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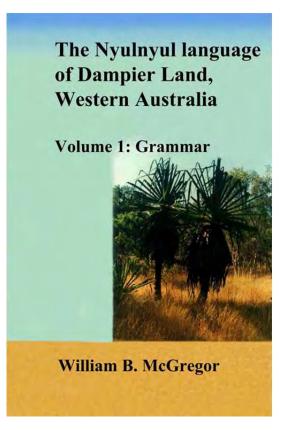
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632 The Nyulnyul language of Dampier Land, Western Australia

Volume 1: Grammar

Volume 2: Texts, wordlists and appendices

William B. McGregor

This book provides a detailed description of Nyulnyul, a Nyulnyulan (non-Pama-Nyungan) language traditionally spoken in the vicinity of Beagle Bay, situated towards the northern end of the Dampier Land peninsula, Western Australia. The language is now to all intents and purposes extinct, and the description is based primarily on recordings made by the present author with the last full speaker of the language, Mary Carmel Charles, in the last two decades of the twentieth century. In addition, secondary data recorded by missionary linguists and other amateur linguists from the late nineteenth century to the mid twentieth century was employed to circumvent inadequacies in the modern corpus.

The description comprises two volumes. Volume 1 is a description of the grammar of Nyulnyul, covering in as much detail as possible the phonetics and phonology, morphology and syntax of the language; an introductory chapter situates the language with respect to other Australian languages and its social and historical context. Throughout there is a focus on meaning, on how the grammatical resources of the language are deployed in making meaning.

Volume 2 presents auxiliary information, including a representative sample of texts (including myths, stories about the traditional way of life, and religious liturgy), wordlists (Nyulnyul-English and English-Nyulnyul), a list of bound morphemes, and an overview of previous research on the language.

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The Nyulnyul language of Dampier Land, Western Australia

Volume 1: Grammar

William B. McGregor



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Copyedited by Melissa Crowther Typeset by William B. McGregor, cover photo courtesy William B. McGregor Cover design by Julie Manley Printed and bound by Addcolour Digital, Canberra This book is dedicated to the memory of the speakers of Nyulnyul, and especially to Mary Carmel Charles who virtually single-handedly taught me about her language.

This book contains photographs of, and mentions the names of, some now deceased Aboriginal people, and may contain some words that are sensitive in some Dampier Land languages and/or communities. Before using this book in aboriginal communities, the reader should determine the wishes of senior members and take their advice on safeguards.

Contents in brief

Volume 1

Preface Acknowledgements Abbreviations and conventions	xxiv xxvii
-	xxvii
Abbreviations and conventions	
	xxix
Introduction	1
Grammatical preliminaries	43
Phonetics and phonology	65
Nominals and pronominals	113
Postpositions	160
Adverbials	210
Inflecting verbs	246
Preverbs	331
Minor word and morpheme classes	345
Noun phrases	398
Verb phrases	435
Clausal syntax	546
Complex sentence constructions	649
Volume 2	
Abbreviations and conventions	xix
Sample texts	705
Nyulnyul-English wordlist	751
	Introduction Grammatical preliminaries Phonetics and phonology Nominals and pronominals Postpositions Adverbials Inflecting verbs Preverbs Minor word and morpheme classes Noun phrases Verb phrases Clausal syntax Complex sentence constructions Volume 2 Abbreviations and conventions Sample texts

viii Contents in brief

English-Nyulnyul finderlist	824
Appendix 1: List of bound grammatical morphemes	857
Appendix 2: Lexemes that occur in CVCs with -J 'say, do'	861
Appendix 3: Previous work on Nyulnyul	870
References	879
Index of names	899
Index of languages	903
General index	905

Table of contents

Volume 1

	List of figures, maps, plates and tables						
	Pref	cace	xxiv				
	Acki	nowledgements	xxvii				
	Abb	reviations and conventions	xxix				
1	Intr	oduction	1				
	1.1	Nyulnyul and its relatives	1				
	1.2	Territory and land tenure	5				
	1.3	Traditional Nyulnyul culture and society	10				
		1.3.1 Food and material culture	10				
		1.3.2 Social organisation	16				
		1.3.3 Life cycle	20				
		1.3.4 Totemism and religion	23				
	1.4	Speech styles	25				
	1.5	Recent history	26				
	1.6	Sociolinguistic situation	32				
		History of language choice, use and shift among the Nyulnyul	34				
		Orthography	38				
	1.9	Data used in this investigation	38				
2	Grammatical preliminaries						
	2.1	Linguistic type	43				
		Recent linguistic changes	46				
	2.3	Theoretical orientation	51				
	2.4	Word and morpheme classes	57				
3	Pho	netics and phonology	65				
	3.1	Phonemes and their realisations	65				
		3.1.1 Phoneme inventory	65				
		3.1.2 Phoneme contrasts	67				
		3.1.3 Phonetic realisations of phonemes	68				
		3.1.3.1 Consonants	69				
		3.1.3.1.1 Stops	69				
		3.1.3.1.2 Nasals	71				

			3.1.3.1.3 Laterals	71
			3.1.3.1.4 Tap/trill	71
			3.1.3.1.5 Glides	71
		3.1.3.2	Realisation of vowels	72
			3.1.3.2.1 Low vowel	72
			3.1.3.2.2 High front vowel	73
			3.1.3.2.3 High back vowel	74
	3.1.4	Phoneme	variation	75
	3.1.5		escription	76
		3.1.5.1	Consonant features	76
			Vowel features	77
3.2	Phonot			77
	3.2.1	Roots		77
		3.2.1.1	General structural features	77
		3.2.1.2	Consonant clusters	78
	3.2.2		morphemes	81
	3.2.3		phemic phoneme sequences	81
			Vowel sequences	82
	224	3.2.3.2	Consonant clusters	82 83
	3.2.4 3.2.5	Reduplic Statistics	ation	85 85
	3.2.3	3.2.5.1	Frequency according to citation for	
			Frequency according to textual ins	
3.3	Svllabi		of words and morphemes	94
3.3	3.3.1	Simple r		94
	3.3.1	3.3.1.1	Structure of monosyllabic roots	95
		3.3.1.2	Structure of polysyllabic roots	95
	3.3.2		morphemes	97
	3.3.3		phemic words	97
3.4	Stress	•		98
	3.4.1	Stress in	free roots	100
		3.4.1.1	Simple free roots	100
		3.4.1.2	Complex roots	101
	3.4.2	Stress in	free stems	102
	3.4.3	Stress in	words hosting clitics	103
	3.4.4		inflected words	104
		3.4.4.1	Stress in prefixing nouns	104
		3.4.4.2	Stress in inflecting verbs	104
3.5		-	nophonemics	107
	3.5.1	External		107
	3.5.2	Internal		108
			Vowel insertion	108
			Vowel harmony	110
			Vowel deletion	110
			Vowel deletion	111
			Nasal assimilation	111
			Nasal deletion Syllable deletion	111 112
		.)). ∠. /	DVIIADIE UEIEUUII	11/

4	Non	ninals a	nd prono	ominals	113		
	4.1	Introductory remarks			113		
			ng nouns		114		
		4.2.1	Pronom	inal prefixes	114		
			4.2.1.1	First person minimal prefix	115		
			4.2.1.2	Second and third person minimal prefixes	116		
			4.2.1.3	Second person augmented prefix	116		
			4.2.1.4	Third person augmented prefix	117		
		4.2.2	Roots a	nd stems that take pronominal prefixes	117		
				Root allomorphs	120		
			4.2.2.2		121		
			4.2.2.3	Other roots taking the same pronominal prefixes	122		
	4.3	Detern			123		
		4.3.1		e determiners	123		
				Demonstratives	123		
				Non-demonstrative determiner	124		
		4.3.2		rative determiners	127		
				war 'other, another, different'	127		
				warang 'others'	132		
		4.0.0		waamarn 'different'	133 134		
	4.4	4.3.3 Interrogative determiners					
		4.4 Quantifiers 4.5 Nominal word formation					
	4.5	4.5.1 Stem forming suffixes			141		
		4.5.1		•	142 142		
			4.5.1.1	-id ~ -(i)ngid Characteristic (CHAR) -kud Associative (ASC)	142		
				-kur ~ -kurd Collective (COLL)	144		
				-kadiny ~ -kabiny Aspect (ASP)	143		
				Other possible nominal suffixes	147		
		4.5.2		-	150		
		4.5.3	Compo		150		
		4.5.5		Coordinate compounds	152		
			4.5.3.2	Specifying compounds	152		
	4.6	Pronor		speenying compounds	153		
		4.6.1		and system	153		
		4.6.2		ns of the pronominals	156		
		4.6.3		of the third person minimal form	158		
5	Post	positio	ns		160		
	5.1	Prelim	inaries		160		
		5.1.1	Forms a	and major functions of the postpositions	160		
		5.1.2		cal and comparative remarks	164		
	5.2	-in Erg	gative (ER	<u> </u>	165		
	5.3	-ang In	nstrument	ral (INS)	168		
	5.4	-nyirr	Comitativ	ve (COM)	172		
	5.5	-ij Dat	ive (DAT)		178		
	5.6						

	5.7	-jun At	olative ₁ (A	ABL ₁)		189		
	5.8	-kun Al	blative ₂ (ABL ₂)		193		
	5.9	-kung Ablative ₃ (ABL ₃)						
	5.10	-ung Allative ₁ (ALL ₁)						
	5.11	-mardil	kan Allat	ive_2 (ALL ₂)		200		
	5.12	2 -mirr Perlative (PER)						
			emporal	, ,		203		
		0	Semblativ	, ,		206		
	5.15	Conclu	ding rem	arks		208		
6	Adv	erbials				210		
	6.1	Introdu	ctory ren	narks		210		
	6.2	Adverb				211		
		6.2.1	Adverbs	s of manner	and intensity	211		
		6.2.2		s of complet		214		
		6.2.3		s of collective	ve action	215		
		6.2.4		of lacking		217		
				determiner		218		
	6.3	-	adverbia			219		
		6.3.1		l adverbials		220		
					points and directions	220		
					irection adverbials	223		
		6.3.2			l adverbials	226		
					s of relative distance	226		
					nd relative frames of reference	228		
	<i>c</i> 1	Т		Deictics		230		
	0.4	-	ral adverl			232		
		6.4.1	-	al qualifiers Shifters		233 233		
			6.4.1.1		time qualifiers	238		
			0.4.1.2	6.4.1.2.1	Parts of the day: the daily cycle	238		
				6.4.1.2.2	Seasons	239		
					Days of the week	240		
		6.4.2	Tempor	al quantifie	•	241		
	6.5			and root for		243		
	0.0	6.5.1			lification of adverbials	243		
		6.5.2	_	ial reduplica		244		
7	Infl	ecting v	erbs			246		
	7.1	Structu	re of infl	ecting verbs		246		
	7.2	Verb ro				250		
		7.2.1		Nyulnyul in:	flecting verb roots	250		
		7.2.2		eristics of Γ		259		
	7.3		orming pr			261		
		7.3.1	Redupli			261		
			-		tterns in IV reduplication	261		
				-	patterns in reduplication	262		

	7.3.2	Reflexiv	ve/reciprocal derivation	264
		7.3.2.1	-	265
			7.3.2.1.1 Allomorphy of the reflexive/reciprocal prefix	265
			7.3.2.1.2 Allomorphy of the reflexive/reciprocal suffix	266
		7.3.2.2	- · ·	266
		7.3.2.3		267
7.4	Person		ber prefixing	267
	7.4.1		son system	267
	7.4.2	-	marking	268
7.5	Tense	1 (6111001	- Indianag	270
7.5	7.5.1	Past tens	se	270
	7.5.1	7.5.1.1	Morphology of past tense	270
		, 10.11.1	7.5.1.1.1 Past tense formation in minimal numbers	271
			7.5.1.1.2 Past tense formation in augmented number	272
			7.5.1.1.3 IVs that form past tense irregularly	273
		7.5.1.2		275
	7.5.2	Present		278
	1.5.2	7.5.2.1	Morphology of present tense	278
		7.3.2.1	7.5.2.1.1 Regular formation of the present tense	278
			7.5.2.1.2 Irregularities in the present tense	280
		7.5.2.2	Meanings and uses of present tense	281
	7.5.3	Future to		283
	1.5.5	7.5.3.1	Morphology of future tense	283
		7.3.3.1	7.5.3.1.1 Second person future	284
			7.5.3.1.2 First and third person future	285
		7.5.3.2	Meanings of future tense	287
7.6	Coning	ation clas	_	291
7.0			IV roots	292
		ø-class I		294
	7.6.3		tegorial IV roots	296
7.7	Irrealis		tegorial IV 100ts	300
/./	7.7.1		logy of the irrealis	301
	7.7.1	-	g and use of the irrealis mood	303
	1.1.2	7.7.2.1		303
		1.1.2.1	7.7.2.1.1 Past irrealis in negative clauses	303
			7.7.2.1.2 Non-past irrealis in negative clauses	304
		7722	Irrealis in positive clauses	305
		1.1.2.2	7.7.2.2.1 Past irrealis	305
			7.7.2.2.2 Non-past irrealis	307
		7.7.2.3	Concluding remarks	309
		1.1.2.3	_	309
			1 6	310
7 0	Aspect		7.7.2.3.2 Scope	
7.8	Aspect 7.8.1	Morpha	logy of the neet imperfective entageny	310 311
			logy of the past imperfective category	
7.0	7.8.2	_	gs and uses of the past imperfective category	312
7.9 7.10		olicative s	SUIIIA	317
	Relator	S sinal encl	itias	318
/ 1 1	- 1 ()[1()[Y	ппагерич	1111 8	3 / 1

	7.12	The inf	finitive	323
		7.12.1	Formal structure of the infinitive	323
			7.12.1.1 Allomorphy of the INF _P	325
			7.12.1.2 Allomorphy of the INF _S	326
		7.12.2	Meaning and use of the infinitive	327
8	Pre	verbs		331
	8.1	Prelimi	inary remarks	331
			grammatical characteristics	332
	8.3	Phonol	logical regularities in PV structure	336
		8.3.1	Phonotactics of PVs	336
		8.3.2	Phonaesthesia	337
	8.4	Stem-f	forming processes	338
		8.4.1		338
		8.4.2	Reduplication	341
		8.4.3	Preverbs derived from roots of other classes	343
	8.5	Conclu	iding observations: preverbs with other bound morphemes	344
9	Min	or word	d and morpheme classes	345
	9.1	Introdu	actory remarks	345
	9.2	Particle	es	345
		9.2.1	arri 'not, no'	346
		9.2.2	arriyangk 'no, don't'	353
		9.2.3	arriyangkang 'without'	355
		9.2.4	arriban 'don't'	356
		9.2.5	nganyji (INT) 'is it the case that?'	358
		9.2.6	nyanangkarr 'maybe, perhaps'	362
		9.2.7	Other particles of probability and possibility	364
		9.2.8	kanard 'can't'	364
		9.2.9	kaard 'still, yet'	365
		9.2.10	bilay 'again'	367
		9.2.11	muj 'already'	372
		9.2.12	wangk 'unexpectedly'	374
		9.2.13	Final remarks	375
	9.3	Enclitic	cs	375
		9.3.1	-mad Emphatic (EMP)	376
		9.3.2	-mil 'regard, respect' (RES)	378
		9.3.3	-manjan 'only'	379
		9.3.4	-ilbi 'mistakenly believe' (MB)	382
		9.3.5	-ad Focus (FOC)	383
		9.3.6	-aw Exclamative (EXC)	385
	9.4	Interjed	ctions	386
		9.4.1	ngii ~ yii 'yes'	386
		9.4.2	nyaa 'here! (take this)'	388
		9.4.3	kaa 'give!'	388
		9.4.4	juu 'alright, OK'	389
		9.4.5	kadakur 'enough, finished'	389

		9.4.6	kala 'finish, enough'	390
			jurrk 'farewell'	391
		9.4.8	yaawu 'youtch!, hey!'	391
		9.4.9	nujaw 'yippee'	392
		9.4.10	waduy and wida 'oh!'	392
		9.4.11	jaa 'move over (please)'	392
		9.4.12	jini 'never mind'	392
		9.4.13	kaw kaw 'ho! come here!'	393
	9.5	Conjun	ections	393
		9.5.1	aa 'and'	393
		9.5.2	akal 'and'	395
		9.5.3	man 'but'	396
10	Nou	n phras	es	398
	10.1	Introdu	ctory remarks	398
	10.2	Structu	re of NPs	399
		10.2.1	The NP as a syntagm of words	399
		10.2.2	Role structure of the NP	402
			10.2.2.1 Deictic	405
			10.2.2.2 Quantifier	406
			10.2.2.3 Qualifier	406
			10.2.2.4 Entity	410
			10.2.2.5 Predicator	410
		10.2.3	ε	413
			10.2.3.1 Positioning of PPs	414
			10.2.3.2 Event-related predication	415
			10.2.3.3 Position of oblique pronominals	416
			10.2.3.4 Position of numerals	416
			10.2.3.5 Concluding observations	417
			An alternative view of the structure of the NP	418
			sive NPs	420
		_	on in NPs	425
	10.5	_	phrase complexes	427
		10.5.1	Extension	427
			10.5.1.1 Conjunction	428
			10.5.1.2 Disjunction of NPs	430
		10.5.2		431
			10.5.2.1 Identification	431
			10.5.2.2 Clarification	432
			10.5.2.3 Attribution	432
		10.5.3	1	432
		10.5.4	Complexes of PPs and adverbials	433
11		phrase		435
	11.1	Introdu		435
		11.1.1	<u> </u>	435
		11.1.2	Usage statistics	436

	11.2	The Eve	ent role		440
	11.3	Verb cla	assificatio	on: the compound verb construction	442
		11.3.1	Formal p	roperties of the CVC	442
		11.3.2	Structure	of the Nyulnyul CVC	446
		11.3.3	Semantic	s of the Nyulnyul PV-IV construction	448
	11.4	Primary	verbal ca	ntegories of Nyulnyul	450
		11.4.1	Monoval	ent categories	451
			11.4.1.1	The -BARNJ 'exchange, do to self' category	451
			11.4.1.2	-N 'be'	456
			11.4.1.3	-JID 'go'	462
		11.4.2	Ambival	ent categories	468
				-J 'say, do'	468
				-R 'poke'	478
				-W 'give'	484
				-NY 'get'	490
			11.4.2.5	•	497
				-KAL 'wander'	508
				-K 'carry'	512
	11.5			categories	519
			-DAM 'h		519
			-JAL 'see		522
			-JALK 'f		525
				ARR 'arise, stand up'	528
				GAR 'stand (up)'	530
			-KARD		531
				sit (down)'	532
				'pour, spill'	534 535
			-NGANK -NGUL '	1	539
			-NGUL -WANY.		541
	11.6		al modifi		542
			ling rema		544
	11./	Conclud	iiig iciiia	IKS	J-1-1
12	Clau	ısal synt	ax		546
	12.1	Prelimi	nary rema	rks	546
			s clauses		549
		12.2.1	Minor cla	auses	549
		12.2.2	Presentat	ive clauses	550
		12.2.3	Relationa	al clauses	552
			12.2.3.1	Elaborating relational clauses	552
				12.2.3.1.1 Identifying	552
				12.2.3.1.2 Attributive	553
				12.2.3.1.3 Additional roles in elaborating relational clauses	556
			12.2.3.2	Extending relational clauses	557
				12.2.3.2.1 Oblique possessive relational clauses	558
				12.2.3.2.2 Comitative possessive relational clauses	559
			12.2.3.3	Enhancing relational clauses	560
				12.2.3.3.1 Purposive	560

		12.2.3.3.2	Locative	561
		12.2.3.3.3	Source	562
12.3 Verbal	clauses			562
12.3.1	Modes o	f being		563
		_	sentative clauses	564
			ational clauses	565
			Elaborating 'being' clauses	565
			Extending 'being' clauses	567
			Enhancing 'being' clauses	568
			12.3.1.2.3.1 Purposive 'being' clauses	569
			12.3.1.2.3.2 Locative 'being' clauses	569
			12.3.1.2.3.3 Source 'being' clauses	570
12.3.2	Experien	ntial structur	re of verbal clauses	570
	_	Experientia		571
		-	y classification of Nyulnyul situation clauses	575
		-	Problem cases	576
			Intransitive clauses	577
			The quasi-transitive construction	579
			Medio-active clauses	579
			Middle clauses	582
			Transitive clauses	585
			Ditransitive clauses	587
			Concluding remarks	589
	12.3.2.3		ar experiential roles	590
			Non-nuclear Mediums	590
			Non-nuclear Agent	591
	12.3.2.4		ative construction	591
			Locative applicative	592
			Benefactive applicative	594
			Comitative applicative	595
			Instrumental applicative	596
			Problem cases	597
12.4 Depend	dency rela		verbal clauses	598
-	Elaborat	-		598
121		Identificati	on	598
		Attribution		599
			Descriptive secondary predicates	600
			Temporal	602
	12.4.1.3	Resultative	±	602
12.4.2	Extensio			603
122		Accompan	iment	603
		Privative		605
		Instrument		605
			ossession constructions	606
	12, 1,2,7		External possession in situation clauses	606
		12, 1,2,7,1	12.4.2.4.1.1 Identically marked EPCs	606
			12.4.2.4.1.2 Differently marked EPCs	608
		12.4.2.4.2	External possession in other clause types	610

	12.4.3	Enhance	ment			611
		12.4.3.1	Spatial			611
			12.4.3.1.1	Location		612
			12.4.3.1.2	Direction		613
			12.4.3.1.3			614
				Intermediate	path	615
		12.4.3.2	Temporal		1	615
				Temporal lo	cation	615
				Temporal ex		617
		12.4.3.3		ental circumst		617
		12.4.3.4				618
		12.4.3.5	Purpose			618
			Involveme	nt		619
12	.5 Interpe	rsonal mo	dification o	f clauses		619
	-		al modifica			620
		12.5.1.1	Polarity			621
			•	Negation of	verbal situation clauses	621
				-	non-situation clauses	623
				•	Negation in elaborating clauses	623
					Negation in extending clauses	623
					Negation of presentative clauses	625
		12.5.1.2	Probability	modification	-	626
			Belief mod			627
		12.5.1.4	Expectatio	n modification	n	630
	12.5.2	Illocutio	nary modifi	cation		631
12	.6 Word	order and	thematisatio	on		632
12	.7 Inform	ation orga	nisation			638
	12.7.1	Ellipsis				638
	12.7.2	Informat	tion structur	e of Nyulnyu	clauses	639
	12.7.3	Disconti	nuous NPs			643
12	.8 Non-fii	nite clause	es			645
13 Co	omplex se	ntence co	nstructions	S		649
13	.1 Overvi	ew of con	nplex senter	nce construction	ons	649
	.2 Embed		•			650
13	.3 Depend	lency rela	tions			651
	13.3.1	Paratacti	ic constructi	ons consisting	g of finite clauses	652
			Extension	·		653
		13.3.1.2	Elaboration	n		655
		13.3.1.3	Enhancem	ent		657
			13.3.1.3.1	Spatial enha	ncement	657
			13.3.1.3.2	Temporal en	hancement	657
			13.3.1.3.3	Manner enha	ancement	658
			13.3.1.3.4	Conditional	enhancement	658
			13.3.1.3.5	Apprehensio	nal enhancement	658
		13.3.1.4	Linguistic	significance of	of the types	659
	13.3.2	Hypotac	tic construc	tions consistii	ng of finite clauses	660
			Enhancem			661

	13.3.2.1.1	-uk LOC		001
		13.3.2.1.1.1	Spatial location	662
		13.3.2.1.1.2	Temporal location	662
		13.3.2.1.1.3	Causal	663
		13.3.2.1.1.4	Reason	663
	13.3.2.1.2	-karr TEM		663
		13.3.2.1.2.1	Temporal	663
		13.3.2.1.2.2	Conditional	665
		13.3.2.1.2.3	Apprehensional	666
	13.3.2.1.3	-ngirr SEM		666
		- $kung$ ABL ₃		667
	13.3.2.1.5	•		667
		13.3.2.1.5.1	-	667
		13.3.2.1.5.2	Reason	668
	13.3.2.1.6	O		668
	13.3.2.2 Elaboration			670
13.3.3			g a non-finite dependent clause	671
	13.3.3.1 Attribution			672
1004	13.3.3.2 Enhanceme			673
13.3.4	• •	ions involvin	g a non-finite dependent clause	673
	13.3.4.1 - <i>uk</i> LOC			674
	13.3.4.2 - <i>ung</i> ALL ₁			674 675
	13.3.4.3 -jun ABL ₁ 13.3.4.4 -ang APP			675
13 3 5	Concluding remarks			675
	gational relationships			679
	Framing and quotation	on		679
101111	13.4.1.1 Reported sp			681
		-	d semantics of reported speech	681
			nctions of reported speech	690
	13.4.1.2 Reported th			695
13.4.2	Complementation			697
	13.4.2.1 Emotional	complements		698
	13.4.2.2 Epistemic o	complements		702
	13.4.2.3 Concluding	g remark		704
		Volume 2	2	
Abbreviatio	is and conventions			xix
Sample text	S			705
- Overvi	ew of textual material	available in l	Vvulnyul	705
	ription conventions	avanaore m	a vy umry ur	706
	Why the emu cannot	fly		708
	Emu myth	J		711
	Bushfoods			734
	Traditional practices			740
Text 5:	Early days Nyulnyul	people		744

xx Table of contents

Text 6: The lord's prayer	746	
Nyulnyul-English wordlist	751	
English-Nyulnyul finderlist	824	
Appendix 1: List of bound grammatical morphemes	857	
Appendix 2: Lexemes that occur in CVCs with -J 'say, do'	861	
Appendix 3: Previous work on Nyulnyul	870	
References	879	
Index of names	899	
Index of languages	903	
General index	905	

List of figures, maps, plates and tables

Fi	igu	res
	σ	

Figure 1–1:	Cluster analysis showing groupings among the seventeen	
_	Kimberley languages	5
Figure 1–2:	Family tree model of the Nyulnyulan languages derived from	
	application of the comparative method	5
Figure 1–3:	The Nyulnyul section system	17
Figure 2–1:	Revised conceptualisation of the linguistic sign incorporating	
	notions from Hjelmslev	53
Figure 2–2:	Diagrammatic representation of the four different types of	
	syntagmatic relation	55
Figure 2–3:	Partial SG analysis of example (2–4)	58
Figure 3–1:	Spectrograms of two instances of <i>rambak</i> , bush potato type'	70
Figure 3–2:	Frequency distribution of consonants over textual subcorpus	91
Figure 3–3:	Frequency distribution of vowels over textual corpus	91
Figure 3–4:	Acoustic analysis of four tokens of kuwaal	99
Figure 7–1:	Temporal plane	276
Figure 7–2:	Scopal relations in (7–122) 'You were supposed to have gone	
	to Derby the other day'	310
Figure 11–1:	Some vectorial configurations for the -BARNJ 'exchange' category	453
Figure 11–2:	Structure of events in -JID 'go' category	468
Figure 11–3:	Vectorial configuration for -R 'poke'	479
Figure 11–4:	Schematic representation of semantics of -W 'give' in SVCs	485
Figure 11–5:	Schematic representation of the -W 'give' category	489
Figure 11–6:	Schematic representation of semantics of -NY 'get'	491
Figure 11–7:	Vectorial configuration for -NY 'catch, get' category	496
Figure 11–8:	Schematic representation of the semantics of -M 'put' in SVCs	501
Figure 11–9:	The -KAL category	510
Figure 11–10:	Schematic representation of the semantics of the -K 'carry' category	518
Figure 11–11:	Schematic representation of the meaning of -K 'carry' in SVCs	519
Figure 12–1:	The tier of experiential roles in Nyulnyul	573
Figure 12–2:	Conflations of experiential roles	574
Figure 12–3:	Correspondence of PTRs and CRs with S-A-O theory	575
Figure 12–4:	Scopal relations in second clause of example (12–328)	622

Maps Nyulnyulan and neighbouring languages 2 Map 1–1: Traditional territory of the Nyulnyul people according to various Map 1–2: 7 sources 9 Map 1–3: Nyulnyul *bur* according to Elkin (n.d.d) Map 1–4: Location of some Nyulnyul and nearby places 11 Map 1–5: Overview of major recent and contemporary trade routes in the Kimberley region 15 **Plates** Plate 1–1: Metal fishing boomerang from Lombadina donated to the Western Australian Museum by Fr Nicholas Emo in 1912 13 Stone fish trap at Emeriau Point 13 Plate 1–2: Aboriginal people at Beagle Bay Mission early twentieth century Plate 1–3: 28 Plate 1–4: General view of the colony at Beagle Bay Mission, probably in 30 the 1920s Plate 1–5: The colony and church at Beagle Bay Mission, probably in the 1920s 31 Plate 1–6: Mary Carmel Charles 40 **Tables** Table 1–1: Lexical comparison of Nyulnyulan languages 4 Table 2–1: Typology of grammatical signs after McGregor (1997b) 54 Table 2–2: Word and morpheme classes in Nyulnyul 60 Table 3–1: Nyulnyul consonant phonemes 65 Table 3–2: Vowel phonemes of Nyulnyul 65 Table 3–3: Intervocalic and final consonant clusters in Nyulnyul roots 79 Table 3–4: Two member consonant clusters across reduplication boundaries 84 Table 3–5: Three member consonant clusters at reduplication boundaries 85 Table 3–6: Phoneme frequencies in root-initial and root-final positions 87 Table 3–7: Frequency of root-initial and root-final consonants according to localisation features 87 Table 3–8: Frequency of consonants in first and second position in two member consonant clusters 88 Table 3–9: Frequencies of consonants in CC initial and final position in terms of place of articulation 89 Table 3–10: Frequencies of phonemes according to position in bound grammatical morphemes 90 92 Table 3–11: Textual frequencies of phonemes Textual frequency of consonants according to place features 93 Table 3–12: Table 3–13: Relative textual frequencies of word-final CCs 93 94 Frequencies of roots with n-syllables for 0\le n\le 6 Table 3–14: Table 4–1: Pronominal prefixes to Nyulnyul Ns 115 Table 4–2: Prefixing noun roots 117 Words of other classes which take noun prefixes Table 4–3: 122

Table 4–4:	Nyulnyul free pronominals	154
Table 5–1:	Nyulnyul postpositions	161
Table 5–2:	Major function types of Nyulnyul postpositions	162
Table 6–1:	Paradigm of cardinal adverbials	220
Table 6–2:	Nyulnyul temporal shifters	233
Table 7–1:	Nyulnyul verb roots	251
Table 7–2:	Uncertain IV roots in Nyulnyul	258
Table 7–3:	Some IV roots and their reduplications	263
Table 7–4:	Nominative pronominal prefixes to Nyulnyul verbs	268
Table 7–5:	Combinations of person and number prefixes in traditional Nyulnyul	269
Table 7–6:	Regular simple past tense marking in Nyulnyul	270
Table 7–7:	Present tense paradigm of -JID 'go'	280
Table 7–8:	Present tense paradigm of -JAL 'see' (accusative enclitics omitted)	280
Table 7–9:	Formation of regular second person futures	284
Table 7–10:	Two patterns of formation of first and third person futures	285
Table 7–11:	Ambicategorial IVs in Nyulnyul	298
Table 7–12:	Pronominal enclitics to the inflecting verb	321
Table 8–1:	Preverbs stems involving -kaj	339
Table 8–2:	Some reduplicated PVs in Nyulnyul	342
Table 10–1:	Examples of NPs analysed according to (10–18)	403
Table 11–1:	High frequency IVs in the Nyulnyul textual corpora	437
Table 11–2:	High frequency PVs in the Nyulnyul corpora	440
Table 11–3:	Inflecting verb roots that occur in CVCs	444
Table 11–4:	Alternative count of frequency of -M 'put' in CVCs	445
Table 11–5:	Frequency of most common IVs in CVCs by type-count in	
	Nyikina and Yawuru after Stokes (1982:182) and Hosokawa	
	(1991:203) respectively	446
Table 11–6:	Semantic characteristics of categories defined by the 10 primary	
	classifying IVs	450
Table 11–7:	Breakdown of PVs that collocate with -J 'say, do' into semantic	
	domains	474
Table 11–8:	Contrasting collocations of -M 'put' and other IVs with PVs	507
Table 12–1:	Relative frequencies of word orders in Nyulnyul texts	548
Table 12–2:	Experiential role types in Nyulnyul	571
Table 12–3:	Characterisation of the semantic meanings of the experiential roles	573
Table 13–1:	Classification of interclausal dependency relations in Nyulnyul	652
Table 13–2:	O'Dowd's hierarchy for nominalisation preferences for	
	subordinate clause types (O'Dowd 1992:66)	678

Preface

This book presents a grammar of the Nyulnyul language, an effectively extinct language that was once spoken in the vicinity of Beagle Bay towards the northern extremity of the Dampier Land peninsula in the far north-west of Australia. It consists of three main parts, following the Boasian tradition. The first part, which constitutes Volume 1, is a description of the grammatical structure of the language; it covers the phonetics and phonology, morphology, and syntax of Nyulnyul, as well as providing some background information on the recent history and culture of the speakers. It aims at comprehensive coverage (in the usual sense of the word in descriptive linguistics). The two other parts comprise Volume 2. The second part presents transcriptions of a representative sample of illustrative texts, both spoken and written—representative of what is available, not of the probable genres of traditional Nyulnyul. The third part presents a comprehensive list of known lexical items in Nyulnyul along with English explanations; it is accompanied by an English to Nyulnyul finder list.

The origins of the book go back a long way. It is some two decades since I began planning this grammar, and initiated the analysis of the language. Motivated by the notion that it is unlikely that further significant information about Nyulnyul will ever be recorded in the field, my original intention was to write a grammar that took into account all available information on Nyulnyul. After many years of grappling with this immense program it became clear that there would be no end to it, at least in my lifetime: there are simply too many secondary sources both published and unpublished (see Appendix 3 for a partial listing of the more linguistically targeted pieces). Thus a few years ago I finally admitted to myself the infeasibility of this project, and opted for a more manageable project, in which I took into account just the most significant secondary sources, ignoring the minor ones.

There are numerous frustrations in working on a language as highly endangered as Nyulnyul. Thus by the time I had begun fieldwork on the language just one full speaker remained, Mary Carmel Charles, along with a few part speakers. And none of these speakers were fully fluent in their spoken Nyulnyul: the part speakers required off-line planning time for their utterances, and Mrs Charles' fluency had been significantly affected by her deafness, as well as by the infrequency of her use of the language. Unlike the part speakers, she was able to produce sentence-sized utterances on-line, without consciously planning them. The evidence suggested that she had been a fluent speaker before becoming deaf, whereas there was no evidence for previous fluency of the part speakers. These factors, coupled with the few speakers available, made fieldwork on Nyulnyul a challenging and relatively unrewarding experience. While I could have worked more intensively with part speakers and rememberers of the language in the Beagle Bay community, I opted not to do so because it would have meant not working with the best speaker, who had not resided

in that community for many years. Effectively, I undertook fieldwork at the place where Mary Carmel Charles resided, and I worked as much as humanly possible with her—which meant for one or two hours per day over the fieldwork periods. (Usually in the remaining time I worked on other languages, lacking part speakers of Nyulnyul who had the time and/or interest to work with me.)

Fortunately, Mrs Charles was highly literate in English. But having to communicate with her in writing meant that few utterances I recorded were very naturalistic, and reactions to my own utterances were almost impossible to obtain. And one of the elicitation techniques that has proved very useful in other languages I have done fieldwork on, in which I built on shared experiences, proved very difficult to put into practice, it being difficult to capture and recall these experiences in writing.

Aside from these practical concerns, working on a language like Nyulnyul is doubly frustrating because one is highly restricted in terms of the questions one can ask. Among the questions that could not be effectively addressed were questions concerning intonation and its functions, which was clearly seriously affected by the speaker's deafness; even stress could only be dealt with somewhat inadequately (it is evident that stress is dependent on the surrounding linguistic environment). Nor could questions relating in one way or another to language use—such as for instance motivations for use of optional morphemes such as optional case markers, the semantics and pragmatics of morphemes conveying interactive or discourse-relevant meanings such as tense and aspect markers—be effectively addressed. This has been personally disappointing since these are the sort of questions that most interest me.

This does not mean that meaning plays a minor role in this grammar; to the contrary, believing that language is in the first place a meaning-making resource, I have paid close attention to meaning at all levels of description. What it does mean is that one is limited in one's testable claims about meaning. I don't believe that one should eschew untestable propositions about meaning (or for that matter structure); to do so would result in extremely restricted and impoverished descriptions. (Contrary to Popper, testability is in my view just one of a number of considerations that might be invoked in evaluating a proposition.) Rather, my strategy has been to formulate such claims (suitably qualified), but to provide some external motivation, for instance in theory or typology.

Of course the experience of working on Nyulnyul has also been rewarding in many ways, and has opened up new directions in my research. At one level there is the experience of having dealt more or less successfully with some of the challenges presented by the language and its historical and social circumstances; and in my final evaluation, doing fieldwork with the full speaker was personally both rewarding and enlightening.

Fortunately a fairly considerable body exists of legacy materials on Nyulnyul, some of good quality. This material has permitted some of the gaps in my own data to be filled. Working on these materials, and exploring their potentials proved exciting, and served to immerse me to the study of the history of linguistics in the region.

Descriptive grammars are available for some Nyulnyulan languages, including Bardi (sketches), Nyikina (comprehensive grammar) and Yawuru (comprehensive grammar), as well as works (monographs and articles) dealing with particular grammatical topics. Aside from this there are a range of unpublished resources. This information has also been

exploited in the description of Nyulnyul. This enterprise raises a number of challenging problems, and points to the need for more extensive treatment, perhaps in the shape of a pan-Nyulnyulan (or pan-Western Nyulnyulan) grammar.

It would be nice to believe that the final product, this grammar, would be useful to descendants of Nyulnyul speakers. It seems that some of these individuals are even now interested in their traditional language, and are studying linguistics. My guess is that Volume 2 (especially the wordlists, and to a lesser extent the texts) will be of most immediate use to such audiences. But a grammatical description such as that in Volume 1 would require translation into a more comprehensible form to be useful to speakers without extensive higher degree training in linguistics. I don't see this as a fault in the description itself—like other written pieces, a grammar is addressed to an audience, in this instance, an audience of professional linguists. At best, the usefulness of this grammar may be as a reference resource that can be interpreted by a trained linguist into a form suitable for other audiences. For instance, it could be used to correct errors in my sketch grammar (McGregor 1996e), which represents a more suitable resource for students.

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My foremost acknowledgement is to †Mary Carmel Charles, the last remaining speaker of Nyulnyul, for her persistence and patience in teaching me about her language, culture, and recent history of her people. In addition I am grateful to various part speakers and rememberers who provided me with information on the language, language situation, and culture, including †Magdalene Williams, †Biddy Kelly, and many Beagle Bay residents, adults and children (many of non-Nyulnyul ancestry).

This grammar is based principally on data gathered in the course of four field trips to the Kimberley, Western Australia, during the years 1985 to 1992. My first direct exposure to Nyulnyul came while I was working for the Kimberley Language Resource Centre in Broome, in 1986; I undertook regular elicitation sessions with Mary Carmel Charles during my year in that township. In 1987, in a committee meeting, the Kimberley Language Resource Centre kindly gave me permission to make copies of the recordings I had made, and to use them in this description. Later field trips were supported by grants from the Australian Institute of Aboriginal and Torres Strait Islander Studies (1988, 1989, 1992), National Aboriginal Languages Program (1989), and the Australian Research Council (ARC Grants A58930745 and A59332055 and an ARC Research Fellowship A9324000). The financial assistance of all of these bodies is gratefully acknowledged.

In addition to the somewhat limited data I gathered myself, I have had access to the information gathered by others. Bronwyn Stokes generously made her 1979 audio recordings and transcriptions of two Nyulnyul stories available to me. These were narrated by two speakers—Albert Kelly and Rosie Victor—who, by the time I had begun to work on Nyulnyul, were too infirm for me to interview. The documentations of Nyulnyul compiled by Beagle Bay missionaries from 1890 to the mid twentieth century have proved useful to the present description, especially the work of Fr Alphonse Tachon, Fr Hermann Nekes and Fr Ernest Worms. My thanks go to the Abbaye Notre Dame de Sept-Fons, Dompierre-sur-Bresbre, France for permission of access to their holdings on Nyulnyul, principally (it appears) documents penned by Fr Alphonse Tachon and to the Australian chapter of the Society of the Catholic Apostolate for their support in my research into Frs Nekes and Worms' materials (see further Nekes & Worms 2006). Among the other important secondary sources of information on Nyulnyul language and culture I single out for special mention the archives of Daisy Bates (held in the Australian National Library) and Adolphus P. Elkin (held in the Archives of the University of Sydney). Needless to say, the contribution of the Nyulnyul people who provided these other researchers with relevant information is gratefully acknowledged. They include the following individuals (the list is incomplete): Dominic Charles, Philippine Dolby, Annie Dyamang, Alexander Gogody, Albert Kelly, Katherine Maiengor, Edward Mawai, Paul Ngolenbor, Felix Ngurdinybur, Rosie Victor, and Rose Wani.

In the late 1980s and early 1990s I was greatly assisted in the task of gathering, cataloguing and compiling the legacy materials in Nyulnyul and other Nyulnyulan languages by a number of research assistants, including Linda de Veer, Robert Handelsman, Nick Thieburger, and Nicole Kruspe. In addition, Danièle Klapproth provided invaluable assistance in translating and summarising manuscripts in German and French. The assistance of these individuals is gratefully acknowledged.

Various parts of this grammatical description have previously appeared in print, and/or have been given in seminar presentations. In many cases the analyses presented in this book update and improve on the previous analyses. I am grateful to the audiences at the various seminars for their useful comments, and to anonymous referees for their comments on manuscript drafts. I am particularly grateful to a number of linguists who commented on earlier drafts and/or shared insights or information with me, including: Peter Austin, Kristin Davidse, Nick Evans, Komei Hosokawa, Patrick McConvell, Alan Rumsey, Jan Rijkhoff, Bronwyn Stokes and Jean-Christophe Verstraete. None of them are, of course responsible for any errors of fact or interpretation in the present work. Fr Kevin McKelson generously gave me a good deal of his time in discussions of Nyulnyul, Beagle Bay, and Kimberley languages and history, especially in the last decade of the twentieth century.

At Pacific Linguistics, Julie Manly, Nick Evans, Malcolm Ross and Wayan Arka have been most helpful in providing quick responses to my numerous queries concerning layout and organisation. Thanks are also due to Melissa Crowther who proof-read the entire penultimate version, and found numerous typos and inconsistencies that had escaped my notice.

Last but not least, my fellow Nyulnyulanist Claire Bowern, the anonymous referee chosen by Pacific Linguistics, is thanked sincerely for her extensive commentary on and critique of the penultimate draft. She has prevented me making a number of blunders.

Abbreviations and conventions

Abbreviations follow the Leipzig Glossing Rules (http://www.eva.mpg.de/lingua/resources/glossing-rules.php), with a few additions and minor emendations. For the reader's convenience, below is provided a full listing of the abbreviations used in the book, including in glosses of example words and sentences (small capitals) as well as elsewhere in the text (ordinary capitals).

ABL	ablative	EMP	emphatic
ACC	accusative	EN	enclitic
ALL	allative	EPC	external possession
APP	applicative		construction
ASC	associative	EV	epenthetic vowel
ASP	aspect	ERG	ergative
AUG	augmented	EXC	exclamative
BLC	Basic Locative Construction	FOC	focus
C	consonant	FUT	future
CC	consonant cluster	IC	immediate constituent
CHAR	characteristic	IMC	identically marked construction
CM	conjugation marker	IMP	imperfective
COLL	collective	INF	infinitival morpheme
COM	comitative	INS	instrumental
CONT	continuous	INT	interrogative
CR	connate role	IO	indirect object
CRD	cardinal (pronoun)	IP	inflectional prefix to inflecting
CVC	compound verb construction		verbs
DAT	dative	IRR	irrealis
DEF	definite	IV	inflecting verb
DMC	differently marked construction	LOC	locative
	dweller of niche	MB	mistakenly believed
DW		MD	mood
d-word	distributional word		

MIN	minimal	SS	present speech situation
N	nominal	SUB	subordinate
NOM	nominative	SVC	simple verb construction
NP	nominal phrase	TEM	temporal
NPF	nominal prefix	TNS	tense
NSF	nominal stem forming suffix	V	verb
NUM	number marker	V	vowel
O	object	VEN	verbal enclitic
OBL	oblique	VP	verb phrase
P	postposition	VPF	verb inflectional prefix
P	prefix	VSPF	verb stem forming prefix
PER	perlative	VSSF	verb stem forming suffix
PL	plural	1	first person
PM	possessum	1&2	first and second person category
PP	postpositional phrase	2	second person
PR	possessor	3	third person
PTR	participant role	-	morpheme boundary
PRO	pronominal	:	length (for vowels)
PRS	present	:	separates words in multi-word
PST	past		glosses of a single word
PV	preverb	•	syllable boundary
PVSF	preverb suffix	•	separates gloss components of portmanteau morphemes
p-word	phonological word	?	questionable or uncertain form
RDP	reduplicant	*	unacceptable or ungrammatical
REF	reflexive/reciprocal		form
REL	relator	*	reconstructed proto-form
RES	with respect to, regarding	,	stressed syllable
RS	inflecting verb root plus inflectional suffixes	/	boundary of tone unit
RSS	referent speech situation	//	phonemic representation
S	subject	[]	phonetic representation
	suffix	{}	morphophonemic
S	semblative		representation
SEM		()	optional element
SG So A	semiotic grammar	د ,	gloss
SoA	state-of-affairs	,	explanation of reference of term

\uparrow	embedding of previous unit in	=	elaboration
	following one	+	extension
\downarrow	embedding of following unit in previous one	×	enhancement
	1	« »	framing (direct quotation)
\leftrightarrow	parataxis	< >	framing (indirect quotation)
\rightarrow	hypotaxis (arrowhead points to dependent)	≤≥	scope

In the representation and layout of example sentences the conventions of the Leipzig Glossing Rules are also by and large adhered to. The main divergences are the following.

First, to save space, the zero third person minimal accusative pronominal enclitic to inflecting verbs is not usually indicated, except where crucial to the discussion.

Second, in the representation of examples from old sources, a four line layout is usually provided, with the first line given as per the original, including phonetic symbols and punctuation (elsewhere punctuation marks are not used in the representation of example sentences). The second line provides a transliteration into the orthography of this grammar, to the extent that this is possible. The remaining lines are as expected; where the free translation is given as per the original and this is not entirely appropriate, it is enclosed in double quote marks. Where words from old sources are cited in the text, they are also given in the phonetic representation of the source, and usually followed by a transliteration into the orthography of the grammar.

Third, portmanteau pronominal forms in the inflected forms of inflecting verbs are usually only partly glossed (again in order to save space, and reduce unwarranted complexity) for person, number and case; tense information is not specified unless relevant to the discussion. Thus, the prefix *yu*-indicates third person (number unmarked) nominative and future tense; the latter information is not usually specified.

Fourth, inflecting verb roots and stems are cited in all capitals (e.g. -JAL 'see'), following a convention I have employed in other writings on Nyulnyul and Kimberley languages. Labels for grammatical roles are given with an initial capital (as in Agent).

1 Introduction

1.1 Nyulnyul and its relatives

Nyulnyul is an Australian Aboriginal language traditionally spoken in the vicinity of Beagle Bay, towards the tip of the Dampier Land peninsula in the far north-west of Western Australia. It is a non-Pama-Nyungan language, a member of the Nyulnyulan family, a small family consisting of about ten named varieties (McGregor 1988a:49, 2004a:40–42; Stokes & McGregor 2003b:30; Bowern 2004b:4–5), all of which are spoken on the Dampier Land peninsula and contiguous parts of the western Kimberley region (see Map 1–1). Whether or not the Nyulnyulan family is genetically related with any other family in Australia (or elsewhere) is uncertain.

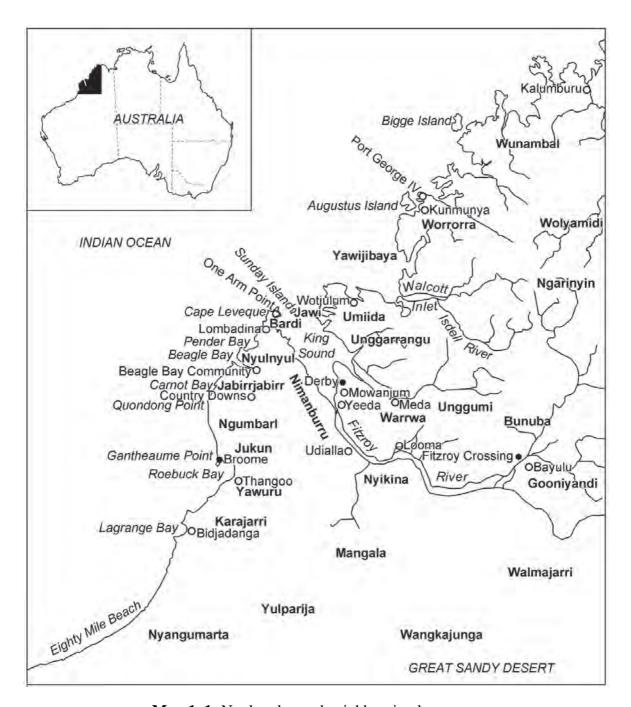
The first linguist to correctly recognise that these languages constitute a family-like genetic group was Fr Wilhelm Schmidt, who referred to them in his *Die Gliederung der australischen Sprachen* as the King Sound Group (Schmidt 1919:164). This was a quite remarkable achievement given that Schmidt had access to relatively little information on the languages.² He based his classification on lexical, grammatical and phonotactic criteria. Thus his identification of this group as distinct from others in his north Australian group was primarily on the basis of a distinct set of basic lexical and grammatical items (including personal pronouns, possessive pronoun prefixes, and interrogatives). Map IV in Schmidt (1926) locates the Nyulnyulan family quite accurately.

Some twenty years after the publication of Schmidt's *Gliederung*, in a lengthy paper published in *Oceania*, Arthur Capell attempted a classification of all languages of northern Australia (Capell 1940). This was based largely on data he himself recorded during an extensive field trip through the Kimberley and Northern Territory in the late 1930s. Believing that it was impossible to deploy the comparative method effectively in the Australian context, Capell employed typological criteria in his classification. He took two features as criterial: (a) whether the language had any prefixes, or had suffixes only (the

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¹ A variety of different spellings of the language name can be found in the literature, including: Ngol-ngool, Niol-Niol, Niol niol, Njol-Njol, Njulnjul, Nyolnyol, Nyol-Nyol, Nyool-Nyool, Nyoolyool, NyulNyul and Nyul Nyul. The spelling adopted here, Nyulnyul, is the one generally accepted these days, and was recommended in McGregor (1988a:60); see also McGregor (2004a:31). This spelling represents the name of the language in the standard orthography (see §1.8 below). There seems to be no connection between either the language name and a snake species, *ngool-ngool*, as proposed by Bates (1985:60), or a word *Nyul-Nyul* meaning 'south' as per Elkin (1938/1974:71–72).

² Presumably by an oversight, the few Nyulnyulan words cited in Schmidt (1919:163) are wrongly labelled as belonging to the Jarrakan family (his Ord River group), and vice versa. (Elsewhere, however, Schmidt attributes words correctly, for instance in the comparative wordlists on pp.176–185.)



Map 1–1: Nyulnyulan and neighbouring languages

former being referred to as PREFIXING languages, the latter as SUFFIXING);³ and (b) whether or not the language had a system of noun classification, and if so, how many classes it distinguished. Using these criteria—augmented by others, as he saw fit—he was able to

³ The asymmetry of Capell's criteria reflects the difference in markedness of the two affix types (Bybee, Pagliuca & Perkins 1990). Other investigators set up comparable contrasts between prefixing and suffixing languages in different ways: for instance, Nekes & Worms (1953) and Holmer (1963) set up the contrast according to the marking on verbs. This does not work so effectively as Capell's criteria in the Australian context.

group together languages that do indeed now appear to constitute genetic families. Thus, he referred to the Nyulnyulan languages as 'prefixing languages without noun classification', distinguishing them from Bunuban languages—which share this characterisation, but are obviously very different—by the geographical qualifier 'Dampier Land languages'. As Capell (1940) also observed, Nyulnyulan languages show a number of lexical commonalities distinguishing them from their neighbours.

In the 1960s, Geoffrey O'Grady undertook extensive lexicostatistical investigations of the languages of Australia, and concluded that, according to lexicostatistical criteria, the Dampier Land languages form a family of four languages and a number of dialects (O'Grady, Voegelin & Voegelin 1966:35–36; see also Oates & Oates 1970:43; Oates 1975: 58–61; Wurm 1972:124–125). Unfortunately, none of O'Grady's lexicostatistical information is available for Nyulnyulan.

Stokes & McGregor (2003) present evidence for the genetic relatedness of the Nyulnyulan languages. They employ two methods, a variant of lexicostatistics (see Stokes & McGregor 2003:36), and the comparative method. Table 1–1 shows the pair-wise shared lexical similarity rates among the ten Nyulnyulan languages, based on 220 basic meanings.

Stokes & McGregor (2003) include a further seven languages of the Kimberley region in their lexical comparisons. The percentages of shared lexemes between any of these languages and a Nyulnyulan language is almost always less than 10%, except when the languages are geographically adjacent. Figure 1–1 (from Stokes & McGregor 2003:37) shows the groupings within this larger set of languages based on a cluster analysis of the full set of lexical comparisons. This reveals clearly that there is minimal lexical similarity with other languages.

This picture is in good agreement with the results gained by application of the comparative method (Stokes & McGregor 2003; see also Bowern 2004b, which discusses similarities with other families), as shown by Figure 1–2.⁵ As this figure indicates, Nyulnyul belongs to the Western group of the family. Within Nyulnyul itself there may have been, in precontact times, some dialectal variation, though the evidence is not entirely compelling. It has been suggested that there were two distinct dialects, a coastal and an inland dialect, spoken by members of two major social subgroups, the coastal and bush or inland Nyulnyul (Magdalene Williams pers.comm.; see also her remarks in Nailon & Huegel 1990:42). Bates (n.d.b:62) speaks of the Yowera dialect, which she says was spoken in the vicinity of Beagle Bay; and in Bates (n.d.a:55) she speaks of the Warrawij dialect spoken near Disaster Bay.⁶ Whether these dialects correspond to the coastal and inland

The tree is drawn from the results obtained by use of a cluster analysis program developed and made available to me by Bo Sommerlund, Institute of Psychology, Aarhus University.

⁵ A glance at Map 1–1 reveals that the Eastern and Western groups are not oriented on an east-west axis. However, speakers of the languages tend to perceive their orientations in this way, the Eastern languages being primarily located on the Kimberley mainland, while the Western languages are seen as Dampier Land languages.

⁶ Neither word appears anywhere in my own Nyulnyul corpus; nor have I encountered them in any other written source, published or unpublished. The term *Yowera* looks suspiciously like *Yawuru*, the name of the language spoken a few hundred kilometres to the south, in the Broome-Thangoo region. However, many of the words Bates cites are clearly Nyulnyul, not Yawuru. The second term *Warrawij* is reminiscent of *Warrwa*, and Tindale (1974:252) remarks that he has heard the term 'heavy Warwa' applied to Nimanburru speech, who he says are believed to be related to the Warrwa. Given that the variety was spoken near Disaster Bay, identification with Nimanburru is not implausible.

4 Chapter 1

varieties remains uncertain, as also does the nature of the linguistic variation between the dialects, on which there appears to be no reliable information.

Table 1–1: Lexical comparison of Nyulnyulan languages (source: Stokes & McGregor 2003:35)

	Jw ^a	Bd	Nn	JJ	Nm	Ngb	Jk	Yw	Nk
Bd	171/ 201; 85%								
Nn	127/ 203; 63%	149/ 216; 69%							
JJ	111/ 204; 54%	136/ 215; 63%	194/ 218; 89%						
Nm	116/ 188; 62%	142/ 200; 71%	190/ 203; 94%	177/ 203; 87%					
Ngb	24/45; 53% ^b	28/45; 62%	33/45; 73%	36/46; 78%	34/44; 77%				
Jk	75/192; 39%	85/199; 43%	110/ 200; 55%	105/ 198; 53%	97/186; 52%	34/45; 76%			
Yw	61/201; 30%	76/210; 36%	88/211; 42%	87/211; 41%	77/198; 39%	29/45; 64%	112/ 195; 57%		
Nk	57/200; 29%	68/211; 32%	81/211; 38%	81/211; 38%	73/197; 37%	28/46; 61%	96/195; 49%	108/ 209; 52%	
Ww	57/199; 29%	73/208; 35%	88/210; 42%	82/210; 39%	79/196; 40%	29/45; 64%	94/195; 48%	97/207; 47%	157/ 207; 76%

a. The following abbreviations are used in the table: Bd—Bardi; JJ—Jabirrjabirr; Jk—Jukun; Jw—Jawi; Ngb—Ngumbarl; Nk—Nyikina; Nm—Nimanburru; Nn—Nyulnyul; Ww—Warrwa; and Yw—Yawuru.

b. Cells in grey indicate those pairs of languages for which the number of words compared is less than 75. In these cases the percentages given are not considered to be reliable indicators of relatedness. Thus it is impossible to be certain of the classification of Ngumbarl, and thus it is tentatively indicated in Figure 1–2 by a broken line.

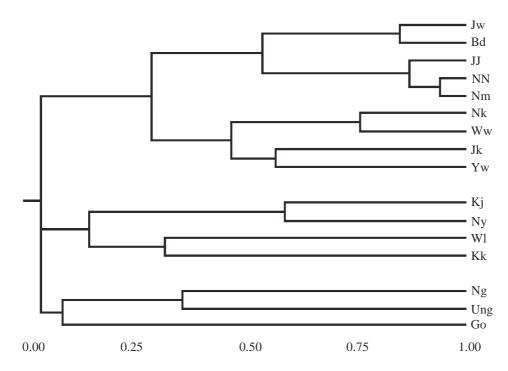


Figure 1–1: Cluster analysis showing groupings among the seventeen Kimberley languages (after Stokes & McGregor 2003:37)

Additional abbreviations: Go—Gooniyandi; Kj—Karajarri; Kk—Kukatja; Ng—Ngarinyin; Ny—Nyangumarta; Ung—Unggumi; Wl—Walmajarri.

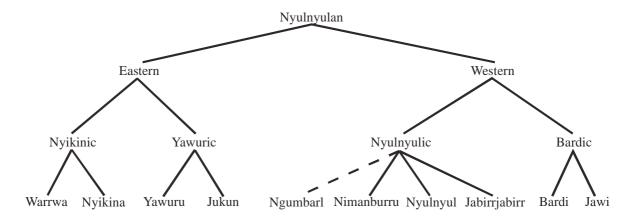


Figure 1–2: Family tree model of the Nyulnyulan languages derived from application of the comparative method (after Stokes & McGregor 2003:31; cf. Bowern 2004b:271)

1.2 Territory and land tenure

The exact location of the boundaries of traditional Nyulnyul territory is uncertain—indeed, it is unlikely that the boundary was precisely delineated. There seems to be little doubt that Nyulnyul territory included a portion of Dampier Land extending from Beagle Bay to

Pender Bay on the Indian Ocean side of the peninsula, and across the peninsula to Cornambie Point and Goodenough Bay (see Map 1–2); almost all sources agree on this.

Furthermore, virtually all sources also agree that the Nyulnyul territory included more than this. What they disagree on is the extent of the additional land, especially in regard to its southern extent—that is, the boundaries with Jabirrjabirr and Nimanburru. In an unpublished manuscript 'The social organisation of the Nūel-Nūel (Nl-nl), Beagle Bay, W.A.' Elkin (n.d.d) shows this boundary as following Boolaman Creek or Norman Creek (which he calls Alligator Creek), thence in a south-easterly direction to about the vicinity of the source of Fraser River; it then turns south for a few kilometres before it continues in a roughly easterly direction for a few kilometres on the southerly side of the river until it hits the coast of King Sound. Tindale (1974:254) is in approximate agreement in regard to the western extremity, which he puts at Sandy Point; however, he has the eastern extremity at Carlyle [sic] Head. This is almost certainly a mistake, as Carlisle Head stands to the north of Goodenough Bay (not Disaster Bay, as per Tindale's map), which would imply that the Nyulnyul had no territory on the King Sound side. And indeed, according to his map, the eastern boundary intersects the coast of King Sound south (not north) of Disaster Bay. Tindale (1974:254) goes on to comment that the Nyulnyul formerly held more territory on this side of the peninsula, but it had been usurped by the Nimanburru.⁸ Perhaps this accounts for the significant disagreement between the south-eastern boundaries proposed by Tindale and Elkin: it may be that the information gathered by Elkin in 1927–1928 reflected boundaries as they were prior to white settlement. Significantly, Elkin's oldest and most knowledgeable informant, Felix Ngurdinybur, who was probably born in the 1860s, had died before Tindale visited Beagle Bay.

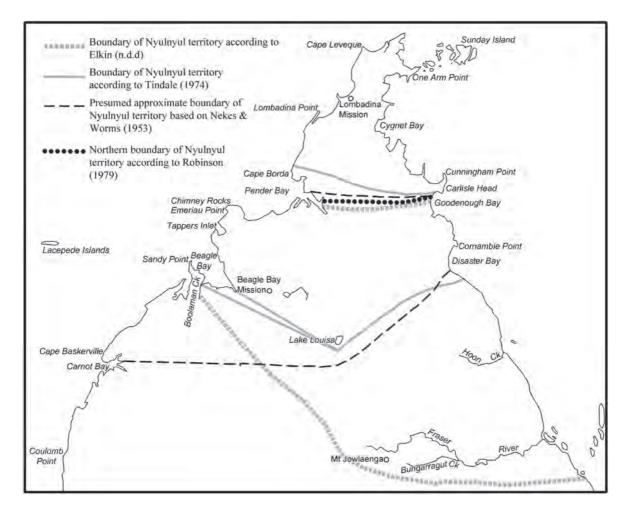
Nekes & Worms (1953:2, 2006:43) in contrast with Elkin and Tindale, give Carnot Bay as the southern extent of Nyulnyul territory along the Indian Ocean side of the Dampier Land peninsula. On the King Sound side, they are in substantial agreement with Tindale, saying that the country between the mouth of Fraser River and Disaster Bay was Nimanburru.

The northern boundary with the Bardi is less contentious, and is (almost) universally placed along an east-west line between Pender Bay and Goodenough Bay. Tindale (1974: 254) has it between the capes at the northern extremities of each bay, whereas Elkin (n.d.d) marks it between their approximate midpoints, as does Robinson (1979:188).

Map 1–2 marks approximate boundaries according to these sources. The available evidence strongly suggests that the south-western boundary of Nyulnyul territory fell in the vicinity of Sandy Point, as claimed by Elkin (n.d.d) and Tindale (1974), rather than at Carnot Bay, as Nekes & Worms (1953:2, 2006:43) aver. According to Remi Balgalai, a well-known and widely respected resident of Beagle Bay who was a young boy at the time of the arrival of the first missionaries at Beagle Bay, and later a fully initiated man:

⁷ Tindale's map, however, shows a different boundary, intersecting the coast at the head of Beagle Bay, with Sandy Point falling outside of Nyulnyul territory, in Jabirrjabirr country—see Map 1–2.

⁸ A sketch map of uncertain provenance, published in Nailon (2004:184), shows rather different territory for Nyulnyul. According to this map, Nyulnyul country extended further south than other sources show it, but only halfway across the Dampier Land peninsula. Nimanburru territory is shown to the east, extending north as far as Bardi country.



Map 1–2: Traditional territory of the Nyulnyul people according to various sources

There was nobody in my tribe who was Christian. We lived at Sandy Point fifteen miles west of the Mission. The language was Dajbberdjabber [sic], the name of the country Winnawal. (Nailon & Huegel 1990:6)

Carmel Charles, the last fluent speaker of Nyulnyul (see fn. 40), concurred: when asked about the ownership of Winawal she responded without hesitation that it was Jabirrjabirr country, belonging to the same people as resided at Carnot Bay.

As mentioned above, it seems unlikely that Nyulnyul territory was delimited by a precise boundary, and there may well have been some overlap with the Bardi in the north and with the Jabirrjabirr and Nimanburru in the south. This is often the case in the Kimberley region—see also Robinson (1979:187) in relation to Bardi territory. And despite the unequivocal statements in Elkin (n.d.d), remarks in his field notebook dated 10th December 1927 (File number 1/1/9 II) indicate that the country west of Alligator Creek—i.e. Boolaman Creek or Norman Creek—was 'mixed in' Jabirrjabirr. (This expression is commonly used today by Kimberley Aboriginal people to describe country to which more than one group has occupational and/or ownership rights.)

Like the Bardi to their north, the Nyulnyul consisted of a number of local hordes, each with its own *bur* 'country, place, camp, territory' (Elkin 1933:437, n.d.d:2; Robinson 1979: 187–190). These *bur* are generally a few square miles in area, and most numerous along the coast; the inland part of the Dampier Land peninsula is sandy and waterless, supporting a

sparse population.⁹ According to Elkin (n.d.d), there are twenty-eight horde *bur* in Nyulnyul country, which he numbered and described as follows (see also Map 1–3, which indicates their approximate locations).

I	Karan ¹⁰	South side of Pender Bay
II	Yenbelkan	Country around the red cliffs
III	Műlj <u>i</u> n <u>i</u> bor	
IV	Koralorkan	Tappers Inlet
V	Yel <u>i</u> l	North side of Beagle Bay
VI	Naward <u>iŋi</u> n <u>i</u> k ¹¹	Mabi Creek, just north of Beagle Bay Creek
VII	Wanbinorla	adjoining Linyn on west
VIII	L <u>i</u> nyan	a bit north-east of mission buildings
IX	Dalan	mission (buildings) site and down to south-east
		part of Beagle Bay
X	Kuyadola	Ryan's Well
XI	Yamarana	little west of Bungadoc
XII	Bängädok or Bängarät	Bungadoc
XIII	Rababunen	Lake Lousa
XIV	Molgan	a low hill
XV	Chowtengan	Chowtengan Spring
XVI	Jumban	near Fraser River
XVII	Bäŋara; Bungarragat	
XVIII	Bäŋarägen	near Lowangan
XIX	Bulora	
XX	Jä̞ŋär <u>i</u> k	Jangeric Well
XXI	Jangan	Jangan Spring
XXII	Warjarä ¹²	Wahja Spring
XXIII	Malaber	Melaburra Spring
XXIV	J <u>i</u> nyen	Valentine Island
XXV	Lanã	
XXVI	Lauenjärmagen	Spring country in Disaster Bay
XXVII	Mäbälä	Cornambie Point
XXVIII	Mädä	Murdeh Point

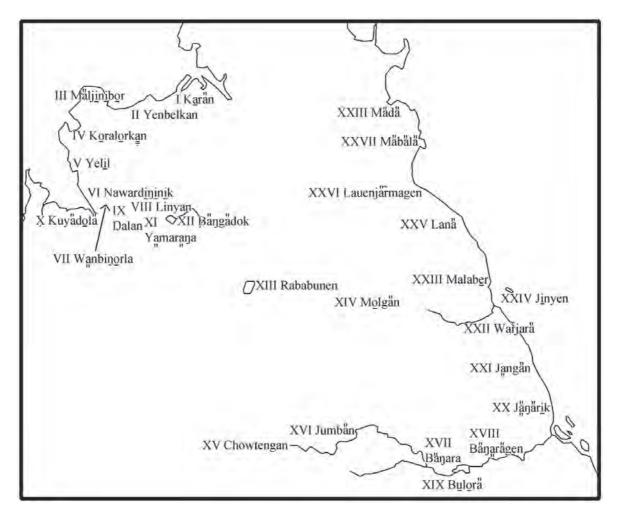
These *bur* were owned by patrilineal descent groups (Elkin n.d.d:4); thus, a man's *bur* would belong to himself and everyone related to him as brother, father, father's brother, father's father's father's brother, son, son's son, brother's son, brother's son's son. All living relatives of these types have full rights under a headman who may be a man himself, or his father or older brother: age is important—this is a position commanding

⁹ Claire Bowern informs me (pers.comm.) that according to Bardi people the interior of the peninsula was uninhabited. The information in Elkin (n.d.d) indicates that there was some inhabitation of the interior, although it was sparse and mainly confined to areas near water sources.

¹⁰ In Elkin's typescript the diacritic over the second *a* vowel is vertical, an overtyped straight double quotation mark.

¹¹ Elkin's typescript represents the engma by an n with an overtyped g.

¹² It is not entirely clear in the typsecript whether the first *r* in this word has a tilde diacritic, or the mark is intended to cross out a mistake. I suspect the former, given that item XXVI also has the same mark over the *r*.



Map 1–3: Nyulnyul *bur* according to Elkin (n.d.d)

respect. If born out of his country, avers Elkin, a man has no rights over the country of his birth.

Each horde—which was named after its *bur*—consisted mostly of men of two sections (see p. 17 below); it also consisted of women of the other two sections, the wives of the man and his brothers, his sons and fathers who resided with them. Marriage was exogamous to the horde—indeed, Elkin (n.d.d) stresses that there was a premium on marriages between comparatively widely separated hordes (which may even have belonged to different 'tribes')—and thus these women had no ownership rights over the country in which they normally resided (Elkin n.d.d:5). ¹³

The owners of a *bur* and their wives did not have exclusive rights of usage or residence to that tract of land. According to Elkin (n.d.d), a man had free and 'hearty' welcome to the *bur* of his MB, although he had no hereditary rights to it. Other people were also permitted access to a person's *bur* for hunting or fishing, provided they had obtained prior permission from the headman of the horde:

¹³ Elkin worked exclusively with men, and presents the situation from their perspective, which limitation he was fully cognisant of. And as Claire Bowern has observed (pers.comm.) there is evidence that men sometimes lived with their wives' families, and that women did have some rights over their father's horde *bur*.

He [the visitor—WBM] sits down some distance from the camp until someone is sent to ascertain his business, after which he is asked to come close. The headman or others generally accompany such a visitor on his fishing or hunting expeditions. Such visits seldom last more than a week. (This refers to days before the coming of the "Whites".) (Elkin n.d.d:4)

Map 1–4 marks the approximate positions of the referents of the known and locatable Nyulnyul toponyms. Both locations and spellings are approximate; furthermore, some of the toponyms may be Bardi, Jabirrjabirr or Nimanburru, rather than (or as well as) Nyulnyul. (The information comes from Worms 1944; Elkin n.d.d; and my own fieldnotes.) Note that the horde *bur* names from Elkin (n.d.d) have not been included on this map unless they are also cited elsewhere as toponyms, since horde names do not necessarily coincide with toponyms. ¹⁴

A person was frequently named after their country: *bur* 'country, camp, place' would be attached to the toponym for their country. For instance, *Winawal-bur* designates a person from *Winawal* (i.e. Sandy Point). It is not clear from the anthropological literature whether these were personal names, nicknames, or just possible means of referring to people. Quite likely a person would have had another personal name as well, their 'real' or inherent name (which was usually, in Aboriginal societies, treated with circumspection). ¹⁵ ('King' Felix's Aboriginal name is always given as *Ngurdinybur*, suggesting he was from the country *Ngurdiny*, although this does not appear as a toponym in available lists.)

1.3 Traditional Nyulnyul culture and society

1.3.1 Food and material culture

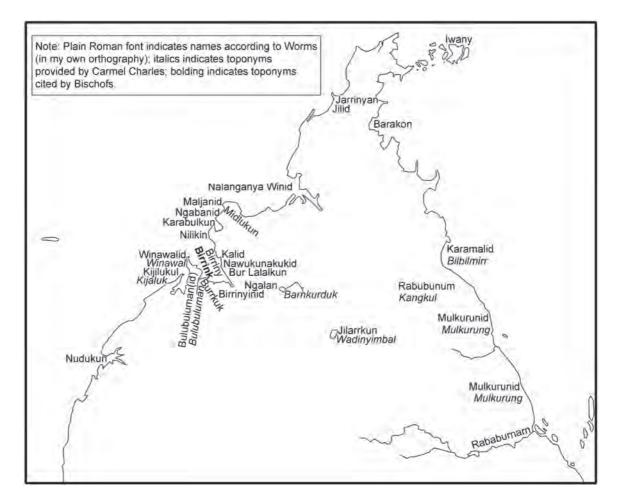
As mentioned in §1.2, the bulk of the Nyulnyul population traditionally lived along the coast where food and fresh water were most plentiful, the inland part of the Dampier Land peninsula being too dry to support more than a sparse population. And judging from the number of *bur* Elkin (n.d.d) was able to identify, it seems that the western coast was more heavily populated than the eastern, presumably because the Indian Ocean provided richer food resources than King Sound.

The main foods were bush fruits and roots, fish and reptiles; in addition, insects, birds, frogs and marsupials were sometimes eaten. Women and children gathered fruit, collected water, cooked, and kept fire sticks alight; men hunted and fished, as well as made fire with fire saws, according to Elkin (n.d.c) (see also below).

Fish were caught by a variety of methods, including by spearing, by use of special boomerangs, in traps, by poisoning, and in postcontact times, with fishing lines and hooks. Special boomerangs made of metal and called *dangk*—presumably a borrowing from English *tank*—were used for killing fish: according to Porteus (1931:10), they 'are hurled with great force and accuracy into the water when a large fish is descried near the surface'; see also Plate 1–1 and Text 4, lines (15)–(16). Two different types of fish trap were employed: permanent stone traps, which were located at the head of Beagle Bay, and

¹⁴ Cf. however Bowern (2009), who suggests that horde booroo names in Bardi are a type of toponym.

¹⁵ In many Australian Aboriginal languages it is possible to designate a person (or persons) from a place by means of a suffix to the toponym. In Gooniyandi, for example, -ngana indicates a denizen of a place, as in Danggoo-ngana 'dweller of Geikie Gorge', and -warrawarra the denizens of a place, as in Danggoo-warrawarra 'Geikie Gorge people'. These forms are not, it should be noted, true personal names.



Map 1–4: Location of some Nyulnyul and nearby places

various other points along the peninsula (see Plate 1–2); and temporary grass traps, which were placed anywhere suitable—stakes were driven into the mud and interlaced with bushes and grass. Fish would be caught in these traps as the tide ebbed. For poisoning fish the roots of the banyjurd bush, a small bush resembling a peanut plant (probably Tephrosia crocea—Aklif 1999:25), were crushed, mixed with sand and water, and thrown into a waterhole, stunning the fish, which would float to the surface of the water (see Text 4, lines (17)–(25)). Another fish poison was *yilngam*, which comes from a creeping vine with long roots. This is presumably the same poison that Elkin (n.d.c) refers to as yelgan, which he describes as a grass growing on the sandhills of Pender Bay; this was broken up with a stone, mixed with sand and water and thrown into water. Elkin (n.d.c) also refers to a third poison, the leaves of the kulay apple tree, which he says were also crushed up, mixed up with sand and thrown into waterholes. Eels too were poisoned, by use of kiinyb, the gum of the Eucalyptus papuana and Eucalyptus polycarpa trees. Turtles were caught when they came onto the beach; their eggs were also taken from the sand where they had been laid, and from inside female turtles. Turtles and dugongs were, by the time of Elkin's visit in 1927–1928, harpooned from dinghies.

Kangaroos and emus were traditionally speared by hunters lying in wait, often in a tree near watering places; bush yards were sometimes erected along animal tracks. Boomerangs and throwing sticks were used for killing ducks and other birds; ducks were also caught by

a hunter in the water; a head camouflage would permit the hunter to move close enough to a bird to grab it. Lizards and goannas were caught alive, and then killed. A large quiet snake, a type of carpet snake, was a favourite food; poisonous snakes were not consumed.

Fish were cooked in ashes, as were snakes and lizards. The former were sometimes cooked in earth ovens, as also were turtles, dugongs, kangaroos and other flesh foods, as well as some ground fruits. Earth ovens were holes in the ground in which a fire had been lit, and scooped out when the ground had heated; the bottom was sometimes lined with hot stones and ashes, on which water was sprinkled. Food was then put into hole and covered with bark and sand. Hot stones were added to the top when cooking large animals such as dugongs.

The preparation of some types of vegetable food is described in Text 3; see also Lands, et al. (1987), and Williams (1999). According to Elkin (n.d.c), the Nyulnyul also kept stores of wirrm, kawurrkawurr, and the beans of three wattle types in vessels; bilkin and the waterlily widimangarin were kept for up to six months in a hole in the ground. Aside from use as foods and poisons, some plants were used for medicinal purposes. For example, the green leaves of the dalwurr plant (Gardenia pyriformis) were rubbed on the feet as a type of balm, giving protection from cuts on sharp reef rocks, stonefish, etc. Plants were also used for making tools, weapons, and other artefacts.

The material culture of the Nyulnyul was typical of Dampier Land and nearby peoples. Men used various types of shields (karrbin), clubs (nawurl), boomerangs (jiib), spears (walangk), spear throwers (ngabaliny), stone axes (jamiyun), stone knives, and so forth. Many of these they made themselves; others they obtained by trade (see p. 14 below). Women used a range of coolamon types (binjin) for carrying food, water, babies, and so on, as well as digging sticks (milkin) for digging tubers, etc., and presumably stone axes for chopping out sugarbag (honey). (Elkin n.d.c provides detailed descriptions of a number of artefacts, including the karrbin 'shield', nawurl 'club', wandil 'type of coolamon'.)

According to Worms (1950:149–152), fire was traditionally made in two different ways by the Nyulnyul and other Dampier Land people. One method was to use a fire drill, wangkalk (wongalg in Worms's spelling), which is put vertically into a notch in another piece of wood filled with dry leaves, bark or sand, and rotated rapidly between the palms. Both men and women used this method. The other was with a fire saw, which Worms (1950: 149) says was called *galeo* in Nyulnyul. Given the cognate form *galiwa* in Jawi (Claire Bowern pers.comm.), the expected Nyulnyul form is *kaliw*. ¹⁶ This tool was apparently used only by men, women being prohibited from using it. It was a knife shaped piece of thin wood that was moved rapidly back and forth through a groove in another piece of wood, which was filled with dry grass. 17

Fire was maintained during the wet season by use of a fire stick, consisting of a piece of bark or spongy rotten wood, which was carried along by women and children. According to Worms (1950:153), this was called mak in Nyulnyul, Bardi and Nimanburru, also niim jungk (its-eye fire) 'eye of the fire' in Nyulnyul (Nekes & Worms 1953:754).

¹⁶ In my own corpus, the only word for 'fire saw' is karlib, which Worms (1950:149) classifies as a Bardi word; Nekes & Worms (1953:549), however, give both as Nyulnyul words for 'fire saw', along with *jabarr* (which does not appear in my corpus).

¹⁷ According to Worms (1950:162-164), Nyulnyul people assured him that the fire saw was introduced to them from the east, which proposition Worms maintains is supported by linguistic and anthropological evidence.



Plate 1–1: Metal fishing boomerang from Lombadina donated to the Western Australian Museum by Fr Nicholas Emo in 1912 (Courtesy Moya Smith ©)



Plate 1–2: Stone fish trap at Emeriau Point (Courtesy Moya Smith ©)

Traditionally, small dwellings were made by sticking saplings, usually of wattle, in the ground, in a circle, and bending the ends over so as to meet at the top. Grass or paperbark

was then placed over the sticks. The huts were about one metre high, with an opening that had to be entered on the hands and knees.

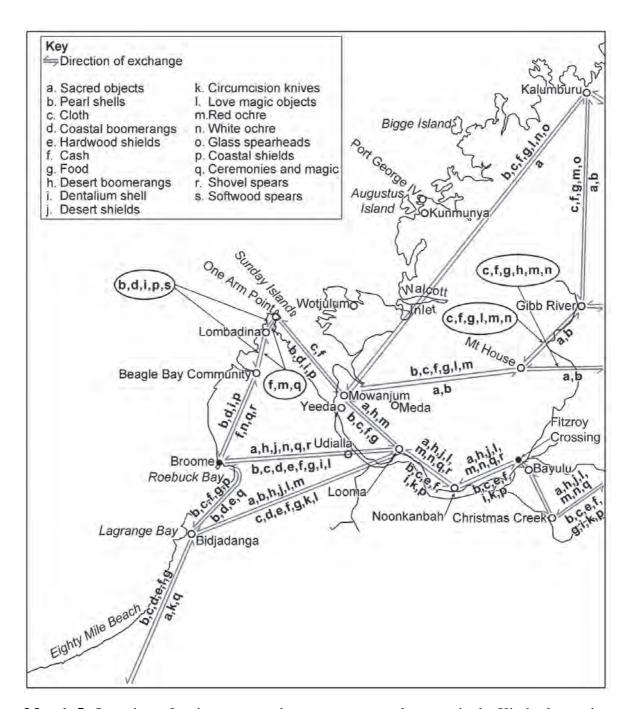
Elkin (n.d.c) provides a detailed description of the newer type of huts constructed in 1927 in Beagle Bay, presumably in the Aboriginal camp located a short distance from the mission buildings (see p. 30 below). Unlike traditional huts, these were made in a rectangular shape, about two metres by one and a half metres, with wattle sticks around one metre in length stuck into the ground about thirty centimetres apart. Paperbark 'shingles' were placed on top and around the walls, and fastened by wire (if available); sometimes a ridgepole was used. As for the traditional hut there was a small doorway, but no windows. Inside, blankets were spread out on the ground. A family would reside in such huts, along with their dogs. Spears were stood up alongside the hut, and boomerangs and other small items pushed under the bark of the roof. Next to each hut was generally a bough shade, made from four upright sticks, with others laid across them to carry branches, bark and bushes. These were about the same height as the hut. When the resident was at home, most of the day would be spent in the bough shade, at one end of which was a cooking fire. Meals were also eaten there.

In addition to the above utilitarian artefacts, the Nyulnyul also used various ceremonial and ornamental objects. These included items of apparel such as belts and bands, some of which were associated with particular ceremonies and/or with stages of male initiation—e.g. Elkin (n.d.c). And like other Aboriginal groups, the Nyulnyul possessed a variety of sacred objects, often referred to in the literature by the Aranda (Arrernte) term *tjuringa* (sometimes spelt *churinga*). It appears that each adult male possessed his own personal tjuringa, which were believed to be connected with his soul (Klaatsch 1906:793; Porteus 1931:37). These objects were not to be seen by women or uninitiated males, and were hidden in the branches of trees, which were out of bounds to the uninitiated (Worms 1986: 38; Porteus 1931:35–36); they were removed from their hiding places only for ceremonial purposes.

Among the sacred objects were various types of bullroarers, musical instruments associated with male ceremonial activity, including love magic. These were made from an elongated flat piece of wood attached to a string, which was twirled around the head to produce a buzzing sound. There were also a range of different types of dancing sticks, and sacred boards and stones (Elkin n.d.c; Porteus 1931:32; Worms 1986:30, 42, 50, 76–77).

Four different colours of paint were used on the human body, as well as on artefacts such as weapons, implements, and ceremonial objects: white ochre, red ochre, yellow ochre, and charcoal.

An extensive network of exchange and trade traditionally existed, and still exists, amongst the people of the Kimberley and other parts of Australia, as shown in Map 1–5 (see e.g. Elkin n.d.c; Berndt & Berndt 1964/1992:128; Akerman 1979; Kolig 1981:126–127). There was a constant movement of goods along routes crisscrossing the continent, some items going one way, others in the opposite direction. From the Dampier Land peninsula came various kinds of pearlshells, boomerangs, shields, and bamboo necklaces, which were passed east via the southern Kimberley, and south into the Pilbara and beyond. Indeed, pearlshells from Dampier Land have turned up as far away as Eyre's Peninsula in South Australia (Berndt & Berndt 1964/1992:128). In exchange, from the east came shovel spears, certain types of boomerang, coolamons, dilly bags, red ochre, love magic and other rituals and ritual objects. From the south came, amongst other things, corroborees, as well as magical knowledge (Petri 1950:48); much of this originated further afield, especially from Central Australia.



Map 1–5: Overview of major recent and contemporary trade routes in the Kimberley region (based on Akerman 1979:248)

Elkin (n.d.c) provides more specific information about Nyulnyul trade, *rurrbukan*, which he avers was engaged in at any time, not just during ceremonies. Elkin gives the words *kingodijan* for goods passing from north to south, and *bgrijan* (his spellings) for goods passing south to north (neither of these words appears in either my or in Nekes' and Worms' corpora).

With the Bardi, the Nyulnyul bartered red and yellow ochre, and white pipe clay in exchange for softwood spears, fish boomerangs, and shells. With the Nyikina and Warrwa they traded pearlshells, small shell beads (*käläkälä*, in Elkin's orthography), boomerangs

and hardwood spears. With the La Grange people they exchanged *riij* 'pearlshell pendants', and *baal* 'hair belts' in return for shells and clubs, ceremonial headbands, hardened spears, and *yeragal* sticks (in Elkin's orthography)—presumably *irrkil*—apparently a type of boomerang thrown at birds. The Nyulnyul also obtained ceremonial knives from the Ngumbarl, and other objects from further south, via the Jabirrjabirr and Nyikina people. These included *babakun*, which according to Elkin (n.d.c) is a white paint from Gigully Creek in Nyikina country; Nekes & Worms (1953:331), however, refer to this as a yellow paint.

According to Elkin (n.d.c), trading was not restricted to neighbouring groups; expeditions would go into more distant territories for purposes of trade. He says that until twenty years prior to his visit to Beagle Bay in 1927–1928 the Nyulnyul undertook regular bartering trips to Derby, Yeeda, Mängil (a hill from which stone tomahawks could be procured), and even across to Meda. ¹⁹ The people from the eastern side of the Nyulnyul territory in particular went to Meda for stone tomahawks with polished edges, red ochre (*dukurl*), and bamboo spears (*jinal* and *jimbila*). Light woomeras were procured from Yeeda and Derby, grass wax from Yeeda, and a large bullroarer (*mudamud*) from Derby way.

1.3.2 Social organisation

Like other Aboriginal societies, that of the Nyulnyul was traditionally kin-based. All members of the social universe, including everyone who a person comes into contact with (including those belonging to different tribes—e.g. Bardi, Jabirrjabirr, Ngumbarl, etc.), are members of the kinship network, if not genealogical (actual), then classificatory (e.g. Elkin 1938/1974:84ff, Berndt & Berndt 1964/1992:68). Kin relations modulate and constrain the behaviour between individuals.

Where the kin relationship was a close genealogical tie, it was of course preestablished, and the appropriate types of interpersonal behaviour were subject to certain prescriptions, while leaving, of course, room for the expression of a range of interpersonal meanings. Significant deviations from the norms might be subject to censure or punishment. But where a distant, classificatory relation obtained between two individuals, it was often subject to some degree of negotiation, in accordance with the types of interactive behaviour which the individuals wished to engage in. That is to say, a classificatory relationship could, to some extent, be negotiated so as to permit the establishment of the desired interactive behaviour (see further Elkin n.d.d; Rumsey 1981, 1982a; McGregor 1989a and below).

The Nyulnyul kinship system is of the type referred to in the anthropological literature as the Nyul-Nyul (often spelled Njulnjul) or Aranda type (Radcliffe-Brown 1930:339; Elkin 1932:307–310, 1938/1974:99–102). This system shows the characteristic that four terminological distinctions are maintained in the grandparent/grandchild generations. Furthermore, it is characterised by a prohibition on any sort of first-cousin marriage

¹⁸ Cf. Bardi *irrgil* ~ *irrgili* 'hunting boomerang made from *Hakea aborescens*' (Aklif 1999:73); Nekes & Worms (1953:529) cite the Nyulnyul form as *irgil*, which they refer to as a type of wattle used for making boomerangs.

¹⁹ Elkin (n.d.c:19) also says that Nyikina and Derby people used to come via the Fraser River to Beagle Bay for trading purposes, which, he suggests, 'possibly accounts for the Woruwa [sic; presumably Warrwa—WBM] being to some extent settled just below the Fraser'. That these visits took place is confirmed by Maudie Lennard and †Freddy Marker, the last two fluent speakers of Warrwa. It seems likely that women were also exchanged during the expeditions: my main Nyulnyul consultant's mother was a Warrwa woman—see fn. 40 below.

(allegedly punishable by death—Elkin n.d.d:14), but permits marriage between some types of second-cousins, namely between children of cross-cousins (Elkin 1932:307, 1938/1974: 100).

According to early sources, the Nyulnyul recognised sections, as did their southern neighbours (e.g. Bates 1985:91; Radcliffe-Brown 1930:339; Elkin 1932:308, n.d.d:10); their northern Bardi neighbours, however, distinguished no sections, subsections or moieties. Figure 1–3 shows the Nyulnyul section system, which is identical with (and uses almost the same terms as) the section system employed by their southern neighbours, including the Yawuru (Hosokawa 1991:8). As this figure shows, *baljarri* and *karrimba* form two intermarrying sections, as do *burungu* and *banaka*. The section membership of a child is determined by that of the mother, the father being ignored in the case of a wrong or dispreferred marriage. This system could be used to help determine the ideal kin relationship between two individuals who might not have met before—e.g. a *baljarri* man and a *banaka* man might call one another *iibal* 'father', since the father of a *baljarri* man would be *banaka*, and of *banaka*, *baljarri*, if marriage followed the preferred pattern. However, other considerations might also be pertinent, and they might decide that they were in an avoidance relation to one another, so as to permit the exchange of their sisters' daughters as wives (see p. 18 below).

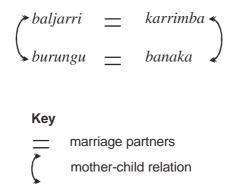


Figure 1–3: The Nyulnyul section system

According to Elkin (n.d.d:25), two forms of irregular marriage were permitted. First, it was possible under certain circumstances to marry into one's mother's section, provided that the two persons were not very closely related. Second, marriage with a member of one's own section was permissible if the spouse came from a distant place, and the woman was the man's mother's mother's brother's son's daughter. Impossible were marriages between sections related paternally: between *karrimba* and *burungu*, and between *banaka* and *baljarri*. Of course, other factors were taken into account than section membership, including patrilocal horde membership, geographical distance, and the actual genealogical relationships involved.

Nyulnyul elders in the late twentieth century, however, denied that sections were ever recognised by the Nyulnyul, and say that they were used only by their southern neighbours. Instead, they claimed that the Nyulnyul traditionally distinguished two generation levels:

jarnd harmonic generation inaar alternate generation

It is important to note that these two terms do not denote generational moieties (contra Worms 1986:128; Petri n.d.:2): a person does not 'belong to' either *jarnd* or *inaar*; rather, they are *jarnd* or *inaar* with respect to a particular person.²⁰ The terms are shifters; they group everyone in the social universe into two groups with respect to a given person, according to whether they belong to a generation harmonic with that person (i.e. same generation, or an even number of generations away), or to a generation that is not harmonic with them (i.e. an odd number of generations away). They do not, that is, designate fixed social groups as do the section terms,²¹ and genuine moiety terms such as the well known *dhuwa* and *yirritja* of the Yolnu of north-east Arnhem Land.

It seems likely that modern Nyulnyul people reject the section system in part due to the knowledge that it was only recently adopted from the south; as Robinson (1979:194) observes,

Statements by Aboriginal people in the western Kimberleys suggest that the four-section system is a relatively recent introduction, and it is possible that the Bardi would have adopted it but for the rapid changes brought about by European settlement.

Worms (1986:128) agrees, and suggests that it had been only during the 'last 30 or 40' years that the section system had taken root, implying a date in the early decades of the twentieth century—Worms typically wrote from an ethnographic present located in the 1930s and 1940s, when he did most of his fieldwork in Dampier Land. In part non-use of the section system may also have indexed their distinctiveness as a Dampier Land people, in contrast to the southerners who have it. It is further possible that speakers' claims that in the late twentieth century the section system was never employed by the Nyulnyul community was a bid for cultural purity, parallel to the linguistic purity embodied in their rejection of English borrowings (see §2.2 below).

As in other Aboriginal groups, men did not marry until they had gone through a number of stages of initiation, including subincision (see §1.3.3), while women generally married at a much younger age. Traditionally polygamy was the norm, and men generally acquired more wives as they got older. This practice was frowned on by the missionaries, who from their first arrival attempted to put a stop to it.

Elkin (n.d.a, n.d.d) provides detailed information on methods Nyulnyul men traditionally employed for obtaining a wife. One method is by means of infant or prenatal betrothal of a girl, referred to as *bakalngarrinyjun*,²² and arranged by her fathers and uncles (mother's brothers); the male who the betrothed girl will call *wanyman* 'spouse's mother and

²⁰ These terms resemble terms found elsewhere in the Kimberley and Pilbara regions. The corresponding Bardi terms are the obvious cognates *jarndoo* and *inar* (Robinson 1979:193; Aklif 1999:79, 61). Etymologically related terms are also found with related meanings in geographically distant languages. Thus *jarnd* has the Nyikina cognate *jarndoo* meaning 'countryman', which is also the meaning of Gooniyandi *jarndi*. And *inaar* is obviously identifiable with the Nyikina *inara* and the Mardudjara *jinara*, both of which designate 'alternate generation'.

²¹ Thus, for instance, if a man were to marry into his mother's section (as per above), his wife would—presuming that the Nyulnyul behaved like many other groups, including the Arrente (e.g. Green 1997)—become *jarnd* to him. But a distant classificatory mother of the man, who was also a distant classificatory sister of the woman, is unlikely to be reclassified either as *jarnd* to the former or as *inaar* to the latter.

A possible etymology for this synchronically unanalysable root—suggested by Freddy Marker, a Warrwa speaker (pers.comm.)—is that it involves the nominal root *bakal*, which refers to a type of coolamon used by women to carry babies, followed by *-ngarri*, a widespread comitative marker in Kimberley languages (though not in Nyulnyul), followed by *-jun*, the ablative postposition (see §4.5). In other words, 'from with the coolamon'—which makes perfect sense semantically.

her siblings' is also consulted. According to Elkin, some of these types of betrothal are automatic: a man must promise his daughter to his wife's mother's brother as soon as she is born; he must also arrange with his sister's husband (real or classificatory) to give the latter's daughter to his *rambarr* 'wife's mother's brother'.

A second method is through sister exchange between two men belonging to intermarrying sections; this is dependent on the consent of the *iibal* 'father' and *kaaka* 'mother's brother' of both women.

A third method is for a man to claim his sister's son's daughter by arranging to call the latter's mother (i.e. his sister's son's wife) *yalirr* 'wife's mother'.

A fourth method is by stealing another man's wife, referred to (in Elkin's orthography) as yirel (i.e. yiril or yirril). In this case the thief and the woman must be of appropriate sections, and not too close (genealogically or geographically). According to Elkin, the aggrieved husband sends word around—this type of news being referred to as nermyarin (presumably something like n(g)ir(r)mngar(r)in)—about the affair, including word to the thief to come to a certain place to fight. Following the fight, the thief may be permitted to keep the woman, if the husband is agreeable.

A fifth method, a variant of the fourth, is for a woman to elope with a man, leaving an older husband in favour of a young man. The woman may be retrieved by the husband, and killed; the man is not touched, however, as it is the woman who is regarded as being at fault. The action taken will depend on the number of wives the old man has, how much he values the woman, and the section of the thief. For instance, there might be no fight if the thief is from the same section as the husband, especially if the latter has many wives. The younger man is expected to pay the older man boomerangs, shields, and so on, in exchange for the woman. However, if the elopers come from sections that should not marry, then a fight would almost certainly follow, and the woman would probably be taken back.

Yet another variant is when a man steals a woman of the right section from her husband, who immediately follows them, and after much discussion takes her back. If he is willing to let the other man have the woman, he will hand her over the next day, without a fight; payment of spears, shields, boomerangs, etc., was expected. In this case there must be another fight after about a month, to satisfy all parties; this may result in bloodshed, but not death. A number of variants on this theme are possible. For instance, the eloping pair might be immediately followed, and the woman taken back, and chastised; should the thief be able to keep the woman until she has had a child, he may return with her to her husband's country with impunity, particularly if she has had no child with the husband; a complementary theft of a woman from the thief's country might be arranged to settle the matter.

Finally, a man may inherit the wives of a deceased brother. Generally, a younger brother has preference, since an older brother is more likely to have sufficient wives. If the deceased man's brothers do not want his wives, they may be given to classificatory brothers. Usually a man who marries another man's eldest daughter will marry the latter's younger sisters as well, or as many of them as he desires; this did not (according to Elkin) apply in cases where a man married his sister's son's daughter, or his sister's daughter's husband's sister's daughter.

1.3.3 Life cycle

Like many other Aboriginal groups the Nyulnyul believed that human beings are the incarnation of preexisting spirits or spirit children called *ray* or *ngarrkalal* (Elkin 1932:438; Coate 1966; Bates 1985:134–139).²³ According to Elkin (1932:438–439):²⁴

Spirit-children, ... [who are] invisible, live in definite centres such as waterholes, springs, trees and rocks on the land and in the sea. The medicine-men are said to know, through dreams, the whereabouts of these places which are, of course, *rai*. The entry of a spirit-child into its mother's womb is always associated with a dream in which the father sees or "finds" it. Further, according to Nyul-Nyul informants, the spirit-child tells the father what its name is to be. It also tells the man that he is the father, and asks him where his wife is. Having given the information to the spirit-child, he may then take it in his hand and put it down near his wife, or on her navel. It will enter her womb, though not necessarily at once. At the time of the quickening, the woman tells her husband that a child has entered her womb. He then remembers "finding" the child in the dream.

Another Nyulnyul conception belief is that if a classificatory brother of a man gives the latter's wife food, a spirit child might follow this into the woman. The spirit child will tell the husband in a dream that he is not the real father, but will have to act in this capacity (Elkin 1932:447). Elkin (1932:439, 449) also asserts that the Dampier Land peoples, including the Nyulnyul, believe in reincarnation, and that some *ray* are reincarnated dead people—not all spirits, however, are reincarnated: some go to Luman, the land of the dead, from which there is no return. (He describes a slightly different conception process for reincarnated persons.)

Little information is available about Nyulnyul birthing and child-rearing practices, and most of it comes from Walter (1982, original version 1928), a not entirely reliable source. Walter (1982:70) asserts that Nyulnyul children were born on the sand, and given a sand bath as their first bath. Babies are carried around in small cradles made from soft paperbark bark, approximately sixty centimetres long by forty-five centimetres wide:

The bark is laid flat on the ground, the child is laid flat on the bark, a string is placed around the bark from the outside, and the mother now takes the bark and the child under her arm, throws the string over her shoulders, and carries her darling like this for hours and hours, under either arm. The child lies comfortable in the Binjen and thrives. (Walter 1982:70–71)

This cradle is used until the child can walk, at which time it travels around on a parent's shoulders, one leg to the front, the other to the back.

Long before the souls are joined to bodies, they wander around waiting for conception. They are called 'Raies' or 'Banbalks'. These Banbalks choose their own parents. During the night the Banbalk appears to the married couple. The man asks, "Who is to be your father?" The Banbalk answers, "you." "And whom do you want to have for a mother?" the future father continues. "That one there," says the Banbalk, pointing to the wife.

If the woman is happy with this, then the Banbalk enters into the body of her child, which God gives to the married couple. When a human being dies, his soul once again becomes Banbalk and can be born anew.

²³ This phonemicisation is based on the Bardi form *ngarrgalala* (Claire Bowern pers.comm.), and the Nyulnyul forms *ngargalul* (Bates 1985:134) and *nagarlala* (Elkin 1932:438). The word is not, however, attested in my own or Nekes and Worms's corpora.

²⁴ Compare Walter (1982:81), who cites Fr Droste on Nyulnyul conception beliefs, as follows:

At around three or four years of age children of both sexes begin to learn boomerang throwing:

Boys and girls take any kind of hard gum leaf between the thumb and forefinger to throw it. With this they only use the forearm in an underarm throw ... and in the moment of throwing they flick their wrist, through which the leaf makes a circualr [sic] movement similar to boomerang throwing. Their skill in throwing leaves is rather incredible. ... When they have enough skill in throwing leaves, they advance to the next stage of using a smooth piece of bark 10×2 cm held between thumb and index finger, to play a game standing in two teams, opposite each other, throwing the bark and trying to hit those of the opposite side. Through a skilful jumping up and sideways, they escape impact, so there is not really much danger of injury. Little girls do not participate in these open games. Parents show the greatest interest in this throwing competition and don't hesitate to encourage opponents by barracking. (Walter 1982: 71–72)

Walter (1982:72) goes on to say that children between the ages of five and ten years were highly indulged, allowed to do as they wished, and were rarely chastised by either parent (see also Bates 1985:143). Children learn about hunting and gathering through going out with their parents. A woman, her daughters, and small children would go out together gathering fruit, roots, etc., and shellfish on the coast. Adolescent boys go out with their fathers, where they learn the necessary skills of hunting and tracking.

As in other Australian Aboriginal societies, the life of a Nyulnyul male in precontact times was punctuated by rituals of initiation that marked his passage from one stage to the next. (Whether the same held for females is not known, though it is likely that a less elaborated series of rituals were traditionally employed.) According to Worms (1938:147), male initiation took place in eight stages (Worms 1986:151–152 distinguishes three more), which lasted over a period of a decade or so, beginning at early adolescence. These rites of passage prepared the male for marriage, and marked his entry into manhood. In addition, as Worms (1986:151) points out, initiation 'is basically a progressive introduction to the religion of the elders and a system of physical manifestations which testify that the candidate has acquired certain elements of knowledge in this domain'.

The last Nyulnyul males to be initiated probably underwent these rites of passage in the late 1890s, by which time the missionaries seem to have succeeded in discouraging the practice. According to Remi Balgalai, the Trappist missionary Fr Alphonse Tachon had remonstrated with the Nyulnyul men to give up initiation, and they had decided: 'He can't do that [i.e. stop them performing their sacred ceremonies] but that is our Law, we old fellows we keep to our Law, we got to stick to that Law til we're dead, but all them boys can follow Christian' (Nailon & Huegel 1990:9). There was thus no one alive when I did my fieldwork who had first-hand knowledge of the rites of initiation. In the first decades of the twentieth century, however, initiated men could still be found, and Fr Worms' writings, primarily Worms (1938, 1986), include information on the rites of passage marking the various stages of entering manhood. Bates (1985) also contains some information, which is in substantial agreement, though Daisy Bates describes initiation practices for Broome and Beagle Bay area Aborigines in general terms, without specifically identifying aspects peculiar to any group. (These works should be consulted for further information, some of which is secret/sacred.)

When a person dies, both men and women hit their heads with sharp stones until they bleed. As elsewhere in the Kimberley region (see e.g. Bohemia & McGregor 1991), for some deaths at least a divination ceremony was performed to identify the person

responsible. Small sticks about ten centimetres in length, *yandal* sticks, are placed near the dead body in the direction of neighbouring tribes, these sticks representing possible murderers, responsible for the killing (Walter 1982:77; Nekes & Worms 1953:923–924). While putting up the sticks, men speak to the dead person, indicating that they expect him/her to name the culprit. The next morning they return to see which stick is dampened at the point; if one is, this represents the person responsible for the death. The corpse is disposed of, and the men from the camp set out armed, to catch the putative murderer. The latter may deny the charge, after which the matter may be dropped after much yelling and shouting. If the person is guilty, a fight follows which ceases only at the death or serious wounding of the person responsible. If the sticks show no sign, this indicates that the death was natural, and no further action is taken.

The corpse was carried far into the bush, and placed in the branches of a tree, facing west, and bound up with creepers (Worms 1986:38; Walter 1982:77); the tree burial platform was called *nandjen* or *jandao*, according to Walter (1982:77). Water, fruit and firewood was left under the tree for the dead person, and then the mourners would leave, requesting that the dead 'keep quiet, not to frighten women or children, to show any lost person the way, and to avert lightning from any lost traveller' (Walter 1982:78). Once the dead body has been left alone, the spirits from the west arrive, and remain with the deceased for several days, after which they take the soul to Luman, the land of the dead, an island located somewhere in the Indian Ocean (Walter 1982:77; Elkin 1932:439; Worms 1986: 169). Some weeks later, the relatives return to the tree and remove the dry bones, which they wrap in paperbark and place horizontally in a hollow tree.

Mourning lasted for about a year. A man's widow would burn down her husband's hut, and lay a wattle branch at the place where he died. Large white circles were painted under her eyes, and white paint was smeared on the chest, arms, legs and back of the mourning widow (Walter 1982:78–79). Children were painted red, while siblings smeared themselves with charcoal. The name of the dead person is tabooed, and possum meat is not eaten for some time by a bereaved person. A widower mourns a deceased wife, but does not paint himself. (Further information on burial and death ritual is contained in Elkin 1927–1928: 50–52, 168.)

A somewhat different account of mortuary rites is provided by Bates (1985:310–311), which is worth citing at length:

In the Broome and Beagle Bay districts the manner of burial varies somewhat from that of their Southern neighbours. Babies are buried in ants' nests and are wrapped in bark, the hole in the nest being scooped out with a digging stick. Little boys are buried in high anthills, the corpse being also wrapped in bark. Bigger boys are buried in trees, and when the flesh has all gone of the bones, these are gathered and put under the ground by uncles or cousins. Young men called wongalong are buried in trees. After three or four days, two or three wongalong climb the tree and cry, and after crying for some time they break all the fingers and toes of the corpse, and taking these they mix up with honey (... honey is eaten only at a certain stage of initiation), and eat the mixture, sucking the marrow from the bones. They wear these afterwards in their forehead band just above the ears, or in their belt. The same proceedings is gone through with the bones of a young girl who is also buried on a tree platform. Sometimes a leg is broken off and the marrow extracted in the same manner. This is supposed to give additional strength and cleverness to the wongalong. Only the wongalong do this, never married men. The spirit of those people, boys and girls, whose fingers and toes the wongalong have eaten come and play with them at night and their spirit follows them about everywhere. The sorcerer can see them coming behind the *wongalong* who have eaten them.^[25]

Old men and old women are buried in the ground. Two spears will sometimes be placed at an old man's head. His boomerang, shield and club are put underneath his head and the body is wrapped in bark. A circle of bushes and small saplings is made round the grave, and a fire is lighted some little distance away. A few mornings after the burial the old man's relatives go to the grave and clean it, and then go to another camp. The dead man's widow (or widows) may come back for a period and clean away the rubbish etc. that might have gathered, but after a time she too goes away from the district. The hair of the dead man will be cut off to show his relatives and they will be satisfied when they see the hair. String may be made eventually of the hair by the dead man's brother. It is wrapped in bark and carried about for some time until it has been shown to all the dead man's relatives. The brother-in-law or father of the dead man may keep the hair. The body is placed on its side with the head towards the south, the feet north, and the face towards the west. The knees are slightly drawn up and the hands clasped together between the thighs. The brothers and sons and male relatives of the dead man put charcoal across their breasts, and across cheeks and forehead. The widows of the dead man make mud curls, also the man's sister and mother. Red ochre and grease are used in making the mud curls, which may sometimes remain on the head during the lifetime of the widows, particularly if they are old women. The daughters of the dead man put charcoal on their faces and breasts.

A lock of the dead man's hair may be twisted by his brother or father and thrown on the ground to unravel itself. Whatever direction the end of the hairstring points is the country of the murderer, and an avenging party immediately sets out for that camp, and someone is killed in retribution.

1.3.4 Totemism and religion

The status of totemism among the Nyulnyul in traditional times is an issue over which there has been considerable dispute in the anthropological literature. The German anthropologist Hermann Klaatsch, who visited Beagle Bay in the early part of the twentieth century, spent a good deal of effort attempting to find evidence of it; his attempts were unsuccessful, and he came to the conclusion that totemism was absent (Klaatsch 1906, 1907). On this Fr Bischofs concurred (Bischofs 1909). When Elkin visited Beagle Bay in 1927–1928 he—like Klaatsch before him—expected to find totemism, but found no trace of it among the Nyulnyul or Bardi people; as he elaborates in his fieldnotes (quoted in Elkin 1933:441):

Even if it were a mater of complete secrecy, which it never is, I should have learned about it, for I have obtained information regarding initiation, the bull-roarer and certain culture-heroes and the songs associated with such, all of which is tabu to the women and uninitiated. I approached the subject from all sorts of angles, but it was like Greek to all with whom I spoke. Perhaps I ought to add that I did gain information regarding totemism from both La Grange, Hall's Creek and Forrest River natives whom I had previously met in Broome, so that my failure in this instance is not necessarily the result of a lack of power on my part. Further, I had amongst my informants in both tribes, men who knew the time when white men first began to live in their country.

Although both Klaatsch and Elkin uncovered evidence of increase songs for a couple of species, as well as corroborees representing certain animals, the beliefs and attitudes

²⁵ Cf. Walter (1982:78), who explicitly states 'The Nyulnyul do not eat any meat from the body'.

²⁶ Bates (1985:207ff) discusses totemism in the Broome area, but makes no specific mention of the Nyulnyul. Stanley Porteus also appears to have found no evidence of totemism among the Nyulnyul; he avers that it had apparently 'fallen into disuse' (Porteus 1931:21).

manifested towards the animals did not show characteristics normally associated with totemism (e.g. group identification with the species, friendly attitude towards it, proscriptions on eating or killing it);²⁷ Elkin (1933:451), however, admits that further investigation might uncover totemic significance for some of these phenomena.

Following his stay in Beagle Bay, Elkin interviewed several Nyulnyul men at Barred Creek, just north of Broome, discovering evidence of conception, dream and local totemism. A father finds the spirit-child in a dream, usually in the form of some species of fish, reptile, snake, turtle, and one marsupial, this species being generally the *jalngk* 'totem' of the father's horde *bur*; only one *jalngk* is associated with each *bur*. Furthermore, there was a taboo on a person eating their totem, although they might possibly kill it.

Elkin (1933:451–452) concludes his discussion of totemism in Dampier Land with the suggestion that the phenomenon did not exist in traditional Nyulnyul belief systems; nevertheless, the Nyulnyul did possess conception beliefs of the type found in groups that recognised totemism. Furthermore, they may have

learnt totemism while associated with Djauor [sic], Nygina, Karadjeri and Djukan men around Broome, and ... realized that the totemic beliefs of these men fitted into the pattern of their own spirit-children and *rai* beliefs, and into the scheme of their local organization. If this be so, it would be very interesting to study the process by which the new beliefs have been, or are still being acquired.

In interviews with Nyulnyul people during the late 1980s I heard on many occasions mention of individuals' totems. For instance, Magdalene Williams informed me (pers.comm.) that her grandfather Felix's totem was the crow (reconfirmed in Williams 1999). However, no information was forthcoming on totemic beliefs.

Like other Dampier Land peoples, the Nyulnyul believed that the world and everything in it came into being during the *bukarrikarr* period, ²⁸ generally translated into English as 'Dreamtime'. The mythical culture-heroes *Kalarlang* and *Minaw* travelled over the countryside making laws, artefacts and various topographic features. At the end of the creative period on earth, *Kalarlang* was apparently killed and went into the sky, to some spot between Centaurus and Scorpio; *Minaw* apparently died near Swan Point, the most northerly tip of Dampier Land, and was buried there. See further Petri (n.d.:3); Walter (1982:79); Worms (1986:128–129); Williams (1999:57–58), which present rather different versions, from various different Dampier Land groups.

Subsequent to *Kalarlang* and *Minaw* came a third 'hero', *Jamarr* (Worms 1986:129; Petri n.d.:9). The laws of *Kalalang* and *Minaw* included both good and bad laws; the latter were reformed and replaced by *Jamarr*'s laws; as well, a number of new institutions were introduced, including circumcision (not previously practised—but cf. Petri n.d.:12), subincision, blood rites, and two kinds of tjuringa, *kalikurru* and *minburr*. According to Worms (1986:129), *Jamarr*, with his three motherless sons, made the first stone axes, and the first fish traps; he then retired to the Southern Cross. More recently, since about 1920, it

²⁷ According to Claire Bowern (pers.comm.) there is some evidence in Bardi of such food prohibitions, though it is not very clear-cut.

²⁸ Although the word is synchronically unanalysable, it clearly derives from the combination of *bukarr* 'dream' and the temporal postposition *-karr* (see §5.13). There is thus in Nyulnyul (and other Nyulnyulan languages) evidence of some conceptual connection between this period and dreaming, contrary to claims by some anthropologists that no such associations existed. See also Green (1992:29, 30); Wilkins (1993: 76, 77), who point out that the Arrernte term *altjerr* means both 'dream' and 'dreaming'.

appears that a new culture-hero, Janba, has been adopted amongst Dampier Land peoples (Worms 1986:130), ultimately from the Arrernte, via trade routes mentioned in §1.3.1.

Another mythical being identified by the Nyulnyul and Bardi is *Lulul*, a giant shark, who protects people swimming in the sea from shark attacks. According to Petri (n.d.:21–22), *Lulul* was the 'boss' of the sea and the life in it, and the originator of laws concerning turtle hunting.

1.4 Speech styles

Little information is available on speech styles in Nyulnyul. A special avoidance style such as is found in many Australian Aboriginal languages for communicating with and/or about certain kin, prototypically the mother-in-law of a man (see e.g. Haviland 1978; Dixon 1980: 58ff; Rumsey 1982a; McConvell 1982; McGregor 1989a), may have existed, but there remains no memory of it. Nor is there any mention of such a style in earlier sources.

According to Carmel Charles, a man should not speak at all to his *yalirr* 'wife's mother' (see also Elkin n.d.d; Hosokawa 1991:7; Stokes 1982:12). Elkin (n.d.d) says that less strict avoidance was practised between two same-sex avoidance relatives, two same-sex *wanyman* 'husband's father, etc.'.²⁹ They could not associate freely with one another, but they could talk through a third person, or with averted heads. Elkin (n.d.d) also remarks that there was a disinclination to utter the wife's mother's name; he observes that in his interviews with Nyulnyul men if a friend were present, he might be given a sign to name the wife's mother.

The only other information relating to speech styles I have located in previous works on Nyulnyul comes from Nekes & Worms (1953:885) (cf. Nekes & Worms 1953:203, 2006: 298, where the examples are cited slightly differently, and only the first is given in Nyulnyul), which briefly discusses and exemplifies an obscenity invoking *warb* 'blood of the blood-letting ceremony' (see Elkin n.d.b; Worms 1938; Bates 1985). They give (1–1) as an example of a curse a man might use against a woman, and observe that eating men's blood is supposed to cause sterility in women.

(1–1) warb wane-wed njoro djaredjar warb wa-na-wid nyu-ru jarrajarr blood 2MIN.NOM.FUT-CM-eat 2MIN-anus leaking "Eat man's blood, your anus is leaking."

The woman's response would be:

(1–2) welger wane-wed djer
wilkirr wa-na-wid-jirr
blood 2MIN.NOM.FUT-CM-eat-3AUG.OBL
"Drink menstruation-blood!"

For this they offer the following elaboration (Nekes & Worms 1953:203, 2006:298):

[This curse] contains an allusion to the secret ceremony of blood, *gangolari*, where initiated men let and drink blood of their companions. At the same time it insinuates a

²⁹ Note that according to Nekes & Worms (1953:854) this term refers to in-laws in harmonic, not alternate, generations with respect to ego.

bad social offence as men are not allowed to have any intercourse with women during the menses. The women have to stay in a separated camp.

I was unable to elicit information about other speech styles often found in Australian languages, such as widows' speech and ritualised joking (prototypically used between a man and his mother's mother's brother). However, according to one part speaker I interviewed there was a special style used when speaking to young children (not uncommon in Australian languages—e.g. Laughren 1984). This was characterised by the addition of final a to all consonant-final words. I have found no other reference to this phenomenon.

1.5 Recent history

Although European contact with Dampier Land peoples probably goes back over three hundred years (see Clement 1990:52), the first significant engagement between Nyulnyul people and Europeans appears to have occurred in the mid to late 1870s.³⁰ The labourintensive pearling industry in Western Australia was then located along the coast between Shark Bay and Port Hedland, and required a sizeable labour force. Initially, this was recruited from the local Aboriginal population, who were abducted and forced to work as divers and labourers on the luggers. But as the local population was depleted (through killing, death, disease, overwork, etc.), blackbirders went further afield in search of slaves; by 1868 they were shanghaiing Aborigines from the La Grange and Roebuck Bay areas, and within a decade had begun raiding the Dampier Land peninsula. By 1879 the Lacepede Islands—located some fifty kilometres out to sea from Beagle Bay—were being used as prison camps for kidnapped Aborigines, who were sold to pearlers (Douglas 1978:53-54; Clement & Bridge 1991:89; Edwards 1991:137; Durack 1969/1985:161).

By the early 1880s the Nyulnyul had had regular and intensive contact not only with blackbirders but also with pearlers (who had by then begun to operate along the Dampier Land coast from their bases in Broome and Derby), guano miners (the Lacepede Islands were rich in guano, used as a fertiliser; the miners frequently visited the mainland to obtain water, which was unavailable on the islands), ³¹ explorers (including Alexander Forest and his party, who entered the Kimberley via Beagle Bay), and pastoralists (who initially landed their sheep at Beagle Bay, prior to the establishment of Derby). Conflict was at times violent, and a number of Nyulnyul people must have been killed, although there are no

Long before the Fathers came to Beagle Bay and started the Mission, I was living with my father and mother, brothers and sisters near the point that white men call Tapper's Inlet. We caught big mob fish there and speared plenty kangaroo. One day some men came off a boat and took my father and some other men into a rowing boat and took them out to a big boat. My father jumped overboard. He swam under water to the shore. The men on the boat were shooting at him all the time. He was too clever. He got away.

Remi further related how many of the young men were taken from the camps, forced on board the boats and taken over the Lacepedes in order to work shovelling guano into barrels to be loaded aboard the boats. They were given hardly any tucker or clothing. Before the wet season they were dumped on the beach without any food, clothing or pay of any kind. (Peile 1972:16–17)

³⁰ For a more detailed account of the postcontact history of the Nyulnyul people, see McGregor (2003b), and references cited therein.

³¹ In an article published in the once popular magazine *Parade*, Fr Anthony Peile quotes the following story, told to him by Remi Balgalai:

entirely reliable records of such killings (early sources did not, of course, indicate tribal affiliations); see however Shackcloth (1950:42–45, 65ff).

In addition to Europeans, many Malays, Japanese, Chinese, Filipinos and Koepangers were employed in the pearling industry, and contact with these outsiders intensified during the 1880s. It is likely that by the end of the decade the Nyulnyul population was seriously depleted. Aside from being murdered by Europeans and Asians, many perished while diving for pearls, while overlanding to their home country from where they had been released by pearlers (Edwards 1983/n.d.:37), as a result of introduced diseases (especially influenza, measles, syphilis, and later leprosy—see further McGregor 2003b; Davidson 1978:124), and due to diminution of natural food resources. By the time A.P. Elkin visited Beagle Bay in 1927, the Nyulnyul population had been reduced, in his estimate, to about 10% of its precontact size (Elkin 1933:279).

Things might have been even worse for the Nyulnyul had it not been for the missionaries. The first mission to be established in Nyulnyul territory was founded in 1884 at Goodenough Bay, by Fr Duncan McNab, a Scottish Catholic priest (see Nailon 2004 for a biography). The venture failed within two years. Then in 1890 a mission was established at Beagle Bay by Trappist monks hailing from Abbaye Notre Dame de Sept-Fons, Dompierre-sur-Bresbre, France. The Nyulnyul appear to have been quick to accept the missionaries presence. No doubt this was partly due to the social disruption and dislocation associated with the advent of pearling, and the missionaries may have been seen as the only viable option to survival. In addition, there can be little doubt that the material goods—primarily food and tobacco—offered by the missionaries were strong inducements; the role of Felix Ngurdinybur may also have been crucial (Magdalene Williams pers.comm.; see also Nailon & Huegel 1990:40; Zucker 1994:41). The Trappists subsequently established another mission at Barnkurduk in 1895, which was soon shifted to Disaster Bay, not far from the site of McNab's earlier mission.

The Trappists remained in Beagle Bay until 1901, when the Pallottine order—an order devoted to missionary work (Bindon 2001; Nailon 2001)—took over. The Pallottines implemented roughly the same routine as the Trappists, but with more discipline. They also insisted on a 'no work, no tucker' policy, rejecting the Trappists' practice of providing food in exchange for mere presence in the mission and participation in Christian ceremony. The Nyulnyul response was a 'no tobacco, no hallelujah' policy—Kolig (1988:385).

The missionaries believed that there were two major obstacles to their work: the nomadic lifestyle of the Aborigines, and the corrupting effect of the pearlers, both European and Asian. Thus, they attempted to cure the Aborigines of their desire to periodically 'go bush', and at the same time to isolate them as far as possible from outside influences—which they believed would debauch and corrupt the 'innocent' and 'childlike' Aborigines (Walter 1982:131). The missionaries' success on neither count was impressive or encouraging (Bates 1938/1966; McGregor 2008).

Shortly after the Pallottine take-over, events occurred which were to have an enormously disruptive impact on the social fabric of the Beagle Bay Aboriginal community. Perhaps the most critical was the influx of alien Aborigines. In 1904 Royal Commissioner Walter E. Roth found large numbers of part Aborigines ('half-castes' in the terminology of the day) in the central Kimberley, and recommended that they be brought under the civilising influence

³² According to the previously mentioned map published in Nailon (2004:184), Goodenough Bay lies in Nimanburru country. However, most other sources place it in Nyulnyul country (see Map 1–2 above).



Plate 1–3: Aboriginal people at Beagle Bay Mission early twentieth century Courtesy State Library of Western Australia, The Battye Library, 67125P

of the missions (Durack 1969/1985:180). The Beagle Bay Mission was not averse to the idea, as it would boost the small number of Aborigines on the mission, and consequently the government subsidy. In the years that followed, Beagle Bay became a so called 'dumping ground' for part Aborigines. (Nailon & Huegel 1990 presents life stories of a number of Beagle Bay residents brought in as children from elsewhere.)

The missionaries encouraged marriages between young Nyulnyul men and young part Aboriginal girls, a practice that had significant social and sociolinguistic repercussions. Granted that the part Aboriginal girls would have spoken little if any Nyulnyul, this must surely have dislocated the Nyulnyul speech community, and may partly explain why no one who was born in Beagle Bay after 1912 appears to have become a fluent speaker of the language.

The practice of bringing part Aboriginal children into the mission came to an end when A.O. Neville became the Chief Protector of Aborigines in 1915, because of his dislike for the mission (Walter 1982:202). However, the damage had already been done, and the non-Nyulnyul residents progressively outnumbered the autochthonous Nyulnyul, to the extent that today few of the latter remain on the mission. Even after Neville had curtailed the importation of part Aboriginal children events occurred which brought numbers of outsiders into the mission. First, in the early 1930s Beagle Bay was used as a temporary base for the lepers who had been brought in from throughout the Kimberley, before the establishment of the Derby leprosarium at Bangaran (Davidson 1978:37–39). And second, following the bombing of Broome in 1942, the entire Aboriginal population of the town and nearby stations was evacuated to Beagle Bay. Even though the Broome children attended a different school from the local children, it is likely that the influx of such large numbers of evacuees had an appreciable effect on the Beagle Bay community, further fragmenting it.

The dormitory system was another very disruptive institution instigated by the Beagle Bay missionaries. A dormitory had already been established in Trappist times to protect the women from the pearling crews. There is also some evidence that the beginnings of a dormitory system for children had been introduced by the Trappists, though for boys only: according to Remi Balgalai, when he was a boy he spent some time in the dormitory, although the girls still slept with their parents in the camp (Nailon & Huegel 1990:8–9). This practice was continued by the Pallottines: Lawrence Clark, who was taken to Beagle Bay in 1904, says that boys went to a dormitory while girls remained in the camp.

The restriction of the dormitory to boys was apparently due to disinclination of the priests and brothers to supervise sleeping arrangements for girls. But on the arrival of the Saint John of God nuns in 1907, Nyulnyul parents were asked to give their children, both boys and girls, to the mission until they turned ten (Biskup 1973:128). This became accepted practice, all children being taken at about the age of six or seven from their parents, and brought up in the mission dormitories; they were permitted to visit their parents only on weekends.

Most of those who grew up after about 1910 spent many years in the dormitories: women I spoke with remained in the dormitories until they were eighteen to twenty, and had either married, or had gone to domestic service somewhere in the north-west. The following description by Mary Carmel Charles (pers.comm.) provides a succinct account of the day-to-day life of those who went through this system:

We were put in the dormitory about 8 o'clock to go to bed. We said our night prayers before going to sleep. The nuns locked our door. We didn't get out til the morning. The nuns used to come and open the door. We had a wash and got ready to go to church. We went to church. After church come back ate our breakfast. After breakfast, we all did our jobs. When I was seventeen or eighteen ... I started work. I went to school til I was fifteen; that's the limit. I milked the goats [that was my particular job]. Went to school when I was six or seven; we were taught by the nuns. After school, go down to the ... woodheap where the men had chopped wood, cut that wood for cooking, kitchen. Two or three older girls were cooking food in the convent for the nuns and brothers. Boys were taught by the brothers; girls by the sisters. Nuns taught us needle work.

As elsewhere in Australia, the dormitory system no doubt contributed significantly to the shift away from speaking the traditional language: children were isolated from regular daily contact (including spoken interaction) with their parents and grandparents, the social environment of the dormitory included substantial numbers of non-Nyulnyul speaking children, and finally it appears that the children were discouraged from speaking Nyulnyul (opinions on this point differ, however).

In the 1920s the mission adopted, in response to demands from the white residents of Broome, and the Chief Protector of Aborigines, the practice of sending mission trained Aborigines away from Beagle Bay to work. Although this was initially restricted to part-Aborigines, Nyulnyul people also began leaving Beagle Bay for employment, and many left permanently, returning only for visits. This was yet another factor contributing to disruption of the Nyulnyul speech community, and ultimately the demise of the language.

Beagle Bay Mission was for many years regarded as a model mission by the Catholic establishment; indeed, it was described favourably by many visiting anthropologists and travellers, impressed by both the material circumstances of the mission, and the methods of conversion employed. For instance, A.P. Elkin was very favourably impressed by the scene he observed in December 1927:



Plate 1–4: General view of the colony at Beagle Bay Mission, probably in the 1920s Courtesy State Library of Western Australia, The Battye Library, 77167P

Neat rows of mud-brick huts, scrupulously swept ground, a bricked-in bath that refilled itself every 48 hours, patchwork vegetable plots and picturesque clump of coconut palms were all surrounded by neat borders. (cited in Wise 1985:57)

The social psychologist Stanley Porteus, who visited Beagle Bay the following year provides a fuller description of the mission precincts in *The psychology of a primitive people* (Porteus 1931:1–2). As he relates, not far from the Beagle Bay church and mission buildings was the 'colony' where Aborigines more or less associated with the mission lived, in small one room mud-brick huts. About a quarter of a mile further away, on a sandy rise, was the Aboriginal camp, which consisted of a group of low huts about four feet (a little over a metre) high, with walls of paperbark. This was where the Aborigines who were not fully 'under the restraints and influence of the mission' lived; these were mainly old men and women who still regularly went walkabout.

The day for mission Aborigines—those living in the colony—was regulated by routines of work and Christian ritual (see e.g. Walter 1982:196–199). However, at night they were permitted freedom to do as they liked, and secular corroborees were regularly performed, the colony residents joining in with the camp residents. The missionaries did not discourage them (indeed, some actually joined in). This practice apparently continued until the 1930s (Walter 1982:7–8).

Even in the late 1920s, nearly thirty years after the Pallottines arrival, and almost forty years after the establishment of the mission, Walter (1982:14) was able to remark:



Plate 1–5: The colony and church at Beagle Bay Mission, probably in the 1920s Courtesy State Library of Western Australia, The Battye Library, 77168P

Despite all the changes that missionary influence had induced, the aborigines (sic) at Beagle Bay were still living in sufficient numbers, and still under the authority of men old enough to antedate the coming of the missionaries, so that they retained some of their most characteristic customs and attitudes.

As Porteus (1931) elaborates, retention of the old customs and beliefs was due to the influence of older men who had been brought up outside of the mission influence. Indeed, he even witnessed the performance of sacred *wangka* songs, which had been kept secret from the missionaries: for although the missionaries were happy to permit secular corroborees, they did not approve of sacred ones associated with male initiation. Porteus was also permitted to visit a storehouse of Nyulnyul tjuringa stones with the older men. A few years later, in 1933, Father Worms was presented with a half a dozen or so of these items (Worms 1986:76–77). The following year he discovered some sacred boards in a tree, which he presumed had been abandoned and forgotten (Worms 1986:42). According to Durack (1969/1985:287), by the late 1930s the remaining old men realised that their law would soon disappear; fearing accidental discovery and the possibility of serious harm to a finder, they gave these items to Fr Worms for safe keeping.

Things have changed substantially since the 1930s. All the old people who constituted links with the pre-mission past have long since died. And with them have gone traditional knowledge, rituals, sacred paraphernalia, and so on. What remains is just a small amount of secular knowledge: a half a dozen or so traditional myths (including the story of the crow

(Torres & Williams 1987), the story of the emu (Charles 1993, and Texts 1 and 2), and a selection of others in Williams 1999), and some knowledge of traditional lifestyles and kinship.

From the mid 1970s the Pallottine missionaries began withdrawing from Beagle Bay. Sometime in the mid to late 1970s the former Beagle Bay Mission pastoral lease was signed over to the Beagle Bay Aboriginal community, to be run as a cattle station. None of the Pallottine fathers or brothers now remain as residents; the last surviving resident missionary, Fr Francis Hügel, died in the 1990s. Nevertheless, links with the Church remain strong: Church services are still conducted regularly, and the local school is run by the Catholic Church. Moreover, the church built by the Beagle Bay people during the First World War physically dominates the community and remains a lasting monument to the missionary past.³³

1.6 Sociolinguistic situation

Nyulnyul has been, as of the end of the twentieth century, an extinct language: no fluent speakers remain, and the language is not used as a primary vehicle of daily speech interaction. The last fluent speaker, Mary Carmel Charles was born in Beagle Bay Mission in 1912, and died in Broome in 1999. From about the time of the Second World War, she resided in Broome and Derby, away from traditional Nyulnyul country and from regular day-to-day interaction with Nyulnyul people other than her immediate family. Another fluent speaker, Albert Kelly, was born in 1916; he died in Derby in 1986 or 1987.

In the last two decades of the twentieth century there may have been a dozen or so part speakers of the language living in Beagle Bay, Broome, Derby, and even further afield; some survived into the twenty-first century. As part speakers, these individuals lack full speaking control of the language, and would not be able to converse fluently in it, or narrate a story on-line, without prior preparation. One part speaker, however, has published a traditional story in the language (Torres & Williams 1987); my guess is that the text was carefully planned and executed over a period of time, and is not edited from a spoken story, as is the traditional story told by Mary Carmel Charles (Charles 1993).

The grammatical system of part speakers shows evidence of simplification (see §2.3 below and McGregor 2003b). On the other hand, part speakers probably have good level of comprehension, and know a considerable number of words, especially names of flora and fauna, important cultural items, and parts of the human body. The majority of part speakers apparently are of Nyulnyul ancestry, although there may also be some who are primarily Jabirrjabirr or Nimanburru.

Intensive casual observation during visits to Beagle Bay in 1986 and 1990 revealed that all adults over the age of fifty (at that time) knew numerous Nyulnyul nouns for flora, fauna, traditional artefacts, and parts of the body, even though few were Nyulnyul by ancestry, or part speakers of the language. Aboriginal English was—and presumably still is—the primary language of the community, and everyone spoke it most of the time. However, they frequently spice their English with Nyulnyul words, especially when making reference to flora and fauna, and when speaking about hunting and gathering activities. This is illustrated in the following examples from transcripts of conversations between missionaries and Beagle Bay residents, published in Nailon & Huegel (1990)—and I have heard numerous similar utterances myself:

³³ The bell tower collapsed on the night of 7th September 2001, but was restored in the following year.

- (1–3) We would go bush for gubiny, wonger (honey) and gulai. (Lena Cox; Nailon & Huegel 1990:22)
- (1–4) When I was little, I did not go fishing, I was round spring, digging berries 'bilgin' bush fruit. Me and my grandmother used to go picking up perendin from sand like potatoes, ngerongden, plum. Other bush fruit, dun, yumbug, medingurrah, kabin, wangarrin, belinar, galumbara, bermugumgulla, I went with grubbing sticks. (Senanus Yulugut; Nailon & Huegel 1990:24)

This sprinkling of traditional lexical items into discourse predominantly in Aboriginal English is a common phenomenon in Aboriginal communities in the Kimberley and elsewhere in Australia (e.g. McConvell 1991:154; Austin 1986:207; Dixon 1980:85, 1991; Donaldson 1985:145; Thieberger 1990:340). It is generally agreed that it often serves a symbolic function, expressing the self and/or group identity of the speaker; inclusion of the occasional word from the traditional language is sufficient to index the speaker as a member of that social group.³⁴

In fact, Nyulnyul now appears to be used almost exclusively symbolically, to index the social identity of the speaker, and not as the primary channel for the communication of information.³⁵ This is presumably what motivated the only instance of freely spoken Nyulnyul which I ever observed—Mary Carmel Charles' proud use of her language in the presence of, and addressed to, the mainly white audience at the launch of her book *Winin*, in Derby in 1994. In this instance, the social identity constructed was that of a person of Nyulnyul descent; in other cases it appears to be as a denizen of Beagle Bay (who may have no significant Nyulnyul affiliation).³⁶

Another use of Nyulnyul in recent times was in language elicitation—indeed, this environment may well account for the bulk of spoken Nyulnyul sentences that have been produced in the past decade or two. Other than this, the language is occasionally used in religious liturgy. Mary Carmel Charles informed me that she often recited prayers and the rosary in Nyulnyul, and I recorded two or three performances of them. A number of part speakers and rememberers also remember some of the liturgical materials. However, it has been many years since the Pallottine priests last intoned these Nyulnyul texts, once the pride of the Beagle Bay missionaries. They were even forgotten in the 1990 Centenary of the

Another possible reason for this usage of terms from the traditional language is that ordinary English lacks specific names for many of the local species of flora and fauna. While there is probably some truth to this explanation, many species do have more or less specific designations in Aboriginal English, in terms such as *bush potato*, *bush apple*, *goanna*, etc. Furthermore, recent times have seen the spread of species terms from languages of the Broome area into Dampier Land languages; these terms may be more frequent than terms of the indigenous traditional language. This observation is consistent with the symbolic function explanation, given that in modern times identity (especially of children) is construed at least as much in terms of general Aboriginality as specific group identity as Nyulnyul, Jabirrjabirr, or Bardi.

³⁵ This appears to have been the situation for some considerable time. Fr Kevin McKelson, who first went to Beagle Bay in the early 1950s, observes that 'the only time I've heard Nyulnyul spoken in Beagle Bay was when people referred to fauna and flora—relics of a bye gone age' (pers.comm.).

³⁶ This is sustained by the strong association between language and land in Aboriginal ideology (e.g. Rumsey 1993). Partly because no other traditional group displaced the traditional owners of Beagle Bay, the Nyulnyul, their language has become the appropriate language with which to establish one's social identity as a member of the Beagle Bay community as distinct from any other Dampier Land community.

Beagle Bay Mission, much to the chagrin of Mary Carmel Charles, who had been practising them for some time, in the expectation of being invited to perform them publicly.

In the 1980s and 1990s Beagle Bay school children also knew the Nyulnyul names for the most common flora and fauna in the area, and used them socially-indexically in their predominantly Aboriginal English discourse. As for those of intermediate ages, from about twelve to forty-five, I am unable to comment on the extent of their knowledge of Nyulnyul.

It is possible that at the end of the twentieth century two hundred or more people knew at least some Nyulnyul words, although only a handful of them would have spoken the language well enough to make even very simple meanings. All of them used some variety of Aboriginal English as their everyday language, even amongst themselves. The Kriol of the Kimberley cattle country does not appear to be widely spoken, except perhaps by school children. Quite probably some of the older ones speak, or at least understand, some Bardi (although no one I spoke to in the Beagle Bay community admitted to speaking that language!),³⁷ and perhaps some Jabirrjabirr or Nimanburru. Whether Nyulnyul has retreated or gained ground since then is not known.

The situation for Nyulnyul is not exceptional: Nyulnyulan languages are among the weakest of the traditional Aboriginal languages in the Kimberley region. All are in precarious states, and unlikely to survive far into the twenty-first century as primary languages of communication. Nyulnyul's three closest congeners, Jabirrjabirr, Nimanburru and Ngumbarl appear to be without any fluent speakers, although they may have rememberers, possibly even part speakers. Fortunately, Frs Hermann Nekes and Ernest Worms gathered information on these languages in the 1930s and 1940s, when they were still actively spoken—Nekes & Worms (1953, 2006); see also §1.8 below.

1.7 History of language choice, use and shift among the Nyulnyul

Prior to European arrival Nyulnyul people presumably spoke Nyulnyul most of the time; they would have understood the neighbouring varieties, which they perhaps also spoke. As has already been mentioned, these varieties—indeed all language varieties they would have been likely to have had regular contact with—are fairly highly mutually intelligible with Nyulnyul. Speakers would not have needed learn these varieties in order to understand most of what was being said. When members of various 'tribal' groups got together for ceremonies, each could speak in their own language, and be understood by their interlocutors, who in turn could speak in their language. Dominic Charles (in a conversation with Patrick McConvell in 1984) recalls that in his youth, in the 1930s, Bardi and Nyulnyul people used to speak to one another in their own language. A number of personal communications to myself from Beagle Bay residents and Nyulnyul people attest to this. Reporting on his baptism, Remi Balgalai says: 'Father asked in Nyulnyul, "Do you believe?" and I answered in Djabberdjabber' (Nailon & Huegel 1990:10).

As has already been remarked, interpersonal contacts were not restricted, even in traditional times, to people residing in contiguous areas. Trading expeditions sometimes extended outside of the local region (see p. 14 above). And ceremonies were occasionally jointly performed with peoples from as far afield as La Grange Bay.

³⁷ Rivalry with Bardi has a long tradition. Elkin observed in 1927 that the Nyulnyul displayed negative attitudes to the Bardi, believing their law to be inferior (Elkin 1938/1974:68). As might be expected, this attitude is reciprocated (Claire Bowern pers.comm.). Ironically, it seems that the Bardi of One Arm Point are now the custodians of Nyulnyul initiation ceremonies.

Quite likely, by 1880 some Nyulnyul persons had picked up at least some English, perhaps in the form of an early coastal Pidgin English used by pearlers (Hosokawa 1987). Over the next decade or two more and more Nyulnyul would have learnt this pidgin as outside contact intensified. Later, some would have learnt Broome Pearling Lugger Pidgin, a Malay based pidgin spoken amongst pearling lugger crews from the time of introduction of indentured Asian labourers in the 1890s (Hosokawa 1987). However, it is unlikely to have been widely used in Beagle Bay: according to Hosokawa (1987), Pidgin English was the main medium of communication between the Asian crews and Aboriginal women in Broome—and the same situation is likely to have obtained in Beagle Bay.

When the Trappists arrived in 1890 Nyulnyul would have still been the dominant language in Beagle Bay, used most of the time, except when talking to pearlers. The Trappists immediately set about learning Nyulnyul. According to one priest who arrived a year after the founding of the mission, the rosary and a few hymns had already been translated into Nyulnyul by Fr Alphonse Tachon (Walter 1982:130). Fr Alphonse continued translating Catholic liturgy, and, claims Durack (1969/1985:63), was ultimately to translate the Paternoster, Ave Maria, Gloria, Credo, and a gospel (though the latter is unconfirmed).

According to information passed on to Fr Walter by Nyulnyul people who had been through the Trappist times:

Most adults readily attended Catechism classes. Religious instruction was given in Nyulnyul which they said Father Alphonse spoke perfectly. About 12 boys and girls were taught in the school where lessons were given in French. The children picked it up easily, for the majority of Blacks, especially the young, have a gift for languages. (Walter 1982:131; cf. Biskup 1973:48).

Remi Balgalai, who attended the Trappist school, concurs: he was mainly taught in French in the school, although the Nyulnyul prayers were taught (Nailon & Huegel 1990:8).

The Trappists' use of French and Nyulnyul may well have been partly due to imperfect control of English by at least some of the missionaries, though one brother and father were native speakers. But this may not have been the only consideration, as indicated by the following quote from a letter from Fr Alphonse to Bishop Gibney (dated 27th July 1891):

If the natives are taught English they will be always more inclined to get to the boats and the white men. Would it be good to teach only to read and write in their own language as the Jesuits did in Paraguay? (quoted in Durack 1969/1985:69).

When the Trappists departed in 1900, according to Durack (1969/1985:124), Nyulnyul was still the lingua franca of the Beagle Bay Mission, although English and French were also spoken.³⁸

The Trappists seem to have been more positive towards Nyulnyul than the Pallottines, who took over the mission in 1901. The Pallottines used it only in religion, and then inconsistently, depending on the inclinations of the individual priests. Initially, there must have been a language barrier, as the Nyulnyul had apparently learnt little standard English from the Trappists and pearlers, while the new missionaries knew no Nyulnyul. Soon after the arrival of the Pallottines, G.S. Olivey, a Travelling Inspector for the Aboriginal Protection Board, visited Beagle Bay, and reported that Fr White had given a simple sermon in English, which one of the Aboriginal men translated into Nyulnyul (Walter 1982:140). The congregation also sang hymns that had been translated by the Trappists.

³⁸ One Trappist missionary, Fr Nicolas Emo, was a Spaniard (Nailon 2005a, 2005b). There is no evidence that any significant amount of Spanish was acquired by Beagle Bay residents.

It was not until 1904 that Fr Rensmann began to preach and give lessons in Nyulnyul. However, he died after only a year of service. Father Bischofs, who joined the Mission staff in 1905, also began to learn the language, and gave religious instruction in it. This was also relatively short lived: by the time Father Worms arrived in 1930 he discovered that all study of Aboriginal culture and language, as well as use of Nyulnyul prayers and hymns, had ceased following the removal of Fr Bischofs during World War 1 under suspicion of espionage.³⁹

In Pallottine times only English was used the Beagle Bay school, and those who attended achieved a high degree of literacy and fluency. Worms is probably correct in his claim (Worms 1970:372) that the majority of the Beagle Bay Aborigines could read and write, and that they wrote letters in both English and the traditional languages. Unfortunately, he does not indicate specifically whether he ever received a letter in Nyulnyul, or whether there was any tradition of writing Nyulnyul; at best, there was probably limited written interchange between himself and Nyulnyul people. Literacy in traditional languages may have been largely the result of extension from English literacy. This seems to have been the case for Mary Carmel Charles, whose system of spelling Nyulnyul clearly employed English-based principles.

Speaking Nyulnyul (or any other Aboriginal language) appears not to have been permitted in the dormitories. This is confirmed by Dominic Charles in the above-mentioned interview with Patrick McConvell in 1984, as well as in various interviews I have conducted with Nyulnyul people. There is, however, some disagreement on this issue among those who went through the system.

By the 1920s English was apparently well along the road to becoming the major language of Beagle Bay:

In Beagle Bay, the Nyulnyul because of pearling, has been mixed with languages of other coloured races, and only on Sunday Island and Lambadina where the Blacks were more isolated, has the language remained pure. The English language has made such inroads in our area that the Aboriginal languages no longer have as much meaning in Church and Religious Instruction as they had in the time of the Trappists. Of course, the old Nyulnyul songs are still sung, and prayers translated into Nyulnyul by the Trappists are still said, but on the whole, English is the only language used. (Walter 1982:83).

It is not clear whether Walter meant that English was the primary language used in religious contexts, in the mission precincts, in the Colony, or in the nearby Aboriginal camp. But in any case by this time most Beagle Bay people could evidently understand, if not speak English.

Walter (1982:83) also states (still speaking of the 1920s) that when Nyulnyul people spoke to Bardi people, some sort of broken or creole Nyulnyul or Bardi was used. What precisely he meant by this is uncertain. Perhaps he is referring to a high level of borrowing of English words into the Nyulnyul or Bardi discourse, or to frequent code-switching between these languages and English. If so, this could suggest that an early manifestation of the process of language death for Nyulnyul was extensive borrowing from, or codeswitching to English. This may perhaps have begun in the context of speaking to outsiders

³⁹ This may be an exaggeration. According to Father Walter, during the 1920s even though English had become the main language for sermons, Nyulnyul songs were still sung and prayers prayed (Walter 1982: 83). My own research tends to support Father Walter on this point: those who were children in the period 1910–1930 were taught to say their prayers, the rosary, the Hail Mary, and the Pater Noster in Nyulnyul.

and later extended to in-group speech. (Interesting as this may be, it remains a speculative interpretation of a perhaps unreliable observation.)

Within the following decade the process of language shift appears to have accelerated. The following passage from Worms (1970:376)—which I take to be referring to the 1930s and possibly 1940s, when he resided for periods in Beagle Bay—is one of the few places where he gives an appraisal of the sociolinguistic situation of Nyulnyul:

The old people still speak their own tongue; the children are taught in English to help them become more able citizens of a mixed community. The middle generation understands both languages, uses mostly English among themselves, and can still follow the conversation of the older folk.

According to Fr Kevin McKelson, when he first arrived in Broome in the early 1950s—a decade or so after the period that Worms was most likely writing about—twenty or so speakers of Nyulnyul remained in Beagle Bay. By then, men and women who had any real experience of life prior to the establishment of the mission would have been aged in their eighties and nineties, and few would have survived. (Felix Ngurdinybur died in 1931—Zucker 1994:41). Those with any substantial links to traditional life—in the form of experience of traditional life as children, or men who had been initiated—would have been in their late sixties or older. Both of these age groups presumably represent the old people referred to by Worms in the above quote (all would have been over fifty in 1935). Worms' middle generation would by this time be in their mid to late fifties, and would have been born during Trappist times. Most likely they were fluent speakers of Nyulnyul, though (according to Worms) they generally used English amongst themselves.

By the late 1960s and early 1970s, the middle generation of the 1930s would have been in their seventies and eighties, and probably represent Nora Kerr's (n.d.) estimated four or five good speakers. Somewhat surprisingly, almost ten years later Stokes estimated less than 10 speakers (Stokes 1982:9); Hudson & McConvell (1984) estimate two or three old fluent speakers, plus ten or more part speakers; and I estimated two fluent speakers—more accurately, formerly fluent speakers—and about a dozen part speakers in 1985. Thus, there was a small group who were born in, and grew up during the early Pallottine years, who learnt to speak the language, presumably during their early childhood in the colony, before being taken to the dormitories at the age of six.

To wind up this section, it may be useful to outline an age-based sociolinguistic profile of the Nyulnyul speech community as it was towards the end of the twentieth century. The last two fluent speakers, now deceased, were born in the early 1910s, of parents who were probably born shortly before the arrival of the first missionaries. The best part speakers seem to have been born in the 1920s. Their parents would mostly have been born during Trappist times or later, and brought up in the Pallottine mission environment; just a few may have been born prior to Trappist times. Anyone born after about 1930 appears to be a rememberer who understands some of the language, but is able to effectively use no more than isolated lexical items; I know of no part speakers born during the 1930s. Finally, the Beagle Bay children of the 1970s to 1990s were brought up in an environment in which there were probably no fluent speakers of Nyulnyul, and whose parents knew just a few words; these children also know only isolated words (see p. 34 above).

1.8 Orthography

Nyulnyul has no well-established orthography, and virtually every publication in the language, about the language, or citing words of the language, employs its own distinct system. These include the French-, German-, and English-based broad phonetic systems of the early missionaries; the more orderly phonetic systems of some anthropologists and missionary-linguists; the phonemic system of modern linguists; and recent practical orthographies used in Nyulnyul literature.

The missionaries who wrote Nyulnyul mostly spelled the words according to the way they sounded to them, as native speakers of English, French, Spanish, and German. Thus, they usually distinguished too many vowels: frequently e and o as well as the three phonemically distinct vowels i, u and a. On the other hand, too few consonants were distinguished; for instance, the phonemic distinction between apico-alveolar and apico-postalveolar articulation was not recognised for stops and nasals, and often the glide r was not distinguished from the tap/trill rr.

In 1984 Joyce Hudson and Patrick McConvell recommended that two phonemic orthographies be adopted for Kimberley languages: one for the 'north Kimberley' (non-Pama-Nyungan) languages; the other for the 'south Kimberley' (Pama-Nyungan) languages (Hudson & McConvell 1984:47ff). These recommendations have never been adopted, and since 1984 a considerable number of variants have been proposed—and to some extent used—for Kimberley languages. McGregor (1988a:7), for instance, recommends four main variants of the Hudson and McConvell 'north' Kimberley orthography, including one specific to the Dampier Land languages, which is based on the system that had at that time been proposed for Bardi. (The current Bardi orthography was not adopted until 1990 according to Claire Bowern pers.comm.) A slight variant of the system I recommended for Dampier Land languages is adopted in this grammar; it uses the following letters and digraphs:

Vowels: a, aa, i, ii, u, uu

Consonants: b, m (bilabials); d, n, l, rr (apico-alveolars); rd, rn, rl, r (apico-

postalveolars); j, ny (lamino-palatals); k, ng (dorso-velars); and w, y

(semivowels)

(The only differences from the system recommended by Hudson & McConvell 1984 are that u is employed for the high back vowel, instead of oo, and uu is used for its long variant, in place of the awkward $\delta\delta$.)

The first commercially published book in Nyulnyul, a children's book, appeared in the late 1980s (Torres & Williams 1987). The practical orthography it uses differs slightly from the above: it employs oo for the high back vowel; it uses g for the velar stop, except when following n, in which circumstance k is used; and it distinguishes the mid back vowel o, which is not a distinct phoneme in the language. The same system is employed in Charles (1993) and Williams (1999), except that o is not used in the former work.

1.9 Data used in this investigation

My involvement with the Nyulnyul language and people goes back to 1985, when I was employed as linguist for the Kimberley Language Resource Centre, then located in Broome. During the year or so of my stay in that town I gathered a reasonable amount of basic lexical and grammatical information on the language, primarily from the fluent speaker, Mary

Carmel Charles,⁴⁰ and from a part speaker, Magdalene Williams.⁴¹ I also conducted a number of sociolinguistic interviews with these two women, as well as with other part speakers and residents of Beagle Bay.

By late 1986 I had become interested in a number of Northern Kimberley languages traditionally spoken to the north and east of Derby (Unggumi, Umiida, Unggarrangu, Yawijibaya, and Worrorra), and secured funding from the Australian Institute of Aboriginal and Torres Strait Islander Studies and La Trobe University to undertake salvage research on these languages in 1987 and 1988. I was overjoyed to find on my arrival in Derby that Carmel Charles had moved there from Broome, and we began intensive elicitation of language material, focussing on the grammar and the lexicon.

On my next two field trips, in 1990 and 1992 (funded by the National Aboriginal Languages Program and Australian Research Council), I again found Mrs Charles in Derby, and we continued our collaboration, again focussing on the grammar and lexicon. Unfortunately, however, I found on my return 1994 that she had moved to Broome, and a commitment made to the remaining speakers of Warrwa precluded our collaboration, as it did again in 1995. By this time, however, it was clear that intensive work with Mrs Charles was out of the question, due to failing eyesight and health.

The material gathered on these field trips constitutes the primary data base for the present study. It was all formally elicited. Nyulnyul was no longer in daily interactive use, and it did not prove possible to stage an interaction between any speakers or part speakers. Unfortunately, due to other commitments—and to the paucity of speakers and part speakers—I was unable to devote as much time as I would have liked to fieldwork on the language. In total, only about 160 hours of elicited Nyulnyul were recorded on cassette tape, including historical, anthropological and sociolinguistic material as well as grammatical and lexical information.

⁴⁰ As has already been mentioned, Mary Carmel Charles was born in 1912 on Beagle Bay Mission. Her father was a Nyulnyul man, her mother a Warrwa woman from the Windjana Gorge area to the east of Derby. After leaving school at the age of 15, she stayed on in the convent, doing odd jobs. Carmel Charles married in 1933, and shifted to Lombardina for a short while until the death of her first husband. She then returned to Beagle Bay where, together with Remi, Gabriel, and Butcher Joe, she was (she avers) one of the informants (unacknowledged) for Fr Nekes. In 1939 she shifted to Broome with her second husband, who was working on a pearling lugger. Except for a brief spell during the Second World War when she returned to Beagle Bay, Mrs Charles lived in Broome until 1986, when she shifted to Derby, where she stayed for nearly ten years before returning to Broome. She died in Broome in 1999. (See Lawton 1979 for a fuller biography.)

⁴¹ Magdalene Williams (1921–1995)—matrilineal granddaughter of Felix Ngurdinybur and Madeline—was also born on Beagle Bay Mission. As a child she attended school there, and lived from the age of six or seven in the dormitory. Probably during the 1940s she spent six months in Balgo Mission with her family, assisting the missionaries. Later, she went to the La Grange mission, where she did cooking and cleaning. She later moved to Broome, where she was living when I first met her in 1985. (See also Nailon & Huegel 1990:42–44; Williams 1999.)



Plate 1–6: Mary Carmel Charles

The fluent speaker I worked with, Mary Carmel Charles, became deaf sometime around World War 2, and the only effective way of communicating with her was by writing 42—and luckily she was highly literate in English, having been well taught by the Saint John of God nuns in the Beagle Bay school. Our elicitation sessions thus consisted of my writing down prompt sentences, which she would translate into Nyulnyul. (I would normally also read out the relevant English prompt, for record-keeping purposes.) As might be expected given such a procedure, the corpus is rather stilted and confined in comparison with corpora I have elicited in languages with hearing speakers.

Moreover, an important backchannel was absent: the speaker's responses to my repetitions of her utterances. These responses provide the field linguist with an important source of phonetic (and ultimately phonemic) information: as a result of a native speaker's corrections or verifications of the linguists' utterance, it is possible to gauge to some extent one's articulatory control. Of necessity I was restricted to auditory cues, and the occasional visible articulatory cue. Thus I have less than full confidence in the phonemic representation of some Nyulnyul words.

Furthermore, as is well known, deafness generally affects a person's speech; being able to monitor their speech only to a limited degree, it becomes difficult to ascertain that articulatory targets have been reached, and articulation usually deteriorates quite rapidly. In Mrs Charles' case, intonation and other prosodic features were most affected: her connected speech often sounded either monotonic or showed exaggerated pitch movements, and many

⁴² She never learnt a sign language, and we did not use a systematic system of manual signs in elicitation. However I did observe that she used what appeared to be a system of home signing when communicating with other Aboriginal people in Broome and Derby. Unfortunately the opportunity to study the system never arose, and it is not known how conventionalised or extensive it was.

vowels were much longer than expected. Quite possibly her articulation was affected to some extent. However, having no other fluent speaker to compare her speech with, this cannot be known for certain. 43 My impression is that many apical consonants were articulated with concomitant r-colouring of the previous vowel, irrespective of whether or not they were phonemically alveolar or postalveolar. Consequently, it was often difficult to distinguish between apico-alveolar and apico-postalveolar consonants, even for a practised ear.

Possibly also at least in part due to her deafness, Mary Carmel Charles did not like narrating monologic texts in Nyulnyul, and only a few were elicited, in spite of the enormous amount of effort I put into encouraging her to tell me stories. ⁴⁴ A selection of these texts are included in Volume 2. The entire corpus of elicited texts—including texts by Albert Kelly ⁴⁵ and Rosie Victor, ⁴⁶ recorded by Bronwyn Stokes (see Texts 2 and 5)—is too small to permit a serious textual study, although it is sufficient to permit some preliminary observations and hypotheses.

The fieldwork methodology of necessity has another important characteristic. The present description is based entirely on occurring utterances. Ungrammatical/unacceptable utterances play no part in the description. Aside from the well-known problems associated with eliciting speakers' reactions to constructed examples (on which see e.g. Bolinger 1968; Christie 1980; Quirk & Svartvik 1966; McGregor 1990:33–34), and interpreting them appropriately, the Nyulnyul situation presented additional difficulties. Any constructed example in Nyulnyul I wished to test had to be written, and because the fluent speaker was not entirely familiar with my conventions of transcription—nor I of hers—the communicative process was inordinately slow: her responses to written utterances were relatively slow and measured, and could not be considered natural. A frequent response to unusual examples was that they were 'Bardi', rather than that they were unacceptable! For these reasons the present work does not include starred sentences.

Realising the limitations of my own corpus, and mindful of the contemporary state of the language, my original intention was to include in the corpus for this grammar everything ever written or recorded in or on the Nyulnyul language, to bring it all together in a single

⁴³ The tape-recorded speech available to me of the other fluent speaker, Albert Kelly (see fn. 45 below), cannot be used effectively in such a comparison, his articulation being too indistinct.

One possibility is that the lack of aural feedback has resulted in her experiencing difficulty in monologuing—she told me on one occasion that following her deafness she was unable to sing, even though she had previously been a keen singer. Another possibility is that being unable to hear aural feedback cues from myself (in the form of backchannel responses, etc.) she was unable to gauge my level of comprehension of the language, and thus may have experienced difficulty in narrating to me. (Visual cues such as eye-gaze might have given her some information, though probably insufficient to ascertain my level of comprehension—and I have elsewhere observed that without a variety in the types of backchannel responses used, they do not achieve their purpose, as speakers suspect that the user is not using them genuinely.) Many other reasons could also be put forward, although it is not possible to decide between them. For instance, it could be that she was not comfortable narrating to me simply because of lack of experience in narrating in Nyulnyul—indeed, during the course of her life she probably heard few Nyulnyul stories narrated in the language (see further McGregor 2003b).

⁴⁵ Unfortunately, I know virtually nothing about the life of Albert Kelly (1916–c.1986), older brother of Magdalene Williams.

⁴⁶ Rosie Victor was born in Derby, around 1910, of a Nyulnyul father and Nyikina mother. A speaker of both languages, she went with her parents to Beagle Bay in 1918, attending school there for four years. In 1919 she did some of the shell work in the newly built church, and subsequently worked in the mission garden after her marriage in 1929. (See also Nailon & Huegel 1990:33–37.)

42 Chapter 1

reference work. However, the enormity of this task has become increasingly apparent over the past decade. The process of inputting Nekes & Worms (1953) and Nekes (1931–1947) to computer so as to make the data accessible has taken many years of casual work by a number of research assistants and myself; digitisation of Nekes & Worms (1953) was only finalised in late 2005, and most of Nekes (1931–1947) has yet to be entered (although a good deal of it appears in the dictionaries of Nekes & Worms 1953). The likely descriptive spinoffs from the additional corpora do not warrant holding up the project for another decade or two, and I have therefore opted to cut the project down to a more manageable size.

In addition to my own Nyulnyul corpus, the primary corpora for the present study are Nekes & Worms (1953), and the texts recorded by Bronwyn Stokes in 1979, these being, in my own estimation the most important previous works on the language, the works most likely to add significant data not included in my own corpus. Tachon (1895) is also an important source, but requires much more care in interpretation, and since little of it has yet been digitised, this source has been only occasionally and unsystematically employed as a secondary source.

2.1 Linguistic type

As a typical Nyulnyulan language, Nyulnyul is a morphologically relatively complex 'prefixing language without noun classification' (Capell 1940; see §1.1 above): it shows prefixes, suffixes and enclitics to nominals, verbs and adverbials, but, unlike a number of Kimberley prefixing languages (including Worrorran and Jarrakan languages), it distinguishes no noun classes.

Its phoneme inventory is typically Australian. Five points of articulation are distinguished for stops and nasals (bilabial, apico-alveolar, apico-postalveolar, lamino-palatal and dorso-velar); unlike the Bunuban and Jarrakan languages to the east, no distinction is maintained between lamino-dental and lamino-palatal articulation. Three place contrasts are available for laterals (apico-alveolar, apico-postalveolar and lamino-palatal). There is an apical tap (with trill and flap allophones), and three glides (a retroflex frictionless continuant and two semivowels). Like all Nyulnyulan languages except Bardi (and possibly its close relative Jawi), Nyulnyul has a three-vowel system, distinguishing /a/, /i/, and /u/. Length is phonemic for all vowels.

Phonotactically, Nyulnyul is rather unusual for an Australian language. A word may begin with either a consonant or a vowel; any consonant, except for rr and ly, and any vowel may begin a word. The contrast in the apical region between alveolar and postalveolar articulation appears to be neutralised word initially, though for reasons that should be clear from §1.9, some uncertainty remains. Word medially, a considerable number of consonant clusters occur; most are two member, although there are a few three member clusters. Underlyingly, many—if not most—words end in a consonant or consonant cluster, although they may be realised with final vowels phonetically. Most final consonants arose historically through loss of final vowels (Stokes & McGregor 2003). Not unexpectedly, there are a large number of closed monosyllables in the language, most of which derive from bisyllabic roots in proto-Western-Nyulnyulan.

The main parts-of-speech are: nominals, pronominals, adverbials, particles, preverbs and inflecting verbs (see §2.4 below). Minor parts-of-speech include interjections and conjunctions. The class of nominals is open, with a large number of members; pronominals constitute a small closed class; adverbials presumably form an open class, although the number of attested members is limited (a hundred or so); particles constitute a small class of no more than about a dozen members; preverbs probably constitute an open class, although it is smallish (fewer than five hundred are attested); and inflecting verbs constitute a closed class, with around two hundred or so members. Interjections number about a dozen, and conjunctions no more than a handful.

The system of free pronominals in Nyulnyul traditionally made the four person, two number distinction characteristic of Nyulnyulan languages (Nekes 1938; Stokes 1982; Hosokawa 1991; McGregor 1989b, 1996e). That is, it distinguished 1 (first person), 2 (second person), 3 (third person) and 1&2 (first plus second person), and the number categories minimal (smallest number in the category) and augmented (plus one or more others). In this system, 1 denotes the speaker and optionally one or more others who are not hearers, and thus corresponds to the traditional category of first person exclusive. 1&2 refers to the speaker and one or more hearers, and thus corresponds to the traditional first person inclusive. (See McKay 1978 and McGregor 1989b for reasons for treating systems such as this as different from the standard inclusive/exclusive system.) There are no other number forms for the Nyulnyul pronominals; in particular, no unit augmented category exists, as in the Eastern Nyulnyulan languages, Nyikina (Stokes 1982:154–155), Yawuru (Hosokawa 1991:27–29), and Warrwa (McGregor 1994c:20).

As already mentioned, Nyulnyul does not distinguish noun classes; nor do its nominals inflect for either case or number. There is a small set of no more than about fifty prefix-taking nominals, most of which refer to parts of the human body. Otherwise, nominal morphology shows few complications. There are a number of stem-forming suffixes, and reduplication and compounding are also employed to create new nominal stems.

Case is indicated by enclitic postpositions. Although these are bound morphemes, they enter into syntagmatic relations with phrases or clauses rather than words, and mark the grammatical relations of these units to other units. There are ergative, instrumental, comitative, dative, locative, allative, ablative, perlative, temporal and semblative postpositions. Nyulnyul is not split ergative: the ergative postposition marks the 'subject' of transitive and middle clauses, regardless of animacy, person, or number; in this regard it resembles most nearby ergative languages (McGregor 1990:2, 1992c, 1998c, 2006a), but differs from the Australian norm (Silverstein 1976; Dixon 1979, 1994). Unlike Eastern Nyulnyulan languages, Nyulnyul does not have a number marking postposition.

The verbal construction in Nyulnyul is fairly complex. There are two construction types: the SIMPLE VERB CONSTRUCTION, and the COMPOUND VERB CONSTRUCTION (Capell 1976; McGregor 2002c).

The simple verb construction (SVC) consists of a single word, an inflected form of a verb root. Verb roots take prefixed inflections marking the person and number of the 'subject', tense, mood and voice. In addition, a range of morphemes may be attached to the end of an inflecting verb: a reflexive/reciprocal suffix; tense, mood and aspect suffixes; accusative or oblique pronominal enclitics cross-referencing the 'object' or beneficiary; and a postposition (one of a subset of half a dozen postpositions). An important verbal category, marked by a verbal prefix, is the irrealis mood, which indicates the status of the referent situation as unrealised; negative clauses invariably select this mood.

Regular verb roots fall into two conjugation classes defined according to: (i) the form of the second person minimal (singular) pronominal prefix in the future tense; and (ii) whether or not a conjugation-marking prefix is present in realis forms. These conjugation classes correlate well with clausal transitivity. There is, however, overlap between the two classes: about a score of inflecting verbs inflect according to both conjugation classes. This phenomenon, referred to by Stokes (1982:186) as alternative prefixing, represents one of the most characteristic features of inflecting verbs in Nyulnyulan languages.

¹ This system is no longer viable, and the modern system is basically a three person system, with but occasional use of the 1&2 forms (see below §4.6.1).

The compound verb construction (CVC) consists of an inflected form of an inflecting verb together with a non-inflecting preverb, which usually precedes it. Only about a dozen inflecting verbs occur in compound verb constructions, and those that do classify the preverb (McGregor 2002c).

Adverbials of manner, space, and time provide circumstantial-type information regarding the situation denoted by a clause. There are relatively few manner adverbs, but quite rich systems of spatial and temporal adverbials.

A number of particles and enclitics provide modal modification of clauses, negating them, interrogating them, indicating the speaker's evaluation of their degree of certainty, and so on. A few of these also occur in NPs, where they provide similar modal modification.

Clauses can be divided into two primary types, verbal and verbless. Verbal clauses fall into four—not two, as per Dixon (1980:278ff, 2002:70, 176–177)—grammatically distinct primary transitivity types. These are: intransitive, transitive, middle, and medio-active; in addition there are a few fairly minor verbal clause types. Intransitive clauses have a single inherent participant (or argument) role, realised by an unmarked NP and cross-referenced by the nominative pronominal prefix in an inflecting verb. Transitive and middle clauses each have two inherent participant roles: one realised by an ergatively marked NP cross-referenced by a nominative pronominal prefix in the inflecting verb; the other by an unmarked NP which is cross-referenced by an accusative pronominal enclitic in a transitive clause, and by an oblique pronominal enclitic in a middle clause. Medio-active clauses show the same 'case frame' as transitive and middle clauses—i.e. an inherent ergatively marked NP and an inherent unmarked NP. However, in contrast to transitive and middle clauses, it is the unmarked NP that is cross-referenced by the pronominal prefix to the inflecting verb.

Verbless clauses include: presentative clauses, which draw attention to, or point out the presence or existence of some entity—and thus correspond to what are frequently designated 'existential' clauses; attributive clauses, which attribute a property or quality of some entity; identifying clauses, which establish the identity of an entity; and a range of minor types.

As in other Australian Aboriginal languages, ellipsis of NPs serving in participant roles is common, and word order is 'free'—it can usually be varied without affecting grammaticality, or even the referential meaning of the clause. In fact, however, freedom of order within clauses applies primarily to NPs and VPs, rather than to words as such; the order of words within NPs and VPs is fairly constrained, and phrasal discontinuity is rare. Particles are fairly restricted in placement, and usually occur in clause initial position. Free word order is most apparent in the spoken texts; in elicited utterances the order of words tends to follow that of the English prompt. Both ellipsis and word order appear to be motivated to some extent by discourse considerations.

Complex sentence constructions are of various types. The most common involves simple juxtaposition of finite clauses, with no overt indication of the grammatical or semantic relationship between them. A second type involves marking one of the clauses as dependent by means of a postposition. More restricted is embedding, which is available only for non-finite clauses. Other complex sentence types are reported speech and thought constructions, in which a clause representing a spoken or cogitated stretch of speech is framed by a clause of speech or thought. The clauses are simply juxtaposed, with no formal mark of the relation between them. Both direct and indirect modes of reporting are available, though speech is usually quoted directly; thought normally indirectly.

2.2 Recent linguistic changes

It has frequently been observed that in language endangerment situations it is usual to find narrowing and reduction in the communicative situations in which the obsolescing language is used. This leads to a narrowing of the functional range of the language in use, and ultimately to narrowing and reduction of the linguistic repertoire of the remaining speakers—to loss of stylistic variation, and structural effects such as lexical reduction, phonological levelling, morphological levelling and reduction, syntactic reduction, such as loss of strategies for the formation of complex sentences (see e.g. Schmidt 1985:4; Dorian 1977:29, 1978; Austin 1986:203; McGregor 2002b; Tsunoda 2005:76–116). Accordingly, one would expect that languages with just a single speaker or two would demonstrate evidence of at least a certain amount of formal-grammatical reduction. There is evidence that this assumption is not necessarily valid in all Australian Aboriginal languageobsolescence situations: for instance, in my own observations, the last fluent speakers of the northern Kimberley languages Unggumi, Umiida, and Yawijibaya, appear to have spoken their languages fully, and demonstrate no appreciable levelling of grammatical forms, no ironing out of morphological or syntactic irregularities; Dench (1995:22-23) makes a similar observation in relation to the Pilbara language Martuthunira. In the case of Nyulnyul, however, structural changes have occurred, and the language as it was spoken in the last decades of the twentieth century shows characteristics indicative of structural disintegration. Fortunately there is a reasonable body of earlier work on the language which can be used for purposes of comparison. In this section I document some of the more notable structural changes in modern Nyulnyul, indicating the speaker groups with which they are associated. For fuller discussion see McGregor (2002b).

[1] PHONOLOGICAL AND PHONETIC CHANGES. There is no evidence of any significant phonological changes amongst either the full speakers or the part speakers I interviewed. All were able to produce, and (the hearing ones) distinguish between such non-English pairs as alveolar vs postalveolar articulation of stops, nasals and laterals; the trill/tap/flap [r]/[r] and the frictionless continuant [1], as well as identify and produce the velar nasal [ŋ] word initially, and elsewhere. However, some phonetic and prosodic changes may have occurred. A very clear and careful articulation is associated with part speakers, suggesting infrequent use of the language. The full speaker showed certain phonetic and prosodic changes most likely consequences of her deafness, including blurring of the contrast between alveolar and postalveolar articulation for stops, nasals and laterals, and a rather monotonic intonation.²

In respect to children at least one phonological change has occurred, which can be attributed to the influence of English: the tap/trill/flap /r/ seems to have merged with (and become identified with) the apical stop /d/, both normally being realised as the alveolar stop. (This statement is based on limited observations in Beagle Bay and Broome, and may not apply to all children.)

[2] LEXICAL CHANGES. On present evidence, a three way distinction can be made between the lexical inventories of full speakers vs part speakers vs other residents and former residents of Beagle Bay.

As to the last full speaker, I was unable to identify many gaps in her extended basic lexicon, by which I mean the roughly 2,000 lexemes covering the major semantic domains,

² By 1979 when Bronwyn Stokes worked with Albert Kelly, also a full speaker, his speech was barely comprehensible; he was unable to speak at all by the time I met him in 1986.

as per Sutton & Walsh (1979). Making allowances for the Dampier Land social and environmental context, Sutton & Walsh (1979)'s checklist of senses was essentially covered, with no obvious gaps. Mary Carmel Charles did, on numerous occasions, have difficulty recalling lexemes, sometimes taking days to do so; in a few cases she was completely unable to recall a particular lexeme, although she knew it existed. It seems reasonable to regard these as short or long term memory lapses.³

However, it is to be expected that large parts of the more specialised and esoteric lexicons—less frequent in language use—were never acquired by the last two full speakers. This could include lexemes specific to male initiation, religious ritual, and sacred knowledge. It might well also include words specific to avoidance speech, song styles, initiation styles, assuming such styles existed (see also §1.4 above).

In a relatively few cases I was unable to elicit specific terms for items one would expect there to be separate lexical entries for. In these cases there was evidence of semantic extension on the part of the speaker. I was for instance informed (by both full and part speakers) that there was no specific nominal meaning 'cloud'; the words wul 'water' and wungun 'rain' were, I was informed, used in this sense. It may well be true that these words were used in the extended senses (and Nekes & Worms 1953 provide some examples). However, Nekes & Worms (1953:851) give wadan 'cloud', as well as rin 'cloudy' (Nekes & Worms 1953:844). Another example is kaarr, which I was informed meant both 'sea' and 'waves'. Nekes & Worms (1953:96), however give a specific lexical entry for 'wave' in Nyulnyul, walabalgod; given that the corresponding term in Bardi is alalgoord 'wave' (Aklif 1999:15) it is probable that they are correct. Nekes & Worms (1953:568) also list kaarr for 'sea' in Bardi, though not Nyulnyul; according to Aklif (1999:40) the Bardi term is gaarra 'sea'. The Nyulnyul form is as expected given the Bardi form (though of course the last speaker might have constructed the Nyulnyul form from Bardi, by correspondence mimicry—Dench 2001:118).

My field investigations with part speakers was not nearly as intensive as with the full speaker, and I did not have the opportunity to check through the entire lexicon of Sutton & Walsh (1979) with any part speaker. Part speakers such as Magdalene Williams had extensive lexicons (see e.g. Williams 1999, which contains quite a sizeable wordlist), embracing many nominals referring to the human classification, kin terms, body parts, the elements, flora and fauna, artefacts, place names, and so on, as well as a fair number of nominals designating qualities, preverbs designating material and mental processes. Some of these semantic domains are particularly well represented by comparison with others; for instance, qualities and material and mental processes are not as well represented as flora, fauna, and human classification. Part speakers also have knowledge of closed class items such as particles ('yes' and 'no'), demonstratives, some pronominal forms, and adverbs of distance and direction.

With part speakers, however, lexical gaps were in evidence: relatively basic items appear not to have been forgotten, but to have never been acquired. For instance, a part speaker claimed with complete certainty that Nyulnyul had no word for 'to bubble (as of boiling water)'; yet the full speaker provided without hesitation the preverb *burrurl-burrurl*.

As has already been mentioned, systematic studies have not been undertaken of the lexical inventories of Beagle Bay residents and their children. It is confirmed, however, that even young children know the Nyulnyul terms for a large number of local flora and fauna

A number of lexical items which occur in Albert Kelly's narrative (see §16.5) but not in Carmel Charles' speech were checked with her. Almost all were rejected as borrowings from Bardi.

species. Although one cannot, of course, be certain about what children do not know, it would seem unlikely that any other semantic domain is well represented—recall Fr Kevin McKelson's comment, cited in footnote 29, §1.6 above.

It is often presumed that impromptu borrowing is rife in speech in obsolescing languages, and indeed all Nyulnyul texts recorded by myself and Bronwyn Stokes include a considerable number of English-derived lexemes, including terms for introduced items; Albert Kelly's texts also include numerous Bardi borrowings. At the same time, however, the Nyulnyul speakers I worked with expressed highly purist notions, and, when asked directly would refuse to give terms for items such as motorcars, aeroplanes, and the like, saying that these items were not known and that they have no Nyulnyul terms. This attitude—which I have not encountered elsewhere among speakers of other dying languages in the Kimberley—may well be a consequence of cultural stereotyping (see in §1.3 above).

[3] GRAMMATICAL CHANGES. Carmel Charles demonstrated full confidence in her ability to construct sentences, and was always able to provide Nyulnyul translations of my English prompts. Nevertheless, some simplifications do appear to have occurred in the grammar since the 1930s and 1940s when Frs Nekes and Worms were active in the field.

The most obvious grammatical reduction in Carmel Charles' Nyulnyul is in the pronominal categories: the characteristic forms for two categories have almost entirely vanished in free pronouns, and are replaced by the forms of another category. As indicated in Table 4–4 below, the free pronouns traditionally followed an Ilocano system (Greenberg 1988), distinguishing four persons (1, 2, 1&2, 3) and two numbers (minimal and augmented) (see §4.6.1 for explanation of these terms). In modern Nyulnyul, however, the 1&2 categories are extremely rare: the minimal free form ('me and you', the speaker-hearer dyad) is rare (and is sometimes replaced by the modern creation *ngay aa juy* 'me and you', perhaps calqued on English). Even rarer is the 1&2 augmented form ('me and you and other(s)', i.e. 1 plural inclusive). Both categories were usually designated by the 1 augmented form of the traditional system. The pronominal system was thus reduced to a three person, two number system, with no inclusive/exclusive distinction, but with the option of distinguishing the 1&2 categories—what might be termed an optional Ilocano system, though in terms of frequency it would be better called an optional Assiniboine system (see Greenberg 1988). (See further §4.6.1 below.)

Nyulnyul possesses two sets of bound pronominal prefixes, one nominal, the other verbal. Both traditionally showed an Assiniboine system, distinguishing three first person categories, 1 singular, 1 dual inclusive, and 1 plural (everything else)—see Table 4–1. As might be predicted from the remarks of the previous paragraph, the second category (1 dual inclusive) has virtually disappeared, and the modern system is effectively the same as for the free pronouns. The same system operates in the bound pronominal enclitics to inflecting verbs; however, it is uncertain what type of system the traditional one was.

Although Carmel Charles had full control of the system of pronominal prefixes to nouns, and always employed it, Albert Kelly did not employ it at all, and nor (as far as I could discover) does any part speaker. Instead, they invariably use the third person singular/minimal prefix, regardless of the person or number of the 'owner' of the part. (See also McGregor 1995b:287.)

Nyulnyul is, as has already been observed, an ergative language, the subject of a transitive clause being marked by the ergative postposition -in. Occasionally, however, in the spoken Nyulnyul of the full speaker, the ergative postposition does not invariably occur on the subject of a transitive clause. This is likely to be due to discourse considerations,

rather than to grammatical simplification (see McGregor 1992c, 1998c, 2002a, 2006a, 2010a). On the other hand, the ergative postposition was never used by part speakers I consulted. (2–1) is a typical instance of a transitive clause uttered by a part speaker (see also Torres & Williams 1987:10).

(2–1) yiil i-na-r-i dog 3NOM-CM-poke-EV 'The dog bit him.'

Various other postpositions—including locative -uk and ablative -kun—are known to part speakers, although there is some evidence that they are not always used in the same way as in traditional Nyulnyul. For instance, I was given jaala-mirr (beach-PER) by a part speaker for 'to the beach' instead of jaal-ung (beach-ALL₁).

In the late twentieth century I collected a fair number of inflecting verb forms from both the full speaker and part speakers. The full speaker showed no difficulty in producing whatever form I requested, for any inflecting verb—although (as mentioned above) she did not usually distinguish the 1&2 pronominal categories from the 1 non-singular. It is likely that some simplification and regularisation has occurred in the paradigms of her inflecting verbs; however, there is no strong empirical support for this possibility. The part speaker who I worked with most also knew a fair number of more common verb forms (such as for 'go away', 'look at me', 'get it', 'I went', 'he bit it', and so on). However, I did not work intensively enough with her to be certain of her degree of control of the complex system of verbal inflections.

[4] SIMPLIFICATION AND CHANGES IN TEXT AND DISCOURSE. Not unexpectedly, it proved extremely difficult to elicit narrative texts, not to say interactive language use. It was not until I had worked with the full speaker over a number of years that she was willing to relate narratives to me—and most of these contained numerous English words, indeed extensive passages in English. The two monologic texts narrated to Bronwyn Stokes also show a good deal of borrowing from English.

This unwillingness to speak Nyulnyul in chunks bigger than sentences might well be due to pathological causes—to performance factors, rather than the speaker's lack of competence to narrate stories. Unfortunately, however, outside of clinical tests that can no longer be undertaken, there is no way of deciding the issue (even if—as I very much doubt—one can reasonably speak of competence completely abstracted from performance). Nor is it possible to decide among the various possible factors that might have given rise to this unwillingness or inability. For instance, it might be partly due to the effects of deafness (Carmel Charles remarked that she was unable to sing after becoming deaf), age, infirmity, and so on. Furthermore, it is not improbable that her deafness had psychological as well as purely physiological effects (resulting from reduced auditory feedback). It is not easy—indeed, it is quite unnatural—to speak to someone in a language one knows that they do not understand, and I have frequently observed in fieldwork in Kimberley Aboriginal communities that speakers control the information they provide in and on a language according to the manifest ability of the linguist to understand and use it. The Nyulnyul

The most obvious change in the morphology of inflecting verbs is in the present tense suffix, which seems to have progressively changed from -yu in the late nineteenth century, to $-yu \sim -in$ (and phonological allomorphs) in the 1930s and 1940s, to just -in (and phonological allomorphs) in the late twentieth century.

speaker, of course, had highly restricted information concerning my knowledge, control, and understanding of the language, and this might partly account for her unwillingness to narrate texts to me.⁵ Finally, due to the circumstances in which she was raised, over her lifetime she probably heard few stories of any type narrated in Nyulnyul, and may have been exposed to virtually no traditional mythology. (It is perhaps significant that Mary Carmel Charles never attempted to tell any myth other than the emu story—Charles 1993—in either English or Nyulnyul.)

Compared to narrative and expository texts which have been gathered from other languages of the region, the available Nyulnyul texts show simplifications. None shows the place to place organisation so typical of Aboriginal narratives in other traditional languages. And as Bronwyn Stokes has remarked to me (pers.comm.), Albert Kelly's text is structurally a relatively simple piece compared to mythical texts in languages such as Nyikina; it is replete with repetition, ⁶ and lacking in variety.

The part speaker I worked most with, as observed above, refused to tell me stories in the language, insisting that she did not have the necessary command (something the full speaker never admitted). She has, however, produced a children's story in Nyulnyul (along with an English translation), Torres & Williams (1987). Unlike the full speaker, she manifestly knew many traditional stories, and Williams (1999) contains a number, all narrated in English.

Evidence from across the Australian continent suggests that certain dialogic formulae—such as greeting and farewell exchanges—may be retained well after the effective demise of a language. My impression is that this also holds for Nyulnyul: that speakers, including part speakers, remember many such dialogic formulae, including, in addition to greetings and farewells, appropriate responses to requests for goods and information, and other common ritualised exchanges. For instance, the speakers who I worked intensively with provided sample greetings and farewells of the types illustrated in the following two examples (constructed by the full speaker):

```
(2-2)
           A:
                nganyji mi-n-in
                                             layib
                         2min.nom-be-prs
                 INT
                                             good
           B:
                yii
                yes
           A:
                 'Are you OK?'
                 'Yes.'
           B:
(2-3)
           A:
                jurrk
                 goodbye
           B:
                тиј
                         nga-jid-in
                                             way
                 already 1MIN.NOM-go-PRS
                                             away
                 'Goodbye.'
           A:
                 'I'm going.'
           B:
```

⁵ Some individuals are proficient story tellers, who enjoy narrating stories. Carmel Charles did not seem to be such a person.

⁶ Repetition is a device employed by skilled narrators in many nearby languages, including Gooniyandi. However, this is quite different in type from the repetition found in Albert Kelly's texts, in which the phenomenon appears to be employed as a filler to prolong the story, rather than to inject life into it.

None of the structural changes mentioned above are atypical of language attrition situations (see references cited at the beginning of the section); most are also changes that might occur during the normal historical development of a language.

2.3 Theoretical orientation

This grammar is descriptive in orientation. It is important that a language in such a moribund state as Nyulnyul be accorded as comprehensive a description as possible, given the limitations of the data. This should ideally comprise not just a grammatical description, but also a dictionary and a collection of transcribed texts, as per the Boasian tradition (see e.g. Himmelmann 1998; Gippert et al. 2006). It is unlikely that there will be opportunities for future fieldworkers to gather much additional grammatical, lexical or textual information. A comprehensive description is arguably of benefit not just to linguists, but also to future generations of Nyulnyul people and residents of Beagle Bay should they wish to revive the language in some shape or other. A sketch grammar like McGregor (1996e) is evidently much more limited in terms of its usefulness to linguists. It is also arguably less useful to communities: although sufficient grammatical information may be provided for language revival purposes, the information is in some cases less reliable than one would hope, ⁷ and the lexical and textual material presented is seriously limited.

A strongly descriptive orientation is thus essential. The grammar ought not to be accessible only to professionals working within the parameters of a particular theory. A grammar like my 1990 grammar of Gooniyandi, which was cast in the theoretical mould of systemic functional grammar (Halliday 1985), the descriptive and theoretical advantages of which it attempted (as a secondary aim) to elucidate, is neither desirable nor possible for a language that finds itself in the state of Nyulnyul. One is much more constrained when dealing with an almost extinct language: it is possible to satisfactorily address few theoretically interesting or significant questions. Thus the present work does not attempt to promote or test the validity of any particular linguistic theory.

Nevertheless, description and theory cannot be entirely divorced from one another. One cannot simply describe, any more than one can theorise in the total absence of empirical data. Nor is it possible—or even desirable—for the descriptivist to adopt an entirely atheoretical position. As observed long ago by Charles Darwin:

About thirty years ago there was much talk that geologists ought only to observe and not theorise; and I well remember some one saying that at this rate a man might as well go into a gravel-pit and count the pebbles and describe the colours. How odd it is that anyone should not see that all observations must be for or against some view if it is to be of any service! (Charles Darwin, in letter to Henry Fawcett, 18th September 1861, cited in Darwin & Seward 1903:195)

Without a suitable theory whole swaths of fascinating linguistic phenomena are liable to remain invisible. And lacking commitment to any theory, a pure descriptivist is unlikely to push their description to the limit, and is liable to remain satisfied with categories that work most of the time.

Theory and description are in a symbiotic relation, impacting on and contributing to one another. It is undesirable to assign them to separate compartments in either thought or writing. Theory is ideally heavily data oriented and informed, and should not be confined to

This is inevitable if the sketch grammar predates a more comprehensive grammar, and is based on less thorough analysis of the data available.

narrow ranges of constructed examples in a minuscule selection of languages (see e.g. McGregor 1997b, 2003a). For their part, descriptions should explicitly adopt a theory (or theories). Especially in a work such as this, however, theory must take the back seat; but it should not be thrown out of the vehicle.

Of course there are dangers inherent in adopting any theoretical position. For one thing, no theory is ideal for the description of every aspect of every language. Another problem is that linguistic theories have very short half-lives: a description written within the parameters of a theory current today will be outmoded in a decade.

There is much to recommend descriptive practice which draws eclectically on a range of theories (e.g. Wilkins 1989:59). Such catholic approaches can, however, be limited if the descriptivist remains content with bricolaging together pieces of theory. Lacking intellectual commitment to any of the parts, the grammarian may well fail to push the description to the limits of the available evidence, and neglect the opportunity to contribute to the development, refinement, or demise, of the theory.

These considerations motivate the use of a certain amount of theory in the present description, albeit with circumspection. What I attempt to do is to present as much as possible in theoretically basic terms such as are taught in introductory courses in linguistics and its subdisciplines. As far as possible I use straightforward language, and illustrate the description with numerous examples, including, where possible, textual examples. But where it serves a useful purpose, and highlights things which would otherwise remain obscure and/or inappropriately described, or where it facilitates understanding or conceptualisation, I do not eschew theory or theory-based formalisms. For instance, the diagrammatic representations of cognitive grammar (e.g. Langacker 1987, 1991, 1999) provide useful ways of characterising and conceptualising the semantic meanings of certain inflecting verbs (see Chapter 11). And graphs like those in Figure 2–3 are useful for representing grammatical relations.

Because of the problem of the short half-lives of linguistic theories, and to keep this work as self-contained as possible, the remainder of this section presents an outline of the grammatical theory I will be presuming, SEMIOTIC GRAMMAR (SG) (see McGregor 1997b for a fuller description), and in places—primarily in the description of units larger than the word—casting the description explicitly in terms of.

Fundamental to this approach is the Saussurean notion that language is a semiotic system in which linguistic signs are elemental entities. Form and function are inseparably connected in the sign, being two aspects of this Janus-faced entity. Thus language is not just a formal algebraic system (as per formal linguistics); nor is it merely a functional system (as some functionalists would have it). SG adopts the view that not only the lexicon of a language, but also its organising system—its grammar—is a semiotic system. This means that grammatical categories and structures are linguistic signs, and show both formal and functional aspects, neither of which should be accorded priority over the other.

Meaning is central to the present grammar; it is not secondary to form, and for instance arrived at through mappings from form. But meaning is not an amorphous mass. Different types of meaning must be recognised, even though the boundary between them is fuzzy. Specifically, a fundamental distinction is presumed between coded meaning (the signified

It is not presumed that **every** grammatical pattern is a sign. For instance, if a particular enclitic invariably occurs in a particular structural position, this pattern—which it is obviously the linguist's duty to observe and describe—cannot be semantically significant, and clearly is not a grammatical sign. (See further McGregor 1997b:42, 86, 390, 2003a, 2006d.)

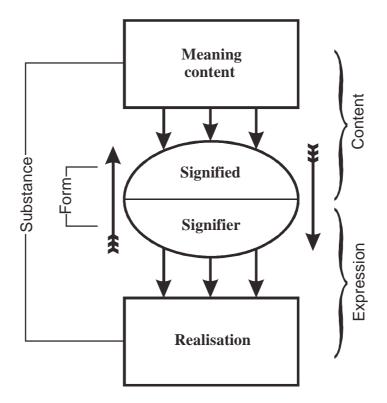


Figure 2–1: Revised conceptualisation of the linguistic sign incorporating notions from Hielmslev

of the Saussurean sign) and implicated meaning (inferred by pragmatic principles such as the Gricean maxims) (Levinson 2000; McGregor 2007c). In addition to implicated meaning, non-coded meaning presumably includes encyclopaedic and contextual meanings not derived by implicatures. Hjelmslev's distinction between form and substance is useful here: non-coded meaning is meaning substance (content substance in Hjelmslev's terminology), while coded meaning is meaning form (content form). This permits us to refine Saussure's conceptualisation of the sign, as shown in Figure 2–1.

It is hypothesised that the grammatical signs of a language can be classified according to a universal quaternary typology, adapted from Halliday's notion of metafunction (Halliday 1970, 1985), and distinguishing EXPERIENTIAL, LOGICAL, INTERPERSONAL and TEXTURAL types. These labels are semantic/functional (see below for explanations). The typology itself, however, groups signs according to both functional and formal aspects simultaneously, and the labels are inadequate and misleading to the extent that they apparently privilege function over form. Table 2–1 shows the types of form that characterise, define, and are defined by, each semiotic type.

The experiential semiotic is constituted by grammatical signs that contribute to the representation of the world of experience; the formal aspect of these signs is constituency (see McGregor 1997b:21–31; Haas 1954). Clauses typically designate real-world situations, and construe them in terms of PARTICIPANT ROLES (which include such things as Actor and Undergoer), one-participant roles (including Instrument and Medium—roughly cognate

⁹ Names of the roles are given with an initial capital letter in order to distinguish them from the corresponding English lexical items (*actor*, *undergoer*, and the like).

object, the role borne by *song* in *sing a song*) and the State-of-Affairs (SoA) (the role normally discharged by a verb and representing an event or process).

Table 2–1: Typology of	grammatical signs	after McGregor 1997b

Semiotic type	Structural type
experiential	constituency (part-whole) relationships; hierarchy; domination
logical	dependency (part-part) relationships; sisterhood
interpersonal	conjugational (whole-whole) relationships; encompassing
textural	a-syntagmatic relationships; links, ties, indices, markers

Signs of the logical type establish connections between entities, phenomena, processes, or whatever; formally, they are dependency relations (cf. Hudson 1976). Following Halliday (1985), dependency relations are classified on two independent dimensions. (a) One is according to the dimension of 'taxis', in which a distinction is drawn between PARATAXIS or coordination, in which the parts are equal in value, and HYPOTAXIS or subordination, in which one part is less important than the other. (b) The other makes a ternary contrast between: EXTENSION, in which one part adds something to the other, either by conjunction or disjunction; ELABORATION, in which one part provides further explanation of the other, by identification (in which an alternative designation is provided of a referent), attribution (in which a quality or property is assigned to a referent), and clarification (in which information is added to specify something more precisely); and ENHANCEMENT, in which one part provides contextual information concerning the other, by embellishment or circumstantiation. Thus, the complex sentence when I arrived I went around the back involves two clauses, when I arrived and I went around the back, the former being dependent on the latter; that is, it is in a relationship of hypotaxis to it. The former also enhances the latter clause by indicating the temporal circumstance in which the event occurred. On the other hand, I arrived and went around the back (which may refer to the same real-world phenomenon) involves a paratactic combination of clauses, the events being simply related by conjunction.

Interpersonal relations structure linguistic expressions according to their interactive use. The term conjugational captures the fact that they concern ways in which a linguistic unit can be 'shaped' to integrate it appropriately into the speech interaction, invoking the traditional grammatical notion of conjugation. Interpersonal signs provide three main semiotically significant types of modification: ILLOCUTIONARY, RHETORICAL, and ATTITUDINAL. Illocutionary modification specifies the way a clause (or some other unit) is to be taken interactively, and includes the traditional category of mood (e.g. declarative, interrogative). Rhetorical modification indicates the way the utterance (or a part thereof) is to be integrated into the discourse, into the framework of shared knowledge and beliefs of the speech interactants. For instance, many languages have expectation modifiers like *only*, which indicate that the relevant thing is less than expected (see e.g. McGregor 1990: 468–477). Third, in attitudinal modification the attitude of the speaker is expressed to some state-of-affairs or entity. The *want*-construction in English expresses this type of modification, as in *I want to go to the movies tonight*, which expresses the speaker's attitude to the referent action: that it is desirable.

Finally, the textural semiotic embraces signs that serve linking or connective functions: that is, they establish connections between linguistic entities, or between linguistic entities

and external world. Textural signs include INDEXICALS (pronominals, determiners, deictics), CONJUNCTIONS (and, or, etc.), ¹⁰ and MARKERS (linguistic items indicating grammatical relations, categories, meanings, or whatever). These need not be structure bound: they often have the potential to cross structural boundaries, and may obtain between an item in one structure and other items in the text or in the context of situation.

Grammatical signs are abstract objects, and as such are not perceptible and lack phonological substance. They are embodied or instantiated in the relations between linguistic entities, which are ultimately made up of morphemes. ¹¹ Groups of morphemes form units that enter into grammatical relations with others, and the syntagms so formed may be classified according to the semiotic nature of the relation between them: experiential/constituency, logical/dependency, interpersonal/conjugational, and textural/ linking. Considered as grammatical structures, it is natural to foreground the structural aspect of these linguistic entities, and thus adopt a quaternary typology as shown in Figure 2–2. Constituency relations are represented (in (A)) in the traditional way, by tree diagrams (which may or may not branch). Dependency relations are marked by curved lines connecting the co-dependents (as in (B)); following Matthews (1981) and Hudson (1984) an arrowhead points to the dependent in hypotactic dependency relations. Conjugational relations are represented by enclosing boxes (as in (C)); this represents their most salient characteristic, that they are encompassing and concerned with packaging. Finally, linking relations are represented by a broken line connecting the linked items (as in (D)); an arrowhead indicates the item to which the link is established.

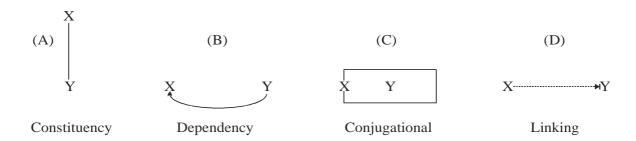


Figure 2–2: Diagrammatic representation of the four different types of syntagmatic relation

Many (though not all) structures of these types are, when instantiated, linguistic UNITS that are capable of entering into grammatical relationships with other units. Looked at from the other direction, any instantiated linguistic unit (other than an atomic one, i.e. a morpheme) can be classified according to the grammatical relations among the bits that

¹⁰ Note that *and* and *or* are italicised here, indicating that I am speaking of them as lexemes. By contrast, in speaking of extension above they are enclosed in quote marks, indicating that there their meanings are being referred to. The conjunctions *and* and *or* typically, of course, mark the logical relationships 'and' and 'or'.

¹¹ I deliberately simplify matters here by assuming an agglutinative-type item-arrangement morphology according to which words are made up of morphemes strung one after another. Nyulnyul lends itself fairly well to such description; however, it is not necessary to assume that this provides a useful way of analysing the structure of words in all languages, or indeed in all morphological aspects of a language such as Nyulnyul—and SG makes no such demands. Indeed, the available evidence suggests to the contrary, that there are languages for which word-paradigm description (or something else) is preferable—see e.g. Hockett (1954); Matthews (1972); Koch (1990); Carstairs-McCarthy (1998/2001).

make it up. The first level of classification of the unit would then be according to the primary semiotic type; further classification is possible according to the number and nature of the signs of the primary type, and their combinations. For instance, a unit characterised by a dependency relationship could be further classified according to whether parataxis or hypotaxis is involved, and whether it is extension, enhancement, or elaboration. Returning to our previous example *when I arrived I went around the back*, this is clearly a linguistic unit, which can be characterised as a hypotactic enhancing dependency structure.

This mode of classification does not tell us everything about a linguistic unit. It is often important to have an idea of how 'big' a unit is, that is, some indication of its relative size. Thus linguistic units are also classified according to whether they are morphemes, words, phrases, or clauses.

The part-of-speech classification of words and morphemes suggested in §2.4 below can be extended at least to some extent to larger units. In describing Nyulnyul, we will employ the notion of phrase, and distinguish two primary types, NPs and VPs. It is arguably also advantageous to distinguish clause types along similar lines, where verbal and nominal clauses are distinguished according to whether or not the verb is inherent. In addition, minor or interjective clauses (corresponding to interjections) should perhaps be distinguished, these being clauses that do not express a proposition, but rather express the speaker's reaction.

To wind up this section, it may be helpful to briefly illustrate the basic features of an SG analysis of a Nyulnyul example. (2–4) is a single clause showing grammatical relations of all four types.

(2–4) kumbarr jan arri daarr i-la-r-an biird stone 1MIN.OBL not arrive 3NOM-IRR-poke-IMP yesterday 'My money didn't come yesterday.'

(2–4) can be analysed non-exhaustively into phrasal units: the NP *kumbarr jan* and the VP *daarr* ... -R (where -R represents the inflecting verb 'poke'). The NP serves in the role of Actor, and denotes the thing engaged in the event; the VP denotes the SoA (see p. 54 above), which specifies the type of event. These two relations represent the experiential structure of the clause.

The adverbial *biird* 'yesterday' is hypotactically dependent on the experiential core of the clause, which it enhances by temporal location; this is the logical structure of the clause. Third, the particle *arri* 'not' and the irrealis mood marker *-la-* in the VP independently hold the proposition expressed by the clause in their scope; ¹³ this gives us the interpersonal structure of the clause.

The two phrases are also structured experientially. The NP involves a nominal (*kumbarr* 'stone') in the role of Entity; the VP has a preverb (*daarr* 'arrive') in the role Process, together with an inflecting verb that classifies it (see Chapter 11).

The pronominal *jan* 'my' and the verbal pronominal prefix *i*- 3NOM serve as indexes. The former points to the speaker as the owner of the money; the latter points to the money as the relevant thing involved in the situation.

¹² The term *inherent* refers to linguistic units required structurally. It is not necessary that they actually have (overt) linguistic substance; it is possible, for instance, for the substance to be omitted due to its being predictable (or given)—see e.g. McGregor (1997b:328–333).

¹³ This simplifies things slightly: as we will see later, the irrealis mood does not have scope over the proposition expressed by the clause, but rather the referent event.

Figure 2–3 provides diagrammatic representation of these observations, employing the graphic conventions shown in Figure 2–2.

2.4 Word and morpheme classes

Nyulnyul is in broad terms an agglutinating language: morphemes combine together by and large in segmentable strings to form words. The shapes of the morphemes and the boundaries between them are usually fairly easily identified, although they are sometimes obscured by sandhi or morphophonemic processes; the main place where this happens is in the inflecting verb. But even there the effects of these processes are not usually as pronounced as in many other non-Pama-Nyungan languages, including the nearby Bunuban and Worrorran languages, and the more distant Daly River and Gunwinjguan languages.

The sense of the term *word* invoked in the previous paragraph is the distributional one whereby words are considered as minimal free forms. Such units are also minimal permutable forms—the smallest forms into which an utterance can be divided, and that can be permuted. For instance, the simple utterance /wambinindamjanyiilbardangkang/ 'the man hit my dog with a stick' can be divided into morphemes as follows: *wamb-in-i-n-dam-jan-yiil-bardangk-ang*—see (2–5) below. These morphemes cannot all stand alone as free forms; nor can they all be freely permuted and preserve grammaticality or meaning; however, they can be grouped into five clusters satisfying these criteria, namely *wamb-in, i-n-dam, jan, yiil* and *bardangk-ang*. These units can all stand alone as utterances, though not all of their constituting morphemes can: for instance, *wambin* could be used in response to a question such as 'who hit her?'; but the *in* can never stand alone as an utterance. Furthermore, these five words may be permuted in any order, provided only that *jan* and *yiil* remain contiguous. Thus, one could say *i-n-dam-jan-yiil-bardangk-ang-wamb-in* or *jan-yiil-wamb-in-i-n-dam-bardangk-ang*, but not *wamb-i-n-dam-jan-in-yiil-ang-bardangk or *in-wamb-dam-i-n-jan-yiil-ang-bardangk.

(2–5) wamb-in i-n-dam jan yiil bardangk-ang man-ERG 3NOM-CM-hit 1MIN.OBL dog stick-INS 'The man hit my dog with a stick.'

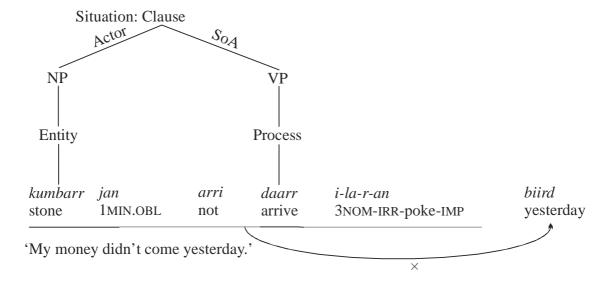
Distributional words (abbreviated d-words) are important linguistic units, and may be bounded by pauses in speech; pauses do not normally occur within d-words, which are normally uttered as complete and uninterrupted wholes. They are also the units which one would expect writers to be most aware of, and to mark off with spaces—and indeed, the units distinguished in this way in Torres & Williams (1987) correspond with few exceptions to d-words. In general, d-words may be permuted in many ways, resulting in grammatical sentences (possibly with concomitant meaning changes). Smaller units usually cannot be. The morphemes that constitute d-words occur in (almost) completely fixed orders. For instance, *wamb* must be followed by -*in*; it cannot be preceded by it (unless -*in* is part of the previous d-word).

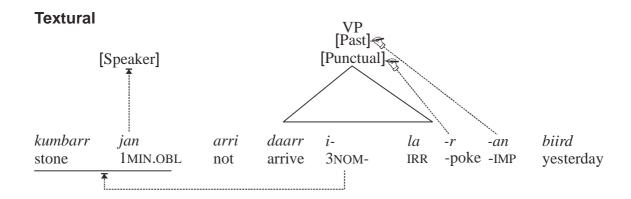
D-words normally correspond to phonological words (abbreviated p-words): the units which serve as the domains for application of rules of stress-assignment (see §3.5 below).

¹⁴ The division into morphemes is not quite exhaustive: *jan* 1MIN.OBL is here assumed to be a single portmanteau morph, since it does not lend itself well to division into component morphemes.

¹⁵ Even this proviso is perhaps not strictly necessary. Very occasionally the words of an NP are separated from one another by other words.

Experiential and logical structure





Interpersonal

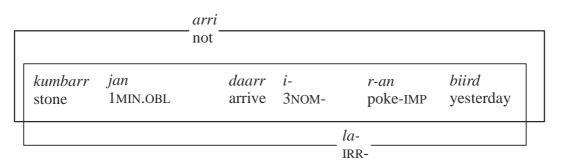


Figure 2–3: Partial SG analysis of example (2–4)

There are however exceptions—for instance, enclitics—which sometimes constitute separate phonological words.

Yet another type of word that must be distinguished is the lexical word or lexeme. These are the items that would be listed in a dictionary. They include monomorphemic roots and polymorphemic stems, as well as larger idiomatic units. Polymorphemic stems consist of a single lexeme together with a derivational morpheme, and/or more than one lexeme, as in compounds and certain reduplications. D-words normally consist of a single lexeme; they may contain other morphemes as well. Sometimes a d-word is an inflectional form of the root. For instance, in (2–5) above, *indam* 'he/she hit him/her/it' is an inflected form of the inflecting verb -DAM 'hit', and *jan* is an inflected form of the third person minimal pronominal. In other cases, however, a d-word cannot be construed as an inflectional variant of the root which it consists of. For instance, *wamb-in* 'man-ERG' and *bardangk-ang* in (2–5) are **not** forms of the roots *wamb* 'man' and *bardangk* 'tree' respectively. In these cases the nominal merely serves as a host for the postposition, postpositions being incapable of independent occurrence (see below, and §5.1).

In order to give an overview of the range of different types of fundamental grammatical units in the language Table 2–2 classifies all Nyulnyul morphemes, not just lexemes but also grammatical morphemes, according to a single parts-of-speech scheme. Also indicated in the table are the most salient properties of each part-of-speech category. Independent primary distinctions are drawn between root and non-root morphemes, and open and closed class morphemes. The former division is relatively unproblematic: there is not usually much doubt as to whether a given morpheme is a root (i.e. an unanalysable lexeme) or non-root (generally a 'function' morpheme). The classification into open and closed classes is less clear-cut. Although nominals and preverbs clearly form open classes—they readily accept borrowings from English—it is not so certain that inflecting verbs are a closed class, or that particles and interjections form open classes. ¹⁶ Morphemes are also classified according to whether they are bound or free; the former are distinguished by grey background shading in the cell.

There are some correlations among these three logically independent variables. Closed class items are usually bound, pronominals being the only exception; open class items are invariably free. Non-roots are always bound, while roots are usually free. There are, however, not insignificant sets of bound nominal and verbal roots; all of these are inherently inflecting forms.

There are four primary lexical classes in Nyulnyul (as in many languages of the region)—nominals (Ns), preverbs (PVs), inflecting verbs (IVs), and adverbials—as well as three secondary classes, pronominals, particles and interjections. As in most Australian Aboriginal languages no distinct class of adjectives can be identified; words translating as adjectives in languages such as English belong to the class of nominals in Nyulnyul, and show no morphological peculiarities separating them from other nominals. They tend to show different syntactic preferences as regards grammatical relations they occur in: very approximately, adjective-like Ns are most frequently found as modifiers, whereas noun-like Ns are usually found as the referring expressions. But these are tendencies rather than strict rules. It is, however, possible to distinguish a subclass of prefixing Ns: a set of bound N

¹⁶ Some Bardi and English particles and interjections occur in the corpus, but it is not clear whether they are borrowings that have been incorporated into Nyulnyul, or the instances of their use can be interpreted as examples of code-switching.

Table 2–2: Word and morpheme classes in Nyulnyul (grey shading indicates bound units)

Morpheme	type	Open classes	Closed classes
Root		Nominals	Prefixing nouns
		Adverbials	
		Preverbs	Inflecting verbs
			Pronominals
		Particles	
			Conjunctions
		Interjections	
Non-root	Associated lexical class		
	Nominal		Pronominal prefixes
			Stem-forming suffixes
	Adverbial		Stem-forming suffixes
			Inflectional suffixes
	Preverb		Stem-forming suffixes
	Inflecting verb		Stem-forming affixes
			Inflectional prefixes
			Inflectional suffixes
			Pronominal enclitics
	Unrestricted		Enclitics
	Unrestricted		Postpositions

roots which cannot occur in the absence of a pronominal prefix. (Other subclasses of determiners, and so on can be distinguished on semantic/functional grounds.)

As a starting point, the following characterisations—a mix of morphological, syntactic, and grammatical properties—are tentatively suggested for the various root classes:

Nominals	Lexemes that normally find themselves in NPs, in which they may serve either as referring expressions or as modifiers. Some nominals admit derivation by suffixes; these derivational suffixes form a small restricted set.	
Adverbials	Lexical items which typically provide either circumstantial modification of clauses, situating the action in time or place, or quality-type modification of VPs, indicating the manner in which an action was performed. Some adverbials occur in derived forms, marked by derivational affixes of restricted types; a few show inflections.	
Preverbs	Lexical roots that normally precede inflecting verbs, and that form VPs with them (see Chapter 11). Preverbs may occur with derivational affixes, some of which are limited to this part-of-speech.	

Inflecting verbs Bound lexical roots that must occur with at least one bound pronominal

prefix of the verbal type, or with the infinitival prefix. There is a derivational affix that is restricted to words of this part-of-speech, though

it occurs with a restricted subset of inflecting verbs.

Pronominals Free lexical items of the person-number indexical type, and which

normally occur in NPs.

Particles Lexical roots holding entire NPs, VPs or clauses within their scope, which

they generally provide modal modification of.

Interjections Lexical roots that typically occur independently as complete utterances,

as minor clauses that do not express propositions.

Two observations are in order at this point. First, Nyulnyul differs from what is allegedly the norm for Australian Aboriginal languages (according to Dixon 1980:278, 2002:70): verbal lexemes, whether PVs or IVs, cannot normally be uniquely classified as transitive or intransitive. It is the rule rather than the exception that a given PV or IV can occur in both transitive and intransitive clauses without any formal marking, although some roots (of both sorts) are attested in clauses of only a single transitivity type. (In fact, it is a regional characteristic that PVs and IVs are labile.)

Second, pronominals have been treated as a distinct class from nominals, even though they clearly satisfy the syntactic criteria for Ns. The main reason for this is morphological: they show, unlike Ns, two inflectional case forms—a cardinal and an oblique—distributed according to the grammatical relations they serve in, as well as two number forms, minimal and augmented. Related to this, pronominals display different syntagmatic behaviour from nominals, for instance in possessive constructions—see §10.3. In addition, they show corresponding bound forms that nouns lack. For these reasons I do not treat pronominals as a subclass of Ns, as is done in many grammars of Australian languages.

Corresponding to three of the primary classes of roots are four distinct classes of non-root morphemes. Non-root morphemes—with the exception of enclitics and postpositions—are fairly restricted in terms of the types of root they occur with: they usually occur exclusively with roots of just one major lexical class. Thus, there are bound morphemes that normally occur just with Ns, others that usually occur with adverbials, others that occur exclusively with preverbs, and yet others restricted to inflecting verbs. To be sure, there is overlap, making it impossible to define root classes simply in terms of morphological potential; and in some cases it is difficult to be certain of the part-of-speech membership of a lexeme. Another source of difficulty for this way of defining root classes is that many lexical roots are not attested with these diagnostic morphemes.

The closed classes are disjoint sets whose membership can be specified extensionally, and to some extent intensionally (as per the previous paragraph). Things are more complicated for open class items: classification is not a simple matter, and many forms are multifunctional, occurring in morpho-syntactic environments prototypically associated with more than one class. For example, *karrj* 'sharp' can be used as an N (as in (2–6)) or as a PV (as in (2–7)). Furthermore, it can be difficult, if not impossible, to decide in certain cases what part-of-speech a word is behaving as, as illustrated by (2–8) and (2–9), which could plausibly involve *karrj* 'sharp' either as a PV in collocation with -J 'do, say' and -M 'put'

respectively, or as an N serving as a secondary predicate (Nichols 1978; Schultze-Berndt & Himmelmann 2004; Himmelmann & Schultze-Berndt 2005). 17

- (2–6) wurrul jan duk nga-n-nyu karrj-ang bardangk fingernail 1MIN.OBL wipe 1MIN.NOM-CM-get sharp-INS stick 'I cleaned my nails with a sharp stick.'
- (2–7) nga-n-nyu-uk nga-marl karrj nga-n-j
 1MIN.NOM-CM-get-LOC 1MIN-arm sharp 1MIN.NOM-CM-say
 'When I caught my arm I swore.'
- (2–8) wukurr-wukurr i-ngi-rri-j kinyingk kumbarr karrj grind-grind 3NOM-PST-AUG-say DEF stone sharp i-n-j 3NOM-CM-say 'They ground the stone to a sharp point.'
- (2–9) karrj wa-na-m ni-lirr sharp 2MIN.NOM-CM-put 3MIN-mouth 'He sharpened the point.'

There are a fair number of roots like *karrj* 'sharp' that can occur in both syntactic contexts, as either Ns or PVs. Such roots are probably best classified as Ns. By contrast, some roots necessarily occur with a nominal stem-forming suffix if they occur in an NP environment as in (2–6); these are best classified as PVs. Adopting this position is consistent with an approach that allows words of certain classes to serve functions not prototypically associated with those classes without invoking the notion that they change class membership (especially given that reclassification is not morphologically registered) or that they belong to both classes (and thus that the parts-of-speech overlap considerably).¹⁸

Other multifunctional lexical items include roots that can occur as either PVs or as interjections, adverbials or nominals. The word *wukul* 'sorry', for instance, can be used as an interjection expressing sorrow on hearing of someone's death, or as a PV expressing the meaning 'be sorry for', as in (2–10).

¹⁷ Criteria may exist that permit resolution of this problem. Thus, for instance, if *karrj* 'sharp' may only occur immediately prior to the IV this would suggest that the lexeme is being used as a PV. This appears to be the case in Bardi, where the cognate *garrja* 'sharp' can't be separated from the IV by the negator (Claire Bowern pers.comm.). However, if other orders were possible we could not conclude that *karrj* 'sharp' was being used as a secondary predicate: the possibility of it occurring in both constructions is not ruled out.

There are also a few N roots which, when marked by a postposition, can serve as PVs. For instance, *ngank* 'language, speech' can serve as a PV meaning 'speak, talk' when it has the instrumental postposition -*ang* attached to it; *maad* 'fun, play' can do likewise when the locative postposition -*uk* or the allative -*ung* is attached. In these cases it seems reasonable to treat the N plus postposition as separate derived lexical items of the PV class. The fact that postpositions can have a derivational function is not particularly surprising, and does not contradict their status as postpositions. A comparable situation exists in English where some adverbials are used in collocation with verbs to form new lexical verbs, the so-called phrasal verbs like *eat up*, *finish up*, *run down*.

wukul nga-n-jal-in (2-10)kinyingk uriny sorry 1MIN.NOM-CM-see-PRS DEF woman 'I am sorry for that woman.'

There are, however, a number of words that can occur as interjections, but are not found in close collocation with an IV (except when used delocutively). These are naturally categorised as interjections. Roots like wukul 'sorry' that occur in other syntactic environments (without special morphological marking) are presumed to 'function as' interjections, though they do not belong to that part-of-speech.

Adverbials sometimes occur within NPs, providing elaborating modification of the head nominal. They can, however, be distinguished from Ns because they have the potential to provide enhancing modification of clauses without the use of relating morphemes (see below). Adverbials that can serve as elaborating modifiers of Vs can be difficult to distinguish from PVs, although when adequate information is available on the behaviour of the particular lexeme the issue should be decidable.

There are also a few lexical forms that appear to be common to both a closed class and an open class. For instance, the otherwise nominal word-form ngank 'word, speech, language' also occurs with inflecting-verb morphology, in which case it serves as an inflecting verb meaning 'speak, talk'. One approach would be to classify this lexical item as an N, recognising the simple verb construction as a further grammatical environment in which an N root can potentially occur. But this is not an ideal solution. It seems to be preferable to regard this behaviour as a peculiarity of a single lexeme or two, which might be regarded as polysemous and ambicategorial.

Let us now turn to non-root, or form morphemes (Matthews 1981:59). Some of these are inflectional morphemes, which when attached to a word of a particular type, give rise to a variant form of that word—a form of a word 'selected' according to its grammatical environment of occurrence. The inflectional morphemes are: the pronominal prefixes to prefixing Ns (see above p. 59); inflectional prefixes and suffixes to IVs (see p. 59); and a small set of inflectional suffixes which attach to cardinal spatial adverbials (see §6.3.1.1). (As mentioned above, the inflectional forms of pronominals are by and large suppletive, and do not involve recurrent inflectional morphemes.)

The pronominal prefixes to Ns index the inalienable possessor of an entity, often a human body part (see §4.2 and McGregor 1995b). Pronominal prefixes to IVs index the 'subject' of the clause, the Actor according to the analysis of §12.3.2.1. Other prefixes indicate tense, mood, and conjugation class. Inflectional suffixes also indicate tense, mood and aspect categories.

All other bound morphemes are non-inflectional. One important class is the stemforming suffixes, which can be divided into four groups corresponding to the three primary open classes of lexical roots, Ns, adverbials, and PVs and the closed lexical class of IVs.

As in most Kimberley non-Pama-Nyungan languages, case marking is not by means of inflectional suffixes to Ns (Rumsey 1982b; McGregor 1990; cf. Goddard 1982). Rather, it is effected by postpositions, bound phrase-level enclitic morphemes, which resemble English prepositions in terms of syntactic properties, but do not have the privilege of free occurrence. Postpositions are relators: they mark grammatical relationships, and thus serve textural functions.

What are referred to in Table 2-2 as enclitics are a second group of morphemes resembling postpositions in that they are neither inflectional nor stem-forming. However, unlike postpositions, they are not relators, and do not mark grammatical functions or roles.

64 Chapter 2

Rather, they are scoping items, items that hold other grammatical units in their scope (see §2.3 above) and thus discharge interpersonal functions. They resemble particles, except that they are distributionally bound, and must be hosted by a word. Postpositions and enclitics are rather promiscuous, and are effectively unrestricted in terms of the lexical classes they may be attached to, unlike the other non-root items, which are relatively restricted.

In conclusion, it is acknowledged that there is a smallish number of lexical words that are difficult to classify according to the above principles. There are, for instance, a few bound roots that take the pronominal prefixes associated with the subclass of inflecting Ns (mostly Ns designating body parts), but which do not otherwise satisfy the criteria for Ns. For example, *-mungk* 'believe, know' appears to function more like a particle than an N, while *-malkang* 'self, alone' seems to serve as an adverbial; a few other words taking the same inflectional prefixes are too infrequent to permit any comment as to what they might resemble syntactically. Other problematic roots include *ningarr* 'true' and *liyan* 'want, like', which usually function as PVs, less often as particles. Some or all of these perhaps show sufficient grammatical peculiarities to warrant treating them as word isolates rather than as members of the regular parts-of-speech categories.

3

Phonetics and phonology

3.1 Phonemes and their realisations

3.1.1 Phoneme inventory

The phoneme inventory of Nyulnyul is unexceptional for an Australian language. Like other Nyulnyulan languages—with the possible exception of Yawuru (see Hosokawa 1991: 43ff)—Nyulnyul distinguishes seventeen consonant phonemes, as shown in Table 3–1. Five places of articulation are distinguished for stops and nasals, and three for laterals. Voicing distinctions are not maintained anywhere in the language. Two rhotic segments are distinguished, the apico-alveolar tap or trill /rr/ and the apico-postalveolar glide /r/. In terms of their phonotactic patterning, /rr/ belongs with the laterals, while /r/ belongs with the glides /w/ and /y/ (see McGregor 1988c for general discussion).

Bilabial Apico-Apico-post-Lamino-Dorso-velar alveolar alveolar palatal **Stops** bd rdj g **Nasals** mn rnny ng l Laterals ly rlTap rrGlides y

Table 3–1: Nyulnyul consonant phonemes

As shown in Table 3–2, there are just three contrastive vowel qualities in Nyulnyul; length is contrastive for all three vowels.

Table 3–2: Vowel phonemes of Nyulnyul

	Front	Back
High	i ii	и ии
Low	a aa	

This work employs a practical orthography which is similar to the ones used in the existing children's literature, Torres & Williams (1987) and Charles (1993). The only differences are that: (i) I employ the symbol *k* for the velar stop, instead of *g* as in Charles (1993) (Torres & Williams 1987 use both *k* and *g*); and (ii) I employ *u* for the high back vowel, instead of *oo* (which is suitable for learners' materials, though less suited to a work such as the present one). See further §1.8.

The earliest investigator, Fr Alphonse Tachon, displayed little understanding of the phonetics or phonology of Nyulnyul. He comments (Tachon 1895) in his brief remarks on pronunciation that the vowels and consonants are pronounced as in French—though he appears to confuse the phones with the written symbols representing them. Usually he recognised only distinctions made in French; on the other hand, he recognised non-existent distinctions if they were made in French. Thus Fr Tachon failed to distinguish apicoalveolar from apico-postalveolar stops, nasal and laterals, while he over-differentiated voicing in stops. He had some awareness of the contrast between the apico-alveolar tap or trill and the postalveolar glide, though he failed to distinguish them in writing. Fr Tachon also had some appreciation of the separate status of the velar nasal, though his discussion indicates that he misunderstood its phonetic qualities; and he usually wrote the segment as an n. He also distinguished more vowels than necessary, using all five vowel letters of the Latin alphabet when only three are necessary. Furthermore, he wrote vowels in places where none are heard, evidently following French spelling conventions: e.g. he says that word final e (presumably in writing) is not pronounced unless given an accent mark. See McGregor (2000a) for further discussion.

By the second period of Australian Aboriginal linguistics (McGregor 2008e), the best investigators—including Arthur Capell (e.g. 1940) and Frs Hermann Nekes and Ernest Worms (e.g. Nekes & Worms 1953, 2006)—effectively understood the fundamentals of the Nyulnyul system of phonemes. They did not, however, systematically distinguish phonetics from phonology, or use the two terms in the modern way. (It was not until much later, the third period (post–1960), that Capell used the terms in their modern sense, at least in his writing on Australian languages.)

Capell and Frs Nekes and Worms identified all contrasting phonetic segments in Nyulnyul, including the alveolar vs postalveolar contrast, the contrast between the apico-alveolar tap/trill and the postalveolar glide, the velar nasal (which they realised could occur word initially, and distinguished from sequences involving a following stop). In their transcriptions, however, Frs Nekes and Worms did not consistently distinguish apico-alveolar from apico-postalveolar segments, or the alveolar tap/trill from the postalveolar glide (see Nekes & Worms 1953). They were also aware that voicing is not distinctive in the stop series. However, they misconstrued this absence of a contrast as a phonetic characteristic: they wrongly assert that stops are consistently 'devoiced' (Nekes & Worms 2006:59).

For the vowels, these linguists wrote e and o in addition to i and u. However, it seems that they were aware that there was no contrast in height in either front or back non-low vowels. Thus, for instance, Capell (1940:252) remarks (in relation to northern languages generally) 'I have contented myself with writing e and o where I have actually heard them, though realizing that i and u would usually do as well'. Likewise, Frs Nekes and Worms were aware that i and e and u and o do not contrast in Nyulnyul (while the latter pair do contrast in Bardi)—see Nekes & Worms (2006:53, 56–58). In most circumstances they wrote the two contrastive vowels as e and o, though they occasionally used i and u, especially if their Nyulnyul collaborators preferred to use these letters in spelling (Nekes & Worms 2006:57).

3.1.2 Phoneme contrasts

In this section I provide minimal and near minimal pairs to demonstrate the phonemic oppositions between suspicious pairs of phones only. We begin with the consonants. Where possible, all environments in which the contrasts are maintained are illustrated, in the following order: word initially, intervocalically, first or second member of a consonant cluster, and word finally.

(1) **Apical contrasts**. The contrast between apico-alveolar and apico-postalveolar (retroflex) articulation is maintained for stops, nasals, and laterals everywhere except (as far as I have been able to determine) word initially.²

(a) Stops /d/ vs /rd/

/d/ /rd/

/badak/ 'sulk' /bardangk/ 'tree' (intervocalically)
/wandarr/ 'prickly heat' /barndal/ 'feather' (second member of a CC)³
/wad/ 'stick in' /yaward/ 'horse' (word finally)

(b) Nasals /n/ vs /rn/

/n/ /rn/

/winin/ 'emu' /wiirni/ 'respect' (intervocalically)
/mabandin/ 'grumbling' /mabarndan/ 'extinguishing' (first member of a CC)
/kanburr/ 'paperbark type' /karnb/ 'upper part of thigh' (first member of a CC)
/yambun/ 'together' /burn/ 'blunt' (word finally)

(c) Laterals /l/ vs /rl/

/l/ /rl/

/bilay/ 'again' /birlarr/ 'spring' (intervocalically)
/majalkin/ 'falling' /majarlkin/ 'concealing' (first member of a CC)
/biil/ 'angry, anger' /birlbirl/ 'palpitate' (word finally)

(2) **Rhotic contrast**. The contrast between the apico-alveolar tap/trill /rr/ and the apico-postalveolar glide /r/ is maintained in all environments except word initially, where only /r/ occurs.

/rr/ /r/

/warrabalak/ 'star' /warang/ 'some, others' (intervocalically)
/kurrburl/ 'hollow log' /jurbarr/ 'stiff' (first member of a CC)
/kujarr/ 'two' /jarijar/ 'crack, hole' (word finally)

(3) **Vowel contrasts**. Vowel contrasts are maintained both in terms of quality and quantity word medially, in syllable nucleus position. Word initial and word final vowels are not common in Nyulnyul (see §3.2), and minimal pairs are not provided for these positions.

² It is admitted that the contrast is not necessarily neutralised word initially, just that I do not have convincing evidence for it (recall remarks in §1.9).

³ Recall that in the practical orthography employed in this description the second element of a homorganic postalveolar nasal-stop cluster is not specifically indicated as postalveolar.

⁴ According to Nekes & Worms (1953:353) the stop following the postalveolar nasal is an apico-alveolar.

(a) Quality /a/ vs /i/ vs /u/

/a/ /i/ /u/
/damba/ 'damper'⁵ /dimb/ 'join' /dumbar/ 'fly'
/kamard/ 'mother's mother' /ngimbirr/ 'night' /kumbarr/ 'stone'
/mangkirr/ 'goanna' /mingkird/ 'all the time' /mungkarn/ 'hair'
/barrambarr/ 'parrot fish' /birray/ 'mother' /burruk/ 'kangaroo'

(b) Quantity⁶

(i) /a/ vs /aa/

/a/ /aa/

/kajanangurr/ 'plant type' /kaaj/ 'bloodwood tree'

/iibal/ 'father' /baal/ 'belt' /bab/ 'deaf' /baab/ 'child'

/kambaj/ 'woman bereaved of child' /kaamb/ 'pandanus palm' /jukar/ 'soft' /dulkaari/ 'plant type'

(ii) /i/ vs /ii/

/i/ /ii/

/bin/ 'that' /biin/ 'rotten'

/bindan/ 'bush' /biik/ 'shade, shadow'

/ngidirrngin/ 'alone, by oneself' /ngii/ 'yes'

(iii) /u/ vs /uu/

/u/ /uu/

/jungk/ 'fire' /juurr/ 'snake' /wub/ 'pup' /buub/ 'flower'

/wurr/ 'buzz' /wuurr/ 'horn of box fish' (Nekes & Worms 1953:911)

3.1.3 Phonetic realisations of phonemes

It will be recalled that the available recorded Nyulnyul speech is quite restricted, and cannot be regarded as representative of the language as it was spoken when it was viable in the nineteenth and early twentieth centuries. Most of the audio-recorded speech was produced by a deaf speaker, Mary Carmel Charles; as already observed (§1.9), there is reason to believe that reduced auditory feedback resulted in phonetic abnormalities in her speech production. The other individuals who were audio recorded were part speakers, or suffered from maladies affecting their articulation. The quality of the only recording I have access to of viable and naturalistic Nyulnyul speech by fluent speakers (made in 1910 by Fr Bischofs) is too poor to permit phonetic observations.

⁵ This word is of course a borrowing from English; there is no reason, however, to believe that it does not follow the phonological patterns of Nyulnyul, and is given here since it makes such a good near minimal triplet with the other two words. The syllable /dam/ is also exemplified in the IV root -DAM 'hit', as in *ngandam* 'I hit him', and in the lexical form *daman* 'raid, attack' cited in Nekes & Worms (1953:418), though not attested in my own corpus.

⁶ Note that in many of the following examples a long vowel in a monosyllabic word is contrasted with a short vowel in an initial or subsequent syllable of a polysyllabic word. The fact that short vowels can occur in monosyllabic words means that vowel length is not a consequence of word size.

Phonetic observations in earlier descriptions of the language are quite inexplicit and lacking by modern standards. Thus, as already mentioned, Tachon (1895) says virtually nothing about Nyulnyul phonetics. The chapter on phonetics in Nekes & Worms (1953)—a revised version of which is published in Nekes & Worms (2006:53–69)—does give some relevant information, though not all is reliable, and details are wanting.

Given these circumstances, observations about Nyulnyul phonetics must be regarded as quite tentative; this holds particularly for observations about the realisation of the phonemes. For the purposes of this grammatical description little can be gained by undertaking a detailed acoustic analysis of the modern audio recordings.

3.1.3.1 Consonants

3.1.3.1.1 Stops

Like the majority of Australian Aboriginal languages, Nyulnyul has a single series of stop consonants. Voice onset time is not phonemic, and both voiced and voiceless allophones occur, with various degrees of aspiration. There is a fair amount of free variation amongst the stop allophones in terms of voice onset time, as well as some complementary distribution. The following remarks identify broad tendencies only.

In word initial position stops show some tendency to be voiced, though voiceless allophones also occur, especially in the case of the velar stop (see Nekes & Worms 2006: 60). The palatal stop is almost always voiced in word initial position, while for the apical stops voiced and voiceless allophones alternate. No audible aspiration is usually apparent in word initial stops: voice onset is either prior to the release of the stop, or at its release.

Intervocalic stops may also be either voiced or voiceless; the former are the most common allophones, regardless of their place of articulation. Voiceless allophones are rarely if ever accompanied by any perceptible aspiration. Some examples are: *iibal* [i:bal] 'father', *wajamarr* [wajāmar] 'later', *bardangk* [badank] 'tree, stick', and *magabal* [magābal] 'a type of creeper'.

In word final position stops are often devoiced, and may be unreleased. Thus *warrij* 'quickly' may be pronounced with a final [J'] or [c'], or with a released stop with devoicing beginning somewhere within the duration of closure. In one short text about bush foods the speaker utters the word *rambak*, bush potato type' in one instance with audible friction following the release of the final stop, [rambakh]; in another instance, it is produced with an unreleased final stop, [rambakh]. This observation can be confirmed by an examination of Figure 3–1. The arrow in the first spectrogram indicates the point of release of the final stop; following this is a period of random noise. The second spectrogram shows no such point of release.

The release of a root final stop need not be followed by a brief period of random noise; sometimes instead of random noise a short and non-salient central vowel in the vicinity of [ə] is heard. In the former case, the stop allophone is likely to be voiceless; in the latter, it is likely to be voiced. This epenthetic central vowel is usually inserted when the word is followed by another word beginning with a stop or nasal. Thus, in the clause *baab marriny ingirrjid* 'the children walked' the first word is likely to be pronounced [ba:bə] (see §3.5.1 below).

There are some correlations between voicing and place of articulation for word final stops. Thus bilabial, apical and palatal stops tend to be voiced in word final position, whereas the velar stop tends to be voiceless.

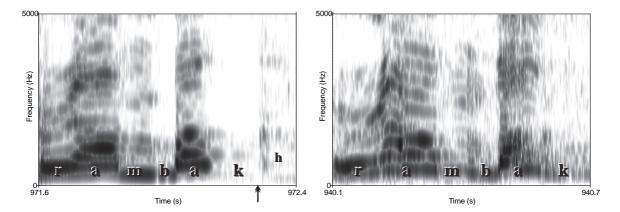


Figure 3–1: Spectrograms of two instances of rambak, bush potato type's

Stops are consistently voiced in intervocalic nasal-stop clusters. For instance, the velar stop in *banangkarr* 'now, today' is always [g], never [k]. Even if the cluster occurs in word final position it is likely that a final stop will be voiced. As just seen for roots ending in a stop, for roots ending in a nasal-stop cluster the stop may be followed by a short central vowel: *kinyingk baab* 'this child', for instance, is likely to be pronounced as [kṛṇṇŋgəbaːb].

The same generalisations linking voicing with place of articulation apply to word final nasal-stop clusters—that is, where the cluster is final in the phonetic word, and not followed by a central vowel—as to word final stops. Thus velar stops strongly tend to be voiceless in words such as *ngank* 'speech, language' and *kinyingk* 'this', whereas the final stops of *wamb* 'man', *band* 'ground, earth', *ngurnd* 'piss, urine', and *kiinyj* 'bone' are normally voiced. In final position the palatal stop seems to be especially weak, particularly in longer words, such as reflexive/reciprocal forms of inflecting verbs (IVs), where it can be virtually imperceptible. For instance, *ngangamakandinyj* 'I scratched myself' has been recorded on more than one occasion in my notebooks without the final stop.

- (1) **Bilabial stops**. Bilabial stops always involve complete bilabial closure. Some lip rounding accompanies the bilabial when the following segment is the high back vowel, as in *burruk* [bworok] 'kangaroo'.
- (2) **Apico-alveolar stops**. These segments involve contact between the tip of the tongue and the front part of the alveolar ridge, just behind the upper teeth.
- (3) **Apico-postalveolar stops**. These segments are produced with contact between the apex of the tongue and the postalveolar region. Retroflex articulation does not seem to occur. As indicated already, in the speech of the person I mostly worked with, alveolar and postalveolar segments were strongly affected by the lack of auditory feedback.
- (4) **Palatal stops**. The palatal stop is normally realised phonetically as a stop rather than as an affricate; there may be a slightly longer off-glide from this segment into a following vowel, but no perceptible aspiration noise occurs (cf. Ladefoged 2001:142–143 on the palatal stop in Nunggubuyu). While the main allophone of the palatal stop is articulated in the palatal region, this phoneme is sometimes realised as a lamino-dental stop. This usually happens in word initial position when the following segment is the low vowel, as in *jakud* 'return' and *jalkangurr* 'doctor', which sometimes begin with [d]. Lamino-dental

allophones are also attested within words: majalin 'to see, to look' has been recorded with dental contact in the second syllable.

(5) **Velar stops**. These involve contact between the dorsum of the tongue and the velum. It is likely that the high front vowel /i/ conditions a fronted allophone of the velar stop, though this suspicion has not been tested against acoustic evidence.

3.1.3.1.2 Nasals

Nasals are generally voiced throughout their duration, and show basically the same allophony in place of articulation as the corresponding stops. Thus, the palatal nasal is sometimes realised by a lamino-dental nasal, especially preceding the low vowel, as in the occasional pronunciation of nyanangkarr as [nanangag] 'perhaps, maybe'. In word final position, some devoicing is liable to occur, though I have not observed entirely voiceless allophones of any nasal.

3.1.3.1.3 Laterals

The three laterals show place-of-articulation allophones comparable to the corresponding stops and nasals. One difference concerns the palatal lateral, for which the lamino-dental allophone appears to be conditioned by syllable final position, rather than by a following low vowel. Thus the pronunciations [yal] of yaly 'lick' and [gi:l] of giily 'bower bird' have been recorded alongside of realisations with final $[\Lambda]$. All laterals appear to have a clear quality regardless of their position in a word. Devoicing of final laterals has not been observed.

3.1.3.1.4 Tap/trill

In intervocalic position the tap/trill /rr/ is normally realised as either the voiced alveolar flap [r] or as a single tap of the tongue tip against the alveolar ridge accompanied by voicing. Occasionally trill allophones are heard. These three allophones also occur in word final position, though devoicing is likely to occur in this environment, which may be either partial or full. Thus wajamarr 'later' may be pronounced [wajamar] or [wajemar] with complete or partial devoicing of the tap/trill. Prior to a stop or nasal consonant, /rr/ is usually realised by a flap or tap; partial devoicing may occur if the following stop is phonetically voiceless.

3.1.3.1.5 Glides

The major allophones of the glides /y/, /w/ and /r/ are voiced frictionless continuants.⁷

/w/ is a velar glide, with major allophones [w] and [w]. The dorsum of the tongue is raised to approximately its position for the vowel [u], and the lips may be rounded slightly, or at least protruded, especially in the environment of the high back vowel. Preceding the high back vowel, the velar glide may be elided (see also §3.1.3.2 on the realisation of vowels). This occasionally happens word initially, where e.g. wurrumbang 'many' may be

⁷ Contrary to Nekes & Worms (2006:63–64), /y/ and /w/ are not fricative segments.

pronounced as either [wurombaŋ] or [orombaŋ]—although the former realisations predominate in my corpus. Most words with initial /wu/, however, seem to be invariably uttered with the initial glide, as in the case of e.g. wuul 'water' and wungkunurr 'heaven'.

/y/ is normally realised as the palatal glide [j]. The blade of the tongue is raised towards the hard palate, to about its position for the vowel [i], but not close enough for friction to result. Preceding the high front vowel, /y/ may be elided (as may /w/ preceding /u/). Some words beginning with /y/ are produced either with or without the glide; for instance, *yiil* 'dog' is attested both as [ji:l] and [i:l], *yiik* 'sore, sick' as [ji:k] and [i:k], and *yiwal* 'high, tall' as [jiwal] and [iwal].

/r/ is an apical glide, normally realised as [1]. The apex of the tongue is usually raised somewhat, and points towards the alveolar ridge, or slightly behind it. Following the low vowel and in word final position, its articulation sounds quite retracted, verging on the retroflex [1], as in [17]iwa1] 'three'. Some devoicing of this glide may occur in word final position and syllable final position preceding a stop, especially if the latter is realised by a voiceless allophone, as in [inäwa1k] (inawark) 'he/she picked him/her/it up'. As far as I am aware, devoicing is never complete.

3.1.3.2 Realisation of vowels

As expected given their small number, the vowels of Nyulnyul show fairly large ranges of allophonic variation. This is particularly so for the short vowels, the allophones of which cover virtually the entire vowel space in terms of quality. Long vowels, by contrast, show little allophony in terms of quality.

In weak syllables—that is, roughly in non-initial unstressed syllables that consist of two morae or fewer (see further §3.4)—vowels tend to be short, lax, and rather indistinct in quality. They are often centralised, sometimes as far as [ə]; this is especially so for epenthetic vowels, as in *narnkarr* [nangärð] 'his/her/its forehead', *banaban* [banðban] 'like this', *niwal* [niwalð] 'his/her/its tail', *binyjibinyj* [piŋyïbiŋyð] 'pearlshell pendant', and *nganangul* [ŋanəŋol] 'I threw it'.

In the remainder of this section we restrict attention to the realisation of vowels in strong syllables.

3.1.3.2.1 Low vowel

Allophones of the low vowel /a/ range from front to back, and in height from low to the low mid region, depending on the phonetic environment. The following are some of the most prominent conditioning factors. As will be observed, in the majority of instances an immediately following segment has the most effect on the quality of the vowel: conditioning is regressive.

A following dorso-velar segment tends to induce the back allophone [a], as in *dakul* [dakul] 'hole', *makirr* [maker] 'road', and *langan* [lanan] 'shoulder'. A following bilabial segment tends to have the same effect: *bambul* [bambul] 'blind', and *kaburr* [kabur] 'guts'.

A following palatal segment tends to condition a front allophone, that is, [a]; this is often raised, sometimes as high as [æ]. Examples include: *wajamarr* [wajāmar] 'later', *ilabanyan* [ilābanan] 'he/she/it might have finished', and *majukurr* [majökor] 'stone fish trap'. In closed syllables with a final palatal, there is usually an audible rising diphthong in the low vowel, as in *ngay* [ŋai] 'I', *bilay* [bɪlæɪ] 'again', *manykarr* [mæɪnger] 'gills', and *nimarraj*

[nimeraty] 'his/her/its shadow'. A preceding palatal segment can induce a front allophone of /a/, even in conditions where a back allophone would be expected, as in *jaminyirr* [jaminer] 'father-in-law', and *yambun* [jambon] 'together'.

A following tap, flap, or trill tends to raise and somewhat centralise the low vowel /a/ to about [v], as in the just cited *nimarraj* [nimeray] 'his/her/its shadow', *arri* [vii] 'not', and *karrambal* [kerambal] 'bird'. Otherwise, apical consonants condition allophones in the low range, closer to [a] than to [a].

The long low vowel /aa/ is, as far as I am able to determine, invariably realised as the long low back vowel phone [a:], as in *mabaar* [maba:ɪ] 'flesh', baal [ba:l] 'belt', and baab [ba:b] 'child'. An adjacent palatal has no noticeable effect on the quality of the long low vowel: *maaj* [ma:t] 'boss' and *nyaa* [na:] 'here!'.

3.1.3.2.2 High front vowel

The high front vowel shows allophones ranging from high to mid, and from front to the anterior part of the central region; it is usually lower and less lip spread than cardinal vowel 1. Its elsewhere realisation is in the region of [i] and [ɪ]. As for /a/, the allophones of /i/ are conditioned by the adjacent consonants, especially the following consonant, by stress, and by position in the word. Some free variation also occurs.

Preceding a palatal consonant, /i/ is normally realised by a high front allophone, within the range of [i]: mijal [mijal] 'sit', binyjibinyj [biŋyībiny] 'pearlshell pendant', minyawu [minau] 'cat', uriny [oɪin] 'woman', and yandilybar [jandiʎbaɪ] 'boat'. When the following palatal is a glide, the glide may not appear phonetically, but leaves its mark, so to say, in the allophone selected, as in arriyangk [priank] 'nothing', where no significant glide usually appears between the vowels—although one can occasionally be heard. A preceding palatal segment may also induce this allophone, though it does so less regularly and consistently: nyimungk [pimoŋk] 'you think', and jilaman [jiläman] 'rifle'. A word-initial palatal glide may coalesce with a following high front vowel, resulting in a high front phone: yirril 'oxbill turtle' is sometimes realised as [irɪl], as well as [jirɪl].

A somewhat backer and lower allophone occurs when /i/ is followed by a velar segment; perceptually it is about midway between [i] and [i], and it sounds less centralised than the high front vowel in Gooniyandi is in the same environment (McGregor 1990:59). I represent this vowel as an advanced central vowel, [i]. Examples are <code>jarringk</code> [<code>jerink</code>] 'tooth', <code>jalingk</code> [<code>jalink</code>] 'ride', <code>ningarr</code> [<code>niner</code>] 'true', and <code>nikinbal</code> [<code>niginbal</code>] 'his appearance'. The degree of centralisation is less when the preceding segment is a palatal, in which case a vowel in the vicinity of [I] (though slightly higher) usually occurs, as in <code>jikir</code> [<code>jikil</code>] 'peep', <code>nyikinbal</code> [<code>piginbal</code>] 'your appearance', and <code>kinyingk</code> [<code>kipink</code>] 'this'. (The last example shows that a preceding velar can reduce the fronting and raising induced by a following palatal.)

Preceding the apico-alveolar rhotic /rr/, a mid font allophone of /i/ usually occurs, approximately [e], as in *nilirr* [nɪleɪ̞] 'his/her lip', *jirr* [ɹeɪ] 'their', *ingirriny* [ɪŋeɪiɲ] 'they got him/her/it', and *baljirrang* [balɹĕraŋ] 'left'. A similar lowering effect is sometimes observed when the following segment is the apical glide /r/, as in *lirlir* [leɹleɪ] 'remove skin'.

⁸ It is possible that the final glide induces movement of the tip of the tongue within the production of the vowel. However, I have not been able to detect any such *r*-colouring.

In word final position, /i/ is sometimes realised by [i], as in the case of *arri* 'not', which is usually realised as [ɐri] or [ɐɾi], where the final vowel is somewhat lax, but still in the vicinity of [i]. In word initial position there is a tendency for it to be realised as [ɪ]. In unstressed syllables, /i/ is normally somewhat less tense than in stressed syllables.

The long high front vowel /ii/ almost always shows the quality [i]; it is slightly less tense, slightly less spread, and slightly lower than cardinal vowel 1, as in *iibal* [i:bal] 'father', *kiinyj* [gi:nt] 'shell', and *ngii* [nti] 'yes'. Diphthongal realisation sometimes occurs, with the quality of the vowel dropping slightly from [i] to about [i]. This seems to be restricted to monosyllabic words; for instance, *yiik* 'sick' has been heard pronounced as [iik] as well as [ji:k], and *yiil* 'dog' has been observed pronounced [ji:l] and [iil].

3.1.3.2.3 High back vowel

Allophones of the high back vowel range in height from about the vicinity of [o] to [u]; it is never as high and back as cardinal vowel 7. There is little audible variation in terms of backness, and there are no central allophones (except in weak syllables—see p. 99 below). Lip rounding does occur, though it is not very prominent, and is perhaps more accurately described as protrusion than rounding. It seems to be most noticeable when it is both preceded and followed by labial segments, as in e.g. wumban [wumban] 'waterhole'.

As is the case for the other two vowels, the quality of the high back vowel seems to be most affected by the following consonant. Thus when it occurs in word final position, /u/ tends to show little variation in quality, being mostly realised as [w], as in *ngannyu* [nannw] 'I got it'.

A following palatal segment tends to front the high point of the tongue in the /u/ vowel somewhat, as in wunyjub [wunjob] 'mother', kunyurl [kunyol] 'moon', and kujarr [kunyol] 'two'. If a palatal segment closes the syllable with the high back vowel, a short glide is often heard, as in karrkuj [kunyol] 'dead' and mukuny [mukunyol] 'grey hair'.

As in the case of /i/ and /a/, a following tap/trill tends to induce an allophone in the mid region, here within the region of [o], as illustrated by the following examples: *kurrbul* [korbul] 'hollow log', *kaburr* [kabor] 'guts', and *jurrb* [torb] 'descend, jump down'. As in these examples, the lowering is most evident when the tap/trill belongs to the same syllable as the high back vowel. Thus a somewhat higher allophone is normally found in the nominal *burruk* 'kangaroo', pronounced [burok]; the preceding bilabial and following high back vowel presumably also contributes to the raised quality of the first vowel.

A following velar segment sometimes induces backed and raised allophones of /u/. It is perhaps most apparent for the labio-velar glide /w/, which tends to induce the allophone [u]; the glide itself may not be discernible, as in *kuwan* [guan] 'pearlshell', and *yuwurr* [juos] 'descend'.

The long high back vowel /uu/ is realised as a long high to mid vowel, in the region of [u:] to [o:] (what conditions the quality is uncertain); it is normally accompanied by some lip rounding (though less than the maximal possible). Examples are: *juurr* [ju:r] 'snake' (notice that the following tap/trill does not lower the long /u/ vowel significantly), *wuul* [wo:l] 'water', and *buu* [bu:] ~ [bo:] 'blow'.

3.1.4 Phoneme variation

There is a considerable amount of alternation among phonemically contrastive segments within both root and non-root morphemes in the Nyulnyul corpora, that is, variation in phonemic representation, that cannot be accounted for by sandhi or morphophonemic processes. Some of this variation occurs between the corpora, and perhaps reflects differences in the dialects of the Nyulnyul interviewees (though there is inadequate information on both the origins and identities of speakers to permit us to assign the variants to particular dialects). There is also variation within my own and the other corpora, some of which can only be interpreted as intra-speaker 'free' variation.

A good deal of the variation exists amongst the vowels. The high font and high back vowels sometimes alternate. For instance, as shown in §4.2.1.3, the second person augmented pronominal prefix to prefixing nouns has two allomorphs *kirr*- and *kurr*- which appear to be largely in free variation, and both occur with a number of noun roots. (See §4.2 for further instances of free variation in the prefixes to nouns.) The nominal 'alive' appears as both *niinyj* and *nuunyj* in both my own corpus and Nekes & Worms (1953). The high front vowel also alternates with the low vowel in a number of instances. Thus, for instance, Nekes & Worms (1953) give *baler*—presumably *balirr*—'shine' (p. 345, p. 624) and *balar*—presumably *balarr*—'light, clear, shining' (p. 342). These are almost certainly the same lexical item.⁹ Another example is provided by the generic word for 'bird', consistently *karrambal* in my corpus, though Nekes & Worms (1953) give it as *karrambal* in most citations (e.g. p. 354), but as *garambel* (i.e. *karrambil*) in the headword entry (p. 572). Examples can be easily multiplied—see also Table 7–1.

In at least one word the long back vowel [uu] alternates with [uwu]: as well as the usual form *yuurr* 'descend', the bisyllabic *yuwurr* 'descend' has been heard. As far as I am aware the long high back vowel never contrasts with the sequence [uwu]; it is therefore possible to treat the long back vowel [u:] as a realisation of either /uu/ or /uwu/. In a couple of instances [ii] seems to alternate with [iya] (it perhaps also alternates with [iyi], though this is less certain). Thus my own corpus has *niimarr* 'sandhill, dune', while Nekes & Worms (1953: 748) give *niamar*—i.e. *niyamarr*; in my own corpus the latter form is glossed 'hilly country', and presumably instantiates the same lexeme. Quite likely *niilbun* 'an onion-like root' (my corpus) is to be identified with *nialbon* (presumably *niyalbun*) variously glossed 'nut-grass bulbs' (Nekes & Worms 1953:789), 'nut-grass, Sturt-grass (*Cyperus rotundus* L.)' (Nekes & Worms 1953:334). Interestingly, Nekes & Worms (1953:763) also give *nīrbon* 'nut-grass, Sturt-grass (*Cyperus rotundus* L.)' with the long front vowel.

Some fluctuation also occurs occasionally amongst consonants. Thus the palatal stop and nasal alternate in $ngarrij \sim ngarriny$ 'very, really', both of which occur in my own corpus (the nasal variant just once), and in Nekes & Worms (1953:792), where they are given separate entries, though glossed identically. Another rather different instance of a stop-nasal alternation occurs in the initial segment of the first person minimal pronominal prefix to IVs, which in the future tense only, shows up irregularly as the velar stop, instead of the velar nasal (see Table 7–4). Both my own corpus and Nekes & Worms (1953) show some instances of alternation between l and rr. For instance, both barrjarniny and baljarniny are

⁹ This might alternatively be put down to errors of transcription, in this instance perhaps due to the raising of the allophone of the low vowel before /rr/. However, there are too many such alternations, some of which are replicated in my own data, to be all put down to scribal errors or hearing deficiencies.

recorded for a type of kangaroo, as are *burrurr* and *burrul* 'string, lace' and *jilirrarr* and *jililarr* 'hang down' ¹⁰ (see end of previous paragraph for another example).

Some variation also occasionally occurs across morpheme boundaries within morphologically complex words. For instance, both *ngiim* and *ngaam* 'my eye' are attested, and indeed occurred in the speech of the last speaker. Just as /ii/ and /iya/ alternate in a few monomorphemic words, they also alternate across morpheme boundaries, as in *ni-yangal* and *ni-ingal* 'his/her/its tongue', both of which are attested in my own corpus (although only the former form occurs in Nekes & Worms 1953:749).

3.1.5 Feature description

A feature description is proposed in this section for Nyulnyul phonology that identifies natural classes of phonemes in accordance with their phonotactic patterning, and to a lesser extent their morphophonemic alternations and allophonic variation. This system employs features that are mostly fairly standard for Australian languages (see e.g. Dixon 1980: 180–194; McGregor 1990:41–49, 1992d), though there are some important differences from universal feature systems both in terms of purpose and design. In particular, the primary motivation for the system is descriptive, not theoretical: it permits (as will be seen) formulation of some generalisations about Nyulnyul.

At the highest level, consonants and vowels are distinguished by the features [consonantal] and [vocalic], which features are in equipollent rather than privative opposition (Trubetzkoy 1969). Effectively these features distinguish segments that occupy syllable margin vs syllable nucleus position. Different sets of features are employed for the description of consonants and vowels (cf. Dixon 1980:187), as discussed in the following subsections.

3.1.5.1 Consonant features

Two orthogonal sets of features are identified, manner features and place features, as follows:

Manner features: [±continuant], [±nasal], [liquid], [lateral], [glide]

Localisation features: [±peripheral], [labial], [dorsal], [laminal], [apical], [±retroflex]

Nasals and stops show some phonetic and phonological (including morphophonemic) commonalities, sufficient to motivate grouping them together in contrast with the other consonants. The feature [±continuant] captures this natural grouping; it is to be interpreted as indicating whether or not there is complete blockage of the passage of air through the oral cavity. The opposition is presumed privative because there is evidence of morphophonemic alternations involving segments of the two types (see also Dixon 1980: 183; McGregor 1990:43). Within the class [—continuant], nasals and stops are distinguished by the feature [±nasal], though the evidence for the privative nature of the opposition is not strong.

As implied by Table 3–1, the apico-postalveolar rhotic r belongs with the glides w and y in terms of its patterning, and shares little with the apico-alveolar rhotic rr (see §3.2). The

¹⁰ The last two pairs of examples perhaps show the effects of (optional) dissimilation. But this cannot be invoked to account for the first of the three alternations.

latter patterns more like the laterals (McGregor 1988c). This motivates the recognition of the two natural classes, $\{w, r, y\}$ and $\{l, rl, ly, rr\}$ and the corresponding manner of articulation features [glide] and [liquid], as in many Australian languages. The liquids may be further divided into laterals and tap/trill, e.g. with the features [lateral] and [tap] ([central] would do equally well).

This feature system does not encapsulate or account for the fact that *ly* and *rr* also share some commonalities in phonotactic patterning, though whether their shared patterning is sufficient to motivate grouping them together is unclear.

In regard to localisation features, [peripheral]—which corresponds to the acoustic feature [grave]—groups together bilabials and velars, articulated in the periphery of the oral cavity, in contrast to apicals and laminals articulated towards the centre of the oral cavity, and by the front part of the tongue. There is some evidence that the opposition is privative, and thus that [peripheral] can take + and - values. [+peripheral] segments can be either [labial] or [dorsal], which contrast shows no evidence of being privative. [-peripheral] segments are produced with either the tip or blade of the tongue, giving the features [apical] and [laminal], which appear to be also in equipollent opposition. [apical] consonants are further specified as [±retroflex], where this feature is to be interpreted as indicating whether or not the tip of the tongue is raised from the neutral position. As we have seen already, this contrast is neutralised in word initial position, indicating that the opposition is privative. [laminal] consonants are not further distinguished in terms of place of articulation.

3.1.5.2 Vowel features

For vowels just three features are required, all apparently binary and privative: $[\pm high]$, $[\pm back]$, and $[\pm long]$. There is some morphophonological evidence for grouping the two high vowels together as a class distinct from the low vowel: there is a process of vowel harmony that is sensitive to vowel height. There are also reasons, including frequency (see below §3.2.5.1), to believe that the low vowel is less marked than the high vowels. The fact that the contrast between front and back is neutralised for the low vowel suggests that the height contrast is privative.

3.2 Phonotactics

Nyulnyul phonotactics is rather unusual for an Australian language. We begin in §3.2.1 by discussing the structural characteristics of roots, then in §3.2.2 move on to non-root morphemes (affixes and clitics). Next, in §3.2.3 we briefly deal with intermorphemic phonotactics. Section 3.2.4 then turns to reduplication, and discusses the phonotactics of inherently reduplicated roots and reduplicated stems, which turn out to show the same structures. Finally, §3.2.5 provides some statistics on the frequency of occurrence of the phonemic segments. The following section, §3.3, continues the discussion of phonotactics with a discussion of the syllable structure of words and morphemes.

3.2.1 Roots

3.2.1.1 General structural features

Most roots in Nyulnyul consist of between one and six syllables (see further §3.3.1 below), and begin and end with a consonant. Root-initial vowels do occur, however, although they

are comparatively rare: only about 2% of free roots in the corpus begin with a vowel. There is a contrast between [i] and [ji], and [i:] and [ji:] in initial position in roots (and words)—that is, /i/ and /yi/ contrast in word-initial position. The situation is less certain for /u/ and /wu/, for which the status of the contrast in word-initial position is somewhat equivocal. Nekes & Worms (1953) include no roots consistently represented with initial /u/. However, in my own corpus some words invariably appear with an initial /u/ (e.g. *uriny* 'woman') while others are invariably uttered with an initial /wu/ (e.g. *wungkunurr* 'Milky Way').

There are restrictions on consonants occurring in root-initial position: the liquids /ly/ and /rr/ do not occur at all, as is the case in a number of Kimberley languages—e.g. Gooniyandi (McGregor 1990:71); Jaru (Tsunoda 1981:37); Ngarinyin (Rumsey 1982b:14); and Nyikina (Stokes 1982:23). As mentioned above, the contrast between apico-alveolar and apico-postalveolar is neutralised in root-initial position.

Unlike most Australian languages, Nyulnyul shows a high frequency of root-final consonants and consonant clusters. Indeed, 92% of roots (by dictionary count) end in consonants; this is evidently a consequence of a recent historical phonological process of final vowel loss. By contrast, only about a third of roots in Warrwa are consonant final (McGregor 1994c:11). Whereas in many nearby languages there are differences in the frequency of consonant-final roots according to part-of-speech, there are none in Nyulnyul. Thus, the difference in frequency of consonant-final preverbs and nominals is negligible: 96% for the former, and 93% for the latter. By comparison, the figures in Warrwa are 56% and 25% respectively (McGregor 1994c:11).

All consonant contrasts are maintained word finally, as they are intervocalically. However, there are significant differences in the frequencies of consonants in word-final position compared to other positions: liquids are overall the most frequent, accounting for about 42% of final consonants; nasals for about 25%; stops for 23% and glides for 10%.

All vowel contrasts are maintained word medially and finally, although long vowels are rare in root-final position for words of more than one syllable.

3.2.1.2 Consonant clusters

Consonant clusters (CCs) occur root initially, root medially, and root finally. Root initially the only attested consonant cluster is /bl/, as in *blurru* 'bald'. The consonant clusters attested in the other two positions are shown in Table 3–3, where the initial consonant is indicated in the columns, the second consonant in the rows. M indicates that the cluster occurs root medially; F, root finally; B, both root medially and finally. Clusters occurring exclusively across the boundaries of formatives in monomorphemic reduplicated roots are not indicated in this table; see §3.2.4 below.

¹¹ A number of paradigmatically contrasting forms of IVs are cited in Nekes & Worms (1953, 2006) with an initial *u*; these have, however, an initial /yu/.

¹² In many Kimberley languages just a few consonant clusters are permitted word initially, and these usually consist of a peripheral stop (i.e. /b/ or /k/) followed by a glide or liquid. In Gooniyandi the permissible initial CCs are *br*, *bl* and *gr* (McGregor 1990:71); in Gunin/Kwini *br* occurs (McGregor 1993b:19); and in Warrwa, only *kw* occurs (McGregor 1994c:11).

								F	irst n	nemb	er							
		b	d	rd	j	k	m	n	rn	ny	ng	l	rl	ly	rr	w	r	у
	b				M		В	В	В	В		В	В	M	В		В	В
	d	F					M	В					M		M			
	rd								В						F			
	j							В	F	В		В		В	В			M
	k			F				В	В	В	В	В	В	F	В		F	M
	m							В	В	M		В			В			
nber	n					M												
Second member	rn																	
ond	ny							В										
Sec	ng							В	M			В			В			
	l																	
	rl																	
	ly																	
	rr																	
	W					M			M			M			M		M	
	r																	
	у														M			

Table 3–3: Intervocalic and final consonant clusters in Nyulnyul roots

Only fifty-three of the 289 possible CCs are attested; that is, only about 18% (or just under a fifth) of the possible combinations are attested. It is likely that other CCs were possible in Nyulnyul, but are not represented in the available data, and some of these might be uncovered with more extensive examination of the historical corpora (although the interpretation of the transcriptions in the legacy material is never straightforward). Doubtless some gaps are accidental, while others are likely to be systematic (e.g. the absence of clusters of identical consonants). There are also some uncertainties. For instance, a few instances of the phonetic sequence [a] are attested, though they may be realisations of /rrVr/, with loss or significant reduction in the unstressed intervening vowel.

As the tabulation makes clear, there are few clusters which occur root finally that are not attested root medially; on the other hand, a fair number of clusters are attested root medially which do not occur finally. Granted that root-final consonant clusters have arisen as a result of loss of final vowels, it is probable that the differences are accidental. A possible exception is the absence of root-final clusters ending in glides, which appears to be too systematic to be accidental.

The following generalisations are fairly robust, though they are not exceptionless:

• In both root-medial and root-final positions the most common clusters are homorganic nasal-stop clusters, which occur at all points of articulation.

- Peripherals are common as second members of CCs, rare as first members. Indeed, they are so common as second members that over a half of the attested CCs have a peripheral as their second member.
- Laminals occur as both first and second member of a fair number of clusters.
- Apicals are common as the first member of CCs, less common as the second member.
- · Glides are not common in CCs, but are about equally frequent as first and second member. Only non-peripheral glides occur in the first position, and only the peripheral glide occurs as the second member of a CC.
- Nasals and liquids are frequent as first members, uncommon as second members.
- CCs in which both consonants show the same manner of articulation are uncommon, and the few that do are always non-homorganic. In other words, geminates do not occur.
- The consonants of a CC usually differ in place of articulation.
- The most unusual sequences are the sequences of an apico-postalveolar nasal or lateral followed by an apico-alveolar stop. These sequences are attested in other Nyulnyulan languages, including Bardi (Bowern 2004a:75) and Nyikina (Stokes 1982:24). No instances of an apico-alveolar nasal followed by an apico-postalveolar stop are attested, as also seems to be the case in Bardi (Bowern 2004a:75) and Nyikina (Stokes 1982:24).

The attested consonant clusters of Nyulnyul can be accounted for in terms of two hierarchies of phonological features (see also McGregor 1990:75, 1994c:12; Hamilton 1995; Nordlinger 1998:31–32):

```
sonorance hierarchy: <sup>13</sup>
(3-1)
              stop < glide < nasal < liquid
```

```
(3-2)
            place hierarchy:
            peripheral < laminal < apical
```

Almost all consonant clusters satisfy the restriction that the first member must be at least as high as the second on both hierarchies. There are just two known exceptions, the CCs bd and md, each of which are attested in just one root: -KABD 'hiccough' and yamdalngurr 'nut tree type'. Not all CCs that satisfy this restriction are attested, though it may be presumed that all that do are permissible.

Five triconsonantal clusters are attested, all of which consist of an apical liquid followed by a homorganic nasal stop cluster. They are listed in the first column below:

```
ulmb 'grass seed'
lmb
lngk
           jaalngk 'totem', jaalngkakurr 'doctor'
          jurrmbul 'soak, steep' (Nekes & Worms 1953:511)
rrmb
           ngurrngk 'knee'
rrngk
          jurrndung, a personal name'
rrnd
```

With one exception, the nasal-stop cluster is peripheral; the exceptional cluster /rr-n-d/ occurs in a personal name, the provenance of which is not known for sure. There seems to be no particular reason why the apico-postalveolar lateral rl is not a possible first member

¹³ One expects glides to be highest in sonorance. However, in terms of their behaviour in clusters they fall below nasals. The hierarchy might be better labelled a manner hierarchy, though otherwise it is reasonable to regard it as concerning sonorance. (In Gooniyandi glides are above nasals, but below liquids-McGregor 1990:75.)

of a triconsonantal CC, and this may be an accidental gap. (However, triconsonantal clusters with this as initial segment are also absent in Bardi—Bowern 2004a:75.)

Some roots have more than one CC, though this is uncommon. If there are two CCs, they are normally of different types, unless they are separated by at least one syllable. For instance, yandilybar 'boat', yambalkin ,Pender Bay', and bindurrk ,a toponym' have a homorganic stop-nasal cluster and a liquid-stop cluster in the successive syllables. So also does the IV root -BARRKAND 'tie up', only in the reverse order. Sometimes the cluster types are quite similar. Thus *ngalkarrmin* 'left-handed' has a liquid-stop cluster followed by a liquid-nasal cluster, while warlkaykarr 'male bereaved of son or daughter' involves a liquid-stop cluster followed by a glide-stop cluster. Two homorganic nasal-stops occur in wurrumbardangk 'big'; they are, however, separated by an intervening syllable. (See also §3.2.4 below.) I know of just one possible exception to this generalisation, balgargar 'mast' (Nekes & Worms 1953:346), which might involve two liquid-stop clusters in sequence; however, it could be that the rg in the transcription of these authors represents the glide-stop sequence /r-k/ (which is attested in my own data).

3.2.2 Non-root morphemes

Morphemes that are not roots show somewhat different phonotactic properties than root morphemes, although in certain respects they are similar. They tend to be short compared to root morphemes, and are not always syllabic in structure (see further §3.3.2). Consonantinitial allomorphs predominate, and are about twice as frequent as vowel-initial allomorphs. Consonant-final allomorphs also outnumber vowel-final allomorphs by about the same margin. There is one quirk: for prefixes, vowel-final allomorphs are three times as frequent as consonant-final allomorphs. Few consonant clusters occur, and they are all homorganic nasal-stop clusters; these occur in both initial and final position.

A number of consonants are not attested initially or finally in non-root morphemes, though it is uncertain to what extent the absences are accidental. There is a preference for laminal and velar segments in these positions. And whereas /rr/ may not begin a root morpheme, it may begin a non-root morpheme; /r/ does not begin any non-root morpheme, though it can begin a root morpheme.

All three vowels occur in non-root morphemes, though the high back vowel is slightly less frequent than either of the other vowels (which are about equally frequent). The only long vowel attested is ii, which occurs in the verbal enclitic -jii 2MIN.OBL, and it is possible that this morpheme involves instead a final y-glide.

3.2.3 Intermorphemic phoneme sequences

A number of phoneme sequences, in particular consonant clusters, occur across morpheme boundaries within words that are not attested intramorphemically. However, tendencies for prefixed morphemes to end in a vowel (mentioned immediately above) and suffixed ones to begin with a vowel, as well as internal sandhi processes (see §3.5.2), reduce the number of actually occurring consonant clusters considerably. There are also consonant clusters that occur intramorphemically that are not attested intermorphemically.

The attested sequences differ according to the type of morpheme boundary (e.g. affix vs clitic) and lexical and grammatical context (e.g. in nominals vs IVs). A full-scale investigation of intermorphemic sequences has not been undertaken—aside from the fact that each boundary type should ideally be treated separately, and that there are doubtless many accidental gaps, the possibilities can be predicted from the conditioning factors for allomorphs and the morphophonemic and sandhi rules. Thus, in this section we restrict ourselves to a few broad observations. Of most interest are the clusters that occur at reduplication boundaries; these are treated in §3.2.4.

3.2.3.1 Vowel sequences

Vowel sequences are attested across morpheme boundaries within words, though they are largely restricted to inflected forms of IVs and bound prefixing nouns. The sequence /ii-a/ is attested, at least in elicited speech, in *ma-mii-mii-an* (INF_p-seek-seek-INF_S) 'hunting', which was produced with a clear syllable boundary between the two adjacent vowels: [ma.mi:.an]. (No intrusive glide has been observed between the two final vowels.) When two instances of the same underlying vowel come into contact at a morpheme boundary the result may be a long vowel, as in *ngaalm* [ŋa:lm] 'my head'. Sometimes, however, a phonetic syllable boundary is heard between the identical vowels crossing morpheme boundaries, as in *innyuuk* [in.pu.ok] 'when he/she/it got him/her/it'. This may be a consequence of the careful production associated with elicitation, and/or the rustiness of the speaker's Nyulnyul.

3.2.3.2 Consonant clusters

The widest range of cluster types occur at clitic boundaries. Nominal roots can end in any consonant, as well as a range of consonant clusters. Postpositions beginning with a consonant (which must be either a stop or a nasal) may follow any [+continuant] root-final consonant (i.e. a lateral, tap, or glide); thus any of l, rl, ly, rr, r, w, or y can be followed by any of the consonants j, k, m, ny, or ng. An epenthetic vowel may, however, optionally separate the two consonants. If the root ends in a [-continuant] segment, however, an epenthetic vowel invariably separates the consonants.

In the case of IVs, a wider range of clusters occurs, including triconsonantal clusters. Pronominal enclitics may attach directly to an IV root, normally without any sandhi processes (such as lenition or vowel epenthesis—see §7.11). Thus sequences consisting of any consonant or attested IV final consonant cluster followed by j, k, ng, or y should be permissible. IVs may also host one of five postpositions, three of which have an initial consonant, k or ng. Sometimes an epenthetic linking vowel separates the postposition from a preceding root-final [—continuant]; however, this happens less regularly than in the case of attachment to nominal roots, so a large range of clusters whose second member is a velar stop or nasal occur.

Fewer clusters occur between inflectional affixes and roots. Thus, for instance, consonant clusters crossing the boundary between pronominal prefixes and prefixing nouns (see $\S4.2$) all begin with the tap/trill rr (the only consonant that occurs finally in a pronominal prefix). This may be followed by any root-initial consonant segment. Noteworthy are the sequences rr-l and rr-y, which are not attested within monomorphemic roots.

Consonant clusters at the boundary between prefixes and IV roots are few due to the fact that few consonants occur finally in prefixes: rr (commonly), l (rarely), and any nasal.

The main restrictions on clusters with initial rr result from the fact that some consonants do not occur initially in IVs, namely rr, ly and y. Otherwise there are two minor restrictions: (a) the sequence rr-r is attested, though it seems to be frequently realised as the tap/trill rr; and (b) rr-n does not occur word finally (the second segment is invariably lost), though it occurs medially. Some of the intermorphemic rr-initial clusters are not found intramorphemically, including e.g. rr-n, rr-ny, and rr-l.

The lateral l occurs only in the cluster l-d, which occurs with just a single IV, namely -DAM 'hit' (see §7.7.1); this cluster does not occur within morphemes.

Intermorphemic clusters involving an initial nasal are of two types. First, there are homorganic nasal-stop clusters, which can be at any place of articulation, depending on the initial nasal of the IV root. Second, there are clusters involving the apical nasal n. As in the case of rr, the second member is virtually unrestricted. It cannot be a non-occurring initial like rr, ly or y; nor can it be r (see §7.5.2.1.1).

3.2.4 Reduplication

As already stated, effectively the same phonotactic patterns characterise reduplications of roots and roots that are inherent reduplications of formatives. Some differences are found in the formal properties (and meanings) of reduplication depending on the part of speech involved (see §4.5.2 on nominal reduplication, §6.5.2 on adverbial reduplication, §7.3.1 on reduplication of IVs, and §8.4.2 on preverb reduplication).

Given the large number of consonant-final roots in Nyulnyul, one expects to find a considerable number of consonant clusters at the morpheme and formative boundaries in reduplications. This expectation is borne out by the data presented in Table 3–4.

As indicated by the greyed rows, segments that cannot begin a lexical root are not permitted as the second member of a cluster straddling a reduplication boundary: they are not permitted initially in the second reduplicant (I use the term generally in reference to either component of a reduplication), whether it is a morpheme or formative. Of course, more clusters may be permissible, but not represented in the corpus; the absence of clusters with the non-permissible initials, however, suggests that they are impossible in this position.

Clusters found at reduplication boundaries show a number of similarities to, as well as differences from, clusters found within roots. The most striking difference is that homorganic nasal stop clusters at reduplication boundaries are dispreferred, whereas they are common within roots. Another difference is that nasals occur at least as often as second member of a CC as first member.

As to similarities, some of the most notable are the following:

- Apicals are common as the first member of a cluster, accounting for over 50% of the clusters. They occur with less than half this frequency as the second member of a cluster.
- Peripherals are frequent as the second member, much less frequent as first member.
- Liquids are common as first members of CCs, but quite rare as second members.
- Glides are more common as second members of CCs than as first members. However, in contrast to the situation within roots, the peripheral glide does occur in first position, and the two non-peripheral glides occur in second position.
- Geminates are dispreferred.

Three member consonant clusters also occur at reduplication boundaries; their range is considerably wider than what is found in simple roots. The first two consonants invariably

								F	irst n	nemb	er							
		b	d	rd	j	k	m	n	rn	ny	ng	l	rl	ly	rr	w	r	у
	b		X		X	X		X		X		X	X	X	X		X	?
	d	X				X				X		X	X	X	X		X	
	rd																	
	j	X		X		X				X		X	X		X		X	
	k		X	X		X		X	X	X					X	X	X	X
	m			X				X			X	X	X	X	X		X	
Second member	n							X					X					
mer	rn																	
ond	ny						X	X				X			X			
Sec	ng		X					X	X	X			X		X		X	
	l	X													X		X	
	rl																	
	ly																	
	rr																	
	w				X	X	X				X	X	X	X	X		X	
	r	X	X			X				X	X				X			
	У							X					X		X		X	

Table 3–4: Two member consonant clusters across reduplication boundaries

belong to the first reduplicant, the third consonant to the second reduplicant. The attested three member clusters are as shown in Table 3–5, where = indicates the boundary between the reduplicants

No known sandhi processes operate entirely consistently and regularly at reduplication boundaries, and thus not all reduplications are entirely predictable in form.

First, a reduplicant-final segment is occasionally nasalised, especially (though not exclusively) when the following segment is a nasal, as in *miin-miid-jin* 'a number of boys or men'. This process is not regular, however, and is apparently lexically rather than phonologically conditioned, since in other cases a stop-nasal cluster occurs at reduplication boundaries.

Second, reduplications are sometimes full, sometimes partial. There are some regularities, such as that trisyllabic roots ending in a consonant are always reduplicated partially, without the final consonant. However, it is not always predictable which strategy will be used, and meaning differences sometimes exist. See the chapters on the various parts-of-speech for further discussion of full and partial reduplication.

Third, in cases in which the second reduplicant is consonant final, an epenthetic linking vowel sometimes appears between the reduplicants. When such a linking vowel should be used is not predictable—for example, there would seem to be no reason why the

Initial CC	Final C		Initial CC	Final C	
liquid-stop	stop	rr-b=b	liquid-nasal	stop	rr-m=j
		rr- b = j			rr-m=k
		rr-k=j			l- ng = j
		l- b = k		nasal	l- ng = m
	glide	<i>rr-b=w</i>		glide	l- m = y
		rr-b=r	nasal-stop	stop	ny- j = b
		rr-k=w		nasal	n- k = m
		l- k = w		liquid	ny- j = l
				glide	m- b = w

Table 3–5: Three member consonant clusters at reduplication boundaries

reduplication of *dimb* 'join' should not be [?]*dimbdimb* rather than *dimbidimb* 'join together, marry', as clusters of nasal followed by two stops are otherwise observed at reduplication boundaries. In some instances, however, a phonotactic explanation appears viable.

In most cases the quality of the additional vowel is predictable: it generally harmonises with the vowel of the surrounding syllables, as illustrated by *barrabarr* 'think', *jangajang* 'chain', -JALAJAL 'look repeatedly', *dimbidimb* 'join together, marry', *bikibiki* 'pig', -WULUWUL 'shave, plane' -BURRUBURR 'obliterate', and *bulubululuman* ,Murphy Creek'. This generalisation seems to hold equally for the reduplication of roots to form new stems and inherent reduplications.

Exceptions exist for both types of reduplication, however. Instances of root reduplications with a different (disharmonic) vowel include *dukiduk* 'brush, wipe off' (attested in Nekes & Worms 1953:431 alongside of the expected *dukuduk* 'brush, wipe off'), *jalijal* 'pile up' (Nekes & Worms 1953:448), *kalbikalb* 'up and up' (alongside of *kalbkalb* with no known meaning difference), and *jarrijarr* 'a leak, a hole'. In inherent reduplications we have *jundijund* 'heel' (Nekes & Worms 1953:505), *lakilak* 'light skinned' (Nekes & Worms 1953:638), -NGULANGUL 'gossip, tell lies', and numerous others. As these examples illustrate, in most cases the unpredictable vowel is the high front vowel. But since there are exceptions, the unpredictable forms are easiest accounted for synchronically as partial reduplications of vowel-final formatives in which the partial reduplicant is suffixed to the formative.

Historically, it is not improbable that many (if not all) of these reduplications with an apparent linking vowel were regular reduplications of vowel-final roots or formatives. With the rule of word-final vowel loss, these lost just their final vowel, leaving the medial one present, and unpredictable—except when it was identical with the first vowel of the reduplicant.

3.2.5 Statistics

A limited statistical investigation was undertaken of phoneme distributions according to position in root morphemes. This investigation first examined the distribution of phonemes in word types (§3.2.5.1), then their distribution in tokens (§3.2.5.2).

3.2.5.1 Frequency according to citation forms

Just under 2,000 distinct roots (free and bound) are represented in the primary corpora used in this investigation, my own corpus, and that of Nekes & Worms (1953). The statistics given in this section are based on these two sets of data. It must be cautioned that there are some uncertainties in the phonological representation of a number of items provided in the secondary corpus: as mentioned already, even though Nekes & Worms (1953) understood the phonology of Nyulnyul (Nekes & Worms 2006:53–55), there are numerous typos in their work, and they did not consistently distinguish between apico-alveolars and apico-postalveolars. Quite likely the figures for the postalveolars (except for r) are below their real frequencies. On the other hand, it is unlikely that they are too grossly under represented: as more marked segments, apico-postalveolars are expected to be less frequent than apico-alveolars, and the statistics for phoneme distribution in Yawuru and Gooniyandi also reveal lower frequencies of the postalveolars in most positions according to dictionary count (Hosokawa 1991:95; McGregor 1990:84).

Table 3–6 shows the frequencies of each phoneme in root-initial and root-final position. No distinctions were drawn according to types of root morpheme, either in terms of their distributional features or part-of-speech membership. Frequencies above 0.005 are rounded off to the nearest hundredth; below this value they are given to the nearest thousandth.

These frequencies confirm that the majority of roots begin (98%) and/or end (94%) with a consonant. The frequencies of consonants root initially are in almost all cases strikingly different from their frequency root finally. Indeed, the frequencies of natural classes of consonants according to manner of articulation show clear differences in these two positions: stops are highly frequent root initially, much less frequent root finally; liquids are rare root initially, but quite frequent finally; glides are reasonably common root initially, but rare finally. The main exception is the nasals, which are about equally frequent in both positions; however, for most individual nasals the discrepancy according to position in roots remains.

These frequencies show approximate agreement with the sonorance hierarchy, (3–1) above. In initial position, the frequency distributes quite well according to the inverse of this hierarchy, with increasing frequency correlating with decreasing sonorance. The fit is less good in regard to final position; but, ignoring stops, the increasing sonorance correlates with increasing frequency. There is thus a rough correlation between initial position in consonant clusters and root-initial position.

The frequencies of segments in roots as shown in Table 3–6 are very similar to the frequencies in the related language Yawuru (Hosokawa 1991:95). More surprisingly, they are also quite similar to the frequencies in unrelated languages Gooniyandi (McGregor 1990:84) and Jaru (Tsunoda 1981:41).

In terms of place of articulation there are also striking regularities in the distribution of consonant phonemes, as brought out in Table 3–7. Peripherals and apicals are markedly different in terms of their root-initial and root-final distributions, while laminals are approximately equally frequent in both places; peripherals strongly prefer initial position, while apicals strongly prefer final position. This also reflects the place hierarchy of (3–2): greater/lesser markedness on the place hierarchy correlates with lower/higher frequency root initially, and higher/lower frequency root finally. Falling in the middle in terms of place

Table 3–6: Phoneme frequencies in root-initial and root-final positions

	Ini	tial	Fii	nal
b	0.15		0.07	
d	0.04		0.07	
rd		0.49	0.03	0.29
j	0.13		0.04	
k	0.17		0.08	
m	0.13		0.03	
n	0.04		0.10	
rn	0.001	0.23	0.01	0.22
ny	0.01		0.05	
ng	0.05		0.03	
l	0.05		0.13	
rl		0.05	0.04	0.37
ly		0.03	0.02	0.57
rr			0.18	
r	0.03		0.05	
W	0.14	0.22	0.01	0.07
У	0.05		0.01	
а	0.01		0.01	
aa	_		0.002	
i	0.01	0.02	0.03	0.06
ii	0.002	0.02	0.005	0.00
и	0.002		0.01	
ии	0.001		0.004	

markedness, laminals are also intermediate in terms of frequency in root-initial and root-final positions.

Table 3–7: Frequency of root-initial and root-final consonants according to localisation features

	Initial	Final
Peripheral	0.65	0.23
Laminal	0.19	0.13
Apical	0.16	0.65

While apicals are not frequent root initially in Nyulnyul, they are rather more common in that position than in the typical Pama-Nyungan language. They are half as frequent again as initial apicals in Jaru, for instance (Tsunoda 1981:41). Strikingly, however, the frequency of initial apicals in Nyulnyul is identical with the corresponding frequency in Gooniyandi (McGregor 1990:84).

Root-medial and root-final consonant clusters occur on the average once per 2.17 roots (according to types), while root-initial clusters are vanishingly rare, being instanced only a couple of times in the root lexicon. This figure includes clusters of all types, including those that straddle the boundary of reduplicated formatives. These, as mentioned elsewhere, are comparable with the cluster types found across the boundaries of morpheme reduplications, and differ somewhat from the cluster types that are otherwise found in simple roots (i.e. roots that are not analysable into formatives). In general, formatives show the same phonotactic properties as roots.

Table 3–8 shows the frequencies of consonants in first and second position in two-member consonant clusters in intervocalic (*medial* columns) and root-final (*final* columns) position. (Only about a dozen instances of triconsonantal clusters are attested; these are not included in the tabulation.) Clusters occurring across formative boundaries were excluded for the reasons stated in the previous paragraph. It will be observed that the position of the CC has little effect on the frequencies of consonants in initial or final position in the cluster.

As revealed in Table 3–8, CCs involving glides in any position are very rare. Otherwise the inverse frequency relation between initial position and final position in CCs is stronger than in the case of root-initial and root-final position (see above). The first position in a CC can be associated (imperfectly) in terms of consonant frequency with root final position, the second position with root-initial position.

Table 3–8: Frequency of consonants in first and second position in two member consonant
clusters

		Cluste	r initial		Cluster final				
	Me	dial	Fin	nal	Me	dial	Final		
b	0.00		0.004		0.30	0.26			
d	0.00		0.00		0.12	0.09			
rd	0.00	0.005	0.004	0.008	0.02	0.03	0.84	0.88	
j	0.002		0.00		0.09	0.14			
k	0.004		0.00		0.31	0.36			
m	0.13		0.10		0.07	0.08			
n	0.25		0.16		0.002	0.00			
rn	0.05	0.61	0.05	0.51	0.00	0.00	0.13	0.12	
ny	0.05		0.08		0.004	0.004			
ng	0.11		0.12		0.05	0.03			

					`	,			
	l	0.17		0.23		0.002	0.00		
	rl	0.01	0.37	0.01	0.47	0.00	0.00	0.002	0.00
	ly	0.004	0.57	0.004	0.47	0.00	0.00	0.002	0.00
	rr	0.18		0.22		0.00	0.00		
_	r	0.00		0		0.03	0.00		_
	w	0.01	0.02	0.008	0.01	0.00	0.00	0.03	0.00
	у	0.01		0.004		0.002	0.00		

Table 3–8: Frequency of consonants in first and second position in two member consonant clusters (Continued)

It is apparent from this table that correlations exist between place of articulation and position in a CC. These correlations are drawn out in Table 3–9, which collapses medial and final clusters. Again the figures reveal the similarities between the initial position of a CC and root-final position, and second position in a CC and root-initial position.

Table 3–9: Frequencies of consonants in CC initial and final position in terms of place of articulation

	Initial	Final
Peripheral	0.24	0.75
Laminal	0.07	0.12
Apical	0.68	0.14

Initial and final frequencies of phonemes were also calculated for bound grammatical morphemes, as shown in Table 3–10. For phonological allomorphs, the elsewhere allomorph was taken as the representative form; in the few cases of suppletive allomorphs, all of the distinct phonological forms were all included. Morphemes consisting of a single segment were excluded from the counts; and bound pronominal forms were treated as single morphemes. The frequencies were calculated in relation to the total number of attested segments in each position separately.

The numbers of bound grammatical morphemes are too small to permit us to formulate strong generalisations. Nevertheless, a couple of observations are in order. First, pre-root morphemes almost always begin with a consonant and end with a vowel. Second, about a third of post-root morphemes begin with a vowel, while very few have a final vowel. One presumes that the high frequency of vowel-initial bound grammatical morphemes that occur in post-root position is a consequence of the loss of word-final vowels. (Recall also that consonant initial post-root morphemes are often preceded by an epenthetic vowel; one guesses that given sufficient time, these vowels would eventually become part of the underlying phonological shape of the morphemes.)

Table 3–10: Frequencies of phonemes according to position in bound grammatical morphemes

		Morpher	ne-initial		Morpheme-final				
	Pre-	-root	Post	-root	Pre-	root	Post	-root	
b	_				_				
d	_						0.16		
rd	_	0.14		0.42			_	0.25	
j	_		0.22				0.07		
k	0.14		0.20				0.02		
m	0.14		0.12						
n	0.10						0.23		
rn	_	0.53		0.21				0.34	
ny	0.05		0.02				0.02		
ng	0.24		0.07				0.09		
l	0.05						0.02		
rl	_	0.05		0.00		0.14		0.20	
ly	_	0.03		0.00		0.14		0.20	
rr	_				0.14		0.18		
r	_						0.02		
w	0.05	0.24		0.07			0.02	0.13	
у	0.19		0.07				0.09		
a	_		0.15		0.52				
aa	_								
i	0.05	0.05	0.15	0.30	0.19	0.85	0.02	0.07	
ii	_	0.03		0.30		0.65		0.07	
и	_				0.14		0.05		
ии									

3.2.5.2 Frequency according to textual instances

An investigation was also made of the textual distribution of phonemes. This is based on a selection of thirteen texts plus a portion of a fourteenth, by four different speakers, and representing narratives and expositions, spoken and written. Hesitations and false starts were excluded, as were borrowings from English. In all, just over 1,500 word tokens made up the textual sample.

Figures 3–2 and 3–3 give an indication of the frequency distribution of the phoneme tokens over this small corpus.

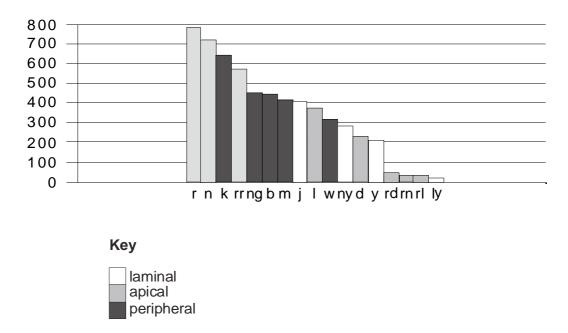


Figure 3–2: Frequency distribution of consonants over textual subcorpus

Figure 3–2 reveals enormous discrepancies in frequencies of occurrence of consonants. The most frequent phoneme, the apical glide r, is about 64 times as frequent as the least frequent phoneme, the palatal lateral ly, which cannot occur in word-initial position.

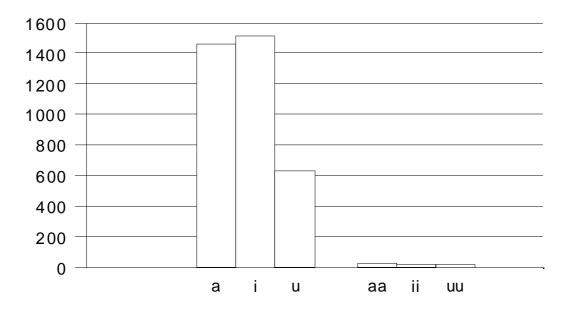


Figure 3–3: Frequency distribution of vowels over textual corpus

Table 3–11: Textual frequencies of phonemes

		Word initia	1		Word final	
\overline{b}	0.11			0.06		
d	0.02			0.08		
rd		0.37		0.01	0.29	
j	0.11			0.04		
k	0.13			0.10		
\overline{m}	0.09			0.01		
n	0.03			0.24		
rn		0.16		0.01	0.33	
ny	0.01		0.77	0.03		0.92
ng	0.03			0.05		
\overline{l}	0.02			0.07		
rl		0.02		0.01	0.14	
ly		0.02		0.002^{a}	0.14	
rr				0.13		
r	0.01			0.04		
w	0.15	0.21		0.003	0.08	
у	0.05			0.04		
a	0.05	0.051		0.02	0.02	
aa	0.001	0.031		_	0.02	
i	0.18	0.181	0.23	0.03	0.05	0.08
ii	0.001	0.101	0.23	0.02	0.03	0.00
и		0.001		0.01	0.01	
ии	0.001	0.001		_	0.01	

a. Interestingly, the corresponding segment in Gooniyandi is also vanishingly rare in textual occurrences (McGregor 1990:86–87).

Surprisingly, the other consonant that is precluded in word-initial position, rr, is one of the most frequent consonantal segments. Overall, apicals are the highest frequency consonants (47%), followed fairly closely by peripherals (38%); laminals are comparatively infrequent (15%). In general, apico-alveolars are more frequent than apico-postalveolars; the exception, r, is perhaps more apparent than real, given that it could be argued that the contrast between these two places is neutralised in glides. Among the peripherals, velars and bilabials are represented almost equally.

In terms of manner of articulation, stops and nasals are the most frequent segments, each accounting for around 30% of consonant tokens; nasals are just slightly more frequent than

stops. Glides account for just over a fifth of consonant tokens, while liquids account for about a sixth (and so are only about half as frequent as nasals).

Figure 3–3 reveals that, as expected, long vowels are textually infrequent. Surprisingly, the high front vowel emerges as the overall most frequent vowel. Its high frequency is at least in part due to the fact that it occurs in some key morphemes that are also highly frequent, including the third person nominative prefix to IVs, *i*-.

As already seen, the frequencies of phonemes in Nyulnyul is highly dependent on position in the word. Thus an investigation that takes account of position is called for. Given that distributional words are more relevant units of analysis than roots at the level of text occurrence, the investigation examined the frequency of phonemes in two key places, initially and finally in distributional words. Table 3–11 shows the frequencies of each phoneme in these two positions. 44 word tokens were excluded because they consisted of a single segment (i.e. the word *aa* 'and'). (Frequencies are again given to the nearest hundredth, except when the segment is considerably less frequent than one in a hundred, in which case it is given in thousandths.)

Table 3–11 reveals again the strikingly high frequency of the high front vowel, which is more than twice as frequent than the low vowel in both word-initial and word-final positions.

In terms of place of articulation features, the consonants are distributed as shown in Table 3–12. Except for the figures for word-final laminals, the figures for token distribution are significantly different from those for textual distribution (compare Table 3–9). What does hold constant across both type and token frequencies are the disparities in frequencies between word-initial and word-final positions for segments of each of the types, with laminals again emerging as showing least divergence.

Table 3–12: Textual frequency of consonants according to place features

	Word initial	Word final
Peripherals	0.51	0.21
Laminals	0.17	0.11
Apicals	0.08	0.59

Table 3–13: Relative textual frequencies of word-final CCs

Cluster	Frequency		
mb	0.09		
nd	0.03		
rnd	0.01	0.52	
nyj	0.03		
ngk	0.36		
nj	0.18	0.20	
nk	0.02	0.20	

Table 3–13: Relative textual frequencies of word-final CCs (Continued)

lb	0.11	
lk	0.06	
rrb	0.09	0.28
rrk	0.01	
rrm	0.01	

Just over 10% of word tokens end in consonant clusters. Their relative frequencies are given in Table 3–13. As this tabulation reveals, just over half of the final consonant clusters are homorganic nasal-stop clusters. Together with the non-homorganic ones, nasal-stop clusters make up just over 70% of the final clusters. Furthermore, clusters with a final peripheral account for three quarters of the tokens, while just over half of the clusters have an initial apical.

These figures indicate relative frequencies of the cluster types, and are counted over words ending in CCs.)

3.3 Syllabic structure of words and morphemes

3.3.1 Simple roots

Free roots in Nyulnyul, both lexical and grammatical, have between one and six syllables, as shown in the first two rows of Table 3–14. As in neighbouring languages, preverbs tend to have fewer syllables than words of other classes, although this tendency is less pronounced in Nyulnyul than in other languages. Thus whereas in both Nyulnyul and Warrwa nearly 90% of preverbs are monosyllabic or bisyllabic, for other parts-of-speech in Nyulnyul two thirds are monosyllabic or bisyllabic as against only a half in Warrwa (compare the figures in Table 3–14 with those in McGregor 1994c:13 for Warrwa). Bound lexical roots (i.e. prefixing nouns (see §2.2.1) and IVs (see §2.8.2))—third and fourth rows of Table 3–14—tend to be somewhat shorter even than preverbs, and in all around 4% are non-syllabic: that is, they consist of either a consonant or consonant cluster, but no vowel (indicated in Table 3–14 under the 0-column).

Number of syllables	1	2	3	4	5	6	0
Preverbs	41%	47%	8%	4%			
Non-preverbs	17%	49%	26%	7%	1%	0.2%	
Prefixing nouns	50%	34%	3%	3%			9%
Inflecting verbs	45%	39%	10%	2%			3%
Overall	24%	48%	22%	6%	0.7%	0.1%	0.5%

Table 3–14: Frequencies of roots with *n*-syllables for $0 \le n \le 6$

In total, just under a half of all roots are bisyllabic, about a quarter are monosyllabic (which is a high proportion for an Australian language—Dixon 1980:127, 2002:553), and about a fifth trisyllabic. Only a little over a twentieth have more than three syllables. The

average number of syllables per word type is 2.1.¹⁴ This figure is comparable with the average number of syllables according to textual tokens, which was 2.4 syllables per word over a stretch of 1,500 words of running texts.

3.3.1.1 Structure of monosyllabic roots

Not only are monosyllabic roots common in Nyulnyul, but also they show a rather large variety of shapes compared to most other Australian Aboriginal languages. They are not strongly associated with any particular part-of-speech, as is often the case (in a number of languages only preverbs and interjections may be monosyllabic). The following shapes are attested, where the colon indicates a long vowel:

V:	CV	CVCC
VC	CV:	CV:CC
V:C	CVC	CVCCC
VCC	CV:C	
VCCC		

These shapes indicate that all monosyllabic roots must be of at least a minimum length—there are none consisting of just a single short vowel, and CV monosyllables are uncommon, and are virtually all bound roots. (There is perhaps one interjection with CV shape; most open monosyllabic interjections have a long vowel.)

Monosyllabic roots may begin with a vowel (short or long) or single consonant (no known monosyllabic root begins with a consonant cluster). They may end in either a vowel or one to three consonants. The most common shapes are closed syllables beginning with a consonant; in particular, CV(:)C represents the most frequent type; monosyllables with a biconsonantal coda are also fairly frequent. Very few triconsonantal codas are attested, and these make up the entirety of root-final triconsonantal clusters across the root lexicon.

3.3.1.2 Structure of polysyllabic roots

In polysyllabic roots, syllables are in a one-to-one correspondence with the vowels—either short or long—that constitute their nuclei. This provides an indication of the centres of the syllables. Their extent can be determined by the following rule of syllabification:

(3–3) A syllable boundary occurs prior to a consonant that precedes a vowel.

