

PACIFIC LINGUISTICS

Series A - No. 58

PAPERS IN AUSTRALIAN LINGUISTICS, No. 12

by

C.S. Street
H. Geytenbeek
K. Glasgow
M. Garner



Department of Linguistics
Research School of Pacific Studies
THE AUSTRALIAN NATIONAL UNIVERSITY

PACIFIC LINGUISTICS is issued through the *Linguistic Circle of Canberra* and consists of four series:

- SERIES A - OCCASIONAL PAPERS
- SERIES B - MONOGRAPHS
- SERIES C - BOOKS
- SERIES D - SPECIAL PUBLICATIONS

EDITOR: S.A. Wurm.

ASSOCIATE EDITORS: D.C. Laycock, C.L. Voorhoeve, D.T. Tryon, T.E. Dutton.

EDITORIAL ADVISERS:

- | | |
|---|---|
| B. Bender, University of Hawaii | J. Lynch, University of Papua
New Guinea |
| D. Bradley, University of Melbourne | K.A. McElhanon, University of Texas |
| A. Capell, University of Sydney | H. McKaughan, University of Hawaii |
| S. Elbert, University of Hawaii | P. Mühlhäusler, Linacre College,
Oxford |
| K. Franklin, Summer Institute of
Linguistics | G.N. O'Grady, University of
Victoria, B.C. |
| W.W. Glover, Summer Institute of
Linguistics | A.K. Pawley, University of Hawaii |
| G. Grace, University of Hawaii | K. Pike, University of Michigan;
Summer Institute of Linguistics |
| M.A.K. Halliday, University of
Sydney | E.C. Polomé, University of Texas |
| A. Healey, Summer Institute of
Linguistics | G. Sankoff, Université de Montréal |
| L. Hercus, Australian National
University | E. Uhlenbeck, University of Leiden |
| N.D. Liem, University of Hawaii | J.W.M. Verhaar, University of
Indonesia, Jakarta |

ALL CORRESPONDENCE concerning *PACIFIC LINGUISTICS*, including orders and subscriptions, should be addressed to:

The Secretary,
PACIFIC LINGUISTICS,
Department of Linguistics,
School of Pacific Studies,
The Australian National University,

Canberra, A.C.T. 2600.
Australia.

Copyright © The Authors.
First published 1980.

The editors are indebted to the Australian National University for help in the production of this series.

This publication was made possible by an initial grant from the Hunter Douglas Fund.

National Library of Australia Card Number and ISBN 0 85883 208 9

TABLE OF CONTENTS

	<i>Page</i>
REDUPLICATION IN MURINBATA by Chester S. Street	1
0. Orthographic Symbols	1
0.1. Abbreviations	2
1. Introduction	3
2. The Nature of Reduplication in Various Languages	3
3. The Nature of Reduplication in Murinbata	4
4. Reduplication in Verbs	5
4.1. Plurality, Repetition, (Habitual Aspect)	5
4.1.1. Reduplication and Aspect	6
4.2. The Formation of Nouns	8
4.3. The Formation of Adjectives	8
5. Reduplication in Nouns	9
6. Reduplication in Adjectives	10
7. Phonological Conditioning of Reduplication in Verbs	10
7.1. Exceptions	13
<i>Appendix I</i> - Paradigm of Incorporated Object Affixes	14
<i>Appendix II</i> - List of Verb Roots that Reduplicate	15
<i>Appendix III</i> - List of Verb Roots that do not Reduplicate	18
<i>Bibliography</i>	20
CONTINUOUS AND DISCONTINUOUS NOUN PHRASES IN NYANGUMARDA by Helen Geytenbeek	23
0. Preface	23
0.1. Abbreviations	24
0.2. Orthography	24
0.3. Introduction	24
1. Head - Modifier Phrases	25