According to this rule a syllable boundary will always precede an intervocalic consonant, and fall between the consonants of a biconsonantal consonant cluster. Consonant clusters consisting of three consonants will have a syllable boundary between the second and third consonants. This is preferable to dividing between the first and second consonant, or before the first consonant. In the latter divisions none of the resulting clusters are otherwise attested as syllable onsets, whereas in the former, four are attested as word final codas in roots, /rrm/, /rrng/, /lm/, and /lng/, and the other two clusters, /rrn/ and /rnng/, are not

¹⁴ For the purposes of this calculation, non-syllabic roots were assigned the value of half a syllable, or roughly one mora, rather than 0 (as per Table 3–14).

improbable as final codas (other codas show similar patterns of consonants in terms of manner and place of articulation).

A further advantage of this rule of syllabification is that the list of syllable shapes given in the previous section is sufficient to account for the syllable shapes of polysyllabic words, with a single addition, namely of syllables consisting of just a single short vowel, i.e. V syllables. Syllables consisting of just a nucleus occur only in root-initial position, where they are not especially common. Elsewhere, syllables contain an onset and/or coda in addition to the nucleus. One consequence is that sequences of vowels do not occur in Nyulnyul roots. This is a claim about the phonology. Phonetically, sequences of vowels and diphthongs do occur. But these are interpreted phonologically as involving sequences involving the glides /y/ and /w/. For instance, the root [bɪlæɪ] 'again' has phonological form /bilay/, and [naol] 'club' has the form /nawul/. Nekes & Worms (1953) lists a number of Nyulnyul roots with sequences of vowels; all of these can be interpreted as vowel-glide-vowel sequences. Thus their *boi* 'small red ant' is phonologically /buy/, their *bial bial* 'float, raft, catamaran' is /biyalbiyal/.

In the previous paragraph it was remarked that the initial syllable of a polysyllabic word shows the peculiarity that it may consist of just a short vowel. This is not the only peculiarity: it will be recalled that initial syllables have a restricted range of consonants that can serve as syllable onsets. In addition, the initial syllable of a root may have a consonant cluster as its onset, unlike root-medial syllables; this is the case for both free and bound roots. It also appears that only a root-initial (and, of course, root-final) syllable may have a consonant cluster as its coda: triconsonatal clusters are attested only at the boundary of the first and second syllables of a polysyllabic root. Finally, there is a strong tendency for long vowels to be found in initial syllables of roots.

Root-final syllables also exhibit some unusual features. Aside from the feature shared with initial syllables of permitting consonant clusters, root-final syllables are predominantly of the shape CV(:)C, that is, they are typically closed. If open, the final syllable does not contain a long vowel unless the lexeme is an inherent reduplication of a monosyllabic formative (and thus also a possible initial syllable), as in *nyiinyii* 'clever, cunning' and *muumuu* 'hum, buzz'. ¹⁶

To sum up, the following syllable patterns are attested in polysyllabic roots:

V	VC	CV	CCV	CVC	CVCC
V:	V:C	CV:		CV:C	
			CCVC		

These patterns are somewhat more restricted than those found in monosyllabic roots, and syllable weights appear to be more constrained.

As in the case of monosyllabic roots, the most common syllable pattern is closed, with an initial consonant or consonant cluster. However, the proportion of closed syllables is considerably lower in polysyllabic words than in monosyllabic roots: only 57% of the syllables are closed, as against 95% in the case of monosyllabic roots.

¹⁵ Other rules of syllable division are possible, which also give rise to syllable shapes most of which are attested in monosyllabic words. However, the rule given here results in the most natural divisions and syllable shapes.

¹⁶ I know of just one exception, kurrii 'greedy, stingy', which might be phonemicised as kurriy.

3.3.2 Non-root morphemes

As already indicated in §3.2.2, non-root morphemes tend to be shorter than root morphemes. There are just two non-root morphemes that consist of a single consonant segment; otherwise non-root morphemes consist of between one and three syllables. Nearly 90% consist of a single syllable, about 9% of two syllables, and just one is trisyllabic. With just one exception, morphemes larger than a single syllable are enclitics (including postpositions); the exception is a bisyllabic derivational morpheme. (These observations are based on the elsewhere forms of the morphemes, except in cases of suppletion, where suppletive forms were separately counted.)

The attested syllable forms for non-root morphemes, and their relative frequencies, are: CVC (44%), CV (32%), VC (19%), V (1%), CCV (1%), and VCC (1%). All of these syllable patterns are attested in roots, though there are differences in the range of Cs and Vs occurring in root and non-root morphemes.

3.3.3 Polymorphemic words

Consistent with the fact that Nyulnyul is fairly agglutinating, and that root and non-root morphemes typically consist of a whole number of syllables, the number of syllables of a polymorphemic word is normally the sum of the number of syllables of the morphemes making up that word. Sometimes, an additional syllable arises as the result of insertion of a vowel between two consonants brought into contact across a morpheme boundary (see §3.5 below). In the comparatively rare cases in which a morpheme is smaller than a syllable, that morpheme is incorporated phonologically into a syllable of an adjacent morpheme. For instance, the tense prefix N- PST (which assimilates in place of articulation to the following consonant) is always syllabified with the previous morpheme, as in nga.niny.jal (nga-ni-ny-jal) 'I saw him/her/it'. The single phoneme of an IV root consisting of just a consonant may be incorporated into the previous or following syllable: nga.nam (nga-na-m) 'I put him/her/it' and nga.la.man (nga-la-m-an) 'I might have put him/her/it'.

Less commonly the number of syllables of a polymorphemic word is fewer than the sum of the syllables of the component morphemes: syllables are not normally lost as a result of morphophonemic processes of contraction or deletion. Reduction occurs mainly in inflected forms of prefixing nouns and IVs. For example, the addition of a CV prefix to a VC(C) root can result in a monosyllabic word with the syllable shape CV:C(C), as in e.g. *ngaalm* (*nga-alm*) 'my head'.

If the morphemes of a polymorphemic word each consist of a whole number of syllables, the syllabic structure of the word is not necessarily identical with the syllabic structure of the sequence of morphemes constituting it. Resyllabification occurs in accordance with rule (3–3), whereby a syllable boundary precedes a consonant preceding a vowel. For instance, attachment of a case-marking enclitic to a nominal often results in shifting of the syllable boundary from between the two morphemes to within the final syllable of the citation form of the nominal root. Thus wamb 'man' has the shape CVCC, and the ergative enclitic -in has the syllabic shape VC. The polymorphemic word wambin has, according to rule (3–3), the syllabic shape CVC.CVC. Attachment of an inflectional suffix to an IV

¹⁷ By contrast, in Gooniyandi, where root and grammatical morphemes show more standard syllabic shapes, little reassignment of segments to another syllable occurs in polymorphemic words, with the exception of the most highly inflected forms (see McGregor 1990:93–94).

typically results in reassignment of a final consonant from one syllable to the next. The final consonant of the IV root -JAL 'see' in the polymorphemic inflected form nga-ngka-mi-jal-inyj 'I will see myself' becomes the onset of the final syllable rather than the coda of the penultimate syllable: ngang.ka.mi.ja.linyj. (The initial nasal of the second morpheme is also resyllabified as the coda of the initial syllable.)

Possible exceptions to resyllabification can be in reduplicated roots in which the reduplicated parts are separated by an epenthetic vowel; indeed, epenthetic vowels may in general be analysed as constituting their own monomoraic syllable. For instance, it is possible that *badabad* 'wrestle' should syllabify as *bad.a.bad*; at least this is the way Mary Carmel Charles habitually divided such reduplications up in careful speech.

Impressionistically, the syllabic structure of polymorphemic words—especially inflected forms—is less complex and more regular than the syllabic structure of roots and grammatical morphemes. Inflection generally eliminates the more complex syllable shapes.

3.4 Stress

Stress is a complex aspect of Nyulnyul phonology, and is not fully understood. ¹⁸ Complications arise from a number of sources. To begin with, as already remarked, all speakers recorded in the late twentieth century suffered from problems of deafness, age, and/or dementia. ¹⁹ The result is recordings that sound comparatively monotonic (in the case of the deaf speaker), and very indistinct at both segmental and suprasegmental levels (in the case of the other two speakers recorded by Bronwyn Stokes). Other prosodic phenomena, including timing and intonation, are likely to have been even more affected by these problems than stress, and are not described in this grammar. ²⁰ It is the deaf speaker's speech that lends itself best to prosodic analysis of stress, and this section deals exclusively with her speech. Another problem is that stress patterns of isolated words do not always agree with the stress pattern of words in sentential contexts. A certain amount of shifting in stress occurs.

Phonetic indicators of stress include greater loudness, higher pitch, increased vowel length, and perhaps increase in pulmonic air pressure; vowel qualities are also somewhat different in stressed and unstressed syllables (see §3.1.3.2 and below). However, pitch and stress are independent, and unstressed syllables can be higher pitched than nearby stressed syllables. Thus unstressed word-final syllables are often accorded high pitch, presumably a result of clausal intonation. For instance, the word *kuwaal*, a white fruit bearing tree' takes initial stress, *'ku.waal*. However, as shown by Figure 3–4, there is no simple correlation between stress, pitch, and loudness. Another example is provided by the verb form

¹⁸ Stress is scarcely discussed in the earlier literature on Nyulnyul. The only place where I am aware of any mention is in Nekes & Worms (2006:67), where there is an exceedingly brief discussion of 'accentuation' amounting to less than half a page. It is stated that accent—one infers in the standard average Australian language—falls on the first syllable of a word, and sometimes a secondary accent falls on the fourth syllable. A few illustrative examples are given in Nyulnyul. The facts, as will be seen in this section, are much more complicated than this.

¹⁹ The only early recording of spoken Nyulnyul (see Chapter 1) is untranscribable.

²⁰ Thus if Nyulnyul texts are compared with Warrwa texts recorded with the last two speakers of the language, it is evident that not only is the Warrwa speech more fluent, but also shows characteristic declination in pitch over intonation units (Ross 2006), which phenomenon is not apparent in the Nyulnyul texts. My guess is that this is a result of the Nyulnyul speakers' debilities, though it is impossible to rule these out as genuine prosodic differences between the traditional languages.

ininyjalan 'he/she/it saw him/her/it', which has been heard with high-rising pitch on the final vowel, 'i.niny.'jalán, the F0 of which was higher than the F0 of the previous stressed syllable. It has also been heard with lower pitch on the final syllable than on the penultimate syllable. Length is also independent of stress, although there is a tendency for short vowels of stressed syllables to be longer than short vowels of unstressed syllables.

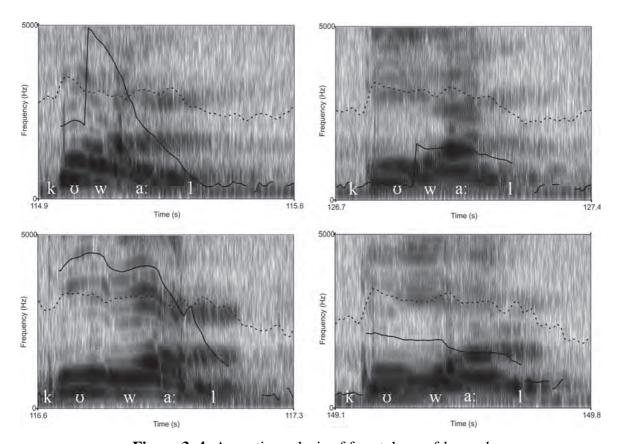


Figure 3–4: Acoustic analysis of four tokens of kuwaal

Pitch (F0) is shown by unbroken lines on a scale from 75–500hz; intensity is shown by broken lines on a scale from 50–100Db.

Another complication in stress in Nyulnyul arises from a not unrelated prosodic feature of syllables, which can interfere with the perception of stress, namely strength. I define a syllable as strong if it either consist of more than two morae, ²¹ or is the initial syllable of a word. Weak syllables, by contrast, are in non-initial position, and consist of at most two morae. There is a better correlation between vowel quality and syllabic strength than stress: vowels of strong syllables tend to have the high point of the tongue in the relative extremes of the vowel chart, whereas vowels of weak syllables tend to have more centralised and less distinct qualities. Vowels of weak syllables also show a strong tendency to be short: in

²¹ A single C or V, as well as the combination of a C and a short V, is here presumed to have the value of a single mora. For larger syllables, the moraic size is calculated by addition of one mora for each additional segment and vowel length. More precisely, the number of morae is calculated by assigning a weight (W) of 0.5 to C(C) (i.e. clusters of consonants are assigned the same weight as a single consonant), V, and : (vowel length), according to the formula $I(\sum W(Z))$, where the I function rounds off to the nearest integer value (where, following usual conventions, halves are rounded upwards), and Z indicates the 'segments' composing the syllable units, the onset, nucleus and coda: C(C), V, or :.

general they are much shorter in duration than vowels of strong syllables. For these reasons strong syllables are more perceptually prominent than weak syllables.

As in most Australian languages, stress is not phonemic in Nyulnyul: it does not serve a contrastive function, and no words are distinguished by different loci of stress. Rather, the function of stress is primarily delimitative, that is, it marks the location of word boundaries (Trubetzkoy 1969:27). However, it does not seem to achieve this function completely consistently either, as stress does not appear to be completely predictable, and, as in many other Nyulnyulan languages, there are words that are not stressed according to the regular pattern.

It is possible that different degrees of stress were distinguished, at least phonetically; however, the data is too uncertain to support definite claims about degrees. In the majority of cases it has proved impossible to distinguish different degrees of stress within single words, each stressed syllables appearing to be about equally prominent. Nor is there any obvious relation between position of syllables in a word and the degree of stress. All stresses are indicated in this section in the same way, using the IPA symbol for primary stress ('), which should be interpreted as meaning 'stressed', with no implication as to degree.

It is useful to define phonological words in terms of patterning in stress assignment (see §2.4 above): a phonological word is a single unit in regard to stress placement; it is a phonological unit over which stress is assigned regularly. The first syllable of a phonological word is accorded stress. One or more subsequent syllables may be stressed also; this must be an odd numbered syllable, provided that its vowel is not at the right edge of the word. In other words, an odd numbered syllable is stressed only if it is strong, or it is followed by at least one more syllable.

In what follows, we look in more detail at the patterns of assigning stress. We begin with free roots (§3.4.1) and stems (§3.4.2); we then turn clitics (§3.4.3), and finally to inflected forms (§3.4.4). The above-mentioned qualifications must be borne in mind: in particular, the description is incomplete, and many details are not known—and probably never will be known.

3.4.1 Stress in free roots

3.4.1.1 Simple free roots

Free lexical roots always have at least one stressed syllable, regardless of their part-of-speech classification. Most free grammatical words also bear stress, although monosyllabic ones like *aa* 'and' are often unstressed (though most can take stress), and may be quite non-salient in speech. In what follows we first outline the regular patterns of stress assignment, then remark on irregularities.

As in the majority of Australian languages the first syllable of a free root is normally assigned stress. This is trivially true for monosyllabic roots. Bisyllabic simple roots (i.e. those that are not analysable into formatives) have just a single stressed syllable, the initial syllable, as in 'ba.barl 'brother', 'ban.birr 'around, across', 'ja.may 'mangrove type', 'ja.rringk 'tooth', and 'bil.kiny 'bulrushes'. This holds true for vowel-initial roots as well as consonant-initial ones, as illustrated by 'ii.bal 'father', and 'a.rri 'not, it is not the case that'.

Trisyllabic roots also have stress on their initial syllable, again regardless of whether the root begins with a vowel or consonant. Illustrative examples are: 'arn.ku.wi ,corroboree type', 'ku.kuny.ja 'sheep', 'ba.ba.rli 'brother' (young child speaking), and 'dul.kaa.ri ,a type

of vegetable food'. If a trisyllabic word ends in a consonant or consonant cluster, the final syllable also takes stress: 'ka.rriny.'kam ,root vegetable type', 'wam.ba.'rrird 'yam', 'wa.la.'man ,name of an inlet' and 'wa.ma.'rriny 'crab'.

Roots consisting of more than three syllables also have a second and/or third stressed syllable. In roots of four to six syllables, the additional stresses usually fall on the third and fifth syllable (again provided that the vowel of the fifth syllable is not at the margin of the word). Examples of stress patterns in roots of four syllables are: 'ku.rru.'lu.kun ,Murphy Creek', 'ngu.rru.'mun.durl 'golden wattle', 'wu.rrum.'ba.rdangk 'big', 'jum.ba.'rraa.rri 'knife', 'ji.bi.'lyu.ru 'whistling duck', and 'ji.na.'la.ri 'bone fish'. The following are examples of stress in some of the very few simple roots consisting of more than four syllables: 'la.win.'ji.marr.'kin ,name of a well near Disaster Bay', 'wi.da.'ma.nga.'ran 'waterlily root', and 'nu.mu.'rru.ku.rru.'kurd ,a bean type'.

As already remarked, stress assignment is not entirely regular in Nyulnyul, and some words do not follow the above patterns. The first syllable of some words is fairly consistently unstressed. Thus the word *kudaarrawany* 'brolga' appears to be invariably stressed on its second and fourth syllable: *ku.'daa.rra.'wany.*²² It will be observed that in this word the second syllable is made up of two morae, and is thus heavier than the first syllable; moreover the stresses are on alternating syllables. Some bisyllabic words in which the second syllable is heavier than the first also attract stress on their second syllable: *ka.'rdimb* 'nasal septum', *ka.'lamb* 'this way', and *ku.'narr* 'that way'.

In roots of four syllables, a strong final syllable may be stressed instead of the third syllable, if the latter is weak, as in 'ka.ja.na.'ngurr ,a type of edible plant'.

3.4.1.2 Complex roots

Complex roots—roots that can be analysed into formatives—show different patterns of stress assignment to simple roots. The component formatives are separately stressed according to the patterns described in the previous section, provided that these formatives are root-like. Most roots are simple, and the available complex roots do not exemplify the full range of expected patterns of formative combinations; nonetheless, it seems reasonable to presume that the same patterns are possible as are attested in stem formation, and that those patterns that are not attested represent accidental gaps.

The majority of complex roots are reduplications; each reduplicant is stressed as a separate root. Thus, bisyllabic reduplications consist of a pair of stressed syllables in sequence: 'bar.'bar 'hit', 'kuny.'kuny 'brain', 'waalk.'waalk 'salmon', and 'laa.'laa 'other times, earlier times'. 23 If the reduplication is trisyllabic, the initial and final syllable are stressed, as in 'mu.ka.'muk 'lame', 'biny.ja'.binyj 'pearlshell' and 'ngu.rla.'ngurl 'sacred, dirty'; in such instances the stress pattern is the same whether stress is assigned to the component formatives or to the whole root as though it were a simple root. Examples of reduplications of bisyllabic and trisyllabic formatives are: 'birr.biny.'birr.biny 'a small bird type', 'mu.kurl.'mu.kurl 'fight over someone's death', and 'ka.ka.ji.'ka.ka.ji 'woodpecker'.

Sometimes a root involves reduplication of one or two syllables of a polysyllabic formative. In these cases each reduplicant is stressed in the usual way, and the remainder is

²² By contrast, in Bardi stress goes on the initial syllable regardless of the weight of the second syllable (Claire Bowern pers.comm.).

²³ Although acoustic analysis usually shows the second formative to be shorter, lower in pitch, and less loud than the first, I am unable to detect differences in the degree of stress on the two syllables in these roots.

normally also stressed in the usual way, as a separate formative. Some examples are: 'bu.lu.'bu.lu.lu.'man ,Murphy Creek', 'bud.'bud.'ka.rna ,a type of bush food', 'jiny.ji.'birr.'birr 'willy wagtail', 'wam.ba.'ngi.li.'ngil ,a type of bushy tree with berries'.

There is a handful of known exceptions, in which the component external to the reduplication receives no stress. This happens when that component is less than two morae in size. Thus the two complex roots *di.'wirl.'wirl* 'hard (of ground)' and *ji.'bily.'bily* 'smallpox, chickenpox' show stress only on the reduplicating syllables, and the resulting stress pattern is unlike the regular stress pattern of roots. (A similar stress pattern is also found in the same circumstances in Nyikina; see Stokes 1982:33.)

There are a few instances of cranberry formations. Both component elements are typically stressed as independent roots, as in 'ya.lirr.'bur 'first' and 'ka.nam.'biird 'last week, the other day'.²⁴ Another potential example is 'jung.ku.'birl.'birl' 'a type of hawk, fire bird', so called because this bird appears in a myth as the bringer of fire (jungk, from proto-Nyulnyulan *jungku 'fire').²⁵

In a small number of instances a root appears to consist of a formative—sometimes identical in phonological form with another root—plus a formative that resembles a bound morpheme (see §3.4.2 below), as in 'ba.kal.'nga.rriny.'jun 'promised spouse' (see fn. 18, Chapter 1). The previously mentioned exceptional 'ka.ja.na.'ngurr ,a type of edible plant' involves ngurr as final syllable; this formative recurs in a number of roots, though it is not regular enough either in use or meaning to be identified as a derivational morpheme.

3.4.2 Stress in free stems

Three main ways of forming stems in Nyulnyul are by reduplication, compounding, and derivation. In this section we briefly discuss stress in stems formed in these three ways.

Stress in reduplications follows the patterns discussed in the previous section for roots that are inherent reduplications (albeit with a smaller variety of patterns): both component parts are independently stressed as separate phonological words. Some examples of full reduplications are: 'bany.'bany 'shoot repeatedly', 'burrb.'burrb 'dance', 'ban.birr.'ban.birr 'everywhere, in all directions', and 'bu.darr.'bu.darr 'straight, smooth'. Examples of partial reduplications are: 'birn.da.'birn.dany 'big people', and 'ra.ngka.'rang.karrk 'daybreak, dawn'.

Compound stems are typically stressed as separate phonological words, regardless of the size of the component words. For example, 'wi.la.'may (meat-vegetable) 'food', 'bi.rray.-'kuburl (mother-father) 'parents', 'nga.lan.-'bur 'denizen of Beagle Bay', and 'wi.na.'wal.-'bur 'denizen of Sandy Point'.

However, there are exceptions. For instance, the compound *wamb-uriny* (man-woman) 'people' is stressed as a trisyllabic root: it takes stress on its initial and final syllables, *'wam.bu.'riny*. In fact, the second syllable of this compound is consistently weak, and its vowel ranges from short to non-existent: the word is not infrequently heard as *'wam.'briny*.

²⁴ In both cases the second element is an otherwise attested root—bur 'place, camp, etc' and biird 'yesterday, the other day'—while the first element is not attested synchronically as a morpheme. (There is comparative evidence that at least yalirr may have previously meant 'first', and that previously the combination was a regular compound.)

²⁵ A Jabirrjabirr version of the myth can be found in Nekes & Worms (2006:304–306); a Nyulnyul version appears in Worms (1940).

Free derived stems consist of a nominal, adverbial or preverb root plus a stem-forming suffix. There are only a handful of derivational suffixes in Nyulnyul, all but one of which are monosyllabic. These can be divided into two types, coherent and non-coherent, depending on whether or not they form a single phonological word with the root (or other unit) to which they are attached. The only known coherent derivational affix is -id CHAR: 'wu.lid' water dweller', 'ya.wa.'rdid' horseman, stockman'. All other derivational suffixes consist of at least two morae, and are stressed as separate phonological words. Thus, for instance, the possible allomorph of -id CHAR, -(i)ngid (see §4.5.1.1), has inherent stress on its final syllable, as shown by 'ya.wa.rdi.'ngird 'horseman'. Other illustrative examples are: 'nyun.'ka.biny (that-ASP) 'other side', 'bin.'ka.diny (that-ASP) 'that side', and 'ju.rru.ng.'ka.diny (right-ASP) 'right-hand side'.

3.4.3 Stress in words hosting clitics

Like derivational suffixes, enclitics can be divided into two groups according to their behaviour with respect to stress. Clitics consisting of two or more morae represent separate phonological words, and have an initial stressed syllable; they are non-coherent. Smaller clitics, consisting of just a single mora, are coherent, and constitute a phonological word with the form to which they are attached. The following examples illustrate coherent and non-coherent enclitics respectively:

• Coherent enclitics

'wamb-in 'man-ERG'
'wul-in 'water-ERG'
'wul-uk 'water-LOC'
'bin-ik 'that-LOC'
'kinyj-ang 'bone-LOC'

'bardang'k-in 'stick-ERG'
'uri'ny-in 'woman-ERG'
'kinying'k-uk 'DEF-LOC'
'kumba'rr-uk 'stone-LOC'
'iiba'l-ij 'father-DAT'

'jalngka'ngurr-in 'doctor-ERG'
'wambu'riny-in 'people-ERG'
'kundi'jin-uk 'shoulder-LOC'
'warla'warl-uk 'talk-LOC'
di'wil'wil-uk 'hard-LOC'

• Non-coherent enclitics

'juy-'mad
'you-EMP'
'burrb-'nyirr
'dance-COM'
'ngay-'ngirr
'I-SEM'
'jin-'manjan
'his-only'

'murrul-'mad
'little-EMP'
'jumba'rraari-'nyirr
'knife-COM'
'wajbal-'ngirr
'European-SEM'
'minyaw-'manjan
'cat-only'

'karram'bal-'mad
'bird-EMP'
'wangal-'nyirr
'wind-COM'
'karram'bal-'ngirr
'bird-SEM'
'karram'bal-'manja

'bird-only'

If a vowel is inserted by a sandhi rule, it is never stressed, and it always belongs with the previous phonological word, not to a non-coherent enclitic. Indeed, the syllable it occurs in is always weak. For instance, a vowel is inserted between the final stop of *yaward* 'horse' and a following comitative postposition, and belongs phonologically with the root: 'ya.wa.rdi.'nyirr. Other examples with the same postposition are: 'ju.rrung.ki.'nyirr 'with a right (hand/leg)', 'ki.nying.ki.'ngirr 'like this', and 'wa.riny.'ji.rri.'nyirr 'with one'.

In the above examples the morphemes are attached to roots. When attached to morphologically complex words, the same general principles apply: coherent morphemes

²⁶ In addition, there is the morpheme -(y)abul 'inhabitant of', attested with just three cardinal adverbials (see Table 6–1). This suffix takes stress on its final closed syllable.

form a part of the previous phonological word; non-coherent morphemes begin a new phonological word. Thus *yaward-id-in* (horse-CHAR-ERG) 'by the horseman' is stressed as a single phonological word of four syllables, there being two coherent bound morphemes attached to the bisyllabic root: 'ya.wa.'rdi.din. On the other hand, yaward-ingid-in (horse-CHAR-ERG) 'by the horseman' is stressed as two phonological words, 'ya.wa.rdi.'ngi.din; here the enclitic ergative postposition is coherent with the previous derivational morpheme.

3.4.4 Stress in inflected words

There are two classes of regularly and inherently inflected words in Nyulnyul, prefixing nouns (see §4.2) and IVs (see Chapter 7). Some spatial adverbials show small inflectional paradigms; we ignore them here. Below we deal first with stress in prefixing nouns (§3.4.4.1), then in IVs (§3.4.4.2). Stress in inflected words shows a number of complexities not encountered in the grammatical environments discussed above, and the following account is incomplete.

3.4.4.1 Stress in prefixing nouns

Inflected forms of prefixing noun roots are stressed as single phonological words. Monosyllabic inflected forms of C or VC(C) roots are of course stressed on their only syllable. Monosyllabic roots of other phonological shapes always form bisyllabic inflected forms, and these always consist of two strong syllables, the roots always being heavy monosyllables. The initial syllable is usually stressed, as in 'nga.marl' 'my hand/arm' and 'nga.mird' 'my leg'. However, the second syllable is strong, and is sometimes stressed instead, as in ni. 'mirl' 'his/her/its nose' and ni. 'many 'his/her/its neck'—recall that bisyllabic roots whose second syllable is strong sometimes show this pattern.

Larger prefixed forms usually show two stressed syllables, one on the first syllable, a second on the third syllable, which is invariably strong: 'nga.la.'bab 'my ear', 'ni.ma.'rrangk 'his/her/its finger', 'ni.la.'wirl 'his/her/its name', and 'irr.kin.'bal 'their appearances'. Again, exceptions exist, and occasionally the second syllable of a trisyllabic prefixed noun is stressed, as in ni.'ma.rraj 'his/her/its shadow'; the usual stress pattern has also been observed on inflected forms of this root, e.g. 'nga.ma.'rraj 'my shadow'.

Stress patterns of inflected forms of prefixing nouns are influenced not just by the shapes of the full words, but also the wider environment in which they appear. Thus, the derivational suffix -(i)ngid CHAR is non-coherent, and inherently stressed. The word nimarlingid 'bandage' (ni-marl-ingid 3MIN-arm/hand-CHAR) has been observed pronounced ni.'ma.rli.'ngid—that is, stress appears to be assigned to the final syllable, then counting back, on the third syllable prior to it.

3.4.4.2 Stress in inflecting verbs

It is in the inflected forms of IVs that most variation in stress assignment is observed. The same inflected IV form is often stressed in alternative ways; for instance, both of the following patterns are attested for *ingirraman* 'they were putting him/her/it': 'i.ngi.rra.'man and i.'ngi.rra.'man. Corresponding inflectional forms of different IVs often show distinct patterns. Thus, for instance, compare the two trisyllabic infinitives 'ma.da.'man 'to hit' with ma.'lung.kan 'to dig'.

Discourse level rhythmic considerations are apparently responsible at least in part for these alternative patterns. Example (3–4), from a text about preparation of food, lends credence to this hypothesis: the entire clause shows a regular alternation of stressed and unstressed syllables. Unfortunately the corpora are too restricted to permit systematic and detailed investigation of this possibility.

(3–4) kinyingk-uk i-ngi-rr-a-m-an 'ki.nying.'kuk i.'ngi.rra.'man

DEF-LOC 3NOM-PST-AUG-CM-put-IMP 'They were putting it there.'

Let us begin with stress assignment patterns peculiar to IVs in isolation. Glossing over some complications (see below), IVs are divided into two phonological words: (a) the inflectional and derivational prefixes, henceforth the IPs; and (b) the IV roots plus derivational and inflectional suffixes, along with any coherent enclitics that are directly attached to these, the RSs. These two phonological words are assigned stress in the usual way.

The IP always consists of between one and three syllables, and takes a single stress on its first syllable. The third syllable, if there is one, is always weak, and thus never gets regular stress. The RS consists of between one and six syllables. It is assigned stress in accordance with the principles outlined in §3.4.2 for free stems. (Thus both reduplicants in a reduplication are assigned initial stress, and all suffixes are treated as though part of the root for stress assignment.) Below are some illustrative examples (the hash symbol separates the phonological words):

• Monosyllabic RS:

'ngang.ka#'land 'I will sit'
'nga.li#'jan 'I might have said'
'i.ngi.rra#'man 'they were putting it'

'i.ngirr#'land 'they sat'
'i.rri#'jin 'they say'
'yang.ka.rra#'man 'we will put it'

• Bisyllabic RS:

'ya.ngarr#'ngan.kan 'we were talking' 'i.ngi.rra#'lu.rran 'they were cooking it' 'ya.nga.rra#'lung.kan 'we were digging' 'i.ngi.rra#'bu.rran 'they were covering it'
'i.nga#'ma.rran 'it was cooking'
'i.ngirr#'jid.an 'they were going'

• Trisyllabic RS:

'i.ngirr#'la.ka.'rran 'they were listening' 'i.na#'wi.ri.'kan 'he was trying it' 'i.nam#'ba.rru.'barr 'he thought about it'

'nga.nga#'la.ka.'rran 'I was listening'
'i.ngi.rra#'mu.ku.'ran 'they were making it'
'i.nam#'ba.la.'bal 'he followed it'

• Quadrisyllabic RS:

'i.ngi.rra#'wu.lu.'wu.lan 'they were comforting him'
'i.ngi.rra#'ja.la.'ja.lan 'they were watching over him'
'i.ma#'kan.da.'kan.dinyj 'he scratched himself'
'i.ngirr#'barn.ji.'barn.jan 'they were exchanging'

The stress pattern arising from the above principles not infrequently results in a verb form that does not show the preferred pattern of alternation of stressed and unstressed syllables. In particular, this does not happen if the IP consists of three syllables, as in many examples above. In these circumstances stress shift may optionally occur: stress on the

initial syllable of the RS remains, but the second syllable of the IP is stressed instead of the first, thus resulting in an alternating pattern in stresses. We have already mentioned examples above, including in (3–4). Other inflected forms where these alternations are attested include *ingirrakan* 'they were carrying it', *ingirrinyan* 'they were getting it', and *ingirraburran* 'they were covering it'. As already remarked, the third syllable of the IP is never stressed. It is always realised as a short, somewhat centralised vowel. When the initial syllable of the verb form is stressed, the third vowel becomes so attenuated that it can be almost imperceptible. Thus in the case of the above cited 'i.ngi.rra#'bu.rran' 'they were covering it', the third vowel becomes extremely indistinct, and it is difficult to distinguish it from the voiced noise heard between the two segments in the consonant cluster /rrb/, especially when the rhotic is realised as a trill. This is presumably motivated by the same tendency to alternating stressed and unstressed syllables that motivates stress shift.

Two complications have been glossed over in the above description. First, the IP may be monosyllablic. The above principles would predict that the first two syllables of the verb are stressed. There are examples in which this does happen, especially when the second phonological word is also monosyllabic: 'wan#'nyu 'you got him/her/it', 'iny#'jid 'he/she/it went', 'iny#'jalk 'he/she/it fell', and 'in#'jal 'he/she/it saw him/her/it'. However, in most cases stress can occur on just the first or the second syllable. An important exception is the past tense forms of the 'say, do' verb in minimal numbers that choose the -DI allomorph. These forms are invariably followed by an oblique bound pronominal, which always takes stress. The initial syllable of the IV is also stressed, as in 'in#di.'jin 'he/she said to him/her/it', 'ngan#di.'jin 'I said to him/her/it'; the second syllable of the inflected verb is never stressed.

In words that are trisyllabic or larger there is a tendency for the first syllable of the inflected verb to be stressed, along with the following odd-numbered syllables, as in 'min.da.'min 'you are hitting him/her/it', 'ma.da.'ma.nung 'in order to hit', 'ma.barr.'kan.din 'to tie', and 'irr.ji.'din 'they are going'. However, the first syllable of the second phonological word may instead be stressed, in which case the preceding syllable is unlikely to be stressed: ma.'barr.kan.'din 'to tie', i.'lu.rrin 'it is burning', i.'jal.kin 'he/she/it is falling', and ma.'lung.kan 'to dig'. These alternative patterns are presumably conditioned by the previously mentioned rhythmic targets.

The second complication arises when the RS is smaller than a syllable, a circumstance that arises in plain past tense, future tense, and non-past irrealis forms of IVs whose root consists of a single consonant. (In other grammatical environments these IVs show second components consisting of at least a syllable, made up by the C plus following suffixed material.) In all cases the IP consists of at least two syllables. If it consists of two syllables, the normal situation is for the initial syllable to be stressed: 'nga.na-m 'I put him/her/it', 'i.na-m 'he/she/it put him/her/it', 'i.na-r 'he/she/it poked him/her/it', 'mi-na-w 'you gave it', 'wa.na-w 'you will give him/her/it', 'yu.ni-j 'he/she will say', and 'i.li-j 'he/she might say'. There are a few exceptional instances in which instead the second syllable (which is always strong) is stressed, as in i.'li-j 'he/she might say' and wa.'na-w 'you will give him/her/it'. In all cases these patterns exist alongside the regular ones discussed above, which they apparently alternate freely with. These are, it seems, the only cases in which the irrealis and conjugation marking prefixes ever take stress.

If the IP consists of three syllables (and the RS is smaller than a syllable), the normal pattern is an alternating stressed-unstressed-stressed pattern: 'i.ngi.'rri-j 'they said', 'i.ngi.'rri-ny 'they got it', and 'i.li.'rra-w 'they might give him/her/it'. Again the option of shifting stress to the second syllable is available.

The IV -BAKAND 'have' appears, exceptionally, to always take stress on its second syllable. Nevertheless, in all other respects the inflected forms are stressed as per the above generalisations, as shown by e.g. 'yang.karr-ba.'kand 'we will have it', 'im-ba'kand 'he/she had it', 'i-ba.'kan.din 'he/she has it'.

This section has outlined some of the main features of stress in inflected forms of IVs. A fuller description is beyond the scope of this grammar.

3.5 Sandhi and morphophonemics

3.5.1 External sandhi

As we have seen, Nyulnyul shows a high frequency of words with an initial consonant and a final consonant or consonant cluster. In sentences a large variety of consonant clusters are therefore expected, many of which do not occur within words. Often, these clusters are prevented by the insertion of a vowel between the words. Following the rule of syllabification of §3.3.1.2, it belongs with the previous phonological word, and thus the syllable in which it falls is weak. This vowel is always quite short, and generally shows a rather indeterminate schwa-like quality.

Vowel insertion frequently occurs when the final segment of the preceding word is a stop, though it may optionally also occur after any other type of consonant. For instance, the question *angk wamb juy?* (who man you) 'who are you?' would normally be realised phonemically as /angka wamba juy/, with two non-salient epenthetic vowels. Other examples are (3–5) and (3–6), where the epenthetic vowels are underlined.

- (3–5) angka buru ku-rr-jid-in what place 2AUG.NOM-AUG-go-PRS 'Where are you lot going.'
- (3–6) in<u>i</u> kumb<u>u</u> wul-id this fish water-CHAR 'The fish is a water-dweller.'

The process of vowel insertion is not restricted to words following one another in connected sentences. It also not infrequently occurs in the utterance of single words in isolation, and in sentence-final position, especially when the word ends in a released stop or the tap/trill. Thus wamb 'man' is often pronounced [wambə], kuumb 'fish' as [kuːmbo], jungk 'fire' as [Jungu] (as in (3–7)), and kujarr 'two' as [kojarə]. Other types of final segment do not so frequently induce insertion of a vowel in careful citation (although they certainly do so within less careful connected speech), though it is not rare to hear one. For instance, mabaar 'flesh' is usually uttered in isolation as [maba:1ə], 27 bur 'place, camp' may be pronounced [boɪo] in utterance-final position, and iibal 'father' often appears as [i:balə].

²⁷ On one occasion the last speaker explained carefully to me that the final 'a' of a word was not a part of it—'the word is not *mabaara*, it is *mabaara*, there is no "a" at the end': she was unable however to utter the word without the intrusive final vowel. This suggests that speakers have some intuitions concerning the underlying shape of words.

(3–7) wilamay-ij jirr jungku food-DAT 3AUG.OBL fire 'Their fire was for (cooking) food.'

3.5.2 Internal sandhi

Compared to many other Kimberley languages—e.g. Gooniyandi (McGregor 1990: 94–119), Ngarinyin (Rumsey 1982b:16–30) and Worrorra (Clendon 2001:70–94)— Nyulnyul is fairly straightforwardly agglutinating, with few word-internal sandhi processes. Only occasionally is there a need to posit underlying forms distinct from phonological forms, and no complex ordered sequences of rules are required. In most cases morphemes are strung together as separate items that show few effects on one another in terms of their phonological shape. The sandhi rules required are by and large restricted in application to narrow morphological environments. Beyond these few partial regularities, exceptions to the agglutinating morphology do exist, though they are usually so exceptional that positing underlying forms and sandhi rules is uneconomical. The exceptions, that is, are best regarded as irregularities.

3.5.2.1 Vowel insertion

A sandhi rule similar to the external sandhi rule of vowel epenthesis also operates within words at certain types of morpheme boundary, most notably enclitic boundaries, and some suffix boundaries. As in the case of external sandhi, the epenthetic vowel always occurs in a weak syllable, and shows a very attenuated quality. In contrast with external sandhi, however, the epenthetic vowel in internal sandhi is normally identical with that of the following bound morpheme, rather than the vowel of the root. Internal vowel epenthesis occurs where a consonant-initial suffix is attached to a form ending in a consonant. It seems to be most common for stops and nasals (in both positions), although it also occurs, somewhat less consistently, with other final and initial consonant combinations.

When any stop- or nasal-initial postposition is hosted by a word with a final stop or nasal an epenthetic vowel occurs, which (as mentioned in the previous paragraph) is identical with the initial vowel of the postposition. Some examples are: *kalb-amardikan* (up-ALL₂) 'upwards', *waalk-amardikan* (sun-ALL₂) 'towards the sun', *wamb-ukun* (man-ABL₂) 'from a man', *bardangk-ukun* 'from a tree', *riib-inyirr* (bad-COM) 'with (something) bad', *wamb-inyirr* (man-COM) 'with a man', and *wurrumbang-inyirr* (many-COM) 'with many'. Notice that the epenthetic vowel is represented as a part of the clitic; this is motivated by the fact that the quality of the vowel is determined by the clitic; in terms of syllable structure, it belongs with the final consonant of the host, while morphologically it belongs to neither.

When the host ends in a liquid or glide, an epenthetic vowel is optional. Thus, both *kurrbul-nyirr* and *kurrbul-inyirr* (hollow-COM) 'with a hollow' and *ngijil-kun* and *ngijil-ukun* (mud-ABL₂) 'from the mud' are attested. In some cases only one variant is attested, as in the case of *makirr-imirr* (road-PER) 'along the road', where the non-epenthetic variant has not been recorded.

In some cases stress may condition vowel epenthesis, increasing its likelihood when the host ends in a liquid or glide. Thus addition of a vowel between a clitic and a monosyllabic host will separate two otherwise stressed syllables, and result in the stress pattern SUS, which is characteristic of trisyllabic words ending in strong syllables. This may account for

the consistent presence of an epenthetic vowel in *yiil-inyirr* (dog-COM) 'with a dog', *irr-inyirr* (they-COM) 'with them', and *ngay-imirr* (I-PER) 'via me'.

The situation is different for enclitics hosted by IVs. In general, no epenthetic vowel is added, and stop-stop (e.g. *injalk-jin* 'it fell on him/her/it'), nasal-nasal (e.g. *indam-ngay* 'he/she hit me'), nasal-stop (e.g. *yarrangulin-jin* 'we throw it for him/her/it'), and stop-nasal (e.g. *ininyjanb-ngay* 'he/she/it trampled me') sequences are frequent, and are not known to alternate with forms showing an epenthetic vowel.

The postposition -karr TEM exhibits behaviour unlike the other postpositions. ²⁸ When attached to a nominal, an epenthetic vowel is rare, except when the host is monosyllabic. Thus, we have baab-karr (child-TEM) 'as/while a child' and kinyingk-karr (DEF-TEM) 'at that time', phonological contexts in which other postpositions would be separated from their host by a vowel. But when hosted by an IV an epenthetic vowel is common (though not obligatory), at least when the host ends in a stop, as in: milijalk-akarr 'if you fall', miliwid-akarr 'if you eat it', and yanij-akarr 'when he/she says/does'. There are also instances in which an epenthetic vowel appears to be conditioned by stress assignment patterns, as in 'yungku'ngul-a'karr 'when he throws it' and wan'jal-a'karr 'when you see it'—compare e.g. 'mila'jalkan-'karr 'if you had fallen'.

Nominal derivational suffixes that consist of at least a strong syllable with an initial stop are also typically separated from a stop-final root by an epenthetic vowel identical with the vowel of the suffix. Examples are *kurnb-ukud* (snot-ASC) 'snotty', *nimird-ukud* (his/her leg-ASC) 'lame', *barnd-ukud* (dirt-ASC) 'dirty', and *yaward-ingid* (horse-CHAR) 'horseman, stockman'. The suffix *-kadiny* ~ *-kabiny* ASP is exceptional, however, and is normally attached directly to the root, as in *bin-kadiny* (that-ASP) 'that side' and *nyun-kabiny* (there-ASP) 'that side'.

In reduplication an apparently epenthetic vowel sometimes separates the two reduplicants, especially when its initial and final consonants are stops or nasals. The vowel is usually the same as the vowel of the initial syllable of the reduplicant, though it shows a highly attenuated quality, as in *wara-war* (other-other) 'one another', where the second /a/ vowel is realised as a vowel close to [ə]. I refer to the vowel as 'apparently' epenthetic since it is also possible that it represents the final vowel of the reduplicating root in pre-Nyulnyul, prior to the rule of word-final vowel loss. Both scenarios seem viable. The second could account for the instances of an unexpected vowel between the reduplicants in a few instances, as in -KADIKAD 'go in and out', -KALBIKALB 'feel lonely, pine for', and -NGALINGAL 'shit on, soil, make dirty, become dirty'—the intervening vowel may have belonged to the root in pre-Nyulnyul.²⁹

In compounds also an epenthetic vowel may separate the two lexemes, if the first ends in a consonant and the second begins with a consonant. The vowel is generally identical in quality with the vowel of the second unit in the compound, although as usual it is realised by a short vowel of centralised quality. Some examples are *wila-may* (meat-vegetable) 'food', *wamba-marirr* (man-wife) 'husband and wife pair', and *mirda-baab* (male child) 'boy', where the vowel before the hyphen is epenthetic. There are too few instances of

²⁸ This does not undermine its status as a postposition, which is based on its behavioural properties, not on its morphophonological ones. These are shared to a large extent with the other postpositions (though with some difference, as will be seen in §5.13).

²⁹ As against this, however, the proto-Nyulnyulan form can be reconstructed as *kalbu 'up, above', with final back rather than front vowel (Stokes & McGregor 2003:63)

compounds in the corpus to permit definitive statements concerning the conditioning factors for the appearance of a linking vowel.

3.5.2.2 Vowel harmony

In a number of places vowels of a bound grammatical morpheme harmonise with the vowels of adjacent syllables; vowels of root morphemes do not usually harmonise with vowels of bound morphemes. This process is usually progressive, though regressive harmony does also occur. Harmony may be full or partial, though most often it is full. It is usually optional.

Vowel harmony is not an entirely general or regular process, and is restricted to certain types of bound morpheme. Thus, for instance, clitics virtually never display any vowel harmony; there is one partial exception, the locative postposition, which very occasionally shows up as -ik when following a stem with the high front vowel in its final syllable. This is however restricted to a few nominals, and is not obligatory (see §5.1.1).

The high front vowel of a minimal pronominal prefix to a prefixing noun often harmonises with a high back vowel in the first syllable of the root, as in nyumungk (< nyimungk) 'you believe' and numurr (< ni-murr) 'his/her bum'. This process is not exceptionless: I have also heard the non-harmonised nyimungk 'you believe'. Elsewhere, in the inflectional paradigms of prefixing nouns vowel harmony does not occur, or is quite irregular, and is e.g. conditioned lexically. Thus only occasionally does the third person augmented allomorph yurr- appear preceding a nominal with the u vowel (and it occurs elsewhere), and the choice between kirr- and kurr- in the second person augmented is only rarely conditioned by the quality of the following vowel. The marked first person minimal allomorph ngi- is quite sporadic in occurrence, and vowel harmony can only be invoked in a fraction of the environments it occurs in. See §4.2.1 for further details on the allomorphic conditioning of these prefixes.

The other morphological environment in which vowel harmony is commonly found is in inflected forms of IVs, where again harmony is progressive. The vowel of the second or third syllable of the IP (see §3.4) may optionally harmonise with the vowel of the first syllable. Some examples are: yu-ngku-land (3NOM.FUT-FUT-sit) 'he/she will sit' (cf. ya-ngka-land (1PL.NOM-FUT-sit) 'we will sit', nga-ngka-land (1MIN.NOM-FUT-sit) 'I will sit'), ku-ngu-rr-janb (2AUG.NOM-PST-AUG-step) 'you stepped on it' (cf. i-ngi-rr-janb (3NOM-PST-AUG-step) 'they stepped on it'), and i-ni-lungk (3NOM-CM-dig) 'he/she dug it'. Similarly, the second (or later) vowel of a suffix in the RS may harmonise with the final vowel of the IV root, as in ma-mulk-un (INF_P-sleep-INF_S) 'to sleep' (cf. malandan (INF_P-sit-INF_S) 'to sit'). Sometimes harmony is partial, as in ku-li-rr-lakarr (2AUG.NOM-IRR-AUG-hear) 'you might hear him/her/it', where harmony is in terms of height only. (See Chapter 7 for additional examples.)

3.5.2.3 Vowel coalescence

Only rarely does a pair of vowels come into contact across a morpheme boundary. Thus vowel sequences only rarely arise in IVs: IV roots always begin with a consonant, and

³⁰ It is possible, though by no means certain, that the vowel of the prefix has assimilated in backness with the following vowel, though not in roundedness. This appears to be the case in Bardi (Claire Bowern pers.comm.).

almost always end in a consonant. On the few occasions in which a vowel-initial morpheme follows a vowel-final one in an inflected IV, the sequence of vowels is usually maintained (at least in the elicited speech of my recordings), as in ma-mii-mii-an (INF_p-seek-seek-INF_s) 'to seek' and warli-in (everyone-ERG). (In elicitation the latter word was always uttered with a perceptible sequence of vowels, [i1].)

One place where vowels in sequence coalesce into a single long vowel is in the minimal number forms of prefixing nouns beginning with a vowel. The final i of the second and third person minimal prefixes coalesces with a root-initial a, as in naalm (< ni-alm) 'his/her/its head' and *nyaalm* (< *nyi-alm*) 'your head', with a root-initial *i*, as in *niilabab* (< *ni-ilabab*) 'his/her/its ear', and with a root-initial u, as in nuur (< ni-uur) 'his/her/its anus' and nyuur (< nyi-uur) 'your anus'.

By contrast, the 1 and 1&2 minimals consistently employ the allomorphs nga- and ya-, and the following vowel of the root always shows the same quality as the final vowel of the prefix. When the inflected form is monosyllabic, the vowel is long, as in $ngaar (\eta \bar{a}r)$ 'my anus' (Nekes & Worms 1953:769) and yaar $(y\bar{a}r)$ 'our dual anuses'. When it is longer, the resulting vowel is short, as in *nganmurr* 'my thigh, my lap', *ngalabab* 'my ear'. (See further §4.2.)

3.5.2.4 Vowel deletion

As seen in §3.4.4.2 above, the vowel of the conjugation prefix is sometimes deleted, or is at least severely reduced in length and quality, in augmented IV forms when the two stressed syllables of the IV are separated by two unstressed syllables.

3.5.2.5 Nasal assimilation

In minimal numbers and preceding a stop-initial IV root, the past tense prefix shows a set of allomorphs $m - \sim n - \sim rn - \sim ny - \sim ng$, where the allomorph assimilates with the stop in place of articulation. The simplest way of accounting for this is by positing a nasal morphophoneme {N} as the shape of the past tense prefix in minimal numbers, and a morphophonemic rule that assimilates the nasal in place of articulation with the following stop. See §7.5.1.1.1 for examples.

3.5.2.6 Nasal deletion

Nasal segments are lost in a few environments, all within the confines of the IV.

- (a) The {N} past tense of minimal number inflected verb forms is lost before any consonant other than a stop; for instance, we have nganaw 'I saw him/her/it' from {nga-na-N-w} (1MIN.NOM-CM-PST-give), and inar 'he/she poked him/her/it' from {i-na-N-r} (3NOM-CM-PST-poke). See §7.5.1.1.1 for additional examples.
- (b) The initial apical nasal of the conjugation prefix is deleted following rr, the augmented number prefix. Thus, for instance, {ya-nga-rr-na-jal} (1PL.NOM-PST-AUG-CMsee) 'we saw him/her/it' is realised phonologically as /yangarrajal/.
- (c) The apical nasal of the IV -N 'be' is deleted following the augmented number prefix rr- when the nasal would otherwise have occurred in word final position, or preceding the present tense suffix -in. (See further §7.5.1.1.3 and §7.5.2.1.1.) Elsewhere (including

112 Chapter 3

preceding the imperfective suffix -an), the nasal is retained. (This process seems to be restricted to circumstances in which the root nasal occurs in an unstressed syllable.)

3.5.2.7 Syllable deletion

Another rule of narrow application deletes the syllable nga preceding another instance of the same syllable in inflected verb forms. This is restricted to the syllabic past tense allomorphs with initial velar nasals when immediately preceding a root with initial syllable nga (or possibly ngV, for any vowel). See the final paragraph of §7.5.1.1.1 for examples.

4 Nominals and pronominals

4.1 Introductory remarks

In §2.4 it was argued that nominals (Ns) form a distinct word class in Nyulnyul by virtue of their morphological and syntactic potentials. Words of this class are morphologically quite simple; no genders or noun classes are distinguished, and Ns do not inflect for categories such as case and number. Grammatical relations of the type normally encoded by case markers are marked instead by postpositions, which are phrase-level bound morphemes (see Chapter 5); number is optionally marked by free words, occasionally by means of a suffix, which actually conveys a collective sense (see §4.5.1).

Like perhaps the majority of Australian Aboriginal languages, Nyulnyul does not have a distinct lexical class of adjectives (see also McGregor 1990:142, forthcoming b). Some Ns typically designate qualities, but they do not differ in terms of their morphological or syntactic properties from Ns which normally designate things. Furthermore, Ns of the former type can often also be used referentially, to designate an entity; for instance, *miid* 'male' is typically used to indicate a quality of an entity, though it can also denote a male person, generally 'boy'. Conversely many of the latter type can be used attributively, and denote a property or quality, as in the case of the typically entity-denoting *majangkurl* 'young girl, young unmarried woman', which can denote the quality 'feminine, female'.

On language internal grounds a closed subclass of prefix-taking Ns is identifiable (see §4.2); unlike other nominal roots, these are bound and must be inflected by a pronominal prefix. Another closed subclass of Ns are the determiners (see §4.3). These show no significant morphological peculiarities distinguishing them from ordinary Ns, but they do show different syntactic behaviours: in contrast with other Ns, their position in the NP is quite fixed: they almost invariably occur phrase-initially.

The remaining Ns form an open class, with at least a thousand attested members. These Ns do not appear to fall into linguistically significant subclasses, although they cover the expected semantic domains. As we saw in §1.4.2 there is a fairly large (possibly closed) set of kin terms and terms for socially significant units. A reasonable number of toponyms are also known, as well as terms for horde and other *bur* (as mentioned in §1.2). Only a few proper names for persons are known, although it is highly likely that these formed a much

By contrast, Bowern (2004a:26–27) maintains that adjectives can be distinguished as a subclass of nominals in Bardi—albeit not a robust one—by their syntactic (though not morphological) behaviour: adjectives can only be used in combination with a 'head' entity-denoting nominal (unless this item has been ellipsed under conditions of givenness). Adjectives can't be used as 'heads' or entity-denoting units in NPs. The situation in Nyulnyul appears to be more flexible, and it does not appear that absolute restrictions apply to members of the nominal class, except in the case of the closed classes identified below. Of course, lexical items differ in their preferences for these positions; these preferences presumably follow from the inherent semantics of the lexemes.

larger set in traditional times, possibly open to borrowings from nearby languages. Ns also cover the following semantic domains: human beings (including sex- and age-specific terms); body parts and products; the personal sphere of human beings (e.g. 'footprint', 'shadow', 'spirit', etc.); traditional and modern artefacts; ceremonial activities (e.g. 'circumcision', 'song', 'corroboree', etc.); language; fire, water, and related entities (e.g. 'charcoal', 'ashes', 'spring water', etc.); elements ('sun', 'thunder', 'lightning', etc.); topography and environment (various types of rocks and minerals, types of country, and so on); flora (various types of plants and trees, as well as their edible and inedible fruits and parts); fauna (insects, crustaceans, reptiles, amphibians, fish and mammals); and qualities (colours, size, shape, mental attributes, etc.). There are a number of second-order Ns (Lyons 1977:443–448), including biil 'anger, angry, fight', maad 'play', bukarr 'dream', wurrkul 'work', maarl 'hot, heat', mukurlmukurl 'fight over someone's death', and possibly also liyan 'like, feelings' and bulj 'tired' (the part-of-speech classification of the latter pair is not entirely certain).

Pronominals form a distinct word class from Ns, as we saw in §2.4. It is, however, convenient to discuss them together with Ns in this chapter because they are normally also found in NPs.

4.2 Prefixing nouns

A small closed class of forty or so Ns are bound forms which obligatorily take inflectional prefixes indicating the person and number of their inalienable 'owner' or 'possessor'. In this section we first describe the forms of the prefixes; we then turn attention to the roots that take prefixes, suggesting that being prefix-taking is not randomly associated with Ns.

4.2.1 Pronominal prefixes

The pronominal prefixes are shown in Table 4–1. In contrast with the free pronouns, there are just three first person forms: a first person singular, a dual inclusive (indexing the speaker-hearer dyad), and a third form covering everything else (i.e. dual exclusive, plural inclusive and plural exclusive). The question arises: are the prefix and free pronominal systems distinct, or are both the same four person minimal-augmented system (see §4.6), with two accidentally homophonous forms in the prefix system? The evidence neither way is completely compelling, though it does tend to favour the distinct system hypothesis. First, it is precisely the same as the system for pronominal prefixes to inflecting verbs (see §7.4.1), and also for pronominal prefixes to Ns in neighbouring and closely related Bardi (Metcalfe n.d.:1; Bowern 2004a:39–40). Second, in all modern Nyulnyulan languages the 1 and 1&2 forms other than the 1MIN all involve the syllable ya, possibly together with an augment, which differs across the Nyulnyulan languages (see also below, p. 155). This suggests that historically the two modern systems developed independently from an earlier system in pre-proto-Nyulnyulan that contrasted first person singular and plural. Third, the distinct system hypothesis is consistent with the observation that earlier writers did not identify a distinct 1&2AUG form, although they did distinguish such a form in the free pronouns (Bischofs 1905-1914:1, 4; Nekes 1938; Nekes & Worms 1953:98, 2006:127). I

² Recall that in modern times it seems to have been just the last remaining full speaker of Nyulnyul who controlled and consistently used the system of nominal prefixing (§2.2).

thus presume that Nyulnyul traditionally showed an Assiniboine system (Greenberg 1988; McGregor 1989b) in its pronominal prefix system.

	Minimal/Singular	Minimal/Dual	Augmented/Plural
1	nga- ^a ~ ngi-		yarr-
1&2		ya-	
2	nyi- ~ nya- ~ nyu-		kurr- ~ kirr-
3	ni- ~ na- ~ nu-		irr- ~ yurr-

Table 4–1: Pronominal prefixes to Nyulnyul Ns

As per remarks in §2.2, the 1&2 form *ya*- was rarely encountered in the speech of the fluent speaker I worked with; when reference was being made to the speaker-hearer dyad she almost always employed the 1 augmented/plural form *yarr*-. Thus the system of pronominal prefixes might be described as optionally Assiniboine in modern Nyulnyul. For terminological simplicity, however, I continue throughout this grammar to employ the labels *minimal* and *augmented* for the number categories in the pronominal prefixes.

It will be observed that the forms of the pronominal prefixes are fairly similar to the cardinal forms of the free pronouns (see §4.6 below), and to the non-future pronominal prefixes to verbs (see §7.4). The major differences from the free cardinal pronouns are: (i) the final glide y of the free 1, 2, and 1&2 minimal pronouns is absent in the corresponding bound forms; (ii) the 1 augmented and 1&2 minimal prefixes involve the initial CV of the 1 augmented and 1&2 free pronouns; (iii) the 3 singular prefix shows no apparent relation to the 3 minimal cardinal pronoun; rather, it resembles the proximal demonstrative *in*; (iv) the initial laminal segment of the 2 minimal pronoun is a stop, while it is a nasal in the pronominal prefixes. There is also vocalic variation in the bound forms which is not present in the corresponding free forms. Differences from the non-future pronominal prefixes to verbs lie mainly in the 2 and 3 minimal forms. (See McGregor 1995b for further discussion and interpretation.)

All of the prefixes—with the exception of the 1&2 minimal and 1 augmented—show allomorphic variants. The allomorphs are all phonological, and the allomorphs differ only in vowel quality. The bulk of this allomorphy is predictable, and phonologically conditioned by harmony with the vowel of the following syllable. Some of the allomorphy results from coalescence of vowels, and some is lexically conditioned. There is also a certain amount of unpredictable variation.

4.2.1.1 First person minimal prefix

As indicated in Table 4–1, the elsewhere allomorph of the first person minimal prefix is nga-. A handful of prefixing nouns take the ngi- allomorph: -k 'back', -lirr 'lip', -m 'eye', -mirl 'nose', and -yangal 'tongue'. Only the first two are attested exclusively with this allomorph, ngiik 'my back', and ngilirr 'my lips' being the only forms represented in the

a. The first form given in each cell is the elsewhere allomorph, except in the case of the second person augmented.

³ In just one instance *nguung* 'my belly, stomach' was recorded, as against a number of instances of *ngaang*.

corpora. The other nouns also occur with the elsewhere allomorph; thus for instance alongside of *ngiim* 'my eye' is the rarer *ngaam* 'my eye'.

4.2.1.2 Second and third person minimal prefixes

The u- allomorph of the second and third person minimals is virtually restricted to the circumstance in which the following vowel is the high back vowel, as in:

```
nyu-murr 'your (minimal) bum' nyu-kurrinykurriny 'your (minimal) navel' nu-murr 'his/her/its bum' nu-kurrinykurriny 'his/her/its navel'
```

This rule of vowel harmony is not exceptionless: -mungk 'believe' never induces the u-allomorph of the third person minimal: I have never heard *nu-mungk 'he believes'. And the second person minimal is normally nyi-mungk 'you believe', though nyu-mungk is attested in one instance. As far as I am aware, this is the only such problematic root—though arguably it is in any case not a prefixing noun.

For prefixing nouns consisting of more than one segment and with an initial consonant the elsewhere allomorph with the high front vowel invariably occurs:

nyi-lirr	'your mouth'	ni-lirr	'his/her/its mouth'
nyi-mal	'your arm'	ni-marl	'his/her/its arm'
nyi-kad	'your body'	ni-kad	'his/her/its body'

When the root has an initial vowel, and thus two underlying vowels come into contact, they coalesce into a long vowel, the quality of which is determined by the root-initial vowel:

nyaalm	'your head'	naalm	'his/her/its head'
nyaarnkarr	'your forehead'	naarnkarr	'his/her/its forehead'
nyuur	'your anus'	nuur	'his/her/its anus'

For the three prefixing nouns consisting of just a single consonant, the elsewhere allomorph occurs with two, namely -k 'back' and -m 'eye'. This is as expected. However, the allomorph with the high back vowel occurs with -ng 'belly, stomach', as in nuung 'his/her/its belly, stomach' and nyuung 'your belly, stomach'.

4.2.1.3 Second person augmented prefix

For the second person augmented prefix, unlike all of the other prefixes, it seems that no allomorph stands out prominently as the elsewhere one, roughly equal numbers of nouns being attested with each—to be exact, twenty-one roots are attested with the *i*- allomorph, while eighteen select the *u*- allomorph. Just eight nouns are uniquely attested to each allomorph. There is no apparent phonological conditioning, except that only the *u*-allomorph is attested with -*uur* 'anus' and -*kurrinykurriny* 'navel'. On the other hand, both *kirr-mungk* (*ger-mong*) and *kurr-mungk* (*gor-mong*) 'you (augmented) believe' occur (Nekes & Worms 1953:760), as do both *kirr-murr* and *kurr-murr* 'your (augmented) bums'. Unexpectedly, *kurr-ng* and *kirr-ng* 'your (augmented) bellies, stomachs' both occur; elsewhere, -*ng* 'belly, stomach' exclusively selects the *u*- allomorph. The *i*- allomorph as unique allomorph, by contrast, is not evidently predictable from the following vowel.

Given these facts, one is virtually forced to the conclusion that the two allomorphs are in free variation (except perhaps for two of the roots with the high back vowel), much as this goes against the grain of this linguist. My guess, for what it is worth, is that the allomorph *kurr*- was previously the elsewhere allomorph, and that it recently (in the last century) began to be replaced by *kirr*-, perhaps by analogy with the third person augmented prefix, for which the *i*- allomorph is clearly the elsewhere allomorph (see next section).

4.2.1.4 Third person augmented prefix

The marked *u*- allomorph of the third person augmented pronoun prefix is rare compared to the *u*- allomorphs of the second and third person minimals. It occurs with -*uur* 'anus', as in *yurr-uur* 'their anuses', but not with -*murr* 'bum, buttocks' or -*mungk* 'believe', for which only *irr*- is attested. It also occurs with the consonantal root -*ng* 'belly': *yurrng* 'their bellies'. (Perhaps the more restricted vowel harmony shown by this prefix may be a consequence of the fact that the vowel is word initial, rather than following a consonant.)

4.2.2 Roots and stems that take pronominal prefixes

The majority of prefixing noun roots are terms for parts of the human body; in addition, there are a small number of terms referring to representations of the person and body parts specific to animals. Table 4–2 provides a full list of the known prefixing noun roots in Nyulnyul (see also Tables 4 and 5 in McGregor 1995b:258); not included are the small set of other roots which, like *-mungk* 'believe', take the same pronominal prefixes, but do not behave like nominals.

Table 4–2: Prefixing noun roots	Table	4–2:	Prefixing	noun	roots
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'head'	-k	'back'
'forehead'	-mikil	'small of back, loins, anus'a
'lips, mouth'	-wink	'chest, breast'b
'eye'	-ng	'stomach, belly'
'nose' ^c	-kurrinykurriny	'navel'
'ear'	-jirrjirr	'navel' ^d
'tongue'	-murr	'buttocks, bum'
'chin'e	-uur	'anus'
'(front part of) neck'	-arnmurr	'thigh, lap'
'nape of neck'	-mird	'leg, knee, shin, calf'
'hand, arm, upper arm'	-jimbarl	'foot, footprint'f
'armpit'	-kad	'body'
'elbow' ^g	-wal	'tail' ^h
'finger'		
	'forehead' 'lips, mouth' 'eye' 'nose'c 'ear' 'tongue' 'chin'e '(front part of) neck' 'nape of neck' 'hand, arm, upper arm' 'armpit' 'elbow'g	'forehead' 'lips, mouth' 'eye' 'nose'c 'kurrinykurriny 'ear' 'tongue' 'chin'e '(front part of) neck' 'nape of neck' 'hand, arm, upper arm' 'armpit' 'elbow'g -mikl -wink -wink -wink -kurrinykurriny -kurrinykurriny -jirrjirr -kurrinykurriny -jirrjirr -kurrinyir -murr -murr -arnmurr -arnmurr -jimbarl -kad -wal

Personal representations

-marraj 'shadow, reflection, soul' -lawirl 'name'

-kinbal 'appearance'

- a. Nekes & Worms (1953:759) give this term as meaning 'small of back, loins'; according to my fieldwork it means 'anus'.
- b. Tachon (1895) gives *-wink* as 'breast', whilst Nekes & Worms (1953:763) cite it as 'chest'. The latter would seem to be the better rendition into modern English.
- c. Tachon (1895) gives the declinable form *-mel* 'beak'; this is presumably his rendering of *-mirl* 'nose'. (This author did not distinguish retroflection in any consonants.)
- d. This form is given in Tachon (1895, n.d.) only; both my data and Nekes & Worms (1953) have *-kurrinykurriny* as the only form for 'navel'. (The forms are perhaps dialectal variants.)
- e. According to data elicited in 1990, this form is non-prefixing—only *ni* initial forms occur in my corpus, even for first person possessors. However, earlier works provide partial paradigms, which suggests that the gaps in my data may reflect language attrition.
- f. There are some uncertainties about this lexeme as the initial stop appears inconsistently in the environments in which it is expected, even in Nekes & Worms (1953) (see §4.2.2.1). The evidence suggests that perhaps two lexemes were in the process of being separated out, one meaning 'foot', the other meaning 'footprint' (see McGregor 1995b, where this analysis is presumed). This may have been a postcontact change motivated by English: in most Australian Aboriginal languages a single term denotes both 'footprint' and 'foot'.
- g. Despite intensive checking with the remaining full speaker, this noun root could not be identified.
- h. Both Tachon (1895) and Nekes & Worms (1953:763) cite extensive paradigms for this N. Lest the reader think forms such as *ngawal* 'my tail' (Nekes & Worms 1953:763) dubious it is observed that in some nearby languages (including Gooniyandi), the term for 'tail' is used in reference to the foreskin. I was unable to verify this with the last fluent speaker of Nyulnyul, and in my data the only forms are for third person singular and non-singular. (Nekes 1938:495 also gives the non-prefixing form *juburr* 'tail'.)

One also imagines that such prefixed forms as *ngawal* 'my tail' might well occur in mythological texts involving animals as the protagonists, as occurs in line (3) of Text 1, where the bustard says *nyi-marl* 'your wings' to the emu. In this case, however, the prefixing noun *-marl* means 'hand', and has been extended to mean 'wing'.

There are a few N roots the status of which is uncertain, and which may or may not be prefixing. All of these have initial *ni* or *na*, but it is not known for sure whether or not this is the third person singular prefix, as no forms for possessors other than the third person singular are recorded. They include:

narnda 'testicle' (Nekes & Worms 1953:744)⁴

ningkaal 'ankle' (Tindale 1952–1954)

ninngir(r) 'vagina' (Nekes & Worms 1953:761)

nimidijin 'anus of an animal' (Nekes & Worms 1953:759)

⁴ The corresponding form in Bardi, which means 'penis', is not prefix taking (Claire Bowern pers.comm.).

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nimbirr 'flipper(s)' (my own corpus)

nimandar(r) 'shadow, reflected image' (Nekes & Worms 1953:757)<sup>5</sup>
```

In addition to the above prefixing noun roots, a small number of morphologically complex forms also take pronominal prefixes. These include derived N stems and compounds. We now discuss these two types in order.

All but two of the derived stems—namely the last two items in the list below—are terms for items of clothing, and involve a prefixing noun root denoting a body part which the item of clothing is closely with, together with the ASC suffix:

```
'head'-ASC
-alm-ird
                                      'hat'
                                      'glasses, mirror'
-m-ingid
                'eye'-ASC
-marl-ingid
                'arm'-ASC
                                      'bandage'6
                                      'boot, shoelace'
                'foot'-ASC
-imbal-ingid
-imbal-ird
                'foot'-ASC
                                      'shoelace'
-mird-ikurd
                'leg/knee'-COLL
                                      'lame'
                                      'eyebrow'
-m-ukun
                'eye'-ABL2
```

Aside from these fairly regularly derived Ns there are a few irregular derived forms, which are probably not Ns. Thus Nekes & Worms (1953:767–768) give prefixed forms of the noun -ng 'belly' with the postposition -ang INS (which they wrongly gloss 'into'), which they gloss as 'love'—e.g. nga-ng-ang (ŋaŋ-aŋ) 'I love', nyu-ng-ang (njoŋ-aŋ) 'you love'. Unfortunately, however, it is not clear from the few examples these authors provide how these words are used. I provide just three of their examples to illustrate what appears to be the main uses, acknowledging that the analysis remains quite uncertain:⁷

- (4–1) yai yaŋ-aŋ yay ya-ng-ang 1&2MIN.CRD 1&2MIN-belly-INS 'We love.' (Nekes & Worms 1953:767–768)
- (4–2) nai na-ŋ-aŋ namari ngay nga-ng-ang ngamarri 1MIN.CRD 1MIN-belly-INS tobacco 'I like tobacco.' (Nekes & Worms 1953:767–768)
- (4–3) waidbel-en wamb-aranj yorn-an ninarean wanb wayidbil-in wamb-uriny yurr-ng-ang ningarriyan wanb white:person-ERG man-woman 3AUG-belly-INS very whiting "White men like the whiting very much." (Nekes & Worms 1953:761–762)

Even less interpretable are the forms nga-ng-jil (nan-djel) 'I am happy, grateful, obliged' and nuu-ng-bal (non-bal) 'diarrhoea' (Nekes & Worms 1953:767–768).

6 It is not known whether this lexical item is restricted in meaning to bandages of the arm, or refers more generally to any bandage. In each of the corpus instances the bandage was attached to a person's arm.

⁵ This form is also not a prefixing noun in Bardi (Claire Bowern pers.comm.).

⁷ The behaviour of these forms resembles in some ways the behaviour of -mungk 'believe' (on which see below) and liyan 'like', which also show apparent instances of verb-like uses. However, in contrast to -mungk 'believe' and liyan 'like', -ng-ang 'like, love' is not attested in collocation with an inflecting verb.

In one instance reduplication derives what appears to be an adverbial. This involves the appropriate prefixed form of the noun -*k* 'back' together with the allative postposition: PF-*k-ung*-PF-*k-ung* (PF-back-ALL₁-PF-back-ALL₁) 'backwards' (where PF denotes prefix), as in e.g. *nyii-k-ung-nyii-k-ung* (2MIN-back-ALL₁-2MIN-back-ALL₁) 'you (go) backwards'. (The corresponding adverbials 'forwards' and 'sideways' are not prefixing; the only reason for the difference is formal: the latter are morphologically unanalysable forms.)

Just a couple of compounds are known that involve a pair of prefixing nouns; these include both coordinate and specifying compounds (see §4.5.3 below). Both Ns invariably take a prefix, rather than occur in uninflected root form. Just one instance of a coordinate compound exists, the compounding of the nouns *-lirr* 'lip' and *-mirl* 'nose' for 'face', as in *ni-lirr-ni-mirl* 'his/her/its face'; both nouns in the coordinate compound take the same pronominal prefix, as in *ngi-lirr-ngi-mirl* 'my face'. In one instance the second member of the compound term for 'face' was *-m* 'eye': *ni-lirr-nii-m* 'his/her/its face'; unlike the first term this does not appear in Nekes & Worms (1953).

The two specifying compounds indicate parts of parts, and the first N (denoting the secondary part) takes the third person prefix in agreement with the third person status of the person-inflected form specifying the part. These forms are attested only in Nekes & Worms (1953); examples are *nuu-ng-nga-marl* (3MIN-belly-1MIN-hand) 'palm of my hand' (Nekes & Worms 1953:767–768), and *nuu-ng-nga-mbarl* 'my sole' (Nekes & Worms 1953:767–768)—cf. *nuu-ng-ni-mbarl* 'his/her/its sole').

In the majority of instances the form of an inflected prefixing noun can be predicted from the root form shown in Table 4–1 and the appropriate form of the prefix allomorph as per §4.2.1.1–§4.2.1.4. In the following two sections we discuss some exceptions that necessitate recognition of a sandhi process applying across the prefix-root boundary, and root allomorphs (and perhaps conjugation classes). We wind up the discussion of prefixing nouns in §4.2.2.3 with a discussion of the semantic basis of prefix-taking.

4.2.2.1 Root allomorphs

The three roots consisting of a single consonant, -m 'eye', -k 'back', and -ng 'stomach, belly' show some unusual choices of prefix allomorphs, as mentioned above. Their inflected forms involve long vowels in minimal forms. The first two roots take regular prefix allomorphs everywhere except in the first person minimal, where they select the marked ngi- allomorph (though -m 'eye' can also take the regular nga-). The third root takes u- allomorphs in second and third person minimal and in third person augmented.

There seems to be no way of accounting for the inflected forms of these three roots by means of the regular processes identified in §3.5.2 operating on single underlying forms for the roots. The simplest solution would seem to be to assign these three roots to a separate inflection class made up of two subclasses. The advantages of doing this over merely listing the roots as irregular and displaying their paradigms is minimal descriptively, though it is worth doing because of the possible light it throws on diachrony.

We begin by specifying the three roots as $-^{i}m$ 'eye', $-^{i}k$ 'back', and $-^{u}ng$ 'stomach, belly'. First, minimal number forms in this inflection class all involve long vowels. The quality of the vowel is almost completely predictable from the class index: the ⁱ forms show the regular *i*- allomorphs in second and third person minimal, and the exceptional (and optional) ngi- allomorph of the first person minimal. The ^u form shows u- allomorphs in the second and third person minimal, and irregularly ngu- in the first person minimal.

Second, in the augmented numbers the normal and expected forms occur (with no root-initial vowel) except that the *yurr*- allomorph of the third person is selected by $-^{u}ng$ 'stomach, belly'.

It seems reasonable to presume that these facts arise historically as a consequence of the loss of word final vowels. It is reasonable to assume that in pre-Nyulnyul the roots were -mi 'eye', -ki 'back', and -ngu 'stomach, belly'. The pre-Nyulnyul second and third person minimal forms would have shown the i and u allomorphs by vowel harmony: nimi 'his/her/ its eye', nungu 'his/her/its stomach, belly', and so on. Loss of the final vowel in the inflected forms would have given rise to the modern forms, given that the vowel was lengthened, perhaps for phonotactic reasons. The unusual (and inconsistent) first person singular allomorphs ngi- and ngu- may be reflections of an earlier more extensive system of vowel harmony. The yurr- allomorph can also be explained in the same way.

The only other root allomorphy concerns the two *j*-initial roots *-jiward* 'chin' and *-jimbarl* 'foot'. The initial *j* is preserved in augmented numbers (see however fn. f to Table 4–2), as in *irr-jimbarl* (3AUG-foot) 'their feet', *kirr-jimbarl* (2AUG-foot) 'your (augmented) feet', and *yarr-jiward* 'our (augmented) chins'. In the minimal numbers the initial syllable *ji* is normally lost, as in *nga-mbarl* 'my foot', *ya-mbal* 'our (dual) feet', *nyimbal* 'your (minimal) foot', and *ni-mbal* 'his/her/its foot' (Nekes & Worms 1953:758). However, the 1&2 minimal form for 'chin' is given by Nekes & Worms (1953:763) as *yai-wad*. This could be either an error for *ya-ward*, or could show lenition of the initial palatal stop of the root (i.e. *ya-yiward*). Unfortunately my corpus shows only the third person minimal form of this root.

4.2.2.2 Semantic basis for prefix-taking

Just a small proportion of the N roots and stems which designate body parts, personal representations and clothing are prefix taking. The vast majority of Ns from these semantic domains are non-prefix-taking, open-class Ns. Why should some Ns be prefixing and others not? McGregor (1995b) proposes that whether or not an N is prefixing is not an accidental fact of morphology, but is semantically motivated. The relevant semantic feature is Bally's notion of the personal domain or sphere, which may be characterised approximately as follows:

The personal domain includes or can include objects and beings associated with a person in an habitual, intimate or organic way (e.g. the body and its parts, clothes, the family, etc.). Each constitutive element of the domain is regarded, not as a simple property, but as an integral part of the person. (Bally 1995:33)

The relevance of this concept to nominal prefixation can be explained as follows:

⁸ This is consistent with the reconstructions of Stokes & McGregor (2003), where *-miny 'eye' is reconstructed for proto-Nyulnyulan, *-ka 'back' for proto-Western Nyulnyulan (the vowel quality could as well have been i), and *-ngu 'belly' for proto-Nyulnyulan.

As indicated in fn. d to Table 4–2, *-jirrjirr* 'navel' is attested only in the earliest sources, and the few forms given there indicate that the root remains invariant throughout the paradigm.

¹⁰ Capell (1972) proposes a purely phonological explanation for the difference between prefixing and non-prefixing Ns in the Worrorran languages, which he appears to suggest applies more widely to other Kimberley languages: 'no prefixation without initial vowel'. McGregor (1995b:264–265) shows that this proposal runs into difficulties in Nyulnyul. Aside from this, the list of N roots in Table 4–1 contains many consonant-initial roots as well as vowel-initial ones.

Prefixing nominals indicate those items which are conceived of as belonging to the personal sphere of a human being, those items which are viewed of as inseparable from the individual. Non-prefixing nominals indicate those entities which do not belong to a human being's personal sphere, and which have independent status as things. (McGregor 1995b:286)

We cannot enter into a detailed discussion of the evidence here; the reader is referred to McGregor (1995b), where it is also argued that the above-mentioned prefix-taking derived Ns satisfy the same semantic generalisation (see McGregor 1995b:267–270):

It is these prefixing items of apparel that are most closely related to the person. They are amongst the physically closest to the relevant part—they are typically tight rather than loose on that body part, and certainly more so than most other items of apparel. Secondly, they are typically more protective and/or functional than other items of apparel: hats protect from the sun's rays (Aborigines in the region, like whites, use hats not just for fashion, but also for protection); bandages protect an infected or sore part; glasses are used for vision, and also protect the eyes from dust and grit; and shoes and shoelaces protect the feet (even traditionally, some sort of footwear was occasionally used for protective purposes in difficult terrain). (McGregor 1995b:268–269)

4.2.2.3 Other roots taking the same pronominal prefixes

It is not only N roots that take the prefixes shown in Table 4–1; there are five other roots that take the same prefixes, as shown in Table 4–3. These are evidently not nominals, since they do not show the syntactic behaviour of the other prefixing roots: thus, for instance, they are not attested in the NP-internal possessive construction (see §10.3), which syntactic environment is normal for the regular prefixing noun roots. Only the first of them is frequent in my corpus, and it is the only one which can be reliably assigned to a word class on the basis of its syntactic behaviour: it is a particle.

-mungk	'believe, know, think'
-malkang	'self, alone'a
-ngakal	'self',b
-yam	'abstain (tabooed?)'c
-malukul	'lack, want'
-nangan	? ^d

Table 4–3: Words of other classes which take noun prefixes

- a. Nekes (1938:157) cites this as the Bardi form, giving *-malk* as the corresponding Nyulnyul form (as also in Nekes & Worms 1953:755). However, in Laves' corpus the Bardi form is given as *-malga*, while in my Nyulnyul corpus only the longer form occurs.
- b. This poorly attested root is cited in Nekes & Worms (1953:775), and attributed to Nyulnyul and Jabirrjabirr. It is labelled a reflexive pronoun.
- c. This word occurs in Nekes (1938:155), where a complete paradigm is provided; it does not, however, occur in my database, and attempts to elicit it failed. A cognate form exists in Bardi with the same meaning.
- d. Tachon (1895:11) cites this item as a verb which declines as a noun; however, he omits to gloss it. Unfortunately, it has proved impossible to find cognates in related languages which might throw light on this question.

McGregor (1995b:270–271) suggests that the prefixation of these words cannot be accounted for in terms of the same semantic features as the prefixation of nouns. This is a consequence of the different diachronic origins of the two sets of prefixing words. Thus prefixing nouns had their origins in an external possession construction (similar to one of the modern types—§12.4.2.4.1.1) in which the possessor pronominal was prototypically found adjacent to the possessum nominal. By contrast, suggests McGregor (1995b), prefixation of the non-nominals probably arose as the result of a parallel process of morphosyntactic change in which a pronoun coalesced with a word that typically followed it (though not in an external possession construction).

4.3 Determiners

Determiners constitute a small closed subclass of Ns which normally function in NPs to 'determine' it—to indicate its referential status. They can be divided into three types: definite, indefinite and interrogative. They are mostly morphologically regular, taking the expected case-marking postpositions according to their grammatical role. There are just a couple of irregular and infrequent determiners, that show unusual and/or restricted behaviour, as described below.

4.3.1 Definite determiners

These Ns indicate that the referent is identifiable, and provide information facilitating its identification.

4.3.1.1 Demonstratives

Two definite determiners are demonstratives, and indicate the entity by its location relative to the spatial deictic centre of the speech situation, the here of the speech situation. Two degrees of distance from the speaker are distinguished in my corpus, proximal and distal:

in 'this' bin 'that'

According to Nekes (1938:158) there are four demonstratives in Nyulnyul, while Nekes & Worms (2006:137) recognise five: *yene* 'this, here', *abar* ~ *babar* ~ *aber* 'that, there' (near distance), *bene* 'that there' (greater distance), *bone* 'that' (great distance), and *njon* 'that' (far away). My corpus shows no instances of *abar* ~ *babar* ~ *aber* 'that, there', or *bone* 'that'. As for *njon* 'that' (far away)—*nyun* in my orthography—the handful of instances in my corpus all show the form in reference to a distant location, and translate as 'there' (see e.g. (4–98) below). The other two demonstratives are obviously *in* 'this' and *bin* 'that'. Precisely how these demonstratives were used in speech—for instance, in reference to entities close to and on the body, on table-top space, or in geographical regions—is not known. None of the legacy corpora include many illustrative examples. One example suggests that *bin* 'that' might indicate proximity to the hearer, and this might be the basis for the contrast with the other 'that' forms (though no decisive examples are available):¹¹

¹¹ This is also perhaps consistent with the suggestion of Nekes (1938:137) that *bin* is the near-distant 'that' form.

```
(4-4)
           yene-gadinj djān
                                   bōr
                                                    bene-gadinj dje
                                                                            bōr
                                         nai,
           in-ikadiny
                                                    bin-ikadiny jii
                       jan
                                   bur
                                         ngay
                                                                            bur
           this-side
                       1MIN.OBL place 1MIN.CRD that-side
                                                                 2MIN.OBL place
           djoe
           juy
           2min.crd
           'This is my seat and that is your seat.' (Nekes 1938:137)
```

The determiners are shifters. Thus, in direct quote the deictic centre is that defined by the interactants in the referent speech event; the speaker of the reported quote is the first person, and the relative proximity of the referent is judged in relation to this individual.

Both *in* 'this' and *bin* 'that' usually precede the head N of their NP—indeed usually they occur NP initially (see §10.2.1). They almost never follow the head N; lines (5) and (202) of Text 2 are among the few exceptions—and both of these examples are clearly marked expressions. Not infrequently demonstrative determiners are the sole items in an NP in which the head N has been ellipsed (see Chapter 10 below). Even in cases like (4–5) where there is no Nyulnyul word for 'microphone', it could be argued that an appropriate N could be borrowed (e.g. from English), and then employed as the head of the NP.¹²

(4–5) in ma-ngank-in-ung this INF_P-talk-INF_S-ALL₁ 'This is for talking into.'

NPs determined by *in* 'this' and *bin* 'that' typically refer to material (first order) entities, such as people, animals, plants, things, and places. They are never used in reference to times, or other abstract items such as ideas, beliefs, emotions, propositions, and the like—the most abstract Ns attested with demonstratives are *jabal* 'story' and *rarr-rarr* 'noise'.

Deictic spatial expressions for 'here' and 'there' in Nyulnyul involve a demonstrative, optionally together with the noun *bur* 'place, camp, country'; the demonstrative is usually also marked by one of the 'lative' postpositions, locative, allative, ablative, etc. Thus, *in-ik* (this-LOC) and *in-ik bur* (this-LOC place) can be used to mean 'here', and *in-ikun* (this-ABL₂) and *in-ikun bur* (this-ABL₂ place) to mean 'from here'. Occasionally the locative postposition is absent, and the plain demonstrative determiner is used as the spatial deictic 'here' or there'.

4.3.1.2 Non-demonstrative determiner

In addition to the two demonstrative determiners, Nyulnyul also has—like the other Nyulnyulan languages—a non-demonstrative determiner that marks definiteness. It indexes an entity not by virtue of relative proximity, but by specifying that it is recoverable. The intended referent is singled out as given or predictable. By using this determiner the speaker indicates that the identity of the referent is retrievable; it belongs to the set of established discourse entities. No further information is provided to assist the hearer identify it.

The form of this non-demonstrative definite determiner in Nyulnyul is *kinyingk*, which is homophonous with the third person singular pronominal—see §4.6 below. It is cognate with non-demonstrative determiners in other Nyulnyulan languages: *kinya* 'this, that' in Warrwa

¹² Although improbable in this particular example, the infinitival form *ma-ngank-in* (INF_p-talk-INF_S) 'talking thing' could normally be employed as the 'head' of the NP, as in *in ma-ngank-in* 'this microphone'.

(McGregor 1994c:17) and Nyikina (Stokes 1982:157), ¹³ *ginyinggi* ~ *ginyingg* 'this, that' in Bardi (Aklif 1999:46), and *kinyangka* 'he, she, it' in Yawuru (Hosokawa 1991:291).

Like the demonstrative determiners, *kinyingk*—which will be henceforth glossed DEF—normally occurs initially in its NP, and may or may not be followed by a noun serving as head of the phrase; only rarely does it follow the head. When it follows the head N, it is usually used contrastively, indicating that it is this particular referent rather than any other that is being referred to.

The definite determiner is frequently used in making reference to something that has been mentioned already in the discourse or text rather than something present in the context of situation of the spoken utterance, where the demonstrative determiners are more likely to be used. Usually, that is, this determiner is used as an anaphoric index. This is the case in almost all instances of *kinyingk* DEF in the texts of Volume 2. Consider, for instance, the use of this determiner in lines (4) and (5) of Albert Kelly's version of the emu story (Text 2): the second mention of the referent in each instance employs this determiner. It is also used in reprise, as illustrated by line (10) of Rosie Victor's text (Text 5), repeated for convenience in (4–6). Here *kinyingk* DEF picks up the referent of the previous NP *wurrumbadangk miida baab* 'big male child', much as in the use of third person pronouns in English expressions like *the eldest son, he was made their king*.

(4–6) wurrumbadangk miida baab kinyingk big male child DEF i-nga-rr-m-an-an-jirr king / 3NOM-PST-AUG-put-IMP-IMP-3AUG.OBL king 'The eldest son they made their "king" (Felix).'

Occasionally *kinyingk* DEF is used cataphorically, to point forward to a referent that has not yet been established. The definite determiner is not specific as to the relative 'distance' of the referent, or its closest mention, from the here-now of the utterance, and thus translates as 'this' or 'that', depending on the relative distance of that mention.¹⁴

In McGregor (1995b:17) I described *kinyingk* as an endophoric determiner. Although all uses of the determiner in the texts of Volume 2 are of this type, it seems from elicited examples that it had a wider range of uses. Consider the following elicited example:

(4–7) maj-in jan i-na-ng-k-ngay
boss-ERG 1MIN.OBL 3NOM-CL-PST-carry-1MIN.ACC
nga-ni-ny-jal kinyingk larrkird bardangk
1MIN.NOM-CL-PST-see DEF boab tree
i-ngi-rr-m-an bijin
3NOM-PST-AUG-put-IMP Pigeon
'My boss took me to see the boab tree where they had imprisoned Pigeon.'

The boab tree referred to in this example, commonly referred to as the 'Prison Boab', is one in which it is widely, though almost certainly mistakenly, believed that Pigeon had been

¹³ The form *kinya* 'this' occurs sporadically across Australia—see e.g. Dixon (1972:258). Gooniyandi has the related form *ginharndi* 'that one, you know its identity' (McGregor 1990:145).

¹⁴ By contrast, Gooniyandi and Bunuba both possess two endophoric determiners (i.e. determiners referring to entities mentioned in the text or discourse, rather than in the context of situation), and these contrast partly in terms of relative distance, as in the Gooniyandi *niyaji* 'this' and *niyi* 'that' (McGregor 1990: 144–145).

incarcerated overnight, en route to Derby. It is thus something which the speaker could assume that anyone could identify. It could also be argued that my previous utterance, the English sentence I employed which resulted in (4–7), had established the intended referent, the Prison Boab tree, and thus that this is a case of endophoric reference. It is impossible to argue convincingly against this alternative; all that can be said is that the speaker had reinterpreted my English prompt sentence 'I took you to see the boab tree where they had imprisoned Pigeon', and rephrased it as something that she might have said to a third party; this would seem to make it more likely that the determiner is being used, as I have suggested, non-endophorically. Unfortunately there are no comparable non-elicited examples.

Kinyingk DEF thus resembles the English definite article the, and indeed sometimes translates as this word. However, as distinct from the English word, it does not contrast with an indefinite article, and its use is not obligatory on definite or specific NPs: yiil 'dog' can be used in reference to a definite animal, and can translate as 'the dog'; it can also translate as 'a dog'. Examination of the contexts of use of kinyingk DEF in the textual corpus reveals that it is generally textually salient entities that are referred to by NPs with this determiner. Often these entities are the main protagonists in narratives, and the main topics of expository texts. But sometimes they are of more local importance, as for instance in line (34) of Text 3: from this point on the water in which the sandalwood has been steeped takes on a significant role. It is presumably for this reason that kinyingk DEF has a stronger identifying potential than the, and usually translates as 'this' or 'that'.

Unlike the demonstrative determiners, *kinyingk* DEF occurs in NPs designating not just physical things (people, animals, plants, material objects, artefacts, and places, but also more abstract second-order entities such as language, speech, words (*kinyingk ngank* 'this language, utterance, word, etc.'), activities (such as dances—*kinyingk burrb* 'this dance'), and third-order entities such as thoughts, reasons, times, and propositions. However, in the latter instances *kinyingk* always serves as the sole word of the NP (there is never another N denoting the abstract item, the proposition); this is illustrated in the following pair of examples:

- (4–8) kinyingk nga-mungk kad arri ningarr

 DEF 1MIN-think still not true

 'That's what I thought, but it wasn't true.'
- (4–9) bulj nga-n-j kinyingk-ij nga-n-in mijal tired 1MIN.NOM-CM-say DEF-DAT 1MIN.NOM-be-PRS sit 'I'm tired, that's why I'm sitting.'

In these examples, *kinyingk* DEF refers to a clause or sentence—or, rather, the proposition it expresses or the situation it refers to—which is not explicit in (4–8), but is explicit in (4–9) (it is the previous clause). Similarly, when reference is being made to times, in general this is through intermediate reference to events referred to in the previous clause or sentence: see line (33) of Text 3.

In fact, *kinyingk* DEF may refer to a stretch of discourse larger than a single clause or sentence, such as a paragraph or episode-sized stretch of speech. *Kinyingk-karr* (DEF-TEM) 'then' and *kinyingk-kun* (DEF-ABL₂) 'then, after that' are used in this way, and function as conjunctions. (See the texts in Volume 2 for illustration of this use of *kinyingk* DEF.)

Nyulnyul has at least one other determiner, the adverbial determiner *baan* 'that way' (also 'like that, that manner'), and possibly also a temporal determiner *kanjun* 'last time, that time' (which is instanced only twice in the modern corpora, in Albert Kelly's text)—see Chapter 6 for discussion.

4.3.2 Comparative determiners

There are three comparative determiners in Nyulnyul, that usually (though not always) facilitate identification of the referent of an NP by relating it to some other entity, often the referent of another NP in the textual environment. They are, with approximate glosses:

```
war 'other, another, different'warang 'others'waamarn 'different'
```

Like definite determiners, comparative determiners also typically occur in NP-initial position, and always (in the present corpus) before the head N, if there is one: NPs consisting of just a comparative determiner are common. Comparative determiners may cooccur with definite determiners, in the same NP, as the following example illustrates. (In the few examples available the definite determiner almost always precedes the comparative determiner, as it does in English. This may or may not be significant.)

(4–10) ni-wink jin rarriny in war uriny ni-wink jirr
3MIN-chest 3MIN.OBL strong this other woman 3MIN-chest 3AUG.OBL
balybaly
flat
'This woman has firm breasts; the others have slack breasts.'

We discuss these three determiners in order in the following subsections.

4.3.2.1 war 'other, another, different'

This determiner normally indicates that the referent of the NP is an entity of the category designated by the head N, but differs from another entity of the same category, the latter being invoked as a standard for the comparison. In other words, the identity of the referent is established by virtue of its being different from another entity that serves as a standard of reference. This standard may have been previously established; indeed, as in examples (4–11) and (4–12), it may be referred to in the previous clause by an NP and/or by a cross-referencing bound pronominal.

- (4–11) jarrad yaarr i-ngi-rr-k-an war church
 1AUG.OBL pull 3NOM-PST-AUG-carry-IMP other church
 i-ngi-rr-mukirr-an banangkarr
 3NOM-PST-AUG-make-IMP then
 'They pulled our (old church) down, and built another one.'
- (4–12) *arri ya-li-rr-jal-an i-ng-kard jimbin* not 1PL.NOM-IRR-AUG-see-IMP 3NOM-PST-enter inside

bin-ik jin wamb bur yambun war-inyirr wamb this-LOC 3MIN.OBL man camp together other-COM man 'None of us saw him go inside his camp with another man.'

The standard for the comparison need not, however, be explicitly mentioned, but may be inferrable from the text, discourse, or context of situation. The typical or natural choice of standard of comparison in Nyulnyul shows some differences from the usual choice in English, and appears to more closely resemble the natural choice of standard in Gooniyandi (see McGregor 1990:454–456). The main considerations relevant in Nyulnyul are the following.

- (a) The standard may be the relevant 'entity' (of whatever category or order: thing, place, time, etc.) involved in the current situation. When reference is being made to other times than the present, it is not usual for the speaker to specify the present as the standard of temporal comparison, as shown in the following example:¹⁵
- (4–13) jan malirr aa baab aa ngay ya-ngki-rr-jid
 1MIN.OBL wife and child and 1MIN.CRD 1PL.NOM-FUT-AUG-go
 perth-ung war-uk kunyurl
 Perth-ALL₁ other-LOC moon
 'My wife, my child and I will go to Perth next month.'
- (b) The standard may be the implied relevant entity involved in the previous, implied referent situation(s). All material situations must occur somewhere, and this location may be taken as the standard, as in (4–14), in reference to which the new location is 'other'.
- (4–14) malbul jirr war-ung bur i-ngi-rr-jid things 3AUG.OBL other-ALL₁ camp 3NOM-PST-AUG-go 'They moved their things to another place.'
- (c) A normal or prototypical item of a given type will usually be chosen as the standard for comparison, in relation to which something else is different. Thus (4–15) was given in response to the English prompt 'He put in his false teeth'. There is, not surprisingly, no indigenous Nyulnyul word for 'false teeth', and the way the speaker got around the problem was to invoke as standard for comparative reference the speaker's normal teeth.
- (4–15) war jarringk i-na-m ni-lirr-uk jin other tooth 3NOM-CM-put 3MIN-mouth-LOC 3MIN.OBL 'He put in his other (i.e. false) teeth.'
- (d) An implicit standard is usually the correct thing, the thing that should have been involved in the situation, and thus *war* sometimes conveys the contextual sense of 'wrong one'—the other one, not the right one:

marriny nga-ny-jid-uk war ngimbirr nga-li-janb-an juurr go 1MIN.NOM-PST-go-LOC other night 1MIN.NOM-IRR-trample-IMP snake 'While I was going along the other night I nearly stepped on a snake.'

¹⁵ In Nyulnyul, unlike English, the comparison is not directional. Whereas in (4–13) the referent time is subsequent to the present, it may also be prior to the present (as in English), as the following example illustrates:

(4–16) war wamb i-ngi-rr-dam-an karrkuj arri bin war wamb other man 3NOM-PST-AUG-hit-IMP dead not this other man 'They killed the wrong man.'

This example also shows that, as in Gooniyandi and many other Aboriginal languages of Australia, both members of a pair of objects may be taken as mutual standards for one another, each being designated 'other' to the other. (4–17) and (4–18) provide further illustration.

- (4–17) war-in baab ni-marl i-n-m-in-jin other-ERG child 3MIN-arm 3NOM-CM-put-PRS-3MIN.OBL war baab ma-dam-in-ung other child INF_p-hit-INF_S-LOC 'One of the boys is getting his hand ready to hit the other.'
- (4–18) *i-ngi-rr-barnj kumbarr war-in i-na-w*3NOM-PST-AUG-exchange money other-ERG 3NOM-CM-give *aa war-in i-na-w*and other-ERG 3NOM-CM-give
 'They exchanged money, giving it to one another.'

Although this is the most common way of separately referring to the two members of a pair, occasionally the former is referred to by an NP with the quantifier *warinyjirr* 'one' (as in (4–19)), or a demonstrative such as *in* 'this'. Here the first NP establishes the standard the other is compared to.

(4–19) marriny i-ngi-rr-jid warinyjirr yalirrbur war baybirr go 3NOM-PST-AUG-go one first other behind 'They walked one behind the other.'

In examples such as (4–17) the first comparative determiner appears to be a type of cataphoric index, pointing to the entity established in the following clause. In (4–20) the cataphoric comparison only is specified, the standard it invokes being ellipsed, being now retrievable. ¹⁶

(4–20) war-in baab kalb i-na-munkar ni-k-uk other-ERG child above 3NOM-CM-lift 3MIN-back-LOC 'One child lifted the other on his back.'

As a comparative determiner, war relates the identity of the referent of the NP to the identity of the referent of another NP, specifying that the two are different. Depending on the discourse context, this may or may not permit exact identification of the referent. The NP may, that is, be specific or non-specific, definite or indefinite. For instance, in (4–11) the referent of war church is definite, it being known to the speech interactants that just two churches had been built at Beagle Bay, and therefore this NP must refer to the new one. In

¹⁶ Another possibility is that—as in Gooniyandi (McGregor 1990:455)—the least active member of a pair is most likely to be chosen as the standard. (4–18) is consistent with this principle: here the passive member of each pair of actions of giving is taken as the standard. This is consistent with expectations linking stativity and passivity with backgrounding, activity with foregrounding.

the majority of examples above, however, the NP is indefinite. Sometimes it is the indefiniteness of the NP that is pragmatically most salient, and the most natural English translations involve indefinites such as *one* and *someone*. (4–17) and (4–19) illustrate this. As the free translation of (4–13) indicates, the usual interpretation of *war* in temporal expressions is that a specific nearby temporal period is referred to. Sometimes, however, contextual factors override this, as in the following utterance, given as an answer to the question 'when are you going to Derby?':

(4–21) war waalk jan other day 1MIN.OBL 'Sometime I might go.'

The point of this discussion is that even though war sometimes translates most naturally into English as an indefinite one or someone, it is not polysemous. Definiteness and indefiniteness are pragmatically engendered, not coded.

In the examples so far *war* 'other, another' serves as an index, facilitating the identification of a referent entity designated by the head N (which may or may not be ellipsed) of a referential NP—an NP which actually refers to some entity. The word is not, however, restricted in these ways, and to these syntactic environments. It may serve as the sole constituent of an NP which serves to attribute a property or quality of some already identified entity. In this circumstance *war* normally translates as 'different' (but cf. also §4.3.2.3). The following examples are illustrative:

- (4–22) in wajbal war i-rr-bunyj this white:person other 3NOM-AUG-smell 'These white people smell different.'
- (4–23) babaal jan war yarr-m brother 1MIN.OBL different 1AUG-eye 'My brother and I have different eyes.'
- (4–24) kinyingk war ni-kinbal ngay-kung
 DEF other 3MIN-appearance 1MIN.CRD-ABL₃
 'His figure is different from mine.' (Nekes & Worms 1953:552)

In examples like (4–23) and (4–24) *war* 'other, another' serves a modifying role in the NP. It may in addition serve as the head of the NP, where it typically translates as 'person', 'one' or 'thing'—much as *one* does in English when serving as the head of an NP. Examples are lines (141), (168), and (195) of Text 2, where *war* as head of the NP makes reference to an individual, the 'other' of this text, the exceptional protagonist—see (c) above. Other examples, in which the referent is an inanimate entity, are:

¹⁷ Which nearby period is being referred to depends on the lexical head of the NP. With *kunyurl* 'moon' reference is typically made to the immediately previous or following month, whereas for *waalk* 'day' it may be the day before yesterday or after tomorrow that is being referred to. Thus, according to Nekes & Worms (1953:552–553), *war waalk jirr* refers to 'the day after tomorrow', while *wara biird* designates 'the day before yesterday'.

- (4-25) in war ma-lakarr-in-ung this other INF_p -listen- INF_s - ALL_1 'This one (thing) is for listening.'
- (4–26) nga-na-ralkam jan nga-marl war-uk
 1MIN.NOM-CM-dry 1MIN.OBL 1MIN-arm other-LOC
 'I wiped my hands on a towel.'

One possibility is that such examples invoke comparison with traditional Nyulnyul artefacts as standards, in relation to which introduced items are 'other'.

War 'other, another, different' reduplicates to wara-war, which translates sometimes as the distributive 'one by one' or 'one after the other', as in (4–27) and (4–28), and sometimes as a reciprocal 'one another', as in (4–29) and (4–30).

- (4–27) nga-n-dam irrjiwar wamb nga-malk-ang wara-war 1MIN.NOM-CM-hit three man 1MIN-self-INS other-other 'I myself hit the three men one after the other.'
- (4–28) nga-n-dam-jirr bardangk wara-war 1MIN.NOM-CM-hit-3AUG.ACC tree other-other 'I knocked the trees one by one.'
- (4–29) kujarr wamb irr-marl-ang i-ngi-rr-dam two man 3AUG-hand-COM 3NOM-PST-AUG-hit irr-marl-inyirr wara-war 3AUG-hand-COM other-other 'Two men were punching one another with their fists.'
- (4–30) war-in i-ni-ny-janb wara-war other-ERG 3NOM-CM-PST-kick other-other 'They kicked one another.'

How reciprocals like (4–29) and (4–30) contrast semantically with the normal means of expressing the reflexive/reciprocal sense, by means of a reflexive/reciprocal verb derivation, is unclear. One hypothesis is that the reciprocal sense is a contextualisation of the 'one by one' or 'one after the other' sense, being engendered when no other suitable referent is available. Thus, whereas in (4–27) and (4–28) the Actor and Undergoer are both specified, and obviously different, in (4–29) and (4–30) only one entity is denoted. According to this hypothesis, the reciprocal involving *wara-war* 'other-other' differs from the ordinary reflexive/reciprocal in that it specifies that the action was carried out sequentially, each individual acting in turn. The reflexive/reciprocal construction is presumably vague in relation to this feature.

A couple of observations lend support to this hypothesis. First, the verb is not in the reflexive/reciprocal voice, suggesting that the activity is indeed being represented as extending from one participant to another, and then back again, rather than as immanent to a single participant. Second, it appears to be only physical activities which occur in this construction; there are no examples in the corpus of *wara-war* 'other-other' with perceptual activities such as seeing. However, inadequate information is available on which to mount a completely convincing argument.

In contrast to English *one another* and *each other*, however, *wara-war* 'other-other' need not necessarily serve as an object (i.e. Undergoer—§12.3.2.1). As example (4–31) illustrates, this word may serve as subject (i.e. Agent—§12.3.2.1)—cf. the ungrammaticality of *each other threw stones at them.

(4–31) wara-war-in i-rr-ngul-an kumbarr other-other-ERG 3NOM-AUG-throw-IMP stone 'They threw stones at each other.'

Note also (4–32), in which instead of reduplicated *wara-war-in* 'other-other-ERG' we have the conjunction of two identical NPs. How (4–31) and (4–32) contrast semantically is uncertain.

(4–32) war-in aa war-in i-na-r i-ngi-rr-jimb other-ERG and other-ERG 3NOM-CM-poke 3NOM-PST-AUG-die kujarr-injun two-??¹⁸
'They speared each other dead.'

Finally, wara-war 'other-other' also expresses the 'different' sense that war sometimes shows, as in (4–33):

(4–33) kujarr wara-war two other-other 'You two are different.'

4.3.2.2 warang 'others'

Warang 'others' is a non-minimal form corresponding to war 'other, another, different'. It presumably derives historically from war plus -ang, the modern instrumental postposition, which has a source in a comitative in proto-Nyulnyulan (McGregor 1995b). This makes sense semantically: in various Australian Aboriginal languages comitatives can convey the sense 'N plus one or more others' (e.g. McGregor 1994c:35; Saulwick 1996). In addition, the corresponding terms seem to be formally related in a similar way in other Nyulnyulan languages, as in the Nyikina (Stokes 1982:86) and Warrwa (my own fieldnotes) form warany-ngany-jina 'other-INS-his' (where -ngany INS can be traced back to the same comitative in proto-Nyulnyulan).

Like war 'other, another, different', warang 'others' indexes entities by virtue of the fact that they are different from a standard of comparison, as illustrated in examples (4–34) and (4–35) below. Presumably the same factors influence the choice of standard as in the case of war 'other, another, different'.

¹⁸ The analysis of the bound morpheme *-injun* in this example is uncertain. It appears in a number of places in Nekes & Worms (1953, 2006), though no explanation or analysis is provided; it is not otherwise attested in my own corpora. One possibility is that it is a morpheme meaning 'together', like the phonologically identical *-njoon* in Bardi (Claire Bowern pers.comm.).

- (4–34) arri mi-la-ngank ngarrij-ang warang-in not 2MIN.NOM-IRR-speak hard-INS others-ERG i-li-rr-lakarr-jii 3NOM-IRR-AUG-hear-2MIN.ACC 'Don't speak loudly, the others might hear you.'
- (4–35) bin baab i-la-kalak-irr warang baab maad-ung that child 3NOM-IRR-approach-3AUG.ACC others child play-ALL₁ 'That child should join the others at play.'

The referent of an NP with determiner warang 'others' is almost always human, or a personified animate being, as in line (14) of Text 1. Only rarely is the referent inanimate, and it seems that warang 'others' is chosen instead of war when the speaker wishes to emphasise the individual status of the various items referred to. This is illustrated clearly in line (85) of Text 2, where the narrator proceeds to list the relevant items. War 'other', on the other hand, is often used in reference to inanimate entities, and appears to underline the collective status of the inanimate items.

Also like the singular comparative determiner, *warang* 'others' can be used in an indefinite sense:

- (4–36) warang wamburiny i-rr-jid-in modikard-inyirr others people 3NOM-AUG-go-PRS car-COM 'Some people are going in a car.'
- (4–37) kinyingk-in arri i-la-barrabarr warang DEF-ERG not 3NOM-IRR-think others 'He/she never thinks about anyone (else).'
- (4–36) apparently invokes a comparison with another person or group of people, possibly including the speaker ((a) of §4.3.2.1 is presumably relevant in drawing this comparison); in (4–37) the standard of comparison is the Agent, and thus the implication that the person doesn't think about anyone but themself.

4.3.2.3 waamarn 'different'

This word characterises something as being different in some respect to the standard of reference with which it is compared. It may well not be a determiner, since its usual function seems to be to attribute a property—the property of difference—of an entity, place, time, or whatever; it seems not to be normally used referentially. We discuss it here because of its evident semantic relationship to *war* 'other, another, different' and *warang* 'others'. Some examples:

(4–38) waamarn-mirr bur i-ni-ny-jal arri
different-PER place 3NOM-CM-PST-see not
i-la-jal-an-ngay
3NOM-IRR-see-IMP-1MIN.ACC
'He looked straight ahead; he didn't look at me.' (Literally: 'He looked at a different place, he didn't look at me.')

- (4–39) arri i-la-jid-an jidinarr i-ny-jid waamarn-mirr not 3NOM-IRR-go-IMP straight 3NOM-PST-go different-PER 'He didn't go straight; he went the wrong way.' (Literally: 'He didn't go straight; he went via a different (place).')
- (4–40) *irr-in jinajinang i-ngi-rra-k-jirr waamarn-jun* them-ERG mock 3NOM-PST-AUG-carry-3AUG.ACC different-ABL₁ wamburiny people 'They were mocking the foreigners (i.e. the people from different places).'

As (4–41) indicates, the standard of comparison may be specified explicitly: ¹⁹

(4–41) waamarn yarrad arri layib different 1AUG.CRD not good 'Different from us, but good.'

Similarity is expressed by means of the enclitic *-ngirr* SEM (see §5.14).

4.3.3 Interrogative determiners

Interrogative determiners are used principally in requests for information concerning the identity of an entity, place, time, or quality. The most common interrogative determiners in the Nyulnyul corpus are the following pair:

angk 'who, what, where'arrak 'where at'

As the glosses indicate, *angk* 'who, what, where' can be used in many contexts, in requests for the identity of virtually anything; it is the unmarked member of the pair, and the most frequent in the corpus. *Arrak* 'where at' is quite marked and infrequent by comparison, ²⁰ and is usually found in the context of requesting information about location. Unlike *angk* 'who, what, where', *arrak* 'where' is only ever the sole constituent of a phrase; no open class N ever co-occurs with it in an NP. The following examples illustrate the use of *arrak* in requests for locational information:

- (4–42) arrak jungkarr walabab where 2AUG.OBL son 'Where are your sons?'
- (4–43) arrak mi-n-in where 2MIN.NOM-be-PRS 'Where are you?'

19 Note that this example, line (32) of Text 2, involves an unusual usage of the negative particle *arri* 'not'; it is clear from context that the meaning is not 'not good'.

²⁰ It is probable that *arrak* involves the locative postposition -*ik* ~ -*uk*, fused to the now meaningless and non-occurring interrogative formative *arr*. Support for this comes from the fact that *arr* occur independently in Jabirrjabirr with the meaning 'where', according to Nekes & Worms (1953:325). This source also gives examples with other lative postpositions for 'where from', etc.

(4–44) arrak mi-na-m mirlimirl where 2MIN.NOM-CM-put paper 'Where did you put the paper?'

Occasionally *arrak* is used in requests for the source or destination of motion. In (4–45) the identity of a target is requested; the allative postposition does not occur. (4–46) requests the identity of the source, the place where the addressee comes from; the ablative postposition *-kun* is accordingly used.

- (4–45) arrak mi-jid-in where 2MIN.NOM-go-PRS 'Where are you going?'
- (4–46) arrak-kun daarr mi-na-r where-ABL₂ come 2MIN.NOM-CM-poke 'Where do you come from?'

It might be thought that the ablative form in example (4–46) should be analysed as *arrakun*, where the ablative postposition is attached to *arr(a)* rather than to *arrak*. However, data in Nekes & Worms (1953:325) suggests otherwise, and indicates that *arrak* is an unanalysable form in modern Nyulnyul. They provide the following forms (in the present orthography): *arrak-uk* 'where'; *arraki-karr* 'when'; *arrak-kung* 'whence'; and *arrak-mirr* 'whither'. Elsewhere they also give other forms, including the comitative *arrak-nyirr* 'how' (Nekes & Worms 2006:139).

In the above examples *arrak* 'where' refers to a location in space. It may also refer to a location on or in the body of a human or other animate being:

(4–47) arrak nyunnyun i-n-ny-in-jii where ache 3NOM-CM-get-PRS-2MIN.ACC 'Where do you have the ache?'

Arrak is also used as a type of selective interrogative, 'which', requesting which of a given set of alternatives is the relevant entity; there are, however, very few examples of this usage.²¹ The following is a typical example:

(4–48) arrak liyan mi-n-m-in nga-ni-ny-jabal where feelings 2MIN.NOM-CM-put-PRS 1MIN.NOM-CM-PST-ask kinyingk baab

DEF child
'I asked her which child she liked the best.'

Nekes & Worms (1953:325, 2006:139) also cite the form *arag-ean*, presumably *arrak-yan*, which they gloss 'what, which, what kind of', exemplifying it with *aragean wamborinj* 'what kind of people?'. This form is not attested in my own corpus.

As indicated above, the unmarked interrogative determiner *angk* 'what, who, where' is used in requests for information of virtually any epistemological type, including: persons,

²¹ Interestingly, the indefinite/interrogative determiner *ngoonyoo* in Gooniyandi is also used in both ways, in requests for spatial location (in which case it is followed by the appropriate locational postposition), and as a selective interrogative (McGregor 1990:147).

animals, plants, inanimate things, thoughts, places, qualities, actions, and so forth.²² The only limitation is that it cannot be used in requests for temporal information, which invariably employ the adverbial *banangkarr* 'now, at that time, when' (see §6.4.1.1).

Angk 'who, what, where' may be the only word in an NP, or it may occur together with an N specifying the type of information sought. It is invariably the first word of its NP. A postposition can be attached to an NP involving angk 'who, what, where' to indicate its grammatical role in the clause; the postposition is normally attached to the interrogative determiner. In (4–49) and (4–50) information is sought about the identity of a person; in (4–51) it is about the identity of a thing; in (4–52) information is sought about a quality; and in (4–53) and (4–54) it is about the identity of an abstract entity.

- (4–49) angka wamba juy who man 2MIN.CRD 'Who are you?'
- (4–50) angk-in wamb i-ni-ny-julng-jii kinyingk jabirl what-ERG man 3NOM-CM-PST-tell-2MIN.OBL DEF story 'Who's the man who told you the story?'
- (4–51) angk yu-ngku-marr what 3NOM-FUT-cook 'What will he cook?'
- (4–52) angk-ingirr niyar kinyingk wilamay what-SEM taste DEF food 'What does that food taste like?'
- (4–53) angka ku-rr-ngank-in what 2AUG.NOM-AUG-talk-PRS 'What are you all talking about?'
- (4–54) angk-ij nyi-mungk nga-la-w-an-juy kumbarr what-DAT 2MIN-think 1MIN.NOM-IRR-give-IMP-2MIN.ACC money nyi-mungk arri nga-la-bakad-an 2MIN-know not 1MIN.NOM-IRR-have-IMP 'Why did you think I would give you money when you knew I had none.'

When used in requests for spatial information, *angk* 'who, what, where' almost always occurs with the generic place N *bur* 'place, country, camp'. In this use, *angk* is attested exclusively in the contexts of requesting the spatial location of an entity or situation, and in requesting direction of movement. Only in requests of direction does the NP occur with a postposition; unexpectedly, as in (4–55), it attaches to the second N, *bur* 'place, country, camp', rather than to the initial interrogative word. This fact suggests that *angka-bur* is no longer a two word NP, but has begun to grammaticalise into a compound expression.

²² In this respect Nyulnyul resembles most other Nyulnyulan languages—including e.g. Nyikina (Stokes 1980), Yawuru (Hosokawa 1991:337), and Warrwa (McGregor 1994c:18)—but differs from the Australian norm, where there are usually distinct forms corresponding approximately to *who* and *what* (Mushin 1995; Dixon 1980:277, 372). Interestingly, Bardi shows two forms *anggi* 'what' and *anggaba* 'who' (Aklif 1999:17, 18); these sometimes overlap in usage, however (Claire Bowern pers.comm.).

(4–55) angka bur-ung ya-ngki-rr-jid ya-ngki-rr-mii what place-ALL₁ 1PL.NOM-FUT-AUG-go 1PL.NOM-FUT-AUG-seek wilamay food 'Where should we go to look for food.'

Occasionally, the ALL₁ postposition is omitted.

When *angk* 'who, what, where' is used for requesting locational information, the expected **angk-bur-uk* (or **angk-uk-bur*) does not occur. Instead, an identifying construction is found (see §12.2.3.1.1), as illustrated by (4–56), in which the first three words constitute a verbless identifying clause. An alternative to this is the construction shown in (4–57), in which the request for location has been rephrased as a request for directional information: the location of the addressee's camp being located according to its direction relative to the speaker and hearer.

- (4–56) angka bur in ya-rri-n mijal what place this 1PL.NOM-AUG-be sit 'What's this place where we are sitting?'
- (4–57) angka bur-ung jii what place-ALL₁ 2MIN.OBL 'Where is your camp?'

In the examples above, the interrogative determiner occurs in an NP. Sometimes, however, it occurs within a verbal construction to request information about an event. In this circumstance the interrogative is normally marked by the locative postposition -uk, and this form apparently serves as a preverb in a compound verb construction with inflecting verb -N 'be'; alternatively, the interrogative is sometimes instead followed by the suffix -kaj CONT (see §8.4.1). These two possibilities are illustrated by the following examples, respectively:

- (4–58) angk-uk i-n-in in baab what-LOC 3NOM-be-PRS this child 'What's this boy doing?'
- (4–59) bin uriny angk-kaj i-n-in that woman what-CONT 3NOM-be-PRS 'What's that woman doing?'

In contrast to most other Australian Aboriginal languages, interrogative determiners in Nyulnyul are not used as indefinites (e.g. Dixon 1980:277; McGregor 1990:146–148, 1994c:17–18; Mushin 1995). Instead nouns like *wamb* 'man', *uriny* 'woman' and *wil* 'meat, animal' are used indefinitely, in reference to, respectively, 'someone, male', 'someone, female', or 'something of the (edible) animal type'. Nor are the interrogatives, or any morphological variant of them, used as hesitation words of the *what-cha-ma-call-it* type, as they are in the nearby languages Ngarinyin (Rumsey 1982b:36) and Gooniyandi (McGregor 1990:148–149).

Somewhat unexpectedly, however, the two interrogative determiners are occasionally attested as complementisers. Examples of the use of angk 'who, what' as a complementiser are (4-60) and (4-61), and of arrak 'where' are (4-62) and (4-63):

- (4–60) warli-in i-ngi-rr-lakarr-an-ngay angka yarrad all-ERG 3NOM-PST-AUG-listen-IMP-1MIN.ACC what 1AUG.CRD ya-nga-rr-ngank-an 1PL.NOM-PST-AUG-speak-IMP 'They were listening to what we were saying.'
- (4–61) war jaada nga-ng-kul angk-ij other dress 1MIN.NOM-PST-wear what-DAT nga-nga-mi-kirirr-inyj
 1MIN.NOM-PST-REF_p-urinate-REF_S
 'I put on another dress because I pissed myself.'
- (4–62) liinyj-in i-na-wirim arrak kanab-in
 policeman-ERG 3NOM-CM-show where murderer-ERG
 i-ngi-rr-mulk
 3NOM-PST-AUG-camp
 'The policeman showed where the murderers had been camping.'
- (4–63) wa-na-k-ngay arrak mi-ni-n-jal jiwarr 2MIN.NOM-CM-carry-1MIN.ACC where 2MIN.NOM-CM-PST-see dead 'Take me to where you saw the dead body.'

Possible exceptions to the claim that the interrogatives are not used as indefinites are examples (4–64) and (4–65). As in (4–64) and (4–65), the exceptional examples are all biclausal constructions of the knowledge complementation type, and involve negation of that knowledge. It is suggested that what is going on in these examples is that the negated clause of knowledge has in its scope a clause in which *angk* is used as an interrogative (see further §13.4.2.2): in (4–64) 'who took it?' is a complement of 'I don't know', while in (4–65) 'why did they stare at me?' is in a complement relation to 'I don't know'. Here again the interrogative is being used almost as a complementiser. There is no need to postulate exceptional indefinite usage of *angk* 'what, who, where' in examples of this type.

- (4–64) arri nga-mungk angk-in i-n-nyu not 1MIN-know what-ERG 3NOM-CM-get 'I don't know who took it.'
- (4–65) *i-ngi-rr-jibijib-an-ngay* arri nga-mungk angk-ij 3NOM-PST-AUG-stare-IMP-1MIN.ACC not 1MIN-know what-DAT 'They stared at me, I don't know why.'

Two further interrogatives are attested in the corpus:

²³ Nekes (1938) does not mention this usage of the interrogatives.

ngan 'where to' anuk 'where'

These are so rare that nothing can be said about them with any degree of confidence.

The only examples of ngan 'where to' occur in examples like the following, where the verb occurs in infinitival form ($\S7.12$), and the addressee is represented by a free pronominal following it, as in:

(4–66) *ngan ma-kad-in jii* where:to INF_P-enter-INF_S 2MIN.OBL 'Where are you going?'

There are as few examples of *anuk* 'where' in the modern corpus, and all bar one of them comes from Albert Kelly's text—see Text 2, lines (38), (39), (40), and (61). (The exception is a single isolated instance provided to me on one occasion by Carmel Charles.) However, unlike *ngan* 'where to', *anuk* 'where' is mentioned in the earlier sources, in particular, in Nekes & Worms (1953:323, 325),²⁴ where the following example is cited:

(4–67) anog i-nen dje baib anuk i-n-in jii baib where 3NOM-be-PRS 2MIN.OBL pipe 'Where is your pipe?'²⁵

4.4 Quantifiers

Like most Australian languages, Nyulnyul shows a paucity of quantifiers. There are terms for the first three cardinal numbers only: *warinyjirr* 'one', ²⁶ *kujarr* 'two', and *irrjiwar* 'three, a few'. None of these are used as ordinals. ²⁷ As the gloss for *irrjiwar* suggests, this term does not always denote precisely three, and in this respect this word differs from *warinyjirr* 'one' and *kujarr* 'two', which usually denote these quantities precisely. ²⁸ The number 'four' can be represented *kujarr-kujarr* or *kujarr aa kujarr*, and 'five' as either *kujarr aa kujarr aa warinyjirr* (Nekes & Worms 1953:601) or *kujarr aa irrjiwar*:

²⁴ Nekes & Worms (1953:323) segment the word *an-ok*. However, they do not mention any other form of the interrogative, and in the absence of evidence to the contrary it is assumed that *anuk* is monomorphemic in modern Nyulnyul.

²⁵ Nekes & Worms (1953:323) gloss this example as "Where is my pipe?"; this is clearly a typo.

²⁶ As has already been mentioned, this word is rarely used as an indefinite like the English *one*; to refer to a single indefinite entity it is more usual to use the comparative determiner *war* 'other, another'—see §4.3.2.

²⁷ Nekes & Worms (1953:528) give an example with *irrjiwar waalk* which they translate as 'the third day'. I have not myself observed comparable usage in Carmel Charles' Nyulnyul, and elsewhere these authors deny the existence of genuine ordinal numbers in Australian languages (Nekes & Worms 2006:124). This example should presumably not be taken at face value, given that it is a translation of the standard religious formula *on the third day he arose*.

²⁸ Note the hedge here with 'usually'; in fact neither *warinyjirr* 'one' nor *kujarr* 'two' are absolutely restricted to precise numerical representations (McGregor 2004b).

(4–68) gudjar a irdjowar malgen binbal-ēd
kujarr aa irrjiwar malkin binbal-id
two and three mysteries sorrowful
'The five sorrowful mysteries (of the Rosary).' (Nekes & Worms 1953:
676–677)

The corpus shows no distinct quantifier Ns representing larger exact cardinal numbers; the other quantifiers designate non-exact numbers. For a few or so entities two additional lexemes may be used: *murrul* 'a small number', and *jalburu* 'a few, not too many'. There are also words denoting a larger number of entities, *wurrumbang* 'many, a large number' and *yirrakur* 'many (people)'; *wurrumbardangk* 'many' is also attested.²⁹ Both *murrul* 'a small number' and *wurrumbang* 'many, a large number' are used in reference to sizes and mass quantities, as in *wurrumbang wul* 'a lot of water'; their inherent semantic meaning most likely concerns mass.

In addition there is *warli* 'all' which indicates that all of the relevant entities or mass in the universe of discourse are referred to (see also the discussion of -*kur* ~ -*kurd* in §4.5.1.3). This universe is normally implied rather than specified, as (4–69) and (4–70) illustrate: in the first it is the audience of the story, while in the second it is the people living at the time established by the initial temporal marker. Like the quantifiers discussed immediately above, *warli* 'all' may be the sole constituent of an NP, or may occur with another N, usually with general reference like *wamburiny* 'people', *wamb* 'man', *bur* 'place', etc.:

- (4–69) wamb-in i-ni-ny-julng jabal warli-in man-ERG 3NOM-CM-PST-tell story everyone-ERG i-ngi-rr-karnm
 3NOM-PST-AUG-laugh
 'The man told (them) a story, and they all laughed.'
- (4-70)waamburiny majangurl-karr ngay warli young-TEM 1MIN.CRD everyone people i-ngi-rr-ngank-an nyulnyul banangkarr-uk arri 3NOM-PST-AUG-speak-IMP Nyulnyul today-LOC not english-manjan irr-mungk i-li-rr-ngank 3NOM-IRR-AUG-speak English-only 3AUG-believe 'When I was young, everyone spoke Nyulnyul; today they don't talk it; they only know English.'

While *warli* 'all' usually quantifies over a set of individual entities, it occasionally quantifies over a set consisting of kinds of entities, as in (4–71).

(4–71) *i-ngi-rr-wid-in warli may jaamin*3NOM-PST-AUG-eat-PRS everyone food complete 'They eat all kinds of food.'

²⁹ Etymologically, this might be segmented into *wurrum* (a meaningless formative) and *bardangk* 'tree, stick'. This is suggested by the fact that the term for 'stick' or 'tree' in various Kimberley languages, including Warrwa, is employed as a generic term 'thing'. If this is so, *wurru(m)* may have its historical origin in a term for 'many'; in support of this, it might be observed that this form is strikingly similar to the third person non-singular form *burrV* 'they', widespread in non-Pama-Nyungan languages (Blake 1988:7), though absent from Nyulnyulan. *Wurrumbang* might be a contracted version of the same word.

Quantifiers, both universal and cardinal, normally precede the head N of an NP, as shown by the above examples. However, if the head of the NP is a pronominal, the reverse order is usual, as in the following examples (see also §10.2):

- (4–72) yarrad warli ya-nga-rr-burduwa-nyj 1AUG.CRD everyone 1PL.NOM-PST-AUG-argue-REF_S 'We were all arguing together.'
- (4–73) yarrad irrjiwar ya-nga-rr-ngank-an in-ik table 1AUG.CRD three 1PL.NOM-PST-AUG-speak-IMP this-LOC table 'We three were talking at this table.'

Exceptionally, postpositions are normally attached to the last (rather than first—see §5.1.1) word of an NP with the quantifier *warli* 'all', regardless of which item this is:

- (4–74) yarrad warli-in ya-nga-rr-bardik-yirr
 1AUG.CRD everyone-ERG 1PL.NOM-PST-AUG-block-3AUG.ACC
 'We all stopped them from fighting.'
- (4–75) kinyingk wamb maja warli wamburiny-ij this man boss everyone people-DAT 'This man is everyone's boss.'

4.5 Nominal word formation

Three morphological processes are attested by which new N stems are formed relatively regularly from roots: affixation of stem-forming derivational suffixes, reduplication, and compounding. In addition, new stems are sometimes formed irregularly by the affixation of other bound morphemes, e.g. postpositions (see Chapter 5). As will be seen from the examples discussed below, in general the stems created by these processes have fairly compositional semantics, though in almost all cases there is some additional component to the semantics that cannot be predicted. For instance, as far as I am aware the derived stem <code>yaward-id</code> (horse-CHAR) has the semantic meaning 'stockman', not 'horseman'; and from the morphological form we can predict no more than that the stem will denote someone or something closely associated with horses—'saddle' would not be excluded purely on the grounds of morphological form. As this example also shows, there is also a degree of unpredictability in terms of the root from which the stem is derived: in this instance, it is derived from <code>yaward</code> 'horse', rather than from the equally likely <code>buluman</code> 'cattle'.

Occasionally, morphologically unanalysable N roots show relics of these processes. The meanings associated with these non-productive processes are sometimes at least partly commensurate with the meanings associated with the corresponding productive processes. Erstwhile suffixes normally convey their usual senses, as in the case of *bakalngarrinyjun* 'promised wife', discussed above (see fn. 18, Chapter 1). Compound roots are always cranberry-formations in which one of the compounded items is identifiable as a lexeme carrying its normal meaning, while the other is a meaningless formative. For instance, *jaamay* 'mangrove type' is manifestly a cranberry-formation involving the meaningless *jaa* and the lexical item *may* 'vegetable food'. By contrast, inherently reduplicated roots rarely bear meanings resembling the meanings associated with reduplication of roots.

In this section we concentrate on the productive processes of stem formation; where relevant, some comments will also be made concerning regularities in root formation.

4.5.1 Stem forming suffixes

Stem forming suffixes are distinguishable from postpositions (see Chapter 5) by their behaviour: unlike postpositions in their regular usage, they derive new N stems from the roots to which they are attached. In comparison to other Australian languages (e.g. Gooniyandi—McGregor 1990:230–236), relatively few N stem forming suffixes are attested in Nyulnyul.³⁰

4.5.1.1 -id ~ -(i)ngid Characteristic (CHAR)

This suffix attaches to Ns, preverbs and infinitival forms of inflecting verbs, deriving new N lexemes.³¹ Its meaning can be roughly glossed 'characterised by a regular or habitual association with'. That is, the new stem designates an entity or quality habitually associated with the thing or activity designated by the lexical root to which it is attached. The exact nature of the association is unspecified, and there is no need for constant physical contiguity or proximity between the two entities. The range of subtypes of the habitual association include: association by inhabitation (example (4–76));³² association by occupational involvement (example (4–77)); association by habitual use or involvement with (example (4–78)); association by common emotional state displayed (example (4–78)); and association by habitual engagement in an action (examples (4–79) and (4–80)).

- (4–76) ini kumbu wul-id this fish water-CHAR 'The fish is a water-dweller.'
- (4–77) in-in yaward-id i-ni-ny-jalajal buluman this-ERG horse-CHAR 3NOM-CM-PST-watch cattle 'The stockman looked over the cattle.'

30 This may, of course, be a reflection of the inadequacies in the corpus and/or the moribund state of the language today. Indeed, some of the suffixes discussed in the following subsections are not attested in my corpus at all, and the only information about them comes from Nekes & Worms (1953, 2006).

32 This is usually restricted to a niche-type, and does not normally include the association between persons and their country, which is usually marked by attaching *bur* 'country' to the toponym (see §4.5.3 below). However, I have at least one example of *-id* in this context: Carmel Charles referred on one occasion to the people of her own country, *yamarrangk*, as *yamarrangk-id*, not *yamarrangk-bur*.

As is not infrequently the case with regard to derivational morphemes, the status of the forms -id and -(i)ngid as allomorphs rather than distinct suffixes is somewhat uncertain. I presume that they are allomorphs for the following reasons: they appear to be indistinguishable in meaning; they are not phonologically or lexically conditioned—although -(i)ngid appears to be restricted to N roots. Attached to N roots the two forms are perhaps in free variation: many roots occur with both—e.g. both yaward-id (horse-CHAR) 'stockman' and yaward-ingid (horse-CHAR) 'stockman' are attested. In Bardi it seems that the corresponding morphemes are separate morphemes (Claire Bowern pers.comm.): -iidi is an agentive derivational morpheme (Bowern 2004a:32), while -ngiid is a characteristic derivational morpheme. As will be seen from the examples cited below, there is not such a clear-cut distinction in the semantics of these items in Nyulnyul.

- (4–78) bin war wamb walangk-id biil-id wamb i-na-r this other man spear-CHAR fight-CHAR man 3NOM-CM-poke 'This other man, the angry spearer, speared the man.'
- (4–79) kinyingk yaward ma-janb-an-id
 DEF horse INF_P-kick-INF_S-CHAR
 'This horse is a kicker.'
- (4–80) kiily lanybi-id bower:bird steal-CHAR

 'The bowerbird is a thief.' (Nekes & Worms 1953:588, 2006:105)

As (4–79) and (4–80) illustrate, the characteristic activity is generally one that a person or animate being actively engages in; likewise for things that characterise the individual: the individual is usually actively involved with it. Nekes & Worms (1953) provide a number of examples illustrating this active engagement sense, including *ma-makur-an-id* (INF_p-make-INF_s-CHAR) 'maker, creator, almighty' (Nekes & Worms 1953:679); *m-alk-in-id* (INF_p-make-in-id (INF_p-hide-INF_s-CHAR) 'concealer' (Nekes & Worms 1953:677); *ma-ngalk-in-id* (INF_p-cry-INF_s-CHAR) 'crier, cry-baby' (Nekes & Worms 1953:689); and *ma-dam-in-id* (INF_p-hit-INF_s-CHAR) 'one who likes to hit, a hitter' (Nekes & Worms 1953:664).

There are, however, exceptions. In a small number of cases the thing characterised is involved as a patient of the activity. One example is given in (4–81), from Nekes & Worms (1953:702), where *ma-wid-in-id* (INF_p-eat-INF_S-CHAR) is glossed 'edible, glutton'; this word admits both agentive and patientive interpretations.³³ Another example is *maboganden-ēd* (*ma-bakand-an-id* INF_p-have-INF_S-CHAR) 'useful, valuable enough to be kept' (Nekes & Worms 1953:662). Apparently reference is made here to entities that one engages significantly with, not just any old possession.

(4–81) ginjing mai areang maweden-ēd kinyingk may arriyangk ma-wid-in-id DEF tucker not INF_P-eat-INF_S-CHAR 'Those fruits are not edible.'

In at least one instance (from Nekes & Worms 1953:670) the characteristic action is one that is habitually induced in another entity as patient by the active entity: *ma-kanb-in-id* (INF_P-vomit-INF_S-CHAR), glossed 'vomitive' in the source. This is illustrated by example (4–82); one guesses that this also admits the interpretation 'flies are vomiters', though this meaning would seem rather improbable.

(4–82) mogonj magänben-ēd
mukuny ma-kanb-in-id
fly INF_p-vomit-INF_S-CHAR
"Flies fallen into food make you vomit." (More literally, 'Flies are vomitiferous.')

Finally, in example (4–83) (from my own corpus) the characterised thing serves as a location for the characterising activity: one slips on mud. Characteristic locative

³³ Interestingly, the English term *eater*, which involves the corresponding agentive derivational suffix *-er*, also admits both interpretations.

involvement is perhaps also involved in the smallish set of terms for items of clothing and adornment that involve -id CHAR on a prefixing body-part N—see p. 119 above.

(4–83) ina ngijil yarrkaly-id that mud slip-CHAR 'That mud is slippery.'

4.5.1.2 -kud Associative (ASC)

This suffix is almost always attached to N roots, and indicates a physical association between the referent of the N and some other entity that is with it.³⁴ Often this comitative association represents a quality of the latter entity, the N-kud (N-ASC) stem serving in an attributive function, as in example (4–84). This is not necessarily the case, however: in (4–85) there is no implication that the foot has the property of wartiness (although this interpretation is possible); all that is indicated is that there is a wart or warts on the foot.

- (4–84) mukul-kud ni-wink i-bakand-in hair-ASC 3MIN-chest 3NOM-hold-PRS 'He has a hairy chest.'
- (4–85) kundany-kud ni-mbal wart-ASC 3MIN-foot 'He has a wart/warts on his foot.'

Unlike -id CHAR discussed in the previous subsection, -kud ASC always involves an association of physical proximity. Thus for -kud ASC the association seems in some sense less inherent, characterising, or defining than for -id CHAR; moreover, it is often impermanent. For instance, a person's nose might be described as kurnb-ukud (snot-ASC) 'snotty', typically a temporary condition of the nose. By contrast, a stockman remains a stockman, and someone closely associated with horses, irrespective of whether he is actually in physical proximity with a horse; he can always be referred to as yaward-id (horse-CHAR). Example (4–86) is consistent with these observations: even though smoke may not be physically present at the place, it appears to the speaker to be, due to poor eyesight. Smokiness is not an inherent feature of the place, just of the way the speaker perceives it.

(4–86) bulkun-kud nga-n-jal-in bur smoke-ASC 1MIN.NOM-CM-see-PRS place 'I see the place smoky.' (I.e. 'I don't see clearly.')

Consistent with the fact that -kud-marked Ns do not indicate inherent features, a body-part N marked by -kud ASC does not express possession of that part. Instead, it suggests that there is something wrong with the part, or something unusual about it (McGregor 1995b:270). This sense presumably arises as a pragmatic implicature, invoked by application of the Gricean Maxim of Quantity: there must be some reason to specify 'with a

³⁴ Possible cognates exist in other Nyulnyulan languages. Bardi has the almost certainly cognate a comitative derivational affix *-goordoo* (Bowern 2004a:32). In the Eastern Nyulnyulan languages we find *-ku(r)dany*, a type of comitative suffix in Warrwa (McGregor 1994c:18), Nyikina (Stokes 1982:107) and Yawuru (Hosokawa 1991:284).

body part', thus the implicature that there is something unusual or exceptional about it. This is illustrated in the following example, in which *ni-mird-ukud* 'with his leg' suggests that the person's leg is bad (the interpretation 'he can't walk, he crawls, having a leg' makes no sense):³⁵

```
(4–87) arri i-la-jid marriny yardab i-n-d-in not 3NOM-IRR-go go crawl 3NOM-CM-say-PRS ni-mird-ukud 3MIN-leg-ASC 'He can't walk; he crawls; he is lame.'
```

An apparent exception, in which the associated entity appears to be permanently present is *bulkun-kud wil* (smoke-ASC meat) 'smoked meat or fish' (cited in Nekes & Worms 1953: 402). This is a consequence of the fact that smoke has induced a change of condition of the meat, and thus the effects of the smoke remain physically present in the meat. The inherent characteristic sense in this example, I suggest, is not encoded, but follows from properties of the world.

4.5.1.3 -kur ~ -kurd Collective (COLL)

These two forms are almost in complementary distribution: -kur occurs with nouns and determiners, ³⁶ -kurd with pronominals. However, -kur is very occasionally found on a pronominal. In addition, -kur is attested on at least one adverbial, and -kurd on one particle. Their status as allomorphs is not one hundred percent certain. ³⁷ However, the phonological similarity (the final stop of the second form is evidently weakened to the corresponding glide in the first), apparent identity of meaning, and the fact that they are in almost complementary distribution suggests that they are allomorphs, and (with some reservations) I adopt this position here.

The morpheme -kur ~ -kurd conveys a quantitative meaning: it indicates a plurality of referents of the root to which it is attached. However, only infrequently is it attached to roots with plural reference, and then it apparently conveys additional meaning as well. This would seem to be—as suggested by Nekes & Worms (2006:100)—that the referents are thought of as forming a group together, that they are engaged in the situation as co-members of some group, who are acting in concert, as it were, collectively; they are not separately engaged in distinct situations. Hence the gloss 'collective'. Exemplification is provided by (4–88), in which reference is made to reciprocal activity, thus precluding the possibility that

³⁵ Contrary to McGregor (1995b:266), -kud ASC does not always specify a negatively valued association; this is merely a possible interpretation in certain contexts. Sometimes, for instance, the lexical item itself conveys the negative evaluation, as in the case of barnd-ukud (dirt-ASC) 'dirty'; but the opposite evaluation is implicit in the term liyan-ukud (like-ASC) 'pregnant'.

³⁶ A likely cognate is Yawuru -*garang*, a collective marker restricted to small things or animals (Hosokawa 1991:287).

³⁷ Nekes & Worms (2006:100) identify -kur (-gor) as a collective marker in Nyulnyul, Nimanburru and Jabirrjabirr, but treat the second form -kurd as -kud ASC (Nekes & Worms 1953:596–597), presumably as a consequence of their failure to systematically distinguish between apico-alveolar and apico-postalveolar stops. Semantically, however, -kurd clearly groups with -kur (with which it is in occasional free variation) when attached to a pronoun. Hence it seems preferable to treat -kurd as being in an allomorphic relation with -kur COLL rather than as an allomorph of -kud ASC.

the actors are separately engaged in distinct events that might have occurred at distinct times or places.

(4–88) bina-kur i-rr-mi-jal-inyj that-COLL 3NOM-AUG-REF_p-see-REF_S 'The two of them are looking at one another.'

This collective sense is also evident in (4–89), where the fruit are grouped together in the coolamon and collectively make a small quantity; (4–90) also seems to admit this interpretation: that the old people will all be going at the same time, as a group, rather than successively over a period of time.

- (4–89) juy may jii i-rr-ø-in binjin-ik
 2MIN.CRD fruit 2MIN.OBL 3NOM-AUG-be-PRS coolamon-LOC
 jalbur-kur arriyangk wurrumbang
 few-COLL not many
 "You have only a few fruits in your coolamon, not many." (Nekes & Worms 1953:448)
- (4–90) bin nyungul-kur wamburiny-in yu-ngku-rr-mangkad-yarrad that old:man-COLL people-ERG 3NOM-FUT-AUG-leave-1AUG.ACC 'Those old people will be leaving us.'

The collective suffix -kur is occasionally attested on the third person augmented pronominal irr, giving irrakur 'them all, all of them', as in line (138) of Text 2; more usually irr-kurd is found, which conveys the same meaning, and is often glossed 'all', as in (4–91). Inspection of the textual examples reveals that there is invariably an established antecedent for the pronominal, and the suffix specifies that all members of this established group are involved; in this respect, irr-kurd and irrakur contrast with warli 'all, everyone' (discussed in §4.3.1.2). Often irr-kurd is followed by -jirr the oblique form of the third person augmented pronominal—see e.g. lines (8), (59) and (64) of Text 2. The semantic effect of adding this suffix is also uncertain.

(4–91) baab irr-kurd children they-COLL 'all of the children'

The interrogative *nganyjirrkurd* 'how many' apparently involves *-kurd* COLL attached to what appears to be the interrogative particle *nganyji* plus the free pronoun *irr* 'they'. This is not to suggest that the modern form is synchronically analysable; rather, it is proposed as a possible etymology. The following examples illustrate this interrogative:

(4–92) nganyjirrkurd kalwar i-ngi-rr-j-an how:many expose 3NOM-PST-AUG-say-IMP 'How many children were born of you?' (4–93) nandjergod madjengol er-en school
nganyjirrkurd majangul i-rr-ø-in school
how:many girl 3NOM-AUG-be-PRS school
'How many girls are in the convent?' (Nekes & Worms 1953:784)

Nekes & Worms (1953:328, 596) also cite *arinjer-god* 'what, what all, what kind, how?', which is not represented in my corpus. Possibly this is the relevant form in Jabirrjabirr or Nimanburru, which languages they also attribute the word to.

The suffix -kur COLL does not necessarily indicate cardinalities; it is also used in reference to masses. Thus in (4–94) (attributed to Jabirrjabirr, but perfectly good in Nyulnyul) it is attached to the adverbial baan 'like that', where it indicates a quantity approximating that which might be demonstrated in an accompanying gesture.

(4–94) *ibal-en bāne-gor-ad in-au ŋai* Jabirrjabirr *iibal-in baana-kur-ad i-na-w-ngay* father-ERG like:that-COLL-CHAR? 3NOM-CM-give-1MIN.ACC *ŋamari ngamari* tobacco 'Father gave me as much tobacco as this.' (Nekes & Worms 1953:358)

Nekes & Worms (1953:601) also give the form *gudjar-gor*—i.e. *kujarr-kur*—with the meaning 'a little bit, some', as in *kujarr-kur murru* (two-COLL sugar) 'some sugar'.

4.5.1.4 -kadiny ~ -kabiny Aspect (ASP)

This stem-forming suffix is also quite poorly attested both in my own corpus, and in the corpora of the earlier investigators, and it remains unclear whether the two forms are allomorphs, or represent different morphemes with very similar meanings. Indeed, the classification of this morpheme as a suffix is somewhat uncertain. Nekes & Worms (1953: 532, 545), for instance, give separate entries for each, and label both as postpositions. Moreover, they gloss both as 'towards' (-kadiny is given an extra gloss 'direction'), although the examples they provide are more in keeping with the analysis suggested here. Like Nekes & Worms (1953) I am unable to identify any meaning difference between the two forms, and accordingly I tentatively identify a single morpheme. As to its classification as a derivational suffix, let me make three suggestive observations: (i) it does not appear to have a relational function (see §2.4); (ii) it can be followed by the ALL₁ postposition -ung, as in (4–98) below; and (iii) it appears to be restricted to a few determiners and the handedness Ns jurrungk 'right, right hand' and ngalkarrmin 'left hand'.

When attached to an N, -kadiny ~ -kabiny ASP refers to a side or aspect designated by the N, in relation to some other entity (which may or may not be explicitly mentioned). Attached to jurrungk 'right', it indicates 'right-hand side', as in (4–95); attached to war 'other' it indicates 'other side' (Nekes & Worms 1953:545); attached to deictic determiners such as in 'this' and bin 'that' it indicates 'this side' and 'that side' respectively, as in (4–96).

- inga-landan djorong-gadin nimal god ibal-og
 i-nga-land-an jurrungk-kadiny ni-marl god iibal-uk
 3NOM-PST-sit-IMP right-ASP 3MIN-arm God father-LOC
 "He sitteth at the right hand of God the Father." (Nekes & Worms 1953:512)
- (4-96)yene-gadinj djān bōŗ bene-gadinj dje-bōr ηai, in-kadiny jan bur ngay bin-kadiny bur jii this-ASP 1MIN.OBL place 1MIN.CRD that-ASP 2MIN.OBL place djoe juy 2min.crd 'This is my seat, that is your seat.' (Nekes & Worms 1953:932)

In the above two examples the suffixed N is employed to locate another entity. It may also be used to indicate direction towards or via—movement towards or via the side of something, as in (4–97)–(4–99). Observe that in (4–98)—but not in (4–97), which was provided to me by the same speaker—-*kabiny* ASP is followed by the ALL₁ postposition. (The usual absence of postpositions on N-*kadiny/kabiny* might be construed as evidence that the derived word is more appropriately classified as an adverbial; we cannot decide this issue here due to paucity of data.)

- (4–97) nga-marl nga-ny-jarrard jurrungk-kadiny 1MIN-arm 1MIN.NOM-PST-extend right-ASP 'I put out my arm rightwards.'
- (4–98) *jubul nga-n-j murrul-mirr wul nyun-kabiny-ung* swim 1MIN.NOM-CM-say little-PER water that-ASP-ALL₁ 'I waded through the shallow water to the other side.'
- (4–99) wamb wurrb i-ng-kad bur-uk mal man inside 3NOM-PST-enter place-LOC exit i-na-ng-k nyun-kabiny 3NOM-CM-PST-carry that-ASP "The man entered the room, he left it by the other side." (Nekes & Worms 1953: 911)

4.5.1.5 Other possible nominal suffixes

Nekes & Worms (1953, 2006) list a number of other nominal suffixes or endings for Nyulnyul, including (in the present orthography):

-bal	suffix, unglossed (Nekes & Worms 2006:85) ³⁸
-banj	suffix, unglossed (Nekes & Worms 1953:363)
-bar	suffix, unglossed (Nekes & Worms 2006:86)
-bil	suffix, unglossed (Nekes & Worms 2006:86)
-bur	suffix, unglossed (Nekes & Worms 2006:86)
-dan ~ -dany	suffix, unglossed (Nekes & Worms 2006:87)

³⁸ In Bardi -bal is an indefinite number marker (Bowern 2004a:197).

-jak	noun suffix or postposition indicating district where a person or animal
	is accustomed to roam about; i.e. dweller of a niche (Nekes & Worms
	1953:442)
-jin	collective plural suffix, used only for persons (Nekes & Worms 1953:
	483, 2006:100)
-kar(r)	noun suffix, unglossed (Nekes & Worms 1953:568)
-kujarr	suffix indicating belonging to, regarding (Nekes & Worms 1953:
	600–601)
-kur(r)	suffix deriving agent nouns (Nekes & Worms 1953:624, 2006:89)
-mad	noun suffix (Nekes & Worms 1953:663–664, 2006:87)
-mal	suffix, unglossed (Nekes & Worms 2006:87–88)
-man	noun suffix, unglossed (Nekes & Worms 2006:88)
-mar ~ -mir	suffix, unglossed (Nekes & Worms 2006:88)
-ngurr	suffix deriving agent nouns (Nekes & Worms 1953:807, 2006:89)
$-wal \sim -wul$	suffix, unglossed (Nekes & Worms 2006:89)
-wan	suffix, unglossed (Nekes & Worms 2006:89–90)

For the majority of these forms there is no clear evidence that they are synchronically analysable as suffixes; most appear to be at best recurrent final sequences of phonemes, to which meanings cannot be readily or consistently assigned in the modern language (cf. Nekes & Worms 2006:364). Below we briefly discuss the forms for which status as derivational suffixes seems most plausible.

Perhaps the best case for suffix status can be made for *-jak* (DW) 'dweller of a niche'. Although this is not represented at all in my corpus, Nekes & Worms (1953:442) provide a small number of examples which attest to the morpheme status of the form: *kurrwal-jak* (sky-DW) 'one who is flying in the sky, eagle, aeroplane'; *bindan-jak* (bush-DW) 'one who travels in the bush, bush traveller'; *widigar(r)-jak* (deep water-DW) 'open-sea fish'; and *wanangarr-jak* (mountain-DW) 'mountain-people'.³⁹

The single example Nekes & Worms (2006:86) cite for *-bur* in Nyulnyul is unconvincing, and the alleged suffix appears to be a part of the root itself. However, there is reason to believe that elsewhere the form is sometimes a bound variant of *bur* 'place, country', that is in the process of grammaticalising (see §4.5.3.2 and McGregor 2007d).

Nekes & Worms (1953:483, 2006:100) cite *-jin* as a plural suffix, restricted to Ns designating persons: *min-miid-ajin* (male-male-PL) 'a number of boys or men', *wangalang-jin* (young:man-PL) 'young men', and *waringkil-jin* (girl-PL) 'girls'. In Bardi the homophonous *-jin* is a also collective or group marker (Bowern 2004a:33). No such morpheme is represented in my own Nyulnyul corpus.

The putative suffix -kujarr is suggestive of a suffixed form of the numeral kujarr 'two', except that its meaning is specified as 'belonging to, regarding'. My corpus does not show this form used in anything like this sense, and so I content myself with citing one of the two almost identical examples Nekes & Worms (1953:600–601) provide:

```
(4–100) wamb-kur dud-kujarr i-ngi-rr-ø man-COLL boxing-regarding 3NOM-PST-AUG-be 'The men are boxing.'
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³⁹ *Wanangarr* is not attested in my Nyulnyul corpus; *wanangarri* is, however, found in Eastern Nyulnyulan languages meaning 'stone, rock, money, hill, etc.'

As to -ngurr, a small number of Ns end with this segment. However, it is by no means certain that any meaning can be consistently associated with it, or that in most cases it makes sense to segment it from the remainder of the word. A case might be made for analysing jalngkingurr 'doctor, witch doctor' as a cranberry formation consisting of jalngk 'totem' plus the nonce form -ngurr. However, for the other Ns—including e.g. kajanngurr, plant type' and kumbulngurr 'kingfish'—the other segments identified do not represent identifiable root morphemes. Similar remarks hold for -kur(r): except for the one possibly analysable banmin-kur(r) ('totem'-kur(r))—which is not attested in my corpus—there is no evidence that this form is a nominal suffix.

4.5.2 Reduplication

Reduplication of N roots is not a highly productive means of forming new N stems in Nyulnyul. In the bulk of examples in my corpus reduplication is total, and indicates plurality, as in *nyungul-nyungul* 'elders, old people' from *nyungul* 'old person', and *murrul-murrul* 'little ones of a species (e.g. children, chickens)', from *murrul* 'little'. Nekes & Worms (1953:483) also mention *minmēde-djen* (*min-miid-ajin*) 'a number of boys or men', in which the final segment of *miid* 'male' of the initial reduplicant has been nasalised (*-jin* is a plural marker, according to these authors'—see above p. 149).

In a few instances reduplication is partial. In two of these the reduplicated form is bisyllabic and ends in a consonant, the root minus this consonant being prefixed to the full form of the root (i.e. $C_1VC_2(C_3)V-C_1VC_2(C_3)VC_4$), as in: binda-bindany 'big people' from bindany 'big', and murru-murrul 'little pieces' from murrul 'little'. Occasionally just the first syllable of the root is reduplicated and prefixed to the full root, as perhaps in kun-kurrbidi-jin 'a number of (pubescent) boys', from kurrbid 'pubescent boy (12–14 years old)' (Nekes & Worms 1953:628) (the final consonant of the prefixed syllable has been replaced by the corresponding nasal). How partial reduplication contrasts semantically with full reduplication remains unclear.

Occasionally a meaning other than plurality is conveyed by reduplication. *Layib* 'good' sometimes reduplicates to *layiblayib* 'very good'. Nekes & Worms (1953) provide a few more examples that do not appear to fit into regular patterns: *kujarr-kujarr* (two-two) 'twofold, double, hesitating' (as in (4–101)); *wamb-wamb* (man-man) 'for men only, sleeping-house for young men' (Nekes & Worms 1953:865); and *jarla-jarl-jirr* (beach-beach-?) ~ *jarl-jirr jarl* (beach-? beach) 'along the shore' (Nekes & Worms 1953:448).

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(4–101) gudjar gudjar in-men lēan djen kujarr-kujarr i-n-m-in liyan jin two-two 3NOM-CM-put-PRS heart 3MIN.OBL 'He is undecided.' (Literally, 'His heart is divided.') (Nekes & Worms 1953: 601)
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A considerable number of nominal roots are constituted by the reduplication of meaningless formatives; these are referred to here as inherent reduplications. Almost all of the formatives are either monosyllabic or bisyllabic. Reduplication of monosyllabic

⁴⁰ A word resembling *jalngkingurr* 'doctor' is found in many languages of the Kimberley region, and might well have been borrowed into Nyulnyul, ultimately from a language (such as Yawuru—Hosokawa 1991: 286) in which *-ngurr(u)* is an productive agentive derivational suffix. Alternatively, *-ngurr* could be the relic of an earlier productive agentive suffix, now lost.

formatives is almost always full, as in *dakadak* 'deaf', *bulbul* 'blister, swelling', *dinydiny* 'grasshopper', *jangajang* 'chain', *walkwalk* 'salmon', and so on. As these examples show, in some instances a vowel occurs between the final consonant of the first instance of the formative and the initial consonant of the second; in other cases no vowel occurs. It is impossible to predict on phonological grounds when an intermediate vowel will occur—e.g. next to *bulbul* 'blister' which does not involve an epenthetic vowel are *bulabul* 'lizard type' and *birlabirl* 'leaves' which do; and next to *dinydiny* 'grasshopper' is *rinyariny* 'sensible'. Perhaps roots that involve an epenthetic vowel derive historically from reduplicated bisyllables, the final vowel of which has been lost, as a result of a regular historical process (see §1.1 and Stokes & McGregor 2003), whereas roots without the vowel are reflexes of reduplicated closed monosyllables in premodern Nyulnyul.

One of the few examples of partial reduplication of a monosyllabic formative is *lulul* 'shark', where the predicted intervocalic sequence /ll/ has been reduced to a single /l/.

For bisyllabic formatives both full and partial reduplications are fairly common. Examples of full reduplication include: *bada-bada* 'bald', *nanin-nanin* 'beads', *kawurr-kawurr*, a tree type', and *kuniny-kuniny* 'tadpole'. In only one case does an (apparently) epenthetic vowel occur between the two copies of the formative: *limbalimb*, a type of bushfood'. Partial reduplication usually involves either prefixation of the initial syllable of the formative to the formative itself, as in *kurn-kurnung* 'toad fish' and *bil-bilmirr*, Disaster Bay', or the suffixation of its final syllable, as in *manbur-bur* 'crab' and *diwirl-wirl* 'hard'.

Few instances of formatives of three or more syllables are reduplicated, and in all of them the reduplication is partial. Usually either the initial two syllables are prefixed to the full formative, or the final two are suffixed to it. Examples of the first type include *bulu-buluman*, Murphy Creek' and *kulu-kuluman* 'mantis' (Nekes & Worms 1953:610); examples of the second type are *kunganngana-ngana* 'apostle bird' and *marnkarrang-karrang*, Mangrove Point'. Sometimes, however, only the initial syllable is reduplicated and prefixed to the formative, or the final syllable reduplicated and suffixed to it, as in: *ngur-ngurmaran*, reed type', *jungkubil-bil* 'fire bird', and *jindibirr-birr* 'willy wagtail'.

Inherent reduplications are not evenly distributed across the nominal lexicon. Among animates, most reduplications are names for birds and flying creatures—indeed, there are at least twenty roots of this type. Some of these Ns may well be onomatopoeic forms, representing the sounds typically made by the particular bird (e.g. jindibirr-birr 'willy wagtail', and kulyurd-kulyurd, owl type'); others are almost certainly not (e.g. jungkubil-bil 'fire bird' (cf. jungk 'fire') and bilybily 'galah' (which is not reminiscent of the noise these birds make)). A fair number of Ns designating water-dwellers are also inherent reduplications, as are Ns denoting a few reptiles. By contrast, only one mammal appears to be designated by such an N, yubur-yubur 'mouse'. Another semantic domain strongly associated with inherent reduplications is that of quality: at least twenty Ns which primarily denote qualities are inherent reduplications—e.g. diwirlwirl 'hard', mukumuk 'cripple, lame', narlnarl 'shiny', kudalkudal 'crooked' and rarrka-rarrka 'rough, callous'. About a dozen Ns designating types of may 'vegetable food' are inherent reduplications; about the same number of terms for artefacts and body parts and products are also reduplications. In addition, about half a dozen toponyms, as well as an assortment of other terms scattered over various semantic domains are inherent reduplications, including: kala-kal 'mica', mukurl-mukurl 'a fight over someone's death', wiliwili 'cyclone', jar-jar 'hole, leak (e.g. in bucket)', and marang-marang 'prehistorical shell mound' (Nekes & Worms 1953:696).

4.5.3 Compounding

Nyulnyul uses two types compounding in nominal stem formation: (a) coordinate, in which the Ns are related by 'and'; and (b) specifying, in which one N provides further specification of the other, narrowing its referential range. Both types usually involve just Ns, rarely an adverbial and an N; I am aware of no compounds involving verbs, inflecting or otherwise. Although some compounds are quite frequent, the process itself does not appear to be a highly productive means of forming new Ns. We briefly discuss these two types in turn in the subsections below.

4.5.3.1 Coordinate compounds

The two most common compound stems are coordinate: *wamb-uriny* 'people',⁴¹ from *wamb* 'man' and *uriny* 'woman', and *wila-may* 'food',⁴² from *wil* 'meat' and *may* 'vegetable food'; both of these are instanced numerous times in the corpus. *Wamba-marirr* (man-wife) 'husband and wife pair' and *birray-kuburl* (mother-father) 'parents' are presumably also coordinate compounds. Prefixing nouns can also be involved in coordinate compounds, as in *ni-lirr-ni-mirl* (3MIN-lip-3MIN-nose) 'his/her/its face'; see p. 120 above.

Another likely example of this type is the complex pronominal form *juy-a-ngay* (you-and-me) 'we two inclusive, you and I'; in modern Nyulnyul speech, this form often replaces the traditional *yay* 'me and you' (see Table 4–4).

4.5.3.2 Specifying compounds

Many toponyms form what appears to be a type of Bahuvrihi compound with the generic N bur 'country, place'; the resulting nominal stem designates a denizen or denizens of that place, as in: Ngalan-bur 'denizen of Beagle Bay'; Winawal-bur 'denizen of Sandy Point'; Yinbilkun-bur 'denizen of Yinbilkun (,Red Cliffs'); and Ngurdiny-bur 'denizen of Ngurdiny'. Such stems are frequently used as personal names of individuals: the Aboriginal name for 'King' Felix, for instance, is generally given as Ngurdinybur, or a spelling variant thereof. It seems that bur in such compounds has begun to grammaticalise, and is on the path to becoming a derivational morpheme meaning 'denizen of' (McGregor 2007d).

A small number of roots other than toponyms also occur in compounds with *bur* 'country, place'. These include: *wadin* 'cloud', as in *wadin-bur* 'cloudy place'; and *yalirr* 'ahead, first', as in *yalirr-bur* 'first, first place', illustrated in example (4–102) (cf. the English NP *in the first place*). Nekes & Worms (1953:920) also give the form *yalirr-buru-ny-jun* (ahead-place-EN-ABL₁) 'first born, elder', apparently involving derivational use of the ablative marker. There are also a few nominal roots which involve the formative *bur* in cranberry-formations: *baniny-bur* 'carpet snake', and possibly *bam-bur* 'blind'.

(4–102) liyan nga-na-m ma-dam-in-ung kinyingk-in like 1MIN.NOM-CM-put INF_P-hit-INF_S-ALL₁ DEF-ERG i-n-dam-ngay yalirr-bur-uk

3NOM-CM-hit-1MIN.ACC first-place-LOC
'I wanted to hit him, but he hit me first.'

⁴¹ This word is also used as an indefinite meaning 'anyone'.

⁴² Nekes & Worms (2006:84) gloss this compound as 'a meal'; this sense is not attested in my corpus.

A few examples are instanced of general (non-sex-specific) terms for human beings perhaps entering into compounds with sex-specific terms, as in *warrinykil baab* (girl child) 'girl baby, girl child' and *miida baab* (male child) 'boy'.

Finally, as mentioned on p. 120 above, prefixing nouns are occasionally involved in specifying compounds. Again, both nominals in the compound are prefixed according to the person and number of the possessor.

4.6 Pronominals

4.6.1 Forms and system

The category of person finds realisation in a number of different places and manners in Nyulnyul grammar. In addition to the free pronominals discussed in this section, there are also distinct systems of bound pronominals, including pronominal prefixes to nouns (see §4.2), and the systems of prefixes and suffixes/enclitics to inflecting verb roots (see §7.4 and §7.11). There are a number of striking formal similarities among the pronominal forms from the different systems, similarities that suggest historical development of the bound forms from corresponding free forms (see McGregor 1995b:272–278 for a possible historical scenario for the development of pronominal prefixes to nouns). It seems likely that the bound pronominal prefixes retain the system of proto-Nyulnyulan.

As already observed in §2.2 and §4.2, the Nyulnyul pronominals traditionally followed an Ilocano system (e.g. Greenberg 1988), distinguishing four persons and two numbers. The person categories distinguished were 1, 1&2, 2 and 3, where 1 indicates the speaker alone, or the speaker plus one or more persons other than a hearer; 2 indicates the addressee, or the addressee plus one or more others (but not the speaker); 1&2 indicates to the speaker plus addressee, and optionally additional others; and 3 indicates third person(s), anyone other than the speaker and addressee(s).

The number categories are minimal and augmented, not singular and non-singular. Minimal number is defined as the cardinality of the set consisting of the smallest number of individuals consistent with the category; removal of anyone from that set would result in a different person category. Augmented number is any number larger than the minimal number—that is, minimal plus others. In three of the four person categories—1, 2, and 3—minimal number is indistinguishable from singular, 'one', as augmented is from plural. But in the case of 1&2 the minimal/augmented contrast does not correspond to the number contrast of singular/non-singular number systems: the minimal category is a non-singular, consisting of two individuals; the augmented is a non-singular, representing more than two. In the minimal/augmented system, 1&2 minimal refers to the speaker-hearer dyad, while the augmented includes other individuals as well. (See McKay 1978; Stokes 1982; McGregor 1989b; Hosokawa 1991 for further discussion of Ilocano systems.)

For each person-number combination three free forms are distinguished: cardinal (CRD), oblique (OBL) and emphatic (EMP), as shown in Table 4–4. (The uses of these forms are discussed in §4.6.2 below.)

		minimal	augmented
1	CRD	ngay	yarrad
	OBL	jan	jarrad
	EMP	janijirr	jarrajirr
1&2	CRD	yay	yadirr
	OBL	jay	jadirr
	EMP	<u>jajirr</u> (<u>dyadyer</u>) ^a	<u>jadirrjirr</u> ^b
2	CRD	juy	kurr
	OBL	jiy	jungkarr
	EMP	jijirr	<u>jungkarrjirr</u> (<u>dyongardyer</u>)
3	CRD	kinyingk	irr
	OBL	jin	jirr
	EMP	jinijirr	jirrijirr

Table 4–4: Nyulnyul free pronominals

- a. Underlined forms are not represented in my own corpus (see below, and §2.3), but come from Nekes (1938), and are repeated in Nekes & Worms (1953, 2006). The first forms given are my guesses as to the correct phonemic renditions of the forms; the forms in brackets are the spellings of Nekes (1938), Nekes & Worms (1953, 2006). The *r*-segments in their transcriptions are uncertain. However, evidence from other forms shown in the table suggest that in each instance it is the tap *rr* that is involved.
- b. Neither Nekes (1938), Nekes & Worms (1953), nor my own corpus include the emphatic form of the 1&2 augmented. I give here the most likely form, based on the 1&2 augmented oblique form, and the *-jirr* emphatic suffix.

There are a number of regularities and partial regularities in the formation of the free form pronominals.

The most obvious and consistent is that the EMP forms involve the suffix -jirr attached to the OBL form, with some minor sandhi modifications. These are the addition of an epenthetic vowel following n-final OBL forms, and loss of the final consonant in d- and y-final OBL forms. One irregularity is that the EMP form of the 3 augmented involves an epenthetic i between the final rr of the OBL and the initial j of the suffix, but the 2 augmented does not. (Nekes 1938:145 agrees, giving the 2 augmented form without an epenthetic vowel, but showing an epenthetic e (=i) in the 3 augmented.)

The OBL forms all involve an initial j. Where the CRD root is y-initial, the corresponding OBL stem is derivable through the operation of a simple rule: replace the initial y of the CRD root with j, retaining the remainder of the CRD root. Those pronominals whose CRD roots do not begin with y—i.e. 1MIN, 2MIN, 2AUG and 3MIN—do not fit this regular pattern. For the 1MIN and 3MIN there is no apparent relationship between the OBL and CRD roots, and there seems little point in attempting to account for the forms by postulating underlying forms and rules. The 2MIN, which has a j-initial CRD root, has an OBL stem which involves a vowel change, from u (in the CRD) to i (in the OBL). For the 2AUG, whose CRD root has an initial k, the OBL and CRD forms are similar enough to warrant some sort of explanation. It appears

that the OBL involves a prefixed j- to the CRD form (thus j-kurr), followed by a process of metathesis of the initial CV of the CRD (ju-krr), possibly to prevent the initial inadmissible segment, and epenthesis of an a vowel between the consonants thus brought into contact (ju-karr). In addition, the initial k is prenasalised. 43

The above discussion of regularities in the formation of the OBL forms from CRD forms shows that there would be little if any descriptive advantage in attempting to account for the OBL forms in Nyulnyul synchronically by deriving them from the CRD forms, and by setting up underlying forms and morphophonemic rules (which would be of limited applicability). All of the CRD and OBL forms shown in Table 4–4 are reflexes of the corresponding proto-Nyulnyulan forms, and relate to those forms via the application of regular phonological processes, and, in the case of the 1AUG, an irregular addition of new phonological material (see Stokes & McGregor 2003:42). Thus the observations of the previous paragraph are relevant to the historical development of the OBL forms in proto-Nyulnyulan rather than in pre-Nyulnyul. The same remarks apply to the observations of the next two paragraphs.

Another striking feature of the Nyulnyul pronominal system is that the augmented stems all involve the formative rr, usually word finally, whereas none of the minimal stems do. This is almost certainly a reflex of the widespread non-Pama-Nyungan plural (or non-singular) marker -rr (Blake 1988:19), and of an augmented/plural *-rr in proto-Nyulnyulan. 44

The final notable formal regularity concerns the recurrent ya in 1AUG, 1&2MIN and 1&2AUG nominatives, and ja in the corresponding obliques. It seems highly likely that this is a reflex of a previous first person plural (or non-singular) pronominal. If this is the case, then two of the three modern forms are reasonably accounted for as follows: 1AUG consists of $ya \sim ja$ followed by the plural marker rr, and the meaningless (as far as we can tell) augment ad; 1&2MIN consists of $ya \sim ja$ followed by y, which on comparison with other Nyulnyulan languages, might well be a remnant of juy 2MIN (after the lenition of the initial stop to the corresponding glide y, and loss of the final vowel—see Stokes & McGregor 2003)—a historical source making perfect sense semantically (see also Greenberg 1988; McGregor 1989b). The third form, 1&2AUG, is not so easily accounted for, but could perhaps involve the widespread non-Pama-Nyungan second person non-singular nurru (Capell & Coate 1984:99, 102–104; Blake 1988), as is pointed out in Stokes & McGregor (2003). The phonological process involved here, whereby the sequence rr followed by r reduces to rr is reasonable, and is attested in other nearby languages (e.g. Nyikina—see Stokes 1982:xxvi, 206, 208).

The traditional system we have just described was not used consistently in the speech of the last speaker, or at all in the speech of part speakers I worked with. Modern speakers and part speakers almost always used the 1AUG form in reference to all first person non-singular groups—i.e. to groups containing the speaker and one or more others. It was used, that is,

⁴³ Prenasalisation is quite common in languages of the region, and often occurs when the second person non-singular occurs non-initially (see McGregor 1990:103–104 on Gooniyandi).

⁴⁴ Note also that this fact adds further support to our analysis of the pronominal system: that $yay \sim jay$ is minimal is reflected in the fact that there is no rr in this form.

⁴⁵ Nyikina appears to have restructured its paradigm in the 1&2. In this language the 1&2 forms are *yayu* (minimal) and *yarrju* (augmented). The final syllable of the augmented form is identical with the initial syllable of the second person minimal pronominal; it is not unreasonable to hypothesise that the initial stop lenited to the corresponding glide in the 1&2MIN somewhere in the development of Nyikina, being intervocalic. If this is so, at some point Nyikina replaced the previous 1&2AUG form involving 2AUG with a form involving 2MIN (as in the 1&2MIN).

not only for the traditional 1AUG category, but for the 1&2MIN and 1&2AUG categories as well. Thus *yarrad kujarr* (1AUG two) 'we two (excluding you)' was the form usually given in response to a prompt involving the speaker-hearer dyad. When pressed for a form for 'you and me', speakers almost always responded with the compound *juyangay* 'you-and-I' (see §4.5.3.1). Thus the modern Nyulnyul pronominal system is perhaps best described as a standard three person, two number (singular and plural) system. However, in a small number of cases the forms *yay* CRD and *jay* OBL were elicited for the speaker-hearer dyad;⁴⁶ all of these were elicited 'involuntarily' when the focus was on something else in the utterance. The 1&2AUG forms *yadirr* and *jadirr* were even rarer in the speech elicited from the last speaker. It is thus uncertain whether the modern system is best described as optionally Assiniboine (as per McGregor 1996e) or optionally Ilocano.

Finally, mention must be made of the use of *kujarr* 'two' in compounds with augmented free pronominals, specifying the number as precisely two, as in *kurr-kujarr* (2AUG.CRD-two) 'you two' and *yarrad-kujarr* (1AUG.CRD-two) 'we two'. That these forms do indeed constitute separate stems is supported by the fact that postpositions attach to the second root, following the free form pronominal; they never occur between the roots, in the usual position occupied by postpositions (see §5.1.1). It would seem that dual pronominal forms have not yet fully grammaticalised in Nyulnyul, but are in the process of doing so, and *kujarr* 'two' may well be an incipient dual morpheme.

4.6.2 Functions of the pronominals

The cardinal forms of the pronominals are the forms used in citation—the forms used to make reference to the speaker, hearer, and/or other(s) outside of a syntactic context; they are also used whenever the pronominal serves in the Entity role of an NP (see §10.2), regardless of the grammatical function it serves in the clause. NPs with pronominals are marked by postpositions in the same way as any other NP, and since pronominals are normally either the sole item in the NP, or otherwise the first item, the postposition is almost always attached to them. Each postposition is attested in combination with cardinal pronominals, and there is nothing exceptional about these combinations, morphologically, syntactically or semantically. As has already been mentioned, Nyulnyul (like the other Nyulnyulan and nearby Pama-Nyungan and Bunuban languages) is not split ergative, and the pronominals have the ergative postposition attached to them when the NP to which they belong serves in the Agent role (see §12.3.2.1). The following examples illustrate the first person singular pronominal in various grammatical roles:

- (4–103) arri ngay burlj not 1MIN.CRD tired 'I'm not tired.'
- (4–104) ngay-in-manjan nga-ni-ny-jal warinyjirr wamb 1MIN.CRD-ERG-only 1MIN.NOM-CM-PST-see one man 'I only saw one man.'

⁴⁶ *Yay* and *jay* were never used for any other first-person category, and definitely never for the speaker plus a third person (other than the hearer).

- (4–105) liyan i-n-m-in wil-ung ma-kad-in yambun like 3NOM-CM-put-PRS meat-ALL₁ INF_p-eat-INF_S together ngay-inyirr
 1MIN.CRD-COM
 'He wants to eat meat with me.'
- (4–107) biird kujarr uriny i-nga-rr-ngank-an wurraarra yesterday two woman 3NOM-PST-AUG-speak-IMP Worrorra ngank ngay-ung language 1MIN.CRD-ALL₁ 'Yesterday two women spoke Worrorra to me.'
- (4–108) *junk i-n-nyu ngay-imirr* run 3NOM-CM-get 1MIN.CRD-PER 'He ran past me.'

The two inflectional forms of the free pronouns, the OBL and EMP, are used solely in marking possession or ownership, alienable and inalienable. The following examples illustrate OBL forms in alienable possession ((4–109) and (4–110)) and in inalienable possession ((4–111) and (4–112)). Observe that indexing of 'possessors' of inalienable possessions by a free OBL pronoun is possible for both prefixing and non-prefixing Ns.

- (4–109) arri mi-li-jid way arriyangk-ang jii kumbarr not 2MIN.NOM-IRR-go away nothing-COM 2MIN.OBL money 'Don't go without your money.'
- (4–110) nga-ngka-jal jan wunyjub 1MIN.NOM-FUT-see 1MIN.OBL mother 'I'm going to see my mother.'
- (4–111) *muj nga-ni-ny-juluk jan nga-marl* already 1MIN.NOM-CM-PST-clean 1MIN.OBL 1MIN-arm 'I have already cleaned my hand.'
- (4–112) jan mukurn 1MIN.OBL hair 'my hair'

There is no postposition or suffix in Nyulnyul marking genitive or dative, and thus possessive NPs do not take embedded NPs in these case forms, as in many Australian Aboriginal languages, including closely related Yawuru (Hosokawa 1991) and Nyikina (Stokes 1982)—though not Warrwa (McGregor 1994c:50–51)—and unrelated Gooniyandi (McGregor 1990). The possessor may, however, be denoted by a full NP (including a pronominal NP) that is not marked by a postposition, but linked to the N designating the possessum by an OBL pronominal serving as a possessive copula. (See §10.3 for further discussion of possessive NPs.)

The EMP pronominals are also used to mark ownership or possession, again both alienable and inalienable. They contrast with the oblique forms in that they invoke contrastive focus on the owner, indicating that the item belongs to that person or thing, and to nothing else. Thus, *jinijirr* 'his, hers, its' in (4–113) contrasts the possessors of the camp with other potential possessors—'his/her/its camp, rather than someone else's'; likewise, *janijarr* 'mine' in (4–114) contrasts the speaker-possessor with other potential possessors—'my hair, not anyone else's'.

- (4–113) kinyingk jinijirr bur DEF 3MIN.EMP camp 'That's his/her/its camp.'
- (4–114) ngay janijirr mungkarn 1MIN.CRD 1MIN.EMP hair 'That's **my** hair.'

As far as I have been able to determine, emphatic forms may be used anywhere where an oblique form can be used, with this difference of meaning.

4.6.3 Status of the third person minimal form

According to the present analysis, the form *kinyingk* is the realisation of two distinct but homophonous roots, one a determiner, the other a pronominal; *kinyingk* is thus ambiguous between these two lexical signs. Evidence for this position is not entirely clear-cut, and it could be maintained that there is a single lexeme *kinyingk* which may be used either like a pronominal or like a determiner. Nekes (1938:158), for instance, advocates the single lexeme position, and takes *kinyingk* as the third person singular form that can also be used as a determiner. What arguments can be adduced to support or refute either proposal?

First, as in Warrwa (McGregor 1994c:17) and Nyikina (Stokes 1982:157), there is a suppletive OBL form of the pronominal *kinyingk*, *jin*, but no corresponding OBL form of the determiner, just *kinyingk-ij* DEF-DAT (see also McGregor 1990:170).

Second, the determiner *kinyingk* DEF though not the pronoun *kinyingk* 3MIN.CRD can occur in NPs of non-minimal number, as in (4–115) (which clearly does not refer to a single leaf) and (4–116) (from line (4) of Text 2, repeated here for convenience).

(4–115) kinyingk bilabil bardangk-ukun riib arri layib this leaf stick-ABL₂ bad not good 'The leaves of that tree are poisonous.'

⁴⁷ According to Nekes (1938:158), the augmented third person pronoun *irr* can also serve as a demonstrative. Examples such as, *irr wamb* 'those men' (which Nekes cites) certainly do occur. But they do not support his case, since first and second person pronominals may also occur in this environment. This mode of expression resembles English forms such as 'we people', 'you people', and 'they (who are) people'.

(4–116) kinyingk-kun wamb-uk ni-kard i-ngi-rri-j

DEF-ABL₂ man-LOC 3MIN-body 3NOM-PST-AUG-say kinyingk karrambal /

DEF bird

'Then those birds took on men's form.'

(4–115) also shows a third difference, namely that the determiner *kinyingk* DEF may occur in an inanimate NP; the pronoun, by contrast, is never used in reference to inanimates.

Under the single item hypothesis we would have to conclude that the pronominal *kinyingk* shows irregular behaviour not found with the other pronominals—augmented bound pronominals do not otherwise cross-reference minimal pronominal NPs. Furthermore, in corpus examples, augmented agreement is found only in those cases where *kinyingk* is not the head of the NP, as in (4–116).⁴⁸

For the above reasons it seems preferable to adopt the position that the form *kinyingk* is ambiguous between a third person minimal pronominal and a determiner.

⁴⁸ This argument is comparable with arguments that have been invoked in support of the contention that *you* in English is ambiguous (rather than vague) between second person singular and second person plural, and thus that there is a systemic contrast between singular and plural in the pronominal system (see e.g. Goddard 1995 and the references cited therein). Another alternative is that *kinyingk* is a single determiner—rather than pronominal—root, that may function like a pronominal. The problem with this suggestion is that the pronominal paradigm would show an inexplicable gap if there were no 3MIN.CRD pronominal, while there exist OBL and EMP third person singular pronominals. There are, to be sure, languages lacking third person (singular) pronominals, that employ demonstratives instead—see e.g. Benveniste (1946/1971). But such languages lack these pronominals entirely, rather than lacking them in just one cell of a paradigm.

5 Postpositions

5.1 Preliminaries

5.1.1 Forms and major functions of the postpositions

Like most nearby languages, Nyulnyul has a set of postpositions—bound morphemes whose primary function is to convey case-information: they are relators indicating the case relations of the units to which they are attached to other units, normally some part of the clause to which they belong (see §2.3 and §2.4 above). Unlike many of its neighbours, Nyulnyul has no number marking postpositions (e.g. McGregor 1990:174, 1994c:26).

Postpositions normally occur in syntagm with NPs, although some have the potential of occurring with words (usually adverbials) and clauses (finite and/or non-finite) as well. Typically—but not invariably—they occur one per unit, regardless of whether it is a word, phrase or clause, and are normally attached to its first word, as in Nyulnyulan languages generally—e.g. Bardi (Bowern 2004a:31), Yawuru (Hosokawa 1991:35), and Warrwa (McGregor 2006a:396); in Nyikina, however, postpositions are somewhat freer in their positioning, and may occur on any element of an NP, though still with a preference for the first word (Stokes 1982:59–60). A unit constituted by an NP together with a hosted postposition is referred to in this grammar as a postpositional phrase (PP).

Table 5–1 shows the case marking postpositions in Nyulnyul, together with their main allomorphs. There are, however, some uncertainties: some morphemes might be better classified as nominal (or possibly adverbial) stem-forming suffixes. Conversely, it is possible that there are other postpositions that are not represented in the present corpus, or that are too poorly represented to permit identification as postpositions (see §5.15). Nekes & Worms (1953:532, 2006:98), for instance, list *-kab* as an ablative marker in Nyulnyul; however, they provide no illustrative examples, and the status of this form remains uncertain. (It seems most likely that it is a borrowing from a neighbouring language.)

As indicated by the forms in Table 5–1, allomorphy is restricted to one of the vowel-initial postpositions, the LOC $-uk \sim -ik$. The elsewhere allomorph is -uk; -ik is attested with only three Ns, all monosyllables with the high front vowel: in 'this', bin 'that' and biik 'shade'. However, each of these words has been observed with the elsewhere allomorph also: e.g. both biik-ik (shade-LOC) 'in the shade' and biik-uk have been heard. Furthermore,

Nekes & Worms (1953:517) give -j as an allomorph of the DAT postposition, illustrating it with the two forms *ngimbirr*-j 'for the night' and *kunyurr*-j 'for/to sleep' (p. 624). In my corpus, however, the initial i-vowel is invariably present.

Postposition Gloss -in Ergative (ERG) -ang Instrumental (INS) -nyirr Comitative (COM) -ij Dative (DAT) *-uk* ~ *-ik* Locative (LOC) -jun Ablative₁ (ABL₁) -kun Ablative₂ (ABL₂) Ablative₃ (ABL₃) -kung Allative₁ (ALL₁) -ung Allative₂ (ALL₂) -mardikan -mirr Perlative (PER) -karr Temporal (TEM) Semblative (SEM) -ngirr

Table 5–1: Nyulnyul postpositions

there are a number of monosyllabic roots with the high front vowel that appear never to occur with -ik, including bil 'anger, fight', binyb 'marsh', and jiib 'boomerang'.²

As per the rule of vowel insertion (see §3.5.2.1), an epenthetic vowel, normally /i/, almost always occurs between a stem with a final [-continuant] (i.e. stop or nasal) and a postposition with an initial consonant. Examples are: *in-i-nyirr* (this-EV-COM) 'with this', *riib-i-nyirr* (bad-EV-COM) 'with something bad', and *wamb-i-nyirr* (man-EV-COM). The ABL₂ and ABL₃ postpositions are exceptional, and take an epenthetic /u/, possibly due to the influence of both the initial velar consonant and following back vowel. (The epenthetic vowel is, however, /i/ for the *u*-medial -*jun* ABL₁.) Following a [+continuant] consonant, no epenthetic vowel normally appears, as exemplified by *kurrbul-nyirr* (hollow-COM) 'with a hollow' and *warinyjirr-nyirr* (one-COM) 'with one'. However, an epenthetic vowel does sometimes occur, as in *makirr-i-mirr* (road-EV-PER) 'along the road' and *irr-i-nyirr* (them-EV-COM) 'with them'. Following a vowel no epenthetic vowel occurs. Thus *kari-jun* (grog-ABL₁) 'from grog', and *kari-nyirr* (grog-COM) 'with grog' only are attested; there are no instances like **kari-i-jun* or **kari-i-nyirr*. For simplicity of representation, in this grammar epenthetic vowels are not separated, but are represented as initial segments of the postposition.

Nekes & Worms (2006:96) give four allomorphs, $-uk \sim -ak \sim -ik \sim -k$. Most of their examples are of the first allomorph. Nekes & Worms (1953:757) illustrate the second allomorph with biik-ak 'in the shade', a form not attested in my own corpus. The only place where this allomorph appears in my corpus is as an evidently frozen form in the spatial interrogative arrak 'where'. Possibly -uk has recently extended its environment of occurrence at the expense of the other allomorph(s). Previously -ik (and possibly -ak) may have been phonologically conditioned by the vowel of the preceding syllable, and the variation may have levelled over time—levelling of allomorphy is not uncommon in language attrition (e.g. Austin 1986, and §2.2 above).

Postpositions function primarily as relators; a couple also show the potential for derivational uses. Three primary types of relator functions can be distinguished for Nyulnyul postpositions. First, ADNOMINAL relator functions are those in which one NP is related grammatically to another, which may or may not form a viable grammatical unit (e.g. an NP or NP complex) with it. Second, relators can have INTRACLAUSAL functions, either marking the grammatical relations borne by NPs in participant roles (i.e. arguments see §2.3 and §12.3.2.1), or marking the relation borne by other NPs to the core of the clause (see §12.3.2.1). Third we have COMPLEMENTISING functions of relators, which are interclausal, marking one clause as dependent on, or in a conjugational relation to, another clause, and specifying the nature of the relation.

All postpositions bar *-ngirr* SEM serve intraclausal relational functions as their primary functions. About half show adnominal uses in addition, and slightly fewer show complementising uses. Only two—-uk ~ -ik LOC and -ung ALL₁—admit all three types of relational function. Table 5-2 summarises the range of functions associated with each postposition. For further details and evidence, see the following sections of this chapter, and §13.3.

Derivational	Relational			
	Adnominal	Intraclausal	Complementising	
		ERG		
		INS	INS	
COM	COM	COM		
	DAT	DAT		
	LOC	LOC	LOC	
ABL ₁	ABL ₁	ABL_1		
		ABL_2		
		ABL_3	ABL_3	
	ALL ₁	ALL ₁	ALL ₁	
		ALL_2		
		PER		
		TEM	TEM	

Given the range of domains within which the postpositions may be used and the fact that the postposition is usually attached to the first word of the unit it marks, it might be expected that sequences of postpositions would not be uncommon. For instance, it might be expected that an ERG could be followed by a LOC postposition used as a complementiser. This appears not to be the case: sequences consisting of postpositions used intraclausally and as complementisers are inadmissible. They are avoided by strategies such as attaching the two postpositions to different words, and less commonly by omitting the interclausal postposition. In (5–1), for example, the complementising -uk LOC occurs on the inflecting

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SEM

verb of the dependent clause, instead of on its first word, *ngank* 'talk', which is marked for its grammatical role in the dependent clause by -*uk* LOC.

(5–1) ngank-uk nga-na-m-uk-juy wara waalk warli-in talk-LOC 1MIN.NOM-CM-put-LOC-2MIN.ACC other day everyone-ERG i-ngi-rr-lakarr-an-ngay angka yarrad 3NOM-PST-AUG-listen-IMP-1MIN.ACC what 1AUG.CRD ya-nga-rr-ngank-an 1PL.NOM-PST-AUG-say-IMP 'While I was talking to you the other day, everyone was listening to what we were saying.'

Only the odd postposition sequence occurs in my corpus. All involve -*jun* ABL₁ as first member, functioning adnominally, and followed by a postposition functioning intraclausally. (5–2) is an example; Nekes & Worms (1953:922–923) provide a similar example involving -*kung* ABL₃ as the second postposition, (5–3). They also cite (Nekes & Worms 1953:323–324)—though do not exemplify—*angk-jun-ij* (what-ABL₁-DAT) as an alternative to *angk-jun* (what-ABL₁) 'why, what from'; the ABL₁ postposition here also seems to be used adnominally.

- (5–2) nganyji milirrkarr-jun-in wamb i-ngi-rr-kalak-an
 INT before-ABL₁-ERG man 3NOM-PST-AUG-approach-IMP
 beagle bay
 Beagle Bay
 'Did the old-timers visit Beagle Bay?'
- (5–3) niŋar ŋan-meo yambon yambon-aŋ manen ningarr nga-n-m-yu yambun-yambun-ang ma-n-in true 1MIN.NOM-CM-put-PRS together-together-INS INF_P-be-INF_S laib njer wamb-orinj gorwol-djon-gong layib-nyirr wamburiny kurrwal-jun-kung good-COM people sky-ABL₁-ABL₂
 "I believe in the communion of saints." (from the Apostles Creed)

Nekes & Worms (1953) cite examples involving other sequences of postpositions, including *-mardikan-kung* ALL₂-ABL₃ (as in example (5–4)) and *-ij-ik* DAT-LOC. The interpretation of these examples is uncertain.

(5–4) wan-djaledjalen yäräd rēb madagan-gong bor wa-n-jala-jal-in-yarrad riib-mardikan-kung bur 2MIN.NOM-CM-see-see-PRS-1AUG.ACC bad-ALL₂-ABL₃ place "and lead us not into temptation" (More literally: 'Watch us in case [we incline] towards bad places.') (Nekes & Worms 1953:664)

Nekes & Worms (1953:517) cite the form *maarr-ij-ik* glossing it 'in the grass', though without contextualising it in a clause. Thus this sequence cannot be interpreted with certainty. The most likely interpretation, however, is that it means 'in (something) pertaining to grass', where -ij DAT is being used either derivationally or adnominally (only the latter use is attested in my own corpus).

No example, either in my own corpus or in Nekes & Worms (1953) unequivocally shows a sequence of postpositions in which both function intraclausally.³ I am thus inclined to regard such sequences as ungrammatical—along with sequences of intraclausal postposition followed by complementising postposition. (Whether a complementising postposition can also follow a postposition functioning derivationally and/or adnominally is not known, but the fact that intraclausal ones can suggests that they might be able to.)

5.1.2 Historical and comparative remarks

It is possible to reconstruct a number of proto-Nyulnyulan postpositions. These are (see further Stokes & McGregor 2003; Bowern 2004a:34):

*-nima	ERG
*-ngany	INS
*-nyarri	COM
*- <i>ji</i>	DAT
*-kun ~ *-kan	LOC
*-junu	ABL_1
*-kabu	ABL_2
*-ngana	ALL
*-marru	PER
*-ngarru	SEM

Only a few of these are phonologically similar to case markers in other Australian families. The initial syllable of the ergative postposition occurs in various non-Pama-Nyungan languages, in particular, in the Mirndi languages Wambaya (Nordlinger 1998: 104), Jingulu, Ngaliwurru, and Jaminjung (Blake 1988:33), though this is probably a reflex of an old pronominal form, not an ergative marker in proto-Mirndi (Harvey 2008; McGregor 2008d). Similarly, I have suggested that the proto-Nyulnyulan ergative marker can be traced back to an indexical item (McGregor 2008d). A second postposition that could be related to forms outside of Nyulnyulan is *-nyarri COM, which might well be related to the dual markers -nyirri ~ -yirri ~ -rri (Ngarinyin), -arri (Bunuba), and -yurru ~ -yirri (Gooniyandi). Lastly, the dative postposition shows a close formal resemblance to the Gooniyandi dative -yoo ~ -joo.

Most of the Nyulnyul postpositions are likely reflexes of the above proto-postpositions, although none preserve the original forms. The ABL_1 form resembles the proto- ABL_1 , with only the loss of the final vowel. The three postpositions with rr in their second syllable—the comitative, perlative and semblative—have also lost their final vowel; in addition their initial vowel has changed from a to i. In the case of the ergative, instrumental, and possibly locative postpositions the final consonant or syllable has been deleted, and the remaining consonant and vowel metathesised. Metathesis of the consonant and vowel has also occurred in the monosyllabic dative postposition. The Nyulnyul ABL_2 is not obviously

³ In this respect Nyulnyul resembles Bardi (Claire Bowern pers.comm.), but differs from Nyikina (Stokes 1982:93–96, 106), and perhaps Yawuru (Hosokawa 1991:256, 268–269, 273–274).

⁴ This is a reasonable change, given that *rr* tends to raise a preceding low vowel and lower a preceding high vowel—see §3.1.3.2.1 and §3.1.3.2.2.

Whether metathesis actually occurred historically is uncertain. It is also possible that the preceding vowel of the nominal harmonised with the vowel of the monosyllabic postposition prior to its loss.

cognate with the proto-Nyulnyulan ABL_2 postposition, and may be a reflex of the protoform of the locative (if the modern form of the locative does not derive from the proto-Nyulnyulan form by the process suggested above). Finally, the Nyulnyul ALL_1 form -ung could perhaps derive idiosyncratically from the proto-Nyulnyulan *-ngana through loss of final syllable, and change of vowel quality $(a \rightarrow u)$. (The high back vowel might represent the relic of the velar consonant, as may have happened with the LOC postposition too.)

We have postulated two ablative postpositions in proto-Nyulnyulan. In fact, it seems that all of the daughter languages also show at least two ablatives—see e.g. Stokes (1982: 96–103) for Nyikina, Hosokawa (1991:265, 276–279) for Yawuru, Bowern (2004a:34) for Bardi, and McGregor (1994c:26) for Warrwa. (Most of these sources use different labels for the two markers in order to distinguish them.) One—usually a reflex of *-junu ABL₁—appears to focus on the source, and seems to be entity orientated. The other(s)—which may or may not be reflexes of *-kabu—appear to focus on the motion rather than its source, and are more action oriented.

A similar contrast appears to obtain between the comitative and instrumental postpositions in each language: the former has an entity orientation, the latter an action orientation. Related to these observations, the former member of each contrasting pair has adnominal relational uses, while the latter never does, as can be seen from Table 5–2 above.

In the following subsections, we discuss in some detail the major functions and meanings of each Nyulnyul postposition. We focus on their uses in NPs, providing but brief discussion of their other contexts of occurrence. Their complementising use is discussed further in Chapter 13. To some extent the discussion of grammatical relations in Chapter 12 repeats information provided here. However it is presented from different perspectives: in Chapter 12 the information concerning the individual postpositions is scattered, the discussion being organised around grammatical relations. In this chapter we attempt as far as possible to present a theory-neutral discussion of the meanings and uses of the postpositions, whereas in Chapter 12 we adopt a specific theoretical position.

5.2 -in Ergative (ERG)

This postposition prototypically marks the 'subject'—more precisely, the Agent (§2.4, §12.3.2.1)—of a transitive clause. It does so regardless of the animacy, person, and number of the referent, and regardless of tense, mood, aspect, or whatever. For example:

- (5–5) wamb-in barn i-na-w burruk jilaman-inyirr man-ERG shoot 3NOM-CM-give kangaroo rifle-COM 'The man shot the kangaroo with a rifle.'
- (5–6) bardangk-in i-ni-ny-judar-ingay tree-ERG 3NOM-CM-PST-trip-1MIN.ACC 'The log tripped me.'

The suggested semantic contrast resembles that suggested by Stokes for Nyikina (Stokes 1982:101), who proposes that it relates to discontinuity vs continuity with the source. Discontinuity with the source suggests orientation to the entity, whereas continuity with it relates to motion orientation. Bowern (2004a) perhaps implicates a similar distinction in her labels *ablative* and *source* for the respective forms in Bardi; Aklif (1999:85) glosses the latter form 'part(s) of, belonging to', again alluding to the notion of continuity with the source.

What counts as a transitive clause is a language particular fact (see §12.3.2.2 for discussion), though of course there are general cross-linguistic tendencies. For now we restrict ourselves to a couple of pertinent observations specifically concerning Nyulnyul. First, transitivity is a clausal, not verbal phenomenon, and neither preverbs nor inflecting verbs in Nyulnyul are necessarily specified according to transitivity (see also McGregor 2002c:112, 275–281). For instance, -JID 'go' normally occurs in intransitive clauses, as in (5–7), though it can occur in what are evidently transitive clauses, as exemplified by (5–8).

- (5–7) kinyingk bur arri uriny-in ya-li-rr-jid ngurlangurl
 DEF place not woman-ERG 1PL.NOM-IRR-AUG-go sacred
 bur
 place
 'This place is not for us women to go to.'
- (5–8) buy-in i-rr-jid-in warli bur ant-ERG 3NOM-AUG-go-PRS all camp 'Ants are going all over the place.'

Second, transitive clauses do not necessarily have verbs, although they almost always do. For instance, the second clause in (5–9)—*juy-in nyi-mungk ngay* (2MIN.CRD-ERG 2MINbelieve 1MIN.CRD) 'you knew me'—is verbless, though apparently transitive; the inflecting nominal *-mungk* 'believe' serves a verbal function. (See §12.3.2.2 for further discussion.)

(5–9) mi-ni-ny-jal-karr-ngay juy-in nyi-mungk
2MIN.NOM-CM-PST-see-TEM-1MIN.ACC 2MIN.CRD-ERG 2MIN-believe
ngay ngay-in arri
1MIN.CRD 1MIN.CRD-ERG not
nga-la-langk-an-juy
1MIN.NOM-IRR-know-IMP-2MIN.ACC
'When you saw me the other day you knew me, although I didn't recognise
you.'

The ergative postposition also marks the Agent (loosely, 'subject') of a middle clause (see §12.3.2.1 for a definition and explanation), as in the initial clause of (5–10), and (5–11).

- (5–10) baab-in i-n-di-jin yiil arri child-ERG 3NOM-CM-say-3MIN.OBL dog not mi-la-r-ngay
 2MIN.NOM-IRR-bite-1MIN.ACC
 'The child said to the dog, "Don't bite me."
- (5–11) *juurr-in ngany i-n-di-jan* snake-ERG hiss 3NOM-CM-say-1MIN.OBL 'The snake hissed at me.'

The ERG postposition is not invariably present in either clause type, as (5–12) and (5–13), elicited within the space of a couple of days of one another, demonstrate. It is possible that some instances of omission of the postposition can be accounted for as consequences of attrition accompanying language death (e.g. Pensalfini 1999; see also §2.3). However, it

seems unlikely that all omissions can be put down to this factor. Evidence from more viable Nyulnyulan languages such as Bardi (e.g. Metcalfe 1979), Nyikina (Stokes 1982:132–134), Yawuru (Hosokawa 1991:252–253), and Warrwa (McGregor 2006a) suggests that omission of the ergative postposition was a feature of traditional Nyulnyul. And quite likely it was motivated by discourse factors, as is the case in Gooniyandi (McGregor 1992c, 1998c) and Warrwa (McGregor 2006a); see also McGregor (2010a). Unfortunately, however, the textual corpus is too small to permit us to test hypotheses concerning the nature of these factors.

- (5–12) kinyingk wamb i-na-lanyb jan kumbarr
 DEF man 3NOM-CM-steal 1MIN.OBL money
 'That's the man who stole my money.'
- (5–13) kinyingk-in wamb i-na-lanyb jan kumbarr
 DEF-ERG man 3NOM-CM-steal 1MIN.OBL money
 'That's the man who stole my money.'

There is a third bivalent clause type in which one of the two inherent NPs is obligatorily ergatively marked, the medio-active (McGregor 1999b). As (5–14) and (5–15) show, in this construction—in contrast to the transitive construction—the ergative-marked NP is not cross-referenced by a bound pronominal in the IV. The nominative pronominal in the IV cross-references an unmarked NP (which happens to be ellipsed in these examples). See further §12.3.2.2.4.

- (5–14) biinyj-in kadkad nga-n-j cold-ERG tremble 1MIN.NOM-CM-say 'I am trembling from cold.'
- (5–15) dudub nga-n-j wul-in full 1MIN.NOM-CM-say water-ERG 'I'm full of water.'

The only examples of -in ERG attached to a preverb are in this construction:

(5–16) birlbirl nga-n-j marriny-in short:winded 1MIN.NOM-CM-say walk-ERG 'I'm short winded from walking.'

The ERG postposition is not, however, restricted to clauses with two inherent participant roles. Rarely, it occurs on an intransitive subject, an Actor—the single participant that is cross-referenced by a nominative pronominal prefix (see further §12.3.2.1), as in:

(5–17) nga-nga-mulk-uk kujarr-in wamb jukari
1MIN.NOM-PST-sleep-LOC two-ERG man sneak
i-ngi-rr-kard bur-uk jan i-ngi-rr-i-ny
3NOM-PST-AUG-enter place-LOC 1MIN.OBL 3NOM-PST-AUG-CM-get
jan wilamay
1MIN.OBL food
'While I slept, two men snuck into my house and took my food.'

(5–18) *yiil-in i-ma-kanda-kand-inyj* dog-ERG 3NOM-REF_p-scratch-scratch-REF_S 'The dog is scratching itself.'

Ergative marking of intransitive Actors often occurs in circumstances such as obtain in (5–17): although the clause is intransitive, it is immediately followed by a transitive clause. This anticipatory use of the ergative marker is not uncommon in Australian languages, and is attested in languages as diverse as Guugu Yimidhirr (Haviland 1979:154), Ngaanjatjara (McGregor 1979), and Gooniyandi (McGregor 1992c).

Not all instances of ergatively marked Actor NPs in intransitive clauses are anticipatory. In examples such as the following, a PP appears to serve as a type of goal or target of action directed towards it by the Actor. Thus in (5–19) the crocodile would have been directing action towards the man; and in (5–20) the man is apparently directing action to the horse. The Actor, that is, appears to show some degree of agency (see further McGregor 1992c, 2006a, 2010a).

- (5–19) linykurr-in i-ny-jarrjarr jiwar-inyirr wamb crocodile-ERG 3NOM-PST-stand dead:person-COM man ni-lirr-uk
 3MIN-mouth-LOC
 'The crocodile got up with the dead man in his jaws.'
- (5–20) wamb-in jalingk i-n-in yaward-uk man-ERG ride 3NOM-be-PRS horse-LOC 'The man is riding on a horse.'

Unlike a number of Australian Aboriginal languages—e.g. Gooniyandi (McGregor 1990), Wangkajunga (my fieldnotes; Jones 2003), Walmajarri (Hudson 1978), and Jaru (Tsunoda 1981)—the Nyulnyul ergative does not mark instruments, either solely, or in combination with another morpheme such as the comitative. Instead a separate instrumental postposition is used, which we now discuss.

5.3 -ang Instrumental (INS)

This postposition is normally attached to nominals—never to pronominals—and occasionally to preverbs.⁷ It serves primarily as an intraclausal relator, specifying the relation between an NP and the nucleus of the clause; it also has non-productive and fossilised lexical uses. It is not used adnominally or as a complementiser.

The primary productive function of -ang INS is as an instrumental marker, marking the grammatical role of instrument (see §12.4.2.3). The Instrument role can occur in both transitive and intransitive clauses (see examples below). It is not attested in middle clauses, although there seems to be no reason in principle why it should not be able to occur in this clause type. Nor is it attested in medio-active clauses (see §12.3.2.2.4); in this instance the

The form -ang can also be attached to inflecting verbs where it serves as an applicative marker (see §7.9). Synchronically, this is analysed as a distinct morpheme, homophonous with the instrumental postposition, rather than as a special use of it. Diachronically, however, the applicative marker has its source in a comitative postposition in proto-Nyulnyulan which had both nominal and verbal uses; see further McGregor (1995c) and Stokes & McGregor (2003).

absence is expected, given the semantics of this construction. Of course, the occurrence of the instrumental role is constrained by semantic considerations: for instance, states are not normally achieved through deployment of instruments, and instruments are less common in intransitive clauses than in transitive clauses.

In the remainder of this section we examine the main uses of the instrumental postposition.

- (a) It marks a nominal denoting a body part used to perform the action. As in (5–21) and (5–22), this is normally a body part of the Actor; it may, however, be a part of the Undergoer (or object—see §12.3.2.1 for discussion) of a transitive clause that is manipulated by the Agent to bring the event about, as in (5–23).
- (5–21) *ni-im-ang i-ni-ny-jal* 3MIN-eye-INS 3NOM-CM-PST-see 'He saw him with his eyes.'
- (5–22) baab marriny i-jid-in ni-mbal-ang child go 3NOM-go-PRS 3MIN-foot-INS 'The baby is walking along on foot.'
- (5–23) nga-na-walawal murrul baab ni-mal-ang 1MIN.NOM-CM-lead little child 3MIN-hand-INS 'I led the baby by the hand.'
 - (b) It marks an artefact used as a tool to facilitate the performance of an event:
- (5–24) jungku wa-na-lurr karlib-ang fire 2MIN.NOM-CM-light fire:saw-INS 'Light the fire with a fire saw.'
- (5–25) wamb-in liyan i-nga-rr-dam walangk-ang man-ERG like 3NOM-PST-AUG-hit spear-INS 'The man tried to hit it with a spear.'

A disembodied body part can also be used as a tool:

- (5–26) *i-ngi-rr-i-r jin ni-mil kinyj-ang* 3NOM-PST-AUG-CM-poke 3MIN.OBL 3MIN-nose bone-INS 'They pierced his nose with a bone.'
- (c) An instrumental PP can mark a medium such as a liquid or substance used to effect the action:
- (5–27) baab i-ngi-rr-juluk wul-ang baby 3NOM-PST-AUG-wash water-COM 'They washed the baby with water.'
- (5–28) wamb-in band-ang i-na-m bur man-ERG ground-COM 3NOM-CM-put ground 'He covered it with dirt.'

- (5–29) dakurl-ang wa-na-m red:ochre-INS 2MIN.NOM-CM-put 'Paint him with red ochre.'
- (d) A missile thrown is usually represented as an instrument, and denoted by an NP marked by the INS postposition:
- (5–30) *kumbarr-ang irr kujarr i-ngi-rr-ma-rri-nyj* stone-INS they two 3NOM-PST-AUG-REF_P-fight-REF_S 'They threw stones at each other.'
- (e) NPs denoting abstract entities such as words are marked by the INS postposition when that entity is employed as the means of achieving a communicative act. This is illustrated in the following example (cf. however, discussion of (5–37) on p. 171 below):
- (5–31) rēb-aŋ ŋang inem-band ŋai wamb-en djān riib-ang ngank i-na-m-band-ngay wamb-in jan bad-INS word 3NOM-CM-PST-curse-1MIN.ACC man-ERG 1MIN.OBL 'My husband cursed me with bad words.' (Nekes & Worms 1953:355)

There are a few exceptional usages of the INS postposition that do not fit the above patterns. For instance, in (5–32) the INS marked NP does not denote something used instrumentally in the performance of the action, but rather something that accompanies the Undergoer. Perhaps the effect of using the INS here rather than the expected COM (see §5.4) is to highlight the involvement of the chains in action and their effect on the manner of performance of the action, hindering the movement of the Aboriginal prisoners.

(5–32) in-in liinyj i-na-m maank wamb mi-jid this-ERG policeman 3NOM-CM-put black man 2MIN.NOM-go marriny jangajang-ang walk chain-INS 'The policeman made the Aboriginal man walk in chains.'

A perhaps not entirely dissimilar exceptional usage is provided by (5–33), where the INS-marked NP specifies a context for the event, and in fact a context that impedes rather than facilitates its performance.

(5–33) mang-aŋ yaŋer-djed, are-njer gunjul maank-ang ya-ngi-rr-jid, arri-nyirr kunyul dark-INS 1PL.NOM-PST-AUG-go not-COM moon 'We walked in the dark without moonlight.' (Nekes & Worms 1953:687)

We turn now to the non-relational, stem-forming uses of -ang INS. In these uses the postposition attaches non-productively to Ns, adverbials, preverbs and particles. These show comitative senses that presumably trace back to proto-Nyulnyulan *-ngany COM; they are unlikely to have developed subsequent to the specialisation of -ang to an instrumental marker (see further McGregor 1995c).

The possibilities for suffixing -ang INS to Ns are as follows. First, quantifying Ns designating cardinal numbers take this postposition to derive frequency quantifiers—evidently of the adverbial class—indicating the number of times an action was done (see

also §6.4.2 below). This appears to be the most productive of this postposition's stemforming potentials, applying as it does regularly to a subset of nominals.

(5–34) nyim-nyim i-n-nyu kujarr-ang / wurrumbang-ang wink-wink 3NOM-CM-catch two-INS many-INS 'He winked twice/many times.'

The interrogative form *nganyj-irr-kurd* (INT-3AUG-COL) 'how many' (see §4.5.1.3) also takes *-ang* INS to form a frequency interrogative meaning 'how often', the use of which is illustrated in the following example:

(5–35) nganyjirrkurd-ang mi-ny-jid jalngkangurr-k how:many-INS 2MIN.NOM-PST-go doctor-LOC 'How often did you go to the doctor?'

Second, it may be attached to the prefixing N -k 'back', to derive a stem meaning 'backwards', as in (5–36). More frequently, however, the suffix -ingk is attached to -k 'back' to convey this meaning—see (5–250) in §5.15 below.

(5–36) nyi-k-ang mi-jid 2MIN-back-INS 2MIN.NOM-go 'Go backwards.'

Third, -ang INS sometimes seems to derive a preverb stem when attached to an abstract N such as ngank 'word' or maad 'play'. The former is used with the inflecting verbs -M 'put' and -BARNJ 'exchange' to mean 'talk to someone' and 'talk to self' respectively—see example (5–37). The latter is also used in collocations with -M 'put', to mean 'play with someone', as in (5–38), and with -J 'do, say' to mean 'play (with something)'.

- (5–37) ngank-ang i-ngi-rr-a-m-juy biird word-INS 3NOM-PST-AUG-CM-put-2MIN.ACC other:day 'They were talking to you the other day.'
- (5–38) maad-ang i-na-m murrul baab play-INS 3NOM-CM-put little child 'He/she played with the baby.'

Fourth, the word for 'others', warang, is evidently formed (as discussed in §4.3.2.2) by suffixing -ang INS to war 'other'.

Doubtless there are other such root-forming uses.

Four manner adverbials—namely *ngarrij* 'hard, energetically', *jimbijimb* 'tensely', *warrij* 'quickly' and *jukar* 'quietly'—permit attachment of *-ang* INS, as illustrated by (5–39). (For *jimbijimb* 'tensely' this is perhaps obligatory.) How the instrumentally-marked adverbial contrasts semantically with the plain adverbial remains unclear (see also §6.2.1).

(5–39) *irr-in i-ngi-rr-barrkand ngarrij-ang wangal-in dub* they-ERG 3NOM-PST-AUG-tie hard-INS wind-ERG blow *i-li-ny-an* 3NOM-IRR-catch-IMP 'They tied it down tightly, lest the wind blow it away.'

The prefix-taking adverb -malkang 'by self, alone' (see Table 4–3 in §4.2.2.4) appears to involve a frozen instance of the INS, although as mentioned in fn. a to Table 4–3 Nekes (1938:157) gives -malk as the Nyulnyul form. Possibly my data is incomplete; alternatively the INS might have frozen to the prefixing adverb in the speech of the last remaining full speaker. This adverb is discussed and exemplified in §6.2.3.

(5–40) nga-malk-ang mungkan nga-na-k muj layib nyi-marl 1MIN-self-INS carry 1MIN.NOM-CM-carry already good 2MIN-arm mi-la-w-ngay 2MIN.NOM-IRR-give-1MIN.ACC 'I can carry it by myself; there's no need for you to give me a hand.'

Just two preverbs are known to host *-ang* INS: *jinajin* 'mock', and *jibar* 'twitch'. The former is attested only with the instrumental postposition, as in (5–41). The latter can occur either with (as in example (5–42)) or without the instrumental.

- (5–41) jinajin-ang mi-la-k-ngay mock-INS 2MIN.NOM-IRR-carry-1MIN.ACC 'You might mock me.'
- (5–42) jibar-ang nga-ni-ny-jal nga-mal twitch-INS 1MIN.NOM-CM-PST-see 1MIN-arm 'My hand twitched.'

Contrary to the situation for other stem-forming uses of the INS postposition, its use with both of these preverbs is quite opaque.

Finally, -ang INS can attach to the particle arriyangk 'nothing' (see further §9.2.2), deriving arriyangk-ang 'without', which is used as a privative particle:⁸

- (5–43) arri mi-li-jid arriyangk-ang jii marlburl not 2MIN.NOM-IRR-go nothing-INS 2MIN.OBL things 'Don't go without your things.'
- (5–44) arri bur i-la-jal arriyangk-ang jin kilaj not place 3NOM-IRR-see nothing-INS 3MIN.OBL glasses 'He can't see without his glasses.'

5.4 -nyirr Comitative (COM)

The main functions of this postposition are adnominal and intraclausal relational: it marks relations between one NP and another NP or the core of a clause; occasionally it functions derivationally. It usually attaches to nominals and pronominals, and sometimes to preverbs, inflecting verbs and particles. Below we first discuss the uses of the comitative postposition

⁸ It might be suggested that in this context *-ang* is still functioning as a relator with a comitative meaning, and that it is in syntagm with the whole NP referring to the entity which is lacking. One difficulty with this suggestion is that it would imply an exceptional comitative use of an erstwhile instrumental marker. Another is that it leaves unexplained why the COM postposition does not occur instead, particularly given that it is known that the latter can be attached to *arri* 'not', as in lines (18) and (54) of Text 2. Nekes & Worms (1953:326–327) also give *arri-nyirr* 'without', and provide example (5–74) below as an illustration of its use. In this case it is clear that *-nyirr* COM is functioning as a relator.

on nominals and pronominals, where relevant commenting on their use with preverbs; then we briefly discuss its uses with inflecting verbs and particles.

Perhaps the major function of this postposition is to indicate someone or something in close physical association with the Actor during their performance of the action, something that accompanies them. The accompanying item may be either inanimate, as in (5–45), or animate, as in (5–46) and (5–47)—see also e.g. lines (49), (50), (57) and (76) of Text 2.

- (5–45) wamb-in i-na-ng-kalak-yarrad walangk-inyirr man-ERG 3NOM-CM-PST-approach-1AUG.ACC spear-COM 'The man came to us with a spear.'
- (5–46) nga-ngka-land biik-uk kurr-inyirr 1MIN.NOM-FUT-sit shade-LOC 2AUG.CRD-COM 'I will sit in the shade with you lot.'
- (5–47) wamb nga-n-j kinyingk-inyirr wamb man 1MIN.NOM-CM-say DEF-COM man 'I grew up with this man.'

Speaking somewhat loosely, an entity designated by a COM PP will usually be of equal or lower rank on the animacy hierarchy (Silverstein 1976) than the thing it accompanies. Thus, if the Actor is inanimate, so too will be the accompanying thing:

(5–48) waŋal-njer wōl in-aṛ wangal-nyirr wul i-na-r wind-COM water 3NOM-CM-poke "Wind brings rain." (More literally, 'Rain comes with the wind.') (Nekes & Worms 1953:816, 819)

In some cases instead of the 'accompanying' interpretation, a quality interpretation is invoked. This is illustrated in example (5–49), where the accompanying entities, here wounds, indicate a property of the Actor. This property is always non-inherent: the association between the entities is never immanent.

(5–49) *jakurd i-ngi-rri-j baburr-nyirr biil-ukun* return 3NOM-PST-AUG-say wound-COM anger-ABL₂ 'They came back wounded from the fight.'

The quality interpretation is available only for entities closely connected to one another, usually by physical contiguity—thus, for instance, if *baburr* 'wound' were replaced by *yiil* 'dog', the accompanying sense only would be invoked. On the other hand, if the physically contiguous entity is prototypically associated with individuals of the specified type, semantic considerations militate against marking it by the COM postposition: for in this case the association would be immanent. It is for this reason that we do not normally find bodypart terms in this context—unless there is something exceptional about them: for instance, if they are in an unusual state or position. For example:

(5–50) nimanburr i-rr-jiwand bardangk-ukun irr-alm-inyirr jimbin flying:fox 3NOM-AUG-hang tree-ABL₂ 3AUG-head-COM down 'Flying foxes hang up in trees with their heads down.'

(5–51) *i-ngi-rr-land ngamarn-nyirr jirr kalwar* 3NOM-PST-AUG-sit breast-COM 3AUG.OBL expose 'They were sitting with their breasts exposed.'

Possibly (5–52) is amenable to interpretation in these terms: although possession of a voice does not characterise a person, possession of a nice voice does. (In this example, the head nominal, *ngank* 'word, voice', has been ellipsed.)

(5–52) niar-njer i-ŋangen niyarr-nyirr i-ngank-in taste-COM 3NOM-talk-PRS "He has a nice voice." (Nekes & Worms 1953:786)

In the rare cases where it is attached to a preverb, the COM postposition indicates an associated process or activity that serves to characterise an entity, as in *jabajab-inyirr* (tickle-COM) 'itchy'; see also line (34) of Text 2.

Not infrequently, *-nyirr* COM marks the instrument or tool with which the action was performed. This may be inanimate (examples (5–53) and (5–54)) or animate (examples (5–55) and (5–56)). (The contrast with INS is discussed at the end of this section.)

- (5–53) wamb-in barn i-na-w burruk jilaman-nyirr man-ERG shoot 3NOM-CM-give kangaroo rifle-COM 'The man shot the kangaroo with a rifle.'
- (5–54) kinyingk wamb kad i-m-barnj karrkuj jumbarraari-nyirr
 DEF man kill 3NOM-PST-exchange dead knife-COM
 'This man stabbed himself with a knife.'
- (5–55) yiil-inyirr ya-ngki-rr-jid burruk-ung dog-COM 1PL.NOM-FUT-AUG-go kangaroo-ALL₁ 'Hunt for kangaroos with dogs.'
- (5–56) wamb i-djed djaling yawad-njer wamb i-jid-in jalingk yaward-inyirr man 3NOM-go-PRS ride horse-COM 'The man is riding a horse.' (Nekes & Worms 1953:449)

In contrast with many other Australian languages that use the COM morpheme to mark instruments, in Nyulnyul it is never followed by the ERG marker in transitive clauses (see e.g. McGregor 1990:187).

Sometimes the COM postposition occurs on an NP denoting a body part used instrumentally, as in the following two examples:

(5–57) *jinib-in i-na-r wamb ni-warl-inyirr jin* stingray-ERG 3NOM-CM-poke man 3MIN-tail-COM 3MIN.OBL 'The stingray spiked the man with its tail.'

(5–58) dukaduk nga-n-nyu nga-ng nga-marl-nyirr rub 1MIN.NOM-CM-catch 1MIN-stomach 1MIN-arm-COM 'I rubbed my stomach with my hand.'

It is more usual for body-part instruments to be marked by -ang INS, unless there is something unusual about them, or the way they are deployed (see remark on p. 145 above):

- (5–59) wirrwirr i-ni-ng-kal riib-inyirr ni-mird stagger 3NOM-CM-PST-wander bad-COM 3MIN-leg 'He staggered along on a broken leg.'
- (5–60) kujarr karrambal yalk i-rr-ø-in warinyjirr-inyirr irr-mird two bird stand 3NOM-AUG-be-PRS one-COM their:leg 'The two birds are each standing on one leg.'

The COM postposition can also mark something feared, as in (5–61), where the COM-marked PP does not indicate something physically accompanying the Actor—the speaker is neither going through the window with the dogs, nor wanting to do anything with them. I suggest that an explanation for this adversative sense is possible along the following lines. In some languages the comitative is used with a mental intentional sense, marking phenomena with which involvement is projected for the future: 'with the intention of, or thought of (involvement with)' (McGregor 1995c). From projected future involvement to feared or undesirable future involvement is a relatively small step via pragmatic implicatures. In keeping with this interpretation, the adversative sense is not always invoked in examples showing the projected involvement sense, shown by (5–62) and (5–63).

- (5–61) arri liyan nga-la-m lakal-ung yiil-nyirr jii-nyirr not like 1MIN.NOM-IRR-put climb-ALL₁ dog-COM 2MIN.OBL-COM 'I didn't want to climb in the window because of (for fear of) your dogs.'
- (5–62) kumbarr arri-jan arri nga-la-m wilamay-nyirr money not-1MIN.OBL not 1MIN.NOM-IRR-put food-COM 'I have no money to buy tucker with.'
- (5–63) uriny arri-jirr milkin arri i-li-rr-lungk wilamay-nyirr woman not-3AUG.OBL stick not 3NOM-IRR-AUG-dig food-COM 'The women have no digging sticks to dig with.'

Turning now to adnominal functions, we observe first that in verbless relational clauses (see §12.2.3) the COM postposition expresses the relational concept of possession: it indicates something associated with an entity, animate or inanimate, normally by physical proximity:

In English with can also be used in a similar way—with those vicious dogs, I won't visit him. (Compare with Joh in power, I would never have visited Queensland—and I can't say I'm happy to be here even now!)

- (5–64) bin bardangk kurrbul-inyirr nyanangkarr i-n-in langkurr this tree hollow-COM perhaps 3NOM-be-PRS possum jimbin bardangk-uk inside tree-LOC 'This tree has a hollow; maybe there's a possum in it.' (Or less literally: 'There is a hollow in this tree; maybe there's a possum in it.')
- (5–65) ngay wurrumbang-inyirr wilamay
 1MIN.CRD many-COM food
 'I'm full of food.' (Literally: 'I have much food')
- (5–66) baaburr-inyirr biil-ijun wound-COM fight-ABL₁ 'They are wounded from fighting.' (Literally: '(They) have wounds from fighting')

Second, a COM PP may be juxtaposed in a qualifying function to a nominal or NP, further specifying the referent, as illustrated by (5–67)–(5–69).

- (5–67) bin wamb jilaman-nyirr i-ni-ng-kird this man rifle-COM 3NOM-CM-PST-eat 'This man with a rifle ate it.'
- (5–68) badang woromban-njer mai
 bardangk wurrumbang-nyirr may
 tree many-COM fruit
 'a tree with plenty of fruit' (Nekes & Worms 1953:912)
- (5–69) wa-n-jal-uk bardangk kurrbul-inyirr i-n-in-uk
 2MIN.NOM-CM-see-LOC tree hollow-COM 3NOM-be-PRS-LOC
 langkurr kaw wa-n-di-jan kaard
 possum call:out 2MIN.NOM-CM-say-1MIN.OBL still
 'When you see a hollow tree with a possum in it, call out to me again.'

In (5–70) the COM PP indicates a respect in which the specified quality of dirtiness obtains.

(5–70) *ni-lirr ni-lirr jin ngunyb ngijil-inyirr* 3MIN-mouth 3MIN-mouth 3MIN.OBL dirty mud-COM 'His face is dirty with mud.'

Derivational uses of *-nyirr* COM are uncommon in Nyulnyul, in contrast to the situation in many Pama-Nyungan languages (Dixon 1980:324). This is doubtless due at least in part to the existence of the derivational suffix *-kud* ASC (§4.5.1.2). The following examples possibly show derivational uses of the postposition:

(5–71) wub-inyirr i-n-in pup-COM 3NOM-be-PRS 'Dog is with pup (i.e. is pregnant).'

(5–72) wamb-inyirr uriny man-COM woman 'married woman'

Other examples include *layib-inyirr liyan* (good-COM heart) 'good hearted; willing to give anything' and *wul-nyirr wul* (rain-COM rain) 'rainy season' (Nekes & Worms 1953:816, 819).

As mentioned at the beginning of this section, *-nyirr* COM is also attested with inflecting verbs and particles. There are only a couple of examples of the former combination, including perhaps line (37) of Text 3, and (5–73). I can offer no explanation for the first example. The second perhaps invokes the future involvement sense identified in (5–62) and (5–63) above.

(5–73) burrul ma-barrkand-in-nyirr string INF_P-tie-INF_S-COM 'The string is for tying with.'

There are no examples of COM-marked particles in my own corpus. However, Albert Kelly's text contains a few examples, as also does Nekes & Worms (1953); all of these involve the particle *arri* 'not'. According to Nekes & Worms (1953:326–327), the combination has a privative meaning, as exemplified by (5–33) above, repeated here for convenience as (5–74). The examples in Albert Kelly's text—see lines (18) and (54) of Text 2—do not show this sense, however. Indeed, they appear to be inexplicable in terms of the above discussion, and seem quite idiomatic.

(5–74) maank-ang ya-ngi-rr-jid, arri-nyirr kunyul dark-INS 1PL.NOM-PST-AUG-go not-COM moon 'We walked in the dark without moonlight.' (Nekes & Worms 1953:687)

From the above discussion of the uses of the COM postposition *-nyirr* it is clear that there is some overlap with senses of the postposition *-ang* INS and the stem-forming suffix *-kud* ASC. For one thing, both *-nyirr* COM and *-ang* INS admit instrumental senses; indeed, they often appear in free variation, as in (5–75).

(5–75) *i-na-m-burruburr jin ni-mbarl baybirr* 3NOM-CM-PST-obliterate 3MIN.OBL 3NOM-foot behind *bardangk-inyirr* / *bilabil-inyirr* / *bilabil-ang* tree-COM bough-COM bough-INS 'He wiped out his tracks behind him with a stick/bough.'

But whereas -ang conveys the instrumental meaning as its core meaning, -nyirr does not. The instrumental meaning is evidently a contextual sense of -nyirr, conditioned by such factors as the meaning of the NP to which it is attached, the verb, other units in the clause, and the nature of the external world of experience. Thus, it is natural to interpret the rifle as an instrument in (5–53), but to interpret the people in the following example as accompanying the Agent in the eating, rather than as instruments (given the real-world fact that people do not normally use other people as eating utensils).

(5–76) *i-ny-jid i-ni-ng-kid wilamay yambun irr-inyirr* 3NOM-PST-go 3NOM-CM-PST-eat food together 3AUG.CRD-COM *wamburiny* people 'He went up and ate with them.'

Further support for this observation comes from differences in the instrumental interpretations available for the two postpositions. Instruments marked by *-nyirr* COM are almost always tools used by the Actor, and typically held in the hand. Other types of instrument marked by *-ang* INS, including body-part instruments, mediums, missiles, and signals, are rarely if ever marked by *-nyirr* COM—consistent with the fact that COM marks something in temporary physical association with the Actor.¹⁰

Granted that this is the case, and that the instrumental meaning is no more than a contextual sense of *-nyirr*, available when the Actor is physically associated with the thing, it seems reasonable to suggest that the same holds for other apparent intraclausal relational senses of this postposition. Thus, *-nyirr* COM perhaps codes adnominal relationships only, all other senses being contextually engendered. It is, that is, nominally oriented, in contrast to *-ang* INS which is clausally oriented, and does not mark adnominal relationships (as shown in Table 5–2).¹¹

Both -nyirr COM and -kud ASC mark relations of proximal but non-inherent association between two entities. But whereas -nyirr COM marks the relationship between phrases, -kud ASC marks relations between words within phrases. Moreover, the entities must be physically contiguous for -kud ASC, and thus the association between man and wife can be marked by -nyirr COM, but not by -kud ASC, in (5–72).

5.5 *-ij* **Dative** (DAT)

This postposition shows a rather different range of senses to the cognate dative postposition $-yi \sim -ji$ of the Eastern Nyulnyulan languages, and presumably codes a different inherent meaning. Most notably, the Nyulnyul DAT postposition is never used to express possession, whereas this is one of the primary functions of the dative in the Eastern languages Nyikina (Stokes 1982:69) and Yawuru (Hosokawa 1991:239–240); it is occasionally used in this function in Warrwa (McGregor 1994c:28). Indeed, adnominal relational uses of -ij DAT are rare, though not impossible.

The postposition -ij DAT attaches to nominals, pronominals and occasionally to preverbs and perhaps adverbials, but not to inflecting verbs. Strangely, DAT PPs are never cross-

¹⁰ It may perhaps be significant that Nekes & Worms (1953) do not distinguish an instrumental sense for *-nyirr*, and provide no clausal examples exhibiting this meaning. I suspect that *-nyirr* COM has generalised somewhat in the speech of the remaining full speaker due to influence from English—and has begun to encroach on the meaning-domain of *-ang* INS. This may account for the few exceptional examples of *-nyirr*-marked body-part instruments.

¹¹ A related possibility is that the apparent clausal uses of the COM marker involve the adnominal use, in a secondary predicate construction in which an additional dependency relation links the adnominal one in the clause (on which see McGregor 1997b, 2005b). The INS, by contrast, does not invoke the adnominal relation, and thus does not actually specify an association between the Actor NP and the INS NP.

referenced by oblique pronominal enclitics to inflecting verbs (see §7.11), 12 as is common in the Eastern Nyulnyulan languages.

The reason for the occurrence of a situation may be indicated by a DAT NP; this may be a projected intention or purpose, or a prior cause or reason. Examples (5-77)-(5-79) illustrate the former possibility, (5-80) and (5-81) the latter.

- (5–77) jungku jadjad nga-na-w kiirl bayakarr dii-ij fire cut 1MIN.NOM-CM-give this:morning morning tea-DAT jarrad mary aa ngay nga-na-mukar dii jarrad 1AUG.OBL Mary and 1MIN.CRD 1MIN.NOM-CM-make tea 1AUG.OBL 'I cut firewood for Mary and me this morning for our tea.'
- (5–78) djeo wēl-ēdj in-galen belar-og
 jiyu wil-ij i-n-kal-in birlarr-uk
 heron meat-DAT 3NOM-CM-roam-PRS spring-LOC
 'The heron struts around the spring looking for fish.' (Nekes & Worms 1953: 376)
- (5–79) $n\bar{o}l\text{-}edj$ nanga-borendj nul-ij nga-ngka-burr-inyj corroboree-DAT 1MIN.NOM-FUT-paint-REF_S
 'I shall paint myself for the corroboree.' (Nekes & Worms 1953:765)
- (5–80) *na-mamalgendjen* yēg-ēdj *nga-ma-malk-inyj-in* yiik-ij 1MIN.NOM-REF_P-conceal-REF_S-PRS sick-DAT 'I hide myself because I am sick (a leper).' (Nekes & Worms 1953:679)
- (5–81) angk-ij arri mi-la-mulk-an ngimbirr what-DAT not 2MIN.NOM-IRR-sleep-PST night 'Why didn't you sleep last night?'

(5–81) is typical: almost all instances of this purposive sense of the DAT postposition involve the indefinite determiner angk 'what, something'; and conversely all instances of angk 'what' followed by -ij DAT admit a purposive interpretation.

Neither prior nor projected reason is coded by the dative postposition, which codes no more than 'in respect of, in regard to'. Thus it often marks an entity involved in, or implicated in the situation in some way, though does not belong to the core of the clause (see §12.3.2.2). For example, in (5–82) the men are fighting over, or in relation to, women;

i-n-di-jin kinyingk-ij wamb 3NOM-CM-say-3MIN.OBL DEF-DAT man 'He spoke about that man.'

However, this example admits an alternative interpretation in which the OBL enclitic cross-references an ellipsed NP: that is, *-jin* 3MIN.OBL could cross-reference an ellipsed PP denoting the addressee of the words. In no other example is a PP designating the person spoken about cross-referenced in the VP. If this is so, a more accurate translation for this clause would be 'He spoke to him about that man'. The

translation shown here represents the original English prompt given by myself.

¹² There is just one example available in which there is an OBL pronominal enclitic to an inflecting verb and a DAT PP in the same clause that might possibly be cross-referenced by it:

and in (5–83) the women hit themselves in respect of the dead person, expressing their sorrow for him or her.

- (5–82) *uriny-ij ya-nga-rr-ma-rr-inyj* woman-DAT 1PL.NOM-PST-AUG-REF_P-fight-REF_S 'We fought together over women.'
- (5–83) bunyji uriny warli uriny i-ngi-rr-ngalk barbar all woman everyone woman 3NOM-PST-AUG-cry hit i-ngi-rr-barnj jiwarr-ij 3NOM-PST-AUG-exchange dead-DAT 'All the women cried and hit themselves for the dead person.'

Example (5–84) is consistent with this claim, initial appearances to the contrary. That is, the stones were thrown in relation to the dogs, because of their behaviour; the stones were not targeted specifically at the dogs, but were thrown in their direction, in order to bring about a change in their behaviour, to stop them fighting and barking, rather than specifically to hit them. In the latter circumstance the ALL₁ postposition would have been appropriate.

(5–84) nga-na-ngul kumbarr kujarr-ij yiil 1MIN.NOM-CM-throw stone two-DAT dog 'I threw stones at the two dogs.'

A special case of the 'in respect of' sense of the DAT postposition occurs in communicative, perceptual, and emotional events, where it specifies someone or something concerning which, or in respect of which the event takes place. ¹³ In clauses of speech the DAT postposition marks a topic or theme of the spoken utterance—someone or something about which the spoken utterance is concerned—as shown in the following examples. In (5–85) and (5–86) the DAT PP refers to the person who is being enquired about (see also example cited in fn. 12); similarly, in (5–87) and (5–88) it refers to a requested thing (cf. example (5–194) below).

(5–85) *i-ni-ny-jabajab wamb-in yarrad malirr-ij jin*3NOM-CM-PST-ask man-ERG 1AUG.CRD wife-DAT 3MIN.OBL
'He asked him regarding our wives.'

13 However, there is one example in the corpus in which a DAT PP instead appears to indicate a manner of performance of the speech event:

laib-ēdj ŋan-den dje, are mil-edj-aŋ wamborinj maŋer layib-ij nga-n-d-in-jii arri mi-li-j-ang wamburiny mangir good-DAT 1MIN.NOM-CM-say-PRS-2MIN.OBL not 2MIN.NOM-IRR-say-APP people always "I tell you in a friendly manner do not always talk harshly to the people." (Nekes & Worms 1953:636–637)

I suspect that the gloss provided by Nekes & Worms (1953) is somewhat misleading, and that a more literal translation would be 'I speak in regard to goodness or rightness: do not always talk (harshly) to people'. That is to say, the speaker says they are speaking in the name of rightness or goodness, from which it might be inferred that they are speaking in a good or friendly manner; this would be a pragmatic implicature rather than a coded meaning.

- (5–86) nga-ni-ny-jabal-irr iibal-ij jii 1MIN.NOM-CM-PST-ask-3AUG.ACC father-DAT 2MIN.OBL 'I asked them about your father.'
- (5–87) nga-ni-ny-jabal jan maj kumbarr-ij jan 1MIN.NOM-CM-PST-ask 1MIN.OBL boss money-DAT 1MIN.OBL 'I asked my boss for my money.'
- ine-manger djān wōl-edj, are
 i-na-mangkarr-jan wul-ij arri
 3NOM-CM-ask:in:vain-1MIN.OBL water-DAT not
 ngale-njan djen
 nga-li-ny-an-jin
 1MIN.NOM-IRR-catch-IMP-3MIN.OBL
 "He asked me for water, I did not give it to him." (Nekes & Worms 1953:692)

In clauses referring to crying the DAT postposition exemplifies the same sense, what or who is being cried for or over:

(5–89) baab i-ngalk-in birray-ij jin child 3NOM-cry-PRS mother-DAT 3MIN.OBL 'The child is crying for his mother.'

This same sense is also exemplified in clauses of perception such as (5–90) and (5–91), in which the DAT postposition marks the topic of communication (in the latter example, -JAL 'see' is used in an extended sense to refer to a consultation with the teacher).

- (5–90) nga-labab nga-na-m babarl-ij jan 1MIN-ear 1MIN.NOM-CM-put brother-DAT 1MIN.OBL 'I listened for word about my brother.'
- (5–91) nga-jid-in nga-n-jal teacher baab-ij
 1MIN.NOM-go-PRS 1MIN.NOM-CM-see teacher children-DAT
 'I'm going to see the teacher about the children.'

Clauses describing emotions such as anger, fear and grief can also take a DAT PP indicating a person or thing in respect of which the emotion is experienced.

- (5–92) wamb biil-ij i-n-d-in yiil-ij jin man fight-DAT 3NOM-CM-say-PRS dog-DAT 3MIN.OBL 'The man got angry with his dog.'
- (5–93) yiil-ij i-jirik-in kinyingk wamb dog-DAT 3NOM-fear-PRS DEF man 'The man is afraid of that dog.'
- (5–94) wolongon i-nen bāb berai-ēdj djen wulungkun i-n-in baab birray-ij jin grieve 3NOM-be-PRS child mother-DAT 3MIN.OBL "The child mourns for its late mother." (Nekes & Worms 1953:908)

Very occasionally -ij DAT is attached to words of other parts-of-speech. At least two temporal adverbials are attested with this postposition: *karrm-ij* (later-DAT) 'later' and *ngimbirr-ij* (night-DAT) 'until night'. It could be that in this context -ij DAT specifies temporal duration, as in Yawuru (Hosokawa 1991:244–245), though this is not entirely certain (see §6.4.1.1).

My corpus shows just one example of the DAT postposition attached to a preverb: this occurs in line (36) of Text 2. Here the DAT marks an activity, namely running, rather than an entity in respect of which the person is good. Nekes & Worms (1953) provide additional examples, including (5–95) and (5–96). The first of these invokes the prior cause or reason sense of the DAT, while the second illustrates the 'in respect of' sense.

- (5–95) Q: aŋgēdj min-damen djen maŋer?
 angk-ij mi-n-dam-in-jin mangir
 what-DAT 2MIN.NOM-CM-hit-PRS-3MIN.OBL always
 A: länjb-ēdj
 - A: länjb-ēdj lanyb-ij steal-DAT
 - Q: 'Why do you always hit him?'
 - A: 'For stealing.' (Nekes & Worms 1953:645)
- (5–96) djagod-ēdj ŋan-den, are lēan ŋal-am jakud-ij nga-n-d-in arri liyan nga-la-m return-DAT 1MIN.NOM-CM-say-PRS not like 1MIN.NOM-IRR-put wai-dj ma-djedan way-j ma-jid-in away-DAT INF_p-go-INF_S "I go back, I do not like to go further on." (Nekes & Worms 1953:443)

Adnominal uses of the DAT postposition involve some of the same senses as just discussed. In relational clauses (see §12.2.3) a DAT PP is normally used to attribute a purpose or use of an entity, as in (5–97) and (5–98). This sense is slightly less obvious in (5–99), where it is asserted that the purpose of this thing is to the addressee's good.

- (5–97) wilamay-ij, jirr jungku food-DAT 3AUG.OBL fire 'Their fire was for (cooking) food.'
- (5–98) jangkurr nga-alm-ij hat 1MIN-head-DAT 'The hat is for my head.'
- (5–99) in layib-ij jii this good-DAT 2MIN.OBL 'This is good for you.'

The general 'in respect of' sense can be found in attributive use within NPs, as shown by (5-100) and (5-101).

(5–101) *jay murrkul banangkarr-ij* 1&2MIN.OBL work today-DAT '(That's) our work for today.'

In (5–102) the DAT PP appears to form a discontinuous NP with *wul* 'water', referring to water involved with the addressee, water that the addressee is responsible for revealing.

(5–102) kir ya-ngka-rr-a-m bur aa wul scrape 1PL.NOM-FUT-AUG-CM-put place and water ya-ngka-rr-a-jal bin juy-ij 1PL.NOM-FUT-AUG-CM-see that 2MIN.CRD-DAT 'We will scrape the ground and we'll see water there from you.'

Occasionally -ij DAT has a stem-forming function, and creates a new lexical stem from the nominal to which it is attached. This use is not productive, and seems to be restricted to the nominal biil 'fight'. The form biil-ij designates the mental state associated with fighting, namely anger (example (5–92)), as well as its physiological manifestation in terms of the facial expression of frowning, as in (5–103). The new lexeme functions as a preverb (contrast biil-id (fight-ASC) 'angry, savage, sulky', which typically functions as a nominal qualifier, and biil-uk (fight-LOC) 'at fighting', which indicates an act of fighting going on at the time of another situation—see p. 187).

(5–103) angk-ij biil-ij mi-n-d-in-ang-ngay what-DAT fight-DAT 2MIN.NOM-CM-say-PRS-APP-1MIN.ACC 'Why are you frowning at me?'

5.6 $-uk \sim -ik$ Locative (LOC)

This postposition, which may be attached to nominals, pronominals, adverbials, preverbs, and inflecting verbs, serves primarily as a relator linking an NP to the core of the clause or to another NP in the clause; it can also be used to link a dependent clause to its head clause. When attached to an inflecting verb, the locative postposition is in a syntagmatic relation with a full dependent clause, not just to its host. The dependent clause is vague in its temporal relation to the head clause, and may specify the time when, time during or while, time after, place where, reason, condition, and so on, for the main clause; it may also function as a type of relative clause. This complementising use of the locative postposition is discussed in §13.3; we ignore it here.

An -uk LOC-marked NP typically provides spatial location for a situation and/or entity. This is non-specific, admitting interpretations including 'at', 'in', 'on', 'by', 'near', 'into', 'onto', and so on. Examples of the range of interpretations are given below. (In some cases a spatial adverbial is also used, apparently in a syntagm with the PP, making more explicit the relational sense invoked; such adverbials are not essential, however, and all of the following senses can be found with plain LOC-marked NPs.)

- 'at':
- (5–104) kinyingk-uk jan malirr aa ngay ya-rr-ø-in
 DEF-LOC 1MIN.OBL wife and 1MIN.CRD 1PL.NOM-AUG-sit-PRS
 'That's where my wife and I live.'
- 'in, into':
- (5–105) *i-ny-jalk-uk wul-uk ngurrngurr i-na-r*3NOM-PST-fall-LOC water-LOC drown 3NOM-CM-poke 'When he fell into the water he drowned.'
- (5–106) mangkirr lakal i-n-ny-in kalb bardangk-uk goanna climb 3NOM-CM-get-PRS up tree-LOC 'The goanna is climbing up in the tree.'
- 'over or across a surface or entity':
- (5–107) marriny nga-ny-jid barnd-uk walk 1MIN.NOM-PRS-go ground-LOC 'I walked across the sand.'
- (5–108) wamb marriny i-rr-jid-in karrawirn-uk man walk 3NOM-AUG-go-PRS hill-LOC 'The men are walking over the hill.'
- 'on, onto':
- (5–109) *i-marr-in-uk i-jalk-in barnd-uk kinyingk* 3NOM-cook-PRS-LOC 3NOM-fall-PRS ground-LOC DEF *yi-rr-warnd-in wamburiny-in* 3NOM-AUG-pick:up-PRS people-ERG 'When it's ripe, and falls to the ground, they pick it up.'
- (5–110) ward i-n-ji mirlimirl-uk stick 3NOM-CM-say paper-LOC 'It stuck onto the paper.'
- 'on top of':
- (5–111) wamburiny yi-rr-ø-in mijal kalb madikard-uk people 3NOM-AUG-be-PRS sit up car-LOC 'People are sitting on top of the car.'
- 'near', 'by', 'next to':
- (5–112) *junk ya-nga-rr-i-ny banbirrinbirr bardangk-uk* run 1PL.NOM-PST-AUG-CM-get around tree-LOC 'We ran round and round the tree.'

Less frequently, an -uk LOC PP provides a temporal location for a situation. This sense is available when the NP it is attached to refers to a time, for instance, in NPs with head nominals waalk 'sun, day', and kunyurl 'moon, month'. An example is:

(5–113) jan malirr aa baab aa ngay ya-ngi-rr-jid
1MIN.OBL wife and child and 1MIN.CRD 1PL.NOM-PST-AUG-go
perth-ung war-uk kunyurl
Perth-ALL₁ other-LOC moon
'My wife, my child and I went to Perth last month.'

Rarely, the LOC postposition is attached to a temporal adverbial:

(5–114) mangir nga-jarrijarr-in rangkar-uk jan malirr arri always 1MIN.NOM-arise-PRS early-LOC 1MIN.OBL wife not i-la-jarrjarr

3NOM-IRR-arise
'I always get up early, but my wife does not.'

As will be seen in §6.4, temporal adverbials do not normally host postpositions. It seems that when they do, they tend to be used non-specifically, to locate generic classes of situations, rather than particular instantiated situations, as in (5–114); similarly, banangkarr-uk (today-LOC) translates as 'these days'.

An -uk-marked PP often locates an entity rather than a situation, in which case the PP is in a dependency relation to an NP. Thus in a relational clause (§12.2.3) an -uk PP can be used attributively, as in (5–115); in a presentative clause (§12.2.2) it specifies the location of the presented entity, as in (5–116).

- (5–115) nga-marraj barnd-uk 1MIN-shadow ground-LOC 'My shadow is on the ground.'
- (5–116) wurrumbang karrambal bardangk-uk many bird tree-LOC 'There are lots of birds in the tree.'

A LOC PP can be linked to an NP by a dependency relation within a verbal clause, where it specifies the spatial location of some entity involved in the situation referred to. Examples (5–117) and (5–118) illustrate this: in the former, the table does not locate the situation, but rather specifies the ultimate location of the money; and in the latter, the hollow log locates the speaker's hand (see McGregor 1999a), not the speaker him/herself or the entire event.

- (5–117) kumbarr jin i-na-mankard jan-uk dabl money 3MIN.OBL 3NOM-CM-leave 1MIN.OBL-LOC table 'He left his money on my table.'
- (5–118) nga-marl nga-na-m jimbin kurrburl-uk bardangk 1MIN-arm 1MIN.NOM-CM-put inside hollow:log-LOC tree 'I put my arm into the hollow log.'

In both cases the entity located by the LOC PP occurs at that location as a result of the occurrence of the action of leaving or putting. What we have here is a type of locational secondary predication (in the sense of Nichols 1978; see also Himmelmann & Schultze-Berndt 2005b), in which it is a location rather than a quality that is predicated secondarily of the Undergoer (see §2.3 above and §12.4 below). As argued in McGregor (1997b:171–173; see also McGregor 2005b) in secondary predication an additional dependency relation is involved between the nuclear situation and the logical relation between the two NPs. In (5–117) and (5–118) it is a resultative relation. Other examples involving -M 'put' include:

- (5–119) blanket kalb i-na-m dabl-uk blanket up 3NOM-CM-put table-LOC 'He put the blanket on the table.'
- (5–120) *ni-marl kalb i-na-m na-alm-uk* 3MIN-arm up 3NOM-CM-put 3MIN-head-LOC 'He put his hands on his head.'

Other relations may obtain between the nuclear situation and the locative relation between the two phrases. None are formally marked: that is, the only relation marked is the locative one between the two NPs. Thus, instead of marking a final location resulting from the action, what may be indicated is a location that obtains throughout the temporal duration of the situation. For example, in a clause of motion, a LOC phrase may indicate where the moving entity was located as they moved—thus, a vehicle or animal on which they travelled, as in:

(5–121) wamb i-n-in jalingk yaward-uk man 3NOM-be-PRS ride horse-LOC 'The man is riding on a horse.'

In such examples, the LOC PP admits a sort of instrumental interpretation; a similar interpretation is available in examples such as (5–122), (5–123), and (5–124), where the thing located is the Undergoer not the Actor. This is, of course, a contextual interpretation, and is not a part of the meaning conveyed by the LOC postposition.

- (5–122) baal-uk jii jingkar wa-na-k belt-LOC 2MIN.OBL carry:on:belt 2MIN.NOM-CM-carry 'Carry it on your belt.'
- (5–123) kumbu nga-na-marr jungk-uk fish 1MIN.NOM-CM-cook fire-LOC 'I cooked fish on the fire.'
- (5–124) *liinyj-in i-na-m-barrkand-irr jangajang-uk* policeman-ERG 3NOM-CM-PST-tie-3AUG.ACC chain-LOC 'The policeman tied them up with a chain.'

A variant of this contextual sense is found in the following pair of examples, where the LOC PP specifies an environment for the entity, which may be deployed by the Actor, but not as a manipulable instrument.

- (5–125) *jadi jan nga-na-ralkam jungk-uk* shirt 1MIN.OBL 1MIN.NOM-CM-dry fire-LOC 'I dried my shirt at the fire.'
- (5–126) waalk-uk wa-na-m sun-LOC 2MIN.NOM-CM-put 'Put it in the sun.'

Similarly in clauses of perception a LOC PP may indicate a medium through which the perceptual process was enabled, as in:

(5–127) nga-nga-mi-jal-inyj glass-uk 1MIN.NOM-PST-REF_P-see-REF_S glass-LOC 'I looked at myself in the glass.'

Here it is presumably the reflection rather than the speaker that is located with respect to the glass; similar remarks hold for examples like (5–128).

(5–128) nga-ni-ny-jal jan baab mirlimirl-uk 1MIN.NOM-CM-PST-see 1MIN.OBL child paper-LOC 'I saw my baby in the photograph.'

Attached to a preverb, the LOC postposition generally marks an event going on contemporaneously with the event designated by the nearby finite VP, as in (5–129).

(5–129) yarrad kujarr mijal ya-rri-n-j warlawarl-uk 1AUG.CRD two sit 1PL.NOM-AUG-CM-say talk-LOC 'We two are sitting talking.'

The LOC-marked preverb in such examples may be serving as a secondary predicate, specifying a concomitant activity.

More generally, -uk LOC can be attached to an NP specifying an activity the Actor is engaged in. The abstract nominals biil 'fight', murrkul 'work', and maad 'play' are frequently found in this context, where (in collocation with the LOC postposition) they seem to function as preverbs. For example:

- (5–130) baab maad-uk i-ngi-rr-kal biik-uk child play-LOC 3NOM-PST-AUG-play shade-LOC 'The children were playing in the shade.'
- (5–131) kinyingk-uk bur mangir maad-uk i-rr-ø-in
 DEF-LOC place always play-LOC 3NOM-AUG-be-PRS
 'This is the place where they play cards.'

This usage may be involved in the interrogative construction in which activity is questioned, where the LOC postposition is attached to *angk* 'what' to form what appears to be a preverb, occurring with the verb -N 'be'.

(5–132) angk-uk mi-n-in what-LOC 2MIN.NOM-be-PRS 'What are you doing?' (Literally: 'What are you at?')

As in English and a number of other languages (McGregor 1985, 1999a; Chappell & McGregor 1995a), a part of the body of a human Undergoer which serves as the locus of an activity, usually violent, can be designated by an NP marked by the LOC postposition, as shown by examples (5–133) and (5–134).¹⁴

- (5–133) buy-in i-na-r-ngay nga-mird-uk ant-ERG 3NOM-CM-poke-1MIN.ACC 1MIN-leg-LOC 'Ants bit me on the leg.'
- (5–134) war-in baab i-n-dam ni-ward-uk other-ERG child 3NOM-CM-hit 3MIN-chin-LOC 'One child hit him on the chin.'

In intransitive clauses, a LOC-marked body-part NP may also specify the locus at which action engaged in by the Actor comes into being:

(5–135) nga-ny-jalk langarn-uk jan jungk jadjad 1MIN.NOM-PST-fall shoulder-LOC 1MIN.OBL fire cut nga-na-w-uk 1MIN.NOM-CM-give-LOC 'I fell on my shoulder when cutting wood.'

As per McGregor (1995b), in this construction the body-part NP is represented as an inalienable possession of the Undergoer in regard to the activity (McGregor 1985; Chappell & McGregor 1995a). See §12.4.2.4 for further discussion of this construction type.

NP internal usage of the LOC postposition is not common in the corpus, and there are few entirely unequivocal examples. The following pair are candidates: their LOC PP provides a locational characterisation of the referent of the NP which it follows. An alternative analysis in terms of juxtaposed NPs is also possible, however. There are insufficient examples to permit one to decide between the alternative analyses. In either case, the LOC NP attributes a location of an entity independent of the situation, in contrast to the secondary predicate uses discussed above.

- (5–136) wul i-nga-mur in-jun jarjar bucket-uk water 3NOM-PST-spill this-ABL₁ hole bucket-LOC 'Water escaped from the hole in the bucket.'
- (5–137) duly nga-na-w in lakirrinjun nga-mal-uk squeeze 1MIN.NOM-CM-give this pimple 1MIN-arm-LOC 'I squeezed the pimple on my arm.'

(5–138) is similar, except that the LOC PP modifies the head N of the NP not in terms of its location, but rather in terms of the type of entity it is a body part of. This might be regarded as an extended, abstract, use of the postposition.

¹⁴ If the body part is a part of the Agent of a transitive clause, the LOC NP will often designate a part used instrumentally, so as to effect the action, as in *carry on the head* (cf. (5–120) above, which is an exception). This sort of 'instrument', however, represents a part of the Agent's body that serves as locus for the Undergoer, and is not usually actively employed. See further McGregor (1985, 1990).

(5–138) kinyingk-kun wamb-uk ni-kard i-ngi-rri-j kinyingk

DEF-ABL₂ man-LOC 3MIN-body 3NOM-PST-AUG-say DEF

karrambal /

bird

'Then those birds took on men's form.'

In concluding this section, mention should be made of a few uses of -uk LOC that do not appear to fall into any of the above patterns, and/or that seem somewhat unusual. In the second class of apparently unusual usages are examples like (5–139) and (5–140). Clearly the event of a bull rubbing its back on a tree can be conceptualised either from the point of view of the tree as location for the rubbing of the back (as in English), or the back as a locus for the action of rubbing (in Nyulnyul). Likewise, tying leaves to a stick can be conceptualised as tying a stick to leaves or leaves to a stick. The contrasts concern perspective and the selection of reference point.

- (5–139) buluman-in ni-k wukurr i-n-j bardangk bullock-ERG 3MIN-back rub 3NOM-CM-say stick ni-k-uk 3MIN-back-LOC 'The bullock rubbed its back on the tree.'
- (5–140) kirdkird wa-na-w bin bardangk birlabirl-uk tie 2MIN.NOM-CM-give this stick leaves-LOC 'Tie leaves to the stick.'

Some examples of uses that do not fall neatly into the above patterns are:

- (5–141) *yambun-uk i-ngi-rr-wid wil* together-LOC 3NOM-PST-AUG-eat meat 'They shared the meat, eating it together.'
- (5–142) *kumbarr jirr-irr i-rr-a-mur-in kari-uk arri-jirr* money 3AUG.OBL-AUG 3NOM-AUG-CM-spill-PRS beer-LOC not-3AUG.OBL *wilamay-ung* food-ALL₁ 'They wasted their money on grog, they had none for food.'

In (5–141) the LOC postposition is attached to an adverbial. It seems that the difference between this and the corresponding clause without the LOC PP is that in (5–141) it is implied that the people shared their food, and did not merely eat together. In (5–142) the LOC PP designates the commodity on which the money was wasted (as in English, on which it is perhaps calqued).

5.7 -jun Ablative₁ (ABL₁)

The ABL₁ postposition can be attached to nominals, adverbials, preverbs and non-finite inflecting verbs. It has adnominal and intraclausal—but not interclausal—relational functions; occasionally it is used derivationally to create a new nominal stem. It marks a currently relevant source or point of origin of an entity or situation.

The most common functions of the ABL₁ postposition are of the adnominal relational type: either within an NP, or between NPs. In the first case an ABL₁ PP (usually consisting of a single word) occurs within another NP, modifying it in terms of the quality of having originated at the place referred to by the former phrase, the ABL₁ PP. Thus, in (5–143) the NP waamarn bur 'different place' is specified as the origin of the people, which quality is attributed to them. ¹⁵ And in (5–144) Christmas Creek station is given as the place of origin of the man. For a place of origin to be interpretable as a quality attributed of the head N it must be significant to the referent entity. It cannot merely represent the point from which a person walked on any arbitrary occasion: the fact that a person might have at some stage of their life left Christmas Creek station or some other place, does not mean that they can be characterised as being from that place. This is in part what was being alluded to above with the remark that the referent of a -jun ABL₁ PP is a currently relevant one.

- (5–143) *irr-in jinajin-ang i-ngi-rr-a-k-jirr* they-ERG mock-INS 3NOM-PST-AUG-CM-carry-3AUG.ACC *waamarn-jun wamburiny* different-ABL₁ people 'They were mocking the foreigners.'
- (5–144) walirr i-n-in kinyingk jiwarr kinyingk-uk back 3NOM-be-PRS DEF dead:body DEF-LOC nga-n-di-jin warinyjirr wamb christmas creek-jun 1MIN.NOM-CM-say-3MIN.OBL one man Christmas Creek-ABL₁ wamb man ""He's lying here, the dead one," I told a man from Christmas Creek."

The ABL₁ postposition sometimes occurs in syntagm with a spatial adverbial instead of an NP, where this adverbial indicates the characterising place of origin—and normal dwelling place—of the referent. Thus:

- (5–145) *kalb-ijun iibal* up-ABL₁ father 'father from above, God'
- (5-146) walijingk-jun south-ABL₁ 'southerners'

The NP in (5–145) has become lexicalised to mean 'God', likewise in (5–146) the expression appears to be lexicalised, there being no separate 'inhabitant of' form of walijingk 'south', as there are for the other cardinal adverbials (see Table 6–1). Other possibly derivational uses of this postposition are illustrated in lines (65) and (73) of Text 2, where nyungul-jun (old:person-ABL₁) appears to be a nominal denoting an old person or old people. It is not known how this contrasts with nyungul 'old person'.

¹⁵ It will be observed that the head N of the ABL₁ PP, *bur* 'place', is not present. Evidently it has been ellipsed from the NP, being contextually retrievable.

(5-147) exemplifies a variant of this sense of the ABL₁ postposition in which the source is not a place but a thing.¹⁶

(5–147) in wurrumbang orange-jun bardin band-uk this much orange-ABL₁ skin ground-LOC 'There are lots of orange skins on the ground over there.'

The ABL₁ postposition sometimes marks an NP designating something with which the entity was involved in a significant way, and that can be attributed as a quality of the entity. Thus, in (5–148) the man is described by his prior involvement with alcohol (i.e. he had been drinking a lot), the effects of which are still present. *Kari-jun* 'from alcohol' would not be used in the NP if the effects had worn off, and the person was now sober. The engagement is an active one in (5–148); however, this is not necessarily the case, as in (5–149), where the man suffers as a patient of the sickness.

- (5–148) *kari-jun wamb i-ny-jarrjarr liyan marriny-ung*beer-ABL₁ man 3NOM-PST-arise like go-ALL₁ *i-ny-jalk*3NOM-PST-fall
 'The drunken man stood up and tried to walk, but he fell over.'
- (5-149) ma-jala-jal-in yubul-jun wamb INF_P -see-see- INF_S sick- ABL_1 man 'Looking after the sick man.'

The involvement may be with an activity, in which case *-jun* ABL_1 is attached to a preverb or a non-finite form of an inflecting verb. ¹⁷ For instance:

```
(5–150) madaman-djon wamb / badaŋg
ma-dam-an-jun wamb / bardangk
INF<sub>p</sub>-hit-INF<sub>S</sub>-ABL<sub>1</sub> man tree
'a wounded man/a felled tree' (Nekes & Worms 1953:664)
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Temporal adverbials marked by *-jun* ABL₁ can be employed within NPs to indicate the temporal provenance of an entity, as in the following example:

(5–151) nganyji i-n-in biird-jun wil

INT 3NOM-be-PRS yesterday-ABL₁ meat
'Is there any of yesterday's meat left?'

Turning now to inter-NP relational uses of *-jun* ABL₁, we find that the main one is to indicate the source or point of origin of an entity, this being attributed of the entity in relational clauses in the following examples (the same sense can be found between NPs in apposition within a clause, as in 'I gave it to that man, the man from Beagle Bay'):

More often the possessive construction is used to express 'ownership' of bodily products and exuviae (see §10.3 below). It is not known precisely how the two constructions contrast semantically.

¹⁷ Nekes & Worms (2006:219) refer to this as a passive participle, and contrast it with the active participle employing the agentive derivational morpheme -id.

- (5–152) in wamb beagle bay-jun this man Beagle Bay-ABL₁ 'This man is from Beagle Bay.'
- (5–153) bin wamb bindan-ijun that man bush-ABL₁ 'That man is a bush fellow.'

The involvement sense is also found in this syntactic context, as in example (5–154), but not the temporal sense—i.e. there are no examples comparable to *this meat is yesterday*'s or *this meat is from yesterday*. However, there is no apparent reason why this should be impossible, and most likely the absence reflects lacunae in the corpora.

(5–154) bin wamb wul-ijun jid i-n-ji that man water-ABL₁ stand:up 3NOM-CM-say i-ny-jarrjarr bilay i-ny-jalk
3NOM-PST-arise next 3NOM-PST-fall 'That man was drunk; he stood up, but fell over.'

The ABL_1 postposition is less often found in intraclausal relational uses, but even so a variety of senses are associated with this environment. In clauses describing events involving motion of an entity, ABL_1 PPs normally indicate the point of origin of the moving object, whether it be the Actor, as in (5-155) and (5-156), or the Undergoer, as in (5-157).

- (5–155) wul i-nga-mur in-ijun jarjar bakid-uk water 3NOM-PST-spill this-ABL₁ hole bucket-LOC 'Water spilt out from the hole in the bucket.'
- (5–156) wardi-jun daarr i-na-r north-ABL₁ emerge 3NOM-CM-pierce 'He came from the north.'
- (5-157) i-ngi-rr-i-ny kumbarr ngay-jun 3NOM-PST-AUG-CM-get money 1MIN.CRD-ABL $_1$ 'They got money from me.'

Sometimes, however, an ABL₁ PP represents the locus at which the situation is seen as beginning, as in (5-158) (cf. (5-174) and (5-175), and McGregor 1990:182–184), or from which it emanates, as in (5-159).

- (5–159) mangir i-ngank-irr ni-lirr kiinyji-jun always 3NOM-speak-3AUG.ACC 3MIN-lips shut-ABL₁ 'He always speaks to them from shut lips.'

An ABL₁ PP can also indicate the cause of a situation, as in:

- (5–160) *ni-marl kinyji i-n-ji yubul-jun* 3MIN-arm bone 3NOM-CM-say sick-ABL₁ 'His hand is clenched shut from illness.'
- (5–161) *i-rr-buduwa-nyj-an* aa karrji-karrji i-rr-barnji
 3NOM-AUG-fight-REF_S-IMP and swear-swear 3NOM-AUG-exchange kaari-jun
 sour-ABL₁
 'They fought together and swore from grog.'
- (5–162) mirer-djon in-djimb
 mirrir-jun i-ny-jimb
 magic:charm-ABL₁ 3NOM-PST-die
 'He died from a magical charm.' (Nekes & Worms 1953:722–723)

The availability of the causal sense does not contradict my claim that sources marked by ABL_1 must be currently relevant. Even if the cause is no longer physically present—as in (5–160), where the person need not still be ill—its effects clearly are.¹⁸

5.8 -kun Ablative₂ (ABL₂)

The senses of this postposition, which attaches to nominals, adverbials and preverbs, overlap somewhat with the senses of *-jun* ABL₁. However, unlike *-jun* ABL₁, the ABL₂ postposition is only used to mark relations within situation clauses; it never qualifies or characterises an entity. Semantically, as mentioned on p. 165 above, the difference is comparable with the difference between the two ablative postpositions in Nyikina (Stokes 1982:96, 101) and Gooniyandi (McGregor 1990:185): ABL₁ invokes focus on a presently relevant source, whereas ABL₂ does not—the source need not be currently relevant, and there is no focus on it. Instead, focus is on the movement itself.

In clauses of motion, ABL_2 PPs indicate the spatial location or entity from which motion is directed, from which the moving entity emanates. This is usually the beginning point of movement, although the source is not necessarily currently relevant: the connection may be physically severed (as in (5-164) and (5-165)), although it need not be (as in (5-163)).

- (5–163) marl i-na-ng-k bur-ukun jin exit 3NOM-CM-PST-carry camp-ABL₂ 3MIN.OBL 'He's walking out of his house.'
- (5–164) way junk i-n-nyu christmas creek station-kun wul away run 3NOM-CM-catch Christmas Creek station-ABL₂ water arri i-la-n-an-karr niwirr-uk not 3NOM-IRR-be-IMP-TEM creek-LOC 'He ran away from Christmas Creek station when it was dry, and there was no water in the creek.'

¹⁸ Thus, a cause marked by the ABL₁ postposition is not necessarily temporally contiguous with its effect—though it often is. Note that in (5–161) the effects of the involvement with drinking must still be applicable for -jun ABL₁ to be used. If they had been drinking a week or so ago, there could be no causal connection between the events, and -jun ABL₁ would not be used.

(5–165) *i-ny-jalk bardangk-ukun*3NOM-PST-fall tree-ABL₂
'He fell out of the tree.'

As (5–163) and (5–165) indicate, sometimes 'out of' is a more precise English gloss; in these instances, the source is a (partly) obscuring or surrounding environment within which the item in motion was initially located. This sense is also illustrated in the next example, where the source is a body part of a human being, rather than a geographical feature.

(5–166) wamburiny i-n-ny-in-karr jin warrwal people 3NOM-CM-get-PRS-TEM 3MIN.OBL fit i-n-ny-in ni-lirr-kun i-mur-in 3NOM-CM-get-PRS 3MIN-mouth-ABL₂ 3NOM-spill-PRS karirr saliva 'When a person has a fit saliva spills out of their mouth.'

This sense also occurs when the ABL₂ postposition is attached to an adverbial:

(5–167) baybirr-kun i-na-ng-kalak-ngay behind-ABL₂ 3NOM-CM-PST-approach-1MIN.ACC 'He came from behind me.'

ABL₂ PPs are not restricted to clauses of translational motion. As (5–168) and (5–169) reveal, they can specify the source of the Undergoer of a transitive clause.

- (5–168) ni-lirr-kun jibul i-n-j wul 3MIN-lips- ABL_2 spray 3NOM-CM-say water 'He sprayed water from his mouth.'
- (5–169) wane-wolb mogonj ŋalm-gon
 wa-na-wulb mukuny nga-alm-kun
 2MIN.NOM.FUT-CM-chase fly 1MIN-head-ABL₂
 'Chase away the flies from my head!' (Nekes & Worms 1953:907)

ABL₂ PPs can also have local spatial senses in clauses that do not involve movement; in such cases they indicate the origin or source from which the event emanates. Depending on the type of event, different contextual senses are identifiable. In states, an ABL₂ phrase can indicate the point at which the Actor is attached to something else. This is illustrated in the following example, in which the positional state of the flying foxes is represented as extending downwards from the branches of a tree.

(5–170) nimanburr i-rr-jiwandi bardangk-ukun irr-alm-inyirr flying:fox 3NOM-AUG-hang branch-ABL₂ 3AUG-heads-COM jimbin down 'Flying foxes hang from branches with their heads down.'

In inceptive and inchoative events an ABL₂ PP often indicates the initial state from which the change took place. In this case the postposition is attached to a preverb, as in:

(5–171) *i-ny-jarrjarr mijal-ukun* 3NOM-PST-arise sitting-ABL₂ 'He stood up from sitting.'

Alternatively, in an inceptive or inchoative event an ABL_2 PP may represent a cause of the change of state, as in (5–172). (In contrast with the causal sense of ABL_1 , exemplified in (5–160) and (5–161) above, the source need not be temporally or physically associated with the speaker's redness in (5–172).)

(5–172) wirril nga-n-ji waalk-ikun red 1MIN.NOM-CM-say sun-ABL₂ 'I got red from the sun.'

In perceptual events an ABL₂ phrase will indicate the locus from which the perceiver engaged in the event, as shown by:

(5–173) *jikir i-n-ji baybirr bardangk-ukun* peep 3NOM-CM-say behind tree-ABL₂ 'He peeped from behind the tree.'

The ABL₂ postposition *-kun* is sometimes attached to a body-part nominal in a clause describing the induced motion of an animate, to indicate that the animate being was moved by action connecting at that part (cf. also (5-166), (5-168), and (5-169)):¹⁹

- (5–174) mangkirr yaarr i-na-ng-k ni-warl-ikun goanna drag 3NOM-CM-PST-carry 3MIN-tail-ABL₂ 'He dragged the goanna by the tail.'
- (5–175) nga-alm-ukun yaarr i-na-ng-k-ngay 1MIN-head-ABL₂ pull 3NOM-CM-PST-carry-1MIN.ACC 'He pulled me by the hair.'

Temporal usage of -kun ABL₂ is rare, and seems to be restricted to circumstances where it is attached to the determiner kinyingk DEF: as lines (61), (64) and (120) (among others) of Text 2 illustrate, the meaning conveyed is 'after that, then'.

5.9 -kung Ablative₃ (ABL₃)

The third ablative postposition, like -jun ABL₁, can be attached to nominals, pronominals, adverbials, preverbs, inflecting verbs and conjunctions. Like -kun ABL₂, but unlike -jun ABL₁, this postposition appears not to have inter-NP usages, and always serves as a relator within clauses or clause complexes. -Kung ABL₃ usually marks the source from which a motion event emanated, this being the initial location of the Actor (see §12.3.2.1):

(5–176) nga-mird nga-na-ng-karrmar nga-ny-jalk-uk 1MIN-leg 1MIN.NOM-CM-PST-break 1MIN.NOM-PST-fall-LOC

¹⁹ In Gooniyandi an ablative postposition can also be used in the same context; however, it is the one focussing on the source, -yangga, that is employed in that language (see McGregor 1990:183–184).

bardangk-ukung tree-ABL₃ 'I broke my leg when I fell out of the tree.'

- (5–177) *nai dar nan-aṛ broome-gong ngay daarr nga-na-r broome-kung* 1MIN.CRD arrive 1MIN.NOM-CM-poke Broome-ABL₃ 'I came from Broome.' (Nekes & Worms 1953:621)
- (5–178) goror djibel djibel in-aran djen jesus kururr jibil-jibil i-na-r-an-jin jesus blood drip-drip 3NOM-CM-poke-IMP-3MIN.OBL Jesus nigad-gong ni-kad-kung 3MIN-body-ABL₃ 'Blood dripped from the body of Jesus.' (Nekes & Worms 1953:633)

In a few cases the clause does not describe a motion event, but involves the change of position of something in it—normally the Undergoer—as in the next example, where the bag of flour changes its location. The ABL₃ PP indicates the point of origin or source of the item that moves.

(5–179) modaŋ eŋere-nj mai wamborinj ibal-gong mudang i-ngi-rr-i-ny may wamburiny iibal-kung full:bag 3NOM-PST-AUG-CM-get food people father-ABL₃ 'The people got a full bag of flour from Father.' (Nekes & Worms 1953:724)

Lines (192) and (210) of Text 2 show ABL_3 PPs in clauses involving no motion whatsoever. (Incidentally, they also show this postposition attached to the spatial adverbial *jimbin* 'below, down'.) In these examples the ABL_3 PP specifies the place from which an Agent perceives something; one might construe this place as the source of an event of fictive motion. And in just one example the *-kung* ABL_3 PP occurs in a non-situation clause, where it designates the tertium comparationis:

(5–180) ginjing war niganbal nai-gong kinyingk war ni-kanbal ngay-kung

3MIN.CRD other 3MIN-appearance 1MIN.CRD-ABL₃

'His figure is different from mine.' (Nekes & Worms 1953:880–881)

When attached to the conjunction *aa* 'and', *-kung* ABL₃ shows a temporal rather than a spatial sense—i.e. 'after that', as in line (60) of Text 2.

Finally, -kung ABL₃ can be attached to verbs. Line (140) of the text in Text 2 shows it attached to a preverb, indicating the causal source of the Actors' tiredness. And according to Nekes & Worms (1953:621), -kung ABL₃ can also be attached to inflecting verbs of dependent clauses which locate the main clause temporally as subsequent to the situation of the dependent clause (see §13.3.1.2.1.4 for discussion and examples). This use of the postposition is not represented in my corpus.

How precisely -kung ABL $_3$ differs semantically from -kun ABL $_2$ is unclear. The two postposition do have somewhat different ranges of senses, but this could be a reflection of inadequacies in the corpus, and it is uncertain how these differences relate to differences in

inherent meanings. Possibly they are dialectal or idiolectal differences; possibly they are sociolinguistic. Carmel Charles almost always used the ABL₂ postposition, (5–176) being the only instance of its use in my entire corpus. Albert Kelly, on the other hand, clearly preferred the ABL₃ postposition; in Text 2 the only environment in which he uses -kun ABL₂ is attached to the determiner kinyingk DEF, meaning 'after that'. The corpus in Nekes & Worms (1953) includes a fair number of instances of each postposition, but the authors do not attempt to characterise the difference between them.

5.10 -ung Allative₁ (ALL₁)

This postposition is attested with nominals, pronominals, adverbials, preverbs and clauses (where it is almost always attached to the inflecting verb). As expected, it is normally used to indicate the destination towards which a motion event is orientated; this is typically defined in relation to an entity (example (5–181)), place (example (5–182)), or geographical region (examples (5–183) and (5–184)). In the latter case the postposition often glosses as 'into'.

- (5–181) *i-ny-jid kumbarr-ung*3NOM-PST-go stone-ALL₁
 'He went to the stone.'
- (5–182) banangkarr mi-jid derby-ung today 2MIN.NOM-go Derby-ALL₁ 'When are you going to Derby?'
- (5–183) wamburiny i-ngi-rr-jid birndan-ung yambun people 3NOM-PST-AUG-go scrub-ALL₁ together 'They went into the bush together.'
- (5–184) buy i-ngi-rr-jid jimbin bur-ung jirr ant 3NOM-PST-AUG-go inside camp-ALL₁ 3AUG.OBL 'Ants went into their hole.'

As in the normal interpretations of the above examples, the destination is usually reached or intended to be reached. This applies also to the future motion event of (5–182), where what is being asked is when the addressee is planning to go to Derby, and not merely in that direction (and e.g. returning from halfway). However, it is not necessary for this to be so, as shown by (5–185), where the PP specifies just the direction upwards. Thus the terminal sense represents a pragmatic implicature rather than coded semantic meaning.

(5–185) *ni-marl-ang i-n-wirim-in kalb-ung* 3MIN-arm-INS 3NOM-CM-try-PRS up-ALL₁ 'He makes signs in the air.'

The postposition -ung ALL₁ is not restricted to clauses of motion, as the following example illustrates:

(5–186) *i-ngi-rr-miimii* wul kulukurr-ung bur 3NOM-PST-AUG-search water west:country-ALL₁ place 'They looked for water in the western country.'

In examples like this the ALL₁ PP indicates the place towards which the action, or a motional component of the action, is oriented. A related sense occurs in the following three examples, where the ALL₁ PP indicates the intended recipient of a communicative event.

- $(5-187) \qquad \textit{arri i-la-rra-r} \qquad \textit{mirlimirl ngay-ung} \\ \text{not 3NOM-IRR-AUG-poke paper} \qquad 1 \\ \text{MIN.CRD-ALL}_1 \\ \text{`They didn't write to me.'}$
- (5–188) biird kujarr uriny i-nga-rr-ngank-an wurraarra yesterday two woman 3NOM-PST-AUG-speak-IMP Worrorra ngank ngay-ung language 1MIN.CRD-ALL₁ 'Yesterday the two women spoke Worrorra to me.'
- (5–189) *in-in baab nyim i-na-w-jan nii-m* this-ERG child blink 3NOM-CM-give-1MIN.OBL 3MIN-eye *ngay-ung* 1MIN.CRD-ALL₁ 'The boy winked at me.'

In (5–190), by contrast, the ALL₁ PP designates the target language, rather than the recipient of the message.

(5–190) ngay-in nga-n-julng-in nyulnyul english-ung 1MIN.CRD-ERG 1MIN.NOM-CM-tell-PRS Nyulnyul English-ALL₁ 'I translated Nyulnyul into English.'

The ALL_1 postposition covers some of the range of meanings usually associated with the dative in Australian Aboriginal languages, including other Nyulnyulan languages. The major ones are the purposive and projected involvement senses. In the former case what is indicated is that the activity is directed towards a target, not as a destination, but rather as its purpose. In (5-191), for instance, *maad* 'play' indicates the purpose of the action of approaching the other children; and likewise in (5-192) for *wil* 'meat, fish'.

- (5–191) bin baab i-la-kalak-irr warang baab this child 3NOM-IRR-approach-3AUG.ACC others child maad-ung play-ALL₁ 'This child doesn't join the others at play.'
- (5–192) wil-ung i-rr-jid-in yu-ngku-rr-miimii fish-ALL₁ 3NOM-AUG-go-PRS 3NOM-FUT-AUG-search 'They're going hunting.'

As we have seen, the DAT postposition also marks some purposes; however, it does not specifically indicate intentional purposes towards which an action is directed.

Both the local sense of direction towards a destination, and the non-local sense of purpose can occur in a single clause, these being distinguished by context and world knowledge. Thus, in (5–193) knowledge of the world indicates that the first ALL₁ indicates the destination, while the second indicates the purpose.

(5–193) nga-ny-jid shop-ung may-ung 1MIN.NOM-PST-go shop-ALL₁ food-ALL₁ 'I went to the shop for bread.'

In the projected involvement sense the ALL₁ PP designates something the individual engaging in the situation intends to be involved in a general way with: an implicated sense (McGregor 1990:324, 2002a), with the additional component 'direction towards': the action is directed towards the implicated thing as a target. It is in terms of the implicated component of meaning that the ALL₁ postposition contrasts with the DAT postposition, which does not specify that the involved thing is a target. Instantiations of the projected involvement sense include: something one may ask for (example (5–194)—contrast (5–85)–(5–87) above where the DAT-marked PP merely indicates something asked about), something desired (example (5–195)), or something in regard to which a psychological or physiological state is experienced ((5–196) and (5–197)—by contrast, the DAT PP in (5–89) indicates someone who the crying is about or over).

- (5–194) wa-n-jabal wil-ung 2MIN.NOM.FUT-CM-ask meat-ALL₁ 'Ask him for meat.'
- (5–195) baab-in jan i-ni-ram-jan kumbarr-ung child-ERG 1MIN.OBL 3NOM-CM-expect-1MIN.OBL money-ALL₁ aa kabirl-in jan and grandson-ERG 1MIN.OBL 'My child expected money from me, even my grandson.'
- (5–196) may-ung jarrad marrkin ya-rri-j food-ALL₁ 1AUG.OBL hunger 1PL.NOM-AUG-say 'We are hungry for food.'
- (5–197) bin baab i-ngalk-in birray-ung jin that child 3NOM-cry-PRS mother-ALL₁ 3MIN.OBL wa-na-wurlawurl

 2MIN.NOM.FUT-CM-comfort 'That child is crying for its mother; comfort it.'

An ALL₁ PP may also indicate something in regard to which a quality or property obtains, and which benefits or disadvantages that entity. Thus in example (5–198) the speaker is saying that they were made boss of a community of people, and in (5–199) the place is specified as being no good in regard to dogs (but not necessarily for anything else).

- (5–198) *maj i-ngi-rr-a-m-ngay wamburiny-ung* boss 3NOM-PST-AUG-CM-put-1MIN.ACC people-ALL₁ 'They made me boss of the community.'
- (5–199) in bur arri layib kinyingk-ung this place not good DEF-ALL₁ 'This place is no good for dogs.'

Finally, when it occurs in syntagm with a full clause, the ALL₁ postposition indicates a purpose for the situation of the main clause, a situation implicated in the situation denoted by the main clause, or a situation sought after. See §13.3.2.2.2 for discussion and examples.

5.11 -mardikan Allative₂ (ALL₂)

This poorly attested postposition attaches to nominals and spatial adverbials, and indicates a place towards which motion is oriented; there is no implication that this point is a target to be reached. It specifies 'towards, in the direction of, but not reaching', whereas -ung ALL₁ specifies 'towards', 'up to' being a possible interpretation. Thus, in (5-200) there is no suggestion that the speaker intended the sun as a target to be hit; nor in (5-201) and (5-202) do kalb 'up, above' and walij 'south' specify targets to be actually reached.

- (5–201) nga-marl nga-ny-jarrad kalb-amardikan 1MIN-arm 1MIN.NOM-PST-reach up-ALL₂ 'I put my arm upwards.'
- (5–202) Q: arag i-nen nancy? arrak i-n-in nancy where 3NOM-be-PRS Nancy
 - A: walēdj-madagan in-djed walij-mardikan i-ny-jid south-ALL₂ 3NOM-PST-go
 - Q: 'Where is Nancy?'
 - A: 'She went south.' (Nekes & Worms 1953:664)

The bulk of instances of this postposition—including all examples in Nekes & Worms (1953)—show it attached to adverbials. -*Mardikan* ALL₂ has only spatial orientation senses, and unlike -*ung* ALL₁, is not used to express purposes. This can presumably be accounted for by virtue of the fact that the postposition -*mardikan* ALL₂ does not specifically indicate a target—a purpose will always be targeted.

5.12 -mirr Perlative (PER)

The perlative postposition attaches to nominals, adverbials and pronominals, but not to preverbs, inflecting verbs, or clauses. Whereas the ablative and allative postpositions indicate a terminus (beginning or endpoint) or extended terminus (possible terminus, if path is projected) of a motion event, the perlative indicates something that is not a terminus or extended terminus—it is not a (projected) beginning or end point of motion—but is an intermediate point or set of points along the way. Thus, one of the functions of this postposition is to specify the path along which motion takes place by reference to a point or points on it. Here the postposition is attached to an NP or adverbial designating a path or route of some type, as in examples (5–203)–(5–205).

- (5–203) nga-ny-jid makirr-imirr 1MIN.NOM-PST-go road-PER 'I walked along the road.'
- (5–204) marriny i-ny-jid kalb wul-imirr walk 3NOM-PST-go up water-PER 'He walked upstream.'
- (5–205) jakurd ya-nga-rri-j niwirr kalb-imirr start 1PL.NOM-PST-AUG-say creek up-PER 'We started back, along the bank of the creek.'

In the last two examples, the path is specified somewhat indirectly: in (2–204) wul 'water' refers to a creek or river (not just the water in it); in (5–205), kalb 'up, above' refers to the top of the bank of a creek.

Sometimes the path is not so clearly defined as in the previous examples, and the motion takes place along a path situated on a surface, or in an area that vaguely defines it. For instance, *jaarl-imirr* (beach-PER) means 'along the beach'. And in (5–206), *wul* refers to a body of water serving as a surface along which the path of motion is situated, in contrast to (5–204) above, where it refers to the course of a creek or river. These different senses are engendered by the context, and do not represent emically distinct meanings.

(5–206) *i-ny-jid* wul-imirr

3NOM-PST-go water-PER

'He went across the water.'

Rather than indicate the path of movement or constraining surface area, a PER PP may specify an intermediate point along the path or surface. This gives rise to senses such as 'via', 'past', 'beside', 'by way of', 'around', 'over', and so on, as illustrated by the following examples:

- (5–207) *junk ya-nga-rr-i-ny banbirrimbirr bardangk-imirr* run 1PL.NOM-PST-AUG-CM-get around tree-PER 'We ran round and round the tree.'
- (5–208) *karrambal dumbar i-n-j nga-alm-imirr* bird fly 3NOM-CM-say 1MIN-head-PER 'The bird flew over my head.'

As expected, the 'intermediate point' sense of -mirr PER is normally invoked when the postposition is attached to an NP with a human or animal referent: the animate being represents something along the trajectory of motion, neither source nor target. This gives rise to the sense 'pass', 'go past', as illustrated in the following examples:

(5–209) banbirr nga-ny-jid bin-imirr arri ngank-ang around 1MIN.NOM-PST-go this-PER not word-INS nga-la-m-an-irr
1MIN.NOM-IRR-put-IMP-3AUG.ACC
'I went past them, not talking to them.'

(5–210) *junk i-n-nyu ngay-imirr* run 3NOM-CM-catch 1MIN.CRD-PER 'He ran past me.'

The 'go past' sense is not, however, restricted to NPs with animate referents.

Just as the PER PP may specify an area rather than a line, so too may it designate an intermediate area along the path, rather than a point on it. This gives rise to the senses 'through' and 'over', as illustrated in the following examples:

- (5–211) marriny i-ny-jid kurrili-mirr go 3NOM-PST-go mangrove-PER 'He walked through the mangroves.'
- (5–212) *jubul nga-n-ji murrul-mirr wul nyunikabiny-ung* swim 1MIN.NOM-CM-say little-PER water other:side-ALL₁ 'I waded through the shallow water to the other side.'

The body of water referred to in (5–206) need not represent the domain within which the path of motion was constrained. It might alternatively be treated as though it was a single point along the path of motion. (5–211) also admits the interpretation 'He walked past the mangroves'; disambiguation is possible by use of an adverbial.

The PER postposition sometimes provides indication of no more than the general orientation of motion: this sense generally translates into English as 'way', as in (5–213).

(5–213) *mi-jid in-imirr ngay nga-ngki-jid bin-imirr* 2MIN.NOM-go this-PER 1MIN.CRD 1MIN.NOM-FUT-go that-PER 'You go this way; I'll go that way.'

In this example the directions of movement are characterised imprecisely in terms of the system of speaker deixis: *in* 'this' and *bin* 'that' designate points somewhere along the path, not end points. When attached to adverbials, this is perhaps the most frequent sense conveyed by the PER postposition, as in the following examples:

- (5–214) bilay kalb-imirr niwir i-ny-jid again up-PER creek 3NOM-PST-go 'He again went upstream.'
- (5–215) bardangk jimbin-mirr i-ny-jid tree inside-PER 3NOM-PST-go 'He went under a tree.'
- (5–215) indicates that he went under the tree on his way.

In all of the above examples the PER phrase occurs in a clause of motion, and a non-terminal feature of the path is specified. However, PER PPs are not restricted to clauses of motion, and the corpus shows a few examples of such PPs in other clause types. In these examples the PER PP still characterises the path along which the situation is orientated. In (5–216) the person being referred to is known to be travelling around, and it is indicated that his digging occurred somewhere along the path defined by the creek; in (5–217) sight is represented as directional: it is first directed at the speaker as a target (reached), then directed elsewhere—towards nowhere in particular.

- (5–216) *i-na-lungk niwir-imirr* 3NOM-CM-dig creek-PER 'He dug along the creek.'
- (5–217) dibirr i-n-j i-ni-ny-jal-ngay
 roll 3NOM-CM-say 3NOM-CM-PST-see-1MIN.ACC
 waamirn-mirr bur i-ni-ny-jal
 different-PER place 3NOM-CM-PST-see
 'He glanced quickly at me and turned away.'

Finally, body-part terms are sometimes found in PER PPs, as in:

- (5–218) nga-na-mund wul-ang ni-kad-imirr 1MIN.NOM-CM-saturate water-INS 3MIN-body-PER 'I saturated him all over his body.'
- (5–219) *ni-many-imirr kalb aa jimbin*3MIN-neck-PER up and inside 'inside and outside of neck'

In (5–218) the person's body defines a 'path' over which the person was wet: the person is the Undergoer, and their body is represented as an intermediary, not a target; the 'line' of the body defines the path of the water. No situation is involved in (5–219); what is referred to here is the more abstract 'line' defined by the neck: a more literal translation might be 'along the neck, inside and outside'.

5.13 -karr Temporal (TEM)

The postposition -*karr* TEM may be hosted by words of any part-of-speech, including nominals, pronominals, adverbials, particles, preverbs and inflecting verbs. It serves primarily as an intra- or interclausal relator, marking either the relation between some unit and the nuclear situation (see §12.3.2), or the relation between situations specified by full clauses. It does not have adnominal or derivational uses, although it occurs in fossilised form in a few lexical roots, mostly temporal adverbials. Unlike the '-lative' postpositions discussed in the previous sections, -*karr* TEM has exclusively temporal uses. No distinctions are made between time at, time until, time from, and so on.

-Karr TEM may be attached to an NP serving as a secondary predicate of time (see \$12.4.1.2.2 and Nichols 1978), indicating the condition of an entity in the situation as or while it occurred (as in (5-220) and (5-221)), or marking the beginning of its occurrence (as in (5-222)). Observe that in (5-220) it is the Actor that is predicated on; in (5-221) it is the Agent; and in (5-222) it is the Undergoer.

- (5–220) dakadak i-n-nyu nyungurl-karr deaf 3NOM-CM-get old-TEM 'He/she became deaf as he/she got older.'
- (5–221) *qaien bāb-gar qai lanjb-og ngay-in baab-karr ngay lanyb-uk*1MIN.CRD-ERG child-TEM 1MIN.CRD steal-LOC

nga-na-ng-kal-an
1MIN.NOM-CM-PST-play-IMP
'When I was a child I used to go for stealing.' (Nekes & Worms 1953:568–570)

(5–222) wamb i-na-m-ngay murrurl-akarr man 3NOM-CM-put-1MIN.ACC small-TEM 'The man grew me up from a small child.'

However, an NP marked by *-karr* TEM need not necessarily serve as a secondary predicate: as the following pair of examples show, the *-karr* TEM-marked NP may indicate a condition of an entirely different entity, one that does not serve any role in the clause (as in (5–223)), or one that may itself designate an environmental condition (as in (5–224)).

- (5–223) majangkurl-karr ngay warli wamburiny i-ngi-rr-ngank-an young:girl-TEM 1MIN.CRD everyone people 3NOM-PST-AUG-speak-IMP nyulnyul banangkarr-uk arri i-li-rr-ngank english-manjan Nyulnyul today-LOC not 3NOM-IRR-AUG-speak English-only irr-mungk 3AUG-believe 'When I was young, everyone spoke Nyulnyul; today they don't talk it; they only know English.'
- (5–224) wul-akarr nga-ngka-land bur-uk jan water-TEM 1MIN.NOM-FUT-sit camp-LOC my 'In the wet season I'll sit in the house.'

Often -karr TEM is attached to the non-demonstrative determiner kinyingk DEF, the resulting form kinyingk-karr being used as a textual connective meaning 'then, at that time'. Textual examples include e.g. lines (17), (27), (33) and (42) of Text 3, and lines (3) and (4) of Text 4. An elicited example is:

(5–225) ya-ngi-rr-ø-uk ngank-uk ya-ngi-rr-ø
1PL.NOM-PST-AUG-be-LOC talk-LOC 1PL.NOM-PST-AUG-be
biird mijilkarr kinyingk-karr wamb i-ni-ng-kalak
yesterday afternoon this-TEM man 3NOM-CM-PST-approach
may wilamay-inyirr
vegetable:food food-COM
'While we were talking yesterday afternoon that man brought my dinner.'

According to Nekes & Worms (2006:139), -karr TEM can be added to the interrogative determiner arrak 'where' (see §4.3.3 above) giving rise to the temporal interrogative arrak(a)-karr 'what time, when'. (See also §6.4.1.1 below.)

Absolute temporal adverbials (§6.4.1.2) and temporal quantifiers (§6.4.2) sometimes host -*karr* TEM, but shifters (§6.4.1.1) evidently do not (although two of them may involve this postposition as a part of their root form—see below p. 233). Some examples are:

(5–226) mi-mulkirr majal-karr arri layib 2MIN.NOM-sleep evening-TEM not good 'Sleeping too long in the afternoon is no good.'

- (5–227) kujarr wamb bilay i-nga-rr-dam marnkarl-karr two man again 3NOM-PST-AUG-hit spring-TEM 'Two men were killed again last spring.'
- (5–228) mangir-karr baan i-na-m-an-an-irr always-TEM thus 3NOM-CM-put-IMP-IMP-3AUG.ACC 'He always did this.' (Nekes & Worms 2006:309)

It is not known precisely how temporal adverbials marked by *-karr* TEM contrast semantically with plain adverbials. One possibility is that the former indicate 'during': this would provide a reasonable explanation for the interpretation accorded to (5–226) in the gloss; it also accounts for (5–227)—the situation is situated sometime within the spring season. This explanation, however, does not shed any light on example (5–228).

As will be seen in the next chapter, a number of temporal adverbial roots involve -karr TEM as an unanalysable formative, at least in my own corpus. These include: milirrkarr 'before, some time ago', banangkarr 'today, now, soon' and bukarrikarr 'dreamtime, long ago'. Some evidence in favour of the formative status of the karr segment comes from the fact that absolute temporal adverbials involving a frozen instance of -karr can be further marked by -karr, as illustrated by the following example:

(5–229) bukarrikarr-karr bur jin winin wunkunurr-uk dreamtime-TEM country 3MIN.OBL emu Milky:Way-LOC 'In the dreamtime the emu's place was in the Milky Way.'

Otherwise, sequences of the same postposition are not attested. Historically, no doubt, these roots have their origin in stems involving the temporal postposition *-karr*.

Finally, -*karr* TEM is used to mark interclausal relations, usually of time or condition (see §13.3.1.2.1.2). For now a couple of illustrative examples will suffice: (5–230) shows a temporal relationship, while (5–231) shows a conditional relationship—also present in the potential sense associated with the putatively insubordinate use in (5–232).²⁰

- (5–230) way junk i-n-nyu christmas creek station-kun wul arri away run 3NOM-CM-get Christmas Creek station-ABL₂ water not i-la-n-an-karr niwirr-uk
 3NOM-IRR-be-IMP-TEM creek-LOC
 'He ran away from Christmas Creek station when it was dry, and there was no water in the creek.'
- (5–231) yaward-in yu-ngku-ngul-karr kinyingk wamb horse-ERG 3NOM-FUT-throw-TEM DEF man warang-in yu-ngku-rr-kanm others-ERG 3NOM-FUT-AUG-laugh 'If the horse throws him, the others will laugh.'
- (5–232) nga-la-marr-karr 1MIN.NOM-IRR-burn-TEM 'I might get burnt.'

²⁰ The particle *nyanangkarr* 'perhaps, maybe' appears to involve *-karr* TEM as a frozen formative—presumably invoking the potential sense associated with the postposition in uses such as this.

As in these examples, *-karr* TEM is often attached to the inflecting verb of the dependent clause. However, this is not always the case, and it may be attached to a word of any class that occurs initially, including a particle. Likewise independent uses in potential clauses such as (5–232) above, *-karr* TEM may be attached to the first word of the clause, irrespective of its part-of-speech classification. Thus, for instance, in (5–233) and (5–234) it is attached to a particle.

- (5–233) arri-karr nga-li-jal-irr wajamarr not-TEM 1MIN.NOM-IRR-see-3AUG.ACC later 'I might not see them later.'
- (5–234) nganyj-ikarr mi-n-nyu nyi-mal INT-TEM 2MIN.NOM-CM-catch 2MIN-arm 'Did you rub that stuff on your arm?'

5.14 -ngirr Semblative (SEM)

This postposition enters into syntagms with words, phrases or clauses, and may be attached to nominals, pronominals, adverbials, particles, preverbs and finite verbs. It has adnominal and complemetising relational uses, but not interclausal relational functions. It indicates that something, someone, some circumstance or some situation is like the referent of the unit to which it is attached. It invokes a likeness between the two referents.

Adonminal relational uses of *-ngirr* SEM are always intraclausal rather than intra-NP: there are no examples where the unit marked by this postposition serves as a qualifier in an NP. (This may, of course, represent an inadequacy of the corpus: one would expect to find it in NPs such as 'the boy-like man'.) In a verbless relational clause (see §12.2.3) an NP marked by *-ngirr* SEM will attribute a quality of being like something: thus, in (5–235) the woman is asserted as being like a man in appearance. (It should be observed that in this example *-ngirr* SEM is in syntagm with the full NP *wamb nikinbal* 'man's appearance'.) The respect in which the comparison is made need not be stated: in (5–236) contextual factors must be invoked in order to understand that the comparison is in terms of weight, rather than in terms of appearance.

- (5–235) bin uriny wamb-ingirr ni-kinbal that woman man-SEM 3MIN-appearance 'That woman looks like a man.'
- (5–236) in uriny kumbarr-ingirr this woman rock-SEM 'This woman is (as heavy as) a rock.'

In a verbal clause, a *-ngirr* SEM PP may attribute a quality of an entity in such a way that it relates to that entity via the event. In inchoative situations this PP will designate a new quality or state of the entity, as in (5–237) and (5–238). In stative clauses, such as (5–239), it designates a quality of the entity in that state or in regard to a specified sense.

(5–237) *nga-na-m butter jungk-uk brayingban-uk wul-ingirr* 1MIN.NOM-CM-put butter fire-LOC frying:pan-LOC water-SEM

i-ny-jid3NOM-PST-go'I put the butter in a frying pan in the fire, and it went liquid.'

- (5–238) karrambal dibirr i-ngi-rr-j-an wamb-ingirr irr-kard bird roll 3NOM-PST-AUG-say-IMP man-SEM 3AUG-body 'The birds took on men's forms.'
- (5–239) bob-ŋer ŋoland i-bondjen djen ger buub-ngirr nguland i-bunj-in jin kirr flower-SEM tree:type 3NOM-smell-PRS 3MIN.OBL scent 'It smells like the scent of the nguland tree.' (Nekes & Worms 1953:797)

A comparison may also be invoked with another entity in respect of the situation. Thus in (5–240) and (5–241) the Agent is compared with someone else in regard to the manner of performing the action; in the former, but not the latter, this is specified explicitly.

- (5–240) may i-ni-ng-kid ni-lirr kinyji wajbal-ngirr food 3NOM-CM-PST-eat 3MIN-lip shut white:person-SEM 'He ate with his lips closed like a white person.'
- (5–241) bin-in wamb aa uriny ngay-ngirr i-ngi-rr-kanm that-ERG man and woman 1MIN.CRD-SEM 3NOM-PST-AUG-laugh 'That man and woman laughed like me.'

It need not be the Agent that is compared, as (5–242) and (5–243) demonstrate. In (5–242) the shooters are not being compared with dogs: rather, it is the persons shot who are. And in (5–243) the missionaries are asserted to have been looking after their charges as though they were little children. In both cases the comparison characterises the manner of performance of the action: as though directed at dogs rather than people, and little children rather than adolescents.

- (5–242) bany i-ngi-rr-m-an-irr yiil-ingirr shoot 3NOM-PST-AUG-put-IMP-3AUG.ACC dog-SEM 'They shot them like dogs.'
- (5–243) murrul-murrul baab-ingirr i-ngi-rr-jala-jal-an-yarrad little-little child-SEM 3NOM-PST-AUG-see-see-IMP-1AUG.ACC riib ya-la-rr-j-an bad 1PL.NOM-IRR-AUG-say-IMP 'They watched over us like little children in case we did wrong.'

Examples like (5–240)–(5–243) involve adnominal rather than interclausal relational functions of *-ngirr* SEM. A likeness is established between the referents of two NPs in respect of the situation: in particular, the situation comes about in a way as though it were another Agent, Undergoer, or whatever, that was involved. There is a type of conditional relation between the attribution of the likeness and the performance of the situation.

The SEM postposition is sometimes in a syntagmatic relation with a full finite clause, the referent of which serves as a point of comparison for another situation which is claimed to

resemble it.²¹ In this case *-ngirr* SEM occurs in Wackernagel's position, hosted by the first word of the clause. Examples are (5–244) and (5–245).

- (5–244) arri nga-la-bakand wurrumbang mukurn kinyingk-ingirr not 1MIN.NOM-IRR-have many hair DEF-SEM *i-bakand-in* 3NOM-have-PRS 'I don't have a lot of hair like that one has.'
- (5–245) daarr nga-na-r yambun ya-nga-rr-land bilay come 1MIN.NOM-CM-poke together 1PL.NOM-PST-AUG-sit again ngank-uk jarrad lala-ingirr ya-rri-ny talk-LOC 1AUG.OBL other:days-SEM 1PL.NOM-AUG-get mijal-uk jarrad sit-LOC 1AUG.OBL 'He waited for me until I arrived then we sat down talking like yesterday.'

5.15 Concluding remarks

In addition to the thirteen postpositions discussed in this chapter there are a few forms that may represent either additional postpositions, or allomorphs of one or more of the above. There are also a few cases where classification as derivational suffix or enclitic rather than as a postposition is not entirely certain—see §4.5.1 and McGregor (1995c:21), where *-ngirr* SEM is treated as a derivational suffix. Two such uncertain forms are *-amb* and *-ingk*, both of which occasionally mark body-part instruments, as in (5–246) and (5–247). However, these two forms are attested with just these two nominal roots respectively, both of which are also attested with the ordinary *-ang* INS postposition.

- (5–246) wirrwirr wirrwirr nga-m-barnj wurrul-amb nga-marl scratch scratch 1MIN.NOM-PST-exchange fingernail-INS 1MIN-arm 'I scratched myself with my fingernail.'
- (5–247) marriny i-jid-in baab-nyirr jin ni-k-ingk go 3NOM-go-PRS baby-COM 3MIN.OBL 3MIN-back-INS 'He's going along carrying the baby on his back.'

```
i-ny-jid-ingirr makirr-imirr dibirr i-n-ji 3NOM-PST-go-SEM road-PER turn 3NOM-CM-say "As he was going along the road, he turned aside."
```

arri-ngirrnga-li-jal-annga-malk-angarriningarrnga-la-m-annot-SEM1MIN.NOM-IRR-see-IMP1MIN-self-INSnottrue1MIN.NOM-IRR-put-IMP"If I hadn't seen it with my own eyes I wouldn't have believed it."

I suspect that these examples result from misunderstandings. In the first example the Nyulnyul speaker evidently interpreted the *as* of the English prompt as meaning 'like', rather than 'while'; the second example is a bit more problematic, though it would seem that the speaker had apparently construed the prompt correctly as meaning 'as I hadn't seen it with my own eyes, I didn't believe it', and then incorrectly interpreting the initial *as* as meaning 'like'.

²¹ In a couple of elicited examples a *-ngirr* SEM-marked clause appears not to draw a comparison between situations:

We cannot definitely identify these forms as allomorphs of the INS postposition due in part to lack of data, and in part because -ingk can be used in circumstances in which -an INS cannot, namely to mark a body-part location for an entity (example (5–248)) or action (example (5–249))—in which examples -ingk contrasts with -uk LOC.

- (5–248) nga-bakand-in kurndany ngi-k-ingk 1MIN.NOM-have-PRS wart 1MIN-back-INS 'I have a big wart on my back.'
- (5–249) *mukuny yardap i-n-j ngi-k-ingk* fly crawl 3NOM-CM-say 1MIN-back-INS 'A fly crawled up my back.'

On the other hand, like -an INS, -ingk can also apparently construct a new adverbial form from -k 'back', as in:

(5–250) nyi-k-ingk mi-jid 2MIN-back-INS 2MIN.NOM-go 'Go backwards.'

6 Adverbials

6.1 Introductory remarks

Adverbials provide information concerning the circumstances of occurrence of a situation or event, indicating how, where, or when it was performed. Unlike nominals, adverbials usually appear without morphological marking of the grammatical relations they serve. Thus adverbials are usually found in root form, and there are no morphological features peculiar to all of them, although, as will be seen, some subclasses show certain morphological peculiarities. They often occur immediately prior to the verb, as in examples (6–1) and (6–2).

- (6–1) *jukar mi-jid yiil-in nyanangkarr* quietly 2MIN.NOM.FUT-go dog-ERG perhaps *i-la-r-juy* 3NOM-IRR-poke-2MIN.ACC 'Go quietly lest the dog bite you.'
- (6–2) way mi-jid away 2MIN.NOM.FUT-go 'Go away!'

In regard to this ordering tendency adverbials resemble PVs (preverbs) (§2.4). However, whereas PVs are categorised by the IV (inflecting verb) they precede, and form a single complex lexical item with it (McGregor 2002c and §11.2), adverbials do not form a new lexical item with the IV; they modify either the IV or the clause nucleus. Moreover, adverbials are rather less constrained syntactically: they are more often separated from the IV than are PVs, and follow it more frequently than do PVs. They are also less restricted in terms of their combinatorial potential, and collocate with considerably more IVs than PVs typically do. Finally, an adverbial may modify a CVC (compound verb construction) (see §11.3)—or a clause involving a CVC; by contrast, normally just one PV occurs with an IV, and on the rare occasions that more than one does, the two relate independently to the IV. Nevertheless, it is not always easy in practice to distinguish between adverbials and PVs, and there remain a number of words of uncertain classification.

Three other classes of words, particles, interjections, and conjunctions, are also morphologically inert. All of these show different sets of syntactic behaviours to adverbials: particles usually enter into a syntagm with entire clauses, and are placed in relation to them; interjections represent clauses in their own right, albeit minor ones (see §12.2.1); and conjunctions normally occur in clause or phrase-initial position.

Adverbials constitute a rag-bag etic grouping rather than a single coherent emic lexical category in terms of their behaviour (see also McGregor forthcoming b). The term

adverbial is employed largely for referential convenience; the term is not inappropriate as a label for any lexical item in the notional class. In fact, the term groups together three distinct lexical parts-of-speech in Nyulnyul, which do show different behaviour. These are:

- (a) ADVERBS, which occur within VPs (see Chapter 11), in which they occur in a dependency relation to an IV or CVC;
- (b) SPATIAL ADVERBIALS, which provide information concerning the location, direction, extent or whatever of the situation referred to by the clause; and
- (c) TEMPORAL ADVERBIALS, which specify a temporal locus or extent of the referent situation.

These characterisations are of course rough, and will be refined somewhat in the course of this chapter, which deals with the three parts-of-speech in order in §6.2–§6.4. Following this, in the final section of the chapter (§6.5), we discuss the only known productive morphological process of adverbial stem formation, namely reduplication, and a few irregular and non-productive processes.

6.2 Adverbs

Adverbs indicate a quality or property displayed by the event during the period of its occurrence. McGregor (1996a) suggests that adverbs belong with verbs—that is, either a simple verb construction consisting of just an IV or a CVC consisting of a PV together with an IV—as sister constituents of VPs, and are dependent on the verb, providing quantifying or qualifying modification of it. Different types of adverb can be distinguished according to the type of modification of the verb they invoke: manner and intensity; completion; collective action; and lacking. Although these are not necessarily emically distinct types, it is convenient to organise the discussion around them.

6.2.1 Adverbs of manner and intensity

The Nyulnyul corpus shows relatively few adverbs of manner and intensity, and these are treated together because they are not clearly distinct. The following is a complete list of the known adverbs of this type: *jukar* 'quietly, slowly, softly, carefully, still', *ngarrij* ~ *ngarrijang* 'hard, loud, tightly', *ralard* 'quickly', *warrij* 'quickly', *jidanarr* 'straight', *budarr* 'correctly' and *kalwar* 'clearly, exposed'. The first two are semantically very general, indicating that the action was done unintensively and intensively, respectively; a range of contextual senses are discernible for each, embracing manner senses as well. A given example often admits a number of interpretations: for instance, in a clause of motion *jukar* might indicate that the motion was enacted quietly, slowly or carefully. Below we illustrate the range of senses of the first two adverbs in order.

Jukar 'quietly, slowly, softly, carefully, still' admits the following senses:

- Quietly: example (6–1) above.
- Slowly:
- (6–3) kulabil jukar jubul i-rri-ny-in irr-manbin-nyirr jirr turtle slowly swim 3NOM-AUG-catch-PRS 3AUG-flipper-COM 3AUG.OBL 'Turtles swim along slowly with their flippers.'

- Softly:
- (6–4) arri mi-l-dam ngarrij-ang jukar wa-n-dam not 2MIN.NOM-IRR-hit hard-INS soft 2MIN.NOM.FUT-CM-hit 'Don't hit him hard; hit him softly.'
- Carefully:
- (6–5) jukar nga-ni-ng-kid arri i-la-mingk-ngay careful 1MIN.NOM-CM-PST-eat not 3NOM-IRR-choke-1MIN.ACC kinyingk-in kinyji

 DEF-ERG bone
 'I ate it carefully so it wouldn't choke me.'
- Still (motionless):
- (6–6) *jukar jid wa-rri-j* still stand 2NOM.FUT-AUG-say 'Stand still you two.'

For *ngarrij* ~ *ngarrijang* 'hard, loud, tightly' the following senses have been observed:

- Hard (forcefully):
- (6–7) arri liyan nga-la-m in wangal i-bilk-in ngarrij not like 1MIN.NOM-IRR-put this wind 3NOM-blow-PRS hard 'I wish the wind wouldn't blow so hard.' (Literally: 'I don't like the wind blowing hard.')
- Loudly:
- (6–8) arri ya-li-rr-ngank jukar ngarrij-ang ya-rr-ngank-in not 1PL.NOM-IRR-AUG-talk soft hard-INS 1PL.NOM-AUG-talk-PRS 'We're not whispering; we are talking aloud.'
- Tightly:
- (6–9) mirrij ngarrij-ang yaarr i-nga-rra-k rope hard-INS pull 3NOM-PST-AUG-carry 'They pulled the rope tight.'

It will be noticed that these two adverbs are not precisely antonymic. Whereas the non-intensive *jukar* admits the contextual sense 'slowly', the corresponding intensive *ngarrij(ang)* 'hard' does not admit a speed interpretation. Instead, *ralard* 'quickly' and *warrij* 'quickly' indicate that an action was undertaken speedily. Examples of the use of *warrij* 'quickly' include (6–10)–(6–11); *ralard* 'quickly' was elicited in isolation, and is not evidenced in a sentence. In (6–10) the speed refers to the speed of motion, whereas in (6–11) it refers to the speed at which the process of chewing was undertaken.

(6–10) warrij marriny nga-ny-jid bur-ung quickly go 1MIN.NOM-PST-go house-ALL₁ 'I hurried home.'

(6–11) wurrul jan kaad nga-na-w warrij fingernail 1MIN.OBL bite 1MIN.NOM-CM-give quickly 'I bit my nails quickly.'

The instrumental postposition -ang is occasionally attached to ngarrij 'hard' (as in examples (6–8) and (6–9) above), to warrij 'quickly' (as in (6–12)), and to jukar 'quietly, slowly, softly, carefully, still' (as in (6–13)). However, the significance of its presence in contrast to its absence remains unclear—as does the reason for its relatively more frequent occurrence on ngarrij 'hard', as against its relatively rare use on the other two adverbials.

- (6–12) kinyingk-in kinyji i-na-mingk warrij-ang
 DEF-ERG bone 3NOM-CM-choke quickly-COM
 mi-ni-ng-kid
 2MIN.NOM-CM-PST-eat
 'The bone choked you because you ate quickly.'
- (6–13) *i-n-nyu jan kumbarr jukar-ang* 3NOM-CM-catch 1MIN.OBL money quiet-COM 'He took my money sneakingly.'

It is not always easy to associate the adverbial specifically with a quality of the event rather than with a characteristic of the actor performing it. In (6–14) the manner adverb *jidanarr* 'straight' indicates how the action was performed, namely not in a straight line, whereas in (6–15) it indicates the configuration of the Actors as they engaged in the state, which in turn betokens a quality of that state.

- (6–14) arri i-li-jid-an jidinarr i-ny-jid waamarn-mirr not 3NOM-IRR-go-IMP straight 3NOM-PST-go different-PER 'He didn't go straight; he went the wrong way.'
- (6–15) baab jidinarr i-rr-ø-in yaalk child straight 3NOM-AUG-be-PRS stand 'The children are standing in a straight line.'

Jidanarr 'straight' can also be used as a modifier in an NP, where it indicates straightness as a quality of the entity denoted by the NP:

(6–16) in makirr jidinarr bin makirr riib this track straight that track bad 'This track is straight, but that other one is crooked.'

Budarr 'correctly, properly' normally refers to a material quality of the action: whether it was performed in the proper way, or effectively, as in (6–17) and (6–18). It seems not to be used evaluatively, to comment on the correctness or otherwise of the performance of the action.

(6–17) wamb nyanangkarr arri nga-li-jal budarr in-ikun man maybe not 1MIN.NOM-IRR-see correctly this-ABL₂ 'It might be a man; I can't see properly from here.'

(6–18) kinyingk yaward nyanangkarr arri budarr bur nga-li-jal
DEF horse maybe not correctly place 1MIN.NOM-IRR-see
'It might be a horse; I can't see clearly.'

In one example, (6–19), *budarr* 'correctly' appears to be used with the contextual sense of 'carefully' or 'cautiously'—the addressee is being warned to act with due caution if they want to avoid being bitten by the dog.

(6–19) budarr wi-n-di-jin bin yiil careful 2MIN.NOM-CM-say-3MIN.OBL that dog i-la-r-juy 3NOM-IRR-poke-2MIN.ACC 'Be careful of that dog or it will bite you.'

Finally, we provide two illustrative examples of *kalwar* 'clearly, exposed':

- (6–20) maaniny kalwar i-n-j nakul i-ny-jid-uk reef expose 3NOM-CM-say tide 3NOM-PST-go-LOC 'The reef was uncovered when the tide went out.'
- (6–21) *jid i-n-j kalwar* stand 3NOM-CM-say expose 'He stood there, visible.'

6.2.2 Adverbs of completion

Two adverbs indicate that an action has been carried through to completion or sufficiency: *kadakur* 'enough, finished' and *jaamin* 'completely, all kinds'. Below we discuss and exemplify each in turn.

The most common environment of occurrence of *kadakur* 'enough, finished' is in collocation with the IV -BANY 'finish, complete', in which environment it appears to intensify the completion of the event, as illustrated by the following example:

(6–22) kadakur i-m-bany-jii finished 3NOM-PST-finish-2MIN.OBL 'It's finished for you,' or 'You're finished.'

It can also occur with other verbs, as in line (9) of Text 2; and it is also used as an interjection (see §9.4 below). According to Nekes & Worms (1953:536), it can also be used as a farewell, 'goodbye'; they do not, however, exemplify this usage.

The other adverb, *jaamin* 'completely', is used in transitive clauses to indicate that the Undergoer (see §12.3.2.1) is completely affected by the event—usually in the sense that it is completely finished up or gone—as is illustrated by the following examples:

- (6–23) wamb-in jaamin i-na-m-bany man-ERG completely 3NOM-CM-PST-finish 'He finished it up.'
- (6–24) *jaamin i-ngi-rr-wid-in kinyingk wajamarr* completely 3NOM-PST-AUG-eat-PRS DEF later

*i-nga-marr-uk*3NOM-PST-cook-LOC
'They finish it up completely when it is cooked.'

(6–25) nga-na-w-irr jaamin arri-jan kumbarr 1MIN.NOM-CM-give-3AUG.ACC completely not-1MIN.OBL money 'I gave them everything, and had nothing myself.'

It might be suggested that *jaamin* 'completely' is really a nominal rather than an adverbial. One of the main reasons for classifying it as an adverbial is that it is restricted to circumstances in which the Undergoer is completely affected: if it were a nominal meaning something like 'all', it would be expected that it could modify the referent of an Actor or Agent NP, or indeed any other clausal role, to indicate that all of the referents were involved. It is also normally found alone—as in the three examples above—although, as (6–26) illustrates, it may occur adjacent to, perhaps within, the NP to which it applies.

(6–26) *i-ngi-rr-wid-in warli may jaamin*3NOM-PST-AUG-eat-PRS all food completely 'They eat all kinds of food.'

6.2.3 Adverbs of collective action

Nyulnyul has three adverbs which indicate whether an action was performed by an individual alone, or by a number of individuals acting together: *ngidirrngin* 'alone', *-malk* 'by self', and *yambun* 'together'. Words and morphemes of other parts-of-speech occasionally convey similar meanings: for example, the reduplicated determiner *warawar* (other-other) 'one by one, one after the other' indicates that the situation separately involves each member of a group (see §4.3.2.1), while the nominal suffix *-kur* COLL indicates that a number of entities were involved collectively in the situation (see §4.5.1.3).

The following examples illustrate the use of *ngidirrngin* 'alone, without a companion' indicating that the Actor acted by themselves, rather than as a member of a group.

- (6–27) ngidirrngin i-ny-jid alone 3NOM-PST-go 'He went alone.'
- (6–28) *ngidirrngin ma-n-in arri layib* alone INF_p-be-INF_S not good 'Living alone is no good.'

Nekes & Worms (1953:795) provide a few examples of this word used as an NP modifier; in all instances it is marked by the ablative postposition:

 $\begin{array}{ccc} (6\text{--}29) & \textit{nidernan-djon} & \textit{wamb} \\ & \textit{ngidirrngin-jun} & \textit{wamb} \\ & \text{alone-ABL}_1 & \text{man} \\ & \text{`a lonely man'} \end{array}$

Whereas the sense of *ngidirrngin* 'alone' appears to be quite concrete, referring to the material circumstances of the situation or entity, the prefix-taking *-malk* 'by self, alone'

specifies performance for or by oneself, that is, independently, regardless of whether or not one is actually by oneself. Some examples are:

- (6–30) *mi-kurid-inyj nyi-malk-ang* 2MIN.NOM-paint-REF_S 2MIN-self-INS 'Paint yourself.'
- (6–31) arri-ngirr nga-li-jal-an nga-malk-ang arri ningarr not-SEM 1MIN.NOM-IRR-see-IMP 1MIN-self-INS not true nga-la-m-an 1MIN.NOM-IRR-put-IMP 'If I hadn't seen it with my own eyes I wouldn't have believed it.'

In the next example, -malk 'by self, alone' initially appears to convey wilfulness. The conversational frame in which it occurs, however, suggests that this word was chosen to focus agency on the speaker themself; intentionality would seem to arise as a pragmatic implicature.

(6-32)ang-en ineŋ-galed dje djēb? angk-in i-na-ng-kalid jii jiib who-ERG 3NOM-CM-PST-break 2MIN.OBL boomerang nanen-galed namalg ŋai-en ngay-in nga-na-ng-kalid nga-malk 1MIN.CRD-ERG 1MIN.NOM-CM-PST-break 1MIN-self 'Who broke your boomerang?' 'I broke it intentionally.' (Nekes & Worms 1953:755–756)

The classification of *-malk* 'by self, alone' is perhaps somewhat problematic: morphological criteria indicate it is a prefixing noun (see §4.2). However, it is invariably used adverbially, as in the above examples: its syntactic behaviour is quite distinct from that of the prefixing nouns that denote body parts and aspects of the personal domain. And it is syntactic behaviour that is taken to be defining of the parts-of-speech (recall §2.4, McGregor forthcoming b) not morphological potential. Notice finally that *-malk* 'by self, alone' is usually, though not always, followed by the instrumental postposition *-ang*.

The third adverb, *yambun* 'together' usually indicates that the Actors performed together collectively as a group:

- (6–33) wil yambun i-ngi-rr-wid meat together 3NOM-PST-AUG-eat 'They ate the meat together.'
- (6–34) mangir ya-nga-rr-wid-an kari yambun always 1PL.NOM-PST-AUG-eat-IMP beer together 'We used to drink together every day.'

There are, however, other uses of *yambun* 'together'. As the following example shows, it sometimes indicates that the Actor did not act alone, but in the company of others. In (6–35) the Actor is a single person (cross-referenced by a minimal pronominal in the verb) who eats together with a group of people denoted by a *-nyirr* COM-marked PP.

(6–35) *i-ny-jid i-ni-ng-kid wilamay yambun irr-inyirr* 3NOM-PST-go 3NOM-CM-PST-eat food together 3AUG.CRD-COM *wamburiny* people 'He went up and ate with them.'

In examples such as this the adverb *yambun* 'together' may perhaps form a syntagm with the PP *irr-inyirr wamburiny* 'with those people', which specifies its domain of application.

These examples invoke the 'togetherness' of the Actor(s); *yambun* 'together' can also indicate the togetherness of an Undergoer (and possibly of the referents of NPs in other roles). In (6–36), the two entities referred to by the ellipsed Undergoer NP are 'together' as a consequence of the putting event.

(6–36) yambun wa-na-kalak together 2MIN.NOM-CM-approach 'Join them together.'

Whereas *ngidirrngin* 'alone' is encountered exclusively in root form, *yambun* 'together' permits a small amount of morphological modification. In (6–37), it is followed—for reasons that remain obscure—by the locative postposition.

(6–37) yambun-uk i-ngi-rr-wid wil together-LOC 3NOM-PST-AUG-eat meat 'They shared the meat, eating it together.'

6.2.4 Adverb of lacking

Wiib 'without, lacking' indicates that something is lacking in the way the Actor performs the event. For instance, (6–38) indicates that the boy is simply looking at the girl, and has made no move to assist her. In such examples wiib can be translated as 'without serious intent'—that the Actor is just performing the event, and no more.

(6–38) waringkil baab ni-mird arlik i-n-j miid-in wiib girl baby 3MIN-leg sorry 3NOM-CM-say boy-ERG without i-n-jal-in 3NOM-CM-see-PRS 'The girl hurt her knee; the boy is watching her.'

In other examples *wiib* 'without' indicates that the event occurred for no reason (as in (6–39)), or, in a verbless relational clause, that something is lacking (example (6–40)).

(6–39) *i-rri-dam-in wiib-jun-ang*3NOM-AUG-hit-PRS without-ABL₁-INS
'They are hitting for no reason.'

¹ This lexeme appears to be absent from Nekes & Worms (1953). The closest match in that work is the Nyulnyul word cited as *webe* (Nekes & Worms 1953:889) and referred to as an indefinite pronoun meaning 'any, any kind, anybody, anywhere'. Given the paucity of examples in both my corpus and that of Nekes & Worms (1953), it is not impossible that these two forms represent a single lexeme.

(6–40) wiib nga-n-in kumbarr arri-jan nothing 1MIN.NOM-be-PRS stone not-1MIN.OBL 'I have no money.'

Maad 'play' is sometimes also used in an allative PP to indicate the non-seriousness of the performance of an action: that it was performed 'for fun'. How maad 'play' contrasts with wiib 'without, lacking' is uncertain.

6.2.5 Adverb determiner

Nyulnyul also has an adverb determiner, *baan* 'in this/that way, like that': an adverb with an inherent deictic component of meaning.² As the gloss suggests, *baan* makes reference to a quality or manner of action, rather than to a quality of an entity (as do nominal determiners); it does not specify the quality, but rather indexes it, indicating that it can be retrieved or inferred from the linguistic or extralinguistic context. Thus, for example, in (6–41) *baan* 'like that' specifies a quality peculiar to emus—that they are unable to fly. This example establishes an intertextual relation with the story about the emu, known to both interactants, thus facilitating the understanding of the reference relation. In (6–42), the quality would be obvious from context, the observed or described fashion of speech employed by the young people; similar remarks hold for (6–43)—the quality can be inferred from contextual factors, specifically from the state of the Actor.

- (6–41) baan winin i-n-in banangkarr-uk that:way emu 3NOM-be-PRS today-LOC 'This is the way the emu is today.'
- (6–42) arri i-li-rr-ngank nyungul-nyungul baan not 3NOM-IRR-AUG-speak old-old like:that 'They shouldn't talk to their elders like that.'
- (6–43) arri mi-la-kunb way baan yu-ngki-n not 2MIN.NOM-IRR-send away like:that 3NOM-FUT-be 'Don't send him away; let him be.'

Occasionally *baan* 'like that' is used non-phorically to denote a quality relevant to the accomplishment of the event. Thus in (6–44) it designates the type of action appropriate to effectively sneaking up on turkeys.

(6–44) *i-ngi-rri-j-jin* baan jibard wa-na-m
3NOM-PST-AUG-say-3MIN.OBL like:that sneak 2MIN.NOM-CM-put
mangkayarr
turkey
'They taught him how to sneak up on turkeys.'

They taught him now to sheak up on turkeys.

Here *baan* 'like that' is used in the manner of a complementiser, as also in (6–45), where it refers cataphorically to an idea designated by the following clause.

² It is likely that this adverb is etymologically related to the temporal adverbial *bana* 'when' of Nyikina and Yawuru, which has reflexes in Nyulnyul words such as *banangkarr* 'when'.

(6–45) ngay-in nga-mungk baan nga-ngka-jimb 1MIN.CRD-ERG 1MIN-know like:that 1MIN.NOM-FUT-die 'I know that I will die.'

Occasionally *baan* 'like that' is found in NPs where it indicates a property of an entity rather than a quality of an action. In (6–46) it indicates a quality (not specified) of the appearance of the clothing; it apparently also modifies the quality-expressing *ni-kinbal* 'its appearance' rather than the entity-expression *jawuj* 'trousers'.

(6–46) baan ni-kinbal jawuj ni-mird jan like:that 3MIN-appearance trousers 3MIN-leg 1MIN.OBL 'the kind of my trousers'

Baan 'like that' is also used to refer to more abstract 'entities' than physical things, and particularly to ideas, which appear not to be designated by the nominal determiners—see also McGregor (1990:153) on a similar use of the adverbial determiner *miga* 'like this, like that' in Gooniyandi. This is illustrated by:

(6–47) *ni-mungk baan*3MIN-think like:that
'He knows that.'

Rarely, baan 'like that' is used in a spatial sense, to indicate a direction specified imprecisely:

(6–48) baan jii that:way 2MIN.OBL 'Go that way/this way.'

6.3 Spatial adverbials

Like other Australian Aboriginal languages, Nyulnyul has a rich set of lexemes expressing spatial relations, that are used to indicate the location, direction, extent, proximity, and so on of an entity or situation. In contrast to some Aboriginal languages, however, these are not nominals, or a subclass of nominals (Levinson 2003:108), but form a separate lexical class of their own in terms of their grammatical properties (as is the case in other Kimberley languages such as Gooniyandi (McGregor 1990:156) and Warrwa (McGregor 2006c:126)). As per the general remarks in §6.1 above, they typically serve in clausal roles, and are only rarely found in NPs. In terms of their behaviour they are most like PPs; but they do not normally host case-marking postpositions. Some of them, however, do show distinct inflectional cases.

In most Australian Aboriginal languages orientation and direction are reckoned according to absolute frames of reference (e.g. Levinson 1997, 2003; Levinson & Wilkins 2006b; McGregor 1990:156–160, 2006c; Schultze-Berndt 2006; Wilkins 2006). This is true of Nyulnyul, where the absolute frame of reference used is the cardinal directions. In neither elicitation nor texts have I encountered use of a relative spatial frame of reference. Thus egocentric terms such as *left* and *right* are restricted to a person's body as in:

(6–49) nga-marl nga-n-jarrard jurrungk-kadiny 1MIN-arm 1MIN.NOM-CM-put right-ASP 'I put out my arm rightwards.'

The terms *baljarrang* 'left' and *jurrungk* 'right' are most likely nominals designating 'left hand, left-handed', and 'right hand, right-handed, straight', respectively, not adverbials. However, intrinsic frames of reference are also employed in Nyulnyul (Levinson 2003: 35–37; cf. Levinson 1997 on Guugu Yimidhirr). Unfortunately, none of the texts employs more than the occasional spatial adverbial, and nothing can be said with certainty about the motivation for choice among the frames of reference.

For the purposes of this description it is convenient to divide spatial adverbials into two primary classes: cardinals and non-cardinals (see also McGregor 1990:156, 2006c). Cardinal adverbials indicate spatial orientation with respect to an absolute spatial frame of reference; non-cardinal spatial adverbials employ non-absolute frames of reference for indicating spatial orientation, primarily intrinsic. We discuss cardinal and non-cardinal adverbials in order in the following subsections.

6.3.1 Cardinal adverbials

One system of cardinals orientates in the horizontal plane, with respect to compass directions; the other orientates in the vertical direction, distinguishing up from down. Unlike languages of the Fitzroy River basin, Nyulnyul lacks a hydrographic system distinguishing 'upstream' and 'downstream'.³

6.3.1.1 Compass points and directions

Four compass points—or perhaps better regions—are distinguished: north, south, east and west. These each come in four distinct forms, distinguishing between location, direction towards, direction from, and inhabitant of. The known forms are as shown in Table 6–1.

	Location	Direction towards	Direction from	Inhabitant of
North	wardi	wardijang	wardik	wardiyabul
South	warlij	warlijang ^a	warlijingk ^b	c
East	banawarr	banawarrjang	banawarrk	baniyabul
West	kularr ~ kulukurr ^d	kularrjang	kulukurrk	kularrabul

Table 6–1: Paradigm of cardinal adverbials

a. Nekes & Worms (1953:664) also give the form *walij-madikan* (*walēdj-madagan*) 'towards the south', with the allative postposition *-madikan* (see §5.11). This form is not attested in my corpus.

³ This might be supposed to be a consequence of the fact that the Dampier Land peninsular has no large rivers, only relatively short creeks, which might not be particularly useful in spatial orientation of entities or situations. However, such an environmental explanation is somewhat dubious, as Warrwa, which was spoken in a region with some largish rivers, also lacks a hydrographic frame of reference.

- b. Nekes & Worms (1953:860) state specifically that this form is Jabirrjabirr; however it appears under the headword *waledj* 'south' in Jabirrjabirr, Nimanburru, and Nyulnyul. (The final *-ingk* is identical to an irregular form of the instrumental postposition—see §5.3.) My own Nyulnyul corpus has a range of alternative forms for 'from the south', including this form, the same form followed by an ablative postposition, and the locative form followed by an ablative postposition.
- c. This missing form has not been elicited, and does not appear in manuscript sources.
- d. I have been unable to discern any meaning difference between *kularr* and *kulukurr*. Possibly the forms are in free variation, or one may be a borrowing. It is not inconceivable that both words derive historically from the possible proto-Nyulnyulan form **kulukarr*. The form *kularr* might have derived first by lenition of the intervocalic *k* to *w* (as per the Nyikina cognate *kuluwarr*), then by reduction of the sequence *uwa* to *aa*, thence ultimately to *a*. The form *kulukurr* could well have emerged via a process of vowel harmony. Second, *warlij* might well be a contraction of *warlijingk*.

The 'location' forms indicate the location of an entity or situation to the north, south, east or west of a reference point, typically the speech situation:

- (6–50) *i-rri-kal-in wardi*3NOM-AUG-wander-PRS north
 'They are wandering around in the north.'
- (6–51) wamb nga-n-j-an banawarr man 1MIN.NOM-CM-say-IMP east 'I grew up to be a man in the east.'

The 'direction to' forms indicate the direction towards which an event is oriented. They are constructed by suffixing an otherwise non-occurring *-jang* to the corresponding locational form. There are a few irregularities: in the 'south' form, the predicted geminate sequence *jj* is reduced to *j*; and for the 'east' form, three alternate realisations have been recorded, *banwarrjang*, *banarrjang* and *banaarrjang*, which involve different reductions of the underlying {awa} sequence. The following examples illustrate use of 'direction to' forms:

- (6–52) *i-ny-jid kularrjang* 3NOM-PST-go westerly 'He went west.'
- (6–53) biird ya-nga-rr-jid banarrjang may river ngank-ung yesterday 1PL.NOM-PST-AUG-go easterly May River word-ALL₁ 'Yesterday we went east to May River for a talk.'

The allative postposition -ung ALL₁ has been observed attached to the locational form of a cardinal adverbial:

(6–54) *i-ngi-rr-miimii* wul kulukurr-ung bur 3NOM-PST-AUG-seek water west-ALL₁ camp 'They looked for water in the western country.'

The presence of *-ung* ALL₁ in this example can be accounted for by the fact that it is the full NP *kulukarr bur* 'western country'—not just the adverbial *kulukurr*—that serves in the grammatical role, indicating the direction towards which the action is oriented.

The 'direction from' forms are less regularly formed than the 'direction to' forms, though each involves a final -k. In the case of the 'east' and 'west' forms it is added to a locative form or forms; for the 'north' and south forms there is additional intermediate material. Some illustrative examples are:

- (6–55) kulukurrk daarr i-na-r from:west come 3NOM-CM-poke 'He went from the west.'
- (6–56) *ngarrij i-bilk-in banawarrk wangal banangkarr* strong 3NOM-blow-PRS from:east wind today 'Strong wind blows from the east today.'
- (6–57) gologor-g mal eŋer-ag wamborinj kulukurrk marl i-ngi-rra-k wamburiny from:west stay 3NOM-PST-AUG-carry people 'The people came from the west.' (Nekes & Worms 1953:609)
- (6–58) binyj wangal i-bilk-in walijingk cold wind 3NOM-blow-PRS from:south 'Cold wind blows from the south.'

In a few instances the ABL_1 postposition *-jun* is attached to a cardinal adverbial to indicate 'direction from', as in *kularr-ijun* 'from the west' in (6–59), *wardi-jun* 'from the north' in (6–60), and *warlijingk-ijun* (involving the ablative form of the cardinal adverbial) in (6–61).

- (6–59) kularr-ijun daarr i-na-ri west-ABL₁ come 3NOM-CM-poke 'He came from the west.'
- (6–60) wardi-jun daarr i-na-r north-ABL₁ come 3NOM-CM-poke 'He came from the north.'
- (6–61) warlijingk-ijun daarr i-na-r from:south-ABL₁ come 3NOM-CM-poke 'He came from the south.'

There are also a small number of instances of -kun ABL₂ on a cardinal adverbial, e.g. in line (3) of Text 5.

The difference between the 'direction from' form of the adverbial and the ablative postposition perhaps concerns whether the adverbial serves in a clausal or an NP role: in examples such as (6–59) and (6–60) the adverbial may belong to an NP with ellipsed nominal *bur* 'place', as in (6–54). Thus a better free translation of (6–59) might be 'He came from the western country'. This explanation does not account for (6–61), however: the 'from' form of the adverbial is not attested as an NP modifier.

The fourth column of Table 6–1 gives the 'inhabitant of' forms for three of the four cardinal adverbials. This appears to be a derived lexical item, presumably a nominal. Thus, baniyabul refers to easterners, people who live to the east of the speaker. These forms all appear to be built on the corresponding locational root, with the suffixation of -(y)abul. There are a few irregularities: in the form for 'westerner', instead of the expected sequence rr-ya we find rra; and in the form for 'easterner', only the first two syllables of the corresponding locational form are retained, and the final vowel is raised from a to i.

In the next example an 'inhabitant of' form is found where an ablative 'direction from' form is expected.

(6–62) baniyabul-jun daarr i-na-ri east-ABL₁ come 3NOM-CM-poke 'He came from the east.'

It is possible that the free translation of this example is inaccurate, and that it would be better phrased 'he came from the easterners', indicating the person's origin in an eastern group, rather than that he simply came from the east.

6.3.1.2 Vertical direction adverbials

These adverbials distinguish between *kalb* 'up' and *jimbin* 'down'. The former covers virtually any direction between the horizontal and the vertical; the latter, any between horizontal and vertically down. Thus, like the compass point adverbials, they are referentially quite vague. Some examples are given below. In (6–63) the direction of motion would be almost vertical, whereas in (6–64) it might be almost horizontal, with a barely perceptible difference in elevation for the termini, evidenced only by the direction of flow of water; in (6–65) something intermediate would most likely be involved.

- (6–63) mangkirr lagal i-n-j kalb bardangk-uk goanna climb 3NOM-CM-say up tree-LOC 'The goanna climbed the tree.'
- (6–64) bilay marriny i-ny-jid jimbin again walk 3NOM-PST-go down 'He walked downstream.'
- (6–65) makirr kalb aa jimbin track up and down 'The road [climbs] upwards and downwards.'

As (6–65) indicates, actual motion need not necessarily be involved. What is relevant in such instances is the orientation of the entity. Entities are typically oriented according to their longest axis—thus, flying foxes hang with their heads *jimbin* 'down', because their bodies (when their wings are folded) are naturally oriented along the sagittal axis.

Cardinal adverbials are absolute in the sense that they make reference to fixed angles—or, better, segments (see Levinson 1997, 2006b). But a point of origin is required to anchor the angle: an entity may be located up with respect to one origin, but down with respect to another. The object chosen as the point of origin may optionally be specified explicitly by a LOC PP, as illustrated by the following two examples:

- (6–66) blanket kalb i-na-m table-uk blanket up 3NOM-CM-put table-LOC 'He put the blanket on the table.'
- (6–67) kalamb jii jimbin mi-kard hither 2MIN.OBL down 2MIN.NOM-enter 'Come inside.'

Jimbin 'down' is also used in reference to orientation within a medium such as water, earth, long grass, and so on, or a potentially enclosing object such as a box, table, or tree. It indicates that the situation, or an entity in it, is located within—and so may be obscured by—that medium or enclosure:

(6–68) *juurr i-ng-kurdal jimbin maarr-uk* snake 3NOM-PST-loose down grass-LOC 'The snake disappeared in the grass.'

Thus, as in many Australian Aboriginal languages, *jimbin* 'down' is used to express the notion 'inside', presumably as a contextual sense. However, this interiority notion is restricted to circumstances in which a part of the enclosing medium or object is vertically above the located entity. Thus *jimbin* 'down' is not attested in expressing interiority with respect to horizontally oriented enclosures like paddocks and yards.

If *kalb* 'up' is an antonym of *jimbin* 'down', it is only antonymic in its coded meaning, not in its range of contextual senses: there is no clear evidence that *kalb* 'up' can be used in expressing the spatial relation 'outside'. Thus although (6–69), elicited in response to a request for 'inside and outside of neck', suggests that *kalb* 'up' may have this sense, it is not certain that this is a good translation of the English prompt. The perlative postposition on *nimany* 'his neck' suggests a better translation might be 'along the neck', and thus the adverbs might be being used to specify vertical directions up and down, rather than inside and outside.⁴

(6–69) *ni-many-imirr kalb aa jimbin*3MIN-neck-PER up and inside 'inside and outside of neck'

The following example shows the use of two vertical cardinal adverbials, each with a different reference point: the first orientates the situation with respect to the Actor, specifying that the direction of motion of the body part was upwards. The second orientates the moving item, the Actor's hand, with respect to the hollow log, indicating that it was ultimately located within the hollow log (part of which would be vertically above the hand).

(6–70) *ni-mal i-na-m kalb jimbin kurrbul-uk* 3MIN-hand 3NOM-CM-put up inside hollow:log-LOC 'He put his hand up into a hollow log.'

⁴ Also consistent with this remark is the possibility that the speaker is construing the neck as the interior of body part, and interpreting the adverbials as designating relative interiority with respect to the opening, the mouth.

As the above discussion suggests, sentences involving vertical adverbials admit a range of interpretations. (6–71) could mean either 'sit on it', or 'sit in some place which is at a higher elevation than the speaker's or hearer's location'; (6–72) might mean 'below his ear', or 'inside his ear'.

- (6–71) kalb mi-landi up 2MIN.NOM-sit 'Sit on it.' or 'Sit up (from here).'
- (6–72) jimbin ni-labab-uk inside 3MIN-ear-LOC 'below his ear', 'inside his ear'

Unlike the compass adverbials, these two adverbials show no inflectional forms. They are normally used either in root form, where they indicate either location or direction towards, or they host a postposition. The postpositions most commonly attached to these adverbials are -jun ABL₁, -kung ABL₃, -mirr PER, and -mardikan ALL₂. The first of these occurs in the lexicalised phraseme kalb-ijun iibal (up-ABL₁ father) 'God'—in keeping with the postposition's usual semantics. The other postposition, -kung ABL₃, indicates that action emanates from a source which is either kalb 'up' or jimbin 'down' with respect to some reference point, as in lines (6) and (197), and (192) and (206), respectively, of Text 2. The third postposition, -mirr PER, indicates orientation along a path kalb 'up' or jimbin 'down' with respect to a reference point. This is illustrated in (6–73).

(6–73) bardangk jimbin-mirr i-ny-jid tree inside-PER 3NOM-PST-go 'He went under a tree.'

The fourth postposition, -mardikan ALL₂, indicates direction towards (see §5.11), with no implication that the target was reached:

(6–74) nga-marl nga-ny-jarrard kalb-amardikan 1MIN-arm 1MIN.NOM-PST-extend up-ALL₂ 'I put my arm upwards.'

It is not clear how (6–74) contrasts semantically with the same clause minus *-mardikan* ALL₂: there are instances in the corpus of unmarked *kalb* 'up' in parallel clauses denoting situations of raising one's arm. The allative postposition *-ung* ALL₁ is also found on vertical cardinal adverbials; and again the semantic effect of its presence remains opaque, as in:

- (6–75) ni-marl-ang i-n-wirim-in kalb-ung 3MIN-arm-INS 3NOM-CM-try-PRS up-ALL₁ 'He makes signs in the air.'

⁵ However, in contrast to English, (6–71) cannot mean 'sit upright'; the adverb *jidanarr* 'straight' is used to convey this meaning.

(6–77) *irr-in arri liyan i-li-rra-m jimbin-ung ma-jid-in* they-ERG not like 3NOM-IRR-AUG-put inside-ALL₁ INF_p-go-INF_S *bur-uk jirr* camp-LOC 3AUG.OBL 'They don't like dogs going into their house.'

In (6-76) and (6-77), it may seem that *jimbin* 'down' specifies a spatial location as the achieved target of the situation. However, the presence of *-ung* ALL_1 in (6-77) is due to the fact that this postposition is always attached to the first word of an embedded clause; *jimbin* 'down' belongs to the second, non-finite clause, not to the finite clause. But the use of *-ung* ALL_1 in (6-75) cannot be accounted for in this way, and this example remains a puzzle.

(6–78), from an early translation of the Lord's prayer (Walter 1982:83), appears to involve the ending -an as a locative marker. This form is not attested in my corpus (although it does occur in Warrwa—see McGregor 1994c:26, 28–30), and it is uncertain whether or not the example should be taken seriously.

(6–78) penelk malbon jeren djer kalban kurwol binilk malbun i-rr-ø-in jirr kalb-an kurrwal just:as obedient 3NOM-AUG-be-PRS 3AUG.CRD above-LOC sky 'As it is in heaven, ...'

In the above examples the vertical cardinal adverbials serve in clausal roles, and provide spatial modification of a situation or entity. They are not, however, restricted to this context, and sometimes instead realise roles in NPs. For example, in (6–79), *jimbin* 'down' serves in the Qualifier role in the NP *jinabud jimbin* 'sole of shoe' (as per §10.2.2.3), indicating the part of the shoe that is prototypically 'down'.

(6–79) *jinabud jimbin ruk i-ny-jid-jan*boot down remove 3NOM-PST-go-1MIN.OBL
'The bottom of my shoe came off on me.'

6.3.2 Non-cardinal spatial adverbials

The non-cardinal spatial adverbials are those that do not specify spatial relations in regard to a reference point in terms of an absolute system. They fall into three subtypes: (a) relative distance; (b) location or orientation with respect to the spatial characteristics of some entity which constitutes a chosen reference point; and (c) relative direction of motion in relation to a chosen reference point. This division is etic, made primarily for convenience of exposition; there is no suggestion that these subtypes are grammatically significant. We discuss the three types in order in the following subsections.

6.3.2.1 Adverbials of relative distance

Two adverbials indicate relative distance in an unspecified direction: *maar* 'far' and *yangan* 'close, nearby'. The distance may be that between the reference point and the location of an object or situation, as in line (2) of Text 2, which indicates the desired location of the permanent water in relation to the speakers. Alternatively, it may be the distance travelled, as illustrated by (6–80).

(6–80) maar marriny nga-ny-jid far walk 1MIN.NOM-PST-go 'I walked far.'

The reference point from which the distance between things or situations is measured may be the speech situation—for instance, the location of an interlocutor—or the location of referent character in a narrative. Alternatively, when it is the distance travelled that is measured, the reference point will normally be the initial location of the Actor (who moves), as in (6–80). However, this is not always the case, and an alternative reference point may be chosen. In this case, the reference point may be specified by a locative PP:⁶

(6–81) arri mi-li-jid yangan jungk-uk mi-la-marr not 2MIN.NOM-IRR-go near fire-LOC 2MIN.NOM-IRR-burn 'Don't go near the fire or you'll get burnt.'

And as (6–82) illustrates, once established this reference point need not be re-specified.

(6–82) mi-land yangan ngay-uk arri maar mi-li-land 2MIN.NOM-sit near 1MIN.CRD-LOC not far 2MIN.NOM-IRR-sit 'Sit near me, not far away.'

The adverbials *yangan* 'close' and *maar* 'far' normally occur in bare form; they can, however, host a postposition, e.g. -*kun* ABL₂ and admit reduplication (see §6.5.2). When they host the ablative postposition it is not the Actor that serves as reference point, but something else. For instance, in (6–83), the reference point is the thing seen, not the seer. Moreover, the situation is construed as emanating from the seer towards the reference point. And in line (2) of Text 2, the -*kung* ABL₃-marked adverbial occurs in an NP, where it indicates a quality of the referent: namely that it is a place that is far away.

(6–83) *i-ngi-rr-jal* wul maar-ukun irr-in
3NOM-PST-AUG-see water far-ABL₂ 3AUG.CRD-ERG
'They saw the water from afar.'

In one instance *yangan* 'close' is marked by the locative postposition:

(6–84) marriny nga-ny-jid yangan-uk kinyingk bur go 1MIN.NOM-PST-go near-LOC DEF camp 'I walked past the (old) building.'

Here *yangan* 'close, nearby' appears to be being used referentially, establishing a place located nearby with respect to the (old) building. This place—rather than the (old) building itself—comprises the location of the speaker's walking. The presence of the locative postposition on the adverbial suggests that it forms an NP with the following two words, and does not function adverbially within the clause. More usually, the adverbial does not belong to an NP, but directly serves a role in the clause, and perhaps forms a complex construction with an adjacent NP (if there is one), as illustrated by the following example:

Although this clause refers to motion, *yangan* 'close' does not, of course, measure the distance travelled, but the distance between the Actor and another entity, namely the fire.

(6–85) midjal yar-en yaŋan badaŋg-og
mijal ya-rr-ø-in yaŋan badaŋg-uk
sit 1PL.NOM-AUG-be-PRS near tree-LOC
'We are sitting near the tree (under it).' (Nekes & Worms 1953:924)

Yangan 'close, nearby' can be used not just in the sense of spatial location, but also more abstractly in relation to the 'space' of occurrence of a situation. That is, it may indicate that a situation was close to occurring: it almost, or nearly occurred. There are a number of examples of this usage in my corpus, including:

- (6–86) nga-marl yangan nga-li-j-an jub mudikad-ukun banangkarr 1MIN-arm close 1MIN.NOM-IRR-say-IMP cut car-ABL₂ today 'I nearly got my hand caught in the car door today.'
- (6–87) bin baab mudikad-in yangan duurr i-la-w-an that child car-ERG close knock 3NOM-IRR-give-PST 'The car nearly knocked that child over.'

The corpora of Nekes & Worms do not reveal examples of this usage of the adverbial, and it may be that this usage is calqued on a use of *nearly* in English. On the other hand, the fact that the reduplicated form of the cognate adverbial in Bardi, *angan* 'close', *anganangan* 'very close to', can also mean something like 'unexpectedly, suddenly' (Claire Bowern pers.comm.) suggests that a modal extension of the spatial adverbial might also be a language-internal development.

6.3.2.2 Intrinsic and relative frames of reference

The second type of spatial adverbial locates or orientates a situation or thing with respect to the inherent aspects of an entity that serves as reference point, or with respect to that reference point in relation to a further reference point, normally a participant in the speech situation. These adverbials include: bulkumarr ~ burlngurr 'middle'; yalirr ~ yalirrbur 'ahead, in front' (see §4.5.3.2); and baybirr ~ baybarra 'behind, away'. In addition to these, Nekes & Worms (1953:929–930, 2006:287) give yawar 'outside, at an end', though they do not provide any Nyulnyul examples of its use. (6–88) shows orientation of movement with respect to the orientation of an unspecified reference point; (6–89)–(6–91) show orientation of motion and location with respect to the orientation of a specified reference point.

- (6–88) yalirrbur yu-ngki-jid / yu-ngku-rr-jid ahead 3NOM-FUT-go 3NOM-FUT-AUG-go 'He/They will go ahead.'
- (6–89) in yiil junk i-n-nyu bulngurr buluman-imirr this dog run 3NOM-CM-catch middle cattle-PER 'The dog ran among the cattle.'
- (6–90) *i-nga-ma-darl-inyj* baybirr kumbarr-uk 3NOM-PST-REF_P-hide-REF_S behind stone-LOC 'He hid behind a rock.'

(6–91) warli baab jid i-rri-j-in irr-marl baybirr everyone children stand 3NOM-AUG-say-PRS 3AUG-hand behind irr-k-ingk
3AUG-back-INS
'The children all have to stand with their hands behind their backs.'

In (6–89) the salient physical properties of the reference point—that the cattle form an area—is the only characteristic according to which the motion is oriented. In (6–91) the reference point is featured, and the behindness is with respect to the inherent front-back dimensions of this reference point. On the other hand, in (6–90) two reference points are implied: that provided by the unfeatured rock, and that provided by another implied entity, located on the opposite side of the rock. The 'behindness' in relation to the rock is not relative to a physical property of the rock. Thus the adverbial *baybirr* 'behind' can be used in the specification of both intrinsic and relative frames of reference.

Like the spatial adverbials discussed in the previous subsection, the frames of reference spatial adverbials normally occur in root form, though they occasionally host postpositions. In the latter circumstance they show some appearance of being nominalised, both formally and functionally—they apparently denote entities: places that are located in the specified relationship to a reference point. This is illustrated by the following examples:

- (6–92) in-imirr i-ngi-rr-jid burlngurr-uk this-PER 3NOM-PST-AUG-go halfway-LOC 'They passed halfway.'
- (6–93) baybirr-kun i-na-ng-kalak-ngay behind-ABL₂ 3NOM-CM-PST-approach-1MIN.ACC 'He came from behind me.'

In (6–92) *burlngurr* 'middle' appears to denote a place or region located in the middle with two unspecified reference points, and this place is used to locate the event with respect to the passing of the two people. Similarly, in (6–93), *baybirr* 'behind' does not orientate the event, but rather designates a region 'behind' with respect to the speaker.

None of the adverbials specifying an intrinsic frame of reference shows an obvious relation to any term for a part of the human body. In fact, just one body-part noun is used relationally in this fashion, the prefixing root -k 'back', as illustrated by (6-94), where it is marked by the irregular instrumental postposition -ingk. The regular instrumental postposition can also be used, as in (6-95), which also illustrates the possibility of reduplicating the entire form. In these examples the reference point is the featured body of the moving object.

- (6–94) kujarr baab marriny i-ngi-rr-jid baybirr irr-k-ingk two children go 3NOM-PST-AUG-go behind 3AUG-back-INS 'The two children walked backwards.'
- (6–95) baab marriny i-ngi-rr-jid irr-k-ang irr-k-ang child walk 3NOM-PST-AUG-go 3AUG-back-INS 3AUG-back-INS 'The children were all walking backwards.'

Like yangan 'close, near', some intrinsic/relative adverbials can be used non-spatially. In (6–96), baybirr 'behind' is used in reference to later time (cf. also the use of the

corresponding term *balyoowa* 'behind' in Gooniyandi—McGregor 1990:182), although this particular example permits both spatial and temporal interpretations. The adverbial *yalirrbur* in (6–97) admits only a temporal interpretation; (6–98) shows an evidently derived form, perhaps a nominal, in which temporal ordering is implied—Nekes & Worms (1953:920) also gloss this word as 'first born'. Line (33) of Text 2 shows a perhaps more abstract comparative use of *yalirrbur* 'ahead' to mean 'better, superior'.

- (6–96) baybirr nga-ngki-jid behind 1MIN.NOM-FUT-go 'I'll go later.'
- (6–97) yay-in ya-ngka-rr-wird yalirrbur-uk
 1&2MIN.CRD-ERG 1PL.NOM-FUT-AUG-eat ahead-LOC
 i-li-rri-ny
 3NOM-IRR-AUG-catch
 'Let's eat it early, lest they get it.'
- (6-98)gudjar alerborindjon maler, war djen yer kujarr yalirrburinjun jin malirr irr war 3MIN.OBL 3AUG.CRD wife two first another wadjima-redjon wajimarr-ijun later:on-ABL₁ "First he had two wives, later on he got a third one." (More literally, 'Two of his wives were from before, the other was from later.') (Nekes & Worms 1953:853)

6.3.2.3 Deictics

A smallish set of spatial adverbials are deictics or shifters, in that they indicate the relative direction of motion or action with respect to a chosen reference point; they specify whether motion (or action) is directed towards or away from the reference point, or neither of these. Included in the set are two adverbials that indicate direction towards the reference point, *nyamalk* 'this way' and *kalamb* 'this direction, towards here'; and three which indicate direction away from the reference point, *nyumulk* 'that way', *kunarr* 'that direction, away from here, over there', and *way* 'away'. It remains unclear precisely how *nyamalk* 'hither, this way' and *kalamb* 'hither, this direction, towards here', on the one hand, and *nyumulk* 'thither, that way', and *kunarr* 'thither, that direction, away from here, over there', on the other, differ in meaning. As (6–100) below indicates, *nyumulk* 'that way' and *kalamb* 'this direction' may occur together in apposition within a single syntactic construction, where they would appear to be (usually) related by addition ('and')—thus meaning 'this way and that way'.

Deictic adverbials normally occur in motion clauses, indicating the direction of motion. This may be motion of the Actor as in (6-99), or of another entity, usually the Undergoer, as in (6-100). The situation, however, need not necessarily be one of motion: it only needs to involve motion, as in (6-101), where of some parts of the Undergoer, the hide of a kangaroo, move with respect to others.

- (6–99) *nyamalk i-ny-jid* hither 3NOM-PST-go 'He went this way.'
- (6–100) aa dub i-nga-rr-a-m jungk kalamb nyumulk kalb mad/ and blow 3NOM-PST-AUG-CM-put fire hither thither above particle 'And they started a fire burning all over the sky.'
- (6–101) yaarr yaarr i-ngi-rr-a-k bardin kunarr aa kalamb pull pull 3NOM-PST-AUG-CM-carry skin that:way and towards 'They stretched out the skin this way and that way.'

Kalamb 'hither'—but not *nyumulk* 'thither' or *nyamalk* 'hither'—is often used with an oblique pronominal to designate a motion event oriented towards the speaker, as in:

(6–102) kalamb jungkarr kurr kujarr hither 2AUG.OBL 2AUG.CRD two 'Come here you two.'

One possible analysis of such examples is that they involve ellipsis of the motion verb, presumably the generic -JID 'go'. However, the presence of the pronominal form *jungkarr* 2AUG.OBL is inexplicable in this scenario, and it would seem preferable to recognise (6–102) as an instance of a distinct verbless construction.

The adverbial way 'away' indicates that not only is motion directed away from the reference point, but also that the moving thing is ultimately located away from that point—it is no longer in the vicinity of the reference point. This is illustrated by (6–2), which shows movement of the Actor; and (6–103) in which the Undergoer moves.

(6–103) way wa-na-kunb away 2MIN.NOM.FUT-CM-send 'Send him away.'

Way 'away' can also be used in a locational sense, indicating that the location of an entity is away from, not in the vicinity of, a reference point; motion may be specified in some other part of the sentence or left unspecified. Thus, in the final clause of (6–104) the speaker is located as 'away' with respect to the situation referred to by the previous clause; motion is, however, indicated by the first clause. It seems that way 'away' is not used when motion is entirely fictive: in no instance is way 'away' used in a clause such as he was sitting away from them, unless there is also a suggestion that he had moved to that position.

The status of *way* 'away' as a deictic spatial adverbial is not entirely clear-cut, and it might also be a preverb—or perhaps admits both preverb and spatial adverbial usages. The fact that it occurs with a wide range of motion expressions, including CVCs, and that it occurs at least as often following as preceding an inflecting verb, suggests that it is an adverbial, and I tentatively adopt this analysis here.

(6–104) jakud nga-n-nyu bur-ung jan nga-n-jal
return 1MIN.NOM-CM-catch place-ALL₁ 1MIN.OBL 1MIN.NOM-CM-see
wamb nyanangkarr i-ng-kard jimbin way
man maybe 3NOM-PST-enter down away
nga-n-k-an-uk
1MIN.NOM-CM-carry-IMP-LOC
'When I arrived home, I saw that maybe a man had gone inside my house while
I was away.'

One other adverbial, *banbirr* 'across', indicates motion directed neither towards nor away from the reference point. This adverbial admits a variety of different contextual interpretations. In (6-105) it indicates that the motion was not directed towards or away from the speaker, but simply towards some other place; in (6-106) it indicates that the motion went past, rather than towards, the reference point, the speaker; and in (6-107) it indicates that the motion was continually changing direction, and hence neither directed towards nor away from the reference point.

- (6–105) *i-n-di-jan* ngank-ang yu-ngki-m-ngay
 3NOM-CM-say-1MIN.OBL word-INS 3NOM-FUT-put-1MIN.ACC
 arri ngank-ang i-la-m-an-ngay banbirr
 not word-INS 3NOM-IRR-put-IMP-1MIN.ACC across *i-ny-jid*3NOM-PST-go
 'He promised to talk to me, but he went elsewhere.'
- (6–106) banbirr nga-ny-jid bin-imirr arri ngank-ang across 1MIN.NOM-PST-go that-PER not word-INS nga-la-m-an-yirr
 1MIN.NOM-IRR-put-IMP-3AUG.ACC
 'I went past them, without talking to them.'
- (6–107) yaward junk i-n-nyu banbirr makirr-mirr ngidirrngin horse run 3NOM-CM-catch across track-PER alone 'The horse ran around the track alone.'

A fully or partially reduplicated variant of *banbirr* 'across'—*banbirrinbirr* or *banbirrbanirr* 'turn around, surround'—is sometimes apparently used as a PV (recall fn. 7), as in (6–108).

(6–108) liinyj-in banbirrinbirr i-ngi-rr-kal bur-uk jin policeman-ERG surround 3NOM-PST-AUG-play place-LOC 3MIN.OBL 'The police surrounded his camp.'

6.4 Temporal adverbials

Temporal adverbials form a relatively large class in Nyulnyul, which may be divided into two main subclasses: (i) temporal qualifiers, which specify a certain point or interval of time; and (ii) temporal quantifiers, which indicate a quantity of time, either the duration of a situation, or its frequency of occurrence. We discuss the two subtypes in order below.

6.4.1 Temporal qualifiers

Temporal qualifiers fall into two classes: (a) shifters or relative time qualifiers, which specify an interval or point of time by reference to its location with respect to a reference point that is normally that of the speech situation; and (b) absolute time qualifiers (non-shifters), which specify the point or interval of time in relation to a time scale established by the natural cyclic progression of days, months, seasons, or years. In the following subsection we discuss the shifters; absolute time qualifiers are discussed in §6.4.1.2.

6.4.1.1 Shifters

Shifters are inherently deictic: they relate a point or period of time to a reference point or deictic centre in terms of its distance and direction from that centre—that is, in terms of the shortness or length of time that has elapsed or will elapse, and whether it is in the past, present or future with respect to the deictic centre. These adverbials are listed in Table 6–2.

J J 1			
Past time	Present time	Future time	
biird 'yesterday'	banangkarr 'today, now, soon, when'	kunard 'tomorrow'	
kanimbird 'the other day, last week, last year'		wajamarr 'later, after, then'	
milirrkarr 'before, long ago'		ral 'right away, soon, now'	
lala 'other days'		karrmij ~ karrm 'later, bye and bye'	

Table 6–2: Nyulnyul temporal shifters

Nyulnyul differs from a number of Australian Aboriginal languages in that it has distinct shifting adverbials for 'yesterday' and 'tomorrow': often these meanings are conveyed by temporal adverbials that otherwise designate parts of the day—'morning' and 'afternoon' respectively. This is the case in Gooniyandi (McGregor 1990:155) and Yawuru (Hosokawa 1991:363). (See §6.4.1.2.1 for terms for parts of the day.) In Nyulnyul *biird* 'yesterday' and *kunard* 'tomorrow' specifically situate events on a day adjacent to the point of reference, usually the time of speaking. Thus, for example:

- (6–109) biird nga-ni-n-jal nakul kalb binyb-uk yesterday 1MIN.NOM-CM-PST-see tide up marsh-LOC 'Yesterday I saw the tide up high on the marsh.'
- (6–110) *liyan i-rri-m-in-ngay derby-ung kunard* like 3NOM-AUG-put-PRS-1MIN.ACC Derby-ALL₁ tomorrow 'They want me to go to Derby tomorrow.'

The other adverbials are much less precise in their inherent meanings, and do not involve accurate placement with respect to their reference point. We begin with *banangkarr* 'today, now, soon, when', which can refer to any point of time during the current day, regardless of whether it is prior to, at the same time as, or subsequent to the time of speaking. (6-111)-(6-114) are illustrative.

- (6–111) arri nga-mungk daarr mi-li-r-an banangkarr not 1MIN-know come 2MIN.NOM-IRR-poke-IMP today 'I didn't think you'd come today.'
- (6–112) bilay ngarl-ngarl i-rri-j banangkarr next bark-bark 3NOM-AUG-say today 'They are still barking now.'
- (6–113) liyan nga-n-m-in way yu-ngku-jid banangkarr like 1MIN.NOM-CM-put-PRS away 3NOM-FUT-go today 'I hope he'll go away soon.'
- (6–114) arri i-la-r-an wul banangkarr nga-mungk not 3NOM-IRR-poke-PST water today 1MIN-know i-la-r-an 3NOM-IRR-poke-IMP 'It didn't rain today, but I thought it would.'

As line (169) of Text 2 shows, the temporal reference point may be the referent speech situation rather than the interactional situation.

Banangkarr 'today, now, soon, when', along with the occasional variant banakarr 'when' (which differs only in lacking the velar nasal), is also regularly used as the temporal interrogative 'when, what time', ⁸ requesting specification of the time at which the situation occurred. ⁹ This is illustrated by the following examples:

- (6–115) banangkarr mi-jid derby-ung today 2MIN.NOM.FUT-go Derby-ALL₁ 'When are you going to Derby?'
- (6–116) kurr irrjiwar banangkarr ku-nga-rr-a-r kinyingk wamb 2AUG.CRD three today 2NOM-PST-AUG-CM-poke DEF man 'When did you three spear him?'

Kanimbird 'the other day, last week, last year' locates the situation at some point of time in the past from yesterday to a year or so ago. ¹⁰ Normally it refers to a point of time a few days ago, as in (6–117), although in (6–118) it makes reference to the previous year.

(6–117) nga-ng-kanyji way nga-ni-ng-kunb-irr
1MIN.NOM-PST-forget away 1MIN.NOM-CM-PST-send-3AUG.ACC kanimbird
other:day
'I forgot I had sent them away the other day.'

⁸ Nekes & Worms (2006:139) give *arrak-karr* (literally, where-TEM) as the temporal interrogative. This form is not exemplified at all in my corpus, and this source provides no examples of its usage.

A similar situation obtains in Gooniyandi, where *yaningi* 'now, at that time' takes the indefinite enclitic *-mi* to form the indefinite temporal marker, which is normally used in requests of temporal information (McGregor 1990:486). In Gooniyandi, however, the root form is not used as an interrogative.

¹⁰ The form *kanimbird* would seem to be a compound involving *kanim* and *biird* 'yesterday'. The first of these forms is not attested elsewhere and apparently meaningless, and the word must be regarded as a synchronically unanalysable cranberry formation.

(6–118) arri ya-la-rr-ngank-an kanimbird not 1PL.NOM-IRR-AUG-speak-IMP other:day 'We didn't talk together recently (i.e. last year).'

The adverbial *lala* 'other day' is attested just once, in example (6–119), and hence nothing can be said with certainty about its meaning or usage. ¹¹

(6–119) daarr nga-na-r yambun ya-nga-rr-landi bilay come 1MIN.NOM-CM-poke together 1PL.NOM-PST-AUG-sit again ngank-uk jarrad lala-ingirr ya-rr-ø-in mijal-uk talk-LOC 1AUG.OBL other:days-SEM 1PL.NOM-AUG-sit-PRS sit-LOC jarrad 1AUG.OBL
'He waited for me until I arrived then we sat down talking like yesterday.'

the speaker's youth, and from a time a little over a century ago, respectively:

The temporal adverbial *milirrkarr* 'before, long ago' indicates a time in the distant past. This is illustrated by the following pair of examples, where reference is made to a time from

(6–120) milirrkarr wurrumbang winin i-nga-n-an bur-uk jarrad before many emu 3NOM-PST-sit-IMP place-LOC 1AUG.OBL banangkarr murrul winin i-rr-ø-in today little emu 3NOM-AUG-be-PRS 'Before there used to be lots of emus in our country; today there are just a few.'

(6–121) milirrkarr maank wamburiny i-ngi-rr-n-an in-ik bur before black people 3NOM-PST-AUG-sit-IMP this-LOC country 'Before there were only Aborigines in this country.'

There are, however, examples of usage of this adverbial in reference to a time no more than about two or three years prior to the reference point.

Milirrkarr 'before, long ago' is also sometimes found in NPs, where it is used to designate the quality of being from the olden days, as in:

(6–122) warli wamburiny milirrkarr everyone people before 'early days people'

The remaining shifters denote non-specific times in the future relative to a temporal reference point. *Wajamarr* 'later, after, then' is normally used to indicate that the referent situation of the clause is expected to occur at some point in the future relative to the speech situation. It is used when the speaker attests relatively strongly to the proposition expressed, and the occurrence of the situation, but does not want to put a precise time on it.

¹¹ *Lala* 'other day' is perhaps a borrowing from a Worrorran language. It is reminiscent of a lexeme for 'Dreamtime' that is widespread in these languages—for instance, Worrorra has *lalai* 'Dreamtime' (Clendon, Lalbanda, Peters & Utemorrah 2000:37).

(6–123) wajamarr nga-ngku-ngunb-irr warli-in later 1MIN.NOM-FUT-send-3AUG.ACC everyone-ERG yu-ngku-rr-lakarr 3NOM.FUT-FUT-AUG-hear 'Later on I'll send them for everyone to hear.'

In narrative texts the reference point may be the time of the referent events, in which case *wajamarr* 'later, after, then' is used to indicate that the current situation occurred sequentially after a previous one. Thus this adverbial is often found in clause-initial position, where it functions much like a conjunction, as illustrated by (6–124) and (6–125).

- (6–124) wajamarr / i-nga-marr-an-uk / banaban later 3NOM-PST-cook-PST-LOC like:that i-ngi-rr-m-an / 3NOM-PST-AUG-put-IMP 'Later, when it had cooked, they did it like this.'
- (6–125) jimbijimb-ang nga-ny-jarrngar wajamarr arms:folded-INS 1MIN.NOM-PST-stand later nga-na-ngul-irr 1MIN.NOM-CM-throw-3AUG.ACC 'I stood with my arms folded, then I unfolded them.'

However, *wajamarr* 'later, after, then' is not restricted to clause-initial position, even when it is used in this way. Thus, in the following example it is in clause final position:

(6–126) jalngkangurr-in i-ngi-r-in wamburiny nidil-ang doctor-ERG 3NOM-PST-poke-PRS people needle-INS layib i-rri-j wajamarr good 3NOM-AUG-say later 'The doctor gives people needles so that they get better.'

Normally events linked by *wajamarr* 'later, after, then' are rather closely related not just temporally, but also in other ways: temporal successiveness suggests a close relation between the events; this may contextualise in a variety of ways. In (6–124), for instance, they are not any events, but events which follow others in a particular procedure; likewise, in (6–125) folding and unfolding of the arms are closely connected; and for (6–126) a causal connection is plausible. (6–127) suggests a resultative connection between hitting by the teachers and the understanding by the students—and by implication that the hitting continued until understanding took place.

(6–127) *i-ngi-rr-dam-yarrad wajamarr*3NOM-PST-AUG-hit-1AUG.ACC later *ya-nga-rr-langk*1PL.NOM-PST-AUG-understand
'They hit us until we understood.'

Occasionally the reference point for *wajamarr* 'later, after, then' is neither the speech nor referent situations, but some time of the day associated with a recurrent situation. Thus, in

(6–128) *wajamarr* 'later, after, then' appears to be comparing the specific referent event of this clause to the normal time when the speaker gets up.

(6–128) nga-ny-jarrajarr wajamarr 1MIN.NOM-PST-arise later 'I got up late (today).'

Another temporal shifter which makes reference to future time is *ral*. This word indicates that the occurrence of the situation is imminent; hence the gloss 'soon, right away, now'. What counts as imminent, of course, cannot be specified exactly in temporal location, and some situations that are indicated as imminent are expected to occur hours or even days after the present. Line (170) of Text 2 exemplifies this adverbial, as does:

(6–129) nga-nga-lakarr-uk mi-nga-mil-uk yubul jakud 1MIN.NOM-PST-hear-LOC 2MIN.NOM-PST-sick-LOC sick return nga-n-ji nga-ni-ny-jal-uk-jii jakud 1MIN.NOM-CM-say 1MIN.NOM-CM-PST-see-LOC-2MIN.OBL return nga-n-ji ral 1MIN.NOM-CM-say right:away 'When I heard you were sick I returned to see after you right away.'

Finally, we mention the future temporal shifting adverbial $karrmij \sim karrm$, which may be glossed 'later, bye and bye'. How the two forms contrast semantically (if indeed they do) remains unclear, there being too few examples of either to permit any interesting hypotheses to be justified, even to decide whether they are allomorphs. This adverbial indicates some point of time, at an unspecified distance in the future, as the temporal location for the situation. Indefiniteness is a characteristic strongly associated with this adverbial. It is frequently found with irrealis verbs, as in (6-130) and (6-131), and clauses involving the particle nyanangkarr 'perhaps, maybe', which of course do not place a precise temporal point of occurrence on the situation, and indeed leave the very occurrence of the situation quite in doubt. Otherwise, they are used where the occurrence of the situation is evaluated as relatively likely, though no commitment is made as to when it is liable to take place; this is illustrated by (6-132).

- (6–130) karrmij nga-la-m later 1MIN.NOM-IRR-put 'I might put it later.'
- (6–131) karrm mi-la-m later 2MIN.NOM-IRR-put 'You might put it.'
- (6–132) yarrad-in ya-ngka-rri-ny karrmij 1AUG.CRD-ERG 1PL.NOM-FUT-AUG-get later 'We'll pick it up later.'

The temporal adverbials we have discussed in this section locate situations in time. They do not require any bound grammatical morphemes specifying their relation to the situation.

¹² The final *ij* of *karrmij* 'later' looks like the dative postposition.

However, some temporal adverbials occasionally host postpositions. For instance, the locative postposition is sometimes attached to *banangkarr* 'now, today', and the ablative postposition *-jun* is sometimes attached to *milirrkarr* 'before'. As (6–133) illustrates, when it is followed by the locative postposition, *banangkarr* normally means 'these days'; and as (6–134) indicates, *milirrkarr-jun* means 'from a previous time', which designates an attribute of the referent. Conceptual entitisation of time appears to be involved in these examples.

- (6–133) karrambal / baan / in-in / banangkarr-uk / ruburr-inyirr / bird like:that this-ERG today-LOC short-COM 'These days the bird has short wings like this.'
- (6–134) nganyji milirrkarr-jun-in wamb i-ngi-rr-kalak-an
 INT before-ABL₁-ERG man 3NOM-PST-AUG-approach-IMP
 beagle bay
 Beagle:Bay
 'Did the olden days' people visit Beagle Bay?'

Words of other parts-of-speech can also be used in making reference to time. For instance, the particle *muj* 'already, before' is used in reference to time past; see §9.2.11. So also are PPs (on which see previous chapter).

6.4.1.2 Absolute time qualifiers

Absolute time qualifiers locate situations with respect to natural cyclic phenomena, such as parts of the day and seasons of the year; there are also some names for days of the week, and for the 'Dreamtime'—the non-historical mythological time during which the world was in its formative stages and its human and animal inhabitants were coming into being. In Nyulnyul the word for 'Dreamtime', *bukarrikarr*, despite being a synchronically unanalysable root, shows a clear morphological relationship to two words for 'dream', the IV -BUKARR 'to dream' and the nominal *bukarr* 'a dream'. The ending *karr* is doubtless identifiable as an instance of the temporal enclitic *-karr*; the intervening *i*-vowel is either a retention from the previous form **bukarri*, or is an epenthetic vowel.

6.4.1.2.1 Parts of the day: the daily cycle

The day is divided into a number of quite natural phases, which are reasonably comparable with the corresponding parts identified in other Aboriginal languages, and even English. The known terms are as follows:

rangkarr 'early in the day'
rangkarr-rangkarr 'early in the day'
rangkarangkarrk 'dawn, daybreak'
barrarangkarr 'daybreak'
bayakarr 'morning'
kiirl 'this morning'
jumbarl 'daytime, afternoon'

majal 'afternoon, evening' ngimbirr 'night, afternoon'

(It will be recalled from p. 233 above that the terms for 'morning' and 'afternoon' in Nyulnyul are not used for 'tomorrow' and 'yesterday', as in some nearby languages.)

Some of these adverbials end in -karr; this is presumably the remnant of the temporal enclitic -karr, which has evidently fused with a former root becoming a new lexical root with it. It cannot now be identified as that enclitic, and must be regarded as a cranberry morph, since the root forms to which it is added, rang, barrarang and baya, do not (to the best of my knowledge) occur independently. The enclitic -karr may, however, be attached to majal 'afternoon, evening'—and perhaps to others of these adverbials (although no examples are available).

The other term for 'dawn, daybreak', *barrarangkarr*, is attested only in Albert Kelly's text. This is almost certainly a compound etymologically, involving *rangkarr* 'early in the day', and *barra*, the word for 'sun, day' in Nyikina, Karajarri, and other nearby languages (though not Nyulnyul itself).

These adverbials can all be used in clauses without postpositions specifying their grammatical role in the clause. The following are some examples of their use:

- (6–135) *jakud ya-ngi-rri-j bur-ung rangkarangkarrk* return 1PL.NOM-PST-AUG-say place-ALL₁ daybreak 'We returned home early in the morning.'
- (6–136) arri nga-la-wid-an may bayakarr not 1MIN.NOM-IRR-eat-IMP food morning 'I didn't eat this morning.'
- (6–137) kinyingk-uk bur nga-nga-mulk ngimbirr
 DEF-LOC place 1MIN.NOM-PST-sleep night
 'That's where I camped last night.'

However, -uk LOC may be attached to at least one of these adverbials, as shown by (6-138). How the presence of the locative postposition contrasts semantically with its absence is not known.

(6–138) nganyji mi-ny-jarrjarr rangkarr-rangkarr-uk kiirl bayakarr INT 2MIN.NOM-PST-arise early-early-LOC still morning 'Did you get up early this morning.'

6.4.1.2.2 Seasons

A number of seasons—or phases of the year—are distinguished by name in Nyulnyul. The words for these seasons are apparently adverbials (see below), and include the following:

marnkarl 'the Wet', roughly December-February; glossed as 'spring' by Mary Carmel Charles.

wirralb 'season following the Wet', roughly March-May; glossed 'autumn' by Mary Carmel Charles.

buyabuy 'beginning of winter'. This term comes from Nekes & Worms (1953:397),

who spell it *boiyeboi*; it is not represented in my corpus, and the phonemicisation is tentative. (It might alternatively be /buyibuy/.)¹³

barrgan 'winter, cold time', approximately May to August.

minimbad 'whale season, end of winter'; this term is given in Nekes & Worms

(1953:716) as a term for September-October. On the same page they give

minimb as the term for 'whale'.

jilalad 'end of dry season', around September. This term is given in Tachon

(1895:44)—tielalat in his spelling—and does not appear in any other

source.

lalin 'summer'; October-November according to Tachon (1895:44), and

December-March, according to Nekes & Worms (1953:640). (Smith &

Kalotas 1985:323 give *lalin* in Bardi as October-December.)

junka 'very hot time', December, according to Tachon (1895:44), who spells the

word tionga.

These seasons were doubtless determined by the weather, wind direction and intensity, times of ripening of fruits, and appearance or disappearance of animal species (aquatic and land)—see further Smith & Kalotas (1985:322). It is possible that astronomical phenomena were also relevant to the identification of these periods, for instance when the Wet season failed, or was extremely short. (It is not known whether in the complete absence of monsoonal rains, as occasionally happens, the term *mankal* would have been used in reference to the period when they ought to have occurred.) Certainly there was a knowledge of recurrent events such as king and neap tides, whose connection with the phases of the moon and times of the year was known.

These words are treated as adverbials because they regularly occur in bare root form when they mark temporal location, as is illustrated by the following example:

(6–139) *i-nga-rr-dam wamb karrkuj barrkan* 3NOM-PST-AUG-hit man dead winter 'A man was killed last winter.'

The temporal enclitic *-karr* may be attached to any of these adverbials to indicate 'during': that the event occurred at some point of time during that season.

(6–140) kujarr wamb bilay i-nga-rr-dam marnkarl-ikarr two man again 3NOM-PST-AUG-hit spring-TEM 'Two men were killed again last spring.'

6.4.1.2.3 Days of the week

At least two days of the week have names: *wajinday* ~ *wiliwilung* 'Monday', and *nakarnak* 'Friday'; it is not known whether there were Nyulnyul names for the other days, or whether the English names were borrowed. No doubt these names date from mission times. Nekes & Worms (1953) do not list any such words, though they had no purist objections to

¹³ Claire Bowern suggests (pers.comm.) that *buyabuy* might be 'rubbish (time)'. In Bardi *buuwi* 'inedible food' is used of the time of the year when there's nothing to eat; Bardi people sometimes call it *rubbish time* in English.

borrowings. *Wajinday* is fairly certainly a borrowing from English *washing day*, presumably because Monday was the day for washing at the mission; *wiliwilung* is probably analysable as *wiliwil* 'line' plus -*ung* DAT: 'to or regarding the (washing) line', referring to the same activity. No etymology is obvious for *nakarnak* 'Friday'.

There are, unfortunately, no examples of either of these words in sentences, and their part-of-speech classification is not known. They are treated here as adverbials simply for convenience, given that the other temporal expressions are adverbials.

6.4.2 Temporal quantifiers

These adverbials indicate temporal quantity, either the duration or the frequency of the situation, and include:

```
    judiny 'forever, for good, completely'
    mangkaj 'all day'
    yadiny 'for a while, short while'
    mingkird 'all the time' (Magdalene Williams pers.comm.; this word is instanced just once in the corpus, elicited for 'all the time'.)
    mangir 'every day, frequently, always'
    mangakarr 'forever' (Torres & Williams 1987; quite possibly this is a mis-spelling of mangirikarr—i.e. mangir 'every day, frequently, always' plus -karr TEM.)
    lawulayi 'always' (cf. lala 'other day')
```

The first three of these adverbials indicate that an event is temporally durative and extends over a period of time, or that the results or consequences of the event have a temporal extent. The following examples illustrate their usage:

- (6–141) baan i-n-in judiny thusly 3NOM-be-PRS for:good 'He's like that forever.'
- (6–142) wa-na-marr / wa-ni-lurr kinyingk judiny
 2MIN.NOM-CM-cook 2MIN.NOM-CM-burn DEF for:good
 yu-ngku-bany
 3NOM-FUT-finish
 'Burn it down so it will be destroyed completely.'
- (6–143) arri i-la-bany kad i-n-in judiny not 3NOM-IRR-finish still 3NOM-be-PRS for:good 'It doesn't dry; it remains for good (i.e. permanent water).'
- (6–144) *yu-ngku-rr-mirrar-jii mangkaj* 3NOM-FUT-AUG-wait-2MIN.OBL always 'They will wait for you all day.'

(6–145) *kad wa-na-r jan nimal / mi-bakand yadiny /* still 2MIN.NOM-CM-poke 1MIN.OBL hand 14 2MIN.NOM-hold for:a:while 'So hold my hand, keep it for a little while.'

The other temporal adverbials generally indicate situations that are repeated a number of times, usually on a number of distinct occasions. This is illustrated in the following examples, and line (213) of Text 2:

- (6–146) wurrul mangir kadikad i-n-ny-in-jin wurrul fingernail always bite 3NOM-CM-catch-PRS-3MIN.OBL fingernail 'He always bites his fingernails.'
- (6–147) ngirrngirr jungurrb arri junk i-li-ny mangir blow short:winded not run 3NOM-IRR-catch always 'He is short winded; he's not used to running.' 15

However, *mangir* 'frequently, always' can be used in reference to durative processes, as shown by example (6–148).

```
(6–148) mangir i-n-in always 3NOM-be-PRS 'It's always there.' (i.e. 'living water')
```

The two groups of temporal quantifiers differ from one another in the respect that the first three of them may only be used in the durative sense, and do not admit the interpretation that a number of iterations of an event type occurred over a period of time. By contrast, the members of the second group of adverbials typically refer to iterations—although at least one admits the durative interpretation available to the members of the first group. Put differently, the first group denote mass times, the latter, count times.

It has already been remarked that the scopal relation between *mangir* 'frequently, always' and *arri* 'not, no' in example (6–147) above is uncertain. In contrast, in (6–149) below it would seem that *arri* must fall within the scope of *lawulayi* 'always': that is, it is always the case that we do not dance—which means that we never do.

```
(6–149) arri burrb ya-li-rri-j lawulayi not dance 1PL.NOM-IRR-AUG-say always 'We never dance.'
```

These quantifying adverbials—like other types of adverbial discussed in this section—are not usually morphologically marked to show their role in the clause. On rare occasions, one of them is followed by a postposition, as in line (213) of Text 2.

It is also possible to indicate temporal frequency by quantifying nominals marked by the instrumental postposition -ang, as in warinyjir-ang 'once' kujarr-ang 'twice', and wurrumbang-ang 'many times'—see §5.3 above.

¹⁴ The prefixing noun *nimal* 'his, her, its hand' is used here as an unanalysable root 'hand', regardless of its possessor.

¹⁵ *Mangir* must have the sense 'frequently, often', if it falls under the scope of the negation: what is negated is that running is frequently done by the actor, not that it is always done by this individual. Alternatively, it might fall outside of negative scope, thus 'always not'.

6.5 Adverbial stem and root formation

6.5.1 Morphological modification of adverbials

As mentioned at various points above, adverbials permit little morphological modification either to specify their grammatical relation, or to derive new adverbial stems. None of this modification is fully systematic or widespread in application.

Some spatial and temporal adverbials occasionally host postpositions; when this happens the adverbial often shows evidence of being nominalised, at least functionally, as in (6-59), (6-60), (6-61), (6-133) and (6-134) above. Cardinal adverbials may also be nominalised by the addition of the suffix -(ya)bul, to derive a form designating the inhabitants of a region. In the following example *baan* 'thusly' is marked by -ard, an otherwise unattested suffix. With an uncertain semantic effect.

(6–150) baan-ard i-ngi-rr-jal thusly-? 3NOM-PST-AUG-see 'That's the way they saw it.'

Compare this with Albert Kelly's rather different usage of the word in lines (46) and (210) of Text 2. Unfortunately, there are too few instances of this form to permit any comment on its range of meanings or uses, or indeed whether it is appropriate to regard this word as a derived form of the adverbial *baan* 'like this'.

The postposition -karr TEM (see §5.13) is not infrequently attached to adverbials, ¹⁷ especially temporal adverbials. It is a frozen formative in temporal adverbial roots such as banangkarr 'now, then, at that time' and bukarrikarr 'Dreamtime' (see above). The first of these may well involve the adverbial determiner baan 'like that'; the second (as already mentioned) probably involves the root bukarr 'dream'. Quite likely, the historical source of the final -karr in temporal adverbials is the temporal enclitic.

A few adverbials occur with the putative suffix -ngin, which generally translates as 'way', as in line (20) of Text 2. On adverbials like kalamb it seems redundant; but not so when attached to baan 'like that', as in line (20) of Text 2. This same ending occurs as a frozen form in the adverbial ngidirrngin 'alone', and on the nominal walirr 'back', forming what looks like an adverbial meaning 'on the back':

(6–151) walirr-ngin bur-uk i-n-di-jirr juurr
back-way place-LOC 3NOM-CM-say-3AUG.OBL snake
wa-rr-jimb
2NOM.FUT-AUG-die
'Lying on his back on the ground, he said, "Die all you snakes."

Finally, just a couple of adverbial roots and stems are formed by compounding. As already mentioned, *barrarangkarr* 'dawn, daybreak', almost certainly derives from an earlier compound; so also does *yalirrbur* 'first, in the first place'.

¹⁶ This is probably cognate with Bardi -*arda* 'thus', which may be an allomorph of either -*garda* or -*barda*, both of which lenite to -*arda* (Claire Bowern pers.comm.).

¹⁷ Nekes & Worms (1953:568–570) dub -*karr* an adverbial suffix of time, and gloss it 'if, when, after'. As suggested in §5.13, there is good evidence that this morpheme is an enclitic, even though a cognate adverbial suffix—generally indicating a type of manner—exists in many languages of the north-west of Australia, non-Pama-Nyungan and Pama-Nyungan (see McGregor 1990:247).

6.5.2 Adverbial reduplication

Adverbs, spatial adverbials and temporal adverbials can be reduplicated, although only reduplications of a few members of each class are actually attested. In most instances reduplication is total, and the semantic effect is generally intensification.

When manner adverbs are reduplicated, as expected, the sense of intensification is usually evident, as in the following examples:

- (6–152) wirrwirr i-ni-ng-kal i-ny-jarrngar-uk stagger 3NOM-CM-PST-play 3NOM-PST-stand-LOC warrij-warrij quickly-quickly 'He got dizzy when he stood up quickly.'
- (6–153) jungar-jungar kad mi-la-barnj-jii nyi-mbal careful-careful¹⁸ cut 2MIN.NOM-IRR-exchange-2MIN.OBL 2MIN-foot kumbarr-uk stone-LOC 'Be careful or you might cut your foot on a rock.'
- (6–154) *jad budarr-budarr nga-na-m* clothes correctly-correctly 1MIN.NOM-CM-put 'I smoothed the cloth.'

Possibly a sense of intensification is also involved in the reduplication *yambun-yambun* 'together-together', which seems to suggest an intensification of the degree of togetherness implied: that the Actors in the situation are interacting with one another. Thus, consider the following examples, in which the Actors must be acting as a group: ¹⁹

(6–155) kujarr yiil yambun-yambun i-rri-j-in two dog together-together 3NOM-AUG-say-PRS 'Two dogs are copulating together.'

The adverbial determiner is not infrequently encountered in reduplicated form, as banaban 'like that'. Unfortunately, however, it is not clear how the reduplicated form contrasts semantically with the root form: as the glosses suggest, both forms appear to be used in reference to qualities of situations ((6-156)-(6-157)) and entities (see line (153) in Text 2). It is possible that the reduplicated form implies intensification, though this is not certain from the examples.

(6–156) angk-ij mi-n-in mijal banaban nyi-mird what-DAT 2MIN.NOM-sit-PRS sit like:that 2MIN-leg 'Why do you sit cross-legged?'

¹⁸ *Jungar-jungar* 'careful' is presumably a reduplication of *jukar* 'soft, slowly'; the reason for the change from the stop *k* to the corresponding nasal is not known.

¹⁹ It is also possible that the reduplicated adverb in this example is reclassified as a PV. There are insufficient examples to permit us to decide between the two possibilities.

(6-157)banaban i-ngi-rr-a-m-jin like:that 3NOM-PST-AUG-CM-put-3MIN.OBL 'This way and that way they made him.'

Some spatial adverbials are reduplicated to express intensification, as in (6–158), where kalba-kalb appears to mean something like 'up high, high above', the degree of 'upness' being intensified, and in line (138) of Text 2, where the relative distance is intensified—thus yangan-yangan indicates an extreme degree of proximity.

(6-158)kalb dumbar i-n-ny-in kalba-kalb, fly 3NOM-CM-catch-PRS up-up 'He used to fly up high.'

The spatial adverbial banbirr 'around' is attested both partially and fully reduplicated. The partially reduplicated form banbirrinbirr means either 'right around something', as in (6-159), or 'round and round something', as in (6-160).

- (6-159)banbirr-inbirr warinyjirr i-ny-jid 3NOM-PST-go around-around 'One went around.'
- (6-160)junk ya-nga-rr-i-ny banbirr-inbirr bardangk-uk run 1PL.NOM-PST-AUG-CM-catch around-around tree-LOC 'We ran round and round the tree.'

The fully reduplicated form banbirrbanbirr is attested only in the second sense, 'around and around':

(6-161)banbirr-banbirr i-jid-in around-around 3NOM-go-PRS 'He wandered around and around.'

Finally, just one temporal adverbial, rangkarr 'early in the day', has been encountered in reduplicated form; it shows both partial and complete reduplication—see p. 238 above. The partial reduplication involves the repetition of the first two syllables, minus the coda of the second syllable; for some reason, this reduplicated form is always found with a final k. (This cannot be identified as the postposition -uk LOC, tempting as this analysis seems, since elsewhere following -rr the initial vowel of the postposition is maintained.) Reduplication here has an intensifying effect, indicating that the relevant time was very early in the morning, dawn or daybreak, right at the prototypical time designated by the adverbial (see also McGregor 1990:247).

7

Inflecting verbs

7.1 Structure of inflecting verbs

Nyulnyul, like the majority of northern Australian languages, shows two main types of verbal lexeme, preverbs (PVs) and inflecting verbs (IVs) (§2.1). PVs admit almost no morphological modification, and certainly no inflection. IVs are morphologically complex, and encode information about the event denoted, including tense, mood, aspect, voice, person and number of the 'subject', 'object' and 'indirect object', and so forth. As already mentioned, PVs usually occur with IVs in compound verb constructions (CVCs), while IVs often occur without a PV in simple verb constructions (SVCs). In this chapter we discuss the morphology of IVs; the morphology of PVs is discussed in Chapter 8. CVCs are treated in detail in Chapter 11.

The morphological structure of finite IVs in Nyulnyul can be described in itemarrangement terms as in the following order-class formula:

Although not indicated in this formula, there are a number of dependencies and cooccurrence restrictions amongst the items. For instance, a tense prefix in order-class –6 is incompatible with a tense prefix in order-class –3; a tense suffix (order-class +2) can only occur if a tense prefix in either order-class –6 or –3 is simultaneously chosen. The number prefix (order-class –5) is compatible only with nominative prefixes of augmented number (in order-class –7). These and other restrictions are mentioned where appropriate in the following sections.

It is not suggested that this mode of description provides an optimal description of Nyulnyul IV morphology. On the negative side, the item-arrangement model necessitates the recognition of some rather complex allomorphic conditioning rules, while in some cases

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This order-class description differs somewhat from the one given in McGregor (1996e:38). The most significant difference concerns order-class +4, REL, which in the previous work (where it was labelled POSTPOSITION) was erroneously assigned to final position. Other differences include the following: (a) tense markers are shown as occurring in three different places, in contrast to the single position of the earlier formula; the second tense slot corresponds to what was wrongly analysed as an epenthetic nasal in the earlier description; (b) just two items are shown in the second order-class, rather than three; the third item, labelled TR (transitive), previously glossed in accordance with the fact that IVs of that conjugation class are overwhelmingly transitive (see §7.6.1 below); (c) a slot is assigned for reduplication in the present formula, though not in the earlier one; and (d) the antepenultimate and penultimate slots of the present formula correspond to a single slot (POSTPOSITION) of the earlier formula.

somewhat arbitrary morphemic divisions and underlying shapes must be proposed, for which the only justification is the fact that, taken together as a set, the entire system works. It may well be that an item-process or word-and-paradigm description would provide a more descriptively and/or theoretically adequate account of the Nyulnyul IV—see e.g. Koch (1990) on the viability of the latter model for some Australian languages.

Perhaps the principal advantage of the item-arrangement description is its conceptual simplicity and appeal, and the fact that abstruse morphological theory is not invoked. Another point in its favour is that it facilitates comparison with other Nyulnyulan languages—in all that have recent descriptions, the morphology of the IV has been represented in item-arrangement terms (often with additional theoretical machinery), including: Bardi (Metcalfe 1979:4; Bowern 2004a:100-102), Nyikina (Stokes 1982:237, 293), Yawuru (Hosokawa 1991:114–115), and Warrwa (McGregor 1994c:38). Examination of these descriptions reveals that there is much in common among the Nyulnyulan languages in terms of the structure of the IV, once differences in terminology are factored in. Perhaps the most obvious difference lies in the relative paucity of order-classes in Nyulnyul vis-a-vis the other languages; this can doubtless be interpreted as the result of simplification accompanying language attrition.

As formula (7–1) indicates, the Nyulnyul IV has two order-classes of bound pronominal elements; these occur at the extremes of the IV, in positions –7 and +5. These are analysed as cross-referencing bound pronominals rather than agreement markers; this is because they indicate characteristics of the referent of the cross-referenced NP, rather than grammatical features of the NP itself. Thus, for instance, NPs are not inherently categorised for number in the third person, but different number forms of the bound pronominals are employed according to the number of the NP referent (at least if the referent is human). A second, rather weaker piece of evidence against the agreement analysis is the observation that in the first person non-singular the bound pronominals draw a different set of paradigmatic oppositions than do the free pronominals (see §7.4 and §7.11, and cf. §4.6). In this case the form of the bound pronominal is predictable from the free pronoun form, without invoking knowledge about the world. However, it seems to be stretching things to say that the bound pronouns 'agree' in person and number with the free pronoun when they distinguish different categories—for instance that a 1 plural form 'agrees' with a 1 minimal form.^{2,3}

Three distinct cases are identified for the bound cross-referencing pronominals, according to their paradigms of forms, and their order-class. There is an obligatory initial nominative-case pronominal prefix (NOM.PRO) in order-class –7, which cross-references the 'subject' (more precisely, the Actor—§12.3.2.1) irrespective of the transitivity of the clause (see §12.3.2.2 on clausal transitivity types). These prefixes show different forms according to the person and number of the referent; there are also certain differences according to tense. Number of the 'subject' is also marked discontinuously, in order-class -5, NUM,

There are also reasons against analysing the relevant morphemes as serving in argument roles in the IV (i.e. against a pronominal argument analysis); see also Chapter 12.

I do not regard as evidence either for or against the agreement analysis the fact that the overt NP corresponding to a first or second person bound pronominal might be a form such as e.g. kujarr wamb 'two men'. The reason this fact is irrelevant is that such NPs—if they serve in the Actor role—would be elliptical, and headed by a pronominal (see Chapter 10).

One commentator objects to my use of 'case' for the paradigmatic forms of these pronominal elements. While it may conflict with some theoretical notions of case, my usage of the term does not do too much violence to the term; it is not inappropriate in that the distinct sets of forms provide information about grammatical relations borne by the NPs they cross-reference.

where a distinction is made between minimal (no prefix) and augmented number (prefix). The 'object' (Undergoer—§12.3.2.1) of a transitive clause is, by contrast, cross-referenced by an accusative pronominal enclitic (ACC.PRO) in order-class +5,⁵ instead of by a prefix. The 'indirect object' (Implicated—§12.3.2.1) of a middle clause (§2.1) is cross-referenced by an oblique pronominal enclitic (OBL.PRO) in the same order-class. This oblique pronominal enclitic also cross-references non-core or adjunct NPs which designate persons indirectly affected by the situation, who benefit or suffer from it (see §12.3.2.1). In these respects the IV in Nyulnyul resembles the IV in other Nyulnyulan languages.

Order-class –6 may be filled by either a tense (TNS) or a mood (MD) marking prefix, these being mutually exclusive. Tense is also marked by morphemes occurring in other positions, prefix and suffix, although mood is exclusively marked by a morpheme in the second order-class. The tense categories themselves are not simply marked by the presence of a morpheme in one of the order-classes, but are simultaneously (partially) marked by allomorph choice of the pronominal prefix, and sometimes by root allomorphy.

Roughly in the centre of the IV, in position 0 labelled ROOT, occurs the IV root itself, which is obligatory. Stems can be formed from IV roots either by reduplication (in which the reduplicated piece is prefixed to the root in order-class -1) or derivation (just reflexive/reciprocal, normally marked by a prefix in position -2 and suffix in position +1). IV stems fall into two main conjugation classes, marked by the presence or absence of a conjugation marker (CM) in order-class -4.

Directly following the stem (and hence the reflexive/reciprocal suffix if there is one, and the root otherwise) is order-class +2, which may be filled by a tense or an aspect marker. There is some evidence suggesting that both morphemes occurring in this order-class may express aspectual meanings, though inadequacies in the corpus make it impossible to be certain. The aspect marker provides tense specification as well.

In antepenultimate position, order-class +3, an applicative marker is permissible; the marker is formally identical with the instrumental postposition (on which see §5.3), though synchronically these are separate morphemes. Order-class +4 is filled by a relator (REL), which is chosen from the set of postpositions (see Chapter 5); around a third of the postpositions occur with IVs. These serve as complementisers.

Most IVs show only a small selection of the order-classes in formula (7–1). Below are a few examples of IVs illustrating typical selections and combinations of morphemes from the various order-classes:

The status of these pronominal elements as enclitics rather than suffixes is not entirely clear-cut. I am inclined to regard them as enclitics for the following primary reasons (cf. Stokes 1982:164, who treats them as suffixes): (i) they closely resemble the free oblique and accusative pronominals formally, and may be regarded as bound and/or encliticised forms of these pronominals; (ii) they constitute separate phonological words of their own, whereas all inflectional suffixes are coherent; (iii) they follow morphemes in the APP and REL order-classes, which appear to be enclitics; and (iv) they appear to be in complementary distribution with free pronouns (whereas pronominal prefixes are not)—cf. the situation in Yawuru where free pronouns very occasionally occur as well as bound pronouns (Hosokawa 1991: 308).

$$-7$$
 -6 -5 0 $+2$ NOM.PRO TNS NUM ROOT TNS ya - nga - rr - $-ngank$ $-in$ 1PL.NOM- PST- AUG- $-speak$ -PRS 'We are talking.'

In addition to the finite IV form described in formula (7–1), IVs in Nyulnyul exhibit a non-finite form which will be referred to as the infinitive. As shown in (7–6), this construction admits only about two thirds of the order-classes constituting the finite IV. (For conceptual convenience, the order-classes are numbered according to the corresponding order-classes of the finite IV.)

$$-7$$
 -2 -1 0 1 2 3 4 $(7-6)$ INF_P (REF_P) (RDP) $ROOT$ (REF_S) INF_S (APP/NSF) REL

Just three order-classes are obligatory: 0, the IV root, and -7 and +2, the INF prefix and suffix. None of the other inflectional slots of the finite IV are available; specifically, neither tense nor mood prefixes may occur, and nor does the conjugation marker appear. Following the INF_S in slot +2, a cliticised applicative and/or case marker may occur; the applicative always occurs first, in order-class -1. Rarely, a stem-forming derivational suffix (NSF) derives a nominal from the infinitive IV; since this may further take a case-marking postposition indicating its clausal role, NSF is evidently in the same order-class as the applicative, number +3. The IV root may be derived either by the reflexive-reciprocal prefix (in position -2) and/or suffix (position +1), or by reduplication (position -1).

The infinitive is even more restricted than formula (7-6) suggests, many of its slots being filled by a unique morpheme. Thus, just the single prefix ma- INF_p occurs in initial position, in the place otherwise occupied in finite IVs by the paradigm of nominative pronominal prefixes. The INF_S slot (order-class +2), which corresponds to the poststem tense/aspect slot of the finite IV (order-class +2), also has a unique filler. The infinitive is thus a non-personal and non-temporal form.

Some examples of infinitival IVs in Nyulnyul are: *ma-jalk-in* (INF_p-JALK-INF_S) 'falling'; *ma-jal-in* (INF_p-JAL-INF_S) 'seeing'; *ma-jalajal-in* (INF_p-JAL-INF_S) 'watching'; *ma-jibijib-in* (INF_p-JIBIJIB-INF_S) 'staring'; *ma-lurr-in* (INF_p-LURR-INF_S) 'burning'; and *ma-barrkand-in-ung* (INF_p-BARRKAND-INF_S-ALL₁) 'tying up'.

Most, if not all other Nyulnyulan languages also distinguish finite from non-finite IVs,⁶ and show an infinitival IV construction resembling the Nyulnyul one; this is always structurally reduced with respect to the finite form. In particular, the infinitival form invariably involves a prefix *ma*- and present tense or imperfective aspect suffix -(i)n. This is the situation, for instance, in Bardi (Metcalfe 1975:186; Bowern 2004a:221) and Nyikina (Stokes 1982:269, 298), as well as most other Nyulnyulan languages: Nekes & Worms (1953) give examples in all Nyulnyulan languages except Warrwa (which is not included in their corpus). In Warrwa the infinitive exists, though is very rarely used (McGregor 1994c: 39). Yawuru is perhaps the only Nyulnyulan language lacking it: Hosokawa (1991:193) finds no evidence of an infinitive, and suggests that the *ma*- forms recorded by Nekes & Worms (1953) and Stokes (1982) are the results of Nyikina influence.

Tachon (1895) identifies both the prefix and suffix for the infinitive in Nyulnyul, though he identifies the suffix as the distant past tense marker. Writing over half a century later, Nekes & Worms (1953) distinguish the infinitival prefix (across Nyulnyulan languages), but do not identify the suffix as a separate morpheme; rather, they consistently treat it as a part of the IV stem or root.

Not accounted for in (7–1) or (7–6) is the enclitic *-mad* EMP (see §9.3.1), which may be attached to a finite or infinitival IV (and apparently to words of any other class), as in *mi-ny-jimb-amad* (2MIN.NOM-PST-die-EMP) 'are you dead?' and *ku-ngu-rr-a-w-mad* (2NOM-PST-AUG-CM-give-EMP) 'will you lot give him/her/it it?' The omission of this enclitic from the order-class formula is because in all available examples it directly follows the IV stem, and it is not known where it would occur with respect to other IV suffixes enclitics—although one suspects that it would occur in absolute final position, given that it apparently relates to the clause as a whole (see §9.3.1).

The chapter is organised as follows. The next section, §7.2, lists the known IV roots and describes some of their most salient characteristics. §7.3 describes the few stem-forming processes that are available to IVs. Then §7.4 turns to the person and number marking prefixes, describing pronominal forms and their variants, as well as the person system. §7.5 turns to tense, describing first the formation of the tenses, then their semantics. §7.6 discusses the two regular conjugation classes, and the inflectional properties of irregular IVs. §7.7 describes the morphology of the reflexive/reciprocal prefix and suffix. The following four sections deal in turn with the suffixes and enclitics: aspectual suffixes (§7.8); the applicative suffix (§7.9); relators (§7.10); and pronominal enclitics (§7.11). The final section, §7.12, discusses the infinitival IV in more detail.

7.2 Verb roots

In this section we first list the IV roots of Nyulnyul (§7.2.1); we then briefly discuss some of their general features (§7.2.2).

7.2.1 List of Nyulnyul inflecting verb roots

Almost two hundred monomorphemic inflecting verb roots are attested with some degree of certainty in Nyulnyul, as shown in Table 7–1. For these, it is possible to assign, more or less tentatively, both a form and a meaning; in addition, a non-trivial selection of inflected forms

⁶ Not all descriptions refer to it as an infinitival form. Thus for instance, Stokes' grammar of Nyikina (Stokes 1982:268) refers to a *general* form of the IV; it is evident that this form is an infinitive.

are available. It will be noted that the vast majority of the IVs listed end in a consonant or consonant cluster; vowel-final IV roots are few in number. An alternative analysis could be suggested in which some or all IVs end in a vowel in underlying form, and that this vowel is deleted in word-final position, and a range of other environments. I have not adopted this analysis here principally for the reason that it does not provide overall any significant descriptive advantage over the consonant-final analysis. There are numerous irregularities in terms of both analyses. The consonant analysis requires a rule of vowel epenthesis that is not entirely regular in application; on the other hand, the vowel-final analysis requires a rule of vowel deletion that is just as irregular. Etymologically (most) IVs were probably vowel final; however, the epenthetic vowel that appears in certain environments is not always the predicted inherited vowel. Finally, the rule of final vowel deletion would also have exceptions, in IVs like -MII 'seek' that never lose their final vowel.

There are in addition to the items listed in Table 7–1 some fifteen IV roots which are too poorly represented in the corpus to permit certain identification and/or classification; these are given in Table 7–2. Thus it seems that Nyulnyul had about the same number of IV roots as Bardi, in which about 230 are attested (Bowern 2004a:30). The inventory of IVs in Nyulnyul and Bardi (and presumably other Western Nyulnyulan languages) is considerably larger than the inventory in their Eastern Nyulnyulan relatives: Yawuru has 82 (Hosokawa 1991:113), Nyikina, 145 (Stokes 1982:185), and Warrwa 60–100 (McGregor 1994c:39).

Table 7–1: Nyulnyul verb roots

Verb root ^a	Gloss	Class ^b	INF _S ^c
-BAD	'seize, take hold of, catch, block, stop fighting'	na-	-in
-BADIK	'complete, finish, block, stop'	ø, na-	-an
-BAKAND	'have, possess'	Ø	-in
-BALAKANYJ	'fight'	Ø	-in
-BALABAL	'follow, track'	na-	-in
-BALIBALIM	'stir, mix'	na-	-an
-BALM	'kiss'	ø?	
-BAMARR	'tremble'	ø , na-	-an
-BAND(I)	'blame, grumble, scold, threaten, curse'	na-	-an
-(BA)NGARINYJ, -BUNGIR(R)	'show off, be proud'	Ø	-in
-BANY	'finish'	ø, na-	-in
-BANYJ	'experience, feel, smell?'	ø	-in
-BARD ^d	'block, prevent'	na-	
-BAR(R)IL	'fly down'	ø	
-BARND	'cover'	ø, na-	-an, -in
-BARNJ	'exchange, do to self'	Ø	-in

 Table 7–1: Nyulnyul verb roots (Continued)

Verb root ^a	Gloss	Class ^b	INF _S c
-BARRABARR	'think, think about (someone)'	na-	-in
-BARRAL, -BAR(R)ALK	'hiccup, burp'	ø	-in
-BARRKAND	'tie'	na-	-in
-BILK	'blow (of wind)'	ø, na-	-in
-BIR(R)IL ^e	'fly'	ø	-an
-BUDUWA(NYJ)	'quarrel, argue'	ø?	-in
-BUKARR	'dream'	na-	-in
-BUL(AM)	'grow'	ø	-an, -in
-BULABUL	'wash, bathe'	ø, na-	-an
-BULM	'soak, steep'	ø, na-	-an
-BUNDAR(R)	'bite, chew hard food'	na-	-in
-BUNYJ	'smell, stink'	ø	
-BUNGKUM	'swell up, bubble up, inflate'	Ø	-an
-BUNGKUBUNGKUM	'swell up, bubble up'	Ø	-an
-BUNUNG	'cast off skin'	Ø	-an
-BURR	'cover over, paint, bury'	na-	-an, -in
-BUR(R)AR(R)	'wait for'	na-	-in
-BUR(R)K	'look for, search'	na-	-an
-DAM ^f	'hit'	na-	-an, -in
-DIM ^f	'maltreat'	na-	
-J ~ -DI	'do, say'	na-	-in
-JABAJAB	'ask'	na-	
-JABAL ~ -JIBAL	'ask'	na-	-an, -in
-JAL	'see'	na-	-an, -in
-JALK	'fall'	Ø	-in
-JANB	'kick, trample, step on'	na-	-an, -in
-JAR(R)K	'shave'	ø, na-	-an
-JARLK	'hide, conceal'	na-	-in
-JARRAD	'stretch, extend'	ø	-in
-JARRAJARR ~ -JARRJARR	'ascend, rise up, awake'	ø	-in
$\hbox{-JAR}(R)AL, \hbox{-JIR}(R)AL$	'slide, slip, get bogged'	ø	-an

 Table 7–1: Nyulnyul verb roots (Continued)

Verb root ^a	Gloss	Class ^b	INF _S c
-JARRINJARR	'rise'	ø	
-JARRNGAR	'stand, stand firm'	ø	-an
-JAR(R)UNG	'pour, fill'	na-	-an
-JIB	'ask'	na-	-an
-JIBIJIB	'stare at, watch'	na-	-in
-JID	'go'	ø	-an, -in
-JIDING	'touch'	na-	-an
-JIL, -JILIK	'lick'	na-	-an
-JIMB	'die'	ø	-in
-JINDIWAR	'hang'	ø	
-JIRIK ~ -JARIK	'fear, be afraid of, tremble'	ø	-an, -in
-JIWAND	'hang'	ø	
-JIWAR	'follow'	na-	
-JUD	'move (of tide)' ('dry up, become dry, tide going out, ebb tide')	Ø	-an
-JUDAR	'trip, hurt' ('go straight on, straight forward')	na-	-in
-JULB	'startle, scare, chase away'	na-	-in
-JULNG	'tell, relate'	na-	-an, -in
-JULUK	'wash'	na-	-un
-JUMB	'extinguish'	na-	
-JUMBARR	'straighten (e.g. a spear)' ('singe a bird or kangaroo, smoke a fish superficially')	na-	-an, -in
-JUNG	'cramp'	ø	
-JURND ^g	'go out (of tide)'	ø	
-JURUB	'fart'	ø	-an, -in
-K	'carry, bring, take'	na-	-an
-KABD	'hiccup'	ø	
-KAD	'enter, go in, go down'	ø	-in
-KADIW	'grow'	ø?	-an
-KAKUL	'break'	ø, na-	-in

 Table 7–1: Nyulnyul verb roots (Continued)

Verb root ^a	Gloss	Class ^b	INF _S c
-KAL	'wander, roam, play'	na-	-an, -in
-KALAB	'be born'	Ø	-an
-KALABIN(Y)J	'regret'	Ø	-in
-KALAK	'approach, come up to'	na-	-an
-KALB	'feel lonely, pine for'	Ø	-in
-KALBARR	'drop, lose'	ø, na-	-an
-KALWAL \sim -KILWAL $(+APP)^h$	'be restless, sleep restlessly'	Ø	-an
-KANB	'get fat'	Ø	-in
-KAND	'scratch'	na-	-an, -in
-KANM	'laugh, laugh at, deride'	ø, na-	-an, -in
-KANYB	'vomit'	Ø	-in
-KANYJ	'forget'	Ø	-in
-KANYJ	'leave, abandon'	na-	-an
-KARLBIR(R)	'sing, hum incantations'	na-	-an
-KAR(R)	'pick, choose'	na-	-an
-KAR(R)M	'deny, refuse'	Ø	-an
-KAR(R)M	'break'	ø, na-	-an
-KARRMAR	'break'	ø, na-	-an, -in
-KIRLBIR(R) ⁱ	'to sing a love song'	na-	-an
-KIR(R)	'dig'	na-	-an
-KIRRIR	'piss'	na-	-in
-KUDAL	'disappear, go out of sight, get lost'	Ø	
-KUDAL	'spin, plait, twist'	na-	-an
-KUDIJ	'flood, come in (of tide)'	na-	-in
-KUDUM	'correct' ('blame, rebuke')	na-	-an
-KUL	'wear, dress, clothe'	ø, na-	-an
-KUMBIN(Y)J	'wedge oneself, be wedged, stick fast'	Ø	-in
-KUNB	'send, allow to go'	na-	-an
-KUNDAR(R)	'get lost, lose one's way'	ø	-in
-KUNDUKUND	'push, drive, drag, float'	na-	-an

 Table 7–1: Nyulnyul verb roots (Continued)

Verb root ^a	Gloss	Class ^b	INF _S ^c
-KURID, -NGIR(R)ID	'paint, anoint'	ø, na-	
-LAKARR	'hear, listen'	Ø	-in
-LAMB	'kiss'	na-	-in
-LAND	'sit'	Ø	-an, -in
-LANGK, -LINGK	'understand, understand someone'	na-	-an
-LANYB	'steal'	na-	-in
-LAR(R)M	'taste, prove, take a little bit'	na-	-an
-LINGAR(R)	'show'	ø	-an
-LUNGK	'dig'	na-	-in
-LURR	'burn, cook'	ø, na-	-an, -in, -un
-M	'put'	na-	-an
-MAD	'build'	na-	
-MADAL	'hide'	ø, na-	
-MAJARRAD	'dribble'	Ø	
-MAKUR	'make'	na-	-an, -in
-MAL	'stir'	ø?	
-MALB	'borrow, lend'	na-	
-MALINANGK	'rise (of sun)'	na-	
-MALK	'hide'	na-	-in
-MANGKAD, -MINGKAD	'leave, abandon'	na-	-in
-MANGANY	'short of, in need of'	Ø	
-MANGKAR(R)	'ask in vain for, be refused'	Ø	-in
-MANY	'wave'	Ø	-an, -in
-MARR	'cook, burn'	ø, na-	-an, -in
-MARRB	'show, perform'	na-	-an
-MII	'look for, seek'	Ø	-an, -in
-MIJAL +APP	'rely on, depend on, trust'	Ø	-an
-MIJUL	'splash water'	ø?	
-MIJULNG	'tell lies'	ø?	-in
-MIL	'sing'	na-	-in
-MILK	'awake, wake up'	ø, na-	-an, -in

 Table 7–1: Nyulnyul verb roots (Continued)

Verb root ^a	Gloss	Class ^b	INF _S ^c
-MINDIJAL	'awaken, wake up, get up'	ø, na-	
-MINGK	'choke'	na-	-in
-MINNYUR(R)UB	'talk about, explain'	na-	
-MINYJ	'take from, borrow'	na-	
-MIRRAR	'wait for'	na-	
-MUKAR	'make'	na-	
-MULK	'sleep'	ø	-an, -in, -un
-MUND	'wet, saturate'	ø, na-	
-MUNKAR	'lift'	na-	
-MURRAR, - $MUR(R)$	'smell, sniff'	na-	-an, -in
-MUUR	'spill'	ø, na-	-an
-N	'sit, be'	ø	-an, -in
-NGAL	'shit on, befoul, become befouled'	ø, na-	-in
-NGALYANGAL	'tease, vex'	na-	-an
-NGALK	'cry, wail'	Ø	-an, -in
-NGALY	'slip'	na-	
-NGANY, -NGANNY	'refuse, deny'	na-	-an
-NGANYB	'bake, roast'	na-	-an
-NGAJIM, -NGAR(R)JIM	'hit'	na-	-an
-NGAR(R)K	'drive, cause to do, be at fault, bring discredit upon; be driven by water, drift'	ø, na-?	-an, -in
-NGARNK	'speak, tell'	Ø	-an, -in
-NGARRJAL	'be mistaken'	na-	
-NGINDIK	'not know, not recognise'		
-NGIRIMB	'chase, run after'	na-	-an
-NGUL	'throw'	na-	-an, -in
-NGULIRR	'obliterate'	na-	
-NGULM	'pretend, deceive'	ø, na-	-an, -in
-NGUNDUM	'hold'	na-	
-NY ~ -NYU	'get, catch, fetch, receive'	na-	-an
-R	'poke, pierce, spear'	na-	-an

Table 7–1: Nyulnyul verb roots (Continued)

Verb root ^a	Gloss	Class ^b	INF _S ^c
-RALK	'dry'	ø, na-	-an
-RALKAM	'dry something'	na-	
-RAMB	'warm oneself'	Ø	-an
-W	'give'	na-	-an
-WALAWAL	'lead'	na-	
-WALM	'call out to'	Ø	
-WAND	'gather, collect, pick up'	na-	-in
-WANDIM	'detain, restrain'	na-	-an
-WANYJ	'climb'	Ø	-in
-WARD	'mock'	na-	
-WARK	'take, bring'	na-	-an
-WARLIWARL	'talk'	ø?	
-WID ~ -KID	'eat, drink, consume'	na-	-in
-WILIM, -WULUM	'call, sing out, howl'	Ø	-an
-WIRIK, -WAR(R)IK	'try, attempt, taste'	na-	
-WIRIM	'point out, indicate'	na-	-an
-WUL	'scrape, shave, plane'	na-	-in
-WULUWUL	'comfort, console'	na-	-an
-WULB	'chase, drive away'	na-	-an
-WUNDAR(R)	'cross a river'	na-	-in
-WUNDUM, ^j -WUNDIM	'stop, prevent, restrain, detain'	na-	-an
-WUR(R)KIWUR(R)KIMI- N(Y)J	'grumbling'	??	-in

- a. Grey font in the first column indicates IV forms from Nekes & Worms (1953) that are not repeated in my corpus. These forms are given in the orthography of the present description. Grey font is also used in the second and third columns when the information given in Nekes & Worms (1953) is merely classificatory; when they cite actual forms and examples that allow the information to be assessed, black font is used.
- b. Class here refers to the conjugation class of the IV, as determined by the CM that collocates with it.
- c. In this column are indicated the allomorph(s) of the infinitival suffix INF_S (see (7–6)) attested with the IVs, in so far as they are known. These are to a large extent lexically conditioned (see §7.12.1.2).
- d. This is possibly the same IV as -BAD 'seize, etc.'; cf. also -BADIK 'block'.
- e. This should perhaps be identified with -BAR(R)IL, though they are glossed differently in Nekes & Worms (1953:368, 390).

- f. This root consistently selects the n- allomorph of the CM.
- g. Compare -JUD 'go out'.
- h. This IV, from Nekes & Worms (1953:543, 553, 587), is attested only with the applicative enclitic *-ang*. However, the single example sentence this source provides seems to involve regular use of the applicative in which the Undergoer corresponds to a locative PP in the corresponding non-applicative (see below §7.10). Thus it seems safe to conclude that the applicative is not actually a part of the IV root.
- i. This is possibly same root as -KARLBIR(R).
- j. This root should perhaps be identified with -WANDIM.

Table 7–2: Uncertain IV roots in Nyulnyul

Verb root	Possible gloss	Class	Comments
-BA(NI)NY	'drink'	na-	Instanced twice in corpus, used specifically in sense 'drink'
-BAKAL			No clues to meaning
-BINY	'weaken'		Possibly a mishearing of -BANY 'finish'
-BUN	'spear, poke'	na-	Cited in Nekes & Worms (2006:309)
-DAB	'hit'	na-	Apparently the regular Jabirrjabirr 'hit' IV, though it alternates with -DAM 'hit' (Nekes & Worms 1953:415, 418); occasionally also used in Nyulnyul
-JARLINIK			No clues to meaning
-KAL	'be homesick'	Ø	Instanced once; perhaps should be identified with the IV -KAL 'wander'
-KAJARR	'get sick'		Not clear whether this is an IV or -K 'carry' + -jarr (the identification of which is uncertain)
-RLABRLAB	'kiss, embrace'		Instanced once in corpus; the only clue to meaning is the meaning of the corresponding Bardi IV
-MIL	'be sick'		Instanced once in corpus as mingamil 'you were sick'
-NGANAM	'ask'		Instanced once in corpus
-NYURR	'take away'	na-?	Instanced in Torres & Williams (1987); possibly a misrepresentation of -NY 'get'
-WAMB			Instanced once in the form <i>ngawamban</i> ; meaning unclear
-WURDUM	'mistreat'		Instanced once in corpus
-WUWU	'tempt'		From a translation of the pater noster

7.2.2 Characteristics of IV roots

Nyulnyul IVs cover many senses that one would expect in a list of a couple of hundred items, although there are some surprises, and a degree of apparent arbitrariness in the range. A range of basic meanings are included: 'sit, be', 'say, do', 'have', 'go', 'see', 'hit', 'get', 'give', and the like. However, there are some unexpected omissions, including absence of an IV with the basic positional meaning 'lie', and none with the motion sense 'swim'. Although there is an IV glossed 'stand', -JARRNGAR, it appears not to code the basic positional meaning 'be in a standing position', but conveys other meaning components as well. Thus Nekes & Worms (1953) gloss it 'stand firm'.

Some of the meanings are more specific than expected given the smallish number of IVs, including 'swell up, bubble up, inflate', 'cross a river', 'shit on, befoul, become befouled', and 'cast off skin'. There are also a good number of apparent synonyms within the list of IVs, including more than one IV for 'hide', 'break', 'smell', and 'cook, burn'.

Some of the forms in Table 7–1 appear to be analysable. There are IV roots that appear to be reduplications of meaningless formatives: -WUR(R)KIWUR(R)KIMIN(Y)J 'grumbling', -BALIBALIM 'stir, mix', -BARRABARR 'think, think about (someone)'. These constitute about 7% of IV roots. In some instances the unreduplicated IV root may have existed, but is not present in the corpora. My own corpus, for instance, shows only the reduplicated form -BUNGKUBUNGKUM 'swell up, bubble up'; the unreduplicated form -BUNGKUM 'swell up, inflate' is however attested (though not exemplified) in Nekes & Worms (1953:407–408).

Formative reduplications almost all follow the formal patterns of root reduplications (see $\S7.3.1$): formatives with CV(C) or CV(C)CV(C) shapes are fully reduplicated, and usually employ a linking epenthetic vowel if there is a final consonant. For larger formatives, just the initial CV(C)CV—the first two syllables without the coda—is repeated, and prefixed to the full formative.

The meaning of formative reduplication is fairly consistent with the meaning of regular IV root reduplication: they typically denote events made up of repeated components: grumbling typically consists of repeated instances of complaint, stirring or mixing of repeated bodily movements. This is consistent with the origins of these IV roots in regular IV root reduplications.

In a few instances what appear to be formative reduplications correspond to unreduplicated IV root bearing no apparent meaning relation to it. Although synchronically both reduplicated and unreduplicated forms are roots, diachronically they can sometimes be traced back to a single IV root. This may be the case for -WULAWUL'comfort, console' and -WUL 'scrape, shave, plane'. It is plausible that -WUL began life meaning 'move a flat item such as a hand or hand-held instrument along surface'. This could easily change over time to 'scrape, shave, plane'; meanwhile the reduplication -WULAWUL might have undergone a different semantic change, from 'repeatedly rub surface' to 'comfort, console'—the latter being a possible result of repeated actions of the former type.

Aside from reduplications, there are also forms like -(BA)NGARINYJ 'show off, be proud', -KUMBIN(Y)J 'wedge oneself, be wedged, stick fast', -MANGAN(Y)J 'short of, in need of', and -BUDUWA(NYJ) 'quarrel, argue' that resemble reflexive/reciprocals in both meaning and form. Thus each has a final -nyj (optional in one instance), and at least one has an initial syllable that might be identified with the reflexive/reciprocal prefix ma-(which is occasionally denasalised in regular reflexive/reciprocals). There are however no known corresponding underived IVs.

Other regularities include the recurrent initial *jarr* of -JARRAJARR ~ -JARRJARR 'ascend, rise up, awake', -JARRINJARR 'rise', -JARRNGAR 'stand, stand firm'; all of these involve vertical orientation of the event. These IVs may have origins in compounds. (There are other recurrent formatives, though the meaning correlations are less plausible.) In a few instances pairs of semantically related IVs differ in vowel quality—for instance, -JIMB 'die' and -JUMB 'extinguish', and -MILK 'awake, wake up' and -MULK'sleep'.

The above observations strongly suggest that the system of IVs in modern Nyulnyul is the remnant of a larger and more productive system. This is consistent with my suggestions concerning the historical development of the compound verb construction in languages of northern Australia (McGregor 2002c).

The IV roots listed in Tables 7–1 and 7–2 overlap little with other parts-of-speech. Just a handful are either homophonous with words of other parts-of-speech or represent dually classified lexemes. Perhaps the best illustration is provided by /lanyb/ 'steal', which represents both the PV *lanyb* 'steal' and the IV -LANYB 'steal'. Another example of formal identity is the nominal *jabal* 'story' and the IV -JABAL 'ask'; semantically these are too different to represent a single dually classified lexeme. Less certain is the nominal *bukarr* 'dream' and the IV -BUKARR 'dream'; there is also a temporal adverbial *bukarrikarr* 'Dreamtime'. These examples suggest that at a former time there may have been a more significant overlap between IVs and other parts-of-speech. Further support for this comes from IVs like -JIMB 'die', which is a plausible cognate of the adverbial *jimbin* 'down, below, inside'.

As a class, IV roots show some phonological differences from roots of other categories, although these differences probably do not reach statistical significance; in most respects they are like roots of other parts-of-speech. All are consonant initial (in underlying form), and most end in either a consonant or consonant cluster. The vast majority of Nyulnyul IVs are at least two morae in size, and consist of at least one CV: (i.e. consonant followed by long vowel) or CVC(C) syllable; the few exceptions consist of just a C, and thus resemble prefixing nouns, the only other lexical category permitting such minimal forms. But unlike prefixing nouns, IVs never begin with a vowel. Also like prefixing nouns—and PVs—less than a tenth of IV roots have more than two syllables. See §3.2.1 for more on phonotactics.

A number of IVs show two or more alternate though related phonological forms in apparent free variation. This variation is present not just in my corpus, but also in Nekes & Worms (1953). Some IVs show forms differing in vowel quality. In some cases the alternation involves the two high vowels, as in: -WILIM ~ -WULUM 'call, sing out, howl' and -WUNDUM ~ -WUNDIM 'stop, prevent, restrain, detain' (Nekes & Worms 1953:870, 910). Slightly more often it involves the low vowel and the high front vowel: -JABAL ~ -JIBAL 'ask', -JAR(R)AL ~ -JIR(R)AL 'slide, slip, get bogged', -JIRIK ~ -JARIK 'fear, be afraid of, tremble', -LANGK ~ -LINGK 'understand, understand someone', and -MANGKAD ~ -MINGKAD 'leave, abandon'. No motivation for these alternations is apparent.

Other alternations involve presence vs absence of a final vowel and consonant. For instance, in the corpora -BADIK and -BAD, both meaning 'complete, finish, block, stop', appear to alternate freely, as do -JIL and -JILIK 'lick' and -KAR(R)M and -KARRMAR 'break'. By contrast, -RALK 'dry' and -RALKAM 'dry something' are in partial free variation: both can be used transitively, 'dry something'; the longer form is, however, not attested as an intransitive IV.

Of course, it is possible that some or all of the above-mentioned apparent free alternants are associated with different varieties. There is no empirical evidence for—or against—this hypothesis, however.

7.3 Stem forming processes

There are two relatively regular processes by which IV stems may be formed from roots, reduplication (§7.3.1) and derivation (§7.3.2).

7.3.1 Reduplication

We have already mentioned that a small fraction of IV roots can be analysed as reduplications of meaningless formatives. More productive and regular is the formation of IV stems by reduplication. Reduplication seems possible for most IV roots. Exceptions are IV roots consisting of just a single consonant; there is no evidence that such minimal roots may be reduplicated. Nor is there any evidence that IV roots that are reduplicated formatives may be reduplicated to form new stems. With these exceptions, reduplications of IVs of any phonological shape seem acceptable. Moreover, root reduplication is fairly regular both formally and semantically. However, as is usual for stem forming processes, predictability is less than a hundred percent. In the next two subsections we deal first with formal patterns in reduplication, then with its semantic effects.

7.3.1.1 Formal patterns in IV reduplication

Formal patterns of, and conditions on, reduplication appear to be basically the same for roots as for formatives. Both total and partial reduplication are attested. Total reduplication tends to be restricted to monosyllabic roots, while partial reduplication is usually associated with roots that are bisyllabic and longer.

In total reduplication of monosyllabic roots an epenthetic vowel sometimes links the two reduplicants. The single example of reduplication of an open monosyllable, -MIIMII 'look for, seek', involves total reduplication. When closed monosyllables are fully reduplicated an epenthetic vowel often separates the reduplicants: -BALABAL 'follow', -BARRABARR 'think', -JIBIJIB 'stare at', -JILIJIL 'lick', -WALAWAL 'lead', -JALAJAL 'look after', and -WULUWUL 'shave'. The epenthetic vowel is usually identical with the vowel of the reduplicant, although there are exceptions, such as -KADIKAD 'go in and out' and -NGALINGAL 'shit on, soil, make dirty, become dirty'.

Occasionally, however, no epenthetic vowel appears: -MUURMUUR 'to pour out, to upset, to throw away, to capsize', -JARRJARR 'rise up', and -BURRBURR 'obliterate'. Given that no vowel occurs in these examples, but does occur in e.g. -BARRABARR 'think', a purely phonological explanation is impossible. Possibly the difference is a consequence of an earlier historical difference in the roots, whereby some had final vowels (subsequently lost on the second reduplicant), while others had final consonants.

Closed monosyllabic roots ending in consonant clusters may also be reduplicated, and this occurs in exactly the same way. Normally a linking vowel separates the final consonant cluster of the first formative from the initial consonant of the second formative, as in -JANBIJANB 'tap with foot', -BARNJIBARNJ 'exchange', and -KANDAKAND 'scratch'. (Notice that in the first two reduplications the epenthetic vowel is different from

the vowel of the reduplicant.) In one case, however, no linking vowel occurs: -JULNGJULNG 'tell'. (The triconsonantal cluster /lngi/ does not occur elsewhere.)

A few instances of reduplication of bisyllabic IV roots are instanced, all of which have closed final syllables. These reduplications are all partial, with the entire IV root minus the final consonant prefixed to the full root. Examples are: -MIRRA-MIRRAR 'wait', -MURA-MURRAR 'smell', -JILI-JILIK 'lick', -MUKAMUKAR 'make an arrangement', and -MANI-MANINY 'waving'.

Reduplication of roots of more than two syllables is vanishingly rare, if it occurs at all. A possible example is -BUDU-BUDUWANYJ 'quarrel, dispute'. This example is not entirely certain, however, since the final three segments might be analysable as the reflexive/reciprocal suffix -inyj, although the balance of evidence suggests that it is probably better to consider it part of the root synchronically.

There are a few irregular instances of other types of reduplication. Thus -JALAL 'see' shows the attachment of the rhyme of the monosyllable to the end of the IV root; this exceptional pattern exists alongside ordinary reduplication for the IV -JAL 'see'. Prefixation of the initial CV of a closed monosyllable occurs in -BA-BAND 'cover'. And in -BAMAMARR 'shake' (a reduplication of -BAMARR 'shake') the initial C and V of the second syllable are reduplicated and inserted between the first and second syllables of the root. A single instance involves full reduplication of a bisyllabic root ending in a consonant: -KALAKKALAK 'follow, approach', from -KALAK 'follow, approach'. (The regular -KALAKALAK also exists.) Whether the meanings of these irregular reduplications differ from the meanings of regular reduplications is not known.

7.3.1.2 Semantic patterns in reduplication

Reduplication of IV roots tends to be fairly consistent in its semantic effect; it normally indicates iterativity. This is illustrated by the examples in Table 7–3. Note that in most cases the unreduplicated IV root has a more general meaning than the reduplicated stem, and is unspecified for iterativity. Thus -BARNJ 'exchange' can be used in reference to any event that -BARNJIBARNJ 'share amongst a group, exchange with one another' can denote. The reverse does not hold, however.

In a few cases iterativity must be inferred from the glosses, as e.g. in -JULAJUL ~ -JULAJULUK ~ -JULUJULUK 'wash clean', -KALBIKALB 'feel lonely, pine for', and -NGALINGAL 'soil, make dirty, become dirty'. My guess is that the resultative senses of the first and last of these examples is not coded, but inferred from the iteration of the events of washing and shitting on. For -KALBIKALB 'feel lonely, pine for', one presumes that reference is being made to an emotional event made up of repeated instances of feeling lonely. The case of -KADIKAD 'go in and out' clearly also involves iteration of the event of going in—omitting mention of the event of exiting that occurs in the English gloss.

There are, however, instances of IV reduplication in which it does seem that more than iterativity is coded. This additional meaning is not consistent, and reduplication is partly lexicalised. For example, the reduplication of -BURR 'cover over', -BURRABURR 'obliterate', involves more than repeatedly covering over, and the reduplication of -JAL 'see, look', -JALAJAL 'watch over, look after', codes not just repetition of the looking event, but repetition with a purpose. In the cases of the two reduplications of -JIRIK 'fear, be afraid of, tremble'—-JIRIKJIRIK 'provoke' and -JIRIJIRIK 'tease, insult, call names,

Table 7–3. Some IV roots and then reduplications		
IV root	Reduplication	
-BARNJ 'exchange'	-BARNJIBARNJ 'share amongst a group, exchange with one another'	
-JANB 'step on, kick'	-JANBIJANB 'tap foot repeatedly, trample on repeatedly'	
-JILIK 'lick'	-JILIJILIK 'lick repeatedly'	
-JULUK 'wash'	-JULAJUL \sim -JULAJULUK \sim -JULUJULUK 'wash clean'	
-KAD 'enter'	-KADIKAD 'go in and out'	
-KALB 'feel lonely pine for'	-KALBIKALB 'feel lonely pine for'	
-KAL 'play, wander, roam'	-KALAKAL 'play around'	
-KAND 'scratch'	-KANDAKAND 'scratch repeatedly'	
-MII 'seek, look for'	-MIIMII 'look around for something, feel about for something'	
-MURRAR 'smell, sniff'	-MURRAMURRAR 'sniff repeatedly'	
-NGAL 'shit on, befoul'	-NGALINGAL 'soil, make dirty, become dirty'	
-WUL 'shave'	-WULUWUL 'shave something (e.g. a spear) repeatedly (until smooth)'	

Table 7–3: Some IV roots and their reduplications

rebuke, scold'—causation is also involved in the reduplications, which appear not to refer to iterations of fearing or trembling.

Yet another semantic component is involved in the reduplication of -MUUR 'spill, pour', -MUURAMUUR 'spill out, throw away, upset, capsize', where the iteration of the event of spilling involves a range of different moving entities. Reduplication of IVs in Nyulnyul only rarely suggests involvement of a number of individuals in the event. There are instances in which the reduplication of -WARK 'pick up', -WARKAWARK ~ -WARKWARK 'take', appear to indicate picking up a number of people, as in e.g. line (1) of the bower bird text (Nekes & Worms 2006:308). Both of these reduplications denote single conceptual events involving action on a number of entities. There are no instances in which a reduplication suggests plurality of an Agent.

In a few examples reduplication is suggestive of a durative rather than an iterative event. This is the case, for instance, in:

```
(7–7) nakul muj i-jud-in / i-judi-jud-in tide already 3NOM-dry:out-PRS 3NOM-dry:out-PRS 'The tide is going out.'
```

Both the IV root and the reduplicated stem can refer to the same situation, the ebbing of the tide. I would argue that this example is consistent with the claim that reduplication codes iterativity. Going out of the tide is made up of the iterations of smaller events in the form of waves that repeatedly meet the shore, and successively fail to reach the previous height, thus, events of drying up of more and more of the shore. The unreduplicated -JUD 'dry out,

dry up' is less specific semantically, and can refer to ebbing of the tide as well as single instances of drying out:

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(7–8) namanj in-djod
nga-many i-ny-jud
my-throat 3NOM-PST-dry:out
'I am thirsty.' (Nekes & Worms 1953:525)
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For a number of reduplications it is impossible to be entirely certain of the semantic effect of reduplication due to lack of instances. For instance, there are too few examples of use of the reduplication of -MARR 'cook, burn', -MARRAMARR 'be cooking', to be sure how exactly the reduplicated IV stem contrasts with the root. Even less certain is the reduplication of -KALAK 'approach, follow', -KALAKALAK, glossed 'help carrying' (Nekes & Worms 1953:543); the IV form cited, however, also involves the applicative, and the corresponding unreduplicated form with the applicative is given the same gloss (Nekes & Worms 1953:543). Nor is it clear how the reduplication -KUNBI-KUNB 'send, allow to go' relates to -KUNB 'send, allow to go'. These examples are not, however, inconsistent with the iterative interpretation.

There are one or two instances in the corpus in which, instead of an IV root being reduplicated, the full finite inflected verb appears to be reduplicated or repeated. The following is one possible example, ⁷ although its analysis is not entirely certain. Based on prosodic features of its production, (7–9) appears to involve reduplication rather than repetition. However, it is not entirely certain what is reduplicated: the entire inflected form of the IV, or just the IV root, with an epenthetic vowel separating the reduplicants.

(7–9) yiil junk i-ny-in ni-yangal i-jindiwar i-jindiwar dog run 3NOM-get-PRS 3MIN-tongue 3NOM-hang 'The dog runs with its tongue hanging out.'

7.3.2 Reflexive/reciprocal derivation

The reflexive/reciprocal is normally realised discontinuously by the prefix $mi- ma- (REF_p)$ and the suffix -inyj (REF_S), which both occur adjacent to the IV root or reduplicated stem. Consistent with their positioning, they are derivational affixes that give rise to new IV stems that are inflectionally regular members of the 'intransitive' ϕ conjugation class (see §7.6). In general, the Nyulnyul reflexive/reciprocal derivation is typical of Nyulnyulan languages; see McGregor (2000b) for an overview.

As suggested by the label, reflexive/reciprocal derivations generally admit either reflexive or reciprocal interpretations, although only the former are possible if the Actor (see §12.3.2.1) is singular in number. As far as I am aware there is no formal difference between reflexives and reciprocals (as Hosokawa 1991 suggests for Yawuru), and the

⁷ Torres & Williams (1987:16) contains the form *injibinjibin*, which is glossed 'to look for'. The most likely explanation is that this form is a misspelling of *injibijibin* 'he/she looked for it', the second *n* being a mistake. This is supported by semantic considerations: it refers to a single undecomposable seeking event, and not to a habitual activity of seeking.

⁸ Reflexive/reciprocal forms of CVCs are again CVCs, and involve not the reflexive/reciprocal form of the IV that normally collocates with a PV, but the special reflexive/reciprocal IV -BARNJ 'exchange, do to self', presumably the irregular derived form of the IV -W 'give'. (See §11.4.1.1 for discussion.)

difference is presumed to be etic in Nyulnyul, and the category semantically vague. The inflected form *ku-li-rr-mi-jal-inyj* (2AUG.NOM-IRR-AUG-REF_p-see-REF_S) thus admits both interpretations 'you (pl) might see/look at yourselves' (reflexive) and 'you (pl) might see/look at one another' (reciprocal). By contrast, *nga-ngka-mi-jal-inyj* (1MIN.NOM-FUT-REF_p-see-REF_S) admits only the reflexive interpretation 'I will see myself'.

Normally prefix and suffix both occur. However, they are not so tightly bound as to motivate analysis as a single circumfix morpheme, as suggested by Bowern (2004a) for Bardi. Thus occasionally just the reflexive/reciprocal suffix occurs, as in *ma-ngajim-inyj-in* (*ma-ŋadjemendjen*) 'hitting one another, fighting'; the suffix, by contrast, seems to be invariably present (see further §7.3.2.2). Whether a meaning contrast is encoded in the presence vs absence of the prefix is uncertain; certainly, absence of the reflexive/reciprocal prefix does not signal a reciprocal meaning, as in Yawuru (Hosokawa 1991:114).

In §7.3.2.1, we discuss the allomorphy of the reflexive/reciprocal prefix and suffix. Then in §7.3.2.2 we discuss irregularities in reflexive/reciprocal derivations. Section 7.3.2.3 concludes with an overview of the meanings of the category.

7.3.2.1 Allomorphy

7.3.2.1.1 Allomorphy of the reflexive/reciprocal prefix

The elsewhere allomorph of the reflexive/reciprocal prefix is *ma*-, as in the following examples: *nga-nga-ma-kand-inyj* (1MIN.NOM-PST-REF_p-scratch-REF_s) 'I scratched myself', *i-rr-ma-kanda-kand-inyj* (3NOM-AUG-REF_p-scratch-scratch-REF_s) 'they scratch themselves/ one another', *ma-ma-balak-inyj-in* (INF_p-REF_p-fight-REF_s-INF_s) 'fighting', and *i-li-rr-ma-r-inyj* (3NOM-IRR-AUG-REF_p-poke-REF_s) 'they might poke themselves/one another'.

Less frequent is the allomorph mi-. What conditions this allomorph is not known. In many cases it occurs when the preceding vowel is the high front vowel, as in i-mi-jal-inyj (3NOM-REF_P-see-REF_S) 'he sees himself' and *i-ngi-rr-mi-jal-inyj* (3NOM-PST-AUG-REF_P-see-REF_s) 'they saw one another/themselves'. It is also common preceding the palatal consonant j, as in ma-mi-jalk-inyj-in (INF_p-REF_p-hide-REF_s-INF_s) 'hiding oneself' and ma-mi-juluk-inyjin (INF_p-REF_p-wash-REF_s-INF_s) 'washing oneself, pouring water over oneself'. However, it does not invariably occur in these environments, as demonstrated by i-ngi-rr-ma-jal-inyj (3NOM-PST-AUG-REF_P-see-REF_S) 'they saw one another/themselves', which alternates with previously mentioned i-ngi-rr-mi-jal-inyj (3NOM-PST-AUG-REF_p-see-REF_s) 'they saw one another/themselves'. Moreover, mi-sometimes occurs in other environments, as in ma-mi-(INF_p-REF_p-hide-REF_s-INF_s) 'hiding oneself' and nga-nga-mi-ralk-inyj (1MIN.NOM-PST-REF_P-dry-REF_S) 'I dried myself'; in the first instance, the elsewhere allomorph is also attested. Nor do other factors such as the morphological environment predict the choice of mi-. The data available permits us to say no more than that ma- and miare in apparent free variation.

A third allomorph *ba*- appears very rarely, and seems to be restricted to IVs with initial syllable *ba* (see however §7.3.2.2 below): *i-m-ba-barnd-inyj* (3NOM-PST-REF_p-cover-REF_S) 'he covered himself', *ma-ba-bangar-inyj-in* (INF_p-REF_p-dry-REF_s-INF_S) 'praising oneself, boasting', and *ma-ba-bad-inyj-in* (INF_p-REF_p-dodge-REF_s-INF_S) 'dodging, avoiding, warding off'. However, in each instance *ba*- alternates with *ma*-: *ma-ma-barnd-inyj-in* (INF_p-REF_p-cover-REF_s-INF_S) 'covering oneself, dressing oneself', *ma-ma-bangar-inyj-in* (INF_p-REF_p-dry-REF_s-INF_s) 'praising oneself, boasting', and *ma-ma-bad-inyj-in* (INF_p-REF_p-dodge-REF_s-INF_s) 'dodging, avoiding, warding off'. What appears to be involved is an optional process

of syllable assimilation: the initial nasal of REF_p assimilates with an initial bilabial stop of an IV only if the following vowel is low.

7.3.2.1.2 Allomorphy of the reflexive/reciprocal suffix

The reflexive/reciprocal suffix shows little allomorphy, and is almost always realised as /inyj/. Occasionally, it appears as /anyj/, as in *ma-balak-anyj-in* (*ma-balagandjen*) (INF_P-hit-REF_S-INF_S) 'fighting, hitting one another', *ma-ma-k-anyj-in* (*ma-magandjen*) (INF_P-REF_P-carry-REF_S-INF_S) 'carrying oneself, surrendering', *i-rr-buduw-anyj* (3NOM-AUG-argue-REF_S) 'they argued together', and *ma-ma-r-anyj-in* (*ma-maṛandjen*) (INF_P-REF_P-poke-REF_S-INF_S) 'fighting, attacking one another'. At least for the latter IV the regular allomorph *-inyj* is also attested, and in my own corpus predominates.

The allomorph -*iny* occasionally occurs following an IV with a nasal-stop cluster: *i-m-ba-band-iny* (3NOM-PST-REF_p-cover-REF_s) 'he/she covered himself/herself' and *i-ngi-rr-ma-kand-iny* (3NOM-PST-AUG-REF_p-scratch-REF_s) 'they scratched one another'. This truncated form occurs sporadically in my corpus, and is not attested at all in Nekes & Worms (1953).

A final [I] vowel is sporadically added to the inflected form of a reflexive/reciprocal IV, as in *ya-nga-rr-buduw-anyji* (1PL.NOM-PST-AUG-argue-REF_S) 'we argued together' and *nga-nga-mi-jal-inyji* (1MIN.NOM-PST-REF_p-see-REF_s) 'I saw myself'.

7.3.2.2 Irregularities

A number of irregularities occur in reflexive/reciprocal derivations. To begin with, reflexive/reciprocal stems are attested for just a small subset of transitive IVs. This doubtless reflects the vagaries of the corpora, and the moribund state of Nyulnyul throughout the second half of the twentieth century. For instance, my own corpus shows no derived reflexive/reciprocal form of -K 'carry', though such a form is attested in Nekes & Worms (1953). And according to Bowern (2004a:161) the reflexive/reciprocal derivation is 'fairly productive' in Bardi, suggesting that attrition may be a contributing factor.

Nevertheless, it is likely that some omissions are genuine gaps. Thus there is no derived reflexive/reciprocal stem for -DAM 'hit'; in its place occur the reflexive/reciprocal forms of -BALAK 'fight, hit' (cf. Yawuru -BILKA 'hit') and -R 'poke', and reflexive/reciprocal CVCs (e.g. involving the PV *barabar* 'hit'). Nor is there a derived reflexive/reciprocal stem corresponding to -JIBIJIB 'stare', although there is one corresponding to -JAL 'see, look'; *na*-class IVs -BALABAL 'follow', -LAMB 'kiss' and -JILIK 'lick', also lack corresponding derived stems. The list can be easily extended.

Ambicategorial IVs generally lack corresponding derived reflexive/reciprocal stems, presumably because when assigned to the intransitive ø-class an IV in augmented number will usually admit a reflexive/reciprocal-like interpretation. There is one known exception, -RALK 'dry', from which can be derived a regular reflexive/reciprocal stem.

A small but not insignificant number of IVs seem to exist only in reflexive/reciprocal form: the IV is formally and semantically a reflexive/reciprocal, but no corresponding underived root exists. This seems to be the case for -BALAK 'fight, hit', mentioned in the previous paragraph, -BANGAR 'show off, be proud', -BUDUW(A) 'quarrel, argue', -KUMB 'wedge oneself, be wedged, stick fast', and -KALAB(I) 'regret' (see Table 7–1).

⁹ In fact, none of the IVs that frequently collocate with PVs in CVCs have regularly derived reflexive/reciprocal counterparts.

Each of these IVs invariably occurs with the reflexive/reciprocal suffix -inyj; at least the first two sometimes also occur with the reflexive/reciprocal prefix $ma \sim ba$. This type of irregularity appears to exist in all Nyulnyulan languages (McGregor 2000b).

At least one IV has a suppletive reflexive/reciprocal form. This is -W 'give', for which the corresponding reflexive/reciprocal stem is -BARNJ 'exchange'. This suppletion is typical of Nyulnyulan languages, and is found in all for which adequate evidence exists (McGregor 2000b), including Bardi, Yawuru, Nyikina and Warrwa.

7.3.2.3 Remarks on the semantics of the reflexive/reciprocal

As we have seen, reflexive/reciprocal stems typically admit both reflexive and reciprocal senses, at least when the nominative prefix is in augmented number; otherwise only reflexive senses are available. There is no reason to believe that these different senses are anything but variant contextual interpretations, and thus that reflexive/reciprocal stems are semantically vague between reflexive and reciprocal senses.

The most likely sense of a reflexive/reciprocal derivation depends on the meaning of the IV root and characteristics of the world. Thus for an IV meaning 'scratch' or 'be proud', a reflexive/reciprocal derivation is most likely to show the reflexive meaning, whereas one meaning 'spear' or 'argue' is more likely to be used in a reciprocal sense.

In all cases of derived reflexive/reciprocal IV stems the event involves individuals that act on one another, and thus serve as both agents and patients. The action is directed either from these entities each to themself, or among themselves. This characterisation allows for a range of possible configurations, as discussed in McGregor (2000b). In no instances is the event enacted for the benefit of the participants: that is, no reflexive/reciprocal IVs have meanings like 'fight someone for one another', 'take something for oneself', or 'look at something for one another'.

7.4 Person and number prefixing

7.4.1 The person system

We have seen (§4.6) that the traditional system of free pronominals in Nyulnyul was a four person one, distinguishing minimal from augmented numbers, and that this system was no longer consistently maintained in the speech of the last full speaker. In the bound pronominals in the verb, things are less certain. There is no evidence that the four person minimal-augmented system was maintained in the verb in traditional Nyulnyul, as it is (in some environments) in the Eastern Nyulnyulan languages Yawuru (Hosokawa 1991: 116-119), Nyikina (Stokes 1982:239-240), and Warrwa (McGregor 1994c:41). Available information strongly suggests that traditionally it was an Assiniboine-type system (Greenberg 1988, 1989; McGregor 1989b) distinguishing 1, 2, and 3 persons in two numbers (singular and plural), and had a distinct form for the speaker-hearer dyad (1&2). The fact that the system is also consistently Assiniboine in Bardi adds support to this suggestion. Today, however, the system is optionally Assiniboine: the 1&2 form is rarely used for the speaker-hearer dyad, which is normally denoted by the first person plural form (which has an additional rr(V)- number-marking prefix (see also §4.2). (Whether or not the traditional Nyulnyul system was also optionally Assiniboine is impossible to determine; my hunch is that it was not.)

The pronominal prefixes themselves do not distinguish between 1&2 minimal or augmented and 1 augmented: the same form is consistently used for all three categories. Thus the pronominal prefixes show a contrast between first, second and third persons, together with singular and plural (or non-singular) numbers. The distinction between 1&2 and 1 plural emerges in the different combinatorial potentials of the prefix and second and third order-class morphemes including the class-marking prefix and the number prefix *rr*-(see §7.4.2). For simplicity, however, pronominal prefixes are glossed according to the minimal/augmented system, except for the form covering the non-singular first person categories (1AUG, 1&2MIN, 1&2AUG), which is glossed 1PL.

Table 7–4 shows the nominative pronominal prefixes to finite IVs. Two sets are distinguished; the second set is employed in future tense, the first elsewhere. The main differences between the sets are in second and third persons. For the second person, the regular future forms are $wa-\sim mi-$ 'you singular' and ku- 'you plural': compare mi-ny-jid 'you (sg.) went' with wa-ny-jid 'you (sg.) will go' and ku-ngu-rr-jid 'you (pl) went' with wa-rr-jid 'you (pl) will go'. And instead of i- for the third person, yu- occurs. Thus we have i-ny-jid 'the went' and i-ngi-rr-jid 'they went', but yu-ngki-jid 'he will go' and yu-ngku-rr-jid 'they will go'. There is no regular phonological allomorphy in the pronominal prefixes, indeed no allomorphy other than what is shown in the table. The pronominal prefixes are thus always readily identified and segmented in IV forms.

Table 7-4. Nonlinative prononnial prefixes to Myaniyar veros		
	Singular	Plural
	Non-future	
1	nga-	уа-
2	mi-	ku-
3	i-	i-
	Future	
1	nga- ~ ka- ^a	уа-
2	wa - $(na$ -class) ~ mi - $(\emptyset$ -class)	wa-
3	νи-	VII-

Table 7–4: Nominative pronominal prefixes to Nyulnyul verbs

7.4.2 Number marking

Not all pronominal prefixes distinguish number. In particular, the same forms are used for minimal and non-minimal third person categories in all tenses, and for minimal and non-

a. The allomorph *ka*- is vanishingly rare, and is restricted to future tense. This is the regular allomorph of the first person minimal pronominal prefix in Warrwa (McGregor 1994c: 41), and is claimed by Nekes & Worms (2006:152, 154) to represent the regular first person singular future prefix, ostensibly in Jabirrjabirr.

¹⁰ This form is usually represented as o, less frequently yo, in Tachon (1895); Nekes & Worms (1953).

¹¹ Occasional exceptional forms such as *aler-djen-an* (*a-li-rr-j-in-an*) 'they said' and *ar-gandjeo* (*a-rr-kanyj-yu*) 'we forget' are most likely either mishearings (first example) or borrowings (second example, which is probably a borrowing of the Bardi form *arrganyju* 'we forget').

minimal second person categories in future tense of na-class IVs. However, number distinctions are made explicit by choice of a morpheme in the third order-class, not just when the prefix is non-specific in regard to number, but in all contexts. This is the prefix rr-, which marks augmented number.

The prefix rr- consistently marks all non-singular categories other than the minimal one, 1&2, which, in traditional Nyulnyul, presumably precluded the choice of rr-. As mentioned already, the synchronic status of rr- has changed somewhat; it now appears to be used primarily as a plural marker: thus, in the speech of the last speaker the speaker-hearer dyad was usually designated by the 1 plural prefix, together with the number marker rr-. Thus almost every time I requested the Nyulnyul form for 'me and you did something' an IV form involving ya-...-rr- was provided (as in (7-10)), which form was also used for both 1 and 1&2 augmented; only on rare occasions was the form without the number marker elicited (as in (7-11)). Thus the modern system may be described as optionally Assiniboine, and normally a simple singular-plural one. (See also the discussion of rr in pronominal prefixes to nominals in §4.6.)

- (7–10) ngay aa juy ya-li-rr-jid derby-ung 1MIN.CRD and 2MIN.CRD 1PL.NOM-IRR-AUG-go Derby-ALL₁ 'You and I might go to Derby.'
- (7–11) ya-ngka-jimb yay 1PL.NOM-FUT-die 1&2MIN.CRD 'We two (me and you) will die.'

Absence of rr- indicates singular number for 1, 2 and 3 persons, and minimal number for 1&2. There is no motivation for identifying a \emptyset - (zero) prefix as a marker of minimal number; minimal number is simply not marked by a morpheme. Thus (7–1) shows the number marker in the finite IV is optional; rr- contrasts with nothing, not with zero.

Table 7–5 shows the possible combinations of pronominal prefixes and number-marker for traditional Nyulnyul, laid out as an Ilocano system. Where distinct future allomorphs exist, they are indicated in the second line.

	Minimal	Augmented
1	nga-	yarr-
	nga- ~ ka-	
1&2	ya-	<i>yarr-</i>
2	mi-	kurr-
	wa - $(na$ -class) ~ mi - $(\emptyset$ -class)	warr-
3	i-	<i>irr-</i>
	yu-	<i>yurr-</i>

Table 7–5: Combinations of person and number prefixes in traditional Nyulnyul

Augmented number is systematically indicated for humans. It is not always indicated for lower order animate or inanimate referents, for which the minimal form is not infrequently chosen, as in (7-12) and (7-13), where reference is made to more than a single body part (in

the case of (7–13) we know from the previous text that the emu has had both of his arms cut). However, as (7–14) and (7–15) show, an augmented inanimate NP may be cross-referenced by an augmented pronominal prefix. Although there are insufficient examples to permit certainty as to the conditions in which number cross-reference is employed, it seems likely that it concerns the relative degree of individuation and/or salience of the inanimate entities in the referent situation or circumstance. That is, the latter two examples may highlight plurality, whereas in the former the number is not significant, and left to the hearer to infer.

- (7–12) ya-mird warrwarr i-n-j 1&2-leg cramp 3NOM-CM-say 'Our legs are cramped.'
- (7–13) in nga-n-in/ nga-marl jan murrul i-n-j/
 this 1MIN.NOM-be-PRS 1MIN-arm 1MIN.OBL little 3NOM-CM-say
 'I'm stuck here; my arms have got short.'
- (7–14) badang magilj-gadj er-en
 bardangk makily-kaj i-rr-ø-in
 tree shaking-CONT 3NOM-AUG-be-PRS
 'The trees are moving in the wind.' (Nekes & Worms 1953:671)
- (7–15) warrabalak bilbil i-rr-i-j-in wunkungurr-uk star shine 3NOM-AUG-CM-say-PRS Milky:Way-LOC 'Stars are shining in the Milky Way.'

7.5 Tense

Three tenses are distinguished in Nyulnyul: past, present, and future. These are indicated not by single morphemes, but by combinations of features, including choice of pronominal prefix allomorph and dedicated tense-markers; there is a fair degree of irregularity in tense marking. In what follows we discuss both the formation of the tenses and their meanings.

7.5.1 Past tense

7.5.1.1 Morphology of past tense

The simple past tense of regular IVs is formed in the same manner regardless of conjugation class. There are two patterns—both of which satisfy formula (7–1)—which are chosen depending on whether or not the augmented number prefix is present, as shown in Table 7–6.

Table 7–6: Regular simple past tense marking in Nyulnyul

Number prefix	Pattern
Absent	$NOM.PRO + (CM) + (TNS) + STEM + \dots$
Present	NOM.PRO + TNS + NUM + (CM) + STEM +

As shown in this table, simple past tense is indicated exclusively by means of prefixes; one or two irregular IVs choose different stem allomorphs depending on tense. The primary difference in past tense formation between the constructions with number marker absent or present, between minimal and augmented numbers, is in the order of the CM prefix (if present) with respect to the TNS prefix. In minimal number, the CM prefix precedes the TNS prefix; in augmented number, the CM prefix (if present) follows the TNS prefix (though not immediately).

The nominative pronominal prefix is obligatory, and is chosen from the non-future set shown in Table 7–4. So also is the number prefix obligatorily present in the case of augmented number. (As already mentioned, this morpheme also frequently occurs in modern Nyulnyul with the 1&2 minimal.)

The CM prefix is obligatory in minimal number for na-class IVs. For ø-class IVs there is no CM prefix (there is no evidence in favour of a Ø CM prefix). The situation in the augmented number is different. In general, no CM prefix occurs except for na-class IVs where the $a \sim i$ - allomorph of the CM prefix occasionally and irregularly shows up.

The tense prefix shows two suppletive allomorphs, which occur in different orderclasses: the syllabic prefix ngi- and the nasal prefix N-, which assimilates in place of articulation to a following stop consonant. These allomorphs are conditioned by different factors in minimal and augmented numbers. The tense prefix is almost always present in past tense. The only exceptions are in the minimal number forms for a small set of na-class IVs and an even smaller set of ø-class IVs (as discussed in the next subsection).

The discussion of the morphology of the past tense is organised according to number. Section 7.5.1.1.1 deals with regular past tense inflection in minimal number; §7.5.1.1.2 deals with regular past tense inflection in augmented number. Irregularities in past tense inflection are discussed in §7.5.1.1.3.

7.5.1.1.1 Past tense formation in minimal numbers

The two suppletive past tense allomorph sets are distributed as follows in the minimal number: the prefix nga- occurs with ø-class roots that begin with any segment other than a stop, while the assimilating nasal occurs with IVs of either conjugation class that begin with a stop; neither allomorph shows up in any other environment.

The following forms illustrate the syllabic allomorph set with the ø-class IV -LAKARR 'hear, listen': nga-nga-lakarr (1MIN.NOM-PST-hear) 'I heard it', mi-nga-lakarr (2MIN.NOM-PST-hear) 'you heard it', and i-nga-lakarr (3NOM-PST-hear) 'he/she heard it'. Illustrating this allomorph with IVs with initial nasals are: nga-nga-mi-kirrir-inyj (1MIN.NOM-PST-REF_ppiss-REF_s) 'I pissed myself', nga-nga-marr (1MIN.NOM-PST-burn) 'I got burnt', i-nga-marr (3NOM-PST-burn) 'it cooked', and mi-ngi-n 'you were'. Illustrative of this allomorph with rhotic and glide-initial IVs are the forms i-nga-ralk (3NOM-PST-dry) 'it dried', nga-ngawalm (1MIN.NOM-PST-call:out) 'I called out', and i-nga-walm (3NOM-PST-call:out) 'he/she called out'.

The second, elsewhere, set of nasal allomorphs are found with stop-initial IVs of both conjugation classes. Some illustrative examples with ø-class IVs are: i-m-badik (3NOM-PSTsuffice) 'it is enough', i-ny-jalk (3NOM-PST-fall) 'he/she/it fell', nga-ny-jalk (1MIN.NOM-PST-fall) 'I fell', nga-ng-kabd 'I hiccoughed', ya-ng-kanm (1PL.NOM-PST-laugh) 'we laughed', and i-ng-kad (3NOM-PST-enter) 'he/she/it entered'. Illustrative examples with naclass IVs are: nga-na-m-bad (1MIN.NOM-CM-PST-prevent) 'I prevented him/her', mi-na-mbad (2MIN.NOM-CM-PST-prevent) 'you prevented him/her', *i-na-m-bad* (3NOM-CM-PST-prevent) 'he/she prevented him/her', *nga-ni-ny-jumb* (1MIN.NOM-CM-PST-extinguish) 'I extinguished it', *nga-na-ng-k* (1MIN.NOM-CM-PST-carry) 'I carried it', and *i-na-ng-k* (3NOM-CM-PST-carry) 'he/she carried it'.

The tense prefix does not show up in other environments. This includes minimal numbers for *na*-class IVs which begin with a segment other than a stop. Illustrative examples involving liquid-initial IVs are: *i-na-lamb* (3NOM-CM-kiss) 'he/she kissed him/her/it', *nga-na-lamb* (1MIN.NOM-CM-kiss) 'I kissed him/her/it', *i-na-lungk* (3NOM-CM-dig) 'he/she dug it', *nga-na-r* (1MIN.NOM-CM-poke) 'I poked him/her' *mi-na-r* (2MIN.NOM-CM-poke) 'you poked him/her', *i-na-r* (3NOM-CM-poke) 'he/she poked him/her', and *nga-na-ralk* (1MIN.NOM-CM-dry) 'I dried it'. Examples with nasal-initial IVs are: *i-na-m* (3NOM-CM-put) 'he/she put it', *mi-na-m* (2MIN.NOM-CM-put) 'you put it', *i-na-malb* (3NOM-CM-borrow) 'he/she borrowed it', *nga-na-mukar* (1MIN.NOM-CM-make) 'I made it', and *i-na-ngal* (3NOM-CM-shit) 'he/she shat on it'. Finally, to illustrate glide initial IVs consider: *nga-na-w* (1MIN.NOM-CM-give) 'I gave him/her', *mi-na-w* (2MIN.NOM-CM-give) 'you gave him/her', *i-na-w* (3NOM-CM-give) 'he/she gave him/her', and *nga-na-wand-i-jan* (1MIN.NOM-CM-gather-EV-1MIN.OBL) 'I gathered it for myself'.

There are two obvious ways of accounting for the absence of a formal marker of the past tense in these circumstances. One possibility is to identify a zero allomorph of the tense prefix. The only motivation I can see for this is descriptive economy, a weak motivation (McGregor 2003c). A more plausible possibility is that the nasal prefix *N*- is present in underlying form, but is deleted by a morphophonemic rule that applies when the following segment is not a stop: see §3.5.2.6.

Another, more minor, class of exceptions involve ø-class IVs with initial syllable nga. Again for such IVs, in minimal numbers, the expected nga- TNS prefix is absent, as in: nga-ngalk (1MIN.NOM-cry) 'I cried', i-ngalk (3NOM-cry) 'he/she cried', nga-ngank (1MIN.NOM-speak) 'I spoke', mi-ngank (2MIN.NOM-speak) 'you spoke', and i-ngank (3NOM-speak) 'he/she spoke'. Presumably omission of the tense prefix here is motivated by a deletion rule that prevents the occurrence of repeated syllables nga-nga (see §3.5.2.7). If this is so, it is reasonable to suggest that the tense prefix nga- is present in underlying form. The rule is perhaps more general than this, as suggested by i-ngulm (3NOM-pretend) 'he/she pretended'; no other relevant forms of this IV are available.

7.5.1.1.2 Past tense formation in augmented number

In the augmented number, as distinct from minimal number where a single allomorph of the syllabic tense prefix occurs, three phonological past tense allomorphs exist nga- ngi- ngu. The assimilating nasal allomorph does not occur. This is as expected given that the past tense prefix invariably precedes the augmented number marker rr. The three allomorphs are largely phonologically conditioned, primarily by vowel harmony.

The allomorph *ngu*- occurs following the second person augmented nominative prefix *ku*-, as in: *ku*-*ngu*-*rr*-*janb*-*ngay* (2AUG.NOM-PST-AUG-kick-1MIN.ACC) 'you all kicked me',

¹² Nekes & Worms (2006:204–205) imply that for the past tense and minimal numbers of the IV -NGANK 'speak' the velar nasal may precede the stem. However, the Nyulnyul forms are only stated to be formed in the same way as the forms in Jabirrjabirr (which are actually given), and it is not clear that the sequence *ng-ng* actually does occur in this morphological environment in Nyulnyul, in contrast with a single instance of the velar nasal.

ku-ngu-rr-jimb-a-mad (2AUG.NOM-PST-AUG-die-EV-IND) 'are you all dead?', ku-ngu-rrmukar (2AUG.NOM-PST-AUG-make) 'you all made it', ku-nga-rr-a-w (2AUG.NOM-PST-AUG-CM-give) 'you all gave it', and ku-ngu-rr-lakarr (2AUG.NOM-PST-AUG-hear) 'you all hear it'.

The allomorph ngi- almost always occurs following the third person nominative prefix i-: i-ngi-rr-dam (3NOM-PST-AUG-hit) 'they hit him/her/it', i-ngi-rr-lakarr (3NOM-PST-AUGhear) 'they heard him/her/it', i-ngi-rr-murrar (3NOM-PST-AUG-smell) 'they smelt him/her/ it', i-ngi-rr-a-r (3NOM-PST-AUG-CM-poke) 'they poked him/her/it', and i-ngi-rr-wand (3NOM-PST-AUG-gather) 'they gathered him/her/it'. Very rarely nga- is found in this environment, in which case it always alternates with ngi-. Thus, i-nga-rr-dam (3NOM-PST-AUG-hit) 'they hit him/her/it' has been heard, in addition to *i-ngi-rr-dam*.

The third allomorph, nga-, is normally found following the first person augmented nominative allomorph ya-. For example: ya-nga-rr-jalk (1PL.NOM-PST-AUG-fall) 'we fell', ya-nga-rr-jal (1PL.NOM-PST-AUG-see) 'we saw him/her/it', ya-nga-rr-land (1PL.NOM-PST-AUG-sit) 'we sat', ya-nga-rr-a-m (1PL.NOM-PST-AUG-CM-put) 'we put him/her/it', ya-ngarr-i-ny (1PL.NOM-PST-AUG-CM-get) 'we got him/her/it', and ya-nga-rr-wid (1PL.NOM-PST-AUG-eat) 'we ate it'. Occasionally and inconsistently the allomorph ngi- follows ya-1PL.NOM, as in ya-ngi-rr-a-k (1PL.NOM-PST-AUG-CM-carry) 'we carried him/her/it'.

Between the augmented number prefix and the IV root a vowel sometimes occurs. This vowel usually appears just with na-class IVs and thus is identified as the conjugation marker allomorph a- found in the future tense (see §7.5.3). Na-class IVs consisting of a single consonant segment almost invariably show the CM, as in i-ngi-rr-a-k (3NOM-PST-AUG-CM-carry) 'they carried him/her/it', ya-nga-rr-a-k (1PL.NOM-PST-AUG-CM-carry) 'we carried him/her/it', i-ngi-rr-a-m (3NOM-PST-AUG-CM-put) 'they put him/her/it', ya-nga-rr*a-m* (1PL.NOM-PST-AUG-CM-put) 'we put him/her/it', *i-ngi-rr-a-r* (3NOM-PST-AUG-CM-poke) 'they poked him/her/it', and ku-ngu-rr-a-w (2AUG.NOM-PST-AUG-CM-give) 'you all gave him/her/it'. When the initial segment of the IV is a palatal, the CM usually takes the form i-, as in i-ngi-rr-i-ny (3NOM-PST-AUG-CM-get) 'they got him/her/it', and ya-nga-rr-i-ny (1PL.NOM-PST-AUG-CM-get) 'we got him/her/it'. Elsewhere, however, i.e. for IVs consisting of more than a single consonant, the vowel is not obligatory, and forms with the vowel usually alternate with forms without the vowel. For instance, both *i-ngi-rr-i-jal* (3NOM-PST-AUG-CM-see) 'they saw him/her/it' and i-ngi-rr-jal (3NOM-PST-AUG-see) 'they saw him/her/it' are attested. Forms without the vowel are more common than forms with the vowel.

Occasionally a vowel separates the augmented number prefix and the initial segment of a stop-initial ø-class IV, as in i-ngi-rr-i-jid (3NOM-PST-AUG-EV-go) 'they went'. This epenthetic vowel—which is conditioned by prosodic considerations (see §3.4.4.2)—is always optional. Thus i-ngi-rr-i-jid alternates with i-ngi-rr-jid (3NOM-PST-AUG-go) 'they went', which is the more frequently attested form.

7.5.1.1.3 IVs that form past tense irregularly

A handful of IVs show irregularities in the past tense inflection: -DAM 'hit', -J ~ -DI 'say, do', -N 'be', -NY 'get', and -KID ~ -WID 'eat'. Let us examine these in turn.

-DAM 'hit' basically behaves as a na-class IV, though with an unexpected twist. Instead of the expected forms nga-na-n-dam 'I hit him/her/it', mi-na-n-dam 'you hit him/her/it' etc., we find nga-n-dam (1MIN.NOM-CM/PST-hit) 'I hit him/her/it', mi-n-dam (2MIN.NOM-

CM/PST-hit) 'you hit him/her/it'. Two obvious ways of accounting for these forms are as follows. First, the CM might be simply omitted in them, for reasons that are not clear. Second, the CM prefix might select the allomorph n in a similar way to the irrealis prefix, which shows the allomorph l- with this IV (see §7.7 below). The resulting sequence of apical nasals could then be reduced to a single nasal by a morphophonological rule. The second suggestion is obviously to be preferred. (It should be noted that this irregularity in the past tense inflection of -DAM 'hit' is restricted to the minimal number; in augmented number, past tense is formed regularly.)

The IV -J 'say, do' has a suppletive root allomorph -DI, with an initial apical stop /d/. This allomorph is found in just the minimal numbers in the past tense paradigm of the IV, and then only when the IV hosts an oblique pronominal enclitic. In the past tense -DI 'say, do' inflects like the only other *d*-initial IV attested in my corpus, -DAM 'hit': *i-n-di-jan* (3NOM-CM/PST-say-1MIN.OBL) 'he/she said to me', *i-n-di-jirr* (3NOM-CM/PST-say-3AUG.OBL) 'he/she said to them', *mi-n-di-jan* (2MIN.NOM-CM/PST-say-1MIN.OBL) 'you said to me', and *nga-n-di-jii* (1MIN.NOM-CM/PST-say-2MIN.OBL) 'I said to you'. The elsewhere allomorph -J inflects irregularly in a similar way, perhaps by analogy with the -DI forms: *i-n-j* (3NOM-CM-say) 'he/she said/did', *i-n-j-ang-ngay* (3NOM-CM-say-APP-1MIN.ACC) 'he said to me', *mi-n-j* (2MIN.NOM-CM-say) 'you said/did', and *nga-n-j* (3NOM-CM-say) 'I said/did'. Here the nasal is identifiable as the CM, since it does not assimilate in place of articulation with the following stop.

-J 'say, do' is also listed as irregular in Nekes & Worms (2006:220–223). However, in this source -J 'say, do' is irregular in a quite different way to my corpus. While the same set of prefixes is found as in my corpus, the root forms are given in Nekes & Worms (2006) as -djeo (-jiyu) in the singular and -edj (-ij) in the plural. The first allomorph does not, however, appear among the singular forms in Nyulnyul texts transcribed by these authors, where the past tense form is consistently djan, as for instance in indjan djerr—presumably i-n-j-an-jirr (3NOM-CM-say-IMP-3AUG.OBL) 'he/she said to them'.

In augmented number the root allomorph is invariably -J, which inflects as expected in the past tense. As for regular IVs, however, there is some variation in whether the CM appears or does not appear following the augmented number prefix *rr*-. Thus, both *i-ngi-rr-i-j-jan* (3NOM-PST-AUG-Say-1MIN.OBL) and *i-ngi-rr-j-jan* (3NOM-PST-AUG-say-1MIN.OBL) 'they said to me' are attested in my corpus.

-N 'be' inflects largely as expected in the minimal number, except that the past tense allomorph ngi- normally appears, rather than the more usual nga-, as in nga-ngi-n (1MIN.NOM-PST-be) 'I was' and i-ngi-n (3NOM-PST-be) 'he/she/it was'. In the augmented number, however, the nasal is not present, and we have forms such as i-ngi-rr (3NOM-PST-AUG) 'they were' and ya-ngi-rr (1PL.NOM-PST-AUG) 'we were'. One might account for these forms by identifying a \emptyset root allomorph for -N 'be'. However there seems little motivation for this suggestion, and it is preferable to postulate that in underlying form the ordinary allomorph -N 'be' is present, and that the nasal segment is deleted by a phonological rule when the sequence rr-n appears word finally. Support comes from the corresponding imperfective forms of the same IV, which show the nasal: ya-ngi-rr-n-an (1PL.NOM-PST-AUG-be-IMP) 'we were' and i-ngi-rr-n-an (3NOM-PST-AUG-be-IMP) 'they were'. The nasal is not deleted in these cases since it does not occur word finally. Thus the

¹³ These forms are confirmed by Nekes & Worms (2006:229), who comment that 'the native informants assured us that they were using the pronominal prefixes alone'. Nevertheless, in the paradigm they provide for the IV they analyse the final rhotic as a part of the IV root in plural number.

only irregularity in the inflection of -N 'be' in the past tense is the choice of the marked past tense allomorph *ngi*-. ¹⁴

-NY 'get' inflects somewhat irregularly in the past tense in late twentieth century Nyulnyul, although according to Nekes & Worms (2006:206–207) it is a regular IV. In the augmented number, the past tense is formed regularly, and as for other IVs consisting of just a consonant, the CM is invariably present; it takes the shape i- under the influence of the palatal nasal. It is in the minimal number forms that the irregularity appears: the root allomorph is -NYU instead of -NY, and the CM is the irregular form n- (see above): nga-nnyu (1MIN.NOM-CM-get) 'I got him/her/it', mi-n-nyu (2MIN.NOM-CM-get) 'you got him/her/ it', and *i-n-nyu* (3NOM-CM-get) 'he/she got him/her/it'.

The two phonological root allomorphs -KID ~ -WID 'eat' are, in the past tense, conditioned by the preceding segment. The stop initial allomorph occurs when the preceding segment is the nasal ng, as in i-ni-ng-kid (3NOM-CM-PST-eat) 'he/she ate it' and nga-ni-ng-kid (1MIN.NOM-CM-PST-eat) 'I ate it'. The glide initial allomorph occurs elsewhere, namely following the augmented number marker rr-, as in i-ngi-rr-wid (3NOM-PST-AUG-eat) 'they ate it' and ya-nga-rr-wid (1PL.NOM-PST-AUG-eat) 'we ate it'. 15

-R 'poke' seems to have been irregular in early twentieth century Nyulnyul, with an unexpected root form $-\eta ar (-ngar)^{16} \sim -\eta aran (-ngaran)$ in past tense (Nekes & Worms 2006:217–220). This IV was regular in past tense inflection in the late twentieth century.

Also irregular in Nyulnyul according to Nekes & Worms (2006) are -K 'carry', -M 'put' and -W 'give', though the irregularities in these IVs are a consequence of the authors' morphological analyses, rather than irregularities in the inflections of the IVs themselves.¹⁷

7.5.1.2 *Meanings of past tense*

Past tense situates the referent event in past time relative to the time of the speech situation (SS) in which the clause was uttered; it indicates that the event was temporally prior to this reference time. This is shown diagrammatically in Figure 7–1, an elaboration of the familiar Reichenbachian time line. In this figure events are situated on a 2 dimensional plane instead of a line, and their time of occurrence is determined relative to the large central dot, representing the 'now' of the SS. Events that fall on the thick horizontal line are those evaluated as real: they have occurred, are occurring, or will occur, in the speaker's opinion; they belong to the real world. Such events are represented by one of the three tenses. Events that are evaluated as occurring on the thick black line to the left of the dot will be denoted by clauses with IVs in the past tense. Events that fall off the line are evaluated as unreal, as belonging to an imaginary rather than real world; the distance on the y axis from the central line reflects the likelihood of the unreal world. These unreal events are typically specified by IVs in the irrealis mood (see §7.7).

¹⁴ I suspect that the explanation is historical: -N 'be' can be traced back to proto-Nyulnyulan *-NI 'sit' (Stokes & McGregor 2003:65). Vowel harmony may have thus been responsible for the previous vowel quality.

¹⁵ This is the only known IV showing the $k \sim w$ alternation. Note that the expected a vowel, the allomorph of the CM, is absent in the augmented number forms.

¹⁶ The missing diacritic under the r in Nekes & Worms (2006:219) is presumably a typo.

¹⁷ A contribution to the misanalysis by Nekes & Worms (2006) is the fact that they inconsistently identify root forms -ag (in the augmented number) $\sim -g$ (in the minimal number) for 'carry', and similarly $-au \sim$ -wan for 'give'. Thus they did not appreciate that the recurrent a vowel (which sometimes they analyse as part of a prefix, sometimes as part of the root) represents an allomorph of the *na*-class conjugation marker.

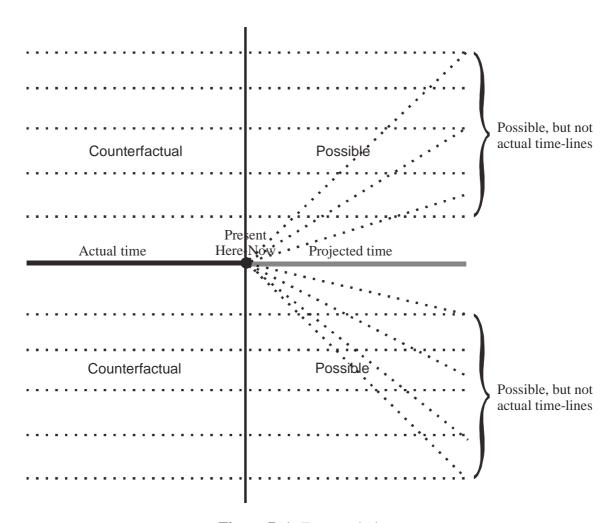


Figure 7–1: Temporal plane

As in the case of deictic categories generally, the temporal reference point can shift to another time than the time of the utterance. In directly quoted speech it is shifted to the 'now' of the referent speech situation (RSS), so that the event is specified as having occurred in the past relative to that time.

In the simplest cases the referent event is a single and isolated occurrence located in past time with respect to the temporal origin of Figure 7–1. For instance, in (7–16) and (7–17) reference is made to the events as though instantaneous in time past, and completed by the time of the speech event.

- (7–16) kinyingk wamb kad i-m-barnj karrkuj jumbarraari-nyirr DEF man cut 3NOM-PST-exchange dead knife-COM 'This man stabbed himself with a knife.'
- (7–17) nga-ni-ny-jal junk i-n-j way 1MIN.NOM-CM-PST-see run 3NOM-CM-say away 'When I saw him he ran away.'

Depending on context, linguistic and extralinguistic, a VP in the past tense may denote an event that, while it has happened, is presently relevant. The following examples illustrate

this. In (7-18) the event is naturally interpreted as having some immediacy and its occurrence is relevant to the here-now; the adverbial muj 'already' presumably contributes to this sense, as it specifically links the occurrence of the event with expectations. But the adverbial does not have to be present for this sense to be inferred, as shown by (7-19) and (7-20). What is being referred to in (7-19) is an event of getting sick that is presently relevant—the effects of which are currently relevant—not to any of the likely range of other such events that might have occurred in the past. In this instance, it is the subsequent clause that engenders this interpretation. In (7-20) the speaker is enquiring about a presently relevant instance of eating, not about whether the addressee has ever eaten anything before in their life. This sense of present relevance, however, is inferred rather than coded, and is defeasible. The first clause of (7-19), and (7-20) could potentially refer to any event of the speaker's husband becoming sick and to any instance of the addressee's eating.

- (7–18) warinyjirr jarringk muj i-ny-jalk one tooth already 3NOM-PST-fall 'One tooth has already come out.'
- (7–19) wamb jan yubul i-n-j aa yubul i-n-in/ man 1MIN.OBL sick 3NOM-CM-say and sick 3NOM-be-PRS 'My husband has got sick and he's lying ill.'
- (7–20) mi-ni-ng-kid may 2MIN.NOM-CM-PST-eat food 'Have you eaten?'

A clause in past tense may designate an event that generally happened in the past, but no longer does so. In this circumstance, what is referred to is not the occurrence of a specific or individuated set of instances, but rather the occurrence of events of the specified generic type. Examples (7–21) and (7–22) illustrate this. In (7–21) reference is made to cultural practices of the past that are no longer performed; the speaker is not referring to any specific instance of the practice. Likewise in (7–22) the second and third clauses in the past tense specify imaginary general events. This sense of the past tense is only rarely invoked: the past imperfective is more often used to convey this meaning (see §7.8.2).

- (7–21) *muju-muj jiwirr wamb i-ngi-rr-a-m-jirr kalb* before-before dead man 3NOM-PST-AUG-CM-put-3AUG.OBL above *karndirlib-uk* platform-LOC 'Long ago they used to put the dead on a platform.'
- (7–22) arri i-li-rr-wid-an i-ngi-rr-ø arriyangk-ang not 3NOM-IRR-AUG-eat-IMP 3NOM-PST-AUG-be nothing-INS wilamay wamb jirr-irr i-ngi-rr-jimb food man 3AUG.OBL-AUG 3NOM-PST-AUG-die 'They didn't eat, they went without food after their husband died.'

Past tense is a realis category: the event is presented as having occurred. This is of course to some extent a matter of the speaker's point of view and their construal of the world. Thus events in mythological and other types of narrative—especially foregrounded plot events

(see also §7.9)—are normally represented in the plain past tense, at least in the late twentieth century corpora (for examples see the texts of Volume 2).

7.5.2 Present tense

7.5.2.1 Morphology of present tense

7.5.2.1.1 Regular formation of the present tense

Present tense of regular IVs, unlike the past and future tenses, is marked by a combination of prefixes and a suffix. IVs that are regular in the present tense inflect according to the same general schematic pattern regardless of conjugation class and person and number, as shown in (7–23).

$$-7$$
 -5 -4 0 $+2$ $(7-23)$ NOM.PRO (NUM) (CM) STEM TNS ...

The nominative pronominal prefix is obligatory, and is selected from the non-future allomorphs in Table 7–4. The number prefix rr- is obligatory for augmented numbers (and is usually also present in the case of the 1&2 minimal category, as elsewhere).

The CM is invariably present in minimal numbers of na-class IVs, and is often present in their augmented numbers, in which case, as usual, it follows the number marker. In the present tense the CM normally takes the allomorph n- in minimal numbers, and a vocalic allomorph in augmented numbers. The *n*- CM occurs in minimal numbers of IVs with initial stops, nasals, and the labial glide w, as confirmed by the forms cited in Nekes & Worms (2006). Occasionally the syllabic form na- occurs with nasal-initial IVs (e.g. with the IVs -MANGKAD 'leave' and -NGUL 'throw'), though this apparently always alternates with the plain consonantal form. For IVs with initial laterals, the allomorphs na- ~ ni- normally occur (apparently conditioned in the usual way, with, as usual, a range of exceptions), although in a few instances n- is attested. Thus we have i-na-langk-in-juy (3NOM-CMunderstand-PRS-2MIN.ACC) 'he/she understands you' and mi-ni-langk-in (2MIN.NOM-CMunderstand-PRS) 'you understand him/her'; for the IV -LUNGK 'dig', however, only i-nlungk-in (3NOM-CM-dig-PRS) 'he/she digs it' is attested. For IVs with the initial glide r the CM is followed by the syllable ngi (see previous footnote), as in i-n-ngi-r-in (3NOM-CM-ngipoke-PRS) 'he/she pokes him/her/it'. According to Nekes & Worms (2006:217-220) this IV is irregular, and the forms they cite involve nga instead of ngi. 19

The vocalic form of the CM with augmented numbers takes the elsewhere form a-; the high front allomorph i- occurs preceding a palatal-initial stem, and irregularly following a high vowel in the preceding syllable. In contrast to the situation for the past tense, the allomorph u- never occurs following ku- 2AUG.NOM. This vowel is occasionally absent. There is no CM prefix for \emptyset -class IVs. However, in augmented numbers an epenthetic vowel may separate the rhotic from a following consonant, as in ku-rr-i-lakarr-in (2AUG.NOM-AUG-EV-hear-PRS) 'you all hear'.

¹⁸ According to Nekes & Worms (2006:183–186) regular lateral- and rhotic-initial IVs take prefixes ending in *nŋe-* (*nngi-*) in minimal numbers—i.e. presumably the CM followed by the nonce syllable *ngi*. This syllable is not attested in my corpus for lateral-initial IVs.

¹⁹ They analyse the IV root form as *-naren* (*-ngarin*) rather than -R in the present tense and minimal number, which appears on their own evidence not to be an optimal analysis.

The present tense suffix takes the elsewhere form -*in*, with a possible marked allomorph -*n* which seems to be restricted to the IVs -MII 'seek' and -MIIMII 'seek'. However, in many cases my corpus shows the elsewhere allomorph even for these IVs—perhaps exemplifying the extra-careful speech of the elicitation sessions.

This suffix is evidently cognate with the present tense or continuous aspect suffix -n of other Nyulnyulan languages, including Bardi (Metcalfe 1975; Bowern 2004a), Nyikina (Stokes 1982), Warrwa (McGregor 1994c), and Yawuru (Hosokawa 1991). Presumably the initial vowel was added in response to the regular historical phonological process of final vowel loss.

The earliest sources on Nyulnyul give a completely different present suffix, e'o (Tachon 1895:26), presumably -yu, as in na'nmoleo (nga-n-mul-yu (1MIN.NOM-CM-fell-PRS)) 'I felled/slew him/her', and nan'āmangade'o (nga-na-mangkad-yu (1MIN.NOM-CM-leave-PRS)) 'I leave/abandon it'. This suffix is not attested in any other Nyulnyulan language. By the 1930s, the present seems to have become regularly formed with the suffix -in. ²⁰ Thus none of the regular IVs of Nyulnyul listed in Nekes & Worms (2006:154–217) employ the suffix -yu in the present. The closest to this form in regular IVs is in the present of -JIMB 'die', -djimbei—perhaps -JIMB-yi (p. 174). Otherwise the regular present forms they provide all end in either -en (= -in) or -an (= -an). (The conditioning factors are uncertain.) Just a couple of irregular IVs show the -eo suffix: -R 'pierce' (as a variant alongside -in in minimal numbers only), -M 'put' (as an option in minimal numbers, regularly in augmented numbers), and -N 'be' (in the augmented number only). Nekes & Worms (2006:222) also give -eo as an alternant in the past tense of -J 'say, do', and -o as the apparent present tense suffix in the augmented number.

A possible diachronic scenario is as follows. In the recent past Nyulnyul may have innovated a present tense suffix, which began falling out of use from the early decades of the twentieth century. This was perhaps concomitant with the obsolescence of the language, and may have been exacerbated by the influence of other closely related languages, speakers of which came to reside in the Beagle Bay Mission in increasing numbers from the 1890s. It was replaced by a suffix perhaps borrowed from Jabirrjabirr or Nimanburru. By the 1930s the replacement was almost complete, with the earlier suffix remaining only in a few high frequency IVs. At that time the new suffix showed some unexplained allomorphy. By the end of the twentieth century the replacement was complete, and the allomorphy of the new suffix had been levelled out. This scenario is in accord with the consistency and regularity of the present tense.

Table 7–7 illustrates the present tense inflections of the regular ø-class IV -JID 'go', while Table 7–8 illustrates the inflections for the regular na-class IV -JAL 'see'. The forms given in these tables are in almost complete agreement with the corresponding forms cited in Nekes & Worms (2006:172–173, 163). In the case of -JID 'go', the only difference is that Nekes & Worms (2006) indicate that the present suffix -in is optional (they do not however give the actual forms in Nyulnyul, but state that they are constructed as in Jabirrjabirr, which forms they do give). In the case of -JAL 'see' the only difference is that Nekes & Worms (2006) give the 1 augmented and 1&2 forms without the initial glide; in my own data these forms invariably appear with an initial glide.

²⁰ It is of course possible that Frs Nekes and Worms recorded information on different regional varieties than Fr Tachon. However, this seems rather unlikely, given that all used Felix Ngurdinybur (see §1.2) as their main teacher.

	Minimal	Augmented
1	nga-jid-in	ya-rr-jid-in
1&2	ya-(rr)-jid-in	ya-rr-jid-in
2	mi-jid-in	ku-rr-jid-in
3	i-jid-in	i-rr-jid-in

Table 7–7: Present tense paradigm of -JID 'go'

Table 7–8: Present tense paradigm of -JAL 'see' (accusative enclitics omitted)

	Minimal	Augmented
1	nga-n-jal-in	ya-rr-i-jal-in
1&2	ya-n-jal-in	ya-rr-i-jal-in
2	mi-n-jal-in	ku-rr-i-jal-in
3	i-n-jal-in	i-rr-i-jal-in

As in its past tense paradigm, the present tense forms of the IV -N 'be' show loss of the root nasal in augmented numbers. Thus we have the three augmented number forms *ya-rr-in* (1PL.NOM-AUG-PRS) 'we are', *ku-rr-in* (2AUG.NOM-AUG-PRS) 'you all are', and *yi-rr-in* (3AUG.NOM-AUG-PRS) 'they are'. These forms can be accounted for by the same rule that accounts for the corresponding past tense forms, except that it applies within rather than at the end of a word. (This rule does not apply when instead the IV takes the suffix *-an* IMP—see §7.8.1.)

7.5.2.1.2 Irregularities in the present tense

A few irregularities in present tense inflection have already been commented on above, including for the IV -R 'poke'. Some additional irregularities are identified and discussed below.

First, a few IVs form their present tense without the present tense suffix -in. These include: -BUNYJ 'stink', -BARNJ 'exchange' (sometimes), -JINDIWAR 'hang', and -JIWAND 'hang'. Thus we have i-jindiwar (3NOM-hang) 'it hangs, it is hanging'. Reflexive/reciprocal stems ending in the reflexive/reciprocal suffix also not infrequently lack the present tense suffix in my corpus; there are no obvious conditioning factors. Thus both i-rr-ma-kanda-kand-inyj (3NOM-AUG-REF_p-scratch-scratch-REF_S) 'they are scratching themselves/one another' and i-rr-ma-kanda-kand-inyj-in (3NOM-AUG-REF_p-scratch-scratch-REF_S-PRS) 'they are scratching themselves/one another' are attested. The paradigms in Nekes & Worms (2006) give a handful of other IVs that show no suffix in some present forms, including e.g. -JID 'go', -K 'carry', and -M 'put'.

Second, the 'say, do' IV -J shows irregularities in the present, as in the past tense. The allomorph with an initial apical stop shows up in minimal numbers, regardless of whether or

not the IV hosts a pronominal enclitic (see §7.5.1.1.3 above on the past tense of this IV). The allomorph itself may take either form /d/ or /di/; the presence of the present tense suffix makes it impossible to decide between the two. Otherwise, this IV behaves like a regular na-class IV in the present.

Third, as in its past tense paradigm, the IV 'consume' shows the phonological allomorphs -KID following a nasal and -WID following a vowel or rhotic. Thus the former allomorph shows up in minimal numbers, following the CM n-, as in nga-n-kid-in (1MIN.NOM-CM-consume-PRS) 'I consume it', mi-n-kid-in (2MIN.NOM-CM-consume-PRS) 'you consume it', and i-n-kid-in (3NOM-CM-consume-PRS) 'he/she consumes it'. The latter shows up in augmented numbers, following the CM, or occasionally the number prefix rr-, as in i-rr-i-wid-in (3NOM-AUG-CM-consume-PRS) $\sim i-rr-wid-in$ (3NOM-AUG-consume-PRS) 'they consume it'. As already mentioned, this IV is the only one that shows this $w \sim k$ alternation: no other w-initial IVs show hardening following a nasal, and nor does any k-initial IV show weakening following a vowel or rhotic.

7.5.2.2 Meanings and uses of present tense

Present tense in Nyulnyul shows a range of uses, most of which are cross-linguistically unremarkable.

Most obviously, present tense is used in reference to situations ongoing at the time of the speech situation, to events that include the 'now' origin in Figure 7–1 in their temporal extent. This usage is generally associated with atelic IVs, denoting events that have no inherent point of realisation or coming into being, as in the following examples:

- (7–24) nga-n-jal-in nga-mbal arr-ak nga-mii-mii-in
 1MIN.NOM-CM-see-PRS 1MIN-foot where-LOC 1MIN.NOM-seek-seek-PRS
 arr-ak i-ng-kad
 where-LOC 3NOM-PST-enter
 'I'm looking at my foot, searching for where [the prickle] went in.'
- (7–25) angk bur mi-jid-in what place 2MIN.NOM-go-PRS 'Where are you going?'

Telic IVs also occur in the present tense in reference to ongoing activity. In this case, the present tense category presents the event as extending over a stretch of time including the moment of speech. That is to say, the event is viewed from within its temporal extent, before the moment of coming-into-being of the event. Thus, (7–26) was used in describing a drawing in which a boy was in the process of killing a snake; (7–27) described a drawing in which a boy has his hand extended towards a dog.

(7–26) miid-in baab i-n-dam-in jurru yu-na-k male-ERG child 3NOM-CM-kill-PRS snake 3NOM.FUT-CM-carry bur-ung yu-ngku-marr camp-ALL₁ 3NOM.FUT-FUT-cook 'The little boy is killing a snake; he will take it to camp and cook it.'

²¹ The form *minju* appears once in my corpus, with the apparent meaning 'you say'. This may, however, be the (old) past tense form *min-djeo* 'you said' of Nekes & Worms (2006:220, 222).

(7–27) *ni-marl i-n-m-in-jin yiil* 3MIN-hand 3NOM-CM-put-PRS-3MIN.OBL dog 'The boy is putting his hand out to the dog.'

Present tense is also used in reference to events that habitually occur, but need not be actually happening at the time of speaking (although this is not precluded). In contrast to habitual events denoted by the IMP aspect (see §7.9 below), the event is considered to be still a habitual occurrence, and likely to continue happening. This sense is often associated with presence of the temporal particle *mangir* 'always':

- (7–28) mangir i-n-jibijib-in-yarrad kujarr always 3NOM-CM-stare-PRS-1AUG.ACC two 'He's always staring at us two.'
- (7–29) mangir i-n-dam-in jin malirr always 3NOM-CM-hit-PRS 3MIN.OBL wife 'He always hits his wife.'

Related to the habitual sense of the present tense is its characteristic or generic sense. Thus, according to (7–30), cold winds habitually come from the south; a cold southerly wind is not necessarily always blowing. (The latter interpretation is ruled out by knowledge of the world, but could of course be contextualised in an appropriate narrative referent world.) The characteristic event may equally be one performed by an animate being, as in (7–31); in such cases, the clause may also indicate that individual's ability to perform the event. Another possibility, as shown by (7–32), is that a characteristic quality of the performance of the event is indicated.

- (7–30) binyj wangal i-bilk-in walijingk cold wind 3NOM-blow-PRS south:ABL 'Cold winds blow from the south.'
- (7–31) yardab i-n-d-in crawl 3NOM-CM-say-PRS '[The child] crawls.'
- (7–32) bulkun-kud nga-n-jal-in bur smoke-CHAR 1MIN.NOM-CM-see-PRS place 'I see the place smoky (i.e. I don't see properly).'

Thus in (7–33) the first clause refers to what characteristically happens to fruit, that it ripens (even though this happens at most once to any token). The occurrence of this characteristic event is construed as a temporal condition on the two other events, first that the fruit falls to the ground, and subsequently that people gather it. Similar remarks apply to (7–34).

(7–33) i-marr-in-uk i-jalk-in barnd-uk / kinyingk / 3NOM-cook-PRS-LOC 3NOM-fall-PRS ground-LOC DEF i-rr-warnd-in / wamburiny-in / 3NOM-AUG-gather-PRS people-ERG 'When it's ripe, and falls to the ground, they pick it up.'

(7–34) nakul i-n-balabal-in-karr maaniny i-n-burr-in tide 3NOM-CM-follow-PRS-TEM reef 3NOM-CM-cover-PRS 'When the tide comes in, the reef gets covered.'

As expected given these examples, present tense is also used for hypothetical events that are expected to occur from time to time. Thus in (7-35) the present tense is used in a generic description of what happens when a person has a fit; there is no particular referent event. As in (7-33) and (7-34), a complex sentence expression is employed with an antecedent event specifying the conditions under which the consequence can be expected to occur; in the absence of the antecedent, generic-hypothetical interpretations would be unnatural, the most likely reading being that a specific event is ongoing.

(7–35) wamburiny i-n-ny-in-karr jin warrwal people 3NOM-CM-get-PRS-TEM 3MIN.OBL fit i-n-ny-in ni-lirr-kun i-mur-in karirr 3NOM-CM-get-PRS 3MIN-mouth-ABL₂ 3NOM-spill-PRS saliva 'If a person has a fit saliva spills out of his mouth.'

Present tense can be used in reference to an event situated in the future, an event that has not yet begun. It seems that there is a stronger commitment or immediacy to the occurrence of the event when encoded in the present than the future. Thus (7–36) indicates a strong commitment on the part of the speaker to undertake the event. With second person Actors the speaker's commitment to the occurrence of the event is read in a different way, so that for instance a sense of obligation on the part of the addressee to perform the event may be implicated, as in (7–37). See also line (158) of Text 2, where the shift to the present in the quoted utterance seems to indicate the speaker's certainty of the occurrence of these events.

- (7–36) way nga-jid-in kunard bayakarr birray kubul-ung away 1MIN.NOM-go-PRS tomorrow morning mother father-ALL₁ jan
 1MIN.OBL
 'I am going away tomorrow morning to my mother and father.'
- (7–37) banakarr ku-rr-jid-in when 2AUG.NOM-AUG-go-PRS 'When are you lot going?'

7.5.3 Future tense

7.5.3.1 Morphology of future tense

Future tense is formed more or less regularly in Nyulnyul, according to one of three patterns depending on the person (and number) of the Actor. One pattern is used if the Actor is second person; the other two are used for non-second person Actors. For second person Actors, future tense is signalled by a portmanteau prefix indicating tense as well as person and number (see Table 7–4). For the other person categories, the pronominal prefixes are in most cases non-distinctive, though some categories show a portmanteau person-number-tense pronominal prefix. In one of the two primary patterns, there is a separate future tense prefix, which immediately follows the nominative pronominal prefix. In the other, no

separate prefix is employed. In contrast with Bardi, future tense is indicated entirely by prefixes; there is no future tense suffix (Bowern 2004a:106). Let us now look in more detail at the formation of the regular patterns.

7.5.3.1.1 Second person future

In the second person, future tense is indicated principally by the allomorph of the nominative pronominal prefix. Instead of the 'elsewhere' allomorphs *mi*- 2MIN.NOM and *ku*-2MIN.NOM, we find *wa*- for both second person minimal in *na*-class IVs and second person augmented (both conjugation classes). The elsewhere allomorph *mi*- indicates a second person minimal future for ø-class IVs. Correlating with the pronominal prefix allomorph are also other characteristic features of second person futures, and two regular patterns can be identified according to conjugation class, as shown in Table 7–9.

Table 7–9: Formation of regular second person futures

Conjugation class	Pattern
Ø	PRO.FUT-(NUM)-STEM
na-	PRO.FUT-(NUM)-CM-STEM

Futures of ø-conjugation class IVs are formed with the future allomorph of the second person pronominal prefix, followed, in augmented number, by the number marker. Examples in minimal number are: mi-jid (2MIN.NOM-go) 'you will go', mi-kad (2MIN.NOM-enter) 'you will enter', mi-miimii (2MIN.NOM-seek) 'you will search', and mi-kanyj (2MIN.NOM-forget) 'you will forget'. Examples in augmented number are: wa-rr-jid (2NOM.FUT-AUG-go) 'you (all) will go', wa-rr-mi-kurid-inyj (2NOM.FUT-AUG-REF_p-paint-REF_s) 'you (all) will paint one another/yourselves', wa-rr-miimii (2NOM.FUT-AUG-seek) 'you (all) will search', and wa-rr-lakarr (2NOM.FUT-AUG-hear) 'you (all) will listen'.

For *na*-class IVs the future pronominal prefix allomorph *wa*- 2NOM is employed, regardless of number. In the minimal number this pronominal prefix is followed by the conjugation class marking prefix *na*- ~ *ni*- ~ *n*-, as in: *wa*-*na*-*barrkand* (2NOM.FUT-CM-tie) 'you will tie it up', *wa*-*n*-*dam* (2NOM.FUT-CM-hit) 'you will hit him', *wa*-*na*-*r* (2NOM.FUT-CM-poke) 'you will spear it', *wa*-*na*-*w* (2NOM.FUT-CM-give) 'you will give it', *wa*-*na*-*band* (2NOM.FUT-CM-cover) 'you will cover it', *wa*-*na*-*bulm* (2NOM.FUT-CM-soak) 'you will soak it', *wa*-*n*-*d* (2NOM.FUT-CM-say) 'you will say', *wa*-*na*-*kalak* (2NOM.FUT-CM-follow) 'you will follow it', *wa*-*ni*-*kunb* (2NOM.FUT-CM-send) 'you will send it', etc. However, there are a few irregularities: the conjugation marker appears as *n*- in the future tense of a number of IVs that select a syllabic allomorph elsewhere: *wa*-*n*-*jabal* (2NOM.FUT-CM-ask) 'you will ask him', *wa*-*n*-*jal* (2NOM.FUT-CM-see) 'you will see it', *wa*-*n*-*janbijanb* (2NOM.FUT-CM-kick) 'you will kick it', *wa*-*n*-*julng* (2NOM.FUT-CM-tell) 'you will tell him', and *wa*-*n*-*balabal* (2NOM.FUT-CM-follow) 'you will follow it'.

For the second person augmented, the nominative prefix wa- is followed by the augmented number marker rr-. This is in turn followed by a vowel, usually the low vowel a, occasionally the high front vowel i; this is presumably an allomorph of the conjugation marker (as in most Nyulnyulan languages; see however §7.6). Nothing ever intervenes between these three prefixes. Some examples are: wa-rr-a-jal 'you (all) will see it', wa-rr-i-jabal 'you (all) will ask', wa-rr-i-ny 'you (all) will catch it', wa-rr-a-r 'you (all) will spear it', wa-rr-a-w 'you (all) will give it', and so on.

7.5.3.1.2 First and third person future

As mentioned above, two major patterns are found in the first and third person futures, according to whether or not a distinct FUT marker is deployed. These patterns do not correlate precisely with any known grammatical or lexical characteristic in modern Nyulnyul, though it is probable that they previously correlated with the two conjugation classes and number (see below). Table 7–10 gives order-class representations of the two patterns, which for convenience are labelled A and B. The two patterns are discussed in the remainder of this section.

Table 7–10: Two patterns of formation of first and third person futures

Pattern	Structural description
A	PRO-FUT-(NUM)-STEM
В	PRO-CM-STEM

Pattern A involves the future tense prefix $ngka \sim ngki \sim ngku$; there are a number of irregularities in the distribution of these allomorphs (see following paragraphs). The pronominal forms in the first person are virtually identical with the forms in the past and present tenses (see fn. a to Table 7–4); in the third person, distinct future tense allomorphs of the pronominal prefixes are found.

The major factor conditioning the allomorph of the future tense prefix is the vowel of the preceding pronominal prefix: the vowel of the future prefix normally harmonises with the vowel of the pronominal prefix. Thus, nga- 1MIN.NOM and ya- 1PL.NOM are almost always followed by ngka-, as in nga-ngka-band (1MIN.NOM-FUT-cover) 'I will cover it', nga-ngka-jal (1MIN.NOM-FUT-see) 'I will see it', nga-ngka-mi-jal-inyj (1MIN.NOM-FUT-REF_p-see-REF_S) 'I will see myself', and ya-ngka-rr-bulm (1PL.NOM-FUT-AUG-soak) 'we will soak it'. By contrast, yu- 3NOM is almost always followed by ngku-: yu-ngku-bany (3NOM-FUT-finish) 'it will finish', yu-ngku-rr-land (3NOM-FUT-AUG-sit) 'they will sit', yu-ngku-rr-band (3NOM-FUT-AUG-cover) 'they will cover it', yu-ngku-rr-bulm (3NOM-FUT-AUG-soak) 'they will soak it'. 22

Occasionally, however, the first vowel of the IV root affects the vowel of the future tense prefix. Thus, alongside *nga-ngka-jid* (1MIN.NOM-FUT-go) 'I will go', *nga-ngki-jid* (1MIN.NOM-FUT-go) 'I will go' is occasionally heard. -LUNGK 'dig' usually conditions the *ngku-* allomorph: *nga-ngku-lungk* (1MIN.NOM-FUT-dig) 'I will dig it', *yu-ngku-lungk* (3NOM-FUT-dig) 'he/she will dig it'. Often, the degree of assimilation is insufficient to induce a change in the vowel of the prefix, which remains within the range of allophonic variation of /a/. Thus the vowel of the future prefix is often realised as [ə], as in: *ngangkajid* [ŋaŋgəJɪd] 'I will go', *yungkajid* [juŋgəJɪd] 'he will go', *ngangkajimb* [ŋaŋgəJɪmp] 'I will die', and *ngangkabulm* [ŋaŋgəbolm] 'I will soak it'.

Aside from *ngki*- being occasionally conditioned by the vowel of the following syllable, it is also sometimes found when the initial consonant of the IV stem is a palatal: *nga-ngki-ny* (1MIN.NOM-FUT-get) 'I will get it', *ya-ngki-ny* (1&2NOM-FUT-get) 'we two will get it', and *yu-ngki-ny* (3NOM-FUT-get) 'he will get it'.

²² Consistent with this observation, Nekes & Worms (2006: Chapter 5) usually cite the third person singular prefix as *yoŋgo* and the plural as *yoŋgor*.

Pattern A is observed by all ø-class IVs, as well as by all IVs in augmented numbers. In addition, a number of *na*-class IVs normally follow this pattern of inflection, including -DAM 'hit', -M 'put', -MANGKAD 'leave', -MARR 'burn, cook', ²³ -MIRRAR 'await', -NGUL 'throw', -NY 'get', -R 'spear', and -W 'give' among many others. In the augmented numbers of *na*-class IVs, however, a vowel not infrequently appears between the augmented number prefix *rr*- and the IV stem, as in *ya-ngka-rr-a-m* (1PL.NOM-FUT-AUG-*a*-put) 'we will put it', *ya-ngka-rr-i-j* (1PL.NOM-FUT-AUG-*i*-say) 'we will say', and *yu-ngku-rr-i-j* (3NOM-FUT-AUG-*i*-say) 'they will say'. However, this not an invariable rule, and the vowel often does not appear, as in *ya-ngka-rr-m* (1PL.NOM-FUT-AUG-put) 'we will put it'. ²⁴ Given the irregular appearance of this vowel, and the fact that it is also irregularly attested in the same environment with ø-class IVs (e.g. *ya-ngka-rr-a-miimii* (1PL.NOM-FUT-AUG-*a*-seek) 'we will look'), identification with the *a*- allomorph of the *na*- conjugation marker is not strongly motivated.

Pattern B is exclusive to *na*-class IVs in minimal numbers; ø-class IVs never follow this pattern, and nor do IVs in augmented numbers. Of those *na*-class IVs that follow pattern B, some do so regularly, some do occasionally, and alternate with pattern A. -J 'say, do' is an example of an IV that consistently follows pattern B, as illustrated by the minimal forms *nga-ni-j* (1MIN.NOM-CM-say) 'I will say', *ya-ni-j* (1PL.NOM-CM-say) 'we will say', and *yu-ni-j* (3NOM-CM-say) 'he/she will say'. Other *na*-class IVs that inflect according to this pattern include: -BADIK 'block' (e.g. *nga-na-badik* (1MIN.NOM-CM-block) 'I will block him'), -BAND 'cover' (e.g. *yu-ni-band* (3NOM-CM-cover) 'he/she will cover it'), -JABAL 'ask' (e.g. *nga-ni-jabal* (1MIN.NOM-CM-ask) 'I will ask him/her'), -K 'carry' (e.g. *ya-na-k* (1PL.NOM-CM-carry) 'we two will take it', *yu-na-k* (3NOM-CM-carry) 'he/she will carry it'), -KALAK 'approach' (e.g. *yu-ni-kalak* (3NOM-CM-approach) 'he/she will approach him/her'), and -JANB 'kick' (e.g. *nga-ni-janb* (1MIN.NOM-CM-kick) 'I will kick him/her').

Examples of *na*-class IVs that are attested in both inflectional patterns A and B include e.g. -JAL 'see', where *nga-na-jal* (1MIN.NOM-CM-see) 'I will see him/her/it' occurs alongside the more frequent *nga-ngka-jal* (1MIN.NOM-FUT-see) 'I will see him/her/it', and -KUNB 'send', as shown by the alternations *nga-na-kunb* (1MIN.NOM-CM-send) and *nga-ngku-kunb* (1MIN.NOM-FUT-send) 'I will send him/her/it'. The irregular -WID 'eat' also shows the same alternation: *yu-na-wid* (3NOM.FUT-CM-eat) 'he/she will eat it' and *yu-ngku-wid* (3NOM.FUT-FUT-eat) 'he/she will eat it' both being attested.

I suspect that at some previous stage in the history of Nyulnyul patterns A and B aligned with the conjugation classes, at least in minimal numbers. At some point pattern A, with its regular prefix ngka-, began to extend and take over from pattern B. Possibly this began as a natural linguistic change prior to the turn of the twentieth century. It may have been hastened by the demise of the language in the mid to late twentieth century. This scenario is consistent with the fact that for the lowest frequency na-class IVs just the pattern A inflections are employed in modern Nyulnyul; the more frequent IVs either consistently follow pattern B (as in the case of the most frequent and generic IV -J 'do, say') or alternate between A and B.

Examination of the inflectional forms in Nekes & Worms (2006: Chapter 5) lends further credence to this suggestion. The Nyulnyul they describe, which is that spoken in the decade

²³ Thus the contrast between ø- and *na*-classes 'burn (intransitive)' and 'cook (transitive)' is lost for this IV in the first and third person futures.

²⁴ The vowel is invariably present in the augmented forms of -J 'say' just given. This is presumably for phonotactic reasons.

and a half from the late 1930s to early 1950s, shows slightly less tendency to follow the inflection of pattern A than the Nyulnyul of the late twentieth century. Thus for instance first and third person forms of -DAM 'hit', -WID 'eat', and -NY 'get' inflect according to A, while -BAD 'catch', -JAL 'see', -JANB 'kick', -NGUL 'throw', and perhaps -R 'poke' consistently follow pattern B in Nekes & Worms (2006). ²⁵ As indicated above, in my corpus -JAL 'see' is attested in both patterns A and B, while -NGUL 'throw' consistently inflects according to pattern A.

Nekes & Worms (2006) give two paradigms for -MARR 'cook, burn' in the first and third person future, one for the transitive (*na*-class), the other for the intransitive (ø-class); these are precisely inflectional patterns B and A respectively. As per fn. 23, this distinction is levelled in my corpus.

What is rather unexpected is that in my corpus the first and third person futures of -J 'say, do' consistently follow pattern B, whereas in Nekes & Worms (2006:220–222) both patterns are represented. Certainly the regularisation of the paradigm for the most frequent IV is expected. However, given its somewhat intermediate status, one would have expected it to have regularised in the direction of pattern A.

7.5.3.2 *Meanings of future tense*

Future tense situates the referent event in future time with respect to a deictic centre, usually the 'now' of the SS, although it may also be of an RSS. For instance, in (7–38) the event of the man's being sent away is situated in the future with respect to the RSS.

(7–38) nga-na-ng-kunb kinyingk-ung wamb yu-na-kunb way 1MIN.NOM-CM-PST-send DEF-ALL₁ man 3NOM-CM-send away 'I sent word to this man to go away.'

Future tense is used in a range of speech act types, including assertions (statements about a referent world) and mands (calls for action). We deal with these in order in this section.

In assertions, future tense generally appears to indicate a relatively strong degree of commitment to the occurrence of the event, though less than for present tense (see §7.5.2.2). More precisely, the speaker does not entertain or admit serious doubts as to its occurrence; since no doubts are specifically entertained, it can be inferred by the Q-principle—what is saliently not said is not the case (Levinson 2000)—no doubts exist, and the speaker is committed to the occurrence of the event. This is not coded, but inferred meaning, and is defeasible. Consistent with this, the clause may be qualified with a modal particle expressing probability, as in (7–39). By comparison, the irrealis future indicates less commitment to the occurrence of the situation (see §7.7 for more on the contrast between the plain and irrealis future), that the speaker's evaluation is that the event falls off the likely time line projecting into the future (see Figure 7–1).

(7–39) nyangangkarr banangkarr daar yu-ngka-r perhaps today arrive 3NOM-FUT-poke 'Maybe he'll arrive today.'

²⁵ For -R 'poke' there are a number of irregularities and inconsistencies in the Nyulnyul forms provided in Nekes & Worms (2006:217–219); I suspect that these are simply errors of representation, and do not reflect actual irregularities in the paradigm.

If no temporal location is specified, the natural interpretation is that the event is to occur in the relatively near future. Thus (7–40) would normally be interpreted as indicating that the event is to occur soon, rather than in say a few years time.

(7–40) nga-ngka-jal jan wunyjub 1MIN.NOM-FUT-see 1MIN.OBL mother 'I'll see my mother.'

This interpretation, however, is defeasible, and depends on context, the speaker's inferred intentions, knowledge of the world, and so on. An unlocated future tense clause may thus be quite be unspecific as to time of occurrence. This is illustrated by (7–41), which denotes an event that is certain to occur, though exactly when it will happen is uncertain.

(7–41) *ya-ngki-jimb yay*1PL.NOM-FUT-die 1&2MIN.CRD
'We two (speaker and hearer) will die.'

As (7–40) and (7–41) show, intention or desire may or may not be present. In some instances obligative senses are present, as in (7–42) and (7–43); these are again clearly inferences based on knowledge of the world and so on, and do not represent coded meaning.

- (7–42) *yu-ngku-jid yu-ni-jal liinyj* 3NOM-FUT-go 3NOM-CM-see police 'He has to go and see the police.'
- (7–43) nga-ngki-jid way bur-ung jan 1MIN.NOM-FUT-go away camp-ALL₁ 1MIN.OBL 'I'd better go home.'

The future tense is also employed in predictions and expectations concerning the occurrence of events in future time. In such inferential uses of the future, the prediction is natural according to knowledge of the world, as illustrated in (7–44). In these cases the speaker is not committing themself strongly to the occurrence of the event.

(7–44) miid-in baab i-n-dam-in jurru yu-na-k bur-ung male-ERG child 3NOM-hit-PRS snake 3NOM-CM-carry camp-ALL₁ yu-ngku-marr 3NOM-FUT-cook 'The boy is killing a snake; he will take it to camp and cook it.'

Future tense is also used in clauses denoting hypothetical events that the speaker does not necessarily expect, let alone wish, as the following examples show. Absence of modal qualification perhaps adds a degree of immediacy to the hypothetical event that may not be present if the future irrealis were used instead (see §7.7).

(7–45) wa-n-dam-ngay nga-ngka-dam-jii bilay 2MIN.NOM-CM-hit-1MIN.ACC 1MIN.NOM-FUT-hit-2MIN.ACC again 'If you hit me, I'll hit you back.'

- (7–46) *yu-ngku-dam-uk-jii mi-ngalk*3NOM-FUT-hit-LOC-2MIN.ACC 2MIN.NOM-cry
 'If he hits you, you'll cry.'
- (7–47) mirlimirl mi-bikand nyi-marl-uk wangal-in paper 2MIN.NOM-hold 2MIN-arm-LOC wind-ERG yu-ngku-ngul-jii 3NOM-FUT-throw-2MIN.OBL 'You will have to hold onto the paper or the wind will blow it away on you.'
- (7–48) yaward-in yu-ngku-ngul-karr kinyingk wamb warang-in horse-ERG 3NOM-FUT-throw-TEM DEF man others-ERG yu-ngku-rr-kanm 3NOM-FUT-AUG-laugh 'If the horse throws him, the others will laugh.'

This sense of immediacy may be what is invoked by the choice of the unmodalised future tense in (7–49), where the speaker obviously has no intention of carrying out the event, and presumably would not have placed it in the realm of likely events. A more accurate evaluation in which the event is expressed by an irrealis might not be so funny.

(7–49) ngi-mil nabindi ngay bilay jub nga-ngki-ny jan 1MIN-nose big 1MIN.CRD again cut 1MIN.NOM-FUT-get 1MIN.OBL iwarl ngi-mil long 1MIN-nose 'My nose is too big. I too will cut my long nose.'

Mands are speech acts that are oriented primarily to action, rather than to information; of course, information is simultaneously conveyed, but in contrast with assertions it is not profiled, and purely linguistic responses would be judged inadequate. Mands are not restricted to action by the addressee. Nyulnyul distinguishes no mood specific to mands; in particular, there is no grammatical category coding the imperative. ²⁶ The plain future tense is usually used in expressing mands, including commands, which are expressed as second person futures, as in the following examples:

- (7–50) way mi-jid away 2MIN.NOM-go 'Go away!'
- (7–51) daarr wa-na-r bilay kunard wa-n-jal-ngay arrive 2MIN.NOM-CM-poke again tomorrow 2MIN.NOM-CM-see-1MIN.ACC 'Come tomorrow and see me.'

²⁶ This is not uncommon in Australian Aboriginal languages, including Kimberley languages (see e.g. McGregor 1990:521–523 on Gooniyandi). Some Australianists have suggested that the imperative is identifiable by a distinctive intonation pattern. However, I am aware of no convincing arguments in any Aboriginal language—and certainly of none in Nyulnyul—that the distinctive intonation pattern codes a grammatical category of the modal type (imperative), rather than (merely) correlates with a speech act type (command).

Verbs in second person and future tense are of course used in other types of mand than commands, including requests (e.g. (7–52) would most likely be construed as a request for food; (7–51) could equally represent a request as a command), demands (again (7–51) admits this construal), and warnings (as in the first clause of (7–53)). Of course, second person futures may also occur in assertions, as shown by (7–45)–(7–47).

- (7–52) nganyji wa-na-w-ngay may marrkin
 INT 2MIN.NOM-CM-give-1MIN.ACC food hunger
 nga-n-d-in
 1MIN.NOM-CM-say-PRS
 'Will you give me food? I'm hungry.'
- (7–53) wa-n-jal bini bardangk yalk mi-n-in
 2MIN.NOM-CM-see that tree stand 2MIN.NOM-be-PRS
 i-la-karrmar mi-li-jalk
 3NOM-IRR-break 2MIN.NOM-IRR-fall
 'Watch out, that tree you are standing on might break and you might fall.'

With first person Actors, clauses in future tense can be construed as promises ((7-54) and (7-55)), assurances (second clause of (7-56)), and hortatives (as in (7-57) and (7-58)).

- (7–54) kunard nga-ni-jal-jii tomorrow 1MIN.NOM-CM-see-2MIN.ACC 'I'll see you tomorrow.'
- (7–55) *ya-ngka-rr-a-w-jii may wil wul uriny* 1PL.NOM-FUT-AUG-CM-give-2MIN.ACC food meat water woman 'We'll give you food, meat, water and a wife.'
- (7–56) *mi-jid in-mirr ngay nga-ngki-jid bin-mirr* 2MIN.NOM-go this-PER 1MIN.CRD 1MIN.NOM-FUT-go that-PER 'You go this way; I'll go that way.'
- (7–57) marrkin nga-n-d-in yay kujarr hunger 1MIN.NOM-CM-say-PRS 1&2MIN.CRD two ya-ngki-jid ya-ngka-mii may 1PL.NOM-FUT-go 1PL.NOM-FUT-seek food 'I'm hungry; let's me and you go and look for some food.'
- (7–58) ya-ngka-dam bin bardangk ya-ni-jal nganyi langkurr
 1PL.NOM-FUT-hit this tree 1PL.NOM-CM-see INT possum
 yu-ngku-rr-jarrjarr
 3NOM-FUT-AUG-awake
 'Let's hit the tree, and see if the possums will wake up.'

Mands with third person Actors are also possible, as in the second clause of (7–59), which is not concerned merely with conveying information, but with control of what the Actor does.

(7–59) arri mi-la-kunb way baan yu-ngki-n not 2MIN.NOM-IRR-send away like:that 3NOM-FUT-be 'Don't send him away; let him be.'

7.6 Conjugation classes

As mentioned in §7.5, Nyulnyul IVs fall into two regular conjugation classes that show differences in their patterns of inflection; there are also irregularities in the inflection of some IVs whereby while they generally behave according to the patterns of one of the two conjugation classes, they do not do so consistently. For instance, they sometimes select unexpected allomorphs of the conjugation marker, tense marker, or the IV root.

The two conjugation classes are referred to as the *na*- and ø-classes (see also Tables 7–1 and 7–2), according to the presence or absence of the CM prefix *na*- ~ *ni*- ~ *n*- ~ *a*- ~ *i*-. The first three allomorphs are restricted to minimal numbers. The first, *na*-, is the unmarked or elsewhere allomorph, and hence is used as the citation form of the CM. The second and third allomorphs are by and large phonologically conditioned: *ni*- occurs preceding a palatal segment, and sometimes following a high vowel in the previous syllable, as in *i-ni-m-bilk* (3NOM-CM-PST-blow) 'it blew (it)', and *i-ni-lungk* (3NOM-CM-dig) 'he/she dug (it)'; and *n*-is restricted to the two known IV roots with initial apical stops, -DAM 'hit' and -DIM 'maltreat'. Some of the above could equally be regarded as showing grammatical or lexical conditioning. The *n*- allomorph is also grammatically conditioned: it occurs consistently in the present tense. The fifth and sixth allomorphs are found just in augmented numbers, though their appearance is irregular, and the same vowels sometimes appear in the same phonological environment (i.e. between the *rr*- augmented number prefix and a root-initial stop or nasal) with ø-class IVs, evidently inserted by a phonological rule.

The CM *na*- does not, however, occur consistently throughout the paradigms of *na*-class IVs. It is regularly absent in future tense and first and third person augmented numbers (see §7.5.3.1.2), and evident only in inflectional pattern B for minimal numbers; nor does it occur at all in the irrealis or non-finite forms of any IV. On the other hand, there are other regular differences in the inflections of IVs according to conjugation class, including selection of allomorph of nominative pronominal prefix in certain circumstances.

Tables 7–1 and 7–2 indicate the conjugation class membership of IVs where known. About one hundred IV roots are assigned exclusively to the *na*-class, though some show scattered irregularities (see §7.5 above). Fewer IV roots are assigned exclusively to the ø-class, just under seventy. As is typical of Nyulnyulan languages, approximately a score of IVs are ambicategorial, and show dual conjugation class membership. (Stokes 1982 refers to these as 'alternative prefixing' roots). IV stems are also assigned to conjugation classes.

There is a strong correlation between the conjugation classes and clause transitivity; there is also a good correlation with root valency, that is, the lexical valency of the IV root (see also McGregor 2002c:218–219). Thus over 90% of ø-class IVs are monovalent, while a similar proportion of *na*-class IVs are bivalent.

As suggested in McGregor (2002c:361), it is likely that the prefix $na \sim ni \sim n \sim a$ of the na-conjugation class is the reflex of an accusative pronominal prefix in the IV of preproto-Nyulnyulan. Consider the following evidence. First, possible cognate pronominal forms exist in a number of non-Pama-Nyungan languages (e.g. McGregor 2008d). Second, in many nearby non-Pama-Nyungan families the IV takes both nominative and accusative pronominal prefixes; it is not unlikely that pre-proto-Nyulnyulan did also. In direct combinations (which those with third person singular accusative would be), the nominative

prefix usually precedes the accusative; this is consistent with the placement of the *na*-prefix. Other accusative prefixes may simply have been lost; they may have been consistently replaced by the third person minimal form. Such a development is not implausible given that elsewhere in Nyulnyulan languages there is evidence that personal inflections have been lost, and a formerly viable paradigm of personal contrasts replaced by the least marked member, the third person minimal form. This scenario, of course, also accounts for the strong association between conjugation class and transitivity. (A somewhat similar process accounts for the presence of *im* (from English *him*) on transitive verbs of Kriol (Rumsey 1983) and Tok Pisin, though this is simply a transitivity marker, and has not become a conjugation marker as such.)

In the following three subsections we discuss in order the three classes of IVs, exclusively na-class, exclusively ϕ -class, and ambicategorial. We focus on the broad picture of class membership, and do not discuss irregularities in the paradigms of particular IVs, which are dealt with in the discussion of tense formation.

7.6.1 na-class IV roots

As indicated above, the majority (over 90%) of *na*-class IVs are bivalent, and normally occur in transitive clauses when they serve as lexical items—that is, when they occur in SVCs. The situation is muddied considerably in CVCs, where there is no direct relation between conjugation class of an IV and either CVC valency or clausal transitivity (see Chapter 11 and McGregor 2002c). We thus specifically exclude from the following discussion, and the following two subsections, uses of IVs in CVCs, and focus solely on SVC usage.

IVs such as -JAL 'see', -BALABAL 'follow, track', -DAM 'hit', -JIWAR 'follow', -NY 'get', -R 'poke', -NGUL 'throw', etc. appear to be virtually restricted to transitive clauses.²⁷ This does not mean that na-class IVs always occur in clauses with two overt NPs: as mentioned previously, ellipsis of NPs in Nyulnyul is common. In most instances, absence of one or two NPs with transitive na-class IVs can be accounted for by ellipsis under givenness or predictability of the missing NP (or its referent). In many cases this is evident from the form of the IV, with a nominative pronominal prefix and an accusative pronominal enclitic. But the third person minimal accusative enclitic has zero form, making it impossible to tell from the IV form alone whether there is a third person Undergoer or not, when no NP is present. Often context makes it clear that there is an Undergoer, as in (7–60), where it is evident that what was not seen was the dog (or its tail). In cases such as (7–61), where the English translation involves intransitive see, there is reason to believe that the clause remains formally transitive and that the Undergoer is the generic, perhaps even dummy, NP bur 'place'. This is indicated by the fact that in environments in which there is no specific Undergoer, or its identity is irrelevant, this generic NP can always be added, as shown by examples (7–62)–(7–65).

²⁷ The *na*-class IV -JAL 'see' is sometimes found in middle clauses. More usually, though, a middle clause with an SVC will have a ø-class IV (see §7.6.2).

- (7–60) yiil nga-ni-ny-janb jin ni-mird arri
 dog 1MIN.NOM-CM-PST-trample 3MIN.OBL 3MIN-leg not
 nga-li-jal-an
 3NOM-IRR-see-IMP
 'I trampled on the dog's leg accidentally; I didn't see it.'
- (7–61) wamb nyanangkarr arri nga-li-jal budarr in-kun man maybe not 1MIN.NOM-IRR-saw properly this-ABL₂ 'It might be a man; I can't see properly from here.'
- (7–62) baab wa-n-j nyi-im bur wa-n-jal open 2MIN.NOM-CM-say 2MIN-eye place 2MIN.NOM-CM-see 'Open your eyes and see.'
- (7–63) bin wamb bambur arri bur i-la-jal this man blind not place 3NOM-IRR-see 'This man is blind; he can't see.'
- (7–64) bur murrul i-n-jal-in place little 3NOM-CM-see-PRS 'He can see only a little.'
- (7–65) kalb bur wa-n-jal up place 2MIN.NOM-CM-see 'Look up!'

Some *na*-class IVs occur in other clause types. For instance, -W 'give' seems to be restricted to ditransitive clauses (see §12.3.2.2.7). At least one *na*-class IV is restricted to intransitive clauses, -KAL 'wander', as shown by (7–66). Quite likely -KUDIJ (-GODEDJ) 'flood, come in (of tide)' is another such IV, though information on this IV is partial.

- (7–66) djeo wēle-bēdj in-galen belar-og jiyu wil-bij i-n-kal-in birlar(r)-uk heron fish-for 3NOM-CM-wander-PRS spring-LOC 'The heron walks about the well for fish.'
- The IV -J \sim -DI 'say, do' is not just formally irregular as a *na*-class IV, but is also irregular in terms of its clausal usage. Thus as the main lexical verb of an SVC, it never occurs in a transitive clause; usually it occurs in a middle clause (see §12.2.2.5) which simultaneously frames a quotation, as in (7–67). Sometimes no quote is present, as (7–69) shows. In a few examples the participant cross-referenced by the oblique pronominal enclitic represents a topic of conversation, as in (7–68).
- (7–67) bin iibal-in jin i-n-di-jirr jin-irr
 this father-ERG 3MIN.OBL 3NOM-CM-say-3AUG.OBL 3MIN.OBL-3AUG
 warl junk wa-rr-i-ny
 son run 2AUG.NOM-AUG-CM-get
 'The father told the children to run away.'

- (7–68) kinyingk wamb nga-n-d-jii

 DEF man 1MIN.NOM-CM-say-2MIN.OBL

 'This is the man I told you of.'
- (7–69) *irr-in i-li-rr-j-jan*3AUG.CRD-ERG 3NOM-IRR-AUG-say-1MIN.OBL
 'They might tell me.'
- -J \sim -DI 'say, do' can also occur in intransitive clauses referring to speech events; there is invariably an element in the clause (that is not a PV) specifying the uttered words (as in (7-70)) or denoting them by a referring expression (as in (7-71) and (7-72)).
- (7–70) kujarr wamb i-ngi-rr-i-j jukar ya-ngka-rr-jid
 two man 3NOM-PST-AUG-CM-say quietly 1PL.NOM-FUT-AUG-go
 i-li-rr-jal-yarrad
 3NOM-IRR-AUG-see-1AUG.OBL
 'The two men said, "We'd better go quietly or they'll see us."
- (7–71) angk mi-n-j what 2MIN.NOM-CM-say 'What did you say?'
- (7–72) kurr kujarr arri baan ku-li-rr-i-j
 2AUG.CRD two not thus 2AUG.NOM-IRR-AUG-CM-say
 'Don't you two say that.'
- -J \sim -DI 'say, do' can also be used in the sense 'do', as illustrated by the second clauses of (7–73) and (7–74). Such clauses invariably have an additional unmarked NP, and the clause itself is quasi-transitive (see $\S12.3.2.1$).
- (7–73) kurr kujarr arri ku-la-rr-j-an angk 2AUG.CRD two not 2AUG.NOM-IRR-AUG-say-IMP what nga-ni-j 1MIN.NOM-CM-say 'Don't tell me what to do.'
- (7–74) arri mi-la-jal-yarrad arri riib ya-li-rr-i-j not 2MIN.NOM-IRR-see-1AUG.ACC not bad 1PL.NOM-IRR-AUG-CM-say 'Don't watch over us, we won't do anything wrong.'

The connection between the *na*-conjugation class and clause transitivity is thus good, though imperfect. Most exceptions involve clause types with two inherent roles, though there is a small subset of *na*-class IVs that consistently occur in intransitive clauses.

7.6.2 ø-class IV roots

In keeping with the formally less marked status of the ø-conjugation class, the correlation between conjugation class and transitivity is slightly weaker than for *na*-class IVs. Thus ø-class IVs in SVCs are attested in clauses of almost all transitivity types: intransitive, quasi-transitive, medio-active, middle, and transitive (on these clause types see the

discussion and examples in §12.3.2.2.2 through to §12.3.2.2.6); absent is usage in ditransitive clauses, which appear to be restricted to *na*-class IVs (see examples in §12.3.2.2.7). There is, however, a preference for intransitive clauses, and a dispreference for transitive clauses.

A few ø-class IVs invariably occur in transitive clauses. These include -LAKARR 'listen, hear' and -BAKAND 'have, hold'. -LAKARR 'listen, hear' usually takes a human Undergoer, as in (7–75), though sometimes it is a more abstract entity such as a noise or words, as in (7–76); as is the case for -JAL 'see', the general ability to hear is represented in a transitive clause with generic Undergoer, as in (7–77).

- (7–75) bin baab arri i-la-lakarr-an bin wamb this child not 3NOM-IRR-listen-IMP this man 'This boy did not listen to this man.'
- (7–76) kaw nga-n-j nga-nga-lakarr jan ngank call 1MIN.NOM-CM-say 1MIN.NOM-PST-hear 1MIN.OBL talk 'I called out, and heard my voice.'
- (7–77) arri nga-la-lagarr wamburiny not 1MIN.NOM-IRR-hear people 'I can't hear anyone.'

The IV -BAKAND 'have, hold' also consistently occurs in transitive clauses (see further McGregor 2001c):

- (7–78) kinimirr-in i-rr-bakand-in karrj jarringk shark-ERG 3NOM-AUG-have-PRS sharp tooth 'Sharks have very sharp teeth.'
- (7–79) kard wa-na-r jan nimal / mi-bakand yadiny / still 2MIN.NOM-CM-poke 1MIN.OBL hand 2MIN.NOM-hold while 'So keep holding my hand, hold it for a little while.'

The ø-class IVs -MII 'search, look for' and -MIIMII 'search, look for' appear to be restricted to transitive and middle clauses, depending on the animacy of the thing sought (see §12.3.2.2.5), as shown by (7–80) and (7–81) respectively. They never occur in intransitive clauses, at least in my corpus.

- (7–80) *i-ngi-rr-miimii* wul kulukurr-ung bur 3NOM-PST-AUG-seek water west:country-ALL₁ place 'He looked for water in the western country.'
- (7–81) ya-ngka-rr-miimii-jin
 1PL.NOM-FUT-AUG-seek-3MIN.OBL
 'We'll look for him.'

A number of ø-class IVs have the potential of occurring in clauses of one or more transitivity types in addition to intransitive clauses. Some occur in both transitive and

intransitive clauses.²⁸ This may be the case for the IV -KANYJ 'forget', which is attested in transitive clauses, and also appears to occur in intransitive clauses (though the examples admit alternative interpretations). Similarly, -LINGAR(R) (-*leŋar*) 'show' is a ø-class IV according to information presented in Nekes & Worms (1953:652). Examples they provide suggest that it can occur with or without an Undergoer NP, though the interpretation of their examples is uncertain. -JARRAD 'stretch, extend', by contrast, is definitely attested in intransitive clauses, though it also occurs in transitive clauses, as in (7–82) (though this could alternatively be an intransitive external possession construction—see §12.4.2.4); by contrast, *nga-ny-jarrard* (1MIN.NOM-PST-stretch) 'I stretched (myself)' is intransitive.

(7–82) kudirrwany-in irr-marl i-rr-i-jarrad-in wajamarr burrb brolga-ERG 3AUG-hand 3NOM-AUG-CM-extend-PRS later dance i-rr-i-j-in 3NOM-AUG-CM-say-PRS 'The brolgas extend their wings and dance around.'

Some ø-class IVs occur in both intransitive and middle (see §12.3.2.2.5) clauses. Examples are -MANY 'wave' and -JIRIK 'fear', both of which prefer middle clauses. In addition, a number of ø-class IVs occur in both intransitive and medio-active (see §12.3.2.2.4) clauses. These include -BAMARR 'tremble, shiver', -JIMB 'die', -MARR 'burn', and -RALK 'dry'. (Some of these IVs are ambicategorial; however, in medio-active clauses it is the ø-class IV that occurs.) The following two examples illustrate -JIMB 'die' in intransitive and medio-active clauses, respectively.

- (7–83) wamb i-ny-jimb man 3NOM-PST-die 'The man died.'
- (7–84) *iik-in i-ny-jimb* sick-ERG 3NOM-PST-die 'He died through sickness.' (Tachon 1895:32)

Reflexive/reciprocal IV stems are consistently assigned to the ø-class, and the SVCs they occur in normally occur in intransitive clauses (McGregor 2000b), unless applicativised (see §7.10). An exception is the irregular reflexive/reciprocal IV -BARNJ 'exchange'. In independent use in SVCs this IV usually occurs in quasi-transitive clauses (where it expresses the meaning 'exchange'), though it possibly also occurs in intransitive clauses (see §11.4.1.1).

7.6.3 Ambicategorial IV roots

As mentioned above, slightly more than a score of IV roots—about 13% of the total number of IVs for which adequate information is available—are ambicategorial. For these IVs the connection between conjugation class and transitivity is better than usual. When assigned to the ø-class, the IV can always occur in an intransitive clause, and sometimes another non-

²⁸ In some cases the difference is marked by choice of different conjugation class for the IV (as discussed in §7.6.3), and in some cases the entire SVC takes the applicative marker (see §7.10), in which case no change in conjugation class of the IV occurs.

transitive type in addition. When assigned to the *na*-class, it always occurs in a transitive clause.

Table 7–11 lists the known ambicategorial IVs of Nyulnyul, and indicates in the second and third columns the difference in meaning according to the categorisation of the IV. The final column shows the nature of the agnation pattern between the intransitive and transitive pairs. In nominative agnations there is a correspondence between the Actor of an intransitive clause and the Actor of the corresponding transitive clause (see §12.3.2.1 for explanations of the role labels); roughly, the 'subjects' correspond. This is illustrated by -BILK 'blow', as shown by (7–85) and (7–86), the 'subjects' of which are the wind. Ergative agnations, by contrast, show a correspondence between the Actor of an intransitive clause and the Undergoer of the corresponding transitive clause: roughly, they equate the intransitive 'subject' and transitive 'object'. (7–87) and (7–88) illustrate this with the IV -BANY 'finish': here it is the thing completed that is the Actor of the intransitive and the Undergoer of the corresponding transitive clause.

- (7–85) <u>wangal</u> *i-bilk-in* wind 3NOM-blow-PRS 'A wind is blowing.'
- (7–86) <u>wangal</u>-in i-ni-m-bilk wind-ERG 3NOM-CM-PST-blow 'The wind blew it.'
- (7–87) *aa* <u>nul</u> *i-m-bany-jirra* <u>kadakur / bur-ung</u> and corroboree 3NOM-PST-finish-3AUG.OBL finished camp-ALL₁ <u>jirr</u> <u>i-ngi-rr-i-jid</u> <u>ral /</u> 3AUG.OBL 3NOM-PST-AUG-EV-go soon 'When their corroboree was quite finished, they went straight to their camp.'
- (7–88) <u>kujarr wil</u> nga-na-m-bany two meat 1MIN.NOM-CM-PST-finish 'I ate up (i.e. finished up) two pies.'

Ergative alternations predominate, and in most instances the transitive clause is a causative of the corresponding intransitive. The central participant effectively has no control over the event, and undergoes it. Nominative alternations are, with the single exception of -BILK 'blow', restricted to IVs denoting activities restricted to human beings (e.g. -KANM 'laugh', -NGULM 'pretend, deceive') or at animates; the exceptional IV relates to the activity of a natural force. Thus, nominative alternations are restricted to instances in which the central participant has some degree of control over the event.

For a couple of IVs it is not clear which way the identification goes: it could be construed in either way; this is indicated in Table 7–11 by ergative/nominative. For instance, for -BULABUL 'wash' and -JAR(R)K 'shave' the correspondence is ergative if viewed from the perspective of the result (who gets washed or shaved), but nominative if viewed from the perspective of the source of energy (who does the washing or shaving).

Table 7–11: Ambicategorial IVs in Nyulnyul

IV root	ø-class	na-class	Agnation type
-BADIK	'finish, enough'	'finish something'	ergative
-BAMARR	'tremble'	'make shiver'?	ergative?
-BANY	'finish'	'finish something'	ergative
-BARND	'extend'	'cover'	ergative
-BILK	'blow (e.g. of wind)'	'blow something'	nominative
-BULM	'soak'	'soak something'	ergative
-BULABUL	'wash (oneself)'	'wash someone'	ergative/nominative
-JAR(R)K	'shave (oneself)'	'shave someone'	ergative/nominative
-KAKUL	'break'	'break something'	ergative
-KALBARR	'drop'	'lose something'	ergative
-KANM	'laugh'	'laugh at someone'	nominative
-KAR(R)M	'break'	'break something'	ergative
-KARRMAR	'break'	'break something'	ergative
-KUL	'wear (clothes)'	'put clothes on (usually on someone else), dress someone'	ergative
-KURID, -NGIR(R)ID	'paint, anoint oneself'	'paint, anoint someone'	ergative
-LURR	'ripen, burn'	'make fire, burn something'	ergative
-MADARL	'hide'	'hide someone'	ergative
-MARR	'cook, burn, ripen'	'cook, burn something'	ergative, nominative
-MILK	'wake up'	'awaken someone'	ergative
-MINDIJAL	'wake up'	'awaken someone'	ergative
-MUND	'get wet'	'saturate someone'	ergative
-MUUR	'spill out, come out'	'pour something out'	ergative
-NGAL	'shit'	'shit on, befoul something'	nominative
-NGAR(R)K	'drift'	'drive'	ergative
-NGULM,	'pretend'	'deceive'	nominative
-RALK	'dry'	'dry something'	ergative

For -MARR 'burn' both patterns are attested;²⁹ the same perhaps holds for -LURR 'burn', though the data available is incomplete. Ergative agnation is illustrated by (7–89) and (7–90): what is shared is the thing burnt. The same pattern is attested with the sense 'cook'—that is, 'something cooks' (intransitive) corresponds with 'someone cooks something' (transitive): compare (7–91) and (7–92). (7–93) and (7–94) exemplify yet another ergative alternation, in this case the fire serves as an Actor in the first, but an Undergoer in the second. However, consistent with the fact that fire is also a natural force, we also find nominative alternations, as in (7–90) and (7–93). The ø-class -MARR 'burn' also occurs in medio-active clauses; the alternation pattern with the corresponding intransitive clause is nominative: compare (7–95) with (7–89). By contrast, the medio-active and corresponding transitive show an ergative alternation: the Actor of the medio-active corresponds with the Undergoer of the transitive.

- (7–89) mayar i-la-marr-an house 3NOM-IRR-burn-IMP 'The house might have been burnt.'
- (7–90) marrj-in i-na-marr warli bur aa bilay mayarr bush:fire-ERG 3NOM-CM-burn all camp and again house jin wamburiny
 3MIN.OBL people
 'The bushfire burnt all of the countryside, including everyone's house.'
- (7-91)are ile-maran bodar, wēl burug gānge gānge wil burruk arri i-li-marr-an budarr karnk karnk meat kangaroo not 3NOM-IRR-burn-IMP properly raw raw ine-mar i-ngi-marr 3NOM-PST-burn 'The kangaroo meat was not cooked well, it was underdone.' (Nekes & Worms 1953:696)
- (7–92) kumbu nga-na-marr jungk-uk fish 1MIN.NOM-CM-burn fire-LOC 'I cooked fish on the fire.'
- (7–93) *jungk i-ngka-marr* fire 3NOM-FUT-burn 'The fire will burn.'
- (7–94) wane-mar djung
 wa-na-marr jungk
 2MIN.NOM-CM-burn fire
 'Light a fire!' (Nekes & Worms 1953:696)

²⁹ Note that this is a different circumstance to that described in the previous paragraph, where it is impossible to associate roles definitely between the two agnates. In this circumstance, both correspondences are clearly available, depending on what is chosen as the Actor of the intransitive clause.

(7–95) nga-la-marr-karr jungk-in 1MIN.NOM-IRR-burn-TMP fire-ERG 'I might get burnt by the fire.'

-KALBARR 'lose, drop' is exceptional: in both ø- (as in (7–96) and (7–97)) and na-class (as in (7–98)) it occurs in transitive clauses.³⁰ In the former conjugation assignment the meaning is 'lose something'; in the latter, it is 'drop something'. This association of meanings is perhaps as expected given the higher transitivity of the na-conjugation class, and the likely lesser control of the Actor, and greater degree of affectedness of the Undergoer in an event of dropping.

- (7–96) mani nga-ng-kalbarr-jan money 1MIN.NOM-PST-lose-1MIN.OBL 'I lost my money.'
- (7–97) noŋor billycan djān ŋaŋ-galbar nungur(r) billycan jan nga-ng-kalbarr without:handle billycan 1MIN.OBL 1MIN.NOM-PST-lose 'I lost a can without a handle.' (Nekes & Worms 1953:768)
- (7–98) *mi-na-marr-uk wil mi-na-ng-kalbarr kinyingk wil* 2MIN.NOM-CM-cook-LOC meat 2MIN.NOM-CM-PST-lose this meat 'While you were cooking you dropped the meat.'

(7-99) and (7-100) indicate that the \emptyset -class IV also has the potential of occurring in an intransitive clause, though the viability of the intransitive interpretation of (7-99) is less certain than for (7-100). Granted these analyses, the above claim that for the ambicategorial IVs a \emptyset -class assignment can always occur in an intransitive clause remains true.

- (7–99) *kumbarr i-ng-kalbarr* money 3NOM-PST-lose 'He lost the money.' 'The money was lost.'
- (7–100) kumbarr i-ng-kalbarr ni-mbal-uk jin rock 3NOM-PST-lose 3MIN-foot-LOC 3MIN.OBL 'The rock dropped on his foot.'

The present data set is too limited to allow full understanding of the semantic meaning of -KALBARR 'lose'. At best we can say that part of the coded meaning is that the event is uncontrolled: the central participant enters its new condition or state accidentally, and not via the controlled action of something else.

7.7 Irrealis mood

Like tense, irrealis mood in Nyulnyul is not marked by a single morpheme, but is formally composite (Verstraete 2005, 2006; McGregor & Wagner 2006). It is coded by a dedicated irrealis prefix in combination with other formal selections; there is no corresponding marker of realis mood—there is no overt morpheme or zero morpheme that marks this category.

³⁰ Nekes & Worms (1953), however, mention only the ø-class IV.

The irrealis category is prominent in Nyulnyul, and as in most Nyulnyulan languages (Yawuru excepted—Hosokawa 1991:138ff), must be employed in negated clauses; there are also other contexts in which the irrealis occurs, including in reference to situations that might have occurred but didn't.

In this section we first describe the morphology of the irrealis (§7.7.1), then we discuss its meaning and use (§7.7.2).

7.7.1 Morphology of the irrealis

The irrealis category is invariably marked by a prefix that occurs in second position (see (7-1)), immediately following the initial nominative pronominal prefix, which is selected from the non-future set in Table 7–4, and preceding the augmented number prefix if there is one. In terms of overall structure irrealis IVs are slightly reduced in comparison with realis IVs, and fewer order-class possibilities exist in the irrealis than in the general formula of (7-1); moreover, there are fewer possibilities for filling some of the inflectional order-classes. The two main derivational strategies remain, however. The structure of irrealis IVs is shown in (7-101). As is clear from (7-6), irrealis IVs are always finite.

Irrealis IVs thus always conjugate like monovalent IVs. (In many other Nyulnyulan languages the conjugation classes are only partly neutralised in the irrealis—McGregor & Wagner 2006:347–348.) Thus the contrast between monovalent and bivalent variants of ambivalent IV roots (see §7.6 above) is neutralised in Nyulnyul. For example, in the past tense the monovalent *nga-ng-karnm* (1MIN.NOM-PST-laugh) 'I laughed' contrasts with the bivalent *nga-na-ng-karnm* (1MIN.NOM-CM-PST-laugh) 'I laughed at him/her'. In the irrealis, however, there is a single form *nga-la-karnm-an* (1MIN.NOM-IRR-laugh-IMP) meaning either 'I might have laughed' or 'I might have laughed at him/her'. This neutralisation is consistent with the correlation between transitivity and mood observed by e.g. Hopper & Thompson (1980:252), whereby irrealis correlates with lower transitivity than the realis (McGregor & Wagner 2006:349). This is a feature of IV stems, and IVs in the irrealis are attested in all clause types (see §12.3.2.2).

In position +2 the ASP order-class may be filled by just the past imperfective suffix -an, which has occasional variants -in and -un; see §7.8.1 on their distribution. This gives the two primary temporal categories of the irrealis, past (where the IMP is chosen) and non-past (where the ASP slot is left unfilled); see §7.7.2 for further discussion.

The three final order-classes in (7-101)—+3, +4, and +5—are filled by clitics. The applicative (position +3) is rare, and always adds a new participant role (see §7.10 below), as in *i-li-rr-ngank-ang-yarrad* (3NOM-IRR-AUG-speak-APP-1AUG.ACC) 'they might talk to

us'. As for the relator slot (position +4), just two postpositions are attested (cf. §7.11): -karr TEM and -uk LOC. Finally, the pronominal enclitic slot (in place 5) admits both accusative and oblique pronominals.

The irrealis prefix, which occurs in position -6, shows limited allomorphy, just the four phonological allomorphs: $la \sim li \sim lu \sim l$. The first three allomorphs are phonologically conditioned, though there are a number of irregularities; the fourth is lexically conditioned.

The first allomorph, *la*-, is the elsewhere one. It is illustrated in the following examples: *i-la-bulm* (3NOM-IRR-soak) 'he/she might soak it', *ya-la-rr-a-k* (1PL.NOM-IRR-AUG-EV-carry) 'we might carry it', *i-la-kal* (3NOM-IRR-wander) 'he/she might wander', *nga-la-kalak* (1MIN.NOM-IRR-approach) 'I might approach', *i-la-kalak* (3NOM-IRR-approach) 'he/she might laugh'.

The second and third allomorphs are conditioned primarily by vowel harmony, usually progressive, though sometimes regressive. Progressive vowel harmony is exemplified by: *mi-li-janb* (2MIN.NOM-IRR-kick) 'you might kick', *mi-li-jalk* (2MIN.NOM-IRR-fall) 'you might fall', and *i-li-kad-an* (3NOM-IRR-enter-IMP) 'he/she might have entered'. This harmony is, however, optional, and the elsewhere allomorph *la-* is also attested in this environment, as illustrated by the attested, though perhaps less frequent, *mi-la-jalk* (2MIN.NOM-IRR-fall) 'you might fall' and *i-la-kad-in* (3NOM-IRR-enter-IMP) 'he/she might have entered'. Regressive harmony is occasionally found, as illustrated by e.g. *nga-li-jiding* (1MIN.NOM-IRR-touch) 'I might touch it'.

Regressive assimilation with the immediately following consonant is also attested, again optionally. A root-initial palatal often conditions *li-: nga-li-janb* (1MIN.NOM-IRR-kick) 'I might kick', *nga-li-ny* (1MIN.NOM-IRR-get) 'I might get it'. The augmented number prefix *rr-* also tends to induce this allomorph, ³² as in *ya-li-rr-kanyj* (1PL.NOM-IRR-AUG-forget) 'we might forget', *ku-li-rr-kanyj* (2AUG.NOM-IRR-AUG-forget) 'you (all) might forget', and *i-li-rr-ngurid* (3NOM-IRR-AUG-paint) 'they might paint (it)'.

Only a couple of instances of *lu*- have been recorded, and each occurs following the second person augmented prefix *ku*-, the only pronominal prefix ending in the high back vowel *u*. Examples are *ku-lu-rr-karrmar* (2AUG.NOM-IRR-AUG-break) 'you (all) might break it', and *ku-lu-rr-kunb* (2AUG.NOM-IRR-AUG-send) 'you (all) might send it'. Again, this assimilation is not obligatory, and we also hear *ku-la-rr-i-j* (2AUG.NOM-IRR-AUG-CM-say) 'you (all) might say' with the elsewhere allomorph *la*-. Sometimes the partially harmonised *li*- is heard, as in *ku-li-rr-i-j* (2AUG.NOM-IRR-AUG-CM-say) 'you (all) might say', and *ku-li-rr-kanyj* (2AUG.NOM-IRR-AUG-forget) 'you (all) might forget'.

The *l*- allomorph is lexically conditioned, and is attested with just -DAM 'hit':³³ e.g. *nga-l-dam-an* (1MIN.NOM-IRR-hit-IMP) 'I might have hit him/her', and *i-l-dam-an-juy* (3NOM-IRR-hit-IMP-2MIN.ACC) 'he/she might have hit you'.

The fact that irrealis IVs in Nyulnyul show more reduced morphological potentials than realis IVs, including neutralisation of various distinctions (e.g. between the conjugation classes, and between present and future time), is consistent with the status of the irrealis as a marked grammatical category.

³¹ By contrast, in the Eastern Nyulnyulan languages Nyikina and Warrwa suppletive allomorphs exist, conditioned by conjugation class and temporal category (Stokes 1982:277; McGregor 2006c).

³² Recall that *rr* often induces phonetic centralising of the quality of a preceding vowel in Nyulnyul (see §3.1.3.2.1), thus inducing raising of the low vowel.

³³ One guesses that this allomorph would also occur with -DIM 'maltreat', though no irrealis forms of this verb are available.

7.7.2 Meaning and use of the irrealis mood

The irrealis codes the unreal status of the referent event: that it did not, does not, or might not occur (McGregor & Wagner 2006; McGregor 2009a). In terms of Figure 7–1, the referent event falls off the 'actual world' time line, and belongs to the realm of 'possible world' time lines. Placement of an event on the time-plane is according to the speaker's beliefs or represented/imputed beliefs, not the actualities of the real world, to which we have but limited direct access—and all of which is mediated via our cognitive faculties (see further below). At the risk of belabouring the point, this means that a speaker will use the irrealis when (for whatever reason) they construe the referent event as one belonging to a possible world, though not to the actual world (which includes events that are evaluated as having happened, happening, and will happen).

As we have seen, just two temporal categories are distinguished in the irrealis, past and non-past. Past irrealis situates an event to the left of the vertical line in Figure 7–1, while the non-past irrealis situates it either on or to the right of the line. In each case the event falls off the horizontal 'actual world' time line. This, as indicated in the previous paragraph, is at least partly a matter of evaluation and opinion: projection of expectations into the future, and construction of a largely non-experienced past (and even present, much of which lies beyond what can be actually perceived).

Negative clauses in Nyulnyul demand the irrealis mood; this is the most frequent grammatical environment in which the irrealis occurs. Thus we begin in §7.7.2.1 by discussing the irrealis mood in negative clauses; following this, in §7.7.2.2 we turn to uses of the irrealis mood in positive clauses.

7.7.2.1 Irrealis in negative clauses

Corresponding to the ternary tense choice in positive clauses, negative clauses in Nyulnyul show a binary choice between past marked by the suffix -an and non-past indicated by nothing. In this respect negation in Nyulnyul is paradigmatically asymmetric (Miestamo 2005). A detailed discussion of the negation of verbal clauses can be found in §12.5.1.1; here I mention just a few points germane to the concerns of this section.

7.7.2.1.1 Past irrealis in negative clauses

The past irrealis occurs in syntagm with a negative particle, usually *arri* 'not', to express the meaning that the event did not occur at a point of time in the past, as in (7–102) and (7–103). It is the entire situation denoted by the clause that is specified as not occurring, not just a component such as intention. Thus (7–102) does not admit the interpretation that I did see the person, though I did not want to see them. (To express the latter meaning a complement construction is employed—see §13.4.2.1.)

- (7–102) arri nga-la-jal-an not 1MIN.NOM-IRR-see-IMP 'I didn't see him/her.'
- (7–103) arri nga-la-jimb-an kaard nga-n-in nunju not 1MIN.NOM-IRR-die-IMP still 1MIN.NOM-be-PRS alive 'I'm not dead; I'm still alive.'

7.7.2.1.2 Non-past irrealis in negative clauses

Corresponding to a positive clause in either present or future is a negative clause in the non-past irrealis and a negative particle, again usually *arri* 'not'. Thus a negated clause in non-past irrealis can state that an event is not happening at the time of speaking (as in (7–104)) or will not happen at a future time (as in (7–105)).

- (7–104) kinyingk uriny arri i-la-kanm this woman not 3NOM-IRR-laugh 'This woman is not laughing.'
- (7–105) arri i-li-rr-i-ny band-ukun not 3NOM-IRR-AUG-EV-get ground-ABL₂ 'They won't pick it up from the ground.'

With a second person Actor, a negated clause in the non-past irrealis is often interpreted as a command not to do something, as in (7-106) and (7-107). However, it can also be interpreted as a statement, as in (7-108). There may be an implication that the event ought to occur, or ought to be occurring.

- (7–106) arriyangk mi-li-jid way nothing 2MIN.NOM-IRR-go away 'Don't go away.'
- (7–107) arri lakal mi-li-j not climb 2MIN.NOM-IRR-say 'Don't climb up!'
- (7–108) arri ku-la-rr-lakarr-ngay not 2AUG.NOM-IRR-AUG-listen-1MIN.ACC 'You are not listening to me.'

A negated clause in the non-past irrealis can also convey the opposite deontic modality, that the event shouldn't happen, demonstrating that deontic senses are implicatures:

- (7–109) wamb-in arri ngank-ang i-la-m jin yalirr man-ERG not word-INS 3NOM-IRR-put 3MIN.OBL wife's:mother 'A man shouldn't speak to his mother-in-law.'
- (7–110) arri i-li-rr-ngank nyungul-nyungul baan not 3NOM-IRR-AUG-speak old-old thusly 'They shouldn't talk to their elders like that.'

A negative clause in the non-past irrealis can have abilitative, or generic-habitual interpretations:

(7–111) arri i-la-ngank not 3NOM-IRR-speak 'He can't speak.' (7–112) *jan malirr arri i-la-jarrjarr* 1MIN.OBL wife not 3NOM-IRR-arise 'My wife doesn't get up (early).'

This indicates that it is more accurate to say that the non-past irrealis situates the non-occurring event not entirely to the left of the vertical line in Figure 7–1.

7.7.2.2 Irrealis in positive clauses

In positive clauses, as in negative clauses, irrealis mood specifically indicates that, in the speaker's view, the event was, is, or is likely to be, unactualised. This is encoded meaning. In addition, there is usually a presumption of the event's possibility, that it could have occurred, could be occurring, or could occur in the future: the event belongs to the realm of possible but not actual worlds, indicated in Figure 7–1 by the broken horizontal lines, and by their distance from the central line. This component of the meaning is not coded in the category, but is a pragmatic inference derived by the Q-principle (Levinson 2000); see McGregor & Wagner (2006:363–367).

In this section we discuss the range of meanings and uses of the irrealis in independent clauses; in many instances, however, the example clauses occur in complex sentences. We restrict attention to those instances in which the sentences involve paratactically related clauses, and cases in which the targeted clause is a main clause. Discussion of the irrealis category in complex sentences is postponed until Chapter 13.

7.7.2.2.1 Past irrealis

The past irrealis expresses counterfactuality. The speaker admits no doubt as to the occurrence of the event: it did not occur. This meaning, as indicated above, is coded by the past irrealis, and I have been unable to cancel it, despite many attempts to do so in the field. In keeping with this, modal particles indicating probability do not co-occur with the past irrealis; just a few modal markers can occur with it, including one indicating false belief ('believe') and one indicating that an event almost occurred ('almost, nearly'). A second component of meaning, potentiality, is also normally present: the event, that is, is evaluated as possible, though not real. This is apparent in the following contextual senses, usually associated with the past irrealis.

- (a) The event almost or nearly happened, though in the end something prevented it. Thus (7–113) indicates that the event of drowning almost happened, though did not; (7–114) indicates that the speaker almost stood on a snake, but managed to avoid it in time; and (7–115) indicates that the speaker missed when they hit at the person.
- (7–113) ngurr-ngurr i-la-w-an i-ny-jalk-uk wil-uk sink-sink 3NOM-IRR-give-IMP 3NOM-PST-fall-LOC water-LOC 'He nearly drowned when he fell in the water.'
- (7–114) marriny nga-ny-jid bur-ung ngimbirr walk 1MIN.NOM-PST-go camp-LOC night nga-li-janb-an juurr 1MIN.NOM-IRR-trample-IMP snake 'When I was going home I nearly stood on a snake.'

- (7–115) ngay-in nga-l-dam-an ngay-in nga-n-dam
 1MIN.CRD-ERG 1MIN.NOM-IRR-hit-IMP 1MIN.CRD-ERG 1MIN.NOM-CM-hit
 bur
 place
 'I nearly hit him, but instead hit the ground.'
- (b) The Actor tried unsuccessfully to perform the event; their attempt to perform the event was thwarted, as in (7–116) and (7–117).
- (7–116) nga-l-dam-an-jii junk mi-nyu way 1MIN.NOM-IRR-hit-IMP-2MIN.ACC run 2MIN.NOM-got away 'I tried to hit you, but you ran away.'
- (7–117) nga-la-r-an karrkuj 1MIN.NOM-IRR-poke-IMP dead 'I tried to spear him dead.'
- (c) The Actor wanted or intended that the event occur, but in the end it did not. The potentiality of the event may be less than in (a) and (b)—the event may be on a time line more distant from the real time line—where there is some evidence of the event's incipient occurrence. Thus, in examples such as (7–118) and (7–119), all that needs to be manifested is a desire to perform the action; there is no necessity that it was acted on in any way (though this is not precluded).
- (7–118) mi-la-r-an karrkuj
 2MIN.NOM-IRR-poke-IMP dead
 'You wanted to kill him.'
- (7–119) kumb nga-la-k-an-jii arri nga-li-ny-an fish 1MIN.NOM-IRR-carry-IMP-2MIN.OBL not 1MIN.NOM-IRR-get-IMP nga-la-k-an-juy 1MIN.NOM-IRR-carry-IMP-2MIN.ACC 'I intended to bring you fish, but I didn't get any, and couldn't bring any.'
- (d) Related to (c) is the sense that the Actor or someone else considered the possibility of performing the event, without necessarily desiring its occurrence. (7–120) and (7–121) illustrate this sense: the event is unrealised, and presented in a complement construction as a thought of the Undergoer.
- (7–120) *ni-mungk nga-l-dam-an*3MIN-think 1MIN.NOM-IRR-hit-IMP
 'He thought I would hit him.'
- (7–121) nga-mungk i-la-rr-jal-an-ngay arri
 1MIN-think 3NOM-IRR-AUG-see-IMP-1MIN.ACC not
 i-la-rr-jal-an-ngay
 3NOM-IRR-AUG-see-IMP-1MIN.ACC
 'I thought they would come to me but they didn't.'

- (e) The speaker considers the event should have occurred, or ought to have occurred, although it didn't due to an unforeseen contingency. This sense is usually associated with a second person Actor, in which case a deontic sense of obligation is usually invoked, as shown by (7-122) and (7-123):
- (7–123) mi-la-julung-an-ngay
 2MIN.NOM-IRR-tell-IMP-1MIN.ACC
 'You should have told me.'

The deontic sense may also be present with Actors of other person categories, as in the following two examples:

- (7–124) nga-li-jal-an-jii sunday nga-ny-jid war-ung 1MIN.NOM-IRR-see-IMP-2MIN.OBL Sunday 1MIN.NOM-PST-go other-LOC bur camp 'I could/should have seen you on Sunday, when I came here.'
- (7–125) mayar i-la-marr-an house 3NOM-IRR-burn-IMP 'The house should have (been) burnt.'

7.7.2.2.2 Non-past irrealis

Non-past irrealis indicates specifically that the event is unrealised as of the time of speaking, and that this unrealised event does not belong to the realm of events that might have happened in the past. In positive clauses the event is temporally located at a time subsequent to SS; the event is never located at the deictic centre, the here-now of the speech event, although one expects that this interpretation is not ruled out, and that a non-past irrealis might be used to indicate an event that is not happening now, but is expected to occur now. (Warrwa examples exist where the present irrealis is used in this way, though they are rare, and the present irrealis is most strongly associated with negative clauses.) Again, as in the case of the past irrealis, there is usually an implication that the event could potentially occur. A range of particular senses of the non-past irrealis are attested:

- (a) The event could happen at a future time, as illustrated by (7-126)–(7-128). The nonpast irrealis expresses less commitment to the occurrence of the event than the plain future tense (which in turn expresses less commitment than the present tense). Thus, in (7-126) the interactants were unwilling to commit themselves to going to Derby: both had reservations about the trip. In (7-127), the meeting was a potentiality that none of the interactants had yet done anything to organise. And (7-128), the speaker is estimating the arrival time given the time of going.
- (7–126) ngay aa juy ya-li-rr-jid derby-ung 1MIN.CRD and 2MIN.CRD 1PL.NOM-IRR-AUG-go Derby-ALL $_1$ 'You and I might go to Derby.'

- (7–127) ngay aa juy aa mrs williams ya-li-rr-ngank
 1MIN.CRD and 2MIN.CRD and Mrs Williams 1PL.NOM-IRR-AUG-speak
 yambun
 together
 'You and I and Mrs Williams might talk together sometime.'
- (7–128) ya-ngki-jid-karr banangkarr juy aa ngay
 1PL.NOM-FUT-go-TEM now 2MIN.CRD and 1MIN.CRD
 daarr ya-la-r fitzroy ngimbirr
 arrive 1PL.NOM-IRR-poke Fitzroy night
 'If we go now, we might arrive at Fitzroy Crossing by night time.'
- (b) An undesirable future event is often represented by the non-past irrealis rather than the future tense, which tends to be more strongly associated with desirable future occurrences. This is illustrated by (7-129) and (7-130). This is as expected: one might be expected to evaluate an undesirable event as unrealised and comparatively unlikely, and a desirable event as 'real' and more likely. Undesirability, however, is not coded by the non-past irrealis, and is often not present, as in (7-126)–(7-128).
- (7–129) bur wa-n-jal i-li-rr-dam-yay place 2MIN.NOM-CM-see 3NOM-IRR-AUG-hit-1&2MIN.ACC 'Watch out, they might hit us.'
- (7–130) *i-la-jimb kunad yubul i-n-in*3NOM-IRR-die tomorrow sick 3NOM-be-PRS
 'He might die tomorrow; he's ill.'
- (c) The non-past irrealis is, like the future tense, also used in mands, though these are weaker, and potentially less face-threatening than mands in future tense. Thus rather than being used in commanding the addressee to do something, a clause in non-past irrealis is relatively soft, and typically expresses a request to perform an action. This is illustrated by (7–131), in which the speaker justifies the request further by providing an explanation.
- (7–131) *juy-in mi-la-w-ngay banangkarr arri-jan* 2MIN.CRD-ERG 2MIN.NOM-IRR-give-1MIN.ACC today not-1MIN.OBL 'You should give me (money) today as I have none.'

This example conveys a deontic sense of obligation. This is not restricted to clauses with second person Actors:

- (7–132) *i-la-m kinyingk-in*3NOM-IRR-put DEF-ERG
 'He should put it; he's got to put it.'
- (7–133) bin baab i-la-kalak-irr warang baab maad-ung this child 3NOM-IRR-approach-3AUG.ACC other child play-ALL₁ 'This child should join the others in play (though he doesn't).'

³⁴ The sense of undesirability associated with the non-past irrealis is particularly clear in uses of the category in complex sentences, e.g. in apprehensional ('lest') constructions; see §13.3.1.1.3 and §13.3.1.2.1.2.

(d) The non-past irrealis is sometimes used in positive clauses in Nyulnyul with an apparent focus on the negative component of meaning. The natural translation into English involves a negated clause, and there is a presumption that the event is not happening and will not happen. This sense seems to be restricted to questioning contexts, as in:

```
(7–134) angk-ij kurr irrjiwar ku-li-rr-bulm jungkarr what-DAT 2AUG.CRD three 2AUG.NOM-IRR-AUG-soak 2AUG.OBL may food 'Why don't you three soak your food?'
```

(7–135) nganyj mi-la-wid
INT 2MIN.NOM-IRR-eat
'Won't you eat it?'

Put slightly differently, examples such as these appear to presume that the event will not occur, although there is no good reason why it shouldn't.

7.7.2.3 Concluding remarks

To wind up the discussion of the irrealis we outline the reasons for identifying components of meaning as semantic or pragmatic, and show the relevance of scope.

7.7.2.3.1 Semantics and pragmatics of the irrealis

As indicated above, two components of meaning are typically associated with the irrealis category in Nyulnyul: the unrealised status of the event [+unrealised], and its potentiality. The first component, I have suggested, is coded by the category. Consistent with this, I have been unable to elicit instances in which this component of meaning is cancelled, despite many attempts to do so in the field (McGregor & Wagner 2006:363–365).

The second represents inferred meaning, derived pragmatically, e.g. by the application of Gricean maxims or Levinsonian heuristics. This meaning can be cancelled, as in some types of complex sentence construction where the situation is taken as purely hypothetical (see Chapter 13). In most instances of use of the irrealis in positive clauses the potential occurrence of the situation is invoked via the Q principle: in the absence of potentiality, why would one utter the clause? Senses of the past irrealis such as 'almost happen', 'try to', and so on, arise in this way. However, in the case of usage (d) of the non-past irrealis the sense of potentiality appears not to be presumed or implicated: rather, it is implicated that the event is not a potentiality, and queries why.

The potential senses associated with the irrealis—the indications that the situation might have happened—are not necessarily invoked in negative clauses either. Of course, negative clauses, as has often been observed (e.g. Strawson 1952:7; Givón 1984:323–324; McGregor 1997b:226–227, McGregor & Wagner 2006:352; Miestamo 2003:171–172; Israel 2004: 706) are pragmatically marked, and do not occur in neutral environments; rather, they invoke presuppositions about the world. However, what they invoke is not so much evaluation of the circumstances surrounding the non-event, but rather evaluation of the proposition in regard to the system of knowledge and beliefs available at that point in the

interaction. Of course, these different types of evaluation typically go together: neither precludes the other.

7.7.2.3.2 Scope

Scope is relevant to the interpretation of the irrealis category: as argued in McGregor & Wagner (2006:367–369), both modal and tense features of the irrealis have scope over the referent situation, the event plus the accompanying experiential and logical roles (see Chapter 12). These two features are coded separately morphologically, by the modal prefix *la*- and by a suffix (or its absence), and they interact independently on the situation specified by the clause. In particular, (a) the irrealis mood prefix specifies that the referent situation was unrealised; simultaneously (b) the tense feature grounds the situation, resulting in a proposition, something that can be true or false and can be argued about (as per e.g. Halliday 1985:72; Dik 1989:202; Van Valin 1993b:8; McGregor 1997b:238).

- (a) specifies that the modal feature coded by the irrealis concerns the referent situation and its occurrence rather than the proposition expressed by the clause; this is consistent with the feature [+unrealised], which clearly concerns situations rather than propositions. The speaker's 'slant' on the proposition—specifically that it is false—emerges as a consequence of the expressed line on the non-occurrence of the situation.
- (b) indicates that the temporal deixis invoked in the Nyulnyul irrealis categories serves to ground the proposition expressed by the clause. Thus a clause in the irrealis is finite rather than non-finite (on which see §7.12 below).

These two components, the modal and the tense features, scope independently over the situation (McGregor & Wagner 2006). That is, neither holds the other in its scope; they scope orthogonally over the entire situation, as shown in Figure 7–2. Note that neither the irrealis nor the past features apply just to the event, but to the full situation, including, in this instance, the Actor and the spatial and temporal circumstances.

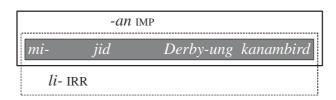


Figure 7–2: Scopal relations in (7–122) 'You were supposed to have gone to Derby the other day'

7.8 Aspect

Just one morpheme other than the present tense suffix (discussed in §7.5.2.1.1 above) can occur in order-class +2 in (7–1). This is the suffix -an IMP that marks past time in the irrealis mood, and occurs in order-class +2 in irrealis IVs. In the environment of realis IVs, however, it is not obvious precisely what meaning the suffix codes, what sort of temporal category it represents, though the balance of evidence tends to suggest that it is a marker of

imperfective aspect (and hence the gloss). In the next subsection I discuss formal characteristics of the category; the following subsection then turns to its meanings and uses.

7.8.1 Morphology of the past imperfective category

The suffix -an IMP always immediately follows the IV root or stem and is almost invariant in form. Just occasional variants -in, and even more rarely -un, are attested. For this reason it must be distinguished from INF_S, with allomorphs -an and -in that are about equally frequent by dictionary count (see Table 7–1 and §7.12.1.2 below).

A handful of IVs uniquely select the -in allomorph: -BARD 'block', -BAKAND 'have', -KAD 'enter', -KANM 'laugh', -LAKARR 'listen, hear', and -MIRRAR 'wait'. These IVs also take the -in allomorph of the INF_S, either invariably or as an alternant (in the case of -KANM 'laugh'); however, a larger number of IVs attested with just the -in allomorph of the INF_S occur with the -an allomorph of IMP. A few IVs select either -in or -an allomorphs of IMP. The third allomorph, -un, is attested with just -NGULM 'deceive', and is presumably conditioned by (optional) vowel harmony. ³⁵

The suffix -an IMP is normally attached to the regular past tense form of an IV. There are a few irregularities, all of which involve the choice of root allomorph of irregular IVs. With -J ~ -DI 'say, do', the elsewhere allomorph is used consistently. Thus for minimal Actors the forms involve -J 'say, do' (see above §7.5.1.1.3), as in nga-n-j-an (1MIN.NOM-CM-say-IMP) 'I said'. -NY ~ -NYU 'get' employs the second allomorph in the past tense for minimal Actors. The suffix -an IMP is added just to the elsewhere root allomorph, as in i-ny-an (3NOM-get-IMP) 'he/she got it'; the marked root allomorph does not occur with the IMP suffix. We cannot account for these forms simply by a rule whereby the root-final vowel is deleted preceding a stem-initial vowel, since with -J ~ -DI 'say, do' the occurring form involves not a /d/ but a /j/.

The augmented forms of the IV -N 'be' show the nasal consonant of the root in the past imperfective, which is not present in the plain past tense, as discussed in §7.5.2.1.1 above. Thus we have *i-ngi-rr-n-an* (3NOM-PST-AUG-be-IMP) 'they were'. This is a further piece of evidence that the nasal of the root is present in underlying form in the past tense, and is lost by a morphophonemic rule when it occurs in word-final position following the apical tap/trill.

The secondary corpora include a handful of examples apparently involving two consecutive instances of the suffix -an IMP, including inem-banjan-an-yer (i-ni-m-bany-an-an-irr (3NOM-CM-PST-finish-IMP-IMP-3AUG.ACC)) 'he/she finished them up' (Nekes & Worms 2006:309), and ineŋ-gan-an-yer (i-ni-ng-k-an-an-irr (3NOM-CM-PST-carry-IMP-IMP-3AUG.ACC)) 'he/she carried them' (Nekes & Worms 2006:308). My own corpus shows no comparable instances. The texts recorded by Bronwyn Stokes in 1979, however, include three: i-nga-n-an-an (3NOM-PST-be-IMP-IMP) 'he lived' (in Albert Kelly's version of the emu myth), and i-na-m-an-an-jin (3NOM-CM-put-IMP-IMP-3MIN.OBL) 'he put it for him(self)' and i-nga-rr-m-an-an-jirr (3NOM-PST-AUG-put-IMP-IMP-3AUG.OBL) 'they put him on them(selves)' (in Rosy Victor's text). To complicate matters further, Nekes & Worms (1953, 2006) also provide examples of forms apparently involving the PRS and IMP suffixes, including: in-djen-an-djer (i-n-j-in-an-jirr (3NOM-CM-say-PRS-IMP-3AUG.OBL)) 'he/she said to them' (Nekes & Worms 2006:308) and engere-men-an (i-ngi-rr-i-m-in-an (3NOM-PST-

³⁵ I strongly suspect that some instances of -in are errors of transcription, reflecting either mishearings or misassignments of high allophones of the low vowel to the high front vowel.

AUG-EV-put-PRS-IMP)) 'they put it' (Nekes & Worms 2006:308). None of these examples are discussed anywhere in Nekes & Worms (2006), and no example in any source is glossed in such a way as to provide any insight into the contrast in meaning between a single tense or aspect marker and a sequence of them. The analysis is thus uncertain: the first suffix might be either the IMP, or the PRS. If the first suffix is not the IMP, then it seems likely that what I analyse as the present tense suffix (§7.5.2.1) is actually a continuous aspect marker, as in Bardi (e.g. Bowern 2004a:101). Given the analytical uncertainties and paucity of examples, I have not implemented this analysis, or revised (7–1) accordingly; nor is the meaning of this combination discussed in §7.8.2 (since nothing more can be said about it).

7.8.2 Meanings and uses of the past imperfective category

Earlier sources treat the suffix -an IMP as a marker of distant or remote past time. Tachon (1895:27), for instance, distinguishes it according to the allegedly Nyulnyul temporal items kel (the interpretation of which is uncertain, and which is not elsewhere attested), in contrast with milargare! (his exclamation mark) 'previously, before', for the ordinary past tense. According to Nekes & Worms (1953), the suffix codes distant past, in contrast with near past of the ordinary past category. Bowern (2004a:101) also treats the probably cognate Bardi suffix -na as a marker of distant past tense. However, while it is clear that the Nyulnyul category marked by -an in combination with the past tense is a deictic temporal category—it situates the event in relation to the time of the speech situation—it is not obvious that the contrast with the ordinary past tense concerns temporal distance. Although in some cases greater distance is indicated, this may arrive via a pragmatic implicature rather than represent coded meaning. Let us now discuss the uses of the category.

As indicated in the previous paragraph, the category marked by -an IMP is a tense category, and the event is specified as belonging to the realm of past time with respect to the here-now of the speech situation. It might be suggested that this component of meaning derives from the past tense prefix. However, as seen in §7.8, in the irrealis paradigm, the presence of -an contrasts with its absence precisely in regard to whether or not the event belongs to past time. Thus it seems reasonable to conclude that past tense is a part of the meaning coded by -an IMP, and that this meaning is expressed twice—not once—in past imperfective IV forms.

In keeping with its formal markedness vis-a-vis the ordinary past tense category, the past imperfective is semantically marked with respect to the plain past tense category.³⁶ It is also marked distributionally: the past imperfective category is much less frequent than the plain past tense, appearing at just over 10% of the frequency of the latter category in my entire corpus. The bulk of instances of the past imperfective in my corpus come from texts; few come from elicited examples.

The most common use of the imperfective in my corpus is in reference to events that habitually happened in the past, but no longer occur; thus most examples translate into English as 'used to'. The following elicited examples illustrate this sense; Texts 3 and 4 show many instances of this sense.

³⁶ Thus the label *imperfective* is not entirely appropriate since it misleadingly suggests that this is the unmarked category with respect to a corresponding perfective.

- (7–136) *jid ya-nga-rr-j-an jikar-karr school-uk* stand 1PL.NOM-PST-AUG-say-IMP line-TEM school-LOC 'We used to stand up in a straight line at school.'
- (7–137) *i-ngi-rr-bulabul-an birrminkil-nyirr wul* 3NOM-PST-AUG-wash-IMP sandalwood-COM water 'They used to wash in sandalwood water.'
- (7–138) *i-ngi-rr-jid-an* kurdabil milirrkarr 3NOM-PST-AUG-go-IMP naked before 'They used to go around naked before.'

As with English *used to*, there is no restriction to iterated performances of active events. States that obtained over a duration of time can be represented by the past imperfective:

(7–139) bin-ik i-nga-n-an mayarr banangkarr-uk arri-jin this-LOC 3NOM-PST-be-IMP house today-LOC not-3MIN.OBL i-ny-jalk-an 3NOM-PST-fall-IMP 'There used to be a house standing over there. Today there is nothing; it has fallen down.'

As seen in §7.5.1.2 above, the plain past tense category is also used to refer to events that generally or habitually happened in the past, though infrequently. In most instances in the corpus habitual or general occurrences in the past are represented by the past imperfective. There is no reason to believe that the past imperfective situates the generic or habitual event further back in past time than the plain past tense does: the events referred to in (7–21) and (7–22) are as distant in the past as the events in (7–137) and (7–138). Rather, it seems that the plain past tense perspectivises a habitual event as though it was a single undifferentiated happening occurring at a single point in time, whereas the past imperfective treats it as having temporal extent, and occurring at intervals. The contrast between the two categories is thus an aspectual one, and does not concern the temporal distance of the event with respect to the speech situation.

The past imperfective is also used in reference to single events that happened in the recent past, as shown by the following examples, which refer to events that occurred just a day or two previously. In these examples, though, the event is viewed as having temporal extent: (7–140) construes the interactive event as one extending over a period of time during which Worrorra was spoken; in (7–141), from the beginning of the second episode of Text 2, the speaker first wonders where they had gotten to on the previous occasion, then rephrases it as a durative event, 'where were we?'. The past imperfective thus has a continuous and/or stative interpretation.

(7–140) biirdi kujarr uriny i-nga-rr-ngank-an wurraarra yesterday two woman 3NOM-PST-AUG-speak-IMP Worrorra ngank ngay-ung language 1MIN.CRD-ALL₁ 'Yesterday two women were speaking Worrorra to me.'

(7–141) an-uk ya-nga-rr-i-kal ya-nga-rr-a-n-an /
what-LOC 1PL.NOM-PST-AUG-EV-wander 1PL.NOM-PST-AUG-EV-be-IMP
mi-land-in /
2MIN.NOM-sit-PRS
'Where were we? Where were we at? Where are you up to?'

Although events situated in past time are overwhelmingly represented by the simple past tense, as might be expected, some IVs appear to prefer the past imperfective. This seems to be the case, for instance, for -KALAB 'be born', which almost always occurs in the past imperfective in reference to events of birth situated in the past, which may be in the relatively recent or distant past:³⁷

- (7–142) banangkarr mi-ng-kalab-an when 2MIN.NOM-PST-born-IMP 'When were you born?'
- (7–143) *i-ng-kalab-an bambur* 3NOM-PST-born-IMP blind 'He was born blind.'

The past imperfective is not infrequently found in complex sentences. Thus in (7–144) the second and third clauses represent the listening event and the speaking event as extending over time, rather than as occurring at a single point. And in (7–145), the event of being bitten by a snake is treated as a simple event that is located within the period of time during which the woman was inserting her hand into the hollow log. Examples of this type, in which the dependent clause (see §13.3) occurs in the imperfective and presents a context for the main clause, are infrequent.

(7–144) ngank-uk nga-na-m-uk-juy war waalk warli-in talk-LOC 1MIN.NOM-CM-put-LOC-2MIN.ACC other sun everyone-ERG i-ngi-rr-lakarr-an-ngay angk yarrad 3NOM-PST-AUG-listen-IMP-1MIN.ACC what 1AUG.CRD ya-nga-rr-ngank-an 1PL.NOM-IMP-AUG-say-IMP 'When I spoke to you the other day, everyone was listening to what we were saying.'

³⁷ Why the IV -KALAB 'be born' shows this behaviour is uncertain. It may be a consequence of the semantic meaning of the IV. It is also possible that there is a formal reason for it, as the presence of the IMP is in complementary distribution with other suffixes and enclitics, both in my own corpora and in Nekes & Worms (1953). However, such a formal correlation seems quite unmotivated, and as it turns out in all of the cases where a suffix or enclitic occurs reference is made to an event of giving birth (represented by a middle clause—see §12.3.2.2.5) rather than of being born. It thus appears that when the event is construed as one that concerns the individual born, it is typically represented as continuous, whereas when it is construed as an activity performed by the mother, it is normally represented as an undifferentiated occurrence at a particular point in time. There is thus a connection with Aktionsart.

(7–145) juurr-in i-na-r bilay uriny juurr-in snake-ERG 3NOM-CM-poke next woman snake-ERG i-na-r i-na-m-an-uk jin ni-marl 3NOM-CM-poke 3NOM-CM-put-IMP-LOC 3MIN.OBL 3MIN-hand kurrbul-uk hollow:log-LOC 'The snake bit the woman again when she was putting her hand in the hollow log.'

As in a main clause, a past imperfective IV in a dependent clause can likewise denote a habitual or general occurrence. This is shown by the following example, where the event of patting the damper occurs subsequent to its removal from the fire, and not within the temporal span of the cooking event.

(7–146) wajamarr / i-nga-marr-an-uk / banaban i-ngi-rr-m-an / later 3NOM-PST-cook-IMP-LOC thusly 3NOM-PST-AUG-put-IMP 'Later, when it had cooked, they did it like this.' (Accompanied by the speaker's gestural demonstration of patting a cooked damper.)

In a number of instances of the past imperfective in complex sentences, it appears to indicate that the referent event occurred at a time in the past with respect to the occurrence of another event in the past, that is, the past in the past, rather than an event ongoing at the time of the clause in the plain past tense. This is shown by the following examples:

- (7–147) nga-marl nga-ni-ny-jal kad nga-m-barnj-an 1MIN-hand 1MIN.NOM-CM-PST-see cut 1MIN.NOM-PST-exchange-IMP 'I looked at my hand; I had cut it.'
- (7–148) nga-ni-ny-jal wajamarr kumbarr jan
 1MIN.NOM-CM-PST-see later stone 1MIN.OBL
 i-ngi-rr-ny-an
 3NOM-PST-AUG-get-IMP
 'I saw later that my money had been taken.'
- (7–149) *i-ngi-rr-murrar i-m-bunyj biin wamburiny* 3NOM-PST-AUG-smell 3NOM-PST-smell rotten people *i-ngi-rr-jimb-an* 3NOM-PST-AUG-die-IMP 'They smelt the stench of the dead people.'
- (7–150) maj-in jan i-na-ng-k-ngay
 boss-ERG 1MIN.OBL 3NOM-CM-PST-carry-1MIN.ACC
 nga-ni-ny-jal kinyingk larrkird bardangk i-ngi-rr-m-an
 1MIN.NOM-CM-PST-see DEF boab tree 3NOM-PST-AUG-put-IMP
 bijin
 Pigeon
 'My boss took me to see the boab tree where they had imprisoned Pigeon.'

Such examples do not argue strongly in favour of the notion that the category marked by

-an is a distant past tense category, although they are consistent with this interpretation.

They are also consistent with the past imperfective interpretation: although the event represented in the imperfective is not ongoing at the time of the event represented in the plain past, it is in some way relevant to the latter event or some entity involved in it.

It seems to me, however, likely that the explanation for the use of the imperfective category in these examples is motivated by the association found in many languages between the imperfective and backgrounded information (e.g. Hopper 1979; Reid 1980). Thus in the above examples the clauses in the imperfective serve a backgrounding function, presenting secondary information, that does not continue the chain of plot events. The temporal order of the clauses in these examples is anti-iconic. The motivation for mentioning these events is to either present new information about a participant in the main past tense clause, or to assist its identification.

This interpretation is supported by examination of occurrences of the past imperfective in narrative texts in my corpus. (Things are different in the narratives recorded by Nekes & Worms 1953, 2006.) Thus, for instance, one version of the emu myth (see Text 1) begins with a clause in the past imperfective:

(7–151) wirnirn / aa / kudarrawany / kujarr / i-ngi-rr-ngank-an / emu and bustard two 3NOM-PST-AUG-speak-IMP 'The emu and the bustard were speaking together.'

This clause sets the scene for the unfolding of the narrative events; it thus presents background information; the referent situation does not form a part of the plot.

Other versions by the same narrator are similar. Thus, another version also begins with a clause in the past imperfective. In this instance, however, what is referred to is the emu's ability to fly in the Dreamtime, which again clearly serves a scene-setting function. Later in the same version this event is again referred to by a clause in the past imperfective. In yet another version of the myth the scene is set first by a clause locating the emu's country, followed by two scene-setting clauses in the past imperfective, one describing the emu's ability to fly high, the other describing the other birds' jealousy of the emu. Subsequent lines of the same version are also in the past imperfective. The first presents a conclusion to the previous sentence, a quotation; the second describes the emu trying to fly after having had its wings cut. These clauses again present situations that do not form a part of the plot, but rather conclusions in which new circumstances are described; the imperfective in these instances again seems to serve a backgrounding function. Narrative events forming the plot, by contrast, appear in clauses in the plain past tense.

A fourth version of the emu myth told by the same speaker is expository rather than narrative, and is oriented to describing scenes more than narrating sequences of events. All of the IVs in this text are in the past imperfective, and evidently represent the situations as states rather than events. The text begins with the location of the emu's camp in the Milky Way, represented first in a verbless relational clause (see §12.2.3); then the same situation is described in a clause with IV -N 'be' in the past imperfective. The other verbal clause contrasts the situation for the emu with that of other birds, which are described as flying around on the earth. Text 5 is similar: the bulk of the IVs are in the past imperfective, and overall reference is made to states rather than events.

Also similar is the use of past imperfective in Text 2, narrated by Albert Kelly. The bulk of the narrative appears in the plain past tense; situations represented in the past imperfective occur in a scattering of places in the narrative, mainly in introductory scene-setting and concluding scene-resetting contexts; there are also occasional instances of use of

the past imperfective in reference to past habitual events (in framed quotations). Plot events are consistently denoted by IVs in the plain past tense.

As mentioned previously, the situation in the texts recorded by Frs Nekes and Worms is different. Thus, in the myth about the bowerbird (Nekes & Worms 2006:308–311), almost every IV referring to past time is in the imperfective, whether it represents a plot or setting situation. The explanation of this difference is uncertain. One possibility is that the predominance of past imperfective IVs results from the manner in which the narrative was recorded, i.e. by dictation. Perhaps with the excessively slow delivery necessitated by dictation the speaker was induced to present each event separately, and was unable to track grounding relations. Another possibility is that changes occurred in Nyulnyul in the half century between Nekes and Worms investigations and my own: perhaps in the Nyulnyul of the 1930s and 1940s the category represented by -an plus past tense of IVs was indeed a distant past, as these authors claim. Both suggestions appear about equally (im)plausible.

7.9 The applicative suffix

In antepenultimate position, position +3, is an optional order-class which may be filled by a single morpheme, -ang, which marks the applicative construction (see further §12.3.2.4).³⁸ As has already been remarked, this morpheme is identical in form with the instrumental postposition, as is the case in all other Nyulnyulan languages bar Yawuru, where the corresponding postposition is a comitative (Hosokawa 1991:280). For reasons discussed in McGregor (1997c), I analyse -ang as representing two homophonous morphemes, rather than a single polysemous or vague one. That is, the applicative is a distinct morpheme from the instrumental postposition in the modern language. Historically, however, the two morphemes almost certainly share a common source in a comitative marker of proto-Nyulnyulan (McGregor 1997c).

The exact status of the applicative morpheme is uncertain. Insufficient information is available to decide whether it is an enclitic (as expected given its formal identity with the instrumental postposition) or a suffix (as suggested by the slight evidence that it can serve a stem-forming function, and the fact that in many languages applicatives are derivational). Its position in the IV is consistent with either analysis, occurring as it does at the boundary between suffixes and enclitics. Here I presume it is a suffix, though nothing hinges on this.

The applicative suffix shows no allomorphic variation; however, in old sources it is sometimes mistranscribed as -an, and thus misinterpreted as the IMP aspect marker. This is

It seems likely that -ang APP could be followed by either -uk LOC or -karr TEM, to locate the referent situation spatially or temporally with respect to another situation: there seems to be no reason why one could not use the form daarr i-na-r-an-ang-uk-irr (arrive 3NOM-CM-poke-IMP-APP-LOC-3AUG.ACC) 'when he arrived there with them' in a complex sentence meaning 'When he arrived there with them, he told them to sit down'. Furthermore, the morphemes that may occur in penultimate position serve as complementisers, whereas -ang does not.

³⁸ In fact, the evidence that this morpheme occurs in the antepenultimate order-class is rather weak. In almost all available examples it is in either penultimate position (i.e. immediately prior to a pronominal enclitic) or final position. This would suggest that it occurs in the same order-class as relators, consistent with its function. However, there is a single example in which the applicative co-occurs with a relator:

i-ni-jibal-irr angk nga-n-d-in-ang-karr-kurr
3NOM-CM-ask-3AUG.ACC what 1MIN.NOM-CM-say-PRS-APP-TEM-2AUG.ACC

^{&#}x27;He asked them, "What am I saying to you?" (Or: 'He asked them, "What might I be saying to you?")

especially true of Fr Alphonse Tachon's manuscripts (Tachon 1895, n.d.), where the velar nasal is consistently written as the apical nasal.

The applicative suffix is poorly attested in Nyulnyul. My own corpus contains just a few instances, while Nekes & Worms (1953) contains at most about a dozen, including some rather dubious ones, mostly instances of final -ang that are likely to be mishearings of -an.³⁹ What is said about the applicative construction in Nyulnyul is thus tentative.

It is shown in §12.3.2.4 that two major applicative constructions are identifiable in Nyulnyul, benefactive and locative. Less certain are comitative and instrumental applicatives. A few examples also indicate that the applicative can be used to indicate an event that is imminent, as in (7–152); this is attested in other Nyulnyulan languages, e.g. Warrwa (see McGregor 1998a). See further §12.3.2.4.

(7–152) *jukurr i-na-w nidil-ang jin ni-marl layib* poke 3NOM-CM-give needle-INS 3MIN.OBL 3MIN-arm good *yu-ngka-m-ang* 3NOM-FUT-put-APP 'She gave him a needle in the arm to make him better.' (More literally, 'She gave him a needle in the arm in order to make him recover soon.')

Neither Tachon nor Nekes and Worms provide any discussion of the applicative, or indeed show any awareness of its existence. True, Nekes and Worms do segment it in their examples; but they say nothing at all about it, and nor do they gloss it. (By contrast, they almost always gloss the homophonous postposition.) Fortunately, it is usually possible to interpret the examples Nekes & Worms (1953) provide in a way that is consistent with what is otherwise known about the applicative in Nyulnyul and other Nyulnyulan languages. An exception is *ma-medjalan-ay* 'to depend on, to rely on, to trust', exemplified in (7–153). The interpretation and analysis of this example eludes me completely.

(7–153) *ga-medjalen-ag ibal nga-mi(-)jal-in-ang iibal*1MIN.NOM-REF?(-)see-PRS?-APP father
'I rely on father', 'The Father cares for me.' (Nekes & Worms 1953:706)

7.10 Relators

Just five of Nyulnyul's thirteen postpositions are attested in penultimate position in finite IVs, i.e. in order-class +4: -uk LOC; -ung ALL₁; -kung ABL₃; -karr TEM; and -ngirr SEM; the only morphemes that may follow them are the pronominal enclitics. In this environment they serve as complementisers, marking the dependent (subordinate) status of the clause, and specifying (more or less explicitly) its semantic relationship to the head clause. The semantic relationships, however, are more constrained than in the standard intraclausal use of these morphemes as NP relators.

Clauses marked by -uk LOC provide a spatial or temporal location for the situation designated by the main clause, as illustrated by (7-154) and (7-155).

³⁹ A number of headwords in Nekes & Worms (1953) are applicativised forms of infinitival IVs. It seems improbable that these forms are acceptable in citation.

- (7–154) *i-m-bulkubulkum i-n-dam-uk-ngay*3NOM-PST-swell 3NOM-CM-hit-LOC-1MIN.ACC
 'It swelled up where he hit me.'
- (7–155) *i-ny-jalk-uk wul-uk ngurrngurr i-na-r*3NOM-PST-fall-LOC water-LOC drown 3NOM-CM-poke 'When he fell in the water he drowned.'

Unlike the other four postpositions, -ung ALL₁ is most frequently encountered with infinitival IVs (see §7.12). It can also be used as a finite clause complementiser, as in (7–156), where it marks a purposive complement. Many instances, however, are analytically uncertain: in (7–157) it is not clear whether the second clause is a complement of the first, or is grammatically independent of it.

- (7–157) *liyan nga-na-m burd-ung ya-ngka-rri-n-ung* feeling 1MIN.NOM-CM-put shit-ALL₁ 1PL.NOM-FUT-AUG-be-ALL₁ *jarrad bur* 1AUG.OBL camp 'I wanted to do a shit, but I had to wait until we got back home.'

The postposition -kung ABL₃ indicates that the dependent situation occurred prior to the head one; complementiser use of this postposition is not attested in my own corpus, and (7-158) is one of the few examples available.

(7–158) mai imbanj-gong-djān ngandjed-djer may i-m-bany-kung-jan nga-ny-jid-jirr meal 3NOM-PST-finish-ABL₃-1MIN.OBL 1MIN.NOM-PST-go-3AUG.OBL marinj, eŋerawandem-ŋai marriny i-ngi-rr-a-wandim-ngay walk 3NOM-PST-AUG-CM-detain-1MIN.ACC 'When the meal was over I started to leave, but they kept me from going.' (Nekes & Worms 1953:543)

-Karr TEM marks a dependent clause which serves to temporally locate its head; as distinct from -uk LOC, however, -karr TEM is usually used when the dependent clause refers to an uninstantiated situation, as in (7–159).

(7–159) nga-li-jal-an-karr-jii kalb
1MIN.NOM-IRR-see-IMP-TEM-2MIN.ACC up
nga-li-m-an-jii mudikard-uk
1MIN.NOM-IRR-put-IMP-2MIN.ACC car-LOC
'If I'd seen you, I'd have picked you up in the car.'

Finally, the very poorly attested -ngirr SEM indicates a likeness between two situations, as illustrated by (7-160).

(7–160) *junk i-n-nyu ngay-imirr nga-ny-jid-ingirr marriny* run 3NOM-CM-get 1MIN.CRD-PER 1MIN.NOM-PST-go-SEM go 'He ran past me like I go.'

The use of these postpositions as complementisers is discussed in detail in §13.3.

7.11 Pronominal enclitics

In final position in the Nyulnyul finite IV may occur an encliticised bound pronominal. There are two sets of these pronominal enclitics, an ACCUSATIVE set and an OBLIQUE set. The former cross-reference the Undergoer (direct object) of a transitive clause, while the latter cross-reference the Implicated, which is either the indirect object (second argument) of a middle clause or someone or something affected by the situation (basically, someone who either benefits or is disadvantaged by it) in other clause types (see §2.3 and §12.3.2.1 for explanation of the role terms). The following examples illustrate these three possibilities in turn: in (7–161), the accusative enclitic *-irr* cross-references the Undergoer *baab* 'children'; in (7–162), a middle clause, the oblique enclitic *-jin* cross-references the Implicated (indirect object) *jiwarr* 'dead person'; and in (7–163) the same pronominal form cross-references the Implicated (target) *warringkil* 'girl'. (Although in each case the cross-referenced NP is morphologically unmarked, it serves a different clausal role.)

- (7–161) baab mi-na-mankard-irr child 2MIN.NOM-CM-leave-3AUG.ACC 'You left the children.'
- (7–162) *i-ngi-rr-ngalk-ajin jiwarr* 3NOM-PST-AUG-cry-3MIN.OBL dead 'They mourned the dead man.'
- (7–163) miid-in baab kumbarr i-na-ngul-jin warringkil male-ERG child stone 3NOM-CM-throw-3MIN.OBL girl 'The boy threw a stone at the girl.'

No IV may have more than a single enclitic pronominal; sequences of enclitics are not permissible. In this respect Nyulnyul differs from Bardi, which admits sequences of pronominal enclitics (Metcalfe 1979:168; Bowern 2004a:102), but resembles more distant relatives such as Yawuru (Hosokawa 1991:152), Nyikina (Stokes 1982:164, 293) and Warrwa (McGregor 1994c:38). Generally, it seems that if there is a choice—if the clause contains both an Undergoer and an Implicated NP—it will preferably be the latter, rather than the former, that is cross-referenced. This is at least partly a consequence of the fact that the NP serving in the Implicated role is the more likely to be human (as in (7–163) above).

It is not entirely certain whether the person system in the pronominal enclitics was Ilocano (like the free pronouns) or Assiniboine (like the pronominal prefixes). Certainly there are distinct 1&2 minimal forms that are occasionally used (although usually in the Nyulnyul I recorded, the 1 augmented forms were used for all non-singular first person categories, just as for free pronouns and pronominal prefixes). No separate 1&2 augmented

form has been found for either the accusative or the oblique enclitic. We can thus be confident that in late twentieth century Nyulnyul the system was also Assiniboine.

Unfortunately neither Nekes (1938) nor Nekes & Worms (1953) includes information on the pronominal enclitics of Nyulnyul—indeed, they do not distinguish enclitics from free pronouns. There is, however, reason to believe that the traditional system was also Assiniboine, like the modern system. Thus in the other Western Nyulnyulan language we have good data on, namely Bardi, the pronominal enclitics show an Assiniboine system (Metcalfe 1975:202–203; Bowern 2004a:102). (In the Eastern Nyulnyulan languages, by contrast, the pronominal enclitics distinguish the same four person system as the free pronouns: see Stokes (1982:165) for Nyikina; Hosokawa (1991:304, 309) for Yawuru, and McGregor (1994c:46) for Warrwa.

Table 7–12 shows the attested forms of the enclitic pronouns, laid out according to the Ilocano system distinguished in free pronouns.

		Minimal	Augmented
1	ACC	-ngay	-yarrad
	OBL	-jan	-jarrad
1&2	ACC	-yay	-yarrad
	OBL	-jay	-jarrad
2	ACC	-juy ~ -jii	-kurr
	OBL	-jii	-jungkarr
3	ACC	-ø	-irr
	OBL	-jin	-jirr

Table 7–12: Pronominal enclitics to the inflecting verb

There is no phonologically-conditioned allomorphy in the pronominal enclitics. In particular, initial glides never harden to stops following occlusive consonants (see (7–28) above); nor do initial stops lenite to glides following vowels. (Such allomorphy is not uncommon in Nyulnyulan languages—see e.g. Stokes 1982:166ff on Nyikina.)

The only allomorphy—or alternation—is associated with the second person minimal accusative form, which sometimes appears as -juy (identical with the nominative free pronoun), and sometimes as -jii (identical with the oblique free pronoun), as illustrated in the following two examples, respectively:

- (7–164) nga-ni-ny-jal-juy ngi-im-ang 1MIN.NOM-CM-PST-see-2MIN.ACC 1MIN-eye-INS 'I saw you with my eye.'
- (7–165) nga-ni-ny-jal-jii ngank-ung mi-na-m 1MIN.NOM-CM-PST-see-2MIN.OBL word-ALL₁ 2MIN.NOM-CM-put 'I saw you talking to him.'

The same alternation occurs in earlier sources. I have been unable to determine what motivates the choice between -juy and -jii in this environment. 40

With one minor qualification, this alternation between accusative and oblique forms does not occur in any other person-number configuration. The qualification is that, as in other Nyulnyulan languages (e.g. Yawuru—see Hosokawa 1991:320), it occasionally happens that the IV -W 'give' occurs with an oblique, rather than the usual accusative pronominal enclitic cross-referencing the recipient of the gift. There are no examples of this type in my corpus; however, there are two examples—both with third person minimal recipients—in the texts recorded by Bronwyn Stokes, in line (151) of Text 2, and line (13) of Text 5.

There was some variation within the speech of the last speaker according to whether or not an IV hosts an accusative enclitic. For example, the IV in (7–166) lacks the accusative enclitic which usually occurs on -MARR 'burn': prosodic features, including the pause before *kurr* 2AUG.CRD and the fact that this word occurs on the same intonation contour as *kujarr* 'two', indicate that the pronominal form is not an instance of the ACC enclitic (cf. Hosokawa 1991:304–305).

(7–166) *jungk-in i-la-marr* / *kurr kujarr* / fire-ERG 3NOM-IRR-burn 2AUG.CRD two 'The fire might burn you two.'

(This fact, incidentally, further adds to the case for treating the bound pronominal elements as enclitics rather than suffixes—see also fn. 5 above.)

Oblique enclitics are never omitted from middle clauses, where they cross-reference the NP filling the Implicated role. In other clause types they are not obligatory. Thus, in (7–167) the beneficiary of the action is referred to by the DAT PP *ngay-ij* 'for me', which is not cross-referenced by the oblique pronominal *-jan* 1MIN.OBL. In contrast, consider (7–168), which shows *-jan* 1MIN.OBL encliticised to the same IV, -NY 'get', indicating that the action was done for the benefit of the speaker. How the two possibilities contrast semantically is impossible to say, due to inadequacies in the corpora. However, it may be hypothesised that only in (7–168) is the speaker represented as affected by the event; in (7–167) they do not serve in a participant role and are less intimately involved with the action. (See the discussion of the contrast between cross-referencing and not cross-referencing dative and other NPs in Gooniyandi in McGregor 1990:330–332.)

- (7–167) ngay-ij i-n-nyu 1MIN.CRD-DAT 3NOM-CM-get 'He got it for me.'
- (7–168) *mi-li-jid-akarr shop-ung ngaak wa-n-nyu-jan* 2MIN.NOM-IRR-go-TEM shop-ALL₁ bread 2MIN.NOM-CM-get-1MIN.OBL 'If you go to the shop get bread for me.'

It is often impossible to determine, on the basis of phonological form alone, whether a pronominal form following an IV is free or bound. For instance, (7–169) admits both possibilities: it could be interpreted as either 'they rode my horse', or as 'they rode a horse

⁴⁰ The choice between the pronominal forms is not dependent on whether or not the thing seen is a person or event, as might be suggested by these two examples. Thus there are examples where the ACC pronominal occurs in the context of a perceived event, and of the OBL pronominal in the context of a perceived person.

on/for me' (e.g. in a race—not necessarily my horse). (7–170), on the other hand, almost certainly involves the bound pronominal enclitic: discontinuity is disfavoured in modern Nyulnyul, making it unlikely (though not impossible) that *jan* 1MIN.OBL is a free oblique pronoun forming an NP with the first word of the clause.

- (7–169) jarlingk i-ngi-rri-ny (-)jan yaward ride 3NOM-PST-AUG-get (-)1MIN.OBL horse 'They rode my horse.' Or: 'They rode a horse on/for me.'
- (7–170) mukurn yaarr i-na-ng-k-jan hair pull 3NOM-CM-PST-carry-1MIN.OBL 'He pulled my hair.'

Two possibilities suggest themselves as explanations of the above observations. First, the enclitic pronouns in Nyulnyul have not grammaticalised to the extent that they appear to have done in most Nyulnyulan languages, especially Eastern Nyulnyulan languages. Second, language attrition has given rise to the modern situation, the postverbal pronominals having been non-systematically reinterpreted as free direct and indirect 'object' pronouns, analogising on English. The early sources do not provide crucial evidence one way or the other, and there is no way of deciding between these alternatives.

7.12 The infinitive

7.12.1 Formal structure of the infinitive

As mentioned in §7.1, IVs distinguish, in addition to their finite forms, an infinitival form, which is quite restricted in terms of its morphological potential, as shown by formula (7–6), repeated for convenience as (7–171).

Data on the infinitive is limited: it is not very common in use, and my own corpus shows infinitival forms of only a fraction of IVs. The two other major Nyulnyul corpora help to flesh out formal details somewhat, since they give the infinitive as the citation form of IVs. There are however inconsistencies, some of which may well reflect language attrition or change (see above).

The infinitive provides no person-number information for any participant in the situation, and nor does it distinguish temporal categories. It involves the single infinitival prefix *ma*- INF in place of the nominative pronominal prefix; see §7.12.1.1 on its allomorphy. ACC and OBL pronominal enclitics appear also to be precluded from infinitival IVs, and in the few instances in which a pronominal form follows directly after an infinitival IV it is apparently not bound to the IV, but in fact belongs to the following clause. In Bardi, by contrast, accusative pronominal enclitics to infinitival IVs are permitted (Bowern 2004a:207).

In addition to ma- INF_p in order-class -7, the infinitival suffix $-an \sim -in \sim -un$ INF_S in order-class +2 almost always occurs as well. There are just a handful of examples in which this suffix does not accompany the INF_p . These are most likely errors of speech and/or

transcription. In Bardi (Bowern 2004a:209) and Nyikina (Stokes 1982:268–269) the present or continuous suffix -*n* is obligatory on infinitival IVs.

The infinitival suffix occurs in a position corresponding to the position occupied by the present tense and imperfective aspect suffixes in finite IVs. However, its allomorphy (see §7.12.1.2 below) precludes identification with either of these morphemes, and indicates that it must be a separate morpheme uniquely associated with the infinitive. Certainly it cannot be identified with the present tense suffix, in which respect, as noted in §7.1 above, Nyulnyul differs from most Nyulnyulan languages. However, given the inadequacies of the available data, there remains a possibility that they are the same morpheme. This possibility would also make sense typologically. Here, however, I have taken the more cautious position, and presume the forms represent two separate morphemes.

The conjugation-marking prefix *na*- does not occur in infinitival IVs in my corpus; nor does it appear in Nekes & Worms (1953). Tachon (1895:27) does not mention this prefix in his discussion of the Nyulnyul infinitive, though there are a few examples in his paradigms, e.g. with the IV -R 'poke'. Given that in Bardi the conjugation marker is not employed at all in infinitival forms of IVs (Bowern 2004a:208–209), it seems likely that this order-class is not available to infinitival IVs in Nyulnyul, and thus that they do not fall into conjugation classes.⁴¹

Thus, in contrast to finite IVs, infinitival IVs are unspecified formally for conjugation class, and no intransitive-transitive alternations exist that are formally indexed by the absence or presence of the conjugation marker. Thus, *ma-marr-in* (INF_p-cook-INF_S) can be interpreted as either 'to cook (intransitive), to burn (intransitive), to ripen' or 'to cook (transitive)', *ma-lurr-in* (INF_p-burn-INF_S) as 'to be burning' or 'to burn something', and *ma-kanm-in* (INF_p-laugh-INF_S) as 'to laugh' or 'to laugh at someone'.

Infinitival IVs do however distinguish reflexive/reciprocal forms by the usual stemforming prefix-suffix combination; this category combination is not, however, very well represented in the corpora. Examples are: ma-ma-r-anyj-in (INF_p-REF_p-poke-REF_S-INF_S) 'to poke oneself', ma-mi-julng-inyj (INF_p-REF_p-tell-REF_S) 'to tell oneself', ma-mabadendjen (INF_p-REF_p-defend-REF_S-INF_S) 'to defend oneself, to dodge, to ward off a weapon', ma-mabandendjen (INF_p-REF_p-cover-REF_S-INF_S) 'to cover oneself, to dress oneself', ma-magandegandendjen (INF_p-REF_p-scratch-EV-scratch-REF_S-INF_S) 'to scratch oneself'. As in finite IVs, the prefix is sometimes absent: ma-band-inyj (INF_p-growl-REF_S) 'to growl/scold one another' and ma-jal-inyj (INF_p-see-REF_S) 'to see oneself', ma-yadjemendjen (INF_p-fight-REF_S-INF_S) 'to hit each other, to fight'. Occasionally the nasal of REF_p dissimilates from the nasal of the INF_p, as in ma-babayarendjen (INF_p-REF_p-praise-REF_p-INF_S) 'to praise oneself, to boast'—cf. ma-bayarendjen (INF_p-praise-REF_p-INF_S) 'to praise oneself, to boast, to be proud'.

Reduplication of the IV root in infinitival IVs seems to be as in finite IVs. Examples are: *ma-jal-a-jal-in* (INF_p-see-EV-see-INF_S) 'to watch over, to look after', *ma-djalalan* (INF_p-see-see-INF_S) 'to see', *ma-balebaleman* (INF_p-stir-stir-INF_S) 'to stir, to mix', *ma-bodobodowandjen* (INF_p-quarrel-quarrel-REF_S-INF_S) 'to quarrel, to dispute' (cf. *ma-bodowandjen* (INF_p-quarrel-REF_S-INF_S) 'to quarrel, to dispute'), *ma-bongobongoman* (INF_p-see-see-INF_S) 'to quarrel, to dispute')

⁴¹ In Nyikina, by contrast, the conjugation marker occurs in infinitival forms of transitive IVs with vowel initial stems (Stokes 1982:269). Granted the occasional appearance of the CM in infinitival IVs in Nyulnyul in Tachon's manuscripts, it could be that proto-Nyulnyulan IVs distinguished conjugation classes, which were subsequently lost in the Western Nyulnyulan group.

swell-swell-INF_s) 'to swell, to blow, to inflate' (cf. ma-bongoman (INF_p-swell-INF_s) 'to swell, to blow, to inflate').

Stem-forming processes available in the infinitival IV are thus the same as are involved in finite IVs.

Just one nominal stem-forming suffix is attested with infinitival IVs, -id CHAR, as in majanb-in-id (INF_p-steal-INF_s-CHAR) 'kicker', madjebalen-ed (INF_p-ask-INF_s-CHAR) 'beggar, begging', and ma-marr-in-id (INF_p-cook-INF_S-CHAR) 'cook'. Nekes & Worms (1953) refer to this form as the 'active participle'. However, while the designation 'participle', is not unreasonable (the form is often used as a nominal qualifier), this form is not invariably active, as observed in §4.5.1.1. This is illustrated by maboganden-ēd (INF_p-have-INF_s-CHAR) 'useful, valuable enough to be kept', magänben-ēd (INF_p-vomit-INF_s-CHAR) 'vomitive', and mananjban-ēd (INF_p-bake-INF_s-CHAR) 'able to be baked'. Indeed, both 'active' and 'passive' interpretations may be available for a single form, as in maweden-ēd (INF_p-eat-INF_S-CHAR) 'edible', 'glutton' (cf. English eater).

The corpora show a small set of infinitival IV forms involving the applicative -ang. Most of these come from Nekes & Worms (1953), where they are given as citation forms: magan-an (INF_p-carry-INF_s-APP) 'to carry, to bring', ma-medjalan-an (INF_p-rely-INF_s-APP) 'to depend on, to rely on, to trust' (see p. 318 above), ma-bandendjen-an (INFp-cover-REFs-INF_s-APP) 'to cover oneself, to dress'. No further information is provided about these forms. My own corpus does, fortunately, exemplify the occasional applicativised IV infinitives (e.g. ma-r-an-ang-ung INF_p-poke-INF_s-APP-ALL₁); see next section.

Five relators are found with infinitival IVs: -in ERG; -ung ALL₁; -jun ABL₁; -nyirr COM; and -uk LOC. The first of these, the ergative, is attested only in combination with the derived CHAR form. Just two of these relators are found on infinitival IVs in the secondary corpora. Thus Tachon (1895) mentions the -jun ABL₁ form, which he refers to as the 'past participle', which he says indicates 'after V-ing'. Nekes & Worms (1953) dub it the 'passive participle', in contrast to the active participle marked by -id (Nekes & Worms 1953:664, 2006: 219–220). Some examples are madaman-djon (INF_P-hit-INF_S-ABL₁) 'one who has been hit, wounded', and magarman-djon (INF_p-break-INF_s-ABL₁) 'broken, piece'.

Both the formal properties and the meanings and uses of the infinitival IV (see next section) suggest that it is a nominalised form.

7.12.1.1 Allomorphy of the INF_P

The elsewhere allomorph of the INF_P is ma-, which is employed with almost all IV stems and roots in the primary corpus. Sometimes the vowel is raised to about schwa, under the influence of a following high vowel. Usually, however, it remains within the phonetic range of the low vowel /a/, though there are occasional exceptions, as in mu-ngulm-in (INF_p-NGULM-INF_s) 'deceiving'.

No m- allomorph is attested in my corpus, though Nekes & Worms (1953) cite a few instances. Thus they have *m-aran* 'to pierce, to spear, to stab' (Nekes & Worms 1953:326, 364, 463); however, the morpheme boundary appears to be misplaced, and according to my analysis, the IV root is -R 'poke', with initial rhotic, not vowel. The other example they give is m-anan 'to pierce' (Nekes & Worms 1953:509), which is probably a Bardi rather than a Nyulnyul form.⁴²

⁴² In Bardi the *m*- is a regular allomorph (Bowern 2004a; Nekes & Worms 1953).

7.12.1.2 Allomorphy of the INF_S

The INF_S suffix shows a rather complex distribution of allomorphs, which is not fully understood. Present evidence suggests that the choice among the allomorphs -an, -in, and -un is sometimes conditioned phonologically, and sometimes not; in the latter cases the choice is presumably lexically conditioned. For this reason Table 7–1 lists the attested allomorphs of the INF_S where known. As can be seen from this tabulation, the first two alternants, -an and -in, are about equally frequent, while -un is quite rare.

The rare allomorph -un appears to be phonologically conditioned by vowel harmony, which applies inconsistently to IVs involving the high back vowel in their final syllable. Thus we have ma-mulk-un 'sleeping', ma-lungk-un 'digging', ma-ngulngurl-un 'gossiping, deceiving'; these all alternate with regular forms involving the allomorph -in.

The second allomorph, -in, is partly conditioned phonologically. Thus derived reflexive/reciprocal stems—which end in the palatal stop—invariably select -in as shown by examples in §7.12.1 (see also Nekes & Worms 2006:215–217). (This of course can also be regarded as lexical conditioning.) A number of palatal-final roots also select this allomorph, including -BARNJ 'exchange', -BANY 'finish', -J 'say, do', and -KUDIJ 'come in (of tide)'. However, there are exceptions: -KANJ 'leave, abandon' and -NY 'get' appear to always take the -an allomorph, while -MANY 'wave hand' usually does.

There are also a number of instances in which -in might be conditioned by a high vowel in the preceding syllable: the IVs -JIBIJIB 'stare', -JIMB 'die', -KIRRIR 'piss', -MIL 'sing', -MINGK 'choke', -WID ~ -KID 'consume', -MULK 'sleep' -NGUL 'throw', -NGULM 'deceive', -LINGK 'know' all select this allomorph. For IVs such as -JID 'go', -LUNGK 'dig',-LURR 'burn' and a few others, -in and -an appear to be in free variation.

There are, however, exceptions: -BADIK 'fill, get filled', -BUL 'grow', -BULM 'soak', -BURR 'cover', -JIDING 'touch', -MUUR 'spill, pour', and -WULB 'drive away' either invariably or normally select -an INF_S. The only vowel final IV stems attested in infinitival form are -MII 'seek' and -MIIMII 'seek, hunt'. In my corpus these two IVs always condition the -in allomorph as expected by vowel harmony; however, in Nekes & Worms (1953) they invariably select the -an allomorph.

The first allomorph, -an, occurs consistently with IVs consisting of just a single consonantal segment, with the exception of -J 'say, do', which invariably selects -in. Thus, we have ma-k-an (INF_p-K-IMP_s) 'carrying', ma-m-an (INF_p-M-IMP_s) 'putting', ma-n-an (INF_p-N-IMP_s) 'being', ⁴⁴ ma-ny-an (INF_p-NY-IMP_s) 'getting', ma-r-an (INF_p-R-IMP_s) 'poking', and ma-w-an (INF_p-W-INF_s) 'giving'.

Otherwise, no obvious phonological or phonotactic features condition the appearance of the -an allomorph—certainly neither the quality of the preceding vowel nor the preceding consonant strongly correlates with this allomorph. It thus appears that the choice between the two allomorphs -an and -in must be to a considerable extent lexically determined by the IV root. To further complicate matters, -an appears in free variation with -in in a fair number of IVs in addition to those remarked on above. This is the case for instance for the IVs -DAM 'hit', -JAL 'see', -JANB 'trample, kick', -KALAK 'approach', among others.

⁴³ By contrast, -an IMP does not show this conditioning, as revealed by e.g. i-li-rr-ma-r-inyj-an (3NOM-IRR-AUG-REF_P-poke-REF_S-IMP) 'they tried to poke one another'. However, only a handful of imperfective reflexive-reciprocal stems are attested, and it is not certain that the imperfective is always distinct from the INF_S in this environment.

⁴⁴ In my own corpus this is the only form observed; however, Nekes & Worms (1953) consistently report the form involving the allomorph -in.

Table 7–1 indicates the IVs attested with both allomorphs; quite likely they are not the only ones, and more complete data would reveal further alternations.

It might be suggested that the irregular allomorphy of the INF_s could be accounted for by postulating root-final vowels for many of the IVs in underlying form, which are subsequently deleted in many environments (see remarks on pp. 251–8 above). The INF_s could then be presumed to show an invariant shape such as -n, -in or -an and thus be identified with the present tense suffix (which would then be reanalysed as continuous aspect marker) or imperfective aspect suffix. This seems plausible, suggesting as it does that some residue remains in (underlying) synchronic forms of the diachronic process whereby root-final vowels were lost. And some of the allomorphy of the INFs would be nicely captured in this way. For instance, it would explain why -K 'carry', -M 'put', -R 'poke', and -NY 'get' choose the -an: these are reflexes of proto-Nyulnyulan roots with final vowel /a/ (Stokes & McGregor 2003:63, 64, 66). However, attractive as this suggestion appears, the postulated underlying vowels would not always be identical with the vowels expected on the basis of comparative reconstruction. For instance, -LAKARR 'hear, listen' is evidently the reflex of proto-Nyulnyulan *-LAKARRA 'hear, listen' (Stokes & McGregor 2003:64; cf. Bowern 2004a:354); however, this IV invariably selects the -in allomorph of the INF_s. Other IVs problematic for the same reason include -LAMB 'kiss', -MARR 'burn' and -NGARNK 'speak'. Moreover, this suggestion cannot account for the differences in the choice of vowels in the allomorphs of the INFs and both the PRS and IMP suffixes. I have therefore not adopted this solution: it shows no advantages over the solution adopted here, that IVs should be indexed for allomorph choice. I presume that underlying forms of IVs are consonant final unless a vowel shows up in word-final position in some form of the IV.

7.12.2 Meaning and use of the infinitive

The main secondary corpora—Tachon (1895, n.d.); Nekes & Worms (1953); Nekes (n.d.)—employ the infinitive as the citation form of IVs; indeed, Nekes & Worms (1953) occasionally use it along with a PV in the citation form of PVs. ⁴⁵ This is unlikely, of course, to represent a speaker usage of the infinitive, though predictably (given that she had worked with Frs Hermann Nekes and Ernest Worms), Mary Carmel Charles occasionally used the infinitival form as a citation form in elicitation sessions in response to verb prompts. She generally translated the infinitival form of IVs as *-ing* forms of the corresponding English verbs. Unfortunately, the secondary corpora give few illustrations, and no discussion of usage or meaning of the infinitive.

The primary use of infinitival IVs appears to be as the VP of non-finite clauses, where the verbal construction of the corresponding finite clause is an SVC. (Where the corresponding finite clause has a CVC the non-finite clause employs just a PV—see §11.1.1.) Non-finite clauses are discussed in detail in Chapter 13 below (see especially §13.2, §13.3.2, and §13.4.2.1). Below we identify some of the most obvious (perhaps etic) types of non-finite clauses, and provide just a few illustrations; Chapter 13 should be consulted for fuller discussion.

[1] **Purposive constructions**. Here the non-finite clause indicates a purpose or use of an entity (as in (7-172)), or the purpose or reason for the occurrence or performance of an event, usually the intention of the Actor (as in (7-173), though cf. (7-174)).

⁴⁵ This is a very strange decision given that there is no evidence that PVs collocate with infinitival forms of IVs in any construction type.

- (7-172) in ma-r-an-ang-ung this INF_p -poke- INF_s -APP- ALL_1 'This is for writing with.'
- (7–173) yiil-in jarrbad i-na-ng-k ngurnd-ung ma-kirrir-in dog-ERG lift 3NOM-CM-PST-carry piss-ALL₁ INF_p-piss-INF_S bardangk-uk stick-LOC 'Dog lifted its leg for a piss on a tree.'
- $(7-174) \qquad \textit{bulkun-in} \qquad \textit{i-n-m-in} \qquad \textit{murrul baab ma-mulk-in-ung} \\ \text{smoke-ERG 3NOM-CM-put-IMP little child INF}_p\text{-sleep-INF}_S\text{-ALL}_1 \\ \text{`Smoke puts the baby to sleep.'}$
- [2] **Complement clauses**. Non-finite clauses can serve as complement clauses, especially in desiderative constructions, as in (7-175) and (7-176), though other types are also attested (e.g. (7-177)).
- (7–176) arri liyan ma-jal-in-uk uriny kaard i-ni-ny-jal not feelings INF_p-see-INF_S-LOC woman still 3NOM-CM-PST-see 'He didn't want to see her, but he did.'
- (7–177) nyanangkarr karrm nga-na-m-badik-irr
 perhaps later 1MIN.NOM-CM-PST-finish-3AUG.ACC
 ma-ma-r-anyj
 INF_p-REF_p-poke-REF_S
 'Maybe later I'll stop them fighting.'
- [3] **Attribution**. In attribution the non-finite clause attributes an event of an entity as an inherent or characteristic property. The non-finite clause may be attributed of a nominal in a relational clause, as in (7–178), or in an NP, as in (7–179); note that in the latter example the lexical nominal 'bottle' is ellipsed, being predictable from the linguistic context. In all examples of this type the non-finite verb stands alone as the only unit in the non-finite clause.
- (7–178) ma-bangar-inyj-in wamb $INF_p\text{-}proud\text{-}REF\text{-}INF_S$ man 'The man is proud.' 'The man is a show-off.'
- (7–179) *kad i-na-w ma-karrm-an i-n-janb-uk* cut 3NOM-CM-give INF_P-break-INF_S 3NOM-CM-tramp-LOC 'He cut his foot when he stood on the broken (bottle).'
- [4] **Referential**. Non-finite clauses can be used referentially as well as attributively. The following examples are illustrative. In (7–180), the non-finite clause occurs in an identifying relational clause (§12.2.3.1.1), identifying the person's work with a general

event type, picking up rubbish; in (7-181), the non-finite clause specifies a general event type about which a quality is predicated in an attributive clause; and in (7-182) the non-finite clause construes a generic event type, namely drinking, as agentive in a medio-active clause.

- (7–181) *ngidirrngin ma-n-in arri layib* alone INF_p-be-INF_s not good 'Living alone is no good.'
- (7-182) bin kujarr yuburl i-rri-j wul-in ma-wid-in this two sick 3NOM-AUG-say water-ERG INF_p-consume-INF_S 'They are sick from drinking grog.'
- [5] **Simultaneous temporal clause, 'while'**. Occasionally a non-finite clause indicates an event going on simultaneously with another event; the non-finite clause is marked by the locative postposition. An example is:
- (7–183) wilamay-uk ma-marr-in i-ni-ny-jal kinyingk mangkirr food-LOC INF_P -cook- INF_S 3NOM-CM-PRS-see DEF goanna 'While he was cooking, he saw the goanna.'
- [6] **Main clauses**. In a small number of instances a clause with a non-finite verb appears to serve as a main clause, as in (7–184). It is possible, however, that it is really a non-main clause, and that the main clause, expressing desire, has been ellipsed. The fact that a framing clause of desire is sometimes structurally reduced and loses its IV lends some support to this possibility: complete loss of the clause may be a further development. Further support comes from the fact that clauses of speech are occasionally omitted from quotations. This seems to me to be more likely than insubordination of the non-finite clause (e.g. Evans 2007).
- (7-184) wamb-in ngay-ung ma-jal-in man-ERG 1MIN.CRD-LOC INF_p -see- INF_S 'The man decided to see me.'

In the above circumstances there is reason to believe that the infinitival IV belongs to a non-finite clause: the infinitive can in each case be accompanied by other units filling out the non-finite clause, as in many of the examples cited. The nominal derivational affix *-id* CHAR, however, would seem to be attached to just infinitival IVs, and not to non-finite clauses; this form cannot be expanded by additional units belonging to the same clause. Usually infinitives are derived by *-id* CHAR in qualifying roles, expressing qualities or states. Thus they frequently occur in attributing functions in attributing relational clauses, as in:

(7–185) kinyingk yaward ma-janb-in-id

DEF horse INF_P-kick-INF_S-CHAR

'This horse is a kicker.'

The two postpositions -uk LOC and -jun ABL₁ also have derivational uses: an IV marked by one of these postpositions sometimes appears to be a nominal, and can serve in the typical nominal functions of entity and/or quality specification. This usage is rare for -uk LOC (it is not otherwise attested for this postposition—see Table 5–2), but perhaps the norm for -jun ABL₁. The only clear example I have of the locative postposition in a derivational function is in maburrinuk (INF_p-cover-INF_S-LOC) 'funeral' (cf. burial). Almost all instances of -jun ABL₁ attached to an IV appear to be derived nominals. Like nominals generally, these can specify qualities, as in (7–186)–(7–188).

- (7–186) *yen baib maboganden-djon in bayib ma-bukand-in-jun* this pipe INF_P-have-INF_S-ABL₁ 'This pipe is used one, not a new pipe.' (More literally, 'This pipe is had (owned).') (Nekes & Worms 1953:662)
- (7–187) madaman-djon badang ma-dam-an-jun bardangk INF_p-hit-INF_S-ABL₁ tree 'a felled tree' (Nekes & Worms 1953:664)
- $\begin{array}{cccc} (7-188) & \textit{mamarandjon} & \textit{w\bar{e}l} \\ & \textit{ma-marr-an-jun} & \textit{wil} \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & \\ & & \\ & \\ & & \\ & &$

Infinitival IVs marked by *-jun* ABL₁ are also attested in referential usage, as illustrated by the following examples from Nekes & Worms (1953): *madaman-djon* (INF_P-hit-INF_S-ABL₁) 'wounded, one who has been hit', and *magarman-djon* (INF_P-break-INF_S-ABL₁) 'broken, a piece'.

8 Preverbs

8.1 Preliminary remarks

It will be recalled that Nyulnyul exhibits two categories of words denoting events, and corresponding to verbs in many other languages: inflecting verbs (IVs) (discussed in the previous chapter), which take a range of inflectional prefixes and suffixes; and preverbs (PVs) (the topic of this chapter), which are completely non-inflecting. In this regard Nyulnyul is a typical northern Australian language. Two verbal parts-of-speech categories are found in languages as diverse as the Pama-Nyungan languages Warlpiri (Nash 1982: 166ff), Walmajarri (Hudson 1978:43ff), Jaru (Tsunoda 1981:177ff), Nyangumarta (Sharp 2004:160–238), and Karajarri (Johnson 1992); the Worrorran languages Ngarinyin, Worrorra, and Wunambal (see e.g. Capell & Coate 1984:171ff; Rumsey 1982b:74ff; Vászolyi 1976); the Jarrakan languages (e.g. Kija and Miriwung—see Kofod 1996, 1978: 222ff); the Daly River languages (e.g. Green 1989; Hoddinott & Kofod 1976b; Reid 1990; Tryon 1970, 1974); and Jaminjungan languages (Hoddinott & Kofod 1976a; Schultze-Berndt 2000).²

In §2.4 PVs were characterised as lexical words that typically collocate with IVs in CVCs. We also observed that this syntactic property does not define a class of PVs distinct from all other lexical items. Lexemes of other parts-of-speech can also occur with IVs, in what are ostensibly CVCs. This includes putative nominals—words normally found in NPs as referring or modifying expressions—such as *liyan* 'like', *mirl* 'lie, untruth', *ningarr*

A variety of terms have been used in the literature for both parts-of-speech. The former category has been referred to as the 'finite verb' or 'finite verbal word' (e.g. Hosokawa 1991:200; Rumsey 1982b:75), 'auxiliary' (Coate & Oates 1970; Capell 1976; Kofod 1978), 'Root₂' (Hudson 1978:44), 'inflected verb' (Metcalfe 1975:4), 'verb' (Tsunoda 1981:76), 'verbal root' (Stokes 1982:41), among other terms. The latter category has been variously referred to as the 'verbal particle' (Rumsey 1982b:75; Hoddinott & Kofod 1976a), 'pre-stem' (Metcalfe 1975:56), 'verb base' (Capell 1976), 'head verb' (Vászolyi 1976), 'lexical verb' or 'primary verb' (Tryon 1976), 'main verb' (Capell 1976; Yallop 1982), 'non-tense-bearing verb' (Tryon 1974), 'prefix' (Alpher 1973), 'free verb (form)' (Coate & Oates 1970), 'Root₁' (Hudson 1978:46), 'verb root' (Kofod 1978:222), and more recently 'coverb' (Wilson 1999; Schultze-Berndt 2000) and 'uninflecting verb' (McGregor 2002c). I have adopted terms that identify the most salient grammatical characteristics of the two types of verb: on the one hand that words of the former category take a wide range of inflections, on the other hand that those of the latter category normally occur initially, preceding the IV.

Not all Kimberley languages show these two verb types. Gooniyandi, for instance, has a single lexical category of verbal roots (McGregor 1990:138, 190). However, it is evident that the Gooniyandi verbal construction derives historically from a compound verb construction: the modern verb root derives from an earlier preverb, and the bound classifier morphemes from earlier inflecting verbs. The situation is almost the same in the closely related Bunuba (Rumsey 2000), although the verb has not progressed quite as far along the path towards a single verbal root class as Gooniyandi, and there is still a distinction between simple and compound verb constructions.

'true', balybaly 'flat', and a small number of words of other classes such as the adverbial baan 'that manner' (see further §11.2). Whether it is best to treat such lexical items as both PVs and nominals (or whatever), to recognise distinct but homophonous roots, or to identify them as grammatically multifunctional lexemes belonging to just one word class, is uncertain. For simplicity, and because of inadequacies in information on many lexical items, the remainder of the chapter we presume one of the first two possible analyses, and include under the category of PVs all lexical items that can occur in the grammatical role typical of PVs.

8.2 Basic grammatical characteristics

The Nyulnyul corpora show just under six hundred PVs, including both monomorphemic roots and bimorphemic stems, although information on many of them is minimal. No doubt the class was larger—and open—in traditional Nyulnyul; it is highly likely that various abstruse and infrequent PVs were lost during the twentieth century, including, one expects, PVs related to cultural practices which went out of use. Comparable numbers of PVs are found in other Nyulnyulan languages: Bardi has at least 650 PVs (Bowern 2004a:156); Yawuru has some three to four hundred (Hosokawa 1991:199); and Nyikina has over four hundred (Stokes 1982:190).³

The class of PVs in Nyulnyul is open, and readily accepts borrowings from English, including, for instance, *rayidim* 'ride (horse)', *binijim* 'finish up', and so on. Borrowings are never incorporated into the IV class.⁴

PVs, as already mentioned (see §2.4), almost always occur in collocation with an IV in a compound verb construction (CVC); moreover, in contrast with other lexemes that occur in syntagms with IVs, PVs are characteristically restricted in terms of the range of IVs they may occur with (recall remarks of §6.1 on differences between adverbials and PVs), and form lexicalised expressions with the collocating IVs. They normally precede the IV, as in the following examples (see further Chapter 11 below):

- (8–1) kurd i-n-d-in hide 3NOM-CM-say-PRS 'He is hiding.'
- (8–2) dukduk i-n-ny-in shake 3NOM-CM-catch-PRS 'He is shaking it.'
- (8–3) kujuk mi-na-w may swallow 2MIN.NOM-CM-give food 'Swallow the food!'

³ Based on dictionary counts Bowern (2004a:156) gives higher figures for both languages, 670 for Yawuru and around 500 for Nyikina. All of the counts must be taken with a grain of salt: not only are the corpora on both languages limited, but also it is not always obvious that a lexeme is a PV, and grammarians are liable to disagree on the categorisation.

⁴ Except, of course, for the occasional borrowing of an inflecting verb from a nearby Nyulnyulan language. For instance, there are a number of recorded instances in which Jabirrjabirr -DAB 'hit' is used in place of Nyulnyul -DAM 'hit'. Quite likely over historical time a number of such borrowings have been incorporated into the language, and now form a part of the native lexical resources of Nyulnyul.

Occasionally PVs follow the IV instead of preceding it. This is a characteristic of particular PVs: *marriny* 'walk' and *mijal* 'sit', for instance, are fairly frequent in post-IV position, whereas most other PVs are not attested at all in this position. Examples are:

- (8–4) ni-mbal-ang i-ny-jid marriny 3MIN-foot-INS 3NOM-PST-go walk 'He went on foot.'
- (8–5) wamburiny i-rr-ø-in mijal kalb madikard-uk people 3NOM-AUG-be-PRS sit above car-LOC 'People are sitting on top of the car.'

Very rarely, a PV is even separated from the IV it collocates with by another word or words. In (8–6) the PV is separated from its IV by a particle; in (8–7) it is separated by a particle and pronominals—notice in this example that the clause only expresses the sense indicated if the initial word *liyan* 'like' belongs with -M 'put' in a CVC.

- (8–6) aa kinyingk-uk bur kalb / dub-dub mad i-n-in / and DEF-LOC country up blow-blow still 3NOM-be-PRS 'And in that country up there, it's still blazing.'
- (8–7) liyan jii juy kard mi-na-m-an /
 feelings 2MIN.OBL 2MIN.CRD so 2MIN.NOM-CM-put-IMP
 yarrad-ijirr-mad /
 1AUG.CRD-AUG-EMP
 'You have shown your love for us.'

As in other northern Australian languages, Nyulnyulan and non-Nyulnyulan (McGregor 2002c:105), a PV is occasionally deployed without a collocating IV. The main circumstance is when it is followed by a postposition in a non-finite VP, as in (8–8)—where the following IV belongs to a distinct clause from the PV—or by a nominal stem-forming suffix (see §8.3). Rarely, an independent PV is found in an environment in which an IV is expected to co-occur with it, as in the underlined PVs in (8–9) and (8–10).

- (8–8) *mirrij-uk i-ny-jalk* walk-LOC 3NOM-PST-fall 'While walking, he tripped.'
- (8–9) *liyan mi-n-m-in jirrm burrb* feelings 2MIN.NOM-CM-put-PRS sing dance 'Do you like singing and dancing?'
- (8–10) rarrb-rarrb i-ngi-rr-ny-an jadjad / bardin jin, scrape-scrape 3NOM-PST-AUG-get-PST cut skin 3MIN.OBL 'They scraped off its bark.'

A few PVs also have the potential of occurring in syntactic environments other than CVCs. A small number can serve as the sole element of a minor clause; thus *wukul* 'pity' can be used as an interjection meaning 'sorry!'. A second possibility is for a PV to be used in the Predicator role in an NP (see §10.2.2), as in (8–11). In all such examples the NP

indicates a manner of performance of the event in terms of a condition or state of a body part of the Actor. It is also possible that PVs were sometimes used expressively, as ideophones, in Nyulnyul. Although there are no entirely convincing examples of this usage—perhaps a reflection of the paucity of freely delivered narratives in the corpora—the final PV in examples such as (8–12) could potentially be being used in this fashion.⁵

- (8–11) *nurl jirrm i-n-j ni-lirr baab* song sing 3NOM-CM-say 3MIN-mouth open 'He sang mouth opened.'
- (8–12) kinyingk bur milirrkarr bany i-ngi-rr-a-m warli

 DEF place before shoot 3NOM-PST-AUG-CM-put everyone wamburiny bany-bany
 people bang-bang

 'This is where they shot everyone long ago.'

Use of independent PVs in commands, attested in some languages of northern Australia (McGregor 2002c:105), is not in evidence in Nyulnyul.

Although it is almost always the case that a CVC consists of a single PV, on rare occasions two PVs may be found conjoined by *aa* 'and', and in collocation with a single IV. (8–13) and (8–14)—both from versions of the emu myth—are examples of this uncommon phenomenon. In the latter example the second conjunct occurs, unusually, in post-IV position, perhaps motivated by the informational weight of the conjoined PVs. Such examples suggest that the IV is selected by the immediately preceding PV; there are too few tokens of this type, however, to be certain that this is a general rule.

- (8–13) well / junk aa marriny i-jid-in / arriyangk-ang ni-marl / well run and walk 3NOM-go-PRS without-INS 3MIN-arm warang-ngirr karrambal / others-SEM bird 'Well, he runs and walks, not like the other birds.'
- (8–14) *junk i-n-ny-in* / *aa marriny* / run 3NOM-CM-get-PRS and walk 'He runs and walks.'

Even more unusual is a complex preverbal unit made up of a PV and qualifying word. The only examples available of this type involve the PV *liyan* 'feeling', and a qualifying word specifying the type of feeling, negative or positive. The following examples illustrate these possibilities respectively. (Note that *liyan* 'feeling' itself normally collocates with -M 'put' in the sense 'like, want, love', and that *alik* 'bad' and *layib* 'good' are evidently not being used adverbially as modifiers of this collocation of *liyan* and -M.)

⁵ Expressive use of ideophones seems not to be particularly prominent in Nyulnyulan languages, and the best illustrations are in Yawuru—McGregor (2002c:330–331).

⁶ Liyan 'feeling' shows similar behaviour in Bardi, where the combination, in reversed order, alig liyan expresses the sense 'be jealous of one another' (Aklif 1999:16).

- (8–15) *liyan alik i-na-m-jan wamb-in* feeling bad:feeling 3NOM-CM-put-1MIN.OBL man-ERG 'The man insulted me.'
- (8–16) *liyan layib i-n-di-jin i-ni-ny-jal-uk-ngay* feeling good 3NOM-CM-say-3MIN.OBL 3NOM-CM-PST-see-LOC-1MIN.ACC 'He was pleased to see me.'

Some PV roots seem to be inherently intransitive or monovalent, others inherently transitive or bivalent, and occur only in clauses of the specified transitivity type. However, there is a significant number of PVs that occur in both transitive and intransitive clauses. There are also PVs that occur in both intransitive and middle clauses, where the latter clause type shows two inherent participant roles, one being an Implicated, rather than an Undergoer (see Chapter 12 for details). Transitivity—i.e. argument structure—is a property of clauses, not of verbs (either PVs or IVs); nor indeed is it a property of CVCs (see immediately below). For instance, *dibirr* 'turn' occurs in both transitive and intransitive clauses, as in the following examples, respectively:

- (8–17) bin ngi-im-ingid dibirr nga-ngka-m ngi-im
 this 1MIN-eye-CHAR turn 1MIN.NOM-FUT-put 1MIN-eye
 i-n-marr-in
 3NOM-CM-burn-PRS
 'I want to turn the mirror around, as my eyes are burning (from the sun).'
- (8–18) *i-ngi-rr-kalak-ngay dibirr i-ngi-rri-j*3NOM-PST-AUG-approach-1MIN.ACC turn 3NOM-PST-AUG-say *waamin-mirr*another-PER
 'They came towards me, but turned away.'

Other PVs that occur—often without formal registration of the difference by a different IV—in both transitive and intransitive clauses include: *dirdird* 'coil', *durdub* 'full', *kalwar* 'expose', *kinyj* 'shut', *kurd* 'hide', *ruk* 'undo', *wanak* 'confuse', and numerous others.

In the two examples above the different transitivities of the clauses could be suggested to be dependent on the transitivity of the IV, or perhaps the transitivities of the PV and IV in accordance with some rule of 'merger'. I have argued elsewhere against this possibility for Nyulnyulan and other languages of northern Australia (e.g. McGregor 2002c:252–266, 275–281, 2006b). Instances are available in which a single CVC involving the same combination of PV and IV can occur in clauses of different transitivity values. The following pairs are illustrative. (8–19) and (8–20) show the PV *dirdird* 'twist' in intransitive and transitive clauses, with the same generic 'say, do' IV. And (8–21) and (8–22) show PV *kaw* 'call', again with the generic 'say, do' IV, in intransitive and middle clauses. These examples show that a merger analysis in which PVs and IVs show inherent transitivity will always run into difficulties. We will say more about transitivity in Chapter 11.

(8–19) wirlawirl dirdird i-n-j fishing:line coil 3NOM-CM-say 'The fishing line is tangled.'

- (8–20) dirdird wa-n-j
 coil 2MIN.NOM.FUT-CM-say
 'Squeeze it!'
- (8–21) wangkid kaw i-n-j crow call 3NOM-CM-say 'The crow caws.'
- (8–22) wamb-in kaw i-n-di-jan man-ERG call 3NOM-CM-say-1MIN.OBL 'The man called out to me.'

8.3 Phonological regularities in PV structure

PVs in Nyulnyul show certain phonological peculiarities setting them off from words of other parts-of-speech, and reflecting their likely origins in ideophones (McGregor 2001a, 2002c:324–339; Schultze-Berndt 2001). The differences are at the level of the categories, and it is not possible to assign particular roots reliably to parts-of-speech on phonological grounds alone. We begin by recalling the phonotactic regularities.

8.3.1 Phonotactics of PVs

PVs show statistical differences in phonotactic patterns from roots of other parts-of-speech. In particular, there is a tendency for PVs to be shorter than words of other parts-of-speech. As seen in §3.3.1, almost 90% of PV roots are monosyllabic or bisyllabic, whereas for other roots only about 70% are monosyllabic or bisyllabic. The percentages for monosyllabic and bisyllabic PVs are very similar to the percentages in other nearby languages (Hosokawa 1991:205; McGregor 2002c:325), although the percentages for roots of other parts-of-speech are rather higher than in other languages (usually less than 60%). The higher frequency of monosyllabic and bisyllabic roots in other parts-of-speech in Nyulnyul is evidently a consequence of the historical phonological process whereby final vowels were lost. It is striking that even with the operation of this process PVs retained their tendency to be shorter than roots of other parts-of-speech; this is consistent with their separate status and origins. It is especially striking that monosyllablic PVs are nearly twice as frequent as monosyllabic roots of other parts-of-speech.

Comparison with the frequencies of PVs of one or two syllables in other Nyulnyulan languages strongly suggests that the historical process of loss of final vowels contributed little to the shortness of PVs, and that they tended to be short and consonant final even in proto-Nyulnyulan.

In many languages of northern Australia PVs show significantly higher frequencies of final consonants and consonant clusters than roots of other parts-of-speech, where final consonants are typically relatively rare. No such difference is statistically significant in Nyulnyul. Thus the frequency of final consonants for PVs is about 96%, while for nominals it is only slightly less, approximately 93%.

8.3.2 Phonaesthesia

In addition to the phonotactic regularities mentioned in §8.3.1, the final consonants of PV roots are not arbitrarily distributed across all semantic domains. PVs tend to cluster into semantic groups according to their final consonant (see McGregor 2002c:328–329 on the Nyulnyul regularities, and McGregor 1996f on regularities in Gooniyandi). The following remarks are based on a subcorpus of around two hundred PVs, mostly from my own data, for which semantic and phonological information is most reliable. Given that this represents perhaps just a third of the class, the generalisations must be taken with caution. Nevertheless, the fact that these are reasonably comparable with patterns found in the distribution of final consonants in Gooniyandi verbs (McGregor 1996f), adds some weight to them.

- PVs ending in laterals frequently refer to actions which involve: (a) liquids—duburl 'swim', dulul 'pour', jibil 'dribble', jubul 'splash'; (b) a figuratively or metaphorically fluid or liquid component of activity—bilbil 'shine, twinkle', jakul 'curl', rilil 'spread', jilal 'weaken', nyilinyil 'tangled', yal 'pull', and possibly lakal 'climb up'; or (c) numerous repetitions of action components—dujul 'pound', dul 'hammer', ngal 'yelp'. For the above, which end in apical laterals, some sense of rigidity or straight line motion is involved; the few PVs which end in the laminal lateral, by contrast, suggest flexibility or flailing, uncontrolled lateral movement: balybaly 'flatten', duly 'squeeze', wilywily 'wag', and yarrkaly 'slide'.
- PVs ending in the apical tap or trill *rr* generally designate activities made up of numerous repetitions of some subcomponent action: *barrabarr* 'think', *birribirr* 'chafe', *kaarr* 'rub', *kunarr* 'move', *kurrkurr* 'rumble', *laaburr* 'pluck', *marrmarr* 'twitch', *muukurr* 'rub', *ngarr* 'growl', *wanyburr* 'bark', *warrwarr* 'cramp' (cramps are generally composed of repetitions of a bodily function), *wirr* 'graze', *wirrwirr* 'stagger', *wukurr* 'rub', and possibly *wiyarr* 'tired' (which could be seen as being ideally composed of numerous repetitions of yawns, etc.), and *mungurr* 'jealous'. Another semantic theme that recurs in PVs ending in *rr* is that of movement (somewhere or other in the process) which involves contact at a point, as in *yaarr* pull, *daarr* 'arrive at', *dibirr* 'turn over', *duurr* 'bump', *jajurr* 'meet', *jukurr* 'poke', *karr* 'crack', *ngurrngurr* 'drown', *warlirr* 'lie down', *yuwurr* 'descend', and possibly *warirr* 'sting' and *karrirr* 'spit'. *Kinyirr* 'sneeze' is not exceptional.
- r-final PVs also tend strongly to denote continuous actions (virtually none designate states), which may involve (a) movement in a trajectory—dumbar 'fly', jingkar 'carry', kalkir 'swim', yiryir 'limp' and yur 'slide'; (b) bodily noises, usually uncontrolled—dur 'fart', karrngar 'cough', ngalarar 'snore', and possibly ngir 'breathe'; and (c) actions that involve actual or figurative movement in a straight trajectory—jibar 'twitch', jikir 'look at', kir 'scrape', kur 'embrace', lir 'peel', lur 'snatch', ngirngir 'point' and wirwir 'gather up'.
- PVs ending in stops tend to designate actions that are not continuous, and which are not made up of repeated subevents (although some are). Beyond this, I am unable to pinpoint any significant semantic features which associate with the different places of articulation of the stops, as in Gooniyandi (McGregor 1996f). The following lists of *j*-final and *b*-

⁷ Hosokawa (1991:207) and Metcalfe (1975:59) mention onomatopoeia in PVs in Yawuru and Bardi respectively, without going into details.

final PVs illustrate the association with non-continuous, non-iterated actions: bididij 'pierce', kalaj 'finish', kalaj 'shake feathers', kinyj 'shut', waj 'take', dubaj 'tear out', and yalyj 'coax'; and baab 'open', burrb 'dance', dimb 'marry', dub 'chop', dub 'set alight', dubdub 'shake', durdub 'full', durrb 'luck', jabijab 'itch', jardab 'crawl', jirrb 'poke', jub 'chop', jungurrb 'short winded', jurrb 'jump', kurrb 'pinch', laalb 'cook in hole', lanyb 'steal', larrblarrb 'smooth', nungkub 'ignore', rarrb 'scrape surface', rub 'pull out', rurrb 'go past', wiib 'watch', and yardab 'crawl'.

It goes without saying that the above identified phonaesthetic patterns are not invariable regularities, and there exist PVs ending in these segments that do not show the semantic features. The claim is merely that there is a statistical association between sound and sense (McGregor 1996f), and that the form-meaning associations in the final segments of PVs are not entirely arbitrary. Other regularities in root formation include reduplication (see §8.4.2), and historical residues of former suffixes—for example, *yaarrkaly* 'slide' looks as though it might be a cranberry morph involving the PV *yaarr* 'pull, drag along' plus the (meaningless, and unattested) formative *-kaly*. (Semantically, this is not entirely implausible: something sliding along might be regarded as being pulled by an indeterminate or imperceptible force.)

8.4 Stem-forming processes

PVs, as remarked on many occasions above, permit little morphological modification. They take no inflections, and the only morphological processes they undergo are stem-forming derivations, although of course they may host bound morphemes such as postpositions and enclitics that do not form lexical or grammatical words with them (see Chapter 9). As far as I am aware, there are just two morphological processes of PV stem formation: derivational suffixation and reduplication. Both of these processes of stem formation are by and large restricted in application to PV roots: there are no known stem forming processes that regularly construct PV stems from roots of other classes.

8.4.1 Preverb stem forming suffix -kaj CONT

There exists a single stem-forming suffix that can attach to a PV to form a new PV, ⁸ -kaj. This suffix conveys the meaning of continuous action, and indicates that the referent event extends temporally over a stretch of time. The same suffix also occurs with the same meaning in Jabirrjabirr and Nimanburru (Nekes & Worms 2006:247–248), ⁹ and it is quite obviously cognate with the Warrwa PV-stem-forming suffix -(ng)kay(a) which also marks continuous aspect (McGregor 1994c:48). Almost certainly it is also cognate with the Nyikina suffix of the same form, which attaches to PVs to indicate ongoing activity (Stokes 1982:344), and with the Yawuru intensifying suffix -kaja which, attached to PVs, marks the process as intense, iterative, progressive, frequent, and so on (Hosokawa 1991:213–214). ¹⁰

⁸ No other such suffix appears in my own corpus, nor in the corpora of earlier investigators such as Frs Tachon, Bischofs, Nekes, and Worms.

⁹ These authors refer to the morpheme as a particle, although it is attached to the PV in most examples they cite.

¹⁰ According to Nekes & Worms (2006:247), the Yawuru morpheme indicates continuous aspect. They go on to say that -*kaja* CONT is also found in the neighbouring Pama-Nyungan language Karajarri.

Only a relatively small number of PVs are attested with -kaj CONT, and it may be that this suffix is not fully productive, and cannot be attached across the board to PVs, including to all PVs with which it might be expected to occur. Table 8–1 shows the complete list of PVs known to occur with -kaj CONT; indication is also given of the meaning of the derived PV stem. The first four derived PVs are from in my own corpus, the others come from Nekes & Worms (1953). Strikingly, there is almost no overlap between the two sources: lakal-kaj 'be climbing' is the only derived PV represented in both corpora. Presumably other PVs could occur with this suffix, and consistent with this expectation, Nekes & Worms (1953) list a number of additional PVs in the closely related language Jabirrjabirr that also occur in Nyulnyul and that admit this derivational suffix.

Table 8–1: Preverbs stems involving -*kaj*

PV root	Gloss	PV stem	Gloss
kaw	'call out'	kaw-kaj	'be calling out, be singing'
ngank	'talk, speak'	ngank-kaj	'be speaking, be talking'
burrb	'dance'	burrb-kaj	'be dancing'
lakal	'climb'	lakal-kaj	'be climbing'
bilbil	'twinkle'	bilbil-kaj	'be twinkling'
ngungu	'make ngungu noise'	ngungu-kaj	'be making ngungu noise'
makily	'shake'	makily-kaj	'be shaking'
wirrkwirrk	'shout'	wirrkwirrk-kaj	'be shouting'
winany	'move'	winany-kaj	'be moving'
dalarr	'make noise'	dalarr-kaj	'be making a noise'
muk	'lame'	muk-kaj	'be going lamely'
wanak	'uncertain, ignorant'	wanak-kaj	'be ignorant'
nyun-nyun	'throb'	nyun-nyun-kaj	'be throbbing'
mur(r)	'chew'	mur(r)-kaj	'be chewing'
ngalarra	'snore'	ngalarra-kaj	'be snoring'
jirrm	'beat rhythm'	jirrm-kaj	'be beating rhythm'
jad	'chop'	jad-kaj	'be chopping'
jadjad	'chop'	jadjad-kaj	'be chopping'

The derived PV stem almost always occurs in CVCs employing the IV -N 'be', irrespective of the IV that the PV root occurs with. Thus, for example, *bilbil* 'twinkle, shine' and *ngalarra* 'snore' normally collocate with -J 'do, say', while the derived forms *bilbil-kaj* 'be flashing' and *ngalarra-kaj* 'be snoring' both collocate with -N 'be', as in (8–23) and (8–24). (8–25) and (8–26) also illustrate this observation, which is unsurprising given the semantic motivations for PV-IV collocations (see §11.2 below).

- (8–23) belbel gadj i-nen wōl
 bilbil-kaj i-n-in wul
 twinkle-CONT 3NOM-be-PRS water
 "The cloud flashes up by distant sheet-lightning." (Nekes & Worms 1953:377)
- (8–24) ibal ŋalara-gadj i-nen
 iibal ngalarra-kaj i-n-in
 father snore-CONT 3NOM-be-PRS
 'The father is snoring.' (Nekes & Worms 1953:536–537)
- (8–25) wamb djung-og djad djad-gadj i-nen wamb jungk-uk jad-jad-kaj i-n-in man fire-LOC chop-chop-CONT 3NOM-be-PRS "The man chops fire-wood." (Nekes & Worms 1953:536–537)
- (8–26) lakal-kaj mi-n-in climb-CONT 2MIN.NOM-be-PRS 'You are climbing.'

The corpora show just a handful of instances in which the derived PV collocates with a different IV. These are all from Nekes & Worms (1953), and involve the IV -JID 'go', as in:

- (8–27) ang-ēdj badelj gadj mi-djeden djān?
 angk-ij badily-kaj mi-jid-in-jan
 what-DAT turn-CONT 2MIN.NOM-go-PRS-1MIN.OBL
 'Why do you turn away from me?' (Nekes & Worms 1953:327)¹¹
- (8–28) bāb mōg gadj i-djed
 baab muk-kaj i-jid
 child lame-CONT 3NOM-go
 'The child is lame.' (Nekes & Worms 1953:725–726)

The derivational suffix -kaj CONT is occasionally attached to words of other classes, apparently deriving PVs. For example, the nominal determiner angk 'who, what' can take the suffix, deriving the PV angk-kaj 'do what', which also collocates with -N 'be', regardless of transitivity. This is demonstrated by the following examples, which indicate that there is no formal indexation of the difference in transitivity: intransitive 'do what' ((8–29) and (8–30)) and transitive 'do what to someone' (example (8–31)) are formally indistinguishable.

- (8–29) bin uriny angka-kaj i-n-in that woman what-CONT 3NOM-be-PRS 'What's that woman doing?'
- (8–30) angka-kaj mi-n-in what-CONT 2MIN.NOM-be-PRS 'What are you doing?'

11 This example is given under the headword *are* 'not', which is specified as Nyulnyul and Jabirrjabirr; the language provenance of the example itself is not indicated.

(8–31) angka-kaj i-n-in alik wukul minyaw what-CONT 3NOM-be-PRS sorry poor cat 'What's he doing to the poor cat?'

There is also a PV root ending in *kaj*, which could be historically an instance of the continuous suffix, but is now an unanalysable part of the lexeme. The word is *warrkaj* 'walk away'—no corresponding PV *warr* exists. ¹² However, as the following example illustrates, this PV occurs with -J 'do, say', rather than -N 'be'.

(8–32) way warrkaj i-n-ji ngay-ukun arri away walk:away 3NOM-CM-say 1MIN.CRD-ABL₂ not i-li-jal-an-ngay 3NOM-IRR-see-IMP-1MIN.ACC 'He walked away from me without looking at me.'

8.4.2 Reduplication

Reduplication is much more frequent and productive than derivational suffixation, and many PVs are attested in both plain and reduplicated forms. In the vast majority of attestations, reduplication of PVs is total—that is, the entire PV form is repeated—as appears to be the case in Bardi also, in which it seems that all or most PV reduplication is total (Metcalfe 1975:61; Bowern 2004a); by comparison, in Yawuru just three PVs reduplicate partially (Hosokawa 1991:408).

Except in one instance, no epenthetic vowel occurs between the two tokens of the root, even when sequences of three consonants arise, as in *jurrbjurrb* 'jump'. The exception is *kad* 'cut', which reduplicates to *kadakad* 'cut up, chop up' (compare *kird* 'block off', which reduplicates to *kirdkird* 'choke'). The vowel may have been added in order to keep the reduplicated form separate from the PV root *kadkad* 'tremble', or it could be an indication that the proto-form of the PV was vowel final.

Reduplication of PVs is semantically significant, and conveys an iterative meaning: the event consists of iterations of events of the type denoted by the root; PV reduplication does not seem to be ever used to indicate that the event was performed by or on a large number of individuals, as is often the case for verb reduplication. This observation is supported by the data in Table 8–2, a partial list of reduplicated PVs. The meaning difference between PV and reduplicated PV is almost entirely predictable.

¹² The temporal adverbial *mangkaj* 'always, all the time' also looks as though it might involve the continuous suffix -*kaj* as a frozen relic form (*mang* does not occur independently).

¹³ According to Metcalfe (1975:56), reduplication is the only type of morphological modification of preverbs in Bardi.

Table 8–2: Some reduplicated PVs in Nyulnyul

Root	Gloss	Reduplication	Gloss
bany	'shoot'	banybany	'shoot repeatedly'
dibirr	'turn over, roll over'	dibirrdibirr	'stir'
bard	'grasp in hand'	bardbard	'clench hand repeatedly'
dub	'blow, give blow to'	dubdub	'give repeated blows to, shake'
dujul	'hit with single blow'	dujuldujul	'pound, hammer, pulverise'
jad	'cut, incise'	jadjad	'chop at, hack'
jal	'split'	jaljal	'split in many places'
jirrb	'poke (e.g. with spear)'	jirrbjirrb	'poke repeatedly (e.g. with spear)'
karrngar	· 'cough'	karrngarkarrngar	'cough and cough'
kaw	'call out'	kawkaw	'call out repeatedly'
kir	'scrape'	kirkir	'scrape repeatedly'
lirr	'peel'	lirrlirr	'peel repeatedly (e.g. bark from tree)'
rarrb	'scrape surface'	rarrbrarrb	'repeatedly scrape surface, rake'
ruk	'undo, take off'	rukruk	'undo or take off repeatedly'
wirr	'graze'	wirrwirr	'scratch repeatedly'
yaarr	'pull'	yaarryaarr	'drag along'

Sometimes a degree of semantic unpredictability is involved, and a new event type is denoted, rather than just any iterated events of the type specified by the PV. This is the case for instance with *dibirrdibirr* 'stir', the reduplication of *dibirr* 'turn over, roll over': the reduplicated form is used only of the repeated rolling action involved in stirring a liquid; it is not used in reference to iterated instances of rolling over of a log. Other examples in which the reduplicated form involves restriction to specific subtypes of the range of events denoted by the unreduplicated lexical PV include *kirdkird* 'choke' from *kird* 'block', *kurkur* 'console' from *kur* 'embrace', *ngirngir* 'pant (as of dog, or after running)' from *ngir* 'breathe', and *nyimnyim* 'wink or blink' from *nyim* 'shut eye, blink'. Additional irregular semantic processes appear to be involved in these examples.

For a few PVs the semantic effect of reduplication is not obvious. The reduplicated stem sometimes does not designate an event that involves iteration of the action designated by the unreduplicated root. For instance, *jajurr* means 'meet together', as does the reduplicated *jajurrjajurr*; *jidin* means 'carry on shoulders', as does *jidinjidin*; *wanak* means 'confuse', as does *wanakwanak*. Presumably the reduplicated and unreduplicated forms do contrast in meaning—perhaps in durativity or intensiveness (see e.g. Hosokawa 1991:408–409 on Yawuru reduplication).

The above evidence indicates that reduplication is a lexical process, a stem forming process, with a semantic effect somewhat akin to that of the continuous aspect derivational suffix discussed in the previous section. Indeed, there are PV roots that undergo both processes, including *jirrm* 'beat rhythm': *jirrm-kaj* 'be beating rhythm' and *jirrm-jirrm* 'be

beating rhythm'. Unfortunately, data is too piecemeal to reveal semantic differences between the two lexicalisation processes.

Finally, it is remarked that the reduplication of a root belonging to another part-of-speech that can serve as a PV occasionally also serves as a PV. Here again the reduplicated stem generally conveys iterative meaning. Thus, the adverbial *banbirr* 'across', which means 'go across, go past' when used as a PV, reduplicates to *banbirrbanbirr*, 'twirl around and around'; by contrast, the partial reduplication *banbirrinbirr* invokes not the iterative sense, but that the event is performed by many individuals: 'surround (by a large number of people)'. Another example is the nominal *karrj* 'sharp', which means 'sharpen' and 'swear' as a PV; the reduplication *karrjikarrji* means 'swear at repeatedly'.

Typically both reduplicated and unreduplicated PVs occur with (some of) the same IVs (see §11.2 for discussion of the semantic basis of preverb-inflecting verb collocations). (In contrast to the situation for the continuous aspect derivational suffix -kaj no single IV occurs with all or most reduplicated PVs.) There are sometimes differences, and in such circumstances the reduplicated PV may have the potential to occur with more IVs than does the unreduplicated one. For instance, dibirr 'turn over' collocates with -M 'put' and -J 'do, say', while dibirrdibirr 'stir' occurs with -W 'give' in addition.

A number of PV roots are (or appear to be) the reduplications of meaningless formatives: that is, they are formally reduplications, but the forms that are reduplicated are not lexical roots. With one exception—namely *dumburl*, as in *dumburldumburl* 'clap hands together'—the formatives are monosyllabic. However, the formatives that are reduplicated are always heavy: usually they are closed monosyllables; occasionally they are monosyllables with a long vowel.

Most reduplicated roots designate events that are constituted by iterations of component subprocesses, and thus satisfy the same general semantic characterisation as reduplicated stems. Again these reduplications are nearly always total, and it is rare for there to be an epenthetic vowel separating the two instances of the formative: bilbil 'shine, twinkle', barbar 'inflict numerous wounds on oneself (e.g. in sorrow for a person who has died)', birrbirr 'chafe', budbud 'twitch', didid 'coil up', jabijab 'itch', jinjin 'mock', kadkad 'tremble', kurrkurr 'rumble', marrmarr 'twitch', mukmuk 'limp', nyilnyil 'be curled, be tangled', nyunnyun 'ache', warrwarr 'cramp', wilywily 'wag', wirwir 'gather up', and yuuyuu 'console'. Just a few reduplicated roots are not readily construed as inherently iterated events: kinykiny 'commit suicide', kudkud 'bend over', mirdmird 'kneel', larrblarrb 'make smooth', and ngurrngurr 'drown'.

8.4.3 Preverbs derived from roots of other classes

As mentioned on p. 338 above, there are no regular morphological processes whereby roots of other parts-of-speech can be converted to PV stems. In addition, a small number of roots belonging to other parts-of-speech can 'function as' PVs: that is, they can occur in the syntagmatic environment typical of PVs. These could be regarded as derived PVs; however, there is no strong evidence that root reclassification is involved: such lexemes may be regarded as nominals (or whatever), which simply serve in grammatical relations typically borne by words of the PV category.

A few roots of other parts-of-speech are not themselves able to serve as PVs, but a PV stem may be derived from them by some morphological process. Thus, as remarked in §5.3, the instrumental postposition -ang occasionally serves as a PV derivational morpheme. The

nominal *ngank* 'word, language', for example, always occurs in the derived form *ngank-ang* 'speak' when it serves as a PV; the nominal *dukurl* 'red ochre' likewise occurs in the derived form *dukurl-ang* when serving as the PV meaning 'paint'; and similarly *maad* 'play' must occur with either the instrumental *-ang* or the locative *-uk* postposition. Only in cases such as these, where there is overt formal indexation of a change of part-of-speech membership is it useful to recognise derivation.

There is at least one PV ending in the phoneme sequence /ang/ that looks as though it might involve the postposition -ang INS, but for which no root without the postposition is known to exist: jinajinang 'mock'. It is possible that this form represents the lexicalisation of a previous morphologically analysable form.

8.5 Concluding observations: preverbs with other bound morphemes

As already mentioned, PVs are occasionally found in other grammatical environments than in CVCs, in which case they may take morphemes normally associated with words of other classes. Thus they are occasionally found with nominal stem-forming suffixes and with enclitics; somewhat more commonly they occur with postpositions. These possibilities are dealt with in some detail in Chapters 4 and 5 above and Chapters 9 and 13 below; see also §8.2. For convenience we briefly reiterate the possibilities (with minimal exemplification and discussion).

The only nominal stem-forming suffix known to occur with PV roots is -id CHAR (see §4.5.1.1), the agentive suffix, that derives a nominal stem meaning 'someone/something characterised by engagement in the activity', as in *lanyb-id* 'stealer' (see (4–76)).

All postpositions with the exception of *-mardikan* ALL_2 and *-mirr* PER may be hosted by PV roots or stems, viz: ERG (see §5.2), INS (see §5.3), COM (see §5.4), DAT (see §5.5), LOC (see §5.6), ABL_1 (see §5.7), ABL_2 (see §5.8), ABL_3 (see §5.9), ALL_1 (see §5.10), TEM (see §5.13), and SEM (see §5.14).

PVs appear to be nominalised when they occur with either nominal stem-forming suffixes or postpositions: they apparently represent actions as abstract entities, rather than as events. There is a certain amount of evidence suggesting that they belong to embedded or nominalised clauses, at least when postpositions are attached to them, even though they are rarely found in combination with other phrases and words that might form clauses with them—see Chapter 13.

The only enclitic other than a postposition that is known to occur with PVs is *-mad* EMP (see §9.3.1 below), which attaches to a PV in its usual syntactic environment, preceding an IV. There is no effect on the word class of the PV, nor is there any change in its meaning.

9 Minor word and morpheme classes

9.1 Introductory remarks

In this chapter we discuss four 'minor' classes of words and morphemes: particles, enclitics, interjections and conjunctions. These classes are 'minor' in the sense that they have few members—between about a dozen and a score—although they are probably not entirely closed. Nor are they necessarily minor in relation to their frequency of usage. These classes include some of the most important, useful, and/or significant words, that are presumably among the earliest to be learnt by children: words such as 'yes', 'no', 'maybe', 'gimme', 'here you are', and the like.

Three of the four classes are word classes; the fourth class, enclitics, consists of bound forms, which constitute of themselves distinct grammatical words, grammatically but not distributionally independent of the words that host them (see further p. 376 below). They may be likened to particles lacking the potential of free occurrence.

These four classes comprise what are in some senses the most syntactically independent words of the language. Interjections, for instance, generally occur as the sole item in the (minor) clause to which they belong. Particles, enclitics and conjunctions are grammatical items that do not normally enter into syntagmatic relations with other members of their class; nor do they form grammatical units with them, as do nominals, verbals, and adverbials. Thus if more than one item of a given type occurs in a construction, they will independently enter into grammatical relations with other linguistic units, rather than together form a separate linguistic unit. Particles and enclitics generally enter into relations with whole grammatical units, which they hold in their scope. They specify a slant on the scoped unit, indicating how it is to be taken (see §2.4; McGregor 1997b:64–70). Conjunctions link certain types of grammatical units to one another, sometimes (but not always) to form larger complex units. (Postpositions could also be grouped along with these four classes; they are treated separately in Chapter 5 primarily for expository purposes.)

Particles, interjections and conjunctions are largely independent morphologically as well as syntactically. Inflected forms do not exist, and derived or compound forms are rare; words of these classes are almost always found in their root forms, although they can serve as hosts for enclitics and postpositions.

9.2 Particles

Particles were characterised in §2.2 in terms of their typical syntactic potential: they scope over other grammatical units (words, phrases and clauses); they are unable to enter into

syntagmatic relations of any other type. (See also §12.5.) The notion of scope is thus of primary significance for these words, and permits us to distinguish them from other words which can also hold clauses in their scope, but may serve in other grammatical uses as well—e.g. adverbials such as *banangkarr* 'now'. Morphologically also they show little variability; they are non-inflecting.

Thus particles fulfil interpersonal functions (see §2.4): they indicate the speaker's modifications of, or slants on, the proposition expressed by the clause (usually), or (less often) their modification of something contained within the clause, such as an NP or adverbial. These modifications are in terms of: (i) the status of the proposition—whether it is true or false; (ii) its illocutionary value—how it is intended to be taken interactively (e.g. as a statement, question, or whatever); (iii) its rhetorical value—how the clause (or a part thereof) is integrated into the expectations, beliefs, and suppositions of the discourse interaction.

It must be stressed that I am not suggesting that these are, *per se*, interpersonal meanings. If anything, they are logical in nature, relating as they do directly to issues of truth, falsity, or probability of a proposition. What is suggested is, rather, that the ways in which forms expressing these meanings are **used** is to provide interpersonal modification of the clause or some smaller unit. This is regardless of the fact that their inherent meanings have nothing to do with the interpersonal domain of meaning. In what follows we characterise both the inherent (internal) meanings of each Nyulnyul particle, and describe the types of interpersonal relations they typically discharge.

9.2.1 arri 'not, no'

Arri is the unmarked negative word in Nyulnyul. It is normally used as a clausal negator, negating the proposition expressed; in this context it is probably best glossed 'it is not the case that'. However, for convenience and simplicity, I will use the single word gloss 'not'. Less frequently it is used as a phrasal negator, where it is best glossed 'no' or 'not'. If the clause is verbal—and thus designates a situation (see §2.4 and §12.3)—it indicates that the referent situation did not occur, is not occurring, will not occur, or whatever.

As has been pointed out by many scholars (e.g. Strawson 1952:7; Givón 1984:323–324; McGregor 1997b:226–227; McGregor & Wagner 2006; Miestamo 2003:171–172; Israel 2004:706), there is an important difference between negative and positive clauses. Negative clauses are context-bound in the sense that they invoke the presupposition that the situation may have occurred, and contradict this presupposition; they are never pragmatically neutral, as the corresponding positive clauses may be. Clauses such as (9–1)–(9–3) below occur in contexts in which there are presuppositions or expectations to the contrary: that the person might climb up, that the speaker might cut his beard, and that he would have gone home, respectively. It would be possible, on the other hand, to utter the corresponding positive clauses without invoking expectations to the contrary—that the person might not climb up, that the speaker might not cut his beard, or that the person didn't go home. Not only are negative clauses pragmatically marked, but also they are formally marked, as in the majority of the world's languages. Thus, whereas negative clauses are always marked by a negative particle, positive clauses are not normally overtly marked by a positive assertive particle.

- (9–1) arri lakal mi-li-j not climb 2MIN.NOM-IRR-climb 'Don't climb up.'
- (9–2) arri kard nga-la-w jan jiidi not cut 1MIN.NOM-IRR-give 1MIN.OBL beard 'I don't cut my beard.'
- (9–3) arri i-li-jid-an bur-ung i-ng-kudal not 3NOM-IRR-go-IMP place-ALL₁3NOM-PST-lose 'He didn't go home; he got lost.'

In Nyulnyul a clause negated by *arri* 'not, no' is unspecific as to whether it is just the occurrence of the situation that is denied, or whether the actor's intent to perform it is being denied in addition. Context alone distinguishes between these two interpretations. For example, (9–4) was given in response to the prompt given in the third line; the second clause engenders the interpretation that the person did not intentionally attempt to pull the large rock onto himself. This is not, however, precluded: all that is specified is that the person did not pull the rock—that they did not even attempt to do so is not specified, but inferred.

(9–4) arri yaarr i-la-k-an i-ny-jalk kalb not pull 3NOM-IRR-carry-IMP 3NOM-PST-fall up ni-kard-uk 3MIN-body-LOC 'He didn't try to pull it over; it fell on top of him.'

What cannot be an admissible interpretation of (9–4) is a specific denial of the claim that the performance was attempted, while the event did occur. To express this meaning—that is to deny intentionality or that an attempt was made to perform the act—a complement construction should be used, as illustrated by (9–5) (see §13.4.2.2 for further information). It is not known for certain whether the occurrence of the situation (running over the dog) is coded or pragmatically implicated and defeasible; I strongly suspect the latter.

(9–5) arri liyan nga-la-m-an ma-janb-in kinyingk yiil not like 1MIN.NOM-IRR-put-IMP INF_P-step:on-INF_S DEF dog 'I didn't mean to run over the dog.'

The scope of *arri* 'not' typically includes the whole clause bar the irrealis marker, that is, NPs and PPs in participant roles and other grammatical relations such as secondary predicates, spatial and temporal dependents, and so on. Thus (9–6) negates the proposition

expressed by the whole clause, which concerns the entire situation referred to, and not just the nuclear situation made up of the event and its participants. Specifically, the NP *arriyangkang jiy marlburl* 'without your things' is included in the scope of *arri* 'not': the addressee is not being instructed not to go, but not to go without their things. Likewise, (9–7) does not suggest that the addressee should say nothing at all.

- (9–6) arri mi-li-jid arriyangkang jiy marlburl not 2MIN.NOM-IRR-go without 2MIN.OBL things 'Don't go without your things.'
- (9–7) arri mi-la-ngank ngarrij-ang not 2MIN.NOM-IRR-speak hard-INS 'Don't talk loudly.'

Often, as in the above examples, *arri* 'not' occurs clause initially, and immediately preceding the inflecting verb (in an SVC) or preverb (in a CVC). However, all of these examples involve an ellipsed NP or PP denoting the Actor (see §2.4 and §12.7.1). If there is an overt NP or PP in the clause discharging this role, it normally occurs in initial position, as in the following examples:

- (9–8) ngay-in nga-nga-lakarr-irr ngay-in arri 1MIN.CRD-ERG 1MIN.NOM-PST-hear-3AUG.ACC 1MIN.CRD-ERG not nga-la-jal-an-irr 1MIN.NOM-IRR-see-IMP-3AUG.ACC 'I only heard them, I didn't see them.'
- (9–9) mangir waalk rangkirr-rangkirr-uk nga-jarr-nga-jarr-in always sun early-early-LOC 1MIN.NOM-arise-1MIN.NOM-arise-PRS jan malirr arri i-li-jarrjarr
 1MIN.OBL wife not 3NOM-IRR-arise
 'I always get up early, but my wife does not.'

Thus the least marked position for *arri* 'not' is immediately preceding the inflecting verb (in a SVC) or preverb (in a CVC); the frequency of clause-initial position is a consequence of widespread ellipsis of given NPs. What immediately follows *arri* 'not' seems to constitute the focus of negation (Taglicht 1984:1–11; McGregor 1990:458). If this is so, the unmarked focus of negation is on the verb; focus on anything else is more marked. (9–10) illustrates this: in this example it is clear that there is contrastive (and thus marked) focus on *wurrumbang* 'much', as against *murrul* 'little'. The occurrence of the nuclear giving event itself is not denied; rather what is being denied is the entire situation, involving particular entities in specific relations to the event. Similarly for (9–11): what is asserted is that a possum did not come out—something might reasonably have been expected to come out of the hollow log when it was hit, and this clause asserts that whatever it was, it was not a possum. This point emerges even more clearly in (9–12), which denies the proposition that

¹ If the order of *langkurr* 'possum' and *arri* 'not' had been reversed in this example, *langkurr* would normally be interpreted as thematic and definite, and the reading would be 'but the possum didn't come out'. In this instance the expectation would be that the possum would have done something, and this would have been contradicted by the negated clause. The difference in expectations involved in each case accounts for the contrast between the two word orders (see also McGregor 1990:368).

women can go to some particular sacred site; men, by contrast, may go there. (Observe also that this clause is clearly 'about' this place—accounting for the thematising of the NP kinyingk bur 'DEF place'.)

- (9–10) arri wurrumbang ku-li-rr-a-w-ngay murrul not much 2NOM-IRR-AUG-CM-give-1MIN.ACC little wa-rr-a-w-ngay 2NOM.FUT-AUG-CM-give-1MIN.ACC 'Don't give me too much; give me a little.'
- (9–11) *i-rr-i-dam-in bin bardangk arri langkurr marl* 3NOM-AUG-CM-hit-PRS that tree not possum emerge *i-la-k* 3NOM-IRR-carry 'They are hitting the tree, but no possum comes out.'
- (9–12) kinyingk bur arri uriny-in ya-li-rr-jid ngurlangurl
 DEF place not woman-ERG lPL.NOM-IRR-AUG-go sacred
 bur
 place
 'This place is not for women to go to, it's sacred ground.'

In examples such as these with marked focus, the observation that a pragmatic presupposition is involved is brought out particularly clearly: the occurrence of a situation of the specified type is presupposed, but the specific filler of the highlighted role is contested. For further discussion of the position of particles in clauses see §12.5.

Arri 'not' is used to negate verbless as well as verbal clauses. An unusual construction is employed in negated verbless presentative clauses (roughly, existential clauses—see §12.2.2): *arri* 'not' is followed immediately by an oblique pronominal indexing the thing in respect of which the entity does not exist, in the vicinity of which, or in whose 'possession' it is not found—in other words, the person, place, thing, or whatever, in respect of which the entity is absent or lacking. (See McGregor 2010b for discussion of this construction in Nyulnyulan languages.) The oblique pronominal cannot be separated from the negative particle.² Whether it is encliticised to the particle, or forms a set of inflected or (less likely) derived forms of the particle is uncertain. An example is:

(9–13) arri-jin wul in-ik walard not-3MIN.OBL water this-LOC bucket 'There's no water in the bucket.'

In negative presentative clauses arri 'not' followed by the oblique pronominal is usually clause initial, as in the above example. Infrequently it follows the element designating the thing in respect to which the entity is absent (as in (9-14)), and even less frequently, the NP designating the entity presented (as in (9-15)).

A comparable situation exists in Warrwa, where the negative particle *mali*- 'without' takes one of a set of regular pronominal suffixes or enclitics cross-referencing the entity experiencing the lack. However, this particle cannot be identified with the regular negative particle *marlu* 'not, no'.

- (9–14) kinyingk bardangk arri-jin bilabil
 DEF tree not-3MIN.OBL leaves
 'This tree has no leaves.'
- (9–15) mukuny arri-jin na-alm-uk hair not-3MIN.OBL 3MIN-head-LOC 'There's no hair on his head.'

In relational clauses (see $\S12.2.3$) *arri* 'not' negates the attribution of a property of an entity, as in (9-16) and (9-17), or the identification of one entity with another, as in (9-18). The usual position of *arri* 'not' is between the two NPs, as in the first two examples.

- (9–16) nga-marl jan arri iik 1MIN-arm 1MIN.OBL not sore 'My arm is not sore.'
- (9–17) kinyingk arri rinyariny kinyingk wamb manyjang
 DEF not sensible DEF man mad
 'Man isn't sensible; he's stupid.'
- (9–18) nga-mungk nga-ni-ny-jal-juy marriny
 1MIN-believe 1MIN.NOM-CM-PST-see-2MIN.ACC walk
 mi-ny-jid wara waalk arri juy
 2MIN.NOM-PST-go one day not 2MIN.CRD
 'I thought I saw you going along the other day, but it wasn't you.'

Arri 'not, no' can also occur clause initially, prior to the NP designating the entity attributed on, as in (9–19) and (9–20).

- (9–19) arri ngay burlji not 1MIN.CRD tired 'I'm not tired.'
- (9–20) arri ngay maj juy maj not 1MIN.CRD boss 2MIN.CRD boss 'I'm not the boss; you are.'

The explanation invoked above for the contrasting orders of *arri* 'not' in verbal clauses applies equally to verbless clauses. For (9–19) and (9–20) apparently invoke marked focus on the speaker: it is not the speaker who is tired, or the boss, but rather someone else. (9–20) may also be compared with (9–21), which involves gapping: the NP designating the quality has been ellipsed, and is given in the following clause:

(9–21) arri ngay juy layib not 1MIN.CRD 2MIN.CRD good 'Not me, you're good.'

The scope of *arri* 'not' never extends beyond the boundaries of an independent clause. Thus if two independent clauses occurring in sequence are both negative, both will be negated by *arri* 'not'. This is illustrated by (9–22) and (9–23) below. By contrast, in (9–24),

just one of the clauses is marked by *arri* 'not', and even though the second clause is in the irrealis mood, it is clear from context that it is not negated.

- (9–22) kinyingk may arri layib kalkarr-in uriny arri i-la-wid DEF food not good widow-ERG woman not 3NOM-IRR-eat 'This food is no good for widows to eat.'
- (9–23) arri marrkin nga-li-j arri nga-la-wid jan not hunger 1MIN.NOM-IRR-say not 1MIN.NOM-IRR-eat 1MIN.OBL may food 'I'm not hungry; I won't eat my food.'
- (9–24) arri mi-li-jid mi-la-kard wul-uk jimbin not 2MIN.NOM-IRR-go 2MIN.NOM-IRR-enter water-LOC inside 'Don't go; you might drown in the water.' (Or 'Don't go lest you drown in the water.')

Any unit that falls within the boundaries of an independent clause will normally be included within the scope of the negative. Thus, a dependent or embedded non-finite clause will normally fall within the scope of *arri* 'not', as in:

(9–25) arri layib ma-dam-an-ung murrulmurrul baab not good INF_P-hit-INF_S-ALL₁ little child 'It's no good to hit little children.'

Other particles, by contrast, are not usually included within the scope of *arri* 'not', which is typically the innermost particle, as in (9–26).

(9–26) wamb-in nyanangkarr arri i-li-ny man-ERG perhaps not 3NOM-IRR-get 'The man will probably nearly miss it.' (More literally, 'The man will probably not get it')

Arri 'not' is not restricted to use as a clausal particle. It can hold other linguistic units, including NPs, nominals, and adverbials, in its scope. In such circumstances, the verb is normally in realis mood, and the clause is formally positive.

In case *arri* 'not' has scope over an NP there are two possibilities. First, it can negate the attribution of a property of an entity within an NP, as in the following example (see also lines (2) and (60) of Text 2), where the referent of the NP is asserted as not belonging to a particular person.

(9–27) arri jin wil i-ni-ng-kid not 3MIN.OBL meat 3NOM-CM-PST-eat 'It was not his meat that he ate.'

Alternatively, the property that is negated need not be a part of an NP. Thus (9–28) is a secondary predicate construction in which the negation of the nominal (*arri maal* 'not hot') designates the property attributed of another NP in the clause, in this instance, the Undergoer. The negation of the property may relate to a full clause, as in (9–28), where it

indicates failure to accomplish the situation—much in the way of the corresponding *but no good* in colloquial English.

- (9–28) liyan nga-n-m-in jan dii arri maal like 1MIN.NOM-CM-put-PRS 1MIN.OBL tea not hot 'I like my tea lukewarm.'
- (9–29) jad-jad nga-n-ji kaamb arri layib cut-cut 1MIN.NOM-CM-say pandanus not good 'I hacked and hacked at the pandanus, but without success.'

Second, *arri* 'not' can negate the existence of the referent of the NP, as in (9–30) and (9–31).

- (9–30) arri bardangk kinyingk-uk bur maarr-manyjin not tree DEF-LOC country grass-only 'No trees are in this country, only grass.'
- (9–31) bin-ik i-na-lungk kaard arri wul that-LOC 3NOM-CM-dig still not water 'He dug there, but no water.'

Adverbial scope of the negative *arri* 'not' is illustrated by example (9–32), where the location designated by a spatial adverbial is negated. Thus it is stated that the referent situation is to occur elsewhere than the place designated by the adverbial—i.e. outside, rather than inside.

(9–32) ngank-id-in i-n-di-jirr baab maad-uk word-CHAR-ERG 3NOM-CM-say-3AUG.OBL child play-LOC wa-rr-a-kal arri jimbin 2NOM-AUG-CM-wander not inside "The teacher said to the children, "You lot go and play, not inside.""

Arri 'not' is occasionally used as interjection that serves as the sole unit in a minor clause, as in line (4) of Text 1 (see §12.2.1 for further discussion); arriyangk 'no' is, however, the more normal choice in this context (see next subsection). It is usual in negative replies to polar questions that arri 'not' is used in this way, where it translates as 'no'. This is illustrated in example (9–33).

(9–33) Q: nganyji mi-ni-ny-jal kinyingk wamb
INT 2MIN.NOM-CM-PST-see DEF man
'Did you see that man?'
A: arri arriyangk nga-li-jal-an
not no 1MIN.NOM-IRR-see-IMP
'No, I didn't see him.'

A similar use is illustrated in (9–34); the difference is that in this instance the minor clause is juxtaposed to the preceding clause, reiterating that the situation it refers to did not come about.

³ The same use is available for the negator *arra* 'not' in Bardi (Aklif 1999:21).

(9–34) nga-mungk wul i-la-r-an i-la-r-an
1MIN-know water 3NOM-IRR-poke-IMP 3NOM-IRR-poke-IMP
wara waalk arri
other day not
'I thought it would rain the other day, but no (it didn't).'

Alternatively, as a minor clause in a complex sentence *arri* 'not' may be used to contradict a presupposition of the preceding discourse, as in lines (19) and (79) of Text 2.

Finally, it is remarked that there are a handful of inexplicable uses of *arri* 'not'. Thus, in line (32) of Text 2 *arri* 'not' appears to be used is an intensifying affirmative rather than as a negator. This perhaps finds a parallel in Bardi: Aklif (1999:21) identifies an interjection *arra*, glossed 'imagine, this happened'; the example provided suggests that it is used to express surprise, perhaps in a similar way to English *Oh no!*. Thus it may be that it is not a separate morpheme distinct from *arra* 'not', but an unusual usage of the negator. Given absence of other examples, I prefer to adopt this analysis for Nyulnyul, rather than identify another morpheme. Other inexplicable, perhaps idiomatic, uses of *arri* 'not' can be found in lines (18) and (54) of Text 2, where the particle is followed by the comitative postposition *-nyirr*.

9.2.2 arriyangk 'no, don't'

Although synchronically monomorphemic, etymologically *arriyangk* 'no, don't' is clearly constructed from the negative particle *arri* 'not' plus the frozen formative -*yangk*, which can be assigned no meaning in modern Nyulnyul.⁴

The uses of this particle overlap somewhat with the uses of *arri* 'not'. The primary difference is that whereas the latter usually serves as a propositional modifier, and rarely functions as an interjection, *arriyangk* 'no, don't' functions more commonly as an interjection (i.e. as the sole constituent of a minor clause—see §12.2.1), and less commonly as a propositional modifier. Nevertheless, it is sometimes used as a clausal negator, and for this reason is treated as a particle rather than interjection.

As a clausal negator *arriyangk* 'no, don't' is virtually restricted to negative commands, and thus normally translates as 'don't', as in:

- (9–35) arriyangk mi-li-jid way don't 2MIN.NOM-IRR-go away 'Don't go away.'
- (9–36) arriyangk mi-la-w kumbarr don't 2MIN.NOM-IRR-give money 'Don't give him money.'

The only exception in the corpus is:

(9–37) arri arriyangk nga-li-jal-an not no 1MIN.NOM-IRR-see-IMP 'No, I didn't see him.'

⁴ One likely possibility is that it can be identified with the determiner *angk* 'who, what', the Nyulnyul reflex of proto-Nyulnyulan *yangka 'what'.

How precisely clauses negated with *arriyangk* 'no, don't' differ semantically from clauses negated with *arri* 'not' remains unclear. One possibility is that *arriyangk* is primarily a phrasal negator and that it negates clauses only secondarily, as a consequence; indeed, it might be better glossed 'nothing' than 'no, don't'. Thus, its use in negative commands might be as a type of softener, ameliorating the forcefulness of the command. Some evidence in favour of this suggestion comes from the privative use of the form *arriyangkang*; however, as per §5.3 above, it is not entirely certain that this form is morphologically analysable as *arriyangk-ang* (no-INS), and it seems best to treat this form synchronically as a different lexical root (see next subsection for discussion).

The primary use of *arriyangk* 'no, don't' is, as mentioned above, as an interjection, where it is the sole word of a minor clause serving as a negative response to the previous utterance. Although there is no conversational data on which to back up this claim, some support comes from brief elicited exchanges such as the following:

(9-38)Q: nganyji mi-lakarr-an-ngay 2MIN.NOM-hear-PRS-1MIN.ACC A: arriyangk arri nga-la-lakarr-juy not 1MIN.NOM-IRR-hear-2MIN.ACC Q: 'Did you hear me?' A: 'No, I can't hear you.' (9-39)U: kunard daarr wa-rr-a-r come 2NOM-AUG-CM-pierce tomorrow wa-rr-i-jal-ngay yii 2NOM-AUG-CM-see-1MIN.ACC yes

R: arriyangk nga-ngka-jal jan babarl kunard no 1MIN.NOM-FUT-see 1MIN.OBL brother tomorrow

U: 'Come and see me tomorrow, will you?'

R: 'No, I'm going to see my brother tomorrow.'

In (9–38), A negates the proposition expressed by Q. On the other hand, R in (9–39) expresses a refusal to undertake the requested activity. R in (9–40) represents a refusal of the offer O. (Although the proposition expressed in the preceding clause is negated in this instance, one presumes that the exchange would be equally possible had the first utterance simply been the minor clause *nyaa* 'here!'.)

(9–40) O: *nyaa wa-n-nyu in* here 2MIN.NOM-CM-catch this

R: arriyangk

no

O: 'Here, take this!'

R: 'No!'

5 This contrast exists in Gooniyandi in the opposition between the two negatives *mangarri* 'not' and *marlami* 'nothing, without' (see McGregor 1990:488–496).

Arriyangk 'no, don't' can also be used simply to express a negative feeling, as in line (21) of Text 2—line (13) of the same text is similar: the emotion experienced by the emu is clearly negative towards the brolgas.⁶

When *arriyangk* 'no, don't' serves as a minor clause, it permits interpersonal modification by means of a particle: (9–41) could be uttered in response to a question such as *nganyji i-n-dam-juy* (INT 3NOM-CM-hit-2MIN.ACC) 'did he hit you?' or a statement such as *arri nga-mungk i-na-wirim kinyingk bardangk* (not 1MIN-know 3NOM-CM-point this tree) 'I don't know whether he pointed at the tree'.

```
(9–41) nyanangkarr arriyangk
maybe no
'Maybe not.'
```

Sometimes *arriyangk* 'no, don't' occurs in an elliptical clause lacking a VP (see §12.7.1). For instance, in (9–42) the final two words apparently constitute an elliptical clause from which *nga-mungk* 'I believe' has been ellipsed, being given (i.e. predictable). (The full clause would be *ngay-in arri nga-mungk* (I-ERG not 1MIN-believe) 'I don't believe'.)

```
(9–42) warli-in irr-mungk juy-in mi-n-dam everyone-ERG 3AUG-believe 2MIN.CRD-ERG 2MIN.NOM-CM-hit ngay-in arriyangk 1MIN.CRD-ERG no 'They all think you hit him, but I don't.'
```

The two instances of *arriyangk* in line (200) of Text 2, which translate 'don't' may be elliptical clauses. This is less certain in the case of line (95) of the same text, where *arriyangk* appears to be used as an NP negator, denying not the existence of a referent for the NP, but rather that entities of the particular types should be involved in situations of relevant types (i.e. consumption), mentioned in the preceding text.

Finally, in just a few instances *arriyangk* 'no, don't' is attributed of an entity, with the implication that it is useless. Both examples come from Text 2; one of these is repeated here for convenience:

```
(9–43) arri mi-li-miimii wil / nimal jii arriyangk / not 2MIN.NOM-IRR-seek meat arm 2MIN.OBL no 'You won't hunt meat; your arms are useless.'
```

9.2.3 arriyangkang 'without'

As remarked in the previous subsection and §5.3, this form appears to be synchronically monomorphemic, even though it evidently derives historically from the attachment of the INS postposition -ang to arrivangk 'no, don't'. Arrivangkang is used in NPs as a privative marker, and hence the gloss 'without'. It always occurs initially in an NP. As the following

⁶ An interjective use of *arriyangk* 'no, don't' that is not attested in the Nyulnyul corpus is in responses to information questions. In various Australian Aboriginal languages—including Warrwa, Gooniyandi (McGregor 1990:289–290), and the Arnhem Land language Gurr-Goni (Green 1995:150)—a negative particle is often employed in answers to information questions, prior to the provision of the requested information. Thus, in response to 'Where did you go yesterday?' one might say 'No, we went to the river.'

examples illustrate, the privative NP may modify another NP (as in (9–44) and line (14) of Text 5), or it may modify another NP via the nuclear situation of a verbal clause (as in (9–45)–(9–47))—that is, in a secondary predicate construction.

- (9–44) bin jin bin uriny arriyangkang wamb this 3MIN.OBL this woman without man 'This belongs to the woman without a husband.'
- (9–45) arri mi-li-jid way arriyangkang jii kumbarr not 2MIN.NOM-IRR-go away without 2MIN.OBL money 'Don't go without your money.'
- (9–46) burluman yu-ngku-rr-jimb arriyangkang wul cattle 3NOM-FUT-AUG-die without water 'The cattle will die without water.'
- (9–47) well / junk aa: marriny i-jid-in / arriyangkang ni-marl / well run and walk 3NOM-go-PRS without 3MIN-arm warang-ngirr karrambal / others-SEM bird 'Well, he runs and walks without wings, not like the other birds.'
- In (9–48) the privative NP indicates the manner in which the action was performed; it does not specify a quality of the Actor.
- (9–48) kinyingk wamb marriny i-ny-jid arriyangkang na-alm
 DEF man go 3NOM-PST-go without 3MIN-head
 'The man walked along crazily.'

In the negation of a clause with a privative NP (which of course falls within the scope of the negator), instead of *arriyangkang* 'without' the shorter form *arriyangk* 'no' sometimes occurs:

(9–49) arri nga-ngka-jid nyun-ung arriyangk motorcar not 1MIN.NOM-FUT-go there-ALL₁ no motorcar 'I can't go there without a car.'

The privative sense of *arriyangkang* 'without' is clearly not too dissimilar from the non-existential sense of *arri* plus oblique pronominal (see §9.2.1 above, §10.4, and §12.2.2): both indicate the absence of an entity in a particular context. The difference is that the latter has clausal scope, whereas the former has exclusively phrasal scope. *Arri* 'not' plus oblique pronominal is used in indexing or pointing to a 'gap' or absence in the world of reference where there is an expectation of something being present; *arriyangkang* 'without' does not serve in this pointing function.

9.2.4 arriban 'don't'

Unlike arri 'not' and arriyangk 'no', arriban is restricted in occurrence, and its meaning is quite clear. It occurs only in the non-past irrealis, and may be glossed 'don't' or 'won't'.

Most frequently it is used in negative commands—commands not to do something, as in the following examples:⁷

```
(9–50) arriban mi-li-j
don't 2MIN.NOM-IRR-say
'Don't do that.'
```

```
(9–51) arriban mi-li-j i-li-rr-ma-dam-inyj kinyingk-ung don't 2MIN.NOM-IRR-say 3NOM-IRR-AUG-REF<sub>p</sub>-hit-REF<sub>S</sub> DEF-ALL<sub>1</sub> jamiyun axe 'Don't give them axes lest they kill one another.'
```

However, it also occurs in other non-assertive speech functions, e.g. in non-second person commands. Thus, when the Actor is the first person, the negative clause constitutes a strong negation of intention—that the speaker (possibly along with one or more others) would not do the action, refuses to do it, or has no intention of doing it. This appears to be the case in the following two examples:

```
(9–52) arriban ya-li-rri-j
don't 1PL.NOM-IRR-AUG-say
'We won't say that.'
```

(9–53) arriban nga-li-j don't 1MIN.NOM-IRR-say 'I won't say that.'

When the Actor is a third person, responsibility for not performing the action is attributed to the hearer, and thus the construction glosses as 'don't let ...'.

(9–54) arriban i-li-j don't 3NOM-IRR-say 'Don't let him do it.'

Both *arri* 'not' and *arriyangk* 'no' also occur in negative commands. It is not clear how the three particles contrast semantically. Perhaps the difference lies in the forcefulness of the command, but there is insufficient evidence on which this assumption can be tested. It may or may not be significant that *arriban* 'don't' is not attested in commands to cease doing something—that is, to desist from doing some action which has already been embarked upon—where only *arri* 'not' occurs. However, *arriban* is also used in the context of commands not to repeat an action in the future, as (9–52) and (9–53) above suggest.

Although I treat *arriban* as a root, it clearly involves *arri* 'not'. Presumably it derives historically from a compound of *arri* 'not' and the adverbial *baan* 'thusly'; this accords well with its meaning.

9.2.5 nganyji (INT) 'is it the case that?'

This modal particle marks the clause as a polar interrogative. Nganyji 'is it the case that?' appears to satisfy the same word order generalisations as *arri* 'not': it often occurs in clause-initial position, as in (9–55)–(9–57), and less frequently following the first unit, as in (9–58) and (9–59). These generalisations hold equally in verbal and verbless clauses.

- (9–55) nganyji i-n-dam-juy
 INT 3NOM-CM-hit-2MIN.ACC
 'Did he hit you?'
- (9–56) nganyji mi-lakarr-in-ngay
 INT 2MIN.NOM-hear-PRS-1MIN.ACC
 'Can you hear me?'
- (9–57) nganyji juy bulj INT you tired 'Are you tired?'
- (9–58) wajbal nganyji i-n-in in-ik white:person INT 3NOM-be-PRS this-LOC 'Was the white person there?'
- (9–59) juy nyi-im nganyji iik 2MIN.CRD 2MIN-eye INT sore 'Are your eyes sore?'

In verbal clauses *nganyji* INT usually immediately precedes the VP, while in verbless clauses it normally immediately precedes an attributing or identifying NP. This seems to be its unmarked position. If the VP is a CVC, *nganyji* precedes the entire unit, as in (9–60). It almost never follows the verb in a verbal clause, or the attributing or identifying NP in a verbless clause. What follows *nganyji* INT is the focus of the interrogative (see also §12.5.2). Thus in the unmarked case interrogative focus is on the verb or attributing or identifying NP; focus on anything else is marked, and invokes a presupposition, as in (9–61) and (9–62). In (9–61) the point of the question is whether the speaker went alone or with someone else, not whether they went at all; and in (9–62) it is the addressee's knowledge that is at issue, not the status of the other man as a medicine man (which is presupposed).

- (9–60) nganyji maal mi-barnj banangkarr
 INT hot 2MIN.NOM-exchange today
 'Are you hot today?'
- (9–61) nganyji ngidirrngin mi-ny-jid
 INT alone 2MIN.NOM-PST-go
 'Did you go alone?'

⁸ Nekes & Worms (1953:772, 773) give the forms *nadj-ad* (*ngajad*) 'whether, if' and unglossed *nadje* (*ngaji*), which they characterise as interrogative particles; these forms are not attested in my corpus. (According to Claire Bowern (pers.comm.) Bardi speakers informed her that these were probably mistakes.)

(9–62) nganyji nyi-mungk kinyingk wamb jalngkangurr INT 2MIN-think DEF man doctor 'Did you know he is a doctor?'

Very rarely nganyji INT follows the VP, as in (9–63) and (9–64); in the latter example there are two instances of the particle, one before the verb, one after it. Possibly nganyji INT serves as a type of tag in such cases—like the English invariant tag eh?.

- (9–63) yambun mi-ny-jid nganyji together 2MIN.NOM-PST-go INT 'Did you go together?'
- (9–64) wul nganyji mi-na-m-bany nganyji water INT 2MIN.NOM-CM-PST-full INT 'Are you full of water?'

Occasionally *nganyji* INT appears to serve other functions. First, as in (9–65)–(9–67), it occasionally functions in a manner reminiscent of a complementiser (see also fn. 8). However, we cannot rule out the possibility that in examples such as this *nganyji* INT is still functioning as an interrogative marker within the framed clause (see §13.4.1 for more on framing).

- (9–65) nga-ngki-jid nga-ni-jal nganyji i-n-in 1MIN.NOM-FUT-go 1MIN.NOM-CM-see INT 3NOM-be-PRS 'I'll go and have a look at what it is.'
- (9–66) wa-rri-jibal nganyji ya-ngki-rr-kalak ngank-ung 2NOM-AUG-ask INT 1PL.NOM-FUT-AUG-arrive word-ALL₁ 'Ask him if we can go and talk to him.'
- (9–67) ya-ngka-rr-dam bin bardangk ya-ni-jal nganyji 1PL.NOM-FUT-AUG-hit that tree 1PL.NOM-CM-see INT langkurr yu-ngku-rr-jarrjarr possum 3NOM-FUT-AUG-awake 'Let's hit that tree, and see if the possums will wake up.'

Second, *nganyji* INT occasionally occurs in what appear to be information-soliciting clauses:

- (9–68) nganyji nyi-mungk angk-in i-n-nyu
 INT 2MIN-believe who-ERG 3NOM-CM-get
 'Who do you think took it?'
- (9–69) nganyji angka liyan mi-n-m-in
 INT what like 2MIN.NOM-CM-put-PRS
 'What do you want?'
- (9–70) *nganyj i-n-di-jii angka bur-ung* INT 3NOM-CM-say-2MIN.OBL what place-ALL₁

*i-jid-in*3NOM-go-PRS
'Where did he say he is going.'

The status of these examples as information questions can, however, be questioned: they might perhaps be better paraphrased 'do you believe someone broke it?', 'do you want something', and 'did he say where he was going', respectively. That is to say, they might be polar interrogatives used pragmatically in seeking information. This could be motivated by considerations of politeness, e.g. by permitting 'outs' by 'yes' or 'no' responses.

This explanation does not extend to *nganyjirrkurd* 'how many', which seems to be synchronically a distinct unanalysable information interrogative (see §4.5.1.3 above), although etymologically it is composed of *nganyji* followed by *irr* 'they', which is in turn followed by *-kurd* COLL. Examples of use of this word can be found in §4.5.1.3; another example is:

(9–71) nganyjirrkurd yiil mi-bakand-in how:many dog 2MIN.NOM-have-PRS 'How many dogs do you have?'

Third, according to Nekes & Worms (1953:774, 2006:257) *nganyji* INT (see fn. 8) can mark possibility, when combined with *kaard* 'still, yet' (their -*gad*). Nekes & Worms (1953) indicate that this usage is restricted to irrealis mood, as in (9–72) and (9–73).

- (9–72) nadje-gad il-au nai ibal-en kerosene nganyji-kaard i-la-w-ngay iibal-in kerosene maybe 3NOM-IRR-give-1MIN.ACC father-ERG kerosene "Perhaps father will give me kerosene."
- (9–73) nadje-gad dar il-ar ibal banangar nganyji-kaard daar i-la-r iibal banangkarr maybe arrive 3NOM-IRR-poke father today "Father might come today."

As mentioned in §4.3.3, in many Australian Aboriginal languages markers of indefiniteness and interrogativity are closely related morphologically, if not identical (see McGregor 1990:146; Mushin 1995). Usually the coded meaning of such markers is indefiniteness, and the interrogative meanings arise via pragmatic inferencing (although many Australianists take the opposite view that the coded meaning is interrogative—Mushin 1995). Possibly *nganyji-kaard* marks propositional indefiniteness in the above examples. If this were so, this word would have to be treated as a separate lexeme, synchronically unrelated to *nganyji*, which clearly codes an interrogative meaning in Nyulnyul. An alternative analysis is that *nganyji-kaard* is indeed analysable morphologically as shown (as implied by the recognition of a morpheme boundary in Nekes and Worms' transcription). If this suggestion is correct, *nganyji* INT would retain its interrogative meaning, and mark the clause as being interrogative. There is no reason why the clause could not be used interactively with the speech act value of a statement rather

⁹ Be this as it may, the only example available of this sequence of particles in a verbless relational clause is (9–104), where there is little doubt that the clause is in interrogative mood. (This appears to involve a sequence of distinct particles, as the prosodic link between *-kaard* and *nganyji* is weak.)

than a question. (As is well known, grammatical mood and speech function often do not coincide, and in many languages clauses in interrogative mood can be used in statements and commands as well as questions.) If this is the case, more literal translations for (9–72) and (9–73) might be 'could father still be about to give me kerosene?' and 'could father still be about to come?'. Framing these interrogatives as statements rather than questions might convey an evaluation of the occurrence of the situation as possible, though questionable—the probability of occurrence is perhaps evaluated as low. (Compare e.g. *could he really have eaten it so quickly?* which can be used as a statement of doubt.)

There are a couple of other instances in which nganyji INT has a bound morpheme attached to it. In (9-74) and (9-75) it is followed by the postposition -karr TEM. What effect the postposition has is not known; possibly it relates to the potential sense associated with the postposition attached to an independent clause (see §5.13 and §13.3.1.2.1.2).

- (9–74) nganyji-karr mi-n-nyu nyi-marl
 INT-TEM 2MIN.NOM-CM-get 2MIN-arm
 'Did you rub that stuff on your arm?'
- (9–75) nganyji-karr yu-ngka-rr-i-ny nyi-marl INT-TEM 3NOM-FUT-AUG-CM-get 2MIN-arm 'Will they rub it on your arms?'

In the following pair of examples, the interrogative particle has what appear to be the enclitic -ad FOC and the postposition $-uk \sim -ik$ LOC, respectively, attached to it. Again, the meaning contributed by the bound morphemes remains opaque.

- (9–76) nadj-ad in-au dje namari nganyj-ad i-na-w-jii ngamarri INT-FOC 3NOM-CM-give-2MIN.ACC tobacco 'Did he give you tobacco.' (Nekes & Worms 1953:772, 773)
- (9–77) *gandjeg mi-neo laib nganyj-ik mi-n-yu layib*INT-LOC 2MIN.NOM-be-PRS good
 'Are you well?', 'How are you?' (Nekes & Worms 2006:141)

Finally, *nganyji* INT appears not to co-occur with *arri* 'not' in the formation of negative polar interrogatives. Whenever I attempted to elicit negative interrogatives I was given either a negative clause scoped by *arri* 'not', or a positive clause scoped by *nganyji* INT, never a clause with both. The following examples are illustrative:

- (9–78) arri mi-li-jal-an-ngay not 2MIN.NOM-IRR-see-IMP-1MIN.ACC 'Didn't you see me?'
- (9–79) nganyji mi-ni-ny-jal i-n-dam baab INT 2MIN.NOM-CM-PST-see 3NOM-CM-hit child 'Didn't you see him smack the child?'

I have no explanation for this complementary distribution.

9.2.6 *nyanangkarr* 'maybe, perhaps'

This particle is one of a number indicating the speaker's evaluation of a proposition as doubtful or uncertain: ¹⁰ that it may or may not be true—and thus the referent situation may or may not have occurred, may or may not occur in the future. It is by a long way the most frequent dubitive particle in the corpus (others are discussed in §9.2.7). The same ordering principles apply for this particle as for *arri* 'not' and *nganyji* INT. Thus, *nyanangkarr* 'maybe, perhaps' usually occurs immediately prior to the verb; if anything intervenes between the two items, it constitutes a marked focus, as in (9–83) and (9–84).

- (9–80) *nyanangkarr yu-ngku-rr-burr karrm-ij yalirrbur* maybe 3NOM-FUT-AUG-cover later-DAT first 'They might cover it later first.'
- (9–81) ngay-in nyanangkarr nga-kalbarr-in jan nga-alm 1MIN.CRD-ERG maybe 1MIN.NOM-lose-PRS 1MIN.OBL 1MIN-head 'I might be losing my senses.'
- (9–82) buy nyanangkarr i-ng-kard nga-labab-uk ant perhaps 3NOM-PST-enter 1MIN-ear-LOC 'Maybe an ant went into my ear.'
- (9–83) nyanangkarr karrm nga-na-m-badik-irr
 maybe later 1MIN.NOM-CM-PST-block-3AUG.ACC
 ma-ma-ra-nyji
 INF_p-REF_p-pierce-REF_S
 'Maybe later I'll stop them fighting.'
- (9–84) *nyanangkarr yubul i-n-in arri nga-mungk* perhaps sick 3NOM-be-PRS not 1MIN-know 'He might be sick; I don't know.'

Nyanangkarr 'maybe, perhaps' sometimes follows the verb. Although this order is less common than preverbal position, it is slightly more frequent than postverbal *arri* 'not' and *nganyji* INT. Examples are:

- (9–85) nga-la-m nga-alm-id nyanangkarr 1MIN.NOM-IRR-put 1MIN-head-CHAR perhaps 'I might put on my hat.'
- (9–86) *nga-ngka-jid perth-ung christmas-karr nyanangkarr* 1MIN.NOM-FUT-go Perth-ALL₁ Christmas-TMP maybe 'I might go to Perth at Christmas.'

¹⁰ Nekes & Worms (1953:568–570) mark a morpheme boundary before the *karr*, presumably identifying it with the homophonous temporal postposition. Although this is a possible etymology, synchronically *nyana(ng)* is unattested.

(9–87) nga-li-jid kunard nyanangkarr 1MIN.NOM-IRR-go tomorrow maybe 'I might go tomorrow.'

Possibly here *nyanangkarr* 'maybe, perhaps' is tagged to the clause as an afterthought. Thus, (9–85) might be better translated 'I will put on my hat, perhaps', etc. This suggestion requires only minor modifications to account for (9–88), where the particle is postverbal, but not clause final.

(9–88) nga-na-k-juy nyanangkarr karrm in bur 1MIN.NOM-CM-carry-2MIN.ACC maybe later this country 'I'll take you to this country later.'

As in examples (9–26) and (9–89), *nyanangkarr* 'maybe, perhaps' perhaps holds *arri* 'not' in its scope; the reverse scoping relation is unattested, however. It will be observed that the order of the particles corresponds with the scoping relations. Unfortunately there are no examples of *nyanangkarr* 'maybe, perhaps' with any other particle, except for *arriyangk* 'no' in example (9–41), where this word functions as an interjection.

(9–89) nyanangkarr arri nga-li-jid wara waalk nga-ngka-jid maybe not 1MIN.NOM-IRR-go one sun 1MIN.NOM-FUT-go 'I might not go (tomorrow); I might go the next day.'

Nyanangkarr 'maybe, perhaps' is not restricted to verbal situation clauses. It is also used to indicate uncertainty in verbless relational clauses in respect of the applicability of an attribute (as in (9–90)) or of the identity of a referent (as in (9–91)).

- (9–90) yiil nyanangkarr birl-id dog maybe fight-CHAR 'The dog might be savage.'
- (9–91) kinyingk yaward nyanangkarr arri budarr bur nga-li-jal
 DEF horse maybe not right place 1MIN.NOM-IRR-see
 'It might be a horse; I can't see clearly.'

Occasionally *nyanangkarr* 'maybe, perhaps' is used in the expression of alternatives, in which case it conveys the contextual sense 'or' (there is no reason to believe that this is a distinct sense of the particle), as illustrated by the following pair of examples.

- (9–92) nganyji bina may i-nga-marr nyanangkarr karnk
 INT this food 3NOM-PST-cook maybe raw
 'Is this food cooked or raw?'
- (9–93) *i-n-mira-mirarr-in wara wamb nyanangkarr uriny* 3NOM-CM-wait-wait-PRS other man maybe woman 'He is waiting for another man or woman.'

9.2.7 Other particles of probability and possibility

A handful of other particles also mark probability or possibility, all of which are quite poorly attested.

One is *ralard* 'perhaps' which, like *nyanangkarr* 'maybe, perhaps', indicates that the speaker evaluates the proposition expressed by the clause as possible, though not certain. There is just one instance of this particle in the corpora, namely example (9–94).

(9–94) ralard nga-li-jimb perhaps 1MIN.NOM-IRR-die 'I might die.'

A second particle, $y\ddot{a}ragad$ (yar(r)akad) 'perhaps', seems to convey a similar modal meaning. It does not occur in my own corpus, but is mentioned in Nekes & Worms (1953: 927), who give the following example:

(9–95) yäragad dar il-ar yeldelbar banangar yar(r)akad daar i-la-r yandalbar banangkar perhaps arrive 3NOM-IRR-poke boat today "The boat might not come today." (More accurately: 'It is possible that the boat will arrive today.')

Nekes & Worms (1953) mention three other particles meaning 'maybe' or 'perhaps': ngajikad (see p. 360 above); garbor (gar(r)bur(r)); and garigan (karrigan). None of these are attested in my own corpus. Although Nekes & Worms (1953:573) indicate that gar(r)bur(r) occurs in Nyulnyul, Jabirrjabirr, and Nimanburru, and that karrigan occurs in a number of languages including Nyulnyul (Nekes & Worms 1953:575), they provide no Nyulnyul examples, and nothing can be said about them.

9.2.8 kanard 'can't'

This particle, which is instanced less than half a dozen times in the corpus, is presumably a borrowing from English *cannot*. (In fact, a form like *kanard* or ka(r)nd is widely used in everyday speech in many traditional languages spoken in the Kimberley these days.) It is included in this section under the particles for completeness of description, and to illustrate that the class of particles, though small, is not completely closed. Some examples are given in (9–96) and (9–97); see also lines (91) and (149) of Text 2. Like the inherited negative particles, *kanard* 'can't' selects irrealis mood in the verb. (9–97) suggests that negatives can be stacked to intensify the degree of negativity.

- (9–96) kanard mi-li-jid wil-ung can't 2MIN.NOM-IRR-go meat-ALL₁ 'You can't go for meat.'
- (9–97) kanard arri i-li-jimb can't not 3NOM-IRR-die 'He might not die.'

9.2.9 kaard 'still, yet'

Kaard, which normally translates as 'still' or 'yet', is usually used as a clausal particle indicating that the referent situation continues to happen. As the following examples show, *kaard* 'still, yet' usually occurs clause initially, although it can also occur finally, as in (9–98). It may be supposed that the same word order generalisations apply to this particle as to the particles discussed above. However, there is inadequate evidence to justify this supposition; in particular, there are no examples available in which anything other than the VP follows the particle, if it is not in final position.

- (9–98) ninyji nga-kal-in kaard arri nga-li-jimb-an alive 1MIN.NOM-wander-PRS still not 1MIN.NOM-IRR-die-IMP 'I am still alive, I am not dead yet.'
- (9–99) kaard yuburl i-n-in still sick 3NOM-be-PRS 'He's still sick.'
- (9–100) arri nga-li-ngul-an kaard nga-bakand-in not 1MIN.NOM-IRR-throw-IMP still 1MIN.NOM-have-PRS nga-mal-uk 1MIN-arm-LOC 'I didn't throw it; I've still got it in my hand.'
- (9–101) arri nga-li-wid-an jan may kaard marrkin not 1MIN.NOM-IRR-eat-IMP 1MIN.OBL food still hungry nga-n-in 1MIN.NOM-be-PRS 'I haven't eaten my breakfast; I'm still hungry.'

Kaard 'still, yet' invokes a presupposition that a particular situation obtained in the past, and asserts that it does indeed obtain as of the time of speaking. More explicitly, the core meaning of this particle can be expressed as follows:

Thus, (9–98) invokes a presupposition that the speaker was alive at some previous point of time, and asserts that they are still alive as of the time of speaking; in (9–99) the speaker presupposes that the person referred to was sick at some point of time, and asserts that they remain sick as of the time of speaking. Similar remarks hold for (9–100) and (9–101).

In each of the above examples an expectation is invoked that the situation might no longer obtain at the time of speaking: in (9–98), unless there was some expectation that the speaker may no longer be alive—possibly they have been acting as though dead (not moving, or whatever)—kaard 'still, yet' would not have been used. Similarly for the other examples. Thus, as for arri 'not', this particle is not normally used in a pragmatically neutral context, in the absence of an expectation to the contrary. Note the use of the qualifier normally in the previous sentence. The point is that the association of the expectation is so

strong that even if it is not actually present in the discourse context, it will be invoked by the act of speaking itself. Thus, I assume that a component of expectation is a part of the core meaning of the particle, encoded by it. (Similar remarks presumably hold for the other particles discussed above.)

Like *arri* 'not', *nyanangkarr* 'maybe, perhaps', *nganyji* INT and the other particles discussed in the preceding sections, *kaard* 'still, yet' typically holds the entire clause within its scope, and provides interpersonal modification of it (see §2.4). For *kaard* 'still, yet', it is interpersonal modification of the rhetorical type, rather than of the status or illocutionary types (as are the particles discussed above). That is, it indicates how the clause fits into the framework of knowledge, beliefs, and expectations associated with the speech interaction, rather than the actuality of the referent situation, or the way the clause is to be taken as a speech act. It tailors the clause to its environment of knowledge, expectations, beliefs, and so on of the speech interactants.

In the above examples *kaard* 'still, yet' occurs with realis mood in verbal clauses. It is not, however, restricted to this mood, as (9–103) illustrates.

(9–103) kaard i-li-rr-a-w-jii arri-karr still 3NOM-IRR-AUG-CM-give-2MIN.ACC not-TEM mi-li-jabal-an-irr 2MIN.NOM-IRR-ask-IMP-3AUG.ACC 'They still wouldn't give you it, even if you had asked them.'

The semantic description given in (9-102) applies virtually unchanged to this example. The only modification required is to permit a more general presupposition and assertion: that the situation occurred or did not occur as of T_1 and T_2 . Thus, for (9-103) it is presumed that they had not given the addressee anything at a point of time in the past, and asserted that they still haven't done so. There is an expectation that they should have done, granted the following clause, which projects a counterfactual condition.

Kaard 'still, yet' occasionally occurs in sequence with other particles. The only sequence exemplified in my corpus is (9–104), in which the interrogative particle has scope over it, interrogating the proposition 'you still know me'.

(9–104) nga-ni-ny-jabal nganyji kaard nyi-mungk ngay 1MIN.NOM-CM-PST-ask INT still 2MIN-know 1MIN.CRD 'I asked him whether he still remembered me.'

There are also examples of *kaard* 'still, yet' with the interrogative enclitic *-mad* (see further §9.3.1); here again the interrogative enclitic has scope over the particle.

According to Nekes & Worms (1953:533), *kaard* can occur with *arri* 'not'; indeed, they give the form *kaard-arri* (*gad-are* in their orthography), glossing it 'not indeed, not at all, by no means'. This gloss appears to have the relationships of scope around the wrong way, with the negative having scope over the rhetorical modifier. However, examination of their text reveals that their gloss is inappropriate and misleading, and that 'indeed not' is clearly what they mean rather than 'not indeed'. Unfortunately they offer no Nyulnyul example (although they explicitly mark it as a Nyulnyul word). Fortunately, they do give a Jabirrjabirr example, which I repeat here as (9-105), since it adds weight to my suggested interpretation. Clearly an appropriately modified version of (9-102), incorporating the modifications required by example (9-103), will account for this example: the situation is asserted as not having occurred previously, and will not occur at any T_2 in the future.

Presumably an expectation is invoked that the speaker might relent and give the addressee food, possibly as a result of the latter's insistent demands. This accounts for the strong sense of denial suggested by the gloss for (9-105), from the original source.

(9–105) gad-are ŋal-au djoe mai djān Jabirrjabirr kaard-arri nga-la-w-juy may jan still-not 1MIN.NOM-IRR-give-2MIN.ACC food 1MIN.OBL "By no means I shall give you my food." (Literally: 'I still won't give you my food (no matter what).') (Nekes & Worms 1953:533)

To conclude the section I mention two uses of *kaard* 'still, yet' distinguished in Nekes & Worms (1953), but not in evidence in my own corpus. First is what appears to be a lexicalised phrasal idiom, given under the headword *gad non*, which they gloss "still in heart," fond of' (Nekes & Worms 1953:536). The second lexical item is not invariant, and inflects according to the person and number of the individual doing the liking; clearly, it is the body-part term *-ng* 'stomach': thus the idiom is more literally glossed, 'still *x*'s-stomach'. They illustrate it with the following examples:

- (9–107) gad non-djon kaard nu-ng-jun still 3MIN-stomach-ABL₂ "one fallen in love, a lover"
- (9-108)non-djon wamb i-djeden baiber gad kaard nu-ng-jun wamb i-jid-in baykarr 3NOM-go-PRS behind still 3MIN-stomach-ABL₂ man in-galegan-djer worinj djen djung i-n-kalak-an-jirr uriny jin junk 3NOM-CM-follow-PRS-3AUG.ACC woman 3MIN.OBL run in-nj i-n-ny 3NOM-CM-catch "The man follows his woman, but she ran away."

Whether or not *kaard* ... -ng really is lexicalised in (9–106)–(9–108) is uncertain, given that the meaning appears to be fully predictable; such examples do, however, suggest that *kaard* 'still, yet' might be able to modify not just clauses, but also smaller units such as NPs.

Second, according to Nekes & Worms (1953:533), *kaard* reduplicates to *kaard-kaard*, which they gloss 'not yet, wait'. Unfortunately, they cite no Nyulnyul examples.

9.2.10 bilay 'again'

This particle generally translates into English as 'again', and like its English translation, admits the two interpretations: (i) an entire event or situation is repeated; or (ii) something

returns to a former state or condition. (i) is illustrated in (9–109) and (9–110); (ii) in (9–111) and (9–112). In the former pair what is repeated is the entire nuclear situation (see §12.3.2), the activity as it is engaged in by the participants; only the circumstances within which it is enacted differ: when and where the situation occurred. In the latter pair, there is no necessity for the entire nuclear situation to have been repeated. In the case of (9–111), what is being stated is that the speaker's leg returned to a previous state, not that the action of lifting the leg was repeated (although it may have been); this is perhaps clearer in (9–112), which could describe a sequence of events which began with the woman throwing the ball.

- (9–109) daarr nga-na-r yambun ya-nga-rr-land bilay emerge 1MIN.NOM-CM-poke together 1PL.NOM-PST-AUG-sit again ngank-uk jarrad lala-ingirr ya-rri-ny mijal-uk talk-LOC 1AUG.OBL other:days-SEM 1PL.NOM-AUG-get sit-LOC jarrad 1AUG.OBL 'He waited for me until I arrived then we sat down talking again like yesterday.'
- (9–110) bilay wa-n-di-jan angka mi-n-di-jan again 2MIN.NOM.FUT-CM-say-1MIN.OBL what 2MIN.NOM-CM-say-1MIN.OBL kirl before 'Repeat what you told me.'
- (9–111) nga-mbal nga-na-m barnd-uk bilay nga-na-m
 1MIN-foot 1MIN.NOM-CM-put ground-LOC again 1MIN.NOM-CM-put kalb
 up
 'I put my foot on the ground and then lifted it up again.'
- (9–112) birray-in jin i-na-ngul kinyingk bul baab-ung mother-ERG 3MIN.OBL 3NOM-CM-throw DEF ball child-ALL₁ jin bilay baab-in i-na-ngul kinyingk bul birray-ung 3MIN.OBL again child-ERG 3NOM-CM-throw DEF ball mother-ALL₁ jin 3MIN.OBL 'His mother threw the ball to him, and then he threw it back to his mother.'

Of course, sense (ii) is invoked when *bilay* 'again' occurs in a verbless attributive clause, as illustrated by (9–113) and line (166) of Text 2. It must be noted, however, that the particle is rarely found in verbless clauses, and this example—from a translation of religious material—is one of just two examples.

(9–113) irrjiwarr waalk bilay ninyji, i-ny-jarrajarr-an widak three day again alive 3NOM-PST-ascended-IMP across i-n-ny-an kalb-ung kurrwal-ung 3NOM-CM-get-IMP up-ALL₁ heaven-ALL₁ 'On the third day he arose from the dead and went up into heaven.'

As in (9-110), (9-111) and (9-112), *bilay* 'again' normally occurs clause initially, and usually preverbally; but like the other particles, it is not restricted to this position, as in (9-109) and:

- (9–114) nga-n-d-in-jii bilay banangkarr 1MIN.NOM-CM-say-PRS-2MIN.OBL again today 'I am talking to you again today.'
- (9–115) maal i-n-nyu bilay hot 3NOM-CM-get again 'Heat got stronger again.'

Presumably word order is motivated by factors similar to those adduced for particles such as *arri* 'not', but there are too few examples to support the claim.

In the above examples involving *bilay* 'again' it seems that there is an expectation that the event might not re-occur at a subsequent time, or the thing re-enter its former position or state. Otherwise, in the absence of such an expectation, the appearance of the particle would be unmotivated. Like *kaard* 'still, yet' discussed in the previous section, *bilay* 'again' is an expectation modifier; it serves as a rhetorical modifier, integrating the utterance into the context of knowledge, beliefs and expectations of the speech interactants (see p. 366 above). But whereas *kaard* 'still, yet' indicates continuity of the event from T_1 to T_2 , in the face of an expectation to the contrary, *bilay* does not. It indicates that at some stretch of time between T_1 and T_2 the event was not actualised, or the entity was not in/at the specified state or location.

In fact, *bilay* 'again' is not as semantically constrained as the above account suggests. It has a range of other senses, which we now outline.

First, rather than the entire event—including participants—being repeated, it may be that one participant in the repeated event is different, or indeed that only the event type itself is repeated. Thus, in (9–116) different Actors and Undergoers—albeit of the same types of entity—are involved in events of the same type. In example (9–117) it is only the killing event that is repeated; the same two men could hardly be killed a second time; nor need the killer be the same person. In (9–118), it will be noted, a different verb is used: the referent actions being similar, though belonging to different lexical categories. In such circumstances *bilay* can generally be glossed 'also'.

- (9–116) warnd-ang i-na-m na-alm-uk ngay-in bilay band-INS 3NOM-CM-put 3MIN-head-LOC 1MIN.CRD-ERG again nga-na-m warnd-ang nga-alm-uk 1MIN.NOM-CM-put band-INS 1MIN-head-LOC 'He tied a band around his head. I also tied a band to my head.'
- (9–117) kujarra wamb bilay i-nga-rr-dam marnkal-akarr two man again 3NOM-PST-AUG-hit spring-TMP 'Two men were killed again last spring.'
- (9–118) warinyjirr jarringk muj i-ny-jalk bilay mukurn i-mur-in one tooth already 3NOM-PST-fall again hair 3NOM-pour-PRS 'One tooth has come out. I'm also losing my hair.'

Second, *bilay* 'again' can admit the contextual interpretation 'then, in sequence', when the events in sequence are of the same type (irrespective of whether one or more participants are different). The following examples are illustrative:

- (9–119) bin-in baab karrji-karrji bin nyungurl wamb bilay that-ERG child swear-swear that old:man man again karrji-karrj i-na-w-ngay swear-swear 3NOM-CM-give-1MIN.ACC 'That child swore at the old man, and then he swore at me.'
- (9–120) yaward-in i-ni-ny-janb nu-ng-uk yaward-in horse-ERG 3NOM-CM-PST-kick 3MIN-stomach-LOC horse-ERG bilay i-ni-ny-janb-ngay nga-ng-uk again 3NOM-CM-PST-kick-1MIN.ACC 1MIN-stomach-LOC 'The horse kicked him in the stomach. Then it kicked me in the stomach.'

(9–121) shows a related sense: reference is made to a situation in which people take turns at throwing boomerangs at one another. The clause itself refers to this entire sequence of events. No link is established with other boomerang-throwing events; however, this does not mean that the semantic description given above is inappropriate. Indeed, it applies with only slight modifications; moreover, *bilay* 'again' acts as an expectation modifier, indicating that the component events making up the throwing exchange occurred with greater than expected frequency. Otherwise, the particle need not have been used, and the clause could refer to precisely the same referent situation. The use of *bilay* in this context is comparable with the use of *again and again* in English: *they threw boomerangs at each other again and again*, like (9–121), does not establish a link with previous throwing events, but rather applies entirely within the referent situation of the clause.

(9–121) *jiib-ang bilay i-ngi-rr-ma-rr-inyj* boomerang-INS again 3NOM-PST-AUG-REF_P-throw-REF_S 'They threw boomerangs at each other.'

Third, bilay 'again' is occasionally used not to indicate that an event has been repeated, but rather that the speaker is repeating the same message to the hearer again. In (9–122), for example, the second clause—which is elliptical, with its verb inamarr 'it burnt it' omitted, being predictable—restates the first in slightly different words, using mayar 'house' instead of bur 'camp', and wamburiny 'people' instead of warli 'everyone'. A single set of events is referred to in this example.

¹¹ It must be acknowledged that (9–122) admits another interpretation—it could be that *bilay* 'again' is used here in the same way as in (9–121), to designate a sequence of related subevents making up the event designated. Had *bilay* 'again' occurred in the first clause, this interpretation would seem perfectly reasonable. It seems less reasonable, however, in the actual example, since it occurs in the second, not the first clause, and the second clause is clearly an elaboration of the first.

(9–122) marrji-in i-na-marr warli bur aa bilay mayar bush:fire-ERG 3NOM-CM-burn everyone place and again house jin wamburiny

3MIN.OBL people

'The bushfire burnt everyone's camp.' (More literally, 'The bushfire burnt everyone's place, again the houses of everyone.')

This usage of *bilay* 'again' is of the type Halliday & Hasan (1976:240ff) dub internal: it concerns interpersonal, rather than experiential usage of language (see also §2.4): the link is established not in the world of experience, between referent situations, but in the interpersonal world of the speech interaction, between speech events. Within the grammatical theory adopted in this work, the distinction cannot be made in this way, as all of the uses of *bilay* 'again' are interpersonal: they are all instances of rhetorical modification (see §2.4). What is called for in the SG account is a modification to the semantic characterisation of *bilay* 'again' which allows the repeated thing to be the utterance of the clause designating the situation, and not just the situation itself, or part thereof. This involves again a difference in scopal relations, whereby we have a contrast between scope over a unit and scope over the utterance of a unit.

Finally, in a few examples, including (9–123), it is not clear what precisely falls into the scope of *bilay* 'again'. Two analyses appear equally likely for this example, and it is impossible to decide between them on present evidence. First, it could be that this is a biclausal construction in which the verbal construction of the second clause—*dumbar inj* 'it flew'—has been ellipsed, being identical with the verb of the initial clause. Second, it could be that this is a monoclausal construction in which *bilay* 'again' has scope just over the adverbial *kalb* 'up' (as per the free English translation). ¹²

(9–123) karrambal dumbar i-n-j jimbin aa bilay kalb bird fly 3NOM-CM-say down and again up 'The bird was flying along, then swooped down and up again.'

Bilay 'again' occurs with other particles, most commonly with *arri* 'not'. In all available examples, the latter particle precedes the former and holds it in its scope. It seems likely that any of the senses of *bilay* 'again' discussed above can be negated, although not all are exemplified in the corpus. (9–124) illustrates the negation of an entire class of situations; (9–125) illustrates the negation of the repetition of a similar situation with a different participant; doubtless the other senses can also be negated.

(9–124) arri dumbar i-li-j-an bilay / warang-in karrambal / not fly 3NOM-IRR-say-IMP again others-ERG bird mungurr i-ngi-rr-jal / jealous 3NOM-PST-AUG-see 'He didn't fly again; the other birds were jealous of him.'

¹² It is possible that (9–122) also involves just a single clause with a complex NP. However, it would seem less likely in this example, and it does not affect the main observation relating to this example, that it may be the utterance of an item that is relevant, rather than the item itself.

(9–125) arri kurr kujarr ku-li-rri-ny arri not 2AUG.CRD two 2AUG.NOM-IRR-AUG-get not nga-li-ny bilay
1MIN.NOM-IRR-get again
'If you two don't take it away, I won't either.'

9.2.11 *muj* 'already'

This particle indicates that the referent situation has begun as of the time of speaking. It is not, however, a purely temporal adverbial, locating the situation temporally as prior to the present, i.e. 'before'. As the gloss 'already' suggests, an expectation is invoked that the event has not yet begun. The present relevance of the situation is implicated by this particle: it is functionally comparable to the perfect aspect. However, as distinct from the perfect aspect, it links the occurrence of the situation to the framework of knowledge, beliefs, and so on that are relevant to the discourse; it thus conveys rhetorical-type interpersonal meaning. The following examples illustrate this. In the dialogue of (9–126), the second speaker contradicts the first speaker's implied belief that they have not washed their hands. In (9–127), an expectation is invoked that the speaker and third person would not have both finished their pension money so soon; and (9–128) invokes an expectation that the children's parents would be still alive.

- (9–126) A: nyi-marl jii ngunyb wa-n-juluk
 2MIN-hand 2MIN.OBL dirty 2MIN.NOM.FUT-CM-wash
 - B: *muj nga-ni-n-juluk jan nga-marl* already 1MIN.NOM-CM-PST-wash 1MIN.OBL 1MIN-hand
 - A: 'Your hands are dirty. Wash them.'
 - B: 'I have already washed my hands.'
- (9–127) muj i-m-bany jin binjin kumbarr ngay already 3NOM-PST-finish 3MIN.OBL pension money 1MIN.CRD i-m-bany jan binjin kumbarr 3NOM-PST-finish 1MIN.OBL pension money 'His and my pension money have finished.'
- (9–128) *muj i-ngi-rr-bany-jirr birray kubul* already 3NOM-PST-AUG-finish-3AUG.OBL mother father 'Their mother and father are already dead.'

As illustrated by (9–129), the temporal reference point can shift from the speech situation to the referent world, and correspondingly the expectations invoked are those relevant to the interactants in the referent speech situation.

(9–129) biird mi-na-mara-mar-in jarrad wilamay langan yesterday 2MIN.NOM-CM-cook-cook-PRS 1AUG.OBL food shoulder jii nga-ni-ny-jiding nyi-mungk muj jakud 2MIN.OBL 1MIN.NOM-CM-PST-touch 2MIN-think already return

nga-n-nyu wanji 1MIN.NOM-CM-get back

'While you were cooking our food, I touched your shoulders to let you know I had come back.'

In the above examples the referent situation belongs to the realm of past time. All that is required, however, is that the situation began by the time of the SS; it may also be ongoing as of that time. What is contradicted is the expectation that the situation has not yet begun, rather than that it has already occurred, and is completed. Thus (9–130) invokes an expectation (or perhaps hope) that the speaker is still young; (9–131) invokes an expectation that it is too early for the wet season storms to have begun; and (9–132) invokes the expectation that rain has not yet begun to fall. As in these examples, the verb is usually in the present tense; the infinitival clause of the second example is unusual.

- (9–130) muj jalbird nyungurl nga-n-d-in already get:old old:person 1MIN.NOM-CM-say-PRS 'Already I am getting old.'
- (9–132) *muj i-ngi-r-in wul* already 3NOM-PST-poke-PRS water 'It's already raining.'

Very occasionally the referent situation is imminent, rather than already begun or in progress. The verb is in the present, and the effect is to emphasise that the event may be regarded as actualised. In other words, it is represented as though it is actualised, despite the perceptual evidence that it is not. Thus in (9–133) the speaker emphasises that they are very nearly dead—presumably in contradistinction to an expectation that they are still alive and kicking; and in (9–134) the speaker emphasises that they are making their move to leave. (Compare the use of the present in the same circumstances in English *I'm* (already) going or *I'm already on my way* in contrast to *I'll go*.)

- (9–133) muj nga-jimb-in already 1MIN.NOM-die-PRS 'I'm close up dead.'
- (9–134) muj nga-jid-in already 1MIN.NOM-go-PRS 'I'm going.'

Muj 'already' is used together with the nominal layib 'good' in an expression which usually translates as 'alright' or 'OK', as in the following examples:

(9–135) A: *muj nga-jid-in way* already 1MIN.NOM-go-PRS away

B: *muj layib* already good

A: 'Goodbye, I'm leaving.'

B: 'OK.'

(9–136) A: jii nyi-kard nganyji nyunnyun i-n-ny-in 2MIN.OBL 2MIN-body INT ache 3NOM-CM-catch-PRS

B: arriyangk muj layib no already good

A: 'Is your body aching?'

B: 'No, I'm alright.'

The same sense is involved in (9–137), which translates more literally as 'alright, go!'.

(9–137) muj layib wa-rr-jid already good 2NOM.FUT-AUG-go 'Get away; scram.'

In examples like this, *muj layib* 'OK' apparently serves as an interjection, representing a minor clause that does not express a proposition. (9–137) is not, then, a single clause, but the combination of a minor and major clause.

Occasionally, muj 'already' reduplicates to mujumuj 'long ago', as in:

- (9–138) *muju-muj jiwirr wamb i-ngi-rr-a-m jirr* already-already dead:body man 3NOM-PST-AUG-CM-put 3AUG.OBL *kalb karndirrib-uk* above platform-LOC 'Long ago they used to put the dead on a platform.'
- (9–139) *muju-muj milirrkarr i-ngi-rr-n-an church bur-uk* already-already before 3NOM-PST-AUG-be-PST church place-LOC 'They built a church there a long time ago.'

At first glance, *mujumuj* in these examples seems to convey just that the event occurred a considerable time ago. However, unexpectedness may also be conveyed. In (9–138) it might be that the speaker is representing as unexpected the means of disposal of the dead; and in (9–139) it seems that she is representing it as unexpected that the people had built such a church in the early part of the twentieth century (perhaps invoking expectations of what people of the time might have been likely to do).

9.2.12 wangk 'unexpectedly'

This particle indicates that an event occurred unexpectedly; it is thus a rhetorical modifier which integrates the situation into the framework of knowledge, beliefs, and expectations of the SS. My own corpus shows only one instance of this particle, example (9–140), which was elicited in response to the English prompt 'he died suddenly': the person died sooner than might have been expected, or at a time that was not expected. I gloss the particle 'unexpectedly' because of example (9–141), which admits the 'unexpectedly' interpretation, but not the 'suddenly' interpretation. It seems clear that these two uses of the

particle can be accounted for under the assumption that 'unexpectedly' represents its core meaning. (The only other example available is also from Nekes & Worms 1953:878–879, and is almost identical with (9–140).)

- (9–140) wangk i-ny-jimb unexpectedly 3NOM-PST-die 'He died suddenly.'
- (9–141) wāŋg dar in-aṛ wamb
 wangk daarr i-na-r wamb
 unexpectedly arrival 3NOM-CM-pierce man
 'The man came unexpectedly.' (Nekes & Worms 1953:878–879)

Like *muj* 'already', *wangk* 'unexpectedly' can be reduplicated, as in (9–142), from Torres & Williams (1987:18). No comparable instances are represented in my elicited corpus. Reduplication intensifies the meaning to 'quite unexpectedly'—which perfectly suits the context of the example: the eagle had been searching everywhere for the crow.

(9–142) wangka-wangk i-ni-ny-jal wangkid unexpectedly-unexpectedly 3NOM-CM-PST-see¹³ crow "When all at once he saw the crow singing below!"

9.2.13 Final remarks

The inadequacies of the corpora make it impossible to be certain of the full quota of particles in Nyulnyul, their meanings, or their uses. A number of words are instanced once or twice that might be particles. For instance, in line (14) of Text 5, repeated as (9–143), there is a possible particle *wiyan* 'without'.

(9–143) wiyan stephen arriangkang malirr / without Stephen without wife 'Unfortunately Stephen was without a wife.'

This word is not attested in my own corpus. Nekes & Worms (1953) mention no such Nyulnyul word, although they do cite Jabirrjabirr *wean* ~ *wēan* 'another, the other'. This may or may not be identifiable with Rosie Victor's *wiyan*; evidence is too slim.

9.3 Enclitics

As per §2.2, enclitics are like particles, except that they do not have the privilege of free occurrence: they must be attached to a 'host' word. There are no significant restrictions on the class of these hosts, which include nominals, pronominals, preverbs, inflecting verbs,

¹³ The verb form is erroneously given in the original text without the past tense prefix, as *inijal*.

adverbials and particles.¹⁴ As in the case of postpositions,¹⁵ an enclitic does not form an inflectional variant of its host: the two together form a single distributional word, but not a single lexical or grammatical word. Nor do they usually constitute a single phonological word, except when the enclitic is phonologically small (see §3.4.3).

Like particles, enclitics provide interpersonal modification (see §2.4) of a unit that includes their host. The type of modification is normally either rhetorical (in which the unit is integrated into the framework of knowledge, beliefs, etc. of the interaction), or expectational (in which the unit is integrated into the framework of expectations relevant to the interaction). Thus enclitics are scoping items, that may hold in their scope words, phrases or clauses. It is sometimes useful to distinguish the scope of an enclitic from its focus: the scope includes the word to which it is attached possibly together with other material, while the focus is usually specifically on its host word.

No sequences of enclitics are attested in the corpora, although there would seem to be no reason why they should be impossible (they occur in Gooniyandi—McGregor 1990: 189–190). Given their syntagmatic potentials, it is only to be expected that sequences are permissible, and that the order they occur in reflects the scopal relationships between them.

Enclitics are normally found in the outermost position, and may not be followed by bound morphemes of any other type. Thus, they follow postpositions (examples (9-161), (9-172), (9-178) and (9-179)), inflectional suffixes (see example (9-174)), and derivational suffixes.

Many enclitics are consonant initial, and sandhi process of vowel epenthesis apply when hosted by a consonant-final word (see §3.5.2.1). Otherwise, enclitics show no allomorphy.

9.3.1 -mad Emphatic (EMP)

This enclitic can be attached to words of any class, including nominals, pronominals, inflecting verbs, preverbs, and adverbials, as well as to some particles. It normally occurs in Wackernagel's position, and scopes over the entire clause. At the same time, particular focus is assigned to the word to which it is attached.

In the corpus of utterances elicited from Carmel Charles -mad almost always occurs in polar questions, and marks the focus of the question. Nekes & Worms (1953:663) concur on this point, and refer to it as an interrogative particle. The following examples illustrate this usage, and show -mad encliticised to a nominal (in (9–144)), a pronominal (in (9–145)),

¹⁴ Certain enclitics—in particular, oblique pronominal enclitics—are restricted to inflecting verbs in Nyulnyul (although in Bardi they are somewhat freer in placement, and may also be hosted by dependents in verbless attributive and identifying clauses). These pronominal enclitics are very different in nature and use to those enclitics which we discuss in this section, and are ignored here. Also excluded from the discussion below is the third person minimal oblique pronominal form *jin*, which sometimes behaves as a bound encliticised form, comparable with the 'possessive''s in English (McGregor 2001b). But unlike the enclitics discussed in this section, *jin* also occurs in a free form, phonologically identical with the bound form—as do some of the other pronominal forms. (Recall also that the oblique pronominals may also be attached to *arri* 'not', giving *arri-jin* (not-3MIN.OBL) 'nothing', *arri-jan* (not-1MIN.OBL) 'nothing for me', etc., of uncertain status—see p. 349 above.)

¹⁵ Recall that postpositions are also enclitics, but differ from the enclitics discussed in this section in their grammatical behaviour. In particular, postpositions are typically attached to NPs, occasionally to finite VPs, and indicate the grammatical relation of that unit. The class of enclitics discussed in this section do not mark grammatical relations, but rather provide a 'slant' on an item. In this section the term enclitic specifically excludes postpositions.

inflecting verbs (in (9-146) and (9-147)), a preverb (in (9-148)), and a particle (in (9-149)).

- (9–144) ring-mad mi-kul-in nyi-mal-uk ring-EMP 2MIN.NOM-wear-PRS 2MIN-hand-LOC 'Do you wear a ring on your finger?'
- (9–145) juy-mad mi-n-in ngidirrngin 2MIN.CRD-EMP 2MIN.NOM-be-PRS alone 'Are you here alone?'
- (9–146) *mi-jarrajarr mi-ny-jimb-a-mad*2MIN.NOM-stand 2MIN.NOM-PST-die-EV-EMP
 'Wake up—are you dead?'
- (9–147) *ibal, minen-djalg-mad namari-dje iibal mi-ni-ny-jalk-mad ngamarri jii*father 2MIN.NOM-CM-PST-hide-EMP tobacco 2MIN.OBL
 'Father, did you hide your tobacco?' (Nekes & Worms 1953:663)
- (9–148) kurr kujarr nganyji burrb-mad ku-ngi-rr-i-j ngimbirr 2AUG two INT dance-EMP 2NOM-PST-AUG-CM-say night 'Did you two dance last night?'
- (9–149) *kaard-a-mad jirr* still-EV-EMP 3AUG.OBL 'Are they going later?'

However, at least one example from my corpus shows -mad in a statement:

(9–150) kurr kujarr kad ku-ngu-rr-a-w-mad jungkarr
2AUG.CRD two cut 2NOM-PST-AUG-CM-give-EMP 2AUG.OBL
kirr-marrangk in-ik tin
2AUG-finger this-LOC tin
'You two cut your fingers on the tin.'

It seems that in this example -mad serves as an expectation modifier with an emphatic sense like 'really' or 'truly', and indicates surprise that the referent situation occurred, or that a certain referent entity was involved in it. Thus (9–150) appears to express surprise at the fact that the addressees had cut their fingers on the tin. Putting it in slightly different terms, the proposition expressed by the clause is not just true, but is really true. An expectation is invoked that it might not be true, or might not be true for a particular item in it; this expectation is contradicted.

This enclitic is quite frequent in Text 2, and virtually all instances are of this second type, intensifiers marking particular emphasis—usually contrastive—on the clause, or some part of it. This is illustrated by the following three examples from that text:

(9–151) juy-mad mi-n-in yalirrabur yarrad baybarra / 2MIN.CRD-EMP 2MIN.NOM-be-PRS first 1MIN.CRD behind 'You're ahead of us; we are behind.'

- (9–152) malbul jin arri wurrumbang / murrul-mad / thing 3MIN.OBL not many little-EMP 'His things are not much, only a little.'
- (9–153) *i-nga-walam-jin wamburiny / irrkurd karrambal-mad /* 3NOM-PST-call:out-3MIN.OBL people all bird-EMP 'He called out to everyone—they were all birds.'

In some cases this enclitic functions as an exclamative marker:

(9–154) yarrad-mad kinyingk-mad burrb liyan mi-na-m akal / 1AUG.CRD-EMP DEF-EMP dance like 2MIN.NOM-CM-put and mi-n-di-jarrad / 2MIN.NOM-CM-say-1AUG.OBL 'We did! You wanted it because you wanted to dance, so you told us!'

Based on the above observations, it seems reasonable to presume that the emphatic sense represents the core meaning of *-mad*. That many instances of clauses involving *-mad* are questions is unsurprising, and this can be regarded as a contextualisation of the core meaning, arrived at by pragmatic inference. However, it is impossible to entirely rule out the possibility that *-mad* represents an enclitic with a core meaning interrogative, that contextualises in places as an exclamative.

9.3.2 -mil 'regard, respect' (RES)

Instanced only a few times in the entire set of corpora, this enclitic is usually used in drawing comparisons. ¹⁶ Unlike the postposition *-ngirr* SEM, however, it is not attached to a nominal or NP representing something that the referent of another NP resembles. Rather, it is attached to a nominal that indicates the basis of the comparison, the feature in respect of which the comparison is made. Thus, it is used in contexts such as 'entities A and B are alike in regard to feature C', rather than 'entity A is like entity B'. In the following examples it is attached to the prefixing N *-kinbal* 'appearance':

- (9–155) kinyingk uriny yarr-kinbal-a-mil
 DEF woman 1AUG-appearance-EV-RES
 'That woman and I are alike in appearance.'
- (9–156) kirri-lirr kirr-mil kirr-kinbal-a-mil kurr 2AUG-lip 2AUG-nose 2AUG-appearance-EV-RES 2AUG.CRD 'Your faces are alike.'
- (9–157) ina wamba irr-kinbal-a-mil irr-m-uk this man 3AUG-appearance-EV-RES 3AUG-eye-LOC 'They are alike in the eyes.'

¹⁶ Of course, given the few attestations of this morpheme, its status as a clitic is somewhat uncertain. It is tentatively treated as a clitic because it is attested with both nominal and pronominal hosts, and there is no reason to believe that it derives a new stem from its host, or that the resulting word is an inflectional form of the host. For instance, there is no reason to believe that *yarr-kinbal-a-mil* is a derived stem, or an inflectional form of *-kinbal* 'appearance'.

This enclitic is less restricted in Nekes and Worms' corpus (Nekes & Worms 1953:708), where it mostly occurs on possessive pronouns designating joint possessors of a shared characteristic. These pronouns occur in NPs having a nominal denoting the characteristic.

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(9–158) imbel agal bende djōl djer-mel imbil akal bindi jul jirr-mil Imbel and Bende face 3AUG.OBL-RES 'Imbel and Bende have similar faces.' (Nekes & Worms 1953:708)
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(9–159) yarad mogonj djarad-mel yarrad mukuny jarrad-mil 1AUG.CRD hair 1AUG.OBL-RES 'Our hair is similar.' (Nekes & Worms 1953:708)

The interpretation of the following example is not obvious:

(9–160) rombe¹⁷ djen-mel er-en pigi pigi rumbi jin-mil i-rri-n pigi-pigi upside:down 3MIN.OBL-RES 3NOM-AUG-be pigs 'The pigs are lying together all upside down.' (Nekes & Worms 1953:708)

Most likely *jin* 'his, hers, its' belongs to a possessive NP in which the possessum N (-kad 'body') is ellipsed.

9.3.3 -manjan 'only'

This enclitic almost always translates into English as 'only'. ¹⁸ It is typically attached to the word it focuses on, although its domain may extend beyond that word to embrace the entire NP containing that nominal. Thus, in (9–161) the focus of *-manjan* 'only' is on 'two (people)', and specifies that it is just two people who saw the other person; in (9–162) the focus is on English as the one language that today's people know; in (9–163) *-manjan* 'only' focuses on *naalm* 'his/her/its head' as what is visible, to the exclusion of the rest of the person's body; similar remarks hold for (9–164) and (9–165). Observe that whereas in (9–163) the enclitic is attached to the end of the NP which *-manjan* 'only' holds in its domain, in (9–164) and (9–165) it is attached to the word it specifically applies to and focusses on. We give a considerable number of examples to demonstrate that there is no apparent restriction on the grammatical role that can be borne by an NP falling within the scope of *-manjan* 'only'.

¹⁷ This lexeme is not attested in my own corpus, where 'upside down' is consistently expressed as 'head down'. Nekes & Worms (1953:708) indicate that this form occurs also in Jabirrjabirr; and the cognate form *rumbu* is also found in Jukun (Bates n.d.c). My guess is that it can be identified with *rumbu*, attested in my own corpus in the sense 'forwards'; this may or may not be indicative of semantic change accompanying language attrition.

¹⁸ Nekes & Worms (1953:686) treat it as a separate word, and gloss it 'only, alone, empty'. They suggest elsewhere (Nekes & Worms 2006:112) that the form is etymologically related to a widespread formative *man* (with a range of variants) 'one'.

- (9–161) *kujarr-in-manjan i-ngi-rr-jal i-n-nyu* two-ERG-only 3NOM-PST-AUG-see 3NOM-CM-catch 'Only the two (people) saw him take it.'
- (9–162) majangurl-karr ngay warli wamburiny i-ngi-rr-ngank-an young-TEM 1MIN.NOM all people 3NOM-PST-AUG-speak-PST nyulnyul banangkarr-uk arri i-li-rr-ngank english-manjan Nyulnyul today-LOC not 3NOM-IRR-AUG-talk English-only irr-mungk 3AUG-know 'When I was young, everyone spoke Nyulnyul; today they don't talk it; they only know English.'
- (9–163) bin wamb i-m-ba-barnd-inyj-in blanket-ang na-alm this man 3NOM-PST-REF_P-cover-REF_S-IMP blanket-INS 3MIN-head jin-manjan kalwar i-ngi-n
 3MIN.OBL-only expose 3NOM-PST-be
 'The man covered himself with blankets; only his head was showing.'
- (9–164) *na-alm-amanjan jin ya-nga-rr-jal* 3MIN-head-only 3MIN.OBL 1PL.NOM-PST-AUG-see 'We could only see his head.'
- (9–165) *ni-marl-manjan jin ngunyb* 3MIN-hand-only 3MIN.OBL dirty 'Only his hands are dirty.'

Like the corresponding English word *only* and the Gooniyandi enclitic *-moowa* 'only', the Nyulnyul enclitic *-manjan* 'only' shows two main senses (McConvell 1983; McGregor 1990:475): (a) the SUBSET sense, in which the target entity is put forward as a subset of the set of possible things that might have played the same role in the clause, as in (9–161)–(9–165) above; and (b) the SCALAR sense, in which a class of entities or qualities are ranked on some scale, and the target asserted entity is put forward as being lower on the scale than the expected thing to fulfil that role. (b) is illustrated in the following two examples, where, respectively, grass is ranked lower in significance (not physical size) than trees, and cats lower than dogs:

- (9–166) arri bardangk kinyingk-uk bur maarr-manjan not tree DEF-LOC country grass-only 'There are no trees in this country, only grass.'
- (9–167) kinyingk-in arri i-la-bakand yiil minyaw-manjan DEF-ERG not 3NOM-IRR-have dog cat-only 'This man has no dogs, only cats.'

Many tokens are amenable to either the scalar or the subset interpretation. Indeed, (9–166) and (9–167) could be accorded either reading, although the subset one is somewhat improbable. (9–168) is also amenable to either interpretation, depending on whether fish is considered a subset of the food one might eat in a meal, or lower ranking on the food scale than bread (which is highly unlikely to have been the meaning intended by the speaker).

(9–168) arri nga-la-wid-an bread nga-ni-ng-kid wil-manjan not 1MIN.NOM-IRR-eat-IMP bread 1MIN.NOM-CM-PST-eat fish-only 'I didn't eat bread; I only ate fish.'

As per McGregor (1990:476), the possibility of the two interpretations being available in particular instances suggests that they are contextualisations of a single core meaning, which could be characterised as: the relevant asserted thing is less than the expected thing, according to some system of ranking, either by set inclusion, or by hierarchical (evaluative) ranking. Thus they are etically, not emically distinct: they are different possible interpretations of a single core meaning. The senses are not emically distinct, and the enclitic *-manjan* 'only' is not polysemous.

Qualities rather than entities may also serve as the foci of *-manjan* 'only', as illustrated by (9–169). Only the scalar interpretation is available, and it is typically in terms of the degree of the quality shown.

(9–169) bany i-ngi-rr-a-w arri wurrumbardang murrul shoot 3NOM-PST-AUG-CM-give not much little baburr-manjan i-bakand-in wound-only 3NOM-have-PRS 'They shot him but he was only a little wounded.'

As the above examples illustrate, *-manjan* 'only' is normally attached to nominals. In just a couple of examples it is attached to an inflecting verb, as in (9–170). Clearly the scalar sense is involved here: pretending to know is evaluated as lower on the scale than actual knowing.

(9–170) *i-ngulm-manjan ni-mungk arri ni-mungk* 3NOM-deceive-only 3MIN-believe not 3MIN-believe 'He's only pretending to know; he doesn't really know.'

Occasionally *-manjan* acquires the sense 'alone'; this is clearly a contextualisation of the 'only' sense, as the following example illustrates—the literal meaning of this clause is that only the woman is present, from which it follows that she is alone:

(9–171) *uriny-manjan i-n-in* woman-only 3NOM-be-PRS 'The woman is alone.'

In a few exceptional instances *-manjan* 'only' appears to be attached not to its focus, but rather to the first word of the clause:

- (9–172) ngay-in-manjan nga-ni-ny-jal warinjirr wamb 1MIN.CRD-ERG-only 1MIN.NOM-CM-PST-see one man 'I only saw one man.'
- (9-173) kinyingk-manjan i-mi-jal-inyj DEF-only 3NOM-REF_P-see-REF_S 'He only thinks of himself.'

(9–174) *ya-rr-bakand-in-manjan murrul i-n-in-jan*1PL.NOM-AUG-have-PRS-only little 3NOM-be-PRS-1MIN.OBL
'We have only got a little bit left.'

Perhaps the apparent misplacement of the enclitic in (9-172) follows from a different interpretation placed by the Nyulnyul speaker on the English prompt sentence, in which only does not occur adjacent to the item it focuses on. That is, it is possible that this example was given as an appropriate response to 'only I saw him', rather than 'I only saw him' (the speaker may well have interpreted the scopal relations involved in a different way to what was intended). In regard to (9-173), it might be suggested that kinyingk DEF is here serving as an Undergoer rather than Actor: that is, as if it were as a reflexive anaphor in the corresponding English expression he_1 thinks of $him(self)_1$ only. No such explanations are available for (9-174). It may thus be the case that an alternative position for -manjan 'only' is in Wackernagel's position, where it perhaps has scope over the entire clause, and lacks a specific focus.

9.3.4 -ilbi 'mistakenly believe' (MB)

This enclitic is not represented at all in my corpus, although Nekes & Worms (1953: 519–520) cite it—*elbe* in their spelling—and provide a handful of examples, two of which are given in (9–175)–(9–176). Nekes & Worms (1953:519–520, 2006:292–293) classify it as a type of conjunction in Nyulnyul (see further below). They recognise that it is a bound form (although they sometimes cite it as a separate word), but unfortunately provide no specification of its meaning. The entry for *-ilbi* in their dictionary gives no gloss, although the words 'particle denoting the irrealis or potentialis' have been crossed out, and they give the unrevealing gloss 'that' in the literal translations of the examples. The free translations provided for their examples suggest that *-ilbi* is most likely to mean 'mistakenly believe' (thus the abbreviation MB)—a number of languages in the vicinity have a particle or enclitic with this meaning, including Gooniyandi (McGregor 1990:497), Wangkajunga (my own fieldnotes), and Jaru (Tsunoda 1981:206). As is usual in languages with such a particle or enclitic, it is not normally specified who is responsible for the mistaken thought: in (9–175) it is the speaker and one or more others; in (9–176) it is the addressee.

(9–175) ŋēr-elbe yaŋer-edj djen
ngirr-ilbi ya-ngi-rr-i-j-jin
spirit-MB 1PL.NOM-PST-AUG-CM-say-3MIN.OBL
"[As the bullroarer resounded] we said (=we thought) it was really the devil."²⁰
(Nekes & Worms 1953:519)

¹⁹ In the speech of the last Nyulnyul speaker, the prefixing word *-mungk* 'believe' is invariably used in expressing mistaken belief—see §13.4.

²⁰ The first clause of this example has been omitted because it contains a highly restricted word in Bardi (Claire Bowern pers.comm.).

```
(9–176) nai-elbe nan-djed wol-on, are ngay-ilbi nga-ny-jid wul-ung arri
1MIN.CRD-MB 1MIN.NOM-PST-go water-ALL<sub>1</sub> not nale-djedan nga-li-jid-an
1MIN.NOM-IRR-go-IMP
"You thought I went for water, but I did not." (Nekes & Worms 1953:519–520)
```

The person responsible for the mistaken belief can be specified by use of a framing clause with the generic IV -J 'say, do', as in (9–175) and (9–177). It is examples such as these that led Nekes and Worms to the belief that *-ilbi* was a conjunction, in fact, a type of complementiser that attaches to the subject of the complement clause (Nekes & Worms 2006:292–293). According to their analysis, then, examples such as (9–176) are elliptical versions of complex sentences with framing clauses. This analysis, it seems to me, puts the cart before the horse: it seems implausible to treat the full complement construction as the genuine grammatical construction, as discussed in §13.4.2.2. In (9–175) they would presumably regard the word marked by the enclitic as a unit of an elliptical framed relational clause meaning 'it is a devil'. I have no quarrel with this part of the analysis.

```
(9–177) min-djed wol-oŋ djo-elbe mi-ny-jid wul-ung juy-ilbi 2MIN.NOM-PST-go water-ALL<sub>1</sub> 2MIN.CRD-MB nan-d dje nga-n-d-jii 1MIN.NOM-CM-say-2MIN.OBL "I thought you went for water, but you did not." (Nekes & Worms 1953: 519–520)
```

9.3.5 *-ad* Focus (FOC)

There are only few more instances of this enclitic in the corpus than of either *-ilbi* 'mistakenly believe' or *-mil* 'regard, respect', and its interpretation is almost as uncertain. The following remarks are therefore tentative.

Nekes & Worms (2006:290–292) gloss -ad 'but, and, that (consecutive)', but give no Nyulnyul examples under this headword; many examples they provide in closely related varieties such as Jabirrjabirr include insufficient context to illustrate the connective use. Examination of the few Nyulnyul examples scattered throughout their dictionary and my own corpus suggest that the morpheme is not a conjunction, and hint that -ad serves instead as a type of focus marker, indicating that the unit to which it is attached conveys the most newsworthy information in the clause. It draws attention specifically to that unit. It almost always occurs in Wackernagel's position. In the two following examples -ad is attached to an NP, and appears to highlight the referent, perhaps as a new mention:

```
(9–178) nga-ni-ny-jal nyi-mal bardangk-in-ad
1MIN.NOM-CM-PST-see 2MIN-hand stick-ERG-FOC
i-na-r-juy arrak i-ng-kad kinyingk bardangk
3NOM-CM-poke-2MIN.ACC where 3NOM-PST-enter DEF stick
'I saw your hand where the splinter went in.'
```

(9–179) kamard-in jan i-na-w-ngay ring grandmother-ERG 1MIN.OBL 3NOM-CM-give-1MIN.ACC ring nga-mal-uk-ad nga-bakand-in 1MIN-arm-LOC-FOC 1MIN.NOM-have-PRS 'My grandmother gave me a ring, and I still wear it on my finger.'

The focal sense of -ad is particularly obvious in (9–180), which would be unexceptional as a Nyulnyul utterance (all of the lexical and grammatical items are acceptable in Nyulnyul).

(9–180) are ŋale-djed, djoe-ad mi-djed Jabirrjabirr arri nga-li-jid juy-ad mi-jid not 1MIN.NOM-IRR-go 2MIN.CRD-FOC 2MIN.NOM-go 'I will not go, but you will go.' (Nekes & Worms 2006:290)

In (9–181) -ad is attached to a nominal indicating a quality, intensifying it: not just sick, but really sick. This is consistent with its focal meaning.

(9–181) wamb yobol-ad i-nen, mōdj bowarewar i-nen wamb yubul-ad i-n-in muj buwarriwarr i-n-in man sick-FOC 3NOM-be-PRS already nearly:dead 3NOM-be-PRS 'The man is sick, he is nearly dead.' (Nekes & Worms 1953:414)

But -ad FOC is not restricted to nominal and pronominal hosts; it is quite promiscuous in the range of parts-of-speech that can host it. Nekes & Worms (1953) give a number of Nyulnyul examples in which it is hosted by a particle, including (9–182)–(9–184).

- (9–182) A: $m\bar{o}dj$ -ad min-djed ibal-oŋ? muj-ad mi-ny-jid iibal-ung already-FOC 2MIN.NOM-PST-go father-ALL₁ B: $\eta\bar{e}$, $m\bar{o}dje$ ηan -djed ηan -ny-jid
 - A: "Did you see father?"

yes

B: "Yes, I just went." (Nekes & Worms 1953:724–725)

already 1MIN.NOM-PST-go

- (9–183) ang-ēdj badelj gadj mi-djeden djān?
 angk-ij badily-kaj mi-jid-in-jan
 what-DAT turn:away-CONT 2MIN.NOM-go-PRS-1MIN.OBL
 are-ad mile-belŋ djan
 arri-ad mi-li-bilng-jan
 not-FOC 2MIN.NOM-IRR-meet-1MIN.OBL
 "Why do you turn away from me? You will not meet me." (Nekes & Worms 1953:326–327)
- (9–184) nadj-ad in-au dje namari
 ngaj-ad i-na-w-jii ngamarri
 INT-FOC 3NOM-CM-give-2MIN.ACC tobacco
 "Did he give you tobacco?" (Nekes & Worms 1953:772, 773)

Although these examples do not prove that -ad is a focus marker, they are consistent with the possibility, and suggest how the presence of this enclitic contrasts with its absence.

In the following example -ad FOC is hosted by what may be a spatial adverbial, and apparently draws attention to the entity in the specified position.

```
(9–185) yagar-ad i-nen djēb wan-njeo
yakar-ad i-n-in jiib wa-n-nyu
top-FOC 3NOM-be-PRS boomerang 2MIN.NOM-CM-get
'Take the boomerang lying on top.' (Nekes & Worms 1953:917)
```

There are also a few examples in Nekes & Worms (1953) in which this enclitic is hosted by an inflecting verb or a preverb: why one rather than the other has been chosen as host is not clear; in both instances the VP is a CVC.

```
(9-186)
          dar
                 nan-ar-ad
                                         djungar
                                                   bōṛ-og,
                                                              are-ad
          daarr nga-na-r-ad
                                        jungkarr
                                                   bur-uk,
                                                              arri-ad
          arrive 1MIN.NOM-CM-poke-FOC 2AUG.OBL place-LOC not-FOC
          golere-wan
                                           wēl mai
                       ŋai
          ku-li-rri-w-an-ngay
                                           wilamay
          2NOM-IRR-AUG-give-PST-1MIN.ACC food
          "I came to your place, you did not give me food." (Nekes & Worms 1953:420)
```

```
(9–187) djagod-ad ŋan-dj mōdj, ŋan-djed djer
jakud-ad nga-n-j muj nga-ny-djid-jirr
return-FOC 1MIN.NOM-CM-say already 1MIN.NOM-PST-go-REL
beagle bay-oŋ
beagle bay-ung
Beagle Bay-ALL<sub>1</sub>
"I am just back, I had gone to Beagle Bay." (Nekes & Worms 1953:443)
```

Although the evidence presented above does not argue conclusively that -ad is a focal marker, it is consistent with this analysis, and it is notable that in each of examples a sense of narrowing down to the thing, place, or event is a plausible interpretation. What is involved is not contrastive focus, and in no example is a specifically contrasting item explicitly mentioned. The enclitic -mad EMP (see §9.3.1) conveys a very similar sense, and it is unclear how precisely the two enclitics contrast semantically.

9.3.6 -aw Exclamative (EXC)

Nekes & Worms (1953:544) contains one Nyulnyul example with -au, presumably -aw, which the authors label a suffix, though it is more likely to be an enclitic; they say that is used as an 'exclamation for a distant call'. The example is given in (9–188). They do not treat this form separately anywhere in their text or dictionary, and nor is this form instanced in my own Nyulnyul corpus. Nevertheless, such a form is widespread in Kimberley languages, and is found in closely related Nyikina (Stokes 1982:122) and Yawuru (Hosokawa 1991:110–111), and further afield in unrelated languages such as Gooniyandi (McGregor 1990:487). Its existence in Nyulnyul is thus not unlikely.

(9–188) wamb-au galamb djungar-au wamb-aw kalamb jungkarr-aw man-EXC hither 2AUG.OBL-EXC 'Hurry up, men! Come here!'

9.4 Interjections

As already discussed, interjections are words that do not normally contract grammatical relations with other words or grammatical units. They are by and large restricted to minor clauses that convey no independent propositional content of their own (see §12.2.2). Although words of other classes—e.g. particles, the PV *wukul* 'pity, sorry'—can occur in minor clauses, interjections are virtually restricted to them: they are restricted to independent occurrence, and are unable to serve in grammatical relations in clauses expressing propositions. The main exception to this is that an interjection X can sometimes be used as a delocutive verb, meaning 'utter X' (see Benveniste 1958/1971).

The few instances of interjections in the modern recorded texts occur in their own intonation contour. It seems likely that the same would have been the case in traditional spoken Nyulnyul, as in many nearby languages. In keeping with this, Nekes & Worms (1953) usually separate them from other words in an utterance by commas, though of course we cannot be sure that this represents intonational separation rather than a convention carried over from written German and English.

As in many Australian Aboriginal languages, Nyulnyul interjections are often monosyllabic; indeed many are open monosyllables. However, they do not stand out as phonotactically unusual in Nyulnyul as in some other languages where free monosyllables are much rarer (compare the figures of Table 3–14 with e.g. McGregor 1990:228).

In the following sections we briefly discuss the known interjections in Nyulnyul. It is likely there are others, such as backchannel devices and continuers (i.e. words like the English mm, uhuh, n2n2, etc. that indicate attention is being paid to what is said). None of these are specific to Nyulnyul, those employed in the available texts being identical with English continuers.

9.4.1 *ngii* ~ *yii* 'yes'

This interjection is normally used to answer polar (yes-no) questions in the affirmative, as illustrated by:²¹

(9–189) Q: nyi-marl nganyji iik

2MIN-arm INT sore

A: yii nga-marl iik yes 1MIN-arm sore

Q: 'Is your arm sore?'

A: 'Yes, my arm is sore.'

²¹ It is not entirely clear whether or not the two forms should be regarded as allomorphs of a single affirmative interjection. I assume that they are because there is no evidence to the contrary—although it would not be surprising if there was a subtle semantic or pragmatic difference between them.

(9-190)O: nganyji nyi-mungk arrak bardangk 2MIN-believe where tree INT

arrak

A: yii nga-mungk yes 1MIN-believe where

'Do you know where it is?' Q:

'Yes, I know where.' A:

As in English, yii ~ ngii 'yes' is used in answering negative questions affirmatively: that is, when agreeing to the proposition negated. This is illustrated by (9–191).

(9-191)arri mi-li-jal-an-ngay O:

not 2MIN.NOM-IRR-see-IMP-1MIN.ACC

yii nga-ni-ny-jal-juy A:

ves 1MIN.NOM-CM-PST-see-2MIN.ACC

'Didn't you see me?' Q:

'Yes, I saw you.' A:

The affirmative interjection is also used in responding positively to other speech act types, including: statements, as in (9–192); commands, as in (9–193) and (9–194); and requests, as in example (9–195), the first clause of which is expressed as an interrogative.

(9-192)bin bardangk / biik A:

> this tree shade

yii bardangk / biik B: yangan niwirr-uk

yes tree shade near creek-LOC

A: 'There are trees/shade over there.'

'Yes, there are trees/shade near the creek.' B:

(9-193)A: kalamba jii

> come 2MIN.OBL

B: yii

ves

'Come here!' A:

B: 'Yes.'

(9-194)A: way jii mi-jid

away 2min.obl 2min.nom.fut-go

yii nga-ngka-jid B:

yes 1min.nom-fut-go

'Go away.' A:

'Yes, I'll go.' B:

(9-195)nganyji wa-na-marlb-ngay A: jii car

> INT 2MIN.NOM-CM-lend-1MIN.ACC 2MIN.OBL car

B: yii wa-na-k

yes 2MIN.NOM-CM-carry

'Can you lend me your car?' A:

B: 'Yes, take it.' *Yii* 'yes' is occasionally attached to an utterance as an invariant afterthought or tag, as in the next example:

(9–196) daarr wa-rr-a-r kunard come 2AUG.NOM-AUG-CM-poke tomorrow wa-rr-i-jal-ngay yii 2AUG.NOM-AUG-CM-see-1MIN.ACC yes 'You lot will come and see me tomorrow, eh?'

The next examples show *yii* 'yes' integrated into the grammar of a sentence. In (9–197), it occurs as a citation in a framed utterance. In (9–198) it is used together with *arri* 'not, no' delocutively as 'say/do yes or no', that is, 'answer'; here *arri yii* 'no yes' seems to be used as though it were a PV.

- (9–197) *nganyji i-n-di-jii* yii INT 3NOM-CM-say-2MIN.OBL yes 'Did he tell you "Yes"?'
- (9–198) nga-na-ng-kanam arri yii i-la-j-an-ngay 1MIN.NOM-CM-PST-ask no yes 3NOM-IRR-say-IMP-1MIN.ACC 'I asked him but he didn't answer.'

9.4.2 nyaa 'here! (take this)'

Like most Kimberley languages Nyulnyul has an interjection that is used to accompany an offer of a material item. The form is also typical: an initial laminal nasal followed by the low vowel, sometimes long, sometimes short. Languages with such an interjection include Nyikina (Stokes 1982:406), Warrwa (McGregor 1994c:25), Nyangumarta (Sharp 2004: 298), Gooniyandi (McGregor 1990:228), and Walmajarri (Richards & Hudson 1990:201). The following invented exchange illustrates the use of this interjection (see also lines (129) and (130) of Text 2):

(9–199) A: wul wa-na-w-ngay
water 2MIN.NOM-CM-give-1MIN.ACC
B: nyaa in wul wa-na-wid
here this water 2MIN.NOM-CM-consume
A: 'Give me water.'
B: 'Here, drink this water.'

9.4.3 kaa 'give!'

This interjection does not occur in my own corpus, however it does appear in Nekes & Worms (2006:296), who cite it as ga 'please (give)'. They provide the following examples:

²² I presume the vowel to be long on the basis of pattern congruity: no other interjections consist of just a consonant and short vowel.

```
(9–200) ga, wan-au ŋai kaa, wa-na-w-ngay give 2MIN.NOM-CM-give-1MIN.ACC 'Give me!'
```

(9–201) ga, ŋamari djarad kaa, ngamarri jarrad give tobacco lAUG.OBL 'Give us our ration of tobacco.'

9.4.4 juu 'alright, OK'

There is a single instance of this particle in the entire corpora, and it is used in a response to a request regarding the addressee's state of being (apparently, such questions can be used as greetings, as in English, at least in living memory).

(9–202) A: nganyji mi-n-in layib
INT 2MIN.NOM-be-PRS good

B: juu OK

A: 'How are you?'

B: 'OK'

9.4.5 kadakur 'enough, finished'

Being a poorly understood word, the status of *kadakur* 'enough, finished' as an interjection or a particle is uncertain. I have tentatively categorised it here as an interjection because in most cases it functions as an independent and separate word, not integrated into a larger grammatical structure, as in (9–203) and (9–204). Sometimes it is the sole item in a minor clause—for instance, when it marks the end of a narrative, as in the last lines of Text 2. In this case it translates into English as *finished!*. Nekes & Worms (1953:536) say that it can also be used as a farewell, but do not illustrate this use, which is not represented in my own corpus.

(9–203) gadogor, im-banj djärad morgol kadakur i-m-bany jarrad murrkul finished 3NOM-PST-finish 1AUG.OBL work "Finished, we finished our work." (Nekes & Worms 1953:536)

(9–204) gadogor, ware-gareg bēle
kadakur wa-rr-a-karrak biil
finished 2NOM-AUG-CM-leave:off fight
"The quarrel is finished, stop fighting!" (Nekes & Worms 1953:536)

They also cite (in Nekes & Worms 1953:788) a more extended conversational exchange, which is worth repeating in full since it provides nice illustration of the use of *kadakur* 'enough, finished' in winding up an interaction:

(9–205) J: wan-au ŋai ŋamari wa-na-w-ngay ngamari 2MIN.NOM-CM-give-1MIN.ACC tobacco

> F: are djān ŋamari arri-jan ngamari not-1MIN.OBL tobacco

J: *ibal ine-ŋannj djān ŋamari iibal i-na-nganny-jan ngamari* father 3NOM-CM-deny-1MIN.OBL tobacco

F: gadegor, ŋane-ŋannj dje ŋamari kadakur nga-na-nganny-jii ngamarri finished 1MIN.NOM-CM-deny-2MIN.OBL tobacco

Joe to the Father: "Give me tobacco." Father: "I have no tobacco."

Joe to Peter: "Father refused to give me tobacco."

Father: "That is enough, I already refused to give you tobacco."

In examples such as (9–206)—see also lines (9), (92) and (139) of Text 2—*kadakur* 'enough, finished' appears to serve as a PV in a CVC.

(9–206) *kadakur i-m-bany* finished 3NOM-PST-finish 'Finished, that's enough.'

It is possible, however, that in such examples *kadakur* 'enough, finished' is still serving as a minor clause, in some relation to the following major clause. For one thing, the IV is almost always either -BANY 'finish' or a verb with a similar meaning, suggesting that the second word is reiterating the first, stressing that whatever it is has finished. And in (9–203) and (9–204) *kadakur* 'enough, finished' is separated from the following verb by a comma, suggesting that it may have been uttered on a separate intonation contour.

9.4.6 kala 'finish, enough'

Kala 'finish, enough' was never used by my main consultant, Mary Carmel Charles, who, when I enquired about it, consistently rejected it, claiming it to be a Bardi word. There are, however, a number of instances of it in Text 2, e.g. lines (31), (82), (94), (97) and (177). The headword gala is attributed to Bardi in Nekes & Worms (1953:542) where it is glossed 'particle indicating the perfect'; Aklif (1999:40) effectively agrees, saying that it 'indicates that an action has already happened'. Despite the fact that they do not explicitly attribute gala to Nyulnyul, Nekes & Worms (1953:542) cite the expression gala laib (kala liyib) as a Nyulnyul expression 'all right, good bye'. According to Carmel Charles, the correct Nyulnyul expression for 'all right' was muj layib (literally, 'already good'). It could be that kala layib had entered Nyulnyul as an unanalysable phraseme in the early twentieth century, perhaps as a borrowing from Nimanburru.

9.4.7 jurrk 'farewell'

As the gloss suggests, this interjection is used in leave-taking. It is instanced a number of times in Text 2, including in lines (169), (177), (179), (196) and (197). Mary Carmel Charles agreed that this was the Nyulnyul word for 'farewell'. She also gave the complex expression *jurrk jurrk muj* as the 'genuine' Nyulnyul expression for *jurrk jurrk kala* in line (177) of Text 2.

It sometimes appears with a final u-vowel, as jurrku, a fact which is also mentioned in Nekes & Worms (1953:511), who separate the vowel as though it were a suffix: $djurg-\bar{o}$ 'farewell'. (This is listed under the headword djurg, which they gloss 'goodbye'. No explanation is forthcoming on the difference between the two forms.) Possibly the final vowel is an instance of the exclamative enclitic -aw (see §9.3.6 above); it could also be an epenthetic vowel.

In the following example (from Text 2) *jurrk* 'farewell' seems to be used delocutively, meaning 'to (say) farewell (to someone)':

```
(9–207) bilay jurrk i-nga-rr-i-j-jin jurrk jurrk again farewell 3NOM-PST-AUG-CM-say-3MIN.OBL farewell farewell iibal / aa jurrk jam / father and farewell grandfather 'Again they farewelled [said goodbye to] him, "Goodbye, goodbye father! Goodbye maternal grandfather."
```

9.4.8 yaawu 'youtch!, hey!'

According to Carmel Charles, this interjection is used as an expression of pain, like English *youtch*, *yow*, etc., and also in calling out to someone to gain their attention, as in English *hey*. An example is (9–208).

```
(9–208) kaw i-ngi-rri-j-a-jin yaawu ay<sup>23</sup> juy call 3NOM-PST-AUG-say-EV-3MIN.OBL hey hey you "Hey you," they called out."
```

Nekes & Worms (1953:926) also mention *yau* (*yaawu*) 'youtch!, hey!' as a Nyulnyul and Jabirrjabirr word. They refer to it as an exclamation, but provide no further explanation of its meaning. However, elsewhere they gloss it as 'stop' (Nekes & Worms 2006:296). Example (9–209) is readily amenable to either this gloss, or to the meaning I have ascribed. There is no basis for deciding between the two alternatives.

```
(9–209) yau, djid wandj
yaawu jid wa-n-j
hey stop 2MIN.NOM.FUT-CM-say
'Hey! be quiet!' (Nekes & Worms 1953:296, 926)
```

²³ Ay is not instanced elsewhere, and I strongly suspect that it is a borrowing from English hey! (the initial segment would of course be lost in borrowing into a language lacking aspirates).

Nekes & Worms (1953:937) also mention $y o \sim y o u$, which they also refer to as an exclamation. Whether this is the same lexical item as y a w or a different one remains unclear, given that there is no explanation of its meaning, and no instances given of its use.

9.4.9 nujaw 'yippee'

This exclamation is given in Tachon (1895:20) as an exclamation of joy. No examples are provided, and I have not found reference to anything comparable in my own corpus or in Nekes & Worms (1953).

9.4.10 waduy and wida 'oh!'

Tachon (1895:20) mentions these two words, which he spells *watoi* and *weta* respectively, and glosses them as exclamations of surprise; they are presumably identifiable with the forms *wadai* 'oh, alas!' of Jaru, Jabirrjabirr, Karajarri, and Yawuru and *wodai* 'oh, alas!' of Bardi (Nekes & Worms 1953:851, 2006:297). (Similar forms are widespread as interjections in Kimberley languages.) Unfortunately, neither source provides examples or any further discussion of their meanings. Tachon (1895) does, however, cite *weta ibala* as an exclamation of pain; quite possibly this is analysable as *wida iibal* 'Oh father!', perhaps a mission-inspired expression.

9.4.11 *jaa* 'move over (please)'

This interjection is listed in Nekes & Worms (2006:296) as conveying a polite request for the addressee to move out of the way: 'please (give room)!'. The only example of its use is:

```
(9–210) dja, wai dje

jaa, way jii

please away 2MIN.OBL

'Please away with you!'
```

9.4.12 *jini* 'never mind'

This is another interjection attested only in Nekes & Worms (1953:485–486), where it is spelt *djene*, and given in the following two examples, under the headword *djener*, cited as an adverb meaning 'not taking care, letting alone, not interfering':²⁴

```
(9–211) djene ongor-djed
jini yu-ngku-rr-jid
never:mind 3NOM-FUT-AUG-go
'Let them go.'
```

²⁴ Note that in both examples the IV is Bardi, not Nyulnyul.

(9–212) djene war-gadj ongor-edj jini way-kaj yu-ngku-rr-i-j never:mind away-CONT 3NOM-FUT-AUG-CM-say 'Let them travel, let them go away!' (More literally, 'Never mind, away they go.')

9.4.13 kaw kaw 'ho! come here!'

This interjection is also mentioned in Nekes & Worms (2006:296); unfortunately they do not exemplify its use, ²⁵ and it is not attested elsewhere in the corpus.

9.5 Conjunctions

Nyulnyul has three conjunctions, *aa* 'and', *akal* 'and' and *man* 'but'; in addition, *nd*, obviously borrowed from English *and*, is not infrequently also used. These words have, in terms of the grammatical framework laid out in §2.4 and McGregor (1997b), textural functions: they mark links between grammatical units such as NPs, clauses and sentences. Each is morphologically invariant, and almost always occurs between the items which it conjoins. We discuss these words in the following subsections, respectively.

9.5.1 aa 'and'

Aa 'and' is the most general and frequent conjunction. (It is also attested in nearby Jabirrjabirr (Nekes & Worms 1953:313); and the Northern Kimberley language Worrorra has the very similar conjunction a (Love 1934:33).) It is used to connect words of the major parts-of-speech, including nominals ((9–213) and (9–214)), adverbials (example (9–215)), and PVs (example (9–216)).

- (9–213) barnabarn wa-na-m lakurr aa mung strain 2MIN.NOM-CM-put egg and honey 'Strain the eggs from the honey.'
- (9–214) war-in i-ni-ny-janb war aa war one-ERG 3NOM-CM-PST-trample other and other 'They kicked one another.'
- (9–215) ni-many-mirr kalb aa jimbin 3MIN-neck-PER up and inside 'inside and outside of neck'
- (9–216) well / junk aa marriny i-jid-in / well run and walk 3NOM-go-PRS 'Well, he runs and walks, not like the other birds.'

²⁵ There is a headword *gau gau* in their dictionary (Nekes & Worms 1953:567–568), for which the definition 'native signal call, coo-ee' is given. No Nyulnyul examples are cited, and, strangely, all examples listed here (and elsewhere in the dictionary) involve the unreduplicated form *gau* as a PV. This is attested in my own corpus, and could be, or derive from, a delocutative use of the interjection.

The conjunction *aa* 'and' can also be used to conjoin NPs, as illustrated by example (9–217), where the NP *ngay* 'I' is conjoined with the NP *jan malirr* 'my wife'.

(9–217) ngay aa jan malirr ya-ngi-rr-i-j
1MIN.CRD and 1MIN.OBL wife 1PL.NOM-PST-AUG-CM-say
warliwarl-uk ngimbirr
talk-LOC last:night
'My wife and I were talking together last night.'

Aa 'and' is also used to conjoin clauses, as in examples (9–218) and (9–219), and sentences, as in (9–220) and lines (42), (44), (93), (124), and (132) of Text 2. When used as a sentence conjunction, aa 'and' occurs in initial position.

- (9–218) *kur i-ngi-rr-barnj aa i-ngi-rr-balm* embrace 3NOM-PST-AUG-exchange and 3NOM-PST-AUG-kiss 'They embraced and kissed each other.'
- (9–219) *i-ngi-rr-barnj kumbarr war-in i-na-w aa* 3NOM-PST-AUG-exchange money other-ERG 3NOM-CM-give and *war-in i-na-w* other-ERG 3NOM-CM-give 'They exchanged money, giving it to one another.'
- (9–220) *aa bina ral bur-ung jin i-ny-jid/* and there right:away camp-ALL₁ 3MIN.OBL 3NOM-PST-go 'And he immediately went over there to his camp.'

Three concluding observations are in order. First, when two or more NPs are conjoined, it is usual for an instance of *aa* 'and' to be used between each conjunct, as in (9–221) and (9–222). (The maximum number of attested conjuncts is three.) Second, conjunctions are not necessarily used: words, phrases, clauses and sentences may be conjoined additively by juxtaposition, without the use of *aa* 'and'. This is illustrated by (9–223)—see also the texts of Volume 2, most sentences of which are not linked by conjunctions.

- (9–221) jan malirr aa baab aa ngay ya-ngki-rr-jid
 1MIN.OBL wife and child and 1MIN.CRD 1PL.NOM-FUT-AUG-go
 perth-ung war-uk kunyurl
 Perth-ALL₁ other-LOC moon
 'My wife, my child and I will go to Perth next month.'
- (9–222) wa-na-mukar karrambal aa winin aa burruk 2MIN.NOM-CM-draw bird and emu and kangaroo 'Draw a bird, emu and a kangaroo.'
- (9–223) kabmin i-na-w bina wamb malirr murrul baab government 3NOM-CM-give this man wife little baby birray jin i-ny-jimb mother 3MIN.OBL 3NOM-PST-die 'The government gave the man and his wife a baby whose mother had died.'

Third, in just one or two instances *aa* 'and' hosts the ablative postposition *-kung*; the combination apparently conveys the meaning 'and after', as in:

(9–224) aa-kung i-n-j/ liyan jin layb i-n-j/ and-ABL₃ 3NOM-CM-say feelings 3MIN.OBL good 3NOM-CM-say arri bindany man murrul/ not big but little 'After that he changed. He felt better, not much but a little.'

9.5.2 akal 'and'

This conjunction was not used at all by Mary Carmel Charles (who used only *aa* 'and', discussed in the previous section), although it occurs a number of times in Albert Kelly's and Rosie Victor's texts (Texts 2 and 5, Volume 2). It is treated as a Nyulnyul conjunction by Nekes & Worms (2006:290) who provide a number of examples of its use; see also Nekes & Worms 1953:361, 472, 671–672, 708, 710–711. Nyulnyul is not, however, listed under the headword as a language with this form, and it is possible that it has been recently borrowed into Nyulnyul from Bardi.

As far as I can tell, *akal* 'and' is used in exactly the same ways as *aa* 'and', to conjoin words, phrases, clauses and sentences by simple addition. In examples (9–158) above and (9–225), *akal* 'and' conjoins words, whereas in (9–226) and (9–227) it conjoins NPs.

- (9–225) yone djebedjeb nēndj agal djiwar wamborindj djer yu-ni-jibijib ninji akal jiwarr wamburiny jirr 3NOM.FUT-CM-stare alive and dead people 3AUG.OBL "He shall judge the living and the dead people." (Nekes & Worms 1953:472)
- (9–226) yar-bo ŋaran ibal, agal wāl, agal holy nimaradj ya-rr-bungarran iibal akal waal, akal holy ni-maradj 1PL.NOM-AUG-praise father and son and holy 3MIN-shadow "Glory be to the Father and the Son, and the Holy Ghost." (Nekes & Worms 1953:361)
- (9–227) god-en ine-magoran gorwol agal yen bōṛ god-in i-na-makurr-an kurrwal akal in bur God-ERG 3NOM-CM-made-IMP heaven and this country "God made heaven and this earth." (Nekes & Worms 1953:671–672)

Lines (52), (67), (101), and (165) of Text 2 illustrate *akal* 'and' as a clausal conjunction, while lines (111), (199) and (212) illustrate it as sentential conjunction. Line (21), repeated as (9–228), shows an unusual use of the conjunction, where the two conjoined clauses are connected not by addition, but rather by elaboration.

(9–228) arriyangk / nimal jin / bindany / akal / wurrumbang bindany / nimal nothing hand 3MIN.OBL big and many big hand jin / 3MIN.OBL 'Alas! His arms were big, his arms were far too big.'

As the above examples illustrate, *akal* 'and' is normally found between the two conjuncts. One of the few exceptions is (9–229), line (223) of Text 2, in which the first occurrence of *akal* 'and' serves as a sentential conjunction, even though it does not occur sentence initially.

(9–229) kinyingk-kun / kanjun-kun bur / akal / kalb i-nga-rr-a-k /
DEF-ABL₂ that:time-ABL₂ camp and above 3NOM-PST-AUG-CM-carry
aa dub i-nga-rr-a-m bur jin /
and blow 3NOM-PST-AUG-CM-make camp 3MIN.OBL
'From then, from that time when they took him up to his camp and set his camp on fire.'

9.5.3 man 'but'

Like *akal* 'and', *man* 'but' is not used by Carmel Charles, and the only examples of this conjunction come from Text 2—Nekes & Worms (1953) do not recognise this form as a Nyulnyul word, and give *-ad* as the Nyulnyul conjunction meaning 'and, but, then' (Nekes & Worms 2006:290); see §9.3.5. It is possible that *man* 'but', like *akal* 'and', also represents a recent borrowing from Bardi.

Man 'but' normally connects sentences or clauses together by a relationship of contrast. This is illustrated by examples (9–230) and (9–231) respectively. (See lines (5), (36), (73), (75), (76), (79) and (89) of Text 2 for further examples of this word as a sentential conjunction.)

- (9–230) man juy nyungul-jun juy kunarr mi-jid kalb / but 2MIN.CRD old-ABL₁ 2MIN.CRD over:there 2MIN.NOM-go up 'But you, old man, you can go from here up to there.'
- (9–231) ya-ngka-rra-miimii wil jarrad / man juy arri 1PL.NOM-FUT-AUG-seek meat 1AUG.OBL but 2MIN.CRD not nyi-mungk / 2MIN-believe 'We'll be able to hunt our meat, but you, you can't.'

In (9–232), man 'but' apparently serves as a clausal conjunction, connecting arri wamburiny 'no people' as an elliptical clause (the verb of which has been omitted since it presents predictable information) to the previous clause, wamb-uriny i-nga-rra-kal 'they lived'; alternatively, it could be proposed that arri wamburiny 'no people' is an NP, which is linked to the NP of the previous clause, wamburiny 'people'.

(9–232) yalarrabur / mar-kung bur / kaard mar / wamburiny
before far-ABL₃ place still far people
i-nga-rra-kal / man arri wamburiny /
3NOM-PST-AUG-wander but not people
'Long ago there was a very far away place where there lived people, but not quite people.'

Like *aa* 'and' and *akal* 'and', *man* 'but' normally occurs clause initially. There are just a few exceptions. In (9–233), *man* 'but' follows *aa* 'and', and in (9–234), it follows the first

word of the clause, in Wackernagel's position. More unusually, in (9–235), it occurs clause finally. What meaning contrasts the different placements of the conjunction might convey remains obscure.

- (9–233) aa man juy warragan juy mi-nga-n-an and but 2MIN.CRD eagle 2MIN.CRD 2MIN.NOM-PST-be-IMP ngay-nyirr / 1MIN.CRD-COM 'But you, eagle, you used to stay with me.'
- (9–234) juy man nyungul / mi-jid kalb / aa malbul jan 2MIN.CRD but old 2MIN.FUT-go up and thing 1MIN.OBL wa-na-k kalamb / 2MIN.NOM.FUT-CM-carry towards 'But you, old man, you can go up there and bring my things down here.'
- (9–235) nikard jin kaard i-n-in man / body 3MIN.OBL still 3NOM-be-PRS but 'But his body is still there.'

Finally, I remark that there is one example in which *man* seems to be used in a consequential rather than contrastive sense:

(9–236) waalk i-ng-kard / man jungk dub dub i-nga-rr-a-m / sun 3NOM-PST-enter but fire blow blow 3NOM-PST-AUG-CM-make 'The sun went down so they lit a fire.'

10 Noun phrases

10.1 Introductory remarks

Since the early 1980s the existence of NP-like units in Australian languages has been called into question. This is premised on two observations: (a) that in the typical Australian language the order of words in putative NPs is free, and the words can be permuted in any order without affecting grammaticality; and (b) that these words may be scattered throughout the clause in which they occur, again without affecting grammaticality. Thus in languages such as Warlpiri it was observed that discontinuity is rife, and there were no absolute grammatical restrictions on discontinuity (e.g. Hale 1981, 1983; Simpson 1983). Ken Hale proposed that Warlpiri is a non-configurational language, that clauses are constituted by words strung together in sequence, without hierarchical structure (Hale 1983). The notion that Australian languages show flat clause structure made up exclusively of words in grammatical relations with other words was adopted by linguists working outside of the generative tradition, including Barry Blake (1983) and Jeffrey Heath (1984). (Configurationality was later construed in rather different ways.)

The nearby Bunuban language, Gooniyandi, is a fairly typical Australian language in both of these respects. However, I have argued (McGregor 1990:267–274) that the different possible orders of words of putative NPs contrast subtly in meaning, and that it is possible to account for these differences by describing NPs in terms of a fixed sequence of grammatical roles. This type of description was shown to apply to other Australian languages (see Harvey 1992). Furthermore, NP discontinuity is constrained in usage, not just in Gooniyandi (McGregor 1997a), but also in Warlpiri (Swartz 1988).

The situation in Nyulnyul is somewhat simpler, and evidence for NPs as grammatical units is unequivocal. Word order in putative NPs is constrained compared to the Australian norm, and discontinuity is rare to the point of nonexistence. (And hence potential examples might be construed as separate NPs.) Furthermore, case-marking postpositions, as we have seen (§5.1), are bound phrase-level enclitics that are hosted by the first word of an NP.

We begin in §10.2 with a description of the structure of simple NPs in Nyulnyul. Word order generalisations of the traditional type are presented: that is, the NP is characterised as an ordered sequence of words of particular parts-of-speech as per e.g. Lyons (1968:216ff). A description in terms of grammatical roles is also provided in order to capture inadequacies in this type of representation, including generalisations across what would otherwise be distinct types of NPs. Following this, in §10.3, we examine the expression of phrasal possession, or NP-internal possession—although in Nyulnyul the construction involves juxtaposition of NPs, not embedding. Section 10.4 turns to the expression of negation in NPs, focusing in particular on the privative. The final section (§10.5) deals with further constructions involving NPs, including combinations involving juxtaposition

of NPs and collocations of NPs and adverbials. Discontinuity of NPs and combinations of NPs is also dealt with.

10.2 Structure of NPs

10.2.1 The NP as a syntagm of words

NPs are grammatical units that behave as unified groupings of words that cohere together. They designate entities, including persons, animate beings, inanimate objects, places, and abstract objects such as times. They represent a single type according to their internal structure, and contrast with other groupings of words such as VPs, which show different internal structure, and specify and refer to events rather than entities. There are two other reasons for identifying phrases as separate units, different from words. First, it is phrases not words that refer to phenomena in the world; words, by contrast, have denotations (coded semantics) but not referents. Second, many types of clausal roles must be realised by phrasal constructions—or combinations of phrasal constructions and other units—rather than by words. This holds in particular for the roles referred to as participant roles (roughly arguments) in §12.4.

A phrase may consist of just a single word. Indeed, the majority of NPs in the Nyulnyul corpora are of this minimal type. (10–1) shows three such singleton NPs (two hosting a postposition), while (10–2) shows two such NPs (again both hosting a postposition); here square brackets indicate the boundaries of the NPs.

- (10–1) [wamb-in] bany i-na-w [burruk] [jilaman-nyirr] man-ERG shoot 3NOM-CM-give kangaroo rifle-INS 'The man shot the kangaroo with a rifle.'
- (10–2) [yiil-in] kad i-na-w-ngay [nga-marl-uk] dog-ERG bite 3NOM-CM-give-1MIN.ACC 1MIN-arm-LOC 'The dog bit me on the arm.'

Of course, there must be evidence that the single words in these examples are also phrases, or otherwise the claim would be empirically vacuous, and phrases could be postulated willy-nilly. The evidence is that the singleton NPs can all be expanded to include other words. For instance determiners such as *kinyingk* DEF can be added to each of the NPs in the above examples with the exception of the final one, which can instead be expanded by adding *jan* 1MIN.OBL. This criterion permits us to distinguish (at least in some circumstances) between singleton NPs and separate isolated words within clauses, that do not form minimal NPs.

Singleton NPs typically consist of the nominal or pronominal 'head'. (In this section I use the term *head* loosely, and for convenience only, in reference to the main entity-denoting element of an NP.) Only rarely do they consist of just another type element, without the lexical head, except when the other element is a determiner, as in (10–3), which consists of two NPs, the singleton *kinyingk* DEF and the fuller *bur jin* 'his/her place'. One of the few exceptions is (10–4), from Text 2, where *malbul* 'things, possessions' has been ellipsed, being given in the previous text.

- (10–3) [kinyingk] [bur jin]
 DEF place 3MIN.OBL
 'This is his camp.'
- (10–4) nganyj [wurrumbang] mi-bakand-in?

 INT many 2MIN.NOM-have-PRS
 'How much/many [things] have you got?'

NPs usually consist of a single word or two. NPs consisting of more words are rare though not ungrammatical—examples of longer NPs are (10–5) and (10–6). In fact, fiveword NPs are not represented at all in the corpus. In most cases, units consisting of more than three words are analysable into two (sometimes more) separate NPs in apposition (see §10.3 and §10.5 below). Embedding of one NP in another is not attested in the Nyulnyul corpora.¹

- (10–5) [marirr jirr] i-m-bakand-an [irrjuwar miida baab] / sister 3AUG.OBL 3NOM-PST-have-IMP three male child 'Their sister (Eugenia?) had three sons (Ignatius, Matthias and Ambrose).'
- (10–6) in [wurrumbang orange-jun bardin] [band-uk] this 2 much orange-ABL $_1$ skin ground-LOC 'There are lots of orange skins on the ground over there.'

NPs consisting of two or more words show a number of regularities in the ordering of the various types of word making them up. These tendencies include the following (which are given in random order):

- In pronominal NPs—roughly, NPs with a cardinal pronominal as head—the pronominal strongly tends to occur in first position, followed by other Ns such as numerals, which normally form compounds with them, except in rare cases where there is another N as well, as in (10–7). Pronominal NPs only rarely include modifying Ns other than numerals.
- In non-pronominal NPs determiners and numerals almost always precede the head N, as do other modifying Ns—see (10–8), (10–9), and (10–11)–(10–15). The major exception is oblique pronominals, which can also follow the head N, as in (10–14), though this order is far less common than the reverse.
- The negative particles *arri* 'not' and *arriyangk* 'nothing' normally occur in NP-initial position, as illustrated by (10–10).
- The components of an NP strongly tend to be contiguous. NP discontinuity is extremely rare, and discontinuous NPs consist of no more than two separate pieces. The pieces occur in the order typical of contiguous NPs, with one piece in clause-initial position, the

¹ There are a few instances in which an N marked by a postposition occurs in an NP. In these cases it seems that the postposition is in collocation with a single word rather than an NP, and appears to be serving a derivational rather than a relational function.

It is not clear whether or not the first word, *in* 'this', forms its own singleton NP or belongs to the following NP. If the latter, we would have one of the very few instances of a four-word NP in the Nyulnyul corpus.

I exclude the trivial case of discontinuity arising from placement of a postposition on the first element of an NP consisting of two or more words.

other in final position; thus the pieces tend to be maximally separated (see also McGregor 1997a). (10–16) and (10–17) illustrate these tight restrictions on discontinuous NPs.

- (10–7) [kurr irrjiwar wamb] liyan ku-nga-rr-dam-ngay
 2AUG.CRD three man like 2AUG.NOM-PST-AUG-hit-1MIN.ACC
 'You three men intended to hit me.'
- (10–8) [kujarr karrambal] yalk i-rr-ø-in [warinyjirr-inyirr irr-mird] two bird stand 3NOM-AUG-be-PRS one-COM 3AUG-leg 'Two birds are standing on one leg (each).'
- (10–9) [kujarr miid baab] bil-uk i-rri-karl-in two male child fight-LOC 3NOM-AUG-play-PRS 'Two boys are fighting.'
- (10–10) marriny i-ngi-rr-jid [arriyangk-ang wul] go 3NOM-PST-AUG-go nothing-INS water 'They went walking without water.'
- (10–11) [mururl baab] small child 'small child'
- (10–12) [riib wamburiny] bad people 'bad people'
- (10–13) [bin wamb] warlirr i-n-in [jan-uk buru] this man lie 3NOM-be-PRS 1MIN.OBL-LOC camp 'This man is lying in my camp.'
- (10–14) [bin wamb] mijal i-n-in [bur-uk jan] this man sit 3NOM-be-PRS camp-LOC 1MIN.OBL 'This man is sitting in my camp.'
- (10–15) [kinyingk uriny] [jarrinyan-jun]
 DEF woman Lombadina-ABL₁
 'This woman is from Lombadina.'
- (10–16) [kinyingk] / i-ngi-rr-wid-an / (...) / [jukud] / DEF 3NOM-PST-AUG-eat-IMP worm 'They eat this worm.'
- (10–17)) [murlijun] nga-n-kird-in [jubak] chewing:tobacco 1MIN.NOM-CM-eat-PRS tobacco 'I chew the chewing tobacco.'

Given the formal constraints on the phenomenon, NP discontinuity is likely to have served discourse functions, as is the case in Gooniyandi and several other Australian languages (McGregor 1997a). Evidence in favour of this hypothesis is adduced in §12.7.3.

10.2.2 Role structure of the NP

The word order generalisations given in the previous section are a mixture of generalisations regarding parts-of-speech and function (specifically, the relation of modification). If we restrict attention to parts-of-speech and their subclasses, it is difficult to make generalisations about the structure of NPs. On the other hand, it is possible to describe the structure of NPs as a sequence of grammatical roles, if we ignore the part-of-speech membership of the component words. Such a description is provided in (10–18), where brackets indicate optional items. In contrast to the situation in clauses (Chapter 12), the order of roles is fixed.

(10–18) (Deictic) (Quantifier) (Qualifier) Entity (Predicator)⁴

As this formula indicates, the only obligatory role is the Entity. This does not mean that all NPs have a word serving in this role. As per previous remarks, NPs without overt fillers of this role do occur. However, in all such cases the filler of this role has been ellipsed, generally under conditions of givenness or predictability. This is illustrated by the following examples. In (10–19) the N serving in the Entity role, *yaward* 'horse', has been ellipsed from the third NP (underlined)—the full form of which is *bin maank yaward* 'that black horse'—being retrievable from the first NP. In (10–20) the Entity N *bardangk* 'stick' is ellipsed from the second NP (underlined) *in bardangk* 'this stick', again being retrievable. By contrast, for the other roles, absence of a filler does not imply ellipsis; rather, it typically (though not necessarily) indicates it has not been selected.

- (10–19) yaward junk makirr-mirr <u>bin</u> <u>maank</u> in junk i-n-j
 horse run track-PER that black this run 3NOM-CM-say
 in-mirr ngidirrngin
 this-PER alone
 'The horses ran along the track, the black one ran past the post alone.'
- (10–20) in bardangk diwilwil aa <u>in</u> nguub this stick hard and this soft 'This stick is rigid, while this one is flexible.'

Examples of NPs satisfying (10–18) are provided in Table 10–1.

⁴ Note that the term *Predicator* is used here as the label for an NP role; this is not to be confused with the predicate role in a clause (as per e.g. Functional Discourse Grammar—Hengeveld & McKenzie 2008).

Table 10–1: Examples of NPs analysed according to (10–18)

Deictic	Quantifier	Qualifier	Entity	Predicator
bin			wamb	jilaman-nyirr
this			man	rifle-COM
'this man with	a rifle'			
		kari-jun	wamb	
		beer-ABL ₁	man	
'drunken man'				
		wamb-inyirr	uriny	
		man-COM	woman	
'married woma	ın'			
			n-alm	biinji
			3MIN-head	cold
'cold head'				
		waringkil	baab	
		girl	child	
'girl'				
jin	kujarr		ni-marl	
3min.obl	two		3 _{MIN} -arm	
'his two arms'				
			wurrul	jan
			fingernail	1min.obl
'my fingernail'				
		jurrungk	ni-mird	
		straight	3min-leg	
'straight leg'				
		kalb-ijun	iibal	
		above-ABL ₁	father	
'god'				
		mirlimirl	kumbarr	
		paper	money	
'paper money'				

Table 10–1: Examples of NPs analysed according to (10–18) (Continued)

Deictic	Quantifier	Qualifier	Entity	Predicator
		layib	bur	
		good	place	
'a good place'				
bin			uriny	baab-inyirr
that			woman	child-COM
'that woman wi	th a child'			
	warli		wamburiny	milirr-karr
	everyone		people	before-TEM
'all the early-da	ys people'			
	wurrumbang	orange-jun	bardin	
	much	orange-ABL $_1$	skin	
'lots of orange p	peels'			
		wurraarra	ngank	
		Worrorra	language	
'the Worrorra la	nguage'			
		burruk	barrjarniny	
		kangaroo	kangaroo:type	
ʻa <i>barrjarniny</i> k	angaroo type'			
	warli	maank	wamburiny	
	everyone	black	people	
'all Aboriginal 1	people'			
	warang	miid	baab	
	others	male	child	
'the other boys'				

Part of the motivation for recognising the grammatical roles of (10–18) is that a single lexical item can function in different ways in different NPs, according to its position. For instance, waringkil 'girl' can serve as an Entity N in an NP (e.g. bin waringkil 'this girl') or as a Qualifier (as in waringkil baab 'girl child, girl'). There are however restrictions on the roles a lexical item can serve, and unmarked correlations exist between roles and classes and subclasses of Ns, both notional and emic.

Determiners (both definite and indefinite) and numerals, for instance, usually serve in the roles Deictic and Quantifier respectively, although they may also serve in the Predicator role. Indefinite determiners can also serve in the Quantifier role, as in the last example of Table 10–1. Determiners can also perhaps serve in the Entity role, when used in reference to relative spatio-temporal locations, as in *in-ik* 'here' and *bin-ik* 'there'. However, it is also possible that these expressions involve the ellipsis of the Entity N *bur* 'place'. The Deictic role can also be filled by an oblique pronominal, and the Quantifier by quantifying Ns such as *warli* 'all, everyone' and *wurrumbang* 'big, many'.

Open class lexical Ns can serve in neither Deictic nor Quantifier roles, and are restricted to the other three roles, usually Qualifier and Entity. There seem to be no absolute restrictions on lexical Ns serving in either role, although they show different tendencies: those that are notionally adjectival and generally translate into adjectives in English (such as *maank* 'black'), are more frequently found in the Qualifier roles, whereas those that generally translate as nouns (e.g. *wamb* 'man', *-marl* 'hand') are more likely to serve in the Entity role.

In terms of the grammatical roles identified in (10–18) and their order, the Nyulnyul NP resembles the NP in various Australian languages, including Gooniyandi (McGregor 1990: 253), Kayardild (Evans 1995:235–249), Martuthunira (Dench 1995:189–193), Wambaya (Nordlinger 1998:131), and Gaagudju (Harvey 2002:316–320). The scheme is also consistent with the Functional Discourse Grammar layered model of the NP, which identifies five layers of modifiers: 0 Classifying modifiers; 1 Qualifying modifiers; 2 Quantifying modifiers, 3 Localising modifiers, and 4 Discourse referential modifies (Rijkhoff 2002:218–238, 2008; Velasco & Rijkhoff 2008a). The Nyulnyul NP roles readily correlate with these layers, and indeed their relative position with respect to the Entity is basically in accordance with them. The most notable differences are the collapsing of some distinctions (e.g. between localising modifiers and discourse referential modifiers), and the existence of some distinctions not made in the layering model (notably between modifiers on each of the levels in accordance with their position preceding or following the Entity N).

In the remainder of this section I discuss in order from left to right the five grammatical roles constituting NP structure in Nyulnyul. Then in §10.2.3 we examine the significance of word order.

10.2.2.1 Deictic

Linguistic units filling this role contextualise the NP, linking it to the linguistic or extra-linguistic context, and thereby facilitating identification of its referent.

Determiners are among the most frequent fillers of this role: these elements specify the referent in terms of proximity to the speaker (demonstrative determiners), definiteness (non-demonstrative determiner), relation to some other similar referent or referents (comparative determiners). Interrogative determiners also often fill this role, indicating that the identity is not known to the speaker, and requesting this information, as in *angk wamb* (who man) 'who, which man'. See §4.3 for discussion and examples.

Also commonly functioning as fillers of the Deictic role are oblique pronominals (§4.6), which specify the identity of the referent by virtue of its being a possession of another (typically or presumed identifiable) entity.

As already mentioned, an NP need not necessarily have an element serving in the Deictic role; indeed, perhaps the majority of NPs are without manifestation of this role. An NP without a Deictic may be interpreted as either definite or indefinite, depending on context.

Occasionally the Deictic role is filled by more than one element. As in the following example, there is usually a definite determiner and a comparative determiner, in that order:

(10–21) kinyingk war winin

DEF other emu

'this other (one the) emu'

10.2.2.2 Quantifier

Fillers of this NP role specify quantity in as far as it is relevant to the construal of the referent of the NP—the number of items of the type specified by the Entity N, the cardinality of the referent set. Thus the most common fillers of this role are quantifiers (§4.4), including numerals and the universal quantifier *warli* 'all'. Very rarely, two numerals are used in collocation to represent larger numbers, e.g. *kujarr kujarr* (two two) 'four'; *warinjirr aa kujarr* (one and two) is attested for 'three', as a perhaps more precise alternative to *irrjiwar* 'three, a few'.

Numerals do not, however, always specify cardinality: wurrumbang 'many', in particular, is sometimes found in NPs denoting masses, expressing the notion 'large quantity', as in wurrumbang wilamay (many food) 'much food' and wurrumbang wil (many water) 'a lot of water'. There is no emic contrast in Nyulnyul between mass and count nouns or NPs, and some instances are amenable to both construals. For instance, wurrumbang wil (many water) could also express the notion 'many glasses/bottles of beer (or other drink)'. Mass quantity can also be specified by Ns such as birndany 'large, a large mass of' and murrul 'little, a small mass of'.

10.2.2.3 Qualifier

Expressions filling this role indicate either a quality or property of the referent of the NP, or specify a subtype of the category of things denoted by the Entity N. In both cases the Qualifier serves a restrictive function, narrowing down the referential range of the Entity N. Although quality and category specification—qualification and categorisation—are distinguishable from one another as conceptually and cognitively distinct operations (e.g. McGregor 1990:272–274, 1992a), it seems that in the Nyulnyul NP they are treated as the same. That is to say, the contrast between them is etic rather than emic. Moreover, no NP token is available that shows two Ns, one serving a qualifying function, the other serving a classifying function; this strongly suggests that indeed the two are not discernible as grammatically distinct role types.

Virtually any open-class N (thus excluding pronominals, determiners, and quantifiers) can serve in the Qualifier role. So also can PPs occur in this function, although they appear to be restricted to single word units, with comitative and ablative postpositions.

A Qualifier indicates a quality or property of the referent of the NP, including the following non-exhaustive list:

I do not deny that this may be the result of vagaries in the corpora, and that grammatical differences may have existed between the two phenomena. In Gooniyandi, qualification can be distinguished from classification by virtue of the fact that only qualification admits degree modification, and allows expression in verbless relational clauses (McGregor 1990). The more limited data from Nyulnyul does not permit formulation of these restrictive generalisations. The only indication that the two may have been emically distinct when Nyulnyul was a viable language comes from a single example in which the two pre-Entity open class Ns appear to serve qualifying and classifying functions respectively: *bin murrul miida baab* 'this little male child'. Significantly, the classifying N occurs adjacent to the Entity N, consistent with its lexical role (cf. McGregor 2002b).

- size
- (10–22) *murrul baab* little child 'little child'
- colour
- (10–23) maank mungkan black hair 'black hair'
- age
- (10–24) nyungul wamb old man 'old man'
- value
- (10–25) riib wamburiny bad people 'bad people'
- texture
- (10–26) diwilwil bur hard ground 'hard ground'
- shape
- (10–27) jurrungk ni-mird straight 3MIN-leg 'straight leg'
- physical appearance
- (10–28) barlbirr na-alm bald 3MIN-head 'bald head'
- · mental quality
- (10–29) mudukarr baab silly child 'silly child'

- characteristic temporal location
- (10–30) milirr-karr-jun wamb before-TEM-ABL₁ man 'early-days person'
- relative distance
- (10–31) mar-kung bur far-ABL₃ place 'a distant place'

The quality or property may be a feature not so much of the referent entity of the NP, but rather of a subclass of things to which the referent entity belongs. That is, the property may characterise a subcategory of the category specified by the Entity N. This is classification, more specifically, subclassification: the category of things specified by the Entity N is divided into groups or types according to a prototypical feature (McGregor 2002c:4–5). The pre-Entity element specifies a characteristic feature of the members of a subcategory as a whole, distinguishing it from other subcategories; it need not actually be a property of the NP referent itself (though this is not precluded). Thus in *warli maank wamburiny* (all black people) 'all Aboriginal people' (see Table 10–1) the quality of blackness is attributed not of the referents of the NP, but rather is used to specify a subcategory of people, namely those who are prototypically black in colour—Aboriginal people as against white people. The referents are not those who satisfy the property of blackness (and a person of similar colour from elsewhere would be excluded), but those who belong to the subcategory specified by this property.

Effectively in this circumstance the pre-Entity and Entity elements together specify the category or class of things denoted; the two Ns function like a compound (although there is no evidence that they represent a separate construction type distinct from the qualifying type under discussion in this subsection). (The only genuine nominal compounds in Nyulnyul appear to be the coordinate and limited specifying types—see §4.5.3.)

This type of pre-Entity Qualifier can indicate features including:

- generic type of a specific N
- (10–32) bin bardangk karnbalm that tree tree:type 'that karnbalm tree'

Genres do not always correspond to European scientific taxonomies: as in other Australian languages the words for the major biological types, animal and plant, also specify edibility. There are few instances of this type of classification in the corpus.

(10–33) may rambak vegetable:food bush:potato 'bush potato'

- specific subtype of a general N, which may be in terms of an accidental feature or according to a taxonomy of the domain, as illustrated by the following examples, respectively:
- (10–34) kurrbul bardangk hollow:log tree 'a hollow log'
- (10–35) kinyingk larrkird bardangk
 DEF boab tree
 'this boab tree'
- a part of a whole
- (10–36) na-alm ngak 3MIN-head bread 'crust of bread'
- (10–37) *lakurr ni-im* egg 3MIN-eye 'eyeball'
- whole to which an entity belongs as a part
- (10–38) *jinabud burirr* shoe string 'shoelaces'
- (10–39) *burruk ni-wal* kangaroo 3MIN-tail 'kangaroo tail'
- gender or sex
- (10–40) miid baab male child 'boy'
- · material
- (10–41) mirlimirl kumbarr paper money 'paper money'
- social or racial group to which a person belongs, which is often specified in terms of colour (see above)
- (10–42) wajbal jalngkangurr white:person doctor 'European doctor'

- name
- (10–43) wurraarra ngank Worrorra language 'the Worrorra language'
- associated entities characteristic of the thing or place
- (10–44) rambak bur bush:potato place 'place of bush potatoes'
- characteristic location
- (10-45) kalb-ijun iibal above-ABL₁ father 'god'

10.2.2.4 Entity

Linguistic expressions filling this role specify the type of thing denoted by the NP. Any open class lexical N has, it seems, the potential to serve in this role, and for some—including e.g. kin terms, personal names, and toponyms—this is the role they almost always serve. Nominal compounds such as *wamb-uriny* (man-woman) 'people' may also realise this role, as may coordinated Ns, as in (10–46). Cardinal pronominals also almost always fulfil the Entity role in an NP. Although there are open class Ns that are not attested in the role, frequently words corresponding to adjectives in English, which normally serve in the Qualifier role (and normally designate qualities), it is not clear that they are absolutely precluded. It is possible that words such as *murrul* 'little' can serve in this function (although this is not actually attested), in which case they might mean 'small item', as is the case in Gooniyandi (McGregor 1990:264). Numerals are perhaps precluded from this role: it seems that when they occur in an NP without an N evidently serving as Entity, such an N has been ellipsed.

(10–46) bin wamb aa uriny this man and woman 'this man and woman'

10.2.2.5 Predicator

Like elements filling the Qualifier role, fillers of the Predicator role indicate properties or qualities of the referent of the NP. However, whereas a Qualifier N—indeed, any N in pre-Entity position—serves to narrow down the referential range of the Entity N, an N (or other expression) in Predicator function adds to what is known about the referent; that is, the quality or property is predicated of the referent, which is as it were presumed identifiable. That is, the information does not assist in the construal of the referent entity, but rather adds to what is known about it. Predicators may be compared functionally with non-restrictive relative clauses. In other words, they are referent modifiers (in the sense of

Bolinger 1967), in contrast with elements in the Qualifier role, which serve as reference modifiers.

By far the most commonly found elements in this role are oblique pronominals, which indicate possessors of the Entity referent, which may be realised by a non-prefixing N as in (10–47) or by a prefixing N (and thus inherently possessed) as in (10–48). Cardinal pronominals do not occur in this function.

```
(10–47) maj jarrad
boss 1AUG.OBL
'our boss'
```

(10–48) ni-wal jin 3MIN-tail 3MIN.OBL 'its tail'

Oblique pronominals occur more frequently in pre-Entity position, in the Deictic role (see §10.2.2.1), where they are deployed to restrict the reference of the NP (see further §10.3.)

Less frequent fillers of the single post-Entity role are determiners and numerals, although elements of both types more often occur in pre-Entity position. Post-Entity determiners are rare, and appear to be restricted to indefinite determiners, as in (10–49).

```
(10–49) kinyingk winin war /
DEF emu other
'this other one the emu'
```

In non-pronominal NPs it is rare to find a numeral in Predicator role—numerals strongly tend to occur in the Quantifier role—and, when one is found, it tends to be an imprecise numeral, specifying an indeterminate quantity, ⁶ as in (10–50) and (10–51).

```
(10–50) wangalang irrkurd majangkul irrkurd / baaba-ning irrkurd / young:man all single:male all child-PL all 'all the young men, all the single men, all the children'
```

(10–51) kudurrwayin irrkurd / brolga all 'all the brolgas'

Open class Ns sometimes occur after Entity Ns, though more often than not they are not alone, but belong to what appears to be larger phrasal expressions serving as Predicator.

In pronominal NPs numerals typically follow the Entity pronominal, although in this circumstance they do not appear (normally) to serve as Predicators: rather, they form word-like units with the Entity N (see §4.6.1). Given the similarity of Nyulnyul and Gooniyandi NP role-structure, it is expected that numerals would occur after pronominal Entities (cf. English we three vs *three we). It is possible that in some instances the numeral in a pronominal NP has grammaticalised into a number marker, while in other instances it serves as a Predicator. If so, there might be prosodic differences between the two possibilities; unfortunately this type of information is unavailable. On the other hand, the fact that occasionally a case-marking postposition occurs on the pronominal rather than the numeral suggests that indeed there may have been a contrast in the traditional language, marginally present in the modern language. In any event, it is not unlikely that the system of number marking of pronominals in Nyulnyul is a recent (and ongoing) innovation, grammaticalised from NPs in which the numeral served in the Predicator role.

Interestingly, as is the case for number specification in pronominal NPs, it seems that other qualities are also typically predicated of pronominal Entities. Examples are, however, neither numerous nor entirely clear-cut; by contrast, no examples exist of open class Ns in pre-pronominal position. (10–52) and (10–53) are among the few examples available. In regard to (10–52), whether or not the numeral belongs with the final N forming an NP serving as Predicator is unclear—see fn. 6 above; the final N could not form a part of a word with the pronominal, however. In (10–53), again the position of the case marker suggests that *wamburiny* 'people' forms a word with the pronominal; however this is inconsistent with the presence of a pause following the pronominal. Indeed, the existence of pauses following the pronominal and the N tends to suggest that we have three separate NPs rather than a single NP made up of three words; on the other hand, the use of a single ergative postposition suggests they form a single NP. There is insufficient data to resolve this conflict. (But see §10.2.4 for an alternative view.)

- (10–52) kurr irrjiwar wamb 2AUG.CRD three man 'you three men'
- (10–53) yarrad / wamburiny-in / birnda-birndany ya-rr-wid-in / 1AUG.CRD people-ERG big-big 1PL.NOM-AUG-eat-PRS 'We older people eat it.'

One of the few examples of open class Ns in Predicator function in a non-pronominal NP is (10–54), which involves the conjunction of nominals; this is suggestive of heavy shift.

(10–54) karrambal bindany aa murrul/bird big and little 'birds big and small'

Other quality-specifying expressions are attested as Predicators, including PVs, as in:

(10–55) *ni-lirr* baab
3MIN-mouth open
'open mouthed'

PPs are slightly more frequent in the Predicator than Qualifier role, possibly motivated by heavy shift. The range of attested postpositions is limited to -uk LOC, -kun ABL₂, and -nyirr COM. Notice that the sentential context provided for (10–58) indicates that the PP belongs to a single NP with the previous nominal; it does not specify a location for the situation.

- (10–56) bin wamb jilaman-nyirr this man rifle-COM 'this man with a rifle'
- (10–57) in muurl ngi-lirr ngi-mil-uk/-ukun this pimple 1MIN-mouth 1MIN-nose-LOC/-ABL₂ 'this pimple on my face'

(10–58) kadakad i-na-w mukurn ni-mbarrm-uk cut 3NOM-CM-give hair 3MIN-armpit-LOC 'She cut the hair under her arms.'

In all available instances PPs in Predicator function are minimal, consisting of a single word (observe that in (10–57) the two lexemes are compounded, as evidenced by the position of the postposition). They always indicate a temporary property of the referent.

Finally, a full clause can occur in post-Entity position, where it predicates a property of the Entity nominal, in the manner of a non-restrictive relative clause. This clause may be either paratactically (as in (10–59)) or hypotactically (as in (10–60) and (10–61)) related to the main clause, or unit in it (see further §13.3.1.1.2 and §13.3.1.2.2). However, it is not certain whether or not such clauses form an NP—or any other viable grammatical unit type—with the Entity nominal. That is to say, present evidence does not permit us to decide whether the non-restrictive reading of a post-Entity clause is constructionally coded or merely represents a contextual reading or inference.

- (10–59) nga-ma-karndakarnd-inyj-an nga-marl
 1MIN.NOM-REF_p-scratch-REF_S-IMP 1MIN-arm
 i-na-r-ngay juurr-in
 3NOM-CM-poke-1MIN.ACC wasp-ERG
 'I scratched my arm where the wasp bit me.'
- (10–60) *i-ngi-rr-ngalk in-ij wamb i-ny-jimb-uk*3NOM-PST-AUG-wail this-DAT man 3NOM-PST-die-LOC
 'They wailed for the man who died.'
- (10–61) naakul i-ng-kard-uk winy i-na-m in tide 3NOM-PST-enter-LOC fill:up 3NOM-CM-put this dakul irr-in i-ngi-rr-lungk-uk wul-inyirr hole 3AUG.CRD-ERG 3NOM-PST-AUG-dig-LOC water-COM 'When the tide came in it filled up the hole they had dug with water.'

10.2.3 Significance of word order in the NP

In the previous sections we argued that NPs in Nyulnyul are structured in terms of grammatical roles, and provided a number of examples illustrating typical fillers of these roles. By and large the three pre-Entity roles are distinguished from one another by their realisation sets, which show little overlap; moreover, if expressions form more than one of these sets occur in an NP they appear in a fixed order. There is just one post-Entity role, and its realisation set differs from the realisation sets of the other four roles, although it overlaps with each of them. These differences in realisation sets motivate the distinction between the roles. So also does the fact that items common to more than one realisation set usually show different frequencies of instantiation in these sets (as we have seen for e.g. numerals in the Ouantifier and Predicator roles).

In this section I discuss further the contrast between pre-Entity and post-Entity position, and attempt to show that it is semantically motivated. As already indicated, pre-Entity expressions contribute to the identification of the referent, whereas post-Entity expressions add additional information to what is known about the referent, without facilitating its identification. The contrast is effectively between defining and non-defining expressions.

First I present some evidence in support of this proposal, beginning with near minimal pairs. I then go on to discuss further examples that lend additional support for the proposal, through consideration of their context of occurrence. Finally, I show that the proposed distinction can be used to make sense of instances where the meaning contrast between preand post-Entity position is not otherwise apparent. Unfortunately, limitations of the corpus mean that the case is somewhat less convincing than one might wish, and certainly more tentative than in Gooniyandi (McGregor 1990:267–274).

10.2.3.1 Positioning of PPs

An NP, as indicated above, may include within it a PP, either preceding or following the nominal serving in the Entity role.⁷

Only a small number of postpositions are attested on PPs occurring within NPs: -uk LOC, -jun ABL₁, -nyirr COM, and -kung ABL₃. PPs with these postpositions differ in terms of their preferred positions with respect to the Entity nominal. In pre-Entity position we find -jun ABL₁, -kung ABL₃, and -nyirr COM; in post-Entity position are -uk LOC, -nyirr COM, and perhaps -kung ABL₃. In pre-Entity position the first group specify qualities of the Entity, and the PP itself does not designate a specific and individuated entity, but rather a class of entities. By contrast, a PP in post-Entity position tends to specify a temporary manifestation or non-inherent property of the Entity-referent, and at the same time designates an individuated entity, something that is actually present in the circumstances. The fact that -uk LOC PPs are restricted to post-Entity position is consistent with these observations, since a location is typically accidentally rather than inherently associated with a thing.

COM PPs can occur in either position, though with meaning differences. Thus compare wamb-inyirr uriny 'married woman' (from Table 10–1) with the following example of a post-Entity COM PP:

(10–62) bin uriny baab-inyirr i-ni-ng-kid-in beer that woman baby-COM 3NOM-CM-PST-consume-IMP beer 'That woman with the baby was drinking beer.'

Here reference was made to a woman who actually had a baby with her while drinking, not a woman with a child (who need not be with her). Similar remarks hold for (10–56)–(10–58) above; contrast (10–58), which specifies the location of the body hair that is cut as in the armpit with *nga-mbarrm mukun* 'my armpit hair'. One could for instance cut up (or otherwise act on) one's armpit hair after severing it from the body. Consider also (10–63).

(10–63) wa-n-jal-uk bardangk kurrbul-inyirr langkurr 2MIN.NOM-CM-see-LOC tree hollow-COM possum

A number of observations support the claim that PPs do indeed belong in the same NP as the Entity N in the examples discussed in this subsection: (a) the PP and the Entity N are contiguous; (b) the two together form a single referential expression; (c) the two phrases together jointly serve in a single grammatical role in the clause to which they belong; and (d) if that grammatical role is one that is marked by a postposition, just one instance of the postposition normally occurs with the entire combination of phrases. (See however §10.2.4.)

*i-n-in-uk kaw wa-n-di-jan*3NOM-be-PRS-LOC call:out 2MIN.NOM-CM-say-1MIN.OBL
'When you see a tree with a hollow with a possum in it, call out to me.'

Although the hollow might be thought of as intrinsic to the tree, here it is construed otherwise, and the hollow treated as a separate entity from the tree. The addressee is not being asked to keep an eye out for a hollow tree—which would be appropriately denoted by the NP *kurrbul bardangk* (hollow tree) 'hollow tree, hollow log'—a tree prototypically consisting of an outer shell, with nothing inside. The tree being sought in (10–63) is one that has a small hollow that also has a possum in it.

PPs marked by the postposition -kung ABL₃ are also attested in both pre- and post-Entity position, though in just one or two instances in each case. (10–31) shows mar-kung 'from afar' in pre-Entity position, where it serves to specify a characteristic of the place referred to, its relative distance. No particular entity is construed by the PP. By contrast, in (5–3) it is the goodness of the saints that characterises them, their association with heaven being as it were accidental (or at least non-inherent—they were not always in heaven).

10.2.3.2 Event-related predication

In a small number of instances a post-Entity element borders on a secondary predicate. By this I mean that the property predicated of the Entity is also closely tied up with the event.⁸

It is, that is, not so much used to characterise the referent to facilitate identification as to indicate a non-defining property, relevant to the entity just in relation to the performance of the event. The following three examples are illustrative. In (10–64), an idiomatic expression, *murrul* 'little' does not specify a quality of the place—reference is not being made to a small place—but rather it is predicated of the place in regard to the person's vision. In (10–65) and (10–66) the quality of being shut does not characterise the person's lips as such, but rather indicates a property of the lips while the events of eating and speaking occur.

- (10–64) bur murrul i-n-jal-in place little 3NOM-CM-see-PRS 'He can see only a little.'
- (10–65) may i-ni-ng-kid ni-lirr kinyj wajbal-ngirr food 3NOM-CM-PST-eat 3MIN-lips shut white:person-SEM 'He ate with his lips closed like a white person.'
- (10–66) mangir i-ngank-kirr ni-lirr kinyj-ijun always 3NOM-speak-TEM 3MIN-lips shut-ABL₁ 'He always speaks with his lips shut.'

⁸ These are not true secondary predicate constructions (in the sense of Nichols 1978; Schultze-Berndt & Himmelmann 2004). Thus the two words in examples such as the following are invariably contiguous, and evidently form a single NP together (whereas by contrast in secondary predication the component elements do not form a larger NP-like unit together). Nor do there exist corresponding biclausal constructions such as 'when the place is little he sees it'.

10.2.3.3 Position of oblique pronominals

Next we consider the contrast between pre- and post-Entity position for oblique pronominals. Projected future possession is normally expressed by a post-Entity oblique pronominal, as in (10–67) and (10–68). In such contexts a possible English gloss is 'PM for PR', or perhaps 'PM which is PR's'; the fact that the PM is the PR's possession does not help identify the referent (recall example (10–3)).

```
(10–67) wamb-in i-na-ng-kalak-yarrad wilamay-nyirr man-ERG 3NOM-CM-PRS-approach-1AUG.ACC food-COM jii 2MIN.OBL 'A man came up to us with your dinner.'
```

(10–68) kinyingk-kun warrkaj wa-n-j may-ung jii

DEF-ABL₂ hunting 2MIN.NOM-CM-say food-ALL₁ 2MIN.OBL

wul-ij jii /

water-DAT 2MIN.OBL

'They will go hunting for your food, and your water.'

Only a small fraction of post-Entity oblique pronominals can be accounted for in this way, however; only rarely do they represent projected possessions. (Nor does there appear to be any tendency for more inalienable possessions to show the oblique pronominal in pre-Entity position.) In just a few instances, an oblique pronominal in pre-Entity position (i.e. functioning in the Deictic role) admits this future possession interpretation, as in (10–69). However, there is a clear contrast with the preceding examples in that the money in question is owed to the person, is already hers, and is identifiable on that basis. The food in the above examples is not identifiable in this way as a specific entity possessed by the speaker or hearer—in context, it could always be questioned 'is that the one designated for me?', which question does not arise in regard to (10–69). By contrast, if *jan* 1MIN.OBL had occurred in final position in (10–69), the corresponding sentence could admit the interpretation 'you didn't send money for me'—where any amount of money could be involved—and it is this sense that is not coded by a pre-Entity oblique pronominal. (We return to possessive constructions in §10.3 below.)

(10–69) arri mi-la-kunb-ngay jan kumbarr not 2MIN.NOM-IRR-send-1MIN.ACC 1MIN.OBL money 'You didn't send me my money.'

10.2.3.4 Position of numerals

The situation for numerals in Nyulnyul is basically as in Gooniyandi: as we have seen, in pronominal NPs the numeral almost always occurs in post-Entity position, while for nominal NPs it usually occurs in pre-Entity position. A similar explanation would appear to be viable (McGregor 1990:271–272). The numeral functions selectively when in the Quantifier role, indicating *n* things of the type E. But when it occurs in Predicator position, it does not select a group of referents of the specified type, but rather the referent set is presumed construed, and the numeral specifies that they are of a particular numerosity. This accounts for the difference between pronominal and non-pronominal NPs—with a

pronominal Entity a numeral does not normally function to select a subset of the specified size from the type denoted by the pronominal (as in *two of us*), but rather, the referent set is typically presumed, and asserted to be *n* in number (as in *we who are two in number*). One place where this correlation does not hold is with the universal quantifier *irrkurd* 'all', which, as illustrated in the following examples typically occurs in post-Entity position when the NP has a nominal Entity:

```
(10–70) nimarraj-in jin waj i-nga-rr-a-k/ kinyingk spirit-ERG 3MIN.OBL take:away 3NOM-PST-AUG-CM-carry DEF mad/jalngkangurru-in irrkurd/ but doctor-ERG all 'For they took away that one's spirit, all the medicine men.'
```

```
(10–71) wamburiny jin wangalang irrkurd majangkul irrkurd / people 3MIN.OBL young:man all single:person all baaba-ning irrkurd / child-PL all 'All the people: all the young men, all the single people, all the children.'
```

The universal quantifier indicates that all entities of the specified type are involved; it does not serve a selective function.

One wonders whether the expression *irrkurdjirr* might be accounted for as a lexicalisation of the phrase *irrkurd jirr* or *irrkurd irr* 'all of them'. (In the latter instance insertion of the palatal stop following the apico-postalveolar stop is not unexpected, a not unreasonable morphophonemic change accompanying lexicalisation of the collocation.) If so, this would be consistent with our expectations that with a pronominal NP the universal quantifier should have a selective function (cf. *all of them*). (10–72) illustrates both this and the post-Entity positioning of the resulting quantified NP:

```
(10-72)
          man yarrad
                           warrakan kaard ya-ngka-rri-jid
                                                                  wil-ij
                                             1PL.NOM-FUT-AUG-go meat-DAT
          but
               1AUG.CRD eagle
                                      still
                                minyaw mangkirr
                                                      barni /
                                                               bina wil
          jarrad /
                     burruk
          1AUG.OBL kangaroo cat
                                        small:goanna goanna
                                                                     meat
                                                               that
          irrkurd-jirr /
          all-3AUG.OBL
           'But we eagles will go for our meat: kangaroo, cat, small goanna, goanna, all
          those animals.'
```

10.2.3.5 Concluding observations

Our hypotheses about the significance of word order in the Nyulnyul NP permit us to make sense of some otherwise exceptional examples. For instance, the N *miid* 'male' almost always occurs as a Qualifier, consistent with the expectation that it would normally be used to characterise the referent according to sex, as in (10–40). There is a single instance in the corpus where the reverse order occurs, namely (10–73). Unfortunately, as an elicited example, nothing more is known about its meaning. Nevertheless, we can guess that the difference between the examples lies in how the feature of maleness is employed: to define the referent, in the first instance, and to add to what is known about it in the second. Thus (10–73) might be more accurately translated as 'a child that is male'. The same explanation

might account for (10–74) ('the part of the hand that is large') and (10–75) ('the people of the early days'), where again the post-Entity N apparently serves a predicating function.

- (10–73) baab miid child male 'male child, boy'
- (10–74) nga-marl birndany 1MIN-arm big 'large part of hand'
- (10–75) warli wamb-uriny milirrkarr everyone man-woman before 'early days people'

Whereas the meaning of an NP with a Qualifier that attributes a property of the Entity N is entirely predictable, for classifying Qualifiers there is usually some degree of unpredictability, and the meaning of the collocation is not entirely compositional. Occasionally the (etic) classifying type has an idiomatic meaning, as in (10–76).

(10–76) banangkarr waalk today sun 'midday'

10.2.4 An alternative view of the structure of the NP

It has been remarked at a few points above that what follows the Entity N tends to show structure characteristic of an NP. First, it may consist of more than one word, in which case the words appear to discharge NP roles in the order shown in (10–18). Second, there is a strong tendency for it to denote an entity: in a number of cases where a contrast is possible between pre- and post-Entity position, in pre-Entity position the unit shows no evidence of being referential, whereas in post-Entity position it does. This is especially clear in the case of PPs, which construe distinct entities when they follow the Entity N (see again §10.2.3.1). To be sure, the post-Entity material is generally a reduced NP, usually lacking an overt Entity N. As for NPs generally, in such cases it is possible to argue that the Entity N has been ellipsed under conditions of givenness or predictability—for instance, in an example such as (10–54) it could be that the Entity N *karrambal* 'bird' has been ellipsed from two NPs in post-Entity position, *bindany karrambal* 'big bird' and *murrul karrambal* 'little bird'.

According to this suggestion, the material in post-Entity position represents an NP in apposition to the preceding material. The entire structure consists of two NPs in apposition; this structure, however, is itself categorised as a unitary NP, since just one case-marking postposition occurs in collocation with the entire construction, as in the first and last PPs of (10–70). The subphrasal appositional construction contrasts with ordinary NP apposition (see §10.5 below) in terms of whether or not the combination is also categorised as an NP. Ordinary apposition of NPs involves two (or more) adjacent NPs, without a higher NP node embracing both, and if marked for case by a postposition, one should normally occur in collocation with each component NP. Indeed, there are near minimal pairs for the contrast between an NP with a post-Entity N and plain NP apposition, with both NPs marked by an

instance of the postposition. Thus compare (10-70) with (10-77), and (10-78) with (10-79).

- (10–77) yiik-in ngarrij-in i-n-dab alik war mad winin / sore-ERG hard-ERG 3NOM-CM-hit sorry other but emu 'But a serious illness had struck that poor emu fellow.'
- (10–78) kujarr mijaw i-ngi-rr-ma-karnd-in wurrul-ang jirr two cat 3NOM-PST-AUG-REF_p-scratch-PRS nail-INS 3AUG.OBL 'Two cats are scratching one another with their claws.'
- (10–79) djal ine-men-an yer walang-an jarl i-ni-m-in-ang-irr walangk-ang pierce 3NOM-CM-put-IMP-APP-3AUG.ACC⁹ spear-INS warindjer-an. warinjirr-ang one-INS "He speared them with his spear." (More accurately, 'He speared them with one spear.') (Nekes & Worms 2006:308)

In examples (10–77) and (10–79), each member of the putative NP is, exceptionally, marked by a postposition. ¹⁰ I have referred to this phenomenon in nearby Gooniyandi as phrase fracturing (McGregor 1989c), and argued that it contrasts semantically with ordinary PPs. Specifically, a fractured PP assigns prominence to each component, which show the features of phrases in apposition (see §10.5); moreover, the clause usually corresponds to an *it*-cleft construction in English. This would seem to be the case also in Nyulnyul: (10–77) focusses on the extremeness of the sickness, while (10–79) focusses on the unitariness of the spear (one, not many), and cleft translations ('it was a serious illness that struck that poor emu fellow', and 'it was with just a single spear that he speared them'). In contrast to the standard PPs in (10–70) and (10–78), the relation between the two parts of the putative PP appears to be made prominent, and represents the primary information expressed; the event itself is apparently presumed. In other words, it is the nexus between the two elements that is highlighted; this nexus is of the types found in phrase apposition. ¹¹

An advantage of this analysis of NP structure is that it permits a more semantically revealing account of the NP, and one that requires one less grammatical relation than (10–18), by utilising relations required elsewhere. Thus all of the semantic relations between NPs in apposition discussed in §10.5 are (potentially) represented between the two phrasal components of the NP. The most common of these is the relation of attribution, illustrated by most of the examples above, where the second piece is attributed of the first; this observation is embodied in the label given to the post-Entity role, the Predicator.

I presume here that Nekes and Worms have mistranscribed -*ang* APP as -*an* IMP. This provides the most natural interpretation of this example, given their gloss.

¹⁰ In example (10–77) the two units forming the fractured phrase fall within the single intonation contour that includes the entire clause. However, for most instances of fracturing we do not have reliable information on intonation, and I hesitate to stipulate occurrence on a single contour as a criterion for fracturing.

¹¹ Fractured phrases can be seen as in some sense intermediate between a single phrase and two separate full phrases in apposition, sharing features with both, and being distinct from each. In contrast with apposition, in fracturing presuppositions are invoked.

Moreover, attribution covers not just cases where the second component represents a quality of the first, but also number and situation in which they are involved. Given that fewer grammatical relations are required for this analysis than (10–18), Occam's razor indicates that it is preferable.

Other semantic relations found in apposition that are also attested between post-Entity material and what precedes it are listing and clarification. Listing is a type of identification, as illustrated by (10–54), where the post-Entity Ns list the types of bird, namely big ones and little ones. In clarification the second part of the NP specifies the first more precisely, in order to make the reference more exact. This is illustrated by a number of examples involving final numerals, such as (10–70)–(10–72) above and the marking of number in pronominal NPs. 12

Finally, the appositional analysis also accounts quite naturally for the observation that post-Entity material is non-defining and adds to what is known about the referent of the phrase (it is referent modifying in Bolinger's terms—Bolinger 1967), whereas the material up to and including the Entity serves to construe the referent (it is reference modifying).

10.3 Possessive NPs

Like the majority of Kimberley languages, Nyulnyul does not distinguish alienable from inalienable possession at phrase level, ¹³ although a comparable distinction is made at word level—see §4.2 and McGregor (1995b) for more detailed discussion. Attributive possession (i.e. NP-internal possession) is specified in two different ways: ¹⁴

- (a) by means of an oblique (OBL) or emphatic (EMP) form of the appropriate free pronominal (see §4.6.1 and §4.6.2 above) denoting the possessor (PR) together with an NP denoting the possessum (PM); or
- (b) an NP denoting the PR and an NP denoting the PM, together with an oblique or emphatic pronominal denoting the PR.

In contrast with many Australian Aboriginal languages, including the closely related Yawuru (Hosokawa 1991), the PR PP is not marked by the genitive or dative case marker. Indeed, a genitive or dative PP cannot be interpreted as a PR in a possessive construction.

The difference between marking the PR by an oblique and an emphatic pronominal concerns focus and contrast. For instance, 'my dog' can be expressed as either *jan yiil* (1MIN.OBL dog) or *janijirr yiil* (1MIN.EMP dog). The former expression is informationally unmarked, whereas the second invokes a contrast between the speaker as possessor and some other potential possessor (see §4.6). Thus, (10–80) invokes a contrast with other

¹² One wonders whether the propensity of the ergative postposition to attach to the number word in preference to the pronominal in Entity function, which is typically the first word of the NP, might not be accounted for by the appositional analysis, presuming also a universal dispreference for marking pronominals by the ergative (as per Silverstein 1976).

¹³ According to Tachon (1895) inalienable possessions are, unlike alienable possessions, not marked by *jin*, the third person singular oblique pronominal. This is not borne out by my own or other data on the language, although there are occasional examples in my corpus where cardinal forms of the pronominals occur instead of the expected oblique for inalienable PMs.

¹⁴ Of course possession can be expressed by pronominal prefixes to a small set of bound nouns. This is, however, considered not to represent NP possession but rather word-level possession. A prefixed N can occur in an NP; but if possession is expressed at the NP level, one or the other of the two types, (a) and (b) must be used.

possible possessors (his/her place, not someone else's), while (10–81) focusses on the speaker, rather than a third person, as the possessor of the money.

(10–80) kinyingk jinijirr bur DEF 3MIN.EMP place 'That's his/her camp.'

(10–81) arri i-la-bakand-in kumbarr jan i-n-nyu not 3NOM-IRR-have-IMP money 1MIN.OBL 3NOM-CM-get janijirr kumbarr 1MIN.EMP money 'Having no money, he took mine.'

Occasionally a possessive NP lacks an N designating the possessed entity, leaving a PM NP consisting of the OBL or EMP pronominal on its own. This happens when the PM N is given or predictable. This often happens in the context of questions about ownership (e.g. 'Whose dog is this?'), where the thing owned is presumed. An oblique pronominal such as *jan* 1MIN.OBL may occur on its own, as in (10–82).

(10–82) A: angk jin in what 3MIN.OBL this B: jan 1MIN.OBL

A: 'Whose is it?'

B: 'Mine.'

Type (a) attributive possession involves an oblique or emphatic pronominal in either Deictic or Predicator role in the NP, and has already been dealt with in §10.2. The only remark that needs to be added is that, in terms of the revised interpretation of NPs suggested in §10.2.3.5, when the PR pronominal precedes the PM, it serves to attribute a property of the PM, which property is used to facilitate the identification of the PM. But where it follows the PM it serves in an identifying function: the PM is identified as a possession of the PR (the PM that is PR's). To put it more concretely, the difference between *jan wunyjub* (1MIN.OBL mother) and *wunyjub jan* (mother 1MIN.OBL) is comparable to the contrast between *my mother* and *mother of mine*.

Type (b) attributive possession involves two NPs, one denoting the PR, the other a type (a) possessive NP denoting the PM (see also McGregor 2001b). Neither NP is marked to specify the possessive relation. This mode of expression is employed far less frequently in the corpus than type (a) single NP possessive construction. If the PR is contextually given, usually the single NP type (a) is employed, as shown by (10–83), where, as is often the case, the PR often also serves in Actor role (see §12.3.2.1 below).

(10–83) bin wamb ya-ngi-rr-ngulangul biird malirr jin this man 1PL.NOM-PST-AUG-speak yesterday wife 3MIN.OBL i-n-dam-in 3NOM-CM-hit-PRS 'The man we were speaking about yesterday is hitting his wife.'

The PR is usually designated by a distinct NP either to make clear the identity of the PR referent, or to focus on the PR as possessor. Thus for first and second person PRs, type (b)

expressions are very rare, type (a) being the normal mode of representation. (10–84) and (10–85) are among the few exceptions. In (10–84) the final NP, warli wamburiny 'all people' clearly serves to explicate the identity of the PR (and note that it does not specify that the PR is first person, this being retrievable from the previous oblique free pronoun). In (10–85) it would seem reasonable to presume that focus is accorded to the speaker as PR, in contrast with other possible contenders for possessorship.

- (10–84) kinyingk wamb maj jarrad warli wamburiny DEF man boss 1AUG.OBL everyone people 'That man is our boss for everyone.'
- (10–85) ngay janijirr bur ngarlan 1MIN.CRD 1MIN.EMP place Beagle:Bay 'My country is Beagle Bay.'

As the above examples show, the PR and PM expressions can occur in either order. In the available data, however, the order PR PM (twenty-four instances) is almost three times as frequent as the order PM PR (nine instances). Although the number of instances is small, this tendency could be a consequence of the greater predictability, topicality, and givenness of the PR with respect to the PM.

When the PM follows the PR NP the oblique pronominal is normally initial in the PM NP (seventeen of twenty-four instances); when the PM precedes the PR, the oblique pronominal is usually in final position in the PM NP (seven of nine instances). In other words, the oblique pronominal is usually adjacent to the PR NP, as in the two above examples. Examples where the oblique pronominal is not adjacent to the PR NP are (10–86) and (10–87).

- (10–86) bin wamb ni-mal jin this man 3MIN-hand 3MIN.OBL 'this man's hand'
- (10–87) bin wamb yiil jin this man dog 3MIN.OBL 'this man's dog'

The rarest order, where the oblique pronominal occurs initially in an initial PM NP, is usually used when listing members of the PR set, as in the following example, where *jarrad* 1AUG.OBL occurs initially and is expanded by a listing:

(10–88) nga-marl-ang nga-n-julujulik-in jarrad jad
1MIN-hand-INS 1MIN.NOM-CM-wash-PRS 1AUG.OBL clothes
baab jan irr aa ngay
child 1MIN.OBL 3AUG.CRD and 1MIN.CRD
'I wash the clothes for my children and myself by hand.'

The oblique or emphatic pronominal appears to serve almost as a type of possessive copula (see also McGregor 2001b); indeed, there are occasional instances in which the third person minimal oblique (but not the corresponding emphatic pronominal) *jin* is used where the PR is a different person and/or number, as in (10–89) and (10–90). This pronominal form may thus be in the process of becoming a generalised genitive marker. It has not yet

fully grammaticalised, however, and it still appears to belong to the PM NP, and normally agrees with the PR in person and number.

- (10–89) bin jin ngay aa juy that 3MIN.OBL 1MIN.CRD and 2MIN.CRD 'That belongs to you and me.'
- (10–90) kalb-kung jurrb i-n-j in-uk jimbin bur-uk
 up-ABL₃ jump 3NOM-CM-say this-LOC down country-LOC
 jarrad / bur-uk jin kudurrwayin irrkurd /
 1AUG.OBL country-LOC 3MIN.OBL brolga all
 'He leapt down from up there, down into this land of ours, into the country of the brolgas.'

The contrast between invariant *jin* 3MIN.OBL and the agreeing 3AUG.OBL pronominal may concern the nature of the possessive relation. Perhaps use of *jin* 3MIN.OBL brings out the separate status of each PR as possessor, as against collective or group ownership expressed by the augmented OBL pronominal. This hypothesis seems consistent with (10–90). It is perhaps more clearly supported by the following example, where what is being referred to is not a camp belonging to everyone, but rather to the distinct camps separately owned by each person:

(10–91) marrj-in i-na-marr warli bur aa bilay mayar bush:fire-ERG 3NOM-CM-burn all camp and again house jin wamburiny
3MIN.OBL people
'The bushfire spread out, burning everyone's camp.'

Unfortunately, data is insufficient to permit this hypothesis to be tested rigorously, and (10–89) seems not to fit the suggested pattern—although it is not inconsistent with the notion that the ownership is conceived of as separate rather than collective.

It seems most natural to regard type (b) possessive construction above as a type of phrase complex (see §10.5 below): there is no evidence that the PR NP is embedded in the entire NP, and e.g. serves the same role as an oblique pronominal.

Assuming it is a phrase complex, the question arises: What is the grammatical relation among the units of the complex? I suggest that it is normally identification, not between the two phrases (the PR and PM are not identified with one another) but between the PR NP and the oblique or emphatic pronominal in the phrase referring to the PR. This is consistent with the fact that the oblique or emphatic pronominal is generally adjacent to the PR, and functions almost as a type of copula, as observed above. If this is so, (10–88) could be accounted for in terms of the listing relation (one of the types found in NP apposition).

Very occasionally the PM NP lacks an OBL or EMP pronominal:

(10–92) bin wamb yiil-in kad i-na-r bin baab this man dog-ERG bite 3NOM-CM-poke this child 'This man's dog bit the child.'

Such examples might represent speech errors, perhaps resulting from the slow rate of delivery characteristic of my Nyulnyul elicitation. Alternatively, and in my view more

likely, they represent a topicalisation construction in which possession is inferred rather than expressed.

The above examples illustrate a variety of different possessive relations, covering various types of alienable possession (ownership (e.g. of clothing), right of inhabitation (e.g. of house), right by birth or conception (e.g. of country), kin relations, foods, drinks, bodily products and exuviae, etc.) and inalienable possessions (by virtue of close or inherent association as a part of the body, personal representations—McGregor 1995b). Attributive possessive constructions are not, however, restricted to this range of alienable possessions, which (with the exception of kin relations) might be characterised as being under the control of the PR, or projected to be under the PR's control. Other relations are covered, including:

- things 'about' or 'concerning' the PR, such as for instance stories about it:
- (10–93) wangkid jinijirr jabal crow 3MIN.EMP story 'The story of crow'

(10–93) does not refer to a story 'owned by' or even controlled by the crow—rather, control or ownership of the story is vested in the group of people who have rights over the story: it is their story. The relation to the crow is by virtue of the fact that the story is very closely associated with the bird, and accounts for its colour; in other words, the bird is the topic of the story.

- things that hold a certain social role or property in regard to something else (the PR), as for instance a person who holds the role of boss in relation to someone else (cf. relationship terms):
- (10–94) kinyingk wamb maj jarrad warli wamburiny DEF man boss 1AUG.OBL everyone people 'That man is the boss of all of us.'
- physically severed parts or remnants of animate beings:
- (10–95) buluman jin kinyji bullock 3MIN.OBL bone 'the skeleton of a bullock'
- parts of inanimate wholes:
- (10–96) ngay-in lir-lir nga-n-nyu bardin jin orange 1MIN.CRD-ERG shed-shed 1MIN.NOM-CM-get skin 3MIN.OBL orange 'I removed the skin of the orange.'
- (10–97) *uriny-in ruburr i-na-m ni-mird jan jawuj* woman-ERG short 3NOM-CM-put 3MIN-leg 1MIN.OBL trousers 'The woman shortened the legs of my trousers.'

- emotions and other cognitive processes that are typically not completely under a person's conscious control:
- (10–98) bin liyan jan arri layib that feelings 1MIN.OBL not good 'That makes me angry.' (Literally: 'My feelings are not good (because of) that.')
- (10–99) ngay-in nyanangkarr nga-kalbarr-in jan
 1MIN.CRD-ERG maybe 1MIN.NOM-lose-PRS 1MIN.OBL
 nga-alm
 1MIN-head
 'I might be losing my senses.'

In (10–99), of course, reference is not being made to the physical head of the person, but the abstract mental phenomenon associated with it.

10.4 Negation in NPs

Unlike many Australian languages (Dixon 2002:84–85), Nyulnyul lacks a privative derivational suffix. The privative meaning 'without'—i.e. 'not accompanied by', 'not having something to hand when performing the action'—is normally expressed by the particle *arriyangkang* 'without' (see §9.2.3). This form appears to be morphologically unanalysable synchronically, though diachronically it presumably derives from *arriyangk-ang* 'don't-INS'. *Arriyangkang* 'without' always occurs in NP-initial position, as the examples in §9.3.2 illustrate; additional examples are:

- (10–100) arri bur i-la-jal arriyangkang jin kilaj not place 3NOM-IRR-see without 3MIN.OBL glasses 'He can't see without his glasses.'
- (10–101) marriny i-ngi-rr-jid arriyangkang wul walk 3NOM-PST-AUG-go without water.'

It seems that privative NPs in Nyulnyul always serve in clausal roles; no examples are available of privative NPs serving in attributive roles within NPs (as in e.g. 'The man without a wife speared a kangaroo'). As (10–100) illustrates, the grammatical role of the privative NP within the clause is not normally specified by a case-marking postposition (which would be the instrumental in this instance). Occasionally the relation is specified by a case-marking postposition, as in:

```
(10–102) arri mi-li-jid arriyangkang marlburl-nyirr jii not 2MIN.NOM-IRR-go without things-COM 2MIN.OBL 'Don't go without your things.'
```

There are too few examples to be certain whether the postposition invariably attaches to the first word following the negative word, as in this example.

Very occasionally, and only in negated clauses, *arriyangk* 'don't, no' is found instead of *arriyangkang* 'without', as in (10–103).

(10–103) wamb layib durrb wirl i-n-ny-in mangir arri jakud man good hunter meat 3NOM-CM-catch-PRS always not return i-li-j arriyangk wil 3NOM-IRR-say don't meat 'The man who is a good hunter never comes back with no meat.'

As mentioned in §9.2.1, the non-existence of an entity can be expressed by the negative particle *arri* followed by an oblique pronoun specifying someone or something with respect to which the entity does not exist (see §12.2.3.2.1 for further discussion). This particle invariably occurs adjacent to the N indicating the absent entity, usually preceding it (as in (10–104)), though occasionally following it (as in (10–105)). Whether or not the particle and N form an NP together is uncertain. However, the fact that *arri-jin rarrjin* (not-3MIN.OBL shame) was elicited for 'shameless' immediately following the elicitation of *rarrjin* 'shame', suggests that it might admit NP-internal usage—possibly even derivational use.

- (10–104) nga-na-w-irr jaamin arri-jan kumbarr 1MIN.NOM-CM-give-3AUG.ACC finish not-1MIN.OBL money 'I gave them everything, and had nothing myself.'
- (10–105) kumbarr arri-jan wilamay-ung money not-1MIN.OBL food-ALL₁ 'I have no money for food.'

In many instances the oblique pronominal denotes (or cross-references)¹⁵ a human being who experiences the absence of the entity—who lacks a possessum in circumstances in which it is expected that they would have it (recall here that negation generally is not pragmatically neutral). However, there is a related negative existential construction in which the oblique pronominal cross-references an inanimate location (see further §12.2.2 and McGregor 2010b).

- (10–106) arri-jin wul in-ik bakid not-3MIN.OBL water this-LOC bucket 'There is no water in this bucket.'
- (10–107) arri-jin wilamay bur-uk jan not-3MIN.OBL food place-LOC 1MIN.OBL 'There's no food in my home.'

The following example indicates that the location need not necessarily be expressed by a locative NP, but can also be specified via some other spatial postposition:

(10–108) nga-nga-miimii wurrumbang bardangk in-mirr
1MIN.NOM-PST-search many tree this-PER
arri-jirr kurrburl
not-3AUG.OBL hollow
'I looked in lots of trees, but there were no hollows.'

¹⁵ It is unclear whether or not an NP denoting the would-be possessor is always in syntagm with the negative particle, and thus whether cross-referencing—rather than pragmatically-based referencing—is involved.

In one or two instances non-existence or absence of some entity is expressed by the negative particle *arri* 'not' alone, without an oblique pronominal:

```
(10–109) bin-ik i-na-lungk kaad arri wurl that-LOC 3NOM-CM-dig still not water 'He dug there, but no water.'
```

Possibly the last two words of this example constitute the negation of an ordinary presentative clause, which is constructionally distinct from the negative presentative construction represented by examples (10–106)–(10–108).

In a few examples the negative particle has scope over a quality or property of an entity, and presumably has either phrase or word scope, as in (10–110) and (10–111), respectively.

```
(10–110) liyan nga-n-m-in jan dii arri maal like 1MIN.NOM-CM-put-PRS 1MIN.OBL tea not hot 'I like my tea lukewarm.'
```

```
(10–111) arri rinyariny
not sensible
'not sensible'
```

The NPs discussed in this section do not satisfy the structural description provided in (10–18). Indeed, they involve a different type of grammatical relation to those represented in that formula, namely scope. As per McGregor (1997b), scope is an interpersonal relation (see also §12.5.1.1 on negation as an interpersonal relation), and thus Nyulnyul NPs show at least minimal structure in the interpersonal dimension.

10.5 Noun phrase complexes

NP complexes involve two or more NPs in syntagm with one another, forming a single unit. They are typically contiguous, and usually remain contiguous if shifted around in the clause, though they do not satisfy the grammatical features of NPs as per §10.2 above. Grammatical relations among the NPs in complexes are of the dependency type (§2.3), either extension or elaboration. There are no clear-cut examples of NP complexes in which the NPs are related by enhancement: all potential examples are amenable to either a single simple NP analysis (as in the case of (10–57) and (10–58), or to an analysis as two separate NPs not forming a complex together. We deal with these two types in order in the following subsections.

We have already encountered NP complexes. First, one interpretation of the NP involves its construal, when there is post-Entity material, as two NPs in apposition (§10.2.4); second, type (b) possessive constructions (§10.3) involve combinations of NPs, but the grammatical relation is not between the NPs, but rather between an NP denoting the PR and an oblique pronominal in the NP denoting the PM.

10.5.1 Extension

In most instances of NP complexes involving extension the relation is one of conjunction, the separate NPs being added together in an 'and' relation. If the complex serves in a participant role in the clause (§12.3.2.1), the cross-referencing bound pronominal in the IV

will indicate the person and number of the addition of the separate NPs. Disjunction is vanishingly rare.

10.5.1.1 Conjunction

Like most Nyulnyulan languages, Nyulnyul has a free conjunction *aa* 'and' that is used to connect NPs via the 'and' relation (see §9.5.1). There are no restrictions on the grammatical role served by conjoined NPs in a clause. In the following two examples, the NP complex serves as Medium (specifically, intransitive subject and transitive object, respectively—see §12.3.2.1).

- (10–112) ngay aa wajbal maj marriny ya-ngi-rr-jid
 1MIN.CRD and white:person boss go 1PL.NOM-PST-AUG-go
 jin bur
 3MIN.OBL camp
 'Me and the white boss went to his camp.'
- (10–113) barnibarn wa-na-m-irr yaward aa buluman separate 2MIN.NOM-CM-put-3AUG.ACC horse and bullock 'Separate the horses and cattle.'

When three or more NPs are conjoined there is generally an instance of the conjunction *aa* 'and' between each of the NP conjuncts:

(10–114) *jan malirr aa baab aa ngay ya-ngki-rr-jid*1MIN.OBL wife and child and 1MIN.CRD 1PL.NOM-FUT-AUG-go *perth-ung war-uk kunyurl*Perth-ALL₁ other-LOC moon
'My wife, my child and myself will go to Perth next month.'

In other roles the conjoined NPs host postpositions indicating the grammatical relation served by the NP. Normally each conjunct hosts an instance of the postposition, as illustrated by:

(10–115) mardanganarr jaad ya-nga-rr-kul-an maad-ung aa bag:clothes clothes 1PL.NOM-PST-AUG-wear-IMP play-ALL₁ and murrkul-ung jaaj-ung jarrad layib jaad work-ALL₁ church-ALL₁ 1AUG.OBL good clothes ya-nga-rr-kul-an 1PL.NOM-PST-AUG-wear-IMP 'We used to wear bag clothes for play and work; our good clothes we wore to

'We used to wear bag clothes for play and work; our good clothes we wore to church.'

Occasional exceptions are found, as in the following example, which could perhaps indicate that there is a difference between N and NP conjunction. However, there is insufficient data to permit one to be sure that this is so. ¹⁶

(10–116) *i-n-dam* lungkun aa ni-ik-uk
3NOM-CM-hit neck and 3MIN-back-LOC
'He hit him on the neck and back.'

In examples (10–112)–(10–115) above, verbal pronominal prefixes and enclitics cross-reference the entire complex of NPs—further evidence that it is a single unit—according to the category of the conjunction of the categories of the NP conjuncts. This is not the case in all instances, as illustrated by the following example:

(10–117) war-in aa war-in i-na-r bin wamba other-ERG and other-ERG 3NOM-CM-poke this man 'The men speared each other.'

This example is an instance of a special type of reciprocal expression, and could perhaps be regarded as a reduced version of a biclausal construction 'the other speared him, and the other speared him'. (Such a biclausal reciprocal construction is attested in Warrwa.)

There are a small number of other instances in which NPs connected by *aa* 'and' appear not to be conjoined together in the usual way. Thus in (10–118) *badangk* 'stick' is not added to *war* 'other' as 'something and a stick'; rather, the second is an example of the type of thing that might be being referred to by the first NP.

(10–118) ni-mbal-ingid nga-kul-in war-in aa bardangk-in 3MIN-foot-CHAR 1MIN.NOM-wear-PRS other-ERG and stick-ERG i-la-r nga-mbal 3NOM-IRR-poke 1MIN-foot 'I wear shoes lest I get prickled in the foot by something or other.'

Sometimes not all adjacent conjuncts are linked by *aa* 'and', as in the following, where the final two conjuncts are added on a separate intonation contour.¹⁷

(10–119) man juy wa-n-kid wul aa bub aa but 2MIN.CRD 2MIN.NOM.FUT-CM-consume water and flower and bilabil / bilkiny rambak / leaf bush:bulb bush:potato 'But you will drink water and eat flowers and leaves, bush bulbs and potatoes.'

¹⁶ The presence of a single instance of the LOC postposition suggests that *lungkun aa niik* (neck and back) is the conjunction of two Ns that serve in the Entity role in an NP. A less likely possibility is that (10–116) is a biclausal construction, involving two different types of external possession construction (see §12.4.2.4), in which everything bar the locative PP has been ellipsed from the second clause (being predictable).

¹⁷ One possibility is that the conjunction *aa* 'and' is used when the conjoined entities are perceived as being of the same order of reality. In the case of (10–119) the last two conjuncts are specific terms, in contrast to the generic terms in the first three conjuncts. As usual, the corpus is too limited to permit this possibility to be tested empirically.

Perhaps the final two conjuncts are not conjoined to the preceding ones, but represent specific examples of the categories enumerated. If so, it still illustrates that NPs can be conjoined without a conjunction. Another example is:

(10–120) *ya-ngka-rr-a-w-jii may wil wul uriny /* 1PL.NOM-FUT-AUG-CM-give-2MIN.ACC food meat water woman 'We'll give you food, meat, water and a wife.'

10.5.1.2 Disjunction of NPs

As remarked above, NP disjunction is uncommon in the Nyulnyul corpus, and there is no known Nyulnyul morpheme encoding the relation of 'or'. The English *or* is sometimes borrowed and used as an NP linker with the meaning 'or'. According to Nekes & Worms (2006:290), however, in Jabirrjabirr and Bardi there does exist a disjunctive morpheme. In Jabirrjabirr, for instance, it is a discontinuous form consisting of a free word *agade* preceding the second member of the disjunction, and a bound form *-ga* following it, as in:

(10–121) arean mai lean min-man, gabin agade lōnda ga Jabirrjabirr which fruit like you-put [fruit type] either [fruit type] or 'Which fruit do you prefer, gabin or lōnda?' (Nekes & Worms 2006:290)

Such a mode of expression is not attested in the Nyulnyul corpora.

Various expressions are attested for the representation of disjunction in the few examples available, suggesting that there was no standard mode of expression. For instance, the second disjunct can be preceded by the particle *nyanangkarr* 'perhaps', as in (10–122) and (10–123). Notice that in the latter example the disjunction is amongst qualities of the entity, and the first element is an IV not an N or NP.

- (10–122) *i-n-maramararr-in war wamb nyananglarr uriny* 3NOM-CM-wait-PRS one man perhaps woman 'He is waiting for another man or woman.'
- (10–123) nganyj bin may i-nga-marr nyanangkarr karnk INT this food 3NOM-PST-cook perhaps raw 'Is this food cooked or raw?'

In other instances, the two disjuncts are in simple apposition, as shown by (10-124) and (10-125).

- (10–124) nganyji juy jurrungk nyi-marl baljirrang INT 2MIN.CRD right 2MIN-hand left 'Are you right-handed or left-handed?'
- (10–125) *nganyj i-ny-jid biird war waalk*INT 3NOM-PST-go yesterday one day
 'Did he come yesterday or the other day?'

The following example shows disjunction in a negative context: here it seems that the particle *arriyangk* 'without' has scope over the disjunction.

(10–126) man wil mung arriyangk / man wil mung arriyangk / but meat honey nothing but meat honey nothing 'But not meat or honey, definitely no meat or honey!'

10.5.2 Elaboration

In elaboration the NPs of an NP complex are linked by the relation of elaboration, that is, equality: the second NP restates the first, providing an alternative designation of it. Three subtypes are distinguished: identification, clarification, and attribution. These are dealt with in order in the following subsections.

10.5.2.1 Identification

In identification the second NP provides an alternative designation of the referent; this may facilitate its identification, although it need not do so. The two NPs in apposition are asserted as coreferential, and the construction is agnate with a verbless identifying clause (see §12.2.3.1.1); however, there is no corresponding verbal clause. There are few instances of this type of NP complex construction in the corpora, and the clearest examples come from religious translations:

- (10-127)ningarr nganmeo [jesus christ] [warrindjerr djen ningar nga-n-m-yu [jesus christ] [warinjirr iin 1MIN.NOM-CM-make-PRS 3MIN.OBL jesus christ true djangarr djenedjerr] [wal nalen djarrad] iangarr *jinijirr*] [wal nalin iarrad] 3MIN.EMP lord only son 1AUG.OBL 'I believe in Jesus Christ his only son, our lord.'
- holy nimarradjen inen.gonban (10-128)rai baab holy ni-marraj-in i-ni-ng-kunb-an rai baab holy 3MIN-spirit-ERG 3NOM-CM-PST-send-IMP spirit child [berraieng djen] [virgin mariang] ged ingalaban i-ng-kalab-an [birray-ung jin] [virgin mary-ung] kid mother-ALL₁ 3MIN.OBL virgin mary-ALL₁ then 3NOM-PST-born-IMP 'The holy ghost sent the child to the mother, the virgin Mary, and then he was born.'

In (10–127) the final words represent three NPs in apposition—Jesus Christ, warinjirr jangarr jinijirr wal 'his one and only son' and nalen jarrad 'our lord'. Each provides a different designation of the referent: name, relation to god, and relation to us. In (10–128) the two NPs birray jin 'his mother' and virgin mary are coreferential; notice that each is marked by an instance of the allative postposition.

A special case of identification is listing, where instead of juxtaposing a second NP to the first to identify it, an NP complex made up of conjoined NPs is juxtaposed to an NP, specifying the members of the referent set of the NP more precisely. The list may be complete or partial. Examples are:

- (10-129)kard nga-na-mangard-in-jii kard mi-n-in 1MIN.NOM-CM-leave-PRS-2MIN.OBL so 2MIN.NOM-be-PRS wamburiny-nyirr jii: kubuwal jii/ jalwal jii/ people-COM 2MIN.OBL father 2MIN.OBL cousin 2MIN.OBL marrir jii / jalangka baaba-ning irrkurd/ 2MIN.OBL nephew child-many all sister 'So I am leaving you; so you are among your people, your father, your cousins, your sisters, nieces and nephews, all the children.'
- (10–130) *aa i-na-lurr jungk aa i-m-bid may* and 3NOM-CM-light fire and 3NOM-PST-cook food *jin / bilkiny rambak kajanangurr /* 3MIN.OBL bush:bulb bush:potato tuber 'He lit a fire and his food cooked; the bush bulbs, bush potatoes and tubers.'

10.5.2.2 Clarification

In clarification, the second NP of an NP complex provides additional specification of the first, relating to it as specific or fuller to generic or less full. The two NPs both have the same N in Entity role, but the second has an alternative or additional quality-specification. Examples are:

- (10–131) warinjirr wamb christmas creek-jun wamb one man Christmas Creek-ABL₁ man 'a man, a Christmas creek man'
- (10–132) orite / i-n-di-jirr / karrambal / warang karrambal / ... alright 3NOM-CM-say-3AUG.OBL bird others bird 'OK, he told the birds, the other birds ...'

10.5.2.3 Attribution

In attribution, one NP attributes a property or quality of another. The construction is agnate with clausal constructions expressing attribution, which include verbless (see §12.2.3.1.2) and verbal clauses (see §12.3.1.2.1). One of the few examples represented in the corpora is:

(10–133) wamb layib durrb wil i-n-ny-in mangir arri
man good hunter meat 3NOM-CM-get-PRS always not
jakud i-li-j arriyangk wil
return 3NOM-IRR-say nothing meat
'The man, a good hunter, gets meat, and never comes back with nothing.'

The characteristic of being a good hunter is attributed of the person; it is not an identifying expression.

10.5.3 Discontinuity of NP complexes

Discontinuity in (putative) NP complexes is slightly more frequent than discontinuity in NPs. One motivation for discontinuity is the size of the unit: if a unit is heavy it is more

likely to be split, which is why discontinuity is more frequent with complexes of NPs than with ordinary NPs. As in NP discontinuity, the discontinuous units are typically located at opposite extremes of a clause. This suggests that discontinuity is a strategy for dealing with the information overload of heavy thematic units. This is illustrated in the following examples (in which the discontinuous pieces are underscored): in (10–134) and (10–135) the NPs of the complex are related by extension, specifically addition; in (10–136), the relation is elaboration, specifically listing.

- (10–134) <u>baab-in</u> <u>jan</u> <u>i-ni-ram-jan</u> <u>kumbarr-ung</u> child-ERG 1MIN.OBL 3NOM-CM-expect-1MIN.OBL money-ALL₁ <u>aa</u> <u>kabirl-in</u> <u>jan</u> and grandson-ERG my 'My child expected money from me, even my grandson.'
- (10–135) <u>nyi-wink</u> nganyj iik <u>aa</u> <u>nyi-kard</u> 2MIN-breast INT sore and 2MIN-body 'Is your breast sore, and all of your body?'
- (10–136) wurrumbang jii may in i-n-in: rambak many 2MIN.OBL food this 3NOM-be-PRS bush:potato niyalbun kajanangurr / bush:fruit tuber 'There's plenty of your food here: bush potato, bush fruit, and bulbs.'

Not all instances of discontinuous NP complexes show the first discontinuous element in clause-initial position. In those that do not, the discontinuous elements are always separated by at least the verb, as in:

```
(10–137) winin aa burruk / walangk-ang i-ngi-rr-a-r-an / aa emu and kangaroo spear-COM 3NOM-PST-AUG-CM-poke-IMP and jiib-ang / boomerang-COM 'They used to spear emus and kangaroos with spears, and boomerangs.'
```

In this example it could be that the final NP is added as an afterthought—there is an intonation break before it, and it does not sit well semantically with the verb.

In (10–138) the two NPs are related by identification: the second provides an alternative and more specific designation of the first.

```
(10–138) wil / kumb / i-rr-a-ny-in / wurrumbang / nukuli / meat fish 3NOM-AUG-CM-catch-PRS many [fish:type] 

'They catch fish, lots of nukuli fish.'
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10.5.4 Complexes of PPs and adverbials

Adverbials and PPs expressing comparable locational or directional meaning are sometimes found together in syntagm, apparently forming complex units similar to the NP complexes discussed in the previous subsections (see also McGregor 1990:287–289). (10–139) is an example: here the adverbial *kalb* 'on top, above' and the PP *karndirlib-uk* 'on a platform'

are adjacent, and appear to form a coherent unit. They are semantically related, the adverbial providing more precise spatial relational meaning ('above, on top') than the locative postposition (proximity).

(10–139) *mujumuj jiwirr wamb i-ngi-rr-a-m-jirr* <u>kalb</u> long:ago dead:body man 3NOM-PST-AUG-CM-put-3AUG.OBL on:top <u>karndirlib-uk</u> platform-LOC 'Long ago they used to put the dead on a platform.'

Other examples, involving different adverbials and/or different postpositions are:

- (10–140) *miid baab yalk i-rr-ø-in* <u>yangan niwirr-uk</u> male child stand 3NOM-AUG-be-PRS near creek-LOC 'The boys are standing near the creek.'
- (10–141) murrul jukud / i-n-in jimbin / nu-ung-uk / little worm 3NOM-be-PRS inside 3MIN-stomach-LOC 'There is a little worm inside the fruit of this tree.'
- (10–142) buy i-ngi-rr-jid jimbin bur-ung jirr
 ant 3NOM-PST-AUG-go inside place-ALL₁ 3AUG.OBL
 'The ants went inside their nest.'

In most instances of such semantically related adverbials and PPs, the two units are adjacent. However, as is the case for NP complexes, discontinuity is occasionally encountered, as in (10–143).

(10–143) war-in baab <u>kalb</u> i-na-munkar <u>ni-ik-uk</u> one-ERG child above 3NOM-CM-lift 3MIN-back-LOC 'One child lifted the other up on his back.'

Although the adverbials found in the above expressions are inherently relational, it is not suggested that the PPs they collocate with are required grammatically: more often than not the adverbials occur in the absence of a PP specifying the reference point of the relation. (Conversely, most lative PPs occur without an adverbial providing more precise relational meaning.) The PPs are not, that is, complements of the adverbials. The PP (which normally occurs in second position) adds further information about the spatial circumstances of the event, and the two units are presumably in an elaborating relation (see §10.5.2).

11 Verb phrases

11.1 Introduction

11.1.1 Nature of verb phrases

There is considerable disagreement among linguists as to the need for the VP category, perhaps even less agreement than for the NP (see §10.1). And among those who accept it, there is considerable diversity of opinion not only as to how it should be analysed, but also what is included in it. In labelled IC analysis, the clause is usually divided initially into two constituents, the 'subject' and the VP, consisting of everything else: the verb, auxiliaries, NPs ('object', 'indirect object', etc.), adverbials, and so on. The same analysis was adopted in early generative grammar, and carried over to X' theory, where V" corresponds to VP, and includes roughly the same things as the VP in IC analysis. However, in Government and Binding and Lexical Functional Grammar it is sometimes considered that the category is subject to parametric variation, and is not required in so-called non-configurational languages, including many languages of Australia, such as Warlpiri (e.g. Horrocks 1987: 101, 252).

In functionally oriented theories, the VP (if recognised) is often taken to be a somewhat smaller and more restricted unit. Functional theories do not usually group the verb together with the non-subject NPs in binary opposition to the subject, but usually treat the VP (under whatever name) as consisting of the verb together with its auxiliaries, e.g. in systemic functional grammar (Halliday 1985) and tagmemics (Longacre 1960). By contrast, Dik's functional grammar (Dik 1989) and role and reference grammar (Van Valin 1993b:7) do not recognise a VP category.

There is no evidence that non-subject NPs and PPs in Nyulnyul belong together with the verb, and form a phrasal unit with it. Thus, NPs are not considered to belong with the verb in a larger grammatical unit; nor do locational and temporal NPs and adverbials belong to such a unit. Nevertheless, it is useful to recognise a VP category, a category that groups together in a single grammatical category SVCs (simple verb constructions), consisting of just an IV (inflecting verb), as in (11–1), and CVCs (compound verb constructions), consisting of a PV (preverb) and an IV, as in (11–2).

- (11–1) baab i-ngalk-jin birray-ij jin child 3NOM-cry-3MIN.OBL mother-DAT 3MIN.OBL 'The child cried for his mother.'
- (11–2) bin wamb yiil jin **kurd** i-n-**d**-in that man dog 3MIN.OBL hide 3NOM-CM-say-PRS 'That man's dog is hiding.'

The bolded morphemes in these examples carry the main lexical burden in the VP, and designate the referent action, state, happening, process, or whatever. That is to say, the IV in (11–1) and the PV-IV collocation in (11–2) serve the same grammatical role in the VP; this role will be labelled the Event. As argued in McGregor (2002c), in CVCs the IV serves a grammatical role: it marks or indexes the category to which the instantiated VP belongs.

Matthews (1981:137) observes that adverbs of manner are notionally neither participants nor circumstances; rather, they qualify the verb, indicating a quality of the performance of the event. Manner adverbials thus belong to VPs, where they serve as dependents on the PV-IV combination (in CVCs) or just the IV (in SVCs). In this regard manner adverbials differ from spatial and temporal adverbials which do not belong to the VP, but are dependents on the nuclear situation (see §12.3.2.1). We discuss these dependents in §11.6 below.

VPs are either finite or non-finite, depending on the finiteness of the clause to which they belong. Finite VPs always have a finite IV (see §7.1). Non-finite VPs are of two types, corresponding to finite SVCs and CVCs, respectively. In those corresponding to finite SVCs there is a non-finite IV (see §7.12.2), whereas in those corresponding to finite CVCs there is no IV, just a PV, which usually hosts a postposition (see §8.3).

As per Chapter 7, the IV is a morphologically complex word, consisting of a root plus prefixes, suffixes, and enclitics. The IV root serves in the Event role in SVCs, and a marking role in CVCs (McGregor 2002c). Voice prefixes and suffixes and aspectual suffixes are also markers of VP categories. Not all of the other morphemes that belong distributionally within the VP serve in VP-internal grammatical functions. For instance, tense and mood markers hold the entire clause in their scope, while pronominal prefixes and enclitics serve clause-level linking functions, indexing NPs in participant roles in the clause.

In this chapter we focus on VP-internal grammatical relations. We begin (§11.2) by discussing the inherent role of Event. We then treat (§11.3) general features, formal and functional, of CVCs, introducing the notion of verb classification. In the following two sections we discuss in detail each IV that has the potential of occurring in a CVC, examining both its independent use and its use in CVCs. First we deal (§11.4) with the IVs that are primary and productive in CVCs, then we treat (§11.5) the secondary and apparently non-productive IVs. We then turn (§11.6) to adverbial modifiers in VPs. Before embarking on this enterprise, however, we provide in §11.1.2 statistics on the high frequency IVs and PVs.

11.1.2 Usage statistics

Frequency counts were made of IVs in the available corpus of texts, which amount to some 2,000 distributional words. The results are shown in Table 11–1, which lists the twenty-two most frequent IVs in order of overall frequency, these being the IVs that are attested at least five times. For purposes of comparison, individual counts were made according to the provenance of the text: MW indicates the written text by Magdalene Williams; MC indicates texts narrated by Mary Carmel Charles; AK indicates the text narrated by Albert

It is not always a trivial task to decide whether or not a linguistic unit belongs to the VP: the boundary between units that serve as dependents of the nucleus of a clause or as dependents within VPs is a matter of debate. There are also (as will be seen on a number of occasions as this chapter unfolds) cases in which it is difficult to decide between either of these and CVC analyses.

Kelly; RV stands for Rosie Victor's text; NW indicates texts recorded by Nekes and Worms; and TR indicates translated religious texts. The penultimate column (\sum) indicates the total number of instances of each IV in SVCs and CVCs respectively, and the final column indicates the proportion of the total number of SVCs or CVCs that the particular IV accounts for.

Table 11–1: High frequency IVs in the Nyulnyul textual corpora

IV	Type	MW	MC	AK	RV	NW	TR	Σ	%
I 'cay do'	SVC	3	10	34	0	6	1	54	12
-J 'say, do'	CVC	0	12	33	0	4	4	53	32
-M 'put'	SVC	0	16	11	2	2	1	32	7
-Wi put	CVC	0	11	30	0	4	9	54	33
-N 'be'	SVC	0	9	33	1	0	2	45	10
-1 v be	CVC	0	0	2	0	1	2	5	3
-NY 'get'	SVC	2	12	8	0	0	0	22	5
-1 \ 1 get	CVC	0	26	1	0	0	1	28	17
-JID 'go'	SVC	4	3	26	1	0	0	34	7
-31D go	CVC	0	1	0	0	0	0	1	1
-JAL 'see'	SVC	1	1	18	0	0	0	20	4
-JAL see	CVC	0	4	0	0	0	0	4	2
-WID 'eat'	SVC	0	15	8	0	0	0	23	5
- WID Cat	CVC	0	0	0	0	0	0	0	0
-K 'carry'	SVC	0	6	6	0	2	0	14	3
-K carry	CVC	0	0	2	0	0	0	2	1
-W 'give'	SVC	0	0	9	1	0	2	12	3
- w give	CVC	0	4	0	0	0	0	4	2
-BAKAND 'have'	SVC	5	0	5	4	0	1	15	3
-BARAND have	CVC	0	0	0	0	0	0	0	0
-MARR 'burn'	SVC	1	12	0	0	0	0	13	3
-MAKK bum	CVC	0	0	0	0	0	0	0	0
-JIMB 'die'	SVC	0	1	5	3	0	1	10	2
-JIMB the	CVC	0	0	0	0	0	0	0	0
-R 'pierce'	SVC	0	4	0	0	0	0	4	1
-ix picice	CVC	0	0	2	0	2	2	6	4
-BANY 'finish'	SVC	1	0	4	0	1	1	7	2
DANT IIIISII	CVC	0	0	1	0	0	0	1	1

Table 11–1: High frequency IVs in the Nyulnyul textual corpora (Continued)

IV	Type	MW	MC	AK	RV	NW	TR	Σ	%
-DAM 'hit'	SVC	0	3	1	0	2	0	6	1
-DAWI IIII	CVC	0	0	0	0	0	1	1	1
-MANGKARD	SVC	0	0	7	0	0	0	7	2
'leave'	CVC	0	0	0	0	0	0	0	0
-MIIMII 'seek'	SVC	0	0	7	0	0	0	7	2
-WIIIWIII SEEK	CVC	0	0	0	0	0	0	0	0
-MUKIR 'make'	SVC	0	5	0	0	0	2	7	2
-WOKIK make	CVC	0	0	0	0	0	0	0	0
-WARND 'gather'	SVC	0	6	0	0	0	0	6	1
-WARND gamer	CVC	0	0	0	0	0	0	0	0
-KAL 'wander'	SVC	0	0	3	1	0	1	5	1
-MAL wander	CVC	0	0	0	0	0	0	0	0
-LAND 'sit'	SVC	0	0	5	0	0	0	5	1
-LAND Sit	CVC	0	0	0	0	0	0	0	0
-LUNGK 'dig'	SVC	0	5	0	0	0	0	5	1
-LONGK dig	CVC	0	0	0	0	0	0	0	0
-MIJULING 'soak'	SVC	0	5	0	0	0	0	5	1
-WIIJOLII VO SOUK	CVC	0	0	0	0	0	0	0	0
Others	SVC	2	36	31	0	9	14	92	20
Onicis	CVC	0	4	0	0	1	2	7	4
All IVs	SVC	19	149	221	13	24	28	454	73
All 1 v 5	CVC	0	62	71	0	12	20	165	27

The corpus is too small and unbalanced to be representative. Many IVs do not show up in comparable frequencies across the corpora, and some evidently reflect the particular subject-matter of the texts. For instance, -WARND 'gather' is represented six times in MC's texts, but in no others; this is because MC's texts include a number describing traditional hunting and gathering practices, which topics are not covered in the other texts. One would ideally like a corpus at least ten times the size of the present one, in a wider and more representative range of text types and subject matters, in order to iron out such particularities.