	<i>Page</i>
1.1. Modifiers	25
1.1.1. Adjectives	25
1.1.2. Demonstratives	25
1.1.3. Possessives	26
1.1.4. Nouns and Pronouns	26
1.1.5. Numerals	26
1.2. Restrictions on Modifiers	27
1.3. Word Order	28
1.4. Case and Concord	29
1.5. The Head	29
2. Co-ordinate Phrases	30
3. Relator - Axis Phrases	30
4. Appositional Phrases	31
5. Discontinuity	32
6. Summary	34
<i>Bibliography</i>	35
CLAUSE-LEVEL TAGMEMES OF BURARRA by Kathleen Glasgow and Mark Garner	37
0. Introduction	37
0.1. Abbreviations and Symbols	38
1. Overview	40
1.1. Clause Types - Summary	40
1.2. Clause-Level Tagmemes	41
1.3. Interrupted Tagmemes	42
1.4. Repeated Tagmemes	43
1.5. Maximal and Minimal Clauses	44
1.6. Ordering of Tagmemes	45
2. Clause Types and their Predicate Tagmemes	46
2.1. Intransitive	46
2.2. Transitive	48
2.3. Intransitive Stative	49
2.4. Transitive Stative	51
2.5. Descriptive	52
3. Participant Tagmemes	54
3.1. Subject	54
3.2. Object	55
3.3. Benefactive	56
4. Lateral Tagmemes	57
4.1. Indirect Object	57
4.2. From	59

	<i>Page</i>
4.3. Location-Instrument	59
4.4. Time	62
4.5. Aspect	63
4.6. Manner	64
5. Peripheral Tagmemes	65
5.1. Mood	65
5.2. Indeterminate	66
5.3. Vocative	69
6. Varieties of Verb Form and their Functions	69
6.1. Non-Past Subjunctive	70
6.2. Non-Desiderative	71
6.3. Imperative	71
6.4. Non-Past Declarative	73
6.5. Past Declarative	73
6.6. Past Subjunctive	74
6.7. Negation	74
6.8. Repeated Action	75
7. Conclusion	76
<i>Appendix A - Outline of Burarra Phonology and Orthography</i>	77
<i>Appendix B - Conjunctions</i>	79
<i>Bibliography</i>	81

THE RELATIONSHIP OF VERB AFFIXATION AND CLAUSE STRUCTURE IN

MURINBATA by Chester S. Street	83
0. Abbreviations	83
1. Introduction	84
1.1. Peripheral Tagmemes	85
1.2. Subject, Object and Indirect Object Tagmemes	86
1.3. Predicate	86
1.4. Verb Affixes	86
1.5. Clause Types	87
1.6. Reflexive Clauses	87
2. The Transitive Goal/Instrument Clause	88
3. The Transitive Source Clause	91
3.1. The Source Tagmeme	91
4. The Transitive Benefactive/Goal Clause	93
5. The Transitive Benefactive Source Clause	95
6. The Verbal Stative Clause	97
7. The Di-Transitive Clause	98
8. The Intransitive Clause	101

	<i>Page</i>
9. The Intransitive Source Clause	103
10. The Intransitive Benefactive/Goal Clause	104
11. Summary	106
12. Clause Modes	106
12.1. The Imperative Clause	106
12.2. The Subjunctive Clause	108
12.3. WH- Interrogative Clause	108
12.4. The Yes/No Interrogative Clause	110
<i>Appendix - Incorporated Body Parts</i>	111
<i>Bibliography</i>	113

REDUPLICATION IN MURINBATA

Chester S. Street

0. ORTHOGRAPHIC SYMBOLS

The language spelling used throughout this paper is the literacy orthography, which is explained more fully in the following tables.

Table 1
VOWELS

	Front	Non-front
High	i	u
Non-high	e	a

Table 2
CONSONANTS

	Labial	Apico- alveolar	Retro- flexed	Lamino- a-pal.	Velar
Voiceless Obstruents	p	t	rt	th	k
Voiced Obstruents *	b	d	rd	dh	g
Nasals	m	n	rn	nh	ng
Laterals		l	rl	ly	
Medians	w	rr	r	y	

*dh is a fricative, b, d, rd and g are stops.

The Lamino alveo-palatal voiceless obstruent, voiced obstruent and nasal each have two allophones as follows. The dental allophones [t, d, n] only precede the non-front vowels a and u. The Lamino alveo-palatal allophones [t̪, d̪, ñ] only precede the front vowels i and e.

Examples of the voiceless obstruent allophones:

thapak	[t̪apak]	'fog/dew'
thimu	[t̪imu]	'nose'
madhalnu	[maɗalnu]	'I'll open it.'
dhekdeh	[d̪ekd̪ek]	'to play'
punhu	[p̪unu]	'liver'
kanhi	[kañi]	'this/here'

0.1. ABBREVIATIONS

a-pal.	alveo-palatal
C	consonant
du.	dual (i.e. two)
f.	female (i.e. a group of whom at least one is a female)
HA	habitual aspect
IO	indirect object
m.	male (i.e. a total male group)
NC	noun class
neg.	negative
pc.	paucal (i.e. a group numbering from three to approximately fifteen)
pl.	plural
R	reduplicated
sb.	siblings (i.e. brothers, sisters, or brothers and sisters)
sg.	singular
t.	tense
V	vowel

1. INTRODUCTION

"Reduplication is a morphological process that consists of the repetition of all or part of a root, stem or word in order to fulfil a specific semantic or syntactic function." (Johnston 1977:1) Or as described by Gerson (1969:59) in his useful little book on grammatical terms, "Reduplication is the repetition of the whole, or part, of a word, in order to form a derivative or inflected form."

This paper is an attempt to show the semantic function and phonological conditioning of reduplication in Murinbata¹.

2. THE NATURE OF REDUPLICATION IN VARIOUS LANGUAGES

Johnston's (1977:2,3) recent research has surveyed functions of reduplication in a number of languages as reported in the literature.

Berlin's (1963) work on the Tenejapa dialect of Tzeltal concluded that:

...the semantic features of augmentation, continuation, intensification (...), and to some extent onomatopoeia (as in the case of particles) are accomplished by the morphological process of reduplication.

Berlin lists the following kinds of intensification:

- (i) Quantity (i.e. substantival);
- (ii) Process (i.e. verbal);
- (iii) Quality (i.e. adjectival).

Key (1965) surveyed reduplication in 47 languages, mainly meso-American, and, according largely with Berlin, concluded that "Reduplication functions in many languages to indicate emphasis, or some shade of plurality or augmentative."

¹ Murinbata belongs to the Garaman language family which is a member of the Australian Macro-phylum family (Voegelin and Voegelin, 1977:135). It is spoken by approximately 900 people, the majority of whom live at Port Keats, N.T., 250 kilometres to the southwest of Darwin. A small number live on nearby cattle stations, with the largest groups at Auvergne Station N.T. and Kununurra, W.A.

The author wishes to sincerely thank Murinbata language helpers Harry Palada Kulampurut and Jumbo Dithi Dulla for their patient, willing and most able help in providing the data upon which this paper is based.

Thanks is also due to Noreen Pym (S.I.L.) for her very able and patient editorial assistance given in the production of this paper.

Early work surveying reduplication in Oceanic Austronesian languages was descriptive in character and was concentrated on Melanesia (Codrington 1885; Ray 1907; Capell 1937-39).

Codrington (1885:147, 191) found that reduplication applied to nouns and verbs, indicating for nouns qualities of plurality, magnification, and depreciation, and for verbs, qualities of repetition, continuation, and emphasis. Ray (1907:445ff, 461), reporting on southeastern Papua, found the same functions for reduplication in languages of that region, as Codrington had found in island Melanesia.

Capell (1937-39:770) also surveyed reduplication in south-eastern Papua, listing a number of functions of reduplication: (i) Intensification (ii) diminution (iii) formation of nouns from verbs (iv) marking of plurality and the collective function in nouns (v) the formation of adjectives (vi) the formation of the continuous tense in verbs (vii) the formation of nouns of instrument (according to Capell this is rare in Papua) (viii) the formation of a special form of the verb for use with the negative (which feature he attests only in Dobuan).