If we exclude the IVs that occur in less than three of the corpora (i.e. under a half), the following list of thirteen most frequent IVs emerges: -J 'say, do', -M 'put', -N 'be', -NY 'get', -JID 'go', -JAL 'see', -K 'carry', -W 'give', -BAKAND 'have', -JIMB 'die', -BANY 'finish', -DAM 'hit', and -KAL 'wander'. (Bolded IVs are instanced in at least four

textual corpora.) Except for -BANY 'finish' and -KAL 'wander', these number amongst the cross-linguistically high frequency verbs.

Despite the inadequacies and unrepresentativeness of the textual sample, this statistical tabulation brings out a number of interesting features. Moreover, that some of the generalisations have parallels in languages with larger and more representative textual corpora suggests that significant statistical patterns may begin to emerge even in a small corpus.²

- almost three quarters of verbal constructions are simple: that is, SVCs are nearly three times as frequent textually as CVCs;
- two speakers—both part speakers—employ only SVCs in their texts;
- the twenty-two most frequent IVs account for 80% of the total number of SVCs, and of these the three most frequent IVs, -J 'say, do', -M 'put', and -N 'be', each account for about 10% of the SVCs, i.e. together almost 30% of the total number of SVCs;
- two of the three most frequent IVs, -J 'say' and -M 'put', are common in CVCs: they each account for a third of the total number of CVCs; the third most frequent IV, -N 'be' is rare in CVCs, and the only other IV that is at all common in CVCs is -NY 'catch', which accounts for 17% of the CVCs;
- twelve of the twenty-two most frequent IVs account for almost all (96%) of the CVC tokens, and of these just three (-J 'say, do', -M 'put', and -NY 'get') account for a bit over 80% of the CVCs; other IVs each account for only 1–2% of the total;
- -J 'say, do' is a consistently frequent IV across texts regardless of textual provenance, in both SVCs and CVCs (except for the two part speakers), although it does not always emerge as the most frequent IV.

Turning now to PVs, we find that just nine out of a total of sixty-two are instanced five or more times in the corpora. These are shown in Table 11–2. The third column shows the overall frequency of the PV. The fourth and fifth columns indicate which, if any, IVs the PV collocates with, and the frequency of the collocation according to narrator. Also indicated in the fourth column is whether the PV does not collocate with an IV—whether it occurs independently or with a postposition. The final column shows the sequential position of the PV in terms of overall frequency of both PVs and IVs. (Note that there are just fifteen frequency positions for the thirty-one PVs and IVs.)

Strikingly, just two PVs are instanced in three or more corpora, *liyan* 'like' and *kaw* 'call out'. Only for these two can we be reasonably confident that their presence on the list is not fortuitous, conditioned by the subject matter of the texts.

These nine PVs (15% of the lexical types instanced in the corpora) account for fully 44% of the total number of CVC tokens in the corpora. The remainder is constituted by the other 53 PVs plus a handful of nominals, most of which (70%) are instanced just once.

Of course, one must be wary of statistical generalisations such as these, and not read too much into them. On the other hand, at least six different speakers are represented, and the material is not restricted to a single genre; to refrain from doing the statistics simply on the basis of small size and non-representativeness (in fact, a problem with many samples in linguistics) is to miss potentially interesting observations and opportunities.

PV	Gloss	Freq	Collocation	Freq by speaker	Posn
dumbar	'fly'	24	-J 'do, say' -NY 'catch' +postposition	5 (MC); 9 (AK) 9 (MC) 1 (MC)	5
burrb	'dance'	13	-J 'do, say' -uk -KAL LOC 'wander' +postposition in isolation	8 (AK) 1 (AK) 3 (AK) 1 (AK)	9
liyan	ʻlike'	9	-M 'put' -BANY 'finish' in isolation	2 (MC); 5 (AK) 1 (TR) 1 (MW)	11
dub	'blow'	7	-M 'put' -NY 'catch'	1 (MC), 5 (AK) 1 (MC)	13
jub	'chop'	7	-NY 'catch' -J 'do, say'	5 (MC) 2 (MC)	13
junk	'run'	6	-JID 'go' -NY 'catch' -J 'do, say' +postposition	2 (MC) 1 (MC) 1 (AK) 2 (AK)	14
kad	'cut'	6	-W 'give' -M 'put' -R 'pierce'	3 (MC) 2 (AK) 1 (AK)	14

Table 11–2: High frequency PVs in the Nyulnyul corpora

11.2 The Event role

'jump'

'call out'

jurrb

kaw

The term Event refers to the sole inherent grammatical role in the Nyulnyul VP; it specifies the event, action, state, happening, or whatever that is denoted by the VP. It is associated with the component of the VP that serves a lexical function, and is thus realised by an IV root or stem in SVCs, as in (11–1) and (11–3), or by the PV root or stem plus IV root in CVCs, as in (11–2) and (11–4). Correspondingly, in non-finite clauses the Event role is realised by a non-finite IV (see §7.12), or by an independent PV, depending on whether the agnate finite clause has an SVC or CVC.

-J 'do, say'

in isolation

in isolation

-M 'put'

5 -J 'do, say'

4 (AK)

1 (AK)

3 (AK)

1 (MC)

1 (MW)

15

15

(11–3) kunard nga-ni-ny-jal-jii tomorrow 1MIN.NOM-CM-PST-see-2MIN.ACC 'I'll see you tomorrow.' (11–4) dukduk i-n-ny-in-ø shake 3NOM-CM-catch-PRS-3MIN.ACC 'He/she shakes it.'

It is because words of two distinct parts-of-speech serve in the same grammatical function—and further that one of them (the IV) serves another grammatical function as well—that it is necessary to distinguish parts-of-speech from grammatical functions. Moreover, as mentioned in §2.4 and §8.1, words of other classes not infrequently occur in the place of PVs; (2–7) illustrates an N serving (along with the following IV) in the Event role. Occasionally also the Event role is served by PVs linked together by a logical relationship such as extension, as in examples (8–13) and (8–14).

It is not always easy to determine whether or not a given collocation of IV and another lexeme is a CVC. For instance, *bur* 'place' occurs in collocation with at least the three IVs -BARNJ 'exchange', -M 'put', and -JAL 'see' in what look like CVCs, as illustrated by the following three examples respectively.

- (11–5) bur i-ngi-rr-barnj jimbin place 3NOM-PST-AUG-exchange inside 'They threw themselves down to the ground.'
- (11–6) bör ŋa-n-m-en warindjer yēl
 bur nga-n-m-in warinyjirr yil
 place 1MIN.NOM-CM-put-IMP one dog
 "I sacrificed one dog." (I.e. to the policeman who was decimating the numerous dogs kept by the residents of the Beagle Bay Mission.) (Nekes & Worms 1953: 409–410)
- (11–7) bur wa-n-jal i-li-rr-dam-yay place 2MIN.NOM-CM-see 3NOM-IRR-hit-1&2MIN.ACC 'Watch out, they might hit us.'

Similar collocations in other Nyulnyulan languages, including with the 'see' IV conveying the sense 'watch' (in Warrwa, Bardi, and Jawi), are sometimes analysed as CVCs, e.g. in Bardi (Aklif 1999:33; Bowern 2004a). However, an equally plausible alternative—in Nyulnyul—is that *bur* 'place' in these examples serves in the clausal role of Medium (see §12.3.2.1), effectively as a notional cognate object.³ Not only is the meaning of the combination quite predictable, but also the position of *bur* 'place' with respect to the IV is more variable than the position of a PV usually is in a CVC. Thus I am inclined to consider the construction to be a clausal one in Nyulnyul, that has not yet grammaticalised to a CVC.

Finally, it must be cautioned that not all PV-IV collocations represent CVCs, or even belong to VPs. There are a few examples (all from secondary sources) in which each verb apparently designates a process. In such examples the IV retains its lexical meaning. Both PV and IV serve in the Event role, presumably in separate clauses. The following two examples, both from Nekes & Worms (1953), are illustrative: the IV itself designates a process that the speaker is engaged in, namely hearing, while the PV designates a different

According to Claire Bowern (pers.comm.), there is intonational and other evidence in Bardi favouring a CVC analysis of constructions like the above that involve *bur* 'place'. The fact that (11–6) involves another unmarked NP in addition to *bur* 'place' does not argue against my analysis: both NPs serve in the Medium role, though just one of them (presumably the animate NP) is the Undergoer.

process, one in which not the speaker but someone else is engaged in, that is, the production of some sound. Despite its formal resemblance to a CVC, the PV-IV construction here is not a CVC, but a complement construction. The PV thus serves as Event in a non-finite VP belonging to the complement clause;⁴ at the same time, in the main clause the IV serves in the Event role in the VP.

(11-8)djamad er-djeden wamborinj, nogor nogor jamad i-rr-jid-in wamburiny ngukurr-ngukurr near 3NOM-AUG-go-PRS people murmur-murmur na-legaren nga-likarr-in 1MIN.NOM-hear-PRS "People are approaching, I hear murmuring." (Nekes & Worms 1953:649) (11-9)gau na-legaren kaw nga-likarr-in 1MIN.NOM-hear-PRS call

11.3 Verb classification: the compound verb construction

11.3.1 Formal properties of the CVC

When an IV occurs with a PV in a CVC,⁵ the two items behave as a single word-like unit. First, they represent together a single complex lexical item, and usually translate into English as a single lexical verb. This complex unit is in some ways like a compound (and hence the label CVC) (McGregor 2002c). Second, they almost always occur in close proximity to one another, typically adjacent. Only occasionally are they separated, and usually this is by an enclitic attached to the PV; only rarely does the PV follow the IV (see §8.2). Third, PVs and IVs usually occur in the same intonation unit,⁶ and without a pause between them.

"I hear a call, somebody is cooeeing." (Nekes & Worms 1953:567–568)

Nevertheless, the PV and IV constitute distinct words both distributionally (each has the potential for independent occurrence), and phonologically (the PV and IV are normally treated as separate word-like units for the placement of stress, and sandhi processes do not apply across the boundary between them).

As in other languages of northern Australia, normally just one PV occurs with an IV in a CVC. Indeed, the corpora show almost no instances of two (or more) PVs in collocation with a single IV, and the examples involve PVs connected by the conjunction aa 'and', as in the following two from different tellings of the emu myth. Both come from the point in the narrative at which the emu has cut his wings short, and finds that he is unable to fly.

⁴ Had it occurred in a finite clause, it would have occurred in a CVC in collocation with the IV -J 'do, say'.

⁵ For simplicity of expression, in this section I use the term PV in reference to any lexical item—whether it be a PV, nominal, adverbial, or particle—that serves in the role normally borne by a PV in a CVC.

The evidence on which this claim is based is, it will be recalled, rather limited: due to the circumstances of elicitation, PV-IV sequences were normally uttered in isolation, and textual material is extremely restricted. The available texts show, however, just a few instances of PV-IV constructions falling into two or more intonation units.

- (11–10) *junk-manjan i-jid-in aa marriny / judiny /* run-only 3NOM-go-PRS and walk straight 'He only runs and walks along straight.'
- (11–11) baan i-n-in / junk i-n-ny-in / aa marriny / like:that 3NOM-be-PRS run 3NOM-CM-catch-PRS and walk 'In that way, he runs and walks.'

In examples such as (11–10) where the two PVs and the IV all occur in the same tone unit, it seems reasonable to presume that it is the conjunction of the two PVs that enters into the syntagmatic relation with the IV, rather than the two PVs separately. Further support for this comes from examples where the two PVs are adjacent. However, the situation is not so clear for example (11–11), where the two PVs occur on different tone units, and the second PV, *marriny* 'walk', is not attested in collocation with the IV -NY 'catch'. For such examples it is possible that a second IV in collocation with *marriny* 'walk' has been ellipsed; alternatively, the PV may have been added as an afterthought.

In example (11–12) the PV is repeated—in reduplicated form on the repetition—not as an afterthought, but to indicate numerous repetitions of the event. In this instance, however, it is not certain that the second reduplicated PV forms a unit with the first one.

```
(11–12) kinyingk-kun jurrb i-n-j/ aa ... jurrb-jurrb/ DEF-ABL<sub>2</sub> jump 3NOM-CM-say and jump-jump 'Then he jumped up and leapt and leapt.'
```

We ignore complex PV aa PV units in the remainder of this chapter.

Not all IVs occur in CVCs. In fact, only about twenty-five of them (i.e. around 15% of the known IV roots) do. These are shown in Table 11–3, which also indicates the number of PV types that are attested with each IV in both primary and secondary corpora; the column headed 'Common' gives the number of collocating PVs shared in the two corpora. Notice that two derived IV stems are attested in CVCs, albeit only in secondary sources.

As this tabulation shows, IV roots differ strikingly in terms of the number of PV types they may occur with, that is, in terms of their productivity in CVCs. On the one hand, -J 'do, say' accounts for 37% (i.e. over a third) of all PV-IV combinations by dictionary count, and in fact occurs with almost a half (48%) of the known PVs. At the other extreme are IVs -JARRNGAR 'stand (up)', the derived reflexive/reciprocal *-ma-M-anyj* 'put self', and -MUUR 'pour, spill', which are attested with just one PV each. In between these extremes, IVs range between two and over a hundred in terms of the number of PVs they collocate with.

The frequency data shown in Table 11–3 suggests that it is not unreasonable to divide the IVs into two classes, productive and non-productive. The boundary between the two classes is not clear-cut, and I have arbitrarily taken 2% to be the cut-off point, less than which an IV is categorised as non-productive. Thus -KAL 'wander' emerges as productive, while -JALK 'fall' is non-productive. Productive IVs account for 94% of the CVC tokens. And as we will see, this division seems to correlate with other characteristics of the CVC.

In most instances more collocations are attested in the secondary than the primary corpus, which fact might be interpreted as indicative of language attrition. (Recall the apparent complete attrition of the CVC system in the Nyulnyul of some part speakers.)

Table 11–3: Inflecting verb roots that occur in CVCs

Verb root	Gloss	Primary	Secondary	Common	Total	%
-J	'do, say'	140	185	36	289	37
-M	'put'	39	98	14	123	16
-NY	'get, catch'	57	33	15	75	10
-N	'be, sit'	17	51	4	64	8
-W	'give'	36	25	8	53	7
-JID	ʻgoʻ	8	27	3	32	4
-R	'pierce'	4	27	2	29	4
-K	'carry'	15	20	8	27	3
-BARNJ	'exchange'	22	4	0	26	3
-KAL	'wander'	8	9	1	16	2
-JALK	'fall'	4	8	2	10	1
-JAL	'see'	2	4	1	5	0.5
-DAM	'hit'	0	4	0	4	0.5
-NGANK	'speak'	0	4	0	4	0.5
-JARRIJARR	'stand up'	0	3	0	3	0.4
-LAND	'sit (down)'	1	3	1	3	0.4
-NGUL	'throw'	1	2	0	3	0.4
-KARD	'enter'	0	2	0	2	0.3
-ma-R-inyj	'pierce self'	0	2	0	2	0.3
-WANYJ	'climb'	0	2	0	2	0.3
-JARRNGAR	'stand (up)'	0	1	0	1	0.1
-ma-M-anyj	'put self'	0	1	0	1	0.1
-MUUR	'pour, spill'	1	0	0	1	0.1
Total		355	515	95	775	100

Table 11–3 errs on the conservative side. For some IVs—especially -M 'put' and -N 'be'—it is often difficult to decide whether a particular collocation with a PV represents a CVC or some other construction. For these, I have included in the counts above only the instances in which the construction is almost certainly a CVC—specifically, it involves a dedicated PV. Being more generous, we would have the following figures:

Table 11–4: Alternative count of frequency of -M 'put' in CVCs

Verb root	Gloss	Primary	Secondary	Common	Total
-M	'put'	51	115	20	146

There are a few further IVs concerning which it is uncertain whether they can or cannot occur with PVs in CVCs. These include -JABAL 'ask', -JULNG 'tell', -KARLBAR 'sing, ensorcel', -MUKAR 'make', and -BAND 'blame, grumble, scold, curse'. The IV -JABAL 'ask' is attested in what appears to be a CVC only in Tachon (1895), who cites the following combinations: wotch konk ma'djebalan which he glosses 'ask with humility'; wo'lok konk ma'djebalan 'ask for water'; and norng madiebalan kongo for which he gives the uninterpretable gloss 'bold, a (fighting)'. It is unclear what wotch, konk, and norng are, and only the latter is glossed elsewhere in the work, as 'knee'! As for -JULNG 'tell', Tachon (1895) cites the collocation kudai kongo madiolongan—presumably kuday(i) kung(u) majulng-an—which he glosses as 'to boast of something'. The form kuday(i) is not attested elsewhere, and nor is it clear what kung(u) is; perhaps it is the ablative postposition: and in keeping with this, there are other instances of the form in Tachon (1895) that could be amenable to this interpretation. If so, this could be a PP in collocation with the IV. Tachon (1895) also cites the collocation tiawal madiolongan (i.e. jawal ma-julng-an) which he glosses as 'narrate'; possibly tiawal is a variant of jabal 'story', and most likely a Bardi borrowing (see Aklif 1999:79). Tachon also cites the collocation kunarara ... -KARLBIR(R) as meaning 'kill by sorcery'; clearly the IV is -KARLBIR(R) 'sing, ensorcell' (attested separately in Tachon 1895 and Nekes & Worms 1953, though not in the primary corpus). However, kunarara is not attested anywhere else, and its meaning is uncertain; quite possibly it is the name of a song used for ensorcelling a person, although it is also possible that it represents a PV. The only attested combination involving -MUKAR 'make' involves kal, cited in Tachon (1895) as meaning 'create'. However, the latter form is not attested elsewhere in anything that looks like a comparable sense. I can only suppose that it may represent the particle *kala* 'finish, complete' and that the collocation was given to Tachon in translating something like 'God created everything'. Elsewhere Tachon gives the collocation kala ... -M as meaning 'begin'. Finally, -BAND 'blame, grumble, scold, curse' is attested only in gardi ma-banden; gardi is presumably the word for 'sharp', and it may well be functioning here as an manner modifier of the IV (representing the Event).

IVs in other Nyulnyulan languages show similar differences in terms of their bite of the CVC cherry. For instance, in the Eastern Nyulnyulan languages Nyikina and Yawuru, eight IVs account for just over 90% of the PV-IV combinations, as shown in Table 11–5.

These tables show that in each language a very high proportion of PV-IV combinations involve -I \sim -JU 'do, say'; this is also the case in Bardi and Warrwa. Also reasonably comparable across the languages are the frequencies of -MA \sim -M 'put', and -KA \sim -A \sim -K 'carry'; -NI \sim -N 'be, sit' is also among the more productive IVs in CVCs in each language, although it is considerably more productive in Yawuru than in either Nyulnyul or Nyikina. The most frequent IVs in each language also include a verb for 'go', and one for 'get, catch, pick up'.

⁷ Elsewhere he cites the collocation *tjawal* ... -JOLONGAN 'advertise', which probably represents precisely the same PV and IV, albeit with different spellings.

,		` ' 1	
Nyikina		Yawuru	
-I 'do, say'	56%	-JU 'say'	33%
-MA 'make, put'	9%	-NI 'be'	20%
-A 'carry'	9%	-MA 'put'	13%
-MA 'go'	7%	-NGARA 'become'	11%
-NGARA 'become'	4%	-RNDIRA 'go'	6%
-ANDI 'pick up'	4%	-NYA 'catch'	4%
-NI 'sit'	3%	-KA 'carry'	4%
-BANJI 'share'	3%	-RA 'spear'	3%
others	5%	others	6%

Table 11–5: Frequency of most common IVs in CVCs by type-count in Nyikina and Yawuru after Stokes (1982:182) and Hosokawa (1991:203) respectively

11.3.2 Structure of the Nyulnyul CVC

McGregor (2002c:107–117) argues that the CVC in Nyulnyul is a verb classification system in which the IV serves as a marker that assigns the PV it occurs with to one of about a dozen primary categories. IVs thus serve a purely grammatical function in CVCs; this is a textural function according to the SG framework (see §2.3, McGregor 2002c:266–275). The system satisfies the set of distributional criteria that must be met for a system to count as classificatory (as per McGregor 2002c:18–19); here we do not go into the criteria or evidence that Nyulnyul satisfies them (on this, see McGregor 2002c:108–110).

Other analyses have been proposed for CVCs in various languages of northern Australia, including, among others, Nyulnyulan languages. I have critiqued the major competing analyses at some length elsewhere (especially McGregor 2002c:245–266, 2006b). For present purposes, it is sufficient to outline my major reservations concerning the analysis that has been most popular in recent years, namely that the CVC is a complex predicate construction (see e.g. Amberber, Baker & Harvey 2010; Baker & Harvey 2010; Bowern 2008b, 2010; Nordlinger 2010; Schultze-Berndt 2000; Wilson 1999).

The first question that arises is: what is a complex predicate? A number of rather different definitions can be found in the literature (e.g. Alsina, Bresnan & Sells 1997:1; Butt 2010:48–49; Hinrichs, Kathol & Nakazawa 1998; Mohanan 1997). Building mainly on Butt (2010), Amberber, Baker & Harvey (2007, 2010) propose three crucial features that must be satisfied for a construction to be a complex predicate:

- (a) two (or more) predicational elements are involved that
- (b) jointly predicate in
- (c) a monoclausal construction

The CVC in Nyulnyul (and other Nyulnyulan languages—McGregor 2006b) certainly satisfies (c) as will be clear from the discussion above and in previous chapters. Let us now examine conditions (a) and (b). This requires, of course, that we know what a predicate or predicational element is, which is not at all clear outside of logic—and certainly not in linguistics. Virtually anything in a language could be regarded as a predicate if we took the

view that a predicational element was anything that can be expressed as a logical predicate, e.g. P(x,y,...). A multi-word NP such as *the big dog* would then be a complex predicate, there being at least three possible predicating elements involved, corresponding to each word (*the* can easily be interpreted as a definiteness predicate D with argument dog, etc.); obviously (c) is satisfied.

One way that the term *predicate* is used in linguistics (and my guess is that this is the sense intended by Amberber, Baker & Harvey 2007 and others—see also Dik 1989 for a similar understanding of the term) is that it is a part of a clause that expresses the main part of a proposition about something, which will usually be a verb, sometimes an adjective or nominal (e.g. in an attributive clause). In this construal, a predicate must be a lexical item; fully grammatical items (such as copulas) should be excluded by definition, as would be components smaller than lexical items. Furthermore, this lexical item should presumably specify a conceptual or semantic event (to be understood in a wide sense, covering phenomena that unfold over time), property, or quality.

Condition (b) requires that the PV and IV jointly predicate, which means in relation to the Nyulnyul CVC that it should be a single lexical item specifying a conceptual event. This condition is fulfilled. The CVC functions as a type of phraseme, indeed constitutes a distinct lexical item that must be separately specified in a dictionary, granted that its meaning is not completely predictable from the meaning of the component PV and IV.

Turning now to condition (a), observe that both the PV and the IV can be regarded as predicational elements according to our linguistic criteria: all three requirements are satisfied by the two types of element in some environment. Both PV and IV are lexical items at least when they occur independently. Thus PVs have the potential of denoting an event involving at least one participating entity represented by an NP serving in a grammatical relation, as is evident from their use as sole predicating element of non-finite clauses (see §11.1 above).

All Nyulnyul IVs have the potential of occurring alone in SVCs in finite clauses, where they serve a lexical function and denote events; they occur in clauses with a complement of inherent grammatical relations. It does not follow that (a) holds, however. The fact that both verbal units can be predicational elements does not mean that they must be predicational in all circumstances. Condition (a) requires, as I understand it, that the item be predicational in the target construction, not just somewhere. For otherwise there would be no reason not to include the English future construction involving *be going to V* among the set of complex predicates, since *go* as a main verb denotes an event in e.g. *I am going to Beagle Bay*.

There is no reason to believe that the IV in a CVC in Nyulnyul serves a lexical function, or that it denotes an event or event component. Lexical features of the IV are not invoked in the CVC, in which the IV serves in a purely grammatical function (as suggested above). This is clearly the case in regard to CVC usage of -BARNJ 'exchange': it is demanded by grammar, by the requirements of reflexive/reciprocal CVCs. It is not so clear in the case of the other IVs where it might be maintained that some component of their lexical semantics is retained in CVCs. Against this, however, is the observation that there are no structural differences between CVCs involving the IV -BARNJ 'exchange' and any other IV; all represent a single construction type. Granted that -BARNJ 'exchange' serves a purely grammatical function in the CVC, it follows that the other IVs also serve in purely grammatical functions. They are not used as lexical items. It follows that (a) fails, and the IVs are not predicates; and thus the CVC is not a complex predicate construction.

Furthermore, as I have argued elsewhere (e.g. McGregor 2006b), we cannot derive the lexical properties of the CVC—the lexical properties of the PV-IV collocation such as

argument structure and Aktionsart—from those of the PV and IV by any combinatorial process such as merger (Baker & Harvey 2010). What follows is an overview of some of the difficulties with merger accounts of Nyulnyul CVCs.

It would be impossible to examine and evaluate all of the range of merger mechanisms that have been suggested in the literature, let alone all logically possible variants. Instead, I identify and discuss a feature of CVCs that is problematic for merger analyses generally. This is valency: I will show that it is impossible to account for the valency of CVCs via any consistent and systematic processes of merger. Aside from this, merger analyses cannot account for one crucial feature of CVCs in Nyulnyul: the stringent restrictions on collocational pairings of PVs and IVs. This feature must be added on to any merger analysis as an additional accidental restriction. Hence merger analyses are both inconsistent with facts of Nyulnyul, and incomplete.

The following pair of examples show that it is impossible to account for the valency of CVCs involving the IV -R 'poke' in a consistent way from the valency of the IV and the PV it combines with. If consistent rules of merger applied, the CVC should have a predictable valency, deriving in some way from the combination of the valencies of the PV and IV. But this is not so. (11–13) is intransitive, with a single inherent Actor (see §12.3.2.1), which is cross-referenced by a nominative pronominal prefix to the IV. By contrast, (11–14) is transitive, with two inherent roles, Actor (the speaker) and Undergoer (the dog) (§12.3.2.1). Other such pairs of CVCs exist in Nyulnyul, as in other Nyulnyulan languages—e.g Yawuru (Hosokawa 1991:209), Warrwa (McGregor 2006b).

- (11–13) *i-ny-jalk-uk wul-uk ngurrngurr i-na-r*3NOM-PST-fall-LOC water-LOC submerge 3NOM-CM-poke 'When he fell into the water he drowned.'
- (11–14) *nor nor nan-aṛ* yēl *ngurrngurr nga-na-r* yiil
 submerge 1MIN.NOM-CM-poke dog
 "I drowned the dog." (Nekes & Worms 1953:810)

I conclude that (a) does not hold, and thus that the complex predicate analysis of the Nyulnyul CVC is not a viable option. This does not, of course, argue for the analysis adopted here that the CVC is a verb classification construction in which the IV serves in a grammatical role of marking. Evidence for this claim lies in the fact remarked on above that the system satisfies the conditions for a grammatical system of classification. This analysis has the added advantage that the restrictions on PV-IV collocations is an integral part of the analysis—indeed, part and parcel of the construction being a verb classifying construction in the first place.

11.3.3 Semantics of the Nyulnyul PV-IV construction

In combination with PVs in CVCs, IVs do not of course convey the full lexical meaning they display in independent usage. For instance, -W 'give' does not convey the lexical meaning 'give' when used in combination with, say, the PV *yaarr* 'pull' (compare *give it a pull*). In CVCs, as we have seen, the IV root serves a purely grammatical rather than lexical function: the IV serves a classificatory function, categorising the PV, assigning it to one of a small number of semantically specified categories (McGregor 2002c; Silverstein 1986).

McGregor (2002c:29–34) argues that three general semantic features are relevant in the verb classification system in the languages of northern Australia (and elsewhere):

- (a) AKTIONSART, the aspectual character of the event;
- (b) VALENCY, semantic transitivity of the event; and
- (c) VECTORIAL CONFIGURATION, the configuration of the activity in terms of actional vectors.

These features are also relevant in Nyulnyul, as revealed in Table 11–6, which shows a specification of the semantics of the ten categories marked by the primary productive IVs in CVCs. It will be observed that valency specification is as monovalent or unspecified: the topmost three categories are exclusively monovalent, while the remainder are unspecified. Thus some CVCs in the categories marked by any IV from the second group of IVs are transitive while others are intransitive. There are, however, striking differences amongst the ambivalent categories as to the frequency distribution of intransitives and transitives: for instance, the -J 'do, say' category shows a more even composition of transitives and intransitives than the -M 'put' category. The telicity contrast telic vs atelic, by contrast, is neutralised only in two categories.

It is clear from this tabulation that the lexical semantics of the IVs are not identical to the semantics of the categories that they mark in CVCs, although they are obviously not completely different. In general, the category meaning is somewhat more schematic and abstract than the lexical meaning of the IV marking it. This situation is often described as semantic bleaching of the lexical meanings of IVs in CVCs. However, it is not clear that we should attribute the category meanings in the CVCs to the IVs that mark the categories. The meanings are associated with categories, and not the IVs. The IVs mark the categories, and thus fulfil a purely grammatical function in the CVC. Their lexical meanings are as it were suspended; they are not accessed in the determination of the meaning of the CVC.

My claim is that IVs in CVCs serve as grammatical markers in a system of semantically based verbal categories (as per §11.3.2). No claim is made that the pairings of PV and IV is predictable on the basis of their semantics, or even that given the lexical meaning of a PV its categorisation is predictable. The claim is that the categorisations are semantically systematic and consistent, though not necessarily perfectly. As is typical of grammatical category systems (McGregor 2002c), there is a degree of arbitrariness in the categorisations which rules out complete predictability; at best we might be able to predict a range of categories that an IV is likely to be assigned to, and some of which will be more likely than others. The situation is as described for the more grammaticalised verb classification system of Gooniyandi:

This is not to suggest that the meaning of the IV as a lexical item is completely irrelevant to the meaning of the CVC. As already observed, there are correlations between the category meanings as shown in Table 11–6 and the lexical meanings of the IVs. Thus it would be surprising if -BARNJ 'exchange' marked the stative category and -N the reflexive/reciprocal, and vice versa. A methodological consequence is that the lexical meanings of the IVs must be determined by examination of their independent uses in SVCs; we do not need to factor in their CVC uses—indeed, we must not do so—to find a common denominator across both environments.

Table 11–6: Semantic characteristics of categories defined by the 10 primary classifying IVs

Valency	Telic	Atelic
	-BARNJ 'exchange' [re	eflexive/reciprocal action]
1		-N 'be' [stative (non-dynamic)] -JID 'go' [activity progresses over time]
	-J 'say, do' [d	ynamic activity]
1/2	 -R 'poke' [action taking place in a straight line, impacting on something at a point] -W 'give' [action directed outwards from actor, making contact with something] -NY 'get' [acquire or achieve an entity or condition by active means] -M 'put' [induce something to enter new state, condition, or location] 	-KAL 'wander' [action not uniquely directed towards a specific goal] -K 'carry' [move something by constantly applied force to new location]

... [t]he pairings of classifier [for which, read IV] and process [read PV] do not as far as I know contradict the semantic analysis presented above. And the major predictive value of the proposed analysis lies in its ability, given that a particular root occurs with n different classifiers and with n distinct meanings, to predict which meanings will be associated with which root-classifier pairings. (McGregor 1990:572)

In the next section, §11.4, we examine each of these primary verbal categories in more detail, remarking on their extensions and attempting to specify their semantics more precisely; each subsection begins with an examination of the semantics and grammatical properties of the category-marking IV in independent use. The brief characterisations shown in Table 11–6 are intended to give an approximate indication of the semantics of the primary verbal categories. Aside from such verbal descriptions, for some categories it is useful to employ diagrammatic representations similar to those of Cognitive Grammar (Langacker 1987, 1991), especially in the characterisation of the vectorial configuration component of meaning.

For the remaining thirteen non-productive IVs the situation is less clear-cut, and it is not so evident that the IV serves as a category marker; nor do the three semantic features appear so relevant to their uses in CVCs. These IVs are thus treated separately in §11.5.

11.4 Primary verbal categories of Nyulnyul

In this section we discuss the ten productive verbal categories in Nyulnyul. §11.4.1 deals with the three monovalent categories, §11.4.2 with the seven ambivalent categories.

11.4.1 Monovalent categories

11.4.1.1 The -BARNJ 'exchange, do to self' category

This is the irregular reflexive/reciprocal IV stem corresponding to the IV -W 'give'. In independent use in SVCs, it generally displays the reciprocal sense, 'give to one another, exchange'. As is the case for -W 'give', the clause may contain an unmarked NP designating that which is exchanged, as illustrated by (11–15) and (11–16); this NP serves in the clausal role of Medium (§12.3.2.1).

- (11–15) wilamay i-ngi-rr-barnj food 3NOM-PST-AUG-exchange 'They gave each other food.'
- (11–16) *i-ngi-rr-barnj kumbarr war-in i-na-w*3NOM-PST-AUG-exchange money other-ERG 3NOM-CM-give *aa war-in i-na-w*and other-ERG 3NOM-CM-give
 'They exchanged money, giving it to one another.'

My corpus also shows the reduplicated form -BARNJABARNJ 'exchange', as in *i-ngi-rr-banyj-a-barnj-an* (3NOM-PST-AUG-exchange-EV-exchange-IMP) 'they shared it together.'

According to Nekes & Worms (1953:357) -BARNJ can also, as a simple verb, be used in the reflexive sense 'surrender oneself, give oneself up' in Nyulnyul. However, they do not exemplify this sense for Nyulnyul, though they do give a couple of Jabirrjabirr examples; presumably this sense was also available in Nyulnyul.

(11–17) *na-baṇdjen dje*, *wan-dab nai* Jabirrjabirr *nga-barnj-in-ji wa-n-dab-ngay*1MIN.NOM-exchange-PRS-2MIN.OBL 2MIN.NOM-CM-hit-1MIN.ACC
'I surrender to you; hit me!' (Nekes & Worms 1953:357)

Although my corpus does not exemplify this sense for the IV, it does show a few instances of -BARNJ 'exchange' in an SVC in which the nominative pronominal prefix is minimal in number. In (11–18) the reflexive interpretation is apparently invoked: the person is establishing himself in a certain social role. (11–19) does not admit a reflexive interpretation: it is not being claimed that the person does not to give himself money, but rather that he does not share his money with others.

- (11–18) *maj i-m-barnj in-ij bur* boss 3NOM-PST-exchange this-DAT country 'He made himself boss of this country.'
- (11–19) arri i-la-barnj kumbarr jin not 3NOM-IRR-exchange money 3MIN.OBL 'He doesn't share his money (i.e. with other people).'

In CVCs there is a consistent bidirectional correlation with reflexive/reciprocal events. -BARNJ 'exchange' thus marks reflexive/reciprocal voice in CVCs. The CVC is specified as monovalent, and the clause it occurs in is either intransitive or semitransitive (see

§12.3.2.2.) Reflexive/reciprocal CVCs contrast with other intransitive CVCs in terms of vectorial configuration: they involve action vectors that do not extend beyond the Actor. Figure 11–1 (based on Figure 2 of McGregor 2000b) depicts some of the possible vectorial configurations admitted by this specification. Aktionsart is not specified, and the event may be either telic or atelic.

As Table 11–3 shows, the secondary sources exemplify only a few collocations, none of which are attested in the primary corpora. In a couple of cases where the last speaker used the IV -BARNJ 'exchange' in a CVC, earlier sources show instead a reflexive/reciprocal form of another IV, the IV that the PV normally collocates with. For instance, *daarr* 'arrive' consistently collocates with -R 'poke' in the secondary sources, in either its plain root form or the derived reflexive/reciprocal stem form, corresponding to the senses 'arrive' and 'meet together'. However in the primary sources the latter sense is expressed exclusively by collocations with the IV -BARNJ 'exchange'. This suggests that -BARNJ 'exchange' may have only recently taken on the role of exclusive marker of the reflexive/reciprocal in CVCs. Against this, however, is the fact that in all other Nyulnyulan languages for which we have information the cognate irregular 'exchange' IV is also used, with very few exceptions, in the same way as a reflexive/reciprocal marker (McGregor 2000b).

Even in my own corpus the number of PVs attested in collocation with -BARNJ 'exchange' is small, presumably reflecting the limitations of this body of data. The bulk of the PVs with which -BARNJ 'exchange' occurs designate processes of violence and impact; other domains covered include motion, emotion, and communication.

The PVs of impact and violence occurring with this IV are: bany 'shoot', barabar 'hit (oneself)', bard 'catch hold of', bardabard 'catch hold of repeatedly (e.g. wrestle)', dirdird 'wind, coil', duk 'wipe', duurr 'bump', jabajab 'scratch lightly, tickle', jard 'press', kad 'cut', kadakad 'cut repeatedly', kinyj 'shut', kinykiny 'commit suicide', kur 'embrace', mäd (mad) 'shake (hands)' (from Nekes & Worms 1953:663), and wirrwirr 'scratch (oneself)'. Most of the collocations admit both reflexive and reciprocal interpretations, providing the number of the Actor NP is not singular (in which case only the reflexive interpretation is, of course, available). In many cases, knowledge of the world and/or context will suggest the appropriate interpretation, reflexive or reciprocal. Thus, although (11-20) admits both reflexive and reciprocal interpretations, the former is the most likely given knowledge of the world; in the case of (11-21) both interpretations are about equally probable, and only context can distinguish. For (11-22) and (11-23) only the reflexive interpretation is available. But for (11–22) this is entirely a consequence of the number of the Actor, whereas for (11-23) it is highly unlikely that a reciprocal reading would be intended even if the Actor was non-singular in number: knowledge of the world suggests that things that may be coiled or tied up are either inanimates or if animate, longish creatures such as snakes; and such entities are unable to perform the act on another such entity.

(11–20) duk ya-nga-rr-barnj warli towel-ang wipe 1PL.NOM-PST-AUG-exchange everyone towel-INS 'We wiped ourselves with towels.' or 'We wiped each other with towels.'

Of course, it is possible that the IV -BARNJ 'exchange' has recently expanded the range of PVs it can collocate with in CVCs, and that in previous times it competed with reflexive/reciprocal forms of other IVs. In this context it is worth observing that of the PVs it collocates with, fully half otherwise collocate with -W 'give'. As for the remainder, all bar a couple also collocate with one or more of -NY 'catch', -M 'put', -K 'carry', -J 'say, do', -R 'poke', and -JAL 'see'. Interestingly, only the IVs -R 'poke', and -JAL 'see' have attested reflexive/reciprocal forms in my corpus. I am uncertain what to make of these facts.

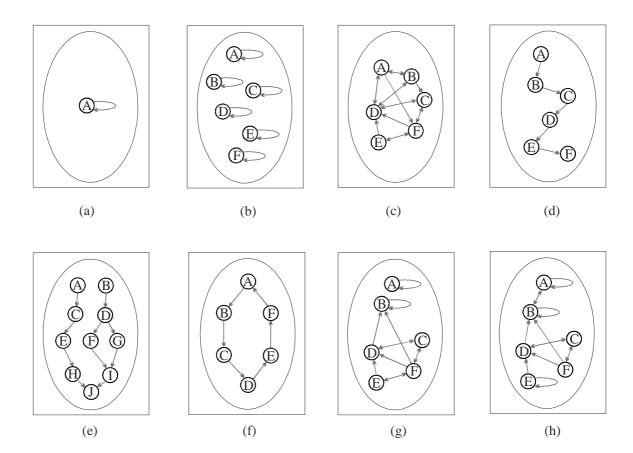


Figure 11–1: Some vectorial configurations for the -BARNJ 'exchange' category

- yiil kad-a-kad i-rr-barnj (11-21)dog cut-EV-cut 3NOM-AUG-exchange back 'The dogs are biting one another's backs.' or 'The dogs are each biting themselves on the back.'
- (11-22)kinyingk wamb kad i-m-barnj karrkuj jumbarraari-nyirr cut 3NOM-PST-exchange dead knife-INS DEF 'This man stabbed himself dead with a knife.'
- (11-23)juurr dirdird i-m-barnj 3NOM-PST-exchange snake coil 'The snake coiled itself up.'

There is no requirement or implication of deliberateness in events categorised by -BARNJ 'exchange', especially in the case of reflexive actions, as in (11–24) and (11–25).

- (11-24)ni-marl kinyj i-m-barnj door-uk 3MIN-hand shut 3NOM-PST-exchange door-LOC 'He shut his fingers in the door.'
- nga-mbal duurr nga-m-barnj (11-25)1MIN-foot knock 1MIN.NOM-PST-exchange 'I stubbed my toe.' (Literally: 'I knocked myself foot.')

Three of the PVs listed above—barabar 'hit (oneself)', kinykiny 'commit suicide', and wirrwirr 'scratch (oneself)'—appear to lexically specify reflexive interpretations. They are attested in collocation with -BARNJ 'exchange' only; the clauses they occur in show no agnate transitive clauses. This is consistent with the view that the reflexive/reciprocal is not a derived category or construction, and that -BARNJ 'exchange' marks the reflexive/reciprocal category, not a morphosyntactic derivation. (The derivation itself, that is, is a purely lexical one.)

The main PVs of motion occurring with -BARNJ 'exchange' are *daarr* 'arrive', *jarrbad* 'lift', and *yaarr* 'drag'. Of these, *daarr* 'arrive' is invariably associated with reciprocal situations (example (11–26)), while the others are associated with reflexive actions of induced motion or change of position (as in (11–27)).

- (11–26) *i-n-d-jan* daarr ya-ngka-rr-barnj
 3NOM-CM-say-1MIN.OBL arrive 1PL.NOM-FUT-AUG-exchange
 'He told me we should meet together.'
- (11–27) kinyingk wurrumbardangk wamb jukar jarrbad i-m-barnj
 DEF big man slowly lift 3NOM-PST-exchange
 i-ny-jarrajarr
 3NOM-PST-arise
 'The big man slowly lifted himself up.'

Just a couple of PVs designating emotions are attested with -BARNJ 'exchange': wukul 'pity', and liyan 'like':

- (11–28) arri wukul nga-la-barnj kinyingk not pity 1MIN.NOM-IRR-exchange DEF 'I don't pity myself.'
- (11–29) bin wamb aa uriny liyan i-rr-barnj that man and woman like 3NOM-AUG-exchange 'That man and woman love each other.'

Similarly, just a few PVs designating communicative acts are known to collocate with -BARNJ 'exchange': karrjikarrj 'swear', jinajinang 'mock', and bar(r)ay 'accuse'; all of these are attested in collocation with other IVs in non-reflexive/reciprocal contexts. The first two are attested only in reciprocal senses, 'swear at one another' and 'mock one another', as in (11-30) and (11-31). Bar(r)ay 'accuse', which is attested only in the secondary corpora, is instanced there only in the reflexive sense 'accuse oneself, confess', as in (11-32).

- (11–30) *karrjikarrj i-rr-barnj kari-jun* swear 3NOM-AUG-exchange grog-ABL₁ 'They swear at one another because of grog.'
- (11–31) *jinajinang i-ngi-rr-barnj* mock 3NOM-PST-AUG-exchange 'They mocked one another.'

(11–32) barai ŋa-m-bandj djen ibal bar(r)ay nga-m-barnj-jin iibal accuse 1MIN.NOM-PST-exchange-3MIN.OBL father 'I confessed to the father.' (Nekes & Worms 1953:365)

To wind up the discussion of the -BARNJ 'exchange' category, I remark on a few problematic cases, the analysis of which is uncertain. First, Tachon (1895) provides an example of *ngurrngurr* 'submerge' in collocation with what appears to be an instance of -BARNJ 'exchange' marked by the reflexive/reciprocal prefix *ma*-:

(11–33) nazien gnor gnor namawendzie wolok ngay-in ngurrngurr nga-ma-wirnji wul-uk I-ERG submerge 1MIN.NOM-REF_p-exchange water-LOC 'I drown myself.' (Tachon 1895)

The combination of the *ma*- prefix with -BARNJ 'exchange' is not attested elsewhere in the Nyulnyul corpora, although Hosokawa (1991:175) remarks that it occasionally occurs in Yawuru (invariably without the reflexive/reciprocal suffix, as in the Nyulnyul example), with what he refers to as a 'collective-reciprocal action' sense. Such a reading is not available for (11–33). Perhaps what is being coded is the unusual and deliberate nature of the event (observe also the presence of the ergative marker on the Actor, unusual in reflexive/reciprocals, which are intransitive at clause level).

Second, my own corpus shows a small number of instances of -BARNJ 'exchange' accompanied by a PP, in which this IV apparently takes on the very general meaning 'act on oneself or one another by means of'. Despite the fact that this is very similar to the meaning of -BARNJ 'exchange' in CVCs—and is more general than the usual meaning in SVCs—these collocations most likely do not represent CVCs. Thus the order of the PP and IV is more variable than usual. I suspect that these combinations typically represent the results of on-line strategies employed by the speaker to deal with problems of memory access. And indeed in some instances the secondary sources provide reflexive/reciprocal SVCs or CVCs expressing the same meanings; in some instances the speaker herself provided such alternative expressions. Examples are:

- (11–34) nga-m-barnj jungk-uk yangan 1MIN.NOM-PST-exchange fire-LOC near 'I warmed myself near the fire.'
- (11–35) angk-ij walangk-ang ku-ngu-rr-barnj what-DAT spear-INS 2AUG.NOM-PST-AUG-exchange 'Why did you lot spear each other?'
- (11–36) nga-ngka-barnj wul-ang 1MIN.NOM-FUT-exchange water-INS 'I will splash water (on my face).'

In a few instances the collocations are CVCs, and the postposition is used derivationally rather than relationally. This is the case for *ngank-ang* ... -BARNJ (speak-INS ... exchange) 'speak together/to oneself':

- (11–37) ngank-ang ya-nga-rr-barnj talk-INS 1PL.NOM-PST-AUG-exchange 'We spoke together.'
- (11–38) ngank-ang i-barnj ni-malk-ang talk-INS 3NOM-exchange 3MIN-self-INS 'He's talking to himself.'

11.4.1.2 -N 'be'

Used independently in SVCs this IV is a generic stative verb of being or existence. In this regard Nyulnyul (like other Nyulnyulan languages) is unlike most Australian languages, which do not possess a general 'be' verb, and instead use the positional stative verbs 'stand', 'sit', and 'lie' in expressing propositions about being. In Nyulnyul positional and orientational stances are specified by PVs; there are no IVs expressing these stative meanings, although there are IVs that convey these senses as components of their meaning.

A common environment in which -N 'be' is found as an independent verb is in expressions of location. The clause generally includes a PP and/or adverbial specifying the location of the Actor:

- (11–39) baab kalb i-n-in bardangk-uk child above 3NOM-be-PRS tree-LOC 'The child is up in the tree.'
- (11–40) mon i-nen djimben gorbol-g
 mung i-n-in jimbin kurrbul-uk
 honey 3NOM-be-PRS inside hole-in
 'The honey is in the hole of the tree.' (Nekes & Worms 1953:628)

Another common context for -N 'be' is in clauses expressing the existence or presence of an entity at a specified location. In contrast with the previous example the Actor NP is presented as new information. It is not clear if the difference between the expression of location and the expression of presence (or existence) is emic.

(11–41) bin-ik bardangk mung i-n-in this-LOC tree honey 3NOM-be-PRS 'There is honey in that tree.'

-N 'be' is 'optional' in both of the above contexts, in the sense that agnate verbless clauses exist, although they express different meanings (see §12.2.2 and §12.2.3). This IV is also optionally used in attributive relational clauses, regardless of the position or stance (if any) prototypically or situationally adopted by the entity of which the property is attributed, i.e. the Actor. Examples are:

(11–42) yubul nga-n-in sick 1MIN.NOM-be-PRS 'I'm sick.'

- (11–43) arri nga-li-wid-an jan may kaard marrkin not 1MIN.NOM-IRR-eat-IMP 1MIN.OBL food still hungry nga-n-in 1MIN.NOM-be-PRS 'I haven't eaten my breakfast; I'm still hungry.'
- (11–44) milirrkarr i-nga-n-an wurrambardang wamb before 3NOM-PST-be-IMP big man 'He used to be a big man.'

Other relational clause types also admit the optional presence of -N 'be', at least if the relation is not one of identification or equality (see §12.3.1). For example, this IV may occur in an SVC in expressions of accompaniment (which usually also admit possessive interpretations):¹⁰

(11–45) wub-inyirr i-n-in small-COM 3NOM-be-PRS 'The dog is with pup.' Or 'The dog is pregnant.' Or 'The dog has a puppy.'

The IV -N 'be' can also express a range of modes or states of being, translating into English as 'live', 'stay', 'remain', illustrated respectively in: 11

- (11–46) *karrambal bindany aa murrul / i-nga-rra-n-an /* bird big and little 3NOM-PST-AUG-be-PST 'Birds, big and small, lived there.'
- (11–47) kaard i-ngi-n bin-ik still 3NOM-PST-be this-LOC 'He/she stayed there.'
- (11–48) arri i-la-bany kaard i-n-in judiny not 3NOM-IRR-finish still 3NOM-be-PRS straight 'It (the water) doesn't dry; it remains forever.'

CVCs involving this IV designate events that are conceived of as homogeneous throughout; they are thus specified as atelic. They usually (though not invariably) also occur in intransitive clauses.

As we have already mentioned (§8.4.1), PV stems formed with the derivational suffix -kaj CONT almost always collocate with -N 'be', consistent with the fact that the derivational morpheme presents the event as continuous—and thus homogenous—throughout some time span. This is so despite the fact that in most instances the referent event is an activity rather than a state—e.g. lakal-kaj (climb-CONT) 'be climbing'. The interrogative 'do what' is normally expressed by angk-kaj (who/what-CONT) in collocation with -N 'be', although angk-uk (who/what-LOC) is sometimes found as an alternative, as in the following example; the contrast in meaning between the two expressions is uncertain.

¹⁰ In Jabirrjabirr it is possible to applicativise the 'be' IV, resulting in an expression of possession; comparable examples are not attested in Nyulnyul. See McGregor (2001c) for discussion.

¹¹ Note that in these examples the words in collocation with the IV, namely *kaard* 'still' and *judiny* 'straight, true', are particles and adverbials, not PVs.

(11–49) angk-uk i-n-in in baab what-LOC 3NOM-be-PRS this child 'What's this boy doing?'

The PVs *maad* 'play' and *murrkul* 'work' also take the locative postposition (rather than the CONT derivational affix) as an apparent derivational affix, the derived form occurring in a CVC meaning 'be playing' and 'be working'. The former is illustrated by the following example:

(11–50) kinyingk-uk buru mangir maad-uk i-rr-ø-in
DEF-LOC camp always play-LOC 3NOM-AUG-be-PRS
'This is the place where they play cards.'

The ablative postposition is also used in a similar way, with the PVs kinyj 'lock, shut' and baab 'open' in reference to states of being shut or open:

(11–51) bäb-djon i-nen nimam baab-jun i-n-in niman open-ABL₁ 3NOM-be-PRS door 'The door is open.' (Nekes & Worms 1953:330)

Nekes & Worms (1953) refer to these PV forms as 'participles', which analysis is not inappropriate functionally.

Finally, there are a few examples of PVs derived by reduplication that collocate with -N 'be' despite the fact that they denote activities. It seems that the derived reduplicated form specifies numerous repetitions of a single activity, where these repetitions are viewed as constituting a homogenous unified event, as in (11–52). Reduplicated PVs do not, however, always occur exclusively in CVCs with -N 'be'.

(11–52) aa kinyingk-uk bur kalb / dub-dub-mad i-n-in / and DEF-LOC country up blow-blow-EMP 3NOM-be-PRS 'And in that country up there, it's still blazing.'

Turning now to non-derived PVs, a range of meaning domains are covered by CVCs with -N 'be':

- (a) positional states;
- (b) bodily experiences;
- (c) locative positions;
- (d) material states or conditions; and
- (e) states of unitedness.

These are treated in order below.

Expressions exist involving -N 'be' and nominals, adverbials, PPs and other items with meanings falling into many of these etic-semantic domains. It is not always clear when the collocation represents a CVC, and when it represents another construction. If the nominal occurs in a corresponding verbless relational clause, it is reasonable to conclude that the collocation is not a CVC, and that the clause is a verbal relational one. This is the case, for instance with *yubul* 'sick' (see example (11–42) above), but not for *nyunnyun* 'ache' (which is a genuine PV). If the adverbial occurs with the same meaning with a range of IVs and

CVCs, this suggests that it is a modifying dependent of the IV -N 'be', and does not form a CVC with it. Thus, there are spatial adverbials and adverbials of togetherness that occur with -N 'be' when it serves as the main verb of an SVC. Due to inadequacies of the corpus, it is often impossible to be certain whether such agnate expressions do not exist, or are merely absent.

- (a) Positional states. These include the three basic positions 'stand', 'sit', and 'lie', represented by the PVs *yaalk* 'stand', *mijal* 'sit', and *walirr* 'lie (on back)'. The PVs *yaalk* 'stand' and *mijal* 'sit' are unusual in regard to the relatively high frequency of their occurrence following the IV; (11–53) and (11–54) illustrate both orders for *mijal* 'sit':
- (11–53) bin wamba mijal i-n-in bur-uk jan that man sit 3NOM-be-PRS camp-LOC 1MIN.OBL 'That man is sitting in my camp.'
- (11–54) baab i-rr-ø-in mijal kalb mudikard-uk child 3NOM-AUG-be-PRS sit above car-LOC 'The children are sitting on top of the car.'

Besides these three basic stances, a few CVCs with -N 'be' denote more unusual postures: *dirdird* 'coiled up', *jakuljakul* 'curled up, bent', *nendenend* (*ngindingind*) 'stretch out arms', and *midimid* (*mirdimird*) 'kneel'. Possibly we could also include in this group *gorg* (*kurrk*) 'heaped up', as suggested by (11–55).

- (11–55) yāben gorg in-an djen wēl burug yaabin kurrk i-n-in jin wil burruk hide heaped:up 3NOM-be-PST 3MIN.OBL animal kangaroo 'The kangaroo-hides are heaped up.' (Nekes & Worms 1953:915)
- (b) Bodily experiences. This meaning domain includes a range of conditions or feelings—including mental states—experienced by animate beings, prototypically humans. Those represented by CVCs involving -N 'be' are construed as homogenous states. They involve the following PVs: nyunnyun 'ache, throb', warwar (warwar) 'convulsion', wolongon (wulungkun) 'grieve', lebab (libab) 'remember', rarambal (rar(r)ambal) 'frightened', ŋanan (nganan) 'unconscious, dreaming', djiu (jiyu) 'itch', gonjorg (kunyurrk) 'sleep', nunji 'alive', bowarewar (buwar(r)iwar(r)) 'nearly dead, close to death', yāi (yai) 'ticklish, itchy', and possibly bembe (bimbi) 'weak' and walman (walman) 'without any purpose'. The following are some examples:
- (11–56) nga-ngi-n nyunnyun nga-ng-uk 1MIN.NOM-PST-be ache 1MIN-stomach-LOC 'I had a pain in my stomach.'
- (11–57) wamb yobol-ad i-nen, mōdj bowarewar wamb yubul-ad i-n-in muj buwar(r)iwar(r) man sick-FOC 3NOM-be-PRS already nearly:dead i-nen i-n-in 3NOM-be-PRS 'The man is sick, he is nearly dead.'

The PV *nyunnyun* 'ache' also occurs with the IVs -J 'say, do' and -NY 'get', which present the experience as, respectively, a more active throbbing one, and a condition that was entered into, an inchoative.

(c) Locative positions. Events of this type are positional states characterised by a feature of spatial location, usually of the Actor. There are a number of CVCs that indicate stative location on the back of an animal, usually a horse, as in collocations with the following: *jalingk* 'ride', *gonde* (*kundi*) 'be on horseback', and *nēgaŋg* (*niikangk*) 'be on horseback'. We illustrate with just one example, involving the most common of these PVs (and illustrating the more marked word order):

(11–58) wamb i-n-in jalingk yaward-uk man 3NOM-be-PRS ride horse-LOC 'The man is riding on a horse.'

Jalingk 'ride' occurs with other IVs, in which case the riding event is presented from a different perspective, and not as a state: with -JID 'go' as a motion event; with -W 'give' transitively as 'ride a horse', as in (11–165); and with -NY 'get' also transitively 'ride a horse', with focus on the beginning of the riding event, as in (11–195).

Other collocations that perhaps belong in group (c) involve *jukurr* 'poke', *bagar* (bakar(r)) 'stick in', ¹² and yagar-ad (yakar(r)-ad) 'lie lightly on top'. In CVCs the first PV specifies a state of being, normally resulting from a previous event of being poked, as in:

(11–59) karawal-in i-na-r-ngay jukurr i-ngi-n prickle-ERG 3NOM-CM-poke-1MIN.ACC poke 3NOM-PST-be jad-uk jan clothes-LOC 1MIN.OBL 'A prickle went into my shirt and kept poking into it.'

Jukurr 'poke in' is also found in collocation with -M 'put', -NY 'get', and -W 'give'; these CVCs denote activities, 'poke out (e.g. tongue)' for the first two, and 'give a poke (e.g. with a finger or needle)' for the third.

The third PV, yagar-ad is poorly understood. Nekes & Worms (1953:917) gloss yagar (yakar(r)) (not attested in free occurrence in Nyulnyul) 'touching lightly; things lying on top of a heap touching lightly the material below, with the result that they can be taken off easily', and illustrate it with:

(11–60) yagar-ad i-nen djēb wan-njeo yakar(r)-ad i-n-in jiib wa-n-nyu lie:lightly:on:top-FOC 3NOM-be-PRS boomerang 2MIN.NOM-CM-get 'Take the boomerang lying on top.' (Nekes & Worms 1953:917)

(d) Material states or conditions. A small number of PVs collocate with -N 'be' to give rise to CVCs denoting material states or conditions which are typically exhibited by inanimates, sometimes by animates also, including: kalwar 'expose', jukar 'quiet', malkin 'quiet', jaluk 'clean', budar (budar(r)) 'empty, clean', and $dj\bar{a}r$ (jaar) 'smell (of something), give off a scent'. The following examples are illustrative.

¹² It is uncertain whether this is a PV or a nominal meaning 'prickle': the example given in Nekes & Worms (1953:339–340) admits either interpretation.

- (11–61) binybabinyb kalwar i-n-in marsh expose 3NOM-be-PRS 'The marsh is exposed now.'
- (11–62) meredjen djār na-nen mirrijin jaar nga-n-in medicine smell 1MIN.NOM-be-PRS 'I smell of medicine.' (Nekes & Worms 1953:816)

Nekes & Worms (1953:625) cite the PV gor(kur), which they gloss 'unfinished, not yet cut up, whole'. This is puzzling since the third gloss, 'whole', appears to conflict with the first glosses, which suggest incompletion and non-wholeness. The second gloss may provide the clue: it is illustrated by a Bardi example meaning 'whole fish, not yet cut up', suggesting that the PV might be better glossed 'in a raw or unprocessed state'. The Nyulnyul example they give, (11-63), is consistent with this analysis. ¹³

- gade (11-63)djeb i-nen, nange-bal gor nga-ngka-bal jiib kaard kur i-n-in boomerang still unfinished 3NOM-be-PRS 1MIN.NOM-FUT-plane garmedj karrmij later 'The boomerang is still unfinished, I shall plane it later on.'
- (e) States of unitedness. The final group, made up of states of unitedness or accompaniment—of being in the presence of, being accompanied by, or being united with—is rather marginal and represented by just a couple of potential PVs, including $mirarendjen\ (mir(r)ar(r)in(y)jin)$ 'accompany' and $yambonyambon-an\ (yambun-yambun-ang)$ 'be united with':
- (11–64) mirarendjen er-en bāb gabel djen mir(r)ar(r)in(y)jin i-rr-ø-in baab kabil jin accompany 3NOM-AUG-be-PRS child grandmother 3MIN.OBL 'The child is accompanied by its grandmother.' (Nekes & Worms 1953:532)
- niŋar ŋan-meo yambon yambon-aŋ manen ningar nga-n-m-iu yambun-yambun-ang ma-n-in true 1MIN.NOM-CM-put-PRS together-together-INS INF_p-be-INF_S laib njer wamb-orinj gorwol-djon-gong layib-nyirr wamb-uriny kurrwal-jun-kung good-COM man-woman sky-ABL₁-ABL₃
 "I believe in the communion of saints." (Creed; Nekes & Worms 1953: 922–923)

¹³ I remain rather unsatisfied by the analysis of this example that is proposed by Nekes and Worms, and wonder whether it does not really involve the particle *kadakur* 'enough, finish', not *gor* (*kur*): possibly the speaker is indicating that the boomerang is finished for the present, and that they will return to it later and complete the final touches on it.

11.4.1.3 -JID 'go'

This IV is the basic verb of motion in Nyulnyul, and is used in SVCs with the meaning 'go' or 'come'; it is a plain verb of motion that involves no deictic component. In SVCs it always refers to translational motion; it is not used in reference to motion events in which the entity remains in a place. It is usually used of entities that move under their own steam, though rarely it is used in reference to motion of an inanimate that is induced by an external source (see (11–74) below).

This IV is comparatively infrequent in the Nyulnyul corpora—contrast the figures provided in Table 11–1 above with those for Gooniyandi, where *ward-* 'go' emerges as the most frequent verb by a large margin (McGregor 2002c:88–90). It is impossible to say whether this is a consequence of the nature of the respective texts, or reflects a real difference between the languages.

In SVCs -JID 'go' is usually (though not invariably) found with a PP or adverbial indicating either a direction or manner of motion. A few examples are:

- (11–66) *gogor gogor-og gan-djed gimber ngukur(r)-ngukur(r)-ung nga-ny-jid ngimbirr*murmur-murmur-ALL₁ 1MIN.NOM-PST-go night

 'I went to confession yesterday evening.' (Nekes & Worms 1953:800–801)
- (11–67) nga-ny-jid makirr-mirr 1MIN.NOM-PST-go road-PER 'I walked along the road.'
- (11–68) nyi-k-ang mi-jid 2MIN-back-COM 2MIN.NOM.FUT-go 'Go backwards.'
- (11–69) baybirr nga-ngka-jid behind 1MIN.NOM-FUT-go 'I'll go after.'
- (11–70) *i-ny-jid wardijang*3NOM-PST-go northerly
 'He went north.'
- (11–71) *jukar ya-ngka-rr-jid i-li-rr-jal-yarrad* quietly 1PL.NOM-FUT-AUG-go 3NOM-IRR-AUG-see-1AUG.ACC 'We'd better go quietly or they'll see us.'
- (11–72) yarrad kujarr ya-nga-rr-jid yambun 1AUG.CRD two 1PL.NOM-PST-AUG-go together 'We went together.'

For some combinations it is difficult to decide whether the adverbial or PP indicates a path or manner of motion and is a dependent on an SVC, or forms a CVC with the IV. For instance, the adverbial *banbirr* 'across, through' and its reduplicated form *banbirrbanbirr* 'around', often appear in what resemble CVCs—as in (11–73) and (11–74). However, since the meaning appears to be compositional and entirely predictable, and no new lexical item

appears to be construed by the combination, I presume that the IV is serving a lexical not grammatical function.

- (11–73) banbirr nga-ny-jid bin-imirr across 1MIN.NOM-PST-go that-PER 'I went through there (past them).'
- (11–74) banbirr-banbirr i-ny-jid, i-n-j
 across-across 3NOM-PST-go 3NOM-CM-say
 na-alm-uk
 3MIN-head-LOC
 'He twirled it around his head.' (More literally: 'It went around, it did at his head.')

Occasionally a clause with -JID 'go' as main verb contains a secondary predication on the Actor:

(11–75) *i-ngi-rr-jid-an* kurdabil milirrgarr 3NOM-PST-AUG-go-IMP naked before 'They went around naked before.'

As this example shows, -JID 'go' normally specifies a general motion event in which the Actor is engaged while they are in the specified state or condition. In just a few instances this IV is used in reference to changes of state in which no actual motion is involved, as in (11–76) and (11–77).

- (11–76) nga-na-m butter jungk-uk fryingpan-uk wul-ingirr
 1MIN.NOM-CM-put butter fire-LOC frying:pan-LOC water-SEM
 i-ny-jid
 3NOM-PST-go
 'I put the butter in a frying pan on the fire, and it went liquid.'
- (11–77) *ngak lambud i-ny-jid* bread mouldy 3NOM-PST-go 'The bread went mouldy.'

As indicated in Table 11–3 above, there is a marked discrepancy between the range of PVs that -JID 'go' collocates with in the primary and secondary corpora, with three times as many PVs represented in the latter as the former. For both corpora, however, the CVCs represent three primary types of event: motion, processes, and bodily conditions.

The largest subclass is, as expected, made up of motion events. Here the PV usually specifies the manner of motion: marriny 'walk', junk 'run', dereder (dirrdirr) 'rotate', lagal (lakal) 'climb', djalingk (jalingk) 'ride', kodkod (kudkud) 'jump', nornor (ngurrngurr) 'sink in water, drown' and possibly bendjan (binjan) 'go hunting'. Some illustrative examples are:

(11–78) baab marriny i-jid-in ni-mbal-ang baby walk 3NOM-go-PRS 3MIN-foot-INS 'The baby is walking along on foot.'

- (11–79) yiil junk i-jid-in dog run 3NOM-go-PRS 'The dog is running.'
- (11–80) watch dereder i-djeden
 watch dirridirr i-jid-in
 watch rotate 3NOM-go-PRS
 'The hand of the watch is turning around.' (Nekes & Worms 1953:429)
- (11–81) wamb nor nor in-djed
 wamb ngurrngurr i-ny-jid
 man sink 3NOM-PST-go
 'The man was drowned.' (Nekes & Worms 1953:810)

Possibly we could include in this subclass also CVCs involving marr(marr) 'flash', used in reference to the flashing of lightning:

(11–82) wōl marr in-djed wul marr i-ny-jid water flash 3NOM-PST-go 'The rain-cloud flashes.' (Nekes & Worms 1953:701)

In this case, however, motion is non-translational, as is also the case for the reduplication *marr-marr*, which may be used in reference to the repeated twitching movement of an animal. This is illustrated in (11–83); (11–84) illustrates the same CVC used to express an emotion—one metonymically associated with twitching or shaking.¹⁴

- (11–83) yiil marr-marr i-jid-in i-mulk-in-karr dog flash-flash 3NOM-go-PRS 3NOM-sleep-PRS-TEM 'The dog twitched in its sleep.'
- (11-84)marmar nan-djed lēndjen dar marr-marr nga-ny-jid liinyj-in daar flash-flash 1MIN.NOM-PST-go policeman-ERG arrive inar-og bōr-og djān i-na-r-uk bur-uk jan 3NOM-CM-poke-LOC place-LOC 1MIN.OBL "I was frightened when the policeman came into my camp." (More literally: 'I twitched when the policeman arrived in my camp.') (Nekes & Worms 1953: 700-701)

In CVCs -JID 'go' show a greater-than-usual number of instances of the marked order, IV-PV. Indeed, as much as 19% of the ninety collocations in my own corpus show this order. The secondary corpora also show a few instances, including two with a PV on both

¹⁴ Note that in example (11–84) it is not entirely clear which clause the NP *liinyj* 'policeman' belongs to. It may belong to the first, which would then be medio-active (McGregor 1999b). Against this, however, is the fact that Agents in medio-active clauses are typically inanimate; thus the possibility that it might belong to the second, intransitive, clause cannot be ruled out.

sides of the IV. All of these exceptional instances involve the PV marriny 'walk'; the following examples are illustrative:

- (11–85) arri i-la-jid marriny yardab i-n-d-in not 3NOM-IRR-go walk crawl 3NOM-CM-say-PRS ni-mird-ukud 3MIN-leg-CHAR 'He can't walk; he crawls, as he is lame.'
- (11–86) wul-in i-na-ngularr yarr-jambarl
 water-ERG 3NOM-CM-obliterate 1AUG-track
 ya-nga-rr-jid-uk marriny
 1PL.NOM-PST-AUG-go-LOC walk
 'The rain obliterated our tracks where we had gone.'

PVs collocating with -JID 'go' sometimes specify a characteristic feature other than manner of motion. This may be path as in: *badelj-gadj* (*badily-kaj*) 'turn away from' (see (11–87)). The secondary sources list two PVs meaning 'approach': *djon'gam* (*junkam*?) (Tachon 1895), and *djamad* (*jamad*) (Tachon 1895; Nekes & Worms 1953)—see example (11–88). It is not, however, certain that these are PVs; indeed, it seems likely that they are adverbials meaning 'near'.

- (11–87) ang-ēdj badelj gadj mi-djeden djān?
 angk-ij badily-kaj mi-jid-in-jan
 what-DAT turn-CONT 2MIN.NOM-go-PRS-1MIN.OBL
 'Why do you turn away from me?' (Nekes & Worms 1953:326–327)
- (11–88) djamad i-djed wamb jamad i-ny-jid wamb approach 3NOM-PST-go man 'The man came nearer.' (Nekes & Worms 1953:451)

The above examples all occur in intransitive clauses. Tachon (1895), however, gives *lambon* (*lambun*) 'accompany', which presumably occurs in transitive clauses; unfortunately, examples are not given. But in at least one instance a CVC involving -JID 'go' with *rīrbrīrb* (*rirrbrirrb*) 'escape' (glossed 'restless' in Nekes & Worms 1953) occurs in a transitive clause:

(11–89) rīrb rīrb i-djeden lendj wamb-en rirrb-rirrb i-jid-in liinyj wamb-in escape 3NOM-go-PRS police man-ERG 'The man tries to escape the police.' (Nekes & Worms 1953:845)

A slightly smaller number of collocations involving a PV and -JID 'go' represent processes, that is, events that involve a change of state that develops as a part of a natural sequence of events over a period of time. These collocations always occur in intransitive clauses. PVs involved in these CVCs include: *jal* 'split' and its reduplication *jaljal* 'split all over'; *jirrib* 'collapse'; *ruk* 'undo'; *rogod* (*rukud*) 'come off'; *lirr* 'skin, peel', *dog* (*duk*) 'cast off skin'; *bäb* (*baab*) 'open'; *gēndj* (*kiinyj*) 'shut'; *djoly* (*july*) 'burst', *böl-böl* (*burl-burl*) 'blister, swell', and *lalal* (*lalal*) 'tear'. Some examples are:

- (11–90) in bardangk jal i-ny-jid bulngurr this stick split 3NOM-PST-go middle 'This log is split down the middle.'
- (11–91) ngijil i-ngi-ralk jaljal i-ny-jid mud 3NOM-PST-dry crack 3NOM-PST-go 'The mud dried and cracked all over.'
- (11–92) bur yirrib i-ny-jid i-ny-jimb wajamarr ground collapse 3NOM-PST-go 3NOM-PST-die later 'The sand caved in on him, and he died subsequently.'
- (11–93) bardin lir i-ny-jid-jin skin peel 3NOM-PST-go-3MIN.OBL 'Snake shed its skin.'
- (11–94) gawar gawar bäb in-djed nimalg gawar(r)-gawar(r) baab i-ny-jid ni-malk fruit:type open 3NOM-PST-go 3MIN-self 'The gawar(r)-gawar(r) fruit burst open of itself.' (Nekes & Worms 1953:330)
- (11–95) böl böl in-djed namal djung-djon burl-burl i-ny-jid nga-marl jungk-jun blister 3NOM-PST-go 1MIN-hand fire-ABL₁ 'My hand was blistered by fire.' (Nekes & Worms 1953:399)

Collocations such as these focus on a gradual development over time into the final state via a natural process that is not under the control of the entity undergoing the change. These events consistently involve a relatively lengthy developmental stage: the processes of splitting and cracking in (11–90) and (11–91), of bursting in (11–94), and of blistering in (11–95) are all slow processes and are evidently construed as natural developments, natural processes of evolution, rather than as instantaneous happenings that befall the entity. Consistent with these features, there is usually no implication of completeness of the inchoative event: the natural processes could continue, and the entity could become increasingly characterised by the state. Thus over time, a log can split more and more, and there is no evident inherent point of completion; likewise for mud cracking, and one's hand becoming blistered. Of course, the construal is primarily a matter of perspective, how the event is conceptualised, and one of the above situations could be represented in another way, in a different construal.

Some contrasting collocations may help to bring out this observation more clearly. Compare, for instance, the opening of the fruit in (11–94) with the opening of a door in (11–96), represented as a transitive process caused by the addressee, and with focus on the final state. The coming into being of the state is relatively instantaneous, and not via a natural cause.

(11–96) bäb wana-m nimam baab wa-na-m nimam open 2MIN.NOM-CM-put door 'Open the door.' (Nekes & Worms 1953:330)

The following five examples provide further support for my claim. In (11–97) and (11–98) the processes of blockage is again a natural one that takes place over time; moreover, complete blockage is not necessarily implied, as it is for example (11–99), with the IV -M 'put'. The process by which the event came into being is of no interest in (11–99), where it is construed as instantaneous, and brought about by the mist rather than by unspecified natural causes (as in (11–97) and (11–98)). And similarly in (11–100) we find reference to the lengthy process of a shirt wearing out, for which only an arbitrary point of completion can be assigned. By contrast, (11–101) designates a single instantaneous event—with a definite endpoint—the tearing of the speaker's shirt via a specified agency.

- (11–97) baib djān gēnjdj in-djed baib jan kiinyj i-ny-jid pipe 1MIN.OBL shut 3NOM-PST-go 'My pipe is blocked.' (Nekes & Worms 1953:590)
- (11–98) gēnjdj ŋan-djed
 kiinyj nga-ny-jid
 shut 1MIN.NOM-PST-go
 'I am blocked', i.e. 'I am constipated.' (Nekes & Worms 1953:590)
- (11–99) lamaman-en bōṛ djaman gēnjdj in-am lamaman-in bur jaman kiinyj i-na-m mist-ERG country all shut 3NOM-CM-put 'Mist covered the whole country.' (Nekes & Worms 1953:590)
- (11–100) lalal indjed djān djād lalal i-ny-jid jan jaad tear 3NOM-PST-go 1MIN.OBL shirt 'My shirt is worn out.' (Nekes & Worms 1953:639)
- (11–101) lalal in-nj djān djād badang-en lalal i-n-ny jan jaad bardangk-in tear 3NOM-CM-catch 1MIN.OBL dress tree-ERG 'The stick tore my dress.' (Nekes & Worms 1953:639)

The third etic class of events covered by CVCs with the IV -JID 'go' is bodily conditions. These include ongoing conditions of animate beings manifested in some part of their body, that are relatively enduring over a period of time. PVs involved include: *bab* (*bab*) 'deaf', *iganj* (*yikany*) 'be pregnant (of dog)', *mōg-gadj* (*muk-kaj*) 'be lame', and *nawanj* (*nawany*) 'be thirsty', as illustrated in the following examples: 15

(11–102) yēl iganj i-djed yiil ikany i-jid dog pregnant 3NOM-go 'The bitch is big with young.' (Nekes & Worms 1953:931)

¹⁵ Why the present tense suffix is missing from the IV in these examples is not known.

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(11–103) bāb mōg gadj i-djed
baab muk-kaj i-jid
child lame-CONT 3NOM-go
'The child is lame.' (Nekes & Worms 1953:725–726)
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The discussion of this section shows that -JID 'go' does indeed serve as a verb classifier in CVCs, and that it specifies a coherent category of events, as shown diagrammatically in Figure 11–2. As indicated, events in this category are not constant states, but progress over time; thus they are inherently dynamic, although not necessarily by virtue of energy input by the Actor. In contrast with the -J 'say, do' category which is unmarked with respect to the telicity of the event, the -JID 'go' category specifies atelic events. Note that it is not presumed that physical motion is fundamental to the semantic specification of the category, although it is likely that this sense was historically prior to the emergence of CVCs. Rather, the inherent semantic specification of the category does not involve motion but rather an abstract event vector that admits various contextualisations.

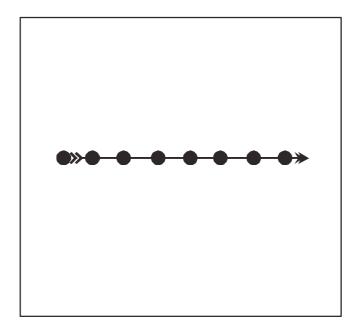


Figure 11–2: Structure of events in -JID 'go' category

11.4.2 Ambivalent categories

11.4.2.1 -J 'say, do'

This is both the most frequent IV by text count (see Table 11–1), and admits the greatest number of different collocations with PV types by a large margin: it accounts for over a third of the total number of attested collocations, and over twice the number of collocations as the next most frequent IVs (see Table 11–3). It is semantically non-specific, and also shows a range of senses in SVCs; furthermore, the category of event it identifies in CVCs is perhaps even more semantically general. A difficulty that emerges with -J 'say, do' is that it occurs in expressions that superficially resemble CVCs, though these may represent other

types of construction. Inadequacies of the corpora mean that it can be difficult to be certain whether a particular collocation is a CVC or another construction.

As a simple ('main') verb in an SVC, -J 'say, do' usually means 'say to', 'speak to', or 'tell' and occurs in middle clauses (see §12.3.2.2.5), where it frames a quote, which it may either precede or follow, as in (11–104) and (11–105). Occasionally, however, the framing clause it occurs in is intransitive, as in (11–106) and (11–107): in the latter example a reciprocal interpretation is usually favoured.

- (11–104) angk-nyirr (?arri-nyirr) arri yarr-mungk what-COM (not-COM) not 1AUG-believe i-ngi-rri-j-jin / 3NOM-PST-AUG-say-3MIN.OBL ""We don't know how to", they told him.'
- (11–105) baab nga-n-di-jirr (ngay-in) way junk child 1MIN.NOM-CM-say-3AUG.OBL I-ERG away run wa-rri-ny
 2AUG.NOM-AUG-get
 'I told the children, "Run away."
- (11–106) miida baab i-n-j jurrb nga-ni-j barnd little child 3MIN-CM-say jump 1MIN.NOM-CM-say sand bur-ung ground-ALL₁ 'The little boy said, "I'll jump down to the ground."'
- (11–107) kujarr wamb i-ngi-rri-j jukar ya-ngka-rr-jid
 two man 3NOM-PST-AUG-say quiet 1PL.NOM-FUT-AUG-go
 i-li-rr-jal-yarrad
 3NOM-IRR-AUG-see-1AUG.ACC
 'The two men said, "We'd better go quietly or they'll see us."
- -J 'say, do' can also frame indirect quotations (see further §13.4.1.1):
- (11–108) banakarr mi-n-j broome-ung mi-jid-in when 2MIN.NOM-CM-say Broome-ALL₁ 2MIN.NOM-go-PRS 'When did you say you were going to Broome.'

The framing clause in which -J 'say, do' occurs may be either middle or intransitive; it is never transitive. In fact, as a simple verb -J 'say, do' never occurs in a transitive clause, and never takes an accusative pronominal enclitic; in CVCs, however, neither of these restrictions applies, as we will see later.

However, the situation is somewhat more complex than outlined in the previous paragraph. If, in an SVC, -J 'say, do' cannot be fully transitive in the sense that it cannot occur in a plain transitive clause, neither can it be completely intransitive: it never stands on its own in an intransitive clause without some form of 'complement' in addition to the Actor ('subject'). This may be a quoted utterance, as in (11–106)–(11–108), or it may serve in an Implicated role (see §12.3.2.1), as in (11–109). (In this example the NP designating the Implicated entity has been ellipsed, and only the cross-referencing pronominal enclitic remains.) (11–109) would be ungrammatical without the oblique pronominal enclitic.

Another alternative is that the clause may contain an NP representing—rather than quoting, i.e. demonstrating (Clark & Gerrig 1990; McGregor 1994b)—what is said, as in (11–110) (which specifies just the language of the words uttered) and (11–111), or the topic of conversation, as in (11–112). At least one such complement must be present.

- (11–109) kinyingk-in i-li-j-jan
 DEF-ERG 3NOM-IRR-say-1MIN.OBL
 'He might tell me.'
- (11–110) liyan ya-rr-a-m-in murrul-akarr nyulnyul like 1PL.NOM-AUG-CM-put-PRS little-TEM Nyulnyul ni-mungk yu-ngka-rri-j jarrad ngank nyulnyul 3MIN-believe 3NOM-FUT-AUG-say 1AUG.OBL word Nyulnyul banangkarr today 'We want to teach them to speak Nyulnyul from when they are little.'
- (11–111) angk-ij maj mi-n-d-in-jan nga-lawil what-DAT boss 2MIN.NOM-CM-say-PRS-1MIN.OBL 1MIN-name mi-li-j 2MIN.NOM-IRR-say 'Why do you call me "boss"? You should call me by name.'
- (11–112) *i-n-di-jin* kinyingk-ij wamb 3NOM-CM-say-3MIN.OBL DEF-DAT man 'He spoke about that man.'

Observe that the unmarked NPs in (11–110) and (11–111) are not Undergoers ('objects'); rather, they are what are traditionally referred to as 'cognate objects' (though they are not cognate with the IV)—that is, they serve as what are referred to in this grammar as non-participant Mediums (§12.3.2.1). Not only are these constructions intuitively more transitive than 'ordinary' intransitive clauses with just an Actor subject, but also they form a separate clause type, pseudo-transitives. With two inherent grammatical roles (§12.3.2.1), they may be regarded as more transitive than intransitive clauses.

In some instances it is uncertain whether an accompanying nominal serves as a cognate object or as a PV, and thus whether the construction is a pseudo-transitive or a CVC. This is the case, for instance, for expressions involving abstract nominals such as *mirl* 'lie, falsehood' and *ningarr* 'true, truth', ¹⁷ as in (11–113), and in expressions involving delocutively used particles such as *yii* 'yes', as in (11–114).

(11–113) ningarr i-n-d-ajin jarrad bur true 3NOM-CM-say-3MIN.OBL 1AUG.OBL place 'He told the truth, (it's) our place.'

¹⁶ In fact, Nyulnyul -J 'say' with a 'cognate object' is not the usual way of expressing the ability to speak a language or the uttering of particular words; more usually the N *ngank* 'word, language' is used as a 'cognate object' in a clause with the IV -NGANK 'speak, utter words'.

¹⁷ That these are nominals is attested by the fact that they can occur in collocation with other nominals, as in *miirl jabal* 'untrue story'.

```
(11–114) nganka nga-na-m arri yii i-la-j-jan
word 1MIN.NOM-CM-put no yes 3NOM-IRR-say-1MIN.OBL
ngay
1MIN.CRD
'I asked him but he didn't answer me.'
```

In addition to the range of 'say' senses, -J 'say, do' is also used for the general cognitive process of thinking, perhaps especially when the thought process is interpretable as a type of inner speech. Thus we find framed clauses demonstrating the thought, as in (11–115) and (11–116).

```
(11–115) djarl ngang-am yer,
    jarl nga-ngka-m-yirr
    pierce 1MIN.NOM-FUT-put-3AUG.ACC
    in-djan djer
    i-n-j-an-jirr
    3NOM-CM-say-IMP-3AUG.OBL
    "'I will spear them," he thought.' (Nekes & Worms 2006:309)

(11–116) nēr elbe anar-edj djen
    ngirr-ilbi ya-nga-rri-j-jin
    devil-MB 1PL.NOM-PST-AUG-say-3MIN.OBL
```

Finally, in a few instances -J 'say, do' is used in the 'do' sense in SVCs. Perhaps the clearest examples are (11–117) and (11–118), which involve the interrogative *angk* 'who, what', and (11–119), that involve the adverbial *baan* 'thusly'. No grammatical difference is evident between these examples and (11–110) and (11–111) above, suggesting that the nominal or adverbial serves as a non-participant Medium ('cognate object'), ¹⁹ and the construction is pseudo-transitive. Further support for this analysis comes from (11–120), in which *angk* 'who, what' appears in a syntagm with the framing verb rather than the complement verb (see further §13.4).

'We thought it was the devil.' (Nekes & Worms 1953:371)

```
(11–117) wa-na-mirrar-ngay angka nga-ni-j
2MIN.NOM-CM-wait-1MIN.ACC what 1MIN.NOM-CM-say
'Wait now: let me think what I'll do.'
```

(11–118) kurr kujarr arri ku-la-rr-j-an angk 2AUG.CRD two not 2AUG.NOM-IRR-AUG-say-IMP what nga-ni-j 1MIN.NOM-CM-say 'Don't tell me what to do.'

¹⁸ It seems that in Nyulnyul SVCs -J 'say, do' cannot be used in the more emotional senses 'like', 'want', 'desire', etc. as it can in Yawuru (Hosokawa 1991:425) and Warrwa (McGregor 1998d, 2007a).

^{19 &#}x27;Do what' is also expressed by a CVC involving the IV -N 'be' and the interrogative *angk* 'who, what' marked by the continuous suffix -*kaj*: *angk-kaj*. This does not affect the analysis advocated here, for in the CVC the continuous derivational suffix is obligatory.

- (11–119) juy baan wa-n-j 2MIN.CRD thus 2MIN.NOM-CM-say 'You will do it.'
- (11–120) angka mi-n-di-jan ya-ni-j banangkarr what 2MIN.NOM-CM-say-1MIN.ACC 1PL.NOM-CM-say today 'What did you tell me we'd do today?'

In a small number of instances an element such as a nominal or adverbial modifies the IV -J 'say, do', expressing the meaning 'do in a particular manner':

- (11–121) nyi-marl kard wa-na-w/ layib wa-n-ji/
 2MIN-hand cut 2MIN.NOM-CM-give good 2MIN.NOM-CM-say
 dumbar wa-n-ji/
 fly 2MIN.NOM-CM-say
 '... if you cut your wings, you will fly well.'
- (11–122) budarr wa-n-di-jin bin yiil
 care 2MIN.NOM-CM-say-3MIN.OBL that dog
 i-la-r-a-juy
 3NOM-IRR-pierce-EV-2MIN.ACC
 'Be careful of that dog or it will bite you.'

The above examples illustrate the active 'do' sense of -J 'say, do', and involve active 'doers' as Actors. In general in Nyulnyul (as will be seen in §12.3.2.1), Actors are not necessarily active and in control of the event; this holds for the 'doing' events denoted by -J 'say, do', which may be happenings, as in (11–123) and line (60) of Text 2. In line with this, a better English translation of (11–123) might be 'What has happened to you?'. What seems to be crucial to doing events is thus that the process is dynamic. Nevertheless, in both instances the happenings reveal behavioural manifestations in the Actor.

(11–123) arri-nyirr mi-n-j? not-COM 2MIN.NOM-CM-say "What's the matter?"

Whether in an SVC the IV -J 'say, do' refers to speech, thought or action, it appears to show the same morpho-syntactic restrictions displayed by -J 'say, do' in its 'say, tell' senses, as noted on p. 469. Indeed, there seems to be no characteristic whereby the senses can be distinguished emically from one another. I conclude that they represent etic interpretations of a monosemous IV with a very generic semantic meaning; it is vague rather than ambiguous. It is beyond the scope of the present description to attempt to precisely specify the semantics of this IV. However, what does appear to be consistent throughout all uses is that the event is a human behavioural activity. All instances of -J 'say, do' in SVCs involve human actors, or, rarely, a personified lower order animate.

Nearly three hundred PVs are attested in collocation with -J 'say, do', amounting to almost half of the set of PVs. However, they do not form a rag-bag of lexical items scattered randomly over all meaning domains. As shown in the list in Appendix 2, nine primary semantic domains are covered by CVCs with this IV:

- (a) vocalisations and noises;
- (b) emission of light and heat;
- (c) attention and cognition;
- (d) emotions;
- (e) bodily behaviour;
- (f) motion;
- (g) social activities;
- (h) inchoatives and induced states; and
- (j) violent actions on an object.

Notable for their absence are CVCs designating states of rest and being, holding and retaining, and perception. This is as expected, given the characterisation of the event category defined by -J 'say, do' as dynamic and active (Table 11–6).

Let us look a bit more closely at fields (a)–(i), and how events classified by -J 'say, do' are distributed over them. Table 11–7 tabulates the numbers of PVs falling into the domains and subdomains in the primary and secondary corpora. Overall there is a good deal of agreement between the two corpora in terms of the relative frequencies of each of the primary domains, though there is more variation within the subdomains. The main differences are in the domains of emotion, where the primary corpus is particularly poorly represented, and in motion and movement, where the primary corpus shows significantly more PVs than the secondary corpora. The level of agreement between the corpora is especially striking given the small number of shared items.

As Table 11–7 shows, overall, three categories are each approximately equally represented by about a fifth of the collocations: (a) vocalisations and noises, (e) bodily behaviour, and (h) inchoatives and induced states. Another two categories, (f) motion and (j) violent actions, each represent just over an eighth of the collocations. Together these five categories account for over eighty percent of all collocations involving -J 'say, do'.

The bulk of category (a) are human and animal vocalisations. Many are intentionally made by human beings to communicate with other people; these often embody expression of an inner state, feeling, or attitude towards the addressee (i.e. they are not the basic processes of vocalisation). Examples include: kaw 'call out, cooee', dar'gal 'assure', kotsch 'whistle', nangananga 'exhort' (probably the reduplication of ngank 'speak'), and lerler ~ larlar 'quarrel, speak roughly/angrily/harshly to'. Sometimes the event is characterised by a distinctive style or manner of articulation, as in: jirrm 'sing', non noil ~ ur 'hum', tar 'murmur', and possibly medj 'be hoarse in the throat' (possibly 'speak with hoarse voice'). In addition there are a number of involuntary vocalisations, including: kinyjirr 'sneeze', ngalarar 'snore', daarr 'burp', and wananinj 'talk in sleep'. CVCs denoting human vocalisations usually occur in intransitive clauses, slightly less frequently in middle clauses; none are attested in transitive clauses, except possibly for the applicative of dor 'confide'.

A fair number of collocations designate vocalisations of animals, including *ngany* 'hiss', *ngarl* 'yelp, howl, bark', *wanyburr* 'yelp, bark', *nono* 'growling noise (of a small wallaby)', and *tuelar tuelar* 'warble'. Dogs are particularly well represented, though this is quite likely

Table 11–7: Breakdown of PVs that collocate with -J 'say, do' into semantic domains

Type	Primary	%	Secondary	%	Total	%
(a) Vocalisations and noises	24 ± 2	17	39 ± 1	21	55 ± 3	19
(i) Humans and animals	20 ± 2	14	32	17	44 ± 2	15
(ii) Inanimates	4	3	4 ± 1	2	8 ± 1	3
(iii) Silence	0	0	3	2	3	1
(b) Emission of light and heat	1	1	4	2	5	2
(c) Attention and cognition	2 ± 1	1	3	1	4 ± 1	1
(d) Emotions	5 ± 1	4	19	11	21 ± 1	8
(e) Bodily behaviour	23 ± 4	16	43	23	59 ± 4	20
(i) Body moves	10	7	10	5	18	6
(ii) Bodily functions	4	3	8	4	11	4
(iii) Aches, pains and experiences	9 ± 4	6	25	14	30 ± 4	10
(f) Motion	27	19	16	9	37	13
(g) Social activities	6	4	5	3	9	3
(h) Inchoatives and induced states	28	19	33	18	53	18
(i) Change of state	11	7	25	14	31	11
(ii) Change of quality	17	12	8	4	22	8
(j) Violent actions on an object	19	13	21 ± 1	11	37 ± 1	13
Total	141 ± 14	94	186 ± 3	99	289 ± 17	98

in part an artefact of elicitation methods.²⁰ A few CVCs denote noises made by inanimates (e.g. *yaa* 'roar (of the sea)'); along with these we might include noises made involuntarily by parts of the human body (e.g. *kurrkurr* 'rumble (of stomach)', *dur* 'fart'). Many of the PVs involved in these CVCs are onomatopoeic, particularly those designating animal vocalisations. The secondary corpora also contain a few CVCs referring to silence.

Field (b) includes events involving emission of heat or light rather than of noise. The PV set is very small, consisting of *bad* 'burst, explode', *bilbil* 'twinkle, shine', *galagal* 'glitter', *nal* 'flame up', and *nalanal* 'flame up'. These are restricted to intransitive clauses.

Field (c) attention and cognition, is also very small in numerical terms. In the attention subgroup are just the two events of visual attention, *jikir* 'peep at, look at' and *tiete* 'watch'. The cognition subgroup is only slightly larger, and its members are mainly cognitive events concerning propositions: *wanak* 'be confused, be ignorant of, don't know', *wanakwanak* 'be confused', *nila* 'guess', and possibly *ningarr* 'believe, tell the truth'.

Slightly more CVCs involving -J 'say, do' fall into field (d) emotions, including: badak 'sulk', budarr 'be careful of, exercise caution with', lurrun 'take fright', nungajil 'feel

²⁰ I suspect that there was a much richer arsenal of PVs describing the noises of animals (especially birds), that has been overlooked as a consequence of lack of knowledge of animal species, and interest in their vocalisations by European investigators, myself included.

happy', rarrjin 'be shamed', kadadat 'fear', ioren 'be disconcerted', moladj 'be tired of, annoyed with', wolb 'shy, timid, fearful', and wot 'be modest'. Most of these CVCs occur in intransitive clauses, though some are also found in middle clauses (e.g. budarr 'be careful of, exercise caution with'), where the emotion is directed towards some other entity; at least one generally occurs in a medio-active clause (moladj 'be tired of, annoyed with'), where the emotion is represented as befalling the person. A few nominals appear in CVCs of this type also, including: biil(-ij) (angry, fight(-DAT)) 'get angry with, excite, hate, quarrel with', layib (good) 'feel good, be(come) good', and liyan (heart, like) 'be pleased'.

Bodily behaviour, field (e), accounts for about the same number of collocations as vocalisations. Many of these are body moves, that is, events involving movement of parts of the body, whether voluntary (e.g. *mirdamird* 'kneel down', *par* 'open eyes', *njog* 'bow head', *dumbul dumbul* 'clap hands on thighs; snap fingers', *balbal* 'flap wings/flippers'), involuntary (e.g. *budbud* 'twitch', *kadkad* 'tremble', *ikailipikailip* 'shiver, shake'), or either (e.g. *nyim* 'blink', *nyimnyim* 'blink, wink'). The corresponding CVCs generally occur in intransitive and middle clauses, as in (11–124) and (11–125); none occur in transitive clauses. If the clause contains an NP referring to the body part that undergoes the change of position, it typically serves in a non-participant role in an external possession construction (see McGregor 1999a, and §12.4.2.4), as illustrated by (11–126).

- (11–124) (wamb) nyimnyim i-n-j man wink 3NOM-CM-say '(The man) winked.'
- (11–125) wamb-in nyimnyim i-n-di-jan man-ERG wink 3NOM-CM-say-1MIN.OBL 'The man winked at me.'
- (11–126) gulibel balbal in-dj djambel djen kulibil balbal i-n-j jambal jin turtle flap 3NOM-CM-say flippers 3MIN.OBL 'The turtle flaps its flippers.' (Nekes & Worms 1953:343)

Also well represented in the field of bodily behaviour are feelings localised in parts of the body, most of them painful (*nyunnyun* 'ache, throb', *can* 'ache', *warrwarr* 'cramp', and possibly *alik* 'feel sore, no good'), and/or undesirable (*wiyarr* 'tired', *marrkin* 'experience hunger', *golal* 'be weak', *gnak* 'catch cold', *galgor* 'stiff, sprain', *mōg* 'be lame', *wendirr wend* 'be/get giddy'). Just a few specify desirable or neutral feelings (e.g. *jabajab* 'be itchy/ticklish', *murrkad* 'be full, sated'). These usually occur in intransitive clauses, as in (11–127) and (11–128), sometimes in medio-actives, as in (11–129) (see further McGregor 1999b, and §12.3.2.2.4 below):

- (11–127) nga-ngka-land nga-mird bulj i-n-j muj 1MIN.NOM-FUT-sit 1MIN-leg tired 3NOM-CM-say already 'I'll sit down; my legs are tired.'
- (11–128) wamb muj jungurrb i-n-d-in man already short:winded 3NOM-CM-say-PRS 'He's already getting short winded.'

(11–129) bulj nga-n-j marriny-in ngay tired 1MIN.NOM-CM-say go-ERG 1MIN.CRD 'I'm tired from walking.'

A few collocations designate activities closely associated with parts of the body, especially the mouth, such as *jibil* 'spit out (something)', *juny* 'kiss, suck', *jongjang* 'smile'; and bodily functions that are less susceptible to control, like *jibiljibil* 'dribble', *nundurr* 'sweat', *belbel* 'palpitate (of heart)', etc. The latter group of less controllable bodily functions usually occur in intransitive clauses, while many of the former group of activities associated with the mouth occur in transitive clauses.

The subgroup of bodily activities associated with particular body parts includes events that appear stative in nature. However, despite the glosses, there are two ways in which they are dynamic. One is that CVCs designating experienced phenomena felt by human beings are dynamic because they vary in intensity over time; one does not experience tiredness, aches, throbs, cold, weakness, hunger, satiation, itchiness, and so forth, as constant sensations; they fluctuate in experienced intensity over time. The other is that as they all show definite beginnings, and it is possible that the CVCs actually designate the entirety of the events from coming into being to the resulting state. That is, it is possible that these CVCs should be characterised as 'become and remain in a certain condition'.

Field (f), which is also well represented and includes about an eighth of the total number of collocations with -J 'say, do', consists principally of translational motion events, events in which there is a change in location of the moving entity. The majority of these CVCs specify manner of motion: duburl 'wade, swim', dumbar 'fly', junk 'run away, run past', jurrb 'jump', kalkir 'swim', warr(-kaj) 'walk, walk along, go travelling', yardab 'crawl', yur 'slide along', and mermer 'canter along, trample (of a horse)'. A small number indicate path of motion: jabad 'rise up', lakal 'climb up', ngurrngurr 'submerge', and yuurr 'descend'; however, it could also be argued that these indicate not just path but manner as well, as is obviously the case for wō 'fly down'.

In one or two instances the CVC specifies non-translational motion. This is the case for instance, in *dibirr* 'roll over, rotate, turn around, turn off'. In other cases the CVC is vague between translational and non-translational motion, as in the case of *dibirrdibirr* 'rotate/roll over repeatedly, roll along'.

A few CVCs with -J 'say, do' specify telic events of motion with inherent points of completion, as in: *daarr* 'return, come back', *djimben* 'set, go down (of sun)', ²¹ *jajurr* 'meet/gather together', *jakud* 'return', and *rīrb* 'disappear'. Each of these events requires a process of motion prior to the point of completion of the event.

The overwhelming majority of the CVCs specifying events in field (f) occur exclusively in intransitive clauses. However, *daarr* ... -J ('emerge/arrive ... say/do') is attested in transitive clauses, in which case it means 'arrive with something, bring something'; the CVC is always overtly marked by the applicative.

Field (g) of social activities includes a range of events that are prototypically performed by human beings, and involve other human beings; many of them could as well have been treated under fields such as (a), (c), (d) or (e), though they seem more interactive. Examples include: *burrb* 'dance', *durrbu* 'get/be lucky', *nungkub* 'ignore, disbelieve', *ngirngir* 'point

²¹ This lexical item is evidently the adverbial *jimbin* 'down, inside'. I take *jimbin* to be serving as a PV in a CVC in this instance since the verb employed is not one of motion, and the combination with -J 'say, do' appears to express an unpredictable meaning.

at', wiirn '(show) respect', gnok (nyuk) 'salute', wōdj 'show respect, awe', wēn 'avoid, be in avoidance relation to, be shy of', and laļaļ 'dance in the lalal style' (one guesses that other dancing styles can be specified by CVCs with -J 'say, do').

Field (h) of inchoatives and induced states, is another strongly represented field. Most of the subgroup of inchoative CVCs involve nominals rather than genuine PVs, and denote processes of reaching the condition or quality designated by the nominal, for example: wamb ... -J (man ... say/do) 'become a man', mank ... -J (black ... say/do) 'go black', layib ... -J (good ... say/do) 'become well', riib ... -J (bad ... say/do) 'go bad'. As already observed, the status of these collocations as CVCs is questionable: the clause is also plausibly analysed as attributive (see §12.2.3.1.2).

In addition, a number of genuine PVs collocate with -J 'say, do' in CVCs that designate processes of entry into states. Examples include: *dimb* 'get married (of people), get joined together (of things)', *derder* 'rust', *kalwar* 'become exposed', *dadal* 'break, get broken', etc. Although some collocations are glossed in the sources with 'be', suggesting that a state is being referred to, I suspect that in fact the CVC refers to both the state and to entry to that state—that the glosses accorded to CVCs involving the PVs *djimal* 'be calm, sultry', *gōbad* 'be wet', *winj* 'be filled' and the like are somewhat inaccurate in as much as they designate the activities of coming into the states as well as being in them. Where information is available on the type of clause these CVCs occur in, it is almost always intransitive, occasionally medio-active.

Field (j), violent actions on an object, is about as well represented as field (f). Almost all of these events involve violent physical contact, as in *badj* 'hew or plane timber', *bar* 'pull, jerk', *dubdub* 'shake, winnow, pat', *ginjginj* 'strangle', ²² *jadjad* 'hack at', *nyag* 'strike, slay', and many others. These are overwhelmingly found in transitive clauses. However, at least *rdirdird* 'coil, bend' can also occur in an intransitive clause, and so possibly can *lar* 'tear'. Tachon (1895) gives the collocation with *mal* 'undergo', which is not exemplified, though one would expect it to be intransitive. These events are inconsistent in terms of telicity: some are plainly telic (e.g. *nyag* 'strike, slay', *pededetsch* 'pierce (with stick)'), others clearly atelic (e.g. *dubdub* 'shake, winnow, pat', *wukurr* 'rub, grind'). This applies even to the range of senses for individual CVCs; two senses of *dibirrdibirr*, 'kneed' and 'stir', are atelic; a third sense, 'roll up' is telic.

The vast majority of events categorised by -J 'say, do' are dynamic, and thus inherently active in the sense of showing change or development over time. There are a small number that appear, on the basis of their glosses, to be stative. It is suggested that in these instances the glosses are inadequate, and that the events referred to really are dynamic. In some instances, it appears that the apparent states require input of energy, and may show variation over time in intensity, for instance. In other instances, it may be that the CVC denotes the component of entry into the state or condition as well as that state. Unfortunately, the information on many such instances is inadequate to permit us to test the proposal.

The meaning associated with the -J 'say, do' category is fairly similar to the meaning of the IV -J 'say, do' in SVCs. In SVCs -J 'say, do' indicates an event of human behaviour. The meaning of the category is slightly more general, and includes only the dynamic component of this sense. Nevertheless, the SVC meaning is apparent in the large number of collocations that concern the domain of human behaviour, bodily and/or social.

²² As observed by Claire Bowern (pers.comm.) this PV can perhaps be identified with *kinykiny* 'suicide' of p. 454 above. However, Nekes & Worms (1953:589) do not mention the collocation with -BARNJ 'exchange', and this identification remains hypothetical.

As is the case for some of the other classifying IVs, -J 'say, do' occurs in collocations that are neither clearly SVCs nor clearly CVCs. For -J 'say, do' these include collocations involving the prefixing lexemes (see §4.2.2.3 above) -mungk 'know', -yam 'abstain', and possibly -ngany (unglossed in source, and meaning unknown), and come from the secondary corpora, Tachon (1895) and Nekes & Worms (1953) (first two only). According to both sources these prefixing lexemes (which they refer to as 'verbal nouns') occur with -J 'say, do' when reference is being made to past or future circumstances or conditions. However, the form of -J 'say, do' employed is invariable, they aver, which suggests that we may have a different construction. An example of this use is:

(11–130) war walg-djer wamb-orinj yermongg in-djan war waalk-jirr wamb-uriny irr-mungk i-n-j-an one sun-but man-woman 3AUG-believe 3NOM-CM-say-IMP "But the people became suspicious." (I.e. 'They came to believe/realise (that something was amiss).') (Nekes & Worms 2006:309)

11.4.2.2 -R 'poke'

In SVCs -R means 'poke', and refers to any event that involves contact with, or puncturing of, a surface by means of a long pointed object. In isolation it was generally glossed by the speaker I worked with as 'spear'; Nekes & Worms (1953) also generally employ this gloss. But it has a much wider range of senses than English *spear*, including poking and piercing by any type of elongated object, such as a splinter, needle, and the like. Bites by insects such as wasps, ants, and bees are denoted by this IV, as are bites by larger animals with sharp teeth, such as snakes and dogs, regardless of the number of punctures involved:

(11–131) *jukar mi-jid yiil-in nyanangkarr* quietly 2MIN.NOM.FUT-go dog-ERG perhaps *i-la-r-juy* 3NOM-IRR-poke-2MIN.ACC 'Go quietly lest the dog bite you.'

The surface with which contact is made need not be punctured; contact in a point alone is sufficient, as in the following examples, in which the SVC translates as 'write'—which is normally done with a long pointed instrument, which traces a trajectory over the surface, on which the trace is usually iteratively discontinuous as the pen is lifted and replaced.

- (11–132) *ya-na-r-in nyulnyul milimil-uk* 1PL.NOM-CM-poke-PRS Nyulnyul paper-LOC 'We are writing Nyulnyul on paper.'
- (11–133) kurr kujarr-in wa-rr-a-r-jin milimil 2AUG.CRD two-ERG 2NOM-AUG-CM-poke-3MIN.OBL paper 'You two should write to him.'

²³ Of these three prefix-taking items, only *-mungk* 'believe' is represented in my own corpus by example sentences, and none are of the type that Tachon (1895) and Nekes & Worms (1953) describe. Indeed, verbless clauses involving *-mungk* 'believe' in my Nyulnyul corpus admit any contextually appropriate temporal interpretation, past, present, or future.

Observe that in (11-132) the Undergoer is not the surface that the pointed object comes into contact with, although it is in (11-133).

As per Table 11-6, in CVCs the IV -R 'poke' categorises the event as telic, involving action at a point on a surface, with a linear vector leading up to that point of contact. Schemas (a)–(c) in Figure 11–3 provide diagrammatic representation of vectorial configurations relevant to this category. As will become clear in the subsequent discussion, the straight line vector may represent an entity involved centrally in the process, and/or the trajectory of a moving entity. The circle represents the surface that contact is made with, regardless of its actual shape: the boundary is shown as closed simply for convenience of representation. Nor is the interior-exterior contrast of the diagram significant: whereas in most cases the direction of the vector is indeed towards what would be regarded as the interior of the landmark, there are cases where it is not. The landmark may or may not be the Undergoer of the clause: in transitive clauses (which amount to about two thirds of the corresponding CVCs) it usually is; in intransitive clauses it is another (possibly abstract, possibly not well defined) surface or boundary inherent to the process. What is crucial is the point of contact on the surface; there must be a vector either leading to it, and/or also away from it, and into the interior of the bounded region. The -R 'poke' category is unspecified for where the vector begins or ends, provided that there is a point of contact somewhere with the surface of the landmark. A single vector is shown in each case, since this is an essential component to all processes classified by -R 'poke'; multiple vectors may instead be involved in each of (a)–(c).

The primary corpus shows just four PVs in collocation with -R 'poke': *daarr* 'arrive', *ngurrngurr* 'submerge, drown', *duurr* 'bump, knock', and *kad* 'cut'; only the first two collocations are common. Approximately twenty other PVs are attested with -R 'poke' in the secondary corpora. Most of these denote motion or violent actions.

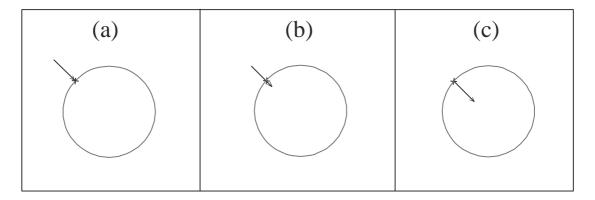


Figure 11–3: Vectorial configuration for -R 'poke'

Motion PVs collocating with -R 'poke'—including daarr 'arrive' and ngurrngurr 'submerge, drown'²⁴—refer to telic events involving an inherent intersection between the moving object and a boundary or surface. Such processes are all readily accounted for in terms of the above schema: the linear vector represents the path of the moving object, the circle, the boundary that is intersected. Thus, for daarr 'arrive' the circle represents the

²⁴ This word is usually translated by *drown*, which, in Aboriginal English does not encode death of the moving thing, merely its submergence into water.

(notional) boundary of the region arrived at,²⁵ while for *ngurrngurr* 'submerge', it represents the surface of the water. (b) represents the relevant scheme for *daarr* 'arrive', while either (b) or (c) represents *ngurrngurr* 'submerge': the most important part of submerging is the motion within the water—as far as I can tell there is no requirement that the moving item moves into the water from outside of it. Tachon (1895) also gives *jirrban* 'plunge' (presumably into water) as one of the PVs that may collocate with -R 'poke', which would also satisfy (b).

Both daarr ... -R 'arrive' and ngurrngurr ... -R 'submerge' occur only in intransitive clauses in my corpus. However, the extended corpus contains examples of the former in middle clauses (see §12.3.2.2.5), where the meaning is 'meet' as in (11–134) or 'come across, find' (according to Tachon 1895), and the latter in transitive clauses, as in (11–14) above, repeated here as (11–135). In these cases, it will be observed that the item whose surface is pierced does not serve in the additional participant role. The meanings are predictable, though in (11–134) the Actor corresponds with the Actor of the agnate intransitive clause, whereas in (11–135) it is the Undergoer that corresponds with the Actor of the agnate intransitive clause.

```
(11–134) irdjowar-en nalen dar eŋer-an<sup>26</sup> djen irrjiwarr-in nalin daarr i-ngi-rr-a-r-an-jin three-ERG boss meet 3NOM-PST-AUG-CM-poke-IMP-3MIN.OBL gabol jesus kabul Jesus child Jesus 'The three wise men met the child Jesus.' (Nekes & Worms 1953:420)
```

(11–135) *nor nor nan-ar* yēl

ngurrngurr nga-na-r yiil

submerge 1MIN.NOM-CM-poke dog

'I drowned the dog.' (Nekes & Worms 1953:810)

The PV *jul* 'kneel' can collocate, according to Nekes & Worms (1953), with -R 'poke', in which case it refers to non-translational motion involved in the change of stance, the act of kneeling down, as in (11–136). The significant characteristic of this action is the straight-line vertical movement of the person, which terminates with contact with the ground at two salient points, the knees. (Note the contrast with *midimid* ... -LAND (kneel sit), which refers to the state of kneeling (Nekes & Worms 1953:705).)

(11–136) yai djol yan-ar midimid ngay jul nga-na-r midimid 1MIN.CRD genuflect 1MIN.NOM-CM-pierce kneel 'I kneel down.' (Nekes & Worms 1953:500)

A handful of CVCs with -R 'poke' refer to jetting or streaming of water. An example is raining, which satisfies the schema of Figure 11–3, reiterated an indefinite number of times.

²⁵ Similar to *daarr* ... -R 'arrive' is the collocation *baab* ... -R (child poke) 'be delivered (of child)', cited though not exemplified in Tachon (1895). As remarked above, the notion of interiority is irrelevant to the use of -R 'poke'.

Nekes & Worms (1953) give this example under the entry for *dar-m-aran* 'to arrive, to come, to meet', so it may reasonably be presumed that this is an erroneous representation of the form of the verb.

Nekes & Worms (1953:513) give the PV *djoror* (*jurrurr*) 'pouring, flowing, running of water', which means 'rain' in collocation with -R 'poke', as in (11–137); Tachon (1895:41) gives the form *tuewil* (*juwil*) 'rain', with a similar example. Both CVCs occur in intransitive clauses.

```
(11–137) djoror in-ar wōl
jurrurr i-na-r wul
rain 3NOM-CM-poke water
'It rains.' (Nekes & Worms 1953:513)
```

Comparable CVCs involve the PVs *djar* 'issue, gush, flow' (Nekes & Worms 1953:463), *djibel djibel* (Nekes & Worms 1953:466), and *njër njër* (Nekes & Worms 1953:819). These readily admit construal in terms of Figure 11–3:²⁷

```
(11–138) djibel djibel in-ar djaredjar-gong wōl
jibil-jibil i-na-r jarrijarr-kung wul
drip-drip 3NOM-CM-poke hole-ABL<sub>3</sub> water
'The rain trickles through the leak of the roof.' (Nekes & Worms 1953:466)
```

```
(11–139) njër njër in-ŋeren wōl gorbol-gong nyirr-nyirr i-ngi-r-in wul kurrbul-kung flow-flow 3NOM-PRS-poke-PRS<sup>28</sup> water hollow:log-from 'The water flows out of the water-pipe.' (Nekes & Worms 1953:819)
```

Most of the remaining CVCs with -R 'poke' refer to violent actions. Although the schema of Figure 11–3 does seem to provide a viable characterisation for these actions, it does not always do so in an obvious way to a speaker of English, and hence some discussion is necessary. What is important is that in each case the violent action is achieved through the instrumentality of an elongated item that makes point-contact with the surface of another entity. Examples are CVCs with *kad* 'cut', meaning 'bite' in collocation with -R 'poke', ²⁹ as in (11–140); *jirrb* 'prick' (cited but not exemplified in Tachon 1895); *kidikid* 'tickle' (Nekes & Worms 1953:583), where the elongated instrument is typically the fingers, the end of which makes repeated contact with the ticklee's body.

```
(11–140) yēl-en gäd in-aṛ bāb
yiil-in kad i-na-r baab
dog-ERG cut 3NOM-CM-poke child
'The dog bit the child.' (Nekes & Worms 1953:533)
```

²⁷ According to Tachon (1895) *burrul-burrul* 'boil' collocates with -R 'poke', and occurs in a transitive clause (though he does not give an example). Presumably it is the motion of the air bubbles in the water that ultimately break the surface that corresponds to the vectorial configuration of Figure 11–3.

²⁸ The apical nasal in Nekes and Worms' transcription is presumably an error.

²⁹ Recall the discussion above on the extension of -R 'poke' in an SVC to 'bite' (p. 478 above). In the case of *kad* 'cut', the choice of IV -R 'poke' specifies rending of a surface by means of an instrument moving in a lengthwise direction rather than laterally, in which case the PV is categorised by -W 'give' and expresses the sense 'make a cut or incision (usually by the blade of a knife)' or with -M 'put' to express the sense 'cut off'.

(11–141) gidigid ŋaŋg-ar djoe kidikid nga-ngka-r-juy tickle 1MIN.NOM-FUT-poke-2MIN.ACC 'I shall tickle you.' (Nekes & Worms 1953:583)

The collocations *kiny* ... -R 'strangle, squeeze the windpipe' and *kulykuly* ... -R 'press, rub, squeeze, wring', mentioned but not adequately exemplified in Nekes & Worms (1953:589, 611), respectively, may perhaps be explained via construal of the fingers as the relevant elongated entities the ends of which come into point contact with the windpipe.

It is where alternative categorisations are possible that the semantic basis of the system of categorisation is revealed most clearly. Thus the collocation *duurr* ... -R 'bump' is instanced just once in my corpus:

(11–142) duurr nga-na-r ni-mbal ni-mird i-ny-jarrad bump 1MIN.NOM-CM-pierce 3MIN-foot 3MIN-leg 3NOM-PST-extend 'I bumped his foot when he stretched out his leg.'

More usually, *duurr* 'bump, knock' collocates with -W 'give', expressing the meaning 'give something/someone a bump or knock'; less frequently it collocates with -BARNJ 'exchange', conveying the meaning 'bump, knock oneself, usually accidentally (e.g. foot on something)'. The significant point is that in the collocation with -R 'poke' in (11–142), the bumping involves point contact between the ends of the speaker's legs, her feet, and the other person's legs. By contrast, in collocation with -W 'give', the bump involves a larger area of contact, effected by a rounded rather than elongated object. For instance, it may be used in reference to the knocking down of a person by a car, or the knocking on a door by a fist. With the reflexive/reciprocal -BARNJ 'exchange' basically the only feature that is relevant is the fact that the action is self-directed; vectoral characteristics are irrelevant. Schema (a) of Figure 11–3 is satisfied. Similar remarks apply to *djudug* (*juduk*) ... -R 'kick', cited in Nekes & Worms (1953:497).

A few collocations of PVs of violence and the IV -R 'poke' are more problematic. For instance, (11–143) involves the above-mentioned collocation of *kad* 'cut' with -R 'pierce', but admits the same explanation. In this example, the other birds are encouraging the emu to cut his wings short; it is not suggested that he bite them short, and the speaker consistently (over repetitions of the text) explained in English with the verb 'cut' rather than 'bite'. One not unreasonable possibility is that in this instance the cutting is conceptualised as performed by a knife using iterated stabbing movements. This may also account for otherwise unattested *ram* ... -R 'carve' (Tachon 1895).

(11–143) kinyingk-kun i-ngi-rri-j-jin kad

DEF-ABL₂ 3NOM-PST-AUG-say-3MIN.OBL cut

wa-na-r-jii ni-mal!

2MIN.NOM-CM-poke-2MIN.ACC 3MIN-hand

'Then they said to him, "You get your wings cut!""

Green (1989:338–339) makes a similar observation in his discussion of the collocation of the uninflecting verb -git 'cut, sever' with the auxiliary IV 'paint' in Marrithiyel, which classifies transitive actions as being performed with the ends of an elongated instrument, in a very similar way to -R 'poke'. He points out that whereas a lizard's tail might be sliced off with a knife in a single sweeping movement, this is normally impossible for larger and

tougher objects, such as wings of birds, which require iterations of motion in a lengthwise direction along the blade of the knife. This may account for the following examples, involving the collocations of *jukurr* 'cut off' and *jukurr*-jukurr 'cut up into pieces':

```
(11–144) djogor wan-ar badang
jukurr wa-na-r badangk
cut:off 2MIN.NOM-CM-poke stick
'Cut a stick (twig) off the tree.' (Nekes & Worms 1953:499)
```

```
(11–145) djogor djogor nang-ar wēl
jukurr-jukurr nga-ngka-r wil
cut:off-cut:off 1MIN.NOM-FUT-poke meat
'I shall divide the meat.' (Nekes & Worms 1953:499)
```

Perhaps this explanation can be generalised to the few remaining unusual collocations with -R 'poke' cited in Nekes & Worms (1953): *murrul-murrul* (little-little) 'divide, break off pieces' (Nekes & Worms 1953:737); *bar* 'split' (Nekes & Worms 1953:364); and *jub-jub* (chop-chop) 'divide, break off' (Nekes & Worms 1953:495). However, examples are lacking, making it impossible to test the hypothesis.

In a few cases the vectorial configurations of events categorised by -R 'poke' seem to be given more general interpretations, whereby the vectors do not represent pathways of actual spatial motion of concrete entities. This is the case for *kinyjikij* ... -R 'accuse' (Tachon 1895), *jil* 'experience cold' (as in (11–146)), and *wilywily* ... -R 'whistle' (Nekes & Worms 1953:895; Tachon 1895).³⁰

```
(11–146) djel in-aṛ ŋai

jil i-na-r-ngay

cold 3NOM-CM-poke-1MIN.ACC

'I felt cold.' (Nekes & Worms 1953:477)
```

Finally, it is remarked that two examples, both from the secondary corpora, show the reflexive/reciprocal form of -R 'poke' in a CVC. Both are clearly consistent with the schema of Figure 11–3, with the additional condition of reciprocity:³¹

```
(11–147) dar aŋar-marendj
daarr (y)a-nga-rr-ma-r-inj
arrive 1PL.NOM-PST-AUG-REF<sub>p</sub>-poke-REF<sub>S</sub>
'We met each other.' (Nekes & Worms 1953:420)
```

```
(11–148) jar(r) ma-ma-r-inyj-an intersect INF<sub>p</sub>-REF<sub>p</sub>-poke-REF<sub>s</sub>-INF<sub>s</sub> 'to intersect' (Tachon 1895)
```

³⁰ It might be suggested that metaphorical extension is involved in these examples, for instance from source domains of motion and contact to the domains of communication and noise-making and perception. It is not implausible that feeling cold is metaphorically based on the scheme of piercing. On the other hand, this does not take account of the constructional environment, and the fact that vectors are not necessarily construed purely in terms of physical motion and entities. My point is that feeling cold is categorised by -R 'poke' because it is construed as involving sharp contact of coldness with the experiencer.

³¹ In my own Nyulnyul corpus *daarr* 'arrive' is consistently used with the general reflexive/reciprocal IV -BARNJ 'exchange' when referring to meeting events.

11.4.2.3 -W 'give'

In SVCs this IV is a straightforward translation of *give*, in the basic sense 'transfer an entity from one person's possession to another's'.³² It is a ditransitive verb, with three inherent grammatical roles. However, as in many nearby languages, it is the recipient that is encoded as the direct object, and cross-referenced by an accusative pronominal enclitic; the gift is almost always coded as an unmarked NP that is not cross-referenced in the verb:

- (11–149) wa-na-w bin wamb kumbarr 2MIN.NOM-CM-give that man money 'Give that man money.'
- (11–150) jaminyirr-in jan i-na-w-ngay kinyingk wife's:father-ERG 1MIN.OBL 3NOM-CM-give-1MIN.ACC DEF uriny woman 'My wife's father gave me this woman (i.e. as wife).'

Occasionally the recipient is encoded as an indirect object, and is cross-referenced by an oblique pronominal. There is no change in the case marking of the NPs; nor is any distinctive formal mark accorded to the verb. For example:

(11–151) nan-au djen ginjing nga-na-w-jin kinyingk 1MIN.NOM-CM-give-3MIN.OBL DEF 'I gave it to him.' (Nekes & Worms 1953:866)

In just a few instances no change of possession is involved, as in (11–152)–(11–154): clearly the women are not transferring possession of their hands (even in a generalised sense of possession), or the man of his back; nor are the flies (which do not at any stage have bung eyes!). At least the first two might be regarded as idiomatic phrasemes, perhaps calqued on English expressions.

- (11–152) *uriny-in irr-marl i-rr-a-w-in-irr* woman-ERG 3AUG-hand 3NOM-AUG-CM-give-PRS-3AUG.ACC 'The women are giving them a hand.'
- (11–153) *ni-k i-na-w-ngay way warr-kaj i-n-j* 3MIN-back 3NOM-CM-give-1MIN.ACC away walk-CONT 3NOM-CM-say 'He turned his back on me and walked away.'
- (11–154) *mukiny-in i-rr-a-w-in-yarrad kujib* fly-ERG 3NOM-AUG-CM-give-PRS-1AUG.ACC bung:eye 'Flies give us bung eyes.'

Figure 11–4 is a diagrammatic representation of the semantics of -W 'give' in SVCs; the dotted line is to be interpreted as the path of motion of the gift, conceived of as a material entity. Whether an associative relation should be shown between the giver and the gift in the

³² Possession is to be understood here in a general sense, as elsewhere in language, and not in the sense of ownership or belonging to.

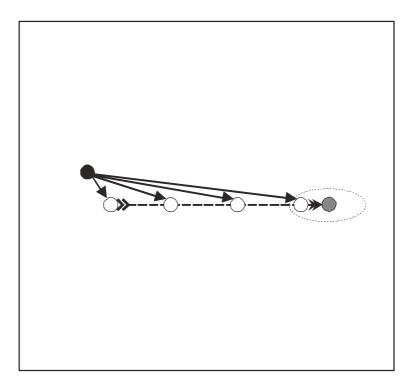


Figure 11–4: Schematic representation of semantics of -W 'give' in SVCs

initial phase is uncertain (it has been omitted because of examples like (11–154)). What is crucial is that the gift ends up in the 'domain' of the recipient—within their possession or sphere of influence.

Most CVCs involving -W 'give' occur in transitive clauses; none occur in ditransitive clauses, and just four or five are attested in intransitive clauses. The meaning domains covered include: violence, grasping and grabbing, induced or uncontrolled motion, and bodily actions. We now examine the domains one by one.

Almost half of the PVs collocating with -W 'give' designate violent actions: bany 'shoot', dukduk 'shake', dudud 'knock', dujul-dujul 'hammer, pound', duurr-duurr 'bang', jad 'cut' (possibly also 'press, lean on, push against', according to Nekes & Worms 1953: 438–439), jad-jad 'cut up', djirb (jirrb) 'poke', jub 'chop', djobdjob (jub-jub) 'divide, break off', jukurr 'give needle, pierce', djogor-djogor (jukurr-jukurr) 'divide up', tiony (juny) 'suck', tiormok (jurrmuk) 'kick', kad 'bite', kadakad 'cut', gel (kirl) 'cut, notch', kird 'block off', kird-kird 'attach', kinyj 'close, shut', and rarrb 'chafe'. Collocations of these PVs with -W 'give' normally occur in transitive clauses (though not all are exemplified in the secondary sources). Illustrative examples are:

- (11–155) *yiil-in kad i-na-w nga-mird* dog-ERG bite 3NOM-CM-give 1MIN-leg 'The dog bit my leg.'
- (11–156) *jad-in* rarrb i-na-w-ngay clothes-ERG chafe 3NOM-CM-give-1MIN.ACC 'My clothes chafed me.'

- (11–157) djogor djogor ŋang-au wēl
 jukurr-jukurr nga-ngka-w wil
 divide 1MIN.NOM-FUT-give meat
 'I shall divide the meat.' (Nekes & Worms 1953:499)
- (11–158) gël ŋan-wan wēl
 kirl nga-n-w-an wil
 cut 1MIN.NOM-CM-give-PRS meat
 'I cut the meat', or 'I cut the meat up into portions.' (Nekes & Worms 1953:585)

Possibly we could include in this group also *karrjikarrj* 'swear at, abuse' (cf. *karrj* 'sharp'), which involves verbal rather than physical violence:

(11–159) karrjikarrj i-na-w-ngay swear 3NOM-CM-give-1MIN.ACC 'She swore at me.'

Verbs referring to grasping and grabbing actions performed with the hands also form a fairly substantial subset of the PVs collocating with -W 'give': *balj-balj* (*baly-baly*) 'clap (hands)', *bard* 'grab, grip, seize', *bard-bard* 'grab, clench (hands)', *didid* 'wring, curl, wind, untangle', *duny* 'squeeze', *galj-galj* (*kaly-kaly*) 'squeeze', *kiny* 'choke', *kur* 'embrace', *kurrb* 'pinch', and *kurrb-kurrb* 'scratch'. Examples are:

- (11–160) balj balj in-au nimal baly-baly i-na-w ni-marl clap-clap 3NOM-CM-give 3MIN-hand 'He clapped with the flat palms of his hands (not with hollow or cupped hands).' (Nekes & Worms 1953:348)
- (11–161) bard nga-na-w-in snatch 1MIN.NOM-CM-give-PRS 'I am holding it.'
- (11–162) bin wamb kur i-na-w jin malirr that man embrace 3NOM-CM-give 3MIN.OBL wife 'That man embraced his wife.'

The remaining two categories—induced or uncontrolled motion and bodily actions—are less well represented, and show little internal coherence. The first set includes: *dibirr-dibirr* 'stir, rotate', *jalingk* 'ride', *jidajid* 'trip', *kurnd* 'piggy-back', *ngurrngurr* 'submerge', *ruk* 'come undone, release', *rukud* 'come off', *yaarr* 'pull', and *yaarrkaly* 'slide'. In this list are some PVs that (with -W 'give') occur in transitive clauses, e.g. *dibirr-dibirr* 'stir, rotate', *jalingk* 'ride', *kurnd* 'piggy-back', *ruk* 'come undone, release' and *yaarr* 'pull', as in (11–163) and (11–164); some that occur in intransitive clauses, e.g *jidajid* 'trip', *rukud* 'come off', and *yarrkaly* 'slide', as in (11–165) and (11–166); and at least one that occurs in both, *ngurrngurr* 'submerge', as in (11–14) and (11–167).

- (11–163) rog wan-au djen yēl meredj ruk wa-na-w-jin yiil mirrij undo 2MIN.NOM.FUT-CM-give-3MIN.OBL dog string 'Untie the string from the dog.', or 'Let the dog loose!' (Nekes & Worms 1953: 845–846)
- (11–164) rog wan-au djād ruk wa-na-w jaad undo 2MIN.NOM.FUT-CM-give shirt "Take off the shirt!" (Nekes & Worms 1953:845–846)
- (11–165) kinyingk yaward jalingk i-na-w ni-k-ingk
 DEF horse ride 3NOM-CM-give 3MIN-back-COM
 'He rode on the horses back.'
- (11–166) rögod in-au button
 rukud i-na-w button
 come:off 3NOM-CM-give button
 'The button came off.' (Nekes & Worms 1953:846)
- (11–167) ngurrngurr i-la-w-an i-ny-jalk-uk wul-uk submerge 3NOM-IRR-give-IMP 3NOM-PST-fall-LOC water-LOC 'He nearly drowned when he fell into the water.'

There are a few problematic examples in the secondary sources that might perhaps belong in the motion set. Tachon (1895) cites *todok* 'stumble' as collocating with -W 'give', but gives no examples. This is probably the same verb that Nekes & Worms (1953) cite as *djudug* (*juduk*) 'kick, stumble', which they also say collocates with -W 'give', but again give no examples. Tachon (1895), however, also gives the form *tiodok*—more plausible as his representation of *juduk*—but glosses its collocation with -W 'give' as 'hide'. Again he gives no examples, but cross-references to *tor ma-wa-n* also glossed 'hide'. My own corpus shows *duurr* 'bump' (though only the reduplication is attested with -W 'give') which makes me somewhat suspicious of the glosses Tachon provides for these two PVs. Perhaps they are better glossed 'kick' and 'bump' respectively, rather than 'hide'.

One other PV mentioned only in Tachon (1895) as collocating with -W 'give' is *nait* (perhaps n(g)ayid) 'to flatten'—referring to an induced change of state. At least one other CVC might be included in this small 'change of condition or state' group: *djormbol* ... -W 'soak ... give'.

(11–168) djormbol ŋan-au moro wōl-og jurrmbul nga-na-w mur(r)u wul-uk soak 1MIN.NOM-CM-give sugar water-LOC 'I soaked sugar in water.' (Nekes & Worms 1953:511)

Just a few PVs occurring with -W 'give' designate bodily actions: *kujuk* 'swallow', *nyim* 'wink, blink', and *wotch* (*wuj*?) 'adore'. Both *kujuk* 'swallow' and *nyim* 'wink, blink' occur in transitive clauses; as (11–170) illustrates, the Undergoer in the latter case is *jin nim* 'his

³³ Claire Bowern (pers.comm.) confirms that in Bardi *judug* means 'kick' or 'stumble'; it collocates, however, with -AR 'kill lice' in that language.

eye'. The referent events are both telic, and made up of single rapid bodily events. The third PV, *wotch* 'adore', appears different, and is attested only in Tachon (1895), who provides no examples—one would guess that he obtained it in the context 'adore God', but precisely what the verb means is not known.

- (11–169) *kujuk ngay-in nga-na-w jan wilamay* swallow 1MIN.CRD-ERG 1MIN.NOM-CM-give 1MIN.OBL food 'I swallowed my food.'
- (11–170) *in-in baab nyim i-na-w jin ni-m*this-ERG child blink 3NOM-CM-give 3MIN.OBL 3MIN-eye *ngay-ung*1MIN.CRD-ALL₁
 'The boy winked his eye at me.'

Does the -W category represent a coherent one semantically? I suggest that the answer is yes. The following features are consistently found in all CVCs involving this IV:

- (i) some entity suffers as a patient, undergoing a change of state or condition; and
- (ii) this is brought about by an agent that makes physical contact with the patient, usually via an intermediary.

These features apply to events of violence, which involve physical contact—possibly via an intermediary (a projectile, instrument, body part, utterance (in the case of *karrjikarrj* 'swear at'), etc.)—and in most cases a change of state or condition of the entity acted on. They also apply to grasping and grabbing actions, and bodily actions. Most processes of motion involve contact between the moved item and a causer. The only problems are presented by the small number of CVCs occurring in intransitive clauses. It is notable, however, that in all such cases the moving entity is not in control of the movement, and it might be presumed that an impersonal agent is involved, at least conceptually, that is considered to be responsible for the uncontrolled movement. The remaining collocations that do not neatly fit into the etic groups also satisfy (i) and (ii).

Figure 11–5 is an attempt to represent this characterisation diagrammatically. The grey circles may represent either the Agent, or something beginning in the Agent's domain that ends up in the domain of the Undergoer. Contact with the Undergoer marks the beginning of the process undergone by it. This is maintained throughout the induced change of state or condition of the Undergoer, though it is not essential that the Agent inputs further energy into the event.

To wind up the discussion of the -W 'give' category, it is worth discussing a few minimal contrasts between collocations involving this IV and collocations with other IVs. Consider first the PV *ruk* 'undo', which alternatively collocates with -R 'poke', as in (11–171). In contrast with the CVC involving -W 'give' in (11–164) above, the collocation with -R 'poke' in (11–171) highlights the fact that the removal of the belt involves a thin pointed object in the buckle that pierces the belt. The contrast here concerns the vectorial configuration of the event, not Aktionsart or valency.

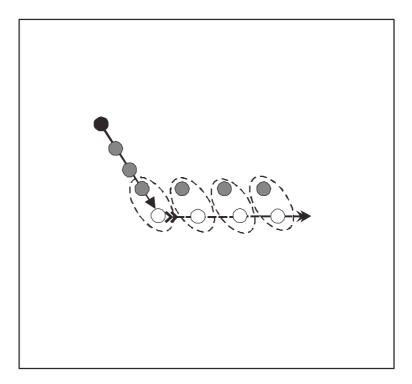


Figure 11–5: Schematic representation of the -W 'give' category

(11–171) rog ŋanŋ-aṛan djān bāl ruk nga-nga-r-an jan baal undo 1MIN.NOM-PST-spear-IMP 1MIN.OBL belt 'I take off my belt.' (Nekes & Worms 1953:845–846)

Somewhat surprisingly, my corpus shows *jukurr* 'cut' in collocation with -W 'give' rather than expected -R 'poke' in expression of the sense 'give a needle to'. This may be because the collocation with -R 'poke' is already employed in expressing the meaning 'cut' (as in (11–144) above). Giving a needle is a postcontact event type, and the collocation with -W 'give' may be recent, motivated by need to distinguish this event from stabbing-type cutting events of the type designated by *jukurr* ... -R. (The collocation may also be partially calqued on the English expression *give a needle to*.) In any event, the event satisfies the vectorial configuration of Figure 11–5.

Another illustration is provided by kur 'embrace'. Whereas (11–162) refers to the telic event of embracement, (11–172), which involves the collocation with -M 'put', denotes a more long-term event in which the focus is on placing the speaker in a new condition.

(11–172) *kur i-ngi-rr-m-an-ngay* embrace 3NOM-PST-AUG-put-IMP-1MIN.ACC 'They grew me up.'

Finally, it is observed that alongside of collocations of *ngurrngurr* 'submerge' with -W 'give' (as in (11–167)) are collocations with -R 'poke' (as in example (11–14)), -JID 'go' (example (11–81)), and -KARD 'enter' (example (11–368)). All of these collocations can be readily understood in terms of the semantic specifications suggested here for the four categories; however, supporting evidence for all of the predicted contrasts is not available.

In SVCs this IV means 'get, catch, take, fetch, receive', and occurs only in transitive clauses, 34 as in (11-173)-(11-175).

- (11–173) wan-nj djān djung wa-n-ny jan jungk

 2MIN.NOM-CM-get 1MIN.OBL fire
 'Get some firewood for me!' (Nekes & Worms 1953:814)
- (11–174) jakarr-ang wa-n-nyu kumb net-INS 2MIN.NOM-CM-get fish 'Fish with a net.'
- (11–175) in jurr uriny-in i-n-nyu bardin this snake woman-ERG 3NOM-CM-get skin 'The woman removed the snake's skin.'

As for *get* and *receive*, the Agent need not necessarily be the primary instigator or mover of the action; it may be someone who receives something from someone else who is responsible for performing the action and provides the major input of energy. This is illustrated by (11–176), where the person responsible is represented by an ablative PP.

(11–176) modaŋ eŋere-nj mai wamborinj ibal-gong mudang i-ngi-rri-ny may wamb-uriny iibal-kung full:bag 3NOM-PST-AUG-get food man-woman father-ABL₃ 'The people got a full bag of flour from Father.' (Nekes & Worms 1953:724)

Nevertheless, at some point the recipient, is responsible for the achievement of the event, at minimum for admitting or accepting the Undergoer within their domain. An attempt to represent the semantics of the IV is provided in Figure 11–6, where the grey action vectors admit that the recipient need not actually do anything.

-NY 'get' is quite productive in CVCs, and the PVs it collocates with belong to the following etic domains: acquisition and retention; removal; motion; induced motion; causation; violence; and bodily experience. Although the majority of CVCs with -NY 'get' are transitive, there is a not insignificant set of intransitive collocations.

About ten PVs that collocate with -NY 'catch' yield CVCs designating or involving processes of acquisition and retention, including grasping or holding. The PVs are: *bard* 'snatch, hold on to', *tod* (*dud*) 'crack fingers', *kirdkird* 'choke someone' (which is probably the same PV as Tachon (1895) transcribes as *ketket* 'tie up'—choking involves holding by the hands for a period of time by an action that resembles tying up with the fingers), *kirkir* 'scoop up', *lean* (*liyan*) 'inhale, take a breath', *nabok* (*nabuk*) 'clasp', *naretch* (*narij*) 'cling to', *niyir* 'test, try', and *ward* 'attach something onto, adhere to'.

³⁴ For convenience I will use the gloss 'get' throughout the discussion, even though this is not always the best gloss for this IV.

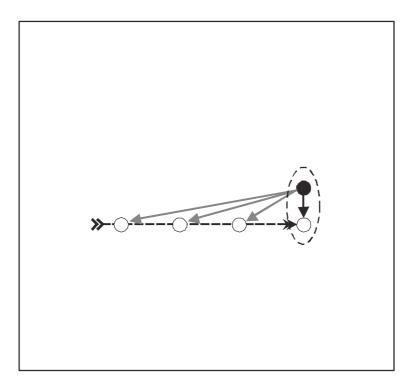


Figure 11–6: Schematic representation of semantics of -NY 'get'

- (11–177) *lēan ŋan-njan liyan nga-n-ny-an*breath 1MIN.NOM-CM-get-PRS
 'I breathe.' (Nekes & Worms 1953:647–648)
- (11–178) *ni-many kirdkird nga-n-nyu*3MIN-neck choke 1MIN.NOM-CM-get
 'I choked him at the neck.'
- (11–179) birlabirl ward yu-ngki-ny leaf attach 3NOM-FUT-get 'He will tie (attach) the leaves to a stick.'

Many of these collocations of acquisition or retention are transitive. However, there are some—including (11–177)—for which information is inadequate, and a few that are almost certainly intransitive, as in (11–180).

(11–180) djād djān wad in-njan ŋagad-og jaad jan ward i-n-ny-an nga-kad-uk shirt 1MIN.OBL attach 3NOM-CM-get-PRS 1MIN-body-LOC 'My shirt sticks to my skin.' (Nekes & Worms 1953:850)

A larger set of CVCs involving -NY 'get' designate processes involving a component of removal; in many of these the removed item is subsequently acquired by the Agent. PVs in such collocations include: *dirdird* 'separate by shaking, yandy', *dub* 'blow (something) away', *duk* 'clear out, remove by wiping away', *dukaduk* 'rub' (i.e. repeated wiping actions), *dukduk* 'shake', *dukudukud* 'shake (e.g. berries from tree)', *jad* 'chop off', *jibul*

'spray water from mouth', *jub* 'chop or cut something off, pull out', *jubjub* 'snatch away from, pluck, peck (as in bird pecking seed from ground)', *djonj* (*juny*) 'suck out', *laaburr* 'pluck out', *laabulaaburr* 'pluck out', *lir* 'peel' (cf. Jabirrjabirr *ler* (*lir*) 'cut, split', according to Nekes & Worms 1953:653), *lirlir* 'peel, remove husk', *lur* 'snatch', *rarrb* 'scrape', *rarrbrarrb* 'scrape', *rub* 'pull out', *rubrub* 'pluck out grass', *ruk* 'pull off, remove', *rukruk* 'undress', *rung* 'suck', *ruŋruŋ* (*rungrung*) 'smoke' (i.e. suck repeatedly), *yarr* 'pull out', *wirriny* 'descale, remove scales' (which is possibly to be identified with *weriny* 'overthrow' cited in Tachon 1895), and *jeralny* ~ *iral* (*yirralny*) 'abduct woman'. We might also include in this meaning domain *kalinykaliny* 'avoid'. These CVCs normally occur in transitive clauses, as in the following examples:

- (11–181) dog ŋan-nj wanger duk nga-n-ny wangkirr wipe 1MIN.NOM-CM-get tear 'I wiped the tears.' (Nekes & Worms 1953:431)
- (11–182) *ni-lirr-kun jibul i-n-ny wul* 3MIN-lip-ABL₂ spray 3NOM-CM-get water 'He sprayed water from his mouth.'
- (11–183) karrambal jubjub i-n-nyu bur yu-ngki-ny-uk bird peck 3NOM-CM-get place 3NOM-FUT-get-LOC jin may 3MIN.OBL food 'The bird pecked the ground to get seed.'
- (11–184) mukurn jan nga-marl-ukun laaburr nga-n-nyu hair 1MIN.OBL 1MIN-arm-ABL₂ pluck 1MIN.NOM-CM-get 'I plucked hairs from my arm.'
- (11–185) marlirr-in jan rub i-n-nyu husband's:sister-ERG 1MIN.OBL pull:out 3NOM-CM-get jan jarringk 1MIN.OBL tooth 'My sister-in-law pulled my tooth out.'
- (11–186) bāb ruŋ in-njen ŋamanj
 baab rung i-n-ny-in ngamany
 child suck 3NOM-CM-get-PRS breast
 'The baby sucks the breast.' (Nekes & Worms 1953:847)
- (11–187) *ibal* run run in-njen baib *iibal* rung-rung i-n-ny-in bayib father suck-suck 3NOM-CM-get-PRS pipe 'The father smokes the pipe.' (Nekes & Worms 1953:847)
- (11–188) *kaliny-kaliny i-n-ny-in-irr* avoid-avoid 3NOM-CM-get-PRS-3AUG.ACC 'He keeps on avoiding them.'

About ten PVs of motion collocate with -NY 'get': dumbar 'fly', dumbardumbar 'fly', gonde (kurnd) 'mount horse', jubul 'swim', junk 'run, run away, run past, start running', jurrb 'jump', kalkir 'swim', lakal 'climb', nolo (nulu) 'dance, turn', and ngurrngurr 'drown, submerge'. Nekes & Worms (1953:323) also mention dab (dab) 'climb' (example (11–192)), which is probably not the same verb as Tachon (1895) gives as tap (dab) 'return, restore' (not exemplified). As the following examples suggest, it appears that with PVs of motion CVCs involving -NY 'get' express the inception of the event, usually together with a period of subsequent motion:

- (11–189) garambal dumbar in-njeo karrambal dumbar i-n-nyu bird fly 3NOM-CM-get 'The bird flew up.' (Nekes & Worms 1953:433–434)
- (11–190) jibard i-na-m bin burruk ni-mungk sneek 3NOM-CM-put that kangaroo 3MIN-think i-nga-mulk jurrb i-n-nyu way 3NOM-PST-sleep jump 3NOM-CM-get away 'He snuck up on the kangaroo thinking it was asleep, but it hopped away.'
- (11-191)wamb i-djeden baiber gad non-djon kad nu-ung-jun wamb i-jid-in baybirr still 3MIN-belly-ABL₁ man 3NOM-go-PRS behind in-galegan-djer worinj djen djung i-n-kalak-an-jirr jin uriny junk 3NOM-CM-follow-IMP-3AUG.OBL woman 3MIN.OBL run in-nj i-n-ny 3NOM-CM-get 'The man is following his woman, but she has run away.' (Nekes & Worms 1953:536)
- (11–192) dab ŋan-nj nimar-aŋ dab nga-n-ny nimarr-ung climb 1MIN.NOM-CM-get sandhill-ALL₁ 'I climb up the sandhill.' (Nekes & Worms 1953:323)

The four preceding examples are intransitive. One collocation that may be transitive involves *kurnd* 'mount':

(11–193) gonde in-njen yawad kurnd i-n-ny-in yaward mount 3NOM-CM-get-PRS horse 'He mounted the horse.' (Nekes & Worms 1953:617)

A few PVs collocate with -NY 'get' to designate processes of induced motion or change of position: *dad* 'put inside, insert', *ger* (*kir*) 'pour out', *jalingk* 'ride (horse)', *jarrbard* 'pick up', *jukurr* 'poke out tongue', *wilywily* 'wag tail' and perhaps *mijal* 'sit'. Some examples are:

- (11–194) ger wan-nj mai kir wa-n-ny may pour 2MIN.NOM-CM-get food 'Pour out the flour.' (Nekes & Worms 1953:591)
- (11–195) baab-in jalingk i-n-nyu kinyingk yaward arri child-ERG ride 3NOM-CM-get DEF horse not i-la-ngul-an 3NOM-IRR-throw-IMP 'The boy is riding the horse; it didn't throw him.'
- (11–196) yiil-in wilywily i-n-ny-in jin ni-warl dog-ERG wag 3NOM-CM-get-PRS 3MIN.OBL 3MIN-tail 'The dog is wagging its tail.'

A slightly larger set of PVs designate caused changes of state: *baab* 'open (e.g. a door)', *jal* 'split (e.g. a log)', *jid* 'stand something up', *dirdird* 'bend, tangle up, coil', *birrabirr* 'chafe', *lalorlalor* 'clear', *lar* (*lar*) 'split', and *niler* (*ni-lirr* 'his/her/its mouth') 'sharpen, grind (a point)'. In each of these contact between the Agent and Undergoer is involved, possibly via an intermediary, and the CVCs consistently occur in transitive clauses:

- (11–197) bin miid baab duurr-duurr i-na-w door arri baab that male child knock-knock 3NOM-CM-give door not open i-la-ny-an 3NOM-IRR-get-IMP 'The boy banged on the door, but couldn't get it open.'
- (11–198) bardangk dirdird i-n-nyu stick bend 3NOM-CM-get 'He bent the stick.'
- (11–199) *jal i-n-nyu kujarr jamiyun-ang* split 3NOM-CM-get two tomahawk-INS 'He split it in two with an axe.'

Around ten collocations with -NY 'get' designate violent actions; these involve the PVs: buurrm 'cut open', diny 'crush', dujul-dujul 'hammer, pulverise', tiamen (jamin) 'exhaust', kad 'cut', kardakard 'scratch, bite', lalol (lalul) 'tear, break', wukurrwukurr 'grind, mix together', and wirr 'graze'—which may possibly be identified with wer 'trace line' cited in Tachon (1895). Examples are:

(11–200) dujul-dujul i-rr-i-ny-in wamb-uriny-in / hammer-hammer 3NOM-AUG-CM-get-PRS man-woman-ERG i-rr-bulm-in wul-uk / 3NOM-AUG-soak-PRS water-LOC 'The people pulverise it and soak it in water.'

- (11–201) lalol eŋere-nj djededjon worinj-en lalul i-ngi-rr-i-ny jidijun uriny-in break 3NOM-PST-AUG-CM-get termite:mound women-ERG 'The women broke the termite-mound [antbed] (to eat the soil as an aperient).' (Nekes & Worms 1953:640)
- (11–202) wirr i-n-nyu ni-marl graze 3NOM-CM-get 3MIN-hand 'It grazed his arm.'

Two other collocations designate actions of verbal violence; these involve *gardj* (*karrj*) 'curse', and *gardjar* (*karrjarr*) 'scold', both of which are presumably cognate with the N *karrj* 'sharp'. Unfortunately the sources do not provide examples.

Just a few CVCs involving -NY 'get' refer to processes of bodily experience, in each case an experience of pain: *nyunyun* 'ache', *rungarung* 'ache', *warrwal* 'have fit', and *warirr* 'sting, pain'. For example:

- (11–203) arrak nyunnyun i-n-ny-in-jii where ache 3NOM-CM-get-PRS-2MIN.ACC 'Where do you ache?'
- (11–204) nga-marl warirr nga-n-ny-in 1MIN-arm sting 1MIN.NOM-CM-get-PRS 'My arm stings.'

A few generalisations emerge from the above. Invariably, events designated by CVCs with -NY 'get' involve changes of position, condition, or state of an entity. They are never unchanging—the CVC never designates just a state or condition, but always its inception also. Nor are they ever simply activities (even violent ones) that do not lead to, or begin with, a change in position, state, or condition of an entity. This claim is further supported by an examination of contrasting collocations of PVs with other IVs. To illustrate this, let us compare some of the examples cited above with alternative collocations. Thus, whereas in (11–193) reference is made to the act of mounting the horse, in (11–205) the subsequent state of being mounted is referred to; in (11–199) reference is made to the act of splitting the log, whereas in (11–206) we are simply told that the log is split—and it is possible that this occurred as the result of a slow natural process, that was not induced by any particular external agency. An interesting contrast is provided by examples (11–194) and (11–207): the former focuses on the relocation of the substance, whilst the latter focuses on the final state, and the controlled process of entry into it. Additional contrasting examples are numerous, but these are sufficient to substantiate the present claim.

- (11–205) gonde i-nen yawad kurnd i-n-in yaward mount 3NOM-be-PRS horse 'He is on horse-back.' (Nekes & Worms 1953:617)
- (11–206) in bardangk jal i-ny-jid bulngurr that stick split 3NOM-PST-go middle 'That log is split down the middle.'

```
(11–207) ger wan-am wōl
kir wa-na-m wul
pour 2MIN.NOM.FUT-CM-put water
'Pour in the water!' (Nekes & Worms 1953:591)
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A second recurrent feature is contact, which is either made—or broken—between entities involved in the event, or between an entity and something significant in the event. Contact may be maintained for some time, but never throughout the entire duration of the event: change is essential. In some cases there are multiple points of contact. The notion of contact is obvious in processes of acquisition and removal. In the case of acquisition, it is usually between an Agent and Undergoer, sometimes between an Actor and location. In the case of processes of removal, contact is typically between an Undergoer and a location (usually unspecified). The relevant processes of motion involve inception, and along with this, the cessation of contact of the entity in motion and its original location. It is also possible to conceive of such processes as involving contact between the moving entity and the process of motion: that it comes into abstract contact with the act of moving. Induced motion involves either or both of making and breaking contact between the moved entity and something else: either the Agent or a location. Similarly for processes of induced change of state. In the case of violent processes, each of these involves physical contact between the Agent and Undergoer. For the few bodily experience processes it is possible to imagine contact between the sufferer and an undesirable condition (as in English catch a cold).

Diagrammatic representation of these features is given in Figure 11–7.

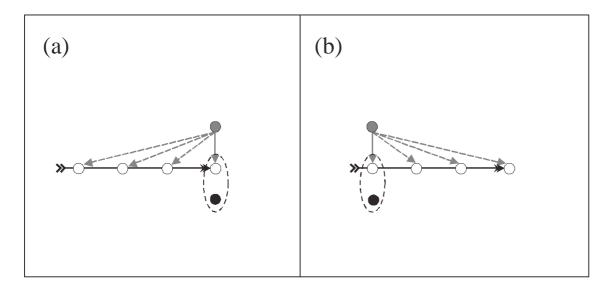


Figure 11–7: Vectorial configuration for -NY 'catch, get' category

Configurations (a) and (b) correspond to whether contact is made or broken. The grey action vectors indicate that there is no necessity for there to be a distinct agent acting on the moving entity, though this is not precluded. The trajector may either move under its own momentum, volition, or control, or it may be induced to move by an external causer. What is essential is that there be a trajector that moves. This may or may not be the Undergoer (in a transitive clause) or the Actor (in an intransitive clause); indeed, in many cases—

especially where contact is achieved—it will be an intermediary that is brought into contact with the Undergoer. This characterises the processes of acquisition distinguished above: the Agent makes contact with the Undergoer by bringing something else into contact with it. The same goes for the processes of violence.

The entities separated or brought into contact need not begin as physically distinct: they may be parts of a single entity that is broken into separate pieces (in (b)) or that are brought into contact (in (a))—for instance, for *dirdird* 'tangle, bend, coil'.

In contrast with -NY 'get' in SVCs, in CVCs the essential point of contact appears to be between a trajector (either Actor or Undergoer, depending on clause type) and something else (another entity, place, or whatever), and not between the Agent (if there is one) and another entity. The Agent may, as mentioned above, be in contact with the trajector; however, this will be by virtue of the other entity, that serves as an intermediary.

11.4.2.5 -M 'put'

SVCs with -M 'put' always occur in transitive clauses. In its most basic use, the clause specifies a situation in which an Agent moves an Undergoer, causing it to be relocated in a new position, which may be specified by a locative PP, as in the following examples:

- (11–208) karrambal-in i-na-m wil baab-uk jin
 bird-ERG 3NOM-CM-put meat child-LOC 3MIN.OBL
 ni-lirr
 3MIN-mouth
 'The bird put the meat in the fledgling's mouth.'
- (11–209) muju-muj jiwarr wamb i-ngi-rr-a-m-jirr before-before dead:body man 3NOM-PST-AUG-CM-put-3AUG.ACC kalb karndilib-uk above platform-LOC 'Long ago they used to put the dead on a platform.'

The relocated item may be a conceptually distinct entity as in the above examples, or a part of the Agent's body, that is shifted, possibly to another location on the Agent's body:

- (11–210) *ni-marl i-na-m kalb jimbin kurrburl-uk* 3MIN-hand 3NOM-CM-put up inside hollow:log-LOC 'He put his hand up into a hollow log.'
- (11–211) bin karrambal n-alm jin i-na-m that bird 3MIN-head 3MIN.OBL 3NOM-CM-put ni-mal-uk jin ma-mulk-un-ung 3MIN-hand-LOC 3MIN.OBL INF_p-sleep-INF_s-ALL₁ 'The bird put its head under its wings to sleep.'

Tachon (1895) cites the infinitival construction warindierek bor maman (warinyjirr-ik bur ma-m-an, i.e. one-LOC place INF-put-PRS, literally 'putting in one place') as meaning 'to unite', though he does not exemplify with a full finite clause.

Although the previous examples all involve a locative PP that specifies the new location of the moved entity, such an NP is not obligatory. The final resting place may be specified

instead by an adverbial, or merely left implied. These two possibilities are illustrated by the following examples:

- (11–212) wumbun mad bina wul wa-na-m-jarrad permanent:water particle that water 2MIN.NOM-CM-put-1AUG.OBL yangan / near 'Put permanent water close by here for us.'
- (11–213) *juurr-in ni-yangal i-na-m-jan* snake-ERG 3MIN-tongue 3NOM-CM-put-1MIN.OBL 'The snake flicked out its tongue at me.'

The examples cited so far all involve spatial motion of the Undergoer. This is not always so, and -M 'put' has a variety of contextual senses, and may designate a variety of situations that do not involve any component of spatial movement of a material object. Example (11–214), from Text 2, shows this: the story, an abstract entity, has not been physically put down by the speaker; rather, it has been embodied in a novel form, on cassette tape—as it were, metaphorically relocated in a different existential modality.

(11–214) kinyingk-kun an-uk nga-na-m jabil jay / DEF-ABL₂ what-LOC 1MIN.NOM-CM-put story 1&2MIN.OBL 'To what point have I put down our story?'

The following examples illustrate further abstract events involving non-material entities that are figuratively 'relocated' in conceptual space. The first involves the performance of a corroboree (*put on* in English); the second, the conventional semiotic association of a name with a place (*assign/put a name to*).

- (11–215) *i-nga-rr-a-mur* aa nul 3NOM-PST-AUG-CM-wash and corroboree *i-nga-rr-a-m-jin* / 3NOM-PST-AUG-CM-put-3MIN.OBL 'They washed and put on a corroboree.'
- (11–216) wajbal-in i-ngi-rr-a-m ni-lawirl sunday island white:person-ERG 3NOM-PST-AUG-CM-put 3MIN-name Sunday Island 'White people call it Sunday Island.'

Other examples may be explained in similar terms, that is, as involving metaphorical relocation of an entity in another conceptual space of existence or mode of being. In (11–217) the Undergoer achieves a new stage, manhood; and in (11–218) the Undergoer achieves a new condition, represented not by a nominal, but by a non-finite clause.

(11–217) wamb i-na-m-ngay murrurl-akarr man 3NOM-CM-put-1MIN.OBL small-TEM 'The man grew me up from a small child.' The following example appears idiomatic, even though it arguably still involves implicit relocation of the ear in a more receptive state than usual.

(11–219) nga-labab nga-na-m babarl-ij jan 1MIN-ear 1MIN.NOM-CM-put brother-DAT 1MIN.OBL 'I listened for word about my brother.'

It is not surprising that -M 'put' can be used to express causation: that the Undergoer has been caused to enter a new state or condition by the Agent. Thus, in (11–220) the speaker's shoes are represented as the cause of the sore feet.

(11–220) nga-mbal-ingid-in i-na-m nga-mbal yiig 1MIN-foot-CHAR-ERG 3NOM-CM-put 1MIN-foot sore 'My shoes made my foot sore.'

The following example, from Text 2, shows -M 'put' alongside *angk-uk angk-uk* (what-LOC what-LOC) which appears to be serving as a manner interrogative, enquiring 'how, in what manner'. Here there is no overt Agent, although the clause may represent a type of impersonal causative—the Undergoer is caused to enter a state by some unspecified or unknown external agency.

(11–221) angk-uk angk-uk i-na-m-kurr / what-LOC what-LOC 3NOM-CM-put-2AUG.ACC 'How did you come to be this way?'

Examples like (11–217) and (11–220) are resultative secondary predicate constructions: the nominal specifying the final state or condition serves as a secondary predicate on the Undergoer NP (see further §12.4.1.2.3). Other examples include:

- (11–222) *uriny-in ruburr i-na-m ni-mird jan jawuj* woman-ERG short 3NOM-CM-put 3MIN-leg 1MIN.OBL trousers 'The woman shortened the legs of my trousers.'
- (11–224) in medicine layib yu-ngka-m-jii this medicine good 3NOM-FUT-put-2MIN.ACC 'This medicine will make you better.'

It will be observed that in each of these three examples the nominal designating the new state or condition occurs immediately preceding the IV, and the question therefore arises as to whether we have an instance of a secondary predicate construction or a CVC with a nominal serving as a PV. I am inclined to the former view. My guess is that the secondary predicate construction permits greater freedom of order of the putative PV with respect to the IV than in a CVC. Thus we find it following the IV in (11–220), and indeed separated

from it—a highly unusual situation for a CVC. Second, corresponding to the above three examples are verbless relational clauses specifying conditions or circumstances of the Undergoer; such agnates do not normally exist for CVCs. Third, the meaning of the above examples appears to be compositional, derivable from the meaning of the construction (a secondary predicate construction) and its component elements. Admittedly, however, there is insufficient information to mount a strong case, or to decide where precisely to draw the boundary. (By comparison, in Jaminjung it is possible to adduce formal criteria by which secondary predicate constructions can be distinguished from CVCs—see Schultze-Berndt 2000, 2002.)

Finally, there remains a small residue of examples which involve -M 'put' in SVCs, but which do not readily fit into any of the above patterns:

- ngurnd-in i-n-m-in-ngay (11-225)3NOM-CM-put-PRS-1MIN.ACC piss-ERG 'I want to do a piss.'
- karrmal-ang i-na-m jin (11-226)wurrul-uk aa paint-INS 3NOM-CM-put fingernail-LOC 3MIN.OBL and ni-mbal wurrul 3MIN-foot fingernail 'She painted her fingernails and toenails.'
- (11-227)kiim-ang i-ngi-rr-m-an walangk jirr gum-INS 3NOM-PST-AUG-put-PRS 3AUG.OBL spear 'They use gum to hold the stone head to the spear.'

It is possible that these examples are idiomatic expressions; it is also possible that in (11-226) and (11-227) the instrumentally marked nominal is serving as a PV, the instrumental postposition being a derivational marker indicating the change of category, as it sometimes does.

The literal spatial relocation sense often associated with -M 'put' in SVCs can be depicted by the diagrammatic representation of Figure 11-8. This diagram captures the fact that an entity is relocated as a result of action on it from an external agency, which typically ceases to act on it once the final location is achieved. No further input of energy is required by the agent for the entity to remain where it has been placed. The grey circle may be interpreted not as a spatial location but as a state, condition, or whatever, allowing this diagram to characterise many of the presumably extended senses of -M 'put' in SVCs.

In CVCs -M 'put' is attested in collocation with over a hundred PVs, nominals, and adverbials—considerably more than any other IV, with the sole exception of -J 'say, do'. The secondary corpora show almost one hundred collocations making it the second most promiscuous IV; my own corpus shows just under fifty collocations, putting it in third place, after -J 'say, do', and -NY 'get, catch'.

Despite its promiscuity, -M 'put' shows (unlike -J 'say, do') a very strong association with transitivity: only a handful of CVCs it occurs in occur in intransitive clauses. Moreover, the CVCs do not cover a very disparate set of semantic domains compared with -J 'say, do'. Four etic meaning domains cover the bulk of the collocations:

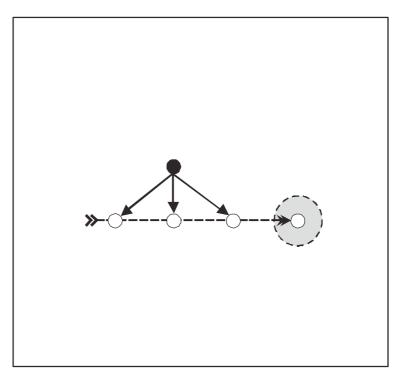


Figure 11–8: Schematic representation of the semantics of -M 'put' in SVCs

- (a) induced change of position and/or motion;
- (b) induced change of state or condition;
- (c) perceptual, emotional, and communicative activities directed towards another person or thing; and
- (d) processes in which an intermediary is deployed in establishing a connection between an Agent and an Undergoer.

These are not mutually exclusive characterisations, and many CVCs satisfy more than one of them. A small but not insignificant number of CVCs represent changes of position or state that are not induced by any apparent external cause, giving us a fifth domain:

- (e) monovalent events, principally inchoatives.
- (a) Induced change of position and/or motion. A considerable number of PVs collocate with -M 'put' to specify induced motion or change of position; these constitute about a quarter of the collocations. These collocations are bivalent, and occur in transitive clauses. The PVs include (among others): balabal 'mix, stir', ban 'move something aside', baniban 'move something aside repeatedly', barnibarn 'separate, strain', bil 'bury', bodar 'put in order', bodar bodar 'put in order', borong borong 'turn over (page)', dibirr 'stir, roll, turn over', dibirr-dibirr 'stir, roll', derder 'roll, turn around', dirdird 'twist', dolod 'pour water', dulul 'pour', jarrbard 'lift up', kanga 'join', djal 'put together', djaledjal 'heap up', djilalar 'hang something upside down', djimbelad 'hang something upside down', djerb 'lift', ger 'pour in', kunarr 'move', mijal 'place, set, put sitting', yende 'stretch out arms', nowar 'lift

up', *rilil* 'spread out',³⁵ *wededjer* 'mix, stir', *wirilban* ~ *wirilban* 'disperse', *wirrwirr* 'gather up', and *woror* 'put together'. Possibly the following, cited but not exemplified in Tachon (1895), also belong in this group: *tuelara* 'let slip', *naenae* 'encircle'. Illustrative examples include:

- (11–228) juurr-in baniban i-na-m marr i-ny-jid-uk snake-ERG move 3NOM-CM-put grass 3NOM-PST-go-LOC 'The snake moved the grass as it went along.'
- (11–229) barnibarn wa-na-m-yirr yaward aa buluman separate 2MIN.NOM-CM-put-3AUG.OBL horse and bullock 'Separate the horses and cattle.'
- (11–230) wul dulul i-ngi-rr-m-an kinyingk-uk daakul i-ngi-rr-lungk water pour 3NOM-PST-AUG-put-IMP DEF-LOC hole 3NOM-PST-AUG-dig 'They poured water into the hole they'd dug.'

Possibly *nulun-nulun* (*nolon-nolon*) 'divide up' also belongs to this meaning domain, presuming that the process of division being referred to is that of splitting up the fish into separate piles:

(11–231) nolon nolon ŋan-man wēl nulun-nulun nga-n-m-an wil divide 1MIN.NOM-CM-put-PRS fish 'I divide the fish.' (Nekes & Worms 1953:765)

An unusual collocation cited in Tachon (1895) is *jamada* (*tja'mada*) 'approach'. No examples are given, and it is not known whether transitive 'approach' is meant, or the causative 'bring something close to'. Nekes & Worms (1953) illustrate this PV just with -JID 'go' in an intransitive combination referring to coming near to something.

- (b) Induced change of state or condition. Collocations involving -M 'put' that fall into the second meaning domain are also exclusive to transitive clauses. A largish set of PVs enter into these collocations, including: baab 'open', balybaly 'flatten', banaban 'make better', pinmel 'strengthen', bodan 'shut', bodara 'put in order', bond 'shut', dadal 'break', dembe and its reduplication dembe-demb 'tie, join together, marry', duly 'burst, open up', durdub 'fill up', djad 'bend', kap 'open, discover', kalwar 'expose', karekare 'flatten', kinyj 'shut, close off', kunyurrk 'put to sleep', laalb 'cook in oven', lānjbal 'make level', larrblarrb 'smooth out', midbad 'tie up', murrkard 'fill up', noren 'make ready, prepare', nelkan 'blacken', nyim 'shut eyes', norm, norn 'tame', ruk 'untie', winy 'fill up'. (This list is incomplete.) Below are some illustrative examples:
- (11–232) kalwar i-rr-i-m-in jirr irr-wink expose 3NOM-AUG-CM-put-PRS 3AUG.OBL 3AUG-breast 'They exposed their breasts.'

³⁵ According to Nekes & Worms (1953:844), *rilil* (*relel*) means 'blanket, anything to sit or lie on'; I suspect that this word is actually a PV, that can be used either to refer to the act of spreading something out, or to the resulting state of being spread out. By contrast, the term they gloss 'spread out', *balngar(r)* (*balnar*) looks suspiciously like a borrowing from English *blanket*, especially if the final segment is the apical tap *rr*—which segment not infrequently alternates with an apico-alveolar stop (see further McGregor 1988c).

- (11–233) baab kunyurrk nga-na-m nii-m jin kinyji baby sleep 1MIN.NOM-CM-put 3MIN-eye 3MIN.OBL shut i-na-m 3NOM-CM-put 'I put the baby to sleep, by closing its eyes.'
- (11–234) larrb-larrb i-na-m kinyingk barnd ni-marl-inyirr jin smooth 3NOM-CM-put DEF sand 3MIN-hand-COM 3MIN.OBL 'He smoothed out the sand with his hand.'
- (11–235) *noren wan-am mai ngurin wa-na-m may*ready 2MIN.NOM-CM-put food
 'Prepare the meal!' (Nekes & Worms 1953:809)
- (11–236) midbad wan-am yēl burur-aŋ midbad wa-na-m yiil burrurr-ang tie 2MIN.NOM-CM-put dog line-INS 'Put the dog on a leash.' (Nekes & Worms 1953:705)
- (11–237) $n\bar{e}m$ dolj yan-am wamb nii-m duly nga-na-m wamb 3MIN-eye burst 1MIN.NOM-CM-put man 'I burst the man's eye.' (Nekes & Worms 1953:433)
- (11–238) nai-en djad nan-am badang
 ngay-in jad nga-na-m bardangk
 I-ERG bend 1MIN.NOM-CM-put stick
 'I bent my stick.' (Nekes & Worms 1953:438, 440)

Presumably *tialambor* 'double', *tiandiol* 'fold', and *welel* 'unfold' also belong to this meaning domain; however, the collocations are attested though unexemplified in Tachon (1895) exclusively. Some Ns that occur in combination with -M 'put' in what may be CVCs are: *bilij* 'make angry', *djorong* 'choose' (literally, 'put right-handed'), *karrji* 'sharpen', *karrji-karrji* 'sharpen', *layib* 'put in order' (literally, 'make good'), *murrul* 'lessen' (literally 'make small'), *-mungk* 'show' (literally, 'put knowing'), and *rarrjin* 'shame'. These are all causatives, and might be grouped together with the above; it is, however, uncertain whether they should be analysed as CVCs or as secondary predicate constructions with SVCs. A single example will suffice:

- (11–239) nimong ine-man gagar-en djen lagor ni-mungk i-na-m-an kakarr-in jin lakurr 3MIN-know 3NOM-CM-put-IMP uncle-ERG 3MIN.OBL egg 'His uncle showed him the egg.' (Wrongly glossed "He showed his uncle the egg." (Nekes & Worms 1953:760)
- (c) Perceptual, emotional, and communicative activities directed towards another person or thing. CVCs involving -M 'put' and expressing a meaning from this domain invariably occur in transitive clauses. PVs in such collocations include: *arlik* 'insult, worry', *barrabarr* 'think about', *binmal* 'refuse', *jikir* 'peep', *kaw* 'call out to', *liyan* 'like, love', *ngank-ang*

'speak to', madang 'ignore, take no notice of', moladj 'humbug, annoy', năr 'snarl, grunt', ningarr 'believe, trust', nawar, nawar 'show', rarrjin 'shame', 36 walon 'look after, care for', walon-walon 'put in order', wangapara 'encourage', yalji 'cajole'. It is possible that the following PVs that are attested but not exemplified in Tachon (1895), also belong in (c): pain 'seduce', palen 'venerate', tagal 'obstruct', tigod 'recall', tieny 'sin (against someone?)', lablab 'relieve', nendie 'vilify', 37 reban 'offend, persecute', worail 'expiate', and jediara 'frighten'. Examples are:

- (11–240) binmal in-am ŋai ibal-en
 binmal i-na-m-ngay iibal-in
 refuse 3NOM-CM-put-1MIN.ACC father-ERG
 'The father gave me a flat refusal.' (Nekes & Worms 1953:386)
- (11–241) arri liyan i-li-rr-m-an / kinyingk may / not like 3NOM-IRR-AUG-put-IMP DEF food 'They didn't like this food.'
- (11–242) arri ningarr i-la-rr-a-m-ngay not believe 3NOM-IRR-AUG-EV-put-1MIN.ACC nga-n-d-in-uk-jirr 1MIN.NOM-CM-say-PRS-LOC-3AUG.OBL 'They don't believe what I tell them.'
- (11–243) walon nan-men wamb djān walung nga-n-m-in wamb jan care 1MIN.NOM-CM-put-PRS man 1MIN.OBL 'I nurse my husband.' (Nekes & Worms 1953:864)
- (11–244) nang-an in-am nai, "are djan kerosene" ngank-ang i-na-m-ngay "arri-jan kerosene" talk-INS 3NOM-CM-put-1MIN.ACC not-1MIN.OBL kerosene 'He replied, "I have no kerosene."" (Nekes & Worms 1953:786)
- (11–245) yēl när in-am nai yiil ngarr i-na-m-ngay dog snarl 3NOM-CM-put-1MIN.ACC 'The dog snarls at me.' (Nekes & Worms 1953:681, 790)
- (d) Processes in which an intermediary is deployed in establishing a connection between an Agent and an Undergoer. This fourth group comprises a small number of transitive events in which an intermediary, often unspecified, is used to bring about action on the Undergoer; this entity—rather than the Undergoer, as in (a) and (b)—is thus the thing that

³⁶ In Bardi, the corresponding collocation of *rarrjin* 'shame' and the IV -MA 'put' occurs in an impersonal construction meaning 'experience shame, get shamed' (Claire Bowern pers.comm.); Nekes & Worms (1953:842) provide examples in Bardi and Jabirrjabirr, while Nekes & Worms (2006:247) imply that comparable examples exist in Nyulnyul. However, the examples in my own Nyulnyul corpus of *rarrjin* 'shame' in collocation with -M 'put' are clearly transitive, with the Undergoer the person who is caused to experience shame.

³⁷ Tachon (1895) also gives the collocation *laib* ... -M the gloss 'vilify'. I am at a loss to explain this, since the first word is surely *layib* 'good, well' (and elsewhere in the same work this word is thus glossed).

invariably suffers a change of position or state. (The Undergoer may of course also experience a change of state or condition.) PVs in this group include *bany* 'shoot', *banybany* 'shoot around', *jirrb* 'poke', *jirrbjirrb* 'poke repeatedly', *dub* 'set something alight (e.g. by putting a burning object against it)', *kur* 'embrace' (cf. 'put arms around'), *kurkur* 'console' (the result of embracing continuously or repeatedly), and perhaps *bagar* 'stick into'. The following are examples:

- (11–246) banj in-am djiliman-aŋ
 bany i-na-m jiliman-ang
 shoot 3NOM-CM-put rifle-INS
 "He shot with the rifle." (Nekes & Worms 1953:362)
- (11–247) wamb-en bagar in-am djeb-aŋ maler djen wamb-in bakar(r) i-na-m jiib-ang malirr jin man-ERG stick:into 3NOM-CM-put boomerang-INS wife 3MIN.OBL "The man threw a boomerang at his wife (with the effect that) a splinter of it stuck in her skin (or flesh)." (Nekes & Worms 1953:339–340)
- (e) Monovalent events, principally inchoatives. A smallish set of combinations of PVs and -M 'put' are monovalent: they do not host an accusative pronominal enclitic, and occur in intransitive clauses. The majority indicate change of location not induced by an external agency: daarr 'arrive', ³⁸ junk 'run', djur 'climb down', ³⁹ garilol 'spin', ragal 'allow space', woror 'assemble together', yuurr 'descend', and yuurr-yuurr '(many) descend'. A few examples illustrating their use with -M 'put' follow.
- (11–248) djur ngan-am badang-gon jur nga-na-m bardangk-kun climb:down 1MIN.NOM-CM-put tree-ABL₂ 'I came down from the tree.' (Nekes & Worms 1953:509)
- (11–249) yor wan-am gorodj-gong
 yuurr wa-na-m kuruj-kung
 descend 2MIN.NOM-CM-put cross-ABL₃
 "Come down from that cross!" (from Matthew 27, 40; Nekes & Worms 1953: 937–938)
- (11–250) areang garilol il-am djān djēb laib arriyangk karilul i-la-m jan jiib layib without spin 3NOM-IRR-put 1MIN.OBL boomerang good 'My boomerang does not spin well.' (Nekes & Worms 1953:576)

³⁸ Only in Tachon (1895) do we find this collocation. One might expect it to mean 'bring to' or 'arrive with'. However, it is glossed as just 'to arrive', suggesting intransitive usage. No examples are provided.

³⁹ It is not clear whether or not this poorly attested PV is a distinct root from *yuurr* 'descend'. Certainly, it is close enough phonologically and semantically to make one suspicious that it might represent a mishearing, a mistranscription, or a dialectal variant.

- (11–251) arri junk i-li-rr-a-m murrul-murrul karrambal not run 3NOM-IRR-AUG-CM-put little-little bird mayar-ung jirr house-ALL₁ 3AUG.OBL 'Don't let the chickens run into their coup.'
- (11–252) wamb-orinj woror eŋer-am badaŋg-og wamb-uriny wur(r)ur(r) i-ngi-rr-a-m bardangk-uk man-woman assemble 3NOM-PST-AUG-CM-put tree-LOC 'The people gathered under the tree.' (Nekes & Worms 1953:912–913)

Tachon (1895) cites a number of change of state inchoatives involving -M 'put'. These include collocations with *alik* 'bad' and *yuud* 'tired, weary', both combinations being glossed 'get tired'. These two PVs are attested elsewhere, but not in this sense with -M: the former collocation is glossed 'worry' in Nekes & Worms (1953); the latter is not mentioned, the only CVC involving this word being with -J 'say, do'. Other lexemes occurring in CVCs with -M 'put' in (Tachon 1895) are *tiogara* 'slacken', and *kala* and *tiodai* 'begin'. The nominals *murrul* 'little' and *wub* 'small' also occur with -M 'put' in collocations glossed as inchoatives meaning 'lessen'; and *riib* 'bad' with this IV is glossed 'deteriorate'. None of these are attested elsewhere in the corpus or exemplified in (Tachon 1895).

In just a few instances CVCs with -M 'put' designate what appear to be ongoing states. These involve the following PVs: *baler* 'shine' (example (11–253)), *koldior* 'be discouraged', *gudjar gudjar* 'divided' (literally 'two-two') (example (11–254)), *tieben* 'be humble', *puliar* 'dazzle', and *jeman* 'weary' (Tachon 1895). Although the components of coming into being appear not to be present in the events denoted by these CVCs, the events do have an inherent inchoative component, even if this is not apparently in focus (given the English translations) in particular instances.

- (11–253) gunjul baler in-meo
 kunyul balir i-n-ma-yu
 moon shine 3NOM-CM-put-PRS
 'The moon is shining.' (Nekes & Worms 1953:624)
- (11–254) gudjar gudjar in-men lēan djen kujarr kujarr i-n-m-in liyan jin two two 3NOM-CM-put-PRS heart 3MIN.OBL 'He is undecided.' (Literally, 'His heart is divided.') (Nekes & Worms 1953: 601)

The group of apparently inherently inchoative events referred to in the last two paragraphs seem to be characteristically induced by an unmentioned external agency. That is to say, they appear to be (at least conceptually) a type of impersonal causative.

There remain just a small number of problematic collocations of PVs with -M 'put' that seem not to fit in any of the above patterns. These involve *jibard* 'sneak up on' (examples (11–190) and (11–255)), and its reduplication *jibardjibard* 'walk on tiptoes' (perhaps more literally 'sneak up carefully on'). It is possible that the collocation is explicable either synchronically or diachronically as a type of causative, specifying something like 'cause to remain in a state of unwariness or ignorance'.

(11–255) djibad in-am wēl burug wamb-en jibard i-na-m wil burruk wamb-in sneak 3NOM-CM-put meat kangaroo man-ERG 'The man is stalking the kangaroo.' (Nekes & Worms 1953:471)

To wind up the discussion of the meanings of CVCs with -M 'put', and to make clear the semantic contrasts with other choices of IV, consider the alternative collocations of PVs with this and other IVs shown in Table 11–8.

Table 11–8: Contrasting collocations of -M 'put' and other IVs with PVs

-M 'put' 'cause something to open' baab 'open' -NY 'get' 'open something' -JID 'go' '(be)come open' -M 'put' 'join together' -J 'say, do' 'marry' -M 'put' 'cause/let someone run' -NY 'get' 'run away, start running' -J 'say, do' 'be running along' -JID 'go' 'be running along' -M 'put' 'pick up' -NY 'get' 'pick up'	
-JID 'go' '(be)come open' dimbidimb 'join' -M 'put' 'join together' -J 'say, do' 'marry' -M 'put' 'cause/let someone run' -NY 'get' 'run away, start running' -J 'say, do' 'be running along' -JID 'go' 'be running along' -M 'put' 'pick up' -NY 'get' 'pick up'	
dimbidimb 'join' -M 'put' 'join together' -J 'say, do' 'marry' -M 'put' 'cause/let someone run' -NY 'get' 'run away, start running' -J 'say, do' 'be running along' -JID 'go' 'be running along' -M 'put' 'pick up' -NY 'get' 'pick up'	
dimbidimb 'join' -J 'say, do' 'marry' -M 'put' 'cause/let someone run' -NY 'get' 'run away, start running' -J 'say, do' 'be running along' -JID 'go' 'be running along' -M 'put' 'pick up' -NY 'get' 'pick up'	
-J 'say, do' 'marry' -M 'put' 'cause/let someone run' -NY 'get' 'run away, start running' -J 'say, do' 'be running along' -JID 'go' 'be running along' -M 'put' 'pick up' -NY 'get' 'pick up'	
-NY 'get' 'run away, start running' -J 'say, do' 'be running along' -JID 'go' 'be running along' -M 'put' 'pick up' -NY 'get' 'pick up'	
-J 'say, do' 'be running along' -JID 'go' 'be running along' -M 'put' 'pick up' -NY 'get' 'pick up'	
-J 'say, do' 'be running along' -JID 'go' 'be running along' -M 'put' 'pick up' -NY 'get' 'pick up'	
-M 'put' 'pick up' -NY 'get' 'pick up'	
-NY 'get' 'pick up'	
-NY 'get' 'pick up'	
jarrbard 'lift up' -K 'carry' 'lift up and carry'	
-BARNJ 'exchange' 'lift oneself up'	
-M 'put' 'expose something'	
kalwar 'expose' -J 'say, do' 'become exposed'	
-N 'be' 'be exposed'	
-M 'put' 'close or block something off'	
-W 'give' 'clench, close quickly/briefly'	
kinyj 'shut' -J 'say, do' 'become shut'	
-JID 'go' 'become blocked over time'	
-BARNJ 'exchange' 'shut something on oneself'	
-M 'put' 'put something into sitting position	tion'
-NY 'get' 'start sitting down'	
mijal 'sit' -N 'be' 'be sitting'	
-LAND 'sit down' 'sit down'	

	· ·	•
PV	Collocating IV	Meaning of CVC
nyim 'blink'	-M 'put'	'shut eyes'
	-W 'give'	'wink at someone'

Table 11–8: Contrasting collocations of -M 'put' and other IVs with PVs (Continued)

Summing up, what appears to be crucial to the -M 'put' category is that an entity enters into a new location, state, or condition via the action of an external cause, real (where there is an external Agent) or presumed (where there is no Agent, but the event befalls the entity). In the former case, the most common, the clause is usually transitive; in the latter, it is typically intransitive. The new location or condition that is entered into is stable, and the entity remains in it for a duration of time; thus there is a sharp contrast with events categorised by -W 'give', where the new condition may be maintained but briefly. Figure 11–8, which represents the semantics of -M 'put' in SVCs, also provides a good representation of the semantics of the -M 'put' category, granted that the external force may be virtual, and need not necessarily be an Agent.

11.4.2.6 -KAL 'wander'

This interesting and somewhat puzzling IV shows a considerable range of senses given the relatively few tokens. In SVCs, Tachon (1895) glosses it as simply 'go', while Nekes & Worms (1953:544) gloss it as 'to walk, to roam about'. It is clear from the available examples that the glosses 'go' and 'walk' are inadequate, not to say misleading. To begin with, -KAL is clearly not the general IV meaning 'go', used generally of any sort of motion—this is -JID 'go' (§11.4.1.3). In all instances of use in an SVC, -KAL refers to motion which is not specifically directed towards any target or goal, as (11–256) and (11–257) show. It is never, that is, used in reference to motion that proceeds unwaveringly to a target. Thus 'walk' is no better as a gloss. The gloss 'to roam about' is clearly closer to the mark, although it perhaps suggests too strongly an aimlessness that need not be present, as is clear from (11–257). What seems to be crucial is that the motion does not follow a simple straight-line path, but meanders around in a seemingly random way. The gloss 'wander' seems to me to be slightly better than 'roam about', and it is adopted here. 40

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(11–256) are mile-galen bindan bindan, morgol arri mi-li-kal-in bindan bindan murrkul not 2MIN.NOM-IRR-wander-IMP bush bush work wan-nj wa-n-ny 2MIN.NOM-CM-catch 'Do not walk around in the bush, but do your work.' (Nekes & Worms 1953: 544)
```

⁴⁰ I suspect that the example below, given in response to the prompt 'the dogs are screwing' actually means no more than 'the dogs are wandering around', interacting as it were randomly with one another, with the possible suggestion of random sexual activity:

yiil bin-uk i-rr-i-kal-in dog this-LOC 3NOM-AUG-CM-wander-PRS 'The dogs are screwing.'

(11–257) djeo wēle-bēdj in-galen belar-og jiyu wile-bij i-n-kal-in birlarr-uk heron fish-DAT⁴¹ 3NOM-CM-wander-PRS spring-LOC 'The heron walks about the well for fish.' (Nekes & Worms 1953:544)

In the above examples reference is made to single motion events. In SVCs, however, -KAL 'wander' can also be used in reference to a general characteristic state of being in habitual movement, considered to typify a person's mode of existence. In this context 'live' is a good gloss for the IV, as in line (2) Text 2, line (2) of Text 5, and examples (11–258) and (11–259).

- (11–258) *ya-ngka-rr-kal*1PL.NOM-FUT-AUG-wander
 'We'll stay (live) together.'
- (11–259) *i-rr-i-kal-in* wardi
 3NOM-AUG-CM-wander-PRS north
 'They are wandering about (living) in the north.'

Although in SVCs -KAL 'wander' occurs only in intransitive clauses, as the above examples illustrate, it is formally transitive (as recognised by Nekes & Worms 1953:544): that is, it takes the transitive conjugation prefix $n \sim ni \sim a$ (as in example (11–257)).

-KAL 'wander' may be reduplicated with the effect of indicating that a single event is composed of numerous iterations, as illustrated by (11–260).

(11–260) wamburiny i-rr-a-kala-kal-in people 3NOM-AUG-CM-wander-wander-PRS 'People are wandering about everywhere.'

-KAL 'wander' is attested in collocation with no more than about a dozen PVs in CVCs; in addition it collocates with a handful of words (mostly Ns) marked by the locative postposition, and adverbials. What is consistent across all these collocations, and thus is presumably the characteristic feature of the category, is that the events involve a non-straight-line vector, as shown in Figure 11–9. The vector may represent either a path of motion, or a more abstract path for the action, which basically corresponds with its aimlessness or undirectedness, sometimes lack of control. As we have seen for a number of other categories, there is no requirement that the vector be unique: that is to say, an event categorised by -KAL 'wander' can be made up of a number of such vectors.

-KAL 'wander' collocates with a number of PVs of motion. In a few cases the combinations denote motion events with non-straight-line trajectories, as with *banbirrinbirr* 'surround', *wirrwirr* 'stagger', *yur* 'slither', and *yarrkaly* 'slip'. Illustrative examples are (11–261)–(11–263). It seems that for motion events it is the shape of the path that is significant, not the degree of control of the trajector.

⁴¹ This form of the dative is not attested elsewhere; the initial b is probably a typo.

Figure 11–9: The -KAL category

- (11–261) liinyj-in banbirrinbirr i-ngi-rr-kal bur-uk
 police-ERG surround 3NOM-PST-AUG-wander place-LOC
 jin
 3MIN.OBL
 'The police surrounded his camp.'
- (11–262) juy yarrkaly mi-ni-ng-kal ngijil-uk 2MIN.CRD slip 2MIN.NOM-CM-PST-wander mud-LOC 'You slipped in the mud.'
- (11–263) wirrwirr i-ni-ng-kal riib-inyirr ni-mird stagger 3NOM-CM-PST-wander bad-COM 3MIN-leg 'He staggered along with a broken leg.'

At least for *wirrwirr* 'stagger' and *yarrkaly* 'slip' it seems that motion can be non-translational: the moving entity need not shift their location. For instance, as shown by (11–264), the staggering may occur whilst the person is in the act of standing up, and presumably it is just the upper part of their body that traces the non-linear trajectory. Similarly *yarrkaly* 'slip' can refer to the action of slipping over in one place, e.g. while trying to maintain balance on a slippery surface.

(11–264) wirrwirr i-ni-ng-kal i-ny-jarrngar-uk warrij-warrij stagger 3NOM-CM-PST-wander 3NOM-PST-stand-LOC quickly-quickly 'He staggered (got dizzy) when he stood up quickly.'

A few other collocations with motion PVs are instanced only in the secondary sources, and there is insufficient information on them to be able to determine whether or not they satisfy the vectorial configuration shown in Figure 11–9. They involve the PVs: *yardab* 'crawl' in a CVC glossed 'creep' (Tachon 1895); *way* 'away' in a CVC glossed 'depart'

(Tachon 1895); *kirr* 'assemble' in a CVC glossed 'come together, assemble' (Nekes & Worms 1953:544)—see (11–265); and the reduplication *kirrkirr* in a CVC glossed 'come together' (Tachon 1895).⁴² Assuming that for the last three categorisations the number of the Actor must be non-minimal, it is not inconceivable that they are motivated by the overall non-linear trajectory traced out by the moving entities. (This suggests in turn that Figure 11–9 might be too precise, that the semantic basis of the category may be entirely negative, and that the category is defined by a non-linear vectorial configuration.)

```
(11–265) ger anar-gal yen-eg
kirr ya-nga-rr-kal in-ik
assemble 1PL.NOM-PST-AUG-wander here-LOC
'We are assembled here.' (Nekes & Worms 1953:591)
```

Other CVCs involve -KAL 'wander' with non-motion PVs or other units used as PVs. Nekes & Worms (1953) provide a few examples of collocations with *ninyj* 'alive', which specifies the 'live' sense that -KAL 'wander' sometimes shows in SVCs (see p. 509 above). An example is:

```
(11–266) nēndj ŋan-galen gad, are ŋale-djimban ninyj nga-n-kal-an kad arri nga-li-jimb-an alive 1MIN.NOM-CM-wander-IMP still not 1MIN.NOM-IRR-die-IMP 'I am still alive, I am not dead yet.' (Nekes & Worms 1953:544)
```

Ninyj 'alive' also collocates with the IVs -N 'be' and -JARRIJARR 'arise, stand up'. The first collocation is not a CVC, but rather represents the attribute in a verbal relational clause (see §12.3.1.2.1). The collocation *ninyj* 'alive' with -JARRIJARR 'arise, stand up' may be a CVC meaning 'arise alive (from death)'.

Other PVs attested with -KAL are: *ngalyub* 'sparkle, blaze' (example (11–267)); *maniny* 'defence; to fence, to ward off, to parry, to dodge' (as in (11–268)); and *jirrjirr* 'to pack' (Tachon 1895). The first two are easily understood in terms of a meandering vector associated with the moving entity. The third is perhaps comparable with CVCs involving *kirr* 'assemble' and the like.

```
(11–267) djung naljob in-galeo / in-galen jungk ngalyub i-n-kal-yu / i-n-kal-in fire sparkle 3NOM-CM-wander-PRS 3NOM-CM-wander-PRS 'The fire blazes.' (Nekes & Worms 1953:780)
```

(11–268) maninj ineŋ-gal djen djēb wamb-en maniny i-ni-ng-kal-jin jiib wamb-in dodge 3NOM-CM-PST-wander-3MIN.OBL boomerang man-ERG 'The man dodged (parried) the boomerang.' (Nekes & Worms 1953:687)

Finally, -KAL collocates with a small number of locative-marked Ns, all of which seem to be consistent with the schema of: *burrb-uk* ... -KAL (dance-LOC wander) 'dance'; *bil-uk* ... -KAL (fight-LOC wander) 'fight (of many people)'; *maad-uk* ... -KAL (play-LOC wander) 'play about' (example (11–269)); and *lanyb-uk* ... -KAL (steal-LOC wander) 'steal things' (example (11–270)).

⁴² Tachon (1895), in fact, cites the form as korgor.

- (11–269) baab maad-uk i-rr-kal-in ngijil-uk child play-LOC 3NOM-AUG-wander-PRS mud-LOC 'The children are playing in the mud.'
- (11–270) nga-n-nyu kinyingk wamb lanyb-uk i-ni-ng-kal 1MIN.NOM-CM-get DEF man steal-LOC 3NOM-CM-PST-wander 'I caught him stealing, red handed.'

Summing up, -KAL 'wander' classifies the action as one characterised by a meandering, non-straight-line trajectory. This may be interpreted either physically in terms of the path followed by a moving object, normally the Actor, or more abstractly in terms of the lack of a straight line vector in the action: it does not proceed directly towards a goal. Different interpretations are available for this feature depending on context: in some cases lack of control over the outcome seems to be prominent; in other cases, control may exist, but there may be no definite goal that is to be achieved, or the achievement of the goal may necessarily involve a multiplicity of actions directed towards different, specific targets. In some instances, all of these interpretations appear to be available; in others, only one.

11.4.2.7 -K 'carry'

In SVCs this IV invariably occurs in transitive clauses, where it refers to processes of induced change of position in which the Undergoer (the thing moved) accompanies the Agent (mover), which is in control of the event, and is generally the primary energy source. There is no specification of direction with respect to a deictic centre, and hence the SVC glosses as 'carry', 'take', or 'bring', depending on context. (Direction can of course be specified by adverbials and PPs.) The Undergoer may be either animate or inanimate. If inanimate, it is typically located somewhere on the Agent's body—in their hands, on their head, on their shoulders, and so forth—that is, it is physically held while the motion event is in progress:

- (11–271) *ny-alm-uk wa-na-k bin kumbarr* 2MIN-head-LOC 2MIN.NOM-CM-carry that stone 'Carry that stone on your head.'
- (11–272) *kurr kujarr wa-rr-a-k-jan wul karrmij* 2AUG.CRD two 2NOM-AUG-CM-carry-1MIN.OBL water later 'You two bring my water later.'

For live animate beings, this interpretation does not usually follow, except for babies, as in (11–273). For other live animates, the Agent and Undergoer are normally just in physical proximity and there is no implication that the Agent actually holds the Undergoer, the former being the higher order animate (example (11–274)), or the more knowledgeable and/ or powerful one, who is in control of the event (example (11–275))—and thus the contextual sense 'lead'. These days, the Agent may be a driver of a car (example (11–276)) in which both participants are located, and the primary motive power is provided by the vehicle.

- (11–273) baab yu-na-k baby 3NOM-CM-carry 'She'll carry the baby.'
- (11-274)uriny-in kinyingk yiil i-n-k-in mirij-ikun woman-ERG DEF dog 3NOM-CM-carry-PRS leash-ABL₂ i-li-ny arri ruk not take:off 3NOM-IRR-get 'The woman is taking the dog on the leash; she won't let it off.'
- (11-275)wa-na-k-ngay arr-ak mi-ni-ny-jal 2MIN.NOM-CM-carry-1MIN.ACC where-LOC 2MIN.NOM-CM-PST-see jiwarr dead 'Take me to where you saw the dead body.'
- (11-276)layib i-la-n-an-karr nga-la-k-an good 3NOM-IRR-be-IMP-TEM 1MIN.NOM-IRR-carry-IMP madika-uk jan car-LOC 1MIN.OBL 'If he had been well, I'd have taken him in the car for a drive.'

Of course, the interpretation that a live animate being is physically carried is not precluded, as illustrated by (11–277); see also line (185) of Text 2, where spirits carry a person. Nor is it essential that the Agent be animate (11–278).

- (11-277)kujarr-in nga-mbal i-nga-rr-a-k-ngay nyun-uk two-ERG 1MIN-foot 3NOM-PST-AUG-CM-carry-1MIN.ACC there-LOC 'My two feet took me there.'
- wanal-en bundur inan-g (11-278)wangal-in bundurr i-na-ng-k wind-ERG dust 3NOM-CM-PST-carry 'The wind brought dust.' (Nekes & Worms 1953:406)

Nekes & Worms (1953:670) list under a separate headword the reflexive/reciprocal form of -K 'carry', ma-magandjen (ma-ma-k-anyj-in INF_p-REF_p-carry-REF_s-INF_s) 'to carry oneself, to surrender, to make peace' (cf. English 'give oneself up'), though this derived form is not represented in my own corpus. They give the following examples:

- (11-279)nanga-magendj djalngogor-on nga-ngka-ma-k-anyj jalngkangurr-ung 1MIN.NOM-FUT-REF_p-carry-REF_s doctor-ALL₁ 'I shall betake myself to the doctor.' (Nekes & Worms 1953:670)
- (11-280)ŋa-magandjen dje nga-ma-k-anyj-in-jii 1MIN.NOM-REF_p-carry-REF_s-PRS-2MIN.ACC 'I surrender myself to you', i.e. 'I make peace with you' (Nekes & Worms 1953: 670)

Around half of the CVCs involving -K 'carry'—all bar two or three in my own corpus—denote processes involving some component of motion. The remainder are a mixed bag including induced changes of state, condition, or bodily/mental state, violence, etc. In the majority of cases these CVCs occur in transitive clauses.

A few PVs specify different manners of carrying, primarily according to the location of the carried entity on the carrier's body. These include: *jidin* 'carry on the shoulders', *jidinjidin* 'carry on the shoulders', *jingkar* 'carry on the belt', *kurnd* 'carry on the shoulders', *mungkan* 'carry on the head or shoulders'. How the various PVs glossed 'carry on the shoulders' contrast with one another is not known; Nekes & Worms (1953), however, gloss the last two collocations as 'carry on back'. Examples are:

- (11–281) mungkan i-na-ng-k jin malbul carry:on:shoulders 3NOM-CM-PST-carry 3MIN.OBL things kurndijin-uk shoulder-LOC 'She carried a load on her shoulders.'
- (11–282) wamb-en mongan inan-g madananar wamb-in mungkan i-na-ng-k madanganar man-ERG carry:on:back 3NOM-CM-PST-carry bag 'The man carried a bag on his back.' (Wrongly glossed "The man carries the bag on the back.") (Nekes & Worms 1953:733)
- (11–283) *jungk jidin-jidin ya-rr-a-k-in* fire carry:on:shoulders-carry:on:shoulders 1PL.NOM-AUG-CM-carry-PRS *wilamay-ung ma-marr-in* food-ALL₁ INF_P-cook-INF_S 'We carry firewood on our shoulders for cooking food.'

In addition to these applicative-type collocations in which the Undergoer accompanies the Actor are a similar number of causative collocations, involving induced change of position or motion of an entity: *tobatsch* 'tear out', *jarrbad* 'lift up', *lur* 'snatch away, tear off', *waj* 'take away, remove', *yal-yal* 'lead along', *yaarr* 'pull along', and *yaarr-yaarr* 'drag along, pull at/out' (also 'tickle'). For these there is no necessity that the Agent move in the company of the Undergoer. Examples:

- (11–284) war-in baab jarrbad i-na-ng-k kumbarr one-ERG child lift 3NOM-CM-PST-carry stone 'One child lifted up the rock.'
- (11–285) yaarr i-na-ng-k kurril ngijil-ukun pull 3NOM-CM-PST-carry mangrove mud-ABL₂ 'He pulled a mangrove root out from the mud.'

⁴³ Compare *kurndijin* 'shoulder', where the *jin* is doubtless a reflex of the 3MIN.OBL pronoun. In Big Nyikina and Warrwa, though not Nyulnyul, this form is used as a possessive suffix—one of a paradigm of person-number forms—on some body-part nouns, including 'shoulder'.

(11–286) yiil-in lur i-na-ng-k in wil nga-mal-ukun dog-ERG snatch 3NOM-CM-PST-carry that meat 1MIN-hand-ABL $_2$ 'The dog snatched the meat from my hand.'

Almost all collocations of -K 'carry' and a PV of motion occur in transitive clauses, and refer to either accompanying or induced motion. There are two exceptions. One involves *marl* 'emerge, exit', which, in collocation with -K 'carry' refers to the emergence of something from body, or more generally from what may be conceptualised as a medium or field ⁴⁴—for instance, pus coming out from a wound, or a person coming out of a house, a person arriving at a destination (where the medium or field is a region outside of the visible domain), the sun rising, and so forth:

- (11–287) ibal war walg djer mal yon-ag
 iibal war waalk jirr marl yu-na-k
 father other sun 3AUG.OBL emerge 3NOM.FUT-CM-carry
 'Father will come the day after tomorrow.' (Nekes & Worms 1953:880–881)
- (11–288) *marl i-na-ng-k bur-ukun jin* emerge 3NOM-CM-PST-carry camp-ABL₂ 3MIN.OBL 'He's walking out of his house.'

The other collocation, attested just in the secondary corpus, involves *rukud* 'come off':

(11–289) djaudj rögod inaŋ-g djen jawuj rukud i-na-ng-k-jin trousers come:off 3NOM-CM-PST-carry-3MIN.OBL 'His trousers slipped down.' (Nekes & Worms 1953:846)

This PV also collocates with -JID 'go'. The contrast in meaning between the two IVs is not clear; it may have something to do with the fact that with -JID 'go' the event is represented as taking place over time, by degrees.⁴⁵

The remaining collocations form a disparate group. One (from my corpus), involves ruk-ruk 'undo-undo', and represents an induced change of state, as in (11–290). A few others represent bodily actions (including speech) that typically induce some change in the mental state or condition of another person. These involve liyan 'startle' (example (11–291)), jin(a)jin(ang) 'tease, mock' (possibly also 'ignore') (as in (11–292) and (11–293)), and ringan 'joke'.

- (11–290) ruk-ruk nga-na-ng-k jan ni-mbal-ingid undo-undo 1MIN.NOM-CM-PST-carry 1MIN.OBL 3MIN-foot-CHAR 'I untied my shoelaces.'
- (11–291) liyan nga-na-ng-k-jin wamb ngay-in heart 1MIN.NOM-CM-PST-carry-3MIN.OBL man 1MIN.CRD-ERG 'I startled him.'

⁴⁴ In places Nekes & Worms (1953) gloss the collocation involving this word as 'stay'. However, the examples they provide all clearly show that the notion of emergence or arrival at a place is also involved.

⁴⁵ One wonders whether the gloss is entirely reliable, and whether the collocation with -K 'carry' does not actually mean 'he took down his trousers', or 'something took/brought down his trousers'.

- (11–292) ginjing-en djenedjen-an in-gen nai kinyingk-in jinajin-ang i-n-k-in-ngay DEF-ERG tease-INS 3NOM-CM-carry-PRS-1MIN.ACC 'He teases me.' (Nekes & Worms 1953:486)
- (11–293) *irr-in jinajin-ang i-nga-rr-a-k-jirr*they-ERG tease-INS 3NOM-PST-AUG-CM-carry-3AUG.ACC *wamarn-jun wamburiny*other:place-ABL₁ people
 'They were mocking the foreigners.'

If the previous four examples are regarded as causatives of states or bodily/mental states, there are just a few examples that might be regarded as corresponding applicatives: bodily or mental states accompanying an individual while they act on another. The best candidates are *binmal* 'refuse (someone), disagree' (cf. 'carry a disagreement or refusal (with respect) to someone'), and *ngir* 'show teeth to, snarl'. (11–294) and (11–295) are examples of *binmal* 'refuse (someone), disagree'; *ngir* 'show teeth to, snarl' is not exemplified in Nekes & Worms (1953) (though a Jabirrjabirr example is provided). Like (11–291), these are middle clauses—see §12.3.2.2.5 ((11–290), (11–292), and (11–293) are transitive). A similar example is (11–296), with the PV *madelj* (*madily*) 'noise' in a collocation that Nekes & Worms (1953) gloss as 'make or bring noise'. The two PVs *reny* (*riny*) 'give opinion' and *tuenidienan* 'utter a profanity to someone', which are represented but not exemplified in Tachon (1895) appear comparable. 47

- (11–294) bab-en binmal inaŋ-g djān
 baab-in binmal i-na-ng-k-jan
 child-ERG refusal 3NOM-CM-PST-carry-1MIN.OBL
 'The child did not obey me.' (Nekes & Worms 1953:386)
- (11–295) binmal nann-g djen ibal
 binmal nga-na-ng-k-jin iibal
 refusal 1MIN.NOM-CM-PST-carry-3MIN.OBL father
 'I did not agree with the father', or 'I did not obey the father.' (Nekes & Worms 1953:386)
- (11–296) madelj gonor-ag djäräd, marar
 madily ku-nu-rra-k-jarrad marar
 noise 2AUG.NOM-CM-AUG-carry-1AUG.OBL quiet
 war-edj
 wa-rr-i-j
 2AUG.NOM.FUT-AUG-CM-say
 'You are making a noise, be quiet!' (Nekes & Worms 1953:664)

⁴⁶ In Bardi *binmal* means 'strong, stubborn' (Claire Bowern pers.comm.). This sense is also consistent with examples (11–294) and (11–295): the Agent is stubborn with respect to the Implicated individual. It is impossible to decide between this sense and the sense suggested by Nekes & Worms (1953).

⁴⁷ Tachon (1895) also gives *tiandianan* 'joke'. I suspect that this is his representation of *jinajinang* 'mock'.

Two further PVs that collocate with -K 'carry' designate violent actions: dod 'punch', as in the following example, and *pelowor* 'be violent'.⁴⁸

```
(11-297)
                          dod
          ŋai-en
                                 nanan-g
                                                         ginjing,
                                                                  ηed
                                                         kinyingk ngid
          ngay-in
                          dud
                                 nga-na-ng-k
          1min.crd-erg
                         punch 1MIN.NOM-CM-PST-carry DEF
                                                                  thud
          in-djalg
          i-ny-jalk
          3NOM-PST-fall
          "I gave him a punch, and with a thud he fell down." (Nekes & Worms 1953:
          430)
```

Nekes & Worms (1953) also give an example of the inflecting lexeme -mungk 'believe' in collocation with the IV -K 'carry':

```
(11-298)
          ŋa-mong
                      gan-ag dje
                                                    lagor
          nga-mungk ka-na-k-jii
                                                    lakurr
          1MIN-know 1MIN.NOM-CM-carry-2MIN.ACC egg
          'I shall show you where that egg is.' (Nekes & Worms 1953:760)
```

The analysis of this example is not certain, and it is possible that this collocation is not a CVC, but rather a type of secondary predicate, roughly, 'knowingly, I will take you to the egg'. In favour of the secondary predicate analysis is the fact that the form of the prefixing noun indicates that it is the speaker, who is also the Agent, that is asserted as 'knowledgeable', not the addressee, as would be expected if the collocation were a CVC indicating knowledge induced in the addressee as suggested by the gloss 'show'. On the other hand, the fact that -mungk 'believe' is not marked by the ergative postposition suggests against the secondary predicate analysis, although ergative marking is not actually obligatory in that context. I am unable to resolve the issue given the information available.

Is there any commonality of meaning across this rather disparate semantic range? I suggest that there is. Let us consider first the processes of motion. With two exceptions, collocations with -K 'carry' are transitive, and designate events in which an entity is relocated. In one subgroup this is via carrying; in the other, it is not. But even in the second subgroup the relocated entity remains with the prime mover; none of the processes assigned to this category involve induced projectile motion. Thus there is a recurrent theme of physical contiguity between the moved entity and the prime mover; the former accompanies the latter, and remains under its control.

I suggest that the transitive processes involving change of state and violence also satisfy these conditions, except that the non-controlling entity, the Undergoer, experiences a change of state or condition, rather than of location, instigated by the Agent. In these examples also the two primary participants remain in physical proximity. For instance, in the case of untying shoelaces (example (11-290)), the shoelaces suffer a change of condition, and remain in contact with the speaker; for mocking also the mocker and mockee are typically physically proximal ((11–292) and (11–293)).

On the basis of these remarks, it seems reasonable to suggest the diagrammatic representation of the semantics of the -K 'carry' category as shown in Figure 11-10. Note

⁴⁸ This PV is mentioned only in Tachon (1895), and not exemplified; it is presumably a derived form of bil 'anger'.

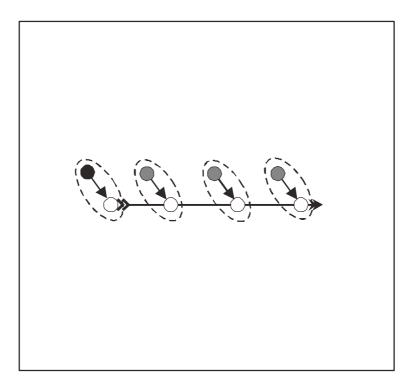


Figure 11–10: Schematic representation of the semantics of the -K 'carry' category

that in this representation the grey dots indicate that the Agent, the source of energy, does not necessarily move in position or condition (which is irrelevant), and the dotted ellipse shows that it remains in an associative relationship with the Undergoer, constantly inputting energy into the event.

This leaves the not-insignificant subset of collocations of PV and IV that occur in clauses other than transitive ones to be accounted for. First, the two remaining motion event can be accounted for in terms of this abstract schema. As for the PV *rukud* 'come off', observe that in (11–289) the person, or at least their leg, undergoes a change of condition—from being covered to being uncovered—and moreover the trousers and leg remain in physical proximity. Interpreting the unfilled dot in Figure 11–10 as the leg, the filled dot as the trousers, the schema is satisfied. For *marl* 'emerge', the blank dot can be interpreted as the point at which the moving entity emerges, which changes condition from being without the moving entity, to being with it; the associative relation obtains from the point of the arrival. This may also account for the sense 'stay with' that Nekes & Worms (1953) comment on (see fn. 44 above), especially if it is implied that the Agent is in control of the event, for instance is responsible for holding the group together.

Second, for non-motion events with PVs *binmal* 'refuse (someone), disagree', *ngir* 'show teeth to, snarl', and *madelj* 'noise', action could be construed as emanating from an animate being to an abstract entity such as a proposition, proposal, facial expression, or noise. Energy must be continually supplied to this entity, which remains in association with the animate throughout the process, and indeed exists only as a result of this input of energy. The actional vector shown in Figure 11–10 through the abstract entity is to be interpreted as indicating that it is brought into non-physical contact with a third entity, that is affected as a result. A similar case might be made for the action of startling in example (11–291), although it might be better accounted for as metaphoric or idiomatic.

For independent usage of -K 'carry' in SVCs, physical relocation of both Agent and Undergoer is always involved, not change of condition or state. Thus a schematic representation of the semantics of this IV could be as shown in Figure 11–11.

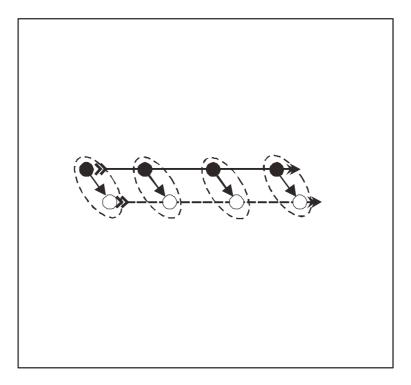


Figure 11–11: Schematic representation of the meaning of -K 'carry' in SVCs

11.5 Secondary verbal categories

The remaining eleven IVs are considered to mark secondary categories because they each collocate with just a few PVs, ⁴⁹ and so are not productive in terms of the formation of new verbal lexemes. In most instances it is impossible, due to the paucity of collocations, to be certain that the collocations represent grammatical units of the same type as collocations with the primary IVs. It is also impossible to be certain of the meanings of the IV in these collocations.

11.5.1 -DAM 'hit'

In SVCs this IV refers to violent actions involving instantaneous striking contact between two objects; unsurprisingly, -DAM 'hit' is consistently found in transitive clauses:

(11–299) wamb-in i-n-dam yiil jan man-ERG 3NOM-CM-hit dog 1MIN.OBL 'The man hit my dog.'

⁴⁹ Two other secondary IVs listed in Table 11–3 are reflexives/reciprocals derived from productive IVs, and have been treated in §11.4 along with the corresponding root forms.

(11–300) ya-ngka-dam bin bardangk ya-ni-jal nganyji langkurr
1PL.NOM-FUT-hit that tree 1PL.NOM-CM-see INT possum
yu-ngku-rr-jarrjarr
3NOM-FUT-AUG-arise
'Let's hit that tree, and see if the possum will wake up.'

Typically the Agent is a human being, and the action is performed with the hands or a hand-held instrument. However, neither of these characteristics is essential. The Agent is sometimes inanimate, normally a natural force or phenomenon that is not under the active control of a human being—for instance, lightning (example (11–301)) and rain (example (11–302)). Items used instrumentally are not represented as Agents of -DAM 'hit'.

- (11–301) kanyjingarr-in i-n-dam ina bardangk bulngurr lightning-ERG 3NOM-CM-hit this tree middle 'Lightning hit the tree in the middle.'
- (11–302) wōl-en in-dam ŋai, gobad ŋan-djeo wul-in i-n-dam-ngay kubad nga-n-j-yu water-ERG 3NOM-CM-hit-1MIN.ACC wet 1MIN.NOM-CM-say-PRS 'The rain wet me.' (Nekes & Worms 1953:595)

There are a few exceptions in which the hitting event involves a thrown object that makes contact with the Undergoer, indicating that 'hit with a missile' is also a possible interpretation of this IV:

(11–303) yiil-in jan i-na-m-balabal-ngay kumbarr
dog-ERG 1MIN.OBL 3NOM-CM-PST-follow-1MIN.ACC stone
nga-n-nyu nga-na-ngul-jin
1MIN.NOM-CM-get 1MIN.NOM-CM-throw-3MIN.OBL
nga-n-dam ni-mirl-uk jin
1MIN.NOM-CM-hit 3MIN-nose-LOC 3MIN.OBL
'My dog followed me, and so I picked up a stone and threw it, hitting it on the snout.'

-DAM and *hit* show differences in use and meaning. In particular, -DAM 'hit'—like the 'hit' verb in most Australian Aboriginal languages (Dixon 1980:103)—can be used in the sense 'kill':

(11–304) *i-ngi-rr-dam jin babarl i-n-dam-uk*3NOM-PST-AUG-hit 3MIN.OBL brother 3NOM-CM-hit-LOC *jin babarl*3MIN.OBL brother
'They killed his brother because he killed their brother.'

The 'kill' sense may be made explicit by inclusion of the word *karrkuj* 'fatally, mortally', as in (11–305) and (11–306). This word almost always follows the IV -DAM 'hit' and does not occur in syntactic contexts typical of PVs; it is almost certainly not a PV, and does not form a CVC with -DAM 'hit'. More likely, *karrkuj* 'fatally, mortally' serves either as a secondary predicate on the Undergoer or as a non-participant Medium (roughly, a cognate object); a

deeper knowledge of the lexical item *karrkuj* 'fatally, mortally' is required to decide between these alternatives.

- (11–305) wamb-en in-dam worinj djen gargodj wamb-in i-n-dam uriny jin karrkuj man-ERG 3NOM-CM-hit woman 3MIN.OBL fatally 'The man slew his wife.' (Nekes & Worms 1953:578)
- (11–306) ngay-in nga-n-dam arri nga-l-dam-an karrkuj 1MIN.CRD-ERG 1MIN.NOM-CM-hit not 1MIN.NOM-IRR-hit-IMP fatally 'I only hit him; I didn't kill him.'

The primary corpus shows no unequivocal instances of -DAM 'hit' in collocation with a PV; the secondary corpus, however, does have a few. All bar one of them refers to violent action involving impact on an Undergoer: *barngan* (*barŋan*, *paringen*) 'slay, split to splinters' (example (11–307)); *daa* (*da*, *tahe*) 'hammer in nail' (example (11–308)); *wiiban* (*wiepan*) 'scourge' (example (11–309)). ⁵⁰

- (11–307) baṛ-ŋan in-dam maler djen wamb-en barngan i-n-dam malirr jin wamb-in slay 3NOM-CM-hit wife 3MIN.OBL man-ERG 'The man slew his wife.' (Nekes & Worms 1953:364)
- (11-308)da eŋarrdaman ganbalm njerreg badang, kanbalm-nyirr-ik bardangk daa i-nga-rr-dam-an hammer 3NOM-PST-AUG-hit-IMP fork-COM-LOC tree engerreboran djimben garr-on. indjimban jimbin i-ny-jimb-an i-nga-rr-i-burr-an kaarr-ung 3NOM-PST-die-IMP 3NOM-PST-AUG-CM-bury-IMP inside sand-ALL₁ 'They nailed him to a fork in a tree [literally, 'in a forked tree'], and when he had died, they buried him in the sand.' (From the Apostles' creed)
- (11–309) wiepan nandameo wiiban nga-n-dam-yu scourge 1MIN.NOM-CM-hit-PRS "I scourge him." (Tachon 1895)

Where two forms are given in brackets the first is the form cited in Nekes & Worms (1953), the second being the form in Tachon (1895). In fact, Tachon (1895) gives three other lexical items which are potential candidates for PVs. One is the form *naretsch*, which occurs in a collocation he glosses 'knock down'; my guess is that the word is actually the adverbial *ngarrij* 'hard, energetically'. Not only is this plausible semantically—to knock someone down requires a hard hit—but also it is the expected orthographic representation of the adverbial in his system; further, he gives this same form in other contexts where it is clearly the adverbial 'hard'. Thus I do not interpret *naretsch* as a PV; however, the possibility that in this particular collocation it is classified by -DAM 'hit' cannot be entirely ruled out. A second is *bakle*, which he glosses 'bark'—i.e. 'debark, remove bark from'; in fact elsewhere in the sketch he gives this as the N for 'bark (of a tree)' (it is also the term for a coolamon made from the bark of this same (one presumes) tree). So the collocation is probably not a CVC, but an 'object-verb' one. A more difficult problem is posed by the collocation *korng madaman kongo*, glossed 'bold, a (asking)'—an uninterpretable gloss, in a three word collocation, only the second of which is identifiable.

The one apparently exceptional PV is *benben* 'shine', as illustrated by the following example:

(11–310) benben in-dam ngalm led-en binbin i-n-dam nga-alm liid-in shine 3NOM-CM-hit 1MIN-head fat-ERG 'My hair shines with fat.' (Nekes & Worms 1953:382)

How this fits with the other collocations with -DAM 'hit' is uncertain, as indeed is the analysis of the clause: it may be either a transitive clause or a medio-active external possession construction (see §12.4.2.4.1). More literal meanings would then be 'the fat hits my hair shiny' and 'my hair (was) hit shiny by the fat', respectively.

One suspects that it would be possible to provide a coherent characterisation of the semantics of the event category carved out by this IV; but there is little point doing so with the scanty data available.

11.5.2 -JAL 'see'

This formally transitive IV occurs in SVCs with the meaning 'see' or 'look'. The 'see' sense is typically invoked in transitive clauses, as in (11–311), the 'look' sense typically in middle clauses, as in (11–312). (See further §13.4.2.2 on complex sentences with this IV.)

- (11–311) ngay-in-manjan nga-ni-ny-jal warinjirr wamb 1MIN.CRD-ERG-only 1MIN.NOM-CM-PST-see one man 'I only saw one man.'
- (11–312) wa-n-jal-jan 2MIN.NOM-CM-see-1MIN.OBL 'Look at me.'

These two senses do not, however, correlate precisely with the contrast in transitivity, as (11–313) demonstrates. Here the 'look' sense is invoked in a transitive clause (if it were middle, -JAL 'see' would have hosted an oblique pronominal enclitic). This is in fact an external possession construction (see further §12.4.2.4.1).

(11–313) jalngkangurr-in i-ni-ny-jal ni-lirr-ik jin doctor-ERG 3NOM-CM-PST-see 3MIN-mouth-LOC 3MIN.OBL 'The doctor looked into his mouth.'

As far as I can tell, -JAL 'see' cannot occur in an ordinary intransitive clause (except in its reflexive/reciprocal form, on which see below). Reference to the ability to see is represented by a transitive clause in Nyulnyul containing a 'dummy object' filled by *bur* 'place', as illustrated by (11–314) (see also p. 441 above). In fact, *bur* 'place' is used in this way when there is no specific entity that is the target to be observed, as in (11–315). (See further McGregor 2007d.)

(11–314) bin wamb bambur arri bur i-la-jal that man blind not place 3NOM-IRR-see 'That man is blind; he can't see.'

(11-315) bur wa-n-jal *i-li-rr-dam-yay* place 2MIN.NOM-CM-see 3NOM-IRR-AUG-hit-1&2MIN.ACC 'Watch out, they might hit us.'

The reflexive/reciprocal form of -JAL 'see' admits both reflexive interpretations 'see/ look at oneself' (example (11–316)) and reciprocal interpretations 'see/look at one another' (example (11–317)). This derived form, which typically occurs in an intransitive clause, also admits the non-perceptual sense 'look out for' or 'take care of', as in (11–318).

- (11-316)waringkil baab i-nga-ma-jal-inyj girl child 3NOM-PST-REF_p-see-REF_s 'The girl looked at herself.'
- i-ngi-rr-mi-jal-inyj kujarr warinyjirrr (11-317)3NOM-PST-AUG-REF_p-see-REF_s two each:other 'The two of them looked at each other.'
- (11-318)kinyingk-manjan i-ma-jal-inyj DEF-only 3NOM-REF_p-see-REF_s 'He only thinks of himself.'

A very similar sense is associated with the formally transitive reduplication -JALAJAL 'look after':

- (11-319) ngay-in nga-na-jalajal arri nga-la-karrmar 1MIN.CRD-ERG 1MIN.NOM-CM-look:after not 1MIN.NOM-IRR-break 'I will look after it; I won't break it.'
- (11-320)yaward-id i-ni-ny-jalajal buluman in-in this-ERG horse-CHAR 3NOM-CM-PST-look:after cattle 'The stockman looked over the cattle.'

Although these are events of continual vigilance involving sight as the primary sense, examples do exist in which other sensory modalities are more central:

(11-321) wa-n-jalajal kiinyj-in yu-ngku-ming-juy 2MIN.NOM-CM-look:after bone-ERG 3NOM-FUT-choke-2MIN.ACC 'Be careful or the bone will choke you.'

No more than half a dozen PVs are attested in CVCs with the IV -JAL 'see'. The primary corpus shows collocations with mungurr 'be jealous of', as in (11-322) and (11-323) and wukul 'pity', as in (11–324). Both occur in transitive clauses, as these examples illustrate.⁵¹ Only the second of these PVs is represented in the secondary corpora.

(11-322)warang-in karrambal / mungurr i-ngi-rr-jal / others-ERG bird jealous 3NOM-PST-AUG-see 'The other birds were jealous of it.'

⁵¹ Interestingly, the corresponding verb in the English of my Nyulnyul teacher is also transitive, as illustrated by her translation of (11–324): 'The other birds jealoused it'.

- (11–323) bina baab mungurr i-n-jal-in jin babarl this child jealous 3NOM-CM-see-PRS 3MIN.OBL brother 'This child is jealous of his brother.'
- (11–324) nyungul-in uriny wukul i-ni-ny-jal-irr old:man-ERG woman pity 3NOM-CM-PST-see-3AUG.ACC 'The old woman pities them.'

It is not suggested here that jealousy and pity are construed in Nyulnyul as involving visual perception; indeed, *mungurr* 'jealous' and *wukul* 'pity' do not modify -JAL 'see' as in 'look at jealously' and 'look at pityingly'. Rather, it seems more plausible that -JAL 'see' serves as a category marker for a small class of mental or emotional experiences that are inherently directed towards, or experienced with respect to, another individual.

The secondary corpora show *ŋadj* with -JAL 'see' in a collocation glossed 'to look with pleasure at a thing, to be fond, to like' (Nekes & Worms 1953:772). Unfortunately, however, no Nyulnyul examples are given, and I am suspicious that the first element of their gloss is a literal translation, and that the second two components are more accurate renditions of the meaning, as the following Jabirrjabirr example suggests:

(11–325) *nadj nan-djalen walg dje-djer* Jabirrjabirr *ngaj nga-n-jal-in waalk jii-jirr* with:pleasure 1MIN.NOM-CM-see-PRS sun 2MIN.OBL-EMP 'I like your watch.' (Nekes & Worms 1953:861)

The secondary sources show one further PV in collocation with -JAL 'see', not exemplified in the primary corpus, budjol 'stare':⁵²

(11–326) areang budjol mile-djal nai arriyangk bujul mi-li-jal-ngay nothing stare 2MIN.NOM-IRR-see-1MIN.ACC 'Do not stare at me.' (Nekes & Worms 1953:396)

Tachon (1895) gives the following example, which might be a CVC, although it seems more likely that it involves an SVC, with the adverbial *jukar* 'softly, quietly' as a dependent on the IV -JAL 'see'.

(11–327) tiugara nandialeo jukar nga-n-jal-yu softly 1MIN.NOM-CM-see-PRS "I am spying." (Tachon 1895)

There are too few PVs attested in collocation with -JAL 'see', and too few tokens of such collocations to permit us to provide a precise specification of the semantics of the -JAL 'see' category.

⁵² The transitive IV -JIBAJIB also conveys the meaning 'stare'; the meaning contrast with the PV is unclear. It is interesting, however, that the IV remains in the speech of the last speaker, while the PV is not attested.

11.5.3 -JALK 'fall'

As a simple verb, -JALK refers to vertical motion in a downward direction, and normally glosses as 'fall'; in some cases it can also be interpreted as 'lie down', where the motion event is being referred to, not the final state. Thus, the verb is not specific as to whether or not the motion is controlled, though typically it is not. These two senses are illustrated in the following examples. In the first the most natural interpretation is that the person was not in control of the event; in the second, the moving item is inanimate, and incapable of control; and in the third and fourth examples the persons are in full control.

- (11–328) *i-ny-jalk* badangk-akun 3NOM-PST-fall tree-ABL₂ 'He fell out of the tree.'
- (11–329) biscuit i-ny-jalk-ajan bur-ung biscuit 3NOM-PST-fall-1MIN.OBL ground-ALL₁ 'My biscuit fell onto the ground.'
- (11–330) kurr kujarr wa-rr-jalk
 2AUG.CRD two 2AUG.NOM-AUG-fall
 'Lie down you two.'
- (11–331) rarrb-rarrb nga-n-nyu jan bur smooth-smooth 1MIN.NOM-CM-catch 1MIN.OBL camp nga-ny-jalk ma-mulk-un-ung 1MIN.NOM-PST-fall INF_p-sleep-INF_s-ALL₁ 'I smoothed out a place and lay down to sleep.'

Items that are generally conceived of as standing—including trees, houses, and the like—may also fall down, and enter a new positional state, as (11–332) illustrates. Similarly, where some entity comes into being in a positional state of lying down (greater horizontal than vertical extent—see §12.3.1.2) the IV -JALK 'fall' may be used, even when vertical motion is not involved. Thus mist can be said to fall on the country, as in (11–333). Finally, as (11–334) illustrates, change of state, rather than position may be involved.

- (11–332) bin-ik i-nga-n-an mayar banangkarr-uk
 this-LOC 3NOM-PST-be-IMP house today-LOC
 arri-jin i-ny-jalk-an
 not-3MIN.OBL 3NOM-PST-fall-IMP
 'There used to be a house standing over there; today there is nothing. It fell.'
- (11-333)lamaman in-djalg nimber, bōr djaman genjdj lamaman i-ny-jalk ngimbirr bur jaman kiinyi mist 3NOM-PST-fall night place all shut yalar-djal in-am, are bōr ya-la-rr-jal i-na-m arri bur 3NOM-CM-put not place 1PL.NOM-IRR-AUG-see "Mist fell last night, it covered the whole country that we could not see a spot." (Nekes & Worms 1953:640–641)

(11–334) arri nga-la-karrmar-an i-ny-jalk murru-murrul not 1MIN.NOM-IRR-break-IMP 3NOM-PST-fall little-little nga-marl-uk
1MIN-hand-LOC
'I didn't try to break it; it fell to pieces in my hand.'

The four PVs collocating with -JALK 'fall' in my own corpus all refer to directions of bodily movement or orientation: *walirr* 'on the back', *rumbu* 'forwards', *bumbu* 'on the stomach', and *yirl* 'on the side'. None of these PVs is used in reference to horizontal motion in any of the implied directions: forwards, backwards and sideways movement is referred to by different PVs. (11–335)–(11–338) are illustrative.

- (11–335) wara baab walirr i-ny-jalk one child back 3NOM-PST-fall 'One of the boys has fallen on his back.'
- (11–336) rumbu nga-ny-jalk forwards 1MIN.NOM-PST-fall 'I fell forwards.'
- (11–337) *i-ny-jalk bumbu*3NOM-PST-fall on:stomach 'He lay on his stomach.'
- (11–338) *i-ny-jalk* yirl 3NOM-PST-fall side 'He lay on his side.'

The above examples suggest that CVCs involving the IV -JALK 'fall' involve three essential components:

- (a) vertical motion;
- (b) achievement of a new position in which the moving entity is oriented horizontally; and
- (c) telicity of the event.

The relevance of telicity is borne out by comparison with CVCs involving the same PVs and different IVs. For instance, *walirr* 'on the back' also collocates with -N 'be', in which case the CVC expresses a purely static meaning:

(11–339) walirr i-n-in kinyingk jiwarr kinyingk-uk
on:back 3NOM-be-PRS DEF dead:body DEF-LOC
nga-n-di-jin warinjirr wamb christmas creek-jun
1MIN.NOM-CM-say-3MIN.OBL one man Christmas Creek-ABL₁
wamb
man
"He's lying here on his back, the dead one," I told a man from Christmas
Creek.'

Of these four PVs only *walirr* 'on the back' and *yirl* 'on the side' are cited in the secondary sources, and then without examples. Nekes & Worms (1953:931) do, however, exemplify *yirl* 'on the side' with -JALK 'fall' in Jabirrjabirr. Nekes & Worms (1953) also mention another bodily-orientation PV, *banngal* which they gloss 'on stomach, on face':

```
(11–340) banŋal in-djalg bāb
banŋal i-ny-jalk baab
on:stomach 3NOM-PST-fall child
'The child lies on (its) stomach, or face.' (Nekes & Worms 1953:360)
```

The other PVs mentioned in the secondary sources as collocating with -JALK 'fall' are: *jimal* 'calm'; *ngid* 'clatter, thud'; *wilwil* 'faint'; and *labayil* 'fail'. None of these PVs occur in the primary corpus. Below are the illustrations of these PVs in collocation with -JALK 'fall' from the secondary sources:

```
(11–341) djimel in-djalg bōṛ
jimil i-ny-jalk bur
calm 3NOM-PST-fall country
'The place lies calm.' Or 'There is no breeze.' (Nekes & Worms 1953:480)
```

(11-342)nai-en dod nanan-g ginjing, ηed dud nga-na-ng-k kinyingk ngid ngay-in 1MIN.CRD-ERG punch 1MIN.NOM-CM-PST-carry DEF thud in-djalg i-ny-jalk 3NOM-PST-fall "I gave him a punch, with a thud he fell down." (Nekes & Worms 1953:430)

(11–343) *ned in-djalg badaŋg ngid i-ny-jalk bardangk*clattering 3NOM-PST-fall tree

"The tree fell down with a clattering noise." (Nekes & Worms 1953:795)

(11–344) wel-wel nandialkeo tiawol wilwil nga-ny-jalk-yu jawul faint 1MIN.NOM-PST-fall-PRS uncle?⁵⁴ "I faint." (Tachon 1895) (Perhaps better 'I am fainting, uncle.')

(11–345) labail nandialkeo labayil nga-ny-jalk-yu fail 1MIN.NOM-PST-fall-PRS 'I fail.' (Tachon 1895)

The collocations involving *ngid* 'clatter, thud' and *wilwil* 'faint' are consistent with the description of the semantics of the -JALK 'fall' category suggested above. The CVC with

⁵³ The noise of a tree falling would seem to be more appropriately described as a thud, as per the previous example.

⁵⁴ Although unattested elsewhere in my corpus, this could be a borrowing from Bardi, where *jawool* means 'uncle, mother's brother, sister's son' (Claire Bowern pers.comm.).

jimal 'calm' also seems consistent, although vertical motion is not involved. Significantly, Nekes & Worms (1953) indicate that this PV can also collocate with -J 'say, do', as in (11–346). The explanatory glosses they provide suggest that the collocation with -JALK 'fall' refers to the cessation of the wind, a telic action resulting in a state (which can also be referred to in English by *drop*), whereas with -J 'do, say' a more dynamic ongoing meteorological event is referred to—not just a lull in the wind, but sticky, muggy conditions.

```
(11–346) bōṛ djimal in-dj
bur jimal i-n-j
place calm 3NOM-CM-say
'The place is calm'; 'It is sultry.' (Nekes & Worms 1953:480)
```

For the remaining PV, *labayil* 'fail', what may be involved is uncontrolled entry to a state of failure. With (11–345) the only available example it is impossible to pursue matters further.

11.5.4 -JARRIJARR 'arise, stand up'

This formally intransitive ø-class IV is normally found in SVCs, where it refers to the act of standing up by an animate being—it is effectively the reverse of -JALK 'fall' both in direction of movement and control. It always refers to the action, not just to the resulting state:

(11–347) *i-ny-jarrijarr mijal-kun*3NOM-PST-arise sit-ABL₂
'He stood up from sitting.'

The IV is, however, somewhat more semantically general than this, and does not always specify that a state of standing was reached. Thus it is also used in reference to the following: the act of awakening (which might be regarded as fictive vertical motion), as in (11–348); to the rising of the sun, as shown by (11–349); and the act of rising to the surface of water, as in (11–350). (Note that in (11–350) the Actor is ergatively marked, though the clause is intransitive—see §5.2).

- (11–348) *mi-jarrijarr mi-ny-jimb-amad*2MIN.NOM-arise 2MIN.NOM-PST-die-INT
 'Wake up! Are you dead?'
- (11–349) *i-ngalk majilkarr waalk i-ny-jarrijarr-uk*3NOM-cry sunset sun 3NOM-PST-arise-LOC 'She cried from sunset to sunrise.'
- (11–350) linykurr-in i-ny-jarrijarr jiwar-nyirr wamb crocodile-ERG 3NOM-PST-arise dead:body-COM man ni-lirr-uk
 3MIN-mouth-LOC
 'The crocodile got up with the dead man in his jaws.'

The only examples of -JARRIJARR 'arise, stand up' in CVCs come from the secondary corpora, which show just a few examples involving PVs: *gongon* (*kunkun*) 'grow, sprout' (example (11–351)); *ŋanan* (*nganan*) 'silly, childish, dreaming' (example (11–352)); and *wananinj* (*wananinj*) 'nightmare, talking aloud in sleep' (example (11–353)).

- (11–351) gongon i-djaredjar bagang kunkun i-jarrijarr bardangk grow 3NOM-arise tree 'The tree grows.' (Nekes & Worms 1953:466–467, 622)
- (11–352) ginjing ŋanan in-djaredjar
 kinyingk nganan i-ny-jarrijarr

 DEF dreaming 3NOM-PST-arise
 'He was sleep-walking.' (Nekes & Worms 1953:782)
- (11–353) ŋēr ŋanem-bugar ŋimber, wananinj ŋan-djaredjar ngirr nga-ni-m-bukarr ngimbirr wananiny nga-ny-jarrijarr ghost 1MIN.NOM-CM-PST-dream night senseless 1MIN.NOM-PST-arise "Last night I dreamed I saw a ghost; I woke up crying." (Nekes & Worms 1953: 867)

In these CVCs the IV specifies the event as an active one of the arising type, that involves either vertical motion (example (11–351)) or, it would seem, fictive vertical motion ((11–352) and (11–353)). There is no implication that a new state is (or ever will be) reached, as shown by example (11–351). (11–352) and (11–353) require further explanation. Possibly they would be better analysed as secondary predicate constructions: (11–352) would then indicate that the person was in a state of dreaming when they got up (and by inference they were walking in their sleep). (11–353) would suggest that they awoke in a senseless state, suffering the effects of a nightmare. However, it is not clear that the secondary predicate analysis is grammatically viable, and it is not inconceivable that the IV serves as a classifier. Thus agnate CVCs exist in which the same PVs are paired with different IVs, and the contrasts appear to be consistent with categorisation of the events as active arising events (invoking the dimensions of Aktionsart and vectorial configuration) vs (plain) stative and dynamic. Thus contrast (11–352) and (11–353) with (11–354) and (11–355).

- (11–354) nanan i-nen bugar nganan i-n-in bukarr unconscious 3NOM-be-PRS dream 'He talks in his sleep.' (Nekes & Worms 1953:782)
- (11–355) wananinj nan-dj nimber wananiny nga-n-j ngimbirr dreaming 1MIN.NOM-CM-say night 'I was talking in my sleep last night.' (Nekes & Worms 1953:867)

⁵⁵ Indeed, both PVs and CVCs in these examples appear to have been poorly understood by Nekes & Worms (1953), and have the appearance of specifying highly culturally-specific concepts.

Finally, (11–356) possibly also has a CVC, though evidence in favour of the secondary predicate analysis is equally strong.

```
(11–356) irdjowar walg belai nēndj in-djaredjaran irrjiwar waalk bilay ninyj i-ny-jarrijarr-an three sun again alive 3NOM-PST-arise-IMP "The third day he rose again from the dead." (Nekes & Worms 1953:528)
```

11.5.5 -JARRNGAR 'stand (up)'

This IV is poorly attested in both SVCs and CVCs, even more so than -JARRIJARR 'arise, stand up', and it is not certain whether it refers to the act of standing up, to the state of standing, or to both. Examples such as (11–357) suggest that it may refer to the act of standing up, while (11–358) suggests that it can refer to the state of standing.⁵⁶

- (11–357) wirrwirr i-ni-ng-kal i-ny-jarrngar-uk warrij-warrij stagger 3NOM-CM-PST-wander 3NOM-PST-stand-LOC quickly-quickly 'He got dizzy when he stood up quickly.'
- (11–358) *jimbijimb-ang i-ny-jarrngar* akimbo-INS 3NOM-PST-stand 'He stood with arms akimbo.'

Nekes & Worms (1953) also gloss -JARRNGAR as 'to stand', apparently referring to the state, as in the only example they provide of its use in an SVC, (11–359).

```
(11–359) yagan i-djerŋan wamb
yakan i-jarrngarn wamb<sup>57</sup>
roaring:tide 3NOM-stand man
'The man stands in the rushing water.' (Nekes & Worms 1953:917)
```

The only putative CVC with -JARRNGAR 'stand (up)' involves the PV *yaalk* 'stand', as illustrated in (11–360). In the primary corpus, by contrast, *yaalk* 'stand' occurs only with -N 'be'.

```
(11–360) yalg ŋaŋga-djarŋar
yaalk nga-ngka-jarrngar
stand 1MIN.NOM-FUT-stand
'I shall (must) stand upright.' (Nekes & Worms 1953:468)
```

If this construction is indeed a CVC, it perhaps involves a repeater classifier.

⁵⁶ In (11–358) *jimbijimb-ang* (akimbo-INS) 'akimbo(ly)' appears to be serving as an adverbial, rather than as a PV. Other examples of *jimbijimb* 'akimbo' cited in Nekes & Worms (1953) also attest to the status of this word as an adverbial.

^{57 -}JARRNGARN appears to be an alternative present tense form of -JARRNGAR 'stand (up)' (it is also attested in Jabirrjabirr, where it occurs in the same context—Nekes & Worms 1953). Presumably it derives from -*jarrngar-an* through coalescence of the final three segments.

11.5.6 -KARD 'enter'

In the primary corpus -KARD 'enter' occurs only in SVCs, where it shows the meaning 'enter, go in':

- (11–361) angk-ij mi-ng-kard jimbin bur-uk jan what-DAT 2MIN.NOM-PST-enter inside place-LOC 1MIN.OBL 'Why did you go into my house?'
- (11–362) barnd i-ng-kard ngii-m-uk sand 3NOM-PST-enter 1MIN-eye-LOC 'Sand went into my eye.'
- (11–363) nga-nga-mulk-uk kujarr-in wamb jukar 1MIN.NOM-PST-sleep-LOC two-ERG man sneak i-ngi-rr-kard bur-uk jan 3NOM-PST-AUG-enter camp-LOC 1MIN.OBL 'While I slept, two men snuck into my house.'

In SVCs -KARD 'enter' is also used of such environmental phenomena as the setting of the sun or moon (example (11–364)) and the coming in of the tide (example (11–365)).

- (11–364) walg ongo-gad-og galamb mi-djed waalk yu-ngku-kard-uk kalamb mi-jid sun 3NOM-FUT-enter-LOC hither 2MIN.NOM-go 'Come after sun-set!' (Nekes & Worms 1953:535)
- (11–365) naakul i-ng-kard-uk winy i-na-m in dakul tide 3NOM-PST-enter-LOC fill:up 3NOM-CM-put this hole 'The tide came in filling up the hole they had dug with water.'

-KARD 'enter' can also be used metaphorically in reference to the acquisition of language, as in (11–366), and presumably of other abilities and/or knowledge.

(11–366) waredj waredj niler-g yongo-gad nang warrij warrij ni-lirr-uk yu-ngku-kard ngank quick quick 3MIN-mouth-LOC 3NOM-FUT-enter language 'He will soon know our language.' (More literally, 'Language will quickly enter him via the mouth') (Nekes & Worms 1953:535)

Nekes & Worms (1953:545) also mention that this IV can be reduplicated to -KARDAKARD 'go in and out'; this derived form is not attested in CVCs.

The secondary sources show just two PVs in CVCs with -KARD 'enter': wurrb (worb) 'inside, into, within', ⁵⁸ and ngurrngurr (nor nor) 'submerge'. ⁵⁹ Examples are:

⁵⁸ Despite the gloss, I presume that this word is a PV; it is not mentioned elsewhere in Nekes & Worms (1953) as an adverbial, and *jimbin* 'inside, in, down' is the usual adverbial with this meaning. Lack of examples means that we cannot be sure that the construction is a CVC.

⁵⁹ The speaker I worked with consistently employed the adverbial *jimbin* in collocation with -KARD in reference to submerging in the water; there is no reason to consider this collocation as a CVC.

- (11-367)wamb worb ingad bōr-og mal wamb wurrb i-ng-kard bur-uk mal man 3NOM-PST-enter place-LOC exit enter njone-gabin inaŋ-g i-na-ng-k nyune-kabin 3NOM-CM-PST-carry that-side 'The man entered the room, and left it by the other side.' (Nekes & Worms 1953:911)
- (11–368) yor yor yan-gad nagul-og
 ngurrngurr nga-ng-kard naakul-uk
 submerge 1MIN.NOM-PST-enter sea-LOC
 'I was nearly drowned in the sea.' (Nekes & Worms 1953:810)

Both of these collocations are obviously consistent with the lexical meaning of the IV. Nor is there any difficulty in interpreting the grammatical function of the IV as one of classification: the PV is assigned to the type of 'enter' events.

11.5.7 -LAND 'sit (down)'

This formally intransitive IV is found, in the primary corpus, almost exclusively in SVCs where it may refer either to the state of being seated (example (11–369)), or to the act of sitting down (example (11–370)). And, as (11–371) shows, the entity that comes into the seated position need not be a human being: the shape of the fly in its final position presumably motivates treatment as sitting rather than of standing or lying down.

- (11–369) kinyingk baab i-nga-land ngidirrngin ni-mbarrm-uk
 DEF child 3NOM-PST-sit alone 3MIN-armpit-LOC
 kinyingk bardangk
 DEF tree
 'The child sat on the branch of the tree.'
- (11–370) jukar irr-akur i-nga-land slowly 3AUG.CRD-COLL 3NOM-PST-sit 'They all sat down slowly.'
- (11–371) junk nga-n-ny-an mukiny i-nga-landi ngi-mil run 1MIN.NOM-CM-get-IMP fly 3NOM-PST-sit 1MIN-nose 'As I ran a fly landed on my nose.'

In one example, from Text 2, -LAND 'sit (down)' is used in the sense 'stay, remain':

(11–372) kinyingk-uk(?-kun) i-n-di-jin uriny jin arri
DEF-LOC(-ABL₂) 3NOM-CM-say-3MIN.OBL woman 3MIN.OBL not
nga-la-land / arri nga-la-land in-uk bur /
1MIN.NOM-IRR-sit not 1MIN.NOM-IRR-sit this-LOC country
"Then he told his wife, "I can't stay; I can't stay in this country."

Both Tachon (1895) and Nekes & Worms (1953) give -LAND 'sit (down)' only active glosses, 'seat oneself' and 'sit down', respectively. Examples such as the following,

however, show that even in the secondary corpora not only may this IV refer to the act of sitting down, but also the subsequent state—indeed, presumably both together as a single event, granted the most natural interpretation of (11–374).

```
(11–373) nanmor-og mine-landan morol-gar
nga-nmur-uk mi-nga-land-an murrul-karr
1MIN-lap-LOC 2MIN.NOM-PST-sit-IMP small-TEM
'You were sitting on my lap when you were small.' (Nekes & Worms 1953: 642–643)
```

```
(11–374) ongo-land bāb njanmor-og
yu-ngku-land baab nya-nmur-uk
3NOM-FUT-sit child 2MIN-lap-LOC
'Let the child sit on your lap!' (Nekes & Worms 1953:642–643)
```

The primary corpus contains just a single example in which -LAND 'sit (down)' occurs with a PV in what might possibly be a CVC—and even this is an uncertain example since the PV occurs after the IV rather than in its usual place before the IV:

```
(11–375) nga-nga-land mijal nga-mal-uk
1MIN.NOM-PST-sit sit 1MIN-arm-LOC
'I sat on my hands.'
```

However, the secondary corpus also contains at least one example of this collocation in the usual order:

```
(11–376) midjal mi-land
mijal mi-land
sit 2MIN.NOM-sit
'Sit down!' (Nekes & Worms 1953:706)
```

Two other PVs are attested in collocation with -LAND 'sit (down)' in the secondary corpora, both of which refer to bodily postures: *djindin* 'squat, sit down with toes only on ground, buttocks on heels', and *mirdimird* 'kneel, bend down'. (The latter is given in both Nekes & Worms 1953 and Tachon 1895, the former in Nekes & Worms 1953 only.) These are illustrated in the following examples:

```
(11–377) djindi mi-land
jindin<sup>60</sup> mi-land
squat 2MIN.NOM-sit
'Sit down!' (Nekes & Worms 1953:485)
```

(11–378) midimid ŋa-landen
mirdimird nga-land-in
kneel 1MIN.NOM-sit-PRS
'I am kneeling.' (Nekes & Worms 1953:705)

⁶⁰ Nekes & Worms (1953:485) give this example under the headword *djindin* 'squatting'; the missing final nasal in the example sentence is presumably a typo.

11.5.8 -MUUR 'pour, spill'

This formally ambitransitive IV designates a motion event involving something that moves in an uncontrolled streaming fashion, as is typical of a liquid. The streaming thing occurs as intransitive subject or transitive object:

- (11–379) wōl i-moran wul i-muur-an water 3NOM-pour-PRS 'Water is pouring out.'
- (11–380) worinj-en in-moran wōl gudjil-gong uriny-in i-n-muur-an wul kujil-kung woman-ERG 3NOM-CM-pour-PRS water shell-ABL₃ 'The woman pours water out of a shell.'

The IV -MUUR 'pour, spill' is also used in reference to the natural or induced movement of bodily effluvia, in a way that the English glosses *spill* and *pour* are not:

- (11–381) kunbul i-nga-muur blood 3NOM-PST-pour 'He bled.' (Literally: 'Blood poured.')
- (11–382) karrirr nga-na-muur ngi-lirr-kun saliva 1MIN.NOM-CM-pour 1MIN-lip-ABL₂ 'I spat from my mouth.'

As is the case for the English verb *pour*, it is not essential that the moving item be a liquid; it can be any other substance that can be construed as a mass moving in a liquid-like fashion. Hence, in (11–383) things in a coolamon are said to pour out: some types of coolamon are used for holding small things like berries that collectively move like liquids. (11–384) and (11–385) are corresponding transitives. The last of these examples perhaps invokes a more metaphoric sense of pouring out, and further suggests wastage, although this is doubtless an inferred rather than a coded meaning.

- (11–383) malbol ine-mor djan bindjen-gong
 malbul i-nga-muur jan binjin-kung
 things 3NOM-PST-pour 1MIN.OBL coolamon-ABL₃
 'Things have fallen from my coolamon.' (Nekes & Worms 1953:734–735, who
 give the rather inadequate free translation "My trough capsized.")
- (11–384) nga-na-muur kinyingk rubbish birndany-uk bin 1MIN.NOM-CM-pour DEF rubbish big-LOC bin 'I put (poured, tipped) the rubbish into the big bin.'
- (11–385) kumbarr jirr-irr i-rr-a-muur-in kari-uk money 3AUG.OBL-EMP 3NOM-AUG-CM-pour-PRS beer-LOC arri-jirr wilamay-ung not-3AUG.OBL food-ALL₁ 'They wasted their money on grog, they had none for food.'

-MUUR 'pour, spill' is also used of non-liquid bodily products that emerge or are evacuated in a stream of entities the separate identities of which are irrelevant. This is illustrated in the following examples:

- (11–386) *karrambal-in i-na-muur lakurr* bird-ERG 3NOM-CM-pour egg 'The bird laid eggs.'
- (11–387) inmureo lagor dien karambal i-n-muur-yu lakurr jin karrambal 3NOM-CM-pour-PRS egg 3MIN.OBL bird 'The bird lays eggs.' (Tachon 1895:32)
- (11–388) yēl wōb inen-mor yil wub i-ni-muur dog young 3NOM-CM-pour 'The dog brought forth young.' (Nekes & Worms 1953:734–735)
- (11–389) murrul baab wurrumbadang i-n-d-in jarringk jin little child big 3NOM-CM-say-PRS tooth 3MIN.OBL i-rr-muur-in 3NOM-AUG-pour-PRS 'As a child gets a older, their (first) teeth come out.'

Many of the examples cited above, especially (11–389), show an element of lack of control over either the performance of the event, or the path of the moving entity.

This IV almost always occurs in SVCs. The primary corpus shows just a couple of examples with a single PV, *warnj* 'exchange'; (11–390) is one of them. Observe that it is the transitive form of the IV that occurs in this collocation. In the secondary corpora, -MUUR 'pour, spill' occurs exclusively in SVCs.

(11–390) warnj i-na-muur wilamay exchange 3NOM-CM-pour food 'He shared the food.'

11.5.9 -NGANK 'speak'

This IV is interesting for a number of reasons. To begin with, it is homophonous with the N ngank 'word, story, language', which is illustrated by examples (11–391)–(11–393). How the two forms are related is uncertain, and it is impossible to decide between the following two analyses on the basis of known facts: (a) there is a single lexical root ngank belonging to both classes, the difference in meaning being a consequence of the different morphosyntactic environments in which the lexeme occurs; or (b) there are two distinct but homophonous lexical roots, an N and an IV. As far as I am aware, this is the only instance of potential overlap between the two parts-of-speech, nominals and preverbs.

- (11–391) nai-en nan-au ibal nang ginjing ngay-in nga-na-w iibal ngank kinyingk 1MIN.CRD-ERG 1MIN.NOM-CM-give father word DEF 'I gave that word to Father.' (Nekes & Worms 1953:785–786)
- (11–392) *ya-nga-rr-a-r ngank kinyingk-ung wamb* 1PL.NOM-PST-AUG-CM-poke word DEF-ALL₁ man 'We wrote words for him.'
- (11–393) yang mi-yang njol njol ngank mi-ngank Nyulnyul language 2MIN.NOM-speak Nyulnyul 'Speak Nyulnyul.' (Nekes & Worms 1953:820)

The same form, *ngank*, is also found with the instrumental postposition -*ang* (on which see §5.3) in CVCs, where it serves as a PV. As in examples (11–394)–(11–395), *ngank-ang* always collocates with the IV -M 'put', and carries the meaning 'speak to'; the clause in which it occurs is apparently transitive.⁶¹

- (11–394) ngank-ang nga-na-m kinyingk wamb ngay-in word-INS 1MIN.NOM-CM-put DEF man 1MIN.CRD-ERG 'I spoke to the man.'
- (11–395) wamb-in arri ngank-ang i-la-m jin yalirr man-ERG not word-INS 3NOM-IRR-put 3MIN.OBL mother-in-law 'He shouldn't speak to his mother-in-law.'

The corresponding IV -NGANK 'speak' is formally intransitive and a ø-class IV, and the SVCs in which it occurs are restricted to intransitive and middle clauses. In intransitive clauses this IV means 'speak' or 'talk', as in (11–396) and (11–397); there may be a non-participant Medium (roughly, cognate object), as in (11–393) and (11–398). The latter example also shows that an addressee can be included in the clause, here in an ALL₁ NP; the sense is then 'talk to'. However, the addressee is not necessarily so marked, and may be represented by an unmarked NP as in (11–399): there may be a meaning difference relating to the effectiveness of the communication, perhaps comparable with the contrast between English 'speak/talk at' and 'speak/talk to'.

- (11–396) ange bāb i-ŋangen ben angk baab i-ŋangen bin what child 3NOM-speak-PRS that 'Which child is talking there?' (Nekes & Worms 1953:786)
- (11–397) *ni-labab-uk i-ngank*3MIN-ear-LOC 3NOM-speak
 'He talked in an ear.'

61 This is certainly the case for example (11–394); for (11–395), however, it is not entirely certain whether *jin* 3MIN.OBL is an enclitic, in which case the clause would be middle, or a free word, in which case it would be transitive.

- (11–398) biird kujarr uriny i-nga-rr-ngank-an worraarra yesterday two woman 3NOM-PST-AUG-speak-IMP Worrorra ngank ngay-ung language 1MIN.CRD-ALL₁ 'Yesterday the two women spoke Worrorra to me.'
- (11–399) arri i-li-rr-ngank nyungul-nyungul baan not 3NOM-IRR-AUG-speak old-old like:that 'They shouldn't talk to their elders like that.'

If the Actor is non-singular in number, it can have a reciprocal-like meaning, 'speak together', 'talk together'—though the IV never takes the reflexive/reciprocal derivational affixes—as in example (11–400).

(11–400) juy aa ngay ya-nga-rr-ngank milirrkarr 2MIN.CRD and 1MIN.CRD 1PL.NOM-PST-AUG-speak before 'You and I spoke together before.'

In addition to these senses, -NGANK 'speak' can also, according to Nekes & Worms (1953:786), convey the senses 'preach' (though the only example provided is in Yawuru) and, in middle clauses, 'take sides with'—i.e. 'speak for (someone)'—as in (11–401).

(11–401) nai-en na-nang-en djen ngay-in nga-ngank-an-jin 1MIN.CRD-ERG 1MIN.NOM-speak-PRS-3MIN.OBL 'I take sides with him.' (Nekes & Worms 1953:786)

Various adverbial and nominal units can be added to clauses with this IV to specify a feature of the speech act, as in (11–402)–(11–404); these are not CVCs, however. (11–402) apparently involves a Medium (cognate object) *niyarr-nyirr ngank* (taste-COM speak) 'tasty (nice) words'; in (11–403) *jukar* 'soft' probably serves as an adverbial modifier of the IV (see §11.6); and in (11–404) *biin-id* perhaps serves as a non-participant Medium (here 'cognate subject')—Nekes & Worms (1953) gloss *biin-id* as 'obscene talker', rather than as 'obscene words' (although this is uncertain: *-id* can serve as both an agentive and patientive derivational marker).

- (11–402) niar-njer i-ŋangen niyarr-nyirr i-ngank-an taste-COM 3NOM-speak-PRS "He has a nice voice." (Literally, 'He speaks nice (words).') (Nekes & Worms 1953:786)
- (11–403) kurr kujarr arri ku-li-rr-ngank jukar 2AUG.CRD two not 2AUG.NOM-IRR-AUG-speak soft 'Don't you two whisper.'
- (11–404) bīn-ed i-ŋangan
 biin-id i-ngank-an
 rotten-CHAR 3NOM-speak-PRS
 'He talks obscenely.' (Nekes & Worms 1953:381)

As indicated in Table 11–3, just four PVs are attested in CVCs with -NGANK 'speak', all from secondary sources. These are *tuewar tuewar* 'whisper' (example (11–405)); 62 *tiagar* 'stutter' (example (11–406)); *grālj grālj* 'stutter' (example (11–407)); and *nwon* 'speak (do?) through the nose' (example (11–408))—most likely *ngun* given the reduplicated form cited by Nekes & Worms (1953), *ngonngon* 'speak (do?) through the nose' (example (11–409)). In each of these collocations -NGANK 'speak' appears to retain its lexical meaning, and plausibly categorises the event as one of speaking. The CVC specifies a marked or peculiar manner of speaking.

- (11–405) tuewar tuewar nanangeo juwarr-juwarr nga-ngank-yu whisper-whisper 1MIN.NOM-speak-PRS 'I whisper.' (Tachon 1895)
- (11–406) tiagar namangeo jakarr nga-ngank-yu stutter 1MIN.NOM-speak-PRS 'I stutter.' (Tachon 1895)
- (11–407) grālj grālj i-ŋangen kraaly-kraaly i-ngank-an stutter-stutter 3NOM-speak-PRS 'He stutters.' (Nekes & Worms 1953:634)
- (11–408) nwon nanangeo ngun nga-ngank-yu speak:through:nose 1MIN.NOM-speak-PRS 'I speak through the nose.'
- (11–409) nononon i-nangen wamb
 ngun-ngun i-ngank-in wamb
 speak:through:nose 3NOM-speak-PRS man
 'The man speaks through the nose.' (Nekes & Worms 1953:786)

Tachon (1895) includes a couple of problematic collocations. For instance, he gives *naretsch manangan*—probably *ngarrij ma-ngank-an* (hard INF_p-speak-INF_S)—as meaning 'to prattle'. ⁶³ It is not clear whether the syntagm is a CVC, an adverbial plus IV, or an IV plus a non-participant Medium NP *ngarrij* (*ngank*) 'hard word'. Nekes & Worms (1953: 792) gloss the syntagm as 'speak loudly', suggesting the second analysis, although it is possible that the same lexemes may enter into different types of construction. Another such collocation is:

⁶² Compare the Jabirrjabirr form *djawar djawar (jawarr-jawarr)* 'whisper', cited in Nekes & Worms (1953: 452), and illustrated in collocation with -NGANK 'speak'. (Unfortunately these authors do not provide a cognate Nyulnyul form.) This form bears a very close formal and semantic resemblance to the adverbial *jukar* 'softly', so it may be that this is a reduplicated adverbial, rather than a PV. It is impossible to decide the issue given the small amount of information available.

⁶³ As Claire Bowern (pers.comm.) has suggested to me, the 'prattle' sense may emerge as an implication from 'speak hard', first via an implication of quantity ('much'), then via an implication of excessive quantity ('too much').

(11–410) manangan dien kiniek tiugara ma-ngank-an-jin kinyingk jukar(r)a INF_p-speak-INF_S-3MIN.OBL DEF softly? "to honour" (Tachon 1895)

I can suggest no satisfactory explanation for this example, unless the final word is the adverbial *jukar* 'softly': it is not implausible that the honouring sense derives from the fact that it involves speaking softly. (Soft speech, for instance, is a widespread characteristic of avoidance registers in Australian languages.)

11.5.10 -NGUL 'throw'

This formally transitive IV usually occurs in SVCs, and refers to events of launching something into a trajectory. Perhaps more accurately, an entity is induced to move by an instantaneously applied force setting it off in a trajectory in which it moves without the application of further energy. Some typical examples are:

- (11–411) juy-in arri mi-la-ngul-an riib way 2MIN.CRD-ERG not 2MIN.NOM-IRR-throw-IMP bad away 'You didn't throw the rubbish away.'
- (11–412) *yaward-in i-na-ngurl wamb* horse-ERG 3NOM-CM-throw man 'The horse threw the man.'
- (11–413) god-en ingo-ŋol dje djuŋg-og rēb-ēdj god-in i-ngku-ngul-jii jungk-uk riib-ij god-ERG 3NOM-FUT-throw-2MIN.ACC fire-LOC bad-DAT 'God will throw you in the fire for the sin.'

It is possible to add an NP representing a person who the projectile is thrown towards. This is represented by an unmarked NP that is cross-referenced by an oblique pronominal enclitic in the IV, as in (11–414). In one example cited in Nekes & Worms (1953), the recipient is cross-referenced by an oblique pronominal and the projectile is represented by an NP marked by the instrumental postposition; this is repeated as example (11–415) below.

- (11–414) *miid-in baab kumbarr i-na-ngul-jin warringkil* male-ERG child stone 3NOM-CM-throw-3MIN.OBL girl 'The little boy threw a stone at the girl.'
- (11–415) are mile-ŋol djān badaŋg-aŋ arri mi-la-ngul-jan bardangk-ang not 2MIN.NOM-IRR-throw-1MIN.OBL stick-INS 'Do not throw me with a stick.' (Nekes & Worms 1953:801)

Corresponding to these examples is an applicative construction in which the recipient is cross-referenced by an accusative enclitic—ø 3MIN.ACC in (11–416). Comparison of this example with examples (11–414) and (11–415) reveals clearly the semantic feature proposed in §12.3.2.4 for the applicative: a close association between two entities involved

in the situation. Thus, (11–416) obviously refers to a situation in which the thing moved reaches its intended recipient, whilst there is no such implication in (11–414) or (11–415).

(11–416) wamba ŋane-ŋol-aŋ mili mil wamb nga-na-ngul-ang milimil man 1MIN.NOM-CM-throw-APP paper 'I handed a letter to the man.' (Nekes & Worms 1953:801)

Finally, it should be mentioned that there is no necessity for the projectile to undergo translational motion.

- (11–417) wangal i-m-bilk wajamarr mayar
 wind 3NOM-PST-strengthen later house
 i-na-ngul band-uk
 3NOM-CM-throw ground-LOC
 'The wind strengthened until it knocked the building down.'
- (11–418) *junk i-n-nyu-uk in baab i-na-ngul* run 3NOM-CM-catch-LOC this child 3NOM-CM-throw 'He ran past and knocked the child over.'
- (11–419) *in-in wiliwil i-na-ngul lak jimbin i-ng-kard* this-ERG cyclone 3NOM-CM-throw boat down 3NOM-PST-enter 'The cyclone sank the boat.'

In the primary corpus this IV is attested with just one PV, namely *ngir* 'breathe', and in just a single example:

(11–420) yay ngir ya-ngku-ngul 1&2MIN.CRD breathe 1PL.NOM-FUT-throw 'We two (me and you) will take a breath.'

In a number of other examples, ngir 'breathe' collocates with -J 'say, do', as in:

(11–421) *ngir i-n-j* breathe 3NOM-CM-say 'He breathed.'

Although it is impossible to be certain of the semantic contrast between the two collocations, it seems likely that the collocation with -J 'say, do' refers to the normal activity of breathing, whereas the collocation with -NGUL 'throw' designates the more marked act of deliberately exhaling and/or inhaling a breath of air.

The secondary corpora show two probable collocations involving -NGUL 'throw'. One is with the PV $w\bar{a}nj$ 'begift, present' (example (11–422)), the other with the PV balar 'shine' (example (11–423)).

(11–422) wāṇdj wane-ŋol djer mai warnj wa-na-ngul-jirr may begift 2MIN.NOM-CM-throw-3AUG.OBL food 'Give them food!' (Nekes & Worms 1953:801)

```
(11–423) gunjul balar
                          inen-nol
          kunyul balar(r) i-na-ng-ngul
                          3NOM-CM-PST-throw
          moon shine
          'The moon shines.' (Nekes & Worms 1953:342)
```

As is the case for other IVs that are highly restricted in terms of their combinatorial potential, so also for -NGUL 'throw' is it the case that its lexical meaning in CVCs remains virtually intact. Alternatives to the classification analysis exist. It might be suggested, for instance, that examples like (11-420), (11-422) and (11-423) involve metaphoric usage of -NGUL 'throw' in an SVC, rather than as a classifier in a CVC. I conclude this section with one other collocation involving -NGUL 'throw', which is even less certain as an instance of a CVC:

```
(11-424)
           gunjul wororaln
                                   inen-noln
           kunyul wur(r)ar(r)alng i-na-ng-ngul
           moon new:moon<sup>64</sup>
                                   3NOM-CM-PST-throw
           'The new moon is shining.' (Nekes & Worms 1953:913)
```

11.5.11 -WANYJ 'climb'

This IV is instanced just once in an SVC in the primary corpus, in its infinitival form mawanyj-an 'to climb, climbing', example (11–425); more usually CVCs are employed to indicate climbing events. The direction of movement is unspecified.

```
(11-425)
            ma-wanyj-in-ang
                                    bardangk arri layib
             INF<sub>p</sub>-climb-INF<sub>s</sub>-INS tree
                                                 not
                                                       good
             'Climbing trees can be dangerous.'
```

The IV -WANYJ 'climb' is cited a few times in the secondary corpora, though not, in the example sentences, in an SVC. In the majority of examples in the secondary sources -WANYJ 'climb' occurs with the PV lakal 'climb up', in a CVC that specifically refers to climbing in an upwards direction:

```
(11-426)
          galb lagal
                         mi-wanj
                                          badang-og
          kalb lakal
                                          bardangk-uk
                         mi-wanyi
                climb:up 2MIN.NOM-climb tree-LOC
          'Climb up the tree!' (Nekes & Worms 1953:546–547)
```

(11-427)are lagal mile-wanj badang-og arri lakal *mi-li-wanyj* bardangk-uk not climb:up 2MIN.NOM-IRR-climb tree-LOC 'Do not climb up the tree.' (Nekes & Worms 1953:334)

Granted that the collocation is a CVC, -WANYJ 'climb' effectively serves as a repeater classifier. In the primary corpus the PV lakal 'climb up' collocates not with -WANYJ 'climb', but exclusively with -J 'say, do', except when it is marked by the stem-forming suffix -kaj CONT, in which case it collocates with -N 'be'.

⁶⁴ Nekes & Worms (1953) inconsistently gloss this word as 'new moon' and 'new light'; the word is not attested elsewhere, so it is impossible to tell which is the better gloss.

- (11–428) *yiil lakal i-n-j kalb modikard-uk* dog climb:up 3NOM-CM-say up car-LOC 'The dog climbed onto the truck.'
- (11–429) *lakal-kaj mi-n-in* climb-CONT 2MIN.NOM-be-PRS 'You are climbing.'

The only other apparent PV attested with -WANYJ 'climb' is *jamal-jamal* (*tja'mal*) 'agile, agility', although as illustrated in the following example it is not certain that the pair together form a CVC:

(11–430) tja'mal tja'mal nan'wanjeo jamal-jamal nga-n-wanyji-yu agile 1MIN.NOM-??-climb-PRS 'I climb agilely.' (Tachon 1895)

11.6 Adverbial modification

In Chapter 6 three grammatically distinct types of adverbial (a rag-bag category, it will be recalled) were distinguished: adverbs, spatial adverbials, and temporal adverbials. The latter two types seem to modify the entire nucleus of the clause, indicating a feature of the referent situation; by contrast, adverbs modify just the verb, not the entire clause; they provide information about the manner in which the referent event was performed. Alongside this difference in meaning, there is a corresponding formal difference between adverbs and the two classes of adverbials: the latter two groups express the sort of meanings also expressed by PPs, which they enter into paradigmatic relations with; adverbs do not contrast paradigmatically with PPs. Moreover, spatial and temporal adverbials sometimes form complex units with PPs; adverbs do not.

Adverbs form a separate part-of-speech, distinct from PVs. The two parts-of-speech typically enter into different constructions, and serve different grammatical functions in them (although admittedly there are some instances that are not easy to classify). PVs provide the primary lexical specification of the event; the IV they collocate with categorises the PV, and together the two form a complex lexical expression designating the Event. Adverbs, by contrast, never specify the event, but rather indicate a quality of it; they serve as modifying dependents in the VP. Specifically, they are dependents on the IV in SVCs, and dependents on the PV-IV collocation in CVCs. Three main differences in grammatical behaviour lend support to these claims.

First, adverbs are hypotactic dependents on the IV or CVC, and their presence is optional: whether they are present or absent, the lexical meaning of the VP remains the same. By contrast, if the PV is omitted from a CVC the lexical meaning does not remain the same. For instance, in (11–431) the adverb *ngarrij* 'hard' could be omitted, and the event referred to would remain one of the wind blowing; but in the case of (11–125) omission of the PV *nyimnyim* 'wink' results in a clause with a different meaning, namely 'he told me' rather than 'he winked at me'.

(11–431) wangal ngarrij i-bilk-in wind hard 3NOM-blow-PRS 'The wind is blowing hard.' Thus, in collocations with adverbs, an IV retains its lexical meaning, whereas in a CVC it does not—or, rather, it is not accessed (see above). Moreover, the presence of an adverb never has any affect on the transitivity of the clause, whereas the transitivity of a CVC is not always identical with the transitivity of its IV.

Second, adverbs show a great deal more promiscuity in terms of the IVs they occur with than do PVs, consistent with the fact that they serve in a modifying function. Most PVs are attested with between one and three different IVs in CVCs; most adverbs are attested with many more than this. Indeed, they are presumably permissible with most IVs, subject to semantic restrictions. By contrast, the restrictions on the PVs that may occur with an IV are of a different nature; they are collocational (idiomaticity is involved), and not purely semantic restrictions.

Third, adverbs regularly occur as modifiers in CVCs, as in (11–432) and (11–433), and then they modify the event denoted by the CVC. By contrast, it is unusual for two PVs to occur together with a single IV, and when they do, neither PV specifies a feature of the combination of the other PV and the IV, or forms a unit with the IV at the expense of the other.

- (11–432) *mirrij ngarrij-ang yaarr i-nga-rr-a-k* rope hard-INS pull 3NOM-PST-AUG-CM-carry 'They pulled the rope tight.'
- (11–433) *jukar jid wa-rri-j* still stand 2AUG.NOM-AUG-say 'Stand still you two.'

As (11–432) and (11–433) illustrate, the PV is typically adjacent to the IV, while the adverb stands outside of the collocation. Adverbs also occur following the IV, on the opposite side to the PV, as in (11–434). Significantly, the adverb never intervenes between the components of the CVC.

(11–434) wurrul jan kaad nga-na-w warrij fingernail 1MIN.OBL bite 1MIN.NOM-CM-give quickly 'I bit my nails quickly.'

The fact that adverbs form less tight syntagms with the other elements of a VP is underlined by the fact that other words not infrequently occur between an adverb and the IV it modifies, as in (11–435); this is very rare for PV-IV collocations.

(11–435) *jukar irr-akur i-nga-land* slowly 3AUG.CRD-COLL 3NOM-PST-sit 'Those people sat down slowly.'

The above attests to the relatively weak connection between an adverb and either an IV (in an SVC) or a PV-IV collocation (in a CVC), and that the grammatical relation served by adverbs is not the same as relations served by PVs. It does not strongly argue for adverbs forming VP-like grammatical units with SVCs or CVCs. Strong evidence for this proposition is lacking. I can only observe that adverbs are typically found adjacent to IVs in SVCs and to PV-IV collocations in CVCs, and that they appear to be dependents on these latter constructions.

11.7 Concluding remarks

The major part of this chapter has focussed on the Nyulnyul CVC, a lexicalised collocation of an invariant PV and an IV that shows a fair degree of morphological complexity. It is my contention that the CVC in Nyulnyul—as in many other languages of northern Australia—is a verb classifying system. As such, it shows some similarities with the better known systems of noun classification (as per e.g. Allan 1977; Craig 1986, 1994; Dixon 1968; Senft 2000), except that it is verbs rather than nouns (or nominals) that are assigned to the categories. (See McGregor 2002c:398–404 for further comparative remarks.) Furthermore, I have presented some evidence that the Nyulnyul CVC is not a complex predicate construction.

In my view, CVCs are more distinct grammatically and semantically from SVCs than a number of Australianists would appear to believe. Specifically, it is my contention that just the former represents a system of verb classification; classification as such is irrelevant to SVCs. Schultze-Berndt (2000), by contrast, considers both CVCs and SVCs in Jaminjung to be event classifying constructions: in both, the IV serves to assign the referent event to a category. (This correlates with the view that the CVC is a complex predicate construction, and that the semantic properties of the CVC arise via merging of the properties of the PV and IV.) Although the verb classification system effectively imposes by implication a categorisation on referent events, in my view this is completely different to the way in which the IV in an SVC imposes a categorisation on events—effectively as a lexical item. And, importantly, the categories that the IVs impose in each instance are quite distinct.

My focus in this chapter has been more descriptive than theoretical, and much of the discussion has concerned the details of the meanings associated with the categories marked by the IVs in CVCs. Each of the primary categories has been characterised semantically, and an attempt has been made to motivate the semantic descriptions by examining the full range of known PV-IV collocations. Relevant to the semantic descriptions suggested for the verbal categories in Nyulnyul are the three features recurrent in verb classification systems across northern Australia (and indeed elsewhere): valency, Aktionsart, and vectorial configuration. The verbal categories are therefore characteristically abstract semantically. As the above discussion of the various IVs in SVCs reveals, many of the IVs themselves have rather abstract semantic specifications—hence the term *generic verb* (e.g. Schultze-Berndt 2000) is not inappropriate. (I suspect, however, Nyulnyul IVs are in no sense unusual in this regard, and lexical meaning is almost certainly more abstract than generally thought—as per Ruhl 1989.) The difference between the semantics of the verbal categories and the semantics of the IVs is a matter of degree rather than kind: in almost all cases discussed above the former is somewhat more schematic than the latter.

Thus this chapter contributes to one of the major directions for future research identified in McGregor (2002c:405), basic and detailed description of verb classification systems.

⁶⁵ It must be stressed that there are constructions that look like the CVC, but differ from it both in terms of behavioural properties, and in terms of the grammatical relations involved. We have mentioned some of these in Nyulnyul in the discussion of this chapter, including complement constructions involving a PV (or the like) and adjacent IV, secondary predicate constructions, adverb-verb constructions, and 'cognate object' type constructions. I have refrained from using the term CVC in reference to the latter constructions, restricting it to those constructions which are genuinely verb classification construction, although a number of non-productive CVCs are more or less dubious as verb classifying constructions. (Other look-alike constructions exist in languages of northern Australia—see e.g. McGregor 2002c: 301–307; Bowern 2010.)

The Nyulnyul CVC appears to be quite similar to the CVCs of other Nyulnyulan languages formally in terms of the properties shown by the construction (see further McGregor 2002c:107–117). There is also a good deal of agreement amongst Nyulnyulan languages in terms of the numbers and identities of IVs that occur recurrently in CVCs. In particular, in all Nyulnyulan languages only around a dozen IVs are commonly used in CVCs, regardless of the size of the IV class in the language. Most of these IVs are cognate, and express basic meanings, although every language seems to have one or two unexpected non-basic though recurrent IVs; these are usually different from language to language, and not cognates. In Nyulnyul it is -KAL 'wander'; in Bardi it is -AR 'pick lice' (although this is cognate with the Nyulnyul -R 'poke' IV). The 'say, do' IV is, in all languages for which a reasonable amount of information exists, found with the largest range of PVs and is the most frequent IV in usage. It marks the most generic category in the verb classification system, the category that is least specific semantically.

Perhaps even more striking than these similarities is the fact that a number of collocations of PV and IV are common across Nyulnyulan languages. These common collocations—especially those that are unexpected or unusual—can be used as evidence for the existence of collocations of PVs and IVs in proto-Nyulnyulan, and together with the similarities remarked on in the previous paragraph, this suggests that the CVC is at least as old as the proto-language. Indeed, even then it may have served as a verb classification construction (McGregor 2009b provides further discussion of this historical scenario.)

More broadly, the Nyulnyul CVC shows a good deal of similarity with CVCs in other northern Australian languages, both formally and semantically in terms of the verbal categories it distinguishes. However, it seems that the CVC in Nyulnyulan languages is fairly low in its degree of grammaticalisation relative to other northern languages (McGregor 2002c:150).

We have not explicitly discussed the question as to what use the system of verb classification might be in Nyulnyul. One usage does, however, emerge from the discussions. That is that the system is used in the construction of lexical verbs. It serves as a resource for the creation of lexical phraseme verbs. Categorisation can thus be seen as another means for the creation of lexical items along with derivation, compounding, reduplication, and idioms. (See McGregor 2002c:363–389 for discussion of some narrative uses of the verb classification system in Gooniyandi. Whether the Nyulnyul system had comparable usages cannot be determined.)

12 Clausal syntax

12.1 Preliminary remarks

This chapter investigates the syntax of clauses, while Chapter 13, investigates the combinations of clauses into larger sentence-sized units, clause complexes.

It is in these two chapters that theory looms largest, and is most essential. My theoretical orientation shows up in these domains in terms of the material presented, its organisation, and the types of question asked and addressed. I make no attempt to relegate theory to the background, and present an 'a-theoretical' account of Nyulnyul clause and sentence syntax (as per so-called 'basic linguistic theory'—e.g. Dixon 2010a, 2010b). Nor do I attempt to deploy components from a range of different theories as they appear useful or insightful. Rather, partly motivated by a desire to maintain descriptive coherence, I adopt a single theoretical perspective, semiotic grammar (SG), as outlined in §2.3, and described in more detail in McGregor (1997b).

Crucial to the SG approach is the notion that the fundamental grammatical components, constructions and relations, are linguistic signs, constituted by both signifiers and signifieds. This means that a large part of grammar—though certainly not the entirety (McGregor 1997b:42)—is constituted by signs. Both aspects of the sign, its signifier and signified, are crucial. Indeed, they are mutually defining. Thus the syntax of the clause cannot be described either in purely formal or purely functional terms. Both are at the centre of syntax. This chapter thus investigates both formal and functional (meaningful) aspects of clause syntax.

An illustration of the duality of grammatical structures can be found in a high-level categorisation of clause types which has both formal and functional aspects. Like a number of Australian Aboriginal languages, Nyulnyul shows two principal formal types of clause: verbal and verbless. Verbal clauses have an inherent VP, which is normally present in the clause, though on rare occasions is ellipsed; verbless clauses do not admit a VP. This means that VPs are in some sense optional in verbal clauses, since they are occasionally omitted (see §12.3.1), but not in verbless clauses, where a VP can never be added without changing the construction. Verbal clauses denote situations: states of being, states-of-affairs, processes, events, activities, bodily behaviour, and so on. Verbless clauses do not denote situations, but rather express relationships among entities (relational clauses) or present entities to the hearer (presentative clauses).

The contrast between these two primary clause types parallels the contrast between the two primary types of phrase, VPs and NPs; there is also a parallel in the contrast between the two sets of elements that serve in the major experiential roles in the two phrase types, the Event (IVs and PVs) and the Entity (nominals). These three contrasts are all underlain by the temporal dimension. Roughly, verbal clauses specify situations that unfold over time, and for which the temporal dimension is essential; nominal clauses express relations that do

not unfold over time, though they are usually located in time. The same holds notionally for phrases and lexical words.

Nyulnyul is a 'free word order' language: word order does not express grammatical relations (such as subject, object, and the like), and in general the phrases making up a clause may appear in any order without affecting grammaticality. However, word order is not as free as in some Australian languages: as already mentioned, it is normal for the words of NPs and VPs to be contiguous. Discontinuous NPs are far rarer in Nyulnyul than in languages such as Warlpiri (Hale 1983; Simpson 1991) and Gooniyandi (McGregor 1997a).

Definite word-order preferences are apparent in Nyulnyul: not all possible orders of phrases are equally likely. To give an idea of the position of Nyulnyul within standard word order typology (e.g. Greenberg 1963; Croft 1990; Haspelmath, Dryer et al. 2005), let us assume for the moment four standard categories, S (subject), V (verb), O (object) and IO (indirect object), identified on notional grounds, as per traditional grammar. (These are not presumed to be genuine grammatical categories in Nyulnyul; indeed the evidence does not lend support to either S or O—McGregor 2002a.)

Table 12-1 shows figures for the various word orders represented in the corpus of available Nyulnyul texts, including both written and spoken (due to the very small size of the written corpus it makes little sense to show separate figures for the two modalities). Included are only finite verbal clauses with overt VPs; verbless clauses are not included, and nor are the few instances of non-finite verbal clauses and verbal clauses with ellipsed VPs. Also excluded are sentences in which the VP (and possibly more) is entirely in English, although sentences in which the VP is in Nyulnyul and one or more NPs are in English are included.

Separate counts are made for the three main types of verbal clauses, intransitive, transitive, and middle (with S and IO) (see further §12.3.2.2.5), though not for the subtypes of each, for which numbers would be too small to be meaningful. The need to separate the clause types is clear from the figures presented: for instance, there is no clear basis on which to count SV with SVO rather than SOV.

Of course, this corpus is very small, and none of the texts represent entirely fluent speech. Thus the figures and relative percentages of the orders must be viewed with caution. They cannot be presumed to accurately represent the situation in traditional Nyulnyul in precontact times. Nevertheless, we cannot presume that they do not provide an approximation to the traditional situation. We cannot presume that the very high frequency of SVO order is a consequence of English influence. Indeed, all Nyulnyulan languages for which relevant data is available show a preference for SVO and VO orders. The strong dispreference for SOV order is also consistent with this.

As can be seen from this tabulation, over a half (57%) of verbal clauses consist of just the verb (there are frequently also non-inherent elements, of course). There is also a strong dispreference for two arguments to be represented in a clause: only about 10% of transitive and middle clauses show two overt arguments. Of the fully filled-out clauses over 80% have the subject and object (O, IO) on opposite sides of the verb, and almost three quarters (74%) have the subject first. There is clearly a very strong preference for SV(I)O (i.e. SVO or SVIO) order; but it is clearly a misrepresentation to suggest that this is the preferred word order in Nyulnyul, as it is represented by under 5% of verbal clauses.

Of clauses with an overt S argument, three quarters show S in initial position. There is also a strong tendency for the object (O or IO) to follow the V: this happens for two thirds of the tokens. There is thus some sense in which SVO is a preferred word order.

Table 12–1: Relative frequencies of word orders in Nyulnyul texts

Clause type	Word order	Frequency	% of type	% of total
Intransitive	SV	50	22	8
	VS	15	6	2
	SVS	1	0.4	0.1
	V	166	72	27
	Total	232	100	38
Transitive	SVO	26	8	4
	SOV	2	1	0.3
	OSV	4	1	1
	OVS	3	1	0.5
	OVO	4	1	1
	VO	74	22	12
	OV	49	15	8
	SV	10	3	2
	VS	6	2	1
	V	152	46	25
	Total	330	100	54
Middle	SVIO	3	7	0.5
	VIOS	1	2	0.1
	VIO	12	26	2
	VS	1	2	0.1
	SV	1	2	0.1
	V	28	61	5
	Total	46	100	8
Total		608		100

Four of the six possible orders of S, V, and O (and two of S, V, and IO) are attested, and orders other than SVO are about equally strongly dispreferred. Unattested are orders with the V in initial position; V does however occur first if there is a single overt argument. One guesses that the absence of VSO and VOS orders is an artifact of the inadequate corpus, rather than a grammatical proscription, granted that VIOS is attested in middle clauses.

There is a strong dispreference for overt S NPs in transitive clauses, consistent with the avoidance of 'lexical As' (Du Bois 1987): only 15% of transitive clauses have an overt S. On the other hand, S is much more frequent in intransitive clauses (28%). This does not indicate ergative patterning, however, as Os do not pattern very much like Ss in intransitive clauses: fully 49% of transitive clauses have an overt O, almost double the percentage of

overt Ss in intransitives. If we instead look at the frequencies across all clause types, intransitive S NPs are overt in 10% of clauses, transitive S NPs in about 9% of clauses, while O NPs are overt in 27% of all clauses. Patterning in the presence of argument roles which presumably correlates with information structuring—is thus clearly more nominative-accusative than ergative-absolutive.

My concern in this description is not with notional categories like S, V, and O, and statistical generalisations concerning their ordering and presence. Rather, it is with identifying and describing the grammatically significant, the emic roles and relations in Nyulnyul clauses, and identifying and describing the various clausal constructions extant in the language.

The chapter is organised as follows. We begin in §12.2 with verbless clauses. Following this, in §12.3 we describe verbal clauses. Both sections focus on identifying the emic subtypes of these major types, the clause-level syntactic constructions, and specifying them in terms of their inherent grammatical relations or roles. In §12.4 we move out from the 'core' of the clause to less central, typically optional grammatical relations. These are mainly dependency relations. The next section, §12.5, deals with interpersonal modification of clauses in terms of status (negation) and modality (probability). In §12.6 we make some preliminary observations on the thematic organisation of clauses in Nyulnyul, followed in §12.7 by a brief treatment of information organisation. Finally, §12.8 makes some brief remarks on non-finite clauses.

12.2 Verbless clauses

Verbless clauses, as noted in §12.1, are clauses without an inherent VP. In most cases a clause without a VP is a verbless clause, ellipsis of VPs being rare. Three types of verbless clause are distinguished: minor clauses, presentative clauses, and relational clauses. These are discussed in order in the following sections.

12.2.1 Minor clauses

Minor clauses are minimal clauses that entirely lack internal grammatical structure, and thus consist of single words. Often this is an interjection (see §9.4), though other parts-ofspeech are also found, including particles and nominals. Normally, one presumes, this word would have been uttered on its own intonation contour; this is supported by the few textual instances available. Minor clauses are often found in combination with major clauses (i.e. non-minor clauses, clauses with internal structure), which they form complex sentences with, as illustrated in (12–1). Numerous other examples are given in Chapter 9.

```
(12-1)
          уаи,
                  djid wandj
          yaawu, jid
                       wa-n-j
          hev
                  stop 2MIN.NOM-CM-say
          'Hey! Be quiet!' (Nekes & Worms 1953:926, Nekes & Worms 2006:296)
```

Minor clauses express no propositional content, and therefore can't be said to be true or false. Lacking propositional content, minor clauses are restricted in terms of the range of speech act types they can used in.

One class of minor clause is used as exclamations. Interjections such as *yaawu* 'youtch!, hey!', *waduy* ~ *wida* 'Oh!', *muj layib* 'OK', and *nujaw* 'yippee', are used in exclamations expressing emotional states.

A second group of minor clauses is concerned with eliciting a response from the addressee: *nyaa* 'here! (take this)', *kaa* 'give!', *jaa* 'move over (please)', *yaw* 'stop', and perhaps *kaw kaw* 'ho! come here!'.

Yet another group of minor clauses serves as markers of position in cultural scripts. In this group are attention getters such as the possible English borrowing *ay* 'hey', as well as *jurrk* 'farewell', *kala* 'finish, enough', and *kadakur* 'enough, finished', that signal the end of a conversation, interaction, narrative (see the final line of Text 2), or narrative segment.

Although minor clauses do not encode or directly express information about the world of experience, they are sometimes concerned with such information, and express a line on the propositional content of another utterance. Such minor clauses are realised by particles, for instance: $ngii \sim yii$ 'yes', arri 'not, no', arriyangk 'no, don't', jini 'never mind', and nyanangkarr 'maybe'. At least the first two of these can also be used to indicate the speaker's line on requested action—to concur with or refuse a request to do something.

Occasionally an interjection is accompanied by a nominal or pronominal used as an address form, as in (12–2), from the text of §16.5. In this (and other examples) it is notable that the two words typically occur in the same intonation contour, suggesting single clause status. Such clauses do not satisfy the above criteria for minor clauses. Presumably the criteria should be modified to admit such instances, since they appear to be very minor in character, and express no propositional content.

(12–2) bilay jurrk i-nga-rri-j-jin jurrk jurrk iibal/
again farewell 3NOM-PST-AUG-say-3MIN.OBL farewell farewell father
aa jurrk jam/
and farewell grandfather
'Again they farewelled him, "Goodbye, goodbye father! Goodbye maternal grandfather."

12.2.2 Presentative clauses

Presentative clauses draw the hearer's attention to the presence or existence of an entity, usually in some spatial location. In the linguistic literature these are usually termed *existential clauses*; however, the designation *presentative* is more appropriate in as much as their major function is to alert the hearer of the presence of an entity, rather than to assert existence in the abstract, as in *God exists* or *There are fairies* (see further McGregor 1990: 307, 1997b:308). Typically a presentative clause consists of an NP denoting an entity, together with a PP and/or adverbial indicating the location in which this entity is present, i.e. that specifies a search domain within which the entity is to be found, as in:

- (12–3) wurrumbang karrambal bardangk-uk many bird tree-LOC 'There are lots of birds in the tree.'
- (12–4) yii bardangk yangarn niwirr-uk yes tree near creek-LOC 'Yes, there are trees near the creek.'

Clauses such as (12–3) and (12–4) are ambiguous, and could equally represent relational clauses (see below §12.2.3), attributing a location to the birds and trees respectively: they could also be instances of the basic verbless locative construction in Nyulnyul. However, the two types are distinct clausal constructions for at least five reasons.

First, the presentative construction is used only when the NP referring to the entity is indefinite; the presented or introduced entity is never denoted by an NP with a determiner. On the other hand, in a locative relational clause it may be definite or indefinite, though usually the former.

Second, and related to this point, the NP referring to the entity may be ellipsed from a relational clause if it is predictable. Thus, although (12–4) was given as a possible reply to the polar question 'are there trees near the creek?', the NP bardangk 'tree' was not ellipsed. On the other hand, it is almost certain to be ellipsed from a locative clause if given as a response to 'are the trees near the creek?'.

There is just one context in which the NP representing a presented item may be ellipsed, namely in complex sentences involving two presentative clauses in apposition, where the location is a focus of contrast, as in (12-5). Ellipsis of the head nominal can occur under conditions of givenness, as shown by (12-6), from Text 2. In this case, what is being presented is not the entity, the eagles—their presence is already known—but rather their number and the composition of their group. (One might hypothesise that other features (such as colour and size) could be selected for presentation in this way.)

- (12-5)bin-ik biik arri in-ik that-LOC shade not this-LOC 'There is shade there, none here.'
- warrakan / wurrumbang mad baab-nyirr (12-6)kaw i-nga-rr-a-m call 3NOM-PST-AUG-CM-put eagle many but child-COM kamard-nyirr nyungul-jun / jirr / jirr aa 3AUG.OBL mother's:mother-COM 3AUG.OBL and old-ABL₁ 'The eagles called out to him; there were plenty, with their children, their grandmothers and the old ones.'

Third, although there is almost always a locative PP specifying a search domain for the entity in a presentative clause, there are occasional examples in which none occurs (see (12–6) above); a locative PP is always present in the basic locative construction.

Fourth, in presentative clauses the NP and PP occur in either order with about equal frequency; in the verbless locative construction, the PP almost always occurs in final position, following the NP representing the entity located (if it is present).

Fifth, negation of the locative construction is by standard negation, employing the negative particle arri 'not'; and it is asserted that a particular entity is not at the specified location. By contrast, in negation of presentative clauses it is asserted that at the particular location, in the specified search domain, no items of the specified type can be found, contrary to the expectation that they would be there. There are two negative constructions corresponding to presentative clauses, expressing absence of entities of the specified type in the search domain, a standard type and a non-standard type; see further §12.5.1.1.2.2 for discussion of these two types of negation.

12.2.3 Relational clauses

Relational clauses are verbless clauses that assert 'logical' relations—in the sense invoked in §2.3, not the sense of philosophical or mathematical logic—between two things, for instance two entities, or an entity and a quality, a place, or whatever. These clauses do not designate events (activities, states, happenings, etc.) that unfold over time, but rather relationships imputed by the speaker.

Relational clauses involve an inherent grammatical relation of the dependency type (see §2.3), which obtains between two grammatical units such as NPs, PPs, and/or adverbials, which units must also be inherent (although they are potentially ellipsable).

Three primary subtypes of relational clauses are identifiable according to the nature of the dependency relation, whether it is elaboration, extension, or enhancement. We discuss these types in order in the subsections below.

12.2.3.1 Elaborating relational clauses

In elaboration one unit provides more information about another, providing an explanation in other words, exemplifying it, giving an alternative designation for it, and so on. Two primary types of elaborating relational clause are represented in the Nyulnyul corpus: identifying and attributive.

12.2.3.1.1 Identifying

Identifying clauses equate the referents of two different NPs, with distinct denotations, and indicate that they are referentially identical. One NP, normally the second, serves to identify the other, the first NP. (12–7) asserts that the referents of the two NPs *ngay janijirr bur* 'my country' and *Ngarlan* 'Beagle Bay' are identical. In this example the second NP is identified by the first: it specifies the identity of the speaker's country.

(12–7) ngay jani-jirr bur ngarlan 1MIN.CRD 1MIN.OBL-EMP place Beagle Bay 'My country is Beagle Bay.'

I analyse such clauses as consisting of a single inherent dependency relation between the two NPs, a relation of identifying elaboration (see McGregor 1996b, 1997b:144–146). The relation is parataxis since neither NP is dependent on the other.

The order of the two NPs is not, however, fixed, and it can be the first that identifies the second: in other words, the dependency relation is reversible. For instance, in questions of identity, where the speaker requests the identity of some entity, it is usually the interrogative determiner that occurs initially, followed by an NP referring to the thing to be identified. This is illustrated in the first clause of (12–8); the second clause retains the same order.

(12–8) Q: angk in what this
A: yiil kinyingk dog DEF
Q: 'What is this?'
A: 'It's a dog.'

The Nyulnyul corpora contain relatively few identifying clauses, and many of them are like (12-7) and (12-9) in that they provide a name for the entity to be identified, usually a person or a place. Alternatively, they indicate the category to which the identified thing belongs, as in (12-8) and (12-10).

- (12–9) Q: angk nyi-lawil
 what 2MIN-name
 A: nga-lawil jan bill
 1MIN-name 1MIN.OBL Bill
 Q: 'What's your name?'
 - A: 'My name is Bill.'
- (12–10) kinyingk yaward nyanangkarr arri budarr bur nga-li-jal

 DEF horse perhaps not clear place 1MIN.NOM-IRR-see
 'It might be a horse; I can't see properly.'

The two NPs in an identifying clause provide alternative designations for a single entity. These designations differ in terms of their specificity, so that one indicates the type of thing being referred to, the other specifies a token or instance of that type. In (12–9), for instance, the interrogative determiner and the English borrowing *Bill* indicate the token, the other NPs indicate the type of thing it is, a name. Likewise, in (12–10) the determiner indicates the token, the lexical NP the type. The type and token are typically (as in these examples) determinable from the lexical and grammatical features of the NP: the most specific NP denotes the token, the less specific NP, the type.

Although identifying clauses have two inherent NPs linked by a dependency relation, one may be ellipsed under conditions of givenness. Normally this is the NP that is identified, as in (12–11), where the two NPs present serve as identifiers of the absent NP.

(12–11) jani-jirr-nyirr malbul arri jii
1MIN.OBL-EMP-COM things not 2MIN.OBL
'They're my things, not yours.'

12.2.3.1.2 Attributive

In attributive relational clauses there is a single NP referring to an object, together with a unit specifying a quality or property that is ascribed of that thing. The attributing expression is typically a single nominal, as in the following examples:

- (12–12) bin yiil yuburl that dog sick 'That dog is sick.'
- (12–13) *ni-mbal jin birndany jan nga-mbal murrul* 3MIN-foot 3MIN.OBL big 1MIN.OBL 1MIN-foot little 'His feet are big; my feet are little.'
- (12–14) bin bardangk nabirndi that stick long 'That stick is long.'

As is the case in these examples, the NP denoting the entity normally occurs first (if it is present), followed by the expression specifying the property. In the few cases where the reverse order occurs, it seems likely that the NP denoting the entity is either added as an afterthought, as in (12–15) and (12–16), or as a type of stylistic variant, as in (12–17), repeated from line (21) of Text 2.