For Australian languages, Tryon (1970:13, 50) in his study of the Daly River languages, has discovered the wide usage of reduplication in these languages. In his analysis on one of these languages, Maranungku, he reports that reduplication of adjectives and verbs is a means of stressing plurality.

Also on Australian languages, Douglas (1964:78, 80) reports that, "Reduplication of adjectives may indicate an increased intensity of the state, or that the description covers a plural subject." He also shows how an adjective is formed by the reduplication of a noun stem.

3. THE NATURE OF REDUPLICATION IN MURINBATA

The discoveries made by the researchers mentioned above form a valuable introductory background to reduplication, as well as providing an introduction to the nature of reduplication in Murinbata.

The function of reduplication in Murinbata verbs, nouns and adjectives is:

VERBS: 1) plurality, repetition, (habitual aspect)
 ii) the formation of nouns
 iii) the formation of adjectives

NOUNS: plurality, emphasis

ADJECTIVES: plurality, augmentation

In concluding this section, it can be seen from above that a characteristic of reduplication in Murinbata is the distinctive division of function between verbs, nouns and adjectives, which is particularly noticable between verbs and nouns/adjectives.

4. REDUPLICATION IN VERBS

4.1. PLURALITY, REPETITION, (HABITUAL ASPECT)

When a verb root is reduplicated, either totally or partially, it signals either plurality of object or repetition of action, depending upon the verb being transitive or intransitive (Street 1977). Another factor also to take into consideration is whether or not the verb is marked to show some sort of plurality by incorporated object affixes. This complex set of affixes, if incorporated can slightly change the meaning of the reduplicated form. The meanings therefore, of reduplicated verb roots are seen to be as follows:

INTRANSITIVE VERBS: repetitive action (this is in contrast to a continuous action which is shown by a continuous aspect marker. Aspect markers are not covered in this paper.)

TRANSITIVE VERBS - without incorporated object affixation: plurality (i.e. more than one) of object

TRANSITIVE VERBS - with incorporated object affixation: a repetitive action towards the object(s)

It has been observed that the incorporated object affixes, used with the transitive verbs to indicate plurality, are normally only used when the object is human, or sometimes, as a matter of interest, if the object is a dog. (Dogs are put on a higher status than other animals, and are also included into the kinship system - see example 9.) Other animate and inanimate objects can be pluralised by the use of object affixation, but generally this is only done for emphasis or focus on that particular object(s). (See Appendix 1 for a complete paradigm of incorporated object affixes.)

At this point it needs to be said that not all verb roots can be reduplicated, either totally or partially, and there appears to be no logical explanation for this, either phonological or semantic. For a non-exhaustive list of verb roots which can be reduplicated, either totally or partially, see Appendix II.

Although not particularly related to the topic of this paper, Appendix III has a non-exhaustive list of verb roots that do not reduplicate, but rather substitute for another verb root to convey the

meaning of plurality or repetitive action.

4.1.1. Reduplication and Aspect

"Aspect shows the way the action was thought of or looked at by the speaker." (Gerson 1969:9)

Although aspect is not a productive function of reduplication, it has been included here because it is particularly relevant to the habitual aspect, in which the verb root in the reduplicated form, either totally or partially, is always used. This will be discussed more fully in a forthcoming paper on Tense, Mood and Aspect in Murinbata. See examples 2b, 6b, 7b and 17b.

EXAMPLES:

(1a) thamul ngu-dal-nu ngarra thay
spear I(sg.)-stand against-t. at tree
'I'll stand the spear against the tree.'

(1b) thamul ngu-dadal-nu ngarra thay
spear I(sg.)-stand against(R)-t. at tree
'I'll stand the spears against the tree.'

(2a) thelput ba-n-pak
house he(sg.)-t.-put
'He put (built) a house.'

(2b) thelput ba-n-pakpak wurran
house he(sg.)-t.-put(R) HA
'He always puts (builds) houses.'

(3a) ku ngalmungkirr mere yungi-purl-dha
 NC *pied goose neg. he(sg.)-pluck-t.*
'He didn't pluck the pied goose.'

(3b) ku ngalmungkirr mere yungi-wurlpurl-dha
 NC *pied goose neg. he(sg.)-pluck(R)-t.*
'He didn't pluck the pied geese.'

(4a) ku menti ba-rde-nu
 NC *turtle I(sg.)-hit-t.*
'I'll hit the turtle.' (i.e. to kill it)

(4b) ku menti ba-rderde-nu
 NC *turtle I(sg.)-hit(R)-t.*
'I'll hit the turtles.' (i.e. to kill them)

(5a) ku were pirra-ngarl-nu
 NC *dog he(sg.)-bark-t.*
'The dog will bark.'

- (5b) ku were pirra-ngarlngarl-nu
 NC dog he(sg.)-bark(R)-t.
'The dog will repeatedly bark.'
- (6a) nakurl nge-wirnturt-nu
 after I(sg.)-arise-t.
'I'll get up later.'
- (6b) nakurl nge-wirnturturt-nu ngurru
 after I(sg.)-arise(R)-t. HA
'Later I'll always be getting up.'
- (7a) nanthi yi ma-m-kale ngarra thay
 NC dilly bag she(sg.)-t.-hang in tree
'She hung the dilly bag in the tree.'
- (7b) nanthi yi ma-m-kalele wurran ngarra thay
 NC dilly bag she(sg.)-t.-hang(R) HA in tree
'She always hangs the dilly bag(s) in the tree.'
- (8a) ma-m-ngan-karlay
 he(sg.)-t.-we(pl.)-wave
'He waved to us.'
- (8b) ma-m-ngan-karlarlay
 he(sg.)-t.-we(pl.)-wave(R)
'He repeatedly waved to us.'
- (9a) ku were thu-rte-nu
 NC dog you(sg.)-remove-t.
'You will remove the dog.'
- (9b) ku were thu-n-rte-nu
 NC dog you(sg.)-they(pl.)-remove-t.
'You will remove the dogs.'
- (9c) ku were thu-n-rterte-nu
 NC dog you(sg.)-they(pl.)-remove(R)-t.
'You will repeatedly remove the dogs.'
- (10a) kunginire nganthi-n-punku-thut
 yesterday I(sg.)-t.-they(du.sb.)-descend
'Yesterday I took the two siblings down.'
- (10b) kunginire nganthi-n-punku-dhutthutthut
 yesterday I(sg.)-t.-they(du.sb.)-descend(R)
'Yesterday I repeatedly took the two siblings down.'

NOTE: This verb is actually a unique retriPLICATION of the verb root, rather than a reduplication.

4.2. THE FORMATION OF NOUNS

A large number of verb roots can be reduplicated, either totally or partially, to form a free form noun.

The following list gives a good sample of this particular function of reduplication.

English of Verb	Verb Root	Formed Noun	English of Noun
<i>to vomit</i>	be	bebe	<i>vomit</i>
<i>to shower/cool off</i>	dhuth	thudhuth*	<i>a shower (place)</i>
<i>to cross a river</i>	kath	kathkath	<i>a bridge</i>
<i>to wade</i>	kubuk	kubukubuk	<i>swampy area</i>
<i>to sharpen</i>	kurrk	kurrkurrk	<i>sharpening tool (a file)</i>
<i>to paint</i>	pak	pakpak	<i>a paint brush</i>
<i>to comb</i>	pek	pekpek	<i>a comb</i>
<i>to wash</i>	purl	purlpurl	<i>a washing place</i>
<i>to sweep</i>	puth	puthputh	<i>a broom</i>
<i>to paint on spots</i>	thak	thakthak	<i>a spot(s)</i>
<i>to dive</i>	thurrk	thurrthurrk	<i>a diving place</i>
<i>to rake</i>	werr	werrwerr	<i>a rake</i>
<i>to smoke</i>	wi	wiwi	<i>a cigarette</i>
<i>to sit</i>	wup	wupup	<i>a seat/chair</i>

*The voiced dh is replaced by its voiceless counterpart th because dh never occurs word initial.

4.3. THE FORMATION OF ADJECTIVES

A small number of verb roots can also be reduplicated, either totally or partially, to form a free form adjective.