- (12–15) arri layib bin wamb not good that man 'That man is no good.' More aptly, 'He's no good, that man'
- (12–16) layib may kinyingk / palm / kaamb / good food DEF palm palm:type 'It is good food, that palm.'
- (12–17) arriangk / ni-mal jin birndany / akal wurrumbang birndany nothing 3MIN-hand 3MIN.OBL big and many big ni-mal jin / 3MIN-hand 3MIN.OBL 'Alas! His arms were big, his arms were far too big.'

In this respect attributive clauses contrast with identifying clauses, where the order of phrases is not so rigidly fixed. The two types also contrast in that identifying clauses involve two referential NPs, whereas in attributive clauses there is just one, the attributing expression never being a referring NP, and permitting no determiner. However, there the attributing expression is presumably an NP, since occasionally another word appears in the same unit specifying a quality, as shown by (12–16) and (12–18).

(12–18) arri ngay majangurl uriny not 1MIN.CRD young:woman woman 'I'm not a young woman.'

Examples like this suggest that in the cases where a single word expression serves in the attributing function the Entity-specifying nominal has been ellipsed under conditions of givenness. If this is so, in example (12–15) wamb 'man' would have been ellipsed from the full NP layib wamb 'good man' under conditions of givenness; a more literal translation of this example would then be 'He's not a good (man), that man'.

Another grammatical difference between attributive and identifying relational clauses is that attributive clauses have agnate verbal clauses involving the verb -N 'be' as a copula, whereas there is no agnate verbal clause construction for identifying clauses.

Attributive clauses express a range of qualities including size, shape, colour, temperature, and value, as illustrated by the examples above; in (12–19), what is attributed is a quantity, which admits either a mass or a count interpretation.

(12–19) malbul jin arri wurrumbang / murrul mad / things 3MIN.OBL not many little but 'His things were not much/many, only a little/few.'

For animates, they can also include sex, states of health and other bodily or mental properties, as in examples (12–20)–(12–22).

- (12-20)bin warringkil burruk that female kangaroo 'That's a female kangaroo.'
- dakadak (12-21)ngay 1MIN.CRD deaf 'I'm deaf.'
- (12-22)kinyingk arri rinyariny kinyingk wamb manyjang not sensible mad DEF man 'Man isn't sensible; he's stupid.'

For humans attributive clauses can specify social roles, as in (12–18) and (12–23), handedness, and a variety of other physical and mental qualities, as in e.g. (12–24). They can also specify activities characterising the person or animal, either because they are habitual (example (12–25)) or because they are particularly salient (example (12–26)), and locations characteristic of the person, typically their place of origin (example (12–27)).

- (12-23)kalarlang wurrumbadangk wamb / Kalarlang big 'Kalarlang was a great man.'
- (12-24)babaal jin wuj brother 3MIN.OBL coward 'His brother is a coward.'
- (12-25)kinyingk yaward ma-janb-in-id horse INF_p-kick-INF_s-CHAR 'This horse is a kicker.'
- (12-26)kinyingk wamb karnabin DEF murderer man 'This man is a murderer.'
- bin wamb bindan-ijun (12-27)that man bush-ABL₁ 'That man is a bush fellow.'

Attributive clauses also express relations of difference and similarity. In both cases, the NP attributed of is non-singular, and refers to the entities claimed to be similar or different:

- (12-28)kujarr warawar different two '(You) two are different.'
- (12-29)kujarr yarr-kinbal-ingirr/-imil yarrad 1AUG.CRD two 1AUG-likeness-SEM/-RES 'We two are alike.'

- (12–30) bin wamb aa babaal jin irr-kinbal that man and brother 3MIN.OBL 3AUG-likeness 'That man and his brother are alike.'
- In (12–30) what is attributed on is an NP complex. One of the NPs may be ellipsed, if retrievable, as shown by the following example:
- (12–31) kinyingk uriny yarr-kanbal-amil
 DEF woman 1AUG-likeness-RES
 'That woman and me are alike in appearance.'

An alternative mode of expression involves an expression denoting the thing that the NP attributed on is like—that is, one thing is said to be like another, rather than that two things are alike. The unit specifying the likeness is marked by the semblative:

(12–32) in uriny kumbarr-ingirr this woman stone-SEM 'This woman is like (i.e. as heavy as) a rock.'

Some environmental and weather circumstances are represented as attributive clauses. Normally these involve the generic nominal *bur* 'place' as the NP that the condition is attributed of, as in (12–33); in these expressions, *bur* 'place' serves almost as a dummy. In examples such as (12–34) it may well be that this dummy NP has been ellipsed.

- (12–33) bur muj naali place already light 'It is already light.'
- (12–34) ngimbirr biinyj night cold 'It was cold last night.'

Very rarely the unit attributed on is a non-finite clause, which represents a class of events as though an entity, as shown by (12–35).

(12–35) ma-wanyj-in-ang bardangk arri layib

INF_P-climb-INF_S-APP tree not good

'Climbing trees can be dangerous.' (Literally: 'Climbing trees is not good.')

12.2.3.1.3 Additional roles in elaborating relational clauses

Elaborating relational clauses sometimes consist of more than two nominal expressions. In particular, there may be a third NP specifying something in respect to which the quality obtains, that restricts its domain of application. For example, such an NP can specify a respect in which something is valued as good (as in (12–36)–(12–38)); it can indicate something in regard to which someone possesses knowledge (example (12–39)); it can indicate something in respect of which difference or similarity is assigned (as in examples (12–40) and (12–41)).

- (12-36)layib maad-uk juy ngay arri 1MIN.CRD good play-LOC 2MIN.CRD not 'I'm good at cards; you aren't.'
- arri layib ma-dam-an-ung murrul-murrul baab (12-37)not good INF_p-hit-INF_S-ALL₁ little-little child 'It's not good to hit little children.'
- (12-38)wamb layib durrb good hunt man 'The man is a good hunter.' (More literally: 'That man is good at hunting.')
- (12-39)nyi-mungk jabal / juy 2MIN.CRD 2MIN-believe story 'I wonder if you know,' (More literally, 'You know the story'.) (Torres & Williams 1987:4)
- (12-40)babaal jan war yarr-m brother 1MIN.OBL different 1AUG-eyes 'My brother and I have different eyes.'
- (12-41)wamb irr-kinbal-amil inirr-m-uk this man 3AUG-appearance-RES 3AUG-eye-LOC 'They are alike in their eyes.'

As these examples illustrate, the marking of the third role varies from none to locative and allative marking. The motivation for the alternations is not known. The following example shows comitative marking of the additional NP:

ni-lirr (12-42)ni-lirr jin ngunyb ngijil-inyirr 3MIN-mouth 3MIN-mouth 3MIN.OBL dirty mud-COM 'His face and hands are dirty with mud.'

It is not entirely certain whether or not an NP serving this role can be added to an identifying clause. (12–43) is a possible example, indicating that the man is boss in regard to everyone. However, it is also possible that the last three words together form a single NP; the presence of the dative postposition tends to suggest otherwise, however.

kinyingk wamb maj warli wamburiny-ij (12-43)DEF man boss all people-DAT 'This man is boss for everyone.'

12.2.3.2 Extending relational clauses

In extension, one unit extends on another by adding something to it, replacing it, or offering an alternative. Combined with a predicate nexus in a relational clause, the extending relation is one of possession. According to formal properties, two main types of extending relational clause can be distinguished in Nyulnyul, oblique and comitative (McGregor 2001b:339). This formal difference corresponds to a semantic difference, justifying these as separate extending relational constructions. Two other types are identified in McGregor (2001b) as common in Nyulnyulan languages, and attested in Nyulnyul, genitive and topic. As we will see in the next subsection, the former is a type of elaborating clause; the latter is an external possession construction (on which see §12.4.2.4 below).

12.2.3.2.1 Oblique possessive relational clauses

Oblique possessive relational clauses involve two NPs, one representing the possessor (PR), the other the possessum (PM), and assert that a relation of possession holds between them; both NPs are unmarked by case-marking postpositions. They have one additional inherent unit, an oblique pronominal that serves as a possessive copula. The PM NP almost always occurs first, followed by the PR NP; the oblique pronominal invariably intervenes between the two NPs. This construction is typical of Nyulnyulan languages (McGregor 2001b:343).

The construction translates into English as a 'belong' possessive construction, and specifies a possessive relationship of alienable possession, typically ownership or possession entailing rights of use or control over the PM (McGregor 2001b:345). This is illustrated by the following examples:

- (12–44) bin jin bin uriny arriyangk-amb wamb that 3MIN.OBL that woman nothing-COM man 'That belongs to that woman without a husband.'
- (12–45) kinyingk jin warli wamburiny
 DEF 3MIN.OBL everyone people
 'This belongs to everyone.'
- (12–46) bin bur jirr irrjiwar wamb that camp 3AUG.OBL three man 'That camp belongs to those three men.'

The only instances in which the order of the PR NP and the PM NP is different is in questions of ownership, when the interrogative determiner occurs first, as is usual:

(12–47) angk jin in who 3MIN.OBL this 'Who does it belong to?' Or 'Whose is it?'

The oblique pronominal cross-references the PR, although there is some tendency for the third person minimal oblique pronominal to be used regardless of number of the PR (that is, it may be grammaticalising as an invariant possessive copula), as shown by (12–45). Indeed, this form may occur regardless of person and number of the PR:

(12–48) bin jin ngay aa juy that 3MIN.OBL 1MIN.CRD and 2MIN.CRD 'That belongs to you and me.'

The possessive relation is also expressed in a range of other verbless clause types, including the following, where one of the NPs is an oblique pronominal:

- (12–49) in bur jirr this camp 3AUG.OBL 'This camp is theirs.'
- (12–50) kinyingk yiil jarrad

 DEF dog 1AUG.OBL

 'This dog is ours.'

These are better analysed as identifying clauses (see §12.2.3.1) in which the nominal serving in the Entity role (§10.2.2.4) has been ellipsed from the second NP under conditions of givenness—it is represented in the initial NP (see also McGregor 1996b, 2001b). If the Entity-specifying nominal is not given, as when it denotes a different conceptual entity to the Entity-specifying nominal of the first NP, it will remain in the NP with the oblique pronominal, as shown by (12–51). (Examples (12–49) and (12–50) also admit alternative parsings giving the readings 'this is their camp' and 'this is our dog'.) Thus in these constructions both NPs refer to the PM, and the relation of possession is encoded at phrase level, within the NP containing the oblique pronominal.

(12–51) kinyingk wamb jan babarl
DEF man 1MIN.OBL brother
'This man is my brother.'

12.2.3.2.2 Comitative possessive relational clauses

This type of possessive relational clause also involves NPs representing the PR and PM, which normally occur in that order. In this case they are merely juxtaposed, without the use of a copula; the PM NP, however, is marked by a comitative postposition. As remarked in McGregor (2001b:341), this construction is quite infrequent in Nyulnyulan languages, including Nyulnyul. But such examples as are represented indicate that the possessive relation is one of inalienability: the PM indicates an inherent or characteristic part or manifestation of the PR. This is illustrated by the following examples:

- (12–52) bin bardangk kurrbul-inyirr that tree hollow-COM 'That tree has a hollow (in it).'
- (12–53) ngay wurrumbang-inyirr wilamay 1MIN.CRD many-COM food 'I'm full of food.'

In (12–53), the food is treated as it were as an inalienable possession: it is food that is in the speaker's stomach, which property serves to characterise the speaker.

Nekes & Worms (1953, 2006) give additional examples in Jabirrjabirr, repeated here to make up for the inadequacies of the Nyulnyul corpus. It is reasonable to presume that virtually identical examples would have been possible in Nyulnyul.¹

¹ Claire Bowern (pers.comm.) confirms that the corresponding examples in Bardi are also acceptable.

- (12–54) djugudodo wōr-njer Jabirrjabirr jukududu wuur(r)-nyirr reef:fish horn-COM 'The reef fish has a horn.' (Nekes & Worms 1953:911)
- (12–55) wamb-njer-ōm djoe?

 wamb-nyirr-om juy

 man-COM-INT 2MIN.CRD

 'Are you married?' (Nekes & Worms 2006:141)

Given that this construction is strongly associated with inalienable possession, it is not surprising that in many instances the construction appears to express an attributive relation. It is uncertain whether this is merely a possible pragmatic interpretation of the construction, or two grammatical analyses of examples such as (12–56) are possible depending on whether the comitative is construed as marking a clausal relation or serving as a derivational marker—i.e. 'with/having wounds' vs 'wounded'.

(12–56) baaburr-inyirr bil-ijun wound-COM fight-ABL₁ 'They are wounded from fighting.'

Standard negation of this clause type is poorly represented in the corpus, and the only example available uses NP negation with the particle *arriyangkan* 'without', rather than clausal negation (with the standard negator *arri* 'not')—see however §12.5.1.1.2:

(12–57) wiyan stephen arriyangkang malirr without Stephen without wife 'Unfortunately Stephen was without a wife.'

This involves, of course, a privative NP construction.

12.2.3.3 Enhancing relational clauses

Enhancing relational clauses link an NP denoting an entity with a unit that embellishes it, giving information circumstantial to it: where it is located in space and time, how it is oriented, what it is for, and so on. In contrast to elaboration, what information is provided about the entity is not an inherent property or quality, but rather represents its surroundings; and in contrast with extension, it is not other entities that are associated with it.

The Nyulnyul corpora show three formally distinct types of enhancing relational clauses: purposive, locative, and source. We deal with these in order below.

12.2.3.3.1 Purposive

In this subtype the second unit indicates a use or purpose of the entity referred to by the first NP. In all available examples the purpose is specified by a non-finite clause, marked by the allative postposition (rarely, by the locative postposition):

- $\begin{array}{ccc} \text{(12-58)} & \text{in} & \text{ma-ngank-an-ung} \\ & \text{this} & \text{INF}_{\text{P}}\text{-talk-INF}_{\text{S}}\text{-ALL}_{1} \\ & \text{`This is for talking in.'} \end{array}$
- (12–59) in war ma-likarr-in-ung this one INF_P -listen- INF_S -ALL₁ 'This other one is for listening.'
- (12–60) binjin jarrad wilamay-ung ma-n-in coolamon 1AUG.OBL food-ALL₁ INF_p-be-INF_S 'Coolamons are for food to be in.'

12.2.3.3.2 Locative

Locative relational clauses provide information about the spatial location of an entity, asserting that it can be found in a specified place, in a search domain. The locating element is normally a locative NP or an adverbial, and this usually follows the NP denoting the thing to be located. The main exception is in the case of questions about location, where, as usual, the interrogative word appears in initial position, as in:

- (12–61) arr-ak jungkarr walabab where-LOC 2AUG.OBL son 'Where are your sons?'
- (12–62) arr-ak jii bur where-LOC 2MIN.OBL camp 'Where is your camp?'

The locative postposition is quite non-specific in terms of the spatial ('topological') information it provides. A few examples are:

- (12–63) nga-marraj barnd-uk 1MIN-shadow ground-LOC 'My shadow is on the ground.'
- (12–64) wamburiny jungk-uk / biik-ik people fire-LOC shade-LOC 'People are at the fire / in the shade.'
- (12–65) bukarrikarr-karr bur jin winin wunkunurr-uk dreamtime-TEM place 3MIN.OBL emu Milky:Way-LOC 'In the dreamtime the emu's place was in the Milky Way.'

The next example shows a spatial adverbial as the enhancing element:

(12–66) waalk muj kalb sun already up 'The sun is already up.'

Verbless locative relational clauses are not common in the Nyulnyul corpora. The preferred pattern is (as in various other languages of the region, e.g. Gooniyandi—

McGregor 1990:302) to represent locative enhancements in verbal locative clauses (see the introductory remarks to §12.3.1.2.3 and §12.3.1.2.3.2, where we discuss the basis of the choice between the two constructions).

12.2.3.3.3 Source

Here an origin, typically not present in the speech situation, is ascribed of an object, usually a human being:

- (12–67) in wamb beagle bay-jun that man Beagle Bay-ABL₁ 'That man is from Beagle Bay.'
- (12–68) kinyingk uriny jarrinyan-jun
 DEF woman Lombadina-ABL₁
 'This woman is from Lombadina.'

In the available examples, the ablative PP invariably specifies a source that is intrinsic to the person, and characterises them: they are places the person has close personal ties with. It is not known whether this construction can be used of non-intrinsic source places, for instance, in reference to a place that a person has just arrived from, a place that is merely the beginning of their journey.

In one example the ablative postposition marks a PV being used independently in a non-finite VP, possibly serving as a non-finite clause. One possible interpretation is that the non-finite clause indicates in this example a source of the present condition of the object, a source situation that led to the condition.

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(12–69) bin waya dirdird-jun that wire tangle-ABL<sub>1</sub> 'The wire is tangled up.'
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The status of the above examples as enhancing relational clauses might be questioned, and the clause instead argued to be attributive. This could be argued in two ways: the ablative could be considered as a derivational morpheme in such examples; alternatively, it could be suggested that the ablative marked nominal or PV represents an elliptical NP, from which the head noun has been omitted, being identical with the head nominal of the first NP. The issue cannot be resolved on presently available evidence.

12.3 Verbal clauses

Corresponding to many of the verbless clause types discussed in the previous section are verbal clause agnates. Minor clauses (§12.2.1), identifying relational clauses (§12.2.3.1.1), oblique possessive relational clauses (§12.2.3.2.1), and purposive enhancing relational clauses (§12.2.3.3.1), however, do not agnate with verbal clauses.

We begin in §12.3.1 by discussing verbal clauses denoting situations of being; these agnate with verbless clauses. It is suggested that the verb in these clauses is not a copula, but specifies an event, and serves in the clausal role of SoA (see §12.3.2.1). In §12.3.2, we turn to verbal clauses denoting situations other than being ones, and present a classification in terms of the inherent roles manifested.

12.3.1 Modes of being

This category of verbal clauses is distinguished by virtue of the existence of verbless clause agnates; the verb is not a copula. More importantly, it is not optional: the agnate verbal and verbless clause are not in free variation. Nor are the verbal and verbless clauses in complementary distribution, with the verb inserted by rule in grammatically well-defined contexts (e.g. in representing past relationships, where the verb may be regarded as a placeholder, and locus for the expression of tense, as has sometimes been suggested for Australian languages). Thus, for instance, while many verbless relational clauses specify features obtaining at the present time, so also do many of their verbal agnates, which are not infrequently in present tense. The following observations lend support to this proposal.

First, if the VP were a meaningless copula, there would be no apparent reason why it could not occur optionally in any relational clause. There would be no explanation for the fact that identifying clauses cannot have a verb: identifying clauses are not restricted to present identifications, and often specify past ones that no longer obtain. Similarly for oblique possessive relational clauses, which also never have a verb. On the other hand, granted that the verbal clauses specify situations of being, the absence of verbal modes of expression for identification and 'belong to' is expected: these are not situations that the identified entity or the PM are engaged in. Rather, they represent relationships imputed by the speaker.

Second, there appear to be differences among the various types—presentative, attributive, extending, and enhancing—in terms of the frequency and naturalness of the verbless or verbal agnate. Thus, as already remarked, in specifying location, the verbal agnate predominates, whereas for attribution it does not, and the verbless mode of expression is as common. These facts require explanation, which is not forthcoming if the verb is considered to be no more than a place holder. An explanation is, however, available under the hypothesis that the verb in the verbal agnates specifies a situation, something that can unfold over time.

Specifically, the higher frequency of the verb in reference to non-inherent features such as locations can be explained by the observation that these features are associated with the current mode of being of the entity. And in the case of purposive enhancing clauses, the purpose specifies an inherent purpose for which the item was designed, and thus the verbless construction is the more common.

Qualities, on the other hand, range from inherent ones to accidental and temporary ones, and thus attribution is not so strongly associated with the verbless over the verbal mode of expression. The same goes for associated entities, which are found commonly in both verbal and verbless clauses with comitative PPs. But there is a tendency for qualities that are more inherent, and associated entities that are less entity-like (show less distinctiveness are separate things) to be represented in verbless clauses.

Third, verbal clauses tend to be more strongly associated with human beings and animates as the entities elaborated, extended, or enhanced on; inanimates are comparatively rare in the corresponding verbal clauses. This is explained by the observation that it is typically the case that animates change many of these properties frequently, often under their own volition, which may then be seen as features of the mode of their concurrent state of being or existence.

Fourth, for some subtypes of being clause there is a choice between the verb -N 'be' and the verb -J 'say, do', which corresponds to a contrast between 'being' and 'becoming': that is, the former specifies a stative situation, while the latter indicates an accomplishment, the

achievement of a state of being. Notice that Nyulnyulan languages differ from many other Australian languages, including nearby Bunuban languages, in that they do not use the postural verbs 'stand', 'sit', and 'lie' in being clauses, depending on the posture adopted by the entity in the logical relation.

Finally, the contrast between verbal and verbless constructions in Nyulnyul does not depend on whether the situation is stereotypical or not (e.g. Levinson 1999, 2000). There are numerous instances (see examples below) in which the situation is stereotypical, but the clause is verbal. Nevertheless, there is some correlation between verbless representation and stereotypicality; verbal representation, by contrast, seems not to be strongly associated with either stereotypicality or non-stereotypicality.

12.3.1.1 Verbal presentative clauses

Verbal presentative clauses, like their verbless counterparts, draw the addressee's attention to the presence of some entity, and typically consist of two NPs: a locative PP specifying a location, the search domain in which the referent of the other NP is to be found. This is illustrated by the following examples:

- (12–70) bin bardangk kurrbul-inyirr nyanangkarr i-n-in langkurr that tree hollow-COM perhaps 3NOM-be-PRS possum jimbin bardangk-uk inside tree-LOC 'That tree has a hollow in it; maybe there's a possum in it.'
- (12–71) bin-ik bardangk mung i-n-in that-LOC tree honey 3NOM-be-PRS 'There are bees in that tree.'

Like verbless presentative clauses, (12–70) and (12–71) admit alternative interpretations as locative constructions. The meaning difference is that the locative construction serves to locate an entity that is typically known and identifiable, whereas the presentative presents an entity to the addressee's attention.

In examples (12–70) and (12–71), in keeping with the third observation of the previous section, the presented entity is animate. However, it is not so much the animacy of the presented entity that is critical, but more that it is the fact that the location in which the entity is to be found is not permanent, and might easily be elsewhere. This invokes the notion of a state or condition of being in a place, not simply an imputed locative relation. The verbal presentative construction is thus sometimes found in cases of contrast, as shown by (12–72) and (12–73). In the former example, the previous presence of the house in a certain place is contrasted with its present absence in the same place (represented by the second reduced verbless clause *banangkarruk arrijin* 'today there is nothing'). In the latter example what is at issue in the presentative construction is numerosity, not the entity as such: the former large quantity is contrasted with the present small quantity (see further Davidse 1999).

(12–72) bin-ik i-nga-n-an mayar banangkarr-uk that-LOC 3NOM-PST-be-IMP house today-LOC

arri-jin i-ny-jalk-an not-3MIN.OBL 3NOM-PST-fall-IMP

'There used to be a house standing over there; today there is nothing; it has fallen down.'

(12–73) milirrkarr wurrumbang winin i-nga-n-an bur-uk
before many emu 3NOM-PST-be-IMP place-LOC
jarrad banangkarr murrul winin i-rr-ø-in
1AUG.OBL today little emu 3NOM-AUG-be-PRS
'Before there used to be lots of emus in our country; today there are just a few.'

Like negation of verbless presentative clauses, negation of verbal presentative clauses does not apply to the presentative component; in a similar way, other interpersonal modifiers do not modify this component. This is brought out clearly in (12–74), where what is questioned is whether anything remains from yesterday, not whether the entity in question has been presented. Again, it will be observed that the verbal mode of expression is associated with construal of a situation of being.

(12–74) *nganyji i-n-in biird-ijun wirl*INT 3NOM-be-PRS yesterday-ABL₁ meat 'Is there any of yesterday's meat left?'

12.3.1.2 Verbal relational clauses

Verbal relational clauses are characterised by an inherent verb of 'being', an inherent NP denoting an entity, and an inherent dependency relation associated with that NP. As in verbless relational clauses, three types are again distinguishable, corresponding to the three primary types of dependency relation: elaboration, extension, and enhancement.

12.3.1.2.1 Elaborating 'being' clauses

As already remarked, the only type of verbal elaborating clause is attributive; the relation of identification is not found in 'being' clauses. Two IVs are found in attributive clauses, -N 'be' and -J 'do, say'. We discuss them in order below.

When the IV -N 'be' is employed, the elaborating clause indicates a state of being in a condition. In agreement with the remarks above, the entity elaborated on is typically a human being or higher order animate, and the condition is typically a temporary and non-inherent one. Moreover, this construction seems to invoke the possibility of the condition not applying to the entity. It is sometimes used to invoke a contrast between circumstances in which the condition is held and circumstances in which they are not. Thus (12–75) invokes a contrast between a former condition of the speaker and their present condition.

(12–75) bandirr-nyirr i-nga-n-an strong-COM 3NOM-PST-be-IMP 'He used to be strong.'

But there are other reasons why a clause might invoke the non-applicability of the condition. For instance, it might be because of the speaker's uncertainty—things could be

otherwise (as in (12–76)), to presage a subsequent change in circumstances (as in (12–77), from Text 2), or because it is assumed contrary to known facts (as in (12–78)).

- (12–76) nyanangkarr yubul i-n-in arri nga-mungk perhaps sick 3NOM-be-PRS not 1MIN-knowledgeable 'He might be sick; I don't know.'
- (12–77) man in bindany in / kinyingk winin / kalb i-nga-n-an-an / but this big this DEF emu up 3NOM-PST-be-IMP-IMP karlkarr / bur-uk jin / bereaved camp-LOC 3MIN.OBL 'But this big one, the emu, he lived in the sky, by himself, in his camp.'
- (12–78) *arri i-li-r-an-karr juurr-in arri yubul* not 3NOM-IRR-poke-IMP-TEM snake-ERG not sick *i-la-n-an* 3NOM-IRR-be-PST 'If he hadn't been bitten by a snake, he wouldn't be sick.'

These observations lend support to the claim that this clause type with -N 'be' specifies an ongoing state of being of the entity, that the condition is construed as applicable while the entity is in this state. The conditions themselves in this range of clauses form a very limited set, including strength, sickness, aloneness, and goodness (as illustrated by (12–79), one of the very few examples in which the condition applies to an inanimate).

(12–79) kinyingk may layib i-la-n-an-karr arri yubul
DEF food good 3NOM-IRR-be-IMP-TEM not sick
nga-li-j-an
1MIN.NOM-IRR-say-IMP
'If it had been good food, I wouldn't have gotten sick.'

Elaborating 'being' clauses with the IV -J 'do, say' denote situations of becoming, in which the specified quality or condition is acquired; in this case it is quite clear that the clause specifies a telic event or happening. Some illustrative examples are:

- (12–80) maarr nabind i-n-j wul nga-na-w grass long 3NOM-CM-say water 1MIN.NOM-CM-give 'The grass grew long when I watered it.'
- (12–81) muj jalbird nyungurl nga-n-d-in already old old:man 1MIN.NOM-CM-say-PRS 'I am getting old.'
- (12–82) bin wangalang wamb yu-ni-j banangkarr that marriagable:man man 3NOM-CM-say now 'He'll be a man soon.'

Note also the following example, in which the becoming clause is followed by a stative being clause, specifying that the acquired condition still applies—the condition was achieved, and remains viable, which notion remains implicit in the previous three examples:

(12–83) wamb jan yubul i-n-j aa yubul i-n-in / man 1MIN.OBL sick 3NOM-CM-say and sick 3NOM-be-PRS 'My husband has got sick and he's ill.'

As is the case for verbless attributing clauses, an additional NP may be added that indicates the respect or extent to which the attribute applies. This is shown by (12–84) where the NP *wamburiny* 'people' indicates the individuals in respect to which the feeling of contentment applies.

(12–84) arri kaard layib mi-n-in wamburiny-nyirr jii
no so good 2MIN.NOM-be-PRS people-COM 2MIN.OBL
juy /
2MIN.CRD
'No, you are still contented living among your people.' (More literally, 'No, you are still good concerning your people.')

Finally, it is observed that some environmental phenomena are specified in what may be verbless attributing clauses:

- (12–85) bur muj naali place already light.'
- (12–86) banangkarr-ingirr maal bur today-SEM hot place 'It's hot like today.'

Ostensibly these clauses express an attribute of the place or location denoted by *bur* 'place'. However, the extent to which *bur* 'place' is referential is uncertain, and it could be that it is being used as a type of dummy, similar to the pronominal *it* in English weather clauses (as per McGregor 2007d).

12.3.1.2.2 Extending 'being' clauses

These clauses correspond closest to comitative possessive relational clauses, differing from them formally in the possession of an inherent VP. Semantically they differ in that they typically indicate a relation of association, of being with, between conceptually distinct entitites, rather than (inalienable) possession, as in the case of the corresponding verbless clauses. Moreover, they clearly specify situations, and often translate into English as lexically full verbs like 'stay' and 'live' rather than just 'be'. These features are illustrated in the following examples:

(12–87) aa man juy warragan juy mi-nga-n-an and but 2MIN.CRD eagle 2MIN.CRD 2MIN.NOM-PST-be-IMP ngay-nyirr / 1MIN.CRD-COM 'But you, eagle, you used to stay with me.'

- (12–88) wurrumbardangk wamb malirr-nyirr jin i-nga-n-an / big man wife-COM 3MIN.OBL 3NOM-PST-be-IMP 'The great man stayed/lived with his wife.'
- (12-89)bin-uk mi-n-in / wariny mad / wamburiny-nyirr that-LOC 2MIN.NOM-be-PRS other but people-COM kamard jalwal jii aa malb jii / mother's:mother cousin 2MIN.OBL and wife's:brother 2MIN.OBL kinyingk-uk uriny-ij jin wamburiny-uk / DEF-LOC woman-DAT 3MIN.OBL people-LOC 'You're sitting there staying with the family: your grandmother, your cousins, and your brother-in-law, there among our wife's people.'

There are no entirely clear-cut examples admitting possessive interpretations (cf. McGregor 2001b, 2001c). Thus (12–90) refers to the pregnant state of a dog, and might be construed as involving a possessive relation between the dog and the foetuses. But here the possession is not highly inherent, and the PM appears to be being treated as more individuated—more as a separate entity—than in the case of the corresponding verbless possessive clause. In line with the discussion above, it is possible that verbal constructions like this invoke the corresponding state in which the associated entity is no longer closely associated with the entity.

(12–90) wub-inyirr i-n-in small-COM 3NOM-be-PRS 'Dog is with pup.'

The following example can perhaps be explained in a similar way: that is, that the possession of short wings—ostensibly an inalienable relation—is being treated as a situation, a state of affairs resulting from the circumstances described in the narrative. Simultaneously, the wings are being treated as conceptually separate entities from the emu. This is not an entirely decisive example, however, as the NP *ruburr-inyirr* 'with short (wings)' is not actually in a close syntagmatic relation with *i-n-in* 'it is'; instead it is the adverbial *baan* 'thus', which refers to this quality.

(12–91) karrambal / baan i-n-in / banangkarr-uk / ruburr-inyirr / bird thus 3NOM-be-PRS today-LOC short-COM 'The bird now today has short wings like this.'

12.3.1.2.3 Enhancing 'being' clauses

As for verbal enhancing relational clauses, three subtypes are identifiable; these correspond to the three verbless subtypes. However, the relative frequency of the types is the inverse: locative 'being' clauses are the only type that are common, the other two are vanishingly rare. This is consistent with the hypothesis that verbal enhancing clauses represent situations, and are typically associated with temporary logical relations, whereas the verbless ones are associated with permanent and unchangeable relations.

12.3.1.2.3.1 Purposive 'being' clauses

There is just one example in the corpus of a purposive 'being' clause:

In contrast with the instances of verbless purposive relational clauses in §12.2.3.3.1, in this instance the purpose is not inherent to the entity: the query concerns whether the damper is yet in a state whereby the intended event can be enacted.

12.3.1.2.3.2 Locative 'being' clauses

As already mentioned, this is the most common means of expressing location in Nyulnyul, and more frequent than the corresponding verbless clause, especially for animates, for which the previous remarks concerning the temporary nature of the location obtain. This construction consists of an NP indicating a figure that is located with respect to a ground represented by a PP and/or adverbial, and a VP with IV -N 'be'; these occur in any order. Moreover, the NP may be ellipsed if predictable (given), which feature distinguishes locative from presentative verbless clauses; moreover, the locative expression is always present. Illustrative examples are:

- (12–93) arrak mi-n-in where 2MIN.NOM-be-PRS 'Where are you?'
- (12–94) jimbin i-n-in inside 3NOM-be-PRS 'He's inside.'
- (12–95) wajbal nganyji i-n-in in-ik white:person INT 3NOM-be-PRS this-LOC 'Is the white person there?'
- (12–96) *i-rr-ø-in jin ni-mbal band-uk* 3NOM-AUG-be-PRS 3MIN.OBL 3MIN-foot ground-LOC 'His tracks are on the ground.'

Ameka & Levinson (2007) define the Basic Locative Construction (BLC) as the locative construction employed in a language as the unmarked colloquial response to a *where*-question. As far as I can tell, there is no clear basis for regarding either verbal locative 'being' clauses or the corresponding verbless locative relational clauses as the BLC in Nyulnyul. Either the verbal or verbless constructions make unmarked responses to *where*-questions. However, to the extent that the verbal construction includes additional information not contained in the verbless construction—it denotes a situation—and often invokes a contrast with the figure entity being elsewhere, one might presume that the verbless construction is the best candidate for the BLC.

Granted this, according to the scheme of Ameka & Levinson (2007), Nyulnyul would be a Type 0 language—no verb in the BLC, but allowing alternative verbal expression. But

Nyulnyul does not fit perfectly into the scheme of Ameka & Levinson (2007). First, the verbless construction is not the most frequent means of expressing locative statements. Second, it is not clear that the verbless construction is associated with stereotypical locative situations in the way conceived by Ameka & Levinson (2007:855), that is, by pragmatic implicature: roughly, the minimal linguistic expression implicates the stereotypical situation.² Thus, for instance, (12–93) does not suggest there is anything non-stereotypical about the position, orientation, or whatever of the addressee; nor does (12–96) suggest that there is something non-stereotypical about the position, orientation, location, or anything else about the tracks. Indeed, in examples like these, it would seem that the stereotypical readings are strongly implicated.

12.3.1.2.3.3 Source 'being' clauses

Again, there is just a single potential example of this construction represented in the corpora, (12–97). In this example the source is a condition; no instances of place sources are represented in the corpora.

(12–97) nga-ni-ny-jal wilawil i-nga-n ma-bakarnd-in-jun 1MIN.NOM-CM-PST-see fishing:line 3NOM-be-IMP INF_p -tangle- INF_S - ABL_1 'I saw the fishing line was tangled up.'

This example is questionable for the same reason that the corresponding verbless source relational clause involving a non-finite clause is questionable: an alternative analysis as a type of attributive clause cannot be rejected out of hand, given the limitations of the corpora.

12.3.2 Experiential structure of verbal clauses

In §12.3.1 we discussed clauses denoting situations of 'being'; these are peculiar because they specify something other than a 'being' situation. This may be a logical relation simultaneously predicated of the NP in the 'being' situation, in which case the clause has an additional grammatical relation of the dependency type. Alternatively, it may be a textural relation of the indexing type, pointing to the presence of the entity referred to by the inherent NP in the 'being' situation. Where precisely this indexing relation is located we did not specify: most likely it is associated with the entire construction; it might, however, be (jointly or exclusively) associated with the inherent NP.

We turn now to situation clauses generally, focusing on their experiential structure, on the ways in which they are structured so as to express meaning about the world of human experience. This is in terms of constituency relations, semantically significant part-whole relations (see §2.3). These constituency relations are first identified and discussed in §12.3.2.1. Then in §12.3.2.2 we outline an experiential classification of Nyulnyul situation clauses in terms of these relations; this is dubbed a transitivity classification.

The discussion of Ameka & Levinson (2007) seems to be premised on the notion—false in Nyulnyul—that the verbal and verbless modes of expression will not represent distinct constructions, with their own separate and distinct coded semantic meanings.

12.3.2.1 Experiential roles

Building on previous work, theoretical (McGregor 1997b) and descriptive (McGregor 1990, 1996e, 1999b, 2002a, forthcoming a), I distinguish three distinct sets of experiential roles according to their typical realisations and modes of marking:

- STATE-OF-AFFAIRS (SoA) is a singleton set consisting of just one role realised by a VP, either an SVC or a CVC. What the VP does as a part of the whole clause is to specify the event, state, happening, process, or whatever, that occurred or might have occurred, often at a particular point in time. The term SoA is a cover term for this multifarious range of temporally situated and restricted phenomena, and the corresponding atemporal phenomenon specified by an infinitival VP in a non-finite clause.
- PARTICIPANT roles (PTRs) are roles borne by NPs that are characterised by the fact that they are cross-referenced by a pronominal prefix or enclitic in finite VPs, the case form of which (see §7.4 and §7.11) marks the specific participant role. Corresponding NPs in agnate non-finite clauses also realise participant roles, though these are unmarked.
- CONNATE roles (CRs) are roles borne by NPs and are defined by the marking on the NP itself, either no marking or by the ergative postposition. The same marking occurs in non-finite clauses. NPs that are marked by other postpositions do not realise experiential roles. On the other hand, not all NPs marked in these ways serve in connate roles; some serve instead in dependency relations.

Note that as the characterisation of participant roles suggests, it is not presumed that the bound pronominals in the IV are the participants (as suggested by e.g. Nekes & Worms 2006 for Nyulnyulan languages generally, and Metcalfe 1975:166 for nearby Bardi; see also Jelinek 1984): they are instead markers of participant roles. It is the NPs that are in, or serve, the roles.

The roles are as shown in Table 12–2, together with indication of their distinctive means of marking, separating them from other roles of the same type.

Type	Realisation	Role	Distinctive marking	
State-of-Affairs	VP	SoA	none	
Participant	NP	Actor	NOM bound pronoun in IV	
		Undergoer	ACC bound pronoun in IV	
		Implicated	OBL bound pronoun in IV	
Connate	NP	Agent	ERG postposition	
		Medium	none	

Table 12–2: Experiential role types in Nyulnyul

The following examples illustrate each PTR and CR, as well as the SoA (present in each clause):

Actor SoA Medium

(12–98) mayar i-nga-lurr jamin house 3NOM-PST-burn completely 'The house burnt down.'

Actor SoA Undergoer Agent Medium

(12–99) ngay-in-manjan nga-ni-ny-jal-ø warinjirr wamb 1MIN.CRD-ERG-only 1MIN.NOM-CM-PST-see-3MIN.ACC one man 'I only saw one man.'

Actor SoA Implicated Agent Medium (12–100) *kulirrawany-in i-n-di-jin* / *winin* / bustard-ERG 3NOM-CM-say-3MIN.OBL emu 'The bustard spoke to the emu.'

Things are more complicated than shown in Table 12–2, due to the fact that—as in other nearby languages, Nyulnyulan (McGregor 2006a) and Bunuban (McGregor 1998c; Rumsey 2010)—the ERG postposition is optional in most environments of its use, and moreover it can occur on some Medium as well as Agent NPs, namely those that are simultaneously Actors. (Ergative marking of Undergoer/Mediums does not occur.) However, the statistical patterns in distribution of the ERG differ markedly according to the role of the NP: around 90% of Agent NPs are marked by the ERG, whereas less than 10% of Actor/Mediums are so marked.

The six roles identified for Nyulnyul are grammatical signs. As such they have not just grammatical forms, but also inherent meanings. Thus on the one hand they must be distinguished from what are sometimes considered to be purely grammatical roles, in the sense that they are purely formal, and have no meaning whatsoever. On the other hand, they must be distinguished from what are sometimes called semantic roles, defined purely by meaning, and lacking formal manifestation. We have already given a rough characterisation of the semantic meaning of the SoA role. The other roles are approximately characterised as shown in Table 12–3. The semantic meanings of the roles are quite abstract, and difficult to characterise accurately.

I have suggested elsewhere (McGregor forthcoming a) that the three experiential role types form a tier of roles, as shown in Figure 12–1. This shows the experiential core of situation clauses in Nyulnyul. Everything else—props, circumstances, and so on—belong to the periphery of the clause.

Table 12–3: Characterisation of the semantic meanings of the experiential roles

Role	Meaning
Actor	The thing that is construed as enacting or performing the event, as engaged or involved most actively in the situation, regardless of whether or not they are acting deliberately (as in (12–99)) or unintentionally (as in (12–98)).
Undergoer	An entity construed as the target of the activity engaged in by the Actor, towards which an action vector is directed and impinges on: it is something directly impacted on by, or that suffers in some way from, the event performed by the Actor. In (12–99) the action vector must reach the man, or he has not been seen.
Implicated	An entity, typically human, that is involved in the event, though less directly than Actor or Undergoer. They may be:
	(a) tangentially impacted on by the event, involved in passing, so to say; or(b) the action may be directed towards them without reaching them.
	In (12–100) the words are directed at the emu, who may or may not receive them; effective communication may or may not be achieved.
Agent	An entity that engages in externally directed activity, that directs an activity vector to a conceptually distinct entity, as in (12–100).
Medium	An entity involved in the event, from which further action does not emanate: the locus of coming-to-being of the event, or a potential locus of coming-to-being. Thus in (12–100) no further action emanates from the emu.

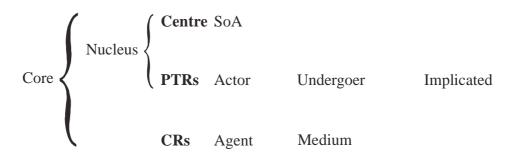


Figure 12–1: The tier of experiential roles in Nyulnyul

An NP may realise both a PTR (by verbal cross-reference) and a CR (by the form of the NP); the roles are tiered or layered over the same linguistic units. Not all of the theoretically possible pairings of PTRs and CRs—in purely formal terms, pairings of pronominal elements and phrase types—occur. The possible conflations are shown in Figure 12–2, which also depicts the tiered nature of the experiential roles.

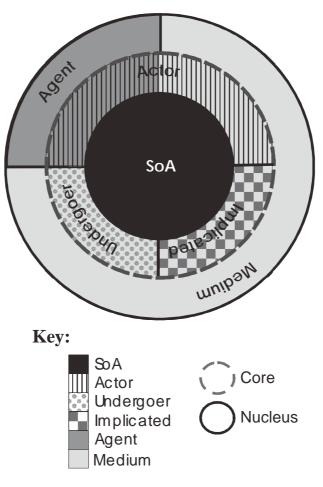


Figure 12–2: Conflations of experiential roles

This scheme of experiential roles permits us to characterise the main types of situation clause in Nyulnyul in terms of the grammatical roles that must be present, that are inherent (even if they may be ellipsed under conditions of givenness). Second, it takes seriously the grammatical facts of the language, that certain grammatical elements mark grammatical relations, and are not there as mere window-dressing.

On both of these counts this theory contrasts with an approach common in linguistic typology that identifies three universal 'roles' (the status of which must be etic), S, A, and O. The S-A-O theory is descriptively inadequate on both counts, and has been critiqued on various grounds—e.g. Durie (1987); Mithun & Chafe (1999); McGregor (2002a). For the orientation of readers familiar with the S-A-O scheme, Figure 12–3 shows roughly how the two systems are related.

The two systems of experiential roles differ in orientation. The system of PTRs is organised on a nominative-accusative-oblique basis, while the system of CRs is organised on an ergative-absolutive basis. This pattern incongruity is important in two ways. First, it permits finer distinctions to be made than would be otherwise possible. Although it might be more cognitively economical if the systems were identical, if they were, their intersections could not be deployed to carve out related but distinct phenomena. Granted the need to make the range of distinctions, instead it would be necessary to distinguish a larger set of roles. Second, it is consistent with the hypothesised universality of both accusative

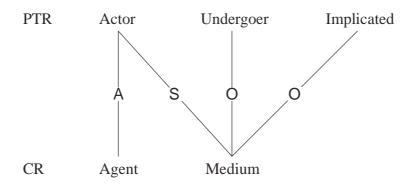


Figure 12–3: Correspondence of PTRs and CRs with S-A-O theory

and ergative patterning in the grammar of human languages, as proposed by Halliday (1985: 149); McGregor (1997b:99).

12.3.2.2 Transitivity classification of Nyulnyul situation clauses

The system of experiential roles outlined in §12.3.2.1 permits us to distinguish among separate clausal constructions in terms of their configurations of inherent participant roles. They yield the following transitivity classification (the SoA role is omitted because it serves no distinguishing value within situation clauses):

(12-101)		PTR/CR	PTR/CR	CR
	intransitive	Actor/Medium		
	quasi-transitive	Actor/Medium		Medium
	medio-active	Actor/Medium		Agent
	middle	Actor/Agent	Implicated/Medium	
	transitive	Actor/Agent	Undergoer/Medium	
	ditransitive	Actor/Agent	Undergoer/Medium	Medium

In (12–101) the constructions are listed in order of increasing transitivity. Intransitive clauses are single valent, with a single inherent NP serving in the roles Actor and Medium. The next four types are bivalent, and require two inherent NPs. The quasi-transitive and medio-active are evidently the least transitive of them (see also below), then middle, and transitive. Finally, the ditransitive is the most transitive in the sense that it consists of three inherent NPs.

As mentioned already, the inherentness of an NP does not mean that it must actually be present: it may be ellipsed if given. Nevertheless, we can conclude that it is still present in the structure—it is represented by a zero, rather than by nothing. Thus, for instance, there is no reason to suppose that the following two examples differ in terms of their inherent experiential meaning or structure:

(12–103) nga-ny-jurub 1MIN.NOM-PST-fart 'I farted.'

To presume that these represent different experiential constructions would require the multiplication of the range of transitivity types shown in (12–101), with no descriptive gain. The only difference between the clauses concerns information structure. The construals of the situation are identical. Moreover, if (12–103) is presumed non-elliptical, we would be forced to conclude that either (a) it is a 0-valent construction, or (b) it is 1-valent. (a) is clearly unacceptable. And (b) requires identifying the bound pronominal as the 'argument', the filler of its single role, Actor. This results in a raft of further descriptive difficulties. How would a non-finite clause such as *ma-jurub-in-ung* (INF_P-fart-INF_S-ALL₁) 'for farting' be dealt with? Here there is no possible candidate for the 'argument' in the verb form, and it must be an external NP that has been omitted—unless one adopts the implausible view that this is a 0-valent clause.

We discuss the six transitivity constructions in order in the following subsections. But first we discuss some problem cases (§12.3.2.2.1).

12.3.2.2.1 Problem cases

The scheme of (12–101) lists no 0-valent clause types in Nyulnyul; there are no uncontroversial instances of situation clauses in Nyulnyul that consist of just the SoA role. A pronominal prefix is obligatory in all finite verbs, and in all available instance this prefix appears to have cross-referencing potential: there are no uncontentious cases of dummy prefixes. Thus in clauses indicating environmental phenomena such as rain, wind, and the like, one can always (it seems) include an overt NP specifying the type of thing (water, wind, or whatever) involved in the environmental situation. Even in the case of examples such as (12–105), it seems that it is possible to include the NP *bur* 'place'. It might be countered in response that nonetheless in these examples the NP itself is a dummy, and does not serve as an Actor; this would perhaps be most plausible for examples such as (12–105), if the NP *bur* 'place' had been included.

- (12–104) *muj i-ngi-r-in wul* already 3NOM-PST-poke-PRS water 'It's starting to rain.'
- (12–105) maal i-n-d-in hot 3NOM-CM-say-PRS 'It got hotter.'

Nekes & Worms (2006:238–241) speak of impersonal verbs in Nyulnyulan languages, which include, in Nyulnyul, -BANY 'finish' and -BADIK 'fill'. The case for these as impersonals is, however, untenable. For -BANY 'finish' they suggest that the paradigm of the verb is defective, and only a third person minimal pronominal is possible, and that the verb has a pronominal enclitic indicating an 'indirect object', as in example (12–106). The problem is that in examples such as this the pronominal prefix does cross-reference an NP denoting the thing that is completed, which serves as Actor/Medium. Nor is the paradigm really defective, as attested by (12–107). We conclude that the construction is not 0-valent.

- (12–106) yu-ngka-bany-uk-jii may jakud wa-n-j 3NOM-FUT-finish-LOC-2MIN.OBL food arrive 2MIN.NOM-CM-say 'When you've finished eating come back.'
- (12–107) *mui* i-ngi-rr-bany-jirr birray kubul already 3NOM-PST-AUG-finish-3AUG.OBL mother father 'Their mother and father are already dead.'

Furthermore, it is not the case that the oblique pronominal enclitic is always present, as shown by (12–108). Thus the expression is not a distinct construction type with either just an inherent Implicated, or an inherent Actor/Medium and an inherent Implicated.

(12–108) *jabal muj i-m-bany* story already 3NOM-PST-finish 'The story is finished.'

As for -BADIK 'fill', Nekes & Worms (2006:239–240) themselves provide paradigms that show the verb is not entirely defective, and distinguishes at least minimal and augmented numbers in the third person. Their examples are in fact medio-actives (see §12.3.2.2.3).

A third set of impersonals identified by Nekes & Worms (2006:240–241) fares no better. This type involves a prefixing nominal, either -mungk 'believe' or -yam 'abstain' followed by the IV 'say', which invariably appears in the third person minimal form, as in (12–109). This construction is not attested in my corpus. And even if it is correctly reported by Nekes & Worms (2006), it is not an entirely convincing example of an impersonal given that the pronominal prefix to the nominal indicates the person and number of the knower.

(12-109)na-mong in-dj nga-mungk i-n-j 1MIN-believe 3NOM-CM-say 'I knew.' (Nekes & Worms 2006:241)

I conclude that these examples do not force us to identify additional clause types. The most convincing are weather clauses, which might be candidates for 0-valent clauses, with dummy Actors. The three alleged types of impersonal evidently fit into the types listed in (12-101).

12.3.2.2.2 Intransitive clauses

Intransitive clauses have a single inherent PTR realised by an NP and cross-referenced by a NOM pronominal prefix to the verb, as illustrated by examples (12–102) and (12–103). Very occasionally this NP is marked instead by the ERG postposition, as in the following examples, the first from a text:

(12–110) kinyingk-in winin jakud i-n-j bur-ung emu return 3NOM-CM-say camp-ALL₁ 3MIN.OBL DEF-ERG may-nyirr jin / food-COM 3MIN.OBL 'That emu returned to his camp with his food.'

(12–111) kujarr-in baab marrkin i-ngi-rr-i-j two-ERG children hunger 3NOM-PST-AUG-CM-say 'The two children are hungry.'

In this regard Nyulnyul is typical of Nyulnyulan languages and other languages of the region (McGregor 1998c, 2007b), indeed of ergative languages generally (McGregor 2010a). Unfortunately, however, the Nyulnyul corpora are too limited to permit investigation of the conditions under which the ergative postposition is used. Quite likely the situation is as in Warrwa and Gooniyandi.³ As remarked above, the possibility of ergative marking of the single inherent NP of an intransitive clause does not vitiate the proposed typology of clause types, since this is vanishingly rare compared to the ergative marking of the Agent of bivalent clauses.

Intransitive clauses cover a variety of situations of the expected types, including: 'being' (with an additional inherent dependency relation, as per §12.3.1), states, changes of state, motion, bodily behaviour, bodily experiences, emotions, cognition, speech, and environmental phenomena ('weather clauses'—see §12.3.2.2.1). (Of course, many of these are represented by other transitivity types as well, if the energy is directed externally.)

Also included in the category of intransitive clauses are reflexive/reciprocals, which are characterised by either an SVC involving a derived reflexive/reciprocal form of the IV (see §7.3.2) or a CVC involving the IV -BARNJ 'exchange' (§11.4.1.1). These two possibilities are exemplified in the following examples, which also show that the clause is intransitive, consisting of an inherent NP cross-referenced by a NOM prefix in the IV.

- (12–112) warli i-rr-ma-kadakand-inyj
 everyone 3NOM-AUG-REF_p-scratch-REF_S
 'They all scratched one another.' Or 'They all scratched themselves.'
- (12–113) *juurr dirdird i-m-barnj* snake coil 3NOM-PST-exchange 'The snake coiled itself up.'

Very rarely, reflexive/reciprocal intransitive clauses involve a PV and the derived reflexive/reciprocal form of another IV:

```
(12–114) wukurl i-mi-jal-inyj
pity 3NOM-REF<sub>p</sub>-see-REF<sub>s</sub>
'He pities himself.' (i.e. 'He is lonely.')
```

As (12–112) indicates, both reflexive and reciprocal interpretations are normally available when the Actor is augmented in number; only the reciprocal interpretation is available for minimal Actors, of course. The two interpretations available for augmented Actors are not emically distinct; reflexive/reciprocals in Nyulnyul are vague in their interpretation, not ambiguous.

In the majority of instances reflexive/reciprocals correspond to transitive clauses, as is the case for the above examples, and the first clause of (12–115). However there are a small number of exceptions, as illustrated by the final clause of (12–115), where the corresponding clause is instead either intransitive or middle, never transitive. As is the case

³ Thus it is uncertain what nuance of meaning is conveyed by (12–111), though one guesses that it might suggest that the children are particularly strongly experiencing hunger.

in Bardi, there are also a small number of derived reflexive/reciprocal IVs that do not correspond to any underived IV, and thus the corresponding intransitive clause does not correspond to another transitivity type. See McGregor (2000b) for further discussion of reflexive/reciprocals in Nyulnyulan languages.

(12–115) ngank-ang ya-nga-rr-barnj kirl phone-uk
talk-INS 1PL.NOM-PST-AUG-exchange same phone-LOC
i-n-di-jan daarr ya-ngka-rr-barnj
3NOM-CM-say-1MIN.OBL emerge 1PL.NOM-FUT-AUG-exchange
'We decided to meet together at Halls Creek when I spoke to him this morning.'

12.3.2.2.3 The quasi-transitive construction

Like other Nyulnyulan languages (e.g. Warrwa), Nyulnyul has a quite rare and restricted clause type that involves two unmarked inherent NPs, just one of which is cross-referenced in the IV. The cross-referenced NP serves as Actor/Medium, while the second NP serves as a plain Medium.

As far as I have been able to determine, the only VP-type that occurs in a quasi-transitive clause involves the suppletive reflexive/reciprocal form of -W 'give', -BARNJ 'exchange', in an SVC with the same meaning, i.e. 'exchange'. The plain non-cross-referenced Medium NP represents the item exchanged, and thus corresponds to the non-cross-referenced Medium NP of a ditransitive clause (see §12.3.2.2.7), which also represents the gift.

- (12–116) *i-ngi-rr-barnj* kumbarr war-in *i-na-w*3NOM-PST-AUG-exchange stone one-ERG 3NOM-CM-give
 aa war-in *i-na-w*and one-ERG 3NOM-CM-give
 'They exchanged money, giving it to one another.'
- (12–117) wilamay i-ngi-rr-barnj food 3NOM-PST-AUG-exchange 'They gave each other food.'

None of the available examples shows an overt NP in the role cross-referenced by the nominative prefix to the IV, though it is reasonable to presume that it serves as an Actor/Medium (rather than an Actor/Agent) by virtue of what happens in other clauses involving -BARNJ 'exchange'.

12.3.2.2.4 Medio-active clauses

As indicated in (12–101) medio-active clauses are like intransitive clauses in having an inherent Actor/Medium, an unmarked NP that is cross-referenced by a nominative prefix in the IV. But they are 2-valent, and have as well an additional inherent NP, serving as an Agent CR; this NP is invariably marked by the ERG postposition, and is not cross-referenced in the IV. Examples are (12–118)–(12–121).

(12–118) dudub nga-n-j wul-in full 1MIN.NOM-CM-say water-ERG 'I'm full of water.'

- (12–119) nga-la-marr-karr jungk-in 1MIN.NOM-IRR-burn-TEM fire-ERG 'I might get burnt by the fire.'
- (12–120) djung-en nana-mar jungk-in nga-nga-marr fire-ERG 1MIN.NOM-PST-burn 'I have a burning thirst.' (Nekes & Worms 1953:507)
- (12–121) bin wul i-nga-ralk waalk-in that water 3NOM-PST-dry sun-ERG 'The puddle dried up in the sun.'

Medio-active clauses are found in all other Nyulnyulan languages with the possible exception of Warrwa, and are discussed from a pan-Nyulnyulan perspective in McGregor (1999b); a similar (though not identical) construction is found in a scattering of Australian languages, for instance, in Djaabugay (North Queensland) (Hale 1976b:324–325; Patz 1991:289). They are referred to as *medio-passives* in Hale (1976b), and *quasi-passives* in Hosokawa (1991:436).

Less than a score of verbs are attested in the Nyulnyul medio-active construction. Most describe temporary conditions of the human body: *kadkad* 'tremble', *bindany* '(get) big (temporary)', *bulj* '(get) tired', *mulaj* '(get) tired', *wajid* '(get) tired', *yubul* '(get) sick', *marl* '(get) hot', *birlbirl* '(get) short winded', *kud* 'bow head', *dudub* '(get) full', *murrkard* '(get) satiated', -BAMARR 'tremble, shiver', -JIMB 'die', -MARR '(get) burnt', -RALK '(get) dry (i.e. dry out)', and -NY 'catch (a headache)'. Just a few describe conditions of inanimates: -RALK '(get) dry', *lalk* '(get) dry', and possibly -BADIK 'full'. Most of the above PVs occur in CVCs with the IV -J 'do, say'.

Medio-active clauses in Nyulnyul describe happenings that befall people, occasionally things, as a result of the operation of external inanimate agencies. In this regard, the fact that it is the unmarked NP that the bound pronominal in the IV cross-references, and not the ERG NP, is as expected.

Medio-actives are thus narrow in regard to the range of situation types they designate. By contrast, intransitive and transitive clauses are comparatively broad semantically. The same observation holds for middle and ditransitive clauses: they are marked constructions, with relatively specific semantic meanings.

The situation is not under the control of either the Actor/Medium or the Agent, neither of which acts deliberately or intentionally. As observed by Stokes (1982:136) in relation to Nyikina, the Agent is prototypically a 'force': natural (such as the sun, fire, rain), supernatural (e.g. dreaming), or personal (hunger, thirst, exhaustion). In Nyulnyul three other types of 'force' are represented, that are not attested in Nyikina: activities, as in (12–122) and (12–123); body parts, as in (12–124); and emotions, as in (12–125).

- (12–122) bulji nga-n-ji marriny-in ngay tired 1MIN.NOM-CM-say walk-ERG 1MIN.CRD 'I'm tired from walking.'
- (12–123) [wilamay mi-n-kid-in wurrumbang] food 2MIN.NOM-CM-eat-PRS many

[bindany wa-n-ji wilamay-in ma-wid-in] big 2MIN.NOM-CM-say food-ERG INF_p-eat-INF_S '(If) you eat a lot, you'll get big (i.e. temporarily) from eating.'

- (12–124) nga-lm-in nga-n-nyu 1MIN-head-ERG 1MIN.NOM-CM-get 'I have a headache.' (Tachon 1895:9)
- (12–125) *kud nga-n-d-in rarrjin-in* bow:head 1MIN.NOM-CM-say-PRS ashamed-ERG 'I bend my head in shame.'

The semantics of the medio-active can be brought out more clearly by comparing it to agnate constructions. Many medio-active clauses agnate with transitive clauses. For instance, corresponding with (12–119) above is transitive (12–126).

(12–126) jungk-in i-na-marr-in-ngay fire-ERG 3NOM-CM-burn-PRS-1MIN.ACC 'The fire burns me.'

The Undergoer of the transitive clause corresponds to the Actor of the medio-active. The unmarked NPs of medio-active and transitive clauses correspond, as do the ERG NPs. What is different is the pattern of cross-referencing. Thus the CRs correspond (both have an Agent and a Medium), though the PTRs do not (both have an Actor, only transitive clauses have an Undergoer).

But (12–119) agnates not only with transitive (12–126), but also with intransitives (12–127) and (12–128)—the IVs of which, like the medio-active, are formally intransitive:

- (12–127) *jungk i-ngka-marr* fire 3NOM-FUT-burn 'The fire will be burning.'
- (12–128) wil i-ngka-marr meat 3NOM-FUT-burn 'Meat will cook.'

The Actor of (12–127) apparently corresponds to the Agent of the medio-active (12–119), while the Actor of (12–128) corresponds to its Actor.

Medio-actives with verbs *dudub* ... -J 'fill up', *murrkard* ... -J 'satiate', and *bindany* ... -J '(get) big' also have both transitive and intransitive agnates, though usually only one of the latter, with the person as Actor/Medium—that is, the agnate is like (12–128). In each case the contrast between the medio-active and transitive is between a happening that befell a person caused by something external to it, and a situation involving an Agent and an Undergoer, conceptualised as involving an action vector from the former to the latter. The contrast between the medio-active and the intransitive is between a happening that befell a person and a state of the person, or entry into the state.

Medio-actives involving some CVCs—including *marl* ... -J '(get) hot', *yubul* ... -J '(get) sick', *bulj* ... -J '(get) tired', *birlbirl* ... -J '(get) short winded', and *kadkad* ... -J 'tremble'—show only intransitive agnates. For these, instead of transitive clauses expressing the corresponding causative, biclausal constructions are employed that involve a

clause indicating the situation giving rise to the state—thus 'I ate something and got sick' rather than 'Something made me sick'. Again the contrast is between a happening and a state or inchoative.

The medio-active is a construction, a distinct grammatical sign, a grammatical form with a specific coded meaning. This meaning is partly compositional: part of the meaning of the medio-active can be derived from the meaning of the component grammatical roles. Not all of it can be, however. Thus the happening component of meaning cannot be derived from the roles that make up the medio-active—or from anything else in the construction (certainly it can't be predicted from the form of the VP).

12.3.2.2.5 Middle clauses

Middle clauses constitute a second clause type that is intermediate between transitive and intransitive. As we will soon see, the Nyulnyul middle is very different both formally and semantically to the grammatical category traditionally called *middle* (e.g. Benveniste 1950/1971; Kemmer 1993). In using *middle* in this non-standard way, I follow Hale (1982) and McGregor (1990:317ff) who use the term for a similar construction in Warlpiri and Gooniyandi, respectively. It is in fact a quite widespread clause type in languages of northern Australia. However, in most of these languages the NP cross-referenced by the OBL pronominal is a DAT one, rather than by an unmarked NP as it is in Nyulnyul.

As in transitive and medio-active clauses, there are two inherent NPs in middle clauses, one of which is marked by an ERG postposition, the other by nothing, that is, it is a plain unmarked NP. This is illustrated by (12–129)–(12–130). Thus the CRs of the three clause types are identical: there is an Agent and a Medium in each.

- (12–129) baab-in i-n-di-jin yiil arri mi-la-r-ngay child-ERG 3NOM-CM-say-3MIN.OBL dog not 2MIN.NOM-IRR-poke-1MIN.ACC 'The child said to the dog, "Don't bite me."
- (12–130) *kudirrawany-in i-n-di-jin* / *winin* / bustard-ERG 3NOM-CM-say-3MIN.OBL emu 'The bustard spoke to the emu.'

However, the three types differ in terms of the pattern of verbal cross-reference. In middle clauses, like transitive clauses—but unlike medio-actives—the Agent NP is cross-referenced by a nominative pronominal prefix on the IV. The Agent is thus also an Actor, as in transitive but not middle clauses. Uniquely, the unmarked NP of a middle clause is cross-referenced by an oblique pronominal enclitic, rather than by an accusative one (as in transitive clauses) or a nominative one (as in medio-actives). It thus simultaneously serves in the Implicated role, not the role of Undergoer (transitive clauses) or Actor (medio-active clauses). This entity is tangentially affected by the situation, usually in a non-material way.

Like medio-actives, middle clauses are a restricted category, both in terms of the type of situations specified, and the properties of the entities engaged in them. Both Agent and Medium in middle clauses are typically animate, and normally human. The situations denoted are thus situations strongly associated with human beings. Indeed, the major situation types realised by middle clauses are: searching or seeking and communication.

In most languages that distinguish the middle clause type, situations of searching or seeking belong to this category (e.g. McGregor 1990:324). This is so in Nyulnyul also, as shown by examples such as the following:

- (12–131) *i-mii-in-jan* yu-ngka-dam-ngay 3NOM-search-PRS-1MIN.OBL 3NOM-FUT-hit-1MIN.ACC 'He's looking for me to belt me.'
- (12–132) nga-nga-miimii-jin mird baab 1MIN.NOM-PST-search-3MIN.OBL male child 'I searched for the boy.'

However, in Nyulnyul, middle clause representation of seeking events alternates with representation in transitive clauses. In particular, if the thing sought is not a person, it is less likely to be represented in a middle clause. (12–133) and (12–134) are among the relatively few tokens of middle clauses of seeking with an inanimate thing sought. Transitive clauses like (12–135) and (12–136) are more typical, especially in reference to searching for food. It is not clear what the basis for the choice between the two alternatives is.

- (12–133) *i-nga-miimii-jin* may / wil aa mung aa may 3NOM-PST-look-3MIN.OBL food meat and honey and food bina irrkurd-jirr / that all-3AUG.OBL 'He looked around for food, meat and honey and vegetables, and everything.'
- (12–134) arri bil mi-li-miimii-jin / not fight 2MIN.NOM-IRR-seek-3MIN.OBL 'Don't go looking for fights.'
- (12–135) *i-nga-miimii* wul kulukurr-ung bur 3NOM-PST-looked water west:country-ALL₁ place 'He looked for water in the western country.'
- (12–136) marrkin nga-n-d-in yay kujarr hungry 1MIN.NOM-CM-say-PRS 1&2CRD two ya-ngki-jid ya-ngka-mii may 1PL.NOM-FUT-go 1PL.NOM-FUT-seek food 'I'm hungry; let's me and you go and look for some food.'

-JAL 'see', which normally occurs in a transitive clause, occasionally occurs in a middle clause, in which case it denotes a situation that might be glossed 'look at' or 'turn one's gaze towards', as in (12–137). The middle clause thus contrasts with the transitive clause in terms of the degree to which the process impinges on the Medium, tangentially or not.

(12–137) wa-n-jal-jan
2MIN.NOM-CM-see-1MIN.OBL
'Look at me.'

The second group, situations of communication, are also typically represented by middle clauses in languages of the region. These include speech (as in (12–129)–(12–130)), bodily

communication ((12-138)-(12-140)), non-speech vocalisations by humans (example (12-141)) and animals (as in (12-142)-(12-143)), and so forth.

- (12–138) *i-nga-many-jin* wal wamb-in 3NOM-PST-wave-3MIN.OBL son man-ERG 'He waved to his son.'
- (12–139) *ni-yangal i-na-m-jan*3MIN-tongue 3NOM-CM-put-1MIN.OBL
 'He poked out his tongue at me.'
- (12–140) *juurr-in ni-yangal i-na-m-jan* snake-ERG 3MIN-tongue 3NOM-CM-put-1MIN.OBL 'The snake flicked out its tongue at me.'
- (12–141) *i-ngi-rr-ngalka-jin jiwarr* 3NOM-PST-AUG-cry-3MIN.OBL dead 'They cried for (mourned) the dead man.'
- (12–142) juurr-in ngany i-n-di-jan snake-ERG hiss 3NOM-CM-say-1MIN.OBL 'The snake hissed at me.'
- (12–143) *yil-in wanyburr i-n-di-jan* dog-ERG bark 3NOM-CM-say-1MIN.OBL 'The dog barked at me.'

Not all situations of communication are realised by middle clauses. For instance, -JULNG 'tell' and -JIBAL 'ask' usually occur in transitive clauses. This is presumably because telling someone something and asking someone something are inherently more effective events than is merely speaking to someone: not only is the action directed to the addressee, but it also impinges on them. And laughing at someone, specified by the IV -KANM 'laugh', is invariably represented in a transitive clause, never by a middle clause. Many clauses of speech are also intransitive, representing the activity as performed by the speaker, with no specific indication of an addressee.

Aside from these two main groups of situations covered by middle clauses, there is a small residue of situations that appear irregular. Thus there are examples like (12–144) where an emotional reaction is attributed of the Agent towards someone or something; on the other hand, there are examples of middle clauses like (12–145) where the Agent induces an emotional reaction in the Implicated. In part the apparent exceptionality of these examples may be due to the fact that the meanings of the VPs (respectively the SVC and the CVC) are not well understood. In particular, it is not known whether they code emotions, or rather behavioural responses prototypically associated with the expression of the emotions. For instance, the VP in (12–144) might code the reactional response of the child to the cat—the child's exhibition of fear—the emotional component being inferred pragmatically.

(12–144) *i-jirik-in-ijin minyawu baab-in*3NOM-fear-PRS-3MIN.OBL cat child-ERG
'The child is scared of the cat.'

(12–145) liyan nga-na-ng-k-jin wamba ngay-in heart 1MIN.NOM-CM-PST-carry-3MIN.OBL man 1MIN.CRD-ERG 'I startled him.'

12.3.2.2.6 Transitive clauses

This third group of 2-valent clauses contrasts with medio-actives and middle clauses in that it is much less semantically specific, and far more frequent in usage: as indicated in Table 12–1, transitive clauses account for a little over half of the clauses of the corpus of Nyulnyul narratives, while middles comprise less than a tenth, and medio-actives are not present at all. These facts are suggestive of the relative unmarkedness of transitive clauses with respect to the other two 2-valent types.

As regards the range of situation types denoted, transitive clauses in Nyulnyul cover roughly the expected range, including: impact and violence; contact; induced or caused motion and change of position; induced or caused change of state; perception; cognition and emotion; bodily functions and activities; and some vocalisations. Some examples illustrating this range of situation types, most of which are incomplete due to ellipsis (as shown in Table 12–1, non-elliptical transitive clauses are rare in the texts; the same holds for elicitation) are:

- (12-146)wamb-in i-n-dam-ø yiil jan man-ERG 3NOM-CM-hit-3MIN.ACC dog 1MIN.OBL 'The man hit my dog.'
- (12-147)kujarr ku-ngu-rr-jiding-ngay angk-ij kurr 2AUG.NOM-PST-AUG-touch-1MIN.ACC what-DAT 2AUG.CRD two 'Why did you two touch me?'
- (12-148)juurr-in banaban i-na-m-ø maarr i-ny-jid-uk snake-ERG move 3NOM-CM-put-3MIN.ACC grass 3NOM-PST-go-LOC 'The snake moved the grass as it went along.'
- (12-149)wul-in i-la-r-juy water-ERG 3NOM-IRR-poke-2MIN.ACC 'Rain might wet you.'
- (12-150)ngay-in nga-nga-lakarr-irr ngay-in 1MIN.CRD-ERG 1MIN.NOM-PST-hear-3AUG.ACC 1MIN.CRD-ERG arri nga-la-jal-an-irr not 1min.nom-irr-see-imp-3aug-acc 'I only heard them, I didn't see them.'
- (12-151)ngay-in arri nga-la-langk-an-juy 1MIN.CRD-ERG not 1MIN.NOM-IRR-recognise-IMP-2MIN.ACC 'I didn't recognise you.'
- (12-152)arri liyan i-li-rr-m-an/ de / nyungul / wamburiny-in / not like 3NOM-IRR-AUG-put-IMP? old:person people-ERG 'People didn't like it.'

- (12-153)burruk-in jarrbad i-na-m-ø n-alm jin kangaroo-ERG lift 3NOM-CM-put-3MIN.ACC 3MIN.OBL 3MIN-head 'The kangaroo lifted its head.'
- wamb i-ni-ny-jabal-yarrad kumbarr-ij (12-154)bin-in that-ERG man 3NOM-CM-PST-ask-1AUG.ACC money-DAT 'That man asked us for money.'

Few vocalisations are represented by transitive clauses in Nyulnyul, though a few are represented by ditransitive clauses (see next section). Those represented by transitive and ditransitive clauses construe vocalisations that impinge most directly on the individual, who is more significantly affected by the event than in the case of middle clause representation. This point is further illustrated in the following example:

(12-155)bin-in baab karrji-karrj bin nyungul wamb bilay that-ERG child sharp-sharp that old:man man karrjikarrj i-na-w-ngay sharp-sharp 3NOM-CM-give-1MIN.ACC 'That child swore at that old man, then he swore at me.'

Also represented by transitive clauses are events of prevention, in which someone is prevented from performing some act (usually unspecified), as illustrated by (12-156). In most instances, the prevention is effected by use of speech, which is usually represented as a direct quote, rather than actions. (In Gooniyandi the corresponding verb, gilij- 'block, prevent', occurs instead in middle clauses—McGregor 1990:565).

(12-156)irr-in arri i-li-rr-bard-in-ngay 3AUG.CRD-ERG not 3NOM-IRR-AUG-block-IMP-1MIN.ACC 'They didn't block (prevent) me.'

In keeping with the relative semantic unmarkedness of transitive clauses is the fact that there are few if any restrictions on the animacy of Actor/Agent and Undergoer/Medium. This is in sharp contrast to medio-active and middle clauses, in both of which there are strong associations between the grammatical roles and animacy. The following examples show inanimate Actor/Agents—including separate inanimate entities and body parts and products of animates—with highly animate Undergoer/Mediums.

- (12–157) bardangk-in i-ni-ny-judari-ngay tree-ERG 3NOM-CM-PST-trip-1MIN.ACC 'The log tripped me.'
- kiinyj-in i-na-mingk-ngay (12-158)bone-ERG 3NOM-CM-choke-1MIN.ACC 'The bone choked me.'
- (12-159)ngurnd-in i-n-m-in-ngay piss-ERG 3NOM-CM-put-PRS-1MIN.ACC 'I want to piss.'

(12–160) kujarr-in nga-mbal i-nga-rr-a-k-ngay nyun-uk two-ERG 1MIN-foot 3NOM-PST-AUG-CM-carry-1MIN.ACC there-LOC 'My two feet took me there.'

Whereas middle clauses invariably have an oblique pronominal enclitic on their IV, occasionally the accusative enclitic is not present on the IV that cross-references the Undergoer NP. (I am not referring to the third person minimal accusative marker, which is a zero.) Thus in (12-161) and (12-162) the third person augmented accusative pronominal enclitic is absent from the IV. In the case of (12–162), this is perhaps not entirely unexpected: it is not uncommon for non-minimal lower order animates and inanimates to be referenced or cross-referenced by minimal pronominals. One might argue in this case that the IV actually has a zero third person minimal pronominal. This argument, however, runs into difficulties in accounting for (12-161), where the Undergoer is human. This could perhaps be a speech error. (12-163) represents a third situation. Here the Undergoer is a second person, which is represented by an NP that is not cross-referenced on the IV. In this, and a number of other examples, the pronominal kurr 2AUG was grouped together prosodically with kujarr 'two', forming a phonological compound with it, not with ilamarr 'it might have burnt' as expected if it were encliticised to that word. I have no explanation for examples such as this, though I suspect that it possibly relates to the highly endangered state of the language.⁴

- (12–161) bin-in uriny i-bakand-in kujarr kujarr mird baab that-ERG woman 3NOM-have-PRS two two male child 'That woman has two sons.'
- (12–162) *kujarr lirlirlirl i-rri-wid-in kujarr kumbu* two pelicans 3NOM-AUG-eat-PRS two fish 'Two pelicans are eating two fish.'
- (12–163) jungk-in i-la-marr kurr kujarr fire-ERG 3NOM-IRR-burn 2AUG.CRD two 'The fire might burn you two.'

One possibility is that -BAKAND 'have' is not a fully transitive verb, and clauses such as (12–161) are not fully transitive, as in many languages (see Benveniste 1960/1971). And the corpus shows no instances of an overt pronominal enclitic to this IV. However, evidence from other Nyulnyulan languages suggests that one is likely to be possible (McGregor 2001c).

12.3.2.2.7 Ditransitive clauses

As indicated in (12–101) above, non-elliptical ditransitive clauses involve two unmarked NPs as well as an ergative marked NP. Just two of these NPs are cross-referenced in the IV and so serve in PTRs, one by a NOM bound pronoun, the other by an ACC; the third thus

⁴ It is likely that it is in relatively recent times that the accusative pronominals have encliticised to the IV. We might be seeing here a structural correlate of the obsolescence of Nyulnyul in the de-encliticisation of these pronominals, in accordance with Jakobson's 'last-acquired-first-lost' principle.

serves in a CR. Ditransitive clauses thus have (according to standard terminology) two argument roles, and one inherent non-argument.

The prototypical ditransitive involves the IV -W 'give', as in (12–164) and (12–165). In Nyulnyul, as in many languages of the region, the only possibility is for the recipient of the giving event to be represented by the ACC bound pronoun (Rumsey 1982b:144; McGregor 1990:334–335); there is no alternative possibility of cross-referencing the gift by this pronoun. Nor can the recipient be cross-referenced by anything but the ACC bound pronoun. That is, the Undergoer is always the recipient, the gift a Medium.

- (12–164) ngay-in nga-na-w-ø mirlimirl
 1MIN.CRD-ERG 1MIN.NOM-CM-give-3MIN.ACC paper
 kinyingk wamb biird
 DEF man yesterday
 'I gave the book to the man yesterday.'
- (12–165) kamard-in jan i-na-w-ngay ring grandmother-ERG 1MIN.OBL 3NOM-CM-give-1MIN.ACC ring 'My grandmother gave me a ring.'

A few communicative events—prototypically events of telling, possibly also sometimes asking—are represented by what may be a second type of ditransitive clause, involving an Implicated/Medium instead of an Undergoer/Medium, as the following examples illustrate. The non-PTR Medium represents the content or theme of the message, while the Implicated/Medium represents the addressee of the communication, as in (12–167) and (12–168). In (12–166) the non-PTR Medium represents a traditional cognate object.

- (12–166) angk-in wamb i-ni-ny-julng-jii jabarl what-ERG man 3NOM-CM-PST-tell-2MIN.OBL story 'Which man told you the story?'
- (12–167) kinyingk wamb nga-ni-ny-julng-jii

 DEF man 1MIN.NOM-CM-PST-tell-2MIN.OBL

 'That's the man I told you about.'
- (12–168) nimber-djon bel nane-minnjorob djen ibal ngimbirr-jun bil nga-ni-minnjurub-jin iibal night-ABL₁ fight 1MIN.NOM-CM-explain-3MIN.OBL father 'I explained to father the nightly fight.'

Other event types that are represented by ditransitive clauses in other languages (such as English), including 'show' and 'teach', are represented by other means in Nyulnyul, including by middle clauses with the second human participant cross-referenced by an oblique pronominal enclitic, and an additional apparently non-inherent Medium CR.

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⁵ The second person minimal cross-referencing pronominal enclitic in examples (12–166) and (12–167) could be either an oblique or an accusative form. I interpret it as an oblique on the basis of the form of the third person minimal enclitic in (12–168).

12.3.2.2.8 Concluding remarks

In addition to the five standard transitivity types listed in (12–101), Nyulnyul shows some unusual clause types. These are all quite rare, and instanced by only a few examples in the corpus, making it impossible to be certain of the best analysis. In some instances it may be that they are actually instances of, or subtypes of, the standard clause types, but with alternative patterns of case marking or verbal cross-reference. These may convey slightly different nuances of meaning than the corresponding standard clause types. For example, in (12–169), there is an ergative marked NP cross-referenced by the NOM prefix, and a locative NP, in contrast to the usual situation for the verb -KAD 'enter', which is to occur in an intransitive clause. It may be simply that this is an ordinary intransitive clause with an ergative marked Actor (cf. examples (12–110) and (12–111) above).

(12–169) ngi-im nga-n-j band-in i-ng-kad
1MIN.NOM-eye 1MIN.NOM-CM-say dust-ERG 3NOM-PST-enter
ngi-im-uk
1MIN.NOM-eye-LOC
'I blinked when dust entered my eye.'

A number of examples are like this, with an ERG PP plus a locative or allative phrase which is either not cross-referenced in the IV or is cross-referenced by a zero third person minimal accusative bound pronominal.

- (12–170) jakurd nga-n-j bur-uk jan wamb-in dudud return 1MIN.NOM-CM-say camp-LOC 1MIN.OBL man-ERG knock i-ngi-rr-a-w bur-uk jan

 3NOM-PST-AUG-CM-give camp-LOC 1MIN.OBL
 'As soon as I got back to my house, someone knocked on my door.'
- (12–171) baab-in warli yuurr yu-ngka-rr-a-m jarl-ung child-ERG everyone descend 3NOM-FUT-AUG-CM-put bank-ALL₁ 'The children will all roll down the bank '

There are a small number of instances in which the verb of what appears to be a main clause is in infinitival form, as in (12–172). The fact that the 'logical' agent of the seeing event, the man, is represented by an ergative NP suggests that this is an ordinary situation clause, with otherwise unusual formal features: allative marking of the ostensible Undergoer NP and an IV in infinitival form.⁶

(12–172) wamb-in ngay-ung ma-jal-in man-ERG 1MIN.CRD-ALL₁ INF_p-see-INF_S 'The man decided to see me.'

The following example is similar. In this instance, however, *liyan* 'like' could represent the framing clause, in which *kinyingk-in* is an Agent.

⁶ Other analyses are of course possible, even plausible. For instance, it could be that this clause is really relational, with the initial ergative PP juxtaposed to a non-finite clause represented by the second and third words. Alternatively, it could be that a 'higher' framing clause is missing, either by error, or because it is presumed. There are no grounds for deciding among the alternative analyses.

(12–173) kinyingk-in arri liyan ma-dam-in kinyingk uriny DEF-ERG not like INF_P-hit-INF_S DEF woman 'He won't want to hit her.'

In a small but not insignificant number of instances a non-verbal word appears to serve in the role of SoA. These are primarily words that serve propositional modification functions, modifying the manner in which the proposition expressed by the clause is to be 'taken'. The following example illustrates this: here the prefixing noun *-mungk* 'believe' appears to serve in the SoA role, specifying an event of belief.

(12–174) yarrad-in yarr-mungk kanaabin ya-nga-rr-dam 1AUG.CRD-ERG 1AUG-believe murderer 1PL.NOM-PST-AUG-hit 'Thinking he was a murderer we hit him.'

12.3.2.3 Non-nuclear experiential roles

As was seen in §12.3.2.2, a situation clause in Nyulnyul can have at most three inherent core roles, the SoA and two PTRs (which always conflate with CRs). The fourth inherent role in a ditransitive clause is always a CR that is not conflated with any other experiential role. Non-inherent CRs can also be found in clauses of other transitivity types. We examine these in this section; see also §12.4 below.

12.3.2.3.1 Non-nuclear Mediums

We have already come across non-nuclear Mediums in 'ditransitive' clauses, which represent the gift in giving events, and the topic in telling events. In ditransitive clauses, this role is, of course, inherent. Many clauses, however, have non-nuclear Mediums that are not inherent.

Some middle clauses of communication have a second Medium NP that is not cross-referenced on the IV and that represents the subject matter or content of the communicative event. This is illustrated by the following examples, where the only overt NPs represent the topic of the communicative event:

- (12–175) angk mi-n-di-jin what 2MIN.NOM-CM-say-3MIN.OBL 'What did you tell him?'
- (12–176) kinyingk wamba nga-n-di-jii

 DEF man 1MIN.NOM-CM-say-2MIN.OBL

 'This is the man I told you of.'
- (12–177) *ni-lawirl kaw nga-n-di-jin*3MIN-name call 1MIN.NOM-CM-say-3MIN.OBL
 'I called out his name.'

Intransitive clauses of speech or communication can also have an second Medium NP specifying something about the communicated material, e.g. the language spoken:

```
(12–178) biirdi kujarr uriny i-nga-rr-ngank-an worraarra yesterday two woman 3NOM-PST-AUG-speak-IMP Worrorra ngank ngay-ung language 1MIN.CRD-ALL<sub>1</sub> 'Yesterday the two women spoke Worrorra to me.'
```

The subject matter of the communicative event seems to be normally represented in a PP rather than an unmarked NP in intransitive clauses.

A clause of perhaps any transitivity type can have a non-nuclear Medium specifying a body part in which the event is actualised, as in the intransitive (12–179); such external possession constructions are discussed in §12.4.2.4 below.

```
(12–179) nga-mbal duurr nga-m-barnj
1MIN-foot hurt 1MIN.NOM-PST-exchange
'I hurt my foot.'
```

12.3.2.3.2 Non-nuclear Agent

We have already encountered non-nuclear Agents in medio-active clauses, where they are inherent. Rarely, a non-cross-referenced Agent NP is optional in a transitive clause. These seem to be restricted to external possession constructions (see §12.4.2.4), as in:

```
(12–180) bardi nga-na-w nga-marl-in kinyingk walangk grip 1MIN.NOM-CM-give 1MIN-arm-ERG DEF spear 'My two hands gripped the spear.'
```

12.3.2.4 The applicative construction

Like other Nyulnyulan languages, Nyulnyul has an applicative construction (or constructions) marked by the instrumental postposition -ang, or a morpheme that is phonologically identical with it, which is attached to the IV. Also as in other Nyulnyulan languages, the same morpheme is used on an IV as a type of complementiser marking a subordinate clause type (on which see §13.3.1.2.1.6). Unfortunately, the corpus of Nyulnyul applicatives in very limited, and its range of uses and meanings is poorly understood.

There are broad similarities in applicative constructions across Nyulnyulan languages—see McGregor (1998a) on Warrwa applicatives; Stokes (1982:304–319) and Hosokawa (1991:174–183) on Nyikina and Yawuru applicatives; and Bowern (2004a:237–246) on Bardi applicatives; Nekes & Worms (1953) cite numerous examples from most Nyulnyulan languages, although they do not specify them anywhere as separate constructions, and provide no analysis. Nevertheless, there are many differences across the languages in terms of details. Thus one needs to be cautious in using cross-linguistic data to fill out the gaps in the Nyulnyul data. On the other hand, it is likely that the applicative in the nearby and most closely languages Jabirrjabirr, Nimanburru, and to a lesser extent Bardi, was not too different from the Nyulnyulan construction. I thus refer in a couple of places below to these languages, where they may help fill in missing data in the Nyulnyul corpus.

The applicative is a voice option that typically marks an increase in valency vis-a-vis the corresponding non-applicative construction (e.g. Comrie 1985; Austin 1997; McGinnis 2008). An NP that serves in an optional role in a clause typically corresponds to an

Undergoer/Medium NP in the applicative; if the unmarked construction was transitive its Undergoer/Medium is a Medium in the applicative, which is a ditransitive construction. In Nyulnyul it is not clear that the applicative is either a derived or inflected form of the IV. In a number of instances the applicativised verb appears to show an unpredictable difference in meaning from the corresponding unmarked verb, and Nekes & Worms (1953) list a number of applicative-marked IVs as separate lexemes. This suggests that the applicative is a derived form. On the other hand, the positioning of the marker distant from the IV root suggests otherwise, as does its formal identity with the instrumental postposition.

Two main types of applicative are attested in Nyulnyul: benefactive and locative applicatives; comitative and instrumental applicatives may also have existed, though they are less certain, and not well represented. Whether these were emically distinct constructions is uncertain. We deal with these four types in the following subsections. In the final subsection we discuss some problem examples.

12.3.2.4.1 Locative applicative

What I refer to as locative applicatives have an NP in the role of Undergoer/Medium that corresponds to a PP in an enhancing dependency relation in the corresponding non-applicative. In most instances this dependency relation is spatial, specifying either a location or a direction towards which the event is oriented.

In almost all examples the Undergoer/Medium of the applicative is a human being who benefits from the situation. An example is (12–181), involving the applicativised IV *magan-aŋ* 'to deliver, to bring' (as per Nekes & Worms 2006:236).

(12–181) wan-ag-aŋ ŋai bindjen djān wa-na-k-ang-ngay binjin jan 2MIN.NOM-CM-carry-APP-1MIN.ACC coolamon 1MIN.OBL 'Bring me my coolamon!' (Nekes & Worms 1953:558)

In the corresponding plain transitive construction, the person to who the thing is brought is cross-referenced by an oblique bound pronominal, as in (12–182). If represented by a separate NP it would be marked by the allative postposition, as per (12–183).

- (12–182) kurr kujarr wa-rr-a-k-jan wul karrmij 2AUG.CRD two 2NOM-AUG-CM-bring-1MIN.OBL water later 'You two bring my water later.'
- (12–183) *yu-ngku-rr-i-ny-karr wil wanyj yu-ngku-rr-a-k*3NOM-FUT-AUG-CM-get-TEM meat back 3NOM-FUT-AUG-CM-carry bur-ung
 camp-ALL₁
 'If they catch something they'll bring it back here.'

Although information is too scanty to draw firm conclusions, it would seem reasonable to hypothesise that (12–181) presents the event as impacting more on the speaker than (12–182), where they are represented as Implicated rather than Undergoer. And in (12–183) the place is merely a destination.

One of the few exceptions involving an inanimate Undergoer/Medium is (12–35) (repeated here for convenience as (12–184)). In clauses referring to climbing events what is

climbed in (here *bardangk* 'tree') is normally represented by a locative PP, as in (12–185). One guesses that the two constructions contrast semantically in terms of the expressed degree of involvement of the thing climbed in.

```
(12–184) ma-wany-in-ang bardangk arri layib

INF<sub>P</sub>-climb-INF<sub>S</sub>-APP tree not good

'Climbing trees can be dangerous.' (Literally: 'Climbing trees is not good.')
```

```
(12–185) are lagal mile-wanj badang-og arri lakal mi-li-wany badangk-uk not climb 2MIN.NOM-IRR-climb tree-in 'Do not climb up the tree.' (Nekes & Worms 1953:334)
```

Locative applicatives are almost always ditransitive (the non-finite clause in (12–184) is the only known exception), and correspond to transitive situations. Some additional examples are:

```
(12–186) wamba ŋane-ŋol-aŋ mili mil wamb nga-na-ngul-ang-ø milimil man 1MIN.NOM-CM-throw-APP-3MIN.ACC paper 'I handed a letter to the man.' (Nekes & Worms 1953:801)
```

- (12–187) way mi-jid-in kumbarr wa-na-m-ang-ngay away 2MIN.NOM-go-PRS money 2NOM.FUT-CM-put-APP-1MIN.ACC 'If you're going away, leave money with me.'
- (12–186) shows that the Undergoer of the applicative is indeed a Medium.

There remain a couple of examples that are more difficult to explain. In (12–188), which given the form of the IV is presumably Nyulnyul (the authors do not specify), one presumes that the speaker would be the Undergoer of the corresponding non-applicative clause. If so, the locative PP of the non-applicative would correspond to a non-participant Medium NP in the applicative. The other alternative, which seems less probable, is that *bardangk* 'tree' is the Undergoer of the ordinary transitive clause, in which the speaker represents a location against which it is brought into contact. There is no basis on which to decide between these alternatives.

```
(12–188) are badang mil-dam-an nai
arri bardangk mi-l-dam-ang-ngay
not tree 2MIN.NOM-IRR-hit-APP-1MIN.ACC
'Do not push me against the tree.' (Nekes & Worms 1953:418)
```

A second problematic example is (12–189), which involves the IV *ma-galwalan-aŋ*, glossed 'to sleep restlessly' by Nekes & Worms (1953:543). Unlike the other examples, this involves an inanimate Undergoer in the applicative, and it is not easy to construe the place as an Undergoer. My guess is that what Nekes & Worms (1953) provide is not a gloss indicating the semantic meaning of the IV but rather a free interpretation of the meaning in the utterance token. Although they cross-reference to the non-applicative *ma-galwalan* there is no entry for this IV, and nor is it used anywhere in the dictionary. It could be a reduplication of -KAL (their *ma-galan*) 'wander'. The sentence would then express the meaning that the speaker wandered or roamed about the previous night—perhaps sleep

walking, literally or figuratively. In this way we can make sense of the registration of *in bur* 'this country' as an Undergoer (cf. English *wander the countryside*).

(12-189)nan-galwal-an yene bōr, are nga-ng-kalwal-ang in bur arri 1MIN.NOM-PST-sleep:restlessly-APP this country not nale-molgan nimber nga-li-mulk-an ngimbirr 1MIN.NOM-IRR-sleep-IMP last:night 'I felt restless at this place, I could not sleep last night.' (Nekes & Worms 1953: 543)

12.3.2.4.2 Benefactive applicative

The benefactive applicative is a transitive construction that typically agnates with a middle clause of communication or bodily behaviour, its Undergoer corresponding to the Implicated of the middle clause. Almost all examples involve the IV -J 'say', either in an SVC or a CVC. The following examples illustrate applicative clauses of speech. Examples (12–190) and (12–191) suggest that the difference between the applicative and the corresponding middle may lie in the degree of affect on the addressee, the degree to which the situation is considered to impinge on the addressee.

- (12–190) worinj-en lar lar ind-j-aŋ ŋai
 uriny-in lar-lar i-n-j-ang-ngay
 woman-ERG harsh 3NOM-CM-say-APP-1MIN.ACC
 'The woman addressed me angrily.' (Nekes & Worms 1953:647)
- (12–191) laib-ēdj ŋan-den dje, are mil-edj-aŋ layib-ij nga-n-d-in-jii arri mi-li-j-ang good-DAT 1MIN.NOM-CM-say-PRS-2MIN.OBL not 2MIN.NOM-IRR-say-APP wamborinj maŋer wamburiny mangir people always
 'I tell you in a friendly manner do not always talk harshly to the people.' (Nekes & Worms 1953:636–637)
- (12–192) *i-ni-jibal-irr* angk nga-n-d-in-ing-karr-kurr
 3NOM-CM-ask-3AUG.ACC what 1MIN.NOM-CM-say-PRS-APP-SUB-2AUG.ACC
 'He asked them "What do I say to you."

The most frequent bodily behaviour situation encountered in the applicative is expressing anger towards someone, represented by $bil-ij \dots -J$ (anger-DAT ... say) 'be angry with':

(12–193) arri mi-li-jiding jirr malburl warldabagarl not 2MIN.NOM-IRR-touch 3AUG.OBL things things bil-ij i-li-rri-j-ang-jii anger-DAT 3NOM-IRR-AUG-say-APP-2MIN.OBL 'Don't touch their things or they will get angry with you.'

(12–194) are mile-dam yēl, bele djaŋard arri mi-li-dam yil bil-ij-jangard not 2MIN.NOM-IRR-hit dog anger-DAT-IRR nar-edj-an djoe⁷ ngarri-j-ang-juy 3MIN.NOM.IRR-say-APP-2MIN.ACC 'Do not hit the dog, he might become wild towards you.' (Nekes & Worms 1953:781–782)

One other attested bodily behaviour clause involves the otherwise unattested PV nungkub 'ignore':

(12–195) nungkub i-ngi-rr-j-ang mangir miil
ignore 3NOM-PST-AUG-say-APP always lie
i-n-d-in-jirr
3NOM-CM-say-PRS-3AUG.OBL
'They ignored him because he was always telling lies.'

12.3.2.4.3 Comitative applicative

Comitative applicative constructions are not well attested in the corpora, and examples are limited to the secondary corpora, Nekes & Worms (1953). (12–196) is the only clear-cut example, and appears under a separate entry for *ma-galagan-aŋ* 'to help carrying' (Nekes & Worms 1953:543). In fact, the IV -KALAK 'follow, approach (from behind)' occurs in transitive clauses, with Undergoer a person who is followed or approached. It seems in this example that the Undergoer of the applicative corresponds to the Undergoer of the corresponding ordinary transitive clause (compare (12–197)). The applicative has a third NP, apparently a Medium, that corresponds to the COM PP of the non-applicative. The interpretation of (12–196) would seem to be that Elean is following the speaker with the water, from which it may be inferred that the speaker is being assisted. The item carried, the water, is not represented as a PTR, but rather as a CR.

(12–196) elean-en ineŋ-galag-aŋ ŋai wōl elean-in i-ni-ng-kalak-ang-ngay wul Elean-ERG 3NOM-CM-PST-follow-APP-1MIN.ACC water 'Elean helped me carrying water.' (Nekes & Worms 1953:543)

(12–197) wamb-in i-na-ng-kalak-yarrad walangk-nyirr man-ERG 3NOM-CM-PST-approach-1AUG.ACC spear-COM 'The man came to us with a spear.'

The next example could well also be a comitative applicative: *daarr* ... -R (arrive ... poke) usually occurs in intransitive clauses expressing the meaning 'arrive'; in this instance

⁷ Nekes & Worms (1953:781–782) attribute this example to Jabirrjabirr and Nyulnyul. However, it involves the prefix *ŋar*-, which by their own account is peculiar Jabirrjabirr; the Nyulnyul prefix would be *il-* (*i-l-*). Regardless of this apparent confusion, it is reasonable to suppose that with the necessary adjustments the example would be acceptable in Nyulnyul.

it appears to mean 'arrive with', thus 'bring'. One guesses that in the agnate intransitive clause the people would be denoted by a comitative PP.

(12–198) dar in-aren-aŋ yer bōṛ jen-og daarr i-na-r-in-ang-irr bur jin-uk arrive 3NOM-CM-poke-IMP-APP-3AUG.ACC place 3MIN.OBL-LOC 'He took them to his place.' (Nekes & Worms 2006:308)

A number of Nyulnyulan languages show a comitative applicative with the 'be' IV, representing a means of expressing possession (see McGregor 2001b, 2001c). This construction is not attested in Nyulnyul. However, Nekes & Worms (1953) give examples in the very closely related Jabirrjabirr; this strongly suggests that the construction also existed in Nyulnyul. Two of their examples are:

(12–199) djungebelebel-en djugar-an i-nen-an-djer Jabirrjabirr jungkibilbil-in jukarr-ang i-n-in-ang-jirr fire:bird-ERG carefully-INS 3NOM-be-IMP-APP-3AUG.ACC djung jungk fire 'The fire bird kept the fire carefully.' (Nekes & Worms 1953:507–508)

(12–200) wandar na-nen-an bugian Jabirrjabirr wandar(r) nga-n-in-ang bukiyan blotches 1MIN.NOM-be-PRS-APP many 'I have many blotches of prickly heat.' (Nekes & Worms 1953:869–870)

12.3.2.4.4 Instrumental applicative

There is some evidence that an instrumental applicative existed in Nyulnyul, as found in Warrwa (McGregor 1998a) and Bardi (Bowern 2004a:241–242). All potential examples come from the secondary corpora, specifically from Nekes & Worms (1953). Three are provided here:

- (12–201) djal ine-men-an yer walang-an jarl i-na-m-in-ang-irr walangk-ang pierce 3NOM-CM-put-IMP-APP-3AUG.ACC spear-INS 'He put the fish together on the spear.' (Nekes & Worms 1953:445)
- (12–202) djal ine-men-an yer walang-an warindjer-an.
 jarl i-ne-m-in-ang-irr walangk-ang warinyjirr-ang
 pierce 3NOM-CM-put-IMP-APP-3AUG.ACC spear-INS one-INS
 'He speared them with his spear.' (Nekes & Worms 2006:308)
- (12–203) egere-bon-an a djeeb-an, i-ngi-rr-a-bun-an aa jiib-ang 3NOM-PST-AUG-CM-spear-IMP and boomerang-INS

ener-damen-an, eŋer-daman gargodj. *i-ngi-rr-dam-an-ang* i-ngi-rr-dam-an karrkuj 3NOM-PST-AUG-hit-IMP-APP 3NOM-PST-AUG-hit-IMP dead 'They speared him and hit him with their boomerangs, killing him.' (Nekes & Worms 2006:309)

Nekes & Worms (1953) do not identify the applicative -ang in any of these examples, and indeed transcribe the relevant morpheme consistently as -an. However, it is likely that this is an error of transcription or hearing, and in fact the morpheme involved here is -ang APP rather than the imperfective $-an \sim -in$, which is already represented in each of the IVs.

As is the case for the Warrwa instrumental applicative (McGregor 1998a), and an option for the Bardi instrumental applicative (Bowern 2004a:242), the instrument NP remains marked by the instrumental postposition -ang; it is not recategorised as an Undergoer/ Medium, as happens in the other three types of applicative discussed above.

There are too few examples to permit us to say anything with confidence about the meaning contrast between the instrumental applicative and the corresponding plain transitive clause.

12.3.2.4.5 Problem cases

A number of problem instances exist in the corpora for which the analyses are uncertain, and/or their status as applicatives is dubious. The following might be an instance of a locative applicative. A place jumped at is usually represented by a locative or allative PP; however, in the case of (12–204) what is jumped at is an animate, and it is represented by a plain NP. Alternatively, it is equally possible that this example represents another sense of the applicative, attested in e.g. Warrwa (McGregor 1998a), that the event is imminent (see also §13.3.1.2.1.6).

```
(12–204) jurrb yu-ni-j-ang
                                   bin karrambal
          jump 3NOM-CM-say-APP that bird
          'It's ready to jump on that bird.'
```

I have no explanation for the following example, from Nekes & Worms (1953), which occurs under the headword ma-medjalan-ay 'to depend on, to rely on, to trust'. Which IV is represented in this example is uncertain. It could be a reflexive/reciprocal form of the IV -JAL 'see' (the REF suffix is sometimes absent (see §7.3.2.2), although here it is possible that it's absence is an error in interpretation). The implication might thus be that the speaker looks after themselves ('see oneself') through or via the father. Another, perhaps less likely, interpretation is that the IV is -MIJAL 'sit', and the construction is a locative applicative: 'I sit with father'. It is more difficult to understand the free translation given this analysis.

```
na-medjalen-an
(12-205)
                                          ibal
           nga-mi-jal-in-ang
                                          iibal
            1MIN.NOM-REF<sub>p</sub>-see-PRS-APP father
            'The father cares for me.' (Nekes & Worms 1953:706)
```

Note that they not infrequently make this error in their transcriptions. Indeed, in (12-203) they make precisely this error, misrepresenting the INS postposition as -an.

12.4 Dependency relationships in verbal clauses

We have already discussed some clausal dependency relations, in particular, those that are inherent to certain clause types, verbless relational clauses (§12.2.3) and verbal 'being' clauses (§12.3.1.2). We now examine dependency relations in other types of verbal clauses. In the majority of cases the relation is not inherent, but as it were an optional extra that is added to flesh out the information provided; there are some exceptions, however, in which a non-'being' verbal clause contains an inherent dependency relation. As will be seen, a much richer array of dependency relations are found in the wider context than in relational and 'being' clauses: situations of 'being' thus represent the marked option, which shows a restricted range of types. Attention in this section is restricted to cases in which the units related by dependency relations do not together form a larger complex unit (on which see §10.5).

The exposition is again organised according to the three main types of dependency relation, elaboration, extension, and enhancement, which are treated in turn in the following three subsections. The dependency relations we discuss here are mostly hypotactic, that is, dependency relations in which the units have different statuses: one unit is head, the other dependent. (They are paratactic in relational clauses and 'being' clauses.)

The types of dependency relation under discussion here, whether or not inherent in the clause, do have something to do with the experiential situation, as distinct from the circumstances for NP complexes where the dependency relation is effectively independent of the situation. Thus in some instances the head is the entire experiential component of the clause. In some instances, the head is a phrasal unit—normally an NP—that simultaneously serves in an experiential role; the dependent NP may also serve in an experiential role. In many cases in which the head is an NP a second dependency relation relates the dependency relation to the experiential core of the situation.

As will emerge below, there are correlations between the type of dependency relation and the type of head. Elaboration typically involves a phrasal head; enhancement typically has the clause core as head; extension seems to show no strong preference either way. An illustration of this correlation is provided by the fact that where the dependency relation is related to the core experiential situation, it is by a relation of enhancement.

12.4.1 Elaboration

Elaboration, as just mentioned, typically involves two NPs, one of which serves in a participant role; the other elaborates on it in a way that is relevant to the situation. The dependency relation itself in turn typically serves in an enhancing dependency relation with the clause core. These are secondary predicate constructions (Nichols 1978).

12.4.1.1 Identification

The type of elaboration involved in secondary predication is almost always attribution. Identification is minimally attested, and seems to be restricted to Undergoers (possibly Implicateds are also permissible) in bivalent clause types. (12–206) and (12–207) are clear examples: in (12–206) the eldest son is identified as the 'king' of the people; in (12–207) the man is identified as the boss. The analysis of (12–208) is somewhat uncertain. Assuming the viability of the free translation, it is the identity of the thing thought about that is at issue; an attributive interpretation, however, also seems plausible: that the persons

attributed a quality of the thing thought of, namely that it was a spirit (these correspond respectively to *it was the spirit* (as per the authors' gloss) and *it was a spirit*.)

- (12–206) wurrumbadangk mirda baab kinyingk big male child DEF i-nga-rr-m-an-an-jirr king / 3NOM-PST-AUG-put-IMP-IMP-3AUG.OBL king 'The eldest son they made their "king" (Felix).'
- (12–207) kinyingk wamb maj i-ngi-rr-mukar

 DEF man boss 3NOM-PST-AUG-make
 'They made this man boss of the country.'
- (12–208) ŋēr-elbe aŋer-edj djen
 ngiir-ilbi ya-nga-rri-j-jin
 spirit-MB 1PL.NOM-PST-AUG-say-3MIN.OBL
 'We thought that it was the spirit.' (Nekes & Worms 1953:371, 519–520)

In (12–209) Sunday Island serves to identify the name of the ellipsed Undergoer NP.

(12–209) wajbal-in i-ngi-rra-m ni-lawirl Sunday Island white:person-ERG 3NOM-PST-AUG-put 3MIN-name Sunday Island 'White people call it Sunday Island.'

It is not clear whether *ni-lawirl* 'his/her/its name' and *Sunday Island* are separate NPs each in an identifying relation to the Undergoer, or whether they form a single unit together that itself identifies the Undergoer. Regardless of the analysis, this example involves a restricted type of identification between minimally *Sunday Island* and the Undergoer, a type that I have elsewhere referred to as naming, where the relation is a purely symbolic one (McGregor 1996b; see also Davidse 1992). Another such example is (12–210), where the NP *irr-lawirl* 'their names' is apparently assigned to the ellipsed NP in the Implicated role; it apparently simultaneously serves as a Medium—and as Undergoer in the agnate clause in which no Implicated role is represented.

(12–210) *i-ny-jid irr-lawirl i-n-nyu-jirr* 3NOM-PST-go 3AUG-name 3NOM-CM-get-3AUG.OBL 'He went along, putting all their names.'

The relation of identification is inherent in all of the above examples: without the dependency relation, the clauses would have quite different interpretations.

12.4.1.2 Attribution

A range of types of secondary predicate can be distinguished in attribution, depending on how the attributive dependency relation is related to the core experiential situation: descriptive, resultative, or temporal. The discussion of this section is organised around these three types. The nature of the dependency relation itself (i.e. in terms of the type of quality or property attributed of the head) can also be used to distinguish amongst different types of attribution; however, this does not yield as useful a classification, and it is almost certainly etic.

As we will see, the head NP in the attributive relation almost invariably serves in a PTR; simultaneously it normally serves as a Medium; only rarely does it serve as an Agent. The question of which grammatical roles may 'host' a secondary predicate has received a good deal of attention in the literature. It is not a focus of this discussion, primarily because the vagaries of the corpora make it uncertain whether or not absences are accidental.

12.4.1.2.1 Descriptive secondary predicates

Descriptive secondary predicates describe an entity in relation to the situation in which it is involved: that is to say, the attribute specifies a quality of some entity that is relevant to its involvement in the referent situation of the clause. For atelic events, the quality is held throughout its temporal duration. The following examples illustrate descriptive secondary predicates in smelling events:

- (12–211) in wil i-bunyj biin this meat 3NOM-stink rotten 'This meat smells rotten.'
- (12–212) $r\bar{e}b$ im-bondj, are laib riib i-m-bunyj arri layib bad 3NOM-PST-smell not good 'It smelled bad, is not good.' (Nekes & Worms 1953:843)
- (12–213) laib morol i-bondjan layib murrul i-bunyj-an good little 3NOM-smell-PRS 'It smells fairly good.' (Nekes & Worms 1953:737)
- (12–214) kinyingk wamb i-m-bunyj nundirr
 DEF man 3NOM-PST-smell sweat
 'This man smells sweaty.'
- (12–214) is questionable as a descriptive secondary predicate: *nundirr* 'sweat' specifies a bodily product that characterises the type of smell involved. However, in contrast to the other examples, there is no corresponding verbless relational clause attributing the N of the man; instead, the N would need to be marked by a comitative postposition.
 - (12–215) and (12–216) show secondary predicates for other types of atelic event.
- (12–215) *i-ngi-rr-jid-an* kurdabil milirr-karr 3NOM-PST-AUG-go-IMP naked before-TEM 'They went around naked in the old days.'
- (12–216) *jid i-n-j kalwar* stand 3NOM-CM-say expose 'He stood there.'

For telic events, the quality holds at the point of occurrence of the event—and typically by implication over a longer subsequent interval of time as well—as in:

- (12–217) *i-ng-kalab-an* bambur 3NOM-PST-born-IMP blind 'He was born blind.'
- (12–218) *ya-nga-rr-kalab-an rinyariny* 1PL.NOM-PST-AUG-born-IMP sensible 'We were both born clever.'

In the above examples, the secondary predicate is attributed of the Actor of an intransitive clause. A descriptive secondary predicate may also be attributed of an Undergoer in a transitive clause:

- (12–219) *liyan nga-n-m-in jan dii arri maal* like 1MIN.NOM-CM-put-PRS 1MIN.OBL tea not hot 'I like my tea lukewarm.'
- (12–220) *ya-rr-wid-in barni* 1PL.NOM-AUG-eat-PRS raw 'We eat it raw.'

There are no comparable examples of descriptive secondary predicates on Agent NPs in transitive clauses, such as exist in many nearby languages. However, there are a couple of examples in which a comparison is drawn to another individual and the way in which they would perform the action. The descriptive attribute simultaneously specifies a quality of the Agent and indicates the manner in which the event is performed, namely in the manner of the standard of comparison. The semblative marker is attached to the NP denoting the standard of comparison; this NP is not further marked by the ergative:

- (12–221) bin wangalang burruk i-na-r wamb-ingirr that boy kangaroo 3NOM-CM-poke man-SEM 'That boy speared the kangaroo like a man.'
- (12–222) may i-ni-ng-kid ni-lirr kiinyj wajbal-ngirr food 3NOM-CM-PST-eat 3MIN-lip shut white:person-SEM 'He ate with his lips closed like a white person.'

In (12–222) the property of being shut is also attributed of the eater's lips, and might also be analysed as a secondary predicate on the NP specifying the body-part instrument employed *ni-lirr* 'his lips'. However, the NP is not marked by the instrumental postposition, and thus one wonders whether the NP is actually incorporated into the clause. Yet the comparative secondary predicate follows it, suggesting that it does. A similar example is (12–223), although in this instance *ngaman* 'breast' does not serve as an instrument.

(12–223) *i-ngi-rr-land* ngaman-nyirr jirr kalwar 3NOM-PST-AUG-sit breast-COM 3AUG.OBL expose 'They were sitting with breasts exposed.'

As observed by Nichols (1978), descriptive secondary predicates can be rephrased as biclausal constructions in which the attribute is predicated in the main clause, and the situation is represented by a dependent clause. Thus, for instance, (12–215) means 'they

were naked when they went around in the early days'. I suspect that the same holds for examples like (12–221) and (12–222). That is, the manner sense is presumed rather than coded by the construction (or any morpheme in it); what is coded by the construction is merely the temporal sense. (12–221) could be thus paraphrased as 'this boy was like a man when he speared the kangaroo', from which the manner interpretation can be inferred.

12.4.1.2.2 Temporal

In some instances the secondary predicate is marked by -karr TEM. A precise temporal relation between the attribute and the core situation is not specified. As the following examples illustrate, it can be at a point in time or throughout an interval of time from a specified beginning point. There is no discernible difference between the former category and descriptive secondary predicates discussed in the previous section, except for the presence of -karr TEM. The second category, however, is peculiar to secondary predicates marked by -karr TEM: unmarked secondary predicates do not admit extent interpretations.

- (12–224) *ya-rr-a-wid-in jariny-karr* 1PL.NOM-AUG-CM-eat-PRS green-TEM 'We eat it when it's green.'
- (12–225) *i-ngi-rr-j-jan* baan kalkir wa-n-j
 3NOM-PST-AUG-say-1MIN.OBL like:that swim 2MIN.NOM-CM-say
 wangalang-karr
 young:man-TEM
 'They taught me to swim as a young man.'
- (12–226) wamb i-na-m-ngay murrurl-karr man 3NOM-CM-put-1MIN.ACC small-TEM 'The man grew me up from a small child.'
- (12–227) yaward-id nga-ng-an wangalang-karr ngay horse-CHAR 1MIN.NOM-be-PRS young:man-TEM 1MIN.CRD 'I've been a stockman since a young boy.'

12.4.1.3 Resultative

Resultative secondary predicates attribute a property of an entity that results from the occurrence of the situation designated by the remainder of the clause. Usually the head of the logical relation, the thing of which the property is attributed, is an Undergoer:

(12–228) wa-na-mukar karrj 2MIN.NOM-CM-make sharp 'Make it sharp.'

⁹ It might be observed that in the case of identification (discussed in §12.4.1.1) the logical relation is almost always in a resultative relation to the event.

(12–229) *i-na-m-bulabul* murrul baab burdarr 3NOM-CM-PST-washed little child clean 'S/he washed the baby clean.'

Occasionally a resultative secondary predication applies to an Actor/Medium in an intransitive clause:

ngarrij-ang i-m-bilk-in wangal wilawil (12-230)strong-INS 3NOM-PST-strengthen-PRS this wind cyclone 'The wind is strengthening into a cyclone.'

12.4.2 Extension

A wider range of relations of extension are found in verbal situation clauses than in relational clauses, where extension is manifested exclusively in the possessive relation (see §12.2.3.2). In situation clauses we find in addition to possession, also accompaniment, privative, and instrument. Accompaniment, privative, and instrumental relations usually involve an NP in a hypotactic dependency relation to the Actor, the relation being formally marked on the dependent NP. The possessive relation typically concerns a Medium, and is either unmarked, or is marked by the locative postposition.

12.4.2.1 Accompaniment

In accompaniment a comitative PP extends on the Actor, indicating another entity involved in the situation along with the Actor, usually in an intransitive clause (as in (12–231) and (12–232)), less commonly in a transitive clause (as in (12–233) and (12–234)).

- (12-231)ngay-nyirr mi-jid 1MIN.CRD-COM 2MIN.NOM-go 'Come with me.'
- (12–232) nga-ngka-land biik-uk kurr-nyirr 1MIN.NOM-FUT-sit shade-LOC 2AUG.CRD-COM 'I will sit in the shade with you.'
- (12–233) *liyan i-n-m-in* wil-ung ma-kid-in yambun 3NOM-CM-put-PRS meat-ALL₁ INF_p-eat-INF_s together ngay-nyirr 1MIN.CRD-COM 'He wants to eat meat with me.'
- (12-234)i-ny-jid i-ni-ng-kid wilamay yambun irr-nyirr 3NOM-PST-go 3NOM-CM-PST-eat food together 3AUG.CRD-COM wamburiny people 'He went and ate with them.'

The adverbial yambun 'together' is sometimes also employed, as in the last two examples. This specifies joint participation in the situation on equal terms. For in general, the accompanying entity, represented by the COM PP is construed as secondary to the Actor, involved only by virtue of the Actor's involvement. Thus the accompanying entity is usually lower on the animacy hierarchy than the Actor:

- (12–236) *i-ngi-rr-jid* yaward-nyirr jirr
 3NOM-PST-AUG-go horse-COM 3AUG.OBL
 'They went with their horses.'
- (12–237) ya-ngi-rr-ø-uk ngank-uk ya-ngi-rr-ø biird
 1PL.NOM-PST-AUG-be-LOC talk-LOC 1PL.NOM-PST-AUG-be yesterday
 mijilkarr kinyingk-karr wamb i-ni-ng-kalak may
 afternoon DEF-TEM man 3NOM-CM-PST-approach vegetable:food
 wilamay-inyirr
 food-COM
 'While we were talking yesterday afternoon that man brought my dinner.'

It seems, however, that the lower status of the accompanying entity is a contextual sense, and that it is a consequence of the fact that the situation is presented from the perspective of the Actor. This would account for (12–238) and (12–239), where the accompanying entity is higher on the animacy hierarchy than the Actor. (12–240), from Text 2, lends further support to the hypothesis that the situations are presented from the perspective of the Actor.

- (12–238) mangir i-n-in yarrad-nyirr always 3NOM-be-PRS 1AUG.CRD-COM 'It (the dog) is always with us.'
- (12–239) linykurr-in i-ny-jarrjarr jiwar-nyirr wamb crocodile-ERG 3NOM-PST-stand dead:person-COM man ni-lirr-uk
 3MIN-mouth-LOC
 'The crocodile got up with the dead man in his jaws.'
- (12–240) aa ral i-ni-ng-kid / kinyingk-uk kalamb nyumulk and soon 3NOM-CM-PST-eat DEF-LOC towards thither i-ny-jid uriny-nyirr jin / 3NOM-PST-go woman-COM 3MIN.OBL 'And he ate immediately. In that place he went to and fro with his wife.'

Finally, observe the contrast with (12–241), where the COM NP forms a complex NP with the preceding NP: the accompanying entity in this instance specifies a characteristic of the Actor exclusively, and not in relation to the situation. There is no implication of joint engagement in the situation.

(12–241) bin uriny baab-nyirr i-ni-ng-kid i-ng-kid-an beer that woman child-COM 3NOM-CM-PST-eat 3NOM-PST-eat-IMP beer 'That woman with the baby was drinking beer.'

12.4.2.2 Privative

The privative is the negation of accompaniment, and is indicated by an NP with the particle *arriyangkang* 'without' (see §9.2.3 and §10.4). As in accompaniment, the extending relation is relevant to the situation. In Nyulnyul the privative typically applies to the Actor of an intransitive clause, indicating that they carried out the situation in the absence of an expected associated entity, again normally of secondary status to the Actor:

- (12–242) arri mi-li-jid arriyangang marlborl-nyirr jii not 2MIN.NOM-IRR-go without things-COM 2MIN.OBL 'Don't go without your things.'
- (12–243) marriny i-ngi-rr-jid arriyangkang wul go 3NOM-PST-AUG-go without water 'They went walking without water.'

Rarely, the privative NP is a dependent on the Agent of a transitive clause; it takes no ergative marking:

(12–244) arri bur i-la-jal arriyangkang jin kilaj not place 3NOM-IRR-see without 3MIN.OBL glasses 'He can't see without his glasses.'

12.4.2.3 *Instrument*

We have already seen that Nyulnyul is somewhat unusual for an Australian language in its possession of a separate instrumental case marker, the functions of which were discussed in §5.3. In its clause-level relation-marking functions, this postposition marks an instrument used to bring the situation about. As seen in §5.3, the range of phenomena covered by this postposition include: body-part instruments, tools, mediums, missiles, and abstract entities such as words. Numerous examples are given of these senses in §5.3. There is no reason to suppose that these are not all specific contextual senses of a single emic grammatical relation, instrument: that is, they are etic senses of the instrumental relation.

At least in the Nyulnyul of the late twentieth century, the instrument relation could be marked by the comitative postposition *-nyirr* as well as the instrumental postposition, possibly as a result of English influence. ¹⁰ I have been able to discern no semantic contrast between the two modes of expression. Examples of the alternation are:

- (12–245) *i-na-m-burruburr jin ni-mbarl baybirr bilabil-ang/-nyirr* 3NOM-CM-PST-obliterate 3MIN.OBL 3MIN-foot behind leaf-INS/-COM 'He wiped out his tracks behind him with a leafy bough.'
- (12–246) dibirr-dibirr wa-n-j bardangk-ang/-nyirr rotate-rotate 2MIN.NOM.FUT-CM-say tree-INS/-COM 'Stir it with a stick.'

¹⁰ In a number of Australian languages one means of representing instruments is by the comitative. Usually (in transitive clauses) this is in combination with the ergative. This sometimes alternates with just the ergative. This combination of the two postpositions is not represented in the Nyulnyul corpus. Nor do we find independent use of the ergative postposition as a marker of instruments (see also §5.2).

It is partly because of this alternation in expression, and partly for semantic reasons that I have opted to treat the instrument as a type of extension: an instrument is an extension of the Actor (usually also an Agent). Admittedly, these reasons are not particularly compelling, and an alternative analysis of the instrumental relation as an experiential role—for instance, a third CR—is also plausible.

12.4.2.4 External possession constructions

External possession constructions (EPCs) are constructions in which the PR and PM occur in separate NPs, such that the PR NP serves in a central grammatical relation, while the PM is more peripheral in the clause—it is not integrated into the core grammar of the clause (see further Payne & Barshi 1999b:3). The possessive relation itself may or may not be overtly signalled in Nyulnyul, depending on whether the PM is a prefixing nominal, or the NP contains an oblique pronominal indicating the PR; this is irrelevant to the construction. The crucial feature is that the PR and PM are related by a dependency relation of extension, and it is the PR that takes centre-stage in the construal of the situation (McGregor 1997b, 1999a).

The use of the unspecific terms central and peripheral in the previous paragraph is deliberate. It is motivated by the fact that external possession in Nyulnyul is not restricted to situation clauses, but can also be found in other clause types, including relational and presentative. We first discuss situation clauses, then turn to the other clause types.

12.4.2.4.1 External possession in situation clauses

As demonstrated in McGregor (1999a), two distinct types of EPC are distinguishable in all Nyulnyulan languages:

- (a) identically marked EPCs (IMCs), in which the PR and PM are given the same case-marking postposition (or none); and
- (b) differently marked EPCs (DMCs) in which they are marked by different postpositions.

(a) resembles what has been referred to as the *favourite construction* for the expression of the part-whole relation in Warlpiri (Hale 1981), while (b) is like the locative-type EPC characteristic of English (e.g. *Mary kissed John on the lips*). Being constructionally distinct, IMCs and DMCs differ semantically as well as formally. In what follows we first discuss IMCs, then DMCs.

12.4.2.4.1.1 Identically marked EPCs

As in other Nyulnyulan languages, IMCs usually involve the PR as a Medium, which simultaneously serves as Actor or Undergoer. Here the PR and PM NPs are both unmarked by a case-marking postposition, and the clause looks like a 'double subject' or 'double object' construction. (12–247)–(12–249) exemplify IMCs with Actor/Medium PRs, (12–250)–(12–251), with Undergoer/Medium PRs.

- (12-247)waringkil baab ni-mird alik i-n-j miid-in wiib child 3MIN-leg sick 3NOM-CM-say male-ERG watch girl i-n-jal-in 3NOM-CM-see-PRS 'The girl hurt her knee; the boy is watching her.'
- (12-248)nga-nkarr тиј jalbird nga-n-d-in 1MIN-forehead already wrinkles 1MIN.NOM-CM-say-PRS 'My forehead is already wrinkled.'
- (12-249)nundurr kurd nga-n-j maal banangkarr sweat still 1MIN.NOM-CM-say hot today 'I'm sweating because it's hot today.'
- (12–250) *yiil dub-dub nga-n-j* na-alm dog pat-pat 1MIN.NOM-CM-say 3MIN-head 'I patted the dog on the head.'
- (12-251)nga-marl buy-in kad i-ngi-rr-a-w-ngay 1MIN-arm ant-ERG bite 3NOM-PST-AUG-CM-give-1MIN.ACC 'Ants bit me on the arm.'

Other clause types also allow Actor/Medium PRs, including medio-actives:

(12-252)bin nyungul wamb ni-marl i-m-bamarr yubul-in 3MIN-hand 3NOM-PST-shake sick-ERG man 'The old man's hands shook from fever.'

IMCs in which the PR serves in other PTRs and/or CRs are rare. The following two examples illustrate the PR as Actor/Agent (in a transitive clause) and Implicated/Medium (in a middle clause) respectively:

- (12-253)bardi nga-na-w-ø nga-marl-in kinyingk grip 1MIN.NOM-CM-give-3MIN.ACC 1MIN-arm-ERG DEF walangk spear 'I gripped the spear by/with my hands.'
- (12–254) *ni-lawirl* kaw nga-n-d-jin 3MIN-name call 1MIN.NOM-CM-say-3MIN.OBL 'I called out his name.'

It should be noted that (12-253) was given in response to the prompt 'my two hands gripped the spear.' Neither this, nor the free translation is entirely accurate, however. Moreover, the ergatively marked body-part NP does not serve as an instrument, in which case it would have been marked by the instrumental or comitative postposition.

Inspection of the above examples reveals that PMs in IMCs are typically body parts of the PR. Other inalienably possessed items are also admitted, including personal representations such as names (as in (12–254)), and once incurable and debilitating diseases such as leprosy, as in (12–255), which being permanently associated with a person, might be regarded as an inalienable possession. Based on evidence from other Nyulnyulan languages, other items closely associated with persons, that might be construed as falling into their personal domain or sphere, could also have been represented in IMCs, though examples are lacking (see further McGregor 1999a:438–439).

(12–255) na-malgendjen yēd djān
nga-ma-lg-inyj-in yiik jan
1MIN.NOM-REF_p-conceal-REF_S-PRS sick 1MIN.OBL
"I (a leper) hide myself (from the doctor, that he may not send me to the leprosarium)." (More literally, 'I hide myself my sickness.') (Nekes & Worms 1953:677)

Following on from this observation, EPCs in Nyulnyulan languages represent the PM as though inseparable from the PR, and thus shows reduced status as an entity in its own right (McGregor 1999a:438). Furthermore, IMCs construe the PM and PR as involved to some extent in the same way in the event—in the same way in regard to the CRs. On the other hand, it is the PR rather than the PM that is involved in the core of the situation, in a PTR. It is not that the PR and PM are identified (as per Hale 1981): rather, in IMCs they are only partly identified, by virtue of the similarity of the CR they serve in.

This can be seen by a comparison of some (near) minimal pairs. Thus compare (12–253) with (12–256), an ordinary transitive clause in which the body part is treated as Actor/Agent:

(12–256) nga-mbal-in i-ni-ny-judar-ngay 1MIN-foot-ERG 3NOM-CM-PST-trip-1MIN.ACC 'My foot tripped me.'

Here it is notable that the feet are as it were acting independently of the speaker: as though they are outside of their control, and acting as though a separate object such as a rock or stick that might trip the person. In (12–253) by contrast the person and their hands are construed as effectively performing the same event. The following contrasting pair lends further support to this proposal. Clearly (12–257) construes the part as being cramped independently of the speaker, and the speaker is less affected than in the case of (12–258), in which they can reasonably be described as being totally affected.

- (12–257) walm i-n-j nga-marl shrivel 3NOM-CM-say 1MIN-arm 'My hand got cramped.'
- (12–258) walm nga-n-j nga-kad shrivel 1MIN.NOM-CM-say 1MIN-body 'I became paralysed.' (More literally, 'I became shrivelled my body.')

12.4.2.4.1.2 Differently marked EPCs

In DMCs in Nyulnyulan languages the PR also typically serves as Actor of an intransitive clause and Undergoer of a transitive clause. The PM is usually marked by a locative postposition, as in intransitive (12–259) and transitive (12–260)–(12–261). The PM indicates the locus of the event's taking place on the PR.

- (12–259) nga-ng-in nyun-nyun nga-ng-uk 1MIN.NOM-be-PRS ache-ache 1MIN-stomach-LOC 'I have a pain in my stomach.'
- (12–260) buy-in i-na-r-ngay nga-mird-uk ant-ERG 3NOM-CM-poke-1MIN.ACC 1MIN-leg-LOC 'Ants bit me on the leg.'
- (12–261) *yiil-in kard i-na-w-ngay nga-marl-uk* dog-ERG bite 3NOM-CM-give-1MIN.ACC 1MIN-arm-LOC 'The dog bit me on the arm.'

Occasionally the PM is marked instead by an ablative postposition, usually when the part indicates the point of contact between the causer of a motion event and the entity moved, as in (12–262). The same mode of representation is found in other nearby languages, including Warrwa and Gooniyandi (McGregor 1990:183–184).

(12–262) mijaw-in jarrbad i-na-ng-k-jin irr wub cat-ERG lift 3NOM-CM-PST-carry-3MIN.OBL 3AUG.CRD little irr-many-ukun 3AUG-necks-ABL₂ 'The (mother) cat carried her kittens by the neck.'

Whether DMCs can have as PR the Actor/Agent of a transitive clause is not entirely clear. Certainly, the most common possibility, in which the possessed entity is marked by the instrumental postposition is not an EPC, since the possessive relation is inferred rather than coded in the construction (McGregor 1999a:437). However, examples like the following could perhaps be DMCs:

- (12–263) *ni-lirr-kun jibul i-n-j wul* 3MIN-lips-ABL₂ spray 3NOM-CM-say water 'He sprayed water from his mouth.'
- (12–264) angk mi-bakand-in nyi-marl-uk nga-ngka-jal what 2MIN.NOM-have-PRS 2MIN-hand-LOC 1MIN.NOM-FUT-see 'What have you got in your hand? I want to see it.'

The interpretation is uncertain, however, since it is not clear that the ablative and locative PPs necessarily relate to the Agent as possessions, rather than via pragmatic inferencing.

Again, DMCs are characterised by a close association between the PR and PM in regard to the situation, and the PM appears to be invariably a body part. However, DMCs contrast semantically with IMCs in that the former construe the situation as being physically located with respect to the body of the PM, while the latter construe the PR and PM as being involved in the same way in the situation in respect to CRs (McGregor 1999a:441–442). DMCs, that is, invoke a purely physical-spatial involvement of the PM, whereas in IMCs the PM is integrated into the core of the situation. Thus IMCs might be considered to represent a higher degree of inalienability than DMCs; and the PM is more intimately or closely involved in the situation. Thus the IMC (12–251) indicates that the biting has a greater impact on the person than the DMCs (12–260)–(12–261). Likewise the IMC

(12–258) suggests greater affectedness of the person by the bodily experience than the DMC (12–259).

12.4.2.4.2 External possession in other clause types

McGregor (2001b) suggests that many Nyulnyulan languages show a *topic predicative possession construction*, a type of relational clause in which a property is attributed of a body part (usually) of an animate entity, which is represented by a fronted and topicalised NP. Instances of this construction are few, and I illustrate first with a Jabirrjabirr example that shows the typical form of the construction: an NP indicating the whole, a nominal indicating a quality, and finally an NP representing the part or inherent characteristic.

```
(12–265) mai daler laib niar

may dalir(r) layib niyar

food fruit:type good taste

"The daler-fruit has good taste." (Nekes & Worms 1953:417)
```

The Nyulnyul corpora do not show such canonical instances. Probable examples the topic predicative possession construction include:

```
(12–266) juy nyi-im nganyji yiik
2MIN.CRD 2MIN-eye INT sore
'Are your eyes sore?'
```

```
(12–267) gudjar alerborindjon djen yer maler, war kujarr (y)alirrbur-inyjun jin-irr malirr war two first 3MIN.OBL-3AUG.CRD wife another wadjima-redjon wajimarr-ijun later-ABL1 "First he had two wives, later on he got a third one." (Nekes & Worms 1953: 317–318)
```

(12–266) is fairly certainly an example of this construction. Here the NP representing the PR and the PM are adjacent; and although it is possible that they represent a complex possessive NP (see §10.3), the fact that there is no possessive copula in the second NP argues against this. In the case of (12–267), a plausible analysis is that *kujarr* 'two' represents the quality, while *jin-irr malirr* 'his wives' represents the PM. Other analyses are also possible, however, including that *kujarr* 'two' and *jin-irr malirr* 'his wives' represent a single NP in a presentative construction. Against this, however, (12–267) does not serve to introduce the women into the text as participants; rather, the point seems to be to express the proposition that Felix had two wives. Thus I consider this example also to be a likely instance of the topic predicative possession construction.

The topic predicative possession construction, it is suggested in McGregor (2001b: 347–349), is a type of EPC. Specifically, 'what is attributed of the PR is attributed of the PM; as a consequence, the PM represents a locus for the attribution of the characteristic [of the PR]' (McGregor 2001b:349). This observation has already been hinted at for (12–267): the clause seems to be about Felix, the PR, attributing of him the quality of having two wives; the property of twoness is then more specifically located in the wives. It is also

plausible in the case of (12–266) that the soreness is being represented as a feature of the person, that is specifically located in their eyes.

If the topic predicative possession construction is an EPC, it is an IMC. It is possible that DMCs also exist for verbless clauses. The best candidate is the negative presentative construction involving non-standard negation, in which the negative particle hosts an enclitic cross-referencing the location or search domain (see §12.5.1.1.2.2 below). As (12–268) illustrates, in some instances it is the inalienable PR of a body-part location that is cross-referenced. (12–269) could also be an example of this construction, since it is more likely that the PR ('they') would be cross-referenced than their parts ('heads').

- (12–268) baaburr arri-jan nga-kad-uk wound not-1MIN.OBL 1MIN-body-LOC 'There are no cuts on my body.'
- (12–269) arri-jirr mukun irr-alm-uk not-3AUG.OBL hair 3AUG-head-LOC 'There's no hair on their heads.'

Semantically, this analysis makes sense: the search domain may be construed in the first place as the person, and then more specifically, their body part, which represents the precise locus. Moreover, the person is more involved in, and affected by, the asserted absence than is the part.

12.4.3 Enhancement

A rich range of optional relations of enhancement are found in verbal clauses, covering not just spatial and temporal relations, but also relations of environment, cause, purpose, and involvement; further types may well also exist. On the other hand, the status of the types as emic or etic is uncertain, and it is beyond the scope of the present description to address this complex issue. The discussion of the meanings of the postpositions in Chapter 5 identifies further senses of these enclitics, most of which are almost certainly pragmatically engendered.

Many relations of enhancement have already been seen previously in this chapter (e.g. such as are involved in secondary predicates), and/or will be encountered in the next chapter in the discussion of complex sentences. We do not discuss these again here. In this section we focus on those relations of enhancement where the enhancing expression is in a dependency relation to the core experiential clause; however, we also mention some cases where the dependency relation holds with an NP, at least in those cases where these relations are not treated elsewhere.

12.4.3.1 Spatial

Relations of spatial enhancement include location, direction, path, and extent. These are generally expressed by adverbials, PPs, or their combinations.

12.4.3.1.1 Location

Any type of situation can be located spatially, though stative situations are more likely to be located than active ones. Some examples of locative expressions with locative PPs are:

- (12–270) warrabalak bilbil i-rri-j-in wunkungurr-uk stars shine 3NOM-AUG-say-PRS Milky:Way-LOC 'Stars are shining in the Milky Way.'
- (12–271) bina wamba yiil jin i-mulk-in bin-ik that man dog 3MIN.OBL 3NOM-sleep-PRS that-LOC 'That man's dog is sleeping there.'
- (12–272) wamb marriny i-rr-jid-in karrawirn-uk man walk 3NOM-AUG-go-PRS hill-LOC 'The men are walking on the hill.'

Occasionally, an unmarked NP serves to specify the location of a situation, as in the following example, from Text 2. The ablative postposition in this instance does not indicate the source of the event, but rather qualifies the place: 'a distant place'. The locational expression indicates a setting for the situation, and indeed for the entire narrative.

(12–273) yalarrabur / mar-kung bur / kaard maar / wamburiny before far-ABL3 place so far people i-nga-rr-a-kal / man arri wamburiny / 3NOM-PST-AUG-CM-play but not people 'Long ago there was a very far away place where there lived people, but not quite people.'

The next two examples illustrate locations expressed by adverbials and complexes of adverbials and PPs:

- (12–274) *ya-rra-land-in jimbin* 1PL.NOM-AUG-sit-PRS inside 'We're sitting inside.'
- (12–275) *i-nga-madal-inyj baybirr kumbarr-uk* 3NOM-PST-hide-REF_S behind stone-LOC 'He hid behind a rock.'

Enhancing expressions of location may indicate the location of an entity involved in a situation rather than the entire situation. Normally it is the NP serving in the Medium role—thus the Undergoer of a transitive clause and the Actor of an intransitive clause—that is located, as shown by the following examples:

(12–276) *kumbarr jin i-na-mankard jan-uk table* stone 3MIN.OBL 3NOM-CM-leave 1MIN.OBL-LOC table 'He left his money on my table.'

- (12–277) *ni-marl* i-na-m kalb jimbin kurrburl-uk 3MIN-hand 3NOM-CM-put up inside hollow:log-LOC 'He put his hand into a hollow log.'
- wamb i-n-in (12-278)jalingk yaward-uk 3NOM-be-PRS ride horse-LOC 'The man is riding on a horse.'

A special case of this kind is the following example, in which the locative PP indicates the location of the Undergoer when the event happened, and the location is thus particularly relevant to the occurrence of the event.

(12–279) *kurr* kujarr kad ku-ngu-rr-a-w-mad jungkarr 2AUG.CRD two cut 2AUG.NOM-PST-AUG-CM-give-EMP 2AUG.OBL kirr-marrangk in-ik 2AUG-finger this-LOC tin 'You two cut your fingers on the tin.'

12.4.3.1.2 Direction

Spatial direction is specified in terms of where a situation apparently emanates from, or what it is oriented towards. Directional expressions are often realised by ablative and allative PPs, and numerous examples were given in §5.7–§5.11. Below are a few additional illustrative examples involving motion events, though directional expressions are not restricted to motion events. In the case of directional expressions it is difficult to draw the line between expressions that apply to an entire situation and those that apply to just an entity in the situation, and the distinction is not drawn here.

- (12–280) *juurr maal* i-n-k-in kurrbul-kun snake emerge 3NOM-CM-carry-PRS hollow:log-ABL₂ 'A snake is coming out of a hollow log.'
- (12-281)wul i-nga-mur in-ijun jarjar bakad-uk water 3NOM-PST-spill this-ABL₁ hole 'Water escaped from the hole in the bucket.'
- (12-282)ya-li-rr-jid derby-ung aa juy 1MIN.CRD and 2MIN.CRD 1PL.NOM-IRR-AUG-go Derby-ALL₁ 'You and I might go to Derby.'
- (12-283)nga-la-k-an derby-ung i-li-jabal-an-ngay 1MIN.NOM-IRR-carry-IMP Derby-ALL₁ 3NOM-IRR-ask-IMP-1MIN.ACC 'I'd have taken him to Derby if he'd asked me.'

Spatial directions are also expressed by adverbials and complex expressions involving adverbials and PPs (see also §6.3):

(12–284) way mi-jid away 2MIN.NOM-go 'Go away!'

- (12–285) nga-marl nga-ny-jarrard baljarrang-mardikan 1MIN-arm 1MIN.NOM-PST-extend left-towards 'I put out my arm leftwards.'
- (12–286) maawirn kalb nga-na-ngurl waalk-mardikan ball upwards 1MIN.NOM-CM-throw sun-towards 'I threw the ball up towards the sun.'

Occasionally, an unmarked NP expression indicates a place towards which a motion event is oriented:

(12–287) angk bur kurr-jid-in what place 2AUG.NOM-go-PRS 'Where are you lot going?'

It was observed in the previous subsection that Agents appear not to be specifically located by spatial expressions of location. However, for at least some situation types the location of an Agent can be indirectly specified by an ablative PP indicating the source from which the event emanates, as illustrated by:

12.4.3.1.3 Extent

Expressions of spatial extent indicate the approximate size of a motion event, or the motion component of a situation, either by indicating its endpoints or by adverbials indicating distances (see §6.3.2). In the former case the endpoints are specified by ablative and allative PPs; one endpoint is often left unspecified:

(12–289) gabil-in jin i-ni-ny-jidiny ni-mbal-ukun grandmother-ERG 3MIN.OBL 3NOM-CM-PST-feel 3MIN-foot-ABL₂ 'Her grandmother felt (along her leg) from her foot.'

In a similar way, directional adverbials may be employed to specify multiple directions, and, by implication, extent. This is achieved in (12–290) by the combination of *kalamb* 'hither, this way' and *nyumulk* 'thither, that way'.

(12–290) aa dub i-nga-rr-a-m jungk kalamb nyumulk kalb mad / and blow 3NOM-PST-AUG-CM-put fire hither thither above but 'And they started a fire burning all over the sky.'

Extent can also be specified by a plain NP, as in the following examples involving the quantifier *warli* 'all':

(12–291) in ngijil waalk-in i-na-marr jal i-ny-jid warli bur this mud sun-ERG 3NOM-PST-burn split 3NOM-PST-go all place 'The sun burnt this mud and it cracked all over.'

(12–292) *buy-in i-rr-jid-in* warli bur ant-ERG 3NOM-AUG-go-PRS all place 'Ants are going all over the place.'

12.4.3.1.4 Intermediate path

Directional expressions (§12.5.3.1.2) specify the path of a motion event, or the motion component (perhaps figurative) of a situation, while extent expressions indicate something about the size of the path. Path can also be specified in terms of an intermediate place or region traversed. It is normally realised by a perlative PP, sometimes in combination with an adverbial (see further §5.12). (12–293) specifies a point on the path; (12–294) specifies a geographical region over which the path of motion was effected; and (12-295) and (12–296) specify the path in terms of a materially defined line.

- karrambal dumbar i-n-ji nga-alm-amirr (12-293)fly 3NOM-CM-say 1MIN-head-PER 'The bird flew over my head.'
- (12-294)i-ny-jid wul-mirr 3NOM-PST-go water-PER 'He went across the water.'
- (12–295) jakurd ya-nga-rri-j niwirr kalb-mirr 1PL.NOM-PST-AUG-say creek above-PER 'We started back, along the bank of the creek.'
- (12-296)kujarr wamb i-ngi-rr-jid makirr-mirr two 3NOM-PST-AUG-go track-PER man 'The two men walked along the road.'

12.4.3.2 *Temporal*

Temporal enhancement either locates a situation in time, or indicates its extent.

12.4.3.2.1 Temporal location

Temporal location is usually specified by temporal adverbials (see §6.4), which are sometimes marked by the locative postposition; less frequently, they are indicated by locative PPs. Examples of the use of temporal adverbials are:

- (12–297) barrkan / i-ngi-rr-wand-in cold:time 3NOM-PST-AUG-gather-PRS bush:fruit:type 'In the winter they gather kuwal.'
- (12-298)kunard nga-ni-jal-jii tomorrow 1MIN.NOM-CM-see-2MIN.OBL 'I'll see you tomorrow.'

(12–299) banakarr mi-ng-kalab-an when 2MIN.NOM-PST-born-IMP 'When were you born?'

It is not clear what motivates the use or non-use of the locative postposition on adverbials. The following examples suggest it might concern specificity of temporal reference. Thus in (12–300) the adverbial is unmarked, and specifies a particular day, whereas in (12–301) the adverbial is marked by an instance of the locative postposition, and has generic reference to the present time. However, examples also exist in which the plain adverbial is used with the generic meaning (as in the introductory sentence of Torres & Williams 1987).

- (12–300) arri nga-mungk daarr mi-la-r-an banangkarr not 1MIN-believe arrive 2MIN.NOM-IRR-poke-IMP today 'I didn't think you'd come today.'
- (12–301) baab-in-manjan i-rr-wid-in / banangkarr-uk / child-ERG-only 3NOM-AUG-eat-PRS today-LOC 'Only children eat it today (i.e. these days).'

Occasionally, more complex expressions are found, involving combinations of adverbials to express time more precisely.

(12–302) nganyji mi-ny-jarrjarr rangkarr rangkarr-uk kiirl bayakarr INT 2MIN.NOM-PST-arise early early-LOC this morning 'Did you get up early this morning?'

I am not aware of usage of spatial adverbials in the expression of temporal location, or vice versa. However, NPs can indicate time in terms of recurrent events involving natural bodies such as the sun (hence 'day') and moon ('month'). Strangely, *waalk* 'sun' always occurs in an unmarked NP, while *kunyul* 'moon' always appears in a locative PP.

- (12–303) *i-n-di-jan* yu-ngka-r war waalk 3NOM-CM-say-1MIN.OBL 3NOM-FUT-poke other sun 'He told me he would spear him the next day.'
- (12–304) jajurr ya-ngki-rr-i-j war-uk kunyul gather 1PL.NOM-FUT-AUG-CM-say other-LOC moon 'Next month we will all gather at Beagle Bay.'

The postposition -karr TEM can also be used on PPs (and adverbials) specifying time, as in the following example, where kinyingk DEF refers to the time of the situation denoted by the previous clause.

(12–305) dujul-dujul i-rr-i-ny-in / kinyingk-karr i-rr-wid-in / yandy-yandy 3NOM-AUG-CM-get-PRS DEF-TEM 3NOM-AUG-eat-PRS 'They eat it after yandying it.'

In Text 2, the speaker frequently uses kinyingk-kun (DEF-ABL₂) 'after that, then' (e.g. lines (4), (10), etc.). One can question, however, whether the PP serves as a temporal location or as a conjunction; the same question can be raised regarding kinyingk-karr 'then' in (12–305).

12.4.3.2.2 Temporal extent

The temporal extent of a situation is usually indicated by adverbials such as temporal quantifiers like *judiny* 'forever, for good, completely' (as in (12–306)), *yadiny* 'for a while, short while', and so on (see §6.4.2 for further discussion and examples). Temporal adverbials can also be reduplicated to indicate temporal extent, as in ngimbirr-ngimbirr (night-night) 'all night' (see example (12–307)).

- (12–306) *nga-ngki-jid* yardiny 1MIN.NOM-FUT-go short:while 'I'm going for a short while.'
- (12–307) *burrb-kaj* i-ngi-rr-i-j ngimbirr-ngimbirr dance-CONT 3NOM-PST-AUG-CM-say night-night 'They danced all night.'

In the following example, the temporal adverbial banangkarr 'now, today' marks an extremity of the situation, the beginning of which is established already in the text; the adverbial is marked by the locative postposition.

akal banangkarr-uk/kinyingk-uk aa ral banangkarr-uk / (12-308)and today-LOC **DEF-LOC** and right:away today-LOC i-n-in mad / 3NOM-be-PRS but 'Until the present day. He's still there, even now, today.'

12.4.3.3 Environmental circumstance

A location can also specify environmental circumstances within which the situation is situated: that is, where the expression does not specify (either directly or indirectly) a place. This is the case in the following example, where mank-uk (dark-LOC) 'in the dark' specifies not a location in space, but a condition of the environment. Pragmatically, one suspects, the environmental conditions serve to locate the situation more in relation to time than space.

(12-309) kurr kujarr ku-ngu-rr-kurdal mank-uk 2AUG.NOM-PST-AUG-get:lost dark-LOC 2AUG.CRD two 'You two got lost in the dark.'

In other cases, an environmental circumstance is more likely to suggest a type of spatial location—in the sun, rather than in the shade:

- (12–310) waalk-uk nga-na-marr-an kinyingk wil sun-LOC 1MIN.NOM-CM-cook-IMP DEF meat 'I am cooking the meat in the sun.'
- (12-311)nga-na-ralk jan blanket waalk-uk 1MIN.NOM-CM-dry 1MIN.OBL blanket sun-LOC 'I dried my blanket in the sun.'

12.4.3.4 Cause

The cause or reason for the occurrence of an event, or the possession of a quality, is usually indicated by a PP involving the postposition *-jun* ABL₁ (see also further examples under §5.7). The PP usually specifies something that the Medium (in a situation clause) or the entity attributed on (in an attributive clause) was engaged with, and which resulted in the situation or quality:

- (12–312) baaburr-inyirr bil-ijun wound-COM fight-ABL₁ 'They are wounded from fighting.'
- (12–313) *ni-marl jin i-ny-jalk yuburl-jun* 3MIN-arm 3MIN.OBL 3NOM-PST-fall sick-ABL₁ 'His fingers fell off from the disease.'

Sometimes, however, a dative PP indicates a cause, as in the following example.

(12–314) angk-ij wa-n-dam-ngay what-DAT 2MIN.NOM.FUT-CM-hit-1MIN.ACC 'Why do you want to hit me?'

However, the contrast between the two modes of expression is not clear, and does not relate to prior cause vs intentional cause, as (5–81) shows. Possibly an ablative PP can indicate only a prior cause, while a dative PP is non-specific—which fits with the fact that -ij DAT indicates 'in respect to'.

12.4.3.5 Purpose

A dependent of purpose indicates an intention of an event, a target or goal towards which action is directed and which is desired to be reached or attained. The purposive expression usually denotes an inanimate or lower order animate that is not incorporated into the core or nucleus of the situation; generally a human being (or higher order animate) serving in such a role will also be incorporated into the core of the clause in the Implicated role. A purpose dependent is usually expressed by an allative PP, as in the following examples:

- (12–315) *ni-marl i-na-m jimbin dakul-uk kurrbul mung-ung* 3MIN-hand 3NOM-CM-put inside hole-LOC hole honey-DAT 'He reached into the hole for honey.'
- (12–316) nga-ny-jid shop-ung may-ung 1MIN.NOM-PST-go shop-ALL₁ food-ALL₁ 'I went to the shop for bread.'
- (12–317) wa-n-jabal wil-ung 2MIN.NOM-CM-ask meat-ALL₁ 'Ask him for meat.'

(12–318) *ya-rr-a-karrmar-in* maad-ung 1PL.NOM-AUG-CM-break-PRS play-ALL₁ 'We are breaking it for fun.'

Occasionally a purpose is represented instead by a dative PP, as in the following examples; it is possible that in these examples the purposive sense emerges by means of a pragmatic inference.

- kumbarr kari-ij (12-319)i-ngi-rr-barnj 3NOM-PST-AUG-exchange money beer-DAT 'They exchanged money for grog.'
- (12-320)kumbarr kujarr-ij yiil nga-na-ngurl 1MIN.NOM-CM-throw stone two-dat dog 'I threw stones at the two dogs.'

12.4.3.6 Involvement

A dependent of involvement is realised by a dative-marked PP, and indicates something that is involved in some way in the situation. The manner of involvement is specified quite vaguely, and often translates into English with expressions such as 'concerning', 'about', and 'with respect to'. In the first two examples below the animate dative NP indicates some being with respect to which the behavioural event is concerned; in the following three, which include both animate and inanimate NPs, the dative NP indicates the topic of the communicative event, the thing or being it is concerned with:

- (12-321)wamb bil-ij i-n-d-in yiil-ii jin fight-DAT 3NOM-CM-say-PRS dog-DAT 3MIN.OBL 'The man got angry with his dog.'
- (12-322)baab i-ngal-jin birray-ii jin child 3NOM-cry-3MIN.OBL mother-DAT 3MIN.OBL 'The child is crying for his mother.'
- malirr-ij jin (12-323)i-ni-ny-jabajab wamb-in yarrad 3NOM-CM-PST-ask man-ERG 1AUG.CRD wife-DAT 3MIN.OBL 'He asked him regarding his wife.'
- (12-324)nga-labab nga-na-m babarl-ij jan 1MIN-ear 1MIN.NOM-CM-put brother-DAT 1MIN.OBL 'I listened for word about my brother.'
- (12-325)bin-in wamb i-ni-ny-jabal-yarrad kumbarr-ij 3NOM-CM-PST-ask-1AUG.ACC stone-DAT that-ERG man 'That man asked us for money.'

12.5 Interpersonal modification of clauses

Interpersonal modification of a clause concerns the ways it can be 'shaped' so as to situate it within the framework of the speech interaction (see §2.3); it concerns the ways in which a clause may be tailored interactively. By this sort of modification the speaker indicates their 'line' on the clause: how it is to be taken interactively. Three types of interpersonal modification are distinguished:

- (a) rhetorical, which is concerned with integrating information presented in the expression into the framework of shared information or knowledge of the interactants;
- (b) attitudinal, which is concerned with attitudes towards the referent situation (or whatever); and
- (c) illocutionary, which is concerned with the way in which the clause is to be taken as an interactive event by the interactants in the speech event.

These types correspond well—though imperfectly—with what lies within the scope of the modification, respectively:

- (a') the proposition expressed by the clause;
- (b') the situation designated by the clause; and
- (c') the speech act the clause is intended to serve as.

The line between these types is not clear-cut, and categorisation is sometimes problematic, partly because of the difficulties in distinguishing coded meanings from inferred meanings.

Interpersonal meaning is expressed by means of conjugational—i.e. whole—relations (see §2.3). The encompassing item forming a whole with the encompassed whole item may be a particle or enclitic, or alternatively a larger unit such as a phrase or clause. In the case of rhetorical and illocutionary modification, both possibilities are represented in the corpus; for attitudinal modification, the encompassing unit is almost always a separate clause. There are just one or two exceptions, such as the following, which appear to be monoclausal constructions, with the word *liyan* 'like' serving an interpersonal modifying function.

(12–326) wamb-in liyan i-nga-rr-dam walangk-ang man-ERG like 3NOM-PST-AUG-hit spear-INS 'The men wanted to throw spears.'

In this section we deal with those cases in which the encompassing unit is smaller than a clause, that is, where the entire unit remains a simple clause. Where modification is by a clause, the resulting unit is a complex sentence; this topic is dealt with in the next chapter.

12.5.1 Rhetorical modification

Rhetorical modification is achieved in the following three main ways. First, it may be by indicating the speaker's evaluation of the truth value of the proposition expressed by the clause, normally by means of a particle indicating either polarity (status) or probability (modality and/or mood). Second, it may be effected by indicating the status of the proposition expressed by the clause as a belief. Third, it may be achieved by linking the message expressed by the clause into the framework of knowledge relevant to the speech interaction; this is expectation modification. We discuss these types in order in the following subsections.

12.5.1.1 Polarity

As is the case in almost all known human languages, negative polarity in Nyulnyul is marked with respect to positive polarity. Formally, negative polarity is indicated in the usual way by use of more morphological material (e.g. Miestamo 2005, 2007, 2010): a negative particle (see §9.2), together with, in verbal clauses, a marked mood, the irrealis. Positive polarity normally has no specific morphological expression, and is not specifically associated with any particular verbal mood.

Negative polarity is also marked functionally with respect to positive polarity. As observed in §9.2.1, negative clauses invoke presuppositions or expectations to the contrary, that is, they presuppose the corresponding positive in the sense that utterance of a negated clause normally occurs only in the context of a presumption of the corresponding positive, or if the corresponding positive is not contextually available, the negation invokes it anyway. Thus the first clause of (12-327) would normally occur in the context in which the object was broken, and the speaker appeared to be responsible. If this were uttered out of the blue, the addressee might well respond that they had not accused the speaker of having broken the object (see Givón 1984:323–324). That is to say, either the presupposition can be presumed to be present in the hearer's mind, or else is invoked by the speech act itself.

```
(12-327)
           arri nga-la-karrmar-an
                                          i-ny-jalk
                                                          murrul-murrul
           not 1MIN.NOM-IRR-break-IMP 3NOM-PST-fall little-little
           nga-mal-uk
           1MIN-arm-LOC
           'I didn't try to break it; it fell to pieces in my hand.'
```

By contrast, positive polarity clauses are not consistently presupposing. Another reflection of the relative functional markedness of negative clauses is their infrequency with respect to positive clauses.

12.5.1.1.1 Negation of verbal situation clauses

Negation of situation clauses is constructionally symmetric (in the sense of Miestamo 2005: 329, 2007), since omission of the negator results in an acceptable positive clause. However, it is paradigmatically asymmetric (Miestamo 2007): it is not simply expressed by a negative marker along with the corresponding affirmative clause that it negates. Negative verbal clauses are invariably in the irrealis mood, a category expressed in the IV (see §7.7), though it has clausal scope. Fewer tense distinctions are made in negated verbal clauses than in affirmative ones: negative clauses contrast past and non-past, while positive clauses make a three way tense distinction between past, present and future. Additionally, the modal contrast between realis and irrealis available in positive clauses is not available in negated clauses; as illustrated by examples such as (12-327), which shows that a negated verbal clause admits the interpretation that no attempt was made to perform the action. This is a pragmatic inference, however, and can be cancelled. (12–328), for instance, is consistent with an attempt having being made on the person's life, or that the event might have happened. These observations lend further support to the relative markedness of the negative.

(12–328) ngay-in nga-n-dam arri nga-l-dam-an karrkuj 1MIN.CRD-ERG 1MIN.NOM-CM-hit not 1MIN.NOM-IRR-hit-IMP dead 'I only hit him; I didn't kill him.'

As seen in §9.2.1 the notions of scope and focus are crucial to an understanding of negation. Both the modal and tense components of irrealis IVs hold the situation independently in their scope: irrealis mood specifies that the referent situation was unrealised, while simultaneously tense grounds the situation. Clausal negative particles hold the proposition—expressed by the grounded tensed clause—in their scope, specifying that it is false; they do not hold the irrealis in their scope (McGregor & Wagner 2006). These facts are depicted in Figure 12–4, which shows the structure of scopal relations in the second clause of (12–328).

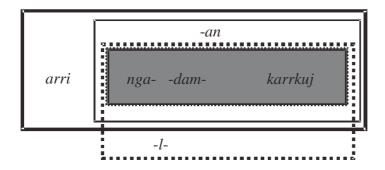


Figure 12–4: Scopal relations in second clause of example (12–328)

Focus, it will be recalled from §9.2.1, falls on the item immediately following the negator. In the unmarked case, focus goes on the VP; all other foci are marked.

What we have just described is standard negation in the terminology of Miestamo (2005). There are other less common ways of negating verbal clauses in Nyulnyul, by use of three other particles (as discussed in §9.2.2, §9.2.3, and §9.2.8, respectively): *arriyangk* 'no, don't', *arriban* 'don't', and *kanard* 'can't'. As the glosses indicate, when used in situation clauses these particles normally occur in clauses used with the speech function of commands, as in the two examples below. Occasional instances of *arriyangk* 'no, don't' are found in assertions, and *arriban* 'don't' also occurs in clauses with first and third person Actors used with non-assertive effect—in promises, permissives, and the like. (The unmarked negative particle *arri* 'not, no' can also occur in clauses with any of these speech functions; it is unclear how negatives using these three particles differ in meaning.) Both of these particles also invariably occur with the irrealis mood in negated verbal clauses.

- (12–329) arriyangk mi-li-jid way no 2MIN.NOM-IRR-go away 'Don't go away.'
- (12–330) arriban mi-li-j don't 2MIN.NOM-IRR-say 'Don't do that.'

12.5.1.1.2 Negation of non-situation clauses

Standard negation of non-situation clauses also involves the regular negative particle arri 'not, no'. In most cases negation is symmetric both constructionally and paradigmatically: the negative clause differs from the corresponding affirmative merely in the presence of the negative particle. 11 The only asymmetry here is the functional one whereby the negative clause is pragmatically marked with respect to the positive clause.

12.5.1.1.2.1 Negation in elaborating clauses

In elaborating clauses, arri 'not, no' normally occurs between the NP representing the entity and the expression representing the attribute or alternative designation for the entity, as in (9-16)–(9-18). One example will suffice here:

```
bur arri layib kinyingk-ung
(12-331)
           in
           this camp not good DEF-ALL<sub>1</sub>
           'This place is no good for these (dogs).'
```

However, other orders are possible, as in the following example (see also (9–19) and (9-20)).

```
(12-332)
          arri layib bin wamb
          not good that man
          'That man is not good.'
```

In all of these examples the negative particle precedes (not necessarily immediately) the expression representing the attribute, the dependent; no exceptions exist. Again it seems probable that the item immediately following the negative particle represents the focus of the negation. This is presumably unmarked focus in (12-331), and (12-332), where the attribute immediately follows the negative particle. Examples like (9–19) and (9–20) apparently show marked focus on the entity elaborated on; this is most apparent in the latter example, where the focus is contrastive.

12.5.1.1.2.2 Negation in extending clauses

The situation for extending relational clauses is more complex, and neither of the two types identified in §12.2.3.2 admit standard symmetric modes of negation by means of the negative particle arri 'not, no'. First, no ordinary clausal negation of the belonging construction (§12.2.3.2.1)—'X does not belong to Y'—is attested. To be sure, there are expressions that formally resemble negations of this construction. (12–333) is one type of example, which differs formally from the belonging possessive construction only in the ordering of the PR and PM NPs. However, if the gloss is correct, this is not the negation of a belonging clause. Rather, it represents an identifying clause in which the identified NP (presumably kinyingk DEF) has been ellipsed, and the PR NP topicalised.

¹¹ It must be admitted, however, that negatives are not attested for all of the non-verbal clause types identified in §12.2 above. Specifically, no examples of negated enhancing relational clauses are available.

(12–333) kurr kujarr arri jungkarr bur 2AUG.CRD two not 2AUG.OBL country 'That's not your country.'

Likewise, the comitative construction (see §12.2.3.2.2) is not negated by use of *arri* 'not' as a clausal negator; rather all attested negations are phrase level. Corresponding to the comitative is a privative construction, as in (12–57). A second construction that functionally represents the negation of the comitative construction involves an oblique pronominal apparently encliticised to the negative particle; the combination serves as an NP privative marker (see further McGregor 2010b), which almost always occurs immediately preceding the nominal denoting the PM. This non-standard negative construction is illustrated in the following examples:

- (12–334) kinyingk bardangk arri-jin bilabil
 DEF tree not-3MIN.OBL leaf
 'This tree has no leaves.'
- (12–335) arri-jan wilamay not-1MIN.OBL food 'I've got no food.'
- (12–336) arri-jarrad wul not-1AUG.OBL water 'We've got no water.'

It was observed in the previous sections that negative clauses are pragmatically marked with respect to the corresponding positive clauses. It is not entirely clear that this is the case for this negative possessive clause and the corresponding comitative: the latter, it will be recalled, typically represents inalienable possessions, which, one expects, would also be presumed to be present or held by the PR. In many languages, however, this type of expression conveys the pragmatic implication that there is something unusual or wrong about the inalienably possessed entity, or something surprising about its possession (see Chappell & McGregor 1995b). If this is so for Nyulnyul, we would presumably have a case of markedness neutralisation rather than markedness reversal.

This negative possessive construction specifies that something is not held in the possession of an individual. This may be further narrowed down to a particular location, as in the following examples:

- (12–337) mukuny arri-jin na-alm-uk hair not-3MIN.OBL 3MIN-head-LOC 'He has no hair on his head.'
- (12–338) baaburr arri-jan nga-kad-uk wound not-1MIN.OBL 1MIN-body-LOC 'I have no cuts on my body.'

Interestingly, the only locative expressions added to this clause type are body-part locations for temporary or regenerative body parts or manifestations—in no example is the location a topographical place. Examples like (12–335) and (12–336) are not attested with locative

specifications. This suggests that (12–337) and (12–338) are EPCs corresponding to the negative possessive construction, specifically locative DMCs, as per §12.4.2.4.2.

12.5.1.1.2.3 Negation of presentative clauses

Presentative clauses, it will be recalled from §12.2.2, present some entity to the attention of the addressee, normally within a specified search domain. They admit both standard negation by *arri* 'not', and non-standard negation by *arri* 'not' together with a bound oblique pronominal, in a construction that closely resembles the negative possessive construction discussed in the immediately preceding section. The two possibilities are illustrated in the following examples. (12–339) and (12–340) exemplify standard negation, while (12–341) and (12–342) exemplify non-standard negation. (See McGregor 2010b for a more detailed description of the non-standard construction.)

- (12–339) arri bardangk kinyingk-uk bur maarr-manjan not tree DEF-LOC country grass-only 'There are no trees in this country, only grass.'
- (12–340) bin-ik i-na-lungk kaad arri wul that-LOC 3NOM-CM-dig still not water 'He dug there, but no water.'
- (12–341) arri-jin wilamay bur-uk jan not-3MIN.OBL food camp-LOC 1MIN.OBL 'There's no food in my home.'
- (12–342) arri-jin wul in-ik walard not-3MIN.OBL water this-LOC bucket 'There's no water in the bucket.'

Precisely how the two negative presentative constructions differ semantically is uncertain. All that can be observed here is that standard negation usually appears to be used in cases involving contrast with something present, as in (12–339), where the absence of trees is contrasted with the presence of grass. However, there are exceptions, and a contrast is not invoked in (12–340). The non-standard negative construction simply indicates absence, and never seems to invoke a contrast with something present.

The second type of negation, non-standard negation, involves an oblique pronominal encliticised to the negative particle *arri* 'not, no', which cross-references the location or search domain. In this regard the construction differs from the negative possessive construction, in which the oblique pronominal cross-references the PR. Thus in (12–341) the oblique pronominal cross-references the third person minimal referent, the location 'my camp', not the speaker, as in the DMC EPC (12–338) above. In the following example, the location is non-minimal, 'three buckets', and cross-referenced by the third person augmented oblique pronominal *-jirr*.

(12–343) bin irrjiwar-uk bucket arri-jirr wul that three-LOC bucket not-3AUG.OBL water 'There is no water in those three buckets.'

In the following example the locative NP has been ellipsed from the second clause, presumably because it presents given information. This leaves the unusually shaped negative presentative clause *arrijin* 'there is nothing (there)', which consists of just a single word.

(12–344) bin-ik i-nga-n-an mayar banangkarr-uk arri-jin that-LOC 3NOM-PST-be-IMP house today-LOC not-3MIN.OBL i-ny-jalk-an 3NOM-PST-fall-IMP 'There used to be a house standing over there; today there is nothing; it has fallen down.'

Normally the cross-referenced location is represented by a LOC PP. However, in the following example, it appears that the location, the trees (as evidenced by the augmented form of the bound pronominal), may be represented by a perlative PP, *in-mirr* (this-PER) 'along this'. An alternative analysis of this example would be that the perlative PP really belongs to the initial situation clause, and that the negative presentative clause has an ellipsed locative expression. There is no way of deciding between the two analyses; my preference for the former is based on the observation that the demonstrative *in* 'this' follows rather than precedes the nominal *bardangk* 'tree', and is marked by the case-marking enclitic, suggesting that the two words do not constitute a single NP.

(12–345) nga-nga-miimii wurrumbang bardangk in-mirr
1MIN.NOM-PST-look many tree this-PER
arri-jirr kurrburl
not-3AUG.OBL hollow
'I looked in lots of trees, but there were no hollows along them.'

12.5.1.2 Probability modification

Like polarity, probability modification is expressed by means of particles that specify the degree to which the speaker attests to, or is committed to, the proposition expressed, their evaluation of its likelihood. These particles, in other words, allow the speaker to distance themselves from the proposition they utter, placing it somewhere between true and false.

The particles concerned are: nyanangkarr 'maybe, perhaps'; ralard 'perhaps'; yäragad (yar(r)akad) 'perhaps'; ngajikad 'maybe, perhaps'; garbor (kar(r)bur(r)) 'maybe, perhaps'; and garigan (karrikan) 'maybe, perhaps' (see §9.2.6 and §9.2.7). Of these, only the first is represented by a reasonable number of examples in the corpora; moreover, it was the one that the last speaker consistently used. It is thus impossible to determine whether, and if so how, they differed in meaning—whether, for instance, they indicate different degrees of certainty. On present evidence, it can only be said that these particles indicate that the truth value of the proposition is not known.

At least in the case of *nyanangkarr* 'maybe, perhaps', marking is symmetric with respect to the corresponding ordinary affirmative: the particle is added without any further changes to the clause. Pragmatically, there is no reason to believe that the modalised clause invokes a presupposition, suggesting that its functional markedness is closer to that of an affirmative clause.

These particles are positioned in the same way as the negative particle, in the unmarked case, immediately prior to the verb. Other orders are marked and invoke focus on the following item. There is one exception: when the clause contains another particle, in which case the particles occur adjacent to one another and in an order reflecting their scopal relations. In (12–346), for instance, nyanangkarr 'maybe, perhaps' has the negation in its scope. There is no reason to suppose that arri 'not', is accorded marked focus.

```
(12-346)
           wamb-in nyanangkarr arri i-li-ny
                                   not 3NOM-IRR-get
           man-ERG perhaps
           'He'll probably nearly miss it.' (More literally, 'He'll probably not get it.')
```

12.5.1.3 Belief modification

In belief modification, the proposition expressed by a clause is specified as a belief of the speaker; no indication is provided as to the basis for the belief. Two items express meaning of this type: -mungk 'believe', which takes the same set of inflections as inflecting nominals; and the enclitic -ilbi 'mistakenly believe' (see §9.3.4). Both of these forms may occur with other elements in what appear to be encompassing clauses specifying more precisely who is responsible for the belief; here we ignore these constructions, focussing specifically on cases in which the item is used independently as a propositional modifier.

As far as I have been able to determine, the semantic meanings coded by the two items are roughly opposite: -mungk 'believe' specifies that the individual cross-referenced by the bound pronominal prefix evaluates the proposition as true, whereas -ilbi 'mistakenly believe' indicates that it is false in someone's opinion (the identity of the person holding the opinion can normally be inferred from context).

As discussed in §9.3.4, the enclitic -ilbi 'mistakenly believe' is attested only in Nekes & Worms (1953, 2006). Little is known for certain about it. Based on the few attestations, it seems to be attached to the first word of a clause, which represents the focus of the mistaken belief, the remainder of the clause being (apparently) presupposed. This is illustrated by examples cited in §9.3.4, one of which is repeated here:

```
(12-347)
           nai-elbe
                          nan-djed
                                             wol-on,
                                                              nale-djedan
                                                         are
           ngay-ilbi
                          nga-ny-jid
                                             wul-ung,
                                                         arri nga-li-jid-an
           1MIN.CRD-MB 1MIN.NOM-PST-go water-ALL<sub>1</sub> not 1MIN.NOM-IRR-go-IMP
           'You thought I went for water, but I did not.'
```

Unexpectedly, the verb in the first clause of this example occurs in the realis, despite the fact that in the following clause it is clearly indicated that the situation did not occur, and the verb appears in the irrealis. I can offer no explanation for this puzzling situation.

Like the English verb believe it appears that -mungk 'believe' presupposes nothing about the truth value of the proposition expressed by the clause: uttering a clause with this propositional modifier is not contradictory with either a clause attesting to the truth or falsity of the proposition. Thus -mungk 'believe' sometimes translates as 'know', as the following examples illustrate:

```
(12-348)
          nga-mungk baan nga-ngka-jimb /
          1MIN-know well 1MIN.NOM-FUT-die
          'I know I will die.'
```

(12–349) Q: nganyji nyi-mungk arr-ak bardangk INT 2MIN-know where-LOC tree

> A: yii nga-mungk arr-ak yes 1MIN-know where-LOC

Q: 'Do you know where the tree is?'

A: 'Yes, I know where (it is).'

(12–350) nganyji nyi-mungk kinyingk wamb jalngkangurr INT 2MIN-know DEF man doctor 'Did you know he is a doctor?'

More often, however, -mungk 'believe' is found in a clause with its inflecting verb in the irrealis. In this circumstance, what is indicated is that the proposition was mistakenly believed:

- (12–351) nga-mungk banangkarr mi-li-jid derby-ung
 1MIN-know today 2MIN.NOM-IRR-go Derby-ALL₁
 'I thought you were going to Derby today [but evidently you aren't, as you are still here].'
- (12–352) nga-mungk wul i-la-r-an i-la-r-an
 1MIN-know water 3NOM-IRR-poke-IMP 3NOM-IRR-poke-IMP
 war waalk arri
 other day not
 'I thought it would rain the other day, but it didn't.'
- (12–353) nga-mungk i-la-rr-jal-an-ngay arri
 1MIN-know 3NOM-IRR-AUG-see-IMP-1MIN.ACC not
 i-la-rr-jal-an-ngay
 3NOM-IRR-AUG-see-IMP-1MIN.ACC
 'I thought they would see me, but they didn't.'

The 'mistaken belief' sense of *-mungk* 'believe' is not determined by the co-selection of the irrealis mood, although all examples in the irrealis appear to demand this interpretation. Thus (12–354) invokes the 'mistaken belief' sense although the verb is in the realis; moreover, some relational clauses admit this interpretation, as shown by (12–355).

- (12–354) nga-mungk nga-ni-ny-jal-juy marriny
 1MIN-know 1MIN.NOM-CM-PST-see-2MIN.ACC walk
 mi-ny-jid war waalk arri juy
 2MIN.NOM-PST-go one day not 2MIN.CRD
 'I thought I saw you going along the other day, but it wasn't you.'
- (12–355) kaari nga-ni-ng-kid-an wurrumbang kinyingk-karr beer 1MIN.NOM-CM-PST-drink-IMP many DEF-TEM nga-mungk kaari layib juy-ij 1MIN-know beer good 2MIN.CRD-DAT 'I used to drink a lot, but that was when I thought it was good for you.'

Both 'know' and 'mistaken belief' senses of -mungk 'believe' are apparently pragmatically engendered, presumably inferred from the linguistic and extra-linguistic contexts. In a realis clause including this particle, the M-Principle (Levinson 2000:33) can be applied to infer that there is something marked semantically about the clause (otherwise the plain clause without the particle would have been used). One possibility is that the contrary possibility to that expressed is invoked, and contradicted, as in negation; this means that examples like (12–348)–(12–350) would normally occur in contexts in which the validity of the proposition was at risk: e.g. for (12–348), that the speaker was presuming eternal life. Another possibility is that a lesser presupposition is invoked, as in (12–354), where it is clear that someone was actually seen. This principle can't be applied to situation clauses in the irrealis. Similar remarks apply to relational clauses, yielding their corresponding two interpretations.

For irrealis clauses the M-Principle cannot be applied in this way, since it is not certain that the irrealis with -mungk 'believe' is marked with respect to the plain irrealis (independent clauses in the irrealis are highly marked to begin with, those without further modalisation perhaps more so than those with additional modalisation). Rather, the irrealis indicates that the proposition is false, and the 'mistaken belief' sense apparently emerges as a logical implication. An exception is in negated clauses where irrealis mood is determined by the negative particle, as in the following example, where the 'know' sense is invoked.

angk-ij (12-356)nyi-mungk nga-la-w-an-juy kumbarr what-DAT 2MIN-think 1MIN.NOM-IRR-give-IMP-2MIN.ACC money nyi-mungk arri nga-la-bakad-in 2MIN-think not 1MIN.NOM-IRR-have-IMP 'Why did you think I would give you money when you knew I had none?'

In the second clause of (12–356), -mungk 'believe' includes the negative particle arri 'not' within its scope. Scopal relations appear to be determined by the order of the two modals, and 'don't know' is expressed by the combination arri ...-mungk (not ...know), as in the following two examples. Again, there appears to be no presupposition regarding the truth or falsity of the proposition expressed—simply lack of knowledge is specified. (No examples exist in which -mungk 'believe' takes the 'mistakenly believe' sense in this context, but this is probably due to inadequacies of the corpora, and the highly unusual status of this meaning.)

- (12-357)arri nga-mungk i-n-dam kinyingk uriny not 1MIN-know 3NOM-CM-hit DEF woman 'I don't know whether he hit her or not.'
- (12-358)arri yarr-mungk banangkarr ya-nga-rr-kalab-an not 1AUG-know when 1PL.NOM-PST-AUG-born-PST 'We don't know when we were born.'

It is possible that examples (12–356)–(12–358) are biclausal constructions, with -mungk 'believe' in separate clauses from the verbs. Certainly some examples involving this word are (see §13.4.2.2). However, a monoclausal analysis seems preferable for examples like (12–359), where the locative postposition indicates that nga-mungk is the first word of a clause that includes the following two words.

(12–359) nga-mungk-uk mi-ngi-n hospital-uk
1MIN-know-LOC 2MIN.NOM-PST-be hospital-LOC
nga-la-kalak-an-juy ya-ngi-rr-jid-uk
1MIN.NOM-IRR-approach-IMP-2MIN.ACC 1PL.NOM-PST-AUG-go-LOC
halls creek-ung
Halls Creek-LOC
'If I'd known you were in hospital I would have seen you on the way to Halls
Creek.'

12.5.1.4 Expectation modification

Expectation modifiers invoke, by virtue of their presence, expectations or presuppositions about the state of affairs in the world; they are about situations, only indirectly propositions. They include particles such as *kaard* 'still, yet', *bilay* 'again', and *muj* 'already', which link the situation referred to by the clause in which they occur to other related situations. Thus, *kaard* 'still, yet' invokes a presupposition that the situation described by the clause in which it occurs was ongoing at a prior time, and asserts that it remains ongoing: the event is happening now, but is the continuation of an earlier state of affairs. This is illustrated in the following examples:

- (12–360) arri nga-la-jimb-an kaard nga-n-in nunju not 1MIN.NOM-IRR-die-IMP still 1MIN.NOM-be-PRS alive 'I'm not dead; I'm still alive.'
- (12–361) kaard yuburl i-n-in still sick 3NOM-be-PRS 'He's still sick.'

See §9.2.9 for further discussion and examples.

Similar remarks hold for *bilay* 'again', except that the situation is not ongoing throughout the period of time from the time of the presumed prior occurrence to the asserted later occurrence (see §9.2.10 for discussion of this particle). The event is presumed to have happened before, and is asserted as happening again, as in (12–362). As remarked in §9.2.10 (see also McGregor 1990:460), *bilay* 'again' does not always indicate repetition of a situation: it also admits the sense 'return to a previous state or condition'.

(12–362) bilay ni-mbal i-na-m-balabal again 3MIN-foot 3NOM-CM-PST-follow 'He followed his footprints again.'

In the case of *muj* 'already' (discussed in §9.2.11 above), what is indicated is that the situation is occurring at the given point of time, when it is expected that it would have begun at a later time:

¹² Precisely where and how to draw the line around these items is uncertain, and this characterisation is admittedly imperfect. As we have already seen, negative particles also invoke presuppositions. Perhaps they can be excluded from this group on the grounds that (in clause usage) they presuppose propositions, rather than situations.

(12–363) A: *wa-n-juluk*

2MIN.NOM-CM-wash

B: *muj nga-ni-ny-juluk jan nga-marl* already 1MIN.NOM-CM-PST-wash 1MIN.OBL 1MIN-hand

A: 'Wash (your hands).'

B: 'I have already washed my hands.'

(12–364) wamb muj jungurrb i-n-d-in man already short:winded 3NOM-CM-say-PRS 'He's already getting short winded.'

Muj 'already' is used both as an expectation modifier and a plain temporal adverbial, 'previously, some time ago'. In the latter case expectations are not invoked by the word, which merely locates the referent event in time. I presume that in its expectation-invoking uses muj 'already' serves as a propositional modifier, rather than a logical dependent. I cannot, however, rule out the possibility that the expectation-modifying sense is not merely a pragmatic inference engendered in some contexts.

One other word that perhaps serves an expectation-modifying function is the rather poorly attested *waangk* 'suddenly, unexpectedly', though it is not clear how this word contrasts semantically with *muj* 'already'. One possibility is that *muj* 'already' invokes an expectation of imminent occurrence of the situation, whereas *waangk* 'suddenly, unexpectedly' does not—the situation might belong to a very vague and indefinite time in the future. Another is that *waangk* 'suddenly, unexpectedly' does not invoke expectations of future occurrence, but indicates that occurrence now is contrary to expectations; that is, it might invoke no actual expectations of the situation's occurrence.

- (12–365) waangk i-ny-jimb suddenly 3NOM-PST-die 'He died suddenly.'
- (12–366) wāng dar in-ar wamb
 waangk daarr i-na-r wamb
 unexpected arrive 3NOM-CM-poke man
 'The man arrived unexpectedly.' (Nekes & Worms 1953:878–879)

Finally, the enclitic *-mad* EMP is, as indicated in §9.3.1, sometimes used as an expectation modifier, indicating surprise at the occurrence of a situation, or the involvement of some entity in it. Whether this sense arises as a pragmatic implicature, or is coded by the enclitic or the grammatical relation it serves in is not known.

12.5.2 Illocutionary modification

Nyulnyul shows a small set of particles and enclitics that specify the illocutionary value of a clause as something other than declarative: they indicate the illocutionary value of the clause held in their scope as marked, rather than non-specific, as in the case of an ordinary clause. The particles, as we have seen, normally occur in clause-initial position, while the enclitics are generally found in Wackernagel's position.

The most common particle indicating illocutionary force is *nganyj* INT, which specifies the clause as a polar interrogative. This particle is discussed and extensively exemplified in §9.2.5; here a single illustrative example is sufficient:

(12–367) A: nganyj nyi-mungk arr-ak bardangk INT 2MIN-know where-LOC tree
B: yii nga-mungk arr-ak

yes 1MIN-know where-LOC

A: 'Do you know where the thing is?'

B: 'Yes, I know where.'

It was also revealed in §9.2.5 that *nganyj* INT occasionally occurs in information interrogatives; it also has non-illocutionary uses, which might be regarded as pragmatically engendered rather than coded.

The poorly attested particle *nganyjirrkurd* 'how many', evidently constructed historically from *nganyj* INT, appears to be a specifically information interrogative particle, used exclusively in interrogatives concerning cardinality. Examples are given in §4.3.3.

Three negative particles—arriyangk 'no, don't', arriban 'don't', and kanard 'can't'—almost always occur in commands not to do something, and thus might be considered to mark not just negative polarity, but also the illocutionary force of a clause as imperative.

Two enclitics are known to have uses in illocutionary modifying functions, -aw EXC and -mad EMP. The first of these, -aw EXC, is poorly attested (see §9.3.6), and the only known examples of its use are provided in Nekes & Worms (1953). The few examples they provide suggest that the enclitic can be added to words of any type, and is often used in drawing the attention of someone in the distance (Nekes & Worms 2006:58). As for the second enclitic, as per §9.3.1, -mad EMP almost always marks the clause as a polar interrogative, though it is occasionally used as an expectation modifier (as mentioned in the previous section).

12.6 Word order and thematisation

Nyulnyul is, as mentioned already, a 'free word order' language: there are few grammatical restrictions on the order of words in a sentence, and virtually any order remains grammatically acceptable; nor is it clear that any particular order of the core grammatical roles is in any sense basic. As usual for claims about word order, this should be understood as a statement about the order of the 'immediate constituents' of clauses, the units that directly compose them. These units are phrases (NPs and VPs), words (including particles, adverbials, and conjunctions), and complexes made up of these units. Phrases usually remain contiguous in Nyulnyul: the words of NPs normally remain adjacent to one another, as do the words of VPs. At various points in this chapter generalisations concerning the order of clausal units have been formulated. The main ones (including those from other chapters) are drawn together into a single listing (internal structure of the component phrasal units is ignored):

- In verbal clauses with both S and (I)O (to return to the informal labels of §12.1) NPs, these are normally on opposite sides of V; S usually precedes V, while (I)O usually follows it.
- In identifying verbless relational clauses the NP denoting the thing identified usually occurs first, followed by the NP serving as the identifier.

- In attributing verbless relational clauses the NP denoting the thing almost always precedes the NP denoting the property or quality attributed of it; word order is relatively fixed.
- In oblique possessive relational clauses word order is fairly fixed, with the NP representing the PR in initial position, followed by the oblique pronominal, followed by the NP representing the PM.
- In comitative verbless possessive relational clauses the PR typically precedes the PM NP.
- In enhancing verbless relational clauses the enhancing unit normally occurs after the NP specifying the entity enhanced on.
- In information questions the interrogative nominal usually occurs clause initially.
- Secondary predicates almost always follow the head nominal, if one is present.
- In EPCs the nominal denoting the PM usually follows the nominal denoting the PR, if it
- In verbal clauses, particles providing interpersonal modification of the proposition (e.g. negation, probability) almost always precede the VP; what follows the particle is generally the focus of modification. Particles providing illocutionary modification almost always occur clause initially; particles providing other types of interpersonal modification show less preference for clause-initial position.
- In verbless relational clauses, particles always occur before the dependent, and usually following the head (if present). The tendency to follow the head is weaker than the tendency to precede the dependent, and in the case of illocutionary modification the particle usually also precedes the head.
- If a clause contains more than one particle, the particles usually occur adjacent to one another, and in an order reflecting the scopal relations between them.
- Conjunctions and elements serving a conjunctive function usually occur in clause-initial position.

A generalisation that can be drawn out from the above listing is that in hypotactic dependency, the dependent unit normally follows the head unit. Furthermore, in hypotactic dependency constructions, particles usually precede the dependent, and typically follow the head. The particle is thus generally found between the head and dependent elements; slightly less commonly, the particle precedes both head and dependent units.

The above generalisations concern the usual orders of units of particular types and units serving in particular grammatical roles. In addition, there is reason to believe that initial position in a clause is special in some sense: an NP, PP, or adverbial in initial position represents, or can in certain circumstances represent, the theme of the clause. Placement of units of these types in initial position in a clause, that is, is associated with their selection as an anchor point for the clause token, a reference point to which the utterance is tied to its context, linguistic and/or speech-situational (McGregor 1997b:291). Depending on the grammatical role that the initial unit serves in the clause (or possibly a unit within the clause) and the nature of its referent, the clause can be anchored down in different ways:

- if it serves in an experiential or a dependency role and specifies an entity it (a) normally indicates what the clause is about, its subject matter; alternatively,
- if it serves in a dependency role and indicates something that is not an entity (e.g. a place, direction, quality, or whatever), it normally specifies a scene within which the referent of the clause is situated (see further McGregor 1997b: 292-296).

One piece of evidence in support of these suggestions has already been mentioned in the above generalisations: in information questions the interrogative determiner usually (though not invariably) occurs first. This is clearly consistent with the observation that information questions would normally be expected to be anchored to the information sought.

Clauses with an initial Actor NP generally admit the interpretation that its referent is what the clause is about:

- (12–368) jan malirr aa baab aa ngay ya-ngki-rr-jid
 1MIN.OBL wife and child and 1MIN.CRD 1PL.NOM-FUT-AUG-go
 perth-ung war-uk kunyurl
 Perth-ALL₁ other-LOC moon
 'My wife, my child and I will go to Perth next month.'
- (12–369) bin wamb yiil jin kurd i-n-d-in that man dog 3MIN.OBL hide 3NOM-CM-say-PRS 'That man's dog is hiding.'
- (12–370) wangkid jinijirr ni-many i-nga-marr, crow 3MIN.EMP 3MIN-throat 3NOM-PST-burn "Inside his throat the colour red, ..." (More literally, 'The crow's throat was burnt.') (Torres & Williams 1987:20–21)

In verbless clauses, it is normally an NP that specifies an entity, a referential NP, that occurs in initial position. The entity can be construed as the subject matter of the clause, what it is about:

- (12–371) bin wamb bambur arri bur i-la-jal that man blind not camp 3NOM-IRR-see 'That man is blind; he can't see.'
- (12–372) ngay janijirr bur ngarlan 1MIN.CRD 1MIN.EMP place Beagle Bay 'My country is Beagle Bay.'
- (12–373) wurrumbang karrambarl bardangk-uk many bird tree-LOC 'There are lots of birds in the tree.'

These are the unmarked choices for theme in verbal and verbless clauses, which are about the Actor or a referent entity about which a property is attributed. An Undergoer NP placed in initial position can also indicate what the clause is about. Examples with this placement of the Undergoer were often elicited from English prompts involving a relative clause.

- (12–374) kinyingk wamb liyan mi-na-m ma-jal-an-uk DEF man like 2MIN.NOM-CM-put INF_p -see- INF_S -LOC 'He's the man you wanted to see.'
- (12–375) bin wamb ya-ngi-rr-ngulangul biird malirr jin that man 1PL.NOM-PST-AUG-speak yesterday wife 3MIN.OBL

i-n-dam-in 3NOM-CM-hit-PRS 'That man we were speaking about yesterday is hitting his wife.'

In a transitive clause with an inanimate Agent, an animate Undergoer is perhaps more likely than the Agent to be chosen as that which the clause is about:

bin baab mudukad-in yangan duurr i-la-w-an that child car-ERG near knock:over 3NOM-IRR-give-IMP 'That child, the car nearly knocked him over.'

Sometimes spatial PPs or adverbials in initial position represent that which the remainder of the clause is about. This is revealed by the following examples, which were elicited from English identifying clause prompts with the identifying NP relativised on:

- (12-377)kinyingk-uk jan malirr aa ngay va-rr-ø-in 1MIN.OBL wife **DEF-LOC** and 1MIN.CRD 1PL.NOM-AUG-sit-PRS 'This is where my wife and I live.'
- (12-378)kinyingk-uk bur mangir maad-uk i-rr-ø-in place always play-LOC 3NOM-AUG-sit-PRS DEF-LOC 'This is the place where they play cards.'
- (12-379)kinyingk bur milirr-karr bany i-ngi-rr-a-m warli place before-TEM shoot 3NOM-PST-AUG-CM-put all wamburiny bany-bany shoot-shoot people 'This is where they shot everyone long ago.'

The examples discussed above are mostly elicited. It has been suggested that they lend themselves to the interpretation that the initial NP indicates what the clause is about, its subject matter. In order to test this suggestion, we should also examine textual examples to see whether there is a correlation between the topic of the text and initial NPs of component clauses. There is some evidence that this correlation exists, though it must be borne in mind that the textual corpus is severely limited both in size and in representativeness. Furthermore, in many instances clauses are elliptical, with inherent roles not represented by overt NPs. The question as to what (if anything) constitutes theme in an elliptical clause is not easy to answer, and we ignore it here. Let us examine some of the evidence supporting our claim about the association between initial position and theme.

To begin with, observe that line (1) of Text 1 begins with a coordinate NP introducing the two characters about which the story is concerned. In another version of the same myth, the initial NP of the first clause presents the emu, the main protagonist. The majority of the textlets describing bush foods (Text 3) begin with an NP establishing the name of the plant variety. This NP is set off in its own intonation contour, and appears to serve as a title for the textlet. In many cases it is an isolated NP; in some instances, however, it does serve in a role in the initial clause, and it is reasonable to consider that it represents the theme of the initial clause:

- (12–380) makabal / wamburiny-in / n: / i-ngi-rr-wid-an
 Marsdenia:viridiflora people-ERG nn 3NOM-PST-AUG-eat-IMP
 milirrkarr /
 before
 'People used to eat makabal in the old days.'
- (12–381) kuwal / dulkaari / wamburiny-in ya-ngi-rr-wid-an /
 Flueggea:virosa ? people-ERG 1PL.NOM-PST-AUG-eat-IMP
 layib / may /
 good food
 'We eat kuwal; it is good food.'

Similarly, the initial NP of (12–382) introduces the main topic of the textlet, spears.

(12–382) walangk jirr i-ngi-rr-mukir-an: / i-ngi-rr-wul-an / spear 3AUG.OBL 3NOM-PST-AUG-made-IMP 3NOM-PST-AUG-shave-IMP 'They made their spears, shaving them.'

Examples of this type can be easily multiplied. In some cases, by contrast, the initial unit provides a temporal or spatial setting for the clause. Thus in (12–383) the initial spatial adverbial establishes a setting within which the edible past of the palm nut is found. In (12–384) the initial NP likewise provides a setting for the event. In both cases, the initial element establishes a new spatial frame within which the narrative events unfold. Where spatial elements occur in final position, however, they do not serve a reframing function; they merely specify a location. One would expect from these observations that initial spatial adverbials mark the beginnings of new narrative episodes; there is a certain amount of evidence that this is so.

- (12–383) jimbin / may jin i-n-in / inside food 3MIN.OBL 3NOM-be-PRS 'Inside is its edible part.'
- (12–384) *aa kinyingk-uk bur kalb / dub-dub-mad i-n-in /* and DEF-LOC country up blow-blow-EMP 3NOM-be-PRS 'And in that country up there, it's still blazing.'

Clause-initial expressions indicating times almost always function in this way, and establish a temporal setting for the unfolding events. Thus, (12–385), the first clause from one telling of the emu story (Text 1), establishes the Dreamtime as the setting for the narrative. In (12–386), the temporal adverbial sets a new temporal frame for the events as somewhat later than the previous events, indicating the beginning of a new stage in the preparation of the food. Similarly in (12–387), the initial adverbial resets the scene to the point of time at which the damper is cooked, and what follows is a description of post-cooking events.

(12–385) bukarri-karr bur jin winin wunkunurr-uk dreamtime-TEM-TEM country 3MIN.OBL emu Milky:Way-LOC 'In the Dreamtime the emu's place was in the Milky Way.'

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(12–386) wajamarr / kumar / i-ngi-rr-mukir-an / later bush:fire 3NOM-PST-AUG-make-PST 'Then they made a bushfire.'
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(12–387) wajamarr / i-nga-marr-an-uk / banaban i-ngi-rr-m-an / later 3NOM-PST-burn-PST-LOC thusly 3NOM-PST-AUG-put-PST 'Later, when it had cooked, they did it like this.' (Speaker demonstrates patting the cooked damper to remove the ashes.)

It is possible for a clause to have more than one theme. There can be both a setting theme and a subject-matter theme, as in (12–383) and (12–385). The setting theme always occurs before the subject-matter theme. Example (12–388) shows that there can be both a temporal and a spatial setting theme in addition to a subject-matter theme. Here the initial unit establishes a setting for the entire narrative in the distant past; the following NP specifies a place within which the events occurred. Both the spatial and temporal locations can be considered as establishing settings for the clause (and following events). The NP wamburiny 'people' represents a subject-matter theme, introducing one of the main protagonist groups into the narrative.

(12–388) yalarrabur/mar-kung bur/ kaard maar/wamburiny before far-ABL₃ place so far people i-nga-rra-kal/ man arri wamburiny/
3NOM-PST-AUG-wander but not people 'Long ago there was a very far away place where there lived people, but not quite people.'

A few concluding observations are in order. First, one might hypothesise that if the initial unit of a clause serves in an interpersonal role, it might tie the clause to its interactive context, the context of beliefs and knowledge relevant at that point in the discourse interaction (as per McGregor 1997b:292–296). The generalisation that particles indicating illocutionary force—like *nganyj* INT—usually occur in clause-initial position is consistent with this expectation: the initial particle evidently serves to anchor the clause in its interpersonal context by indicating how it is to be construed as a speech act.

Second, in this section we have restricted attention to clauses in which all inherent roles are represented linguistically. As we will see in the next section, clauses in Nyulnyul are frequently elliptical. What, if anything, counts as theme in an elliptical clause is uncertain. In some instances the initial unit does appear to serve an anchoring function; in other instances, this interpretation is not viable. The following two examples illustrate these possibilities, respectively. In (13–389), the theme would indeed appear to be *dalwurr* 'Gardenia pyriformis': this is the subject matter of the textlet. On the other hand, in (13–390) the initial spatial adverbial does not serve to set a scene for the subsequent events, but merely specifies the manner of working on wood to make fire.

(12–389) dalwurr / i-ngi-rr-wid-in / murrul-murrul / Gardenia:pyriformis 3NOM-PST-AUG-eat-PRS little-little 'They eat dalwurr just a little.'

(12–390) kalamb kunarr / i-ngi-rr-m-an / hither thither 3NOM-PST-AUG-put-IMP 'They rubbed it this way and that way.'

12.7 Information organisation

12.7.1 Ellipsis

Like a typical Australian Aboriginal language, Nyulnyul discourse is highly elliptical. Thus in the textual corpus fully 83% of verbal clauses have at least one NP serving in an inherent grammatical role ellipsed (see Table 12–1). Ellipsis of NPs, especially referential ones, in relational clauses is also common in Nyulnyul texts. It normally occurs under conditions of givenness or predictability: ellipsed NPs usually present predictable information, and it is rare for NPs presenting predictable information to be present in a clause token. For instance, in line (7) of Text 1 the inherent Actor/Medium NP is ellipsed; the identity of the referent is obvious: it can only be one of the two main protagonists of the narrative, the one who has just severed his wings. Quite clearly in lines (8) and (9) the ellipsed Actor/Medium NP also refers to the same protagonist. Another illustration comes from a textlet about the bush-food magabal 'Marsdenia viridiflora' (see Text 3). Having introduced this as the topic of the textlet in the first sentence, which says that people used to eat it in the old days, the following two clauses qualify this in terms of present behaviour of people. The NP magabal 'Marsdenia viridiflora' evidently presents predictable information in these clauses, and is ellipsed; there is no other possible contender for the role of Undergoer/Medium. Numerous other examples can be found in the texts.

- (12–391) baab-in-manjan i-rr-wid-in / banangkarr-uk / child-ERG-only 3NOM-AUG-eat-PRS today-LOC 'Only children eat it today.'
- (12–392) aa: / wamburiny-in arri ya-li-rr-wid / um people-ERG not 1PL.NOM-IRR-AUG-eat 'We adults don't eat it these days.'

Very occasionally in the corpus of elicited material one finds ellipsis of expressions other than referential NPs, e.g. expressions that denote qualities or events. Again, this occurs under conditions of givenness, as illustrated by the following example:

(12–393) ngay layib maad-uk juy arri 1MIN.CRD good play-LOC 2MIN.CRD not 'I'm good at cards; you aren't.'

This is not restricted to elicited utterances, however. In the following example, from Text 2, no verb is present, the event presumably being predictable from the previous sentence, which indicates that they were looking around for food.

(12–394) *aa bilay kalamb nyumulk / kalamb nyumulk bur-ung jirr* and again hither thither hither thither camp-ALL₁ 3AUG.OBL

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bilay / again 'And again, to and fro, to and fro again in their camp.'
```

In clauses of motion, the motion verb is sometimes omitted. In requests for the addressee to come to the speaker or to go away from the speaker there is sometimes just an adverbial and pronoun (which is sometimes in the cardinal, sometimes in the oblique form), the motion verb being omitted. The motion verb is presumably omitted because it is predictable. ¹³ Examples are:

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(12–395) way kalamb jii away hither 2MIN.OBL 'Come here.'
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(12–396) kalamb kurr hither 2AUG.CRD 'Come here, you lot.'

12.7.2 Information structure of Nyulnyul clauses

The available corpus of spoken Nyulnyul suggests that there were in the traditional language unmarked correlations between intonation units and information units (a single intonation unit packaged a single unit of information), and between clauses and intonation units (clauses tend to be produced on a single intonation contour). Accordingly, the unmarked case is for a clause to express a single unit of information. It is rare, though not impossible, for more than one clause to fall within a single intonation unit. The few tokens in the textual corpus involve either repetition of a clause, as in (12–397), or repetition with minor change, as in (12–398), where the second clause re-expresses the first in a slightly different way—an inchoative is represented as the corresponding stative. Such examples are consistent with the association between intonation units and information units.

```
(12–397) dub wa-na-m dub wa-na-m / blow 2MIN.NOM-CM-put blow 2MIN.NOM-CM-put 'Set it alight; start it burning.'
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(12–398) wamb jan yubul i-n-j aa yubul i-n-in / man 1MIN.OBL sick 3NOM-CM-say and sick 3NOM-be-PRS 'My husband has got sick and he's lying ill.'

Usually when clauses are repeated each instance is uttered on its own intonation unit. This is particularly so for inexact repetition, as in the following examples. In (12–399) the repetition elaborates on the first token, making it more precise by providing fuller specification of the grammatical roles; additionally, the negative particle is replaced by a

¹³ It seems less likely that examples such as these exemplify an additional type of verbless clausal construction.

¹⁴ Intonation units are stretches of speech which fall under a single intonation contour. (Recall from fn. 21 of Chapter 3 that in the available narrative corpus in Nyulnyul the typical declination of pitch over an intonation contour is not observed.) As in many nearby languages, the boundaries of an intonation contour are often marked by pauses, following which there is a resetting of pitch.

synonym. In (12–400), each repetition adds to the previous by specifying a new value for the Undergoer. In these examples something new is added by each repetition, and the correlation between information and intonation units is further supported.

- (12–399) arri mi-li-jid wil / kanard mi-li-jid wil-ung not 2MIN.NOM-IRR-go meat not 2MIN.NOM-IRR-go meat-ALL₁ juy-in / 2MIN.CRD-ERG 'You won't go for meat, you won't be able to go for meat.'
- (12–400) man buub wa-n-kid/ bilabil wa-n-kid/ aa but flower 2MIN.NOM-CM-eat leaf 2MIN.NOM-CM-eat and maarr wa-n-kid/ aa wul wa-n-kid/ grass 2MIN.NOM-CM-eat and water 2MIN.NOM-CM-eat 'But you will eat flowers, and eat leaves, and you'll eat grass, and drink water.'

A single clause may be divided into two or more intonation units. Investigation of examples suggests that the division is motivated by a need to make parts of the clause more informationally prominent. Let us consider a few circumstances.

- (a) Introduction of new characters. When new characters—individuals that play important roles in the narrative (see McGregor 1987a, 1987b)—are introduced into a narrative text, they are usually accorded a degree of prominence, consistent with their importance in the development of the narrative plot. One way of doing this is by setting off the NP denoting them on a separate intonation unit or units from the remainder of the clause (see also McGregor 1987a, 1987b); this configuration is placed in initial position to simultaneously assign it thematic prominence. Thus, the main protagonist in one telling of the emu myth, the emu, is introduced by two identical NPs, each on its own intonation unit. The other protagonist group, the other birds, is introduced in a similar way, on two intonation units, though this time by a single NP. Representing these referents in separate intonation units singles the NPs out as representing one or more measures of information, thus singling them out as important characters.
- (12–401) winin / winin / bur jin / kurrwal / emu emu country 3MIN.OBL sky 'The emu, his country used to be in the sky.'
- (12–402) warang-in / karrambal / mungurr i-ngi-rr-jal-an / others-ERG bird jealous 3NOM-PST-AUG-see-IMP 'The other birds were jealous of it.'

The emu is introduced into Text 2 in a similar way, in two NPs, each in their own intonation unit.

(12–403) man in bindany in / kinyingk winin / kalb i-nga-n-an-an / but this big this DEF emu up 3NOM-PST-be-IMP-IMP kalkarr / bur-uk jin / alone camp-LOC 3MIN.OBL 'But this big one, the emu, he lived in the sky, by himself, in his camp.'

- (b) Introduction of major theme of an exposition. We have already seen (§12.6) that the theme of an expository piece may be introduced via a clause-initial NP in its own intonation unit. Examples are (12–380) and (12–381).
- (c) Expansion. Sometimes an NP is expanded by a following NP (or NPs) that provides a listing of some or all of its component members. As the following examples show, the initial NP may form a part of the intonation unit constituted by the remainder of the clause. The expanding material normally occurs on its own intonation unit or units.
- (12-404)i-nga-miimii-jin may / wil aa mung aa may bina 3NOM-PST-search-3MIN.OBL food meat and honey and food that irrkurd-jirr / all-3AUG.OBL 'He looked around for food, meat and honey and vegetables, and all those things.'
- (12–405) *kaw i-nga-rra-m* warrakan / wurrumbang-mad baab-nyirr child-COM call 3NOM-PST-AUG-put eagle many-EMP *kamard-nyirr* jirr / aa nyungul-jun/ jirr 3AUG.OBL mother's:mother-COM 3AUG.OBL and old-ABL₁ 'The eagles called out to him; there were plenty, with their children, their grandmothers and the old ones.'
- (d) Extension. Sometimes a unit is followed by another in a separate intonation unit, that extends on it, adding something new to it while still forming a part of the same clause. In the rare cases in which more than one PV occurs with a single IV the second may occur on its own contour, as illustrated by the following example:
- bilay / judiny / baan i-n-in / (12–406) arri dumbar i-li-ny 3NOM-IRR-get again straight thusly 3NOM-be-PRS not fly junk i-n-ny-in/ aa marriny/ run 3NOM-CM-get-PRS and walk 'He couldn't fly again straight, like that; (now) he ran and walked.'

Compared to the case in which the two PVs occur in the same intonation unit along with the IV, it would seem that separation into two serves to add additional prominence to the conjuncts.

A variant on this pattern is illustrated by the following example, in which the second conjunct adds nothing new, but rather serves an intensifying function. In this example it would seem that the first token of the PV jurrb 'jump' along with the IV -J 'say' specifies the initial jump, while the following PVs indicate repetition of the act.

```
(12-407)
           kinyingk-kun jurrb i-n-j/
                                              aa ... jurrb jurrb/
                        jump 3NOM-CM-say and
           DEF-ABL<sub>2</sub>
                                                      jump jump
           'Then he jumped up and leapt and leapt.'
```

(e) Afterthoughts. Afterthoughts are units, often NPs, that occur on their own intonation unit, following the remainder of the clause to which they belong, where no other instance of that unit is included in the remainder of the clause. Afterthoughts are added to make the identity of the filler of one of the grammatical roles in the clause more precise. Thus (12–408), from Text 2, specifies the people as the Agents of the gathering: although this is the first time that the people are mentioned in the text, they are not important in the text (they are not subsequently mentioned), and nor are they thematic; the NP serves to specify that it is the people, adults rather than children, that pick up the bushfood that has fallen on the ground. Other illustrations are provided by (12–409) and (12–410); for these examples the referents of the final NPs, the brolgas and the palm respectively, are well established at the points in the texts where the examples occur, and represent 'accessible information'. The speaker evidently adds the NPs for clarity.

- (12–408) *i-marr-in-uk i-jalk-in barnd-uk* / 3NOM-cook-PRS-LOC 3NOM-fall-PRS ground-LOC *kinyingk* / *i-rr-warnd-in* / *wamburiny-in* / DEF 3NOM-AUG-gather-PRS people-ERG 'When it's ripe, and falls to the ground, they pick it up, the people.'
- (12–409) burrb-uk i-nga-rra-kal / kudurrwayin irrkurd / dance-LOC 3NOM-PST-AUG-play brolga all 'They were dancing, all the brolgas.'
- (12–410) wamburiny-in i-ngi-rr-warnd-in / kaamb / people-ERG 3NOM-PST-AUG-gather-PRS palm 'People gather it, the palm.'

The stipulation that no reference is made to the item in the remainder of the clause is too strong, as indicated by (12–411), in which the two following intonation units present information clarifying the identity of the referent of the determiner *kinyingk* DEF.

- (12–411) layib may kinyingk / palm / kaamb / good food DEF palm kaamb 'It is good food that, the palm, kaamb.'
- (f) Repetition. Sometimes a unit that occurs within the intonation unit constituted by a clause is repeated on its own intonation contour, adding prominence to it:
- (12–412) aa / kalib-ang i-ngi-rr-mukir-an jungk /kalib-ang / and fire:saw-INS 3NOM-PST-AUG-make-IMP fire fire:saw-INS 'And they made fire with a fire saw, with a fire saw.'
- (g) Restatement. An NP set on its own separate intonation unit may restate something in the main portion of a clause, putting it in a different way, as in (12–413), where 'not much' is rephrased as 'little'. (12–414) illustrates restatement in which the second NP in a coreferential pair relates to the first as specific to general.
- (12–413) malbul jin arri wurrumbang / murrul mad / thing 3MIN.OBL not many little but 'His things were not much, only a little.'
- (12–414) baab-in / liyan i-rr-m-in / murrul-murrul / may / children-ERG like 3NOM-AUG-put-PRS little-little food

murrul-murrul karrangkam / little-little food:type 'The children like the little bush food, the little karrangkam.'

12.7.3 Discontinuous NPs

As already mentioned, discontinuous NPs are rare in Nyulnyul, less common than in perhaps the majority of Australian Aboriginal languages, including Warlpiri (Swartz 1988), Nyangumarta (Geytenbeek 1980), and Gooniyandi (McGregor 1997a). This may be partly a reflection of the highly moribund situation of the language in the late twentieth century. It is also possible that NP discontinuity was even in traditional Nyulnyul a more marked option than in the 'standard average' Australian language. Unfortunately, comparative Nyulnyulan data does not help much: while modern grammars of Bardi, Nyikina, and Yawuru mention that NP discontinuity occurs in these languages, no indication is given of its relative prevalence.

The few tokens of discontinuous NPs adhere to patterns not uncommon in Australian languages. First, just one discontinuous NP usually occurs in a clause. Second, a discontinuous NP usually consists of just two words that occur at opposite ends of the clause, as in the following examples (the discontinuous parts are underlined):

- kaari nga-ni-ng-kid-an wurrumbang kinyingk-karr sour 1MIN.NOM-CM-PST-drink-IMP many **DEF-TEM** kaari layib juy-ij nga-mungk 1MIN-believe sour good 2MIN.CRD-DAT 'I used to drink a lot of beer, but that was when I thought it was good for you.'
- (12–416) *dalwurr* / i-ngi-rr-wid-in / murrul-murrul / Gardenia:pyriformis 3NOM-PST-AUG-eat-PRS little-little 'Nyulnyul people eat Gardenia pyriformis just a little.'
- (12-417)kinyingk / i-ngi-rr-wid-an / (...) / <u>jukud</u> / 3NOM-PST-AUG-eat-PRS DEF worm 'They eat this worm.'

Third, a discontinuous NP rarely consists of more than two words, and when it does, the components generally occur at opposite ends of the clause, as in the above examples and:

wirli / gumbu / i-rr-a-ny-in / (12-418)wurrumbang / meat fish 3NOM-AUG-CM-get-PRS many 'They get lots of fish.'

Fourth, if a case-marked PP is discontinuous, each separate piece of the PP is individually marked by an instance of the case-marking postposition, as in (12–419). This is again a recurrent pattern in Australian languages—although in Yawuru it seems that only the first piece is normally marked (Hosokawa 1991:40). Line (188) of Text 2 is a possible example of a discontinuous ergative PP, though the analysis is problematic.

(12–419) <u>kinyingk-ang</u> i-ngi-rr-dam-an / <u>kumbu / dangk-ang</u> / DEF-INS 3NOM-PST-AUG-hit-IMP fish metal:boomerang-INS 'They used to hit fish with this metal boomerang.'

Fifth, in each of (12–416)–(12–419) the second discontinuous piece occurs on its own intonation unit; in all but the last of these so also does the first piece. This exemplifies what I have elsewhere referred to as Type B discontinuous NPs (McGregor 1997a); no Type A (in which the second discontinuous piece falls into the same intonation unit as the rest of the clause) are attested.

NP discontinuity in Nyulnyul seems to be motivated by similar considerations as are relevant to Type B discontinuous NPs in Gooniyandi: the second discontinuous piece is predicated of the first, and either attributes a quality of it or identifies it (McGregor 1997a). It is added as an afterthought (see §12.7.2), providing additional qualifying or identifying information about the referent, as relevant to the referent situation. Thus, as the above examples show, in the qualifying type the second discontinuous piece typically indicates a quantity, added as additional information to what is known about the referent. In the identifying type, the second piece of the NP provides the type specification, the first piece being a determiner. Thus discontinuous NPs in Nyulnyul are subject to what Hale (1983:31) refers to as the unmerged interpretation.

This analysis also applies to examples like (12–420) in which the discontinuous NP is made up of conjoined nominals. Discontinuity, and separation into different intonation units is motivated by considerations of information quantity: the two parts are each accorded prominence.

```
(12–420) winin aa burruk / walangk-ang i-ngi-rr-a-r-an / aa emu and kangaroo spear-INS 3NOM-PST-AUG-CM-poke-IMP and jiib-ang / boomerang-INS 'They used to catch emus and kangaroos with spears and boomerangs.'
```

Finally, it is observed that discontinuous NP complexes are also attested in Nyulnyul, as per §10.5.3. The following example is a Type A construction in which the second discontinuous NP occurs on the same intonation unit as the remainder of the clause:¹⁵

```
(12–421) <u>kinyingk-uk</u> i-na-m-an-an-jin <u>bur</u> <u>kinyingk-uk</u>
DEF-LOC 3NOM-CM-put-IMP-IMP-3MIN.OBL camp DEF-LOC
<u>disaster bay</u> /
Disaster Bay
'He made his camp there, at that place, Disaster Bay.'
```

Consistent with McGregor (1997a), the second discontinuous NP serves a reference-clarifying function.

¹⁵ The fact that a Type A construction is attested for NP complexes strongly suggests that Type A constructions would also have been permissible for discontinuous NPs, granted that it is more likely that an NP than an NP complex will fall into a single intonation contour.

12.8 Non-finite clauses

Non-finite clauses are verbal clauses in which the verb occurs in an invariant, non-finite, form that does not distinguish the usual categories of tense, mood, aspect, and person and number of participants. Non-finite clauses are thus characterised by the presence of either an infinitival form of an IV (see §7.13) or a bare PV. The former type is much more frequent than the latter. Non-finite clauses are typically subordinated to a finite clause, and thus are discussed in Chapter 13.

Non-finite clauses are severely reduced structurally in comparison with finite verbal clauses. In the vast majority of tokens they consist of just a non-finite verb form, usually together with a postposition indicating the grammatical role of the non-finite clause in the complex sentence. This is illustrated in the following examples, the first two of which illustrate non-finite clauses with infinitival forms of IVs, the second pair of which illustrate plain independent PVs. (The non-finite clauses are underlined in the examples below.)

- (12-422)kinyingk bur ma-land-in-ung place INF_p-sit-INF_s-ALL₁ 'This thing is for sitting on.'
- nganyji liyan mi-la-m-an (12-423)ma-dam-in-ung 2MIN.NOM-IRR-put-IMP INF_p-hit-INF_s-ALL₁ INT 'Did you try to hit him?' Or 'Did you want to hit him?'
- (12-424)ni-marl i-na-m dumbar-ung 3MIN-arm 3NOM-CM-put fly-ALL₁ 'The bird put its wings out to fly.'
- (12-425)nganyji liyan mi-n-m-in burrb-ung like 2MIN.NOM-CM-put-PRS dance-ALL₁ 'Do you like dancing?'

Non-finite clauses do, however, admit the presence of other units besides the non-finite VP. The most common overt grammatical role in non-finite clauses is the Undergoer role, which as usual normally follows the VP. This is illustrated by the following examples:

- (12-426)murrkul jin ma-wand-in riib/bilabil 3MIN.OBL INF_p-gather-INF_s bad/leaves work 'His job is picking up rubbish/leaves.'
- (12–427) bin bardangk layib <u>ma-dam-in-ung</u> good INF_p-hit-INF_s-ALL₁ dog that stick 'This is a good stick for hitting dogs with.'
- kujarr ni-marl ma-dam-in-ung (12-428)i-n-m-in 3MIN-arm 3NOM-CM-put-PRS INF_p-hit-INF_s-ALL₁ other boy 'He's holding his two hands out ready to hit the other boy.'

In some cases it is impossible to determine whether an NP represented in a non-finite clause is serving as an Undergoer or as an Implicated (as in (12-429) and (12-430), in which the non-finite clause could be either transitive or middle—see p. 583 above), or even a non-participant Medium role (as in (12–431), where it is uncertain whether ngurnd 'piss, urine' is an Undergoer/Medium, or just a plain Medium). This uncertainty is a consequence of the absence of cross-referencing pronominals in the non-finite VP.

- (12–429) *liyan i-n-m-in* <u>kumbarr-ung ma-miimii-in</u> like 3NOM-CM-put-PRS money-ALL₁ INF_p-search-INF_S 'He likes looking for money.'
- (12–430) liyan nga-n-m-in $\underline{burruk-ung} \underline{ma-miimii-in}$ like 1MIN.NOM-CM-put-PRS kangaroo-ALL $_1$ INF $_p$ -search-INF $_S$ 'I like hunting kangaroos.'
- (12–431) *yiil-in jarrbad i-na-ng-k* <u>ngurnd-ung ma-kirir-in</u>
 dog-ERG lift 3NOM-CM-PST-carry piss-ALL₁ INF_p-piss-INF_S
 <u>bardangk-uk</u>
 stick-LOC
 'Dog lifted its leg for a piss.'
- (12–431) illustrates that units serving other grammatical relations may also occur in non-finite clauses: here the final word serves in a dependency relation of enhancement. (12–432) shows the presence of an NP serving as a Medium CR, while (12–433) shows the inclusion of a unit serving in an extending dependency relation.
- (12–432) *liyan nga-na-m* <u>ma-ngank-in</u> <u>nyulnyul</u> like 1MIN.NOM-CM-put INF_p-speak-INF_s Nyulnyul 'I would like to learn to speak Nyulnyul.'

In a few instances non-finite clauses include adverbial elements serving in dependency relations:

- (12–434) *liyan i-na-m* <u>way junk-ung</u> like 3NOM-CM-put away run-ALL₁ 'He tried to run away.'

That non-finite clauses may contain an Actor NP is demonstrated by example (12–436), where the pronoun evidently belongs to the non-finite clause.

(12–436) bulj nga-n-j <u>marriny-in</u> ngay tired 1MIN.NOM-CM-say walk-ERG 1MIN.CRD 'I'm tired from walking.'

There are no examples of non-finite clauses with overt Agent NPs, which is perhaps suggestive of an ergative orientation in the syntax of non-finite clauses. However, examples such as (12–426)–(12–430) suggest that the Agent role is actually present in non-finite

transitive and/or middle clauses, but has been ellipsed in the available examples, since it represents predictable information.

Word order in non-finite clauses is not entirely fixed. Thus while (12–426)–(12–428) show Undergoer NPs following the non-finite verb, there are also tokens in which they precede the verb, as in (12–437). Other examples suggest that units in other grammatical roles are also not fixed in position in the clause. There are insufficient tokens to permit one to make generalisations concerning the order of units.

(12-437)liyan nga-n-m-in wil ma-kid-in-ung like 1MIN.NOM-CM-put-PRS meat INF_p-eat-INF_s-ALL₁ 'I want to eat meat.'

As the above examples illustrate, there is usually one or more shared grammatical roles between the non-finite clause and the finite clause it is syntagmatically related with. There are no apparent restrictions on the grammatical roles that this NP may serve in either the main finite clause or the non-finite clause. In the non-finite clause it may serve, as we have seen, in a PTR, a CR, as an Instrument (as in (12–427)) or a dependency relation. In finite verbal clauses, as the above examples illustrate, it usually serves as an Actor, though it may also be an Undergoer:

- (12–438) *bulkun-in* i-n-m-in <u>murrul baab ma-mulk-in-ung</u> smoke-ERG 3NOM-CM-put-PRS little baby INF_p-sleep-INF_s-ALL₁ 'Smoke makes the baby sleep.'
- (12-439)nyanangkarr karrm nga-na-m-badik-irr ma-ma-r-anyi perhaps later 1MIN.NOM-CM-block-3AUG.ACC INF_p-REF-poke-REF 'Maybe later I'll stop them fighting.'

In verbless relational main clauses the shared NP usually serves as the head of the dependency relation, specifying the entity that the non-finite clause enhances on, as in (12-427) and (12-440).

(12–440) binjin jarrad wilamay-ung ma-n-in coolamon 1AUG.OBL food-ALL₁ INF_P-be-INF_S 'Our coolamons are for food.'

Occasionally, however, as (12-435) and (12-441) illustrate, there is no shared NP between the two clauses. In both of these examples it seems that the non-finite clause is the head of the verbless relational clause, about which a property is attributed.

arri layib <u>ma-jibijib-in-ung</u> not good INF_p-stare-INF_s-ALL₁ 'It's rude to stare.'

There is one possible purely formal difference between the two non-finite clause types, the one with an infinitival IV, the other with just a PV. In the former type case-marking postpositions are virtually always attached to the initial word of the non-finite clause, as well as optionally also to the infinitival IV. In non-finite clauses with PVs, however, the postposition appears to be invariably attached to the preverb, regardless of whether it is initial or not in the non-finite clause as illustrated by (12–424), (12–425), and (12–434). This difference may or may not reflect a genuine grammatical difference between the two types of non-finite clause; the paucity of examples renders it impossible to be certain whether it is an accidental feature or a regularity.

Finally, it should be recalled that not all non-finite VPs occur in non-finite clauses. For instance, the nominal derivational suffix *-id* CHAR can derive a nominal from a non-finite verb, as in *ma-janbid-in-id* (INF_P-kick-INF_S-CHAR) 'kicker', *wangirr-id* (cry-CHAR) 'crier, cry-baby', and *mariny-id* (walk-CHAR) 'walker'.

13 Complex sentence constructions

13.1 Overview of complex sentence constructions

Complex sentence constructions are sentence-sized grammatical constructions involving more than one clause. These are constituted by syntagms of a pair of clauses or a clause and a smaller unit such as an NP, and syntagms of such syntagms. The syntagmatic relations involved are of one of the three macro-types identified in §2.3: CONSTITUENCY (part-whole relations); DEPENDENCY (part-part relations); and CONJUGATIONAL (whole-whole relations).

In CONSTITUENCY, one clause (or syntagm of clauses) is EMBEDDED in another clause, or a unit in it, and serves in an experiential role in that larger unit. Embedded clauses in Nyulnyul are always non-finite. (Non-finite clauses are not, however, necessarily embedded in other clauses or units in other clauses.)

The second type of interclausal relationship, DEPENDENCY, obtains when one clause enters into a syntagmatic relationship of sisterhood with another clause or unit within the other clause.² As per §2.3, dependency relations can be classified on two dimensions, according to: (i) the relative status of the related clauses, whether they are of equal status, in which case the relation is PARATAXIS (roughly, coordination—Haspelmath 2004:3), or one clause is dependent on another, in which case it is HYPOTAXIS (roughly, subordination); and (ii) the 'semantic' nature of the relation, distinguishing between EXTENSION ('and', 'or', etc.), ELABORATION ('e.g.', 'i.e.', etc.), and ENHANCEMENT (spatial and temporal location, direction, etc.).

In CONJUGATIONAL relations, one clause as it were surrounds or envelopes another, enclosing it within its scope or domain, much as the particle *probably* holds the remainder of the clause in which it occurs in its domain, as in *probably they followed his dripping blood until nightfall*. The main types of interclausal conjugational relations include: TAGGING (McGregor 1995a, 1997b), FRAMING (i.e. quotation—McGregor 1994a, 1997b), and COMPLEMENTATION (McGregor 1997b, in press). See McGregor (1994b, 1997b) for

¹ This chapter draws on previous work on complex sentences in Nyulnyul (McGregor 1994a). While the basic parameters remain unchanged, there are some changes in detail. Thus, I now draw the line between embedding and dependency in a different way—see McGregor (1997b) for more up to date presentation of the SG theory of clause combinations. This chapter also deals with a range of types not treated in McGregor (1994a), including complementation and quoted speech constructions.

A number of linguistic theories—including mainstream formal theories such as Government and Binding, Lexical Functional Grammar and Generalised Phrase Structure Grammar (see e.g. Borsley 1991), and a number of functional theories including some varieties of West Coast Functional Grammar (e.g. O'Dowd 1992) and Cognitive Grammar (Langacker 1987)—make no systematic distinction between embedding and subordination, regarding all types of complex sentence construction as involving embedding (sometimes designated by the inclusive label 'subordination'). As will be seen as the discussion of this chapter unfolds, there are good reasons to distinguish between them—see also Halliday (1985); Van Valin (1993b:118); Hopper & Traugott (2003:170).

arguments that framing and complementation must be distinguished from both embedding and dependency.

In the following sections we discuss the three primary syntagmatic relations in order. To assist the reader follow the argument, we indicate symbolically in the examples the relevant grammatical relation at the boundary between the related units (in most instances the boundary is unproblematically identifiable). The following symbols are employed (repeated here for the reader's convenience from *Abbreviations and conventions*):

Constituency relations:

- embedding of previous unit in following one 1
- embedding of following unit in previous one \downarrow

Dependency relations:

- parataxis
- hypotaxis (arrowhead points to dependent)
- elaboration
- extension +
- enhancement

Conjugational relations:

- framing (direct quotation)
- framing (indirect quotation) $\langle \rangle$
- $\leq \geq$ scope

13.2 Embedding

Embedding plays a quite minor role in clause combination in Nyulnyul, and is very infrequent in use. The only clausal experiential role that permits an embedded clause is the Agent CR, and then only in a medio-active clause; apparently it is impossible for a clause to be embedded in a PTR in Nyulnyul. Possibly the phrasal experiential role of Entity also allows an embedded clause, though this is less certain—see §13.3.2.1.1 below. Embedded clauses are always non-finite (see §12.8).

There are just a handful of instances of non-finite clauses embedded as Agents in medioactive clauses. The non-finite clause indicates the cause of a situation in which a human being suffers as a result of their involvement in the situation denoted by the ergatively marked non-finite clause. The following examples illustrate embedded clauses with nonfinite PVs and IVs respectively:

- (13-1)bulj nga-n-ji *↓ marriny-in ngay* tired 1MIN.NOM-CM-say go-ERG 1MIN.CRD 'I'm tired from walking.'
- ↓ wilimay-in ma-wid-in (13-2)bindany wa-n-ji food-ERG 2MIN.NOM.FUT-CM-say INF_P-eat-INF_S 'You'll get very fat from eating too much.'

Non-finite clauses are structurally impoverished and usually consist of a single grammatical unit—a PV or non-finite IV (i.e. a non-finite VP)—together with a postposition. Only rarely are other clausal roles filled, as in (13–1) and (13–2), and their verbs distinguish none of the tense, mood, or aspectual categories of verbs of finite clauses.

The interpretation of the following two examples is problematic: for although these examples appear to involve non-finite clauses embedded in finite medio-active clauses, the non-finite verb is not marked by the ergative postposition.³ Second, the non-finite verb occurs clause initially in these two examples, whereas in all other instances, the ergatively marked unit invariably occurs finally in a medio-active clause.

- (13–3) ma-jarrjarr-in ngimbirr ngimbirr ↑ liyan jan bil-ij
 INF_P-wake-INF_S night night feelings 1MIN.OBL anger-DAT
 nga-banyj
 1MIN.NOM-finish
 'I feel angry, getting woken up at night.' (More literally: 'Being woken up at night makes me angry.')
- (13–4) ma-ngulangul-in-ngay ↑ liyan bil-ij i-n-m-in-jan INF_P-talk-INF_S-1MIN.ACC feelings anger-DAT 3NOM-CM-put-PRS-1MIN.OBL 'Gossiping about me makes me angry.'

13.3 Dependency relations

Dependency relations play a much more prominent role in complex sentence constructions than does embedding, and a wide range of formal and semantic subtypes are identifiable. Table 13–1 provides a summary of the range of subtypes, classified initially according to the two dimensions: parataxis vs hypotaxis, and elaboration vs enhancement vs extension. Further distinctions are made according to the nature of the linguistic units involved in the relations. First, both clauses may be finite; this is the most common situation. Alternatively, one of them—typically, but not invariably, the modifying clause—may be non-finite. Second, the unit that is qualified (the primary unit in parataxis, the head in hypotaxis) may be either a clause or an NP.

This section is organised as follows: we begin in §13.3.1 with constructions involving finite clauses, discussing first parataxis (§13.3.1.1); we then turn to hypotaxis (§13.3.1.2). Next we turn, in §13.3.2, to the cases in which one of the clauses is non-finite, again discussing first parataxis (§13.3.2.1), and then hypotaxis (§13.3.2.2).

Possibly this is because the non-finite verb already has -in INF_S attached to it; the second -in ERG may have been deleted by a phonological rule. It will be observed that in the other examples cited above the ergative does not follow this suffix, but is attached to another unit in the non-finite clause.

Table 13–1: Classification of interclausal dependency relations in Nyulnyul

	Parataxis		Hypotaxis		
Tactic relation	2 ^a	Finite	Non-finite	Finite	Non-finite
Totallon	1		l		
Extension	clause ^b	addition replacement			
Elaboration	clause	specification	attribution		
	NP	identification			
		description		description (LOC, SUB) ^c	
Enhancement	clause	place		place (LOC)	
		time		time (LOC, SUB)	contemporaneous (LOC)
				temporal condition (TEM)	
				after (ABL ₃)	after (ABL ₁)
				cause, reason (LOC, SUB)	
		manner		condition of manner (TEM)	
		conditional		conditional (TEM)	implicated, purposive (ALL ₁)
		apprehension		apprehension (TEM)	
				comparative (SEM)	
	NP		implicated (ALL ₁)		

a. The numerals 1 and 2 here indicate primary and secondary unit in the dependency relation, respectively.

13.3.1 Paratactic constructions consisting of finite clauses

As observed in McGregor (1988b:38, 1994a:35), the attention of Australianists has tended to focus on complex sentences in which the clauses are related by 'subordination' (usually construed so as to include both hypotaxis and embedding), rather than by parataxis, which

b. The primary clause is almost always a finite clause; we ignore the handful of exceptions in the remainder of this section.

c. Abbreviations in brackets indicate the morpheme (usually a postposition) that marks the dependency relation.

is usually accorded cursory treatment. Yet in many Australian Aboriginal languages—e.g. Gooniyandi (McGregor 1988b), Warrwa (my own data), and Yankuntjatjarra (Goddard 1988:188)—parataxis is by far the most frequent in usage. This lack of interest in parataxis is presumably at least to some extent due to the absence of formal markers: the clauses are juxtaposed, usually without use of formal indicators of the relations between them; nor does either clause usually show distinctive internal syntactic structure. Given the lack of formal marking, it could be questioned whether the clauses do indeed go together to form a larger construction, and it might be maintained that it is sufficient to treat them as structurally unrelated independent sentences. Perhaps the formal marking is not segmental, and some prosodic feature such as the 'comma intonation' is characteristic of paratactically related clauses forming complex sentences, and distinguishes them from independent sentences (Chafe 1988; Mithun 1988:332; McGregor 1990:427). Unfortunately, as already mentioned, information on intonation is—and will remain—incomplete and unreliable. The status of the subtypes distinguished below as constructions can also be questioned—it could be maintained that they are alternative interpretations of single semantically vague construction; we will say a few words about this interpretation in §13.3.1.1.4.

13.3.1.1 Extension

The major subtype of extension is addition—usually referred to as coordination—in which one clause is added to another, the relation between the clauses being 'and'. As (13–5) shows, the clauses are normally juxtaposed without the use of a conjunction. Occasionally, the conjunction *aa* 'and' is used, as in (13–6). (There is no information on the expression of alternation ('or'); it is unlikely, however, that it constitutes a distinct linguistic type from addition—see McGregor 1988b:48.)

- (13–6) karrbin wa-n-nyu-jan / ↔+ aa baal shield 2MIN.NOM-CM-catch-1MIN.OBL and belt wa-n-nyu-jan / 2MIN.NOM-CM-catch-1MIN.OBL 'Bring me my shield and bring me my hair belt.'

As (13–5) illustrates, the order of clauses usually reflects the temporal order of the referent situations—the spearing would normally precede the bringing back to camp of the kangaroos. In (13–6), on the other hand, the situations are presumably contemporaneous. Not infrequently the second clause indicates a reason or purpose for the first:

Occasionally the temporal order of the referent situations is explicitly indicated by an adverbial such as *wajamarr* 'later' or *kinyingkarr* 'then, after that', as in:⁴

```
i-ngi-rr-marr-an kinyingk wil / ... / ↔ + wajamarr
3NOM-PST-AUG-cook-IMP DEF meat later
i-ngi-rr-wid-an /
3NOM-PST-AUG-eat-PST
'They cooked the fish and later ate them.'
```

A subtype of addition is the adversative, where what is added simultaneously constitutes a point of contrast to the situation it is added to. Again, as illustrated by (13–9), the two clauses are usually juxtaposed. In Text 2 there are a number of instances of the conjunction *man* 'but', as in (13–10); however the speaker I worked with did not use this word at all, and consistently used just juxtaposition.

```
(13–9) mangir nga-jarrijarr-in rangar-uk ↔+ jan malirr arri always 1MIN.NOM-arise-PRS early-LOC 1MIN.OBL wife not i-la-jarrjarr
3NOM-IRR-arise
'I always get up early, but my wife doesn't.'
```

```
(13–10) ya-ngka-rra-miimii wil jarrad, ↔+ man juy
1PL.NOM-FUT-AUG-seek meat 1AUG.OBL but 2MIN.CRD
    arri nyi-mungk,
    not 2MIN-believe
    'We'll be able to hunt our meat, but you, you don't know how to.'
```

A second type of extension is replacement. Here one clause replaces another: that is, it indicates what actually happened or will happen instead of a situation that did not or will not occur. (13–11) is an example.

```
(13–11) arri dumbar i-li-ny / bilay wara-ngirr karrambal / ↔+
not fly 3NOM-IRR-catch again one-SEM bird
kaard i-n-in judiny / baan /
still 3NOM-be-PRS straight thusly
'He can't fly any more like the other birds; he still goes straight along like that.'
```

The Nyulnyul comparative construction is typical of an Australian language: it is a biclausal construction in which two attributive clauses are juxtaposed, the second extending on the first. The attributing dependent in the second clause is the antonym of that of the first clause.

⁴ It might be suggested that the interclausal relationship in examples such as (13–8), where the temporal relationship is explicitly spelt out, is enhancement (as per Halliday 1985:213 for English). However, words like *wajamarr* 'later' are adverbials, not conjunctions: they do not mark the interclausal relationship, as do conjunctions like *aa* 'and'; the interclausal relationship thus remains one of addition, sequentiality being indicated by a different means entirely. As we will see in §13.3.1.1.4, there are other reasons why (13–8) does not involve enhancement.

- (13–12) in kumbu birndany \leftrightarrow + bini war murrut this fish big that other little 'This fish is bigger than that other one.'
- (13–13) *jiy yiil birndany* ↔+ *janijirr murrul* 2MIN.OBL dog big 1MIN.EMP little 'Your dog is bigger than mine.'

In the following example the attributing dependent in both clauses is identical:

(13–14) kinyingk naabind ↔+ baabarl jin kinyingk naabind DEF long brother 3MIN.OBL DEF long 'He is tall but his brother is even taller.'

13.3.1.2 Elaboration

Elaboration is the relation in which one unit provides further description or specification of another. Rather than add something new, it provides an alternative representation or designation of the unit, restating it in other words, filling in details, or clarifying it. The relation is of the 'be' type, with subtypes qualification (attribution), identity (identification), exemplification ('for example'), exposition ('in other words'), clarification ('to be precise'), and so on. (13–15) provides illustration: the emu ran back to his camp, and this single situation is referred to by three clauses which each characterise it in different terms. Similarly, in (13–16) the second clause specifies more precisely how the emu's cousins are moving—they are flying above him.

- (13–15) $junk \ i-n-j/$ $\leftrightarrow=$ $jakud \ i-n-j/$ bik-uk jin run 3NOM-CM-say return 3NOM-CM-say shade-LOC 3MIN.OBL $\leftrightarrow=$ $bur-ung \ jin$ i-ny-jid/ camp-ALL₁3MIN.OBL 3NOM-PST-go 'He ran; he went back; he went to his camp, into the shade.'
- (13–16) bina i-rr-jid-in / \leftrightarrow = dumbar i-rri-j-in kalb / there 3NOM-AUG-go-PRS fly 3NOM-AUG-say-PRS up "There they go, they're flying away up in the sky."

As these examples illustrate, information is presented piecemeal, with precision increasing from one clause to the next, as the speaker provides an increasingly detailed description of the situation. The elaborating clause always follows the clause it elaborates on.

What is elaborated on need not necessarily be the whole clause; it may also be an NP. There are two main possibilities: the elaborating clause may identify this NP, or it may describe it. The two referent situations of the clauses normally share at least one entity in common, including the one being elaborated on. This entity is usually the theme of both clauses (see §12.6). Occasionally, however, it is a unit belonging to the theme of the elaborating clause, and sometimes it is the information focus of the clause containing the constituent elaborated on (see §12.7.2). We consider NP identification and description in order below.

In NP identification the identifying clause makes more precise the identity of the referent of an NP by referring to a situation believed or known to be associated at some time with that entity, and thus defining it. This is illustrated by (13–17), in which the first clause establishes the identity of the Agent of the second (which is ellipsed, being given in the first clause) by making reference to a known situation. The first clause thus functions to establish an entity, the theme, that is the Agent of the second clause.

(13–17) bina wamb ↔= ya-ngi-rr-ngurla-ngurl biird malirr jin
this man 1PL.NOM-PST-AUG-speak-speak yesterday wife 3MIN.OBL
i-n-dam-in
3NOM-CM-hit-PRS
'The man we were speaking to yesterday is hitting his wife.'

In (13–18), by contrast, it is the second clause that identifies the Actor of the first. The identity of an entity in the first clause, namely the man doing the talking, is specified by the characterising clause, attached as a type of afterthought. Observe that whereas in (13–17) the identifier precedes the identified (ellipsed in the second clause), in (13–18) the reverse order occurs. (As mentioned in §12.2.3.1.1, either order of identifier and identified is possible.)

(13–18) bin wara wamb ngank-ang i-n-m-in bina wamba ↔= this other man talk-INS 3NOM-CM-put-PRS this man bulj i-n-d-in tired 3NOM-CM-say-PRS 'The man who is tired is talking to the other man.'

The identifying clause functions as a defining or restrictive relative clause, although formally it shows no grammatical features distinguishing it from an ordinary independent clause, and no use is made of a relative pronoun or other linking device.

An elaborating clause may instead describe the referent of an NP by attributing a property or quality of it, this property or quality taking the form of a full situation in which the entity is involved. The elaborating clause serves as a non-defining (non-restrictive) relative clause. For example, in (13–19) the final clause attributes a quality of the Undergoer of the first (which is also the Actor of the second), describing, though not identifying it.

i-ngi-rr-murrar i-m-bunyj biin wamburiny ↔= 3NOM-PST-AUG-smell 3NOM-PST-smell rotten people i-ngi-rr-jimb-an
 3NOM-PST-AUG-die-IMP
 'They smelt the stench of the dead people.'

The entity elaborated on generally serves in an experiential role—usually a PTR—in both clauses, although occasionally it is in a dependency relation to another unit in one or both clauses. Thus in (13–20) the NP elaborated on is *murrul baab* 'little child', which serves as Medium (i.e. in a CR, not a PTR) in the first clause, but as a dependent of the Entity N in the Actor NP in the second elaborating clause, where it is represented by the pronominal *jin* 'his, hers, its'.

(13–20) gobimin i-na-w bina wamb malirr murrul baab ↔= birray government 3NOM-CM-give this man wife little baby mother jin i-ny-jimb

3MIN.OBL 3NOM-PST-die
'The government gave the man and his wife a little baby whose mother was dead.'

13.3.1.3 Enhancement

In enhancement one clause embellishes on another by providing circumstantial information on place, time, cause, manner, condition, and so forth. In paratactic enhancement the enhancing clause may either precede or follow the clause it enhances on (but see §13.3.1.1.4 for qualifications). In the following subsections we briefly discuss the intuitively identifiable types—which may or may not be emically distinct.

13.3.1.3.1 Spatial enhancement

Here the enhancing clause denotes a situation that serves as a spatial location for the situation designated by the enhanced clause (which invariably occurs in initial position):

(13–21) wa-na-k-ngay ↔× arrak mi-ni-ny-jal
2MIN.NOM-CM-carry-1MIN.ACC where 2MIN.NOM-CM-PST-see
jiwarr
dead:body
'Take me to where you saw the dead body.'5

13.3.1.3.2 Temporal enhancement

In temporal enhancement one clause denotes a situation that serves as a temporal location for another. The temporal relation is not formally marked. In (13–22) the second clause enhances the first by providing information about its time of occurrence by relating it to the occurrence of another situation. The clauses occur in non-iconic order.

(13–22) *ini bottle i-ng-karrmar* ↔× *i-ny-jalk nga-mal-ukun* this bottle 3NOM-PST-break 3NOM-PST-fall 1MIN-arm-ABL₂ 'The bottle smashed when it fell from my hand.'

The reverse order—i.e. in which the locating clause occurs first—is also attested:

(13–23) marriny nga-ny-jid bur-ung ngimbirr ↔× nga-li-janb-an go 1MIN.NOM-PST-go camp-ALL₁ night 1MIN.NOM-IRR-step-IMP juurr snake 'When I was going home last night I nearly trod on a snake.'

⁵ *Arrak* 'where' belongs to the second clause, in which it serves as a locational dependent; it does not function as a complementiser.

13.3.1.3.3 Manner enhancement

This occurs when one clause—usually the second—specifies the manner in which the situation referred to by the other clause was performed: a concomitant state or activity that the Actor of the first clause was engaged in while performing the situation designated by the first clause. This is illustrated by example (13–24):

(13–24) yiil junk i-n-ny-in ↔× ni-yangal i-ny-jindawar dog run 3NOM-CM-get-PRS 3MIN-tongue 3NOM-PST-hang:out 'The dog runs along with its tongue hanging out.'

13.3.1.3.4 Conditional enhancement

In conditional enhancement one clause indicates a condition for the occurrence of the situation designated by the other clause, as in (13–25) and (13–26). In (13–25) the second situation does not occur, allegedly due to the non-occurrence of the first; in (13–26) the first situation did not occur, allegedly because the second did not. In these examples both clauses are in the irrealis; if, however, the consequence is in the future, the IV of the conditional clause would also be in the future tense.

- (13–25) ku-la-rr-lagarr-ngay ↔× kurr

 2AUG.NOM-IRR-AUG-listen-1MIN.ACC 2AUG.CRD

 ku-la-rr-langk-ngay

 2AUG.NOM-IRR-AUG-understand-1MIN.ACC

 'If you lot listen to me you would understand me.'
- (13–26) nga-la-k-an $derby-ung \leftrightarrow \times i-li-jabal-an-ngay$ 1MIN.NOM-IRR-carry-IMP Derby-ALL₁ 3NOM-IRR-ask-IMP-1MIN.ACC 'I'd have taken him to Derby if he had asked me.'

In (13–27), by contrast, the referent situation of the consequence clause did in fact occur, expectations to the contrary. This is a type of counterfactual indicating that had the antecedent situation not obtained—contrary to the fact that it did—the consequent situation would not have obtained either (see §7.7.2 and McGregor & Wagner 2006 on this use of the irrealis mood).

(13–27) arri-ngirr nga-li-jal-an nga-malk-ang ↔× arri ningarr not-SEM 1MIN.NOM-IRR-see-IMP 1MIN-self-COM not true nga-li-m-an 1MIN.NOM-IRR-put-IMP 'If I hadn't seen it with my own eyes I wouldn't have believed it.'

13.3.1.3.5 Apprehensional enhancement

Here one clause indicates an undesirable situation that would eventuate unless the situation referred to by the other clause occurred. As in (13–28), the clause denoting the undesirable situation generally occurs second, following the one indicating the evasive action to be taken. The verb of the second clause is always in either irrealis mood or future tense.

(13–28) arri mi-li-kid kinyingk ↔× yuburl mi-li-j not 2MIN.NOM-IRR-eat DEF sick 2MIN.NOM-IRR-say 'Don't eat this or you'll get sick.'

13.3.1.4 Linguistic significance of the types

In §13.3.1.1.1–§13.3.1.1.3 we distinguished a range of types of paratactic complex sentence constructions according to the nature of the interclausal meanings. There are three possibilities:

- (a) these meanings are contextual senses of a single general meaning associated with a single general paratactic dependency relationship;
- (b) the meanings are linguistically significant and distinct as core meanings associated with various emically distinct paratactic subtypes; or
- (c) some combination of (a) and (b) holds: that is, some of the meanings are linguistically significant as core meanings of certain types of paratactic relation, while others are contextual senses of more general paratactic types.

Australianists generally presume (a). However, there is some evidence suggesting that the three primary types—extension, elaboration and enhancement—are linguistically significant. First, only in the case of extension is it possible to explicitly mark the interclausal relationship by means of the conjunctions *aa* 'and' and *mad* 'but'. Second, extension is inherently unidirectional: the second clause is always added to the first; the relation never goes the other way around, with the first added to the second. Thus, if a conjunction is employed, it always occurs initially in the second clause, never in the first. In this regard extension differs from elaboration and enhancement, for which, as we have seen, it may be the first clause which elaborates or enhances the second. In keeping with this, in extension the order of clauses typically reflects the temporal order of occurrence of the referent situations (if they are located at different times), whereas the order of clauses in elaboration and enhancement does not always iconically reflect situation order.

Some support for an emic contrast between elaboration and enhancement is provided by the observation that only for enhancement is it possible to paraphrase the biclausal construction as a single clause with a modifying adverbial element of place, time, manner, condition or apprehension (corresponding respectively to §13.3.1.1.3.1–§13.3.1.1.3.5 above). As argued in McGregor (1992b, 1996a), such adverbials are in a dependency relation to the experiential core of the clause they belong to, or to a unit in it. Such paraphrases are not possible for elaboration, whether clausal or NP. No monoclausal agnates exist, except possibly in the case of NP elaboration where it could be argued that the modifying finite clause may be considered agnate with a modifying word within the elaborated NP. Also in support of the emic status of the contrast is the fact that in elaboration there is usually at least one shared entity between the clauses; this is typically denoted by an overt NP functioning as the theme of the elaborating clause. By contrast, in enhancement there is no requirement that there be a shared entity, and if there is one, its designating NP is usually ellipsed in the enhancing clause.

These arguments suggest that the three types of paratactic relation are emically distinct covert types. Whether each of the subtypes we have identified above are also emically distinct is beyond the scope of this description. My suspicion is that many of the subtypes identified are merely contextual senses of the primary types, although it is likely that at least

some of the subtypes of enhancement are emic. In support of this hypothesis, observe that corresponding to each type is a different substituting adverbial—e.g. *arrak* 'where' for spatial enhancement; *banangkarr* 'now, when' for temporal enhancement; and so forth.

13.3.2 Hypotactic constructions consisting of finite clauses

Hypotactic finite clause complexes are characterised by the presence of a morpheme serving as a complementiser, and indicating the dependent status of the clause to which it is attached and the relation to its head clause. Six morphemes occur in this function, and occur in penultimate or antepenultimate position in the IV (see formula (7–1)): four are postpositions, one is a general complementiser, and one derives historically from a postposition. The four postpositions are: -uk LOC, -kung ABL₃, -karr TEM, and -ngirr SEM. As mentioned previously, the postposition is normally attached to the verb of the dependent clause; sometimes it is attached to another word of the clause as well. Only rarely does another word host the postposition instead of the verb; (13–29) is one of the very few examples available.

(13–29) yu-ni-janb-ngay ←× bur-karr arri nga-la-jal 3NOM-CM-trample-1MIN.ACC place-TEM not 1MIN.NOM-IRR-see 'It will kick me if I don't watch out.'

The fifth form is a general complementiser, which is attested only in Nekes & Worms (1953, 2006), who give its form as *-djer*. They interpret it as the emphatic marker for pronouns (see Table 4–4),⁷ suggesting that its phonological shape is *-jirr* or possibly *-jarr* (recall that the low vowel is raised considerably in the environment of the rhotic *rr*). However, they give no reasons, and on the face of it it seems unlikely that an emphatic marker would be used to mark the subordinate status of a clause, given that these are prototypically backgrounded.⁸ The most likely possibility is that *-jirr* SUB is a reflex of a proto-Nyulnyulan marker *-*jarri* of uncertain sense and usage.⁹ Likely cognates in Eastern Nyulnyulan languages are the subordinate clause marker *-jarri* ~ *-yarri* ~ *-ja* in Nyikina (Stokes 1982:319); the sequential marker *-jarri* ~ *-yarri* in Warrwa, also used as a clausal subordinator, as well as a sequential marker (McGregor 1994c:58); and the sequential marker *-jarri* in Yawuru, again also used as a subordinate clause marker (Hosokawa 1991: 151–152). Bardi has the evidently cognate form *-jarr* that is used for some sort of topic chaining (Bowern 2004a:193, 2009a:6–10, Claire Bowern pers.comm.).

Finally there is the applicative -ang, which is homophonous with the instrumental postposition (see §7.9). Given that the applicative in this function cannot be followed by another complementiser, an alternative analysis is that the morpheme is actually the

⁶ Interestingly, in Bardi constructions involving postpositions are rare; they are restricted in terms of the range of postpositions that may occur—the most frequent being the semblative, while the locative is not employed at all—and are attested almost exclusively with finite VPs (Bowern 2009a:10–11).

Nekes & Worms (1953:488–489) also say that this emphatic marker can be added to nouns and adjectives (i.e. nominals); this usage does not figure in my corpus.

⁸ Nekes & Worms (1953:490) relate the Nyulnyul -djer to a Bardi verbal suffix -djere 'because, for'; but no such form appears in Aklif (1999) or Bowern (2004a). Nekes & Worms (1953:491) also cite a Jabirrjabirr verbal suffix -djeredj 'because for', which they analyse as -djer plus the dative postposition (Nekes & Worms 1953:636–637). None of these possibilities is very promising.

Bowern (2009a:9) suggests that the form was originally a relative clause marker. I do not find the reasons for this very plausible, and certainly marking of relative clauses is just one usage in Nyikina and Warrwa.

instrumental postposition occurring in the penultimate position in the order-class formula of (7–1). There is no sound empirical basis on which to choose between these two possibilities, and thus we adopt the most economical assumption, that there is a single morpheme, which occurs in a single position.

Finite clauses marked by complementisers do not normally occur independently; only a few exceptional instances are represented in the corpus, all involving postpositions. It seems likely that they all involve ellipsed main finite clauses. On the other hand, finite clauses that are not marked by these morphemes are always capable of independent occurrence—there are no structurally marked forms that lack the privilege of independent occurrence. This points to the reduced or secondary status of finite clauses marked by postpositions; these are invariably the modifying clauses in the clause complex, regardless of their relative position. These facts attest to the inherently dependent status of the clause marked by a postposition.

Clauses marked by such prototypically nominal morphemes as postpositions and case markers are often presumed to be at least partly nominalised (e.g. McKay 1988:13, 33–34; O'Dowd 1992:61). There is no reason to suspect that this is so for Nyulnyul finite clauses marked by the above-mentioned postpositions. They show no properties suggestive of the situation being treated as an entity. Nor do they show the structural reduction characteristic of nominalised clauses in many languages (e.g. Silverstein 1993:482); they are normally as structurally 'full' as ordinary finite clauses. Non-finite clauses, by contrast, are nominalised, as indicated by their non-finite status, rather than by the fact that they usually occur with a postposition (see §13.3.3 below).

There is no evidence that finite clauses marked by complementisers may be embedded in larger units. Like subordinate clauses in many Australian Aboriginal languages, these clauses occur in the margins of the head clause (see e.g. Hale 1976a; Austin 1988); they do not interrupt it. More importantly, they clearly do not serve in experiential roles of the types identified in Chapter 12. Rather, the types of meaning relation they bear to the main clause are like those associated with dependency relationships generally.

Hypotactic clauses almost always enhance their head clause, and a range of enhancing relations comparable with that found in paratactic enhancement occur; extension does not occur at all, and elaboration is restricted to cases in which the elaborating clause is dependent on an NP rather than a clause.

13.3.2.1 Enhancement

In this section we discuss the six complementisers attested in syntagmatic combinations with finite clauses in hypotactic constructions, describing the range of ways they are used.

13.3.2.1.1 -uk LOC

The locative postposition is one of the most frequent markers found on finite hypotactic dependent clauses, and conveys a range of sense, including spatial, temporal, causal and reason. We discuss these senses in order in the following subsections.

13.3.2.1.1.1 Spatial location

Here the -uk LOC clause provides spatial enhancement of the main clause, indicating where its referent situation occurred. Thus, in (13–30) it indicates that the place where the speaker saw her footprints was where she had been previously walking; in (13–31), it indicates the location of the swelling in terms of what happened to a body part.

- (13–31) *i-m-bulku-bulkum* →× *i-n-dam-uk-ngay*3NOM-PST-swell-swell 3NOM-CM-hit-LOC-1MIN.ACC
 'It swelled where he hit me.'

13.3.2.1.1.2 Temporal location

More often, an -uk LOC clause indicates a temporal location for the clause it enhances on; it locates the situation designated by the main clause. Precise specification of the temporal relation is not provided. Frequently, as in (13–32), the dependent clause refers to a situation prior to the main situation, and that is completed by the time of occurrence of the latter—the falling would have been completed by the time the Actor drowned. Sometimes, however, the two situations overlap temporally, as in (13–33), where the free English translation involves while or as, rather than when; and sometimes, as in (13–34) either interpretation is permitted: the dependent situation may or may not have been completed by the time of occurrence of the main situation.

- (13–32) *i-ny-jalk-uk* wul-uk ←× ngurrngurr *i-na-ri*3NOM-PST-fall-LOC water-LOC drown 3NOM-CM-pierce
 'When he fell in the water he drowned.'
- (13–33) *i-ngi-rr-a-r* →× *i-ngi-land-uk jungk-uk jin* 3NOM-PST-AUG-CM-poke 3NOM-PST-sit-LOC fire-LOC 3MIN.OBL 'They speared him while/as he sat by his fire.'
- (13–34) yiil ngarl i-n-j $\rightarrow \times$ nga-ni-ny-janb-uk ni-wal-uk dog yelp 3NOM-CM-say 1MIN.NOM-CM-PST-step-LOC 3MIN-tail-LOC 'The dog yelped when I stood on its tail.'

Dependent clauses marked by -uk LOC refer to specific situations, in terms of which the main clause is located temporally (or spatially, as per §13.3.2.1.1.1). As the above examples demonstrate, the dependent situation almost always begins prior to the beginning of the main situation. There are just a couple of counterexamples in the corpus, in which the dependent situation begins after the beginning of the main situation, and the English translation involves until. (13–35) is one of them:

(13–35) *i-ngalk majilkarr* →× *waalk i-ny-jarrjarr-uk*3NOM-cry sunset sun 3NOM-PST-stand-LOC 'She cried from sunset to sunrise.'

13.3.2.1.1.3 Causal

As might be expected from $\S13.3.2.1.1.2$, -uk LOC-marked clauses sometimes permit a causal interpretation, presumably as a contextual sense or pragmatic implicature. This sense is apparent in (13-34) and (13-36), where the dependent clause temporally includes the main clause: the snake's movements are prior to the movement of the grass, which they cause.

(13–36) juurr-in baniban i-na-m →× maarr i-ny-jid-uk snake-ERG move 3NOM-CM-put grass 3NOM-PST-go-LOC 'The snake moved the grass as it was going along.'

13.3.2.1.1.4 Reason

Closely related to causal enhancement is enhancement by reason: here the dependent clause specifies a reason for the occurrence of the main clause:

(13–37) *i-ngi-rr-dam jin babarl* →× *i-n-dam-uk jin* 3NOM-PST-AUG-hit 3MIN.OBL brother 3NOM-CM-hit-LOC 3MIN.OBL babarl brother

'They killed his brother because he killed their brother.' 10

13.3.2.1.2 -karr TEM

This postposition is also not uncommonly found as a marker on hypotactic enhancing clauses. It admits temporal, conditional, and apprehensional senses.

13.3.2.1.2.1 Temporal

Like -uk LOC clauses, -karr TEM clauses sometimes indicate a temporal location for the situation denoted by the head clause, locating it with respect to its time of occurrence. However, unlike -uk LOC dependent clauses, -karr TEM clauses never locate situations spatially. Moreover, whereas an -uk LOC clause normally denotes a specific instantiated situation, a -karr TEM clause generally does not. It may indicate an uninstantiated or unrealised situation: a situation the non-occurrence of which serves as a temporal location for the situation of the head clause. (13–38) is a typical example: the unrealised situation of there being water in the creeks serves to locate the head situation temporally in the dry season. Alternatively, it may indicate a situation projected to occur at a future time, as illustrated by example (13–39).

¹⁰ Jin 3MIN.OBL is occasionally used in reference to non-singular third person groups—see §4.6.3.

- (13–38) way junk i-n-nyu christmas creek station-ukun →× wul arri away run 3NOM-CM-get Christmas Creek station-ABL₂ water not i-la-n-an-karr niwirr-uk
 3NOM-IRR-be-IMP-TEM creek-LOC
 'He ran away from Christmas Creek station when it was dry and the creeks had no water.'
- (13-39)marer djan djar ong-ar-gar, ←× anger-ijed marrir jan daarr yu-ngka-r-karr ya-ngki-rr-jid 1MIN.OBL arrive 3NOM-FUT-poke-TEM 1PL.NOM-FUT-AUG-go sister bindan mai-an bindan may-ung food-ALL₁ bush 'After the arrival of my sister, I shall go with her for bush-fruit.' (Nekes & Worms 1953:420)

Occasionally, as in (13–40), a -karr TEM dependent clause designates a specific individuated situation, and not an unrealised situation. It is impossible to be entirely certain of the best interpretation of such examples, there being so few tokens. But it seems likely that in these cases the -karr clause is less specific in terms of its locational potential than is an -uk LOC dependent clause: specifically, it locates the situation generally with respect to the situation denoted by the dependent clause, as falling within its general environment. That is, examples such as (13–40) appear to be comparable to examples such as (5–219)–(5–221) in which -karr marks a secondary predicate. Thus, this example may invoke a type of conditional interpretation: the dependent clause specifies an event that a participant of the main situation is simultaneously engaged in, where this event is construed as providing a condition for the occurrence of the main situation.

(13–40) *junk nga-n-nyu-karr* $\leftarrow \times$ *nga-ni-ny-jal juurr* run 1MIN.NOM-CM-get-TEM 1MIN.NOM-CM-PST-see snake 'As I was running along, I saw a snake.'

By contrast, (13–41) involves an -uk LOC clause which also designates a situation of running (which contextualises as 'drive'). Here it seems that greater temporal precision is implied, and the dependent clause does not just represent a situation which the relevant participant in the main clause is simultaneously involved; the conditional reading is not invoked. What is involved here is temporal location, rather than condition.

(13–41) *junk nga-n-nyu-uk* ←× *nga-ni-ny-janb arri* run 1MIN.NOM-CM-catch-LOC 1MIN.NOM-CM-PST-tramp not *nga-li-jal-an* 1MIN.NOM-IRR-see-IMP 'When I was driving along, I accidentally ran over him, not seeing him.'

In examples of hypotactic temporal enhancement involving -uk LOC, both dependent and head clauses are almost always in past or present tense. Only rarely are they in future tense, and where they are, the as yet unrealised situation is represented as a virtual certainty. Occasionally also the dependent clause is in the irrealis, in which case the main clause is in the past. Such dependent clauses contrast semantically with -karr TEM dependent clauses in

the irrealis. Thus, consider the following typical example of an -uk LOC dependent clause in the irrealis:

(13–42) *i-li-jalk-an-uk* ←× *i-ng-kanm*3NOM-IRR-fall-IMP-LOC 3NOM-PST-laugh
'When he nearly fell over, he laughed.'

In such examples the irrealis conveys the contextual sense 'nearly occur'; thus, the above claim that -uk LOC dependent clauses designate specific instantiated situations is borne out, the instantiated situation being the near occurrence of the situation of falling. This contextual sense is never invoked in dependent clauses involving -karr TEM, where the irrealis occurs in a negated clause, and admits only the non-occurrence sense, as in (13–38). (If the dependent clause has positive polarity, a conditional interpretation only is available—see under §13.3.2.1.2.2.)

13.3.2.1.2.2 Conditional

Dependent -*karr* TEM clauses are also used in conditional constructions, where they function as antecedents (protases), denoting situations allegedly constituting conditions for the occurrence of the situation of the head clause. Conditional clause constructions may be counterfactual, hypothetical or generic; past conditionals are expressed by -*uk* LOC dependent clauses (see §13.3.2.1.1.4 above).

In counterfactual conditionals the dependent situation is assumed to have occurred contrary to the fact, and a consequence of this assumption is asserted; both main and dependent clauses are in the irrealis:

(13–43) nga-li-jal-an-karr-jii kalb ←×
1MIN.NOM-IRR-see-IMP-TEM-2MIN.ACC up
nga-li-m-an-jii mudikard-uk
1MIN.NOM-IRR-put-IMP-2MIN.ACC car-LOC
'If I had seen you, I'd have picked you up in the car.'

In hypothetical conditionals, the antecedent is hypothetical (unrealised), but not counterfactual. The dependent clause in a hypothetical conditional is either in future tense or the non-past irrealis, as in (13–44) and (13–45) respectively. Precisely how these two possibilities contrast semantically is not known. It seems, however, that future tense represents the situation as more imminent, and more likely to occur—possibly because steps have been taken to promote its occurrence; the non-past irrealis seems to suggest that the antecedent event is a mere potentiality (see further McGregor & Wagner 2006).

- (13–44) yu-ngku-rr-i-ny-karr wil ←× wanyji yu-ngku-rr-a-k
 3NOM-FUT-AUG-CM-get-TEM meat back 3NOM-FUT-AUG-CM-carry
 bur-ung
 camp-ALL₁
 'If they catch something, they will bring it back to camp.'
- (13–45) mi-li-jid-ikarr kinyingk-ung bur $\leftarrow \times$ 2MIN.NOM-IRR-go-TEM DEF-ALL₁ place

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i-li-rr-a-r-juy 3NOM-IRR-AUG-CM-poke-2MIN.ACC 'If you go into that country they might spear you.'
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The third type of conditional is a type of generic conditional in which the antecedent clause makes reference to a situation that habitually or regularly occurs, and represents a condition on the occurrence of another habitual situation:

(13–46) jii yiil-in mangirr kadikad i-rr-w-in jan
2MIN.OBL dog-ERG always bite 3NOM-AUG-give-PRS 1MIN.OBL
kaa nga-jid-in-karr way
car 1MIN.NOM-go-PRS-TEM away
'Your dogs are always biting my car when I drive away.'

13.3.2.1.2.3 Apprehensional

-karr TEM clauses are also found in apprehensional constructions, where they indicate an undesirable situation the speaker suggests will occur or would have occurred unless the evasive action of the main clause is undertaken:

(13–47) arri lakal mi-li-ny →× bardangk-uk mi-la-jalk-ikarr not climb 2MIN.NOM-IRR-get tree-LOC 2MIN.NOM-IRR-fall-TEM 'Don't climb up in the tree, or you'll fall out.'

A variant is illustrated in the following example in which the initial clause expresses the emotional state of the participant for who the second situation is undesirable:

(13–48) *iibal bin murrul miid baab i-jirrik-in-jin kuburl* →× father this little male child 3NOM-fear-PRS-3MIN.OBL father *i-l-dam-karr* 3NOM-IRR-hit-TEM 'He's afraid of his father, that he might hit him.'

It is not yet clear whether the subtypes identified above for -uk LOC and -karr TEM clauses are emically distinct, or are contextual senses of two general types. My guess is that the latter circumstance is the more likely: it seems probable that there are two general hypotactic enhancing clause types, one designating a specific situation that serves to locate the main situation in either space or time, the other making non-specific reference to some situation—or class of situations—which serves as a condition on the occurrence of the main situation, rather than a location for it.

13.3.2.1.3 *-ngirr* SEM

Just one or two instances are attested of the postposition *-ngirr* SEM attached to a finite verb, ¹¹ drawing a comparison between the situation described by this clause and another

¹¹ Note the striking difference from Bardi, where this is the most frequent of the postpositions to mark dependent clauses (see fn. 6 above).

situation. (13–49) is an example; here the running of the person referred to in the first clause is compared with that of the speaker's.

```
(13–49) junk i-n-nyu ngay-imirr \rightarrow \times nga-ny-jid-ingirr marriny run 3NOM-CM-get 1MIN.CRD-PER 1MIN.NOM-PST-go-SEM go 'He ran past me like I go.'
```

More usually, this morpheme is attached to an NP denoting the thing resembled—see §5.14 above.

13.3.2.1.4 -kung ABL₃

A single example is available of this postposition attached to a finite clause, marking it as a subordinate clause of previous time, (13–50). Note that in this example the *-kung* ABL₃ dependent clause enters into a dependency relation to the final clause, not the immediately following one, which is also in a dependency relation to the final clause—a more literal translation would be 'When the meal was finished and I had started to leave, they detained me'.

```
(13–50) mai imbanj-gong djān ←× ŋandjed-djer
may i-m-bany-kung-jan nga-ny-jid-jirr
meal 3NOM-PST-finish-ABL<sub>3</sub>-1MIN.OBL 1MIN.NOM-PST-go-SUB
marinj, ←× eŋerawandem ŋai
marriny i-ngi-rr-a-wandim-ngay
go 3NOM-PST-AUG-CM-detain-1MIN.ACC
'When the meal was over I started to leave, but they kept me from going.'
(Nekes & Worms 1953:870)
```

13.3.2.1.5 *-djer* SUB

13.3.2.1.5.1 Temporal

In a few instances a temporal interpretation is available for a subordinate clause marked by -djer. Like subordinate clauses marked by -uk LOC and unlike those marked by -karr TEM, subordinate clauses marked by -djer denote specific instantiated events. How precisely -uk LOC and -djer SUB temporal subordinate clauses contrast semantically is uncertain. Possibly for -djer subordinate clauses the main clause follows the occurrence of the subordinate clause, which is viewed as occurring at a point in time—as a completed rather than ongoing situation. For -uk LOC subordinate clauses, the subordinate situation shows temporal extent, and is relevant to the main clause event.

```
(13-51)
           ang-ē
                      areang
                                 dar
                                        mil-ar-an
                                                                 \rightarrow \times
                      arriyangk daarr mi-la-r-an
           angk-ij
           what-DAT nothing
                                 arrive 2MIN.NOM-IRR-poke-PST
           nan-welem
                        djer dje.
           nga-ng-wilim-jirr-jii
           1MIN.NOM-PST-call-SUB-2MIN.ACC
           'Why did you not come [when] I called you?' (Nekes & Worms 1953:323–324,
           893)
```

```
(13–52) aŋgēdj madaŋg min-am ŋai, →×
angk-ij madangk mi-na-m-ngay
what-DAT deaf 2MIN.NOM-CM-put-1MIN.ACC
ŋaŋ-welem-djer dje
nga-ng-wilim-jirr-jii
1MIN.NOM-PST-call-SUB-2MIN.ACC
'Why did you not listen when I called you?' (Nekes & Worms 1953:665)
```

The above remarks are consistent with the following example, in which the situation referred to by the *-djer*-marked clause is evidently prior to the main clause: ¹²

```
(13–53) djagod-ad ŋan-dj mōdj, →× ŋan-djed djer
jakud-ad nga-n-j muj nga-ny-jid-jirr
return-FOC 1MIN.NOM-CM-say already 1MIN.NOM-PST-go-SUB
beagle bay-on
beagle bay-ung
Beagle Bay-ALL₁
"I am just back, I had gone to Beagle Bay." (Nekes & Worms 1953:443)
```

(13–50), which seems to constitute an exception to these claims may in fact be explicable: if the speaker's movement away from the meal is construed as having no temporal extent, and thus a point of time, it could be that the 'start' sense is implicated (especially given the final head clause). By contrast, the use of -kung ABL₃ on the first clause of that example clearly specifies that the event has been completed.

13.3.2.1.5.2 Reason

Nekes & Worms (1953) cite a number of Jabirrjabirr examples of *-djer* subordinate clauses showing the 'cause' or 'reason' sense. They give just one Nyulnyul example:

```
(13–54) wogol ŋan-djalen wamb →× yobol i-nen djer
wukul nga-n-jal-in wamb yubul i-n-in-jirr
pity 1MIN.NOM-CM-see-PRS man sick 3NOM-be-PRS-SUB
'I pity the man because he is ill.' (Nekes & Worms 1953:906)
```

This example can also be construed as satisfying the general feature mentioned in the previous subsection: that the subordinate situation is viewed as showing no temporal extent, that it is construed as happening at a single point in time.

It is impossible to say more about -jirr SUB clauses given the severe limitations on the available data.

13.3.2.1.6 -ang APP

Hypotactic enhancing clauses marked by the applicative are as rare as those marked by -djer SUB, though examples are attested in modern as well as old sources. The clause marked by the applicative indicates a situation that is enabled by the situation specified by the main clause; it is imminent given the occurrence of the main situation. A complex

¹² Another possibility is that the *-jirr* SUB-marked clause is being used independently (e.g. Evans 2007).

sentence with an applicative clause thus often—though not always—lends itself to interpretation as a purposive or intentional construction. This is illustrated by the following examples:

- (13–55) *i-n-di-jan ni-marl yu-ngka-w-ngay* →× 3NOM-CM-say-1MIN.OBL 3MIN-arm 3NOM-FUT-give-1MIN.ACC *yaarr yu-na-k-ang-ngay* pull 3NOM-CM-carry-APP-1MIN.ACC 'He told me he would give me a hand to remove (the car from a bog).'
- (13–56) *jukurr i-na-w nidil-ang jin ni-marl* →× *layib* poke 3NOM-CM-give needle-INS 3MIN.OBL 3MIN-arm good *yu-ngka-m-ang* 3NOM.FUT-FUT-put-APP 'She gave him a needle in the arm to make him better.'

A handful of likely instances of applicative hypotactic clauses can be found in the old sources on Nyulnyul. The earliest written Nyulnyul source, Tachon (1895), refers to a verbal form that is used to express a goal, wish, or intention, that involves the suffix -an, as in (13–57). It is likely that this suffix is the applicative, which he has mistakenly represented as involving the plain apical nasal—Tachon also mistook the instrumental as showing the form -an (as did Nekes & Worms on a number of occasions—see §12.3.2.4).

(13–57) kalimb wanak iawata →× beagle bayen kalamb wa-na-k yawarda beagle bay-ung hither 2MIN.NOM-CM-carry horse Beagle Bay-ALL₁ nangdietan nga-ngka-jid-ang 1MIN.NOM-FUT-go-APP 'Get the horse so that I may go to Beagle Bay.' (Tachon 1895)

This usage of the APP is attested in at least two other Nyulnyulan languages, Nyikina (Stokes 1982:310–312) and Warrwa (McGregor 1998a). Although Stokes (1982) says that the APP clause indicates a situation concurrent with the situation designated by the main clause, the examples she provides show otherwise: the APP situation is always subsequent to that of the main clause, and its occurrence imminent given the occurrence of the main situation. What is concurrent with the situation of the main clause is the intention to perform the situation of the dependent clause.

One way of understanding this usage of the APP is diachronically. -Ang APP is a reflex of proto-Nyulnyulan *-ngany COM (see Stokes & McGregor 2003). Use of comitative marking on a clause may have indicated that the situation was in association with another situation; perhaps this was construed as something held in the mind of a participant in the main clause: the main situation occurred with the subordinate one in the mind of one of the participants. Another possible explanation is based on the observation that comitative-marked NPs are linked by a hypotactic 'and' relation to some other NP. It would make perfect sense for such a dependent marker to be used as a conjunctive device linking situation clauses. Examples like (13–82) below, in which the applicative clause is non-finite, add plausibility to these proposals: they could reflect an intermediate step between use of the APP (or COM) on NPs and on fully finite clauses.

13.3.2.2 Elaboration

As already mentioned, hypotactic dependent clauses usually enhance on the situation designated by the head clause. Rarely, however, a hypotactic dependent clause elaborates on a unit in another clause, invariably an NP, providing further information about it. Functionally, such a dependent clause is a type of relative clause. The dependent clause is marked by either the postposition *-uk* LOC or *-djer* SUB.

Illustrative examples of -uk LOC relative clauses are (13–58) and (13–59):

- i-ngi-rr-janb bin walangk →= i-na-r-uk
 3NOM-PST-AUG-trample this spear 3NOM-CM-poke-LOC jin malirr karrkuj
 3MIN.OBL wife dead
 'They trampled on the spear he killed his wife with.'
- (13–59) naakul i-ng-kard-uk ←= winy i-na-m in dakul tide 3NOM-PST-enter-LOC fill:up 3NOM-CM-put this hole irr-in i-ngi-rr-lungk-uk wul-inyirr they-ERG 3NOM-PST-AUG-dig-LOC water-COM 'The tide came in filling up the hole they had dug with water.'

Examples of -djer SUB relative clauses (not instanced in my own Nyulnyul corpus) are:

- (13-60) $wamb \rightarrow = \eta amare inelanb$ ginyingen dyer ŋai kinyingk-in wamb ngamari i-na-lanyb-jirr-ngay **DEF-ERG** tobacco 3NOM-CM-steal-SUB-1MIN.ACC man nangadam kinying wamb nga-ngka-dam kinyingk wamb 1MIN.NOM-FUT-hit DEF man 'I will hit that man who stole the tobacco.' (Nekes 1938:159)
- (13–61) ere-ŋalgan, wamb →= indjimb-djer
 i-rri-ngalk-an wamb i-ny-jimb-jirr
 3NOM-AUG-cry-IMP man 3NOM-PST-die-SUB
 "They mourn, a man died." (More literally, 'They mourn a man who died.')
 (Nekes & Worms 1953:488)
- (13–62) yaräd ibal djärad, →= galb-oŋ gorwol mi-nen djer yarrad iibal jarrad galb-ung kurrwal mi-n-in-jirr our father 1AUG.OBL above-ALL₁ heaven 2MIN.NOM-be-PRS-SUB "Our Father who art in heaven" (Nekes & Worms 1953:633)

In the following examples it is possible that the subordinate clauses are free relative clauses, that is, do not elaborate on an NP in the main clause. However, elaborating analyses are also possible, respectively: 'Father God I am very sorry for the bad things that I have done' and 'I told father about Robert who had stolen things'.

(13–63) ibal god, naredj na-galabendjen $\rightarrow = r\bar{e}b$ iibal god ngarrij nga-kalab-anyj-in riib father god hard 1MIN.NOM-regret-REF_s-PRS bad

```
nga-n-de-djer
nga-n-di-jirr
1MIN.NOM-CM-say-SUB
'Father God, I am very sorry that I have sinned.' (Nekes & Worms 1953:542)
```

(13-64)djen ibal $robert \rightarrow = langb-og$ barai nan-man barray nga-n-m-an-jin iibal robert lanyb-uk accuse 1MIN.NOM-CM-put-IMP-3MIN.OBL father Robert steal-LOC ineŋ-gal dier i-ni-ng-gal-jirr 3NOM-CM-PST-wander-SUB 'I told father about Robert stealing.' (Nekes & Worms 1953:365)

Some examples given in this section admit an interpretation as temporally enhancing the main clause. Thus, (13–58) could also be interpreted as meaning 'They trampled on the spear when he killed his wife with it'; (13–61) as 'They mourn when a man died'. However, the temporal sense seems unnatural, though not completely impossible, in some cases: (13–59) could be interpreted as 'The tide came in and filled (it) up with water when (after) they had dug a hole', and (13–60) as meaning 'I will hit the man when/if he steals tobacco'.

These facts suggest that NP elaboration and clausal enhancement (i.e. relative and temporal clauses) are not emically distinct in hypotaxis, and that the NP elaboration senses in the above examples arise as contextual senses. I cannot offer compelling arguments either way. However, one observation does tend to suggest the emic status of the contrast: in all cases of NP elaboration there is an NP common to both clauses, and this NP occurs at the boundary between the clauses, as in (13–58)–(13–64). For temporally related clauses, it is unusual for an NP to occur at the boundary of the clauses; and if there is one, it often does not denote an entity shared between the clauses.

Presuming it to be an emically significant type, hypotactic elaboration always involves attribution; there are no examples admitting an identifying interpretation. This is doubtless due to the fact that in hypotaxis one clause is of lesser significance than the other.

13.3.3 Paratactic constructions containing a non-finite dependent clause

As indicated in Table 13–1, non-finite clauses also enter into paratactic and hypotactic relations with other units. If the relation is parataxis, the non-finite clause forms a syntagm with a phrase or word within a relational clause (see §12.2.3); non-finite clauses do not enter into paratactic relations with finite clauses. If the relation is hypotaxis, the non-finite clause will form a syntagm with another clause, typically a finite clause.

Non-finite clauses are usually marked by postpositions, which serve as complementisers specifying the grammatical relation of the non-finite clause to the unit they are in a syntagmatic relation with. If the non-finite VP is a PV the postposition must be attached to it. Otherwise, the postposition is attached to the first word of the clause, as (13–65) illustrates; sometimes a second instance is attached to the IV as well.¹³

¹³ Observe that in example (13–65) the non-finite clause occurs as a dependent in a verbal relational clause with Actor the person making the boomerang. The non-finite clause is, that is, like a temporal locative dependent on the Actor, the realisation of which has been ellipsed (presumably under givenness).

```
(13–65)  

—× jiib-uk ma-makur-an i-ng-in babarl-uk boomerang-LOC INF<sub>P</sub>-make-INF<sub>S</sub> 3NOM-be-PRS brother-LOC jin daarr i-na-r

3MIN.OBL come 3NOM-CM-poke 'When he was making a boomerang, his brother arrived.'
```

The set of postpositions that can be attached to non-finite clauses differs from, but overlaps with, the set that can be attached to finite clauses. Postpositions attaching to non-finite clauses include: -in ERG, -uk LOC, -ung ALL₁, and -jun ABL₁, of which only the locative also marks finite clauses. Three of these four postpositions mark non-finite dependent clauses: -uk LOC, -ung ALL₁, and -jun ABL₁; the ergative postposition marks an embedded clause, as discussed in §13.2. In addition, a non-finite clause may be marked by the applicative -ang, which is homophonous with the INS postposition.

Non-finite clauses are infrequent in both paratactic and hypotactic constructions, and hence what is said about them here is tentative.

As just mentioned, non-finite clauses may be in paratactic relations with Ns or NPs in either verbal or verbless relational clauses.¹⁴ The only types of relational clause that non-finite clauses occur in are the attributive and the enhancement-implicated types (see Table 13–1). (For discussion of relational clauses see §12.2.3.)

13.3.3.1 Attribution

The corpus includes a half a dozen or so examples like (13–66)–(13–68) in which an attributing relational clause involves what appears to be a non-finite clause, ¹⁵ in a paratactic relation with a nominal or NP. In (13–66) and (13–67), the non-finite clause is attributed on by *layib* 'good'; in (13–68), by contrast, the non-finite clause indicates a quality of the thing referred to. Notice that in the latter example the NP designating the item at issue has been ellipsed, which is why I have shown the dependency relation finally, so as to avoid the reading that the non-finite clause relates to the adverbial *jimbin* 'inside'.

- (13–66) $ma-r-an \leftrightarrow = arri \ layib$ INF_p -pierce- INF_S not good.' Spearing one another is no good.'
- (13–67) $miil\ ma-mi-julng-in \leftrightarrow= arri\ layib$ lie $INF_p-REF_p-tell-INF_S$ not good 'Telling lies is no good.'

¹⁴ An alternative analysis of these relational-clause constructions is that the non-finite clause is embedded under the Entity role of an NP, which in turn enters into the dependency relationship characterising the clause. Such an analysis might appear to be preferable to the analysis adopted here, at least for examples such as (13–66) and (13–67) below, where the non-finite clause occurs in a position normally adopted by an NP. (By contrast, in other examples, such as (13–68), this does not hold: the attributing unit need not necessarily be an NP.) However, I am aware of no reason to suppose that the non-finite clause is anything but a clause-sized unit serving in a grammatical role typically associated with phrases.

¹⁵ The status of the non-finite unit as a clause is not entirely uncontentious: it is almost always made up of just a non-finite VP, which makes it possible that the non-finite unit is simply a nominalised verb. However, occasionally another unit occurs in syntagm with the non-finite verb which must belong to a non-finite clause with it, as in examples (13–67) and (13–68), and for this reason it is presumed that the non-finite unit is indeed a clause.

In these examples the non-finite clause is, unusually, unmarked by a postposition. However, in (13–69), it seems that the ablative-marked non-finite clause is attributed of an entity in a verbal relational clause, where it indicates a quality of the entity deriving from a previous situation—namely, the quality of being tangled up, which results from a situation of tying up (by an unspecified agency):

(13–69) nga-ni-ny-jal wilawil i-ngi-n $\leftrightarrow=^{16}$ 1MIN.NOM-CM-PST-see fishing:line 3NOM-PST-be ma-barrkand-in-jun $INF_p-tie-INF_S-ABL_1$ 'I saw the fishing line was tangled up.'

13.3.3.2 Enhancement

A non-finite clause may enhance on an N in a relational clause, indicating some event implicated with it, as in (13–70), and sometimes as a type of purpose, as in (13–71). Notice that the first example is a verbal clause, whereas the second is a verbless relational clause (see §12.2.3).

- (13–70) $damba\ i-n-in \longrightarrow ma-wid-in-ung$ $damper\ 3NOM-be-PRS\ INF_P-eat-INF_S-ALL_1$ 'The damper is ready to eat.'
- (13–71) $kinyingk \rightarrow \times jalbird-ung bindany malbul$ DEF lifting-ALL₁ big thing 'This is for lifting big things.'

As in these examples, the non-finite clause is typically marked by the postposition -ung ALL₁; this marker, however, is occasionally omitted, as in examples (13–72) and (13–73).

- (13–72) in blanket $\rightarrow \times$ ma-band-in ngimbirr this blanket INF_P -cover- INF_S night 'This blanket is for covering yourself at night.'
- (13–73) arri-jarrad $jamiyun \rightarrow \times$ ma-dam-in bini bardangk not-1AUG.OBL axe $INF_P-hit-INF_S$ this tree 'We have no axe to hit the tree.'

13.3.4 Hypotactic constructions involving a non-finite dependent clause

A non-finite clause marked by one of the postpositions -uk LOC, -ung ALL₁, -jun ABL₁, or by -ang APP may enter into an enhancing hypotactic relation with a finite clause. Just occasionally a non-finite hypotactic clause occurs without a marker. The following is a

¹⁶ The dependency relation is of course with the NP wilawil 'fishing line', not the VP.

typical example of the latter type, illustrating that the unmarked non-finite clause is always semantically of the purposive or implicating type (see §13.3.4.2 below)—i.e. would normally be marked by -ung ALL₁:

```
(13–74) jungk-uk i-ngi-rr-m-an / →× ma-jumbarr-in / fire-LOC 3NOM-PST-AUG-put-IMP INF<sub>p</sub>-straighten-INF<sub>S</sub> i-ngi-rr-jumbarr-an / 3NOM-PST-AUG-straighten-PST 'They put it in the fire to straighten it, and straightened it.'
```

It is suggested that the postposition is ellipsed in such environments, being inferable by conventional implicature.

13.3.4.1 -uk LOC

A locative-marked non-finite clause denotes a situation simultaneous with the situation referred to by the finite clause on which it is dependent. Normally it indicates an action the Actor is engaged in concomitant with their engagement in the main (finite) situation, as illustrated by (13–75) and (13–76) below. This construction contrasts with the ergative-marked embedded non-finite clause construction that denotes a situation temporally prior to the situation of the finite clause.

- (13–75) $marrij-uk \leftarrow \times i-ny-jalk$ go-LOC 3NOM-PST-fall 'Going along, he fell.'
- (13–76) wilamay-uk ma-marr-in $\leftarrow \times$ i-ni-ny-jal kinyingk mangkirr food-LOC INF_p -cook- INF_S 3NOM-CM-PST-see DEF goanna 'While he was cooking, he saw the goanna.'

13.3.4.2 -ung ALL₁

The allative postposition is by far the most common postposition used with non-finite clauses. The non-finite clause indicates a situation in which a participant of the finite clause was, or will be involved, as a result of their engagement in the finite situation. Sometimes the non-finite situation represents a purpose for the performance of the finite situation, as illustrated by examples (13–77) and (13–78). The Actor of the non-finite clause may or may not be identical with the Actor of the finite clause; it will, however, normally be identifiable with a participant in the finite clause. (13–79) illustrates a preverb non-finite clause.

- (13–78) bini karrambal n-alm jin i-na-m ni-mal-uk that bird 3MIN-head 3MIN.OBL 3NOM-CM-put 3MIN-hand-LOC jin $\rightarrow \times$ ma-mulk-un-ung 3MIN.OBL INF_P-sleep-INF_S-ALL₁ 'The bird put its head under its wings to sleep.'

```
(13–79) ni-marl i-na-m \rightarrow \times dumbar-ung 3MIN-hand 3NOM-CM-put fly-ALL<sub>1</sub> 'It put out its wings to fly.'
```

The non-finite ALL_1 clause does not always indicate a purpose for the situation designated by the finite clause. More generally it represents a situation that is implicated with the finite situation, as illustrated by the following example, which does not readily admit a purposive interpretation:

```
(13–80) ngay-in nga-n-k-in jan yiil majilkarr 1MIN.CRD-ERG 1MIN.NOM-CM-carry-PRS 1MIN.OBL dog evening →× marriny-ung go-ALL₁ 'I take my dog for a walk in the evenings.'
```

13.3.4.3 -jun ABL₁

Just a couple of non-finite clauses are marked by -jun ABL₁; this indicates the currently relevant source or point of origin of a situation, as illustrated by the following example (see further §5.7):

(13–81) mangir i-ngank-in $\rightarrow \times$ ni-lirr kinyji-jun always 3NOM-speak-PRS 3MIN-mouth shut-ABL₁ 'He speaks with his mouth shut.' (Literally, 'He always speaks from a shut mouth.')

13.3.4.4 -ang APP

Nekes & Worms (1953) provide one example of the applicative attached to a non-finite IV form, (13–82). However, they do not discuss it; nor do they appear to have recognised the verbal morpheme for what it is. Indeed, given that they gloss it 'for', it is likely that they mistook it for the allative case postposition -*ung*; their text shows a number of confusions of the instrumental and allative postpositions.

```
belai dar in-aṛ-an ginjong-djon →× wamb djer
bilay daar i-na-r-an kinyingk-jun wamb jirr
again arrive 3NOM-CM-poke-IMP DEF-ABL₁ man 3AUG.OBL
wamborinj ma-warga-wargan-ŋ
wamburiny ma-warka-wark-an-ng
people INF<sub>P</sub>-take-take-INF<sub>S</sub>-APP
'Again he arrived from over there, to take the people.' (Nekes & Worms 2006: 309)
```

13.3.5 Concluding remarks

Non-finite clauses show reduced status as clauses; only a very restricted range of grammatical roles are normally realised, and as seen in §12.8, there are too few instances of multi-word non-finite clauses to permit one to formulate viable word-order generalisations.

As the examples discussed in §12.8, §13.3.3, and §13.3.4 reveal, non-finite clauses are always continuous, and their components are never scattered throughout the finite clause they occur in.

The clause itself does not refer to a specific or individuated situation; rather, it typically denotes a generic class of situations. Furthermore, non-finite clauses do not express propositions, and propositional modification by negatives, probability markers, and the like do not occur in the available examples. They apparently represent unchallengeable statements, presuppositions. In these respects non-finite clauses are semantically more nominal-like, which ties in with their putative grammatical status as nominalisations (cf. O'Dowd 1992, especially p. 53).

By contrast, as observed above, there is no evidence that finite clauses can ever be nominalised, even when they are hypotactically dependent on another grammatical unit. All available evidence indicates that finite clauses are in no way reduced with respect to the grammatical roles that may be filled. Furthermore, they express propositions, and propositional modifiers such as negative and probability markers may occur within their boundaries. Finite clauses may be dependent in the sense that they are linked to another clause as 'secondary' to it; they are of lesser importance, or less central than the other clause. The type of dependency involved with finite hypotactic clauses concerns relative status, which is apparent in two well-known contextualisations: backgrounding and presupposition.

Most locative-marked finite clauses are backgrounded with respect to the main clause: they represent the ground against which the situation of the main clause is brought into relief as a figure—see Talmy (1978); Hopper & Thompson (1984:736–737); McKay (1988: 22ff). This is in keeping with what would normally be regarded as the prototypical function of the locative: to ground the situation, and indicate its location (see also Clendon 1988: 199). Some *-karr* TEM clauses also indicate backgrounded situations: these include those discussed in §13.3.2.1.2.1 above.

Backgrounding concerns the relation between referent situations. Finite clauses also express propositions, and the reduction of status of a hypotactic clause may relate to the proposition it expresses rather than to the situation it denotes. Thus, as many linguists have suggested, head (main) and dependent clauses contrast semantically as asserted to presupposed (e.g. Givón 1980:372; Talmy 1978:362), or asserted to conditionally asserted (Nichols 1988:399), or something similar. This semantic contrast seems to apply to some *-karr* TEM clauses in Nyulnyul, as it does for dependent clauses generally in Gooniyandi (McGregor 1988b:61). In particular, the dependent clause represents a proposition which is not asserted, but presupposed in the sense that it is—for the sake of argument—placed outside of the range of questions of truth or falsity. Thus, in examples such as (13–44) and (13–45), it is presumed, for the sake of argument, that they will catch something and that you will go to that country, respectively, and this presumption is related to the asserted main situation as a condition for its occurrence.

There are problems with the hypothesis that subordinate or dependent clauses always invoke presuppositions (e.g. Townsend & Bever 1977:6; Matthiessen & Thompson 1988: 313). I am not claiming that they do; rather, I am suggesting that they do in certain circumstances—namely when it is the proposition expressed, rather than the situation denoted by the clauses that enters into the relation of dependency. Nor do I suggest that dependent clauses are unchallengeable (e.g. Givón 1982) or not accessible to 'discourse argument' (cf. Matthiessen & Martin 1991:25). Certainly they may be challenged, and are

amenable to argument. What is important is that they are put forward as propositions to be presumed for the sake of argument.¹⁷

The backgrounding and presuppositional functions of dependent clauses thus emerge as contextual senses of the logical relation of hypotactic dependency. This relation has a more general meaning in the context of finite clause dependency relations, which concerns the relative 'status' of the clauses. Thus, contra Talmy (1978:632), I do not take foregroundingbackgrounding as the general or core meaning, which may contextualise to assertedpresupposed; there is no evidence for this suggestion—grounding no more applies to propositions than does assertion or presupposition to situations. ¹⁸ My proposals are perhaps somewhat reminiscent of those of Matthiessen & Thompson (1988:289), who suggest that hypotaxis is a grammaticalisation of the textural rhetorical relationship of nucleus to satellite, which also appears to be essentially a relation of relative status. Both backgrounding and assumption for the sake of argument are essential ingredients of rhetorical organisation, which concerns, of course, both the ways in which referent situations are interrelated, and the ways in which propositions are interrelated.

The situation is very different for hypotactic dependence associated with non-finite clauses, where it is not so much that one situation is demoted with respect to the other (cf. Fox 1983). Rather, the hypotactic dependence of non-finite clauses is due to the fact that all items within a clause which relate logically to the remainder of the clause—adverbials, postpositional phrases, and so on-relate to it as dependent to head (McGregor 1992b, 1997b). There is no correlation with rhetorical organisation of texts. Dependence follows from the status of the non-finite clause as a nominalisation, making it incapable of expressing a proposition.

The Nyulnyul facts discussed in this section lend some support to O'Dowd's hierarchy of nominalisation preference for subordinate clauses (O'Dowd 1992:66), shown in Table 13-2—and against the hierarchy of Silverstein (1993:481). In Nyulnyul, nominalisations tend strongly to be associated with 1 and 2 on this table: the most common nominalisations are of the purposive—better, implicated—type, and the framed type (which correspond to O'Dowd's type 1 complement clauses). Indeed, it might be suggested that the allative type is the unmarked type of non-finite clause: not only does the allative postposition predominate over all other types, but also it is the only one that may be omitted from a nonfinite clause (see above). On the other hand, the vast majority of 'when' clauses are not represented by nominalisations at all, but rather by hypotactic dependence, by -uk LOC and -karr dependent clauses, depending on the type of temporal relation involved. And finally, as we have seen, the Nyulnyul equivalent of 'relative clauses' are almost always expressed by finite clauses related by parataxis—as in nearby languages such as Gooniyandi (McGregor 1988b).

¹⁷ Matthiessen & Thompson (1988:315) object that it makes no sense to suggest that the as-clause in would the owner please come and get it as I think things are starting to grow? is "unchallengeable", let alone known'. This misses the point: nothing prevents the proposition which is to be assumed for the sake of argument to also be explicitly marked as something that the speaker thinks may be the case. Stacking up of propositional modifiers is common in natural languages.

¹⁸ Languages appear to differ in terms of which aspect of the clause they downgrade formally in hypotaxis, the situation referred to, or the proposition expressed. In Nyulnyul, it would appear to be the situation, since hypotaxis is marked by postpositions; in Gooniyandi, by contrast, it is the proposition, and hypotaxis correlates with choice of a marked mood (McGregor 1988b). Whether there are any semantic or pragmatic correlates of this formal difference is not known.

Table 13–2: O'Dowd's hierarchy for nominalisation preferences for subordinate clause types (O'Dowd 1992:66)

Most susceptible	1. Reduced complement clause
	2. Before/after clause; purpose clause
	3. 'When' clause
	4. Relative clause
Least susceptible	5. Full complement clause

Some of the associations implied by Table 13–2 seem unexpected. Why should there be a strong association of relative clauses and parataxis, and of purposive clauses with nominalisation, when the opposite would be expected?¹⁹ An explanation is forthcoming, I suggest, when it is observed that the effect of nominalisation in Nyulnyul is—somewhat paradoxically—not to make a situation more 'tangible', but rather to make it less so. In becoming 'entitised', it becomes more abstract, less connected with a particular instance or realisation; it becomes effectively temporally unlocated, and generic—it specifies situation types not tokens (cf. O'Dowd 1992:70, who proposes a rather different explanation relating to 'discourse' considerations). To achieve their identifying and ascribing functions, relative clauses should denote specific and individuated situations. On the other hand, purposes, being projected into the future and having no realisation, are more likely to be expressed as nominalisations.²⁰

For parataxis and hypotaxis of finite clauses, many more types were identified than are formally distinguished. In Australian Aboriginal linguistics it is usually presumed that only the formally distinct types have emic significance, all others being treated as alternative etic interpretations of the formal types—e.g. Hale (1976a), and many contributions to Austin (1988); the same presumption is also encountered more widely in descriptive linguistics and linguistic typology: see e.g. Mithun (1988:356). I have argued (McGregor 1988b) to the contrary that at least some of the 'interpretations' are distinguishable and have emic status as covert categories.

Although more work is needed to determine precisely which relations represent covert categories, emically distinct types include at least constituent elaboration and temporal and spatial enhancement (McGregor 1988b argues the same for Gooniyandi). These are usually taken to be alternative interpretations (designated NP-relative and T(ime)-relative) of a single generalised subordinate clause type, adjoined to the main clause in a marginal position (Hale 1976a; McKay 1988; Dench 1988; Goddard 1988). My arguments demonstrate that in Nyulnyul the two types differ in the nature of the logical relation involved and the type of units in the relation.

¹⁹ This is because relative clauses ought to be more entity like, purposive clauses, more situation like, as predicted by the hierarchy of Silverstein (1993:481).

In a number of Australian languages (including the Mantharta languages of coastal Western Australia) relative clauses are more nominal than purposive clauses, and thus neither O'Dowd's nor my explanation is universally applicable. My explanation is not intended as a universal. It seems likely that differences such as these between complex sentence constructions may well correlate with syntactic-semantic differences in non-finite clauses in the respective languages. Thus it seems that non-finite clauses in a number of Pama-Nyungan languages of central Australia are fuller, and more proposition-like than are non-finite clauses in Nyulnyul and Gooniyandi.

Dependency and embedding are fundamentally distinct grammatical relations, and give rise to quite different complex sentence constructions. A system that recognises distinct construction types provides a better characterisation of the range of possible interclausal relationships than a continuum in which interclausal relations are ranked from most to least subordinate; see also e.g. Lehmann (1988); O'Dowd (1992).

An issue consistently ignored throughout the above discussion is that of cross-clause reference relations. Conditions and restrictions on these relations have been a major focus of research on complex sentence constructions in Australian languages in the past three or four decades. This is in part a legacy of the dominant syntactic theories, in which reference conditions have loomed large in the characterisation of complex sentence constructions; it is perhaps also in part a reflection of the nature of Pama-Nyungan languages, which were (during the 1970s and 1980s) the primary descriptive targets of Australianists. Unlike 'typical' Pama-Nyungan languages, 'typical' non-Pama-Nyungan languages display extensive cross-referencing systems, and thus there is little need for constraints on reference relations between grammatical roles in clauses of complex sentences. (However, the situation for Pama-Nyungan languages is not as clear-cut as usually represented in the literature, and the so called constraints often emerge as tendencies at best—see Goddard 1988:185 for similar misgivings.)

As for Nyulnyul, there is no convincing evidence that constraints on interclausal reference relations do exist, even where they might be most useful, in non-finite clauses. Thus, whereas in the majority of non-finite clauses the Actor of the non-finite clause is coreferential with a participant in the finite clause, this does not hold for (13–69)–(13–71), where it is the Undergoer that is coreferential with a role in the finite clause. Granted, however, that there are no significant constraints on coreference between the clauses of complex sentences, it does not follow that the referential relationships are of no interest. To the contrary, I would argue that they are important to the 'texture' of complex sentences, and their investigation is an important topic for future research.

13.4 Conjugational relationships

13.4.1 Framing and quotation

We believe that one such highly productive, 'pivotal' phenomenon is that of so-called reported speech, i.e., the syntactic patterns (direct discourse, indirect discourse, quasi-direct discourse), the modifications of those patterns and the variants of those modifications, which we find in a language for the reporting of other persons' utterances and for incorporating those utterances, as the utterances of others, into a bound, monologic context. The extraordinary methodological interest inherent in these phenomena has gone totally unappreciated to the present day. No one was able to discern in this issue of syntax, in what superficial examination held to be a secondary matter, problems of enormous general linguistic and theoretical significance. ... It is precisely when emplaced in sociologically oriented scientific concern with language that the whole significance, the whole hermeneutic power of this phenomenon is disclosed. (Vološinov 1973:112)

In this section we describe the grammatical means available in Nyulnyul for the representation of speech as quotations: for the attribution of stretches of speech to a sentient being, typically a person. I use the terms *reporting* and *reported speech* in reference to these phenomena. As per the words of Vološinov cited in the above epigraph, which remain true to this day, speech reporting is an extremely important phenomenon, although its theoretical

significance is largely overlooked. In particular, as will emerge from the discussion below, I would argue that it provides a fundamental model for understanding a range of grammatical phenomena relating to the interpersonal domain, thus forging a link with a 'sociologically oriented scientific concern with language'. The phenomenon has also been poorly treated in descriptions of Aboriginal languages (McGregor 1994b); thus for instance none of the contributions to Austin (1988) deal, except in passing, with reported speech, most recent grammars give it no more than cursory treatment in a couple of pages, and only a handful of articles deal specifically with the topic (e.g. Alpher 1987; McGregor 1994b; Rumsey 1994, 2010). We begin by briefly outlining the SG perspective on reported speech and related phenomena (see McGregor 1994b, 1997b:251–270 for fuller treatment).

Most linguists have assumed that the reported utterance is embedded in the clause of speech, especially in indirect quotation. There is no evidence for this analysis of Nyulnyul reported speech, any more than there is for Gooniyandi or English (see McGregor 1997b: 256–258). Nor is there any evidence that the reported clause is in a dependency relationship to the reporting clause, as suggested by Halliday (1985) and Foley & Van Valin (1984). Rather, as per McGregor (1994b, 1997b), the interclausal relation is one of framing: ²¹ the reporting clause of speech frames the reported clause, setting it off from the neighbouring clauses, and indicating how it is to be taken, much as a frame sets a painting or photograph off from its surrounding environment. It is to be regarded not as something the speaker would necessarily say, but rather as something someone else said, might have said, or would say. More specifically, the framing clause serves to set off the framed clause as a demonstration—or (re)performance—rather than a description of its referent, the uttered stretch of speech (Clark & Gerrig 1990). ²²

The metaphor of framing is worth exploring a little further. A picture, its frame, and the framed picture can all be regarded as distinct wholes, none of which is in any meaningful sense a part of any other, or made up of any of the others. The picture and its frame are not parts of the framed picture in the same way that the depicted entities of a picture are component parts of the picture. In fact, the picture and its frame are entities of very different characters, of very different 'orders of reality': the picture is an icon for some referent world, while the frame serves to set that icon off from its surroundings; its own status as an entity in the referent world is immaterial. Similarly in language: the report is an icon in as much as it demonstrates its referent, and it is set off from its surroundings by the clause of speech, which relates to its referent by description, not by demonstration.

The syntagmatic relation involved in reported speech is between distinct wholes: the whole constituted by the demonstrating report, and the whole constituted by the entire framing construction, the framed report. The reporting clause itself also frequently forms a distinct whole, which mediates between these other two wholes. However, the frame is not always a clause—it is sometimes realised prosodically, in terms of a distinct voice quality; and in some languages it may be realised by a quotative morpheme. Thus the frame does not always constitute a distinct whole.

As we will shortly see, framing is not actually an interclausal relation, except in the 'best' circumstances; it may, for example, be between a clause (the framing clause) and a smaller or larger segment of text. On the other hand, one not infrequently finds more than one clause of speech in syntagm with a quote. And sometimes it is less than a clause—e.g. a quotative or hearsay marker, or a phrase indicating the speaker, or even just marked prosody. Partly for these reasons, embedding and dependency accounts fail.

²² Clark & Gerrig (1990) suggest, however, that the contrast between demonstration and description accounts for the grammatical contrast available in many languages between direct and indirect quotation. This is criticised below.

Given that the syntagmatic relationship in framing is whole-whole, it follows that we are dealing with an interpersonal relation (see §2.3 and McGregor 1997b): reporting an utterance (or part thereof) provides a specific slant or perspective on it. It represents the speaker's line on it, indicating that it is not to be evaluated directly in terms of its truth value. Rather, the quote is represented as emanating from another source, and thus that it need not represent what the speaker would say themself. It follows from these observations that reporting speech is not simply the repetition or retelling of the words or meanings of another person, but is a particular way of saying which permits the speaker to distance themself from what they say.

Two types of quote are distinguished according to the nature of the framed material, whether it is uttered or thought; this gives rise to REPORTED SPEECH and REPORTED THOUGHT, respectively. These are discussed in the following subsections respectively. It should be noted, however, that the distinction is made for expository purposes only; no claim is made that these represent grammatically distinct phenomena in Nyulnyul.

13.4.1.1 Reported speech

13.4.1.1.1 Grammar and semantics of reported speech

As usual in Australian languages, utterances are normally represented in Nyulnyul in the form of direct reports (e.g. Heath 1984:559; Rumsey 1990:347; McGregor 1990:413). Thus, the deictic categories of tense, person, and spatial deixis retain the deictic reference point of the speech situation in which the reported utterance allegedly occurred, the referent speech situation (RSS). Retention of the RSS person categories is illustrated in the following examples:

- (13–83) birray-in jin i-n-di-jin « arri mother-ERG 3MIN.OBL 3NOM-CM-say-3MIN.OBL not nga-li-ny-jii lolly »

 1MIN.NOM-IRR-get-2MIN.OBL lolly

 'His mother told him "I won't get you a lolly.""; 'His mother told him she wouldn't get him a lolly.'
- (13–84) *i-n-di-jan* « *juy mirl-id* » 3NOM-CM-say-1MIN.OBL 2MIN.CRD lie-CHAR 'He told me "You're a liar."; 'He called me a liar.'

In the reported clause of (13–83) the person categories of first and second persons referred to in the pronominal prefix and enclitic to the verb are calculated according to the RSS. Similarly, the second person pronoun in (13–84) designates the RSS addressee, who is the SS (present speech situation) speaker. As shown by the alternative free translations, these examples can be translated into English as either direct or indirect speech, depending on factors that remain unclear at present.

Retention of the temporal point of reference as the time of the RSS is illustrated in the following textual example:

(13–85) *i-ngi-rri-j-jin* / « *jub wa-n-nyu* / *nyi-marl* / » 3NOM-PST-AUG-say-3MIN.OBL cut 2MIN.NOM-CM-get 2MIN-arm "They told him "Cut your wings!""

The situation of cutting the emu's wings was in the distant past (*bukarrikarr* 'dreamtime') with respect to the SS, but in the future with respect to the RSS: the other birds are here encouraging the emu to get its wings shortened.

(13–86), from Text 2, illustrates the retention of the spatial deictic centre of the RSS: the adverbial *kalamb* 'towards here, hither' refers to motion directed towards the RSS speaker, not the SS speaker.

```
(13–86) « malbul jan wa-na-k kalamb / in-uk wamburiny-uk thing 1MIN.OBL 2MIN.NOM-CM-carry towards this-LOC people-LOC in-uk bur / » this-LOC country "Bring my things to here, here, in this people's country" (he said).'
```

As the above examples suggest, there are no restrictions on the type of clause that can be framed as a report; any vocalised utterance may be, including minor clauses, as in (13–87).

```
(13–87) kaw i-ngi-rri-j-jin « yawu / » « ay juy » call 3NOM-PST-AUG-say-3MIN.OBL hey! hey! you 'They called out, "Hey!" / "Hey you!"
```

As (13–86) shows, not all reported utterances are framed by clauses of speech representing the RSS. Indeed, the majority (around two thirds) of reported clauses are not framed: only about a third of them are. Reporting is clearly not simply an interclausal relationship, and a single clause of speech may 'encompass' many clauses. When this is taken into consideration, over half of the reported clauses in the corpus have a clause of speech in the environment that represents the speech situation in which they occurred.²³ If instead of counting clauses we count apparent turns of speech, it turns out that about a third are without clauses of speech in the environment which could count as frames for them, while the remaining two thirds have a framing clause. These figures compare quite well with my findings for Gooniyandi, where around two thirds of reported utterance turns are framed, and with those of Tannen 1986 in her investigations of reported speech in English and Greek oral narratives where approximately 20% are not framed.

Where a framing clause is present, it usually precedes the reported utterance: for 70% of turns with a framing clause, it precedes the report. If attention is restricted to directly framed clauses (i.e. clauses that are not separated from the framing clause by other clauses), the figure is almost identical. For the framing clause to follow the framed clause is marked. All of the above examples showing a framing clause of speech have it preceding the reported clause; an example of the reverse order is (13–88), from Text 2:

```
(13–88) « kalamb kurr / kalamb kurr » i-n-di-jirr / hither 2AUG.CRD hither 2AUG.CRD 3NOM-CM-say-3AUG.OBL ""You lot come here, come here," she told them."
```

In just a couple of instances a reported clause is interrupted by its framing clause; this is the only circumstance in which a finite clause may be split up by units belonging to another finite clause. An example is:

²³ This does not mean that in every case the clause of speech is in a constructional relationship with the quotation.

```
(13–89) « ngii » i-n-di-jin « arri yarrad man iibal jii yes 3NOM-CM-say-3MIN.OBL not 1AUG.CRD but father 2MIN.OBL juy / » 2MIN.CRD "Yes," she said to him, "you won't be with us but with your father."
```

The following are the main IVs employed in framing clauses of speech:

```
-J ~ -DI 'say, do'

-NGARNK 'talk, speak'

-JABAL 'ask'

-JULNG 'tell'

-WALM 'call out'

-MIL 'sing'
```

In addition to these, -M 'put' occasionally frames a spoken utterance, as in the sixth line of the text in Nekes & Worms (2006:309), where it frames a song 'shown' to the addressees by the singer. No doubt a more extensive corpus would reveal other inflecting verbs that can be employed with this function. We now briefly discuss each of these verbs in turn.

The most textually frequent IV is, unsurprisingly, the generic IV -J \sim -DI 'say, do'. It normally occurs in middle clauses (see $\S12.3.2.2.5$), in which an addressee is specified; less frequently, it occurs in intransitive clauses with no addressee specified. There is no restriction on the speech function of the framed utterance: it may be a statement, a command, a question, an interjection, or whatever.

The other IVs are less common. There are only a couple of examples in which -NGANK 'talk, speak' frames a quote; none of these show an addressee, either as a free PP, or cross-referenced by a verbal enclitic pronominal. An example is (13–90).

```
(13–90) irrjiwar wamb-in i-ngi-rr-ngank-an « wilawil-ung three man-ERG 3NOM-PST-AUG-speak-IMP fishing:line-ALL<sub>1</sub> ya-ngki-rr-jid »

1PL.NOM-FUT-AUG-go

'The three men said, "We'll go fishing."
```

The IV -JABAL 'ask' is transitive, and usually frames questions, non-polar and polar:

```
(13–91) i-ni-ny-jabal-angay « angka liyan mi-n-m-in » 3NOM-CM-PST-ask-1MIN.ACC what feelings 2MIN.NOM-CM-put-PRS 'He asked me, "What do you want?""
```

```
(13–92) « nganji layib to ma-r-an wamburiny »

INT good to<sup>24</sup> INF<sub>P</sub>-pierce-INF<sub>S</sub> people

i-ni-ny-jibal-yarrad

3NOM-CM-PST-ask-1AUG.ACC

"Is it right to kill people," he asked us.'
```

This IV also occasionally frames commands.

²⁴ Observe that here the speaker has borrowed the English *to* infinitive marker, which she uses along with the infinitival prefix and suffix to the IV.

Both -JULNG 'tell' and -WALM 'call out' are rare as framing verbs, at least in my corpus. -JULNG 'tell' usually has an Undergoer NP such as *jabal* 'story', and optionally an addressee (cross-referenced by an OBL pronominal enclitic). When it frames a quote, the addressee appears as an Implicated (rather than Undergoer); in the few examples available no Undergoer NP occurs. In (13–93), for instance the quoted clause *baab jan irr irrilakarrin-ngay* 'my children listen to me' is framed as something the RSS speaker told the RSS addressee.

(13–93) arri ningarr nga-la-m-ana nga-ni-ny-julng-jin
not true 1MIN.NOM-IRR-put-IMP 1MIN.NOM-CM-PST-tell-3MIN.OBL
« baab jan irr i-rri-lakarr-in-ngay »
child 1MIN.OBL 3AUG.CRD 3NOM-AUG-listen-PRS-1MIN.ACC
'He was surprised when I told him, "My children listen to me." (Literally, 'He didn't believe me when I told him, "My children listen to me.")

As expected, -WALM 'call out' frames loudly spoken utterances; these are often commands, questions or greetings/farewells. An example is:

(13–94) ngay-in nga-nga-walm-irr « kalamb jungkarr » 1MIN.CRD-ERG 1MIN.NOM-PST-call-3AUG.ACC hither 2AUG.OBL 'I called them, "Come here, you lot!"

The final inflecting verb in the above list, -MIL 'sing', is not instantiated in my own corpus, where 'sing' is invariably represented by a CVC. A few examples, however, are found in the secondary corpora.

In addition to these six IVs, there are a small number of framing clauses with CVCs. These involve: *kaw* 'call out', which collocates with -J 'say, do' and -M 'put'; *ngank-ang* 'speak-INS', which collocates with the reflexive/reciprocal inflecting verb -BARNJ where it conveys the meaning 'decide together'; and *burrb* 'dance', which collocates with -J 'say, do'. These are illustrated by the following two examples and line (6) of the bowerbird text (Nekes & Worms 2006:308), respectively:

- (13–95) kaard i-ngi-rr-jibijib-in-ngay kaw
 still 3NOM-PST-AUG-stare-PRS-1MIN.ACC call
 nga-n-di-jirr « jid wa-rri-j »
 1MIN.NOM-CM-say-3AUG.OBL stop 2AUG.NOM-AUG-say
 'They kept staring at me even though I called out to them, "Stop!"
- (13–96) ngank-ang ya-nga-rr-barnj kirl phone-uk
 talk-INS 1PL.NOM-PST-AUG-exchange ?? phone-LOC
 i-n-di-jan « daarr ya-ngka-rr-barnj»
 3NOM-CM-say-1MIN.OBL come 1PL.NOM-FUT-AUG-exchange
 'We decided, when I spoke to him on the phone this morning, "We will arrive together [at Halls Creek]."

Spoken utterances are occasionally reported indirectly. In indirect reporting the reference point for person categories is shifted to the reference point of the SS: that is, person is determined in reference to the present speech situation, rather than the one in which the utterance reportedly occurs or occurred, the RSS:

```
(13–97) i-n-di-jan < kunard yu-na-jal-ngay > 3NOM-CM-say-1MIN.OBL tomorrow 3NOM-CM-see-1MIN.ACC 'He told me he'd see me tomorrow.'
```

```
(13–98) kurr kujarr arri ku-la-rr-j-an < angk 2AUG.CRD two not 2AUG.NOM-IRR-AUG-say-IMP what nga-ni-j > 1MIN.NOM-CM-say 'Don't tell me what to do.'
```

In (13–97) the RSS speaker is also the person who allegedly will do the seeing on the following day; but this individual is referred to in the third person, rather than in the first person, which is what the speaker would have used in their actual utterance. Similarly in (13–98) the Agent of the reported clause is in the first person, and refers to the SS not the RSS speaker.

What happens to the other deictic categories, spatial and temporal? (13–97) and (13–98) do not give clear indication, since the referent situation of the quotation is in the future with respect to both the RSS and the SS. (13–97) suggests, but does not prove, that the SS is taken as the deictic centre. Unfortunately, there are no decisive examples.

What is clear, however, is that the mood of the framed clause is represented according to the RSS rather than the SS. This is demonstrated by (13–99) and (13–100). In (13–99) the referent event—as the final clause specifies—is unrealised, and would have been denoted by a verb in the irrealis if presented from the perspective of the SS. Instead, the verb is in the realis. Likewise in (13–100) the framed verb is in the realis rather than in the irrealis, as it would have been if the situation had been presented from the modal perspective of the SS—according to which the speaker is apparently not sick.

```
(13-99)
          i-ngi-rr-i-j
                                 < ngay-in
                                                  nga-n-nyu
                                                                      > arri
          3NOM-PST-AUG-CM-say
                                   1MIN.CRD-ERG 1MIN.NOM-CM-catch
                                                                        not
          nga-li-ny-an
           1MIN.NOM-IRR-catch-IMP
           'They said that I took it, but I didn't.'
(13–100) mi-n-di-jan
                                       < yuburl mi-ngi-n
                                                 2min.nom-pst-be
          2MIN.NOM-CM-say-1MIN.OBL
                                         sick
           'You told me you were sick.'
```

As has already been mentioned (p. 682), the framing clause normally precedes the framed clause in direct quotation. The same holds, although to an even stronger degree, for indirect quotation, where the order is invariant. The closest to a counterexample is (13–101).

```
(13–101) yarrad mad / kinyingk mad burrb liyan mi-na-m
1AUG.CRD still DEF still dance feeling 2MIN.NOM-CM-put
akal / mi-n-di-jarrad /
and 2MIN.NOM-CM-say-1AUG.OBL
""We did! You wanted it because you wanted to dance, so you told us!""
```

This entire example is a direct report from a character in a mythological narrative (Text 2). Although the underlined clause might be initially taken to be an indirect quote, it is in fact

not. Rather, it is used as a description, not a demonstration. The clause of speech is appended on a separate intonation contour, indicating that it was added as an afterthought, making explicit the evidential status of the underlined clause. The RSS speaker distances himself from the proposition by attributing it to the addressee. (See the following subsection for further information on the interpersonal functions of quotation.)

This example shows, furthermore, that the simple opposition between direct and indirect discourse is inadequate. In addition we need to recognise a category of afterthought or tagged discourse, in which a description—represented entirely from the RSS perspective—is re-evaluated as it were as a demonstration.

These possibilities are not unexpected or inexplicable given our framing analysis of reported speech. Given a framed picture, perhaps the most natural centre in terms of which entities in the picture could be located is a point on the frame, for instance, the bottom left-hand corner, at the border between the frame and the picture. This models direct speech, for which the framing clause of speech determines the deictic centre for the framed clause (that which is demonstrated, corresponding to the picture). And direct report, as we have seen, appears to be the unmarked, the most natural way of representing speech in Nyulnyul (as in most languages). However, it is also possible for entities in the picture to be located with respect to the viewer. This corresponds to a type of indirect speech in which the deictic categories all shift to the SS: the entity is located with respect to the frame of reference established by the viewing situation. These would appear to be the two major possibilities. However, it is also possible to locate an entity in the picture according to its distance from the frame in one direction, and from the eye in another direction. There is thus nothing unusual about a mixture of centres for the different deictic categories.

In this way, framing provides a more intuitively satisfying account of speech reporting than constituency (whereby the reported clause would be embedded in the reporting clause of speech, e.g. as an object, as in the traditional view) or dependency (whereby the reported clause would be dependent on the reporting clause, as per e.g. Halliday 1985). Retention of the deictic categories of the RSS remains inexplicable if quotation is modelled either as embedding or as dependency; it is rendered comprehensible when we adopt the framing model.

How do direct and indirect reporting contrast semantically? Perhaps the most common answer to this question has it that direct reporting specifies the (exact) wording of the utterance, whilst indirect reporting indicates its meaning. This view is found in stronger and weaker variants; some linguists-and many philosophers-would have it that direct reporting reports the exact wording of the utterance. Otherwise, they aver, the proposition expressed by the sentence would be false—while indirect reporting reports simply the meaning or intention of the spoken utterance, and thus that an indirect report remains true even if the exact words are not repeated, and only the sense is. This strong position has been falsified, both for English and other languages (see e.g. Tannen 1986; Coulmas 1986; Clark & Gerrig 1990; McGregor 1990:413). Even comparatively weak versions of this proposal can be shown to be false. For instance, McGregor (1994b) argues that Halliday's weakened version (Halliday 1985:232), according to which in the ideal situation reporting represents the wording of an utterance, while indirect reporting represents its meaning, fails to account for the contrast between direct and indirect quotation in Gooniyandi. Similar remarks hold for Nyulnyul: there is no reason to believe that, even as an ideal, direct speech reporting represents the wording of an utterance.

A rather different suggestion is made by Clark & Gerrig (1990), who propose that the contrast between the two modes relate to the semantic contrast between description and

demonstration (see fn. 22). These they see as distinct ways in which language may be used: in description a linguistic expression describes its referent, whereas in demonstration a linguistic expression depicts it. According to Clark & Gerrig (1990), indirect quotes describe their referents, while direct quotes demonstrate them. Thus, according to these authors in direct reports such as (13–85)–(13–87), the report depicts what the speaker said, providing a representation that resembles its referent (the actual utterance quoted). In other words, the direct report relates to the original utterance much in the way as some bodily behaviour of another person can be demonstrated by a person, to show how they performed a particular act. On the other hand, in (13–97)–(13–98) it does not depict the referent, but simply describes what was said, indicating the content.

I have elsewhere criticised this account of the contrast between direct and indirect speech quotation (McGregor 1994b), and argued that both types demonstrate the quoted utterance. Indirect reports are as much demonstrations as direct reports. A description of an utterance would use a designating word or phrase such as word (as in She spoke words to me) or question (as in She asked me a question). But what indirect quotes describe are the referent situations of the framed clauses, not the utterances they represent. This is perfectly clear in terms of the framing model adopted here. The character of the report as direct or indirect has nothing to do with its status as a depiction or demonstration of a spoken utterance; quoted utterances, as we have said, are like pictures. The direct or indirect status of a report concerns not its status as a demonstration, but rather which point is chosen as the deictic centre in relation to which categories in the quote are located.

If what I am saying is correct, direct and indirect speech reports are not fundamentally different; the principal difference between them is in the choice of deictic centre, and thus the vantage point from which the utterance is viewed. In direct quotation it is viewed from the vantage point of the RSS; in indirect quotation it is viewed from the vantage point of the SS (McGregor 1990:413–417, 1994b; Simpson 1989:120). Direct quotation thus distances the quote more from the speaker and hearer, and the speech situation in which they are located, than does indirect quotation. Consequently the quote becomes closer to the RSS, and the hearer is drawn more effectively into the story. Hence the dramatic effect of direct quotation (e.g. Wierzbicka 1974). Indirect quotation, by contrast, maintains the proximity of the quotation to the SS at the expense of the RSS, and thus draws the hearer more effectively into the speech situation, and away from the story.

What evidence can be adduced in support of these proposals? First, examination of indirect reports reveals that they occur in those contexts in which the quote is maximally relevant to the SS. The most common circumstance of use of indirect reporting is where the reported utterance projects an event in the future with respect to both the RSS and the SS. In (13–97) and (13–98), for instance, the situation designated by the indirect report is in the future with respect to both the RSS and SS. By reporting it from the viewpoint of the SS, the relevance of the report to the present speech situation is emphasised; not only has it been said that the situation will occur in the future, but furthermore it will (in the SS speaker's estimation). This point is brought out clearly in the following example, where the message to be passed on is one the speaker wishes not just conveyed, but hopes will be true in the immediate future; had it been represented directly, the SS speaker's line on the situation would not have been represented, the speaker would be intruding less into the situation designated, and the projected situation would be less immediate.

A comparable example is (13–103), where it is the addressee who is requested to ensure that the proposition becomes true. In other examples, the Actor of the reported clause is the SS speaker, and the report is one the speaker wishes both to be conveyed, and which they promise will be true—see example (13–104).

```
(13–103) warli ya-rr-jabal-in < naal-in jarrad layib everyone 1PL.NOM-AUG-ask-PST god-ERG 1MIN.OBL good yu-ngka-m-yarrad > 3NOM-FUT-put-1AUG.ACC 'We all prayed to god to make us good.'
```

```
(13–104) wa-n-di-jirr < nga-ngka-marr ngay-in > 2MIN.NOM-CM-say-3AUG.OBL 1MIN.NOM-FUT-cook 1MIN.CRD-ERG 'Tell them that I will cook it.'
```

The majority of indirect reports are like these, and thus the uncertainty as to whether tense is (in indirect reporting) represented from the RSS or the SS is resolved: it is both.

Second, in performatives, where the RSS and SS are both part of the same speech interaction, indirect reporting is preferred over direct reporting. In the following pair of sentences, the quoted utterances would most naturally have occurred immediately prior to the current speech act—the addressee has presumably just told the speaker something, and to do something, respectively. It is represented from the point of view of the present speech situation because it is presently relevant. Note furthermore that the reported utterances have the illocutionary force of questions. However, by framing them as reports, their illocutionary force has been changed: in the first instance, the question has been represented as a command (compare this with *angka mi-n-di-jan* [what 2MIN.NOM-CM-say-1MIN.OBL] 'What did you say to me?'); and in the second it has been re-presented as a command not to do something (compare *angk nga-ni-j* [what 1MIN.NOM-CM-say] 'what will I do?').

```
(13–106) kurr kujarr arri ku-la-rr-j-jan < angk 2AUG.CRD two not 2NOM-IRR-AUG-say-1MIN.OBL what nga-ni-j > 1MIN.NOM-CM-say 'Don't tell me what to do.'
```

Examples such as (13–105) and (13–106) involve the (re-)classification of the present speech act, the framing clause indicating how it is to be 'taken'. Indirect reporting is usually involved, although it is not always possible to distinguish indirect from direct reporting, as is the case in (13–107) and line (116) of Text 2.

A third type of illustration of the function of indirect reporting in making the reported event more presently relevant is provided by (13–99): here the reported utterance, that the speaker had taken something is clearly presently relevant, and constitutes a proposition which the speaker is taking pains to deny. It is possible that another, not entirely unrelated, explanation is available for examples such as this. In Gooniyandi one of the contexts in which indirect reporting is preferred over direct reporting is where the use of the latter would involve referring to the speaker as a third person. This would have occurred in (13–99) had the quotation been direct (assuming that the RSS addressee was someone other than the SS speaker).

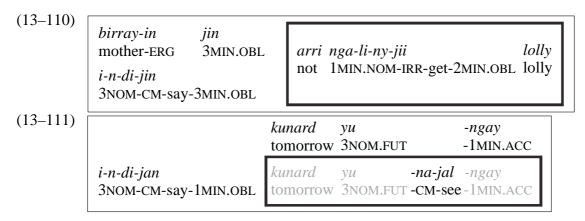
As a final piece of evidence that the semantic contrast between direct and indirect speech reports relates to point of view, consider (13–108), which is interesting because it involves both a direct and an indirect report, the former following the latter.

The clause *ngangkanyj* 'I forgot' is an indirect quote framed by the negated clause of speech; the following negative clause is clearly a direct report, the addressee of which is the SS speaker, who is also referred to in the first person in the indirect report. Why should the Nyulnyul speaker have represented the meaning I was seeking with the prompt (the gloss provided for (13–108)) in this way? This question is answerable in terms of the theory we have outlined here. To bring this out, consider the more literal translation *why didn't you say I'd forgotten: "You didn't give me money!"?* I submit that by framing the speech utterance in this way the speaker draws out the present relevance of their own forgetfulness, but distances themself from the exact event which has been forgotten, thereby refusing to take full responsibility for not giving the addressee the money. This suggestion is consistent with the fact that the addressee seems to be being blamed for the speaker's mistake.

Attention has been focussed in the above discussion—as it typically is—exclusively on the representation of speech from the production perspective, on the framing of utterances by clauses of speech. Perception has been completely ignored, even though an utterance can equally be represented from the point of view of its apprehension by a hearer. In the latter case, the utterance is framed as a quotation by the verb -LAKARR 'hear'. (13–109) is one of the very few examples of this type of reporting:

Here *mingamilk yubul* 'you woke up sick' represents an utterance that the SS speaker allegedly heard in the RSS. It seems reasonable to suggest that it is framed by the clause of perception in order that the speaker may distance himself or herself from this proposition, just as would be the case if the same referent situation had been represented as 'they told me you were sick'. In this instance the utterance is indirectly reported (if it had been directly reported, the Actor of the framed clause would have been in the third, not second, person minimal). In terms of what we have already said about reporting speech, this is exactly as expected: the reported utterance is maximally relevant to the SS—which motivates the representation of the utterance from the perception rather than the production end. The impact of the quoted utterance to the SS is more significant than would be its relevance to the RSS; indeed, it explains why the speaker has visited the hearer.

To conclude the discussion of the grammar of reported speech, structural representations are provided, in (13–110) and (13–111) respectively, of a direct speech report ((13–83) above) and an indirect speech report ((13–97) above). Observe that both types are structurally identical; the difference between them, as argued above, relates to perspective, to the vantage point from which the reported utterance is viewed by the speaker. Thus in (13–110) the deictic categories are shown within the box indicating the frame of the quoted utterance (the RSS), while in (13–111) they are shown as lying outside, in the larger box, indicating the SS. A consequence is that there is no ambiguity between direct and indirect speech reports in Nyulnyul—they are both realised in the same way. Rather, the difference lies on the dimension of vagueness.



13.4.1.1.2 Narrative functions of reported speech

McGregor (1993a) explores the distribution of framed utterances in Gooniyandi narratives, and argues that their placement cannot be predicted from a knowledge of where speakers actually spoke, or are likely to have spoken; only a very small percentage of the speech that might reasonably be expected to have occurred in the RSS is actually represented. Furthermore, represented speech is not distributed either evenly or randomly throughout narrative texts, in places where characters might be presumed to have spoken. Rather, framing a clause as a quotation serves to highlight it, drawing attention to it as particularly significant in the unfolding of the story. There are three main reasons why a situation might be highlighted by framing it:

- (a) it is exceptional or unusual in a way that contributes to the unfolding of the plot;
- (b) it is significant in terms of the way it characterises certain narrative characters, constructing their personas;
- (c) it is significant in the context of the narration process itself, the SS.

In regard to (a), the type of situation that tends to be treated as exceptional or unusual are unpredictable situations: situations that do not occur in expected places in a culturally established script or schema (Schank & Abelson 1977; Hasan 1978; Ventola 1987). They generally occur at the beginnings of a new scheme, or at points where a scheme terminates unexpectedly.

It seems likely that similar discourse-organisational factors motivate framing an utterance as a quote in Nyulnyul. In each of Carmel Charles' three narrative versions of the emu myth (Text 1) a quoted utterance occurs at the point at which the main event of the story occurs: when the emu is told—and subsequently agrees—to have its own wings cut short. This quoted utterance serves to initiate a sequence of events (the 'schema' for having one's wings cut), which one would otherwise not predict to occur simply as the result of the emu and the brolga conversing with one another. It thereby singles out and highlights the most significant event in the narrative, the pivotal event in the progression from the initial state in which the emu was able to fly better than other birds, to the final state, the present worldly state of affairs, in which the emu is unable to fly at all.

Only one other of Carmel Charles' texts includes a quotation: a textlet describing the procedure of catching fish in grass fish traps (Text 5). A series of events are described that constitute the culturally given schema, culminating in the gathering of fish from the traps. Significantly, the quoted utterance occurs at the point where the men are calling out that they have gathered enough fish for their needs, and should now stop. The script has been interrupted for reasons other than that all of the fish have been collected from the traps, the natural terminal point of the script; this is singled out and accorded focus. Tellingly, what is accorded focus is the claim that enough fish have been gathered, rather than the natural event of the tide's turning. The quoted utterance thus indicates something important to the schema, and one of the ways it can be terminated via human agency.

The Nyulnyul myth about the bower bird included in Nekes & Worms (2006:308–311) also provides illustration of this point. The first main event of the narrative, the bower bird's taking the people to show them his corroboree is underlined by two quotations, which represent the way in which he induces them to do what he wants them to do. These events are critical events in this narrative, and are represented as quoted utterances.

The version of the emu myth told by Albert Kelly (Text 2) includes a very large number of quoted utterances. Nevertheless, in this text also quoted utterances occur at points that are significant in terms of the narrative semiotic, rather than just anywhere. To substantiate this point, let us consider first the quoted speech utterances from the first episode of the narrative. The first framed speech occurs in lines (15)–(16), where the emu has just been observing the brolgas dance, and now asks them how it is that they dance so well. In response, the brolgas ask the emu to dance for them. The quoted exchange between the two groups of birds thus serves to initiate a dance script for the emu, which serves to initiate the whole chain of events constituting the narrative. In the absence of the emu's desire to emulate the brolgas there would be no story. It thus occupies a critical position in the narrative. The next quote, which occurs in lines (22)–(24), follows after the emu has actually tried unsuccessfully to dance like the brolgas; they make the unexpected suggestion that he should get his wings cut so he can dance properly, like they themselves. This second

quoted utterance in this version is the same as in Carmel Charles' version of the myth, marking the beginning of a new script or schema, again that of cutting the emu's wings (as discussed above).²⁵

Having succeeded in convincing the emu, they cut its wings, and the next quote occurs at the point where the emu has recovered sufficiently from the operation to get up: they tell him to try dancing now, thus initiating another attempt at the dancing script. This event is immediately followed by a quotation from the brolgas who evaluate the emu's performance, indicating that he has now danced very well, and is in fact better than them. This quote also serves as an evaluation by the brolgas of their suggestion: they now evaluate the emu's performance as good, thus justifying the radical action they had suggested. The final quoted exchange in this episode (lines (36)–(37)) heralds the emu's realisation that things may not all be as excellent as the brolgas have claimed; the emu apparently asks them how they run, for which they can only answer that they don't know how to. This highlights inadequacies in the resolution of this segment of the narrative, and engenders expectations that might be intended to motivate the hearer to listen to the rest of the narrative.

Summing up, investigation of the first episode of Albert Kelly's version of the emu myth reveals that quoted speech utterances do not occur randomly in the development of the story. Rather, they occur at significant points in the plot: they serve to initiate sequences of activity, usually forming cultural scripts, that would not otherwise begin; they serve to evaluate the success of actions undertaken; and they identify difficulties with the sequence of activities undertaken. Furthermore, they single out and identify problematics and their resolutions; and in addition, they serve evaluative functions. And finally, what quotation achieves as a result is to add a human dimension to narrative by constructing a referent world in which people (or personified animals) do not just enact sequences of situations, but do so through and as a result of conscious deliberation and processes of decision-making.

Similar remarks apply to many of the quoted utterances in the third episode of Text 2 (for the second episode, see discussion of (b) below). The quote from line (143) highlights the emu's sickness, which comes as a surprise, since from the beginning of the third episode it has appeared that the emu had adjusted to his new life on the ground. This heralds the beginning of the end of the story. Lines (146)–(150) are the next quoted utterances, and involve the emu's wife soliciting the assistance of the doctors in a bid to make the emu well again. These quoted utterances serve to highlight the sickness of the emu, as a part of the move to enlist the doctors' help. The emu apparently improves somewhat, but soon becomes sick again, and starts saying farewell to his wife (beginning in line (169)). Thus the final stage of the story is introduced, the emu's death, and the emu launches into a final dying speech, highlighting his impending death. This marks the initiation of the funeral script, in which the emu's body is disposed of. The birds then offer their farewells to the emu, and make various parting requests (lines (196)–(197), and (198)–(205)).

The second reason for highlighting an utterance by framing it, (b) of p. 691 above, concerns character construction: it is significant in the way it characterises a narrative character or characters, contributing to the construction of their persona(s)—what a person says constitutes them as social beings, imbues them with characteristics as persons (see

²⁵ Notice how the two versions of the myth construct the motivation for the narrative events in quite different ways. In Mary Carmel Charles' versions the brolgas are jealous of the emu, who can fly higher than they can, and this motivates their suggestion to the emu to cut its wings. In Albert Kelly's version, by contrast, it is the emu who appears to be the jealous one: he wants to dance like the brolgas, and enlists their help to do so.

further McGregor 1993c, 1994b). What is at issue here is not the location of reported speech in the text, but rather its distribution across characters: who gets to speak, and what they get to say. Thus, (a) and (b) are not disjoint: an utterance can be highlighted for both reasons simultaneously. In Carmel Charles' three narrative versions of the emu story, for instance, the quoted utterances relating to the chopping of the emu's wings are all spoken by the brolga, or the other birds; in one case also the emu responds, indicating his willingness to undergo the operation. Thus, the quotes themselves appear to construct the brolga (and other birds) as being in control of the world—they make the suggestion; the emu is powerless.

The bower bird myth reported in Nekes & Worms (2006) provides further illustration of character construction by means of quoted speech utterances. The bower bird is the only character whose utterances are quoted at all, and he is the only participant individuated in the story; moreover, his actions are the initiating ones: the actions of the others are all performed in response to the bower bird's. Furthermore, he is quoted as communicating a song to the people, further underlining his social status. The content of this song may also be relevant to the construction of the bower bird's character, for it concerns his current actions, dancing, apparently highlighting them at the expense of his planned actions, spearing the people—and thus his role as a trickster. In regard to the plot, the song has the effect of lulling the people into a false sense of security, thus facilitating his attempts to kill them. In this way, reporting the song achieves a much more dramatic effect in the narrative than would a mere description of what happened, a statement to the effect that the bower bird had sung a song.

The bulk of the second episode of Albert Kelly's text, lines (38)–(98), is in the form of reported speech, with the occasional descriptive passage. This episode, unlike the first and the third, barely pushes the plot forward at all; almost nothing happens. Rather, the entire episode consolidates the state of affairs which has arisen following the events of the first episode: it represents the emu's coming to terms with his new environment and winding up his affairs in his old age. The first quoted utterances occur in lines (48)–(63), and represent the emu's wondering where he is, learning what he has had done to himself, and the consequences of these actions—that he is now confined to living on the ground. No new scripts or schemata are initiated here; the effect of the quoted utterances is to single out the earlier events in regard to the construction of the emu's new persona. Then in the next set of quoted utterances the emu converses with his former relatives, the eagles, letting them know what has happened to him (lines (70)–(72)); they subsequently inform him about the types of food he will now have to eat, namely vegetables, in place of his former diet of meat and honey (lines (93)–(113)). In lines (85)–(88) the emu enlists the help of his former relatives to get his possessions from his former camp, and destroy what is left; this also serves in the construction of his new persona—by underlining the severance of the ties with his previous circumstances; it contributes nothing to the development of the plot at all. In the last quoted conversation of this episode, lines (116)–(123), he is told not to be unhappy with his new lot; he is offered a wife, a place to camp, and told what he can hunt for. This winds up the characterisation of the emu's new persona.

Finally, the first two quoted utterances in the third episode of Albert Kelly's text, lines (129)–(130), also serve a character-constructing function. The events referred to—the sharing out of the spoils of the hunt—are quite unremarkable, and hardly in need of highlighting in relation to the plot: indeed, they are not subsequently developed in any way. Their significance lies in the way they contribute to the construction of the emu's persona:

they underline the fact that he has now become one of the brolgas, and has entered into reciprocal exchanges with them.

The third reason for highlighting by framing, (c), relates to the SS rather than to the narrative plot. The only reported speech utterance in Magdalene Williams' myth about the crow provides illustration (Torres & Williams 1987:20):

```
(13–112) wi-n-di-jin wamburiny « wangkid
2MIN.NOM.FUT-CM-say-3MIN.OBL people crow
i-bakand-in riib mangakarr »
3NOM-have-PRS bad forever
"Shows the world the burning coal that Crow was fed." (Literally: 'You will tell people the crow has bad (luck) forever.')
```

This report occurs at the end of the narrative proper, following the final event of the story, in which the crow has swallowed a burning coal, which has turned his throat red. What follows is a coda in which the speaker indicates firstly that the narrative explains why the crow is black today, and secondly draws out a moral, that children should keep the laws (unlike the crow). It serves to highlight the consequences of the narrated events to the crow, which remain with the bird forever. At the same time it marks the boundary between the narrative proper and the speaker's evaluative comments.

These functions of framed speech quotations in Nyulnyul narratives can all be grouped together under the rubric of highlighting. Situations are brought into relief as especially significant to the story, to characters in the story, or to the situation of narration by framing them as quoted utterances; the effect is similar to that of framing a painting or photograph, by which prominence is given to it by setting it off from the surrounding context, thus indicating that it is to be regarded as representing a different order of reality. In keeping with the framing analysis proposed for quotation, highlighting is an interpersonal function. This is because highlighting is the process of drawing particular attention, the hearer's attention, to certain things in a text or discourse, making them more prominent than other things. More specifically, the type of highlighting involved might be glossed roughly as follows: 'attend to this as it is important to your understanding of the way the events unfolded, why narrative characters behaved in the way they did, and/or the present relevance of the events'.

Factors (a)–(c) do not determine when an event will be framed as a report. Rather, they represent reasons why a narrator might choose to highlight a situation by framing it. The argument that framing serves a highlighting function in narrative is based on the observation that framed utterances tend to be found in certain places in narratives, under certain conditions—these being circumstances in which one might reasonably expect a narrator to highlight an utterance. The actual occurrence of a speech report at a certain point is no more deterministic than is the highlighting of words in a textbook by students. Clearly this highlighting serves a function, and an outsider could make a case that highlighting served the function of marking significant ideas on the basis of observations of the distribution of highlights throughout a text. Points where a student might highlight words may be to some extent predictable (just as we could predict that in the emu story the bustard's suggestion to the emu to have his wings cut will be reported); but they are not predetermined. It depends (within limits) on how the narrator chooses to construe the plot.

To conclude the discussion, one further comment is in order about speech reports in narratives. Albert Kelly's text contains a few instances of reported speech utterances within

reported speech utterances. All but one of these is a performative:²⁶ that is, the clause of speech specifies the type of speech event the utterance represents in its discourse context. An example is line (15): the initial clause frames the following clause as a speech act. It could have been omitted without affecting the way the following clause is evaluated—as a spoken utterance directed to the brolgas. Perhaps framing the quote serves not only to highlight its relevance to the narrative plot, but also to highlight it in the interaction between the brolgas and emu. This hypothesis seems reasonable: the fact that the brolgas dance well is significant in their interaction with the emu. Lines (116) and (118) also include a performative framing clause, which could be omitted. These doubly framed clauses also seem to be significant not just narratologically, in terms of the construction of the emu's character, but also in terms of the interaction between the protagonists: the brolgas are highlighting significant issues in the integration of the emu into their world—that the emu should not be unhappy, and that he will be given a wife. Line (123) is not inconsistent with this, although it is not quite as obvious why it should be highlighted.

13.4.1.2 Reported thoughts

Ideas and thoughts are reported as though spoken, using the same constructions as used in reporting speech. The syntagmatic relation between the reported thought and the clause of thinking is also framing. The generic IV -J \sim -DI 'say, do' which most frequently frames quoted speech also frames thoughts, as shown by example (13–113).

```
(13–113) « djal nang-am yer, » in-djan-djer
jarl nga-n-ka-m-irr i-n-j-an-jirr
pierce 1MIN.NOM-CM-FUT-put-3AUG.ACC 3NOM-CM-say-IMP-3AUG.OBL
"I will spear them," he thought.' (Nekes & Worms 2006:309)
```

Reported ideas and thoughts are rare in the existing corpora. Most examples whose English translations employ the verb *think*—in particular those involving *-mungk* 'believe' in the matrix clause—are better analysed as epistemic complements (on which see §13.4.2.2), although there are some uncertain examples.

Verbs of perception occasionally frame thoughts. In this case, what is perceived is not a situation as such; rather, a perceived situation is interpreted by the perceiver as indicating some idea about the world that is not directly observable. Putting things in a slightly different way, the framed clause represents a thought or idea that was inferred on the basis of sensory evidence. The most common verb in the framing clause is -JAL 'see', as in (13–114)–(13–116).

```
(13–114) jakud nga-n-ju bur-ung jan nga-n-jal arrive 1MIN.NOM-CM-say place-ALL<sub>1</sub> 1MIN.OBL 1MIN.NOM-CM-see wamba nyanangkarr i-ng-kad jimbin way man maybe 3NOM-PST-enter inside away
```

²⁶ The one non-performative reporting clause of speech within a reported clause of speech occurs in (13–101). As observed in the discussion of that example, the reporting clause appears to be tagged to the speech report underlining the evidential basis for the reported clause. Possibly the speech reports of lines (187) and (226) are also amenable to this type of explanation: the following clause of speech is tagged to the reported utterance, and underlines its truth.

nga-ngi-n-uk >
1MIN.NOM-PST-be-LOC
'When I arrived home. I saw that maybe a man had

'When I arrived home, I saw that maybe a man had gone inside my house while I was away.'

- (13–115) ya-ngka-dam bin bardangk ya-ni-jal < nganyji 1PL.NOM-FUT-hit this tree 1PL.NOM-CM-see INT langkurr yu-ngku-rr-jarrjarr > possum 3NOM-FUT-AUG-awake 'Let's hit the tree, and see if the possums will wake up.'

In (13–114) what was actually seen was not a person entering the speaker's house, but rather evidence indicating that someone had been in her house. In (13–115) and (13–116), the situation of perception is located in future time, and it seems reasonable to consider what is to be perceived as being represented—in these clauses—as an idea. In all available examples the framed thought is quoted indirectly, rather than directly. There is no reason however to expect that direct quotation with a verb of perception would be ungrammatical.

Unlike reported speech, reported thoughts are almost always framed by a clause of thought. This is presumably due at least in part to the fact that without a framing clause it is not normally possible to distinguish them as representations of thoughts, rather than as utterances by the narrator. There are, however, instances that do admit interpretation as reported thoughts, but that are not framed. Consider, for instance, (13–117).

(13–117) arriyangk / layib-layib burrb i-ngi-rri-j / kudurrwany irrgurd / nothing good-good dance 3NOM-PST-AUG-say brolga all 'Oh dear! They danced superbly, all those brolgas.'

This example, which comes from Text 2, can be reasonably interpreted as representing what the emu thought whilst watching the brolgas dance; the presence of the first word, *arriyangk* 'nothing' ('oh dear!') as an interjection attests to this. Indeed, it suggests that the entire utterance is to be taken as an exclamation of surprise by the emu, albeit one that was not actually uttered. The deictic centre for tense has clearly been shifted to the SS of the actual narration, however: the thought is represented from the perspective of the SS interactants, although the speech function of the original appears to have been retained: that is, the exclamation of the emu apparently doubles as an exclamation by the narrator, drawing the addressee's attention to a particularly significant phenomenon, the dancing of the brolgas. Thus, it is also possible to interpret this as a non-reported clause, an utterance that serves as an expression of the narrator's attitude to the brolga's dancing. Quite possibly both interpretations are viable, and this example may represent free indirect speech (e.g. Vološinov 1973; Halliday 1985; McGregor 1994b; Vandelanotte 2009).

McGregor (1993a) proposes that reported thoughts in Gooniyandi narratives are distributed in the same way as reported speech utterances: they highlight certain situations, drawing them to the hearer's attention as particularly relevant to the development of the narrative. Quite likely the same holds in Nyulnyul, although there are far too few instances in the narrative corpus to be certain. Perhaps the clearest illustration is (13–113), from the

bower bird myth (Nekes & Worms 2006:309), where the thought represents the bower bird's decision to initiate once again his script for spearing the people—though on this occasion it fails.

The few reported thoughts in Albert Kelly's narrative are also consistent with this hypothesis. The first uncontentious reported thought—in this case framed by a clause of perception—occurs in the first episode, in line (18),²⁷ repeated as (13–116) above, which serves to initiate the emu's dance script, which in turn leads to the main event of the narrative. The second reported thought, also a perceptually motivated one, occurs in line (46), at which point the emu has just awoken and realised something is amiss; the fact that he is in a different country is highlighted, preliminary to the main point of this episode, the construction of his new persona. And finally, in line (157) it seems reasonable to suggest that the speaker has highlighted the situation of his own death in the conversational interaction in which this example appeared as an indication that he is about to enter into a sequence of events ultimately culminating in his own death. A few utterances later, in line (160), the emu also mentions his death, but this time does not frame, but rather modalises it, indicating that it is highly probable. By this point, of course, his death does not need to be highlighted, this being now a part of the shared knowledge or beliefs of the interactants in the speech situation.

Overall, there are more instances of indirectly quoted thoughts than directly quoted thoughts in the Nyulnyul corpora. However, given the small number of clear-cut instances of quoted thoughts, it is not clear that this can be taken to be a viable generalisation.

13.4.2 Complementation

In this section we will be concerned with so-called object complements, such as *I wanted to shave*, *I tried to shave*, they forced me to shave, in which, according to the traditional analysis, the second clause serves as an object of the first, the matrix clause. Two primary types are distinguished in Nyulnyul: (a) emotional complements ('like, want'), and (b) epistemic complements ('believe (mistakenly)'). These are distinguished according to the verbs of the matrix clauses; it is unlikely that they represent distinct constructions. The matrix clause specifies a mental reaction or attitude to the complement clause, the subject's 'take' on the complement clause. As argued in McGregor (in press), the traditional analysis is inappropriate, and there is no evidence that the complement clause serves as an object or Undergoer of the matrix clause. Rather, the matrix clause holds the complement clause in its scope, in a similar way to modal adjuncts such as *nyanangkarr* 'perhaps'. We discuss the two complement types in order in the following subsections. ²⁸

²⁷ A couple of sentences prior to this occurs the possible reported thought, (13–117). This also readily lends itself to interpretation in terms of the framework laid out here: it highlights the good dancing of the brolgas, begins constructing the emu as impressionable, and motivates the initiation of the conversation schema which begins in the following lines.

²⁸ I make no presumptions about the universality of these semantic types of complementation; in particular, there is no presumption that multi-clausal constructions of emotion and/or belief will always involve complementation. Indeed, there are languages in which the former may be expressed by a framing construction, as in Warrwa (McGregor 2007a) and Ngarinyin (Rumsey 1982b:157–166).

13.4.2.1 Emotional complements

Emotional complements involve a matrix clause of wishing, desiring, liking, and so on, which, in Nyulnyul, usually involves a CVC involving the PV *liyan* 'heart, like, love, desire, wish, want' in collocation with the IV -M 'put'.²⁹ The complement clause may be either finite or non-finite. The following examples illustrate non-finite complement clauses:

- (13–118) baab-in jii liyan i-na-m \leq jabul ma-lakarr-in child-ERG 2MIN.OBL like 3NOM-CM-put story INF_p-hear-INF_S jii ngank nyulnyul \geq 2MIN.OBL language Nyulnyul 'Your daughter would like to hear your stories in Nyulnyul.'
- (13–119) baab-in liyan i-rr-m-in ≤ ma-dam-in-ung karrambal ≥ child-ERG like 3NOM-AUG-put-PRS INF_p-hit-INF_p-ALL₁ bird 'Children like shooting birds.'
- (13–120) arri liyan nga-la-m ≤ lakal-ung ≥ yiil-nyirr jii-nyirr not like 1MIN.NOM-IRR-put climb-ALL₁ dog-COM 2MIN.OBL-COM 'I didn't want to climb (through the window) because of your dogs.'

As these examples illustrate, the complement clause always follows the matrix clause of wishing. The non-finite complement clause is almost always marked by -ung ALL₁, which is normally attached to the first word of the non-finite clause, usually the verb.

In almost all available instances of the non-finite type, the person wanting the complement situation is also the Actor of that situation. There are just a few exceptions in the corpus, including the following two:

- (13–121) $arri\ liyan\ i\text{-}li\text{-}rra\text{-}m\ \leq ma\text{-}jid\text{-}in\ derby\text{-}ung \geq not\ like\ 3\text{NOM-IRR-AUG-put}\ \text{INF}_p\text{-}go\text{-}INF}_S\ \text{Derby-ALL}_1$ 'They don't want him to go to Derby.'
- (13–122) irr-in arri liyan i-la-rra-m \leq yarrad-ung 3AUG.CRD-ERG not like 3NOM-IRR-AUG-put $1AUG.CRD-ALL_1$ ma-kalak-in-irr \geq $INF_p-approach-INF_S-3AUG.ACC$ 'They don't want us to go near them.'
- (13–123) irr-in $arri\ liyan\ i-li-rra-m$ $\leq jimbin-ung$ 3AUG.CRD-ERG not like 3NOM-IRR-AUG-put $inside-ALL_1$ ma-jid-in bur-uk jirr \geq $INF_P-go-INF_S$ place-LOC 3AUG.OBL 'They don't like dogs going into their houses.'

(13–121) was given in response to the English gloss provided; although it is possible that the speaker misread the prompt, and gave instead a translation of 'they don't want to go to Derby', I don't believe this is the case: it was elicited directly after eliciting 'they want me

²⁹ In some instances *liyan* 'heart, like, love, desire, wish, want' occurs independently in collocation with the clause expressing the desired situation; in such circumstances it would seem that the word is serving as a clause-level particle (see §9.2).

to go to Derby tomorrow'. In any event, (13–122) and (13–123) only make sense in the different subject reading.

In most cases, if the Actor of the wished-for situation is different from the person experiencing the desire for it, the desired clause is finite, as illustrated by the following examples:

```
(13–124) arri liyan nga-la-m ≤ in wangal i-bilk-in not like 1MIN.NOM-IRR-put this wind 3NOM-blow-PRS ngarrij ≥ hard 'I wish the wind wouldn't blow so hard.' (More literally: 'I don't like it that the wind blows so hard.')
```

```
(13–125) jibard baybirr bardangk-amirr arri liyan i-la-m sneak behind tree-PER not like 3NOM-IRR-put ≤ wamburiny-in i-li-rr-jal i-rr-land-in bur-uk people-ERG 3NOM-IRR-AUG-see 3NOM-AUG-sit-PRS camp-LOC jirr wilamay-uk i-rri-wid-in ≥ 3AUG.OBL food-LOC 3NOM-AUG-eat-PRS 'He snuck through the trees, not wanting to be seen by the people sitting eating in their camps.'
```

Just as there are a few exceptional non-finite complements with different subjects, there are occasional finite complement clauses with the same Actor as the matrix clause:

```
(13–126) liyan nga-n-m-in \leq nga-ngki-jid wara waalk \geq like 1MIN.NOM-CM-put-PRS 1MIN.NOM-FUT-go one sun 'I want to go next week.'
```

Perhaps, instead of simply being sensitive to interclausal reference relations, the motivation for the choice between non-finite and finite complement clauses concerns the degree of distinctiveness and separation of the complement situation from the desiring situation. The more integrated the two situations, the more likely that the complement clause will be non-finite. This accounts for the fact that the non-finite clause generally has the same Actor as the matrix clause, and the finite clause a different Actor. It is notable that for exceptions such as (13–126) the desired event is set in the relatively distant future with respect to the cognitive process. That is, the desired event is not something that is currently about to be embarked on—it is planned for the future, and as such the desire to perform it can hardly be burning. Granted this, it is possible that the non-finite complements of (13–121)–(13–123) are motivated by perceived immediacy or current relevance of the complements to the situations of desire. Or what amounts to much the same thing, the cognitive event is defocused, and the construction focuses more on the desirability of the complement event than on its status as something thought about.

In keeping with this observation, finite complement clauses also allow a wider range of realisation possibilities for the complement situation. Non-finite complement clauses apparently indicate nothing specific concerning the occurrence of the event as of the time of speaking, the SS; it may or may not have occurred—which obtains is evidently a pragmatic inference. For instance, for (13–127) one infers that the speaker did run over the dog—

otherwise they would be expected by the M-principle (Levinson 2000) to have uttered the simpler sentence 'I didn't run over the dog'.

```
(13–127) arri\ liyan\ nga-la-m-an \le ma-janb-in\ kinyingk\ yiil \ge not\ like\ 1MIN.NOM-IRR-put-IMP\ INF_p-tramp-INF_S\ DEF\ dog 'I didn't mean to run over the dog.'
```

On the other hand, as of the time of the referent thinking event, a non-finite complement event is always unrealised. This does not necessarily hold for finite complements, as shown by (13–124): the complement situation is currently occurring as of the time of the reported thought—which in this instance is the same as the time of the speech situation. The complement situation is always presented from the perspective of the SS. Thus in (13–128) the situation 'work without complaining' is non-occurring as of the time of speaking (they are complaining about working), and so the main complement verb is in the irrealis.

```
(13–128) ngay-in liyan nga-n-m-in \leq irr murrkul 1MIN.CRD-ERG like 1MIN.NOM-CM-put-PRS 3AUG.CRD work i-li-rr-i-j arri i-li-rr-ngank \geq 3NOM-IRR-AUG-CM-say not 3NOM-IRR-AUG-speak 'I wish they would work without complaining.'
```

Non-finite complements form tighter constructions than finite complements, perhaps iconically representing the close integration of the two situations. Not only is there usually a postposition marking the relation of the complement clause to the matrix clause, but also there is usually just a single set of NPs shared by the entire construction. These are usually case marked according to the non-finite complement clause—thus the shared subject NP, if present, typically occurs sentence-initially and gets ergative marking if the complement clause is transitive. It is also possible for another NP, which fills a grammatical role in the non-finite clause only, to be thematised, and to occur initially in the construction, as in (13–129); such thematisation does not occur in finite complements. Moreover, the two verbs are almost always contiguous. If the complement is finite, the verbs are not infrequently separated by the subject of the complement clause. (McGregor 2007a shows that the desiderative complement construction in Warrwa, although very different to the Nyulnyul construction, requires identity of subjects and is also very close-knit.)

```
(13–129) bini wamb liyan mi-na-m \leq ma-jal-in-ung \geq that man like 2MIN.NOM-CM-put INF<sub>p</sub>-see-INF<sub>S</sub>-ALL<sub>1</sub> 'That man is the one who you wanted to see.'
```

A number of other senses can be distinguished for complements of *liyan* ... -M ('like ... -put'). These include 'hope for', as in (13–130), and 'intend/intended to', as in (13–131). Less closely related senses are 'decide to', as in (13–132), and 'try to' as in (13–133). These senses are presumably contextually engendered rather than coded, and perhaps arise as implicatures: the statement that the situation was desired implicates (in (13–132) and (13–133)) that it was manifest in some way, either via prior discussion or via an attempt to bring it about.

```
(13–130) liyan nga-n-m-in ≤ way yu-ngku-jid banangkarr ≥ like 1MIN.NOM-CM-put-PRS away 3NOM-FUT-go now 'I hope he'll go away soon.'
```

```
(13–131) liyan i-na-m \leq juy-ung ma-jal-in banangkarr like 3NOM-CM-put 2MIN.CRD-ALL_1 INF_p-see-INF_S today majalkarr \geq i-ny-jid hospital-ung afternoon 3NOM-PST-go hospital-ALL_1 'He intended to see you this afternoon, but he went to hospital.'
```

- (13–132) $liyan i-ngi-rr-a-m \le wil-ung ma-mii-ung \ge like 3NOM-PST-AUG-CM-put meat-ALL_1 INF_p-hunt-ALL_1$ 'They decided to go hunting.'
- (13–133) $nganyji\ liyan\ mi-la-m-an\ \le ma-dam-in-ung \ge INT\ like\ 2MIN.NOM-IRR-put-IMP\ INF_p-hit-INF_S-ALL_1$ 'Did you try to hit him?'

There are other ways of expressing the notion 'attempt to, try to' in Nyulnyul, and these show different nuances of meaning. One of the senses of the irrealis mood, for instance, is also attemptive. However, there is no specific indication in the irrealis that an attempt was made, or that the situation was even desirable; all that is specified is that the situation did not occur—see §7.7.2. Thus, the irrealis can be used of situations which almost occurred, albeit without any desire on the part of the actor: e.g. 'he nearly fell over'. The IV -WIRRIK 'try out, test' specifies that an actual attempt was made to perform the event. The projected event is represented in a non-finite clause, in what may also be a complement construction, as illustrated by (13–134).

```
(13–134) murrul baab yalk i-ni-wirrik \leq marriny-ung \geq little baby stand:up 3NOM-CM-test going-ALL<sub>1</sub> i-ny-jalk 3NOM-PST-fall 'The little baby got up and tried to walk, but he fell over.'
```

Whereas *liyan* is used only of sentient beings, typically humans, with the implication of high order cognitive abilities, -WIRRIK 'try out, test' conveys no such suggestion—for instance a fledgling trying out its wings attempting to fly could be described with *iniwirrik* 'it attempted, it tried'. This event is unlikely to be described with *liyan*. What is crucial to the difference between *liyan* ... -M 'want' and -WIRRIK 'try out, test' is that the former, but not the latter, ascribes a mental state to the Actor of the matrix clause; with -WIRRIK 'try out, test', an actual physical attempt must be involved.

A second, very poorly attested type of emotional complement clause involves a matrix clause with *liyan* 'like' and -J \sim -DI 'say, do'. This expresses the meaning 'like, be pleased (that the complement event occurred)', as illustrated by (13–135). In all available examples the complement clause is finite, and represents the situation from the deictic centre of the SS (i.e. in the manner of indirect quotation). Nekes & Worms (1953:491, 636–637) give *laib lēan ma-djon* (good like INF_P-say-INF_S) 'to like, be pleased' in Jabirrjabirr and Nyulnyul, but provide illustrative examples only in Jabirrjabirr.

```
(13–135) liyan layib i-n-di-jin \leq i-ni-ny-jal-uk-ngay \geq like good 3NOM-CM-say-3MIN.OBL 3NOM-CM-PST-see-LOC-1MIN.ACC 'He was pleased to see me.'
```

13.4.2.2 Epistemic complements

Epistemic complements present the proposition expressed by a clause as someone's belief, and usually involve a matrix clause which includes *-mungk* 'believe', which is inflected by nominal person-number prefixes that index the person who holds the belief (see §4.2 and §12.5.1.3 above). As the following pair of examples show, *-mungk* 'believe' may also be accompanied by an ergatively marked PP specifying the person responsible for the belief, indicating that the scoping unit is, in these cases, a clause.

- (13–136) warli-in irr-mungk ≤ juy-in mi-n-dam ≥ everyone-ERG 3AUG-believe 2MIN.CRD-ERG 2MIN.NOM-CM-hit ngay-in arriangk
 1MIN.CRD-ERG nothing
 'They all think you hit him, but I don't.'
- (13–137) yarrad-in yarr-mungk ≤ kanaabin ≥
 1AUG.CRD-ERG 1AUG-believe murderer
 ya-nga-rr-dam
 1PL.NOM-PST-AUG-hit
 'Thinking he was a murderer we hit him.'

There are only a small number of similar examples. More frequently, *-mungk* 'believe' occurs alone in combination with the complement clause, and in such cases the word itself has scope over the complement clause as a propositional modifier (see §12.5.1.3). In this section we discuss only those examples that evidently involve a scoping clause rather than word. Some additional examples, showing other elements in combination with *-mungk* 'believe', and presumably forming a clause with it, include:

- (13–138) angk-ij $nyi-mungk \le nga-la-w-an-juy$ $kumbarr \ge what-DAT 2MIN-think 1MIN.NOM-IRR-give-IMP-2MIN.ACC money <math>nyi-mungk \le arri nga-la-bakand-an \ge 2MIN-think not 1MIN.NOM-IRR-have-IMP$ 'Why did you think I would give you money when you knew I had none.'
- (13–139) nganyji nyi-mungk ≤ kinyingk wamb jalngkangurr ≥ INT 2MIN-think DEF man doctor 'Did you know he is a doctor?'
- (13–140) yalarrbur-uk irr-in irr-mungk \leq flour i-ngi-n first:time-LOC 3AUG.CRD-ERG 3AUG-believe flour 3NOM-PST-be ma-ngurrid-ung \geq INF_p-paint-ALL₁ 'In the old days, people used to think flour was for painting themselves with.'

As suggested in §13.4.1.2 above, it is not clear precisely how to draw the line between epistemic complements and framed thoughts. It seems reasonable to presume that in all instances in which *-mungk* 'believe' is employed in the matrix clause we have a complement construction. This is because in these cases there is always a monoclausal agnate involving *-mungk* 'believe' as a particle, whereas no such monoclausal agnate exists for the framed thoughts discussed in §13.4.1.2. And second, the deictic centre is always that

of the SS, and the modal categories are evaluated from that centre. 30 However, the following example, which involves the generic IV -J ~ -DI 'say, do', also appears to be a belief complement. 31

 $(13-141) \leq \min - djed \qquad wol-o\eta \qquad djo-elbe \qquad \geq \eta an-d \quad dje \\ \qquad mi-n-jid \qquad wul-ung \quad juy-ilbi \qquad nga-n-d-jii \\ \qquad 2 \text{MIN.NOM-CM-go water-ALL}_1 \ 2 \text{MIN.CRD-MB} \qquad 1 \text{MIN.NOM-CM-say-2MIN.OBL} \\ \text{`I thought that you had left to bring water.'}$

As in the above examples, verbal complement clauses are normally finite. (13–142) is one of the very few examples of a non-finite verbal clause in the scope of a *-mungk* clause.

(13–142) arri nga-mungk ≤ jalingk-ung yaward ≥ not 1MIN-believe ride-ALL₁ horse 'I don't know how to ride a horse.'

More often than not, as the above examples illustrate, there is an implication that the proposition is mistakenly believed, as is commonly the case when *-mungk* 'believe' is used as a particle (as will be recalled from §12.5.1.3).

Other meanings expressed by the epistemological complement construction include 'know (a proposition)', as in (13–143); 'decide', as in (13–144); 'know how to do something', as in (13–142) and (13–145); and in emphasising possession of knowledge, that the speaker knows a proposition, as in (13–146) and (13–147).

- (13–143) arri nga-mungk ≤ i-n-dam kinyingk uriny ≥ not 1MIN-believe 3NOM-CM-hit DEF woman 'I don't know whether he hit her or not.'
- (13–144) arri nga- $mungk \le nga$ -li-jid-akarr beagle bay- $ung \ge not 1$ MIN-believe 1MIN.NOM-IRR-go-TEM Beagle Bay-ALL₁ 'I haven't decided whether to go to Beagle Bay.'
- $(13-145) \le wul-uk \quad kalkir \ge liyan \quad i-na-m \quad arri \quad ni-mungk \quad \le kalkir \ge water-LOC \quad swim \quad like \quad 3NOM-CM-put \quad not \quad 3MIN-believe \quad swim \quad 'He tried to swim in the water, but didn't know how to swim.'$
- (13–146) ngay-in nga-mung $k \le baan$ nga-ngka-jim $b \ge 1$ MIN.CRD-ERG 1MIN-believe thusly 1MIN.NOM-FUT-die 'I know that I will die.'
- (13–147) ngay-in nga- $mungk \le yu$ -ngku- $jimb \ge 1$ MIN.CRD-ERG 1MIN-believe 3NOM-FUT-die 'I know that he will die.'

The sense 'know how to' seems to be restricted to non-finite complement clauses, consistent with the fact that lack of knowledge how to perform some action concerns that

³⁰ It is basically for these two admittedly not convincing reasons that I adopt the position that there are two constructions rather than a single thought/belief construction.

³¹ An alternative, equally possible analysis is that in this example -J 'say, do' frames the first clause as a reported thought, and that it is the enclitic -ilbi MB that is responsible for the belief interpretation.

action generally, rather than in a particular instance. Intriguingly, in all instances of this sense the matrix clause is negated—the procedural knowledge is not possessed. Whether or not this is an artefact of the small corpus is not known.

13.4.2.3 Concluding remark

In a single example a non-finite verb appears as the only verb in an independent sentence:

(13–148) wamb-in ngay-ung ma-jal-in man-ERG 1MIN.CRD-ALL₁ INF_P-see-INF_S 'The man decided to see me.'

One would have expected *majalin* 'seeing' to have occurred within the scope of a finite clause of emotion, in a complement construction of the type discussed in §13.4.2.1. The fact that the first person minimal pronoun *ngay* occurs with the allative postposition lends further support to this expectation. Thus one might expect that a matrix clause with VP *liyan* ... -M 'like' has been ellipsed. If this is so, the example is not an instance of insubordination (Evans 2007).

The Nyulnyul language of Dampier Land, Western Australia

Volume 2: Texts, wordlists and appendices

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Contents in brief

Volume 1

	List of figures, maps, plates and tables	xxi
	Preface	xxiv
	Acknowledgements	xxvii
	Abbreviations and conventions	xxix
1	Introduction	1
2	Grammatical preliminaries	43
3	Phonetics and phonology	65
4	Nominals and pronominals	113
5	Postpositions	160
6	Adverbials	210
7	Inflecting verbs	246
8	Preverbs	331
9	Minor word and morpheme classes	345
10	Noun phrases	398
11	Verb phrases	435
12	Clausal syntax	546
13	Complex sentence constructions	649
	Volume 2	
	Abbreviations and conventions	xix
	Sample texts	705
	Nyulnyul-English wordlist	751

vi Contents in brief

English-Nyulnyul finderlist	824
Appendix 1: List of bound grammatical morphemes	857
Appendix 2: Lexemes that occur in CVCs with -J 'say, do'	861
Appendix 3: Previous work on Nyulnyul	870
References	879
Index of names	899
Index of languages	903
General index	905

Table of contents

Volume 1

	List	xxi							
	Pref	Preface							
	Ackı	nowledgements	xxvii						
	Abbreviations and conventions								
1	Intr	oduction	1						
	1.1	Nyulnyul and its relatives	1						
	1.2	Territory and land tenure	5						
		Traditional Nyulnyul culture and society	10						
		1.3.1 Food and material culture	10						
		1.3.2 Social organisation	16						
		1.3.3 Life cycle	20						
		1.3.4 Totemism and religion	23						
	1.4	Speech styles	25						
	1.5	Recent history	26						
	1.6	Sociolinguistic situation	32						
	1.7	History of language choice, use and shift among the Nyulnyul	34						
	1.8	Orthography	38						
	1.9	Data used in this investigation	38						
2	Grammatical preliminaries								
	2.1	Linguistic type	43						
		Recent linguistic changes	46						
	2.3	Theoretical orientation	51						
	2.4	Word and morpheme classes	57						
3	Pho	netics and phonology	65						
	3.1	Phonemes and their realisations	65						
		3.1.1 Phoneme inventory	65						
		3.1.2 Phoneme contrasts	67						
		3.1.3 Phonetic realisations of phonemes	68						
		3.1.3.1 Consonants	69						
		3.1.3.1.1 Stops	69						
		3.1.3.1.2 Nasals	71						

			3.1.3.1.3	Laterals	71
			3.1.3.1.4	Tap/trill	71
			3.1.3.1.5	Glides	71
		3.1.3.2	Realisation	n of vowels	72
			3.1.3.2.1	Low vowel	72
			3.1.3.2.2	High front vowel	73
			3.1.3.2.3	High back vowel	74
	3.1.4	Phonem	e variation		75
	3.1.5	Feature	description		76
		3.1.5.1	Consonant	t features	76
		3.1.5.2	Vowel fea	tures	77
3.2	Phonot	actics			77
	3.2.1	Roots			77
		3.2.1.1	General st	ructural features	77
		3.2.1.2	Consonant	t clusters	78
	3.2.2	Non-roc	ot morpheme	es	81
	3.2.3	Intermo	rphemic pho	oneme sequences	81
		3.2.3.1	Vowel seq	uences	82
			Consonant	t clusters	82
	3.2.4	Redupli	cation		83
	3.2.5	Statistic			85
		3.2.5.1	Frequency	according to citation forms	86
		3.2.5.2	Frequency	according to textual instances	90
3.3	•	Syllabic structure of words and morphemes			
	3.3.1	Simple	roots		94
		3.3.1.1	Structure of	of monosyllabic roots	95
		3.3.1.2		of polysyllabic roots	95
			ot morpheme		97
	3.3.3	Polymo	97		
3.4	Stress				98
	3.4.1		n free roots		100
		3.4.1.1	Simple fre		100
		3.4.1.2	Complex 1	coots	101
	3.4.2		n free stems		102
	3.4.3		n words host	•	103
	3.4.4		n inflected w		104
		3.4.4.1		refixing nouns	104
		3.4.4.2		nflecting verbs	104
3.5		-	phophonemi	ics	107
	3.5.1	External			107
	3.5.2	Internal			108
			Vowel ins		108
			Vowel har	•	110
			Vowel coa		110
			Vowel del		111
			Nasal assi		111
			Nasal dele		111
		3.5.2.7	Syllable de	eletion	112

4	Non	ninals a	nd prono	ominals	113
	4.1	Introdu	narks	113	
	4.2	Prefixi	ng nouns		114
		4.2.1	Pronom	inal prefixes	114
			4.2.1.1	First person minimal prefix	115
			4.2.1.2	Second and third person minimal prefixes	116
			4.2.1.3	Second person augmented prefix	116
			4.2.1.4	Third person augmented prefix	117
		4.2.2	Roots a	nd stems that take pronominal prefixes	117
			4.2.2.1	Root allomorphs	120
			4.2.2.2	Semantic basis for prefix-taking	121
			4.2.2.3	Other roots taking the same pronominal prefixes	122
	4.3	Determ	niners		123
		4.3.1	Definite	e determiners	123
			4.3.1.1	Demonstratives	123
			4.3.1.2	Non-demonstrative determiner	124
		4.3.2	Compar	rative determiners	127
			4.3.2.1	war 'other, another, different'	127
			4.3.2.2	warang 'others'	132
			4.3.2.3	waamarn 'different'	133
		4.3.3	Interrog	rative determiners	134
	4.4	Quanti	fiers		139
	4.5	Nominal word formation			
		4.5.1	Stem fo	rming suffixes	142
			4.5.1.1	-id ~ -(i)ngid Characteristic (CHAR)	142
			4.5.1.2	-kud Associative (ASC)	144
			4.5.1.3	-kur ~ -kurd Collective (COLL)	145
			4.5.1.4	-kadiny ~ -kabiny Aspect (ASP)	147
			4.5.1.5	Other possible nominal suffixes	148
		4.5.2	Redupli	cation	150
		4.5.3	Compou	unding	152
			4.5.3.1	Coordinate compounds	152
			4.5.3.2	Specifying compounds	152
	4.6	Pronon	ninals		153
		4.6.1	Forms a	and system	153
		4.6.2	Function	ns of the pronominals	156
		4.6.3	Status o	f the third person minimal form	158
5	Post	position	ns		160
	5.1	Prelim	inaries		160
		5.1.1	Forms a	and major functions of the postpositions	160
		5.1.2	Historic	al and comparative remarks	164
	5.2	-in Erg	ative (ER	G)	165
	5.3	-ang Ir	nstrument	al (INS)	168
	5.4	-nyirr	Comitativ	ve (COM)	172
	5.5	-ij Dati	ive (DAT)		178
	5.6	-uk ~ -	ik Locativ	ve (LOC)	183

x Table of contents

	5.7	<i>-jun</i> Ablative ₁ (ABL ₁)	189			
	5.8	.8 -kun Ablative ₂ (ABL ₂)					
	5.9	-kung Ablative ₃	195				
	5.10	-ung Allative ₁ (197				
	5.11	-mardikan Allat	$tive_2$ (ALL ₂)	200			
	5.12	-mirr Perlative ((PER)	200			
	5.13	-karr Temporal	(TEM)	203			
	5.14	-ngirr Semblativ	ve (SEM)	206			
	5.15	Concluding rem	narks	208			
6	Adv	erbials		210			
	6.1	Introductory ren	marks	210			
	6.2	Adverbs		211			
			s of manner and intensity	211			
		6.2.2 Adverb	•	214			
			s of collective action	215			
		6.2.4 Adverb	C	217			
			determiner	218			
	6.3	Spatial adverbia		219			
			al adverbials	220			
			Compass points and directions	220			
			Vertical direction adverbials	223			
			rdinal spatial adverbials	226			
			Adverbials of relative distance	226			
			Intrinsic and relative frames of reference Deictics	228			
	6.4	0.3.2.3 Temporal adver		230 232			
	0.4	_	ral qualifiers	232			
		1	Shifters	233			
			Absolute time qualifiers	238			
		0.4.1.2	6.4.1.2.1 Parts of the day: the daily cycle	238			
			6.4.1.2.2 Seasons	239			
			6.4.1.2.3 Days of the week	240			
		6.4.2 Tempor	ral quantifiers	241			
	6.5	-	and root formation	243			
		6.5.1 Morpho	ological modification of adverbials	243			
		-	ial reduplication	244			
7	Infl	ecting verbs		246			
	7.1	Structure of infl	ecting verbs	246			
		Verb roots	Č	250			
		7.2.1 List of 1	Nyulnyul inflecting verb roots	250			
			teristics of IV roots	259			
	7.3	Stem forming p	rocesses	261			
		7.3.1 Redupli		261			
		7.3.1.1	Formal patterns in IV reduplication	261			
		7.3.1.2	Semantic patterns in reduplication	262			

	7.3.2	Reflexiv	ve/reciprocal derivation	264
		7.3.2.1	Allomorphy	265
			7.3.2.1.1 Allomorphy of the reflexive/reciprocal prefix	265
			7.3.2.1.2 Allomorphy of the reflexive/reciprocal suffix	266
		7.3.2.2	Irregularities	266
		7.3.2.3		267
7.4	Person		ber prefixing	267
/ . -	7.4.1		son system	267
	7.4.1	-	marking	268
75		Nullibei	marking	
7.5	Tense	D44		270
	7.5.1	Past tens		270
		7.5.1.1	Morphology of past tense	270
			7.5.1.1.1 Past tense formation in minimal numbers	271
			7.5.1.1.2 Past tense formation in augmented number	272
			7.5.1.1.3 IVs that form past tense irregularly	273
		7.5.1.2		275
	7.5.2	Present		278
		7.5.2.1	Morphology of present tense	278
			7.5.2.1.1 Regular formation of the present tense	278
			7.5.2.1.2 Irregularities in the present tense	280
		7.5.2.2	Meanings and uses of present tense	281
	7.5.3	Future to	ense	283
		7.5.3.1	Morphology of future tense	283
			7.5.3.1.1 Second person future	284
			7.5.3.1.2 First and third person future	285
		7.5.3.2	Meanings of future tense	287
7.6	Coniug	ation clas	=	291
		na-class		292
		ø-class I		294
	7.6.3		tegorial IV roots	296
7.7	Irrealis		66 July 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	300
, . ,	7.7.1		logy of the irrealis	301
	7.7.2	-	g and use of the irrealis mood	303
	7.7.2	7.7.2.1		303
		1.1.2.1	7.7.2.1.1 Past irrealis in negative clauses	303
			7.7.2.1.2 Non-past irrealis in negative clauses	304
		7.7.2.2	<u> </u>	305
		1.1.2.2	7.7.2.2.1 Past irrealis	305
		7722	7.7.2.2.2 Non-past irrealis	307
		7.7.2.3	Concluding remarks	309
			7.7.2.3.1 Semantics and pragmatics of the irrealis	309
7 0			7.7.2.3.2 Scope	310
7.8	Aspect			310
	7.8.1		logy of the past imperfective category	311
	7.8.2		gs and uses of the past imperfective category	312
7.9		plicative s	suffix	317
	Relator			318
7 11	Dronom	ninal encl	itics	320

	7.12	The inf	finitive	323
		7.12.1	Formal structure of the infinitive	323
			7.12.1.1 Allomorphy of the INF _p	325
			7.12.1.2 Allomorphy of the INF _S	326
		7.12.2	Meaning and use of the infinitive	327
8	Pre	verbs		331
	8.1	Prelim	inary remarks	331
	8.2	Basic g	grammatical characteristics	332
	8.3	Phonol	ogical regularities in PV structure	336
		8.3.1	Phonotactics of PVs	336
		8.3.2	Phonaesthesia	337
	8.4	Stem-f	forming processes	338
		8.4.1	Preverb stem forming suffix -kaj CONT	338
		8.4.2	Reduplication	341
		8.4.3	Preverbs derived from roots of other classes	343
	8.5	Conclu	iding observations: preverbs with other bound morphemes	344
9	Min	or word	d and morpheme classes	345
	9.1	Introdu	actory remarks	345
	9.2	Particle	es	345
		9.2.1	arri 'not, no'	346
		9.2.2	arriyangk 'no, don't'	353
		9.2.3	arriyangkang 'without'	355
		9.2.4	arriban 'don't'	356
		9.2.5	nganyji (INT) 'is it the case that?'	358
		9.2.6	nyanangkarr 'maybe, perhaps'	362
		9.2.7	Other particles of probability and possibility	364
		9.2.8	kanard 'can't'	364
		9.2.9	, 3	365
		9.2.10	, E	367
		9.2.11	3	372
			wangk 'unexpectedly'	374
		9.2.13	Final remarks	375
	9.3	Enclitic		375
		9.3.1	-mad Emphatic (EMP)	376
		9.3.2	-mil 'regard, respect' (RES)	378
		9.3.3	-manjan 'only'	379
		9.3.4	-ilbi 'mistakenly believe' (MB)	382
		9.3.5	-ad Focus (FOC)	383
	0.4	9.3.6	-aw Exclamative (EXC)	385
	9.4	Interjed		386
		9.4.1	ngii ~ yii 'yes'	386
		9.4.2	nyaa 'here! (take this)'	388
		9.4.3	kaa 'give!'	388
		9.4.4	juu 'alright, OK'	389
		9.4.5	kadakur 'enough, finished'	389

		9.4.6	kala 'finish, enough'	390
		9.4.7	jurrk 'farewell'	391
		9.4.8	v	391
		9.4.9	nujaw 'yippee'	392
		9.4.10	waduy and wida 'oh!'	392
		9.4.11	jaa 'move over (please)'	392
			jini 'never mind'	392
		9.4.13	kaw kaw 'ho! come here!'	393
	9.5	Conjun	actions	393
		9.5.1	aa 'and'	393
			akal 'and'	395
		9.5.3	man 'but'	396
10	Nou	n phras	ses	398
	10.1	Introdu	actory remarks	398
	10.2		are of NPs	399
			The NP as a syntagm of words	399
		10.2.2	Role structure of the NP	402
			10.2.2.1 Deictic	405
			10.2.2.2 Quantifier	406
			10.2.2.3 Qualifier	406
			10.2.2.4 Entity	410
		1000	10.2.2.5 Predicator	410
		10.2.3	ε	413
			10.2.3.1 Positioning of PPs	414
			10.2.3.2 Event-related predication	415
			10.2.3.3 Position of oblique pronominals	416
			10.2.3.4 Position of numerals	416
		10.2.4	10.2.3.5 Concluding observations An alternative view of the structure of the NP	417
	10.2	10.2.4	sive NPs	418 420
		Negatio	425	
		_	ohrase complexes	427
	10.5	-	Extension	427
		10.5.1	10.5.1.1 Conjunction	428
			10.5.1.2 Disjunction of NPs	430
		10 5 2	Elaboration	431
		10.0.2	10.5.2.1 Identification	431
			10.5.2.2 Clarification	432
			10.5.2.3 Attribution	432
		10.5.3	Discontinuity of NP complexes	432
			Complexes of PPs and adverbials	433
11	Verl	phrase	es	435
	11.1	Introdu	action	435
			Nature of verb phrases	435
		11.1.2	Usage statistics	436

	11.2	The Eve	nt role		440
	11.3	Verb cla	ssification: the c	ompound verb construction	442
		11.3.1	Formal propertie	s of the CVC	442
			Structure of the l	•	446
				Nyulnyul PV-IV construction	448
	11.4	•	verbal categorie		450
		11.4.1	Monovalent cate		451
				ARNJ 'exchange, do to self' category	451
			11.4.1.2 -N 'be'		456
		11.10	11.4.1.3 -JID 'g		462
		11.4.2	Ambivalent cate		468
			11.4.2.1 -J 'say,		468
			11.4.2.2 -R 'pok		478
			11.4.2.3 -W 'giv 11.4.2.4 -NY 'g		484 490
			11.4.2.4 -N1 g 11.4.2.5 -M 'pu		490
			11.4.2.5 -W pu 11.4.2.6 -KAL '		508
			11.4.2.7 -KAL 11.4.2.7 -K 'car		512
	11 5	Second:	ry verbal categor		519
	11.5		-DAM 'hit'		519
			-JAL 'see'		522
			-JALK 'fall'		525
			-JARRIJARR 'a	rise, stand up'	528
			-JARRNGAR 's	<u>-</u>	530
		11.5.6	-KARD 'enter'	-	531
		11.5.7	-LAND 'sit (dov	'n)'	532
		11.5.8	-MUUR 'pour, s	pill'	534
			-NGANK 'speak	,	535
			-NGUL 'throw'		539
			-WANYJ 'climb	,	541
			al modification		542
	11.7	Conclud	ing remarks		544
12	Clau	sal synt	ıx		546
	12.1	Prelimi	ary remarks		546
	12.2	Verbles	clauses		549
		12.2.1	Minor clauses		549
		12.2.2	Presentative clau	ses	550
		12.2.3	Relational clause	S	552
				ting relational clauses	552
				1.1 Identifying	552
				1.2 Attributive	553
				1.3 Additional roles in elaborating relational clauses	
				ng relational clauses	557
				2.1 Oblique possessive relational clauses	558
				2.2 Comitative possessive relational clauses	559
				ing relational clauses	560
			12.2.3.	3.1 Purposive	560

			12.2.3.3.2	Locative	561
			12.2.3.3.3	Source	562
12.3		clauses			562
	12.3.1	Modes o	_		563
			-	sentative clauses	564
		12.3.1.2		tional clauses	565
				Elaborating 'being' clauses	565
				Extending 'being' clauses	567
			12.3.1.2.3	Enhancing 'being' clauses	568
				12.3.1.2.3.1 Purposive 'being' clauses	569
				12.3.1.2.3.2 Locative 'being' clauses	569 570
	1222	Evnorion	utial atmostur	12.3.1.2.3.3 Source 'being' clauses	57(57(
	12.3.2	_	Experientia	e of verbal clauses	571
			-	y classification of Nyulnyul situation clauses	575
		12.3.2.2	-	Problem cases	576
				Intransitive clauses	577
				The quasi-transitive construction	579
				Medio-active clauses	579
				Middle clauses	582
				Transitive clauses	585
				Ditransitive clauses	587
				Concluding remarks	589
		12.3.2.3		ar experiential roles	590
				Non-nuclear Mediums	590
			12.3.2.3.2	Non-nuclear Agent	591
		12.3.2.4		ative construction	591
				Locative applicative	592
			12.3.2.4.2	Benefactive applicative	594
			12.3.2.4.3	Comitative applicative	595
			12.3.2.4.4	Instrumental applicative	596
			12.3.2.4.5	Problem cases	597
12.4	-	•		verbal clauses	598
	12.4.1	Elaborati			598
			Identificati		598
		12.4.1.2	Attribution		599
				Descriptive secondary predicates	600
			12.4.1.2.2		602
	10.40		Resultative		602
	12.4.2	Extensio			603
			Accompan	iment	603
			Privative		605
			Instrument		605
		12.4.2.4	_	ossession constructions	606
			12.4.2.4.1	External possession in situation clauses	606
				12.4.2.4.1.1 Identically marked EPCs	606
			12 4 2 4 2	12.4.2.4.1.2 Differently marked EPCs External possession in other clause types	608 610

		12.4.3	Enhance	ment			611
			12.4.3.1	Spatial			611
				12.4.3.1.1	Location		612
				12.4.3.1.2	Direction		613
				12.4.3.1.3	Extent		614
				12.4.3.1.4	Intermediate	path	615
			12.4.3.2	Temporal			615
				12.4.3.2.1	Temporal lo	cation	615
				12.4.3.2.2	Temporal ex	tent	617
			12.4.3.3	Environme	ental circumst	ance	617
			12.4.3.4	Cause			618
			12.4.3.5	Purpose			618
			12.4.3.6	Involveme	nt		619
	12.5			dification o			619
		12.5.1	Rhetoric	al modificat	tion		620
			12.5.1.1	Polarity			621
					_	verbal situation clauses	621
				12.5.1.1.2	_	non-situation clauses	623
						Negation in elaborating clauses	623
						Negation in extending clauses	623
						Negation of presentative clauses	625
				•	modification		626
				Belief mod			627
				-	n modification	n	630
	10 -			nary modifi			631
				hematisatio	n		632
	12.7		ation orga	nisation			638
			Ellipsis	. , ,	CNI 1	1	638
					e of Nyulnyul	ciauses	639
	12.0		Disconti nite clause	nuous NPs			643 645
	12.0	NOII-III	iite Ciause	es			
13	Com	iplex se	ntence co	nstructions	5		649
				nplex senten	ce construction	ons	649
		Embed					650
	13.3		lency rela				651
		13.3.1			ons consisting	g of finite clauses	652
				Extension			653
				Elaboration			655
			13.3.1.3	Enhancem			657
					Spatial enha		657
					Temporal en		657
					Manner enha		658
					Conditional		658
			10.0 : :			nal enhancement	658
		1000		-	significance of	· ·	659
		13.3.2	• •			ng of finite clauses	660
			13.3.2.1	Enhancem	ent		661

		13.3.2.1.1	-uk LOC		661
			13.3.2.1.1.1	Spatial location	662
			13.3.2.1.1.2	Temporal location	662
			13.3.2.1.1.3	-	663
			13.3.2.1.1.4	Reason	663
		13.3.2.1.2	-karr TEM		663
			13.3.2.1.2.1	Temporal	663
			13.3.2.1.2.2	-	665
			13.3.2.1.2.3	Apprehensional	666
		13.3.2.1.3	-ngirr SEM		666
			-kung ABL3		667
		13.3.2.1.5	-djer SUB		667
			13.3.2.1.5.1	Temporal	667
			13.3.2.1.5.2	Reason	668
		13.3.2.1.6	-ang APP		668
		13.3.2.2 Elaboration	n		670
	13.3.3	Paratactic constructi	ons containing	g a non-finite dependent clause	671
		13.3.3.1 Attribution	1		672
		13.3.3.2 Enhancem	ent		673
	13.3.4	Hypotactic construc	tions involving	g a non-finite dependent clause	673
		13.3.4.1 -uk LOC			674
		13.3.4.2 <i>-ung</i> ALL ₁			674
		13.3.4.3 <i>-jun</i> ABL ₁			675
		13.3.4.4 -ang APP			675
	13.3.5	Concluding remarks			675
13.4	Conjug	gational relationships			679
	13.4.1	Framing and quotati	on		679
		13.4.1.1 Reported s	peech		681
		13.4.1.1.1	Grammar and	l semantics of reported speech	681
		13.4.1.1.2	Narrative fun	ctions of reported speech	690
		13.4.1.2 Reported t	houghts		695
	13.4.2	Complementation			697
		13.4.2.1 Emotional	complements		698
		13.4.2.2 Epistemic	complements		702
		13.4.2.3 Concluding	g remark		704
			Volume 2		
Abbi	reviation	ns and conventions			xix
Sam	ple text	S			705
,5 00	_		l availabla in N	Irmlormi	705
	Overview of textual material available in Nyulnyul Transcription conventions Text 1: Why the emu cannot fly				
		Emu myth	113		708 711
		Bushfoods			734
		Traditional practices			740
		Early days Nyulnyul			744
	IOAt J.	Larry adjorty anny ar	Poopio		/ 7 7

xviii Table of contents

Text 6: The lord's prayer	746
Nyulnyul-English wordlist	751
English-Nyulnyul finderlist	824
Appendix 1: List of bound grammatical morphemes	857
Appendix 2: Lexemes that occur in CVCs with -J 'say, do'	861
Appendix 3: Previous work on Nyulnyul	870
References	879
Index of names	899
Index of languages	903
General index	905

Abbreviations and conventions

Abbreviations follow the Leipzig Glossing Rules (http://www.eva.mpg.de/lingua/resources/glossing-rules.php), with a few additions and minor emendations. For the reader's convenience, below is provided a full listing of the abbreviations used in the book, including in glosses of example words and sentences (small capitals) as well as elsewhere in the text (ordinary capitals).

ABL	ablative	EMP	emphatic	
ACC	accusative	EN	enclitic	
ALL	allative	EPC	external possession	
APP	applicative		construction	
ASC	associative	EV	epenthetic vowel	
ASP	aspect	ERG	ergative	
AUG	augmented	EXC	exclamative	
BLC	Basic Locative Construction	FOC	focus	
C	consonant	FUT	future	
CC	consonant cluster	IC	immediate constituent	
CHAR	characteristic	IMC	identically marked construction	
CM	conjugation marker	IMP	imperfective	
COLL	collective	INF	infinitival morpheme	
COM	comitative	INS	instrumental	
CONT	continuous	INT	interrogative	
CR	connate role	IO	indirect object	
CRD	cardinal (pronoun)	IP	inflectional prefix to inflecting	
CVC	compound verb construction		verbs	
DAT	dative	IRR	irrealis	
DEF	definite	IV	inflecting verb	
DMC		LOC	locative	
	differently marked construction	MB mistakenly believed		
DW	dweller of niche	MD	mood	
d-word distributional word				

MIN	minimal	SS	present speech situation
N	nominal	SUB	subordinate
NOM	nominative	SVC	simple verb construction
NP	nominal phrase	TEM	temporal
NPF	nominal prefix	TNS	tense
NSF	nominal stem forming suffix	V	verb
NUM	number marker	V	vowel
O	object	VEN	verbal enclitic
OBL	oblique	VP	verb phrase
P	postposition	VPF	verb inflectional prefix
P	prefix	VSPF	verb stem forming prefix
PER	perlative	VSSF	verb stem forming suffix
PL	plural	1	first person
PM	possessum	1&2	first and second person category
PP	postpositional phrase	2	second person
PR	possessor	3	third person
PTR	participant role	-	morpheme boundary
PRO	pronominal	:	length (for vowels)
PRS	present	:	separates words in multi-word
PST	past		glosses of a single word
PV	preverb	•	syllable boundary
PVSF	preverb suffix	•	separates gloss components of portmanteau morphemes
p-word	phonological word	?	questionable or uncertain form
RDP	reduplicant	*	unacceptable or ungrammatical
REF	reflexive/reciprocal		form
REL	relator	*	reconstructed proto-form
RES	with respect to, regarding	,	stressed syllable
RS	inflecting verb root plus inflectional suffixes	/	boundary of tone unit
RSS	referent speech situation	//	phonemic representation
S	subject	[]	phonetic representation
	suffix	{}	morphophonemic
S	semblative		representation
SEM SG		()	optional element
	semiotic grammar state-of-affairs		gloss
SoA	state-of-affairs	,	explanation of reference of term

\uparrow	embedding of previous unit in	=	elaboration
	following one	+	extension
\downarrow	embedding of following unit in	×	enhancement
	previous one	« »	framing (direct quotation)
\leftrightarrow	parataxis	< >	framing (indirect quotation)
\rightarrow	hypotaxis (arrowhead points to dependent)	<u><></u>	scope

In the representation and layout of example sentences the conventions of the Leipzig Glossing Rules are also by and large adhered to. The main divergences are the following.

First, to save space, the zero third person minimal accusative pronominal enclitic to inflecting verbs is not usually indicated, except where crucial to the discussion.

Second, in the representation of examples from old sources, a four line layout is usually provided, with the first line given as per the original, including phonetic symbols and punctuation (elsewhere punctuation marks are not used in the representation of example sentences). The second line provides a transliteration into the orthography of this grammar, to the extent that this is possible. The remaining lines are as expected; where the free translation is given as per the original and this is not entirely appropriate, it is enclosed in double quote marks. Where words from old sources are cited in the text, they are also given in the phonetic representation of the source, and usually followed by a transliteration into the orthography of the grammar.

Third, portmanteau pronominal forms in the inflected forms of inflecting verbs are usually only partly glossed (again in order to save space, and reduce unwarranted complexity) for person, number and case; tense information is not specified unless relevant to the discussion. Thus, the prefix *yu*-indicates third person (number unmarked) nominative and future tense; the latter information is not usually specified.

Fourth, inflecting verb roots and stems are cited in all capitals (e.g. -JAL 'see'), following a convention I have employed in other writings on Nyulnyul and Kimberley languages. Labels for grammatical roles are given with an initial capital (as in Agent).

Sample texts

Overview of textual material available in Nyulnyul

As has already been indicated, very little textual material exists in Nyulnyul. The earliest known audio recording of Nyulnyul was made by Fr Bischofs at Beagle Bay in 1910. This was made on a wax cylinder, with a phonograph provided by the Berlin Phonogramm-Archiv. This short conversational piece represents the only known recording of fully fluent Nyulnyul involving more than a single speaker. Unfortunately, I have been unable to transcribe the text myself, in part due to the great rapidity of utterance compared to late twentieth century speech, and partly because of the poor quality of the recording.

The next known audio recording of a Nyulnyul text was not made until almost seventy years later, by Bronwyn Stokes, in 1979, by which time the language had become moribund. Stokes recorded two Nyulnyul texts, one a traditional myth (see Text 2), the other giving biographical information on a family (Text 5). A few years later I began work on the language and recorded a smallish number of texts: recall from Chapter 1 that the speaker I worked with experienced considerable difficulty in producing fluent texts in Nyulnyul, was disinclined to do so, and produced few; nevertheless, those she produced were surprisingly fluent, given her deafness. All of these later texts were monologic, and produced by speakers suffering from some disability.

A few written Nyulnyul texts are also available. The earliest are translations of religious liturgy, including the lord's prayer, Ave Maria, and the rosary. These date to the last decade of the nineteenth century, and were done by Trappist monks, most likely under the guidance of Fr Tachon, and almost certainly with the assistance of Felix Ngurdinybur. There are also some more recent translations of religious texts, some of which appear to be emendations of the earlier ones, that were made in the first half of the twentieth century; these include texts prepared by Fr Ernest Worms (see e.g. Worms n.d.) and Fr Francis Hügel (Huegel 1938–1971).

In the nineteenth century no attempts were made to record indigenous Nyulnyul texts spoken by native speakers. Interest in what Nyulnyul people had to say did not emerge until the twentieth century. Except for the single audio recording made by Fr Bischofs in 1910, all of the texts from the first half of the twentieth century were dictations of orally presented texts. These include a few mythological texts, including the bower bird story (Nekes & Worms 2006:308–310), and a myth about the moon (Capell 1949). There are also a small number of dictated myths in Jabirrjabirr, e.g. in Nekes & Worms (2006), as well as secular narratives about everyday topics.

From the second half of the twentieth century are two children's books, Torres & Williams (1987) and Charles (1993). These present transcriptions of myths about the crow and emu respectively. Both are edited versions of spoken texts, though the exact details of the process involved in the production of the former is not known.

English translations of Nyulnyul myths can also be found in a range of published and unpublished sources. For instance, Worms (1940) contains German versions of a few Nyulnyul myths; it is not known whether these were translated by Fr Worms from Nyulnyul originals, or originally told by Nyulnyul people in English. Williams (1999) also contains a number of narratives in English about Nyulnyul people; most likely these were originally narrated in English by Magdalene Williams.

Finally, there exists a relatively small corpus of Nyulnyul song texts. As well as the spoken piece referred to above, Fr Bischofs recorded some *nurlu* songs on his phonograph in 1910, as well as death-wailing by a group of women (see Koch 2000). These recordings were made in Beagle Bay Mission, though it is not certain whether the words of the songs are in Nyulnyul, Nyulnyul song language, or some other language or register. A quarter of a century later, in 1936 Fr Ernest Worms also recorded songs on a phonograph provided by the Berlin Phonogramm-Archiv (unfortunately, he recorded no spoken Nyulnyul). The recordings are of songs by persons of various groups, including Nyulnyul, though again what language or register they are actually in is not known. Moyle (1981/1988) contains a few songs recorded in Beagle Bay, probably in Jabirrjabirr; the companion booklet contains transcriptions of these songs. These recordings were made in the late 1960s; the main singers had died by the time of Bronwyn Stokes' and my fieldwork, and neither of us recorded any songs. (In my case, this was also partly due to Mary Carmel Charles' deafness: she claimed to have lost her ability to sing as a consequence.)

Transcriptions of a handful of songs are also available. Bates (1985:212–213) contains transcriptions of songs perhaps in Nyulnyul, and presumably dictated to Daisy Bates in the early 1900s. A.P. Elkin wrote down some songs dictated to him in Beagle Bay during his 1927–1928 field trip (Elkin 1927–1928); and Elkin (1933) contains words of two songs in Jabirrjabirr or Nyulnyul. Worms (1938) contains the words for at least one song possibly in Nyulnyul, as does Nekes & Worms (2006:345–347).

Transcription conventions

With the exception of the first two versions of the lord's prayer in Text 6, which are written translations composed by missionaries, all of the texts transcribed below were delivered orally by speakers of Nyulnyul.

The orally delivered texts satisfy a pattern common in Australia whereby narratives (among other genres) are declaimed in a sequence of short bursts of speech usually consisting of between one and three words, that are separated by relatively long pauses. For instance, the first minute of Albert Kelly's text (Text 2) consists of just over fourteen seconds of speech, that is, about one fifth of the narrative time is made up of speech, four fifths of silence. The longest pause is 3.54 seconds in duration; the shortest measured 0.35 seconds; the majority (59%) are over a second in duration. The longest stretch of speech in this first minute is only about 2.1 seconds in length, and the majority are half a second or less in duration.

Assuming these figures to be relatively representative of late twentieth century Nyulnyul, pausing is even longer in Nyulnyul than in nearby languages. Thus Belinda Ross' investigation of prosody in Warrwa narratives revealed that between 45% and 65% of fourteen texts was constituted by silence (Ross 2006:55). This difference is quite likely a result of speakers' disabilities: deafness, dementia, incomplete fluency, and/or sickness, which are likely to result in more and longer pauses motivated by speech processing. A

consequence is that it is more difficult to identify those pauses that are rhetorically motivated by narrative structure (e.g. Carroll 1996; McGregor 2005a; Ross 2006).

In the few Australian Aboriginal languages in which prosodic features of narrative speech have been studied in recent years—including Gooniyandi (McGregor 1990); Gunwinygu (Carroll 1996); and Warrwa (Ross 2006)—there is a connection between pause units and intonation units, stretches of speech which represent the domain over which intonation contours apply (see §12.7.2). The ends of intonation units tend to be marked by pauses, and they are made up of one or more pause units (McGregor 1990; Carroll 1996); in Warrwa, however, Ross (2006) finds a virtual coincidence of pause and intonation units. The situation in Nyulnyul appears to be comparable, with intonation units typically made up of one or more pause units, most frequently the latter.

Aside from these inter-word pauses, the texts contain a relatively small number of pauses within words. These are found mostly in morphologically complex words, primarily in inflecting verbs, and invariably occur at morpheme boundaries. There are also of course brief segments of silence occurring during the period of occlusion of stop consonants.

With the exception of the latter, pauses of all types and lengths are indicated in the transcriptions by single slashes. When the pause falls between words, the slash is separated by white space from the surrounding words; otherwise, there is no additional white space, and the entire form is represented as a word sized unit.

The texts are divided into numbered lines which represent sentence-like units. These are partly determined by prosodic features—the pause-units appear to fit together into larger intonation units—and partly by meaning. Due to inadequacies in the corpus, it is impossible to suggest viable criteria for these sentence-sized units. It could be that larger units corresponding to paragraphs also existed in traditional narratives. However, this has not been explored.

Another characteristic prosodic feature of narrative delivery in a number of Australian Aboriginal languages is the lengthening of vowels (e.g. McGregor 1990; Carroll 1996); what is different about Nyulnyul is that it is often not a word-final vowel that is lengthened (if present, these are typically short and lax), but rather the last word-medial vowel. Vowel lengthening can indicate various things, including iteration or prolongation of an event, that there is more to come, and to provide planning time for the next utterance. In the transcriptions, this non-phonemic lengthening of vowels is indicated by a colon (:) (phonemic vowel length is indicated by doubling of the vowel, as per the orthographic conventions described in §1.8). Where the vowel is prolonged much more than usual, an additional colon is employed, occasionally more; the extra lengths have not been measured instrumentally, and the number of colons is to be interpreted as no more than vaguely suggestive of the extra length.

Each text is represented in the standard three-line fashion employed elsewhere in the grammar. This is hardly an ideal mode of presentation, though it has advantages in the context of this description, as it provides clear representation of the texts, in a manner that facilitates testing of the claims of Volume 1.

Text 1: Why the emu cannot fly

Mary Carmel Charles

This text was recorded in Derby, on 31st May 1988, and was transcribed by myself on 6th June; parts of the written transcription were checked with the narrator. The transcription was revised and improved on a number of subsequent occasions.

It is a traditional myth explaining why the emu cannot fly; such myths are widespread across Australia (Maddock 1975). An edited compilation of this text together with the following version of the myth, narrated by the same person, appears as Charles (1993).

- (1) winin / aa: / kudarrawany / kujarr / i-ngi-rr-nganka/-an / emu and bustard two 3NOM-PST-AUG-speak-IMP 'The emu and the bustard spoke together.'
- (2) kudu / kudarrawany-ini / i-n-di-jin / winin / bust bustard-ERG 3NOM-CM-say-3MIN.OBL emu 'The bustard spoke to the emu.'
- (3) mm:h / aa:: / a:: a::: / aa:::: / nyi-marl kad wa-na-w / layib mm and um um um 2MIN-hand cut 2MIN.NOM-CM-give good wa-n-ji / 2MIN.NOM-CM-say fly 2MIN.NOM-CM-say 'Um, ... if you cut your wings, you will fly well.'
- (4) arri: / wara-ngirr / karrambal / dumbar wa-n-ji / kalb-kalb / not one-SEM bird fly 2MIN.NOM-CM-say up-up 'No, you'll be able to fly up in the sky like the other birds.'
- (5) arri wara-ngirr / yarrad /
 not one-SEM 1AUG.CRD
 'Not like one of us.'
- (6) aa: / orite / now / aa / winin-in / ningarr i-n-di-jin / wi / and alright now and emu-ERG truly 3NOM-CM-say-3MIN.OBL em kudarrawany / ni-marl / jub i-n-ji / bustard 3MIN-arm cut 3NOM-CM-say 'OK, now, the emu truly did it, and cut his wings.'
- (7) *i-ni-ny-jal* aa: / arri dumbar i-li-j /
 3MIN-CM-PST-see and not fly 3NOM-IRR-say *i-li-j-jin* / wara-ngirr / karrambal /
 3NOM-IRR-say-3MIN.OBL one-SEM bird
 'He looked, but he couldn't fly like the other birds.'
- (8) baan / i-n-in / banangkarr-uk / ruburr-inyirr / thus 3MIN-be-PRS today-LOC short-COM 'The bird now today has short wings like this.'

- (9) aa:: / [laughter] / ni-marl / his arm / arri dumbar i-li-j /
 and 3MIN-arm his arm not fly 3NOM-IRR-say
 kalbi / kalbi / bilay /
 up up again
 'Um, because of his wings, he can't fly up in the air again.'
- (10) baan i-n-in / judin / banangkarr-uk / thus 3NOM-be-PRS straight today-LOC 'He is like that these days.'
- (11) well / junk aa marriny i-jid-in / arriyangkang ni-marl / well run and walk 3NOM-go-PRS nothing 3MIN-arm wara-ngirr karrambal / one-SEM bird 'Well, he runs and walks, without wings, like the other birds.'

Second version

Mary Carmel Charles

The following version of the emu myth was delivered to me on 1st September 1992. I had asked the speaker to fill in some gaps in the previous version she told me, in order to make a story more suitable for publication (see Charles 1993). I was given first the story in English, and then in Nyulnyul.

- (12) winin / winin / bur jin / kurrwal / emu emu country 3MIN.OBL sky 'The emu's country used to be in the sky.'
- (13) kalb dumbar i-n-ny-an kalba-kalb / up fly 3NOM-CM-get-IMP up-up 'He used to fly up high.'
- (14) warang-in / karrambal / mungurr i-ngi-rr-jal-an / others-ERG bird jealous 3NOM-PST-AUG-see-IMP 'The other birds were jealous of it.'
- (15) nyi-marl jub wa-nyu / i-ngi-rri-j-jin /
 2MIN-arm chop 2MIN.NOM-get 3NOM-PST-AUG-say-3MIN.OBL
 'They told him to chop his wings off.'
- orite / i-n-di-jirr / karrambal / warang karrambal / alright 3NOM-CM-say-3AUG-OBL bird others bird jub wa-rri-ny nga-marl / cut 2NOM-AUG-get 1MIN-arm 'He told the other birds "You can chop off my wings."

- (17) orite / jub i-ngi-rr-i-ny-an / ni-marl / jin winin / alright cut 3NOM-PST-AUG-CM-get-IMP 3MIN-arm 3MIN.OBL emu 'Alright, they chopped his wings.'
- (18) *i-ni-wirrik-an* / *dumbar-ung* / *arri dumbar i-li-ny-an bilay* / 3NOM-CM-try-IMP fly-ALL₁ not fly 3NOM-IRR-get-IMP again *kaard i-nga-n bur-uk* / *warinyjirr-uk bur* / still 3NOM-PST-be ground-LOC one-LOC place 'He tried to fly, but couldn't any more; he had to stay on the ground in one place.'
- (19) *junk-manjan i-jid-in aa marriny / judiny /* run-only 3NOM-go-PRS and walk straight 'He just runs along and walks straight.'
- (20) arri dumbar i-li-ny bilay / judiny / baan i-n-in / junk not fly 3NOM-IRR-get again straight thus 3NOM-be-PRS run i-n-ny-in / aa marriny / 3NOM-CM-get-PRS and walk 'He can't fly again; straight like that, how he runs and walks.'
- (21) arri dumbar i-li-ny/ bilay wara-ngirr karrambal / kaard not fly 3NOM-IRR-get again one-SEM bird still i-n-in judiny / baan / 3NOM-be-PRS straight like:that 'He can't fly like the other birds; he still goes straight along like that.'
- (22) warang karrambal dumbar i-rr-i-ny-in br... / kinyingk arri others bird fly 3NOM-AUG-CM-get-PRS br... DEF not dumbar i-li-ny bilay / fly 3NOM-IRR-get again 'The other birds fly along; the emu can't fly any more.'
- (23) WM: *nhn* / WM: *nhn* / WM: 'Nhn.'
- (24) baan i-n-in judiny / thus 3NOM-be-PRS straight 'It's like that.'
- (25) mungurr i-ngi-rr-jal-an winin jealous 3NOM-PST-AUG-see-IMP emu 'They were jealous of the emu.'

Text 2: Emu myth

Albert Kelly

This third version of the emu myth was recorded by Bronwyn Stokes in Derby on four different occasions in September 1979. It was transcribed by Bronwyn Stokes. What follows is a revised and corrected version of Stokes' transcription, which indicates pauses more comprehensively and provides more grammatical details. I am grateful to Bronwyn Stokes for permission to reproduce the text here.

The spoken text itself is quite difficult to understand, due to the narrator's problems in articulation, and there remain a number of uncertainties concerning what he actually says. Although overall the mode of delivery sounds somewhat more natural than Mary Carmel Charles' delivery (in regard to prosodic features typical of Kimberley languages), in many places, especially in the last episode, the narrator adopts a sing-song style presentation more characteristic of the Catholic mass than Aboriginal mythology.

The contrast between this version and Text 1, the version told by Mary Carmel Charles is striking. Whereas Text 1 is short, and provides virtually no information other than what is absolutely central to the plot, Text 2 is extremely long, includes much information that is not central to the plot, and is highly repetitious, in places to the point of being tedious. Albert Kelly's version is particularly interesting because of the way in which elements of the Christian religion have been incorporated into it, especially in the fourth episode.

Bronwyn Stokes: Recording begun on 4th September 1979

- (1) wa-rr-likarr / wamburiny /
 2NOM.FUT-AUG-listen people
 'You people listen!'
- (2) yalarra-bur / maar-kung bur / kaard mar / wamburiny /
 first-place far-ABL3 place still far people
 i-nga-rr-a-kal / man a: arri wamburiny / karrambal /
 3NOM-PST-AUG-CM-wander but n not people bird
 'Long ago there was a very far away place where there lived people, but not quite people: they were birds.'
- (3) bindany aa murrul / i-nga-rra-n-an /
 big and little 3NOM-PST-AUG-be-IMP
 'Birds, big and small, lived there.'
- (4) kinyingk-kun / wamb-uk niw / a ni-kard / i-ngi-rri-j

 DEF-ABL₂ man-LOC ah um 3MIN-body 3NOM-PST-AUG-say kinyingk / karrambal /

 DEF bird

 'Then those birds took on men's form.'
- (5) man in / bindany in / kinyingk / winin / kalb i-nga-n-an-an / but this big this DEF emu up 3NOM-PST-be-IMP-IMP

karlkarr / bur-uk jin /widower place-LOC 3MIN.OBL'But this big one, the emu, he lived in the sky, by himself, in his camp.'

- (6) a kalb-kung jurrb i-n-j/ in-uk/ jimbin/ bur-uk jarrada/
 um up-ABL3 jump 3NOM-CM-say this-LOC down place-LOC 1AUG.OBL
 a bur-uk jin/ kudurrwayin irrkurd/
 um place-LOC 3MIN.OBL brolga all
 'He leapt down from up there, down into this land of ours ... into the country of the brolgas.'
- (7) a may-ung i-ny-jid / um food-ALL₁ 3NOM-PST-go 'The emu went for food.'
- (8) i-nga-mii-mii-jin / may / wil / aa mung / aa 3NOM-PST-look-look-3MIN.OBL food meat and honey and may bina / irrkurd-jirr / food this all-3AUG.OBL 'He looked around for food, meat and honey and vegetables.'
- (9) *i-n-nyu* / *kadakur* / *dumbar i-n-j bilay kalb* / 3NOM-CM-get finish fly 3NOM-CM-say again up *bur-ung jin* / place-ALL₁ 3MIN.OBL 'He got enough. He flew off again up to his camp.'
- (10) kinyingk-kun / jikir i-na-m/-irr jimbin bilay / DEF-ABL₂ watch 3NOM-CM-put/-3AUG.ACC down again 'Then he watched them again below.'
- (11) burrb-uk / i-nga-rr-a-kal / kudurrwayin irrkurd / dance-LOC 3NOM-PST-AUG-CM-wander brolga all 'They were dancing, all the brolgas.'
- (12) *i-ni-ny-jal-irr* / 3NOM-CM-PST-see-3AUG.ACC 'He watched them.'
- (13) arriangk / layib / layib burrb i-ngi-rri-j / kudurrwayin irrkurd / nothing good good dance 3NOM-PST-AUG-say brolga all 'Oh dear! They danced superbly, all those brolgas.'
- (14) kinyingk-kun / bilay / dumbar i-n-j / kalamb / jimbin / bur

 DEF-ABL₂ again fly 3NOM-CM-say hither down place
 bur-uk jin / kudurrwayin /

 place-LOC 3MIN.OBL brolga

 'Then the brolga flew off again in this direction, into his camp.'

- (15) wa-n-di-jan / nganyj / burrb / ku-rri-j-in

 2MIN.NOM-CM-say-1MIN.OBL INT dance 2AUG.NOM-AUG-say-PRS

 nganyj / burrb / ku-rri-j-in / layib /

 but dance 2AUG.NOM-AUG-say-PRS good

 "Tell me how do you dance so well?"
- (16) angk-uk / angk-uk / i-na-m-kurr / i-na-m-kurr
 what-LOC what-LOC 3NOM-CM-put-2AUG.ACC 3NOM-CM-put-2AUG.ACC
 kinyingk / burrb / layib/-mad ku-rri-j-in / aa: /
 DEF dance good-EMP 3NOM-AUG-say-PRS um
 "How did you come to be this way, how did it happen? You dance so well." Um.'
- (17) ni-marl jii / akal / jurrb wa-n-j juy-in /
 3MIN-hand 2MIN.OBL and jump 2MIN.NOM-CM-say 2MIN.CRD-ERG
 "So start flapping your wings."
- (18) ya-ngka-rri-jal-jii / aa / arri-nyirr-mad wa-n-j /
 1PL.NOM-FUT-AUG-see-2MIN.ACC um not-COM-EMP 2MIN.NOM-CM-say
 "We'll watch you; we'll see what you can do."
- (19) kinyingk-uk / burrb i-n-j / arri bindany ni-marl jin /
 DEF-LOC dance 3NOM-CM-say not big 3MIN-hand 3MIN.OBL
 'He started dancing there, but his arms were too long.'
- (20) arri / i-li-jid / kalamb / nyumulk / ak baani-ngin kalamb-ngin / not 3NOM-IRR-go hither thither over thus-ALL hither-ALL 'He couldn't go this way and that, around, back and forth.'
- (21) arriyangk / ni-marl jin / bindany / akal / wurrumbang bindany / nothing 3MIN-hand 3MIN.OBL big and many big ni-marl jin / 3MIN-hand 3MIN.OBL 'Alas! His arms were big, his arms were far too big.'
- (22) kinyingk-kun / i-ngi-rri-j-jin / kad

 DEF-ABL₂ 3NOM-PST-AUG-say-3MIN.OBL cut

 wa-na-r-jii / ni-marl /

 2MIN.NOM-CM-poke-2MIN.ACC 3MIN-hand

 'Then they said to him, "You get your arms cut!""
- (23) aa layib burrb wa-n-j / akal / yarrad-ijirr / um good dance 2MIN.NOM-CM-say and 1AUG.CRD-3AUG.OBL "Then you will dance as well as we do."
- (24) burrb wa-n-j layib yarrad-ijirr /
 dance 2MIN.NOM-CM-say good 1AUG.CRD-3AUG.OBL
 yarrad-ijirr /
 1AUG.CRD-3AUG.OBL
 "You will dance beautifully like us, just like us."

- (25) kinyingk-kun / ka / kad / i-nga-rra-m ni-marl jin / DEF-ABL₂ cu cut 3NOM-PST-AUG-put 3MIN-hand 3MIN.OBL 'Then they cut his arms.'
- (26) *i-nga-n-a:n* / *layib* / *layib i-n-j* / *ni-marl jin* / 3NOM-PST-be-IMP good good 3NOM-CM-say 3MIN-hand 3MIN.OBL *i-ny-jarrjarr* / 3NOM-PST-arise 'His arms healed and he got up again.'
- i-ngi-rri-j-jin / mi-jid / burrb-ung / 3NOM-PST-AUG-say-3MIN.OBL 2MIN.NOM-go dance-ALL₁ mi-jid / 2MIN.NOM-go
 'They said to him, "Go dancing, there you go!"
- (28) kinyingk-kun / jurrb i-n-j / aa: / jurrb / jurrb /
 DEF-ABL₂ jump 3NOM-CM-say and jump jump
 'Then he jumped up and leapt and leapt.'
- (29) kud kud i-n-j/ jurrb i-n-j/ bend bend 3NOM-CM-say jump 3NOM-CM-say 'He bent and leapt.'
- (30) kaliny i-n-j / kalaj / i-n-j / bilay / dodge 3NOM-CM-say shake:feathers 3NOM-CM-say again 'He dodged and shook his breast again.'
- (31) la:yib mi-n-ji kala / juy layib / good 2NOM-CM-say finish 2MIN.CRD good "'You did very well. You are good."'
- (32) waman yarrad / arri layib / different 1AUG.CRD not good ""Different from us, but good.""
- (33) juy-mad / mi / mi-n-in yalarra-bur / yarrad
 2MIN.CRD-EMP 2MIN.NOM 2MIN.NOM-be-PRS first-place 2AUG.CRD
 baybarra /
 behind
 "'You're ahead of us; we are behind.""
- (34) juy-mad/ yalarra-bur/ kinyingk/ burrb-nyirr jii juy/
 2MIN.CRD-EMP first-place DEF dance-COM 2MIN.OBL 2MIN.CRD
 "'You're in front, you with this dancing of yours!"'
- (35) kinyingk-kun / way i-ny-jid / kaard burrb-nyirr / bina / kunarr / kalamb / DEF-ABL₂ away 3NOM-PST-go still dance-COM this thither hither 'Then he went away, dancing there, this way and that.'

- (36) man / junk-ij ju / junk-nyirr / kinyingk / layib / but run-DAT ru run-COM DEF good "But how do you run?" He was excellent at running."
- (37) angk-inyirr / arri yarr-mungk / i-ngi-rri-j-jin / what-COM not 1AUG-know 3NOM-PST-AUG-say-3AUG.OBL "We don't know how to", they told him.'

Bronwyn Stokes: Recorded Derby, 6th September 1979

- (38) kinyingk-kun / an-uk / an-uk / nga-na-m /
 DEF-ABL₂ where-LOC where-LOC 1MIN.NOM-CM-put
 'Then where did I get up to?'
- (39) kinyingk-kun / an-uk nga-na-m / jabil / jay /
 DEF-ABL₂ where-LOC 1MIN.NOM-CM-put story 1&2MIN.CRD
 'To what point have I put down our story?'
- (40) kinyingk-kun / an-uk / nga-na-m / jabil jay /
 DEF-ABL2 where-LOC 1MIN.NOM-CM-put story 1&2MIN.CRD
 winin-ij /
 emu-DAT
 'To where then did I record our story about the emu?'
- (41) nga-ng-karlbarr / aa: aa nga-mungk / nga-mungk nga-mungk / 1MIN.NOM-PST-forget um um 1MIN-know 1MIN-know 1MIN-know 'I've forgotten ... I know!'
- (42) *junk i-n-j* / *aa jakud i-n-j* / *aa biik-uk jin* / run 3NOM-CM-say um return 3NOM-CM-say um shade-LOC 3MIN.OBL *bur-ung jin* / *i-ny-jid* / place-ALL₁ 3MIN.OBL 3NOM-PST-go 'He ran, he came back, he went to his camp, into the shade.'
- (43) *dub i-na-m-jin::* / *ju:ngk* / *i-ngi-* / *i-nga-mulk* / blow 3NOM-CM-put-3MIN.OBL fire 3NOM-PST-sleep 'He lit his fire. He slept.'
- (44) *aa:* / *may i-ni-ng-kid* / *aa ral* / *i-nga-mulk* / um food 3NOM-CM-PST-eat and soon 3NOM-PST-sleep 'He ate his food and went to sleep straight away.'
- (45) kinyingk-kun: / barrarang-karr / i-ny-jarrjarr /
 DEF-ABL₂ daybreak-TEM 3NOM-PST-arise
 'Then in the morning he got up.'
- (46) banad i- i-ni-ny-jal/ waman ba:rnd bur/ arri jin possible 3NOM 3NOM-CM-PST-see different sand place not 3MIN.OBL

bur / place

'He could see different sandy country, not his country.'

- (47) *i-nga-*/ *i-nga-walam-jin*/ *wamburiny*/ *irrkurd*/ 3NOM-PST 3NOM-PST-call:out-3MIN.OBL people all *karrambal-mad*/ bird-EMP
 'He called out to the people, they were all birds.'
- (48) i-nga-walam-jirr / angki bur-uk / angki bur-uk / 3NOM-PST-call:out-3AUG.OBL what place-LOC what place-LOC nga-n-in / 1MIN.NOM-be-PRS 'He called out to them, "What country am I in?"
- (49) juy / mi-n-in / yarrad-nyirr / arri mi-li-jid

 2MIN.CRD 2MIN.NOM-be-PRS 1AUG.CRD-COM not 2MIN.NOM-IRR-go kalb /

 up
 "You are here with us; you can't go back up there."
- (50) arri dumbar mi-li-j/ in-uk/ wamin/ yarrad-nyirr/
 not fly 2MIN.NOM-IRR-say this-LOC different 1AUG.CRD-COM
 judiny/
 straight
 "You can't fly away; you must stay here with us forever."
- (51) ngii / man / aa / angk-in / angk-in ka / kad i-na-m-jan
 yes but and who-ERG who-ERG cu cut 3NOM-CM-put-1MIN.OBL
 nhh / ni-marl /
 [laughter] 3MIN-hand
 "Yes, but who cut my arms?"
- (52) yarrad-mad/ kinyingk-mad/ burrb / liyan / mi-na-m
 1AUG.CRD-EMP-EMP DEF-EMP dance like 2MIN.NOM-CM-put
 akal / mi-n-di-jarrad /
 and 2MIN.NOM-CM-say-1AUG.OBL
 ""We did! You wanted it because you wanted to dance, so you told us!""
- (53) nga-mungk / kinyingk-kun / i-nga-ngalk / i-nga-ngalk / 1MIN-know DEF-ABL₂ 3NOM-PST-cry 3NOM-PST-cry "I remember!" Then he wept; he wept.'
- (54) arri-nyirr mi-n-j /
 not-COM 2MIN.NOM-CM-say
 ""What's the matter?""

- (55) nga-ngalk-in / bur nga-na-mangkard jan kalb / 1MIN.NOM-cry-PRS place 1MIN.NOM-CM-leave 1MIN.OBL up "'I'm weeping for my country I left up there."
- (56) nga-na-mangkard / kalb bur jan / arri nga-li-jid /
 1MIN.NOM-CM-leave up place 1MIN.OBL not 1MIN.NOM-IRR-go
 bilay / bur-ung jan kalb /
 again place-ALL₁ 1MIN.OBL up
 "I left my country up in the sky; I'll never go again to my country in the sky."
- (57) mi-n-m-in in bin-uk / yarrad-nyirr /
 2MIN.NOM-CM-put-PRS this this-LOC 1AUG.CRD-COM
 "'You'll have to stay right here, with us."'
- (58) ya-ngka-rra-w-jii / ma:y wi:l wu:l / uriny / 1PL.NOM-FUT-AUG-give-2MIN.ACC food meat water woman ""We'll give you food, meat, water and a wife.""
- (59) bina irrkurd-jirr / liyan wa-na-m-in /
 that all-3AUG.OBL like 2MIN.NOM-CM-put-PRS
 ya-ngka-rra-w-jii /
 1PL.NOM-FUT-AUG-give-2MIN.ACC
 "Everything you might want, we'll give to you."
- (60) aa-kung i-n-j/ liyan jin/ layib i-n-j/ arri and-ABL₃ 3NOM-CM-say like 3MIN.OBL good 3NOM-CM-say not bindany/ ma:n/ murrul/ big but little 'After that he changed. He felt better, not much but a little.'
- (61) kinyingk-kun / i-na-ngank / an-uk wamburiny jan / warrakan / DEF-ABL₂ 3NOM-CM-speak what-LOC people 1MIN.OBL eagle jalwal jan / cousin 1MIN.OBL

 'Then he spoke: "Where are my people? My cousins the eagles?""
- (62) bina i-rr-jid-in / dumbar i-rri-j-in kalb / there 3NOM-AUG-go-PRS fly 3NOM-AUG-say-PRS up "There they go, they're flying away up in the sky."
- (63) *i-rri-jal-in-jii* / *kaw wa-na-m-irr* / 3NOM-AUG-see-PRS-2MIN.ACC call 2MIN.NOM-CM-put-3AUG.ACC "They can see you. Call out to them!"
- (64) kinyingk-kun / karrambal / kudurrwayin irrkurd-jirr / i-nga-n-an /
 DEF-ABL₂ bird brolga all-3AUG.OBL 3NOM-PST-be-IMP
 yangan /
 near
 'Then he stayed near all those brolgas.'

- (65) kaw i-nga-rra-m/ warrakan/wurrumbang-mad/baab-nyirr
 call 3NOM-PST-AUG-put eagle many-EMP child-COM
 jirr/ kamard-nyirr ji:rr aa/nyungul-jun/
 3AUG.OBL mother's:mother-COM 3AUG.OBL and old-ABL₁
 'The eagles called out to him; there were plenty, with their children, their grandmothers and the old ones.'
- (66) kaard arri yarr-mungk / still not 1AUG-know "We don't understand."
- (67) kaw i-nga-rra-m / akal / in / i-n-m-in-kurr /
 call 3NOM-PST-AUG-put and this 3NOM-CM-put-PRS-2AUG.ACC
 maj jungkarr / waman /
 boss 2AUG.OBL different
 'So they called out, "He made you all a different boss!""
- (68) jukar jukar jukar irrakurr / i-nga-land / slow? slow? slow? all 3NOM-PST-sit 'He sat down.'
- (69) angk liyan mi-n-m-in / i-ngi-rri-j-jin / warragan / what like 2MIN.NOM-CM-put-PRS 3NOM-PST-AUG-say-3MIN.OBL eagle ""What do you want?" the eagles said to him."
- (70) arri nga-la-bakand in / arri nga-la-bakand in / not 1MIN.NOM-IRR-have this not 1MIN.NOM-IRR-have this "'I have nothing here, I haven't got anything.'"
- (71) arri nga-la-bakand in / arri / dumbar nga-li-j /
 not 1MIN.NOM-IRR-have this not fly 1MIN.NOM-IRR-say
 "I've got nothing here; I can't fly off."
- (72) in nga-n-in / nga-marl jan / murrul i-n-j /
 this 1MIN.NOM-be-PRS 1MIN-hand 1MIN.OBL little 3NOM-CM-say
 arri dumbar nga-li-j /
 not fly 1MIN.NOM-IRR-say
 "T'm stuck here; my arms have got short; I can't fly off."
- (73) man ju:y/ nyungul-jun juy/ kunarr mi-jid kalb/but 2MIN.CRD old-ABL₁ 2MIN.CRD thither 2MIN.NOM-go up "But you, old man, you can go from here up to there."
- (74) malbul jan / wa-na-k kalamb / in-uk / wamburiny-uk thing 1MIN.OBL 2MIN.NOM-CM-carry hither this-LOC people-LOC in-uk bur / this-LOC place "Bring my things to here, here, in this people's country."

- (75) man in arri kalb i / in bur / irri-jirr bur /
 but this not up th this country 3AUG.CRD-3AUG.OBL place
 kudurrwayin kirrkij aa / wuralil aa / jibalkurr aa / jindibirrbirr aa /
 brolga chicken:hawk and grey:jay and bird:type and willy:wagtail and
 'Just here, not up there, right here, their country, the brolgas, the chickenhawks and
 grey jays and jibalkurrs and willywagtails.'
- (76) man juy warrakan / juy mi-nga-n-an / ngay-nyirr / but 2MIN.CRD eagle 2MIN.CRD 2MIN.NOM-PST-be-IMP 1MIN.CRD-COM "But you, eagle, you used to stay with me."
- (77) nga-mungk baan / wi:l / ya-nga-rri-ny-an / may

 1MIN-know thus meat 1PL.NOM-PST-AUG-get-IMP food
 ya-nga-rri-ny-an / aa winyjid wanyj /

 1PL.NOM-PST-AUG-get-IMP and wife later
 "I know you well. We used to hunt animals, then later we would get vegetables."
- (78) ya-nga-rra-k / ina / kalb / bur-ung jarrad / 1PL.NOM-PST-AUG-carry this up place-ALL₁ 1AUG.OBL "We took them up there to our camp.""
- (79) man ba banangkarr / arri / arri / nga-li-jid / kalb / arri / dumbar but to today not not 1MIN.NOM-IRR-go up not fly nga-li-j / kalb / 1MIN.NOM-IRR-say up "But now, no, I won't go up there, I won't fly off up there."
- (80) riib nga-n-j / ni-marl jan / arriyangk / bad 1MIN.NOM-CM-say 3MIN-hand 1MIN.OBL nothing "I feel terrible; my arms are useless."
- (81) juy man nyungul / mi-jid / ka:lb / aa malbul jan /
 2MIN.CRD but old 2MIN.NOM-go up and things 1MIN.OBL
 wa-na-k / kalamb /
 2MIN.NOM-CM-carry hither
 "But you, old man, you can go up there and bring my things down here.""
- (82) kala layib / ya-ngka-rri-jid / finish good 1PL.NOM-FUT-AUG-go "Alright, lets go!"
- (83) nganyj wurrumbang mi-bakand-in /
 INT many 2MIN.NOM-have-PRS
 "How much have you got?""
- (84) malbul jin / arri wurrumbang / murrul-mad / things 3MIN.OBL not many little-EMP 'His things are not much, only a little.'

- (85) warang wa-n-nyu jan / jiib wa-n-nyu-jan /
 others 2MIN.NOM-CM-get 1MIN.OBL boomerang 2MIN.NOM-CM-get-1MIN.OBL
 "Get my other (things); get my boomerangs."
- (86) karrbin wa-n-nyu-jan / aa baal wa-n-nyu-jan / shield 2MIN.NOM-CM-get-1MIN.OBL and belt 2MIN.NOM-CM-get-1MIN.OBL "Bring my shield and my hair belt."
- (87) a: dub wa-na-m/ dub wa-na-m/ bur jan/
 um blow 2MIN.NOM-CM-put blow 2MIN.NOM-CM-put place 1MIN.OBL
 dub wa-na-m/ dub wa-na-m/
 blow 2MIN.NOM-CM-put blow 2MIN.NOM-CM-put
 "Set it alight; start it burning."
- (88) kaard / yu-ngka-bany / kalb / bur jan / kaard yu-ngka-bany / still 3NOM-FUT-finish up place 1MIN.OBL still 3NOM-FUT-finish arriyangk / nothing "'My camp up there is to be wiped out, destroyed, nothing to remain."'
- (89) man kurr / ina wa-rri-n / nga ngay-ung / yangan / but 2AUG.CRD this 2AUG.NOM-AUG-be 1MIN 1MIN.CRD-ALL₁ near "But you all stay here close to me."
- (90) wa-n-jal bur jan / a: / wa-n-nyu jan /
 2MIN.NOM-CM-see place 1MIN.OBL um 2MIN.NOM-CM-get 1MIN.OBL
 wi:l /
 meat
 "You can see my camp. You will get my meat."
- (91) *a arri mi-li-jid / wil kanard mi-li-jid wil-ung* um not 2MIN.NOM-IRR-go meat cannot 2MIN.NOM-IRR-go meat-ALL₁ *juy-in /* 2MIN.CRD-ERG "'You won't go for meat, you won't be able to go for meat."'
- (92) kadakur i-m-bany-jii / ni-kard aa ni-marl / finished 3NOM-PST-finish-2MIN.OBL 3MIN-body and 3MIN-arm "That's quite finished with your body and arms."
- (93) man buub wa-n-kid/ bilabil wa-n-kid/ aa maarr but flower 2MIN.NOM-CM-eat leaf 2MIN.NOM-CM-eat and grass wa-n-kid/ aa wul wa-n-kid/
 2MIN.NOM-CM-eat and water 2MIN.NOM-CM-eat "But you will eat flowers, and eat leaves, and you'll eat grass, and drink water."
- (94) kala layib / irrkurd-jirr / finish good all-3AUG.OBL ""All right, all those things.""

- (95) man wil / mung / arriyangk / man wil mung arriyangk / but meat honey nothing but meat honey nothing "But not meat or honey, definitely no meat or honey!"
- (96) arri mi-li-kid / mi-li-kid /
 not 2MIN.NOM-IRR-eat 2MIN.NOM-IRR-eat
 "You won't be eating them, no, you won't."
- (97) *i-m-bany-jii* / *kala* / 3NOM-PST-finish-2MIN.OBL finish "They're quite finished for you."
- (98) man yarrad / warrakan / kaard / ya-ngka-rri-jid wil-ij
 but 1AUG.CRD eagle still 1PL.NOM-FUT-AUG-go meat-DAT
 jarrad / bu:rruk / minyaw / mangkirr barni / bina wil irrkurd-jirr /
 1AUG.OBL kangaroo cat small:goanna goanna that meat all-3AUG.OBL
 "But we eagles will go for our meat: kangaroo, cat, small goanna, goanna, all
 those animals."

Bronwyn Stokes: Continued 7th September 1979

- (99) bina irrkurd-jirr / kinyingk-kun / ya-ngka-rra-man
 that all-3AUG.OBL DEF-ABL₂ 1PL.NOM-FUT-AUG-le...
 ya-ngka-rra-mangkad-jii / ya-ngka-rra-mangkad-jii /
 1PL.NOM-FUT-AUG-leave-2MIN.ACC 1PL.NOM-FUT-AUG-leave-2MIN.ACC
 "All those things. Then we're going to leave you."
- (100) juy-mad / wa-n-in / ni-malkang / 2MIN.CRD-EMP 2MIN.NOM-be-PRS 3MIN-self "You are going to stop here alone."
- (101) man yarrad / ya-ngka-rra-jal-jii / akal / dumbar but 1AUG.CRD 1PL.NOM-FUT-AUG-see-2AUG.ACC and fly ya-ngka-rri-j / bina kalb / 1AUG.NOM-FUT-AUG-say that up "But we'll be able to see you, when we fly off up there into the sky."
- (102) ya-ngka-rra-miimii / wil jarrad / man / juy / arri nyi-mungk / 1PL.NOM-FUT-AUG-seek meat 1AUG.OBL but 2MIN.CRD not 2MIN-believe "We'll be able to hunt our meat, but you, you can't."
- (103) wurrumbang / jii may ina i-n-in: rambak niyalbun many 2MIN.OBL food this 3NOM-be-PRS bush:potato bush:fruit kajanangurr / tuber "There's plenty of your food here—bush potato, bush fruit, and bulbs."

- (104) *aa buub bina / irrkurd-jirr / i-rr-ø-in-mad /* and flower that all-3AUG.OBL 3NOM-AUG-be-PRS-EMP "And there are flowers there and all those things."
- (105) niyamarr-uk / akal / aa kalanganyj/-uk i-rr-ø-in / hilly:country-LOC and um plain-LOC 3NOM-AUG-be-PRS "They're on the hillside and the plain."
- (106) kinyingk may jii wa-n-kid banangkarr /
 DEF food 2MIN.OBL 2MIN.NOM-CM-eat today
 "Those are your foods you will eat now."
- (107) arri mi-li-kid / ya-nga-rri-j-jii / arri
 not 2MIN.NOM-IRR-eat 1PL.NOM-PST-AUG-say-2AUG.OBL not
 mi-li-kid wil / mung irrkurd-jirr / man kinyingk
 2MIN.NOM-IRR-eat meat honey all-3AUG.OBL but DEF
 jarrad-ijirr /
 1AUG.CRD-EMP
 "You won't be eating, we've already told you, you won't be eating meat, honey,
 their foods, but these **our** foods.""
- (108) man ju:y/ wa-n-kid/ wul/ aa buub/ bilabil/ aa but 2MIN.CRD 2MIN.NOM-CM-eat water and flower leaf and bilkiny/ rambak/ bush:bulb bush:potato
 - "But you will drink water and eat flowers and leaves, bush bulbs and potatoes."
- (109) nga-n-di-jii muj / nyi-mungk baan / 1MIN.NOM-CM-say-2MIN.OBL already 2MIN-believe thus "I've told you already; you know quite well."
- (110) kinyingk / may jii / wa-n-kid banangkarr /
 DEF food 2MIN.OBL 2MIN.NOM-CM-eat today
 "'You're going to eat these foods now."
- (111) akal juy arri mi-li-jid / wil-ung / and 2MIN.CRD not 2MIN.NOM-IRR-go meat-ALL₁ "So you won't be going for meat."
- (112) arri: / mi-li-miimii wil / ni-marl jii arriyangk / not 2MIN.NOM-IRR-seek meat 3MIN-arm 2MIN.OBL nothing "'You won't hunt meat; your arms are useless."'
- (113) naabin i-n-j / murrul / naabin / arri mi-li-jid / short 3NOM-CM-say little short not 2MIN.NOM-IRR-go "They've become short, tiny, not long enough; you can't go."
- (114) man / yarrad / nalma/-kung jarrad / riib / but 1AUG.CRD head-ABL₃ 1AUG.OBL bad

ya-nga-rri-j-jin / juy-ij / 1PL.NOM-PST-AUG-say-3MIN.OBL 2MIN.CRD-DAT "But we've told you the bad news on our minds."

- man mi-likarr/ (115)but 2min.nom-listen "So listen!"
- (116)ya-rri-j-in-jii / arri mi-la-ngalk juy / 1PL.NOM-AUG-say-PRS-2MIN.OBL not 2MIN.NOM-IRR-cry 2MIN.CRD "We're telling you, don't weep!"
- (117)arri yubul mi-li-j/ not sick 2MIN.NOM-IRR-say "You won't get miserable."
- juy / (118)ya-rri-j-in-jii 1PL.NOM-AUG-say-PRS-2MIN.OBL 2MIN.CRD ya-ngka-rr-a-w-jii / uriny / 1PL.NOM-FUT-AUG-CM-give-2MIN.ACC woman "We're telling you, we'll give you a wife."
- (119)layib-mad / yu-ngka-m-jii / kinyingk-nyirr / good-EMP 3NOM-FUT-put-2MIN.ACC DEF-COM "It will be good for you with her."
- (120)kinyingk-kun warr-kaj *wa-n-j* / may-ung um DEF-ABL₂ hunt-CONT 2MIN.NOM-CM-say food-ALL₁ jii / wul-ij jii / 2MIN.OBL water-DAT 2MIN.OBL "Then you will go hunting for your food, and your water."
- (121)kaard / maar / mi-jid / mi-li-jid-mad / uriny-nyirr aa um still 2MIN.NOM-go 2MIN.NOM-IRR-go-EMP woman-COM far jii / 2MIN.OBL "You would have to go a long way, but with your wife, you won't need to go far."
- (122)bur wa-na-m jii / bina / aa and place 2MIN.NOM-CM-put 2MIN.OBL that "And you will make your camp in that place."
- maarr / aa buub / aa (123)may bilkiny irrkurd-jirr / and flower and food bush:bulb all-3AUG.OBL grass kanjun / wa-n-nyu nga-n-d-in-jii / 1MIN.NOM-CM-say-PRS-2MIN.OBL that:time 2MIN.NOM-CM-get "Then I tell you, you will collect grass and flowers and vegetables and bush bulbs, all those things"

- (124)wa-na-k/ kalamb / bindany bur-uk jii / aa and 2MIN.NOM-CM-carry hither big place-LOC 2MIN.OBL yangan / kudurrwayin irrkurd-uk / a: warrbil-uk/ aa / near brolga all-LOC um diver:duck-LOC and jalinymarr / lililil / pelican bird:type "And bring them to there, in your big camp nearby, in the place of all the brolgas, the diver ducks, and the pelicans and the jabirus."
- (125)bin-uk / mi-n-in / wariny-mad / warinyirr / kamard / mother's:mother this-LOC 2MIN.NOM-be-PRS one-EMP one kinyingk-uk uriny-ij/ jalwal jii/ aa malb jii / cousin 2MIN.OBL and wife's:brother 2MIN.OBL DEF-LOC woman-DAT wamburiny-uk / jin / 3MIN.OBL people-LOC "You're sitting here staying here with the family: your grandmother, your cousins, and your WB, there among our wife's people."

Bronwyn Stokes: Continued 11th September 1979, Derby

- (126) an-uk ya-nga-rri-kal / ya-nga-rra-n-an / what-LOC 1PL.NOM-PST-AUG-wander 1PL.NOM-PST-AUG-be-PRS mi-land-in / 2MIN.NOM-sit-PRS 'Where were we? Where did we stop? Where are you up to?'
- (127) ngii / nga-mungk /
 yes 1MIN-know
 'Yes ... I know.'
- (128) kinyingk-in / winin / jakud i-n-j / bur-ung jin / may-nyirr

 DEF-ERG emu return 3NOM-CM-say place-ALL₁ 3MIN.OBL food-COM

 jin /

 3MIN.OBL

 'That emu returned to his camp with his food.'
- (129) aa / kinyingk-kun / i-na-w-irr / wamburiny / nyaa / um DEF-ABL₂ 3NOM-CM-give-3AUG.ACC people here i-n-d-in i-n-d-in-jirr / 3NOM-CM-say-PRS 3NOM-CM-say-PRS-3AUG.OBL 'Then he gave it to those people; "here", he says to them.'
- (130) nyaa / may / wa-n-k / juy-jirr / ngay-ukun /
 here food 2MIN.NOM-CM-carry 2MIN.CRD-3AUG.OBL 1MIN.CRD-ABL₂
 ngay-uk / ngay-ukung /
 1MIN.CRD-LOC 1MIN.CRD-ABL₂
 "'Here! You take food for yourself from what I've got."'

- (131) *aa bina:* / ral / bur-ung jin / i-ny-jid / and that right:away place-ALL₁ 3MIN.OBL 3NOM-PST-go 'And he immediately went over there to his camp.'
- (132) aa: / i-na-lurr / jungk / aa i-m-bid / may jin /
 and 3NOM-CM-light fire and 3NOM-PST-cook food 3MIN.OBL
 bilkiny / rambak / kajanangurr / aa / muj-mad / i-m-bid /
 bush:bulb bush:potato tuber:type and already-EMP 3NOM-PST-cook
 'He lit a fire and his food cooked; the bush bulbs, bush potatoes and tubers were
 now cooked.'
- (133) aa / ral i-ni-ng-kid / kinyingk-u:k / kalamb nyumulk / i-ny-jid / and soon 3NOM-CM-PST-eat DEF-LOC hither thither 3NOM-PST-go uriny-nyirr jin / woman-COM 3MIN.OBL 'And he ate immediately. In that place he went to and fro with his wife.'
- (134) kaard may-ung / i-nga-rr-miimii-jin / still food-ALL₁ 3NOM-PST-AUG-looked-3MIN.OBL 'So they looked for food.'
- (135) aa bila:y / kalamb nyumulk / kalamb nyumulk / bur-ung jirr and again hither thither hither thither place-ALL₁ 3AUG.CRD bilay / again
 'And again, to and fro, to and fro again in their camp.'
- (136) *i-nga-rra-mur* / *aa nul i-nga-rra-m*/-*jin* / 3NOM-PST-AUG-spill and corroboree 3NOM-PST-AUG-put-3MIN.OBL 'They washed and put on a corroboree.'
- (137) aa burrb i-ngi-rri-j-jin / and dance 3NOM-PST-AUG-say-3MIN.OBL 'And they danced a corroboree.'
- (138) kinyingk war winin / ral burrb i-n-j / yangan / yangan DEF other emu soon dance 3NOM-CM-say close close irrakur-uk / all-LOC 'That emu fellow had now got to dance right alongside them.'
- (139) aa: nul i-m-ba/ a: i-m-bany-jirr/ a: and corroboree 3NOM-PST-fini... um 3NOM-PST-finish-3AUG.OBL um kadakur/ bur-ung jirr/ i-ngi-rri-jid/ ral/ finish place-ALL₁ 3AUG.OBL 3NOM-PST-AUG-go soon 'When their corroboree was quite finished, they went straight to their camp.'

- (140) wiyarr i-ngi-rri-j/ burrb-kung / ral i-nga-rra-mulk / tired 3NOM-PST-AUG-say dance-ABL₃ soon 3NOM-PST-AUG-sleep 'They were tired from dancing, and soon they were asleep.'
- (141) aa kinyingk / winin war / barrarang-karr / bur-ukung i-ny-jarrjarr / and DEF emu one daybreak-TEM place-ABL₃ 3NOM-PST-arise 'And that emu fellow in the morning he got up from the camp.'
- (142) *aa* yu:bul i-n-j/ liyan jin/ alik i-n-an/ liyan and sick 3NOM-CM-say like 3MIN.OBL worry 3NOM-be-IMP like jin karlj i-n-an/ 3MIN.OBL miserable 3NOM-be-IMP 'He felt emotionally sick, he was miserable.'
- (143) *i-n-di-jin* / *i-n-di-jin* uriny jin /

 3NOM-CM-say-3MIN.OBL 3NOM-CM-say-3MIN.OBL woman 3MIN.OBL

 alik nga-n-j / liyan jan / alik ina

 worry 1MIN.NOM-CM-say like 1MIN.OBL worry this *i-n-m-in-ngay* /

 3NOM-CM-put-PRS-1MIN.ACC

 'He said to his wife, "I've become sick in spirit, it's made me miserable here."
- (144) kinyingk-uk bur-ung / jin-ung / i-ny-jid /
 DEF-LOC place-ALL₁ 3MIN.OBL-ALL₁ 3NOM-PST-go
 'Then she went to the medicine man's camp.'
- (145) jalngkangurr-uk / i-nga-miimii-jirr: / doctor-LOC 3NOM-PST-seek-3AUG.OBL 'She looked for them in the doctor's camp.'
- (146) kalamb kurr / kalamb kurr-aw / i-n-di-jirr / hither 2AUG.CRD hither 2AUG.CRD-EMP 3NOM-CM-say-3AUG.OBL "You come here, come here," she told them."
- (147) wamb ja:n yubul i-n-j/ aa yubul i-n-in/
 man 1MIN.OBL sick 3NOM-CM-say and sick 3NOM-be-PRS
 "'My husband has got sick and he's lying ill."'
- (148) layib wa-rra-m-in | layib wa-rra-m-in | good 2AUG.NOM-AUG-put-PRS | good 2AUG.NOM-AUG-put-PRS | jan | wa:mb | 1MIN.OBL | man | "You've got to make him better; you must cure my husband."
- (149) liyan nga-n-m-in / kanard / arri / i-li-jimb / like 1MIN.NOM-CM-put-PRS cannot not 3NOM-IRR-die "I love him; he mustn't die."

- (150) liyan nga-n-m-in / ningarri-??? / like 1MIN.NOM-CM-put-PRS true-??? "'I really love him."
- (151) kinyingk-kun / jalng i-nga-rra-w-jin /
 DEF-ABL₂ medicine 1NOM-PST-AUG-give-3MIN.OBL
 'Then they gave him medicine.'
- (152) *i-nga-rr-a-w-an-jin* / 3NOM-PST-AUG-CM-give-IMP-3MIN.OBL 'They gave it to him.'
- (153) baan / baan i-nga-rra-m-jin / aa way i-ngi-rri-jid / thus thus 3NOM-PST-AUG-put-3MIN.OBL and away 3NOM-PST-AUG-go 'They improved him, and went away.'
- (154) arriyangk / nothing 'But alas!'
- (155) yiik-in / ngarrij-in / i-n-dab / alik war/-mad winin / sick-ERG hard-ERG 3NOM-CM-hit worry other-EMP emu 'But a serious illness had struck that poor emu fellow.'
- (156) kinyingk-uk / i-n-di-jin uriny jin / a:rri

 DEF-LOC 3NOM-CM-say-3MIN.OBL woman 3MIN.OBL not

 nga-la-land / a:rri nga-la-land / in-uk bur /

 1MIN.NOM-IRR-sit not 1MIN.NOM-IRR-sit this-LOC place

 'Then he told his wife, "I can't stay; I can't stay in this country."
- (157) nga-mungk baan / nga-ngka-jimb /
 1MIN-know thus 1MIN.NOM-FUT-die
 "I know I will die."
- (158)kaard / nga-ngka-ma / nga-na-mangard-in-jii / kaard 1MIN.NOM-FUT-lea... 1MIN.NOM-CM-leave-PRS-2MIN.ACC still still mi-n-in / wa:mburiny-nyirr / jii: / kubuwal iii/ 2MIN.NOM-be-PRS people-COM 2MIN.OBL father 2min.obl jalwal jii/ marrir jii/ aa / jalangka / baaba-ning irrkurd / cousin 2MIN.OBL sister 2MIN.OBL and nephew child-PL "So I am leaving you; so you are among your people, your father, your cousins, your sisters, nieces and nephews, all the children."
- (159) kaard mi-n-in / still 2MIN.NOM-be-PRS "You are still with them."
- (160) ralard / nga-li-jimb /
 perhaps 1MIN.NOM-IRR-die
 "'I might die."

- (161) mi-n-in / nyi-mungk baan / 2MIN.NOM-be-PRS 2MIN-know thus "You are here; you know best."
- (162) ngii / i-n-di-jin / arri yarrad / man / iibal jii
 yes 3NOM-CM-say-3MIN.OBL not 1AUG.CRD but father 2MIN.OBL
 juy /
 2MIN.CRD
 "Yes," she said to him, "you won't be with us but with your father."
- (163) bina i-jid-in / that 3NOM-go-PRS "He's going there."
- (164) *mi-mii-in-jin* / 2MIN.NOM-look-PRS-3MIN.OBL "You are looking for him."
- (165) layib / wa-rr-ø-in / bina kalb / akal / mi-li-jimb / good 2AUG.NOM-AUG-be-PRS that up and 2MIN.NOM-IRR-die in-uk / this-LOC "You will all be better off up there, for you might die here."
- (166) kinyingk-uk / alik war / kinyingk-uk / bilay /
 DEF-LOC worry other DEF-LOC again
 'That poor fellow relapsed to his previous state.'
- (167) waalk / i-n-malinangk / sun 3NOM-CM-rise 'The sun rose.'
- (168) aa ral / alik war / i-ny-jimb / and now sorry other 3NOM-PST-die 'And now that poor fellow was dying.'
- (169) *i-n-di-jin uriny jin* / *jurrk* / 3NOM-CM-say-3MIN.OBL woman 3MIN.OBL farewell nga-na-mankard-in-jii banangkarr / 1MIN.NOM-CM-leave-PRS-2MIN.ACC today 'He said to his wife, "Goodbye, I'm leaving you now."
- (170) nga-ngka-jid / kalb / ral / bur-uk jan /
 1MIN.NOM-FUT-go up now place-LOC 1MIN.OBL
 "Soon I will go up into my country."
- (171) kinyingk-kun / kalb-kun / nga-ngka-jal-jii / kalamb: nyumulk / DEF-ABL₂ up-ABL₂ 1MIN.NOM-FUT-see-2MIN.ACC hither thither "Then from up there I will see you coming and going."

- (172) mi-li-jid-mad /
 2MIN.NOM-IRR-go-EMP
 "You can't go."
- (173) nga-ngka-jal-jii / kalb-ukun /
 1MIN.NOM-FUT-see-2MIN.ACC up-ABL₂
 "'I'll watch you from up there."'
- (174) layib / mi-n-in / a: / wamburiny-nyirr layib / mi-n-in / good 2MIN.NOM-be-PRS um people-COM good 2MIN.NOM-be-PRS "You are living happily with everyone; you are fine."
- (175) arri biil / mi-li-miimii-jin /
 not fight 2MIN.NOM-IRR-seek-3MIN.OBL
 "Don't go looking for fights."
- (176) arri / kaard layib / mi-n-in / wamburiny-nyirr jii /
 not still good 2MIN.NOM-be-PRS people-COM 2MIN.OBL
 juy /
 2MIN.CRD
 "No, you are still contented living among your people.""
- (177) liya:n-ij jirr/ aa liyan-ij jii juy/ jurrk/ like-DAT 3AUG.OBL and like-DAT 2MIN.OBL 2MIN.CRD farewell jurrk/ kala/ farewell finish "For their sake, and for yours, I finally say goodbye to you."
- (178) nga-jid-in / kala / 1MIN.NOM-go-PRS finish "'I'm really going."'
- (179) nga-n-mard-in-ji / jurrk / jurrk / 1MIN.NOM-CM-leave-PRS-2MIN.OBL farewell farewell "'I'm leaving you, goodbye, goodbye."
- (180) kaard / wa-na-r jan / ni-marl / mi-bakand /
 so 2MIN.NOM-CM-poke 1MIN.OBL 3MIN-hand 2MIN.NOM-hold
 yadiny /
 for:a:while
 "So hold my hand, keep it for a little while.""
- (181) kinyingk-kun / jarrbard i-nga-rra-m ral /
 DEF-ABL₂ lift 3NOM-PST-AUG-put soon 'After that they lifted him away.'
- (182) *ni-kard-nyirr jin* / *muj i-ny-jimb/-mad* / 3MIN-body-COM 3MIN.OBL already 3NOM-PST-die-EMP 'They lifted up his body, for he had already died.'

- (183) jarrbard i-nga-rra-m /
 lift 3NOM-PST-AUG-put
 'They lifted him.'
- (184) angk-in / arri yarr-mungk / what-ERG not 1AUG-know ""Who did it? We don't know.""
- (185) kaard nimarraj/-in / nimarraj-in i-nga-rra-k / way kalb / still shadow-ERG shadow-ERG 3NOM-PST-AUG-carry away up 'So the spirits, the spirits carried him up into the sky.'
- (186) *i-n-in-mad* / *bur-uk jin* / *i-nga-rra-k kalb* / 3NOM-be-PRS-EMP place-LOC 3MIN.OBL 3NOM-PST-AUG-carry above 'Now he's in his country; they took him up into the sky.'
- (187) kinyingk-mad nga-n-d-in-kurr /
 DEF-EMP 1MIN.NOM-CM-say-PRS-2AUG.ACC
 nga-n-d-in-jungkarr /
 1MIN.NOM-CM-say-PRS-2AUG.OBL
 'I'm telling it to you all now; I'm telling you all.'
- (188) ni-ma:rraj-in jin / waj i-nga-rra-k / kinyingk/-mad / 3MIN-shadow-ERG 3MIN.OBL away 3NOM-PST-AUG-carry DEF-EMP jalngkangurru/-in irrkurd / doctor-ERG all 'For they took away that one's spirit, all those medicine men.'
- (189) *aa::* dumbar i-ngi-rri-j/ kinyingk-nyirr/alik war/ um fly 3NOM-PST-AUG-say DEF-COM sorry other 'They flew off with him, poor fellow.'
- (190) bu:r-uk jin / i-nga-rra-m / place-LOC 3MIN.OBL 3NOM-PST-AUG-put 'They put him in his own camp.'
- (191) aa: dub / i-nga-rra-m / jungk / kalamb nyumulk kalb-mad / and blow 3NOM-PST-AUG-put fire hither thither up-EMP 'And they started a fire burning all over the sky.'
- (192) man kinyingk-u:k / i-nga-rri-jal / jimbin-kung / ka:lb / but DEF-LOC 3NOM-PST-AUG-see inside-ABL₃ up 'And so they could see up there in the sky from down below.'
- (193) *ni-kard jin bina:: i-n-in /*3MIN-body 3MIN.OBL that 3NOM-be-PRS 'His body is there.'

- (194) *i-nga-n-an* / *kalwar* / *kalawar* / 3NOM-PST-be-IMP clear clear 'He has stayed there; he's visible.'
- (195) alik war / i-nga-rra- / i-nga-rra-wala:m-jina / sorry other 3NOM-PST-AUG- 3NOM-PST-AUG-call:out-3MIN.OBL "Poor fellow!" they called out to him."
- (196) i-nga-rra-wala:m-jina / aa kaw 3NOM-PST-AUG-call:out-3MIN.OBL and call i-nga-rra-m-jina / jurrk jurrk 3NOM-PST-AUG-put-3MIN.OBL farewell farewell mi-na-mangard/-in-yarrad / judiny / 2MIN.NOM-CM-leave-PRS-1AUG.ACC straight 'They called out to him and shouted to him, "Goodbye, goodbye! You're leaving us forever."
- (197) judiny-kuk / jurrk / jurrk / wa-na-jal-yarrad / kalb-ukung / for:ever-LOC farewell farewell 2MIN.NOM-CM-see-1AUG.ACC up-ABL₃ "For ever and ever, goodbye, goodbye! You'll see us from up there."
- (198) la:yib / wa-na-m-in-yarrad /
 good 2MIN.NOM-CM-put-PRS-1AUG.ACC
 "You've got to look after us."
- (199) akal / yubul / ya-ngka-rra-kajarr / layib
 but sick 1PL.NOM-FUT-AUG-get:sick good
 wa-na-m-in-yarrad /
 2MIN.NOM-CM-put-PRS-1AUG.ACC
 "When we get sick, you must take care of us.""
- (200) arri: / mi-la-wurdum-yarrad / arriyangk / arriyangk / not 2MIN.NOM-IRR-mistreat-1AUG.ACC nothing nothing "Don't you treat us badly, don't do that to us, don't!"
- (201) kaard wa-na-jal-jarrad/
 so 2MIN.NOM-CM-see-1AUG.OBL
 "So you watch over us."
- (202) ma:y wa-na-w-yarrad / may bina irrkurd-jirr food 2MIN.NOM-CM-give-1AUG.ACC food that all-3AUG.OBL wurrumbang / aa wungur / wa-na-w-yarrad / wurrumbang / many and spring 2MIN.NOM-CM-give-1AUG.ACC many yarrad-ijirr/-ij / 1AUG.CRD-EMP-DAT "Give us food, plenty of those foods! And spring water, give us plenty for our needs!"

- (203) wumbun-mad bina: / wul wa-na-m-jarrad / yangan / permanent:water-EMP that water 2MIN.NOM-CM-put-1AUG.OBL near "'Put permanent water close by here for us."
- (204) kir: ya-ngka-rra-m bur: / aa wul ya-ngka-rra/-jal scrape 1PL.NOM-FUT-AUG-put place and water 1PL.NOM-FUT-AUG-see bina / juy-ij / that 2MIN.CRD-DAT "We will scrape the ground and we'll see water there from you."
- (205) liyan jii juy / kaard / mi-na-m-an /
 like 2MIN.OBL 2MIN.CRD still 2MIN.NOM-CM-put-IMP
 yarrad-ijirr/-mad /
 1AUG.CRD-EMP-EMP
 "You have shown your love for us."
- (206) aa ngank-uk i-nga-rra:-m jimbin-kung / and speak-LOC 3NOM-PST-AUG-put inside-ABL₃ 'And they spoke to him from below.'
- (207) kalb / bur i-nga-rri-jal-jin /
 up place 3NOM-PST-AUG-see-3MIN.OBL
 'They saw him up there in the camp.'
- (208) kinyingk-uk / bur maank i-n-j /
 DEF-LOC place dark 3NOM-CM-say
 'It got dark.'
- (209) waalk i-ng-kad / man / jungk dub-dub i-nga-rra-m / sun 3NOM-PST-enter but fire blow-blow 3NOM-PST-AUG-put 'The sun went down so they lit a fire.'
- (210) kaard / i-nga-n-an kalb / aa jimbin-kung banad still 3NOM-PST-be-IMP up and down-ABL3 possible i-nga-rri-jal kalb / 3NOM-PST-AUG-see up 'He still stayed up there and from below they could see him.'
- (211) bina i-n-in ni-kardi / jin / ni-kard jin that 3NOM-be-PRS 3MIN-body 3MIN.OBL 3MIN-body 3MIN.OBL bina: i-nga-n-an / that 3NOM-PST-be-IMP 'His body is up there in the sky; he has stayed up there.'
- (212) akal banangkarr-uk / kinyingk-uk / aa / ral banangkarr-uk / but today-LOC DEF-LOC and right:away today-LOC banangkarr-uk / i-n-in-mad / today-LOC 3NOM-be-PRS-EMP 'Until the present day. He's still there, even now, today.'

- (213) wa-rri-jal / mangari-karr / kalb bina / i-n-in / 2AUG.NOM-AUG-see always-TEM up that 3NOM-be-PRS 'You can always see him sitting up there.'
- (214) bila:y / jurrk / i-nga-rri-j-jin / jurrk / jurrk iibal / again farewell 3NOM-PST-AUG-say-3MIN.OBL farewell farewell father jurrk jam / kamard jurrk / farewell mother's:father mother's:mother farewell 'Again they said goodbye to him, "Goodbye, goodbye father! Goodbye maternal grandfather. Goodbye maternal grandmother!"
- (215) karlud / jibii / jurrk / jalwal / marrir jan
 father's:father father's:mother farewell cousin sister 1MIN.OBL
 juy / yalirr jan juy /
 2MIN.CRD wife's:mother 1MIN.OBL 2MIN.CRD
 "Goodbye paternal grandfather, and paternal grandmother, cousins, you my sister and you my mother-in-law!"
- (216) *i-ngi-rri-j-jin* / *jurrk* / 3NOM-PST-AUG-say-3MIN.OBL farewell 'They said to him, "Farewell."
- (217) kaard mi-n-in / layib kalb / bur-uk jii / jurrk / still 2MIN.NOM-be-PRS good up place-LOC 2MIN.OBL farewell "So you are living happily up there in your country; farewell."
- (218) kinyingk-uk / i-nga-n-an kalb / akal banangkarr waalk jin /
 DEF-LOC 3NOM-PST-be-IMP up and today sun 3MIN.OBL
 'He has stayed up there in the sky, so now daylight is from him.'
- (219) wangalang / a: wamburiny / majangkul / jirr waalk banangkarr / young:man um people single:person 3AUG.OBL sun today 'The young men, the people and the single ones have their light now.'
- (220) kaard / i-rri-jal-in/-jin / still 3NOM-AUG-see-PRS-3MIN.OBL 'They can still see him.'
- (221) *i-ng-kad kalb* / *ngimbirr-mad* / 3NOM-PST-enter up night-EMP 'When he has gone out of sight up there, then it is night.'
- (222) aa kinyingk-uk / bur / kalb / dub/-dub-mad i-n-in / and DEF-LOC place up blow-blow-EMP 3NOM-be-PRS 'And in that country up there, it's still blazing.'
- (223) kaard / kinyingk-kun / kanjun-kun bur / akal / kalb i-nga-rra-k / still DEF-ABL₂ that:time-ABL₂ place but up 3NOM-PST-AUG-carry

aa dub i-nga-rra-m bur jin / and blow 3NOM-PST-AUG-put place 3MIN.OBL 'From then, from that time when they took him up to his camp and set his camp on fire.'

- (224) aa i-nga-rri-jal-in-jin / bur / layib / and 3NOM-PST-AUG-see-PRS-3MIN.OBL place good 'And they saw his camp clearly.'
- (225) *ni-kard jin* / *kaard i-n-in* / *man* / 3MIN-body 3MIN.OBL still 3NOM-be-PRS but 'But his body is still there.'
- (226) in-ukung bur kalamb / wamburiny-in / nga-n-di-jungkarr /
 DEF-ABL₃ place hither people-ERG 1MIN.NOM-CM-say-2AUG.OBL
 'From this country came people, I'm telling you!'
- (227) wamburiny jin / wangalang irrkurd / majangkul irrkurd / people 3MIN.OBL young:man all single:person all baaba-ning irrkurd / child-COLL all 'All the people: all the young men, all the single people, all the children.'
- (228) kaard i-rri-jal-in /
 still 3NOM-AUG-see-PRS
 'So they can see.'
- (229) kalb / i-n-in-mad / winin kinyingk / ni-kard jin / above 3NOM-be-PRS-EMP emu DEF 3MIN-body 3MIN.OBL 'It's up there, still, that emu's body.'
- (230) kadakur / finish 'The end.'

Text 3: Bushfoods

Mary Carmel Charles

The following textlets were narrated by Mary Carmel Charles on 9th June 1988. They were elicited from the photographs in the illustrated booklet *Mayi: some bush foods of Dampierland* (Lands, *et al.* 1987). There was a considerable amount of discussion in English throughout the interaction, including reading from the booklet. Below is the main Nyulnyul text, excluding the bulk of the surrounding discussion in English; [...] indicates places where discussion occurred.

(1) makabala / [...]

Marsdenia:viridiflora

'A type of vine.'

- (2) makabal / wamburiny-in / n: / i-ngi-rr-wid-an Marsdenia:viridiflora people-ERG nn 3NOM-PST-AUG-eat-IMP milirrkarr / before 'People used to eat Marsdenia viridiflora in the old days.'
- (3) baab-in-manjan i-rr-wid-in / banangkarr-uk / child-ERG-only 3NOM-AUG-eat-PRS today-LOC 'Children eat it today.'
- (4) aa: / wamburiny-in arri ya-li-rr-wid / and people-ERG not 1PL.NOM-IRR-AUG-eat 'We adults don't eat it these days.'
- (5) baab-in ya-rr-jirrm-in / makabala / child-ERG 1PL.NOM-AUG-???-PRS Marsdenia:viridiflora 'Children eat (?) it.'

- (6) kuwal / [...]

 Flueggea: virosa
 'A type of berry.'
- (7) kuwal / dulkaari / wamburiny-in ya-ngi-rr-wid-an / Flueggea:virosa vegetable:type people-ERG 1PL.NOM-PST-AUG-eat-IMP layib / may / good food 'We used to eat Flueggea virosa; it is good food.'
- (8) *i-ngi-rr-warnd-an uriny-in* / *binyjin-uk jirr* / 3NOM-PST-AUG-gather-IMP woman-ERG coolamon-LOC 3AUG.OBL 'Women gathered it in their coolamons.'
- (9) bur-ung i-ngi-rr-k-an /
 place-ALL₁ 3NOM-PST-AUG-carry-IMP
 'They took it to their camp.'
- (10) warli:: wamburiny-in i-rri-wid-in kinyingk / kuwal / everyone people-ERG 3NOM-AUG-eat-PRS DEF Flueggea:virosa 'Everyone eats this food, Flueggea virosa.'

(11) kaabiny / [...]

Terminalia:ferdinandiana
'A type of bush food.'

- (12) ya-nga-rr-wid-an may / arri ya-la-rr-marr / jungk-uk / 1PL.NOM-PST-AUG-eat-IMP food not 1PL.NOM-IRR-AUG-cook fire-LOC 'We ate this food raw; we don't cook it on a fire.'
- (13) ya-rra-wid-in baani /
 1PL.NOM-AUG-eat-PRS thus
 'We eat it like that [raw].'
- (14) WM: mm / kaabiny /
 mm Terminalia:ferdinandiana
 WM: 'Mm, Terminalia ferdinandiana.'
- (15) i-marr-in:/-uk / ya-rra-wid-in / ya / yarrad-in 3NOM-cook-PRS-LOC 1PL.NOM-AUG-eat-PRS ya 1AUG.CRD-ERG ya-rra-j-in / jin / kinyingka may / aa: jilk / 1PL.NOM-AUG-say-PRS 3MIN.OBL DEF food and dry when it's dry / when it's dry / when it's ripened, we eat this food, when it's dry.'
- (16) dujul-dujul i-rri-ny-in wamburiny-in / i-rr-bulm-in /
 hammer-hammer 3NOM-AUG-get-PRS people-ERG 3NOM-AUG-soak-PRS
 wul-uk /
 water-LOC
 'They hammer it, and soak it in water.'
- (17) kinyingk/-karr / ya-rra-wid-in / mm / [...]

 DEF-TEM 1PL.NOM-AUG-eat-PRS mm

 'Then we eat it.'
- (18) waankirr / [...]

 Persoonia:falcata

 'A bush fruit like a mango.'

- (19) kaamil-awil / irr-kinbal-amil / kaabiny /
 ???-SEM 3AUG-resemblance-SEM Terminalia:ferdinandiana
 'It is like Terminalia ferdinandiana.'
- (20) ya-rra-warnd-in / jariny-karr / 1PL.NOM-AUG-gather-PRS green-TEM 'We gather it when it's green.'
- (21) *i-marr-in-uk i-jalk-in barnd-uk* / *kinyingk* / 3NOM-cook-PRS-LOC 3NOM-fall-PRS ground-LOC DEF *i-rr-warnd-in* / *wamburiny-in* / 3NOM-AUG-gather-PRS people-ERG 'When it's ripe, and falls to the ground, they pick it up.'

- (22) *i-rri-k-in bur-ung* / *aa::* / *bilay*3NOM-AUG-carry-PRS place-ALL₁ and again *kaabiny-ngirr* / *i-rr-dam-in* / *Terminalia:ferdinandiana*-SEM 3NOM-AUG-hit-PRS

 'They take it to camp, and again they hit it, like *Terminalia ferdinandiana*.'
- (23) dujul-dujul i-rri-ny-in /
 hammer-hammer 3NOM-AUG-get-PRS
 'They hammer it.'
- (24) aa:: what / [...] nga-kanyj-in ni-lawil / wait now / aa:: /
 and what 1MIN.NOM-forget-PRS 3MIN-name wait now and
 yarrad-in / wirrm / ni-lawil /
 1AUG.CRD-ERG wirrm 3MIN-name
 'And what's it, I forget its name, wait now ... we call it wirrm.'
- (25) *i-rr-jalk-in-karr* / *barnd-uk* / *maank* / *i-n-d-in* / 3NOM-AUG-fall-PRS-TEM ground-LOC black 3NOM-CM-say-PRS 'When it falls to the ground, it is black.'
- (26) yarrad / i-rr-warnd-in / aa: bilay /
 1AUG.CRD 3NOM-AUG-gather-PRS and again
 kaabiny-ngirr / i-rr-m-in /
 Terminalia:ferdinandiana-SEM 3NOM-AUG-put-PRS
 'We ... they gather it, and put it like the Terminalia ferdinandiana.'
- (27) *dujul-dujul i-rri-ny-in* / *kinyingk-karr i-rri-wid-in* / hammer-hammer 3NOM-AUG-get-PRS DEF-TEM 3NOM-AUG-eat-PRS 'They hammer it, and then eat it.'
- (28) WM: good good WM: 'Good.'
- (29) warli-in wamburiny i-rr-wid-in kinyingk / wirrm / everyone-ERG people 3NOM-AUG-eat-PRS DEF wirrm ni-lawil / [...]

 3MIN-name 'Everyone eats it, this wirrm, as it is called.'

- (30) birrminkil / [...]

 Santalum:lanceolatum

 'Sandalwood.'
- (31) wamburiny-in / birrminkil / ba / bardin jin / liilii people-ERG sandalwood ba skin 3MIN.OBL peel

i-ngi-rri-ny-an / 3NOM-PST-AUG-get-IMP 'People used to peel the bark of the sandalwood tree.'

- (32) aa / wu / wul / ba / wul-uk i-ngi-rri-m-an wul-uk / and wa water ba water-LOC 3NOM-PST-AUG-put-IMP water-LOC 'They put it in water.'
- (33) kinyingk-karr i-ngi-rr-mijuling / i-ngi-rr-mijuli/-julingk /
 DEF-TEM 3NOM-PST-AUG-wet 3NOM-PST-AUG-wet-wet
 i-ngi-rr-mijulingk /
 3NOM-PST-AUG-wet
 'Then they wet it.'
- (34) aa / kinyingk-ang wul / i-ngi-rr-bulm-an / and DEF-INS water 3NOM-PST-AUG-soak-IMP 'They soaked it in water.'
- (35) nga-mijuling / [nga-mijuling /] ye / e / (...) / nga-mijuling-inyji /
 1MIN.NOM-wet 1MIN.NOM-wet yes yes 1MIN.NOM-wet-???
 'I wet it, yes I wet it.'
- (36) well / i-ngi-rr-mijul / [...] / kinyingk-ang wul / well 3NOM-PST-AUG-wet DEF-INS water 'They wet it in water.'
- (37) layib i-na-marr-nyirr/ kinyingk/birrminkil/ jin
 good 3NOM-CM-cook-COM DEF Santalum:lanceolatum 3MIN.OBL
 wul/
 water
 'They cook the sandalwood in water.'

- (38) kaamb / [...] palm:tree 'palm tree'
- (39) wamburiny-in i-ngi-rr-warnd-an / kaamb / people-ERG 3NOM-PST-AUG-gather-IMP palm 'People used to gather palm.'
- (40) dad i-ngi-rr-ny-an / jimbin / may jin i-n-in / insert 3NOM-PST-AUG-get-IMP inside food 3MIN.OBL 3NOM-be-PRS 'They put it inside; its food is inside.'
- (41) kinyingk / duk-duk i-ngi-rr-ny-an / jungku-karr /
 DEF wipe-wipe 3NOM-PST-AUG-get-IMP fire-TEM

i-rr-marr-in jungk-uk / *yalirri-bur-uk* / 3NOM-AUG-cook-PRS fire-LOC first-place-LOC 'They wipe it, and cook it first on a fire in their camp.'

- (42) kinyingk-karr / i-nga-marr-an-uk / dul-dul / hammer it / DEF-TEM 3NOM-PST-cook-IMP-LOC hammer-hammer hammer it or pick it aa / pick it out / kaamb / or pick it and pick it out palm 'Then, when it is cooked, they hammer it and pick out the edible parts.'
- (43) layib may kinyingk / palm / kaamb / good food DEF palm palm 'It is good food, that palm.'

Mary Carmel Charles.]

- (44) dalwurr / [...]

 Gardenia:pyriformis

 'Gardenia pyriformis' [This is a type of tree, used for medicine; sometimes eaten, though rarely—"they hardly cared for that, the fruit of that tree", according to
- (45) dalwurr / i-ngi-rr-wid-an / murrul-murrul / Gardenia:pyriformis 3NOM-PST-AUG-eat-IMP little-little 'They [Nyulnyul people] ate Gardenia pyriformis just a little.'
- (46) arri liyan i-li-rr-m-an / de / nyungul / wamburiny-in / not like 3NOM-IRR-AUG-put-IMP de old people-ERG 'Old people didn't like it.'
- (47) arri liyan i-li-rr-m-an / kinyingk may / not like 3NOM-IRR-AUG-put-IMP DEF food 'They didn't like this food.'

(48) *dadakurr* / [...] gum:tree

'fruit from gum tree' [The tree has a pretty creamy flower when in bloom; there is a small worm inside that was eaten.]

- (49) dadakurr / kinyingk / dadakurr / wamburiny-in i-ngi-rr-jal-an /
 gum:tree DEF gum:tree people-ERG 3NOM-PST-AUG-see-IMP
 i-ngi-rri-ny-an bardangk-ukun /
 3NOM-PST-AUG-get-IMP tree-ABL₂
 'They saw gum trees and got the dadakurr from them.'
- (50) (...) *kalb / warinyjirr aa: kujarr / i-ngi-rr-dam-an /*up one and two 3NOM-PST-AUG-hit-IMP
 'Up on top, they hit three.'

- (51) baab / baab / i-ngi-rr-ny-an / jimbin / dadakurr-uk nu-ng / child child 3NOM-PST-AUG-get-IMP inside gum-LOC 3MIN-stomach may / we / murrul / food we little 'The children get the food from inside the gum nut.'
- (52) murrul / ee:: / n: / wait now / what we call / jukud / murrul jukud / little eh nn wait now what we call worm little worm i-n-in jimbin / nu-ng-uk / 3NOM-be-PRS inside 3MIN-stomach-LOC 'There is a little worm inside the fruit of this tree.'
- (53) kinyingk / i-ngi-rr-wid-an / [...] / jukud / DEF 3NOM-PST-AUG-eat-IMP worm 'They eat this worm.'
- (54) milirrkarr junin / arri banangkarr-uk / before ??? not today-LOC 'They used to eat it before, not today.'

Text 4: Traditional practices

Mary Carmel Charles

As in the case of the other Nyulnyul texts narrated by this speaker, a considerable amount of English was present in the following spoken textlets, which were recorded on 14th May 1990, including explanations and translations following many clauses. The transcription below shows just the spoken Nyulnyul component of the interactions; no indication is given of either the spoken English component or where it occurs, since this is not directly relevant to the description of Nyulnyul grammar, and for reasons of space.

- (1) walangk ijirr i-ngi-rr-mukar-an: / i-ngi-rr-wul-an / spear 3AUG.OBL 3NOM-PST-AUG-make-IMP 3NOM-PST-AUG-shave-IMP 'They used to make their spears, shaving them.'
- (2) jad i-ngi-rra-wul/ walangk/i-ngi-rr-wul-uwul-an/
 cut 3NOM-PST-AUG-shave spear 3NOM-PST-AUG-shave-shave-IMP
 'They shave and shave the spear.'
- (3) kinyingk-karr jungk-uk i-ngi-rra-m-an /
 DEF-TEM fire-LOC 3NOM-PST-AUG-put-IMP
 i-ngi-rr-jumbarr-an / orite layib i-n-j-an /
 3NOM-PST-AUG-warm-IMP alright good 3NOM-CM-say-IMP
 'Then they put it on the fire and straighten it until it was good.'
- (4) kinyingk-karr / i-ngi-rr-m-an / jirr walangk /
 DEF-TEM 3NOM-PST-AUG-put-IMP 3AUG.OBL spear

ma-r-an-ung / INF_p-poke-INF_s-ALL₁ 'Then they would use them for spearing.'

(5) i-ngi-rra-r-an wamb / bin-ung / bil-uk / barrin-ngirr / 3NOM-PST-AUG-poke-IMP man that-ALL₁ fight-LOC delousing:stick-SEM 'They speared people in anger, like (with) a delousing stick.'

- (6)kad i-ngi-rra-w-an bardangk / .../ cut 3NOM-PST-AUG-give-IMP stick 'They cut sticks.'
- (7) jungk / kalib-ang / aa: / kalib-ang i-ngi-rr-mukar-an and fire:saw-INS 3NOM-PST-AUG-make-IMP fire fire:saw-INS 'And they made fire with a fire saw.'
- (8)dub i-ngi-rr-m-an / light / kumar: / ... / kumar chop 3NOM-PST-AUG-put-IMP light bush:fire bush:fire ijirr jungku / .../ 3AUG.OBL fire 'They chopped it, and lit bushfires.'
- (9)kalamb kunarr / i-ngi-rr-m-an / hither thither 3NOM-PST-AUG-put-IMP 'They rubbed it this way and that way.'
- (10)buu i-ngi-rr-m-an / dub i-n-ny-an / blow 3NOM-PST-AUG-put-IMP chop 3NOM-CM-get-IMP 'They blew on it, and chopped wood.'
- (11)wajamarr / kumar / i-ngi-rr-mukar-an / bush:fire 3NOM-PST-AUG-make-IMP later 'Then they made a bushfire.'
- (12)wilamay-ij / jirr jungku / 3AUG.OBL fire food-DAT 'Their fire was for (cooking) food.'
- (13)WM: nhn / nhn 'Nn.' WM:
- (14)i-ngi-rr-lurr-an / wajamarr / 3NOM-PST-AUG-light-IMP later 'They lit it later.'

- (15) wamb-in / i-ngi-rr-mukar-an / dangk / jiib-ingirr / man-ERG 3NOM-PST-AUG-make-IMP tank boomerang-SEM 'Men used to make a type of boomerang out of metal from tanks.'
- (16) kinyingk-ang i-ngi-rr-dam-an / kumbu / dangk-ang / DEF-INS 3NOM-PST-AUG-hit-IMP fish tank-INS 'They used to hit fish with this boomerang.'
- (17) *uriny-in i-ngi-rr-lungk-an banyjurd* / woman-ERG 3NOM-PST-AUG-dig-IMP fish:poison 'Women used to dig for the *banyjurd* fish poison.'
- (18) banyjurd / i-ngi-rr-lungk-an / i-ngi-rr-k-an bur-ung / fish:poison 3NOM-PST-AUG-dig-IMP 3NOM-PST-AUG-carry-IMP place-ALL₁ 'They used to dig for banyjurd, and then take it back to camp.'
- (19) i-ngi-rr-k-an / way wil / wiliwil-ung /
 3NOM-PST-AUG-carry-IMP away meat fishing:line-ALL₁
 i-ngi-rri-ny-an kinyingk / banyjurd / wukurr
 3NOM-PST-AUG-get-IMP DEF fish:poison grind
 i-ngi-rr-j-an /
 3NOM-PST-AUG-say-IMP
 'They brought it along on fishing lines and ground it.'
- (20) band-ang i-nga-rr-m-an band-ang / ground-INS 3NOM-PST-AUG-put-IMP ground-INS 'They put it with earth.'
- i-ngi-rri-ny-an banyjurd aa band /
 3NOM-PST-AUG-get-IMP fish:poison and ground
 i-ngi-rr-ngul-an / kumbarr-uk /
 3NOM-PST-AUG-throw-IMP rock-LOC
 'They got the banyjurd and earth, and threw them into rockholes.'
- (22) ... / kalb-ung / kalb / i-ngi-rr-jimb-an / up-ALL₁ up 3NOM-PST-AUG-die-IMP 'They came to the surface, and died.'
- (23) *uriny-in i-ngi-rr-warnd-an kinyingk wil /* woman-ERG 3NOM-PST-AUG-gather-IMP DEF meat 'The women used to gather these fish.'
- (24) *i-ngi-rr-k-an* wanyji bur-ung / 3NOM-PST-AUG-carry-IMP back place-ALL₁ 'They brought it back to camp.'

(25) *i-ngi-rr-marr-an kinyingk wil / wajamarr / i-ngi-rr-wid-an /* 3NOM-PST-AUG-cook-IMP DEF meat later 3NOM-PST-AUG-eat-IMP 'They cooked the fish and later ate them.'

- (26) winin aa: burruk / walangk-ang i-ngi-rr-a-r-an / aa:
 emu and kangaroo spear-INS 3NOM-PST-AUG-CM-poke-IMP and
 jiib-ang /
 boomerang-COM
 'They used to catch emus and kangaroos with spears and boomerangs.'
- i-ngi-rra-r-an-irr / i-ngi-rr-k-an

 3NOM-PST-AUG-poke-IMP-3AUG-ACC 3NOM-PST-AUG-carry-IMP

 wanyji bur-ung /
 back camp-ALL₁

 'They speared them and brought them back to camp.'
- (28) laarrb i-ngi-rr-m-an / i-ngi-rr-wid-an /
 oven 3NOM-PST-AUG-put-IMP 3NOM-PST-AUG-eat-IMP
 'They cooked them in the oven and then ate them.'

- (29) flour / i-ngi-rr-ny-an / jimbin / i-ngi-rr-m-an / binyjin-uk / flour 3NOM-PST-AUG-get-IMP inside 3NOM-PST-AUG-put-IMP coolamon-LOC 'They used to put flour into their coolamons.'
- (30) wul i-ngi-rr-ny-an / dididid i-ngi-rr-ny-an / water 3NOM-PST-AUG-get-IMP shake 3NOM-PST-AUG-get-IMP 'They put water (into the coolamons) and shook it.'
- (31) wukurr-wukurr i-ngi-rr-ny-an / grind-grind 3NOM-PST-AUG-get-IMP 'They mixed it around.'
- (32) orite / baly-baly i-ngi-rra-m-an / baly-baly / alright pat-pat 3NOM-PST-AUG-put-IMP pat-pat 'They flattened it out.'
- (33) jungk i-ngi-rr-lurr-an / ngarlin balabal i-ngi-rr-m-an / fire 3NOM-PST-AUG-light-IMP hot:sand mix 3NOM-PST-AUG-put-IMP 'They lit a fire, and mixed it with hot sand.'
- (34) *i-ngi-rr-m-an* / *jungk-uk* / 3NOM-PST-AUG-put-IMP fire-LOC 'They cooked it in the fire.'

- (35) *i-ngi-rr-barnd-an* / *ngarlin* / *band-ang* / 3NOM-PST-AUG-cover-IMP hot:sand ground-INS 'They covered it with hot sand.'
- (36) n: / rirrk kalb i-ngi-rr-m-an /
 and coal up 3NOM-PST-AUG-put-IMP
 'And they put coals on top of it.'
- (37) wajamarr / i-nga-marr-an-uk / banaban i-ngi-rr-m-an / later 3NOM-PST-cook-IMP-LOC like:that 3NOM-PST-AUG-put-IMP 'Later, when it had cooked, they did it like this.' [Speaker demonstrates patting the cooked damper to remove the ashes.]
- (38) barnd / i-ngi-rr-ny-an / dub-dub i-ngi-rr-m-an / sand 3NOM-PST-AUG-get-IMP dust-dust 3NOM-PST-AUG-put-IMP 'They dusted off the dirt and ashes.'
- (39) *i-ngi-rr-wid-an* / 3NOM-PST-AUG-eat-IMP 'They ate it.

Text 5: Early days Nyulnyul people

Rosie Victor

This text was recorded by Bronwyn Stokes in October 1979 from Rosie Victor, who was ill in hospital at the time, in Derby. "It was recorded with considerable uncertainty", according to Bronwyn Stokes. It documents the family background of "King" Felix Ngurdinybur.

- (1) kalarlang wurrumbadangk wamb /
 personal:name big man
 'Kalarlang¹ was a great man.'
- (2) wamburiny-in i-nga-rra-kal-an iibal-nyirr jirr / people-ERG 3NOM-PST-AUG-wander-IMP father-COM 3AUG.OBL 'The people were with their father.'
- (3) kalarlang i-ny-jid walij-kun kularr wardi banawarr / personal:name 3NOM-PST-go south-ABL₂ west north east 'Kalarlang went from the south, to the west, north and east.'
- (4) kinyingk-uk i-na-m-an-an-jin bur kinyingk-uk

 DEF-LOC 3NOM-CM-put-IMP-IMP-3MIN.OBL place DEF-LOC

 Disaster Bay /

 Disaster Bay

 'He made his camp there, at that place, Disaster Bay.'

¹ Kalarlang was a mythical "hero" of the Nyulnyul, according to Worms (1950); Nekes & Worms (2006: 7–8). Rosie Victor treats him here as a real person, in fact, the father of Felix Ngurdinybur.

- (5) kinyingk-uk bur i-ny-jimb-an /
 DEF-LOC place 3NOM-PST-die-IMP
 'He died there.'
- (6) kinyingk-ung kujarr-nyirr yiil i-ngi-rr-jimb-an /
 DEF-ALL₁ two-COM dog 3NOM-PST-AUG-die-IMP
 'From there, there with two dogs, they died.'
- (7) wurrumbadangk wamb malirr-nyirr jin i-nga-n-an / big man wife-COM 3MIN.OBL 3NOM-PST-be-IMP 'The great man stayed with his wife.'
- (8) *i-ngi-rr-badangk irrjuwar wal jin-irr akal warinyjirr* 3NOM-PST-AUG-have three child 3MIN.OBL-3AUG and one *uriny bad* / woman daughter 'They had three sons and one daughter (Eugenia).'
- (9) *i-ny-jimb-an iibal jirr i-ny-jimb-an* / 3NOM-PST-die-IMP father 3AUG-OBL 3NOM-PST-die-IMP 'He died, their father died.'
- (10) wurrumbadangk miida baab kinyingk
 big male child DEF
 i-nga-rr-m-an-an-jirr king /
 3NOM-PST-AUG-put-IMP-IMP-3AUG.OBL king
 'The eldest son they made their "king" (Felix).'
- (11) kinyingk-in king felix i-m-bikand-an kujarr uriny / DEF-ERG king felix 3NOM-PST-have-IMP two woman 'That "King Felix" had two wives.'
- (12) warinyjirr-in wunjub i-m-bikand-an warringkal baab / one-ERG wife 3NOM-PST-have-IMP girl child 'One wife (Magdalene) had a daughter (Josephine).'
- (13) war uriny i-na-w-jin babal jirr victor
 other woman 3NOM-CM-give-3MIN.OBL brother 3AUG.OBL Victor
 jam /
 mother's:father
 'The other wife (Louisa) he gave to their brother, Victor, their mother's father.'
- (14) wiyan stephen arriyangkan malirr/ without stephen nothing wife 'Unfortunately Stephen was without a wife.'
- (15) marirr jirr i-m-bikand-an irrjuwar miida baab / sister 3AUG.OBL 3NOM-PST-have-IMP three male child 'Their sister (Eugenia) had three sons (Ignatius, Matthias and Ambrose).

Text 6: The lord's prayer

Version 1

Given below are three versions of the lord's prayer to illustrate the religious material produced by the Beagle Bay missionaries. The first version comes from Walter (1982: 82–83), and presents the prayer in the exact form given in that source. According to Walter (1982:82), this translation was made by Fr Alphonse Tachon. Almost exactly the same text is repeated in Bischofs (1905–1914), except that this source retains the spelling of Fr Alphonse (where e.g. palatal consonants are indicated by the vowel i following the consonant; this has been changed to a j in Walter's transcription). There are evidently a number of trivial typographical errors in the Nyulnyul version, as well as more substantial mistakes in the Nyulnyul text and English translation. Some of the more minor errors have evidently crept in during the processing of the text for publication, as they do not appear in Bischofs (1905–1914).

- (1) Our Father, Who art in Heaven,

 Jerada ibala djerara, kaplan kurwol mi-nen djer

 Our Father our, above in Heaven You are the One.
- (2) Hallowed be Thy Name,

 njilawol wotsch jongoretsch djen;

 Name belong you sacred and secret will be belong you;
- (3) Thy kingdom come, tjoie nalandje You belong us Lord
- (4) Thy will be done on earth,
 mi-pakanda tjamhu malbon jongoretsch borok,
 To You alone completely obedient will be here (on earth)
- (5) As it is in heaven,
 penelk malbon jer-en djer kalpan kurwol
 Just as obedient they are who above in heaven
- (6) Give us this day our daily bread; wanao panangar jerada mai djerada give today our food for us
- (7) and forgive us our trespasses,
 mi-kandja reb ar-mogoren djer,
 You forget the bad we do to them
- (8) as we forgive those who trespass against us,
 penelk jareden ar-gandjeo reb jereman djer jaranda
 just as we forget the bad they did to us

- (9) And lead us not into temptation aren mi-lemangada jerada, jongor-wowooenk jerada rebstsch not you forsake us when they tempt us to bad
- (10) but deliver us from evil. Amen.
 reb manamor are dar ilar djerada. Amen.
 bad give not it harm us. Amen.

Below is an attempt to correct the errors in the above translation and transcription; this version represents the text in the standard three line format. It will be observed that in a number of places there are significant discrepancies between the Nyulnyul lines and the corresponding English portion of the prayer.

- (11) yarrad iibal jarrad kalb-an kurrwal mi-n-in-jirr
 1AUG.CRD father 1AUG.OBL up-LOC sky 2MIN.NOM-be-PRS-SUB
 'Our father who is in heaven.'
- (12) nyi-lawil wuj yu-ngku-rri-j-jii
 2MIN-name sacred 3NOM-FUT-AUG-say-2MIN.OBL
 'They must say your name reverently.'
- (13) juy nalan jii
 2MIN.CRD lord 2MIN.OBL
 'You are our lord.'
- (14) mi-bakand jaamin malbul yu-ngku-rri-j bur-uk
 2MIN.NOM-have completely things 3NOM-FUT-AUG-say place-LOC
 'You have everything, they will do at the place.'
- (15) banilk malbul i-rri-n-jirr kalb-an kurrwal likewise things 3NOM-AUG-be-SUB above-LOC sky 'Like they are in heaven.'
- (16) wa-na-w-yarrad banangkarr may jarrad
 2MIN.NOM-CM-give-1AUG.ACC today food 1AUG.OBL
 'Give us today our bread.'
- (17) mi-kanyj riib ya-rr-makurr-in-jirr

 2MIN.NOM-forget bad 1PL.NOM-AUG-make-PRS-3AUG.ACC
 'Forget the bad we have done to them.'
- (18) banilk yarrad-in ya-rr-kanyj-yu riib likewise 1AUG.CRD-ERG 1PL.NOM-AUG-forget-PRS bad i-rra-m-in-jirr-yarrad
 3NOM-AUG-put-PRS-SUB-1AUG.ACC
 'Like we forget the bad things they do to us.'
- (19) *arri mi-li-mangkad-yarrad* not 2MIN.NOM-IRR-leave-1AUG.ACC

yu-ngku-rr-wuuwuu-ingk-yarrad riib-ij 3NOM-FUT-AUG-tempt-???-1AUG.ACC bad-DAT 'Don't forsake us, when they tempt us with bad things.'

(20) riib ma-na-mur arri daarr i-la-r-jarrad amen bad 2MIN.NOM-CM-spill not arrive 3NOM-IRR-poke-1AUG.OBL amen 'Throw away the bad things, and don't let them come to us. Amen.'

Version 2

The following somewhat different translation of the prayer comes from Nekes (1931–1947). It provides a somewhat better translation of some of the latter parts of the prayer than does the Trappist translation. It employs an orthography virtually identical with that used in Nekes (1938). Palatal consonants are indicated by an apostrophe, vowel length by a macron, and the velar nasal by engma. A second typescript version uses the orthography of Nekes & Worms (1953), but is otherwise virtually identical with this version of the prayer. The author of the translation is not known, and could be Fr Nekes or Worms, or even Fr Hügel.

The first line in each of the following numbered segments represents the form given in the original source; the other three lines are provided by the present author. The second line is a re-representation of the source line into the orthography of this grammar. The third line gives morpheme-by-morpheme glosses, and the fourth line a relatively free translation into English.

- (21) yared ibal dared galb-on gorwol mi-nen der yarrad iibal jarrad kalb-an kurrwal mi-n-in-jirr
 1AUG.CRD father 1AUG.OBL up-LOC sky 2MIN.NOM-be-PRS-3AUG.OBL 'Our father in heaven.'
- (22) ńilawol wod yongored den nyi-lawil wuj yu-ngku-rri-j-jin

 2MIN-name reverence 3NOM-FUT-AUG-say-3MIN.OBL 'They must say your name with reverence.'
- (23) doe dared de nalen juy jarrad jii nalin 2MIN.CRD 1AUG.OBL 2MIN.OBL lord 'You are our lord.'
- Йe (24)wamborińen ongarlagaren yenege wamburiny-in yu-ngku-rr-lakarr-in-jii in-ik 3NOM-FUT-AUG-hear-PRS-2MIN.OBL² this-LOC people-ERG ermarad bor banelg laiben wamborińen banilk layib-in irr-marraj wamburiny-in bur good-ERG 3AUG-shadow people-ERG place as

² The form given in the original transcription indeed involves the present tense suffix -en. This must be an error.

erlagaren de galbe gorwol i-rr-lakarr-in-jii kalb kurrwal 3NOM-AUG-hear-PRS-2MIN.OBL up heaven

'People must obey you here on earth as the good souls of men and women obey you up in heaven.'

- (25) wanau yared mai banangar walg wa-na-w-yarrad may banangkarr waalk 2MIN.NOM-CM-give-1AUG.ACC food today sun 'Give us food today.'
- yaŋeredan (26)laib rēb riib ya-nga-rri-j-an-jirr lavib bad 1PL.NOM-PST-AUG-say-IMP-3AUG.ACC good ared laib ńer waneman wa-na-m-an-yarrad layib-nyirr liyan 2MIN.NOM-CM-put-IMP-1AUG.ACC good-COM like angarbandenan rēb yer ya-ngka-rr-barnj-in-ang-irr riib 1PL.NOM-FUT-AUG-exchange-PRS-APP-3AUG.ACC bad yared eneramane i-ngi-rr-a-m-an-yarrad 3NOM-PST-AUG-CM-put-IMP-1AUG.ACC
 - 'We have done wrong; make us good, so that we will forgive those who have done wrong to us.'
- (27) wandaledalen ared rēb madagan gonge bor wa-n-jali-jal-in-yarrad riib-madakan-kung bur 2MIN.NOM-CM-see-see-PRS-1AUG.ACC bad-ALL₂-ABL₃ place 'Keep us away from bad places.'
- (28) ńimal ŋende ŋende minen dared
 nyi-marl ngindi-ngind mi-n-in-jarrad
 2MIN-hand protect-protect 2MIN.NOM-be-PRS-1AUG.OBL
 rēbe gonge amen
 riib-kung amen
 bad-ABL₃ amen
 'Keep us away from bad things. Amen.'

Version 3

The final version of the prayer is an oral version, declaimed by Mary Carmel Charles. It is clearly closer to Version 2 than to Version 1. In the first four or five lines of this telling, the text is almost identical with Version 2; after this, however, it diverges increasingly. Given that the earlier manuscript versions are fuller, it seems likely that the speaker has forgotten some of the lines.

- (29) yarrad iibal jarrad / kalb kurrwal / 1AUG.CRD father 1AUG.OBL up sky 'Our father, up in the sky.'
- (30) nyi-lawil wuj yu-ngku-rri-j-jii /
 2MIN-name reverence 3NOM-FUT-AUG-say-2MIN.OBL
 'They will say your name with reverence.'
- (31) juy jarrad jii nalin / 2MIN.CRD 1AUG.OBL 2MIN.OBL lord 'You are our lord.'
- (32) wamburiny-in yu-ngka-rr-lakarr-in-jii in-ika bur / people-ERG 3NOM-FUT-AUG-listen-PRS-2MIN.OBL this-LOC place 'People will listen to you here on earth.'
- (33) banilk layib-in irr-marraj wamburiny-in likewise good-ERG 3AUG-shadow people-ERG i-rr-lakarr-in-jii / kalb kurrwal / 3NOM-AUG-hear-PRS-2MIN.OBL up sky 'As the good souls of men and women obey you up in heaven.'
- (34) wa-na-w-yarrad may / banangkarr waalk / 2MIN.NOM-CM-give-1AUG.ACC food today sun 'Give us food today.'
- (35) riib ya-nga-rri-jinyj / layib-nyirr liyan / bad 1PL.NOM-PST-AUG-???³ good-COM like wa-na-m-yarrad / banangkarr waalk / 2MIN.NOM-CM-put-1AUG.ACC today sun 'We have done wrong; make us good today.'
- (36) la / layib-inyirr liyan / ya-rra-w-in/-irr /
 goo good-COM like 1PL.NOM-AUG-give-PRS-3AUG.ACC
 'We want to do good for them.'

The speaker clearly utters this form, whatever it might be. My guess is that she may have meant *yangarrikanyj* 'we forgot'—the clause may mean 'we forgot the bad things (others have done to us).'

Nyulnyul-English wordlist

This section lists the majority of known root morphemes in Nyulnyul, including items attested in both the modern corpora and Nekes & Worms (1953). Bound non-root morphemes are listed in Appendix 1. Root morphemes attested only in other sources (such as Tachon n.d.) are excluded. Also excluded are personal names (a number of which are included in Nekes & Worms 1953), although toponyms are included if they refer to places believed to be in Nyulnyul territory.

In some cases the information available on a lexical item is too minimal to permit one to identify even a gloss; sometimes it is possible to guess a gloss with a small degree of confidence. Rather than exclude such items, for the sake of completeness I have included them, along with whatever indication of their senses that is possible.

The structure of the entries is as follows. Headwords exclusively from my own corpus are given in italics in the practical orthography of this grammar. Headwords from Nekes & Worms (1953) that are not attested in the modern corpus are given first in the practical orthography of this grammar, in the hypothesised phonemic form (alternatives are not normally given, though the usual problems of the transcriptions of these authors should be borne in mind); the original representation of the source is given immediately following the headword, in brackets, and in italics. Where an item occurs in both the modern corpus and Nekes & Worms (1953), the information from the latter source, including the orthographic form given there, is given on a new, indented line. Information from Nekes & Worms (1953) is referenced by page number in that work.

As indicated in Chapter 2, a number of words show alternative phonemic forms. For these items, the alternating headwords are separated by a comma; the most common (and/or most probable) of the forms is given first.

The part-of-speech membership of an item is indicated, where known, by the following abbreviations immediately after the headword:

(adv) adverbial conjunction (conj) (in) inflecting noun (inter) interjection (iv) inflecting verb (n) nominal particle (part) pronominal (pro) (pv) preverb

Toponyms are indicated by (top) following the part-of-speech abbreviation (n).

In only a few instances do Nekes & Worms (1953) provide indication of part-of-speech membership of items in their list. I have added this information myself, where it can be reasonably inferred from the information they supply, including the glosses and example sentences; in doubtful cases a question mark is used. Otherwise, part-of-speech information is not included.

Following the part-of-speech abbreviation is a gloss in single quotes. In most cases glosses from Nekes & Worms (1953) are presented as in that source; occasionally they have been edited for comprehensibility. Scientific names given by Nekes & Worms (1953) for species of animals and plants are retained; I have had no opportunity to check these. This is a wordlist, not a dictionary, and the glosses are just that, glosses; they are not intended to provide accurate representations of the lexical meanings of the headwords—to do this would be well beyond the scope of this work, and the available data. However, to give an indication of the range of uses of the lexemes I have attempted to provide for each headword as exhaustive a list of glosses as possible, consistent with the information available.

In some cases instead of a gloss (or in addition to a gloss) is an explanation of the usage of the word, or the type of item it is. This information is distinguished from glosses by being enclosed in the German style of quote marks (see *Abbreviations and conventions*).

Nekes & Worms (1953) shows a number of inconsistencies in the representation of both the form of lexemes and their glosses, some of which are clearly typographical errors, while some are likely to represent viable alternative forms or senses. I list each form-sense pairing from that work; one is represented as the main entry, the others, as subentries; both are given page number cross-references.

No illustrative examples of the lexemes are provided (though in many instances the relevant entries in Nekes & Worms (1953) do contain example sentences), and nor, in the majority of cases, is any grammatical information other than part-of-speech membership given. Some exceptions are when a headword lends itself to morphological analysis, in which case this is indicated along with a comment on the degree of certainty of that analysis.

It should be cautioned that a small number of lexical items in the following list may be sensitive in some Dampier Land languages and/or communities, including perhaps the Nyulnyul and/or Beagle Bay communities; I was unable to ascertain this for Nyulnyul, however, due to the moribund situation of the language. While items known to be sensitive have been removed from the main text of the grammar, they have been retained in the wordlist for reasons of completeness. Those which are known to be sensitive in some language are cited in grey font to facilitate their identification, and avoid inadvertent reading by members of Dampier Land communities; unfortunately, in the absence of significant contact with speakers of other Nyulnyulan languages, I do not have complete information on such items.

A

aa (conj) 'and'abarr (abar) (n) 'that, there' (Nekes & Worms 1953:313)abun (abon) (n) 'that, there' (Nekes & Worms 1953:313, 331)

alik (n, pv) 'bad, poor fellow'
aleg 'bad, sick, trouble, miserable'
(Nekes & Worms 1953:316)
-alm (in) 'head'
angk (n) 'what, who'

angkiba (angeba) (n) 'who, what, which' (Nekes & Worms 1953:323–324)

angurr (n) 'sandfly'

anuk (anog) 'where' (Nekes & Worms 1953:323, 325)

arnkuwi (n) a Bardi circumcision corroboree

arrak (n) 'where'

arrak-yan (arag-ean) 'what, which, what kind of' (Nekes & Worms 1953:325)

arri (part) 'not, no, it is not the case that'

arri- (part) 'lack, nothing, be without';takes bound oblique pronouns indicatingperson and number of would-bepossessor

are djai 'we (dual) are without, we two have not' (Nekes & Worms 1953: 326–327)

are djuŋgar 'you are without, you have not' (Nekes & Worms 1953:326–327)

arriad (*are-ad*) 'not' (Nekes & Worms 1953:326–327)

arriban (part) 'don't'

arringarrin (are ŋaren) (part) 'indeed not, truly not' (Nekes & Worms 1953:325, 326–327)

arrinyirr (arinjer) 'what, how' (Nekes & Worms 1953:328)

arrinyirr-kud (arinjergod, arinjer-god)
'what; what all, what kind, how' (Nekes
& Worms 1953:328, 596–597)

arriyangk (part) 'without, nothing, no'

are-ang 'no, not, never' (Nekes & Worms 1953:327)

arriyangkang (part) 'without'
ay (inter) 'hey!'

B

baab (n) 'child, offspring, sister, daughter; son of a woman; daughter of woman and her brothers' baabaningwar (n) 'children'; possibly baabaning war [from Torres & Williams 1987:26, where it is cited as babaningwar]

baabinil (bābe-nel) (n) the word used by a mother in talking about her children to her own mother and mother-in-law (i.e. to members of the *yenar* division) (Nekes & Worms 1953:331)

baabining (bābe-niŋ) (n) word used by mother in calling her own children, the children of her brothers, sisters and cousins; the word used by a mother in talking about her children to her own mother and mother-in-law (i.e. to members of the *yenar* division)' (Nekes & Worms 1953:331)

baaburr (n) 'scar, wound'

baad (pv) 'hold onto'

baal (n) 'belt, hair belt'

baan (adv) 'like that, that way, do like that'

baan (bān) (n) 'scorpion' (Nekes & Worms 1953:349)

baard (pv) 'clap, put arms around something'

baarl (n) 'hairstring belt'

baarrj (n) 'spittle'

bab (bab) (n) 'deaf' (Nekes & Worms 1953: 330)

bab (pv) 'open'

bäb, ba.b 'open (intr, tr), be open burst open' (Nekes & Worms 1953:330)

babakun (babagon) 'yellow paint' (Nekes & Worms 1953:331)

babarl (n) 'brother'

babal 'brother, cousin, men of the same marriage class' (Nekes & Worms 1953: 331)

babarli (n) 'brother' (little child speaking)

babarr (babar) (n) 'that, there' (Nekes & Worms 1953:331)

- babirr (baber) (n) 'scar, cicatrice, tattoo' (Nekes & Worms 1953:332)
- -BAD (iv) 'seize, take hold of, catch, block, stop fighting'
- bad (pv) 'grasp, hold on to, get hold of, catch, snatch'bäd 'catch while in motion, snap (e.g. a ball), embrace' (Nekes & Worms 1953: 332)
- bad (bad) (pv) 'burst, crack, crash, noise of bursting'. According to Nekes & Worms (1953:332), the b of bad imitates the bursting noise and is different from b in bad 'catching'. (Possibly the authors mean that b is an ejective.)
- badabad (pv) 'wrestle'
- badabad (badabad) (n) 'bald' (Nekes & Worms 1953:333)
- badak (pv) 'sulk, angry, vexed, sulky, disobedient'
- badal (badal) (adv) 'later on, bye and bye' (Nekes & Worms 1953:333)
- badar (badar) 'crooked, bent' (Nekes & Worms 1953:334)
- -BADIK (iv) 'complete, finish, block, stop'
- badily-kaj (badelj-gadj) (pv) 'turn away' (Nekes & Worms 1953:326–327)
- baj (badj) (pv) 'hew, plane timber' (Nekes & Worms 1953:337)
- bajalbarr (badjalbar) (n) 'dolphin' (Nekes & Worms 1953:337)
- -BAKAL (iv) meaning unknown
- bakalngarrinyjun (n) 'promised spouse'
- -BAKAND (iv) 'have, possess'
- bakarl (n) 'paperbark, coolamon type, cradle for child, a type of coolamon, used for carrying babies'
- bakarr (bagar) 'a good shot, a splinter of a boomerang sticking in the flesh' (Nekes & Worms 1953:339–340)
- balabal 'stir'

- -BALABAL, -BALIBAL (iv) 'follow, track'
- -BALAKANYJ (iv) 'fight'
- balal (n) 'channel with rain water' (Nekes & Worms 1953:341)
- balanbalan (balan balan) (n) 'sandy place, sea shore, sandhill' (Nekes & Worms 1953:342)
 - balen balen 'sandy sea shore' (Nekes & Worms 1953:345)
- balarr (balar) 'waterlily' (Nekes & Worms 1953:342)
- balbal (pv) 'flapping of wings, paddling of flippers (turtle), swimming' (Nekes & Worms 1953:343)
- balbirr (n) 'bald'
- balber 'bright, clear, clearing, open' (Nekes & Worms 1953:343)
- -BALIBALIM (iv) 'stir, mix'
- -BALIBALIM 'stir, mix' (Nekes & Worms 1953:344)
- balijun (baledjon) (n) "tree-water", natural water reservoir in hollow trees, especially in belawal and gadj trees' (Nekes & Worms 1953:344)
- balil (balel) (n) name of the initiated of the first (Nyulnyul) or fourth (Bardi) degree of initiation' (Worms 1938a:168, 173) (Nekes & Worms 1953:344)
- balingk (n) 'female kangaroo; female of an animal'
- baliny (balinj) (adv) 'in a moment, soon, at once' (Nekes & Worms 1953:345)
- balirr (baler) (pv) 'shine, be shining (of moon)' (Nekes & Worms 1953:624, 345) balar 'light, clear, shining' (Nekes & Worms 1953:342)
- baljarr (n) section term'
- baljarrang, baljirrang (n) 'left'
- baljarrangk (n) 'left'
- balkan (n) 'spirit of dead person'

balkarrkarr (balgargar) 'mast' (Nekes & Worms 1953:346)

-BALM (iv) 'kiss'

balngarr (balnar) (pv) 'spread, stretch' (Nekes & Worms 1953:346, 844)

balngib (balneb) (n) 'flying opossum, phalanger (Petaurus)' (Nekes & Worms 1953:347)

balybaly (n) 'flat, flabby, slack, flatten' balj balj (pv) 'flat, palm of the hand, clap' (Nekes & Worms 1953:348)

-BAMARR (iv) 'tremble'

bambu (n) 'didgeridoo'

bambur (n) 'blind'

banaban (pv) 'pass'

banaban (adv) 'like this, this way, this way and that way, do like this'

banak (n) section term'

banakarr (adv) 'when'

banangkarr (adv) 'today, soon'

banard (adv) 'like this'

banarrjang (adv) 'to the east'

banawarr (adv) 'east'

banawarrjang (adv) 'easterly, to the east, east'

banbalk (banbalg) (n) 'ghosts, tree ghosts' (Nekes & Worms 1953:352)

banbarrimbirr 'circle, go around'

banbirr (adv) 'around, past, across'

banber (n) 'thither' (Nekes & Worms 1953: 352)

banbirrbanbirr (pv) 'round and round, around, go round and round'

banber banber 'everywhere, in every direction' (Nekes & Worms 1953:352)

banbirrinbirr (adv) 'around'

bamberember 'round about, circling' (Nekes & Worms 1953:352)

bandab (n) 'sand monitor; lives in trees'

bandarrang (bandaraŋ) (n) a type of hardwood tree; the wood is harder than manowan, and used for manear-clubs; decoction of its bark is used as a remedy for colds' (Nekes & Worms 1953:354)

bandilmad (bandelmad) (n) 'young bird' (Nekes & Worms 1953:354, 663–664)

bandily (n) 'gecko; a type of gecko that lives under bark and in trees'

bandukurr (bandogor) (n) 'groin' (Nekes & Worms 1953:353, 356)

-BAND(I) (iv) 'blame, grumble, scold, threaten, curse'

bangard (n) 'a type of blind brown snake, scrub python'

-(BA)NGARINYJ, -BUNGIR(R) (iv) 'show off, be proud'

bangkabij (n) 'sea hawk'

bangkalyjurn (n) 'orchid'

bangkibiny (bangebinj) (n) 'fish hawk, osprey' (Nekes & Worms 1953:362)

bani (n) 'goanna'

bani 'large lizard, iguana (Varanus giganteus)' (Nekes & Worms 1953:358)

baniban (pv) 'move'

banijin (adv) 'that way'

banikabin (adv) 'that side'

banikarr (bāne-gar) (adv) 'what time, when' (Nekes & Worms 1953:350)

banikur (bāne-gor) (adv) 'that much, as much as this' (Nekes & Worms 1953: 358)

banikurad (bāne-gor-ad) (adv) 'that much, as much as this' (Nekes & Worms 1953: 358)

banilk (banelg) (adv) 'likewise, similar' (Nekes & Worms 1953:350, 351, 359)

banin (adv) 'like that, that way'

baningirrkud (bāniŋ-ergod) (adv) 'that much, so much' (Nekes & Worms 1953: 359)

baninybur (n) 'carpet snake, black headed python'

baninyirrang (adv) 'whole'

baninjeraŋ 'whole, entire' (Nekes & Worms 1953:359)

baniyabul (n) 'easterners'

bane-abol 'from the east, eastern tribes' (Nekes & Worms 1953:313, 359)

banyjurd (n) 'poison; a poison used for poisoning fish; from a little bush like a peanut plant, probably *Tephrosia* crocea—Aklif (1999:25); poison comes from the roots'

bandjod 'fish poison of narcotizing tubers' (Nekes & Worms 1953:357)

bankad (bangad) (n) 'a poisonous snake (of green colour)' (Nekes & Worms 1953: 359)

bankaduk (n) (top) Disaster Bay'

bankad-uk (bangad-og) (n) (top) "Snake Country" (name of a well ten miles north-east of Beagle Bay Mission) (Nekes & Worms 1953:359)

bankard (n) 'yellow-bellied brown snake, taipan'

bankarr (ban-gar) 'that kind, in that way' (Nekes & Worms 1953:350)

bankarrkak (n) (top) unidentified place'

banmangk (banmang) (n) 'shell fish' (Nekes & Worms 1953:360)

banminkurr (banmingor) 'witchdoctor' (Nekes & Worms 1953:624)

banngal (bannal) (pv) 'lie on face, lie on stomach' (Nekes & Worms 1953:360)

-BANY (iv) 'finish'

bany (pv) 'shoot'

banj 'crack, bang' (Nekes & Worms 1953: 362)

banybal (pv) 'flatten'

banybany (pv) 'shoot, shoot repeatedly'

-BANYJ (iv) 'experience, feel, smell'

banyjun (banj-djon) (n) 'one who has been shot' (Nekes & Worms 1953:362)

bar (bar) (pv) 'split' (Nekes & Worms 1953:364)

barabar (pv) 'hit oneself'

barambar (barambar) (n) 'parrot fish' (Nekes & Worms 1953:365)

bararrb (bararb) (n) 'frontlet (worn by women, made of human hair and teeth of kangaroos)' (Nekes & Worms 1953:366)

bararrk (bararg) 'sorry, pity' (Nekes & Worms 1953:366)

barbar (pv) 'hit oneself'

bardabard (pv) 'clench'

-BARD (iv) 'block, prevent' Cf. -BAD 'seize, etc.', -BADIK 'block'

bardangk (n) 'tree, stick, branch'

bardangk-kud (badang-god) 'with particles of wood' (Nekes & Worms 1953:

596-597)

bardin (n) 'skin, skin of fruit, shell of seed, scale of fish'

baden 'skin, bark' (Nekes & Worms 1953:335)

barlbirr (n) 'bald, plains country'

barn (pv) 'shoot'

barnabarn (n) 'half, a half'

barnamb (n) 'a type of stingray'

-BARND (iv) 'cover'

barnd (n) 'sand, dust, ground, earth'

barndab (n) 'goanna, climbing lizard type'

barndal (n) 'feather'

bandel (n) 'hair of the body, feathers' (Nekes & Worms 1953:354)

barndid (n) 'boil, tumour, blister' banded (n) 'boil, sore' (Nekes & Worms 1953:354)

barndily (n) 'spit lizard' [a lizard type]

barngan (baṛ-ŋan) 'entirely split, hit into splinters, slay, into pieces' (Nekes & Worms 1953:364, 369)

barni (n) 'raw' (?)

barnibarn (pv) 'strain, separate something'

-BARNJ (iv) 'exchange'

suppletive reflexive/reciprocal form of -W 'give'

-BANDJ 'exchange, surrender' (Nekes & Worms 1953:357)

-BARNJIBARNJ (iv) 'share, exchange'

barnkad (n) 'king brown snake'

barnkurduk (n) (top) place where Beagle Bay Mission stands; this was a ceremonial ground'

barnman (n) 'rai, spirit-child' banmen 'totem' (Nekes & Worms 1953: 360)

barnmangk (n) 'cockles'

barnmangkarr (n) 'rough-backed turtle, fresh water turtle'

barr (bar) (pv) 'pull, pull on, jerk' (Nekes & Worms 1953:363)

-BARRABARR, -BARRIBARR (iv) 'think, think about (someone)'

barrakul (baragol) (n) a gum tree, gum, black berries' (Nekes & Worms 1953: 365)

-BARRAL, -BARRALK (iv) 'hiccup, burp'

barrambarr (n) 'blue-boned parrot fish'

barrawarr (barawar) (n) 'canoe' (Nekes & Worms 1953:366)

barrayi (barai) (pv) 'accuse, accusation, confess, confession' (Nekes & Worms 1953:365)

barrbakun (n) 'rain'

barbagon 'thunderstorm, rain' (Nekes & Worms 1953:367)

barrbarr (barbar) 'hot' (Nekes & Worms 1953:367)

barril (barel) (n) 'bottle' (Nekes & Worms 1953:368)

barrin (baren) (n) 'a stick used for delousing and pricking pimples' (Nekes & Worms 1953:369)

barrj (n) 'saliva'

barrj (n) 'kidney, lung' bardj 'lungs' (Nekes & Worms 1953: 367)

barrjarniny (n) 'a type of wallaby' (n) bardjanin 'kangaroo' (Nekes & Worms 1953:367)

barrjarr (bardjar) (n) section term' (Nekes & Worms 1953:367)

barrkaj (n) 'necklace; type of berry; berries the shape of a horn, threaded for a necklace'

bargadj 'pipe-shell (Dentalium), necklace made of these shells' (Nekes & Worms 1953:369)

bargad 'necklace' [Presumably the final *j* has been erroneously omitted in the transcription.] (Nekes & Worms 1953: 497)

barrkan (n) 'cold time, winter, May-August'

-BARRKAND (iv) 'tie'

barrkarn (n) 'winter'

barrkarrk 'pigeon-toed'

barul (n) 'catfish'

-BARRIL (iv) 'fly down' (Nekes & Worms 1953)

bayakarr (adv) 'then, this morning'

baybirr (adv) 'behind'

bayib (baib) 'pipe (for smoking)' (Nekes & Worms 1953:338)

-BA(NI)NY (iv) 'drink' (?)

bibirnwan (n) 'spotted ray'

bibinwan, jineb bibinwan (n) 'stingray with black spots on the back and two stings' (Nekes & Worms 1953:371, 486)

- biburrbiburr (bibur bibur, bibor bibor) (pv) 'resound' (Nekes & Worms 1953: 519–520)
 - bibur bibur 'sound of the bullroarer, buliwana; make resounding noise' (Nekes & Worms 1953:371)
- bidab (bedab) (n) 'paperbark tree' (Nekes & Worms 1953:371)
- bidi (n) 'daughter'
- bididikurr (bididigor) (n) 'fire drill' (Nekes & Worms 1953:624)
- bidijin (bededjen) 'sand-hole with a subterranean spring' (Nekes & Worms 1953:372)
- bidily (bidilj) 'green, fresh, green grass' (Nekes & Worms 1953:373)
- bidimar (bidimar) (n) 'red sandstone, red paint, small lumps of red soil in the hair as a sign of mourning' (Nekes & Worms 1953:373)
- bidirrij (bidir-ēdj) 'very, serious' (Nekes & Worms 1953:373)
- bii (bē) 'ripe, cooked' (Nekes & Worms 1953:370)
- biib (n) 'bad'
- biijun (bē-djon) (n) 'cooked, ripe' (Nekes & Worms 1953:374)
- biik (n) 'humpy, shade'
- biil (n) 'anger, angry, fight'
- *bēl* 'angry, anger, rage, fight, quarrelsome' (Nekes & Worms 1953:377)
- biil-id (n) 'angry, wild, savage, aggressive, sulky, cannibal'
 bēl-ēd, bēle-ēd 'quarrelsome, wild, vicious, given to biting (dog, snake)'
 (Nekes & Worms 1953:377, 378)
- biilij (pv) 'anger, frown, frown at someone' biilinyirr (bēle-njer) 'with rage, quarrelsome, impudent' (Nekes & Worms 1953:379)

- biin (n) 'rotten, stinking'bīn 'putrid, rotten, maggot, carrion';figuratively, 'unchaste, immoral' (Nekes & Worms 1953:381)
- biini (n) 'worm, stomach worm'
- biinid (n) 'no good, swearer, swear word, fuckster'
- biini-kud (bīne-god) 'rotten, covered with maggots' (Nekes & Worms 1953: 596–597)
- biinyj (n) 'cold, winter' bindj 'cold' (Nekes & Worms 1953:383, 385)
- biird (adv) 'yesterday, the other day' baid 'yesterday' (Nekes & Worms 1953: 338)
- biirndi (n) 'penis'
- biiya (bēa) 'ripe, cooked' [cf. bii] (Nekes & Worms 1953:370)
- bikibiki (pigi pigi) (n) 'pig' (Nekes & Worms 1953:708)
- bilabil (n) 'leaf, leaves, bough, tea'
- bilarr (belar) (n) 'blackened soil after bushfire' (Nekes & Worms 1953:376)
- bilawuwilk (n) 'white gum'
- bilay (part) 'again, in return, more'
- bilbil (pv) 'shine, twinkle, flash'
- bilbilkaj (belbelgadj, belbel-gadj) (pv) 'be twinkling, be blinking, be flashing' (Nekes & Worms 1953:377, 536–537)
- bilbilmirr (n) Disaster Bay'
- bilijbilij (n) 'galah'
- bilirrmad (bilermad) (n) 'blue-tongue lizard (Tiliqua scincoides)' (Nekes & Worms 1953:663–664)
- biliyang (bilian) 'ceremonial meal' (Nekes & Worms 1953:377)
- -BILK (iv) 'blow (of wind)'
- bilkinul (belgenol) (n) (top) a country of the Nyulnyul' [also buleman and

- *neronjangamb*] (Nekes & Worms 1953: 379)
- bilkiny (n) plant type, bullrushes; has a sweet juicy long root; a nut dug out of the ground'
- bilkirr (bilger) (n) 'hammer-head shark' (Nekes & Worms 1953:379)
- bily (n) 'greedy'
- bilykud (bilj-god) (n) 'greedy' (Nekes & Worms 1953:380)
- bily-kurri (bilj-gori, belj-gori) (n) 'greedy, selfish' (Nekes & Worms 1953:380, 629)
- bilyurr (biljor) (n) 'soul, spirit' (Nekes & Worms 1953:380)
- bimbi (bembe) 'sickly, weak during reconvalescence' (Nekes & Worms 1953:381)
- bin (n) 'that' bën (n) 'that, there' (Nekes & Worms 1953:381)
- binarr (binar) 'quiet, reserved in speech' (Nekes & Worms 1953:382)
- binbal (binbal) 'pain, ache' (Nekes & Worms 1953:382)
- binbal-id (binbal-ēd) 'sorrowful' (Nekes & Worms 1953:676–677)
- binbin (benben) (pv?) 'greasy hair, shine with fat' (Nekes & Worms 1953:382)
- bindal (bindal) (n) 'scorpion (Urodacus fossor)' (Nekes & Worms 1953:382)
- bindan (n) 'bush, pindan scrub'
- bindanjak (bindan-djag) (n) 'one who travels in the bush, bush traveller' (Nekes & Worms 1953:442)
- bindany (djineb bindanj) (n) 'stingray type' (Nekes & Worms 1953:486)
- bindibind (bendebend) (n) 'butterfly' (Nekes & Worms 1953:382)
- bindikal (bindegal) (n) 'bad luck, disappointment' (Nekes & Worms 1953: 383)

- bindun (bindun) (n) 'mangrove' (Nekes & Worms 1953:383)
- bindurrk (n) (top) an unidentified place with a small creek'
- bing, bink (beng) 'fat, corpulent' (Nekes & Worms 1953:386)
- bingir (binger) (n) 'new moon' (Nekes & Worms 1953:386)
- binjan (bendjan) (pv) 'go hunting' (Nekes & Worms 1953:385)
- binjiman (bindjeman) (n) 'cork tree (Hakea laurea)' (Nekes & Worms 1953:385, 681)
- binmak (binmag) (n) 'sheet lightning' (Nekes & Worms 1953:386)
- binmakbinmak (binmag binmag) (pv) 'flash with sheet lightning' (Nekes & Worms 1953:386)
- binmal (binmal) (pv) 'firm, self-willed, obstinate, fearless, refusal, refuse someone, disobey someone' (Nekes & Worms 1953:386, 774–775)
- -BINY (iv) 'weaken' (?)
- binyb (n) 'marsh'
- binb (n) 'muddy plain, wet beach when tide has gone out' (Nekes & Worms 1953: 382)
- binybabinyb (n) 'marsh'
- binybiny (n) 'shiny'
- binyiny (n) 'duck'
- binyjibinyj, binyjabinyj (n) 'long pearlshell pendant, arm band' bindj 'pearlshell pendant, hair ornament of mother of pearl' (Nekes & Worms 1953:385)
- binyjin (n) 'bucket, coolamon, basket, dillybag, coolibah tree'
- bira-karr (bera-gar) 'abandoned' (Nekes & Worms 1953:568)
- biral (beral) 'brown, yellowish, rusty, yolk' (Nekes & Worms 1953:388)

- birimbirr (berember) 'ebony tree' (Nekes & Worms 1953)
- birl (bil) (pv) 'bury someone' (Nekes & Worms 1953:375)
- birlaarr (n) 'spring, spring country' belar 'spring place, bush abounding in water' (Nekes & Worms 1953:376)
- birlbirl (pv) 'short winded' birlbirl (belbel) (pv) 'palpitate, palpitation of the heart, pulsing of the arteries, breathless' (Nekes & Worms 1953:377)
- birndabirndany (n) 'big people'
- birndany (n) 'big, thick' bindinj 'big' (Nekes & Worms 1953: 383)
- birrabirr (pv) 'chafe'
- birrabul (n) 'a type of beetle that digs in the ground in the wet season'
- birramingkarl (n) 'cork tree'
- birrarl (n) 'yellow, brown'
- birray (n) 'mother'
- birray-kuburl (n) 'parents; mother and father'
- birrbalin (birbalen) 'scar, tatoo' (Nekes & Worms 1953:389)
- birrbinybirrbiny (n) 'small type of runner bird'
- birridir (bereder) 'hard, dry, without water' (Nekes & Worms 1953:389)
- birringk (bereng) (n) (top) country of the Nyulnyul' (Nekes & Worms 1953:390)
- birringkid (berengenēd) (n) 'people of Bereng' (Nekes & Worms 1953:390)
- birriny (birinj) (n) 'Pleiades' (Nekes & Worms 1953:390)
- birrirl (n) 'cockle shell'
- birrman (birman) (n) tree with round leaves and red berries, sap of the roots used as

- putty (ganda) (Nekes & Worms 1953: 391)
- birrminkirl (n) 'santalum lanceolatum; sandalwood, sandalwood tree, cork tree' birmingal 'sandalwood with black sweet fruits (November-February)' (Nekes & Worms 1953:391)
- -BIR(R)IL (iv) 'fly'; possibly the same as -BAR(R)IL, though glossed differently in Nekes & Worms (1953:368, 390)
- biyalbiyal (bial bial) (n) 'float, raft, catamaran' (Nekes & Worms 1953:370)
- blirrmad (bĭlermad, blermad) (n) 'blue tongue lizard' (Nekes & Worms 1953: 379)
- blurru (n) 'bald'
- bud (bod) (n) 'neck, nape of neck' (Nekes & Worms 1953:392)
- budarr (pv) 'exercise care, properly, carefully, cautiously'bodar, budar 'properly, well, in good order, correct, clean, empty' (Nekes & Worms 1953:393)
- budarrbudarr (pv) 'straighten, smooth out' bodar bodar 'put into order, properly, right' (Nekes & Worms 1953:393, 578–579)
- budbud (pv) 'twitch'
- budbudkarna (n) 'a type of bush food; children's name for it'
- budijirrkarr (budidjergar) (n) 'red fly, "police-fly" (chases other flies); abundant during bargana-season' (Nekes & Worms 1953:394)
- -BUDUBUDUWANYJ (iv) 'argue, quarrel'
- buduburr (bodobor) 'stamp feet in anger' (Nekes & Worms 1953:394)
- budukurr (bodogor) (n) a small edible shark' (Nekes & Worms 1953:395)
- budungan (n) a type of bush'

- budungkurr (bodongor) (n) 'big pimples, pock marks' (Nekes & Worms 1953: 395)
- -BUDUWA(NYJ) (iv) 'quarrel, argue'
- bujul (budjol) 'stare' (Nekes & Worms 1953:396)
- -BUKARR (iv) 'dream'
- bukarr (n) 'dream'bugar 'unconscious' (Nekes & Worms 1953:782)
- bukarrikarr (adv) 'dreamtime'
- bukinyan (bogenjan, bogonjan) (n) 'ghost of the dead' (Nekes & Worms 1953:398)
- bukuly (bogolj) 'ornament of feathers attached to a hair-pin of bone of a kangaroo (warandj)' (Nekes & Worms 1953:398)
- bukunjun (bogon-djon) (n) 'pregnant' (Nekes & Worms 1953:398)
- bul (böl) (pv) 'draw water' (Nekes & Worms 1953:399)
- -BULABUL, -BULIBUL (iv) 'water, wash, bathe, shower'
- bulibul (bule bul) (n) 'small lizard (lives in huts and houses)' 'The natives gave the following description: "bule bul is dirty looking, not nice, eyes dull; garwin (another lizard living in the huts) is smooth, has bright eyes, and looks lovely".' (Nekes & Worms 1953:400)
- buliwan (buliwan) (n) 'bullroarer' (Nekes & Worms 1953:402)
- bulj (pv, n) 'feel tired, be tired, tired'
- buljad (buldjad) (n) 'flat shield' (Nekes & Worms 1953:401)
- buljun (bol-djon) (n) 'swelling' (Nekes & Worms 1953:401)
- bulk (bulg) (n) 'bowels' (Nekes & Worms 1953:402)

- bulkaar (n) 'white, dandruff' bulgor 'white' (Nekes & Worms 1953: 402)
- -BULKUBULKUM (iv) 'swell up'
- bulkumarr (adv) 'middle' (?)
- bulkun, bulkurn (n) 'smoke'
- -BULM (iv) 'soak, steep'
- bulmbujun (bolmbodjon) (n) a small shark (not edible, given to biting) (Nekes & Worms 1953:402)
- bulngurr (adv) 'middle, between, halfway, on the way'
- bulubululuman (n) (top) Murphy Creek'
- bulubuluman (n) (top) an anchorage for boats at Beagle Bay'
- buluman (n) 'bullock'
- bulurr (bolor) (n) 'skull' (Nekes & Worms 1953:403)
- -BUL(AM) (iv) 'grow'
- bumbu (pv) 'lie on stomach'
- bund (bond) (pv) 'shut, shut something, closed, blocked' (Nekes & Worms 1953: 405)
- bundal (bondal) (n) 'club' (Nekes & Worms 1953:405)
- -BUNDAR(R) (iv) 'bite, chew hard food' (Nekes & Worms 1953)
- bundul (bundul) (n) 'garfish' (Nekes & Worms 1953:406)
- bundurr (bundur) (n) 'dust' (Nekes & Worms 1953:406)
- bungan (bunan) (n) 'degree of initiation' (Nekes & Worms 1953:408)
- -BUNGKABUNGKUM, -BUNGKUBUNGKUM (iv) 'swell up, bubble up'
- bungkan (bongan) (n) 'boy under twelve years of age' (Nekes & Worms 1953: 408)

- -BUNGKUM (iv) 'swell up, bubble up, inflate' (Nekes & Worms 1953)
- bungkurr (djineb bongor) (n) stingray type' (Nekes & Worms 1953:486)
- bungkurrungurr (n) a place name'
- buni (bone) 'that, there' (Nekes & Worms 1953:407)
- -BUNUNG (iv) 'cast off skin'
- -BUNYJ (iv) 'smell, stink'
- bunyj 'all, everyone'
- bunyman (n) 'mussel' (?)
- bur (n) 'place, country, camp, house'bōṛ 'place, home, room, earth, soil, country; time' (Nekes & Worms 1953: 409)
- burd (n) 'shit'
 bud 'excrement, action of the bowels, stool' (Nekes & Worms 1953:392)
- burlburl (böļ böļ) (pv) 'blister, swelling, come up in blisters' (Nekes & Worms 1953:399)
- burn (bon) (pv) 'blunt, be blunt' (Nekes & Worms 1953:407)
- -BURR (iv) 'cover over, paint, bury'
- burr (bör) (pv) 'sacrifice something, sacrifice self, abandon, give away' (Nekes & Worms 1953:409–410)
- burrarlburrarl (boral boral) 'bubbling' (Nekes & Worms 1953:410)
- burrb (pv) 'dance, hop, leap'
- burrbburrb (pv) 'dance'
- burrbkaj (pv) 'dance'
- burrij (boredj) 'rudder, long oar to steer raft or canoe' (Nekes & Worms 1953:411)
- burrj (bordj) 'in vain, without success' (Nekes & Worms 1953:396, 411, 863)
- burrlalakan (borlalagan) (n) 'Red Point, a fishing place near Beagle Bay in the country of the Nyulnyul' (Nekes & Worms 1953:412)

- -BURRUBURR (iv) 'obliterate'
- burruk (n) 'kangaroo'
- burrurlburrurl (pv) 'bubble'
- burrurr (n) 'string, strands from the wangkay tree, used as string, laces'
- burur 'hair string, string, thread made of human hair worn as ornament' (Nekes & Worms 1953:414)
- burulburul (böröl böröl) (n) 'owl, frogmouth, mopoke (Podargus strigoides)' (Nekes & Worms 1953: 412–413)
- burung (n) section term'
- burun a section term' (Nekes & Worms 1953:413)
- -BUR(R)AR(R) (iv) 'wait for' (Nekes & Worms 1953)
- -BUR(R)K (iv) 'look for, search' (Nekes & Worms 1953)
- buu (pv) 'blow on something, blow something away, off, smoke (e.g. a cigarette)'
- *bō* 'blow, breathe' (Nekes & Worms 1953: 391)
- buub (n) 'flower'bōb 'flower, blossom' (Nekes & Worms 1953:392)
- buuk (n) 'no good, rubbish'bōg 'bad, not edible' (Nekes & Worms 1953:397)
- buul (bōl) (n) 'brain; figuratively oysters (having the colour and softness of the brain); milk (for the same reason)' (Nekes & Worms 1953:399)
- buwarriwar (bowarewar) 'be seriously ill, nearly dead' (Nekes & Worms 1953: 414)
- buy (n) 'ant'
- buyibuy (boiyeboi) 'the beginning of the bargana-season' (Nekes & Worms 1953: 397)

D

- da (da, dai, dai dai, dau dau) 'sound of hammering' (Nekes & Worms 1953:415)
- daarr (pv) 'emerge, arrive; arrive with someone (in APP construction); come back (intr), come back with (tr); meet together; come from somewhere' dar 'arrive, come, meet together' (Nekes & Worms 1953:420)
- daarra (pv) 'burp'
- -DAB (iv) 'hit' [presumably a borrowing from Jabirrjabirr or Bardi]
- dab (dab) 'up, upwards' (Nekes & Worms 1953:415)
- dad (pv) 'put inside'
- dadakurr (n) 'gum tree; fruit from gum tree, a type of nut like a coconut; pretty creamy flower when in bloom. There is a small worm inside that was eaten.'
- dadal (dadal) (pv) 'break something; break (intr)' (Nekes & Worms 1953:415)
- dadurr (dador) (pv) 'sound heard when chewing bones' (Nekes & Worms 1953: 416)
- dak (dag) (n) 'deaf' (Nekes & Worms 1953: 416)
- dakadak (n) 'deaf' dagedag 'deaf' (Nekes & Worms 1953: 416)
- dakul (n) 'hole, depression, pit'
- dakurl (n) 'red ochre'
- dalab (dalab) (n) 'fruit of kawirrkawirr tree' (Nekes & Worms 1953:416)
- dalarr-kaj (dalar-gadj) (pv) 'noise, sound caused by cutting firewood' (Nekes & Worms 1953:417)
- dalwurr (n) 'gardenia pyriformis; a type of
 tree, used for medicine; rarely eaten
 "they hardly cared for it"
- -DAM (iv) 'hit, kill'

- daman (daman) (n) 'raid, attack, hostile attack during the night; to be attacked, fall under attack' (Nekes & Worms 1953:418)
- damanjun (daman-djon) (n) 'attacker, those participating in a raid' (Nekes & Worms 1953:418)
- damba (n) 'damper'
- dangk (dang) (n) 'jaw, jaw bone, lower jaw' (Nekes & Worms 1953:419)
- danyburr (danjbor) (n) 'surf, breakers' (Nekes & Worms 1953:420)
- darl (dal) 'snapping one's finger' (Nekes & Worms 1953:416)
- darrabar (n) 'black cockatoo' derabar, derebar 'black cockatoo (Calyptorhynchus banksi, Latham)' (Nekes & Worms 1953:421, 428)
- darriyarl (n) 'black cockatoo'
- darrkal (dargal) 'be dry, dried up' (Nekes & Worms 1953:421)
- darrnban (darnban) (n) 'firm, tight, clenched' (Nekes & Worms 1953:422)
- dibirr (pv) 'turn over, roll over, go around'
- dibirrdibirr (pv) 'stir, roll up, kneed, rotate'
- dilarrdilarr (delar delar) 'sound of hammering or cutting wood; be hammering' (Nekes & Worms 1953:425)
- dilb (delb) (n) 'kidney' (Nekes & Worms 1953:425)
- dilbak (dilbag) (pv) 'snapping one's fingers' (Nekes & Worms 1953:425)
- dilydily (dilj dilj) 'sparkle, foam of waves' (Nekes & Worms 1953:426)
- dimb (pv) 'join together, marry'
- dimbidimb (dembe demb) (pv) 'tie together, join together, marry' (Nekes & Worms 1953:414, 426)
- -DIMINYJ (iv) 'mistreat'

- dindi (n) 'peewee'

 dindi 'mud-lark (*Grallina cyanoleuca*,
 Latham)' (Nekes & Worms 1953:422,
 427)
- dinjal (n) 'hawk type, sparrow hawk' dindjal 'sparrow hawk' Nekes & Worms 1953:427
- diny (pv) 'crush'
- dinydiny (pv) 'crack, make cracking noise'
- dinydiny (dinj dinj) (n) 'grasshopper' (Nekes & Worms 1953:428)
- dirdird (n, pv) 'curly hair, tangled, crooked,
 curly'
- dirdird (pv) 'squeeze something, bend something, coil something up, wring neck; be coiled up (as of snake)' didid 'curly; make curly, wind, wring' (Nekes & Worms 1953:423–424)
- dirldirl (del del) 'spotted, striped, freckles' (Nekes & Worms 1953:424, 425)
- dirrb (pv) 'dive into water'

 derb 'dive, creep underneath, stoop, pass
 under or through' (Nekes & Worms
 1953:428)
- dirrb-id (derb-ied, derbi-ēd) (n) 'diver' (Nekes & Worms 1953:428, 515)
- dirridirr (pv) 'rotate, go around (e.g. hands
 of clock)'
 - dereder 'turn, go around, giddy' (Nekes & Worms 1953:429)
- dirruway (derowai, derwai) 'steer' [from English steer away] (Nekes & Worms 1953:429)
- diwilwil, diwirlwirl (n, pv) 'hard'
- diyu (n) 'constipated'
- deo 'hard, tough' (Nekes & Worms 1953: 428)

- dub (pv) 'blow, blow away (e.g. by wind);shake; make fire by blowing onto, blow onto to create fire'dob 'flame up, light fire, make fire'(Nekes & Worms 1953:430)
- dubdub (pv) 'blow off e.g. ashes by repeated blowing, be blazing (of fire), pat, shake, winnow'dob dob, dobedob (pv) 'dust something' (Nekes & Worms 1953:430)
- duburl (pv) 'swim'
- dud (dod) (pv) 'blow, punch, give a punch' (Nekes & Worms 1953:430, 795)
- dud-kujarr (dod-gudjar) (pv) 'boxingregarding, be boxing' (Nekes & Worms 1953:600–601)
- dudub (pv) 'full, replete'
- dudud (pv) 'knock'
- dujub 'fight in retribution'
- dujul (pv) 'hammer, pound'dodjol 'sound of cracking nuts' (Nekes & Worms 1953:431)
- dujuldujul (pv) 'hammer, pound'
- dujul-kaj (dodjol gadj) 'be hammering' (Nekes & Worms 1953:431)
- duk (pv) 'wipe something, wipe oneself, clean out, shake'dog 'wipe off, wipe away, brush, cast off skin' (Nekes & Worms 1953:359, 431)
- dukduk (pv) 'shake something, wag, rustle, winnow, pick nose'
- dukub (dogob) 'mischievous, obstinate' (Nekes & Worms 1953:432)
- dukuduk (pv) 'bounce'
- dukuduk (dogodog, dogedog) (pv) 'wipe off, brush, cast off skin' (Nekes & Worms 1953:431)
- dukuduk (pv) 'rub'

dukurl (n) 'red ochre; red ochre, paint for corroboree; mixed with water or fat'dogol 'ochre' (Nekes & Worms 1953: 432)

duldul (pv) 'hammer'

duli (doli) (adv) 'early, soon' (Nekes & Worms 1953:432)

dulkaari (n) a type of vegetable food'

dulng (doly) 'stumpy, small' (Nekes & Worms 1953:432–433)

dulud (dolod) (pv) 'pour something out' (Nekes & Worms 1953:385)

dulul (pv) 'trickle, pour something out' dolol 'pour something' (Nekes & Worms 1953:433)

duly (pv) 'squeeze'

dolj 'burst, explode' (Nekes & Worms 1953:354)

dolj 'burst open, get open, burst something open' (Nekes & Worms 1953: 433)

dumal (dumal) 'flame up, light, glare of a fire' (Nekes & Worms 1953:433)

dumbar (pv) 'fly'

dumbar 'fly up, flap wings' (Nekes & Worms 1953:433–434)

dumbardumbar (pv) 'fly'

dumburl (pv) 'clap'

dumburldumburl (pv) 'clap'
dumbul dumbul 'clap the cupped hands
together or against the upper-thigh'
(Nekes & Worms 1953:434)

dungurlang (n) 'red ochre'

duny (pv) 'squeeze'

dunyjurrurd (n) 'name of a bay'

dur (pv) 'fart'

dör 'fart' (Nekes & Worms 1953:435)

durlburr (n) 'flying fox'

dolbor (n) 'flying fox (Pteropus gauldi)' (Nekes & Worms 1953:432)

durr (pv) 'become/get warm'

durrb (n) 'hunter, good hunter, lucky; be lucky, have luck (e.g. catching fish)'

durb 'courageous, not shy, vicious (snake), successful' (Nekes & Worms 1953:435)

durrun (doron) (n) 'pointed stick used for magic murder' (Nekes & Worms 1953: 435)

duurr (pv) 'bump or knock something as by a blunt instrument' [The event typically involves contact of flat surfaces, or a blunt object on a flat surface; can also refer to bumping with the lateral edge of a long item, e.g. bumping someone with/ on the leg, and to bumping oneself (on something), typically accidentally, and thus e.g. 'to stub ones toe'.]

duurr (dor) 'cosy, snug, feeling at home, tame (animal)' (Nekes & Worms 1953: 434–435)

duurrduurr (pv) 'bump-bump, bang, bump
 (repeatedly)'

duy (dui) 'whirl, rise (of dust, smoke, etc.)' (Nekes & Worms 1953:431)

I

ibinbal (*ibinbal*) (n) 'fathers, plural of *iibal* 'fathers' (Nekes & Worms 1953:514, 515)

iibal (n) 'father, father's brother'ibal 'father, priest' (Nekes & Worms 1953:514)

iik (n) 'sore'

iilngam (n) 'a fish poison; a fish poison that comes from a creeping vine with long roots'

iirl-uk-win (*ēl-og-wen*) 'fallen tree' cf. Bardi *ēl* 'slant, on side' (Nekes & Worms 1953:519)

ijarr (*idjar*) 'shy, timid' (Nekes & Worms 1953:518, 792)

ijarr-jun (*idjar-djon*) 'refugee' (Nekes & Worms 1953:518)

ikany (*iganj*) 'pregnant, be pregnant (of dog)' (Nekes & Worms 1953:931)

ily (ilj) 'dance-ornament, a hand stick with shavings at its ends' (Nekes & Worms 1953:521)

ilyingirr (n) 'sea eel'

in 'this'

yene (n) 'this' (Nekes & Worms 1953: 932)

inar (n) 'adjacent or disharmonic
 generation'

yenar term denoting a certain relationship and applied to members of that pair of marriage-classes between whom intermarriage is forbidden; used by the *djando* who are members of the intermarrying classes yenara are banaga and bardjari, garimba and burungu (Nekes & Worms 1953:932)

inbal (*inbal*) 'incantation, spell' (Nekes & Worms 1953:523)

ingarduk (n) 'deadly ray'

inikurr (yene-gor) (n) 'this lot, these' (Nekes & Worms 1953:932)

irr (pro) 'they' 3AUG.CRD

ēr 'third person plural, they; often used for marking the plural' (Nekes & Worms 1953:527)

yer 'third person plural; they, them' (Nekes & Worms 1953:932–933)

irrkud (pro) 'them, theirs'

irrakul (irgil) (n) 'wattle, boomerang and tjuringa made out of irrkil wood' (Nekes & Worms 1953:529)

iragol 'yellow wattle, spear of *iragol* wood' (Nekes & Worms 1953:527)

 $irrakur\left(n\right)$ 'them, all of these people, many'

irral (*iral*) 'abduct' (Nekes & Worms 1953: 527)

irrib (pv) 'cave in, collapse'

irrirl (n) 'oxback turtle'

irrjiwar (n) 'three'

irdjowar 'three, the third' (Nekes & Worms 1953:528)

irrkud (n) 'everyone'

irrmurr (irmor) (n) 'father's sister, aunt' (Nekes & Worms 1953:529, 698–699)

iwan (iwan) (n) 'stone axe' (Nekes & Worms 1953:530)

iwannyirr (n) 'a big roughback stingray'

djineb iwannjer (n) 'stingray type' (Nekes & Worms 1953:486)

iwarl (n) 'tall, long'

iwal 'high, tall, long' (Nekes & Worms 1953:530)

yiwal 'high, long, tall' (Nekes & Worms 1953:933)

J

 $-J \sim -DI$ (iv) 'say, do, think'

jaad (n) 'shirt, dress'

jaal (n) 'beach, bay'

jaal, jarl (n) 'bank (of creek)'

jaalngk (n) 'spirit, totem'

djalng (n) 'magic power, healing power of witch doctor, medicine, totem' (cf. ana of Pacific Islands) (Nekes & Worms 1953:450)

jaam (n) 'mother's father, grandfather' *djām* (n) 'mother's father, mother's
father's brother and sister,
grandchildren' (Nekes & Worms 1953:
451)

jaamay (*jamay*) (n) 'mangrove and its edible fruit' (Nekes & Worms 1953:451)

jaamin (adv) 'completely, the lot, all kinds, finish, everything, the remainder, the rest'

djaman 'all' (Nekes & Worms 1953:452) jaang (n) 'periwinkle'

- djan 'oysters' (Nekes & Worms 1953:459)
- jaarnd (n) 'same or harmonic generation, member of harmonic or same generation'diānd 'relationship: the division of trib
 - *djānd* 'relationship; the division of tribe in *djānd* and *yenaṛ*' (Nekes & Worms 1953:457)
- jaaway (n) 'cunt'
- jabaarr (n) 'gecko'
- -JABAJAB (iv) 'ask'
- jabal (n) 'story'
 - djabal 'conversation, news, story' (Nekes & Worms 1953:436)
- -JABAL, -JIBAL (iv) 'ask'
- *jabalid* (*djabal-ēd*) (n) 'story teller' (Nekes & Worms 1953:436)
- *jaban* (*djaban*) (n) 'bullroarer' (Nekes & Worms 1953:436)
- *jabarr* (*djabar*) (n) 'fire saw' A small stick (*wōb badang* 'the young of the stick') is rubbed up and down in a groove of the *djabar*. (Nekes & Worms 1953:436)
- *jabij* (*djabedj*) 'feint, pretend to hit' (Nekes & Worms 1953:437)
- *jabijab* (pv) 'be itchy, ticklish, tickle, stinging, scratch oneself'
- *djabe djab* 'be itchy' (Nekes & Worms 1953:437)
- *jabiyang* (n) a type of shark with a comb on its nose
- djineb djabian 'sawfish type' (Nekes & Worms 1953:486)
- *jabul* (*djabol*) 'young man' (Nekes & Worms 1953:437)
- jabuluk (djabolog) (n) (top) a tract of land in Nyulnyul country, near Beagle Bay' (Nekes & Worms 1953:437)
- jabuly (n) 'grey hair'
- *djabolj* 'grey haired, old' (Nekes & Worms 1953:437)
- jad (pv) 'cut something; chop off; chop'

- jad (djad) (pv) 'bend something, crooked' (Nekes & Worms 1953:438)
- *jad* (*djad*) 'shirt, dress' [borrowing from English *shirt*] (Nekes & Worms 1953: 439)
- *jad-kaj* (*djäd-gadj*) 'sound of cutting, be cutting (wood)' (Nekes & Worms 1953: 438)
- jadal (djadal) (n) 'resting place (stool, bench, pillow), aerie of eagle' (Nekes & Worms 1953:439)
- *jadirr* (pro) 'ours, 1&2AUG.OBL' *djader* 'first person plural inclusive; our, us' (Nekes & Worms 1953:440)
- jadjad (pv) 'cut, chop' djad djad 'sound of cutting, cut wood, be cutting' (Nekes & Worms 1953:438)
- jad-kaj (djad-gadj) (pv) 'be chopping' (Nekes & Worms 1953:536–537)
- jaji (n) 'cousin, either sex'djadji 'paternal and maternal cousin';djalel according to Elkin (Nekes & Worms 1953:440)
- *jajirr* (pro) 'ours, 1&2MIN.OBL.EMP'
- *jajurr* (pv) 'meet together'
- jajurrjajurr (pv) 'meet'
- *jakal* (*djagal*) (n) 'steps, cuts in a tree for foothold'; figuratively, 'side of mother's hip as nest for baby' (Nekes & Worms 1953:442)
- jakarraman (djagaraman) 'sacrament' (Nekes & Worms 1953:514)
- *jakin* (*djagin*) (n) 'taboo, abstinence from certain foods' (Nekes & Worms 1953: 443)
- jakud (pv) 'return, go back to place'djagod 'return, go back, bring back'(Nekes & Worms 1953:443)
- *jakuljakul* (pv) 'curled up, be bent, bend something'
- jakurr (n) 'net, throwing net, fishing net'

-JAL (iv) 'see'

jal (pv) 'become/get split; split something
in two'

djal 'split' (Nekes & Worms 1953:445)

jal (*djal*) (pv) 'put together' (Nekes & Worms 1953:445)

jalabanan, jarlabanan (n) 'a bone fish'

djalabanan, djalebanan 'freshwater herring' (Nekes & Worms 1953:446)

-JALAJAL (iv) 'watch over'

jalangird (n) 'small goanna'

jalangk (n) 'niece, nephew'

jalar (djalaṛ) (adv) 'daybreak, dawn' (Nekes & Worms 1953:447)

jalbangurr (*djalbaŋor*) (n) 'a hollow trunk buried in the ground for collecting rain water running from a nearby tree with upright shaft in the middle to draw out the stored water' (Nekes & Worms 1953: 447)

jalbird (n) 'old, big one, wrinkled'

jalbur (n) 'a few'

djalbor 'a little, a few, some' (Nekes & Worms 1953:448)

jalburkur (*djalbor-gor*) (n) 'a few' (Nekes & Worms 1953:448)

jalijaljirr (*djaledjal-djer*) 'along the shore' (Nekes & Worms 1953:448)

jalikiny 'fight over women'

djalaganj 'jealousy, combat of men
claiming the same woman as wife'
(Nekes & Worms 1953:446)

jalingk (pv) 'ride (on a horse); ride (a horse)'

jalingk (*djaling*) (pv) 'ride, pick-a-back' (Nekes & Worms 1953:449)

jalinymarr (n) 'pelican'

jalirl (n) 'cousin'

djalel 'cousin' (Nekes & Worms 1953: 448)

djalal 'paternal and maternal cousins'; tjalal according to Fr W. Droste (Droste 1908), and chalual according to Fr Nicholas Emo (Emo 1895) (Nekes & Worms 1953:446)

jaljal, *jarljarl* (pv) 'crack, be cracked, become cracked'

jaljirr jal (djal-djer djal) 'along the shore' (Nekes & Worms 1953:448)

-JALK (iv) 'fall'

-DJALG 'place down, put something down somewhere; cause something to lie down somewhere'

jalk (*djalg*) 'bent, crooked, winding' (Nekes & Worms 1953:449)

jalkamangarr (n) 'hermit crab'

jalkar (n) a type of tree with fruit

jalkirra (djalgera) (n) (top) Bishop's Well, a place with a well near Beagle Bay Mission' (Nekes & Worms 1953:450)

jalngkakurr (*djalngagor*, *djalngagor*) (n) 'medicine man, witch doctor, doctor' (Nekes & Worms 1953:450–451)

jalngkangurr (n) 'doctor'

jalngkun (*djalngon*) (n) 'oysters' (Nekes & Worms 1953:451)

jalngkurrinyuriny (n) 'flu'

jalwal (n) 'cousin'

jalwiny (n) 'vein, spine'

djalwinj 'sinew, vein' (Nekes & Worms 1953:451)

jamad (*djamad*) (adv) 'nearby, approaching' (Nekes & Worms 1953: 451, 800–801)

jamangungkurr (*djamaŋoŋgur*) (n) 'second degree of initiation' [See Worms 1938: 170.] (Nekes & Worms 1953:452, 455)

- *jamay* (n) 'mangrove, a type of mangrove tree with green berries; edible; fruit of the mangrove tree'
- *jambil* (*djambel*) (n) 'hind flippers of turtle' (Nekes & Worms 1953:453)
- *jambiny* (*djambinj*) (n) 'white ants, termites' (Nekes & Worms 1953:453)
- jaminyirr (n) 'wife's father, son-in-law, daughter's husband (of a man)' djaminjer 'relation of father-in-law and his brothers with son-in-law' (Nekes & Worms 1953:454)
- jamiyun (n) 'axe, stone axe'
 djamiog, djamion 'axe, hatchet' [from English tomahawk] (Nekes & Worms 1953:454)
 damiyon 'hatchet, axe' [evidently either a mishearing or typo for djamiyon]
- jan (pro) 'my, 1MIN.OBL' djān 'possessive pronoun; personal pronoun when indirect verbal object' (Nekes & Worms 1953:455)
- -JANB (iv) 'kick, trample, step on'

(Nekes & Worms 1953:419)

- *janbanil* (*djanbanel*) (n) 'forked branches, steps' (Nekes & Worms 1953:457)
- -JANBIJANB (iv) 'tap foot'
- jang (djaŋ) (pv) 'chew' (Nekes & Worms 1953:459)
- jangajang (n) 'chain' djane djan 'chain' [from English chain] (Nekes & Worms 1953:459)
- jangkurr (n) 'hat'djangor 'hat' (Nekes & Worms 1953: 461)
- jangurl (n) 'small roots'
- janib (n) 'young boy'
- *janijirr* (pro) 'mine, 1MIN.OBL.EMP' *djān-djer* 'my, mine' [possibly plurality or large quantity of possessions] (Nekes & Worms 1953:774–775)

- *janirr* (pro) 'mine (many possessions)'
- janjarl (n) 'rain'
 - djandjal 'rain by north wind' (Nekes & Worms 1953:458)
- jard (pv) 'press'
 - djad 'press, lean on, push against' (Nekes & Worms 1953:438–439)
- jardab (pv) 'crawl'
- jardjard (pv) 'chop'
- jarijar 'crack'
- djaredjar 'a leak, hole' (Nekes & Worms 1953:466, 769)
- *jariny* (n) 'unripe, green, green colour' *djarinj* 'green, unripe' (Nekes & Worms 1953:467)
- jarjar (n) 'hole (e.g. in bucket)'
- -JARLINIK (iv) unknown meaning
- -JARLK (iv) 'hide, conceal' (Nekes & Worms 1953)
- jarr (djar) (pv) 'flow, gush, issue' (Nekes & Worms 1953:463, 909)
- -JARRAD (iv) 'stretch, extend'
- jarrad (pro) 'ours, 1AUG.OBL' djärad 'first person plural exclusive; our, us' (Nekes & Worms 1953:463–464, 926–927)
- jarradijirr (pro) 'ours, 1AUG.OBL.EMP'
- -JARRAJARR, -JARRJARR (iv) 'ascend, rise up, awake, jump up, stand'
- jarrbad, jarrbard (pv) 'lift something up
 (and carry it along); lift self up; pick up
 (from ground)'
 - *djarbad* 'upward, aloft, lift up' (Nekes & Worms 1953:465)
- *jarrban* (*djarban*) (pv) 'cross; cross over river, across, cross the water; interrupt a conversation' (Nekes & Worms 1953: 447, 465)
- jarrijany (djaredjanj) (n) 'wattle tree' (Nekes & Worms 1953:466)

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jarrinan (n) 'Lombadina'
jarringk (n) 'tooth, teeth'
-JARRINJARR (iv) 'rise'
-JARRJARR (iv) 'rise, get up'
jarrjarrbin (djardjarbin) (pv) 'be weak,
   slack' (Nekes & Worms 1953:465)
jarrjurr (n) 'kookaburra'
-JARRNGAJARR (iv) 'get up, arise'
-JARRNGAR (iv) 'stand, stand firm'
jarrwanngurr (n) 'blue hand crab'
-JAR(R)AL, -JIR(R)AL (iv) 'slide, slip, get
   bogged' (Nekes & Worms 1953)
-JAR(R)K (iv) 'shave' (Nekes & Worms
   1953)
-JAR(R)UNG (iv) 'pour, fill' (Nekes &
   Worms 1953)
jawa (djawa) (n) 'cold, cool; smell as of
   incense' (Nekes & Worms 1953:469)
jawuj (dja'udj) (n) 'trousers' [from English
   trousers] (Nekes & Worms 1953:462)
jawul (dja'ol) (n) 'a place cleared for
   ceremonies' (Nekes & Worms 1953:462)
jay (pro) 'ours, 1&2MIN.OBL'
djai 'first person dual inclusive; we, our'
   (Nekes & Worms 1953:441)
jayilkir (n) 'a type of bush food'
-JIB (iv) 'ask' (Nekes & Worms 1953)
jibalburu (n) 'honey sucker' [bird type]
jibalkur (n) 'honey eater, honey sucker'
   [bird type]
jibar (pv) 'twitch'
jibard (pv) 'sneak'
   djibad 'sneak, stalk something' (Nekes
   & Worms 1953:471)
jibardjibard (pv) 'sneak'
iibi (n) 'father's mother'
-JIBIJIB (iv) 'stare at, watch someone'
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jibijib (djibe djib) (pv) 'itch' (Nekes &
   Worms 1953:472)
jibil (pv) 'spit'
   djibel, djiwel 'drop, drip, spit' (Nekes &
   Worms 1953:472)
jibiljibil (pv) 'dribble'
   djibel djibel 'drip, trickle' (Nekes &
   Worms 1953)
   djibel djibel 'drip through hole' (Nekes
   & Worms 1953:472)
jibilybily (n) 'smallpox, chickenpox'
jibilyuru (n) 'whistling duck'
jibinjibin (djiben djiben) (n) 'green fly,
   greenbottle' (Nekes & Worms 1953:472)
jibir 'a sign; twitching in the hand, a sign
   that a man is coming; bad luck' (Torres
   & Williams 1987:10–11, 26–27)
   djiber 'presentiment, foreboding of
   coming event on account of nervous
   jerks or palpitation of a vein' (Nekes &
   Worms 1953:473)
jibul (pv) 'spray'
-JID (iv) 'go'
jid (pv) 'walk' (?)
jid, jird (pv) 'stand, stand up, arise, stop'
   djid 'stop, stand up, rest, standstill'
   (Nekes & Worms 1953:473–474)
   djid 'upright, stand upright' (Nekes &
   Worms 1953:914)
jidam (n) 'thunder'
   djidam 'thunder' (Nekes & Worms 1953:
   474)
jidangk (n) 'strap'
jidijun (n) 'antbed'
djididjon 'ant hill, termite nest' (Nekes &
   Worms 1953:475)
jidilarr (djidelar) 'slope, steep, downwards,
   deep' (Nekes & Worms 1953:475)
jidin (pv) 'carry on shoulders'
jidin (djeden) (n) 'swell fish, box fish' [This
   fish is capable of inflating, and is called
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- 'cow fish' on account of its horns, *wōr*.] (Nekes & Worms 1953:475)
- jidinarr (adv) 'straight, forwards' djidenar 'straight' (Nekes & Worms 1953:476)
- -JIDING (iv) 'touch'
- jidinjidin (pv) 'carry on shoulders'
- *jidirrjidirr* (*djider djider*) (n) 'hilly, uneven, rough' (Nekes & Worms 1953:474)
- jii (pro) 'your, 2MIN.OBL'
 dje 'second person singular; your, yours;
 personal pronoun object' (Nekes &
 Worms 1953:470)
- jiib (n) 'boomerang'djēb 'boomerang' (Nekes & Worms 1953:471)
- *jiib* (*djīb*) (n) 'spear shaft' (Nekes & Worms 1953:471)
- jiid, jiird (n) 'beard'
- jiid (pv) 'block, prevent'
 jiidi (pv) 'stop, stand'
- jiija (n) 'sister (little child speaking)' [from English sister]
- jiijirr (pro) 'yours, 2MIN.OBL.EMP'

 dje-djer 'second person singular,
 emphasised by additional suffix -djer
 'your'' (Nekes & Worms 1953:476)
- *jiirlk* (n) 'a type of *may* like *kaabiny*, ground up *kaabiny* seed'
- *jiirr* (*djīr*) (n) 'sandhill, dune' (Nekes & Worms 1953:489)
- *jik* (*djig*) (n) 'small bag hanging around neck' (Nekes & Worms 1953:476)
- *jikad* (*djigad*) (n) 'shovel nosed shark' (Nekes & Worms 1953:477)
- jikar 'in line'
- jikily (n) 'bohemia tree'
- jikir (pv) 'peep'
- *jil* (*djel*) (n) 'cold, fresh, refreshment; feel cold' (Nekes & Worms 1953:477)

- -JILAJILIK (iv) 'lick'
- jilal 'weak, make weak, weaken'
- jilalarr (djilalar) (pv) 'slope, downwards, hanging down; hang something up' (Nekes & Worms 1953:478)
- jilaman (n) 'rifle, gun, bullet'
- *jilb* (n) 'hermit crab'
- *jilbidingurru* (*djilbidi-ŋoro*) (n) 'mullet' (Nekes & Worms 1953:807)
- jilbin (n) 'short'
- *jilbirribirr* (*djilbereber*) 'striped, spotted, white spot on forehead of horses, dogs, etc' (Nekes & Worms 1953:478)
- jililiny (djililinj) (n) 'parrot, blue-mountain (*Trichoglossus rubitorquis*, Vigors and Horsfield); red-collared lorikeet' (Nekes & Worms 1953:479)
- jiliman (djileman) 'gun' (Nekes & Worms 1953:478, 479)
- *jilirrarr* (*djilerar*) 'hanging down' (Nekes & Worms 1953:479)
- *jilkirr* (*djilger*) (n) 'white ants, termites' (Nekes & Worms 1953:479)
- -JIL, -JILIK (iv) 'lick'
- jimal (djimal) (pv) 'calm, be calm, sultry' (Nekes & Worms 1953:480)
- jimarr (djimar) (n) 'stone knife for circumcision' (Nekes & Worms 1953: 480)
- jimarral (djimaral) (n) 'equal age, agemates, equal in age' (Nekes & Worms 1953:480, 488)
- -JIMB (iv) 'die'
- -jimbarl (in) 'foot, footprint, tracks'
- -jimbarlingid (in) 'boots'
- *jimbijimb* (pv) 'tip toes, arms folded' *djimbe djimb* 'holding hands on the hips, "hips firm", akimbo, with arms akimbo' (Nekes & Worms 1953:480–481)
- *jimbijimbang* (pv) 'stand with arms folded'

- *jimbil* (*djimbil*) (n) 'spear head of quartzite or glass' (Nekes & Worms 1953:481)
- jimbilad (djimbelad) (pv) 'downwards, hanging down; hang something up, come down' (Nekes & Worms 1953:481)
- *jimbin* (adv) 'inside, below, underneath' *djimben* 'inside, under, down, below' (Nekes & Worms 1953:481)
- *jimil* (*djimel*) (n) 'a creeper with edible roots' (Nekes & Worms 1953:482)
- jimindi (djimende) (n) 'fontanelle, membranous space between the frontal and parietal bones of infant's head' (Nekes & Worms 1953:482)
- jin (pro) 'his, her, its, 3MIN.OBL'djen 'third person singular: his, her;indirect verbal object: him, her' (Nekes & Worms 1953:482)
- jin irr (djen yer) (pro) 'his (before plural)' [The term 'before plural' apparently indicates a plurality of possessions.] (Nekes & Worms 1953:932–933)
- jinaburd (n) 'shoe, boot'
- jinalarl (n) 'a bone fish'
- jinan (djinan) (n) 'fish hawk, osprey (Pandion haliaetus)' (Nekes & Worms 1953:484)
- jinarl (n) 'glass or stone tipped spear'
 djinal 'spear, bamboo' (Nekes & Worms
 1953:483–484)
- *jinbur* (*djinbor*) (n) 'garfish' (Nekes & Worms 1953:484)
- jindibal (djindebal) (n) 'chisel of stone or shell; clamped by a double strip of wood and fixed with spinifex resin (gandi, limiri)' (Nekes & Worms 1953:484)
- *jindibirribirr* (*djindibereber*) (n) 'willie wagtail (*Rhipidura leucophrys*, Latham; *Rhipidura flabellifera*, Gmelin)' (Nekes & Worms 1953:485)

- jindin (djindin) (pv) 'squat, sit down with toes only on ground, buttocks on heels' (Nekes & Worms 1953:485)
- -JINDIWAR (iv) 'hang'
- -JINDIWARJINDIWAR (iv) 'hang'
- jingkar (pv) 'carry on belt'
- jingkarr (djingar) 'joke, witty, playful' (Nekes & Worms 1953:487)
- jinib (n) 'stingray'
 - djineb 'generic name for stingrays and sawfish' (Nekes & Worms 1953:486)
- *jinijinang* (pv) 'mock someone, mock one another'
 - djenedjen-aŋ 'tease someone, bother' (Nekes & Worms 1953:486)
- *jinijirr* (pro) 'his, hers, its, 3MIN.OBL.EMP' *djenedjer* 'his, her' (Nekes & Worms 1953:486)
 - djen-djer 'third person singular: his, belonging to him' (Nekes & Worms 1953:483)
- jinirr (pro) 'his many things'
- jinirr (djener, djene) (adv) 'not taking care, letting alone, not interfering' (Nekes & Worms 1953:485–486)
- jinirr (djiner) (n) 'leech' (Nekes & Worms 1953:486)
- jinji (djindji) (n) 'honey eater (Meliphagida)' (Nekes & Worms 1953: 485)
- *jinjirr* (*djindjer*) (n) 'poison (arsenic, strychnine used by white men for killing dingos)' (Nekes & Worms 1953:485)
- *jinyjibirrbirr*, *jindibirrbirr* (n) 'willy wagtail'
- jirdijird (pv) 'trip over'
- jirib (pv) 'poke'
- -JIRIJIRIK (iv) 'tease'
- -JIRIK, -JARIK (iv) 'fear, be afraid of, tremble'
- -JIRIKJIRIK (iv) 'provoke'

- jirr (pro) 'their, theirs, 3AUG.OBL'

 djer 'third person plural: their' (Nekes & Worms 1953:488)
- jirraawal (n) 'a big white fish'
 djerawal 'whiting' (Nekes & Worms
 1953:489)
- jirrb (pv) 'poke, stab; give someone a needle; stick into ground; prick'djirb 'poke, pierce, stick' (Nekes & Worms 1953:490)
- *jirrb* (*djerb*) (pv) 'lift up' (Nekes & Worms 1953:489–490)
- jirrbijirrb (pv) 'poke'
- *jirrib* (n) a type of big tree, with prickly leaves like sandpaper, and small fruit
- jirrid (djered) (n) 'a small bush fig (ficus glaberosa)' (Nekes & Worms 1953:490)
- jirrijirr (pro) 'theirs, 3AUG.OBL.EMP'
- *jirril* (*djiril*) 'strong, strength, loud voice' (Nekes & Worms 1953:491)
- *jirrirr* (pro) 'theirs (with an augmented number of possessums)'
- jirrirr (n) 'shooting star'
- -jirrjirr (in) 'navel'
- *jirrkabiny* (*djergabinj*) 'frog' (Nekes & Worms 1953:492)
 - *djergabin* 'frog' (Nekes & Worms 1953: 488)
- jirrm (pv) 'sing'
- jirrmjirrm (pv) 'sing'
- *djirm djirm* 'sound of music sticks' (Nekes & Worms 1953:492)
- jirrmkaj (djirm gadj) (pv) 'sound of music sticks, beat music sticks' (Nekes & Worms 1953:492)
- jirrngiliny (n) 'cockle shell'
- jirrngkin (djirngin) (n) 'owl' (Nekes & Worms 1953:493)

- jirruway (djirowai, djirrwai) 'oar, steer' [from English steer away] (Nekes & Worms 1953:493)
- -JIR(R)IJIR(R)IK (iv) 'insult, call names, rebuke'
- -JIWAND (iv) 'hang'
- -JIWAR (iv) 'follow'
- jiwarr (n) 'dead body, skeleton, dead
 person'
 - *djiwar* 'dead; to die' (Nekes & Worms 1953:493, 784)
- jiwarrij (n) 'a dance for the dead'
- *jiwil* (*djiwil*) (n) 'spittle' (Nekes & Worms 1953:493)
- jiw (djeo) (n) 'heron (Notophoyx Novae Hollandiae)' (Nekes & Worms 1953: 488)
- *jiyu* (*djiu*) (pv) 'itch, be itchy' (Nekes & Worms 1953:487–488)
- jub (pv) 'cut, chop'
- jubak (n) 'tobacco'
- jubjub (pv) 'snatch, pluck out'
 jubjub (pv) 'peck, peck something'
- *jubjub* (*djob djob*) (pv) 'break, cut, divide, break off' (Nekes & Worms 1953:495)
- *jubul* (pv) 'swim, dive, duck in water, duck someone in water, noise of something falling into the water'
- *djobor* 'splash water by bathing, splash in water' (Nekes & Worms 1953:495–496)
- *juburr* (*djobor*) (n) 'bird's tail' (Nekes & Worms 1953:495)
- -JUD (iv) 'move (of tide), dry up, become dry, tide going out, ebb tide'
- -JUDAR (iv) 'trip, hurt (?), go straight on, straight forward'
- -JUDIJUD (iv) 'go out (of tide)'
- *judiny* (adv) 'straight, for good, forever' *djudinj* 'for good and for all' (Nekes & Worms 1953:497)

- *juduk* (*djudug*) (pv) 'kick, stumble, cause to stumble' (Nekes & Worms 1953:497)
- judukurr (djudugur) (n) 'heat, sweat' (Nekes & Worms 1953:498)
- jukar (n) 'soft, softly, quietly, slowly'
- jukjuk (pv) 'shake-a-leg dance'
- jukuk (n) 'a large type of dove'; 'white cockatoo' (?)
- jukunyjukuny (n) 'Able Bore, a spring'
- *jukurd* (n) 'caterpillar, a type of grub, about 6" long, which lives in roots of trees, worm that lives in *dadakurr* fruit'
- *jukurr* (pv) 'poke out tongue; be caught poking in (e.g. food in teeth, splinter in clothing); poke someone, give needle; poke finger in someone's ribs'
- *jukurrjukurr* (*djogor djogor*) (pv) 'divide, cut (e.g. twig), break off' (Nekes & Worms 1953:499)
- *jul* (*djol*) (n) 'face, look, appearance' (Nekes & Worms 1953:500)
- *jul* (*djol*) (pv) 'bend knee, kneel down, genuflect' (Nekes & Worms 1953:500)
- -JULAJULUK (iv) 'wash'
- -JULB (iv) 'startle, scare, chase away'
- *julk* (*djolg*) (n) 'mouse' (Nekes & Worms 1953:501)
- -JULNG (iv) 'tell, relate'
- -JULNGJULNG (iv) 'ask'
- -JULUJULUK (iv) 'wash'
- -JULUK (iv) 'wash'
- *jululk* (*djololg*) (n) 'skull' (Nekes & Worms 1953:503)
- *julumad* (*djulumad*, *djolomad*) (n) 'mother whose child died' (Nekes & Worms 1953:503, 663–664)
- -JUMB (iv) 'extinguish'
- jumbarl (adv) 'afternoon'

- -JUMBARR (iv) 'straighten (e.g. a spear by heating); singe a bird or kangaroo, smoke a fish superficially'
- jumbarraarri, jumbirrirri (n) 'knife'
- jumbirl (n) 'daytime' djumbol 'day, daylight' (Nekes & Worms 1953:503)
- jumbul 'hurt'
- *jumburr* (n) 'small type of rock cod, small rock cod'
- jundijund (djonde djond) (n) 'heel' (Nekes & Worms 1953:505)
- jundul (djondol) (n) 'narrow' (Nekes & Worms 1953:505)
- -JUNG (iv) 'cramp'
- jungk (n) 'fire, firewood'djung 'fire, firewood, thirst' (Nekes & Worms 1953:506, 507)
- jungkarr (pro) 'your, 2AUG.OBL'djungar 'second person plural: you, yours' (Nekes & Worms 1953:507)
- jungkim (djungem) (n) 'yolk of a bird's egg' (Nekes & Worms 1953:506)
- *jungkubirlbirl* (n) 'hawk type, fire bird' *djungebelebel* 'mythical fire bird that brought the fire and fire drill' (Nekes & Worms 1953:507–508)
- jungkumarr (djungomar) (n) 'glow worm' (Nekes & Worms 1953:506, 508)
- jungurrb, jungarrb (pv) 'short winded, puffed' juu 'short' (?)
- junk (pv) 'run, be running along; start running'
- djung (pv) 'haste, speed, run, run away' (Nekes & Worms 1953:505–506)
- junkid (djungiēd) (n) 'runner' (Nekes & Worms 1953:506)
- juny (pv) 'kiss'

 djonj 'suck, kiss' (Nekes & Worms
 1953:508)

- *juny* (*djonj*) (n) 'marrow of bone' (Nekes & Worms 1953:508)
- juraj (n) 'rice'
 - djöra'dj, djöra'dji 'rice' [from English rice] (Nekes & Worms 1953:509)
- *jurbarr* (*djoṛbar*) 'become stiff' (Nekes & Worms 1953:510)
- jurdjurd (n) 'a type of big bird'
- jurdukurr (n) 'sweat'
- -JURND (iv) 'go out (of tide)'
- *jurr* (pv) 'elbow, hit with elbow, elbow someone'
- jurr (djur) (pv) 'come down, go down, climb down; cross river' (Nekes & Worms 1953:509)
- jurrar (djurar) (pv) 'track, footprint' (Nekes & Worms 1953:510)
- *jurrayinjun* (*djoraendjon*) 'elopement of a woman' (Nekes & Worms 1953:511)
- jurrb (pv) 'jump, jump about, flap wings, hop away, descend, climb down'djurb 'jump, hop over' (Nekes & Worms 1953:510)
- jurrbjurrb (pv) 'hop along'
- jurrk (inter) 'goodbye, farewell'djurg 'goodbye' (Nekes & Worms 1953: 511)
- jurrkjurrk (inter) 'goodbye, farewell'
- *jurrku* (*djurg-ō*) (inter) 'farewell' (Nekes & Worms 1953:511)
- *jurrmbul* (*djormbol*) (pv) 'soak something, steep' (Nekes & Worms 1953:511)
- *jurrung* (*djoroŋ*) (pv) 'choose' (Nekes & Worms 1953:512)
- jurrungk (n) 'right, right-handed'djorong 'to the right, on the right hand'(Nekes & Worms 1953:512)
- jurrungkkadiny (adv) 'rightwards'
 djorong-gadin 'to the right-hand side'
 (Nekes & Worms 1953:512)

- *jurrurr* (*djoror*) (pv) 'pour, rain, flow, issue, run (of water)' (Nekes & Worms 1953: 513)
- *jurráb* (*djora'b*) (n) 'strap' [from English *strap*] (Nekes & Worms 1953:509)
- -JURUB (iv) 'fart'
- *jururr* (*djoror*) (pv) 'poke, prick' (Nekes & Worms 1953:513)
- *jururrjururr* (*djorordjoror*) (pv) 'poke, prick, poke into repeatedly' (Nekes & Worms 1953:513)
- juu (inter) 'OK'
- juu (n) 'plover'
- *juub* (*djōb*) (n) 'soap' [from English *soap*] (Nekes & Worms 1953:495)
- *juuk* (*djōg*) (n) 'sea eel (*Anguilla australis*)' (Nekes & Worms 1953:498)
- *juunk* (*djōng*) (n) 'heavy, iron' (Nekes & Worms 1953:508)
- *juurr* (n) 'snake, honey bee, mosquito, sandfly'
 - *djuṛ* 'snake (generic), noxious insects, insect of the honey (i.e. bee), vermin' (Nekes & Worms 1953:508–509)
- *juwajuwa* (*juwajuwa*) (n) 'snipe (Gallinago megala, Swinhoe)' (Nekes & Worms 1953:494)
- juy (pro) 'you, 2MIN.CRD'
- *djoe* 'second person singular, you' (Nekes & Worms 1953:498)
- juyangay (pro) 'me and you'

K

- -K (iv) 'carry, bring, take'
- -k (in) 'back'
- ka (gä) (inter) 'give' (Nekes & Worms 1953:531)
- *kaab* (*gāb*) (pv) 'uncover, open something' (Nekes & Worms 1953:531)

kaabiny (n) 'terminalia ferdinandiana, a tree type with gum; its seed is eaten green'

gabin 'gum tree with edible fruits and gum' (Nekes & Worms 1953:532)

kaabir (n) 'liver'

kaard (adv) 'still, yet' gad 'still, yet' (Nekes & Worms 1953: 533)

kaard arri (gad-are) (part) 'not indeed, not at all, by no means' (Nekes & Worms 1953:533)

kaard nung (gad noŋ) "still in heart", fond of, like' (Nekes & Worms 1953:536)

kaadk (n) an unidentified type of plant'

kaaj (*gādj*) (n) 'bloodwood tree' (Nekes & Worms 1953:535)

gādj tree with black bark, used for coolamons and shields' (Nekes & Worms 1953:536)

kaajirr (n) 'whiskered salmon'

kaal (n) 'father'

kaamb (n) 'pandanus, palm tree, nut of the pandanus tree'

gāmb 'cone of pandanus tree' (Nekes & Worms 1953:555)

kaamilawil unknown meaning'

kaank, karnk (n) 'raw' gānge 'unripe, raw' (Nekes & Worms 1953:564)

kaarawirl (n) 'long grass, spear grass'

kaari (n) 'bitter, beer, grog, salt water'

kaariid (n) 'drinker, alcoholic'

kaarr (pv) 'rub'

kaarr (n) 'sea, ocean, waves'

kaarramarn (n) 'exchange, exchange of goods for a wife by two in-laws'

kabad (gabad) 'perhaps' (Nekes & Worms 1953:865–866)

-KABD (iv) 'hiccup'

kabirl (n) 'grandson, father's mother' gabel 'father's mother' (Nekes & Worms 1953:532)

kabul (gabol) (n) 'bamboo' (Nekes & Worms 1953:533)

kabul (*gabol*) 'frog' (Nekes & Worms 1953: 533)

kabul (gabol) 'baby' (Nekes & Worms 1953:533)

kaburr, kaabur (n) 'guts, tripe, intestines' gabor 'bowels, stomach' (Nekes & Worms 1953:533)

-KAD (iv) 'enter, go in, go down'

kad (pv) 'kill'

kad (pv) 'hold back'

kad, kard (pv) 'cut, bite'

gäd 'bite' (Nekes & Worms 1953:533)

kadakadin (n) 'bee' (?)

-KADAKAND (iv) 'scratch'

kadakur (adv) 'finished, completed,
 enough'

gadogor 'finished, all right, goodbye' (Nekes & Worms 1953:536)

-KADIKAD (iv) 'go in and out'

kadikad (pv) 'bite, cut up'

kadin (gadin) 'inside, within, in' (Nekes & Worms 1953:535)

-KADIW (iv) 'grow' (Nekes & Worms 1953:535)

kadkad (pv) 'tremble'

gadgad 'shiver, tremble' (Nekes & Worms 1953:535)

kadkad (gad gad) 'not yet, wait' (Nekes & Worms 1953:533)

-kad-kud (nigad-god) (in) 'corpulent' (Nekes & Worms 1953:596–597)

- kajanangurr, kajanngurr (n) a type of bush food found in spring country; resembles a peanut'
 - gadjannor, gadjananor a plant with small sweet bulbs; bulbous plant; time: rain-season' (Nekes & Worms 1953:537, 807)
- -KAJARR (iv) 'get sick (?)'
- kajarr (n) 'a type of whiskered salmon'
- kajirrangurr, kajirringur (n) a type of vegetable, a peanut-like food, bullrush type, with roots like a peanut
- kajunang (gadjonaŋ) 'a while, for a time' (Nekes & Worms 1953:538)
- kajurd (n) 'cold ashes; ashes from white gum tree'
 - gadjod 'ashes' (Nekes & Worms 1953: 538)
- kakajikakaji (n) 'woodpecker'
- *kakarr* (n) 'uncle, mother's brother, father's brother'
 - gagar 'uncle, mother's brother' (Nekes & Worms 1953:540)
- -KAKUL (iv) 'break' (Nekes & Worms 1953)
- -KAL (iv) 'wander, roam, play'
- -KAL (iv) 'be homesick' (?)
- *kala* (*gala*) (part) indicating the perfect (Nekes & Worms 1953:542)
- -KALAB (iv) 'be born'
- -KALABIN(Y)J (iv) 'regret' (Nekes & Worms 1953)
- -KALAK (iv) 'approach, come up to'
- -KALAKAL (iv) 'play'
- kalakal (galagal) 'mica, glittering of pipeshell bargadj' (Nekes & Worms 1953: 543)
- kalakala (gala gala) 'diarrhoea' (Nekes & Worms 1953:543)
- -KALAKALAK (iv) 'follow someone'

- kalalang (galalan) (n) mythical hero, creator (Nekes & Worms 1953:543)
- kalamb (adv) 'hither, towards here' galamb 'hither, here' (Nekes & Worms 1953:544)
- kalambangin (adv) 'towards here'
- kalamb nyamalk (galamb njamalg) 'hither and thither' (Nekes & Worms 1953:813)
- kalanganj (galanandj) (n) 'clearing, plain' (Nekes & Worms 1953:546)
- *kalarrad* (*galarad*) (n) 'turtle egg' (Nekes & Worms 1953:546)
- kalarrijun (galaredjon) 'yellow wattle' (Nekes & Worms 1953:546)
- kalaru (n) 'lightning'
- -KALB (iv) 'feel lonely, pine for' (Nekes & Worms 1953)
- kalb (adv) 'up, on top, outside' galb 'above, on top, high' (Nekes & Worms 1953:546–547)
- -KALBARR (iv) 'drop, lose'
- kalbijun (n) 'mangrove tree'
- kalbijun (galbedjon) (n) 'edible witchetty grub; larva of big Cossos moth in the gandileb tree' (Nekes & Worms 1953: 548)
- -KALBIKALB (iv) 'feel lonely, pine for'
- kalbikalb (adv) 'above, up and up'
- *kalbiny* (*galbinj*) (n) 'hook of spear thrower' (Nekes & Worms 1953:548)
- kalbirirr 'roof of mouth, palate'
- kalbkalb (adv) 'up high'
- *kalimand* (*galemand*) (n) 'seaweed' (Nekes & Worms 1953:550)
- kaliny (pv) 'dodge, avoid' galinj (pv) 'shunt, dodge, evade' (Nekes & Worms 1953:550)
- kalinykaliny (pv) 'avoid'

- kalirr (galer, gäler) 'foam of waves, green scum on stagnant water' (Nekes & Worms 1953:553, 546)
- kaliw (galeo) 'fire saw' (Nekes & Worms 1953:149)
- *kaljind* (*galdjend*) 'love song, corroboree with love songs' (Nekes & Worms 1953: 548-549)
- kalkarr, karlkarr (n) 'bereaved of spouse, widow, widower' galgar 'widow, widower' (Nekes & Worms 1953:551)
- kalkir, kalkur (pv) 'swim'
- kalkuriny (n) 'whirlwind' galgorinj 'whirlwind' (Nekes & Worms 1953:551)
- kalkurr (galgor) (pv) 'stiff, sprain' (Nekes & Worms 1953:551)
- kalu (galu, galua, galw, galwa) (n) 'raft, catamaran' (Nekes & Worms 1953:553)
- kalud, kalurd (n) 'grandfather, father's father' galod 'grandfather, father's father and his grandchildren' (Nekes & Worms 1953:553)
- $-KALWAL \sim -KILWAL (+APP)$ (iv) 'be restless, sleep restlessly' (Nekes & Worms 1953)
- kalwar (pv) 'be/become exposed, expose something, exposed'
- kaly (n) 'watery or liquid food'
- kamal-abul (gamal-abol) 'countryman' (Nekes & Worms 1953:313, 554)
- kamani (n) 'mother's mother'
- kamard (n) 'mother's mother, grandmother' gamad 'grandmother, mother's mother' (Nekes & Worms 1953:554)
- kamardkamard (n) 'blue jay'
- kamarrangany (gamarananj) (n) 'Australian echidna (Tachyglossus

- aculeatus aculeatus, Shaw)' (Nekes & Worms 1953:555)
- kambaj (gambadj) (n) 'old woman' (Nekes & Worms 1953:555)
- kamban (gamban) (n) 'short paddle' (Nekes & Worms 1953:555)
- kambil (gambel) 'third degree of initiation' [See also Worms 1938:168, 176.] (Nekes & Worms 1953:556)
- kanaabin (n) 'murderer' ganabin 'magic murderer' (Nekes & Worms 1953:558)
- kanambird, kanimbiird (adv) 'last week, the other day'
- kananganj (gananandj) (n) 'emu (Dromaius novae hollandiae); black spot in the Milky Way' (Nekes & Worms 1953:559)
- kanard, karnad (n) 'ta-ta lizard' ganad 'small lizard' (Nekes & Worms 1953:558)
- -KANB (iv) 'get fat' (Nekes & Worms 1953)
- kanbak (ganbag) (n) 'music sticks, two cigar-like sticks beaten together rhythmically' (Nekes & Worms 1953: 559)
- kanbal (ganbal) (n) 'track of snake or lizard' (Nekes & Worms 1953:559)
- kanbaliny (n) 'type of seabird'
- ganbalinj 'brown hawk (Falco Ieracidea)' [The mythical fire bird that brought fire and fire drill; its nightly call gobinj gobinj announces visitors. Its other name is *Djungebelebel*; married the mythical bird *Gidau*.] (Nekes & Worms 1953:559)
- kanbirr (n) 'rough paperbark (with bush honey)'
- ganbor 'paperbark tree' (Nekes & Worms 1953:560)
- -KAND (iv) 'scratch'
- kandabid (gandabed) (n) 'frogs burying themselves in the sand during dry

season; used for water supply' (Nekes & Worms 1953:560)

-KANDAKAND (iv) 'scratch'

kandarr (gandar) (n) 'shark' (Nekes & Worms 1953:561)

kandilib (gandileb) (n) 'mangrove' (Nekes & Worms 1953:561)

kandirrirang, kandirrirrang (n) (top) a windmill near Beagle Bay, the first waterhole from Beagle Bay on old road to Broome'

kangk (gaŋg) (n) 'handle of axe' (Nekes & Worms 1953:565)

kangkul (n) (top) Lake Flora, a small lake'

kanimbiird (ganembēd) (adv) 'some time ago' (Nekes & Worms 1953:563)

kanjun 'last time, you remember' (?)

kankikanki (gange gange) 'underdone, not really raw' (Nekes & Worms 1953:564)

-KANM (iv) 'laugh, laugh at, deride'

-KANYB (iv) 'vomit'

-KANYJ (iv) 'forget; leave, abandon'

kanyjingarr (n) 'lightning'

karajarr (n) 'barramundi'

karalykaraly (grälj grälj, gärä'lj gärä'lj) (pv) 'stutter, talk indistinctly' (Nekes & Worms 1953:634)

karawil (n) 'prickle'

-kard (in) 'body'

kardakard (pv) 'scratch'

kardimb (n) 'nose stick, nose bone, bee's
hole; hole through which bees enter nest;
wax'

gadimb 'perforation of the septum, nose-pin of wood or bone; entrance to bee's nest' [Original meaning was 'tube, pipe'; this is revealed, for instance, by gadimb djen mon meaning 'waxen tubular entrance of bee-nest' in Jabirrjabirr and Nyulnyul.] (Nekes & Worms 1953:545, 732–733)

kardk (n) 'bloodwood tree'

karimb (n) section term'

garimb section term' (Nekes & Worms 1953:576)

karirr (n) 'saliva'

garer 'spittle, phlegm, expectoration' (Nekes & Worms 1953:572, 577)

kariwin (garewen, garwen) (n) 'sandhill, camp on sandhill' (Nekes & Worms 1953:577, 581)

-KARLBIR(R) (iv) 'hum, sing incantations' (Nekes & Worms 1953)

karli (n) 'woomera'

karlib (n) 'fire saw, fire drill'
galeb 'fire saw' [Consists of two pieces:
galeb (djabar), the resting stick of soft
wood and grooved; and djabar (Bardi,
Nyulnyul), wōb (Jabirrjabirr), the proper
saw of hardwood is quickly moved in the
groove of former with its sharp edge.]
(Nekes & Worms 1953:549)

karlikurru (galigoro) (n) 'bullroarer, tjuringa' (Nekes & Worms 1953:550)

karlil (n) 'a bone fish'

karlurr (galor) (n) 'lightning' (Nekes & Worms 1953:553)

karlurr (gaļor) (n) 'mullet' (Nekes & Worms 1953:553)

karnamarr, kanamarr (n) 'shark' ganamer 'small shark' (Nekes & Worms 1953:558)

karnb (n) 'thigh'

ganb 'upper part of thigh, superficial inguinal glands' (Nekes & Worms 1953: 559)

karnbalm (n) 'cross, tree type' ganbalm 'forked branch; cross of christ' (Nekes & Worms 1953:559)

karnburr (n) a type of tree, paperbark'

karndi (n) 'tree burial'

karndilib (n) 'platform for the dead'

karndirrkarndirr (n) 'green tree python'

karr (n) 'salt'

karrabard (n) 'ribs'

570-571)

karraburl (n) 'nail tailed kangaroo, wallaby'garabol 'small wallaby with grey fur and black tail' (Nekes & Worms 1953:

karralan (n) 'dirty water; rash from caterpillars or grass'

karraling (*garalin*) (n) a type of bush fruit (Nekes & Worms 1953:571)

karralkun (garalgon) (n) 'female' (Nekes & Worms 1953:572)

karramaal (n) 'white ochre'

karrambal (n) 'bird' garambel 'bird (generic)' (Nekes & Worms 1953:572)

karramil (n) 'white ochre'

karrangkam (n) 'bush onion; a type of bush food which is eaten raw; not cooked in the fire previously'

garangam 'yam' (Nekes & Worms 1953: 572)

karrawirn (n) 'hill' garawain 'rocks, stony place' (Nekes & Worms 1953:572)

karrb (garb) (pv) 'broken piece; get broken' (Nekes & Worms 1953:573)

karrbad (garbad) 'left or right side of body and other objects' (Nekes & Worms 1953:573)

karrbin, karrbiny (n) 'shield, narrow shield'

karrbin (garbin) 'wattle, its crushed seeds; bent shield'; by analogy, 'cockroach' (Nekes & Worms 1953:573)

karrburr (garbor) (adv) 'irrealis, perhaps' (Nekes & Worms 1953:573)

karridad (garedad) (n) 'double gee (Emen Australis), prickly grass' (Nekes & Worms 1953:575)

karrij (garedj) (n) 'small blue bone fish' (Nekes & Worms 1953:575)

karrikan (garigan) (n) 'body, corpse, cadaver, relic' [Bones or hair are kept and carried as remembrance of deceased persons.] (Nekes & Worms 1953:575)

karril (n) 'a small seabird'

karrilul (garilol) (pv) 'spin (of boomerang), be spinning, spin (intr)' (Nekes & Worms 1953:576)

karrinykam (n) 'a type of edible root, eaten
raw; a root like a sweet potato'

karrird 'together' (?)

karrj (n) 'sharp (point)'gardj 'sharp, pointed; figuratively, sharp word; sharpen something, scold, curse'(Nekes & Worms 1953:574)

karrj (pv) 'swear'

karrjad (gardjad) (n) 'bush-rice (Oryza sativa), grass-seed, flour of grass-seed' (Nekes & Worms 1953:574)

karrjikarrj, karrjikarrji (n, pv) 'sharp, swear at, sharpen'

karrjil (gardjel) (n) 'green frog' (Nekes & Worms 1953:574)

karrkuj (pv) 'dead, to death'gargodj 'good shot, death-blow, slay,kill' (Nekes & Worms 1953:578)

karrm (adv) 'later' garm 'bye and bye, soon, later on' (Nekes & Worms 1953:578–579)

karrmal, karrmil (n) 'paint, ochre' garmel 'chalk, clay, white paint' (Nekes & Worms 1953:579)

-KARRMAR (iv) 'break'

karrmij (adv) 'later, bye and bye'

karrmin (garmin) (n) 'branch' (Nekes & Worms 1953:580)

karrmkarrm (garm garm) (adv) 'soon, in a moment' (Nekes & Worms 1953:393, 578–579)

- karrngar (n, pv) 'cough' gaṛŋar 'cough, expectoration, cold' (Nekes & Worms 1953:580)
- karrngarkarrngar (n) 'cough, cold'
- karrung (garoŋ) 'bag, sack' (Nekes & Worms 1953:581)
- karrurrurr (garoror) (n) 'turtle eggs still without shells in ovary' (Nekes & Worms 1953:581)
- -KARR (iv) 'pick, choose' (Nekes & Worms 1953)
- -KARRM (iv) 'deny, refuse' (Nekes & Worms 1953)
- -KARRM (iv) 'break' (Nekes & Worms 1953)
- -KARRMAKARRM (iv) 'deny, refuse'
- kaw (pv) 'call, call out, call someone' gau 'call, cooee' (Nekes & Worms 1953: 567–568)
- kawajirr, kawijirr, kawijirr (n) 'sugarleaf' gawadjar 'bush-sugar' [This sweet white exudation of leaves of belawal or gadje tree (bloodgum) is caused by Psyllids or Lerp insects.] (Nekes & Worms 1953:581)
- kawarrkawarr (gawar gawar) (n) 'fruit type' (Nekes & Worms 1953:330)
- gawar gawar, gawer gawer 'fruit of gawergawer tree' (Nekes & Worms 1953:582) gawer gawer 'fruit of the nalin tree' (Nekes & Worms 1953:741)
- kawkaj (pv) 'sing'
- kawkaw (pv) 'caw'
- kawurrkawurr (n) a bush food; a type of food, having a shell, and nuts inside, prickly (makes you itchy), cooked in the sand and tastes like coffee. A type of tree whose bark is used for tying up coolamons. A tree with fruit and large nut about 4" long, like a banana'
- kayarr (gaiar) (n) 'white man, light skinned' (Nekes & Worms 1953:538)

- kaykay (gai gai) (n) 'frog' (Nekes & Worms 1953:539)
- ki (inter) 'what's that'
- kidaw (gidau) (n) 'sooty oystercatcher, redbill (Haematopus unicolor, Forster)' [Gidau was married by Ganbelinj, the fire bird.] (Nekes & Worms 1953:583)
- *kidikid* (*gedeged*) (n) 'wattle, acacia with white blossoms' (Nekes & Worms 1953: 583)
- kidikid (gidigid) (pv) 'tickle, tickle someone, ticklish' (Nekes & Worms 1953:583)
- kidun (gidon) (n) 'hut' (Nekes & Worms 1953:584)
- *kiid* (*gēd*) (n) 'then' (Nekes & Worms 1953: 583)
- kiil (gēl) (adv) 'today, not long past, this morning' (Nekes & Worms 1953:585, 845)
- kiily (n) 'bower bird'
 gēlj 'bowerbird (*Chlamydera unchalis*,
 Fardine and Selby)' (Nekes & Worms
 1953:588)
- kiim (n) 'gum (of a tree)'

 gem 'gum, resin' [from English gum]

 [This may or may not be a good
 etymology.] (Nekes & Worms 1953:588)
- kiinyb (n) 'gum of a white tree (Eucalyptus papuana and Eucalyptus polycarpa—see Aklif 1999:39, 46, 98), poisonous, poison used for eels; red colour; used for toothache'

 genbe 'dark, inedible resin of gadjo or belewal tree' (Nekes & Worms 1953: 588)
- kiinyj (n) 'shell, bone, scales' gēndj 'bone'; by analogy, 'shell, kernels' (Nekes & Worms 1953:588)
- *kiinyj* (pv) 'close, shut, shut something, lock up something, turn off (e.g. tap, light),

shut something on oneself, become closed or clenched; blocked, constipated' $g\bar{e}njdj$ 'shut something, close/cover over, closed, be blocked, constipation' (Nekes & Worms 1953:590) $g\bar{e}djdj$ 'shut' [Presumably this is a typo

for *gēnjdj*.] (Nekes & Worms 1953:452)

kiinyj (pv) 'join together'

kiirr (*gēr*) 'scent, smell' (Nekes & Worms 1953:391, 591)

kijaluk (n) (top) a bay on the border of Nyulnyul and Jabirrjabirr countries

kijil 'calm'

kil (*gël*) 'cut, notch' (Nekes & Worms 1953: 585)

kilawil (gilawel) (n) 'bamboo, spear shaft of bamboo' (Nekes & Worms 1953:585)

-kinbal, -kanbal (niganbal, nigenbal) (in) 'shape, form, look' (Nekes & Worms 1953:751)

kiny (ginj) (pv) 'strangle, choke, squeeze the windpipe' (Nekes & Worms 1953: 589)

kinyingk (n) 'this, that, DEF'
ginjing 'he, she, it, that' (Nekes &
Worms 1953:590)
kinyingk (pro) 'he, she, it, 3MIN.CRD'
ginjing 'he, she, it, that' (Nekes &
Worms 1953:590)

kinyingkkarr (n) 'at that time'

kinyirr (pv) 'sneeze'

kinykiny (ginj ginj) (pv) 'strangle someone, squeeze windpipe' (Nekes & Worms 1953:589)

kir (geṛ) (pv) 'pour in, pour out' (Nekes & Worms 1953:591)

kird (pv) 'block, cover over'

kirdkird (pv) 'choke'

kirdkird (pv) 'tie, tie onto'

-KIRLBIR(R) (iv) 'sing a love song' (Nekes & Worms 1953)

kirr (n) 'perspiration, smell of perspiration'

kirr (ger) (pv) 'assemble, meet together' (Nekes & Worms 1953:591)

kirrid (n) 'type of reef fish'

kirrij (giridj) (n) 'screen of bushes, side screen for corroborees, hiding place for hunters' (Nekes & Worms 1953:592)

-KIRRIR (iv) 'piss'

kirrkij (n) 'whistling hawk' girgidj 'sparrow hawk' (Nekes & Worms 1953:592)

-KIRR (iv) 'dig' (Nekes & Worms 1953: 591)

kubaj (gobadj) (n) 'string of a shell necklace, bargadj' (Nekes & Worms 1953:595)

kubin (gobin) cry of gambalinj bird that brought the fire and announces visitors' [See Worms 1940:269–270, 'The First Fire', and Myth 9 of Part 5 of the 1953 work.] (Nekes & Worms 1953:595)

kubukub (n) 'cockle'

kuburl (n) 'father, father's brother'gobol 'father' (Nekes & Worms 1953:595)kud (pv) 'emerge, come out'

kudaj (godadj) 'naked' (Nekes & Worms 1953:597)

-KUDAL (iv) 'disappear, go out of sight, get lost'

-KUDAL (iv) 'spin, plait, twist'

-KUDIJ (iv) 'flood, come in (of tide)' (Nekes & Worms 1953:598)

kudilkudil (*godel godel*) 'crooked, curved, winding' (Nekes & Worms 1953:599)

kudirrwany (n) 'brolga, native companion' godorwaien 'native companion, brolga (Megalornis rubicundus, Perry)'; by analogy, 'mosquitoes with long legs' (Nekes & Worms 1953:600)

- kudud (n) 'heart' godod 'heart' (Nekes & Worms 1953: 599)
- -KUDUM (iv) 'correct, blame, rebuke'
- kudur (godor) (n) 'club with big head' (Nekes & Worms 1953:600)
- kudurr (godor) 'presentiment, foreboding' (Nekes & Worms 1953:600)
- kudurrngun (godorŋon) (n) 'dugong (Halicore dugong, Gmelin)' (Nekes & Worms 1953:600)
- *kujaj* (*godjadj*) (pv) 'sleepy, drowsy after sleep, feel weak' (Nekes & Worms 1953: 600)
- kujarr (n) 'two' gudjar 'two' (Nekes & Worms 1953: 601)
- kujarr aa kujarr (gudjar a gudjar) 'four' (Nekes & Worms 1953:601)
- *kujarrang* (adv) 'twice' *gondjaran* 'twice' [The first *n* is presumably a typo.] (Nekes & Worms 1953:619)
- *kujarrkujarr* (*gudjar gudjar*) 'twofold, double, hesitating, divided, be divided' (Nekes & Worms 1953:601)
- kujarr-kurr (gudjar-gor) 'a little bit, some' (Nekes & Worms 1953:601)
- kujib (n) 'bung eye'gudjeb 'swollen eye caused by sting of flies' (Nekes & Worms 1953:601)
- kujil, kujirr (n) 'bailer shell'gudjil 'big shell, used as drinking vessel'(Nekes & Worms 1953:601)
- kujuk (pv) 'swallow' gudjug 'swallow' (Nekes & Worms 1953:602)
- kukunyja (n) 'sheep' gogondja 'sheep' (Nekes & Worms 1953:603)
- -KUL (iv) 'wear, dress, clothe'

- kul (gol) 'deep' (Nekes & Worms 1953:447, 465)
- kulal (golal) (n) 'weak, tired, slack' (Nekes & Worms 1953:604)
- kulan 'pigeon-toed'
- kularr, kurlarr (adv) 'west' goļar 'west' (Nekes & Worms 1953:604)
- kularrabul (n) 'westerners, west'
 golarabol 'western tribes' (Nekes &
 Worms 1953:605)
 golarobol 'western tribes' (Nekes &
 Worms 1953:604)
 kularr-abul 'western tribes' (Nekes &
 Worms 1953:313)
- kularrjang (adv) 'westerly, to the west'
- kulay (golai) (n) 'bush-apple and tree'
 [available January-March] (Nekes &
 Worms 1953:603); probably *Planchonia*careya (Aklif 1999:48)
- kulban (golban) (n) 'wattle, acacia' (Nekes & Worms 1953:605)
- kulibil, kurlibirl (n) 'turtle'gulebil 'big, green turtle (Chelonia midas)' (Nekes & Worms 1953:607)
- kulikirrk (adv) 'from the west'
- kulj (goldj) (n) 'grass' (Nekes & Worms 1953:373)
- kulkul (göl göl) (pv) 'rumbling in the bowels' (Nekes & Worms 1953:608) gol gol 'rumble (of stomach)' (Nekes & Worms 1953:700)
- *kulkur* (*golgor*) 'quiet, be quiet' (Nekes & Worms 1953:609)
- kulkurr (golgor) 'laughter' (Nekes & Worms 1953:608)
- kulm (n) 'big boomerang'
 golm a tree with black berries' [This was used for fishing-boomerangs, which are now often replaced by metal boomerang "tank" of same shape.] (Nekes & Worms 1953:609)

- kulmalyi-karrang (golmalji-garaŋ) (n) 'relatives of deceased child' (Nekes & Worms 1953:611)
- kulngannganangana (golyannananana) (n) 'apostle-bird (*Pomatostomus rubeculus*, Gould)' (Nekes & Worms 1953:609)
- kuluk (n) 'shallow water'
- kulukuluman (gologoloman) (n) 'mantis' (Nekes & Worms 1953:610, 681)
- kulukurr (adv) 'western country'gologor 'west' (Nekes & Worms 1953:609)
- kulungarrkin (n) 'green leaf eater'
- kulungurrb (n) 'paperbark' goloŋorb 'paperbark tree, tea tree' (Nekes & Worms 1953:610)
- kulurr, kulul (n) 'male genitals'kulurr (gulur) 'testicles, membrum virile, phallus' [also 'handle of spearthrower' in Mangala and Walmajarri] (Nekes & Worms 1953:610)
- *kuluwadiny* (*golowadinj*) (n) 'love song, incantation' (Nekes & Worms 1953:605, 610)
- kulykuly (golj golj) (pv) 'press, wring, squeeze' (Nekes & Worms 1953:611)
- kulyurdkulyurd (n) 'night owl'
- kumaarang (n) 'black ochre'
- *kumal* (*gumal*) (n) 'sweet potato' (Nekes & Worms 1953:611)
- kumaly (gomalj) (n) 'lumps of ochre in hair of mourning woman, relatives of deceased child' (Nekes & Worms 1953: 611)
- kumar (n) 'bushfire'
- kumar-kud (gomar-god) 'covered with charcoal, black painted' (Nekes & Worms 1953:596–597)
- kumbaj (n) 'woman bereaved of son or daughter'

- kumbal (n) 'namesake'
 gumbal 'namesake' (Nekes & Worms 1953:612)
- kumbarr (n) 'stone, rock, hill, money'gumbar 'stone, rock'; by analogy,'money (coin), anchor' (Nekes & Worms 1953:612)
- kumbijun (gombedjon) 'sacramental confession' [from English confession] (Nekes & Worms 1953:612)
- kumbil (gumbil) (n) 'yellow, yellow ochre' (Nekes & Worms 1953:612)
- -KUMBINYJ (iv) 'wedge oneself, be wedged, stick fast' (Nekes & Worms 1953:612)
- kumbulngurr (gumbulnor, gumbulnor) (n) 'kingfish, opah (Lampris guttatus)' (Nekes & Worms 1953:612, 807)
- kumbun (gombon) (n) a white-skinned ghost haunting mangrove swamps' (Nekes & Worms 1953:612)
- kunab (n) 'flathead'gonab 'flat fish (Pleuronectida)' (Nekes& Worms 1953:615)
- kunard (adv) 'tomorrow' gonad 'tomorrow' (Nekes & Worms 1953:615)
- kunarr (adv) 'thither, that direction; move, make something move, go over there' gonar 'thither, that way, away' (Nekes & Worms 1953:615)
- -KUNB (iv) 'send, allow to go'
- -KUNBIKUNB (iv) 'send, allow to go'
- kunburl (n) 'blood' gunbul 'blood' (Nekes & Worms 1953: 616)
- kundaly (gondaldj) (n) 'biceps, armlet of human or opossum hair worn around the biceps by the *buŋana* of fifth degree of initiation' [See also Worms 1938:155.] (Nekes & Worms 1953:617)

- kundany (n) 'wart' gondanj 'wart' (Nekes & Worms 1953: 617)
- -KUNDAR(R) (iv) 'get lost, lose one's way' (Nekes & Worms 1953)
- kundi (pv) 'carry on shoulder, give someone a piggyback'gonde 'carry on the back, on the shoulders, pick-a-back; mount horse, ride horse, be on horseback' (Nekes & Worms 1953:617)
- kundijin (n) 'shoulder' gondidjan, gondidjen, gondodjan 'shoulder' (Nekes & Worms 1953:617, 618)
- -KUNDUKUND (iv) 'push, drive, drag, float' (Nekes & Worms 1953)
- kungkar (n) a type of berry'kungkarr (gungar) (n) 'thorny shrub, the black berries of this shrub' (Nekes & Worms 1953:623)
- kungurn (n) 'black snake'goŋon 'black, poisonous snake' (Nekes& Worms 1953:623)
- kuninykuniny (goninj goninj) (n) 'tadpole' (Nekes & Worms 1953:621)
- kunjurrdirn (gondjordin) (n) 'huntingstand; lying in wait for kangaroos in moonlight' (Nekes & Worms 1953:619)
- kunkun (gongon) (pv) 'grow, sprout' (Nekes & Worms 1953:622)
- kunng (gonŋ) (pv) 'be out of breath, short winded, suffocated' (Nekes & Worms 1953:622)
- kunurr (n) 'white tree, white gum'
 gonor 'white gum tree (Eucalyptus
 rostrata)' (Nekes & Worms 1953:623)
- kunyb (n) 'mucus, snot'gonb 'mucus of the nose, cold, cough'(Nekes & Worms 1953:615)

- kunyj (n) 'rubbish (place); sacred (place),proscribed (place) for women'gondj (n) 'secret place for initiated men'(Nekes & Worms 1953:619)
- kunyj-kud (gondj-god) 'with secret, secret objects; secretful, secret, sacred objects and symbols, e.g.: bullroarers, tjuringas, phallic implements etc.' (Nekes & Worms 1953:596–597, 619)
- kunyjurrung (n) 'namesake play'
- kunykuny (n) 'brain'gonj gonj 'brains, spinal marrow' (Nekes & Worms 1953:624)
- kunyul (n) 'moon' gunjul 'moon' (Nekes & Worms 1953: 624)
- kunyulanj (gunjulandj) 'moonlight' (Nekes & Worms 1953:624)
- kunyurr (pv) 'sleep'
 gonjor 'sleep, be asleep, go to sleep';
 kunjurr-k 'be asleep'; kunjurr-ng 'feel
 sleepy' (Nekes & Worms 1953:624)
- kunyurrj 'sleepy'
 kunjurr-dj 'sleeping' (Nekes & Worms
 1953:624)
- kunyurrk (pv) 'asleep'kunjurr-k 'be asleep' (Nekes & Worms 1953:624)
- kur (pv) 'embrace'
- kurd (pv) 'hide, be hiding'
- kurd (pv) 'bend over, stoop'god 'bend down' (Nekes & Worms 1953:459–460)god 'bow, bend down, bend of head or body, hide' (Nekes & Worms 1953:596)
- *kurdabil* (pv) 'naked, go around naked' *godabel* 'naked' (Nekes & Worms 1953: 597)
- kurdawi (n) 'piss'

kurdiny (n) an edible plant; edible bowl of white gum tree; lump on a tree, white gum'

kurdkurd (pv) 'sneak'

kurdurr.rd (n) 'shoulder'

-KURID, -NGIRID (iv) 'paint, anoint'

kurkur (pv) 'console'

kurlay (n) a fruit type; ripe in rain time (?)

kurliny (n) 'small louse'

kurlujunu (n) 'shoulder'

kurlukuk (n) 'dove'

gologog 'dove' (Nekes & Worms 1953: 609)

kurluman (n) 'frill necked lizard, umbrella lizard'

guleman 'frilled lizard (*Chlamydosaurus*)' (Nekes & Worms 1953:607, 681)

kurlungurrb (n) 'tea tree; paperbark type; a paperbark tree from which tea was made, from near the saltwater'

kurnkurnung (n) 'toadfish, blowfish'

kurr (pro) 'you all, 2AUG.CRD'gor 'second person plural, you' (Nekes & Worms 1953:624)

kurr (*gor*) 'be unfinished, not yet cut up, whole' (Nekes & Worms 1953:624, 625)

kurrajirr (goradjer) (n) 'whiskered salmon' (Nekes & Worms 1953:626)

kurral (n) 'butcher bird'

kurrawurl (n) 'owl'

kurraykurray (n) 'rain bird'

kurrb (pv) 'pinch'

kurrbid (*gorbed*) (n) 'boy of twelve to fourteen years of age' (Nekes & Worms 1953:628)

kurrbuk (*gurbog*) 'vomit, vomited matter' (Nekes & Worms 1953:628)

kurrburl (n) 'throat, hollow, hollow log, food pipe, windpipe'
gorbal 'hole' (Nekes & Worms 1953: 628)
gorbol 'hole, tube, throat' (Nekes & Worms 1953:628)

kurrid (n) 'dingo' gored 'dingo (Canis dingo, Meyer)' (Nekes & Worms 1953:629)

kurridi (guridi) (n) 'sandals made out of bark and skin of kangaroo-rats, covering the lower legs, and used for magical purposes' (Nekes & Worms 1953:629)

kurrii 'greedy, stingy'
gori 'greedy' (Nekes & Worms 1953:
629)

kurri-id (*gore-ēd*) 'greedy one' (Nekes & Worms 1953:629)

kurril (n) 'mangrove' gorel 'mangrove' (Nekes & Worms 1953:629)

kurrimbudu (gorimbodo) (n) 'mud snail' (Nekes & Worms 1953:629)

-kurrinykurriny (in) 'navel'

kurrk (gorg) (pv) 'heap up, be heaped up' (Nekes & Worms 1953:915)

kurrkurr (*gorgor*) 'heap, gathered' (Nekes & Worms 1953:631)

kurrudurd (n) 'small dove, pigeon' gorodod 'small dove' (Nekes & Worms 1953:632)

kurruj (göro'dj) 'cross, crucifix' [from English cross] (Nekes & Worms 1953: 632)

kurrulukun (n) (top) Murphy Creek'

kurruly (n) 'wild goose'

kurrurr, kurrurl (n) 'crab, mangrove crab' goror 'big blue crab, lobster' (Nekes & Worms 1953:633) kurrwal (n) 'sky'
gorwal 'sky, heaven' (Nekes & Worms
1953:633)

kurrwaljak (gorwol-djag) (n) 'one who is flying in the sky; eagle; aeroplane' (Nekes & Worms 1953:442) gorwol-djag 'sky-runner, aeroplane' (Nekes & Worms 1953:634)

kururr (n) 'corroboree ground'

kururr (goror) 'blood' (Nekes & Worms 1953:633)

kuubad (gōbad) 'wet, wet something' (Nekes & Worms 1953:595)

kuuk 'dumb'

gog 'dumb' (Nekes & Worms 1953:602)

kuul (*gōl*) 'father, father's brother' (Nekes & Worms 1953:603)

kuulm (n) 'a small purple berry'

kuumb (n) 'fish'

gōmb 'fish (generic)' (Nekes & Worms 1953:612)

kuung (*gōŋ*) 'toothache' (Nekes & Worms 1953:623)

kuungk (*gōŋg*) 'quiet' (Nekes & Worms 1953:623)

kuwaal (n) 'flueggea virosa; a white tree bearing fruit, a juicy white berry'goal edible white berries on small bushes; time: January-April' (Nekes & Worms 1953:594)

kuwalkad (goalgad) (adv) 'south, southern' (Nekes & Worms 1953:594–595)

kuwan (n) 'pearlshell' goan 'pearlshell (Avicula margaritifera)' (Nekes & Worms 1953:595)

kuwani (gwane) (n) 'small crocodile, not very dangerous' [presumably a freshwater or Johnstone River crocodile] (Nekes & Worms 1953:634)

kuwarrkuwarr (gowar gowar) 'yellow (as of tea)' (Nekes & Worms 1953:634)

L

laab (lāb) (n) 'sediment, grounds, ear wax, tobacco juice of the pipe, sap' (Nekes & Worms 1953:635)

laaban (lāban) (n) 'hair of body, feathers, down' (Nekes & Worms 1953:635)

laaburr (pv) 'pluck'

laaj (lādj) 'subincision, incision of corpus cavenosum urethrae from the glans to the root' (Nekes & Worms 1953:636)

laarrb (n) 'oven'

-labab (in) 'ear'

labilab (n) 'light, thin'

labelab 'light in weight, thin' (Nekes & Worms 1953:635)

labin (n) 'body hair'

labulaburr (pv) 'pluck'

laburrlaburr (pv) 'pull out'

lajad (ladjad) 'hail' (Nekes & Worms 1953: 636)

lak (n) 'lugger, boat'

lakal (pv) 'climb, climb up, be climbing' lagal 'climb, climb up' (Nekes & Worms 1953:637)

lakal-id (lagal-ēd) (n) 'climber' (Nekes & Worms 1953:637)

lakalkaj (pv) 'climb, be climbing'

-LAKARR (iv) 'hear, listen'

lakayb (n) 'grease, fat' lagaib 'fat, grease' (Nekes & Worms 1953:637)

lakayb-kud (lagaibe-god) 'rich in fat, grease' (Nekes & Worms 1953:637)

lakilak (lagelag) 'light skinned' (Nekes & Worms 1953:638)

lakud (*lagod*) (pv) 'block someone, obstruct' (Nekes & Worms 1953:638)

lakurr (n) 'egg; pollen from bees' nest;yellow, pearl'lagor 'egg, eyeball, pearl, seed, foetus'(Nekes & Worms 1953:638)

lakurr niim (n) 'eyeball'

lala (adv) 'other days'

lalaj (laladj) (n) 'grasshopper' (Nekes & Worms 1953:638)

lalal (*lalal*) (pv) 'tear, be/become torn split, tear something' (Nekes & Worms 1953: 639)

lalb (n) 'cooking hole'

lalb 'fire place, earth-stove, Erdofen' [a hole dug in the ground for roasting meat or yams] (Nekes & Worms 1953:639)

lalbarr (lalbar) 'high voice, soprano' (Nekes & Worms 1953:639–640)

lalbaw (*lalbau*) 'piece' (Nekes & Worms 1953:639)

lalin (n) 'summer'
lalen 'hot season, December-March'
(Nekes & Worms 1953:640)

lalk (n) 'dry'

lalg 'dry, faded, withered, thirsty' (Nekes & Worms 1953:640)

lalul (*lalol*) (pv) 'break, break something' (Nekes & Worms 1953:640)

lamad (lamad) (n) 'cheek' (Nekes & Worms 1953:640)

lamaman (n) 'dew, thick fog, mist'
lamaman 'mist' (Nekes & Worms 1953: 590)

lamaman 'dew, mist, fog' (Nekes & Worms 1953:640, 641)

lamard (n) 'cheek'

lamarr (lamar) 'fair haired, light brown hair' (Nekes & Worms 1953:641)

-LAMB (iv) 'kiss'

lambad (lambad) (pv) 'open, open something' (Nekes & Worms 1953:584) lambin (lamben) (n) 'creeper (Ipomaea congesta)' (Nekes & Worms 1953:641)

lambuburr (lambobor) 'always, lasting' (Nekes & Worms 1953:642)

lambud (n) 'mouldy'
lambod 'mouldy, musty; be mouldy'
(Nekes & Worms 1953:642)

lanarr (lanar) (n) 'septum, partition between the nostrils' (Nekes & Worms 1953:642)

lanbirr (n) 'scabies, scar'

-LAND (iv) 'sit'

langarn (n) 'shoulder'

langirr (laner) (n) 'bait; by analogy, uvula' (Nekes & Worms 1953:644)

langkurr (n) 'possum'

-LANGK, -LINGK (iv) 'understand, understand someone'

lanin (lanen) 'dew, fog, mist' (Nekes & Worms 1953:643)

-LANYB (iv) 'steal'

länjb 'theft, stealing' (Nekes & Worms 1953:645)

lanybal (länjbal) (pv) 'flat, level, smooth; level something out' (Nekes & Worms 1953:645)

lanyb-id (pv) 'steal' lanjbi-ēd, länjbi-ēd (n) 'thievish, thief' (Nekes & Worms 1953:588, 645)

lanyb-uk (pv) 'steal' (cf. Nekes & Worms 1953:645)

lar (*laṛ*) (pv) 'tear' (Nekes & Worms 1953: 645)

larlarl (lalal) (pv) 'certain dancing step of a corroboree; dance in this style' (Nekes & Worms 1953:639)

larr (lar) (n) pointed stick 30–40 cm long, 2–3 cm wide, pushed through the hair at the back of the head, and worn during dances (Nekes & Worms 1953:645)

- larrar (larar) 'pit, hole, crack' (Nekes & Worms 1953:646)
- larrib (lareb) a secret ceremony and instruction after circumcision' [See Worms 1938:169.] (Nekes & Worms 1953:646)
- larrik (lareg) (n) (top) a plain and garden south of Beagle Bay Mission' (Nekes & Worms 1953:646)
- larrilarr (larelar) 'wooden or bone nosepin through septum' [Statement of a native: 'If you wear the larelar through the nose, you have good luck for finding bush honey.'] (Nekes & Worms 1953: 647)
- larrkinjun (n) 'pimple'
- larrkird (n) 'boab tree'
- larrlarr (lar lar) 'rude, rough, harsh, angry; speak harshly; speak angrily with someone' (Nekes & Worms 1953:647)
- -LAR(R)M (iv) 'taste, prove, take a little bit' (Nekes & Worms 1953)
- lawinjimarrkin (n) (top) a well near Disaster Bay'
- -lawirl (in) 'name'
- lawulay (adv) 'always'
- lawurnid (n) (top) an unidentified place'
- layib (n) 'good, straight, new' laib 'good, right, nice' (Nekes & Worms 1953:636–637)
- layib-layib (n) 'good; make good, repair'
- layilayi-ak (lailai-ag) 'in the evening (before sunset)' (Nekes & Worms 1953: 637)
- *lii* (n) 'pearlshell; like a pearlshell, stuck in rocks; good food'
- liid (n) 'fat, grease, marrow, sweet fatty part of bees' honey, honey' lede 'fat, grease' (Nekes & Worms 1953:
- liilii (pv) meaning uncertain

- liim (lēm, lēm-djon) 'orphan, ownerless, derelict' (Nekes & Worms 1953:650)
- liinyj (n) 'policeman, bitter'lēndj 'saltwater, salty, sour; by analogy, intoxicating drinks'; metaphorically, 'policeman' (Nekes & Worms 1953:651)
- liinyj-id (lēndj-ēd) 'sour food; one who likes sour food, e.g. pickles' (Nekes & Worms 1953:651)
- liinyjliinyj (lēndj lēndj) (n) 'salty water, sea water' (Nekes & Worms 1953:651)
- liirr (n) 'beetle'
- *lēr* 'cicada (*Cyclochia Australiasiae*)' (Nekes & Worms 1953:652)
- liirrban (lērban) 'neap tide' (Nekes & Worms 1953:653)
- lijalij (n) 'a light pearlshell'
- lililil, lirlirlirl (n) 'jabiru'

 lelelel 'jabiru, tropical stork

 (Xenorhynchus asiaticus)' (Nekes &

 Worms 1953:650)
- *liljin* (n) 'song type, dreaming song' *lilurr* (*lelor*) 'bell' (Nekes & Worms 1953:
- limb (limb) 'sour, salty, bitter';
 metaphorically, 'policeman' (Nekes &
 Worms 1953:651)
- limbilimb (n) a big-leafed tree with nuts' limbelimb tree with edible sour nuts' (Nekes & Worms 1953:651)
- -LINGAR(R) (iv) 'show' (Nekes & Worms 1953)
- linyjirr (n) 'nit'

650)

- *lindjer* 'eggs of human louse, louse' (Nekes & Worms 1953:651)
- linykurr (n) 'crocodile'
 lingor 'crocodile (Crocodilus porosus)'
 (Nekes & Worms 1953:652)
- linymal (n) 'pike'
- lir (pv) 'shed skin, slough, peel skin'

lirlir (pv) 'pluck off, remove (e.g. shell from seed, peel fruit)'

lirr (pv) 'skin, shed skin, peel off e.g. bark'

-lirr (in) 'lips, mouth'

lirrban (n) 'low tide'

lirrlirr (pv) 'peel; peel something'

lirrlirr (ler ler) (pv) 'harsh, rough, rude, quarrelsome; quarrel' (Nekes & Worms 1953:645)

ler ler 'call of the black cockatoo' (Nekes & Worms 1953:654)

lirrmarr (lermar) (n) 'black cockatoo (Calythorhynchus banksi, Latham)' (Nekes & Worms 1953:654)

liyan (pv) 'like, love, want'

lēan 'heart, like, love, be in love, be glad, will, inmost feelings, breath, breathe, breathing space' (Nekes & Worms 1953:647–648)

liyankud (n) 'pregnant' lēan-god 'pregnant' (Nekes & Worms 1953:647–648)

lubad (*lobad*) 'reddish inedible oysters' (Nekes & Worms 1953:655)

luburr (*lobor*) 'rising of smoke, steam' (Nekes & Worms 1953:655)

lulul, lurlurl (n) 'a shark, grey nurse' [a
 large mythical shark which used to save
 people]

lolol 'shark' (Nekes & Worms 1953:656)

lumbud (*lombod*, *lambod*) 'mouldy, musty' (Nekes & Worms 1953:657)

lumirn (n) 'dark; place where person's spirit goes on death'

luman 'realm of the dead, on an island in the west, from where nobody can return' (Nekes & Worms 1953:657)

-LUNGK (iv) 'dig'

lungkun (n) 'neck'

lungkurd (n) 'blue tongue lizard'lungud 'blue-tongue lizard (tiligua scincoides)' (Nekes & Worms 1953:658)

lungkurr (n) 'mullet'

lungumbid (n) (top) a place about 9 miles west of Beagle Bay, where brother Augustin Stix lived

lunjimad (londjemad) (n) paperbark tree type' (Nekes & Worms 1953:657, 663–664)

lunkulibil (longolebel) (n) 'fish-hawk, osprey (pandion haliaetus)' (Nekes & Worms 1953:657–658)

lur (pv) 'snatch' lor 'snatch away, tear off' (Nekes & Worms 1953:658)

-LURR (iv) 'burn, cook'

lurr (n) 'hollow'

lurrilurr (lorelor) (n) 'frigate bird, man-o'war bird' (Fregata ariel, Gray; Fregata minor, Gmelin) (Nekes & Worms 1953: 659)

lurrumb (loromb) 'down, underplumage, feather ornament' (Nekes & Worms 1953:659)

lurrun (pv) 'fright'

luu (lō) 'tide, high tide' (Nekes & Worms 1953:654)

luunk (lōng) 'corner' (Nekes & Worms 1953:657)

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-m (in) 'eye'

-M (iv) 'put'

maad (n) 'play, game, joke, crazy'
mad 'play, joke, game' (Nekes & Worms
1953:663)

maad-id (made-ed) (n) 'cheerful (child)' (Nekes & Worms 1953:663)

- maad-uk (mad-og) 'play' (Nekes & Worms 1953)
- maajin (n) 'rotten wood'
- maak (māg) 'rotten, be rotten; putrid' (Nekes & Worms 1953:669)
- maal (n) 'hot, heat, hot weather; thirsty' māl 'heat, hot' (Nekes & Worms 1953: 672)
- maand (n) 'rubbish, stinking'
 mand 'matter, pus, putrid' (Nekes & Worms 1953:684)
- maaniny (n) 'reef'
- maank (n) 'black'

mang 'black, dark blue, dark' (Nekes & Worms 1953:687)

maankmaank (n) 'black'

maank-ngunjun (bur) (mange-ŋondjon) 'dark place, dark night' (Nekes & Worms 1953:687)

maar (n) 'spinifex'

maar (adv) 'far'

mār 'far, distant' (Nekes & Worms 1953: 694)

- maar-jun (māṛ-djon) 'one from a far distant country, stranger' (Nekes & Worms 1953:698)
- maarl (pv) 'emerge, come out'
- maarnkarraankarrang (n) (top) Mangrove Point'
- maarr (n) 'grass'

mar 'grass, (grass) fish trap (a double line of sticks with bushes and grass pressed between), grass net' (Nekes & Worms 1953:694)

- maarri-kud (mare-god) 'grassy, grass covered' (Nekes & Worms 1953: 596–597)
- maarrimaarri-kud (maremare-god) 'covered, mixed, soiled with grass' (Nekes & Worms 1953:694)

- maawirn (n) 'ball'
- mabaar (n) 'flesh'

mabar 'flesh as opposed to bone' (Nekes & Worms 1953:661)

mabakandin-id (maboganden-ēd) (n) 'useful, valuable enough to be kept' (Nekes & Worms 1953:662)

mabuk (mabog) (n) 'pup, young dog' (Nekes & Worms 1953:662)

mabulin-id (n) 'well growing' [infinitive of -BUL] (Nekes & Worms 1953:662)

maburrin-uk (n) 'funeral' [infinitive of -BURR]

-MAD (iv) 'build'

mad (mäd) (pv) 'shake (hands) with someone' (Nekes & Worms 1953:663)

-MADAL (iv) 'hide'

- madaman-jun (madaman-djon) (n) 'one who has been hit, wounded' [infinitive of -DAM] (Nekes & Worms 1953:664)
- madamin-id (madamen-ēd) (n) 'one who likes to hit, a hitter' [infinitive of -DAM] (Nekes & Worms 1953:664)
- madangarnarr, madangarnar (n) 'bag, bag clothes'
- madaŋanar 'bag' (Nekes & Worms 1953: 359, 665)
- madangk (madang) 'deaf, disobedient, selfwilled; disobey, take no notice of someone' (Nekes & Worms 1953:665)
- madangmadang (mad-aŋ mad-aŋ)
 'playfully' (Nekes & Worms 1953:663)
- madikilin (madegelin, madegolin) 'deaf sleep, silence of the night' (Nekes & Worms 1953:666)
- madily (madelj) (pv) 'noise, make noise' (Nekes & Worms 1953:697)

 madalj, madelj 'make noise, shout' (Nekes & Worms 1953:664)
- madingkurr (madengor) (n) 'island' (Nekes & Worms 1953:666)

- madukurr (madogor) (n) 'feathers, down' (Nekes & Worms 1953:666)
- maduwarr (madowar) (n) 'river, running water; Fitzroy River' (Nekes & Worms 1953:666)
- maj (n) 'boss, foreman'
- majal-karr (madjal-gar) 'evening, at evening time' (Nekes & Worms 1953: 666)
- *majanbin-id* (n) 'kicker' [infinitive of -JANB]
- majangkurl (n) 'young girl, young unmarried woman'madjangol 'girl' (Nekes & Worms 1953: 666)madjongol 'girl' (Nekes & Worms 1953:
- -MAJARRAD (iv) 'dribble'
- majibalin-id (madjebalen-ēd) (n) 'beggar, begging' [infinitive of -JIBAL] (Nekes & Worms 1953:471, 667)
- majil (madjel) 'evening, afternoon' (Nekes & Worms 1953:667)
- majil-karr, majal-karr (adv) 'afternoon, evening, sunset'
- majirr (n) 'matches' madjer 'matches' (Nekes & Worms 1953:667)
- majukurr, majurr (n) 'stone fish trap'
- majulngin (n) 'beginning of story'
 [infinitive of -JULNG]
- makabal (n) 'marsdenia viridiflora' a type of vine
- makanbin-id (maganben-ēd) (n) 'what makes fat, nutritive' (Nekes & Worms 1953:515)
- makanybin-id (magänben-ēd) (n) 'vomitive' [infinitive of -KANYB] (Nekes & Worms 1953:670)

- makarrman-jun (magarman-djon) (n) 'broken, piece' [infinitive of -KARRM] (Nekes & Worms 1953:670)
- makawal (djineb magawal) (n) stingray type (Nekes & Worms 1953:486)
- makily (magilj) (pv) 'move to and fro, shake' (Nekes & Worms 1953:671)
- makily-kaj (magilj-gadj) (pv) 'be shaking, moving' (Nekes & Worms 1953:671)
- makirr, makarr (n) 'road, track'
 magar 'road' (Nekes & Worms 1953:
 670)
 magor 'road' (Nekes & Worms 1953:
 476)
- makukurl (n) 'long tail'
- makunban-jun (magonban-djon) (n) 'one who is sent, envoy, messenger, apostle' [infinitive of -KUNB] (Nekes & Worms 1953:671)
- -MAKUR (iv) 'make'
- makurrman (magorman) 'number of men' (Nekes & Worms 1953:681)
- magorma 'men, a number of men, men of the camp' (Nekes & Worms 1953:672)
- -MAL (iv) 'stir'
- malawir (n) 'curlew'
- -MALB (iv) 'borrow, lend'
- malb (n) 'wife's brother (of male)'
- malband (malband) 'nest' (Nekes & Worms 1953:674)
- malburl (n) 'possessions, things; things left behind by dead person, treasure, property'
 - *malbol* 'things, belongings, present (gift)' (Nekes & Worms 1953:674)
- malibarr (malibar) 'circle' (Nekes & Worms 1953:674)
- malimal (malemal, malmal) 'matter in eyes after sleep' (Nekes & Worms 1953:675)
- -MALINANGK (iv) 'rise (of sun)'

- malirr (n) 'wife, husband's sister, sister's husband'maler 'wife' (Nekes & Worms 1953: 676)
- malirr-id (meler-ēd) (n) 'fond of women, a man fond of his wife' (Nekes & Worms 1953:676)
- maljin (maldjen) (n) (top) country of the Nyulnyul, north of Beagle Bay, Chimney Rock (Midelogon) (Nekes & Worms 1953:674)
- maljinbur (maldjenbor) (n) 'native of Maljin' (Nekes & Worms 1953:674)
- -MALK (iv) 'hide'
- malkarrarr (malgarar) (n) 'dorsal fin, saw of sawfish (*Pristis antiquorum*)' (Nekes & Worms 1953:676)
- malkin 'secretly'
 malgen 'hiding place, secret, mystery'
 (Nekes & Worms 1953:676–677)
- malkin-id (malgen-ēd) (n) 'concealer' (Nekes & Worms 1953:677)
- malngun (malnon) (n) 'blue bone fish' (Nekes & Worms 1953:678)
- malul (malol) (n) 'young man, first degree of initiation' [See Worms 1938:149, 158.] (Nekes & Worms 1953:678)
- malungkubil (malongobel) (n) 'ibis (Threskiornis molucca)' (Nekes & Worms 1953:678)
- malurun-jun (maloron-djon) (n) 'something burnt, smoked, waste' [infinitive of -LURR] (Nekes & Worms 1953:678)
- malyin (maljen) (n) (top) unidentified place' (Nekes & Worms 1953:865)
- mamakuranid (n) 'maker, almighty' [infinitive of -MAKUR]
 mamagoran-ēd 'one who makes, maker, creator, almighty' (Nekes & Worms 1953:679)

- mamalkin-id (mamalgen-ēd) (n) 'concealer' [infinitive of -MALK] (Nekes & Worms 1953:679)
- mamarrinid (iv) 'cook' [infinitive of -MARR]
- mamb (mamb) 'wave' (Nekes & Worms 1953:680)
- mambangan (mambanan) 'eighth degree of initiation' [See Worms 1938:174.] (Nekes & Worms 1953:680)
- mamida (mamida) 'platform for corpse'; by adaptation, 'sheet iron' (Nekes & Worms 1953:680)
- manbang (n) 'pandamus nut' manbang (manbaŋ) (n) 'pandanus, screw pine' (Nekes & Worms 1953:684)
- manbin (n) 'flipper'

 manben 'fore flippers of turtle' [cf.

 ararar "hand" of the flipper'] (Nekes &

 Worms 1953:684)
- manbur (n) 'small crab type; type of crab living on beach'
- manburbur (n) 'small crab used as fish bait'
- mandaki (mandagi) (n) 'small tjuringa, often with engraved female figure and connected with *Djanba*-cult' [See Worms 1942:224–226.] (Nekes & Worms 1953:684)
- mandakidkid (mandagidgid) love spell with swinging of small tjuringa, mandagidgid [Probable root-meaning 'hidden, covered, secret', as in Bardi m-onden, ma-monden-djon 'to cover'. Cf. manta, mantu 'secret' in Tangand (according to Tindale); mantiki 'small tjuringa' in Luritja (according to Carl Strehlow); mandu 'magic smoke' in Flinders Range language (according to Mountford); mund, mundo 'magic killing' in Bardi, Jabirrjabirr, Nimanburru, Nyulnyul, Nyikina, Yawuru; monda 'secret' in Maraura (according to Tindale); mandargi, mandargin 'small tjuringa' in Walmajarri; mandurgal 'magic string' in

- Mangala, Walmajarri, Yawuru (Worms 1942:222, 225); *mandarago* 'bullroarer' in Bemba; and *man-gir* 'pointing stick' in Nyulnyul.] (Nekes & Worms 1953: 684)
- mandakin (mandagin) (n) small tjuringa, often with engraved female figure and connected with *Djanba*-cult [See Worms 1942:224–226.] (Nekes & Worms 1953: 684)
- mandurr (mandor) (n) 'possum hair; frontlet of the djamonongor; inner part of the high coiffure, djibarebar' (Nekes & Worms 1953:685)
- mangakarr (adv) 'forever'
- mangal (manal) (n) 'thorn, spine, thorny tree' [cf. mangul 'spear type'] (Nekes & Worms 1953:689)
- mangalkin-id (manalgen-ēd) (n) 'crying' [infinitive of -NGALK] (Nekes & Worms 1953:689)
- -MANGANY (iv) 'short of, in need of' (Nekes & Worms 1953:689)
- manganyban-id (mananjban-ēd) (n) 'able to be baked or roasted' [infinitive of -NGANYB] (Nekes & Worms 1953:689, 789)
- mangarr (maŋar) (pv) 'be stiff, paralysed' (Nekes & Worms 1953:690)
- mangir (adv) 'always' maner 'always' (Nekes & Worms 1953: 690)
- mangirkarr (maŋergar) (adv) 'always' (Nekes & Worms 1953:435)
 maŋer-gar, maŋergar 'always' (Nekes & Worms 1953:690, 868)
- mangirr-karrin (maner-garen) 'always' (Nekes & Worms 1953:690)
- mangkaban (n) 'bandicoot'
- mangaban 'grey brush wallaby' (Nekes & Worms 1953:690)

- -MANGKAD, -MINGKAD (iv) 'leave, abandon'
- mangkaj (adv) 'always' mangadj 'always, often, everlasting' (Nekes & Worms 1953:690)
- -MANGKAR(R) (iv) 'ask in vain for, be refused' (Nekes & Worms 1953)
- mangkirr (n) 'goanna, small goanna type'manger 'lizard, iguana' (Nekes & Worms 1953:692)
- mangul (n) 'spear type'
- mangulin-id (n) 'a good thrower' [infinitive of -NGUL]
- -MANIMANINY (iv) 'wave'
- maniny (maninj) (pv) 'defence, defend, fence, ward off, parry, dodge' (Nekes & Worms 1953:687)
- maniyarr (manear) (n) 'club of bandaraŋwood' (Nekes & Worms 1953:686)
- manjang (n) 'stupid'
- manki-ngunjun (mange-nondjon) 'darkness' (Nekes & Worms 1953:805)
- mankirr (manger) (n) 'magic pointing stick' (Nekes & Worms 1953:687)
- manuwan (manowan) (n) 'hardwood tree with red blossoms' (Nekes & Worms 1953:688)
- -MANY (iv) 'wave'
- -many (in) 'front part of neck'
- -MANYIMANY (iv) 'wave'
- manyirr (n) 'thirst'
- manyjang (n) 'mad, silly, ignorant, don't know'
- manyjinuk (iv) 'tree burial'
- manykarr (n) 'gills'
- maran-jun (maran-djon) (n) 'one who has been speared' (Nekes & Worms 1953: 504)
- mararramb (n) 'orphan'

- marl (pv) 'exit, come out from'
- maļ 'come from' (Nekes & Worms 1953: 609)
- marl (mal) (pv) 'stop, cease, rest, stay come, arrive (intr)' (Nekes & Worms 1953:672–673)
- -marl (in) 'hand, arm, upper arm'
- marlb (malb) (n) 'husband' (Nekes & Worms 1953:674)
- marliwirr (malewer) (n) 'curlew (Burhinus magnirostris)' (Nekes & Worms 1953: 676)
- marlmarl (pv) 'exit, exit from (of many things)'
- marlurl (n) 'circumcision'
- marmad (pv) 'frighten, get frightened'
- marnaawan (n) wattle species; a type of big wattle tree with red flowers; a type of paperbark with red flowers'
- marnbang (n) 'pandanus'
- marndaliny (n) 'burial tree (proscribed to women)'
- marniny (n) 'coral'
- marnkal, marnkarl (adv) 'spring (season)' mangal 'rain season' (Nekes & Worms 1953:687)
- marnungkubil (n) 'ibis'
- -MARR (iv) 'cook, burn'
- marr (pv) 'flash, be flashing around (e.g. lightning)' (Nekes & Worms 1953:701)marr 'sheet lightning, flashing, flash (of lightning)' (Nekes & Worms 1953:701)
- -marraj (in) 'shadow, reflection, soul'
- marrajalk (n) a type of freshwater fish'
- -MARRAMARR (iv) 'cook'
- -marrangk (in) 'finger'
- marrangmarrang (maran maran) (n) 'prehistorical shell mound' (Nekes & Worms 1953:696)

- marrar (maraṛ) (pv) 'quiet, patient, be quiet' (Nekes & Worms 1953:697) marar 'quiet, be quiet' (Nekes & Worms 1953:664)
- marrarl (maral) 'introduction of the initiated into the law of Djamar on a secret place' (Nekes & Worms 1953: 695)
- marrarramb (mararamb) (n) 'mourners, deprived of relatives' (Nekes & Worms 1953:697)
- marrarrwirr (mararwer) 'meeting of tribes, fight, war' (Nekes & Worms 1953:697)
- -MARRB (iv) 'show, perform'
- marrbad (marbad) (n) 'spider' (Nekes & Worms 1953:697)
- marrimarr (maremar) (n) 'face' (Nekes & Worms 1953:698–699)
- marrimirr (maremer) (n) 'black ants, bulldog ants' (Nekes & Worms 1953: 699)
- marriny (pv) 'go, walk'
- marinj 'journey, walk, go for walk' (Nekes & Worms 1953:699)
- marrinyan (marinjan) 'appetite, have appetite, greedy' (Nekes & Worms 1953: 699)
- marrir (n) 'sister, sister (older or younger)'
 marer 'sister, father's brother's daughter,
 mother's sister's daughter' (Nekes &
 Worms 1953:699)
- marrj (n) 'bushfire'
- marrjal (mardjal) (n) 'fresh water herring' (Nekes & Worms 1953:698)
- marrk (marg) (n) 'coral' (Nekes & Worms 1953:700)
- marrkin (n) 'hunger, hungry' margen 'hunger, hungry' (Nekes & Worms 1953:700)

- marrmarr (pv) 'twitch'

 marrmarr (marmar) (pv) 'fright, fear,
 shock, alarm, become frightened' (Nekes
 & Worms 1953:700–701)
- marrmb (marmb) (n) 'aerial roots of mangrove' (Nekes & Worms 1953:701)
- marurl (n) a black berry; almond type
- mawidin-id (maweden-ēd) (n) 'edible' [infinitive of -WID] (Nekes & Worms 1953:670–671)

 maweden-ēd 'edible, glutton' (Nekes & Worms 1953:702)
- may (n) 'vegetable food'mai 'fruit, vegetable food' (Nekes & Worms 1953:667)
- mayar (n) 'house'

 maiar 'hut, house' (Nekes & Worms 1953:668)

 maier 'hut, house' (Nekes & Worms 1953:668)
- mayjin (maedjen) (n) 'guts, bowels' (Nekes & Worms 1953:668)
- mayurr (n) 'fish trap, fishing net'
- -mbarrm (in) 'armpit'
- mibalad (mibalad, mibelad) 'ants, sugar ants' (Nekes & Worms 1953:703)
- midbad (midbad) (pv) 'tie' (Nekes & Worms 1953:414)midbad 'tie, tie something onto' (Nekes & Worms 1953:705)
- miidijin (mededjen) 'many males' (Nekes & Worms 1953:784)
- midimal (midimal) (n) 'red kangaroo (Macropus rufus pallidus, Schwarz)' (Nekes & Worms 1953:705)
- midinkurran (midingoran) (n) 'bush olive' (Nekes & Worms 1953:705)
- -MII (iv) 'look for, seek'
- *mii* (*mī*) 'dirty, rubbish' (Nekes & Worms 1953:702)

- miid (n) 'male, boy, young/baby boy'mēd 'male, boy' (Nekes & Worms 1953: 704)
- miid nimal (mēd nimal) 'thumb' (Nekes & Worms 1953:704)
- *miid nimbal (mēd nimbal)* 'big toe' (Nekes & Worms 1953:704)
- miidijin (mēdedjen) 'number of boys' (Nekes & Worms 1953:705)

 mēde-djen 'number of boys' (Nekes & Worms 1953:704)
- *mii-jun* (*mī-djon*) 'dirty, soiled' (Nekes & Worms 1953:702)
- -MIIMII (iv) 'seek, look for'
- miind (mēnd) (n) 'eyebrow' (Nekes & Worms 1953:714)
- miirl (pv) 'tell lie'mēl 'lie, falsehood' (Nekes & Worms 1953:707)
- miirlid (n) 'liar' mēl-ēd, mēle-ēd 'liar' (Nekes & Worms 1953:707, 710)
- mij (medj) 'hoarse, be hoarse' (Nekes & Worms 1953:706)
- mijal (pv) 'sit, sit down, be sitting'
 midjal 'sit, sit down; put something in a
 sitting position, sit something, set, place;
 be awake, be sitting' (Nekes & Worms
 1953:706)
- -MIJAL ... -ang (iv) 'rely on, depend on, trust'
- mijalad (n) 'sitter, someone who is sitting'
- mijaw (n) 'cat, mouse'
 mijawu (n) 'rat'
 midjau 'rat, mouse, small possum'
 (Nekes & Worms 1953:706)
- -MIJUL (iv) 'splash water'
- -MIJULNG (iv) 'tell lies'
- -mikil (in) 'small of back, loins, anus'
- -MIL (iv) 'sing'

- *mil* (*mel*) 'similar' (Nekes & Worms 1953: 750)
- milamb (melamb) 'tired' (Nekes & Worms 1953:708–709)
- miliirr (milier) 'soon' (Nekes & Worms 1953:710)
- milirrkarr (adv) 'before, previously, a long time ago'
 - *miler-gar* 'the past, some time ago, old' (Nekes & Worms 1953:710–711)
- milirrkarr-jun (milergar-djon) 'belonging to the past, old' milergare-djon wamba 'ancestor' (Nekes & Worms 1953: 710–711)
- -MILK (iv) 'awaken, wake up'
- milk (melg) 'ankle' (Nekes & Worms 1953: 711)
- *milkarr* (*milgar*) 'fish by moonlight' (Nekes & Worms 1953:712)
- milkin (n) 'stick, digging stick, walking stick, hitting stick'melgen 'digging stick' (Nekes & Worms 1953:712)
- milmil (melmel) 'sheet lightning, twinkling' (Nekes & Worms 1953:712)
- milngmilng (melŋ melŋ) 'expect, look for' (Nekes & Worms 1953:712)
- minarriny (n) (top) Minari"
- minbal (minbal) (n) 'wing' (Nekes & Worms 1953:714)
- minburr (minbor) (n) 'bullroarer, tjuringa; culture hero who punishes evil-doers through *Dalor*, the rainbow' [See Worms 1940:220.] (Nekes & Worms 1953:714) minboro 'bullroarer, tjuringa' (Nekes & Worms 1953:714)
- -MINDIJAL (iv) 'awaken, wake up, get up' -MINGK (iv) 'choke'
- mingkaban (n) 'bandicoot'

- mingkid (minged) 'firm, not shaking, not wobbling'; figuratively, 'settled' (Nekes & Worms 1953:717–718)
- mingkirr (n) 'bush turkey'
- minimb (minimb) (n) 'whale' (Nekes & Worms 1953:716)
- minimbad (minimbad) 'whale season' [the end of the cool bargana season, September-October] (Nekes & Worms 1953:716)
- minin 'rubbish, dirt' minen 'rubbish, dirty' (Nekes & Worms 1953:716)
- minirriny (n) (top) place where Dutch planes were bombed by Japanese in World War 2'
- minmiid (minmēd) (n) 'the three stars of the Orion's Belt, "The Men"; by adaptation "The Three Wise Men" (Nekes & Worms 1953:716)
- minmed 'number of boys or men' (Nekes & Worms 1953:704)
- minmēd "The Men", three stars of the Orion's Belt'; by adaption: 'the three wise men of the gospel' (Nekes & Worms 1953:704)
- minmiidijin (minmededjen) (n) 'number of boys or men' (Nekes & Worms 1953: 716)
- minmēde-djen 'number of boys or men' (Nekes & Worms 1953:704)
- -MINNYURRUB (iv) 'talk about, explain'
- minyaw (n) 'cat, native cat'
- minybal (minjbal) (n) 'wing' (Nekes & Worms 1953:718)
- minyiminy (n) a little type of bat' minje minj 'bat' (Nekes & Worms 1953: 719)
- minyin (minjin) (n) 'punishment, prison' (Nekes & Worms 1953:719)

- minyin-jun (minjin-djon) (n) 'prisoner; be a prisoner' (Nekes & Worms 1953:668) minjin-djon 'one who undergoes punishment, prisoner' (Nekes & Worms 1953:719)
- -MINYJ (iv) 'take from, borrow'
- mir (mir) secret word for 'blood' (Nekes & Worms 1953:719)
- *miraj* (n) 'widow, old woman whose husband is lost; woman bereaved of brother'
- -mird (in) 'leg, knee, shin, calf'
- mirdamal (n) 'big red kangaroo'
- mirdangurrin (n) 'a nice juicy berry'
- mirdimird, mirdmird (pv) 'kneel' midi mid 'kneel, bend down' (Nekes & Worms 1953:705, 758) midimid 'kneel, be kneeling, bend down' (Nekes & Worms 1953:705)
- mirij (n) 'rope, leash'
- meredj 'rope, string' (Nekes & Worms 1953:721)
- -mirl (in) 'nose'
- mirlimirl (n) 'paper, book'
- mirraj (miradj) (n) 'woman whose brother, sister, or cousin has died, mourner' (Nekes & Worms 1953:720)
- -MIRRAMIRRAR (iv) 'wait'
- -MIRRAR (iv) 'wait for'
- mirrarrinyjin (mirarendjen) 'accompany, accompanied' (Nekes & Worms 1953: 720)
- mirrbul (mirbol) (n) 'beetle; a kind of cockshafer appearing after the first rain in December' (Nekes & Worms 1953: 720)
- mirrijin (meredjen) (n) 'medicine' [from English medicine] (Nekes & Worms 1953:721)

- mirrilymirrily (merilj merilj) (n) 'emu feathers, used during dances' (Nekes & Worms 1953:721)
- mirrirrirr (mererer) 'expect, wait for' (Nekes & Worms 1953:721, 722)
- mirrirr-jun (mirer-djon) 'magical charm' (Nekes & Worms 1953:722–723)
- mirrjany (n) 'octopus'
- mirrmirr (mer mer) (pv) 'stamp, trample, clattering noise, canter with a clatter' (Nekes & Worms 1953:722)
- mirrngkiny (mirŋginj) (n) 'octopus' (Nekes & Worms 1953:722)
- mirrurr (miror) (n) 'Orion's Belt' [A Jabirrjabirr person compared the Orion to a saucepan with the three stars of the Belt as its handle.] (Nekes & Worms 1953:722)
- miyalurr (mialor) (n) 'large green-brown, edible snake (*Python amethystinus*)' (Nekes & Worms 1953:703)
- miyaw (miau) 'black lumps of powdered charcoal mixed with fat in the hair of a mourning woman' (Nekes & Worms 1953:703)
- mudang (modan) 'bag, a whole bag (of flour) not yet opened' (Nekes & Worms 1953:724)
- mudirl, murdurl (n) 'tick'

 modol 'tick (Boophilus Australis)'

 (Nekes & Worms 1953:724)
- muj (adv) 'already'
- mujumuj (adv) 'long ago, long time'
- mukal (mogal) 'barren' (Nekes & Worms 1953:726)
- -MUKAMUKAR (iv) 'make (arrangement)'
- -MUKAR (iv) 'make'
- mukulmukul (mogol mogol) (n) 'pimple, blotches of prickly heat' (Nekes & Worms 1953:727)

- mukuny, mukiny (n) 'fly' mogonj 'fly' (Nekes & Worms 1953: 727)
- mukuny-kud (mogonj-god) (n) 'full of flies' (Nekes & Worms 1953:727)
- mukurdarl (n) 'cicatrice on chest or arms' mogodal 'scars on the chest, cicatrices' (Nekes & Worms 1953:726)
- mukurlmukurl 'fighting after a death to clear feelings' [applies to brothers and cousins]
- mukurn (n) 'hair, human hair' mogan 'hair of head' (Nekes & Worms 1953:726)
- mul (n) 'blackhead'mol 'pimple' (Nekes & Worms 1953: 727)
- mulaj (moladj) 'tired of, annoyed, troubled; trouble, annoy someone, be tired of' (Nekes & Worms 1953:727–728, 736)
- -MULK (iv) 'sleep'
- mulkurr (molgor) (n) 'gravel, grit' (Nekes & Worms 1953:729)
- mulkurrkud (molgorgod) (n) 'stingray' [Literally, 'covered with gravel, as its skin contains sandy grit like the turbot (*Rhombus maximus*)'.] (Nekes & Worms 1953:729)
- mulkurrmulkurr (molgor molgor) 'gravelly (e.g. of ground)' (Nekes & Worms 1953: 729)
- mulkurrung (n) (top) unidentified place'
- mulkurrurrung (molgororon) (n) 'masonwasp (Abispa ephippium)' [This wasp uses clay and grit for building its nest on walls.] (Nekes & Worms 1953:729)
- mulmul (mol mol) 'under the surface' (Nekes & Worms 1953:729)
- mulyikar (n) 'tiny baby'moljegar, moljogar 'mother who has lost a child' (Nekes & Worms 1953:729)

- mumurr (momor) (n) 'blowfly' (Nekes & Worms 1953:732)
- *munbi* (*monbe*) 'mouth without tooth mutilation' (Nekes & Worms 1953:730)
- munbunarr (n) a type of catfish
- -MUND (iv) 'wet, saturate'
- *mung* (n) 'honey' *moŋ* 'honey' (Nekes & Worms 1953: 732–733)
- mung-id (moŋ-ēd) (n) 'lover of honey' (Nekes & Worms 1953:515)
- mungk (mong) 'cincture carried during the blood-ceremony (lareb)' (Nekes & Worms 1953:733)
- mungkan (pv) 'carry on head'mongan 'lift up on shoulders, carry on the back or shoulders' (Nekes & Worms 1953:733)
- mungurr (pv) 'jealous, be jealous of' monor 'jealous, envious' (Nekes & Worms 1953:733–734)
- mungurr-id (n) 'jealous person'
- mungurr-ij (moŋor-ēdj) (n) 'jealous person' (Nekes & Worms 1953:733–734)
- -MUNKAR (iv) 'lift'
- murdumurd (n) 'backbone'
- murlijun (n) 'cooked, chewing tobacco'
- murr (mor) (pv) 'sound caused by chewing bones' (Nekes & Worms 1953:734)
- -murr (in) 'buttocks, bum'
- -MURRAMURRAR (iv) 'smell'
- -MURRAR, -MUR(R) (iv) 'smell, sniff'
- murrinkiny (n) 'octopus'
- *murrk* (*morg*) 'brackish water' (Nekes & Worms 1953:735)
- murr-kaj (mor-gadj) (pv) 'bite, be chewing' (Nekes & Worms 1953:734)

- murrkard (n, pv) 'full, satiated, be full, make full'morgad 'filled, satisfied, be full, be satisfied' (Nekes & Worms 1953:736)
- murrku (n) 'salty, salt'
- murrkul (n) 'work' morgol 'work' (Nekes & Worms 1953: 736)
- murrkulid (n) 'work thing, workshoes' morgol-ēd 'industrious' (Nekes & Worms 1953:736)
- murrmurr (mormor) 'carry a child on one hip' (Nekes & Worms 1953:736)
- murru (n) 'sugar' moro 'sand, quicksand, rough sand, gravel'; by analogy 'sugar' (Nekes & Worms 1953:736, 848)
- murrubal (morobal) advance of men and women on a wide front toward the boy to be initiated, holding boomerangs between them; initiation ceremony and song, initiation dance man and woman, instruction for the initiated [See Worms 1938:153, 165–166.] (Nekes & Worms 1953:737, 859)
- murrubal (morobal, morobol) 'untidy, scattered' (Nekes & Worms 1953:737)
- *murrukud* (*morogod*) (n) 'stingray' (Nekes & Worms 1953:737)
- murrul (n) 'short, little, narrow'
 morol 'small, little, few' (Nekes &
 Worms 1953:737)
- murrulmurrul (n) 'little, very little'
- morol morol 'divide, break off pieces' (Nekes & Worms 1953)
- murrumundil (moromondel) 'green paint prepared from pollen of the turpentine tree' (Nekes & Worms 1953:737)
- murrumurrul (n) 'pieces, little bits'
- murrungkiny (moronginj) (n) 'jelly fish' (Nekes & Worms 1953:737)

- muuji (mōdje) (adv) 'long ago, already' (Nekes & Worms 1953:724–725)
- muujimuuji (mōdje mōdje) 'some time ago' (Nekes & Worms 1953:724–725)
- *muuk* (*mōg*) 'lame, be lame' (Nekes & Worms 1953:725–726)
- muuk-kaj (pv) 'lame, go around lame' mōg gad 'lame, be lame' (Nekes & Worms 1953:725–726)
- muukumuuk, mukumuk (pv) 'limp, cripple' mõge mõg, mõgomõg 'lame' (Nekes & Worms 1953:725–726, 727)
- *muumuu* (*mōmō*) (pv) 'hum, buzz' (Nekes & Worms 1953:392, 730)
- muund (mōnd) 'bury, bury spell; a magic ceremony of burying the name of an enemy' [The bones of a lizard are broken with a pointing-stick (wadangar), then the animal is singed and buried in a hollow tree. The name of the person to be enchanted is called during these actions and the victim will soon die. See Worms 1942:217.] (Nekes & Worms 1953:731)
- muund-jun (monde-djon) 'a buried person or thing, one who fell sick by the mondo-spell' (Nekes & Worms 1953:731)
- -MUUR (iv) 'spill, spill water, spill water from receptacle, wash (oneself)'
- muurl (n) 'pimple'
- muurl (mōl) 'cooked, ripe' (Nekes & Worms 1953:727)
- muurl-jun (mōḷ-djon) 'cooked, chewing tobacco, tobacco mixed with ashes' (Nekes & Worms 1953:727, 728)
- -MUURMUUR (iv) 'spill out, flow out'
- muwad (mowad) 'without fire, in the dark; non-combustible'
- mowad djung 'non-combustible firewood' (Nekes & Worms 1953:738)
- muwi (mui) (n) 'spirits' (Nekes & Worms 1953:725)

N

-N (iv) 'sit, be'

naal 'light'

nal 'flame, flame up, take to flames' (Nekes & Worms 1953:740)

naali jungk 'fire stick'

naalm (nalm) (n) 'head, lid; by adaptation, bottle-stopper, cork' (Nekes & Worms 1953:742)

naarrk (n) a long root that is white inside; a type of root, which looks like a candle

nabal (nabal) 'tasteless' (Nekes & Worms 1953:739)

nabirnd (n) 'long' nabend 'tall, high, long' (Nekes & Worms 1953:739)

nakarnak 'Friday'

nakul (n) 'tide, spring tide, high tide, salt
water'

nagul 'sea, ocean, tide' (Nekes & Worms 1953:740)

nalal (nalal) 'hiding place, protection, safety' (Nekes & Worms 1953:740)

nalamb (nalamb) (n) 'diver bird (podiceps ruficollis, Vroeg)' (Nekes & Worms 1953:740)

nalangan (nalanan, nalenan) 'spring tide' (Nekes & Worms 1953:740)

nalanginy (nalaŋinj) (n) a non-poisonous mangrove snake (*Cerberus Australis*) (Nekes & Worms 1953:741)

nalarrdad (nalardad) (n) 'turtle eggs' (Nekes & Worms 1953:741)

nalin (nalen) (n) 'boss' (Nekes & Worms 1953:420)

nalen 'master, boss, leader of corroboree; Lord Jesus' (Nekes & Worms 1953:741)

nalin (nalen) (n) 'gum tree with silver grey bark' (Nekes & Worms 1953:741)

nalinal (nalenal) (pv) 'flame (of a fire)' (Nekes & Worms 1953:741)

nalin-jun (nalen-djon) 'white edible resin of nalin tree' (Nekes & Worms 1953:741)

nalurr (nalor) 'ready' (Nekes & Worms 1953:742)

namad (namad) (pv) 'nothing, want, not occupied, at leisure' (Nekes & Worms 1953:742)

nanbil (n) 'shovel nosed shark'

nangurr (naŋor) 'deep (of voice)' (Nekes & Worms 1953:590)

nankarr (n) 'cliff'

nangar 'forehead, front'; figuratively 'point, cape' (Nekes & Worms 1953: 744)

nankarrjun (n) 'mud skippy with big forehead'nangardjon 'skipjack (fish)' (Nekes &

nanm (nanm) (n) 'handle' (Nekes & Worms 1953:745)

narlangkarr (n) 'jelly fish'

Worms 1953:745)

narlnarl (n) 'shiny'

narndi (n) 'prick, penis' naṇda 'testicle' (Nekes & Worms 1953: 744)

narnm (n) 'hard'

nanm 'set, become set, solidified (of honey, blood, oil, or grease)' (Nekes & Worms 1953:745)

narrk (narg) (n) 'the saplings of the nalin tree, and the edible roots of the saplings' (Nekes & Worms 1953:741)narg 'edible roots of saplings of nalen

narg 'edible roots of saplings of nalentree' (Nekes & Worms 1953:746)

nawan (nawan, nawen) 'round' (Nekes & Worms 1953:747)

nawul (n) 'nulla nulla, club'naol 'club' (Nekes & Worms 1953:746)-ng (in) 'stomach, belly'

- ngaab (n) 'father's brother' ŋāb 'father's brother, father's cousin' (Nekes & Worms 1953:770)
- ngaabaliny (n) 'woomera' ngabalinj 'spear thrower' (Nekes & Worms 1953:770)
- ngaak (n) 'bread' ngag 'sponge'; analogously 'bread' (Nekes & Worms 1953:775)
- ngaal (pv) 'yelp'
- ngaalan (adv) 'summer'
- ngaalan, ngalin, ngarlan (n) (top) Beagle Bay' nalen (n) country of Nyulnyul tribe, place of church of Beagle Bay Mission and precincts' (Nekes & Worms 1953: 778)
- ngaalan, ngalin (n) 'hot sand'
- *nalen* 'hot sand' (Nekes & Worms 1953: 778)
- ngaaluk (n) 'white cockatoo'
- ngaanj (ŋāndj) (n) 'little girl' (Nekes & Worms 1953:783)
- ngaarr (pv) 'growl'
- ngabily (ŋabilj) (n) 'soft (paperbark, cloth), delicate, tender' (Nekes & Worms 1953: 770)
- ngadir (n) 'pus'
- ngaj (ŋadj) (pv) 'pleasure, be fond of, like' (Nekes & Worms 1953:772)
- ngaj-ad (nadj-ad) (part) 'whether, if' (Nekes & Worms 1953:772, 773)
- ngaji (ŋadje) (part) interrogative (Nekes & Worms 1953:772, 773)
- ngaji-kad (ŋadje-gad) (part) 'perhaps, maybe' [particle connected with negative verb indicating potential mood, irrealis] (Nekes & Worms 1953:774)
- -NGAJIM, -NGARRJIM (iv) 'hit' (Nekes & Worms 1953)

- -ngakal (-ngaal) (in) 'self' (Nekes & Worms 1953:775)
- ngakalangan (nagalanan, nagolanan) (n) 'small duck' (Nekes & Worms 1953: 775)
- -NGAL (iv) 'shit on, befoul, become befouled'
- ngalangal (ŋalaŋal) (n) 'flame' (Nekes & Worms 1953:776)
- ngalarra (ŋalara) 'snore' (Nekes & Worms 1953:777)
- ngalarra-kaj (ŋalara-gadj) (pv) 'snoring, be snoring' (Nekes & Worms 1953: 536–537)
- ngalarra-kaj (ŋalara gadj) (pv) 'snore, be snoring' (Nekes & Worms 1953:777)
- ngalil (nalel) (n) 'running water' (Nekes & Worms 1953:778)
- ngalil ngarriny (nalel narinj) 'habitual, usual' (Nekes & Worms 1953:778)
- ngalinbur (ŋalenbor) (n) 'native of Ngalin' (Nekes & Worms 1953:778)
- -NGALINGAL (iv) 'shit on, befoul'
- ngalir (ŋaler) (pv) 'glitter' (Nekes & Worms 1953:543)
 - ngalirngalir, ngalarngalar (ŋaler ŋaler, ŋalar ŋalar) (pv) 'glow, glitter, be glittering, shine' (Nekes & Worms 1953: 777)
 - *naler naler* 'glow, sparkle, shine' (Nekes & Worms 1953:778)
- ngaliyirr (n) 'shining, bright'
- -NGALK (iv) 'cry, wail'
- ngalkarrman, ngalkarrmin (n) 'left-handed' nalgarman 'left, left-handed' [Also name for a wallaby (garabol) which is said to touch the ground first with the left, then with the right paw.] (Nekes & Worms 1953:779)
- ngalkarrman-kadin (ŋalgarman-gadin) 'to the left' (Nekes & Worms 1953:779)

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ngalu (nglu) (n) 'tobacco' (Nekes & Worms 1953:779)
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-NGALY (iv) 'slip'

-NGALYANGALY (iv) 'tease, vex'

-NGALYANGAL (iv) 'tease, vex' (Nekes & Worms 1953:780)

ngalyaw (ŋaljau) (n) 'fresh leaves, shoots' (Nekes & Worms 1953:780)

ngalyk (n) 'moustache'

ngalyub (naljob) (pv) 'flame, flash, sparkle, blaze' (Nekes & Worms 1953:780)

ngaman (n) 'breast'

naman 'breast, milk, udder' (Nekes & Worms 1953:780)

ngamarri (namari) (n) 'tobacco' (Nekes & Worms 1953:780)

ngaminyngaminy (n) 'berry type; a type of berry used for corroborees, threaded on hair for necklace; red and black'

nganan (ŋanan) 'silly, childish, dreaming; walk in sleep; talk in sleep' (Nekes & Worms 1953:782)

nganjin (ngandjen) 'tree stage burial, nest' (Nekes & Worms 1953:784)

-NGANK (iv) 'speak, tell'

ngank (n, pv) 'language, speech, word, speak'

nang 'language' (Nekes & Worms 1953: 820)

yang 'language, word, talk' (Nekes & Worms 1953:785–786)

ngankid (n) 'teacher, messenger'

ngankimbany (ŋangembanj) (n) 'talker, chatterbox' (Nekes & Worms 1953:786)

nangen-banj 'chatterbox' (Nekes & Worms 1953:363)

ngany (pv) 'hiss'

-NGANYB (iv) 'bake, roast' (Nekes & Worms 1953)

nganyj (part) interrogative particle

nganyjid (nandjed) 'how many' (Nekes & Worms 1953:784)

nganyjik (ŋandjeg) (part) interrogative (Nekes & Worms 1953:784)

nganyjin, nganjil (n) 'burial platform'

nganyjirrkud (inter) 'how many'

nandj-ergod 'how many' (Nekes & Worms 1953:529)

nandj-er-god 'how many' (Nekes & Worms 1953:784)

nganyjirrkud-ang (nandjergod-an) 'how often' (Nekes & Worms 1953:785)

-NGANY, -NGANNY (iv) 'refuse, deny'

ngaraburn (n) a type of tree'

ngarirr (narir) (n) 'belt of human hair' (Nekes & Worms 1953:792)

ngarl (pv) 'bark'

ngarlij (pv) 'yelp'

ngarlngarl (pv) 'bark'

ngarr (ŋär) (pv) 'snarl, snarl at someone' (Nekes & Worms 1953:790)

yör 'snarl' (Nekes & Worms 1953:807)

ngarrabarn (n) 'coolibah, coolibah tree' nareban 'gum tree' (Nekes & Worms 1953:792)

ngarrabil (n) 'coolibah'

ngarrij (n) 'hard' naredj 'truly, very' (Neke

naredj 'truly, very' (Nekes & Worms 1953:792)

ngarrijang (adv) 'hard, loud'

ngarrin (ŋarin) 'very, truly' [perhaps ngarriny] (Nekes & Worms 1953:327)

ngarriny (n) 'hard'

garinj 'very' (Nekes & Worms 1953: 518)

narinj 'truly, very' (Nekes & Worms 1953:792)

-NGARRJAL (iv) 'be mistaken'

ngarruban (ŋaroban) (n) 'gum tree, bark of which is used for making coolamons,

- bindjen, olad' (Nekes & Worms 1953: 794)
- -NGARRK (iv) 'drive, cause to do, be at fault, bring discredit upon; be driven by water, drift' (Nekes & Worms 1953:793)
- ngay (pro) 'I, me, 1MIN.CRD' nai 'first person singular; I, me, my' (Nekes & Worms 1953:774–775)
- ngid (ped) (pv) 'thud' [imitative of a clattering noise; fall with a thud or clattering noise] (Nekes & Worms 1953: 430, 795)
- ngidirrngin (adv) 'alone' nidernan 'alone, by oneself, lonely' (Nekes & Worms 1953:795)
- ngidirrngin-jun (nidernan-djon) (n) 'a lonely one, one being left alone, one who feels lonely' (Nekes & Worms 1953: 795)
- ngidngid (ned ned) (pv) 'clatter, imitative of clattering noise; canter along with a clatter (of horse)' (Nekes & Worms 1953:795)
- ngii (inter) 'yes' ŋē 'yes' (Nekes & Worms 1953: 724–725, 794)
- ngiijil 'mud' (n)

 ŋīdjel 'mud, swamp' (Nekes & Worms
 1953:795)
- ngiijil-kud (ŋīdjel-god) 'covered in mud' (Nekes & Worms 1953:795)
- ngiir (pv) 'breathe'
- ngiirngiir (pv) 'pant'
- ngiirr (ŋēr) (n) 'devil, evil spirit, ghost' (Nekes & Worms 1953:371, 797)
- ngimbirr (adv) 'last night, other night, night time'
 - *nimber* 'night' (Nekes & Worms 1953: 796)
- ngimbirrngimbirr (adv) 'all night, through the night'

- ngimbirr-j (nimber-dj) (adv) 'until night' (Nekes & Worms 1953:796)
- ngindi (ŋende) 'stretch out hands' (Nekes & Worms 1953:783)
- -NGINDIK (iv) 'not know, not recognise'
- ngindingind (nende nend) (pv) 'hold out, stretch out hands e.g. to stop a child from falling or to receive something; be stretching out hands' (Nekes & Worms 1953:796)
- ngir (ŋĭṛ, ŋĭrr) 'grin, show teeth' (Nekes & Worms 1953:797)
- -NGIRIMB (iv) 'chase, run after'
- ngirrinyan-gamb (nerenjan-gamb) (n) (top) a country of the Nyulnyul' (Nekes & Worms 1953:798)
- ngirrjun (nir-djon) 'grinning' (Nekes & Worms 1953:754)
- ngirrngirr (pv) 'blow, puff'
- -ngkurn (in) 'nape'
- ngub (n) 'soft, flexible' ηου 'soft' (Nekes & Worms 1953:798)
- ngubirliny (n) 'squid'
- nobelinj 'cuttlefish (sepia officinalis)' (Nekes & Worms 1953:798)
- ngudangud (ŋodaŋod) 'dance-step, stamping and moving corroboree' (Nekes & Worms 1953:799)
- ngurdinybur (nodinjbor) (n) 'person of Ngurdiny' (Nekes & Worms 1953:800)
- ngujurr (nodjor) 'embrace' (Nekes & Worms 1953:800)
- ngukurrngukurr (nogor nogor) 'murmur; confession' (Nekes & Worms 1953: 800–801)
- -NGUL (iv) 'throw'
- nguland (noland) (n) tree type (Nekes & Worms 1953:797)
- -NGULANGUL (iv) 'speak'
- -NGULANGULM (iv) 'tell lies'

- -NGULIRR (iv) 'obliterate'
- ngulk (yolg) (n) 'beard, feelers of catfish' (Nekes & Worms 1953:802)
- -NGULM (iv) 'pretend, deceive'
- ngulng (yoly) 'big shell used as a trumpet' (Nekes & Worms 1953:802)
- -NGUNDUM (iv) 'hold'
- ngungu (nono, nonono) 'growling noise of a small wallaby, garrabul' (Nekes & Worms 1953:807)
- ngungu-kaj (ŋoŋo-gadj) (pv) 'cry out ngungu, growling noise of small garrabul wallaby, make growling noise' (Nekes & Worms 1953:570–571, 807)
- ngunjun (nondjon) (n) 'black stones, rocks' (Nekes & Worms 1953:804)
- ngunungun (nononon) 'snuffle, speak through the nose' (Nekes & Worms 1953:806)
- ngunyb (n) 'dirty' ŋōnbe 'dirty' (Nekes & Worms 1953: 804)
- ngur (nor) (pv) 'swell up, be swollen' (Nekes & Worms 1953:353)
- nguriny (n) 'mosquito'
- ngurl (no!) 'pollen (in a bees' nest)' (Nekes & Worms 1953:801)
- ngurlangurl (n) 'sacred, sacred place; dirty'
 ngurn (pv) 'sigh'
- ngurnd (n) 'piss, urine' ngurnde 'urine, urinate' (Nekes & Worms 1953:804)
- ngurnngurn (pv) 'whimper'
- ngurraj (ŋuradj) 'in the dark, without a fire' (Nekes & Worms 1953:808)
- ngurrin (noren) 'ready, prepare, make ready' (Nekes & Worms 1953:809)
- ngurrngk (n) 'joint, elbow, knee, knee cap' norng 'knee, knee-pan' (Nekes & Worms 1953:809)

- ngurrngungk (n) 'elbow, joint'
- ngurrngurr (pv) 'submerge; go down in the water; get drowned; drown'
 nor nor (pv) 'drown, drown (tr), get drowned, sink, sink down; get down; drown something' (Nekes & Worms 1953:810)
- ngurrngurr (n) 'mosquito'
- ngurrngurrman (nornorman) 'heavy' (Nekes & Worms 1953:681, 810)
- ngurrngurrmarran (nornormaran) (n) 'reeds' (Nekes & Worms 1953:810)
- ngurrumundurl (n) 'wattle tree flower, golden wattle'
- nguruk (norog) (n) 'soup of boiled kangaroo blood' (Nekes & Worms 1953: 811)
 - yorog 'kangaroo blood' (Nekes & Worms 1953:745)
- *nibalin* (*nibalen*) 'clever, skilled' (Nekes & Worms 1953:749)
- nibard (n) 'oyster'
- nibilbil (nibilbil) 'witchdoctor, leader' (Nekes & Worms 1953:749)
- niinyj, ninyj, nunyji (n, pv) 'alive, living'
- *nēndj* 'alive, be alive' (Nekes & Worms 1953:761)
 - *nōndj* 'alive' (Nekes & Worms 1953: 533)
- niirrbun, nirlbun (n) 'a type of root like an onion'
 - *nīrbon* 'nut-grass, Sturt-grass, "*nalgo*" (*Cyperus rotundus*)' (Nekes & Worms 1953:763)
- niiyarr (nīar) 'tasty, sweet; metaphorically, harmonious voice' (Nekes & Worms 1953:749)
- nikar (nigar) (n) 'greedy, selfish' (Nekes & Worms 1953:751)
- nikilbardin, nikilbardirn, nikirlbardin (n) 'eel'

- nigalbadan 'freshwater eel' (Nekes & Worms 1953:751)
- nilan (nelan) 'summons to tribal meetings, appointment and time for this meeting' (Nekes & Worms 1953:752)
- nilankul (nilangol) (n) 'big white mosquito' (Nekes & Worms 1953:752)
- nilikin (n) (top) Trappist Inlet'
- nilingarr (nileŋar) 'itch, be itchy' (Nekes & Worms 1953:754)
- nilirr (n) 'sharp, point, fish hook'
- nilirrin (nileren) (n) 'whet stone' (Nekes & Worms 1953:754)
- nimadarrj (nimadardj) (n) 'red sand cliffs' (Nekes & Worms 1953:754–755)
- nimal (n) 'root, branches'
- nimalkan (nimalgan) (n) 'paperbark tree (Melaleuca leucadendron)' (Nekes & Worms 1953:756)
- nimam (nimam) (n) 'door, entrance door' (Nekes & Worms 1953:330, 756)
- nimam (nimam) (n) 'person with perforated septum' (Nekes & Worms 1953:756)
- nimanburr (n) 'flying fox'
- nimanburr (n) name of people living near Disaster Bay; language much like Nyulnyul'
- nimanburr (nimanbur) (n) 'flying fox' (Nekes & Worms 1953:757)
- nimandarr (n) 'shade, shadow (of animals
 and humans only)'
 - nimandar 'shadow, reflected image, shade' (Nekes & Worms 1953:757)
- nimanganjun (n) a type of gum gathered from a tree'
 - nimanandjon 'gum of the gabin, aranor, and mador trees' (Nekes & Worms 1953: 757)
- nimarla waalk (nimala walg) 'sunbeams'; literally, 'hand sun, hands of the sun' (Nekes & Worms 1953:861)

- nimarr, niimarr, niyamarr (n) 'hill' nimarr (nīmar) (n) 'sandhill, dune' (Nekes & Worms 1953:757)
- nimbirr (n) 'flippers of turtle'
- nimidijin (nimidedjen) (n) 'anus of animal, bowels' (Nekes & Worms 1953:759)
- nimikil (n) 'root of a tree'
- -mikil (nimegel, nimagel) (in) 'small of the back, loins' (Nekes & Worms 1953:759)
- nimikil bardangk (nimegel badang) back of tree, big roots over the ground (Nekes & Worms 1953:759)
- nimilirriny (nimilerinj) (n) 'feet of crabs, centipedes etc.; twigs of branches (considered as small hands)' (Nekes & Worms 1953:759)
- nimilirriny (nimilerinj) (n) a crab named after its ten feet (Nekes & Worms 1953: 759)
- nimirdkud (in) 'lame'
- nimirldil (n) 'a root about 4 cm long'
- ningarr (n, pv) 'true, believe, believe someone'
 - *niŋar* 'true, really, indeed, very; put trust in someone, believe someone' (Nekes & Worms 1953:761–762)
- ningarriyan (ninarean) 'really' (Nekes & Worms 1953:761–762)
- ninngirr (ninngirr) (n) 'vagina' (Nekes & Worms 1953:761)
- nirram (neram) (pv) 'expect, wait for' (Nekes & Worms 1953:762)
- nirrinyirr (n) 'sweet, lolly'
- niwanil (niwanel) (n) 'sand bank, sands, beach at low tide' (Nekes & Worms 1953:763)
- niwirr (n) 'creek, river' niwer 'creek, flowing water' (Nekes & Worms 1953:763)

- niyalbun (nialbon) 'nutgrass, Sturt-grass (cyperus rotundus)' (Nekes & Worms 1953:748)
 - *nialbon* 'bush onion, grows in dry sand; Sturt-grass (*Cyperus rotundus*)' (Nekes & Worms 1953:334)
- niyamarr, nimarr, niimarr (n) 'hilly country' niamar 'sandhill, dune' (Nekes &
 - Worms 1953:748)
- nubundubund (nobondobond) (n) 'heel' (Nekes & Worms 1953:764)
- nul (n, pv)'song, corroboree'nōl 'corroboree, dancing stick (carried horizontally from both ends)' (Nekes & Worms 1953:765)
- nulunnulun (nolon nolon) (pv) 'divide, divide something, break off' (Nekes & Worms 1953:765)
- nulurrud (nolorod) 'corner' (Nekes & Worms 1953:765)
- *numb* (*numb*) 'stumpy (e.g. of tail)' (Nekes & Worms 1953:763)
- numulurr (nomolor) (n) 'stern of boat, back of cart, big end of axe head' (Nekes & Worms 1953:760, 765)
- numurrukurrukurd (n) bean type; a type of tree with beans'
- nundin (nonden) 'cut' (Nekes & Worms 1953:766)
- nundurr, nundirr (n) 'sweat' nundur 'sweat' (Nekes & Worms 1953: 766–767)
- nung (n) 'soft inside part of bread'; literally,
 'its stomach'
- nungajil 'happy, feel happy' [possibly a
 cranberry morph involving nung 'his/
 her/its stomach' and unidentified second
 element]
- nungkub (pv) 'ignore'

- nungkurn (nongon) (n) 'nape, back of neck' (Nekes & Worms 1953:768)
 nungkurn(ku) (n) 'bend of neck'
- nungurr (noŋor) 'without handle' (Nekes & Worms 1953:768)
- nurrng (norŋ) 'feel at home, snug, tame' (Nekes & Worms 1953:769)
- nuund (nōnd) (n) 'broken off, blunt' (Nekes & Worms 1953:766)
- nuwany (nowanj) 'bald' (Nekes & Worms 1953:726)
- -NY, -NYU (iv) 'get, catch, fetch, receive' *nyaa* (inter) 'here!'
- *njä* 'here, take!' (Nekes & Worms 1953: 812)
- nyaar (njāṛ) 'scent, smell' (Nekes & Worms 1953:816)
- nyaawan (pv) 'round, make round'
- nyak (njag) (pv) 'stroke, blow' (Nekes & Worms 1953:812)
- nyamalk (adv) 'thither, that way'
- njamalg 'thither, that way' (Nekes & Worms 1953:544)

 njamalg 'thither, in this direction' (Nekes & Worms 1953:813)
- nyami (n) 'mother's father'
- nyanangkarr (part) 'perhaps, maybe' njaningar 'perhaps, maybe; irrealis' (Nekes & Worms 1953:815)
- nyiinyii (njēnjē) 'clever, cunning' (Nekes & Worms 1953:818)
- nyilinyil (pv) 'tangle, curly, knot; become tangled'njeli njeli 'tangled, curly; be tangled'
 - (Nekes & Worms 1953:817)
- nyilinyili (njeli njeli) (n) 'jelly fish (medusa)' (Nekes & Worms 1953:817)
- nyilnyil (njel njel) (n) 'orchid (*Cymbidium* canaliculatum)' [so named because it grows tangled on a tree] (Nekes & Worms 1953:817)

- *nyim* (pv) 'wink, blink'
- nyimbalnyimbal (njimbal njimbal) (n) 'swallow, fly-catcher' (Nekes & Worms 1953:817)
- nyimnyim (pv) 'wink, blink' njim njim 'blink' (Nekes & Worms 1953: 818)
- nyirrbirr (njirbir) 'sacred, good' (Nekes & Worms 1953:819)
- nyirrinyingam (n) a place name'
- nyirrnyirr (njër njër) (pv) 'flow (e.g. through a pipe), gush' (Nekes & Worms 1953:819)
- nyuk (njog) (pv) 'bow, bend head' (Nekes & Worms 1953:820)
- nyulnyul (njol njol) tribe and language between Carnot Bay and Pender Bay with centre at Beagle Bay Mission (nalendj). [See Worms 1944:307.] (Nekes & Worms 1953:820)
- nyun (n) 'there' njon 'that, there' (Nekes & Worms 1953: 821)
- nyun (njön) (pv) 'throb, shooting pain' (Nekes & Worms 1953:820–821)
- nyungul (n) 'old man'
 njungul 'old' (Nekes & Worms 1953:821)
- nyunikabiny (n) 'other side'
- nyunnyun (pv) 'ache'
- nyunnyun-kaj (njön njön gadj) (pv) 'throb, be throbbing, shooting pain' (Nekes & Worms 1953:820–821)
- nyuny (njunj) (pv) 'blow nose' (Nekes & Worms 1953:821–822)

R

- -R (iv) 'poke, pierce, spear'
- raak (rāg) 'loose, slack' (Nekes & Worms 1953:839)

- raam (rām) 'carving, engraving on shields, boomerangs, tjuringas, etc.' (Nekes & Worms 1953:840)
- raambarl (n) 'white sand'
- rabirrbal, raburrbil (n) 'centipede'
- raberbal 'centipede' (Nekes & Worms 1953:838)
 - raberal 'centipede' (Nekes & Worms 1953:759)
- rakal (ragal) 'light, outside, out of doors, in the open air; give someone room, let them pass' (Nekes & Worms 1953:839)
- ral (adv) 'soon'
 - ral 'soon, quick' (Nekes & Worms 1953: 839)
- ralard (adv) 'quickly'
- -RALK (iv) 'dry'
- -RALKAM (iv) 'dry something'
- ramaburnarn (n) (top) Fraser River'
- -RAMB (iv) 'warm oneself' (Nekes & Worms 1953)
- rambak (n) plant type, a type of root; large bush onion; bush potato which grows on dry ground, small potato; cooked in hot sand'
 - rambag 'native potatoes'; analogously 'tonsils' (Nekes & Worms 1953:840)
- rambarr (rambar) (n) 'relationship between father-in-law and son-in-law' (Nekes & Worms 1953:840)
- rambarrngarri (rambarŋari) 'marriage between members of the same moiety' (Nekes & Worms 1953:840)
- rambin (ramben) (n) 'heavy' (Nekes & Worms 1953:840)
- rangin (n) 'wife's father, daughter's husband, mother/father-in-law (of woman)'
 - rayen 'relationship between daughter-inlaw and parents-in-law' (Nekes & Worms 1953:841)

- rangkarangkarrk (adv) 'daybreak, dawn' rangar rangar-g 'daybreak, early twilight' (Nekes & Worms 1953:841)
- rangkarr (adv) 'early'
 rangar 'dawn, daybreak' (Nekes &
 Worms 1953:841)
- rangkarr-rangkarr, rangkirr-rangkirr (adv) 'early'
- rangrang (ran ran) (pv) 'bark' (Nekes & Worms 1953:841–842)
- rany (ranj) (pv) 'clean, sweep something' (Nekes & Worms 1953:842)
- rarrambal (rarambal) (pv) 'fear, fright, be frightened' (Nekes & Worms 1953:842)
- rarrb (pv) 'chafe, scrape' rarb 'clean, sweep' (Nekes & Worms 1953:842)
- rarrbrarrb (pv) 'rake, smooth ground, scrape a surface'
- rarriny (n) 'strong'
- rarrjin (n) 'shame, ashamed' rardjen 'shy, timid, bashful, blushing' (Nekes & Worms 1953:842)
- rarrkararrk (rargararg) 'rough, callous, rough skin of sole' (Nekes & Worms 1953:843)
- rarr-rarr (pv) 'make noise'
- rawurlirl (pv) 'creepy, frightened'
- rayi (n) 'spirit-child, waiting to be born'rai 'secret, hidden, spirit-child' (Nekes & Worms 1953:838)
- *riib* (n) 'bad, bitter' *rēb* 'bad, sin' (Nekes & Worms 1953: 843)
- *riij* (n) 'pearlshell pendant, hair-string belt; hair string belt, round shape, used for corroboree'
 - *rīdj* 'disc of pearlshell (*Maleagrina maxima*) used as ornamented pubic covering of subincised man' [See Worms

- 1938:155, 163, 168, 171.] (Nekes & Worms 1953:844)
- riirrb (rīrb) (pv) 'unsteady, restless, running about; run away, disappear' (Nekes & Worms 1953)
- riirrbriirrb (rīrb rīrb) (pv) 'restless, try to escape' (Nekes & Worms 1953:845)
- rilil (pv) 'spread'

 relel 'blanket, anything to sit or lie on'
 (Nekes & Worms 1953:844)
- *ring (riŋ)* 'cloudy' (Nekes & Worms 1953: 844)
- ringulngadan (renolna-dan) 'evening' (?) (Nekes & Worms 1953:367)
- rinyariny (n) 'sensible, clever, expert'
- rinyriny (rinj rinj) 'sense, consciousness; lose consciousness' (Nekes & Worms 1953:844)
- rirrar (n) 'rain'
- rirrb (pv) 'disappear, go away'
- rirrbrirrb (pv) 'disappear, try to escape; disappear from someone'
- rirrk (n) 'spark, ashes, charcoal'
- *rīrg* 'charcoal'; analogously, 'black beetle' (Nekes & Worms 1953:845)
- rirrm (rirm) 'tooth mutilation, gap after extraction of upper incisors' (Nekes & Worms 1953:845)
- -RLABRLAB (iv) unknown meaning; means 'kiss, embrace' in Bardi
- -rnkarr (in) 'forehead'
- -rnmurr (in) 'thigh, lap' 1
- rub (pv) 'pull out'
 - *rob* 'pull out, take out, remove' (Nekes & Worms 1953:845)
- rubarub (pv) 'pluck, pull out, pull
 something out'

¹ In Bardi -*nmurr* refers to the fat part on the side of the hips.

- rubrub (pv) 'pluck, pull out'rob rob (pv) 'pull out' (Nekes & Worms 1953:845)
- ruburr (n) 'short'
 robor 'short, small, little' (Nekes &
 Worms 1953:845)
- rudrud (rod rod) (n) 'sand-wasp (Salius bicolor)' (Nekes & Worms 1953:845)
- ruk (pv) 'undo, untie; come undone, come off, pluck out (e.g. hair)'rög 'take off e.g. belt, untie, undress, cast off skin (of snake)' (Nekes & Worms 1953:845–846)
- rukruk (pv) 'untie, untangle'
- rukud (rögod) (pv) 'loose, come loose, come off, slip down (e.g. of trousers)' (Nekes & Worms 1953:846)
- rumbi (rombe) 'upside down' (Nekes & Worms 1953:708)
- rumbu (adv) 'forwards'
- rung (pv) 'suck'
 run 'suck (breast)' (Nekes & Worms 1953)
- rungrung (run run) (pv) 'suck, smoke pipe' (Nekes & Worms 1953:847)
- rungurr (ronor) 'fourth degree of initiation' [This is accompanied by the conferring of a feather of the eaglehawk as representative of the eternal law-giver. See also Worms 1938:171.] (Nekes & Worms 1953:847)
- rurrb (rorb) 'beat, defeat' (Nekes & Worms 1953:847)
- rurrbukun (adv) 'exchange, payback'
- rorbo, rorbogon 'exchange, barter' (Nekes & Worms 1953:847–848)

U

ulmb (n) 'grass seed, a sharp and sticky grass seed'

- umal (n) 'husband's brother (of woman)'
- uralal (n) 'a bird like a blue jay'
- uriny (n) 'woman, married woman' worinj 'woman' (Nekes & Worms 1953: 911–912)
- uudarr (ōdar) (n) tree with edible fruit (Nekes & Worms 1953:825)
- -uur (in) 'anus'

W

- -W (iv) 'give'
- waakal (n) 'weak'
- waal (n) 'son (of a man)'
 wāl 'child, son, daughter' [A father calls his children wāl, a mother, bāb; they talk about them as wāle bāb.] (Nekes & Worms 1953:856)
- waalk (n) 'sun, day'walg 'sun, day'; by adaptation, 'watch, clock' (Nekes & Worms 1953:861)
- waalk (n) a type of red-bellied snake, orange in colour, with black head; very poisonous
- waalkidany (walge danj) 'sunshine, sunrise' (Nekes & Worms 1953:861)
- waalkijun (walgedjon) 'ripe and sun-dried fruit of wanger tree' (Nekes & Worms 1953:862)
 - walgedjon 'ripe, sun-dried' (Nekes & Worms 1953:876)
- waalkwaalk (n) a small salmon type, without whiskers
- waalmarr (n) 'male kangaroo'walumar (n) 'male kangaroo' (Nekes & Worms 1953:880)
- waamarn, waamin (n) 'wrong way, straight, another way, other place, elsewhere' wamen 'other man's property, strange, foreign' (Nekes & Worms 1953: 865–866)

- waamarnjun (wamen-djon) 'stranger, foreigner' (Nekes & Worms 1953: 865–866)
- waambiirrdkjun (n) 'rock cod'
- waangk (wāŋg) (adv) 'suddenly, unexpectedly' (Nekes & Worms 1953: 878–879)
- waangkayid tree type [possibly a mistake for wangkay]
- waankirr (n) 'persoonia falcata; a bush fruit like a mango'
- waanyj (n, adv) 'exchange, back, return'wāndj 'return, back' (Nekes & Worms 1953:873)
- waarl (n) 'daughter'
- wabarr (wabar) (pv) 'doubtful, doubt something' (Nekes & Worms 1953: 849–850)
- wabarrird (n) 'yam from rocky country'
- wabi (wabe) 'slanting, sideways, side view, profile'; by adaptation 'photo in profile' (Nekes & Worms 1953:850)
- wabidang (n) (top) name of a lake'
- wadabarr, wardabarr, wardabal, wardibal
 (n) 'dugong'
- wadaber 'dugong, sea cow (dugong australis, Owen)' (Nekes & Worms 1953:850)
- wadan (wadan) (n) 'cloud' (Nekes & Worms 1953:851)
- wadangkarr (wadangar) (n) 'spindle-shaped piece of wood ("dagger") for magic killing (by pushing magically into victim's body) and incantation' [See Worms 1940:224–226.] (Nekes & Worms 1953:851)
- wadawi (wadawe) (n) 'owl' (Nekes & Worms 1953:851)

- wadi (adv) 'north' wadi 'north' (Nekes & Worms 1953: 851)
 - waid 'north' (adv) [a misspelling of wadi] (Nekes & Worms 1953:854)
- wadijang (adv) 'northerly, to the north'
- wadinyimbal (n) (top) Lake Louise'
- wadiyabul (n) 'northerners'
 - *wādi-abol* 'northern tribes' (Nekes & Worms 1953:313)
 - wadi-abol 'northern tribes (coastal tribes north of the Yawuru)' (Nekes & Worms 1953:851, 852)
- waj (pv) 'take away'
- wajamarr (adv) 'later'
 - wadjimar 'following, younger, later on' (Nekes & Worms 1953:853)
- wajarr (n) 'fishing spear'
- wajbal (n) 'white person'
- wajid (wadjed) (pv) 'tired, feel tired, be tired, weak' (Nekes & Worms 1953: 852–853)
- wajilbarr (n) a type of fish'
- wajinday (n) Monday'
- wajirrb (n) 'spring' wadjerb 'waterhole' (Nekes & Worms 1953:852–853)
- wajun (wadjon) (n) 'flying fox' (Nekes & Worms 1953:853)
- wakal (wagal) 'female, weak, helpless' (Nekes & Worms 1953:855)
- wal (wal) 'tired, weak' (Nekes & Worms 1953:856)
- -wal (in) 'tail'
- walabaab (n) 'son'
- walabalkud (walabalgod, walebalgod) 'wave of the sea' (Nekes & Worms 1953:856)
 - walabal-god 'waves of the sea' (Nekes & Worms 1953:596–597)

- walabarrkaj (n) 'seagull' walabargadj, walebargadj 'seagull (Larus novae-hollandiae, Stephans)' (Nekes & Worms 1953:856)
- walak (walag) (n) 'brown bull frog' (Nekes & Worms 1953:857)
- walaman (n) (top) an unidentified inlet'
- walamangkarr (n) 'spring country; a type of tree with light bark, grows in spring country, type of tree growing in spring country, fruitless, flowers only' walamangar, walemangar 'paperbark tree (Melaleuca leucadendron)' (Nekes & Worms 1953:857, 861)
- walangk (n) 'spear' walang 'wooden spear' (Nekes & Worms 1953:857–858)
- walangkarr (walangar) (n) red cliffs' (Nekes & Worms 1953:858)
- walangkun (n) 'rainbow, rainbow snake'
 walard (n) 'bucket'
- -WALAWAL (iv) 'lead'
- walbarr (walbar) (n) 'spear-thrower (erroneously called sword), woomera, notched stick for making noise-music, bullroarer, tjuringa, engraved wooden implements' (Nekes & Worms 1953: 859)
 - walburr (walbor) (n) 'possum-hair ready to be twisted into string on a twisting-propeller, marawiringa; cloth for dress not yet made, unfinished' (Nekes & Worms 1953:859)
- walibil (walebel) (n) 'brother-in-law'; [Wife's brothers and cousins call husband's brothers and cousins walebel, and vice versa.] (Nekes & Worms 1953: 860)
- walij (adv) 'south'waledj 'south' (Nekes & Worms 1953: 860)
- warlijang (adv) 'southerly, to the south'

- warlijingk (adv) 'from the south'
- walijingkjun (n) 'southerners'
- walilan (walelan) (n) 'mast of a boat' (Nekes & Worms 1953:857)
- waliman (waleman) (n) (top) a country of the Nyulnyul' (Nekes & Worms 1953: 860)
- walimanid (waleman-ēd) (n) 'people of Waliman' (Nekes & Worms 1953:860)
- walin (walen) (n) 'lungs' (Nekes & Worms 1953:857, 861)
- walirr (pv) 'back, backwards, lie on back'waler 'lie on the back' (Nekes & Worms 1953:861)
- waliyarr (n) 'wide'
- waljabirrany (waldjaberanj, waldjaberinj) (n) 'tree frog' (Nekes & Worms 1953: 859)
- walkaykarr (walgaigar) (n) 'mourners, relatives of a deceased who is his or her father, father's brother or sister, or children of father's brother or sister' (Nekes & Worms 1953:861)
- walkiwalk (walge walg) (n) 'salmon' (Nekes & Worms 1953:862)
- walkurr (walgor) (n) 'brother' [called such by his brother] (Nekes & Worms 1953: 862)
- -WALM (iv) 'call out to'
- walm (pv) 'shrivel, shrivel up, become paralysed, cramp; shrivel something'walm 'stiff with cold, be stiff' (Nekes & Worms 1953:862)
- walman (walman) (adv) 'any, anyone, anything, anywhere' (Nekes & Worms 1953:863)
- walman-kal (walman-gal) 'nothing (at all)' (Nekes & Worms 1953:863)
- wal-nilirr (wal-niler) 'weak mouth, stutter' (Nekes & Worms 1953:754)

- walung (waloŋ) (pv) 'care; take care of someone, nurse someone' (Nekes & Worms 1953:864)
- walungarriny (n) 'circumcision, circumcision corroboree'
- waloŋorin 'initiation dance' (Nekes & Worms 1953:864)
- walungkun (walongon) 'mythical Rainbow Snake, the native law' [See Worms 1940: 239–249.] (Nekes & Worms 1953:864)
- walungwalung (waloŋ waloŋ) (pv) 'keep things in order' (Nekes & Worms 1953: 864)
- walyawaly 'splay footed'
- wamarrij (n) a type of yam'
- wamarriny (n) 'crab, a type of crab used as bait for fish'
- -WAMB (iv) unknown meaning
- wamb (n) 'man, husband'wamb 'man, men' (Nekes & Worms 1953:865)
- wamba-marirr 'husband-wife pair'
- wamb-id (wambe-ēd) 'man's', as in 'man's dress' (Nekes & Worms 1953:515)
- wamb-uriny (n) 'people'
- wamb-wamb (wamb wamb) (n) 'for men only, sleeping house for young men' (Nekes & Worms 1953:865)
- wambangilingil (n) a type of bushy tree with berries'
- wambarrird, wambirriij (n) a type of yam' wamberēdj 'yam' (Nekes & Worms 1953:865)
- wambiirrdijun (n) 'man-eating rock cod'
- wamwam (wam wam) (n) 'wattle tree blossoms, blossoms of djaredjanj, gololo and gonam trees' (Nekes & Worms 1953:610, 615, 866)
- wanak (wanag) (pv) 'unknown, uncertain, ignorant; not knowing, be ignorant of' (Nekes & Worms 1953:866–867)

- wanak-kaj (wanag gadj) (pv) 'not know; be ignorant, do not know' (Nekes & Worms 1953:866–867)
- wanamb (wanamb) 'bright light shining in distance' (Nekes & Worms 1953:867)
- wanangarrjak (wananar-djag) (n) 'mountain people' (Nekes & Worms 1953:442)
- wananiny (wananinj) 'nightmare, talk aloud in sleep; be dreaming, talk in sleep; wake up senselessly' [part of *goraŋara* ceremony, a kind of seance with an imagined bilocation, as described under *mundurgal* in Worms 1940:234–235] (Nekes & Worms 1953:867)
- wanb (wanb) (n) 'whiting (fish)' (Nekes & Worms 1953:767–768, 868)
- -WAND (iv) 'gather, collect, pick up'
- wandabin (wandabin) (n) 'stingray' (Nekes & Worms 1953:869)
- wandang (n) 'headband' wandan 'frontlet' (Nekes & Worms 1953:869)
- wandarl (n) 'coolamon'
- wandawandabil (wandawandabel) 'gay coloured' (Nekes & Worms 1953:870)
- -WANDIM (iv) 'detain, restrain' (Nekes & Worms 1953)
- wandar (wandar) 'prickly heat (eczema tropicum)' (Nekes & Worms 1953: 869–870)
 - wander, wander 'prickly heat (eczema tropicum)' (Nekes & Worms 1953: 869–870, 871)
- wangal (n) 'wind' waŋal 'wind' (Nekes & Worms 1953: 877)
- wangal kumbarr (waŋal gumbar) (n) (top) "Wind-Rocks", four totem-rocks in the eastern end of Pender Bay' (Gorbalgon, nalaŋanja Wenied) (Nekes & Worms 1953:877)

- wangalang (n) 'boy, young man of marriageable age'waŋalaŋ, waŋelaŋ 'young man' (Nekes & Worms 1953:877–878)
- wangalang-jin (wanalan-djen) (n) 'number of young men' (Nekes & Worms 1953: 877–878)
- wangamad (wangamad) 'crystal, witchdoctor's stone, used for magic purposes' (Nekes & Worms 1953:876)
- wangarr (wangar, wanger) (n) 'turpentine tree, gum tree' (Nekes & Worms 1953: 876)
- wangarr (waŋar) (n) 'cobweb, transparent objects; headgear, net, veil' (Nekes & Worms 1953:878)
- wangka (wanga, wange) 'corroboree' [See Worms 1938:169.] (Nekes & Worms 1953:879)
- wangkanard (n) (top) third waterhole on old road from Beagle Bay to Broome'
- wangkarrmaliny (wangarmalinj) (n) 'body louse' (Nekes & Worms 1953:879)
- wangkawang (adv) 'suddenly'
- wangkay (n) 'wattle tree, edible bean of wattle, yellow wattle; has long yellow flowers; branches of this tree are used for spears'
- wangkid (n) 'crow' wanged 'crow' (Nekes & Worms 1953: 879)
- wangkirr (n) 'tears'
 wanger 'weep, tears, lament' (Nekes &
 Worms 1953:879–880)
- wangkirr (n) a type of bush fruit'
- wangkirr-kaj (wanger-gadj) (pv) 'weep, be weeping' (Nekes & Worms 1953: 536–537)
- wanidi (wanidi) (n) 'rudder' (Nekes & Worms 1953:875)

- wanimingk (wanemeng) (adv) 'other direction, other way' (Nekes & Worms 1953:875)
- wankamad (wangamad) 'crystal' (Nekes & Worms 1953:663–664)
- wankay (wangai) 'a dance' (Nekes & Worms 1953:876)
- wankirr (n) 'bush mango, small mango-like fruit; seed eaten green'
- wanmalk (n) a type of lizard like the ta-ta lizard, only bit bigger; has a black stripe
- wanyburr (pv) 'bark'
- wanyburrwanyburr (pv) 'bark'
- wanber wanber 'bark' (Nekes & Worms 1953:868)
- -WANYJ (iv) 'climb'
- wanymirn (n) 'husband's father, husband's mother, parents-in-law'
 wäinman, wänjman, wäinmen
 'avoidance' [This avoidance exists between: (1) husband's maternal grandmother, her sisters and brothers with his wife; (2) wife's maternal grandmother, her brothers and sisters with her husband; (3) paternal with maternal grandmother; (4) paternal grandmother's brothers with maternal grandmother's sisters, and vice versa.]
- war (n) 'other, another, next, one' war 'another, other, different' (Nekes & Worms 1953:880–881)

(Nekes & Worms 1953:854)

- war (war) (n) 'rag, piece of cloth, texture' (Nekes & Worms 1953:881)
- warakany (n) 'eagle'
- waralal (waralal) (n) 'bluish pigeon' (Nekes & Worms 1953:882)
- warang (n) 'others'
 waran 'others, some' (Nekes & Worms
 1953:881, 883)
- warangaj (waranadj) (n) 'awl, nose-pin made out of kangaroo-bone used for the

ritual opening of the Basilica vein' (Nekes & Worms 1953:883)

wararr 'pain'

warar 'pain' (Nekes & Worms 1953: 809, 884)

warawar (n) 'one another, different'

warb (warb) 'blood of the blood-letting ceremony, eaten by the newly initiated or poured directly over his body' [See also Worms 1938:149, 162, 165, 167, 170, 173.] (Nekes & Worms 1953:885)

warbil (n) 'a type of bird like a stork or ibis'-WARD (iv) 'mock'

ward (pv) 'stick in, get stuck in'wad 'stick, adhere, stick to something'(Nekes & Worms 1953:757)wad 'sticky, adhesive, stick to' (Nekes &

-ward (in) 'chin'

Worms 1953:850)

warinyjirr (n) 'one' warindjer 'one' (Nekes & Worms 1953: 887)

warinyjirrang (adv) 'once' warindjer-aŋ 'once' (Nekes & Worms 1953:887)

warinyjirrwarinyjirr (warindjer warindjer) 'one by one' (Nekes & Worms 1953: 887)

warirr (pv) 'sting, get stung' (?)

-WARK (iv) 'take, bring'

-WARKAWARKA (iv) 'carry, bring'

-WARKWARK (iv) 'take, bring, carry'

warl (n) 'son (of man)'

warlabarrkaj (n) 'seagull'

warlawarl (pv) 'talk'

warldabakarl (n) 'things'
waldebagal 'things, belongings' (Nekes
& Worms 1953:859)

warli (n) 'everyone' wale 'all' (Nekes & Worms 1953:860) -WARLIWARL (iv) 'talk'

warlkaykarr (n) 'man bereaved of son or daughter'

warnakwarnak (pv) 'confuse'

warnd (n) 'band'

warndabiny (n) 'coconut tail stingray'

warndarl (n) 'coolamon'

warnj (waṇdj) (pv) 'gift, present, give gift, give something' (Nekes & Worms 1953: 873)

warnjirriid (wandjerēd) 'generous, liberal' (Nekes & Worms 1953:873)

warnkarr (n) a bush food, eaten when it's green; cf. wirrm'

warnki (wangi) 'initiation dance' (Nekes & Worms 1953:876)

warnkurrbin (wangorbin) (n) 'red Oxford turtle' (Nekes & Worms 1953:876)

warr (war) 'belonging to the family' (Nekes & Worms 1953:880)

warr (war) (pv) 'go, walk, pass by' (Nekes & Worms 1953:881–882)

warrabalak (n) 'star' warabalag 'star' (Nekes & Worms 1953: 882)

warrakan (waragan) (n) 'eagle hawk, Southern Cross' (Nekes & Worms 1953: 882)

warral (waral) 'peace' (Nekes & Worms 1953:882)

warramb (n) 'flood, current'
waramb 'running water, flood' (Nekes &
Worms 1953:883)

warrangaj (n) 'eagle'

warrangurr (waraŋor) (n) fruit tree' (Nekes & Worms 1953:883)

warrb (warb) 'blood (of a man)' (Nekes & Worms 1953:769)

warrbil (warbel) (n) 'diver duck' (Nekes & Worms 1953:885)

- warrij (adv) 'quickly' waredj 'quick' (Nekes & Worms 1953: 885–886)
- warrijwarrij (adv) 'quickly' waredj waredj 'quickly' (Nekes & Worms 1953:885–886)
- warringkil (n) 'baby girl, girl'
 waringel 'female' (Nekes & Worms
 1953:887)
- warringkiljin (waringeldjen) (n) 'many females' (Nekes & Worms 1953:784)
- warrk (warg) (n) 'bees' wax' (Nekes & Worms 1953:732–733)
 - warg 'wax' (Nekes & Worms 1953:887)
- warrkaj (pv) 'walk'
 - war-gadj 'travel' (Nekes & Worms 1953:485–486)
 - war-gadj 'go, walk, pass by' (Nekes & Worms 1953:881–882, 887)
- warrma (warma) (n) tribes on the eastern shore of King Sound, Kimberley [According to Berndt & Berndt 1941–1942:328, these people were known by the Oldea tribes, South Australia as Warwula "people of the pearlshell".] (Nekes & Worms 1953:888)
- warrmal (warmal) 'Walmajarri' (Nekes & Worms 1953:888)
- warrwarr, warrwal (pv) 'cramp, fit' war war 'convulsion, fit; have fit, have convulsions' (Nekes & Worms 1953: 888)
- warrwi (warwi) (n) 'native cistern, trough of bark; trough; vessel of bark' (Nekes & Worms 1953:888)
- way (adv) 'away' wai 'walk, go, away' (Nekes & Worms 1953:853–854)
- waybil (waibel, waidbel, wadbel) (n) 'white man' [from English white fellow] (Nekes & Worms 1953:854)

- wayingarr (waieŋar) 'eastern (e.g. Bunuba); south-eastern (e.g. Mangala) and desert tribes (Walmajarri)' (Nekes & Worms 1953:854)
- wayjirrb (n) 'spring'
- wibi (webe) 'any, any kind, anybody, anywhere' (Nekes & Worms 1953:889)
- wibi (part) 'nothing, no reason, for fun'
- -WID, -KID (iv) 'eat, consume, drink'
- widak (wedag) (pv) 'up, fly up, rise up, ascend' (Nekes & Worms 1953:889)
- widamangarrin (n) 'waterlilly root'
- widij (wededj) (pv) 'dig' (Nekes & Worms 1953:889, 890)
- widijirr (wededjer) (pv) 'mix, stir, stir something' (Nekes & Worms 1953:890)
- widikarr (widigar) 'deep water, open sea' (Nekes & Worms 1953:568, 890)
- widikarrjak (widigar-djag) 'deep sea fellow, open sea fish, e.g. kingfish' (Nekes & Worms 1953:568, 890)
- widimangarrin (widemaŋaren) (n)
 'waterlily (Nymphaea stelata)' (Nekes &
 Worms 1953:890)
- wiib (pv) 'watch, stare'
- wiib (adv) 'nothing, be lacking'
- wiiji (wēdje) (n) 'loin cloth, pubic covering longer than minjil' (Nekes & Worms 1953:891)
- wiijun (wīdjon) 'male' (Nekes & Worms 1953:892)
- wiilk (wēlg) (n) 'orchid, "bird flower, bird nest" (Nekes & Worms 1953:894)
- wiin (n) 'another one'
- wiin (wēn) (n) 'shy, bashful, avoidance between certain relatives (djadji, djamenjar, babeli, raŋaŋ, wainman, and yaler) (Nekes & Worms 1953:895)
- *wiin-id* (*wēn-ed*) (n) 'shy person, shy' (Nekes & Worms 1953:895, 897)

- wiirni (pv) 'respect'
- wiirnk (wīng) (n) 'head louse' (Nekes & Worms 1953:898)
- wiirri (n) 'ribs'
- wiirrm (n) 'a type of bush food, when it goes black'
- wil (n) 'meat'
 - wēl 'animal, meat, fish' (Nekes & Worms 1953:892)
 - wel 'meat' (Nekes & Worms 1953:362)
- wilamay (n) 'food'
- wil-id (wel-ēd) (n) 'meat eater' (Nekes & Worms 1953:515)
- -WILIM, -WULUM (iv) 'call, sing out, howl'
- wilingk (n) nut; yellow coloured nut, which gets sticky on outside'
- wilinyinkarr (n) 'pink-tailed catfish'
- wilinyj (n) a type of fish, yellow-spotted rock cod'
- wilinyu 'lucky'
- wilirarr (welerar) 'calcareous plate of cuttlefish, yobelinj (Sepia officinalis)' (Nekes & Worms 1953:894)
- wilirrminy (n) 'blue mountain parrot'
 wilermin 'parrot, red-collared lorikeet,
 blue mountain' (Nekes & Worms 1953:
 894)
- wiliwil, wilawil (n) 'cyclone, cockeye bob' wili wili 'cyclone' (Nekes & Worms 1953:894)
- wiliwilung (n) Monday"
- wilkarr (welgar) (n) 'blood' (Nekes & Worms 1953:894)
- wilyarr (wiljar) (pv) 'weak, be weak, slack' (Nekes & Worms 1953:895)
- wilywily (pv) 'wag'
- wilywily (wilj wilj) (pv) 'whistle' (Nekes & Worms 1953:895)

- winany (winanj) (pv) 'moving, alive' (Nekes & Worms 1953:895)
- winany-kaj (winanj gadj) (pv) 'be moving, be alive' (Nekes & Worms 1953:895)
- winarr (winar) 'grey lizard with round tail' (Nekes & Worms 1953:895)
- winawal (n) (top) Sandy Point'
- winbal (winbal) (n) 'dry' (Nekes & Worms 1953:895)
- windid (windid) (n) 'crab' (Nekes & Worms 1953:896)
- windilij (windeledj) (n) 'windlass' [from English windlass] (Nekes & Worms 1953:896)
- windir (windir) (n) 'everlasting flower, immortal'; figuratively 'small star' (Nekes & Worms 1953:896)
- winduk (windog) (n) 'curlew (Burhinus magnirostris)' (Nekes & Worms 1953: 896)
- win-id (wen-ēd) (n) 'generous, liberal, kind' (Nekes & Worms 1953:897)
- winin (n) 'emu'
 - wiṇiṇ (n) 'emu (*Dromaius novae-hollandiae*, Lath.)' (Nekes & Worms 1953:897)
- winiwalang (winewalan) (n) 'island' (Nekes & Worms 1953:989)
- winjalngin (windjalnen) (n) 'red snapper (fish)' (Nekes & Worms 1953:897)
- winjidirr (windjeder) (n) 'wife' (Nekes & Worms 1953:880)
 - windjider 'married couple, husband and wife' (Nekes & Worms 1953:897)
- winjil (windjel) (n) 'large big-headed turtle' (Nekes & Worms 1953:897)
- -wink (in) 'chest, breast'
- winki (n) 'big louse'
- winm (winm) 'wrinkled' (Nekes & Worms 1953:532, 898)

- winy (pv) 'fill up, fill something up, make full'
 - winj (pv) 'filled, full, be full' (Nekes & Worms 1953:898)
- winyjid (n) 'wife, husband's brother (of woman), spouse'
- winyk (wenjg) 'frown' (Nekes & Worms 1953:899)
- wir (wer) (pv) 'walk, walk about, wander' (Nekes & Worms 1953:899)
- wirdamangarrang (n) 'lily root'
- wirdiwird (n) 'windbreak'
- -WIRIK, -WARIK (iv) 'try, attempt, taste'
- -WIRIM (iv) 'point out, indicate'
- wir-jun (wer-djon) (n) 'stranger' (Nekes & Worms 1953:899, 901)
- wirlal (wilal) 'edge' (Nekes & Worms 1953:892)
- wirlil (welel) 'shine, glow' (Nekes & Worms 1953:893)
- wirliwirl (n) 'fishing line'welewel 'fishing line' (Nekes & Worms 1953:894)wirlwirl (pv) 'fishing'
- *wirr* (*wer*) (n) 'ribs' (Nekes & Worms 1953: 899)
- wirr (wer) (pv) 'fly up, ascend, jump up' (Nekes & Worms 1953:899)
- wirr (wër) (pv) 'scratch, scratch something, comb, plane' (Nekes & Worms 1953: 899)
- wirralb (n) 'autumn, after the rain'
 wiralb "mosquito time", season before
 the hot laja season' (Nekes & Worms
 1953:899)
- wirri (weri) 'content, happy, pleased' (Nekes & Worms 1953:901)
- wirri-id (weri-ēd) (n) 'wanderer' (Nekes & Worms 1953:515)
- wirri-id (weri-ēd) (n) 'content' (Nekes & Worms 1953:901)

- wirrikad (weri-gad) 'waist high' (Nekes & Worms 1953:901)
- wirrilimb (werelemb) 'quarrelsome, fighting' (Nekes & Worms 1953:902)
- wirrirr, wirril (n) 'red' werer 'red' (Nekes & Worms 1953:903)
- wirrjun (wer-djon) (n) 'scratch' (Nekes & Worms 1953:899)
- wirrkanj (wirgandj) 'second degree of initiation of the Yawuru' [The newly initiated leads a solitary life while under instruction about the native law, wambagudjara; Worms 1938:166–167.] (Nekes & Worms 1953:903)
- wirrkinmal (wirginmal) (n) 'rod, whip, switch' (Nekes & Worms 1953:903)
- wirrkwirrk (werg werg) (pv) 'shout, noise' (Nekes & Worms 1953:903)
- wirrkwirrk-ang (werg werg-aŋ) (pv) 'shout' (Nekes & Worms 1953:903)
- wirrkwirrk-kaj (werg werg gadj) (pv) 'shout, be shouting' (Nekes & Worms 1953:903)
- wirrm (n) a plant type'

 werm 'black spots on skin, birthmark,
 dry (black) wrinkled wanger fruit'

 (Nekes & Worms 1953:903)
- wirrmalal (wirmalal) (n) 'light skinned' (Nekes & Worms 1953:903)
- wirrmangarrin (n) a sweet juicy root
- wirrum (n) 'a small fruit like a mango, dry wankirr'
- wirrwirr (pv) 'scratch, stagger, stagger along'
- wirrwirr (wer wer) (n) 'ribs' (Nekes & Worms 1953:899, 904)
- wirwir (pv) 'gather together, gather up, muster'
- wub (n) 'pup'wōb, wob 'young' (Nekes & Worms 1953:904)

- wud (wōd) 'of one, by oneself, without' (Nekes & Worms 1953:904–905)
- wukul (inter, pv) 'pity, be sorry for someone, pity someone, pity oneself, sorrow, sorry, lonely'wogol 'pity, have pity on someone' (Nekes & Worms 1953:906)
- wukulid (n) 'generous'
- wukurr (pv) 'rub, grind' wogor 'grind' (Nekes & Worms 1953: 906)
- wukurrid (n) 'grinder'
- wukurrwukurr (pv) 'grind'
- wukwuk (wog wog) (n) 'owl, boobook (nonox ocellata)' (Nekes & Worms 1953:906)
- wukwuk (wog wog, wag wag) 'croak of frog' (Nekes & Worms 1953:906)
- -WUL (iv) 'scrape, shave, plane'
- wul (n) 'water, liquid' wol, wōl 'water, rain' (Nekes & Worms 1953:906–907)
- wulal (wolal) 'melted, watery' (Nekes & Worms 1953:907)
- -WULAWUL (iv) 'comfort, console'
- -WULB (iv) 'chase, drive away'
- wulb (wolb) (n, pv) 'fear, fearful, timid, be timid' (Nekes & Worms 1953:907)
- wulbur (wolbor) 'fear, fearful' (Nekes & Worms 1953:907)
- wulkudud (wolgodod) 'rise of smoke' (Nekes & Worms 1953:908)
- wulul (wolol) (n) 'woolly, long hair, mane' (Nekes & Worms 1953:908)
- wulungkun (wolongon) 'sorry, pity, mourn, grieve, be grieving' (Nekes & Worms 1953:908)
- -WULUWUL (iv) 'shave repeatedly'
- -WULWUL (iv) 'soothe, calm, encourage'

- wumban (womban, womban-djen) (n) 'elder brother' (Nekes & Worms 1953:909)
- wumbarn (n) 'waterhole'
- wombon 'submarine spring on beach' (Nekes & Worms 1953:909)
- wumuni (n) 'wife's sister, father's sister'
- -WUNDAR(R) (iv) 'cross a river' (Nekes & Worms 1953)
- -WUNDUM, -WUNDIM (iv) 'stop, prevent, restrain, detain'
- wundung (n) 'fishing by night'
 wundung (wondon) 'fire brand, burning
 bark of golonorb or londjemad tree for
 night fishing' (Nekes & Worms 1953:
 910)
- wungkalk (wongalg) (n) 'fire drill' (Nekes & Worms 1953:910)
- wungkurdany (n) 'one-eyed snake'
- wungkurrbin (n) 'a small turtle'
- wungul (woŋol) 'joke, play, fun' (Nekes & Worms 1953:910)
- wungul-id (woŋol-ēd) (n) 'joker' (Nekes & Worms 1953:910)
- wungur (n) 'rain water'
 woŋor 'water, rain' (Nekes & Worms
 1953:911)
- wunkul (wongol) 'rain in mangala-season, rainy weather' (Nekes & Worms 1953: 910)
- wunkunurr (n) 'sky, heaven, Milky Way' wongonor 'Milky Way' (Nekes & Worms 1953:910)
- wunyjub (n) 'mother' wondjob 'mother' (Nekes & Worms 1953:910)
- wunyjurr (n) a type of crab that lives in a hole in the mangroves'wondjor an edible crab' (Nekes & Worms 1953:910)
- wur (woṛ) 'howl (of dog)' (Nekes & Worms 1953:911)

-WURDUM (iv) 'mistreat'

- wurlkudany (n) 'one-eyed snake, deadly'
 wolgodanj 'black-headed rock snake
 (aspidites melanocephalus)' [For safety
 the one-eyed snake should be passed on
 the side of the 'dull' eye only. Its other
 name is ibal djuru 'father of snakes'. It is
 the totem of banaga marriage-class; the
 totem of the garimba-class is
 mawalangar.] (Nekes & Worms 1953:
 908)
- wurr (wor) (pv) 'buzz (of bees)' (Nekes & Worms 1953:732–733)
 wor 'buzz, hum, make buzzing noise' (Nekes & Worms 1953:911)
- wurrb (worb) (adv) 'inside, into, within' (Nekes & Worms 1953:911)
- wurrbwurrb (wurb wurb) (n) 'prickly creeper' (Nekes & Worms 1953:911)
- wurrumbang (n) 'many, several' woromban 'plenty, much, many' (Nekes & Worms 1953:912)
- wurrumbangang 'many times'
- wurrumbardangk (n) 'big'
 worombadang 'big' (Nekes & Worms
 1953:912)
- wurrumbardangk kunyul (worombadang gunjul) 'full moon' (Nekes & Worms 1953:912)
- wurrurr (woror) (pv) 'together, put together, assemble, be together' (Nekes & Worms 1953:912–913)
- wurrurral (wororal) (n) 'grass, spinifex type' (Nekes & Worms 1953:913)
- wurrurralng (wororaly) 'new moon' (Nekes & Worms 1953:913)
- wurul (n) 'fingernail, toenail'worol 'nail of finger or toe, claw' (Nekes & Worms 1953:912)
- -WURRIWURRKIM (iv) 'grumble'
- -WURRKIWURRKIMINYJ (iv) 'grumble' (Nekes & Worms 1953:912)

- *wuu* (*wō*) (pv) 'fly down' (Nekes & Worms 1953:904)
- wuuj (wōdj) 'fear, fright, respect, awe' (Nekes & Worms 1953:905–906)
- *wuul* (*wōl*) (n) 'juice' (Nekes & Worms 1953:829)
- wuulk (wōlg) (n) 'belly, womb' (Nekes & Worms 1953:908)
- wuurr (wōr) (n) 'horn of the box fish and reef fish'; by adaptation 'horn of cows and goats' (Nekes & Worms 1953:911)
- wuwakwuwak (wuag wuag) (pv) 'croak' (Nekes & Worms 1953:492)
- -WUWU (iv) 'tempt'

Y

- *yaa* (*yā*) 'ticklish' (Nekes & Worms 1953: 914)
- yaa, yay (yā, yai) 'roaring of the sea, be roaring' (Nekes & Worms 1953:914)
- yaab (n) (top) a big lake'
- yāb 'a pool with rain water' (Nekes & Worms 1953:914)
- yaabin (yāben) 'skin, green hide, shell of turtle eggs' (Nekes & Worms 1953:915)
- yaad (yād) (n) 'light dancing shield' (Nekes & Worms 1953:915)
- yaakan (yāgan) 'roaring water' (Nekes & Worms 1953:914)
- yaalid (n) (top) an unidentified place'
- yabiyab (n) 'piss, urine'
- yadid (yaded) (n) 'crooked, deformed, out of shape' (Nekes & Worms 1953:916)
- yadiny (adv) 'for a short while' yadinj 'a while, short time' (Nekes & Worms 1953:916)
- yadirr (pro) 'we, 1&2AUG.CRD' yader 'first person plural inclusive; we' (Nekes & Worms 1953:916)

- yakan (yagan) 'roar of incoming tide' (Nekes & Worms 1953:917)
- yakarr (yagar) (pv) 'touching lightly; touch lightly; things lying on top of a heap touching lightly the material below, with the result that they can be taken off easily' (Nekes & Worms 1953:917)
- yakarr-ad (yagar-ad) (pv) 'touching lightly; things lying on top of a heap touching lightly the material below, with the result that they can be taken off easily; be lying on top' (Nekes & Worms 1953:917)
- yakarralangurr (yagaralanor) (n) 'longlegged spring frog' (Nekes & Worms 1953:917)
- yaku (n) 'wife's brother'
 yag, yak 'husband, husband's brother,
 husband's brother's son (when addressed
 by the wife)' (Nekes & Worms 1953:
 918)
- yal (yal) 'spread' (Nekes & Worms 1953: 918)
- -yalangkun (in) 'elbow'
- yalbur (yalbor) 'equal in age, contemporary' (Nekes & Worms 1953: 918–919)
- yalid (n) (top) unidentified place'
- yalirr (n) 'wife's mother, daughter's husband (of woman), son-in-law (of woman), mother-in-law (of man)' yaler 'mother-in-law, son-in-law' (Nekes & Worms 1953:918)
 - yāler 'avoidance' [This word also refers to the persons between whom the state of avoidance exists, for instance, between a mother-in law and her son-in-law and his brothers; between the sisters of the mother-in-law at one side and the son-in-law and his brothers at the other side; between the wife and her husband's mother's brother; between wife's brother and husband's mother and her sisters; etc.] (Nekes & Worms 1953:920)

- yalirrabaybirr (yalera baiber) 'in frontbehind, one behind another' (Nekes & Worms 1953:920)
- yalirrbur (adv) 'first, in the first place' yaler-bor 'first, elder' (Nekes & Worms 1953:920)
- yalirrburinyjun (yalerborendjon, yalerborondjen) 'first, first born, elder' (Nekes & Worms 1953:920)
- yalj (pv) 'coax'
 yalj (yaldj) 'constant, persevere, keep on,
 persist, keep asking, long for' (Nekes &
 Worms 1953:919)
 yalji (adv) 'try'
- yaljiyalj (pv) 'coax'
- yalk (pv) 'get up, arise, stand, be standing' yalg (pv) 'erect, upright, standing, stand erect' (Nekes & Worms 1953:920)
- yaluk (yalog) hardwood tree (Nekes & Worms 1953:921)
- yaly (pv) 'lick'
- yamam (yamam) 'silly, mad' (Nekes & Worms 1953:921)
- yamarrangk (n) (top) a place near Beagle Bay, where the Trappist monks first went; in Mary Carmel Charles' country'
- yamarrangkird (n) the inland people from Beagle Bay area, Mary Carmel Charles' group'
- yambalkin (n) (top) Pender Bay'
- yamban (yamban) (n) 'stingray' (Nekes & Worms 1953:922)
- yambul (yambol) (n) 'sandfly (ceratopogon)' (Nekes & Worms 1953: 922)
- yambul (yambul) (n) 'shell' (Nekes & Worms 1953:922)
- yambun (adv) 'together' yambon 'together' (Nekes & Worms 1953:922–923)

- yambunyambun (adv) 'together, copulate' yambon yambon 'union' (Nekes & Worms 1953:922–923)
- yamdalngur (n) tree type; a fruit tree with purple nuts about 1.5" diameter, bit like a peanut
 - yamdalnor nut tree with purple fruit' (Nekes & Worms 1953:923)
 - yamdarnngkurr (n) a type of tree with nuts like almonds'
- yandal (yandal) 'ordeal'; literally, 'sticks' [Five small sticks are stuck on the ground in the form of a cross. The stick in the centre represents the relatives of the deceased, the other sticks, people living in the four directions of the compass. The sticks are inspected on the next morning. The one found to have become wet indicates the direction of the murderer's camp.] (Nekes & Worms 1953:923–924)
- yandilybar (n) 'boat' yendelbar 'boat' (Nekes & Worms 1953: 932)
- -yangal (in) 'tongue'
- yangirn (adv) 'near, close by' yaŋan 'near, close' (Nekes & Worms 1953:924)
- yangkurr (yangor) (n) 'sand fly (Phlebotomus)' (Nekes & Worms 1953: 925)
- yankal (yangal) (n) 'spear thrower' (Nekes & Worms 1953:924)
- yanyjur (n) 'cockle shell'
- yardab (pv) 'crawl' yadab 'crawl' (Nekes & Worms 1953: 915)
- yarlabiny (n) 'a little fish'
- yarr (pv) 'pull, drag, pull out' yar 'pull, push' (Nekes & Worms 1953: 926)

- yarrad (pro) 'we, 1AUG.CRD' yärad 'first person plural; we' (Nekes & Worms 1953:926–927)
- yarrajin (pro) 'all of us together'
- yarrakad (yäragad) (part) 'irrealis, perhaps' (Nekes & Worms 1953:927)
- yarral (yaral) (n) 'sail, sail cloth' (Nekes & Worms 1953:927)
- yarralal (yaralal) 'straight' (Nekes & Worms 1953:927)
- yarrawul (yarawol) 'slim, slender' (Nekes & Worms 1953:927)
- yarrkaly (pv) 'slide, slip'
- yarjalj, yargalj, yarjalg (pv) 'slippery, slip' (Nekes & Worms 1953:928–929)
- yarrkalyid (pv) 'slippery'
- yarryarr (pv) 'tickle, drag; tickle someone; drag something'
- yarwiny (n) a legless lizard
- yaw (inter) 'hey!, youtch!' yau, yoo an exclamation (Nekes & Worms 1953:926)
- yaward (n) 'horse, donkey, mule' yawad 'horse' (Nekes & Worms 1953: 929)
- yawardangid, yawardid (n) 'stockman'
- yawarr (yawar) 'outside, at the end' (Nekes & Worms 1953:929–930)
- yawurlirl (n) 'a small salmon, skipjack, small skippy'
- yay (pro) 'we, 1&2MIN.CRD'
- yayjay (yaidjai) 'cockle-shell mound, midden, kjökenmöddinger of prehistorical people; ancestors' (Nekes & Worms 1953:916–917)
- yidarr (yedar, yeder) (n) 'creek, deep lagoon' (Nekes & Worms 1953:930)
- yii (inter) 'yes, OK'
- yiii (yiii, iii) (pv) 'roaring of the sea, be roaring' (Nekes & Worms 1953:930)

- yiik (n) 'sore' yēg 'sick, ill, sickness, sore' (Nekes & Worms 1953:930)
- yiil (n) 'dog' yēl 'dog' (Nekes & Worms 1953:931)
- yikany (pv) 'pregnant, be pregnant (of dog)' (Nekes & Worms 1953)
- yilbiny (yilbinj) 'love song' (Nekes & Worms 1953:931)
- yilm (yelm) "against the wind", camping place of boys and unmarried men; sleeping house (dormitory)' (Nekes & Worms 1953:931)
- yilmyilm (yelm yelm) (adv) 'windwards' (Nekes & Worms 1953:931)
- yilngam (yelŋam) (n) "fish poison of narcotizing tubers" (Nekes & Worms 1953:931) = iilngam (?)
- yimban (yemban) (n) 'elder brother' (Nekes & Worms 1953:931)
- yinbukun (yinbogon) (n) 'wooden coolamon' (Nekes & Worms 1953:932)
- yinyin (yin yin) (n) 'dragon fly (*Libella* concellata)' (Nekes & Worms 1953:932)
- yirl (pv) 'lie on side'
 yel 'slanting, lying on one side' (Nekes
 & Worms 1953:931)
- yirlyirl (pv) 'sideways'
- yirral (yeral) (n) 'sail, sail cloth' (Nekes & Worms 1953:933)
- yirrib (pv) 'cave in'
- yirril (n) 'oxbill turtle'
- yirrmur, yurrmuru (n) 'father's sister, mother's sister, aunt'
- yiryir (pv) 'limp along'
- yiwan (yiwan) (n) 'stone axe' (Nekes & Worms 1953:407)

- yiwan, iwan 'stone axe'; by similarity, 'crab' (Nekes & Worms 1953:933)
- yuburl (n) 'sick, get sick' yobol 'sick, be sick, ill, sore' (Nekes & Worms 1953:934)
- yubul-jun (yobol-djon) (n) 'sick person' (Nekes & Worms 1953:934)
- yuburryuburr (yubur yubur) (n) 'mouse (Leggadina delicatus, Gould)' (Nekes & Worms 1953:934)
- yumbun (yumbun) (n) 'dust' (Nekes & Worms 1953:936)
- yungurruk (yunurug) (n) 'mythological Rainbow Serpent' (Nekes & Worms 1953:937)
- yunkarr (yongar) (n) 'spear thrower' (Nekes & Worms 1953:937)
- yur (pv) 'slide'
- yurridurl (n) 'a type of reptile that lives in the mud, sea snake'
- yurryurr (yor yor) 'come down (of many individuals)' (Nekes & Worms 1953: 937–938)
- yuu (yoo, you) (inter) an exclamation (Nekes & Worms 1953:937)
- yuud (yōd) (n) 'big sea shell used as a trumpet, Bugle shell' (Nekes & Worms 1953:935)
- yuud (yōd, yōde) (pv) 'tired, be tired, lazy' (Nekes & Worms 1953:935)
 yōde 'be tired' (Nekes & Worms 1953: 699)
- yuurr (pv) 'go down (e.g. a bank), descend' yor 'down, climb down, alight' (Nekes & Worms 1953:937–938) yuwurr (pv) 'descend'

English-Nyulnyul finderlist

This section presents a combination of finderlist for the preceding Nyulnyul wordlist and thematically organised wordlist; it is not intended to be an English to Nyulnyul dictionary. The headwords represent approximate glosses for the lexemes in the previous list, and/or generic terms, which are expanded in the following subentries. Where necessary to distinguish among senses of the glosses, the part-of-speech classification of the gloss is indicated: (adj) adjective; (adv) adverb; (inter) interjection; (n) noun; (v) verb. Excluded from this listing are items the meaning of which are unknown.

In many instances more than one Nyulnyul form is given for an English gloss. Where these are alternative phonemic representations of the same lexeme, or represent variants of the same lexeme with morphological modification, they are separated by commas; where they represent distinct lexemes, they are separated by colons.

Conversely, many Nyulnyul lexemes appear under more than one English headword. This may be because the Nyulnyul item has more than one English gloss. In some cases, however, English terms are listed under superordinate terms, to facilitate finding.

A

abandon burr
abandoned bira-karr
abduct irral
above kalb, kalbikalb
accompany mirrarrinyjin
accusation barrayi
ache nyunnyun
aeroplane kurrwaljak
afternoon jumbarl
again bilay
agemate jimarral
aggressive biilid
alive niinyj, nunyj
all bunyj
all kinds jaamin

almighty, god *mamakuranid* alone ngidirrngin; wud already kala; muj alternate generation inar always lawulay; lambuburr; mangir, mangirkarr, mangirr-karrin, mangkaj and aa anger, angry badak; biil; biilij; larrlarr ankle milk annoyed *mulaj* another war; wiin ant buy black ant marrimirr bulldog ant marrimirr sugar ant *mibalad* white ant jambiny; jilkirr antbed jidijun

-mikil: -uur bad alik; biib; riib anus of an animal nimidijin bad luck bindikal any walman bag, bag clothes karrung; madangarnarr apostle bird kulngannganangana a whole bag, not yet opened mudang appearance jul bailer shell kujil bait langirr approach -KALAK argue -BUDUBUDUWANYJ bake -NGANYB arise -JARRAJARR, -JARRJARR baked manganybanid bald badabad; balbirr; blurru; nuwany arm -marl armpit -mbarrm ball *maawirn* around banbirr; banbirrinbirr bamboo kabul bamboo spear shaft kilawil ascend -JARRAJARR. -JARRJARR: widak band warnd ashes rirrk bandicoot mangkaban, mingkaban ashes of white gum tree kajurd bark (n) bardin cold ashes kajurd bark (v) ngarl, ngarlngarl; rangrang; ask -JABAJAB; -JABAL, -JIBAL; -JIB; wanyburr, wanyburrwanyburr -JULNGJULNG: -NGANAM barramundi karajarr ask in vain for -MANGKAR(R) barren mukal asleep kunyurrk bat, little bat *minyiminy* assemble kirr bathe -BULABUL, -BULIBUL attacker damanjun beach jaal attempt -WIRIK, -WARIK bean type numurrukurrukurd aunt irrmurr; yirrmur beard jiid autumn wirralb beat rurrb avoid kalinykaliny bee juurr avoidance relation rambarr beer kaari away way bees' wax warrk awl warangaj beetle types birrabul; liirr; mirrbul axe jamiyun before milirrkarr beggar majibalinid B beginning of story majulngin baby kabul behind baybirr tiny baby *mulyikar* believe ningarr back (of the body) -kbell *lilurr* on the back walirr

belly -ng; wuulk

backbone murdumurd

hawk jungkubirlbirl

honey eater jibalkur; jinji belonging to the family warr honey sucker jibalburu below jimbin ibis marnungkubil belt of human hair baal; ngarirr jabiru *lililil* bend knee jul kookaburra jarrjurr bend over kurd large dove jukuk bent jad; jalk osprey bangkibiny; jinan; lunkulibil owl burulburul; jirrngkin; bereaved of child *julumad*; *mulyikar*; kulyurdkulyurd; kurrawurl; wadawi; warlkaykarr wukwuk berry types kuulm; kungkar; marurl; peewee dindi mirdangurrin; ngaminyngaminy pelican jalinymarr biceps kundaly pigeon kurrudurd big birndany; wurrumbardangk plover juu big red kangaroo mirdamal rain bird kurraykurray big sea shell ngulng; yuud seabird type kanbaliny seagull walabarrkaj, warlabarrkaj bindi-eye karridad sea hawk bangkabij bird (generic) karrambal small dove kurrudurd apostle bird kulngannganangana small duck ngakalangan bird like a blue jay *uralal* small runner bird birrbinybirrbiny bird like a stork or ibis warbil small seabird karril black cockatoo darrabar; darriyarl; snipe juwajuwa lirrmarr sooty oyster catcher kidaw blue jay kamardkamard sparrow hawk dinjal blue mountain parrot *jililiny*; *wilirrminy* swallow nyimbalnyimbal bluish pigeon waralal type of big bird jurdjurd boobook owl wukwuk whistling duck jibilyuru bower bird kiily whistling hawk kirrkij brolga kudirrwany white cockatoo *ngaaluk* butcher bird kurral wild goose kurruly crow wangkid willie wagtail jindibirribirr, curlew malawir, marliwirr; winduk jinyjibirrbirr diver bird *nalamb* woodpecker kakajikakaji diver duck warrbil young bird bandilmad dove kurlukuk bite -BUNDAR(R); kad; murr-kaj duck binyiny bitter kaari; liinyj; limb eagle warakany; warrakan; warrangaj emu kananganj; winin black maank: maankmaank frigate bird *lurrilurr* black ant marrimirr frogmouth burulburul black cockatoo darrabar; darriyarl; galah bilijbilij lirrmarr

black ochre kumaarang boomerang jiib big boomerang kulm black snake kungurn boot -jimbarlingid; jinaburd black stones ngunjun born, be -KALAB blackened soil bilarr borrow -MALB; -MINYJ blackhead mul boss maj; nalin blame -BAND(I) bottle barril blind bambur bounce dukuduk blink nyim, nyimnyim bowels bulk; mayjin blister burlburl bower bird *kiily* blocked bund; kiinyj bow (v), bend down nyuk blood kunburl; kururr; wilkarr of a kangaroo nguruk boxing-regarding dud-kujarr of a person warrb boy miid baab of twelve to fourteen years of age blood-letting ceremony warb kurrbid bloodwood tree kaaj; kardk under twelve years of age bungkan blow, strike buu; dub; nyak young boy *janib* blow (of wind) -BILK brackish murrk blow (nose) nyuny brain kunykuny blowfly mumurr branch karrmin blue bone fish malngun bread ngaak blue-boned parrot fish barrambarr break dadal; jukurrjukurr; -KAKUL; blue hand crab jarrwanngurr -KARRMAR; -KAR(R)M; lalul blue jay kamardkamard breast ngaman blue mountain parrot *jililiny*; *wilirrminy* breathe ngiir blue tongue lizard blirrmad, bilirrmad; bright ngaliyirr lungkurd bright light wanamb bluish pigeon waralal bring -WARK; -WARKWARK blunt burn broken off nuund boab larrkird broken piece karrb; makarrmanjun boat yandilybar brolga kudirrwany body -kard brother babarl; babarli; walkurr body hair labin elder brother wumban, yimban bohemia tree jikily brother-in-law malb; umal; walibil; yaku boil barndid brown biral, birrarl

brown bullfrog walak

bubble burrurlburrurl

bone kiinyi

boobook owl wukwuk

bubble up -BUNGKABUNGKUM, -BUNGKUBUNGKUM; -BUNGKUM	canoe barrawarr care walung
bucket walard	carpet snake baninybur
bugle shell yuud	carry -K; -WARK; -WARKAWARK
build -MAD	on belt jingkar
bulldog ant marrimirr	on head mungkan
bullet jilaman	on hip <i>murrmurr</i>
bullock buluman	on shoulders jidin, jidinjidin; kundi
bullroarer buliwan; jaban; karlikurru; minburr	carving raam cast off skin -BUNUNG
bum -murr	catfish barul
bump duurr; duurrduurr	caterpillar jukurd
bung eye kujib	cat mijaw; minyaw
burial platform marndaliny; nganyjin	cave in irrib, yirrib
burn -LURR; -MARR; -MARRAMARR	caw (of crow) kawkaw
burnt malurunjun	centipede rabirrbal
burp -BARRAL, -BARRALK; daarra	ceremonial meal biliyang
burst duly	ceremonial place jawul
bury birl; -BURR	chafe birrabirr; rarrb
bush fire kumar; marrj	chain jangajang
bush, scrub bindan	channel balal
butcher bird kurral	charcoal rirrk
butterfly bindibind	charcoal-covered kumarkud
buttocks -murr	charcoal lumps in hair of mourning woman
buzz muumuu; wurr	miyaw
	chase -NGIRIMB; -WULB
C	chase away -JULB
call out kaw; -WALM, -WILIM,	cheek lamad, lamard
-WULUM call of black cockatoo lirrlirr	cheerful maad-id
callous rarrkararrk	chest -wink
	chew jang
calm jimal; kijil	chickenpox jibilybily
calm (v), pacify -WULWUL	child baab
camp bur	children baabinil; baabining
camping place for boys and unmarried men <i>yilm</i>	chin -ward
,	chisel jindibal

choke kirdkird; -MINGK complete -BADIK choose jurrung concealer malkinid; mamalkinid confession barrayi; kumbijun chop jadjad, jardjard; jadkaj; jub; jubjub cicatrice mukurdarl confuse warnakwarnak cincture mungk console kurkur circle malibarr constipated divu circumcision marlurl; walungarriny constipation kiinyj cistern warrwi consume -WID, -KID clap baard; dumburl, dumburldumburl content wirri cook (n) mamarrinid clapsticks kanbak cook (v) -LURR; -MARR, clatter ngidngid -MARRAMARR clattering noise mirrmirr cooked muurl, muurlijun, muurljun clearing kalanganj cooking hole *lalb* clench bardabard coolamon bakarl; binyjin; wandarl, clenched darrnban warndarl; yinbukun clever nyiinyii coolibah ngarrabarn cliff nankarr coral marniny; marrk climb lakal; lakalkaj; -WANYJ cork tree binjiman; birramingkarl climber lakalid corner luunk; nulurrud close yangirn corpse, cadaver karrikan closed bund; kiinyj correct -KUDUM clothe -KUL corroboree wangka cloud wadan circumcision corroboree arnkuwi cloudy ring ground kururr club bundal; maniyarr; nawul cosy duurr big-headed club kudur cough karrngar, karrngarkarrngar coax yalj, yaljiyalj country bur cobweb wangarr countryman kamalabul cockle barnmangk; kubukub cousin jaji; jalirl, jalwal cockle shell birrirl; jirrngiliny; yanyjur cover -BARND coconut tail stingray warndabiny cover over -BURR; kird coil dirdird crab kurrurr; windid cold jawa; jil; biinyj beach crab manbur cold ashes kajurd bait crab wamarriny come in (of tide) -KUDIJ blue hand crab jarrwanngurr

comfort -WULAWUL

hermit crab jalkamangarr; jilb mangrove crab wunyjurr small crab manburbur crack (n) bad; dinydiny crack (v) jaljal; jarijar cramp -JUNG crawl jardab, yardab crazy maad creator, god mamakuranid creek yidarr; niwirr creeper lambin crier mangalkin-id cripple muukumuuk croak wukwuk; wuwakwuwak crocodile linykurr small crocodile (freshwater) kuwani crooked badar; jalk; kudilkudil; yadid cross (n) karnbalm cross (v) jarrban; -WUNDAR(R) crow wangkid crush diny cry -NGALK cry of gambalinj bird kubin crystal wankamad, wangamad cunt jaaway curled up jakuljakul curly nyilinyil curlew malawir, marliwirr; winduk current warramb cut jad; kad; nundin cut notch kil cut up kadikad cuttlefish *ngubiliny* plate of wilirarr

cyclone wilawil, wiliwili

D

dance burrb, burrbburrb, burrbkaj dance for the dead *jiwarrij* dance-ornament ily dance-step larlarl; ngudangud dance type wankay dandruff bulkaar dark night, dark place maankngunjun (bur) darkness mankingunjun daughter bidi; waarl daughter-in-law (of woman) yalirr dawn jalar; rangkarangkarrk daybreak jalar; rangkarangkarrk daytime jumbirl dead, to death karrkuj dead body, dead person jiwarr deadly ray ingarduk deaf bab; dak; dakardak; madangk deaf sleep madikilin deceive -NGULM deep kul deep voice nangurr deep sea widikarr deep sea dweller widikarrjak defend *maniny* deformed yadid denizen of Waliman walimanid of Bereng birringkid deny -KARRM, -KARRMAKARRM descend yuurr; yuwurr; yurryurr detain -WANDIM devil *ngiirr*

dew lanin; lamaman

diarrhoea kalakala

dress -KUL didgeridoo bambu die -JIMB dribble jibiljibil; -MAJARRAD dig -KIRR; -LUNGK; widij drink -BA(NI)NY digging stick milkin drinker kaariid dingo kurrid drive along -NGAR(R)K dirty mii; miijun; ngunyb; ngurlangurl drive away -WULB dirty water karralan drop -KALBARR disappear rirrb, rirrbrirrb; -KUDAL drown ngurrngurr disobedient badak; madangk dry (adj) birridir; lalk dive dirrb dry (v) darrkal; -RALK; -RALKAM; winbal diver dirrhid duck (n) binyiny diver bird *nalamb* duck in water (v) jubul diver duck warrbil dugong kudurrngun; wadabarr divide nulunnulun dumb kuuk do -J, -DI dust bundurr, yumbun doctor jalngkangurr dodge kaliny \mathbf{E} dog yiil eagle warakany, warrakan; warrangaj dolphin bajalbarr ear -labab don't arriban early duli; rangkarr; rangkarr-rangkarr door nimam earth barnd dorsal fin malkarrarr east banawarr double gee karridad to the east banarrjang doubtful wabarr easterly banawarrjang dove kurlukuk eastern people baniyabul; wayingarr down (adv) jimbin eat -WID, -KID down (n) lurrumb; madukurr ebony tree birimbirr downwards jidilarr; jilalarr; jimbilad echidna kamarrangany drag -KUNDUKUND edge wirlal dragon fly yinyin edible mawidinid draw water bul eel nikilbardin dream (n) bukarr egg lakurr dream (v) -BUKARR elbow (n) -yalangkun dreaming nganan elbow (v) jurr Dreamtime bukarrikarr elder brother wumban, yimban

fart dur; -JURUB

fat, corpulent bing

fathers ibinbal

father iibal; kaal; kuburl; kuul

fat, grease liid

elope jurrayinjun father-in-law (of woman) rangin embrace kur; ngujurr fear -JIRIK, -JARIK; rarrambal; wuuj; wulb; wulbur emerge kud; maarl fearless binmal emu kananganj; winin feather barndal feathers of emu *mirrilymirrily* feather ornament bukuly enter -KAD feelers of catfish ngulk evening majil, majilkarr feel lonely -KALB; -KALBIKALB everlasting flower windir feint *jabij* everyone irrkud, warli female karralkun; wakal exchange -BARNJ; -BARNJIBARNJ; female of animal balingk kaarramarn; waanyj many females warringkiljin exclamations yaw; yuu few jalbur; jalburkur exit marl, marlmarl fight -BALAKANYJ expect milngmilng; mirrirrirr; nirram in retribution dujub experience -BANYJ over women jalikiny expose kalwar over a death mukurlmukurl extend -JARRAD fill up winv extinguish -JUMB finger -marrangk eye -m fingernail wurul eye matter malimal finish -BANY eyeball lakurr niim finished -BADIK; kadakur eyebrow miind fire *jungk* fire drill bididikurr; wungkalk F fire saw jabarr; karlib face jul; marrimarr fire stick naali jungk fair haired lamarr fireless muwad fall -JALK firewood jungk far *maar* firm darrnban; mingkid farewell jurrk, jurrku, jurrkjurrk first yalirrbur

first born yalirrburinyjun

fish (generic) kuumb, kuumbu

big white fish jirraawal

blue bone fish malngun

barramundi karajarr

blue-boned parrot fish barrambarr

bone fish *karlil*; *jinalarl* catfish *barul*; *munbunarr*

flathead kunab

freshwater fish, unidentified *marrajalk* freshwater herring *marrjal*; *jalabanan*

garfish bundul; jinbur
grey nurse shark lulul
hammer-head shark bilkirr
kingfish kumbulngurr
a little fish yarlabiny

man-eating rock cod wambiirrdijun

mud skippy nankarrjun

mullet jilbidingurru; karlurr; lungkurr

parrot fish barambar

pike linymal

pink-tailed catfish wilinyinkarr

red snapper winjalngin

reef fish kirrid

rock cod waambiirrdkjun

salmon walkiwalk sawfish jabiyangk

shovel nosed shark *jikad*; *nanbil* skipjack, small salmon *yawurlirl*

small rock cod jumburr

small shark budukurr; bulmbujun

small blue bone fish karrij

swell fish *jidin*

toadfish *kurnkurnung* unidentified type *wajilbarr*

whiskered salmon kajarr; kaajirr;

kurrajirr

whiskerless salmon waalkwaalk

whiting wanb

yellow-spotted rock cod wilinyj

fish hook *nilirr*fish poison *yilngam*fish trap, net *mayurr*

fishing wirlwirl

by moonlight *milkarr* by night *wundung*

fishing line wirliwirl

fishing spear wajarr

fit warrwarr flabby balybaly

flame (n) nalinal; ngalangal

flame up (v) dumal flaming ngalyub flap balbal

flash bilbil; bilbilkaj

flash (sheet lightning) binmakbinmak

flat balybaly; lanybal flat shield buljad flathead fish kunab flatten banybal flesh mabaar

flipper *nimbirr*; *manbin* hind flipper *jambil*

float biyalbiyal flood warramb

flow jurrurr; nyirrnyirr

flower buub fly (n) mukuny

red fly budijirrkarr

fly (v) -BIRRIL; dumbar; dumbardumbar fly down -BARRIL; wuu

fly up wirr

flying fox durlburr; nimanburr; wajun

flying possum balngib

foam *kalirr* fog *lamaman*

folded (of arms) jimbijimbang follow -JIWAR; -KALAKALAK fond of women or wife malirrid

fontanelle *jimindi* food *wilamay*

food pipe, oesophagus kurrburl

foot -jimbarl	gather together wirwir
footprint -jimbarl; jurrar	gay coloured wandawandabil
fond of kaad nung	gecko jabaarr; bandily
for a while yadiny	generation terms
foreboding kudurr	alternate generation inar
forehead -rnkarr	harmonic, same generation jaarnd
forever judiny; mangakarr	generous wukulid; warnjirriid; winid
forget -KANYJ	get -NY, -NYU
forked branch janbanil	get fat -KANB
forwards jidinarr; rumbu	get lost -KUNDAR(R)
fresh leaves ngalyaw	get sick -KAJARR
freshwater herring marrjal; jalabanan	get up -JARRNGAJARR; -MINDIJAL yalk
Friday nakarnak	ghost bukinyan
frigate bird lurrilurr	tree ghost banbalk
fright lurrun	white-skinned ghost kumbun
frighten marmad	gift warnj
frightened rawurlirl	gill manykarr
frog jirrkabiny; kabul; kaykay	girl warringkil
brown bullfrog walak	give! (inter) ka
burying frog kandabid	give (v) -W
green frog karrjil long-legged spring frog yakarralangurr	glass tipped spear jinarl
tree frog waljabirrany	glow ngalarngalar
frogmouth burulburul	glow worm jungkumarr
front of neck -many	go -JID
frontlet bararrb	go down <i>jurr</i> ; yuurr
frown biilij; winyk	go in -KAD
fruit, see under plants	go in and out -KADIKAD
full dudub; murrkard	go out (of tide) -JUDIJUD; -JURND
full of flies mukunykud	goanna <i>baani</i> ; <i>bani</i>
fun wungul	climbing goanna barndab
funeral maburrinuk	small goanna jalangird; mangkirr
	god see almighty, god
G	golden wattle ngurrumundurl
galah <i>bilijbilij</i>	good <i>layib</i> ; <i>layiblayib</i>
garfish bundul; jinbur	good shot bakarr

goodbye jurrk; jurrkjurrk grow -BUL(AM); -KADIW; kunkun grow old jalbird grandfather, father's father kalud grow well mabulinid grandfather, mother's father jaam; nyami growl ngaarr; ngungu; ngungukaj grandmother, father's mother jibi grumble -WUR(R)IWUR(R)KIM; grandmother, mother's mother kamani; -WUR(R)KIWUR(R)KIMIN(Y)J kamard gum (of a tree) kiim grandson kabirl gum of white tree kiinyb grasp bad gum tree types barrakul; dadakurr; grass kulj; maarr kaabiny; nalin; ngarruban grass seed ulmb guts kaburr; mayjin grass-covered, grassy maarrikud, maarrimaarrikud H grasshopper dinydiny; lalaj habitual ngalil ngarriny gravel mulkurr hail *lajad* gravelly mulkurrmulkurr hair *mukurn* grease liid; lakayb of body laaban; labin greasy lakaybkud hair belt baarl greasy hair binbin half barnabarn greedy bily, bilykud, bilykurri; kurrii; hammer (v) duldul; dujul, dujuldujul nikar hammer-head shark bilkirr greedy person kurriid hand -marl green fly, greenbottle jibinjibin handle of axe kangk green frog karrjil handleless nungurr green grass bidily hang -JINDIWAR; green hide yaabin -JINDIWARJINDIWAR; -JIWAND green leaf eater kulungarrkin hang down jilalarr; jimbilad green paint murrumundil happy nungajil green tree python karndirrkarndirr hard *narnm*; *ngarrij*; *ngarrijang*; grey hair *jabuly* diwirlwirl grey lizard winarr hardwood tree manuwan; yaluk grind wukurr, wukurrwukurr harmonic generation *jaarnd* grinder wukurrid harsh larrlarr grin ngir; ngirrjun hat jangkurr groin bandukurr have -BAKAND ground (n) barnd hawk, fire bird jungkubirlbirl ground kaabiny seed jiirlk sparrow hawk dinjal

hold out ngindingind

he kinyingk hole dakul; jarjar head -alm hollow lurr hollow, hollow log kurrburl headband wandang heap up kurrk homesick, be -KAL heaped kurrkurr honey mung lover of honey mungid heart kudud honey eater (bird) jibalkur; jinji hear -LAKARR honey sucker (bird) jibalburu heat judukurr hook kalbiny heat in fire -JUMBARR hop jurrb heavy juunk; ngurrngurrman; rambin hop along jurrbjurrb heel jundijund; nubundubund horn wuurr her jin; jinijirr; jinirr; jin yirr horse yaward here! nyaa hot barrbarr; maal hermit crab jalkamangarr; jilb hot sand ngaalan heron jiwu house bur; mayarr hew baj how arrinyirr; arrinyirrkud hey! ay; yaw how many nganyjid; nganyjirrkud hiccup -BARRAL, -BARRALK; -KABD how often nganyjirrkudang hide kurd; -JARLK; -MADAL; -MALK howl wur hiding place *nalal* humpy biik high voice lalbarr hum muumuu hill karrawirn; kumbarr; nimarr hunger, hungry marrkin hilly country niyamarr hunt binjan hind flipper jambil good hunter durrb his jin; jinijirr; jinirr; jin yirr hunting-stand kunjurrdirn hiss ngany hurt jumbul hit barabar; barbar; -DAB; -DAM; husband marlb; wamb; yaku -NGAJIM, -NGARRJIM husband-wife pair wambamarirr hitter madaminid hut kidun, mayarr hither kalamb; kalambangin hither and thither kalamb nyamalk I hoarse *mij* I ngay hold -NGUNDUM ibis marnungkubil hold back kad hold onto baad if ngajad

ignorant manyjang; -NGINDIK; wanakkaj

ignore nungkub	jelly fish murrunginy; narlangkarr;
impudent biilinyirr	nyilinyili
in line jikar	jerk <i>barr</i>
in the dark ngurraj	join dimb; dimbidimb
in the evening layilayiak	joker wungulid
incantation inbal	joke jingkarr; wungul
indeed not, truly not arringarrin	juice wuul
influenza jalngkurrinyuriny	jump jurrb
initiation ceremony murrubal dance warnki degrees of bungan	K kangaroo burruk big red kangaroo mirdamal
first balil second jamangungkurr second (Yawuru) wirrkanj third kambil	kangaroo type barrjarniny nail tailed kangaroo karraburl red kangaroo midimal keep in order walungwalung
fourth rungurr eighth mambangan inquest yandal	kick -JANB kicker majanbinid
inside jimbin; kadin; wurrb insult alik; -JIR(R)IJIR(R)IK interrogative particle ngaji; nganyj;	kidney dilb kill kad king brown snake barnkad kingfish kumbulngurr kinship terms aunt irrmurr, yirrmur brother babarl, babarli; walkurr brother-in-law malb; umal; walibil; yaku cousin jaji; jalirl, jalwal daughter bidi; waarl daughter-in-law (of woman) yalirr elder brother wumban; yimban
nganyjik island madingkurr; winiwalang it kinyingk itch jibijib; jiyu; nilingarr itchy jabijab its jin; jinijirr; jinirr; jin yirr	
J	
jabiru <i>lililil</i> jaw <i>dangk</i> jealous <i>mungurr</i> jealous person <i>mungurrid</i> ; <i>mungurrij</i>	father <i>iibal</i> ; <i>kaal</i> ; <i>kuburl</i> ; <i>kuul</i> fathers <i>ibinbal</i> father-in-law (of woman) <i>rangin</i> grandfather, father's father <i>kalud</i> grandfather, mother's father <i>jaam</i> ; <i>nyami</i>

grandmother, father's mother jibi	later karrm; wajamarr
grandmother, mother's mother kamani;	later on badal; karrmij
kamard	laughter kulkurr
grandson <i>kabirl</i>	laugh, laugh at -KANM
husband marlb; wamb; yaku	law
husband-wife pair wambamarirr	introduction to the law of <i>Djamar</i>
mother <i>birray</i> ; <i>wunyjub</i> mother-in-law (of man) <i>yalirr</i>	marrarl
mother-in-law (of man) yaum mother-in-law (of woman) rangin;	lead -WALAWAL
yalirr	leaf birlibirl
nephew <i>jalangk</i>	
niece jalangk	leash mirij
parents birraykuburl	leave -MANGKAD, -MINGKAD
parents-in-law wanymirn	leave alone jinirr
sister marrir	leech jinirr
sister-in-law wumuni	left baljarrangk
son waal; walabab; warl	leftwards ngalkarrmankadin
son-in-law (of man) jaminyirr	left-handed ngalkarrman
son-in-law (of woman) <i>yalirr</i> uncle <i>kakarr</i> ; <i>ngaab</i>	legless lizard yarwiny
wife malirr; winyjid	leg -mird
kiss -BALM; <i>juny</i> ; -LAMB	legs of crustacean nimilirriny
	liar <i>miirlid</i>
knee ngurrngk	lick -JIL, -JILIK; -JILAJILIK; yaly
kneed dibirrdibirr	lid naalm
kneel mirdimird, mirdmird	lie
knife jumbarraarri	on back walirr
knock dudud	on face banngal
kookaburra <i>jarrjurr</i>	lie on side yirl
	on stomach bumbu
\mathbf{L}	lift -MUNKAR
laces burrurr	lift up <i>jarrbad</i>
lame muuk, muukkaj; muukumuuk;	light
nimirdkud	flame <i>naal</i>
language ngank	in weight <i>labilab</i>
large turtle winjil	in appearance balirr
large snake <i>miyalurr</i>	skinned kayarr; lakilak; wajbal, waybil; wirrmalal
lasting lambuburr	
last night <i>ngimbirr</i>	lightning kalaru; kanyjingarr; karlurr
last week kanambird	like (v) liyan; kaad nung
iasi week <i>kunumuha</i>	like that baan, banin

like this banard; barnabarn, banaban love song kuluwadiny; kaljind; yilbiny likewise, similar banilk love spell mandakidkid lily root wirdamangarrang low tide *lirrban* limp muukumuuk; yiryir lucky wilinyu lips -lirr lugger lak listen -LAKARR lump of ochre *kumaly* little *murrul*; *murrulmurrul* lung barrj; walin little bat *minyiminy* \mathbf{M} little bit *kujarrkurr* mad manyjang; yamam little girl *ngaanj* magic stick mankirr liver kaabir magic charm *mirrirrjun* lizard grey lizard winarr magical domain legless lizard yarwiny magic ceremony of burying the name of an like ta-ta lizard wanmalk enemy muund small lizard bulibul someone who falls sick by the *mōndo* spell spit lizard barndily muundjun ta-ta lizard kanard spindle-shaped piece of wood for magic umbrella lizard kurluman killing wadangkarr loins -mikil make -MAKUR, -MUKAMUKAR, loin cloth wiiji -MUKAR lolly nirrinyirr maker mamakuranid lonely person ngidirrnginjun make noise rarr-rarr long iwarl; nabirnd male *miid*; *wiijun* male kangaroo waalmarr long ago milirrkarr; muuji, muujimuuji, many males miidijin тијитиј man wamb long grass kaarawirl concerning men wambid long hair wulul men of the camp *makurrman* long tail *makukurl* mane wulul long-legged spring frog yakarralangurr mangrove bindun; jamay; kalbijun; look for -BUR(R)K: -MII. -MIIMII kandilib; kurril loose raak; rukud mangrove snake *nalanginy* louse linyjirr mantis kulukuluman big louse winki many wurrumbang body louse wangkarrmaliny many males miidijin; minmiidijin head louse wiirnk many times wurrumbangang love (v) liyan many young men wangalangjin

marriage within same moiety rambarrngarri married couple winjidirr marrow juny marry dimbidimb marsh binyb; binybabinyb mason-wasp mulkurrurrung mast balkarrkarr; walilan matches *majirr* me and you juyangay meat wil meat eater wilid meet jajurr, jajurrjajurr meeting of tribes marrarrwirr melted wulal messenger makunbanjun; ngankid mica kalakal mischievous dukub midden marrangmarrang; yayjay middle bulkumarr; bulngurr Milky Way wunkunurr mine jan, janijirr; janirr miserable alik mist lanin; lamaman mistaken -NGARRJAL mistreat -DIMINYJ; -WURDUM; -WUWU mix -BALIBALIM; widijirr mock jinijinang; -WARD Monday wiliwilung; wajinday money kumbarr moon kunyul moonlight kunyulanj mosquito juurr; nguriny; ngurrngurr big white mosquito *nilankul*

mother birray; wunyjub

mother bereaved of child *julumad*; mulyikar mother-in-law (of man) yalirr mother-in-law (of woman) rangin; yalirr mouldy lambud; lumbud mountain people wanangarrjak mourn wulungkun mourner *marrarramb*; walkaykarr mouse julk; yuburryuburr moustache ngalyk mouth -lirr without tooth evulsion munbi move baniban move about winany, winanykaj of tide -JUD mucus kunyb mud ngiijil mud skippy nankarrjun mud snail kurrimbudu muddy ngiijilkud mullet jilbidingurru; karlurr; lungkurr murderer kanaabin murmur ngukurrngukurr muscle bunyman mythical hero kalalang mythical Rainbow Snake walungkun; yungurruk my jan; janijirr; janirr

N

nail tailed kangaroo *karraburl*naked *kudaj*; *kurdabil*name *-lawirl*namesake *kumbal*namesake play *kunyjurrung*nape (of neck) *bud*; *-ngkurn*

0 narrow jundul native obliterate -BURRUBURR; -NGULIRR of Maljin maljinbur obstinate binmal of Ngalin ngalinbur obstruct lakud navel -jirrjirr; -kurrinykurriny ocean kaarr neap tide liirrban octopus mirrjany; mirrngkiny, murrinkiny near yangirn OK juu nearby jamad old milirrkarrjun neck lungkun old man nyungul bend of neck nungkurn(ku) old woman kambaj nape bud, -ngkurn once warinyjirrang necklace barrkaj one warinyjirr nephew jalangk one another warawar nest malband one behind another yalirrabaybirr net jakurr one-by-one warinyjirrwarinyjirr new moon bingir; wurrurralng one-eyed snake wungkurdany; wurlkudany niece jalangk open lambad; bab night time ngimbirr orchid bangkalyjurn; nyilnyil; wiilk through the night *ngimbirrngimbirr* ordeal yandal nightmare wananiny Orion's Belt mirrurr nit *linyjirr* three stars of Orion's Belt minmiid no good biinid; buuk orphan *liim*; mararramb noise madily osprey bangkibiny; jinan; lunkulibil of cutting firewood dalarr other war non-combustible muwad others warang north wadi other days lala northern tribes wadi-abul other direction wanimingk nose -mirl other night ngimbirr nose stick kardimb; larrilarr other place waamarn not arri; arriyad other side nyunikabiny not indeed kaad arri ours (yours and mine) jajirr; jay nothing walman-kal; wiib ours (1AUG.OBL) jarrad; jarradijirr nulla nulla nawul ours (1&2AUG.OBL) jadirr nut wilingk nutritive makanbin-id outside rakal; yawarr oven laarrb

periwinkle jaang

owl burulburul; jirrngkin; kulyurdkulyurd; kurrawurl; wadawi; wukwuk	persevere yalj
	perspiration kirr
oxback turtle irrirl, yirril	phallus <i>kulurr</i> ; see also <i>penis</i>
oyster nibard; jalngkun	pick -KAR(R)
P	pick-a-back <i>kundi</i> pick up -WAND
pain binbal; wararr	piece <i>lalbaw</i>
paint (n) karrmal	pieces, little bits murrumurrul
paint (v) -KURID, -NGIRID	pigeon <i>kurrudurd</i>
palate <i>kalbirirr</i>	pigeon-toed kulan; barrkarrk
pandanus kaamb; manbang, marnbang	pike <i>linymal</i>
paper mirlimirl	pimple larrkinjun; mukulmukul; muurl
paperbark tree bakarl; bidab; kurlungurrb; lunjimad; nimalkan	big pimple budungkurr pinch kurrb
parents birraykuburl	pink-tailed catfish wilinyinkarr
parents-in-law wanymirn	piss (n) kurdawi; ngadir; ngurnd; yabiyab
parrot fish barambar	piss (v) -KIRRIR
pat <i>dubdub</i>	pity bararrk; wukul; wulungkun
patient marrar	pit <i>larrar</i>
payback <i>rurrbukun</i>	place bur
peace warral	place where person's spirit goes on death
pearlshell binyjabinyj; kuwan; lii	lumirn
pearlshell pendant riij	plains country barlbirr
pearlshell type lijalij	plane wirr; -WUL
peck <i>jubjub</i>	plant (n); see also tree
peel (skin from) lir	bamboo <i>kabul</i>
peep <i>jikir</i>	bulrushes bilkiny
peewee dindi	bush bindan; budungan
pelican jalinymarr	bush apple kulay
penis biirndi; narndi; see also phallus	bush banana kawurrkawurr
people wamburiny	bush fig jirrid
big people birndabirndany	bush fruit <i>karraling</i> bush mango <i>wankirr</i> ; <i>wirrum</i>
perhaps kabad; karrburr; nyanangkarr; ngajikad; yarrakad	bush olive <i>midinkurran</i> bush onion <i>karrangkam</i> ; <i>niyalburn</i> ;

niirrbun

bush peanut kajanangurr pluck laaburr; labulaburr; rubarub; rubrub bush potato karrinykam; rambak pluck off *lirlir* bush rice karrjad pluck out (e.g. hair) ruk creepers iilngam; jimil; lambin; wurrbwurrb pock marks budungkurr edible lump on white gum tree kurdiny point ngirngir fruit of kawirrkawirr tree dalab point out -WIRIM fruit of wanger tree waalkijun pointed stick durrun; larr fruit type kawarrkawarr poison banjurd; jinjirr Gardenia pyriformis dalwurr poke jirib, jirrb; jirrbijirrb; jukurr; jururr, gum gathered from a tree *nimanganjun* jururrjururr; -R lily root wirdamangarrang Marsdenia viridiflora makabal policeman limb; liinyj nut like a peanut kajirrangurr pollen ngurl orchid bangkalyjurn; nyilnyil; wiilk poor fellow Persoonia falcata waankirr possessions malburl roots possum langkurr long candle-like root *naarrk* flying possum balngib root about 2 inches long nimirldil possum-hair mandurr; walburr root type, sweet and juicy wirrmangarrin pour -JAR(R)UNG; jurrurr sandalwood (Santalum lanceolatum) pour out dulud; kir birrminkirl pregnant liyankud; yikany scrub bindan presentiment kudurr Terminalia ferdinandiana kaabiny thorny shrub kungkarr press jard; kulykuly waterlily balarr; widimangarrin pretend -NGULM waterlily root widamangarrin prevent -BARD; jiid; -WUNDUM, yam wamarrij, wambirriij -WUNDIM unidentified types budbudkarna; prickle karawil dulkaari; jayilkir; kaadk; kurlay; prickly creeper wurrbwurrb wangkirr, warnkarr; wirrm, wiirrm prickly heat wandir platform for corpse karndilib; mamida blotches of prickly heat *mukulmukul* play -KAL; -KALAKAL; maad; maaduk prison minyin playfully madangmadang prisoner minyinjun pleasure ngaj promised spouse bakalngarrinyjun Pleiades birriny properly budarr plover juu property malburl proud, be -(BA)NGARINYJ, -BUNGIR(R)

provoke -JIRIKJIRIK	rebuke -JIRIJIRIK
puff ngirrngirr	red wirrirr
pull yaarr	red-bellied snake waalk
pull out <i>laburrlaburr</i> ; <i>rub</i>	red cliffs walangkarr
punch dud	red ochre dakurl; dukurl; dungurlang
punished person minyinjun	red Oxford turtle warnkurrbin
punishment minyin	red sand cliffs nimadarrj
pup mabuk, wub	red sandstone bidimar
push -KUNDUKUND	red snapper winjalngin
puss ngadir	reddish oysters lubad
put -M	reeds ngurrngurrmarran
put inside dad	reef maaniny
put together jal	reef fish kirrid
Q	reflection -marraj
	refugee ijarr-jun
quarrel -BUDUWA(NYJ); -BUDUBUDUWANYJ	refuse -KAR(R)M;
quarrelsome biilinyirr; wirrilimb	-KAR(R)MAKAR(R)M; -NGANY, -NGANNY
quickly ralard; warrij, warrijwarrij	regret -KALABIN(Y)J
quiet binarr; kulkur; kuungk	relatives of deceased child kulmalyi-
quietly jukar	karrang
_	rely on -MIJALang
R	replete dudub; murrkard
raft kalu	reptile type living in mud yurridurl
rag war	reservoir
raid daman	in hollow tree balijun
rain barrbakun; janjarl; rirrar; wunkul	in hollow trunk jalbangurr
rain water wungur	resin of <i>nalin</i> tree <i>nalin-jun</i>
rainbow walangkun	resound biburrbiburr
rainbow snake walangkun	respect wiirni
rain bird kurraykurray	resting place jadal
rainy season marnkal	restless riirrbriirrb
rainy weather wunkul	restrain -WUNDUM, -WUNDIM
rake (v) rarrbrarrb	return jakud
raw kaank	ribs karrabard; wiirri; wirr; wirrwirr
ready nalurr; ngurrin; ningarriyan	ride jalingk

rifle jilaman run junk right jurrungk runner junkid right-handed jurrungk running water ngalil rustle dukduk rightwards jurrungkkadiny ripe bii; biijun; biiya; muurl S rise -JARRJARR; -JARRINJARR; luburr; -MALINANGK; wulkudud sacred nyirrbirr rise (of dust, smoke, etc.) duy sacred, sacred place kunyju; ngurlangurl (dysphemistic) river maduwarr road makirr sacrifice burr sail, sail cloth yarral, yirral roam -KAL saliva barrj; karirr roar of incoming tide yakan salmon walkiwalk roar of sea yaa; yiii salt karr; murrku roar of water yaakan salt water, sea water liinyjliinyj roast -NGANYB salty limb roasted manganybanid rock kumbarr same age yalbur same generation jaarnd rock cod waambiirrdkjun small rock cod jumburr sand barnd rod wirrkinmal sand bank niwanil roll dibirr, dibirrdibirr sand monitor bandab root, branches nimal; nimikil sand wasp rudrud aerial roots of mangrove marrmb sandal kurridi rope *mirrij* sandfly juurr; yambul; angurr, yangkurr rotate dibirrdibirr; dirridirr sandhill jiirr; kariwin rotten biin, biinikud; maak sandy place balanbalan rotten wood maajin saplings of *nalin* tree *narrk* rough jidirrjidirr; rarrkararrk saturate -MUND rough-backed turtle barnmangkarr savage biilid rough paperbark kanbirr say -J, -DI round nawan, nyaawan scabies lanbirr round and round banbirrbanbirr scale bardin rub dukuduk; kaarr; wukurr scar baaburr, babirr; birrbalin rubbish buuk; kunyju; maand; minin scare -JULB rudder burrij; wanidi scent kiirr; nyaar rumble (of bowels) kulkul scold -BAND(I)

scorpion baan; bindal seriously ill buwariwar shade biik scrape rarrb; -WUL scratch -KADAKAND; -KAND; shadow -marraj; nimandarr -KANDAKAND; kardakard; wirrjun shake dubdub; duk; dukduk; makily, scratch wirr; wirrwirr makilykaj shake (hands) mad screen kirrii scrub python bangard shake-a-leg dance jukjuk sea kaarr shallow kuluk sea eel ilyingirr; juuk shame rarrjin seagull walabarrkaj, warlabarrkaj shape -kinbal sea hawk bangkabij share -BARNJ.-BARNJIBARNJ sea snake yurrudul shark kandarr; karnamarr seabird kanbaliny sharp karrj, karrjikarrj; nilirr seaweed kalimand shave -JAR(R)K; -WUL, -WULUWUL she kinyingk seasons autumn wirralb shed skin lir beginning of bargana-season buyibuy sheep kukunyja rainy season marnkal sheet lightning binmak; marr; milmil spring marnkal shell kiinvi; vambul summer lalin; ngaalan shell of seed bardin whale season minimbad shell of turtle eggs yaabin winter barrkarn shell fish banmangk secret objects kunyjkud shield karrbin secretly malkin light dancing shield yaad section terms baljarr; banak; burungu; shine balirr; bilbil; ngaliyirr; wirlil karimb shiny binybiny; narlnarl sediment laab shit burd see -JAL shit on -NGAL, -NGALINGAL seek -MII, -MIIMII shoe -jimbarlingid; jinaburd seize -BAD shoot bany; banybany; barn self -ngakal one who is shot banyjun send -KUNB, -KUNBIKUNB shooting star *jirrirr* sense rinyriny short jilbin; murrul; ruburr sensible rinyariny short of something -MANGANY separate barnibarn short paddle kamban septum lanarr short winded birlbirl; jungurrb; kunng serious bidirrij

shoulder kundijin; kurdurr.rd; kurlujunu; sleeping house for young men wambwamb langarn sleepy kujaj; kunyurrj shout wirrkwirrkang; wirrkwirrk; slide -JAR(R)AL, -JIR(R)AL; yarrkal; yur wirrkwirrkkaj slim yarrawul shovel nosed shark jikad; nanbil slip -JAR(R)AL, -JIR(R)AL; -NGALY; show -LINGAR(R); -MARRB yarrkaly show off -(BA)NGARINYJ, -BUNGIR(R) slippery yarrkalyid shrivel walm slope jidilarr; jilalarr shut bund; kiinyj slough lir shy ijarr; wiin slowly jukar shy person wiinid small bag *jik* sick yuburl small blue bone fish karrij be sick -MIL small crab manburbur sick person yuburljun small dove kurrudurd sickly bimbi small duck ngakalangan side (of object) karrbad small shark budukurr; bulmbujun sideways yirlyirl small goanna jalangird sigh ngurn small lizard bulibul silly manyjang; nganan; yamam small louse kurliny similar mil small of back -mikil sing jirrm, jirrmjirrm; kawkaj; -MIL small roots jangurl sing incantations -KARLBIR(R) sing love song -KIRLBIR(R)small tjuringa mandaki, mandakin sister marrir small turtle wungkurrbin sister-in-law wumuni smallpox jibilybily sit -LAND; mijal; -N smell (n) kiirr; nyaar sitter mijalad smell (v) -BUNYJ; -MURR, -MURRAR, -MURRAMURRAR skilled nibalin smoke (n) bulkurn skin bardin; yaabin smoke (v) rung; rungrung skull bulurr; jululk smooth budarrbudarr sky kurrwal snake juurr sky flier, aeroplane kurrwaljak black snake kungurn slack jarrjarrbin; kulal; wilyarr carpet snake baninybur slanting wabi green tree python karndirrkarndirr sleep kunyurr; -MULK king brown snake barnkad sleep madikilin large snake miyalurr sleep restlessly -KALWAL, -KILWAL mangrove snake *nalanginy*

one-eyed snake wungkurdany; soul bilyurr; -marraj wurlkudany sounds Rainbow Snake walangkun, chewing bones dadurr; murr walungkun; yungurruk cracking nuts dujul red-bellied snake waalk cutting wood dilarrdilarr scrub python bangard hammering da; dilarrdilarr sea snake yurrudul music sticks jirrmkaj taipan bankard sour limb yellow-bellied brown snake bankard sour food *liinyj-id* snap finger dilbak; darl south walij snarl ngarr southerly walijang snatch lur southern kuwalkad sneak jibard; jibardjibard; kurdkurd southerners walijingkjun from the south walijingk sneeze kinyirr sparkle *dilydily* sniff -MURRAR, -MUR(R); -MURRAMURRAR spark rirrk snipe juwajuwa speak -NGANK; ngank; -NGULANGUL snore ngalarra; ngalarra-kaj spear (n) mangul; walangk spear head jimbil snot kunyb snuffle ngunungun spear (v) -BUN speared maranjun snug nurrng spear grass kaarawirl soak (v) -BULM; jurrmbul spider marrbad soft ngabily; ngub soft inside bread nung spill -MUUR; -MUURMUUR spin karrilul; -KUDAL softly jukar some jalbur; kujarrkurr spinifex maar; wurrurral son waal; walabab; warl spirit balkan; bilyurr; jaalngk; muwi spirit child barnman; ray son-in-law (of man) jaminyirr spit jibil son-in-law (of woman) yalirr spit lizard barndily song nul dreaming song liljin spittle baarrj; jiwil splash water -MIJUL soon baliny; karrmkarrm; miliirr; ral soothe -WULWUL splay footed walyawaly split bar; jal; lalal sooty oyster catcher kidaw sore iik; yiik split entirely barngan sorrowful binbalid spotted dirldirl; jilbirribirr sorry bararrk; wulungkun spotted ray bibirnwan

sprain kalkurr deadly ray ingarduk spotted ray bibirnwan spray jibul other types barnamb; bindany; spread balngarr; rilil; yal bungkurr; makawal spring (water) wajirrb, wayjirrb stink -BUNYJ subterranean spring bidijin stinking maand spring (season) marnkal stir -BALIBALIM; dibirrdibirr; -MAL spring country bilaarr; walamangkarr stockman yawardangid; yawardid spring tide nalangan stomach -ng squat jindin stomach worm biin squeeze duly; duny; kulykuly stone kumbarr squid ngubirliny stone axe iwan, yiwan stagger wirrwirr stone fish trap *majukurr* stamp buduburr; mirrmirr stone knife jimarr stand (still) jid stop jid, jiidi; -WUNDUM, -WUNDIM stand (firm) -JARRNGAR story *jabal* star warrabalak story teller jabalid stare bujul; wiib straight budarrbudarr; jidinarr; yarralal stare at -JIBIJIB strain barnibarn startle -JULB stranger maarjun; waamarnjun; wirjun steal -LANYB; lanybuk strangle kinykiny steps jakal strap jidangk stern numulurr stretch balngarr stick in ward stretch out -JARRAD; ngindi stick bardangk string of shell necklace *kubaj* delousing stick barrin striped dirldirl; jilbirribirr digging stick, walking stick, hitting stick stroke nyak milkin strong *jirril*; rarriny stiff jurbarr; kalkurr; mangarr stumble juduk still kaad stumpy dulng; numb sting warirr stupid manjang stingray jinib; mulkurrkud, murrukud;

wandabin; yamban

big roughback stingray iwannyirr

coconut tail stingray warndabiny

subincision *laaj*submerge *ngurrngurr*suck *rung*, *rungrung*suddenly *waangk*, *wangkawang*

stutter karalykaraly; walnilirr

talk about -MINNYUR(R)UB

sugar murru tall iwarl sugarleaf kawajirr tame nurrng sulky badak tangle nyilinyil summer lalin; ngaalan tap foot -JANBIJANB summons nilan taste -LAR(R)M; -WIRIK, -WARIK sun waalk tasteless nabal sunshine waalkidany tasty niiyarr surf danyburr ta-ta lizard kanard swallow (n) nyimbalnyimbal tattoo babirr: birrbalin swallow (v) kujuk tea tree kurlungurrb swear karrjikarrji teacher ngankid sweat jurdukurr; nundurr tear (n) wangkirr sweep rany tear (v) lar; lalal tease -JIRIJIRIK; -NGALYANGALY sweet niiyarr sweet, lolly *nirrinyirr* tell -JULNG sweet potato kumal tell lie *miirl*; -MIJULNG; -NGULANGULM swell ngur tempt -WUWU swell up -BULKUBULKUM; -BUNGKABUNGKUM, termites jambiny; jilkirr -BUNGKUBUNGKUM; -BUNGKUM testicles kulurr swell fish jidin that abarr; abun; babarr; bin; kinyingk swelling buljun that kind bankarr swim duburl; jubul; kalkir that much banikur; banikurad; baningirrkud T that side banikabin taboo jakin that way nyamalk tadpole kuninykuniny theft lanyb taipan bankard their jirr tail -wal theirs *jirrirr*; *jirrijirr* of bird juburr them all irrakur; yirrkud take away -NYURR; waj then bayakarr; kiid; kinyingkkarr take from -MINYJ there abarr; abun; babarr; nyun take -WARK; -WARKWARK they irr talk warlawarl; -WARLIWARL thief, thievish lanybid talker *ngankimbany*

thigh *karnb*; -rnmurr

think, think about -BARRABARR, -BARRIBARR; -J, -DI

thirst *manyirr* this *in*, *kinyingk*

this morning bayakarr; kiil

this way kalamb

thither *kunarr*; *nyamalk* thorn, thorny tree *mangal* thorny shrub *kungkarr*

three *irrjiwar* throat *kurrburl*

throb nyun; nyunnyunkaj

throw -NGUL

thrower mangulinid

thud *ngid*thunder *jidam*tick *mudirl*

tickle *kidikid*; *yarryarr* ticklish *kidikid*; *yaa*

tide *nakul*high tide *luu*

tie -BARRKAND; midbad

tip toes jimbijimb

tired bulj; kulal; milamb; wajid; wal; yuud

toadfish kurnkurnung tobacco ngalu; ngamarri today kiil; banangkarr

toenail wurul

together wurrurr; yambun; yambunyambun

tomorrow kunard tongue -yangal tooth jarringk

tooth evulsion rirrm

toothache kuung

toponyms

Able Bore *jukunyjukuny* an anchorage at Beagle Bay

bulubuluman

Beagle Bay ngaalan

Beagle Bay Mission site barnkurduk;

ngaalan

place near Beagle Bay lungumbid;

yamarrangk

plain and garden south of Beagle Bay

Mission larrik

windmill near Beagle Bay

kandirrirang

Bishop's Well *jalkirra* Chimney Rock *maljin*

Disaster Bay bankaduk; bilbilmirr

well near Disaster Bay lawinjimarrkin

Fraser River ramaburnarn

Lake Flora kangkul

Lake Louise wadinyimbal

Lombadina jarrinan

Mangrove Point *maarnkarraankarrang*

Minari *minarriny*

Murphy Creek kurrulukun Pender Bay yambalkin

place where Dutch planes were bombed

by Japanese in WW2 *minirriny*

Red Point burrlalakan Sandy Point winawal

"Snake Country" bankad-uk

third waterhole on old road from Beagle

Bay to Broome wangkanard

Trappist Inlet nilikin

"Wind-Rocks" wangal kumbarr unidentified places bankarrkak; birringk; bilkinul; bindurrk;

bungkurrungurr; dunyjurrurd; jabuluk; kijaluk; lawurnid; malyin; mulkurrung; ngirrinyan-gamb; nyirrinyingam; wabidang; walaman, waliman; wumbarn; yaab; yalid; yaalid

totem jaalngk

touch -JIDING tree frog waljabirrany touch lightly yakarr; yakarr-ad tremble -BAMARR; kadkad track (n) -jimbarl; jurrar; makirr tribal and other groupings Beagle Bay Mission region nyulnyul track (v) -BALABAL, -BALIBAL Disaster Bay region nimanburr track of snake or lizard kanbal eastern shore of King Sound warrma trample -JANB; mirrmirr inland Nyulnyul group yamarrangkird traveller, bush traveller bindanyjak Walmajarri warrmal tree bardangk trickle dulul acacia kulban tripe kaburr berry tree birrman trip -JUDAR big-leafed tree with nuts limbilimb trip over *jirdijird* bloodwood tree kaaj; kardk true *ningarr* bohemia tree jikily bushy tree with berries wambangilingil try -WIRIK, -WARIK; yalji coolibah ngarrabarn turkey mangkayarr; mingkirr cork tree binjiman; birramingkarl turn dibirr ebony tree birimbirr turn away badily fruit trees jalkar; jirrib; kuwaal; turpentine tree wangarr uudarr; warrangurr; yamdalngur, yamdarnngkurr turtle kulibil; mangkayarr gum trees barrakul; dadakurr; kaabiny; large turtle winjil nalin; ngarruban oxback turtle irrirl, yirril hardwood trees bandarrang; manuwan; red Oxford turtle warnkurrbin valuk rough-backed turtle barnmangkarr mangroves bindun; jamay; kalbijun; small turtle wungkurrbin kandilib; kurril turtle eggs kalarrad; nalarrdad pandanus kaamb; manbang, marnbang turtle eggs in ovary karrurrurr paperbark trees bakarl; bidab; twice kujarrang kurlungurrb; lunjimad; nimalkan tea tree kurlungurrb twinkle bilbil; bilbilkaj thorny tree *mangal* -KUDAL twist turpentine tree wangarr twitch budbud; jibar, jibir; marrmarr wattle trees jarrijany; kidikid; kulban; two kujarr marnaawan; ngurrumundurl; wangkay; twofold kujarrkujarr wamwam white tree kunurr yellow wattle irrakul; kalarrijun U unidentified types karnburr; umbrella lizard kurluman ngaraburn; ngarrabil; nguland; uncle kakarr; ngaab walamangkurr uncover kaab tree burial karndi; manyjinuk; nganyjin

under surface mulmul wander -KAL: wir wander around banbirrji underdone kankikanki wanderer wirriid understand -LANGK, -LINGK want livan unfinished kurr warm duurr unknown wanak warm oneself -RAMB unoccupied namad wart kundany unripe kaank; jariny wash -JULAJULUK, -JULUJULUK, unsteady riirrb -JULUK untie ruk: rukruk watch wiib until night ngimirr-j watch over -JALAJAL up kalb water wul up high kalbkalb waterlily balarr; widimangarrin upside down rumbi waterlily root widamangarrin upwards dab watery or liquid food kaly urine kurdawi; ngadir; ngurnd; yabiyab wash -BULABUL, -BULIBUL urinate -KIRRIR wattle tree jarrijany useful mabakandinid wattle tree with red flowers marnaawan usual *ngalil ngarriny* wattle tree flower, golden wattle ngurrumundurl wattle tree, yellow wattle wangkay \mathbf{V} wattle tree blossoms wamwam vagina ninngirr wattle, acacia kulban vegetable food may wattle, acacia with white blossoms vein jalwiny kidikid very ngarriny wave mamb vomit -KANYB wave (in sea) kaarr; walabalkud vomited matter kurrbuk; makanybin-id wave (v) -MANIMANINY; -MANY; -MANYIMANY W we (1&2 augmented) yarrad we (1 augmented) yadirr wag dukduk; wilywily we (1&2 minimal) yay waist high wirrikad we all yarrajin wait kadkad weak jarrjarrbin; jilal; kulal; waakal; wait for -BUR(R)AR(R); -MIRRAR; wajid; wal; wilyarr -MIRRAMIRRAR weaken -BINY wake up -MILK; -MINDIJAL wear -KUL walk jid; marriny; warr; warrkaj wedge oneself, be wedged -KUMBIN(Y)J Walmajarri warrmal

weeping wangkirrkaj whole baninyirrang; kurr west kularr wide waliyarr from the west *kulikirrk* widow kalkarr; miraj westerly kularrjang widower kalkarr western country kulukurr wife *malirr*; winyiid westerners kularrabul wild biilid wet kuubad wild goose kurruly whale minimb willie wagtail jindibirribirr, jinyjibirrbirr whale season *minimbad* wind wangal what angk; angkiba windbreak wirdiwird what kind arrakyan; arrinyirrkud winding jalk; kudilkudil what's that ki windwards yilmyilm when banakarr windpipe kurrburl where anuk; arrak wing minbal; minybal whet stone *nilirrin* wink nyim; nyimnyim whether ngajad winnow dubdub which angk; angkiba; arrakyan winter barrkarn while kajunang wipe duk whimper ngurnngurn witchdoctor banminkurr; nibilbil whip wirrkinmal witchetty grub kalbijun whirlwind kalkuriny without arriyangk; arriyangkang whirl duy witty jingkarr whiskered salmon kaajirr; kurrajirr woman *uriny* whistle wilywily woman bereaved of son or daughter whistling duck jibilyuru kumbaj whistling hawk kirrkij woman bereaved of brother, sister, or cousin white bulkaar mirraj white ant *jambiny*; *jilkirr* womb wuulk white cockatoo ngaaluk wood bardangk white gum bilawuwilk; kunurr woodpecker kakajikakaji white person kayarr; wajbal, waybil woody bardangkkud white ochre karramaal, karramil

woomera karli; ngaabaliny; walbarr;

yankal; yunkarr

work shoes murrkulid

word ngank

work murrkul

white sand raambarl white tree kunurr whiting (fish) wanb who angk; angkiba

work things murrkulid wound baaburr wounded madamanjun wrestle badabad wrinkled jalbird wrong way waamarn

\mathbf{Y}

yam wambarrird
rocky country wabarrird
yellow birrarl; kuwarrkuwarr
yellow-bellied brown snake bankard
yellow ochre kumbil
yellow paint babakun
yellow-spotted rock cod wilinyj

yellow wattle irrakul; kalarrijun
yelp ngaal; ngarlij
yes ngii; yii
yesterday biird
yolk jungkim
young bird bandilmad
young boy janib
young girl majangkurl
young man jabul; wangalang
your, belonging to you (pl) jungkarr,
jungkarrjirr
your, belonging to you (sg.) jii; jiijirr
you (pl) kurr
you (sg.) juy
youtch! yaw



Appendix 1

List of bound grammatical morphemes

The following list includes all bound non-root morphemes in Nyulnyul, with indication of the range of allomorphs (epenthetic linking vowels are not indicated). The first allomorph given is the elsewhere allomorph. Not included in the list are bound lexical root morphemes, including bound nominal roots (see Table 4–2 in §4.2 for a listing) and bound IV roots (see Tables 7–1 and 7–2 in §7.2.1 for listings), even though some of the latter have grammatical uses (see Table 11–3 in §11.3.1 for a list of these items). Also omitted are the bound morphemes on which no significant information is available (see §4.5.1.5); marginally attested morphemes are indicated by grey background.

The following abbreviations are used in the fourth column 'Type': EN enclitic; NPF nominal prefix; NSF nominal stem forming suffix; P postposition; PVSF preverb suffix; VEN verbal enclitic; VPF verb inflectional prefix; VSF verb inflectional suffix; VSPF verb stem forming prefix; and VSSF verb stem forming suffix. The fifth column cross-references to the section or sections in which the morpheme is discussed in most detail.

Form	Abbreviation	Gloss	Type	Reference
-ad	FOC	focus marker	EN	§9.3.5
-an ~ -in ~ -un	IMP	imperfective	VSF	§7.7.1, §7.8.1
-an ~ -in ~ -un	INF_S	infinitival suffix	VSF	§7.12.1.2
-ang	INS	instrumental	P	§ 5.3
-ang	APP	applicative	VSF	§7.9
-aw	EXC	exclamative	EN	§9.3.6
i-	3nom	3 rd person nominative	VPF	§7.4.1
$-id \sim -(i) ngid$	CHAR	characteristic	NSF	§4.5.1.1
-ij	DAT	dative	P	§ 5.5
-ilbi	MB	mistakenly believe	EN	§9.3.4
-in (~ -n)	PRS	present	VSF	§7.5.2.1.1
-in	ERG	ergative	P	§5.2
-inyj ~ -anyj ~ -iny	v REF _S	reflexive/reciprocal	VSSF	§7.3.2
irr-	3aug	3 rd person augmented	NPF	§4.2

Form	Abbreviation	Gloss	Type	Reference
-jan	1MIN.OBL	1 st person minimal oblique	VEN	§7.11
-jangarr (-djaŋar)	IRR	irrealis, potential mood	VEN	Nekes & Worms (1953: 459–460)
-jarrad	1AUG.OBL	1 st person augmented oblique	VEN	§7.11
-jay	1&2MIN.OBL	1 st &2 nd person minimal oblique	VEN	§7.11
-jii	2min.obl	2 nd person minimal oblique	VEN	§7.11
-jin	3min.obl	3 rd person minimal oblique	VEN	§7.11
-jirr	3AUG.OBL	3 rd person augmented oblique	VEN	§7.11
-jirr (-djer)	SUB	subordinate clause marker	VEN	§13.3.2.1.5; Nekes & Worms (1953: 488)
-jirr	EMP	emphatic		§4.6.1; §13.3.2; Nekes & Worms (1953: 488–489)
-jun	ABL_1	ablative	P	§5.7
-jungkarr	2AUG.OBL	2 nd person augmented oblique	VEN	§7.11
-juy ~ -jii	2MIN.ACC	2 nd person minimal accusative	VEN	§7.11
ka-	1MIN.NOM.FUT	1 st person minimal nominative future	VPF	§7.4.1
-kaj	CONT	continuous	PVSF	§8.4.1
-kadiny ~ -kabiny	ASP	aspect	NSF	§4.5.1.4
-karr	TEM	temporal	P	§5.13, §7.10
kirr- ~ kurr-	2AUG	2 nd person augmented	NPF	§4.2
ku-	2AUG.NOM	2 nd person augmented nominative	VPF	§7.4.1
-kud	ASC	associative	NSF	§4.5.1.2

Form	Abbreviation	Gloss	Type	Reference
-kujarr (-gudjar)		belonging to, regarding		Nekes & Worms (1953: 600–601)
-kun	ABL_2	ablative	P	§5.8
-kung	ABL ₃	ablative	P	§5.9, §7.10
-kur ~ -kurd	COLL	collective	NSF	§4.5.1.3
-kurr	2AUG.ACC	2 nd person augmented accusative	VEN	§7.11
la- ~ li- ~ lu- ~ l-	IRR	irrealis	VPF	§7.7
<i>ma- ~ mu-</i>	INF_{P}	infinitival	VPF	§7.12.1.1
ma- ~ mi- ~ ba-	REF_{P}	reflexive/reciprocal	VSPF	§7.3.2
-mad	EMP	emphatic	EN	§7.1, §9.3.1
-manjan		only	EN	§9.3.3
-mardikan	ALL_2	allative	P	§5.11
mi-	2MIN.NOM	2 nd person minimal nominative	VPF	§7.4.1
-mil	RES	in regard/respect to	EN	§9.3.2
-mirr	PER	perlative	P	§5.12
N-	PST	past	VPF	§7.5.1.1
na- ~ n- ~ a- ~ i-	CM	conjugation marker	VPF	\$7.5.1.1, \$7.5.2.1.1, \$7.5.3.1.1, \$7.6.1
nga-	1min.nom	1 st person minimal nominative	VPF	§7.4.1
nga- ~ ngi-	1min	1 st person minimal	NPF	§4.2
-ngay	1MIN.ACC	1 st person minimal accusative	VEN	§7.11
ngi- ~ nga- ~ ngu-	PST	past	VPF	§7.5.1.1, §7.5.1.1.2
-ngirr	SEM	semblative	P	§5.14, §7.10
ngka- ~ ngki- ~ ngku- ~ ø-	FUT	future	VPF	\$7.5.3.1.1, \$7.5.3.1.2
ni- ~ na- ~ nu-	3min	3 rd minimal	NPF	§4.2
nyi- ~ nya- ~ nyu-	2min	2 nd minimal	NPF	§4.2

Form	Abbreviation	Gloss	Type	Reference
-nyirr	COM	comitative	P	§5.4
rr-	AUG	augmented	VPF	§7.4.2
$-uk \sim -ik$	LOC	locative	P	§5.6, §7.10
-ung	ALL_1	allative	P	§5.10, §7.10
wa-	2FUT	2 nd person future	VPF	§7.4.1
уа-	1PL.NOM	1 st person plural nominative	VPF	§7.4.1
ya-	1&2min	1 st &2 nd person minimal	NPF	§4.2
yarr-	1AUG	1st person augmented	NPF	§4.2
-yarrad	1AUG.ACC	1 st person augmented accusative	VEN	§7.11
-yay	1&2MIN.ACC	1 st &2 nd person minimal accusative	VEN	§7.11
-yirr ~ -irr	3AUG.ACC	3 rd person augmented accusative	VEN	§7.11
уи-	3nom.fut	3 rd person nominative future	VPF	§7.4.1
-ø	3MIN.ACC	3 rd person minimal accusative	(VEN)	§7.11

Appendix 2

Lexemes that occur in CVCs with -J 'say, do'

Lexemes from my own corpus are given in the left-hand column, those from other corpora are given in the right-hand column. The following abbreviations are used: B—Bardi; I—intransitive; JJ—Jabirrjabirr; M—middle; MA—medio-active; Nk—Nyikina; Nm—Nimanburru; T—transitive; and Y—Yawuru. In addition, * indicates that the lexeme is attested for Nyulnyul in the secondary source, but not exemplified with -J 'do, say', though it is exemplified with this IV in a nearby language, usually indicated immediately after; ? indicates that it is uncertain whether the collocation with -J 'say, do' represents a CVC; and underlining indicates that the word is an N or adverbial.

(a) Vocalisations and noises (intransitive and middle)

(i) Humans and animals

```
daarr 'burp'
                                               darl'gal 'assure'
dur 'fart' (I)
                                               djobor 'splash in water' (I)
jirrm 'sing' (I)
                                               dor 'confide' (APP)
jirrmjirrm 'sing, make corroboree' (I)
                                               dôr 'fart' (I)
karrngar 'cough' (I)
                                               garnar 'cough, (have cold)' (I)
karrngarkarrngar 'cough repeatedly'
                                               gau 'call, cooee' (I, M)
kaw 'call out' (I, M)
                                               gau gau 'call to, cooee'
kawkaw 'call out, shout, caw' (I)
                                               gnon, njunj 'snuff, sniff, blow nose'
kinyjirr 'sneeze'
                                               gôlgôl 'rumble (of stomach)' (I)
ngalarar 'snore'
                                               ioiodion 'warn' (M?)
                                               kotsch 'whistle'
ngany 'hiss' (I)
ngarl 'yelp, howl, bark' (I)
                                               lerler, larlar 'quarrel, speak roughly/angrily/
                                               harshly to'
ngarlngarl 'yelp' (I)
                                               medj 'be hoarse in the throat' (I)
ngarr 'growl'
                                               mōmō 'buzz' (I)
```

ngir 'sigh, breathe' (I)	nangananga 'exhort'
ngirngir 'pant, breathe (heavily?)' (I)	nel(a) 'defy'
ngurn 'sigh' (I)	nol'i 'affirm'
ngurnngurn 'whimper (of dog)' (I)	non noil 'hum'
wanyburr 'yelp, bark (of dog)' (I)	ηâr, ηôr 'snarl' (I)
wanyburrwanyburr 'howl (of dog)' (I)	ηêdηêd 'make clattering noise' (e.g. of
wanyourrwanyourr nown (or dog) (1)	horse) (I)
	nono 'growling noise (of small wallaby)' (I)
jurrk 'farewell' (?)	pe 'report, sing out'
yii 'answer' (?)	popop 'play trumpet'
	raŋ raŋ 'bark'
	tar 'murmur'
	tielongor 'sneeze'
	tuelar tuelar 'warble'
	ur 'hum'
	wag wag 'croak' (I)
	wananinj 'talk in sleep' (*) (I)
	wanber wanber 'bark' (I)
	wor 'howl (of dog)' (I)
(ii) Inanimates	
burralburral 'bubble up, boil'	banj 'crack, bang (of rifle)' (I)
kurrkurr 'rumble (of stomach)'	bibur 'resound'
dinydiny 'make cracking noises' (I)	bibur bibur 'resounding noise of bullroarer'
karr 'make cracking noise'	lelor 'ring' (or 'bell') (?)
	$y\bar{a}$ 'roar (of sea)' (I)
(''')	
(iii) Silence	
	$g\bar{o}\eta g$ 'silent' (I)
	kalgor 'to silence' (?)
	maror 'be quiet' (I)

(b) Emission of light or heat

bilbil 'twinkle (of star), shine' (I?) bad 'burst, explode' (I)

galagal 'glitter' (I)

nal 'to flame (of fire)' (I)

nalenal 'flame up (of fire)' (I)

(c) Attention and cognition

jikir 'peep at, look at' tiete 'watch'

wanak 'be confused' (I) wanag 'be ignorant of, don't know' (M)

wanakwanak 'be confused' (I) nile 'guess'

<u>ningarr</u> 'believe, tell truth' (?)

(d) Emotions

badak 'sulk' (I) badag 'angry, vexed' (I) (*JJ)

<u>bilij</u> 'get angry with' (I); 'insult, frown at' <u>bel</u> 'angry, vexed'; 'quarrel'

(APP, T)

lurrun 'take fright' <u>beletsch</u> 'excite' (I); 'hate' (M); 'quarrel' (I)

nungajil 'feel happy' kadadat 'fear'

<u>rarrjin</u> 'be shamed' (I) <u>karl'djen</u> 'be shamed'

ioren 'be disconcerted'

budarr 'be careful of, exercise caution with' kodiat 'unnerve'

(M)

layib 'feel good' (I) (*JJ), 'be(come) good'

lian 'be pleased'

moladj 'be tired of, annoyed with' (MA)

nele 'distrust' (M?)
neram 'expect' (M)

rerber 'fear'

rerdien 'be humble' wabar 'reconcile'

weri 'please, be happy' (*JJ) (T?)

wir 'doubt, wonder at' (T)

wolb 'shy, timid, fearful' (I); 'run away'

wot 'be modest'

(e) Bodily behaviour

(i) Body moves

budbud 'twitch'

dumburldumburl 'clap (hands)'

jakuljakul 'bent legged'

jibar 'twitch' (I)

kadkad 'tremble' (I, MA)

mirdimird 'kneel down' (I)

nyim 'blink'

nyimnyim 'blink, wink' (I, M)

kalaj 'shake feathers'

kinyj 'become closed, shut, clench(ed)' (I)

kud 'bend over, stoop, hide' (I) (kurd?)

kudkud 'stoop over, sneak up on' (kurd?)

balbal 'flap wings/flippers' (I)

daļ 'snap fingers' (*B) (I)

dilbag 'snap fingers' (I) (?)

dumbul dumbul 'clap hands on thighs; snap

fingers'

gnimin 'wink' (M)

god 'bow, stoop, incline body' (M)

ikailipikailip 'shiver, shake' (I)

nangognony 'rub eyes'

njog 'bow head' (I, M)

par 'open eyes'

(ii) Bodily functions

jibil 'spit out (something)' (T)

jibiljibil 'dribble'

jid 'be standing, stand up'

nundurr 'sweat' (I)

belbel 'palpitate (of heart)'

dador 'chew bones, noise of —' (T)

djan 'chew' (I?)

djonj 'kiss, suck' (T?)

gurbog 'vomit' (I) (*B, Y, Nk)

iongiang 'smile'

non non 'pulse, beat of heart'

tuewil 'spit'

(iii) Aches, pains and experiences

birlbirl 'be short winded' (MA)

jabajab 'be itchy/ticklish'; 'tickle' (T)

jungurrb 'be short winded' (I)

murrkad 'be sated' (I)

marrkin 'experience hunger' (I)

nyunnyun 'ache' (I)

walm 'become shriveled, paralysed,

cramped' (I)

can 'ache'

dag 'be deaf, asleep, unhearing' (I)

djardjarbin 'be weak (with hunger)' (I)

galgor 'stiff, sprain' (I) (*JJ)

gnak 'catch cold'

godjadj 'be/feel weak' (I, MA)

golal 'be weak' (I) (*JJ, B)

warrwarr 'cramp' gonjordj 'feel sleepy' (I) wiyarr 'tired' (I) gonn 'be short winded, out of breath' manar 'stiff, paralysed' (I) alik 'feel sore, no good' (I) (?) margen 'hungry' (I) burli 'be/feel tired' (I, MA) (?) melamb 'tired' (MA) (*JJ, Nm) <u>mal</u> 'get/feel hot' (?) $m\bar{o}g$ 'be lame' (I) yubul 'get sick' (?) morgad 'be full, sated' (I, MA) nilenar 'itch' (I) njônnjôn 'throb' (I) poldia 'tire' tjorp, tiorp 'get excited, ache' tuela 'exhaust' wadjed 'be tired, weak' (I) wagal 'be tired, weak' (I) (*JJ) wal 'be tired, weak' (I) (*JJ) wendirr wend 'be/get giddy' wiljar 'weak, slack' (I) $y\bar{o}d(e)$ 'be tired' (I) (f) Motion barn 'move' djagod 'return' ('step'??) (I) barnabarn 'move apart' djamad 'approach, draw near' (I) daarr 'return/come back with, bring back' djimben 'set, go down (of sun)' (I) dibirr 'roll over, rotate, turn around, turn off' djoror 'flow' (I) (I) djoror djoror 'issue from' (I); 'poke, prick dibirrdibirr 'rotate/roll over repeatedly' (e.g. rain)' (T) duburl 'wade, swim' (I) djurb (tiorp) 'jump, hop' (I) dulul 'drip/flow from' (I) djurb djurb 'hop along' (I) dumbar 'fly' (I) galb 'go up (of sun) (I) jabad 'raise up' (I?) lobor 'rise' (I) (*JJ) *jajurr* 'meet/gather together' mermer 'canter along, trample' (of horse) *rīrb* 'disappear' jajurrjajurr 'meet together' (I) jakud 'return' (I) tadgak 'run'

```
jibard 'come close, sneak up' (I)
                                               tialar 'overflow' (I?)
jubul 'splash, dive into water, swim' (I)
                                               war(-gadj) 'walk, travel' (I)
junk 'run away, run past' (I)
                                               w\bar{o} 'fly down' (I)
jurrb 'jump' (I), 'flap wings' (T)
                                               yadab 'crawl' (I)
jurrbjurrb 'hop along'
kalkir 'swim' (I)
kud 'emerge (on body)' (I)
lakal 'climb up' (I); 'climb over
(something)' (T)
ngurrngurr 'submerge' (I)
warr(-kaj) 'walk, (walk along, go travelling,
go hunting)'
yardab 'crawl' (I)
yarrkaly 'slide'
yiryir 'limp along'
yur 'slide along' (I)
yuurr 'descend' (I)
(g) Social activities
burrb 'dance' (I)
                                               burbu 'dance'
burrbburrb 'dance' (I)
                                               gnok 'salute'
durrbu 'get/be lucky' (I)
                                               jama 'make fool of self' (T? I?)
kaliny 'dodge'
                                               lalal 'dance in the lalal style'
                                               wēn 'avoid, be in avoidance relation to, be
maadang 'play (with something)'
                                               shy of' (M) (*JJ)
nungkub 'ignore, disbelieve' (APP; T)
                                               wōdj 'show respect, awe' (M?)
ngirngir 'point at'
wiirn '(show) respect' (M?)
angk 'do what/something' (?)
                                               angek 'do something/what' (?)
riib 'do bad' (?)
yambunyambun 'do together' (?)
```

djorbar 'become stiff or dead' (?)

(h) Inchoatives and induced (resulting) states (i) Change of state dimb 'get married (joined)' (I, T?) balg 'harden' durdub 'get full' (MA) bon 'be blunt' (I) duurr 'heat up, get/feel warm' (I, MA) durrb 'get/be lucky' dadal 'break' (I) jarljarl 'become cracked' (I) dargal 'be dry (of country)' (I) jid 'stand up, come to a stand, become calm, dembe dembe 'join together, marry' (I) (*JJ) stop (doing something)' (I) kalwar 'become exposed' derder 'rust' (I) nyilanyil 'become tangled up' djerdjer 'be standing' (I) rarriny 'get strong' (I) djid 'stop, stand upright' (I) ward 'stick/attach to, get stuck in' (I); 'tie to, djimal 'be(come) calm, sultry' attach to' (T) garb 'get broken' (I?) gōbad 'be wet' (I) kar 'crack (of wood)' (I?) karail 'get rotten' karen 'be(come) ripe' (I?) kodot 'harden' lambod 'be(come) mouldy' (I) *māg* 'be(come) putrid/rotten' (I) mal 'stop, stay, rest, become calm' (I) melel 'melt' nanm 'set, coagulate, solidify' (I) (*JJ) *njel(i)njel* 'be tangled, curly' (I) ten 'harden' walm 'stiff with cold' (I) winj 'be(come) filled' (I) (ii) Change of quality balbirr 'go bald' (?) beral 'get brown, rusty' (?) biinyj 'get cold' (?) djiwar 'die' (I) (?)

<u>birndany</u> 'get strong/big' (?)

<u>dakadak</u> 'go deaf' (?) <u>lēndjlēndj</u> 'become sore from salt' (?) <u>karri</u> 'sharpen, get sharp' (I) (?) <u>nīdjel-god</u> 'become covered in mud' (?) lalk 'get dry' (MA) (?) <u>nōnbe</u> 'get/become dirty' (?) layib 'become well, go well' *rēb* 'become bad/useless' (?) mank 'go black' (?) werer 'become red or inflamed' (?) <u>nabind</u> 'get long' (?) *ninji* 'come alive' (?) ngub 'go soft' (?) ngunyb 'be(come) dirty' (?) nyungurl 'get old' (?) ruburr 'get short' (?) <u>riib</u> 'go bad' (?) wamb 'become a man' (?) wirril 'redden' (?) wurrumbardangk 'get old/big' (?) (j) Violent actions on an object badj 'hew or plane timber' (T) bil 'fight' buu 'blow' bar 'pull, jerk' (T) delar delar 'hammer, hit (wood)', 'sound of dibirrdibirr 'kneed, stir, roll up' (T) —' (T) didid 'coil up, bend, squeeze' (T); 'become coiled, become tangled' (I) djirb 'poke' (T) dobedob 'clean dust from' (T) ginjginj 'strangle' (T) dubdub 'shake, winnow, pat' (T) dujul 'pound' (T) katzie katzie 'plant, sow' (T?) dujuldujul 'pound' (T) koliar 'mix' (T) duk 'wipe' (T) kor 'bind' dukduk 'shake, winnow' (T) lar 'tear' (T? I?) dumburl 'clap' *leler* 'fry beans' (T?) mat mat 'brandish' jad 'cut' (T) jadjad 'hack at' (T) nyag 'strike, slay' (T) (*JJ) jarrbard 'pick up' (T) pededetsch 'pierce (with stick)'

jard 'press' (T)
jub 'chop, cut' (T)
kaarr 'rub' (T)
rarrb 'scratch, scrape surface' (T)
rubrub 'pluck/pull out' (T)
wukurr 'rub, grind' (T)

ranj 'sweep, clean' (T)
rarb 'sweep' (T)
tiop 'empty' (T??)
tialborgor 'shorten'
tiobol 'mix' (T)
wogor 'dust, clean'
wogor wogor 'grind' (T) (*JJ)
mal 'undergo'

Appendix 3

Previous work on Nyulnyul

Nyulnyul has a longer—and perhaps more chequered—tradition of linguistic research than any other Kimberley language, a tradition that can be traced back to the last decade of the nineteenth century, with the pioneering work of the Trappist missionary Fr Alphonse Tachon. Since then, a goodly number of field researchers of a variety of different persuasions have studied the language and/or culture. This includes missionaries, anthropologists, a psychologist, an ethnomusicologist, linguists, and various others including the redoubtable Daisy Bates (Reece 2007; McGregor 2008a) and innumerable casual observers who recorded fragments of information on Beagle Bay, its denizens, and its language. Nyulnyul people themselves have also recorded information about their language and culture.

According to Bishop Gibney's diary entry for 20th July 1890, Fr Alphonse Tachon had already begun to collect a vocabulary at Disaster Bay during their initial expedition to Beagle Bay, which led to the establishment of the mission there. During his years in charge of the mission at Beagle Bay, Fr Alphonse compiled a grammar and dictionary of Nyulnyul, and translated various pieces of religious liturgy and prayers into the language (Zucker 1994:31, 40; Walter 1982:82–83; McGregor 1998b, 2008f). It appears that he had some

As mentioned in §1.5, initial contact between whites and the Nyulnyul had begun over a decade prior to

further information on Fr McNab.)

this. I have been able to find scant record in the literature of information recorded on the Nyulnyul language by the pearlers and pastoralists who made contact with the Nyulnyul people. Hamlet Cornish, in his reminiscences, has a man from Beagle Bay saying mamma badger meaning 'their wrath against us'. This is, however, not identifiable as Nyulnyul (and the person allegedly quoted was recognised as having worked on pearling luggers, may well not have been speaking Nyulnyul). And James Martin, who published a report on expeditions to the west Kimberley coast in 1862 and 1863, lists about seventy basic words in the language of the 'sea-coast tribes'. Although most of the terms of both lists are undoubtedly Nyulnyulan, they are not Nyulnyul words. Nevertheless, Martin made some surprisingly perceptive remarks: 'the language of both sea-coast and inland tribes ... is agglutinate, with Malay affinities few, obscure, and only partly recognised; the dialects prevail over exceedingly small areas, as is the case with eastern Kelœnonesian tribes' (Martin 1865:287). Fr Duncan McNab, who single-handedly established a mission base in Disaster Bay, near Point Cunningham, in 1884, may well have written down some Nyulnyul and begun to learn the language. In a report to Fr Alphonse Tachon dated 22nd July 1895, Fr McNab remarks that he wrote down as many as sixty or seventy words of 'the native language' a day (cited in Zucker 1994:218). Although he does not specify either the place or the language (he worked at various locations in the Kimberley), presuming it was Disaster Bay, the language could have been Nyulnyul (recall from §1.2 that there are differences of opinion concerning the traditional language of Disaster Bay). As far as I am aware, nothing remains of Fr McNab's writings. (See Nailon 2004 for

speaking control of the language, and that he used it in teaching and religious services—see, for example, Remi Balgalai's comment quoted on p. 34 above.

Fr Alphonse's description of Nyulnyul is a sketch grammar of approximately twenty pages (Tachon 1895) covering most basic nominal and verbal morphology. The bulk of the analysis is reasonable; he recognised pronominal prefixes to Ns, postpositions (which he interpreted as cases), and verbal tenses, moods and voice. He correctly identifies -in (his -en) as the ergative marker—in his terminology, the marker of the subject of an active verb), and includes some remarks on its distribution. He also identified the range of pronominals, including yay (his iaio) 'me and you', though he did not analyse the system correctly, treating it as distinguishing inclusive/exclusive in the first person non-singular (see §4.6.1).²

Fr Alphonse's dictionary (Tachon n.d.) is quite substantial. However, although most of the entries are readily identified, he did not understand the sound pattern of the language. Tachon failed to distinguish initial ng from n, and indeed frequently confuses the two in other environments also. Nor did he distinguish between the two r-sounds, the tap and the trill, or between apico-alveolar and apico-postalveolar articulation in stops, nasals and laterals. The wordlist itself betrays Fr Alphonse's primary purpose, missionising: there are entries for a variety of concepts that would be useful in translating religious material (e.g. 'adulterer', 'adulteress', 'angel', 'beget', 'expiate', 'idleness', 'immortal', 'lewd', 'obscenity', etc.). Many of these entries involve translation of concepts, as in his term for 'bigamist' wurombang maler injer, which literally means 'having many wives' (phonemically, wurrumbang malirr-inyirr 'many wife-COM'); in other cases words are glossed in terms most appropriate to the Christian religious register (e.g. kurwol (i.e. kurrwal) is given under 'heaven' and 'paradise', but not under 'sky'). Various other domains are not so as well represented as would be expected for a word list of the present size, including flora, fauna, kinship and artefacts. See McGregor (2000a) for a fuller appraisal of Fr Tachon's work.

It is of interest to cite the following comments about the Nyulnyul language by Fr Alphonse in a letter to his aunt, this being one of the earliest recorded observations on the language:³

There are more words in it [i.e. Nyulnyul—WMcG] than in Caledonia. The language is harmonious although there are too many z's. They are down to earth and here is an example: to say 'I love you' they say literally, 'I give you my stomach', or 'I give you my breath.' They laughed at me when I told them it would be better to say, 'I give you my heart.' I will have to create words. (Letter from Fr A. Tachon to his aunt, dated 20th May 1891, cited in Zucker 1994:32; original held in Abbaye Notre-Dame de Sept-Fons, Dom Pierre-sur-Besbre, France).

Fr Nicolas Emo, a Spanish Trappist, who arrived in Beagle Bay in 1895, and spent the rest of his life in the Kimberley region, may also have undertaken some investigations of the Nyulnyul language. Nekes & Worms (1953) refer in their bibliography to a manuscript of his on the language dated 1895. I have not seen this work, and there appears to be little else

Tachon did not use this terminology. What he says is: 'nous; iarede, lorsque celui à qui l'on parle est compris dans nous; nous: ierada, lorsque il n'y est pas compris ...' (Tachon 1895:4).

Interestingly, the body-part metaphor mentioned in this quote appears no longer to be used, although it is attested in Nekes & Worms (1953). As to the metaphor of 'giving breath to', Tachon is presumably referring here to an idiom involving *liyan*, one of the senses of which is 'breath'; however, there are also good reasons to believe that this word also has the sense 'heart' in Nyulnyul—and perhaps also proto-Nyulnyulan (Stokes & McGregor 2003:64).

in the way of references to linguistic work by this priest.⁴ (Nailon 2005a, 2005b provide information on the life and missionary work of Fr Emo; little is known of his linguistic work, however.)

At the turn of the twentieth century, as has already been mentioned, the Trappist order relinquished the Beagle Bay Mission, which was shortly afterwards taken over by the Pallottine order. At the same time the Western Australian Minister for Lands requested a report on the improvements effected to the 10,000 acres that had been granted to the Beagle Bay Mission, to ascertain whether the conditions of the lease had been met. In August 1900 Bishop Gibney, Dean Martelli and Daisy Bates set off for the Kimberley to undertake the documentation and inventorying of, and the repairs to, the mission lands and chattels. During her four months on the mission, Bates recorded information about the culture, and some words (see Bates 1938/1966, 1985)—as well as observations of day-to-day life on the mission.

Soon afterwards, Daisy Bates joined her second husband, Jack Bates, at Roebuck Plains station, near Broome, where she lived for a year (Bates 1985:5). During this time she gained a considerable amount of information about the Aborigines of the region, including information about the Nyulnyul language and people; some of this appears in print, scattered throughout Bates (1985). She also began compiling 'a Broome dictionary, of several dialects and 2,000 words and sentences, with notes of innumerable legends and myths' (Bates 1938/1966:45). Possibly what she is referring to here is Bates (n.d.b), which includes words provided by three individuals, Billingee from Willie Creek, who presumably spoke Jukun, Wabbingan from Beagle Bay, who spoke the Yowera dialect of Nyulnyul (see §1.1), and Beejee from Broome, who presumably spoke either Jukun or Yawuru. Unfortunately, this document does not specify the linguistic provenance of any words. A number are, however, clearly identifiable as Nyulnyul—e.g. wamb 'man' and eebaal ~ eebal 'father' (note the absence of final a, which occurs in the Yawuru cognates). This is a reasonably extensive wordlist, of fairly good quality, and covering most of the expected semantic domains (body parts, human relationships, flora, fauna, the elements, and a variety of verbs). Also included is a list of short sentences, many of which appear to be in Nyulnyul; an example is ngai mallerjan 'she is my wife'—orthographically, ngay malirr jan (I wife my), which is perfect Nyulnyul.

The first Pallottine missionary to take an interest in the Nyulnyul language and culture was Fr Henry Rensmann, who took over as superior of the Beagle Bay Mission in 1903. He began learning Nyulnyul, and used it in religious instruction (Walter 1982:157). According to Durack (1969/1985:170), he also began compiling a dictionary of the language. However, he drowned the following year, and nothing seems to remain of his work.

Shortly afterwards, Fr Joseph Bischofs arrived in Beagle Bay, and took charge of the mission. Like Frs Alphonse Tachon and Henry Rensmann, he soon began giving religious instruction in Nyulnyul (Walter 1982:162). However, unlike his predecessors, Fr Bischofs was not interested in Nyulnyul solely for missionising purposes; he also had a scholarly interest in the people and their language. He published a short, fairly general piece on the Dampier Land peoples in 1908 in the journal in *Anthropos* (Bischofs 1908), as well as a comment on the absence of totems among the Nyulnyul, also in the same journal (Bischofs 1909). He had Fr Tachon's sketch of Nyulnyul typed up and slightly edited, and also the wordlist, which he reworked with English glosses replacing the French of the original; he

⁴ According to Durack (1969/1985:220), Fr Nicolas had always been a keen collector of artefacts, though he apparently had little understanding of Aboriginal people.

also made some adjustments to the spelling of the Nyulnyul words, without, however, significantly improving the consistency or accuracy of representation. My guess is that he did this for his own use, to assist him learn the language—I am not suggesting that he deliberately plagiarised Fr Alphonse Tachon's work in a bid to take the credit for it himself.⁵ According to Walter (1982:162) he also translated various items of religious texts and liturgy into the language; it seems likely, however, that the translations he used were also substantially based on Fr Tachon's earlier work.

Fr Bischofs is notable for being the first person to make an audio recording of a Kimberley language (see Koch 2000; McGregor 2008c:419–420). He cut some thirty wax cylinders at the Beagle Bay Mission in 1910, on a phonograph provided by the Berlin Phonogramm-Archiv. Approximately forty minutes of Nyulnyul songs, music, and speech (a multi-party conversation which I have been unable to transcribe—see §1.9) were recorded.

The first professionally trained investigator to work with the Nyulnyul people appears to have been the German physical anthropologist Hermann Klaatsch, who probably visited Beagle Bay for a few weeks in 1906 and 1907. According to Walter (1982:164), Professor Klaatsch collected artefacts and made a number of 'anthropological measurements'—presumably cranial measurements. (See also Durack 1969/1985:359–360.) He also investigated aspects of traditional Nyulnyul beliefs and social organisation.

Fr Wilhelm Droste, who arrived in Beagle Bay in 1909, apparently took some interest in the language and culture of the Nyulnyul people. He wrote articles on various aspects of the culture, and is said to have compiled a grammatical description of Nyulnyul (Walter 1982: 13).⁶ It has also been claimed that he preached in the language (Williams 1999).

Alfred R. Radcliffe-Brown makes reference, in his lengthy article on social organisation in Australia (Radcliffe-Brown 1930), in relation to the Nyulnyul kinship system, to his own fieldnotes of 1912. It seems likely that he obtained his information from Nyulnyul men incarcerated on Bernier Island in a hospital for Aborigines suffering from venereal disease, which he visited during the course of the Cambridge University anthropological expedition he led (see e.g. Bates 1985:7–8).

Adolphus P. Elkin, subsequently professor of anthropology at the University of Sydney, visited Beagle Bay in late 1927, during a field trip to the Kimberley. He stayed there for six weeks, during which time he gathered a considerable amount of information about Nyulnyul culture—especially kinship, land tenure, and religion. By his own account, he worked for at least four hours per day with knowledgeable old men, including Felix Ngurdinybur, then aged over 75. His unpublished description of Nyulnyul social

Both works are mistakenly attributed to Fr Bischofs in the catalogue of the library of the Australian Institute of Aboriginal and Torres Straits Islander Studies, without any indication of the original source. It seems most likely that archivists attributed the works to Fr Bischofs because they were found amongst papers held by the Bishop of Broome. In fact, the sketch grammar contains no indication of either date or author (though the fact that it was written in French should have made the archivists suspicious), while the word list contains the attribution 'P. Bischop', amended by hand to 'Bischofs'—hardly a mistake the man himself would have made. It thus seems unlikely that Fr Bischofs was a party to the attribution of the works to him.

⁶ Nekes & Worms (1953) make reference to a 1908 manuscript description of the language by Fr Droste; this date must, however, be wrong, since he did not arrive in Australia until the following year. My suspicion is that the manuscript they refer to is the typed-up version of Fr Tachon's sketch grammar, which (as mentioned in the previous footnote) included no indication of author or date.

organisation, Elkin (n.d.d), is the most detailed and perceptive account of traditional Nyulnyul society available.

As we have already seen, Elkin recorded a number of Nyulnyul toponyms (see Map 1-3), kin terms, and so on; he also transcribed a few song texts, two of which appear in Elkin (n.d.c). He used a broad phonetic notation, which he probably learnt during his years as a PhD student in London. Overall, the quality of his transcriptions is good, and the bulk of the transcribed words are relatively easily identified. He distinguished between the two rhotics, writing the retroflex frictionless continuant as r, the trill as \tilde{r} (he sometimes missed the latter in word-final position, however, as e.g. in his representation of *yalirr* 'mother-in-law' as *yala*); he also distinguished the velar nasal, word initially as well as medially (although he missed a number of them in the former position). He does not appear, however, to have been aware of the contrast between apico-alveolar and apico-postalveolar articulation in stops, nasals and laterals (apparently first recognised by John McConnell Black in the late 1910s—Black 1917, 1920). He also used five vowel symbols, augmented by a variety of diacritics which are left unexplained, and which presumably follow the system he learnt in London in the early 1920s. (Some of the diacritics may well represent r-colouring of the vowel, and thus indirectly retroflection of the nearby consonant.)

Elkin's unpublished notebooks (housed in the Archives of Fisher Library in the University of Sydney) contain a wealth of important information on the Nyulnyul language and culture. Notebook III (Elkin 1927–1928), for instance, contains the transcription of a corroboree in Nyulnyul, 'Turtle song', which Elkin says was sung when the west wind blew, a special increase song for fish. There is also a linguistic notebook of approximately 20 small pages (Elkin n.d.b). This consists mainly of verb paradigms; but there are also a number of Ns with postpositions attached.

Around the same time, the social psychologist Stanley Porteus also worked with the Nyulnyul people, having been invited by A.R. Radcliffe-Brown to study Aboriginal psychology. In 1928 he undertook an expedition through the Kimberley, in the course of which he visited Beagle Bay. He administered various psychological tests to the locals. A very readable account of his expedition can be found in Porteus (1931), which also gives information on the history of Beagle Bay, life in Beagle Bay in the late 1920s, biographical information on the major figures in the community, and cultural information. It also provides discussion of the psychological tests which Porteus deployed. Unfortunately, however, Porteus says nothing substantive about the Nyulnyul language.

Following the removal of Fr Joseph Bischofs from the Beagle Bay Mission as an enemy alien in the mid 1910s, no Pallottine missionary seems to have displayed much interest in either the traditional culture or language of the Nyulnyul until the arrival of Frs Ernest Worms in 1930 and Hermann Nekes in 1935. Collaborating together for the next thirteen years until Fr Nekes' death—for some time from opposite sides of the continent, as Fr Worms had taken up a post in Melbourne in 1938—these two men recorded a considerable amount of information on Dampier Land and nearby languages, including Nyulnyul,

Fr Nekes worked as a missionary in Cameroon from 1901–1909, where he studied Yaunde ('Ewondo'), a Bantu language, and wrote a number of books and articles on this language. He subsequently took up a post as lecturer in West African languages in the Seminary for Oriental Languages in Berlin, and from 1916 lectured on misology, ethnology and linguistics at the philosophical and theological academy of the Pallottine Province in Limburg. He met Fr Worms in 1918, when the latter was a student in the academy. According to Durack (1969/1985:288) it was because he became so interested in Worms' work in Australia that Nekes came to Australia, to work with his former student. (See Worms 1953; Durack 1969/1985:280–292; Capell 1964; Nekes & Worms 2006:4–12 for further biographical details.)

Jabirrjabirr, Ngumbarl, Bardi, Nimanburru, Yawuru and Nyikina. Fr Nekes used Beagle Bay as his base, until sickness forced him to move to Melbourne in 1942, where for the remainder of his life he continued analysing the material gathered in Beagle Bay by himself and Fr Worms. Fr Worms also undertook a number of field trips to other parts of the continent, gathering information on languages of the East Kimberley, Queensland (including Dyirbal) and New South Wales. He returned to the Kimberley in the late 1940s after a ten year absence; on this occasion he was posted to Balgo. During his short stay there he produced a brief piece on Kukatja (Worms 1958).

The information they gathered on Nyulnyul includes lexical material, verb paradigms, sentences, and a few texts. Although they did not produce a grammar or dictionary of Nyulnyul (or any other language, for that matter), much of the material they gathered appears in their *magnum opus*, Nekes & Worms (1953) (published as Nekes & Worms 2006), as well as various articles authored by the two men separately (see Nekes & Worms 2006:36–40 for a full listing of their works). Nekes (n.d.) also contains a good deal of lexical and morphological information on Nyulnyul.

Although they did not use the term 'phoneme', they were aware of the phonemic principle, and their transcriptions of Nyulnyul are roughly phonemic—and on the whole relatively accurate. They were aware of the distinction between the apical glide r and the tap rr, and realised that the velar nasal could occur word initially—and generally correctly identified it when it did. Unlike previous investigators, they distinguished apico-alveolar stops, nasals and laterals from the corresponding apico-postalveolars, distinguishing the latter by means of a dot under the letter. Unfortunately, this diacritic was sometimes eradicated by penny-pinching editors in published works (e.g. in Nekes 1938, under the editorial pen of A.P. Elkin).

Fr Worms was less interested in descriptive linguistics than Fr Nekes, and less of a linguist. He wrote papers on a variety of topics in linguistics and anthropology, including belief systems, the sense of smell, mythology, religion, and art. None of these is specifically devoted to Nyulnyul, though a reasonable amount of information on the Nyulnyul can be gleaned from them.

Fr Francis Hügel, who had arrived in Australia at the same time as Fr Worms, also maintained an interest in Aboriginal customs and languages. A long-time resident of Beagle Bay, he ultimately produced a Nyulnyul prayer and hymn book (Huegel 1938–1971). He advised me in 1985 (pers.comm.) that he had collected many myths from the Beagle Bay people, some possibly in the Nyulnyul language; regrettably no information is available on the whereabouts of the recordings and/or transcripts. During the 1960s and 1970s he also recorded the life stories of a number of Beagle Bay residents, which have since appeared in print, together with life stories told to Sr. Brigida Nailon in the 1980s (Nailon & Huegel 1990).

Subsequent to the research of Frs Nekes and Worms, virtually no serious linguistic research was done on Nyulnyul until the late 1970s, although in the intervening years various anthropologists and linguists had recorded small amounts of mainly lexical information.

Arthur Capell was the first professional linguist to record information on Nyulnyul.⁸ During his 1938–1939 field trip through the Kimberley and Arnhem Land, he visited

⁸ Gerhardt Laves visited the Dampier Land region in late 1930, also at the instigation of Radcliffe-Brown. There is no evidence that he recorded anything on Nyulnyul; he worked mainly on Karajarri, less on Bardi (see e.g. Bowern 2003, 2008a).

Beagle Bay Mission, and gathered a small amount of information there (Capell 1940:433). It seems unlikely, however, that Capell stayed long; nor did he do much work on the language. He recorded much more information on Nyikina and Warrwa (Capell 1952/1953), probably because these languages had not been very intensively worked on. Howard Coate, a missionary linguist and long-time collaborator of A.P. Elkin and A. Capell, also recorded some information on the language during his brief stay on Sunday Island in the late 1940s; however, little of this remains: he informed me that he destroyed all of these manuscripts (McGregor 1996d), although some have been subsequently found (Bowern 2004a).

In 1950 the Summer Institute of Linguistics (SIL) linguist Wilfred Douglas, who had been working as a missionary to the Bardi people on Sunday Island from 1947, put together a short description and vocabulary of Nyulnyul (Douglas 1950), possibly as an essay for the SIL course he attended that year (Oates 2003). This was based entirely on information recorded previously by Arthur Capell, and does not represent any advance on Fr Tachon's description written over half a century previously.

The anthropologist Norman Tindale gathered a vocabulary of around sixty basic items in Nyulnyul, presumably during his 1952–1954 expedition (Tindale 1952–1954). Almost all items are readily identified. Tindale employed a type of broad phonetic transcription, and overall his representations are good. The list consists almost entirely of nouns: terms for body parts, flora, fauna, and a few designating the elements and environment. The most interesting feature of his list is that the prefixing body-part terms are almost all given in the second person singular form—e.g. 'njilə'bæb (nyilabab) 'your ear'—rather than in the third person singular form, the usual citation form (see §4.2). Presumably Tindale elicited the items by pointing to his own body parts!

At approximately the same time Fr Kevin McKelson was stationed in Beagle Bay Mission for a short while. There is no evidence that he recorded any Nyulnyul or undertook any research on the language.

The anthropologists Helmut Petri and Gisela Odermann briefly visited Beagle Bay in the mid 1950s, while they were undertaking intensive studies of Nyangumarta. They make occasional mention of Nyulnyul people, culture, and language in their anthropological writings.

In 1966–1967 Fr Anthony Rex Peile appears to have made audio recordings of a considerable number of Kimberley languages, including Nyulnyul. I have no information on the nature or quality of materials he recorded in the Nyulnyul language, though it is unlikely to have been very extensive.

During her 1968 field trip to the Kimberley district, the ethnomusicologist Alice Moyle visited Beagle Bay, en route to Lombadina. She recorded a few *liljin* songs from Remi Balgalai, then aged in his eighties, as well as one composed by him. The songs contain many lexical items which I am unfamiliar with, and it is possible that these are special song words, and/or that they are actually Jabirrjabirr words, this being Remi Balgalai's mother tongue (which is, of course, mutually intelligible with Nyulnyul). Balgalai is prompted by a Nyulnyul woman, Susie Anadj, but again the language is uncertain. Some conversation can be heard in the background, though I have been unable to transcribe it.

In the years 1967–1968, the linguist Nora Kerr undertook two periods of fieldwork on Nyikina, funded by the then Australian Institute of Aboriginal Studies. Towards the end of her second field trip of 1968 she began fairly hastily collecting lexical items in other languages of the Broome area, primarily for purposes of comparison with Nyikina. Kerr recorded a number of Nyulnyul words from one Flora Williams, then residing in Broome. In her unpublished comparative wordlist, Kerr (n.d.) includes just over 250 Nyulnyul words,

from her standard 538 item list (which was based on a list included in *Linguistic materials* for fieldworkers, published by Australian Institute of Aboriginal Studies). These are transcribed in a broad phonetic notation. The quality of the transcription is overall good, and the bulk of the items included are readily identified.

In 1979 Bronwyn Stokes, who was then working intensively on Nyikina, tape-recorded two texts in Nyulnyul, one narrated by Albert Kelly (Text 2), the other by Rosie Victor (Text 5). These are, to the best of my knowledge the only extant tape recordings of Nyulnyul texts other than my own, and perhaps the recording of texts by Albert Kelly made by his sister Magdalene some years ago (see below). Stokes transcribed and translated both texts, and kindly made the recordings and transcriptions available to me.

A few years later, in 1982, one Leon Barwell (concerning who I have no biographical information) recorded some two hours of Nyulnyul elicitation with Albert Kelly. Not having access to this recording I am unable to comment on its quality.

In 1984, while conducting their pilot study of the language situation and needs in the Kimberley, Joyce Hudson and Patrick McConvell recorded a small selection of words in Nyulnyul (reproduced in Hudson & McConvell 1984), and interviewed a part speaker. My work on Nyulnyul began in the following year (see §1.9).

Finally, Nyulnyul people themselves have been involved in the process of documenting and recording information about their language and culture. In 1985 Magdalene Williams played to me a recording made some years previously by her brother, Albert Kelly, with her assistance, in an attempt to save the language for their grandchildren. This contained a few short texts in Nyulnyul, including a discussion of aspects of traditional Nyulnyul culture and lists of names of bird and animal species. ¹⁰ Like the Nyulnyul texts I recorded, these texts show quite a lot of mixing with English.

In 1987 the Aboriginal publishing house, Magabala Books, published a bilingual children's book in Nyulnyul and English, *The story of crow* (Torres & Williams 1987). This presents Magdalene Williams' version of the crow story in Nyulnyul, written with the assistance of Pat Torres, who also illustrated the book. In the same year, Merilee Lands edited a book on the bush foods of Dampier Land, which contains a number of Nyulnyul words for *may* 'vegetable food', given to her by May Howard and George Dann. This book was also published by Magabala Books (Lands, *et al.* 1987).

Six years later, Carmel Charles' story about the emu appeared, also published by Magabala Books (Charles 1993). Like Torres & Williams (1987), this was intended for children, and is in Nyulnyul with an English translation. It was put together, edited and translated by William McGregor from four or five different tellings of the story by Carmel Charles, who also provided assistance in the editorial process.

At the end of the twentieth century, Magabala Books published a second joint work by Pat Torres and Magdalene Williams, *Ngay janijirr ngank: this is my word* (Williams 1999). In this posthumously published work, Magdalene Williams provides some details

⁹ Almost all of the Nyulnyul lexical items are from the beginning of the list, suggesting that Kerr systematically elicited them in order from the standard list, and simply ran out of time. Thus her list contains numerous body-part terms (mainly given in their third person singular forms), some terms for artefacts, and a number of verbs. The most notable absences are in the domains of spatial and temporal adverbials, qualities, quantities, flora, fauna, pronominals, and determiners (deictics, indefinites, etc.).

¹⁰ I am grateful to Magdalene Williams for advising me of the existence of this recording, and playing it for me. The subsequent fate of this recording is not known to me. Whether it is identical with the abovementioned recording by Leon Barwell is uncertain; certainly I got the impression from Mrs Williams that these are two very different recordings.

concerning her life, and the life of some of her relatives (including Felix Ngurdinybur, her grandfather), information about traditional Nyulnyul culture, a number of traditional myths (told in English), and information about the history of Beagle Bay. Appended to the text is a wordlist of approximately 250 items, spelt in the same orthography as is used in Torres & Williams (1987).

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Index of names

Abelson, Robert P. 691 110fn, 113fn, 114, 118fn, 119fn, 132fn, Akerman, Kim 14, 15 136fn, 142fn, 144fn, 148fn, 149, 160, Aklif, Gedda 18fn, 47, 125, 136fn, 165fn, 164, 165, 228, 240fn, 243fn, 247, 250, 334fn, 352fn, 353, 390, 441, 445 251, 265, 266, 279, 312, 320, 321, 324, Allan, Keith 544 325fn, 327, 332, 341, 358fn, 382fn, 441, Alpher, Barry 680 446, 477fn, 487fn, 504fn, 516fn, 527fn, Alsina, Alex 446 538fn, 544fn, 559fn, 591, 596, 597, 660, Amberber, Mengistu 446, 447 875fn, 876 Ameka, Felix 569–570 Bresnan, Joan 446 Anadj, Susie 876 Bybee, Joan 2fn Austin, Peter 33, 46, 161fn, 591, 661, 678, 680 Capell, Arthur 1, 3, 43, 44, 66, 121fn, 155, 331, 705, 875–876 Carroll, Peter J. 707 Baker, Brett 446, 447, 448 Balgalai, Remi 6, 21, 26fn, 29, 35, 876 Chafe, Wallace 574, 653 Bally, Charles 121 Chappell, Hilary 188, 624 Barshi, Immanuel 606 Charles, Dominic 34, 36 Barwell, Leon 877 Charles, Mary Carmel 7, 25, 29, 32, 33–34, Bates, Daisy 1fn, 3, 17, 20, 21, 22–23, 23fn, 36, 39, 40–41, 47, 48, 49, 50, 65fn, 68, 25, 27, 706, 870, 872, 873 98, 142fn, 197, 327, 376, 390, 391, 395, 396, 706, 708, 709, 711, 734, 740, 749, Beejee 872 Benveniste, Emile 159fn, 386, 582, 587 877 Berlin Phonogramm-Archiv 705, 706, 873 Christie, William M. 41 Berndt, Catherine H. 14, 16, 816 Clark, Herbert H. 470, 680, 686 Berndt, Ronald M. 14, 16, 816 Clark, Lawrence 29 Bever, Thomas G. 676 Clement, Cathie 26 Billingee 872 Clendon, Mark 108, 676 Bindon, Peter 27 Coate, Howard H.J. 20, 155, 331, 876 Bischofs, Joseph 23, 36, 68, 114, 705, 706, Comrie, Bernard 591 746, 872–873, 874 Cornish, Hamlet 870fn Biskup, Peter 29 Coulmas, Florian 686 Black, John McConnell 874 Cox, Lena 33 Blake, Barry 140fn, 155, 164, 398 Craig, Collette 544 Bolinger, Dwight 41, 411, 420 Croft, William 547 Borsley, Robert D. 649fn Bowern, Claire L. 1, 3, 8fn, 9fn, 10fn, 12, Dann, George 877

Darwin, Charles 51

20fn, 24fn, 34fn, 38, 62fn, 80, 81, 101fn,

Davidse, Kristin 564, 599 Davidson, W.S. 27, 28 Dench, Alan 46, 47, 405, 678 Dik, Simon 310, 435, 447 Dixon, Robert M.W. 25, 33, 44, 45, 61, 76, 94, 125fn, 136fn, 137, 176, 425, 520, 544, 546 Donaldson, Tamsin 33 Dorian, Nancy 46 Douglas, Malcolm 26 Douglas, Wilfred 876 Droste, Wilhelm 20fn, 873 Dryer, Matthew 547 Du Bois, John W. 548 Durack, Mary 26, 27, 31, 35, 872 Durie, Mark 574

Elkin, Adolphus P. 1fn, 6, 7–10, 11, 12, 14, 15–20, 22, 23–24, 25, 27, 29, 34fn, 706, 873–874, 876

Emo, Nicolas 35fn, 871–872 Evans, Nicholas 329, 405, 668fn, 704

Foley, William 680 Forest, Alexander 26

Gerrig, Richard J. 470, 680, 686 Geytenbeek, Helen 643 Givón, Talmy 309, 346, 621, 676 Goddard, Cliff 63, 159fn, 653, 678 Green, Ian 331, 482 Green, Jennifer 18fn, 24fn Green, Rebecca 355fn Greenberg, Joseph 48, 115fn, 153, 155, 267, 547

Hale, Kenneth 547, 580, 582, 606, 608, 644, 661, 678
Halliday, Michael A.K. 51, 53, 54, 310, 371, 435, 575, 649fn, 654fn, 680, 686, 696
Hamilton, Philip 80
Harvey, Mark 164, 398, 405, 446, 447, 448
Hasan, Ruqaiya 371, 691
Haspelmath, Martin 547, 649
Haviland, John 25, 168
Heath, Jeffrey 398, 681
Himmelmann, Nikolaus P. 51, 62, 186, 415fn

Hinrichs, Erhard 446 Hjelmslev, Louis 53 Hoddinott, William G. 331 Holmer, Nils 2fn Hopper, Paul 301, 316, 649fn, 676 Horrocks, Geoffrey 435 Hosokawa, Komei 17, 25, 35, 44, 65, 86, 125, 136fn, 144fn, 145fn, 150fn, 153, 157, 160, 164fn, 165, 167, 178, 182, 233, 247, 248fn, 250, 251, 264, 267, 301, 317, 320, 321, 322, 332, 336, 337fn, 338, 341, 342, 385, 420, 446, 448, 455, 471fn, 580, 591,660 Howard, May 877 Hudson, Joyce 37, 38, 168, 331, 388, 877 Hudson, Richard 54, 55

Huegel, Francis *see* Hügel, Francis Hügel, Francis 3, 7, 21, 27, 28, 29, 32, 33, 34, 35, 705, 875

Jelinek, Eloise 571 Johnson, Edward 331 Jones, Barbara 168

Kalarlang 24, 744
Kalotas, Arpad C. 240
Kathol, Andreas 446
Kelly, Albert 32, 41, 46fn, 47fn, 48, 197, 711, 877
Kemmer, Suzanne 582
Kerr, Nora 37, 876–877
Kimberley Language Resource Centre 38
Klaatsch, Hermann 14, 23, 873
Koch, Grace 706, 873
Koch, Harold 247
Kofod, Frances 331

Ladefoged, Peter 70
Lands, Merilee 12, 734, 877
Langacker, Ronald 52, 450, 649fn
Laughren, Mary 26
Laves, Gerhardt 875fn
Lehmann, Christian 679
Lennard, Maudie 16fn
Levinson, Stephen 53, 219, 220, 223, 287, 305, 564, 569–570, 629, 700
Longacre, Robert E. 435
Love, James R.B. 393

Lyons, John 114fn, 398

Maddock, Kenneth 708 Marker, Freddy 16fn, 18fn Martin, James 870fn Martin, James R. 676 Matthews, Peter H. 55, 63, 436 Matthiessen, Christian 676 McConvell, Patrick 25, 33, 34, 36, 37, 38, 380, 877 McGinnis, Martha 591 McKay, Graham 44, 153, 661, 676, 678 McKelson, Kevin 33fn, 37, 876 McNab, Duncan 27, 870fn Metcalfe, Toby 114, 167, 247, 250, 279, 320, 321, 337fn, 341, 341fn, 571 Miestamo, Matti 303, 309, 346, 621 Mithun, Marianne 574, 653, 678 Mohanan, Tara 446 Moyle, Alice M. 706, 876 Mushin, Ilana 136fn, 137, 360

Nailon, Brigida 3, 6fn, 7, 21, 27, 28, 29, 32, 33, 34, 35, 870fn, 872, 875

Nakazawa, Tsuneko 446

Nash, David 331

Nekes, Hermann 2fn, 6, 12, 16fn, 22, 25, 34, 39fn, 42, 44, 47, 48, 66, 69, 75, 85, 86, 96, 98fn, 102fn, 114, 118, 122, 123, 130fn, 132fn, 135, 143, 145fn, 147, 149, 158fn, 160, 161fn, 163, 177, 178fn,

180fn, 204, 214, 217fn, 220, 221, 243fn, 250, 260, 272fn, 274, 274fn, 275fn, 279, 287, 312, 317, 318, 325, 326, 327, 358fn, 360, 364, 366, 367, 382, 383, 393fn, 430, 451, 461, 502fn, 504fn, 537, 571, 576, 577, 591, 660, 748, 751–752, 874–875

Neville, A.O. 28

Oates, Lynette 3, 876

Ngurdinybur, Felix 6, 10, 24, 27, 37, 39fn, 152, 279fn, 705, 744, 745, 873

Nichols, Johanna 62, 186, 203, 415fn, 598, 601, 676

Nordlinger, Rachel 80, 164, 405, 446

O'Dowd, Elizabeth 649fn, 661, 676, 677, 678, 679 O'Grady, Geoffrey 3 Oates, William 3 Odermann, Gisela 876

Pagliuca, William 2fn
Patz, Elisabeth 580
Payne, Doris 606
Peile, Anthony Rex 26fn, 876
Pensalfini, Robert 166
Perkins, Revere 2fn
Petri, Helmut 14, 18, 24, 25, 876
Porteus, Stanley 10, 14, 23fn, 30, 31, 874

Quirk, Randolph 41

Radcliffe-Brown, Alfred R. 16, 17, 873, 874, 875fn
Reece, Bob 870
Reid, Nicholas 331
Reid, Wallis 316
Rensmann, Henry 36, 872
Richards, Eirlys 388
Rijkhoff, Jan 405
Robinson, Michael 6, 7, 18, 18fn
Ross, Belinda 98fn, 706, 707
Roth, Walter E. 27
Ruhl, Charles 544
Rumsey, Alan L. 16, 25, 33fn, 63, 78, 108, 137, 292, 331, 572, 588, 680, 681, 697fn

Saulwick, Adam 132 Schank, Roger G. 691 Schmidt, Annette 46 Schmidt, Wilhelm 1 Schultze-Berndt, Eva 62, 186, 219, 331, 336, 415fn, 446, 500, 544 Sells, Peter 446 Senft, Gunter 544 Shackcloth, Irene 27 Sharp, Janet 331, 388 Silverstein, Michael 44, 173, 420fn, 448, 661, 677, 678fn Simpson, Jane 398, 547, 687 Smith, Moya 240 Stokes, Bronwyn 1, 3, 4, 5, 25, 37, 41, 42, 43, 44, 46fn, 48, 50, 78, 80, 102, 109fn, 121fn, 125, 132, 136fn, 144fn, 151, 153, 155, 157, 158, 160, 164fn, 165, 165fn, 167, 168fn, 178, 193, 247, 248fn, 250,

251, 267, 275fn, 279, 291, 302fn, 320, 321, 324, 324fn, 327, 332, 338, 385, 388, 446, 580, 591, 660, 669, 705, 711, 744, 871fn, 877
Strawson, P.F. 309, 346
Sutton, Peter 47
Svartvik, Jan 41
Swartz, Stephen 398, 643

Tachon, Alphonse 21, 35, 42, 66, 118, 122,

240, 250, 279, 312, 318, 324, 325, 392, 420fn, 445, 455, 465, 481, 482, 487, 488, 497, 502, 505fn, 506, 521fn, 524, 538, 669, 705, 746, 751, 870-871 Taglicht, Josef 348 Talmy, Leonard 676, 677 Tannen, Deborah 682, 686 Thieberger, Nicholas 33 Thompson, Sandra 301, 676, 677 Tindale, Norman 3fn, 6, 876 Torres, Pat 32, 38, 49, 50, 57, 65fn, 264fn, 375, 557, 616, 634, 694, 705, 877, 878 Townsend, David J. 676 Traugott, Elizabeth 649fn Trubetzkoy, Nikolai S. 76, 100 Tryon, Darrell 331 Tsunoda, Tasaku 46, 78, 86, 88, 168, 331,

Van Valin, Robert D. 310, 435, 649fn, 680 Vandelanotte, Lieven 696 Vászolyi, Erik 331 Velasco, Daniel G. 405 Ventola, Eija 691

382

Verstraete, Jean-Christophe 300 Victor, Rosie 41, 744, 877 Vološinov, V. 679, 696

Wabbingan 872 Wagner, Tamsin 300, 301, 303, 305, 309, 346, 622, 658, 665 Walsh, Michael 47 Walter, Georg 20, 21, 22, 27, 28, 30, 35, 36, 36fn, 226, 746, 870, 873 Wierzbicka, Anna 687 Wilkins, David 24fn, 52, 219 Williams 616 Williams, Flora 876 Williams, Magdalene 3, 12, 24, 32, 38, 39, 41fn, 47, 49, 50, 57, 65fn, 241, 264fn, 375, 557, 616, 634, 694, 705, 706, 877 Wilson, Stephen 446 Worms, Ernest A. 2fn, 6, 12, 14, 16fn, 18, 21, 22, 24, 25, 31, 34, 36, 42, 47, 48, 66, 69, 75, 85, 86, 96, 98fn, 102fn, 114, 118, 130fn, 132fn, 135, 143, 145fn, 147, 149fn, 160, 161fn, 163, 177, 178fn, 180fn, 214, 217fn, 220, 221, 243fn, 250, 260, 272fn, 274, 274fn, 275fn, 279, 287, 312, 317, 318, 325, 326, 327, 358fn, 360, 364, 366, 367, 382, 383, 393fn, 430, 451, 461, 502fn, 504fn, 537, 571, 577, 591, 660, 668, 705, 706, 751–752, 874–875

Yulugut, Senanus 33

Wurm, Stephen A. 3

Zucker, Margaret 27, 37, 870, 871

Index of languages

Aboriginal English 32, 33, 34, 479fn, 523fn Aranda *see* Arrernte Arrernte 18fn, 24fn

Bardi 4, 10, 12, 16fn, 18fn, 20fn, 34, 36, 38, 43, 47, 47fn, 48, 59fn, 62fn, 66, 80, 81, 101fn, 110fn, 113fn, 114, 118fn, 119fn, 122, 125, 132fn, 136fn, 142fn, 144fn, 149, 160, 164fn, 165, 165fn, 167, 228, 240fn, 243fn, 247, 250, 251, 258, 265, 266, 267, 284, 312, 320, 321, 324, 325fn, 332, 334fn, 337fn, 341, 341fn, 352fn, 353, 376fn, 390, 392, 395, 430, 441, 445, 487fn, 504fn, 527fn, 545, 571, 591, 596, 597, 643, 660, 666fn, 875, 875fn Broome Pearling Lugger Pidgin 35 Bunuba 125fn, 164, 331fn Bunuban languages 3, 43, 564, 572

Daly River languages 331 Djaabugay 580 Dyirbal 875

English 18, 35, 36, 46, 48, 49, 59fn, 125, 126, 128, 130, 139fn, 158fn, 159fn, 175fn, 178fn, 188, 228, 240fn, 364, 370, 376fn, 380, 386, 389, 410, 411fn, 419, 430, 447, 484, 534, 547, 550, 558, 567, 654fn, 680, 682, 686, 706

French 35, 66

Gaagudju 405 Gooniyandi 5, 10fn, 18fn, 50fn, 73, 78, 86, 88, 97fn, 118, 125fn, 128, 129fn, 135fn, 137, 157, 164, 167, 168, 193, 195fn, 219, 230, 233, 234fn, 331fn, 337, 354fn, 355fn, 380, 382, 385, 388, 398, 401, 405, 406fn, 410, 416, 419, 462, 545, 547, 578, 582, 586, 609, 643, 644, 653, 676, 677, 677fn, 680, 682, 689, 690, 696, 707

Greek 682 Gunin/Kwini 78fn Gunwinygu 707 Gurr-Goni 355fn Guugu Yimidhirr 168, 220

Jabirrjabirr 4, 7, 10, 34, 134fn, 145fn, 147, 221, 258, 268fn, 279, 332fn, 338, 339, 364, 367, 375, 379fn, 383, 384, 391, 392, 430, 451, 457fn, 492, 504fn, 524, 538fn, 560, 591, 595fn, 596, 610, 660fn, 668, 701, 705, 706, 875

Jaminjung 164, 500, 544

Jaminjungan languages 331

Jarrakan languages 1fn, 43

Jaru 78, 86, 88, 168, 331, 382, 392

Jawi 4, 12, 43, 441

Jingulu 164

Jukun 4, 379fn, 872

Karajarri 5, 239, 331, 338fn, 392, 875fn Kayardild 405 Kija 331 King Sound Group *see* Nyulnyulan family Kriol 34, 292 Kukatja 5, 875

Malay 870fn Mantharta languages 678fn Mardudjara 18fn Marrithiyel 482 Martuthunira 46, 405 Miriwung 331 Ngaanjatjara 168 Ngaliwurru 164 Ngarinyin 5, 78, 137, 164, 331, 697fn Ngumbarl 4, 34, 875 Nimanburru 3fn, 4, 7, 10, 12, 34, 145fn, 221, 279, 338, 364, 390, 591, 875 non-Pama-Nyungan languages 57, 63, 140fn, 155, 164, 291, 679 Nunggubuyu 70 Nyangumarta 5, 331, 388, 643, 876 Nyikina 4, 18fn, 44, 78, 80, 102, 125, 132, 136fn, 144fn, 155fn, 157, 160, 164fn, 165, 165fn, 167, 178, 193, 218fn, 239, 247, 250, 251, 267, 279, 302fn, 320, 321, 324, 332, 332fn, 385, 388, 445, 446, 514fn, 580, 591, 643, 660, 669, 875, 876 Nyulnyul Warrawij dialect 3 Yowera dialect 3, 872 Nyulnyulan family 1–3, 4–5

Pama-Nyungan languages 88, 176, 679 Pidgin English 35 pre-Nyulnyul 109, 121, 155 pre-proto-Nyulnyulan 114, 291 proto-Mirndi 164 proto-Nyulnyulan 109fn, 121fn, 132, 153, 155, 164, 165, 168fn, 170, 221, 275fn, 317, 324fn, 327, 336, 353fn, 545, 660

Tok Pisin 292

Umiida 39, 46 Unggarrangu 39 Unggumi 5, 39, 46

Walmajarri 5, 168, 331, 388 Wambaya 164, 405 Wangkajunga 168, 382 Warlpiri 331, 398, 547, 582, 606, 643 Warrwa 4, 44, 78, 94, 98fn, 124, 132, 136fn, 144fn, 157, 158, 160, 165, 167, 178, 219, 220, 226, 247, 250, 251, 267, 268fn, 279, 302fn, 307, 320, 321, 338, 349fn, 355fn, 388, 429, 441, 445, 448, 471fn, 578, 591, 596, 597, 609, 653, 660, 669, 697fn, 706, 707, 876 Worrorra 39, 235fn, 331, 393 Worrorran languages 57, 121fn Wunambal 331

Yankuntjatjarra 653 Yaunde 874fn Yawijibaya 39, 46 Yawuru 4, 44, 65, 86, 125, 136fn, 144fn, 145fn, 157, 160, 164fn, 165, 167, 178, 182, 218fn, 233, 247, 248fn, 250, 251, 264, 265, 267, 279, 301, 317, 320, 321, 322, 332, 332fn, 334fn, 337fn, 338, 341, 385, 392, 420, 445, 446, 448, 455, 471fn, 591, 643, 660, 872, 875

General index

ablative ₁ postposition 152, 189–193, 215, 238 adnominal uses 190 complementiser use 673, 675 derivational uses 190, 330 intraclausal relational uses 192–193 on adverbials 190 on preverbs 458	allative ₁ postposition 197–200 complementiser use 673, 674–675 on inflecting verbs 319 projected involvement sense 199 purposive sense 198 allative ₂ postposition 200 animacy hierarchy 173 applicative constructions 539–540, 591–592
ablative ₂ postposition 193–195, 614	benefactive 594–595
contrast with ablative 193	comitative 595–596
in external possession constructions 609	instrumental 596-597
on adverbials 227	locative 592–594
ablative ₃ postposition 195–197, 395, 490 complementiser use 660, 667	applicative marker 168fn, 248, 317–318, 325
contrast with ablative ₂ 196–197	complementiser use 660, 668, 669, 675
on inflecting verbs 319	diachronic source of 669
Actor role 63, 571, 573	apprehensional constructions see under
adjectives	paratactic clause complexes, hypotactic
absence of 113	clause complexes
see nominals	'arise, stand up' inflecting verb
adverbial compounding 243	as main verb 528
adverbials 59, 60, 63	as verb classifier 529–530
morphological modification of 243	artefacts see material culture
relation to other parts-of-speech 210	aspect see imperfective aspect
see also adverbs, spatial adverbials, temporal adverbials	Assiniboine pronominal system 48, 115, 267, 320
adverbs	attitudinal modification 54, 620
of collective action 215–217	attribution 54, 431
of completion 214–215	attributive possession 157, 158, 420–425
of lacking 217–218	absence of alienability contrast 420
of manner and intensity 171, 211–214	augmented number 153, 269
vs preverbs 542–543	avoidance style 25
afterthoughts 363, 554, 686	
in separate intonation units 641	backchannels 40fn, 41fn, 386
Agent role 571, 573	backgrounding
non-nuclear 579, 591	function of imperfective aspect 316
Aktionsart 449, 544	in complex sentences 676, 677

Basic Locative Construction 569	clitics
'be' inflecting verb	coherent 103
as main verb 456–457	non-coherent 103
in relational clauses 456–457,	comitative postposition 172–178
565–566	adnominal functions 175-176
as verb classifier 457–461	derivational functions 176–177
Beagle Bay Mission 27–32, 876	uses of 173–177
dormitory system 29	vs instrumental 177–178
sociolinguistic situation 32–34	comparative construction 654–655
belief modification 627–630	complement clauses 328
body parts	see emotional complements, epistemic
as instruments 169	complements
as paths 203	complementisers 660, 661
in metaphors 871fn	general 667–668
instruments 174–175	see also under postpositions
see also prefixing nouns	complex predicates see under compound
unusual or exceptional 145	verb constructions
bound pronominals	complex sentence constructions see clause
in inflecting verbs 247–248	complexes
morphological type 248fn	compound verb constructions 45
see also pronominal enclitics,	formal properties 442–443
pronominal prefixes	grammatical structure of 446–448
systems of 48	inflecting verbs used 443–446
•	problems with complex predicate
'carry' inflecting verb	analysis 446–448
as main verb 512–513	productive inflecting verbs 445–446
as verb classifier 514–519	reflexive/reciprocal 451–456
reflexive/reciprocal form 513	see also verb classification
case marking see postpositions	compounds see adverbial compounding,
clarification 54, 431	nominal compounding, compound verb
clause complexes 45	construction
cross-clause reference constraints 679	conception beliefs 20, 24
emic significance of types 678	conjugation classes 44, 291–300
see also embedding, complement	correlation with transitivity and valency
clauses, hypotactic clause complexes,	291, 294, 295–296
paratactic clause complexes, reported	na-class 292–294
speech, reported thoughts	overlap in membership 296–300
clauses	ø-class 294–296
flat structure hypothesis 398	conjugational relations 54, 55
initial position in see theme	interclausal 649
verbal 45	conjunctions 55, 393–397
transitivity types 45	connate roles 571
verbless 45	ergative-absolutive orientation 574
'climb' inflecting verb	consonant clusters 78–81, 82–85
as main verb 541	frequencies of 93–94
as verb classifier 541–542	in monosyllabic roots 95

in reduplications 83–85	of nominals see under nominals
intermorphemic 82–83	of preverbs see under preverbs
phoneme frequencies in 88–89	determiners
consonants	adverb 218–219
feature system 76–77	comparative 127–134
in root final position 78	distributive sense 131
places of articulation 43	reciprocal sense 131–132
constituency relations 53, 55	definite 124–127
continuers see backchannels	as conjunction 204
conversation	contrast with third person minimal
single audio recording of 705, 873	pronominal 158–159
coordination see paratactic clause	demonstratives 123–124
complexes	interrogative 134–139
counterfactual	complementiser use 138
conditionals 658, 665	dialogic formulae 50
sense of irrealis mood 305–307	direct quotation see under reported speech
cranberry morphs 141, 152	discontinuity
stress assignment in 102	of noun phrase complexes 432–433
C	of noun phrases 398, 547
dative postposition 178–183	discourse functions 644
adnominal uses 182–183	formal properties 643–644
day	disjunction 363
phases of 238–239	ditransitive clauses 587–588, 593
days	role structure 575
of the week 240–241	
deafness	elaborating clauses see under relational
affects on intonation 40	clauses
affects on speech 40–41, 68	elaboration 54
death-wailing 706	ellipsis
deictic categories	-
_	in noun phrases 554
in reported speech 681–682, 685	in noun phrases 554 of noun phrases 548–549, 638
in reported speech 681–682, 685 deictic centre	<u> </u>
<u> </u>	of noun phrases 548–549, 638
deictic centre	of noun phrases 548–549, 638 of verb phrases 638–639
deictic centre in reported speech 687	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651
deictic centre in reported speech 687 in reported thoughts 696	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701
deictic centre in reported speech 687 in reported thoughts 696 demonstratives <i>see under</i> determiners	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699
deictic centre in reported speech 687 in reported thoughts 696 demonstratives <i>see under</i> determiners dependency relations 54, 55	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699 non-finite 698–699
deictic centre in reported speech 687 in reported thoughts 696 demonstratives see under determiners dependency relations 54, 55 in verbal clauses	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699 non-finite 698–699 non-finite vs finite 699–700
deictic centre in reported speech 687 in reported thoughts 696 demonstratives see under determiners dependency relations 54, 55 in verbal clauses accompaniment 603–604	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699 non-finite 698–699 non-finite vs finite 699–700 enclitics 63–64
deictic centre in reported speech 687 in reported thoughts 696 demonstratives see under determiners dependency relations 54, 55 in verbal clauses accompaniment 603–604 privative 605	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699 non-finite 698–699 non-finite vs finite 699–700 enclitics 63–64 interpersonal modifying 376–386
deictic centre in reported speech 687 in reported thoughts 696 demonstratives see under determiners dependency relations 54, 55 in verbal clauses accompaniment 603–604 privative 605 see also secondary predicates	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699 non-finite 698–699 non-finite vs finite 699–700 enclitics 63–64 interpersonal modifying 376–386 see also postpositions
deictic centre in reported speech 687 in reported thoughts 696 demonstratives see under determiners dependency relations 54, 55 in verbal clauses accompaniment 603–604 privative 605 see also secondary predicates interclausal 649, 651–652	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699 non-finite 698–699 non-finite vs finite 699–700 enclitics 63–64 interpersonal modifying 376–386 see also postpositions enhancement 54
deictic centre in reported speech 687 in reported thoughts 696 demonstratives see under determiners dependency relations 54, 55 in verbal clauses accompaniment 603–604 privative 605 see also secondary predicates interclausal 649, 651–652 range of types 652	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699 non-finite 698–699 non-finite vs finite 699–700 enclitics 63–64 interpersonal modifying 376–386 see also postpositions enhancement 54 'enter' inflecting verb
deictic centre in reported speech 687 in reported thoughts 696 demonstratives see under determiners dependency relations 54, 55 in verbal clauses accompaniment 603–604 privative 605 see also secondary predicates interclausal 649, 651–652 range of types 652 see also relational clauses, hypotactic	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699 non-finite 698–699 non-finite vs finite 699–700 enclitics 63–64 interpersonal modifying 376–386 see also postpositions enhancement 54 'enter' inflecting verb as main verb 531
deictic centre in reported speech 687 in reported thoughts 696 demonstratives see under determiners dependency relations 54, 55 in verbal clauses accompaniment 603–604 privative 605 see also secondary predicates interclausal 649, 651–652 range of types 652 see also relational clauses, hypotactic clause complexes, paratactic clause	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699 non-finite 698–699 non-finite vs finite 699–700 enclitics 63–64 interpersonal modifying 376–386 see also postpositions enhancement 54 'enter' inflecting verb as main verb 531 as verb classifier 531–532
deictic centre in reported speech 687 in reported thoughts 696 demonstratives see under determiners dependency relations 54, 55 in verbal clauses accompaniment 603–604 privative 605 see also secondary predicates interclausal 649, 651–652 range of types 652 see also relational clauses, hypotactic clause complexes, paratactic clause complexes	of noun phrases 548–549, 638 of verb phrases 638–639 embedding 650–651 emotional complements 698–701 finite 699 non-finite 698–699 non-finite vs finite 699–700 enclitics 63–64 interpersonal modifying 376–386 see also postpositions enhancement 54 'enter' inflecting verb as main verb 531 as verb classifier 531–532 epenthesis 107, 108–110

ergative postposition 165-168, 420fn	generation terms 17–18
in intransitive clauses 167–168, 577–578	not generation moieties 18
loss of 48–49	'get' inflecting verb
on non-finite clauses 650	as main verb 490-491
optional 166–167, 572	as verb classifier 490–497
Event role 440–442	'give' inflecting verb
exchange and trade networks 14–16	as main verb 484–485, 588
'exchange' inflecting verb	as verb classifier 485–489
as main verb 451	glides
in quasi-transitive clauses 579	phonetic realisation of 71–72
as verb classifier 451–456	'go' inflecting verb
existential clauses see presentative clauses	as main verb 462–463
expectation modification	as verb classifier 463–468
clause level 630–631	grammatical changes
experiential roles	see also under language attrition
conflations of 574–575	simplification 32
non-nuclear 590–591	grammatical constructions 546
nuclear 571–575	grammatical relations 53–55
tier of 572–573	as signs 546
experiential semiotic 53, 54	greetings 50
extending clauses <i>see under</i> relational	
clauses	'have' inflecting verb 587
extension 54	'hit' inflecting verb
across intonation units 641	as main verb 519–521
external possession constructions 606	as verb classifier 521–522
differently marked 606, 608–610	horde countries 7–9
identically marked 606-608	hordes 9
identically marked vs differently marked	hypotactic clause complexes
609	apprehensional 666
see also topic predicative possession	attribution 672–673
construction	causal 663
	conditional 665–666
'fall' inflecting verb	hypothetical 665
as main verb 525–526	elaboration 670–671
as verb classifier 526–528	enhancement 673
farewells 50	reason 663, 668
favourite construction see external	spatial 661–662
possession constructions-identically	temporal 662, 663–665, 667–668
marked	hypotaxis 54
fieldwork methodology 41	••
fish traps 11	identification 54, 431
frames of reference see spatial frames of	in verbal clauses see under secondary
reference	predicates
free pronominals see pronominals	in verbless clauses see under relational
future tense	clauses
in mands 289–290	illocutionary modification 54, 620
meanings of 287–291	clause level 631–632
morphology of 283–287	

Ilocano pronominal system 48, 153, 269,	interjections 59, 61, 62, 63, 386–393
321	in delocutive use 386
imperatives see under future tense	internal possession see attributive
imperfective aspect	possession
discourse use of 316–317	interpersonal modification
meanings of 312–316	of clauses 619
morphology of 311–312	interpersonal semiotic 54
impersonals 576–577	interrogatives see under particles
Implicated role 571, 573	intonation units 639–643, 707
inalienability 420fn, 609	relation to information units 639
indefinites see under particles	intransitive clauses 577–579
indexicals 55	reflexive/reciprocals 578–579
indirect quotation see under reported speech	role structure 575
infinitives 249	irrealis mood
main clause uses 329–330, 589–590	in negation 621
morphology of 323–327	meanings of 303–310
uses of 327–330	morphology of 300-302
inflecting verbs 59, 61	non-past
ambicategorial 296–300	meanings of 304–305, 307–309
frequencies of 437–438, 439	past
function in compound verb constructions	meanings of 303, 305–307
447, 449	scope of 310
item-arrangement formula 246, 249, 301, 323	temporal categories distinguished 301, 303
non-finite forms see infinitives	
overlap with other parts-of-speech 260	kinship 16–19
reduplication see under reduplication	Aranda system 16
reflexive/reciprocal derivation 248,	Nyulnyul system 16
264–265, 324	
frozen 259	language attrition
irregularities 266–267	grammatical changes in 48–49
prefix 265–266	lexical changes in 46–48
semantics 267	phonological and phonetic changes in 46
suffix 266	structural changes in 46–51
root allomorphs 260	language shift 34–37
root suppletion 274	laterals
roots 250–259	phonetic realisation of 71
tense-mood-aspect marking 248	lexical knowledge
information units 639–643	of part speakers and rememberers 32–33,
initiation rituals 21	34
Instrument role 168, 605–606	linguistic sign 52–53
instrumental postposition 168–172	linking relations 54
derivational uses 170–171	listing 641
on adverbs 213	locative construction <i>see under</i> relational
on preverbs 536	clauses
uncertain allomorphs of 208–209	locative postposition 183–189
uses of 169–171	adnominal use 188–189
insubordination 329, 704	complementiser use 660, 661–663, 674
	30111111111111111111111111111111111111

derivational uses 330	negative presentative construction 349-350,
in external possession 188	426, 611, 625–626
in secondary predication 186	new characters
on inflecting verbs 318	strategies for introduction of 640
temporal senses of 185	nominal compounding 152–153
logical semiotic 54	coordinate 152
	specifying 152–153
markers 55	nominalisation
marriage 18–19	hierarchy 677–678
missionary influence on 28	of clauses 661
material culture 12–14	nominals 59, 60
medio-active clauses 45, 167, 579–582	stem forming suffixes 142–150
embedding in 650–651	nominative agnations 297–299
role structure 575	non-finite clauses 645–648
medio-passives see medio-active clauses	as nominalisations 676-678
Medium role 571, 573	in attrubuting relational clauses 328,
non-nuclear 590–591	672–673
middle clauses 166, 582–585	in clause complexes 647
contrast with other clause types 582	in hypotaxis 673–675
role structure 575	in parataxis 671
minimal number 153, 269	referential use of 328
minor clauses 352, 549–550	structure of 645–647
see also interjections	temporal 329
missionary linguistics 870–872, 872–873,	non-root morphemes
874–875, 876	syllable shapes in 97
mood see irrealis mood	noun phrase complexes 427–432
mortuary rituals 21–23	attribution 432
myths 705–706	clarification 432
	identification 431–432
names and reference 10, 152	noun phrases
nasal assimilation 111	conjunction of 428–430
nasal deletion 111	Deictic role 405
nasals	disjunction of 430–431
phonetic realisation of 71	ellipsis of 45
negation	Entity role 410
and irrealis mood 303–305	grammatical roles in 402-413
focus of 348, 622	possessive see attributive possession
of clauses 621–626	pre vs post entity contrast 418–420
of elaborating clauses 623	Predicator role 410–413
of extending clauses 623–625	Qualifier role 406–410
of noun phrases 354, 355–356, 425–427	structure of 402
of presentative clauses 625–626	unit status of 398
of verbal clauses 621–622	word order contrasts 413–418
scope of 347–348, 350–352, 622	word order generalisations 399-401
see also under particles	noun prefixes see prefixing nouns,
negative commands 353, 357, 364	pronominal prefixes
negative possessive construction 624–625	nouns see nominals

number prefixes	past tense
to inflecting verbs 268–270	irregular inflections 273–275
number see augmented number, minimal	meanings of 275–278
number	morphology of 270–273
numerals 406, 411	patrilineal descent groups 8
position in noun phrases 416–417	pauses 706–707
see also quantifiers	performatives 688–689, 695
•	perlative postposition 200–203
oblique pronominals see under pronominals	personal sphere 121–122, 608
obscenities 25	phonaesthesia 337–338
optional ergative case marking see under	phoneme
ergative postposition	alternations 75–76
orthographies for Nyulnyul 38	contrasts 67–68
	frequencies 86–94
Pallottine missionaries 27, 35–36, 872,	inventory 43, 65
872–873, 874–875	phonemic principle
paratactic clause complexes 653	early awareness of 875
apprehensional 658–659	phonetics and phonology
conditional 658	early work on 66
elaboration 655–657	phonotactics 43
noun phrase attribution 656-657	of roots 77–81
noun phrase identification 655-656	phrase order see word order
extension 653–655	place hierarchy 80
linguistic significance of 659–660	and phoneme frequency 86, 93
manner 658	'place' nominal
spatial 657	as dummy 567
temporal 657	as generic 136–137
parataxis 54	in collocation with inflecting verbs 441
participant roles 53, 571	in compounds 152
nominative-accusative orientation 574	in cranberry morphs 152
particles 59, 61, 345–346	'poke' inflecting verb
borrowings from English 364	as main verb 478–479
dubitive 362–364	as verb classifier 479–483
expectation 365–375	polymorphemic words
scope of 366, 371	syllable structure of 97–98
unusual uses of 367, 369–371	possession see also attributive possession,
interpersonal functions of 346	external possession constructions,
interrogative 358–361	possessive clauses
position of 358–359	possessive clauses
unusual uses of 359–360	comitative 559–560
negative 346–357	oblique 558–559
as interjections 352, 353, 354	postpositional phrases 160
position of 348–352	complexes with adverbials 433-434
unusual uses 353, 355	position in noun phrases 414–415
probability see dubitive	postpositions 44, 63, 160–165
parts-of-speech see word and morpheme	adnominal functions 162
classes	complementising functions 162, 672, 673
	derivational functions 162

forms 161	privative see negation-of noun phrases
functions 162	probability modification
in proto-Nyulnyulan 164–165	clausal 626–627
intraclausal relational functions 162	probability modifiers see under particles
on inflecting verbs 318–320	pronominal enclitics to inflecting verbs
placement of 160	accusative 248, 292, 320–323
sequences of 162–164	omission in transitive clauses 587
use on adverbials 243	alternations 322
'pour, spill' inflecting verb	case system 320–321
as main verb 534–535	oblique 179fn, 248, 320, 321–322
as verb classifier 535	in middle clauses 582
prefixing nouns 114–123	person-number system 320
compounding 120	pronominal prefixes
derived 119	to inflecting verbs 63
listing of 117–119	accusative 291
E	
root allomorphy 120–121	nominative 247, 268
see also under pronominal prefixes	system 267–268
semantic range 121–122	to nominals 63, 114–117
present tense	use on other lexical types 64, 122–123
irregular 280–281	pronominal system 44, 114–115, 153
irregular suffix 279	changes to 48, 155–156
meanings of 281–283	number categories 44
recent changes in morphology of 49fn,	see also augmented number, minimal
279	number
regular 278–280	see also Assiniboine pronominal system,
presentative clauses	Ilocano pronominal system
see also negative presentative	pronominals 59, 61
construction	cardinal forms 153
presentative constructions 456	use of 156–157
verbal clauses 564–565	emphatic forms 153, 154
verbless clauses 550–551	use of 158
presuppositions	free 153–159
in complex sentences 676–677	case forms 153–154
in negation 346	case functions 156–158
preverbs 59, 60	number categories 153
conjunction of 334	oblique forms 153, 154–155, 411
derived	position in noun phrases 416
in compound verb constructions	use of 157
457–458	system 48
grammatical characteristics 332–336	pseudo-transitive clauses 470
high frequency 439	purposive constructions 327
collocating inflecting verbs 440	'put' inflecting verb
phonotactic regularities 336	as main verb 497–500
reduplication 341–343	as verb classifier 500–508
stem forming suffixes 338–341, 343–344	transitivity associations 500
use outside of compound verb	•
constructions 333–334, 344	Quantifier role 406
valency 335	-

quantifiers 139–141	restrictive 656
universal 140	subordinate 670
quasi-passives see medio-active clauses	religious liturgy
quasi-transitive clauses 579	Nyulnyul translations of 705
role structure of 575	repetition
quotation see reported speech	in separate intonation units 642
	reported speech 469, 470, 680–681
-R 'poke' inflecting verb	absence of clause of speech 682
reflexive/reciprocal form in compound	and highlighting 694
verb constructions 483	as demonstrations 680fn, 687
reduplication 85	dependency analysis of 680
in infinitives 324	direct 681–684, 690
in inflecting verb roots 259	direct vs indirect contrast 686–689
in nominal roots 150–151	embedding analysis of 680
of adverbials 244–245	framing analysis of 680–681, 686, 690
of inflecting verbs 261–262	indirect 469, 684–685, 690
semantics of 262–264	narrative functions of 690–695
of nominals 150–151	perception perspective 689
of prefixing nouns 120	placement of clause of speech 682–683,
semantics of 150, 341–342	685
reflexive/reciprocal clauses <i>see</i> intransitive	within reported speech 694
clauses	reported thoughts 471, 695–697
reflexive/reciprocal inflecting verb see	narrative functions of 696
'exchange' inflecting verb	restatement
reflexive/reciprocals see under inflecting	in separate intonation units 642
verbs, compound verb constructions	resyllabification
Reichenbachian time line <i>see</i> time plane	of polymorphemic word 97–98
relational clauses	rhetorical modification 54, 620
identifying 559	clause level 620–631
verbal	rhetorical modifiers <i>see under</i> particles
elaborating 565–567	rhotic see tap/trill, glides
extending 567–568	roots
locative 569–570	syllabic structure of 94–96
purposive 569	3 , 114 010 811 810 811 81 81 81 81 81 81 81 81 81 81 81 81
source enhancement 570	sandhi
verbless	external 107
attributive 553–557	internal 108–112
identifying 552–553	'say, do' inflecting verb
identifying vs attributive 554	as main verb 469–472
locative 561–562	as verb classifier 472–478
non-inherent roles in 556–557	in reported speech 683
purposive 560–561	in verbal relational clauses 566
see also possessive clauses	intermediate transitivity of 469–470
source enhancement 562	scope 347–348
word order 554	seasons 239, 240
relative clauses 678	secondary predicates 186, 463, 529
locative marked 670	descriptive 600–602
non-defining 656	roles that can be attributed on 601
non-ucining 050	Total mai can be announced on 001

identifying 598–599	irregular assignment 100, 101, 102, 107
resultative 499–500, 602–603	phonetic correlates of 98–99
see also external possession	variation in assignment 105–106
constructions	stress assignment
temporal 602	and clitics 103–104
second-order nominals 114	in complex roots 101–102
sections 9, 17, 18	in free roots 100–101
'see' inflecting verb	in inflecting verbs 104–107
as main verb 522–523	in prefixing nouns 104
as verb classifier 523–524	in stems 102–103
reflexive/reciprocal forms 523	subordinate clause markers see
semblative postposition 206–208	complementisers
adonminal uses 206–207	subordination see hypotactic clause
complementiser use 207–208, 660,	complexes
666–667	syllabification rule 95
on inflecting verbs 320	syllable deletion 112
semiotic grammar 52–58, 546	syllable shapes 95
simple verb constructions 44	in monosyllabic roots 95
'sit (down)' inflecting verb	in polysyllabic roots 96
as main verb 532–533	see also under roots
as verb classifier 533	syllables
situation clauses see verbal clauses	strong 99
songs 706, 873, 874, 876	weak 72, 99–100
sonorance hierarchy 80	symbolic value of Nyulnyul 33
and phoneme frequency 86	
spatial adverbials 219–232	tags 359, 388, 695fn
compass points 220–223	tap/trill
deictic 230–232	phonetic realisation of 71
relative distance 226–228	temporal adverbials
vertical 223–226	absolute 238–241
spatial frames of reference	deictic 233–238
absolute 219	qualifiers 233–241
intrinsic 228–230	quantifiers 241–242
relative 229	temporal postposition 203–206
'speak' inflecting verb	complementiser use 205-206, 660,
as main verb 535–537	663–666
as verb classifier 538–539	hosted by a particle 361
speech representation see reported speech	in secondary predicates 203–204
speech styles 25–26	on inflecting verbs 319
'stand (up)' inflecting verb	tense see future tense, past tense, present
as main verb 530	tense
as verb classifier 530	territory of the Nyulnyul 5–7
standard of comparison 128-129	text and discourse
State-of-Affairs role 571	changes in 49–50
stop consonants	textural semiotic 54–55
phonetic realisation of 69–71	theme 633–638
stress 98–107	in elliptical clauses 637
degrees of 100	more than one in a clause 637

scene setting 633	environmental circumstances 617
subject matter 633	modes of being
'throw' inflecting verb	contrast with verbless relational
as main verb 539–540	clauses 563–564
as verb classifier 540–541	role of verb phrase 563
time plane 275, 277, 303	non-finite see under non-finite clauses
topic predicative possession construction	transitivity types 575–577
610–611	verbless clauses 546
toponyms 10, 11, 113	see also presentative clauses, relational
totemism 23–24	clauses
transitive clauses 166, 585–587	vowel
role structure 575	coalescence 111
unmarkedness of 586	deletion 111
Trappist missionaries 27, 35, 705, 870–872	harmony 110
	lengthening 707
Undergoer role 571, 573	vowel insertion
	see epenthesis
valency 449, 544	vowel sequences
vectorial configuration 449, 544	intermorphemic 82
verb classification 544–545	vowels
comparison with other Nyulnyulan	distinctiveness of length 65
languages 545	feature system 77
see also under compound verb	in root-initial position 77–78
construction	phonetic realisation of 72–74
semantic basis of 449–450, 544	
verb phrases	'wander' inflecting verb
nature of 435–436	as main verb 508–509
non-finite 648	as verb classifier 509–512
role of adverbs 542–543	weather clauses 556, 567, 576
verbal clauses 546, 562	word
enhancement relations in 611	see also under word types
causal 618	senses of the term 57–59
involvement 619	word and morpheme classes 43, 57–64
location 615–616	multifunctionality of 61–63
purpose 618	word order 547–548, 632–633
spatial	in non-finite situation clauses 647
direction 613–614	see also under noun phrases
extent 614–615	word types
location 612–613	distributional 57
path 615	lexical 59
temporal	phonological 57, 100
extent 617	written texts 705