Some adjectives thus formed also take the adjectival affix -mam- (as do some other adjectives) and some do not take it. There is no apparent reason for this.

The list below gives a sample of this particular function of reduplication.

English of Verb	Verb Root	Formed Adjective	English of Adjective
<i>to be cool</i>	burr	burrburr	<i>cold</i>
<i>to be bogged/stuck</i>	dharrkat	tharrkat- [*] tharrkatmam	<i>boggy (ground)</i>
<i>to stick</i>	let	letetmam	<i>sticky</i>
<i>to move fast</i>	puyut	puyutpuyut	<i>fast</i>
<i>to abuse/swear</i>	thelk	thelkthelk	<i>abusive/swear (word)</i>
<i>to smooth</i>	tidhal	tidhaltidhalmam	<i>smooth/slippery</i>
<i>to dry</i>	tum	tumtum	<i>dry</i>
<i>to open eyes wide</i>	walngka	walwalmamka	<i>wide opened (eyes)</i>

*The voiced dh is replaced by its voiceless counterpart th because dh never occurs word initial.

5. REDUPLICATION IN NOUNS

Plurality, Emphasis

The basic function of reduplication in nouns is that of plurality; and secondary to this emphasis which is used only in kinship terminology to indicate actual relationships in contrast to the extended meaning of the kinship terminology.

The reduplicating process with nouns is that of total reduplication.

Within a clause, noun reduplication is not always strictly adhered to to express plurality. It becomes somewhat redundant in its function of indicating plurality because of the use of verb root reduplication and its function of indicating plurality, (see examples 1b, 2b, 3b, 4b, 16b, 19b, 20b) and also the fact that subject and/or object are shown in the verb indicating singularity or various degrees of plurality (see examples 9b, 9c).

EXAMPLES:

- (11) kale '*mother (sg.)*'
 kalekale '*mothers (pl.)*' or '*mother (actual)*'
- (12) mangka '*father's mother (sg.)*'
 mangkamangka '*father's mothers (pl.)*' or '*father's mother (actual)*'
- (13) ku were '*dog*'
 ku werewere '*dogs*'

6. REDUPLICATION IN ADJECTIVES

Plurality, Augmentation

The basic function of reduplication in adjectives is that of plurality; and secondary to this, to only some adjectives, a function of augmentation has been observed.

The reduplicating process with adjectives is that of total reduplication.

As with the reduplicated nouns, the reduplication of adjectives within a clause is not usually adhered to to express plurality. It becomes somewhat redundant in its function of indicating plurality because of the use of verb root reduplication and its function of indicating plurality, and also the fact that subject and/or object are shown in the verb indicating singularity or various degrees of plurality.

EXAMPLES:

(14a) ku nintu ngala
 NC horse big
 'A big horse.'

(14b) ku nintu ngalangala
 NC horse big(R)
 'Many big horses.'

(15a) ngalthe
 narrow
 'Narrow.'

(15b) ngalthengalthe
 narrow(R)
 'Very narrow/close.'

NOTE: When a modified noun phrase is expressed in the plural, only the adjective is reduplicated, not the noun and the adjective. For example, ku nintunintu ngalangala is not acceptable.

7. PHONOLOGICAL CONDITIONING OF REDUPLICATION IN VERBS

The phonological conditioning of reduplicating, either totally or partially, the verb root, differs slightly depending upon its function. That is, whether the reduplicated form is:

- (a) remaining as a verb root conveying the meaning of plurality or repetition, or
- (b) being formed into a noun or adjective.

Total reduplication is the norm in Murinbata, but there are also many cases where only partial reduplication occurs. In such cases reduplication is reduced to either the verb root plus the initial CV

of the verb root in the preceding position, or the verb root plus the final VC of the verb root in the following position. That is: CVCVC or CVCVC (the verb root, CVC in this case, has been underlined for clarity).

A survey of reduplicated verb roots in Murinbata revealed that, in the case of (a) above, 53% of the verb roots were totally reduplicated, 20% were reduplicated using the final VC of the verb root, and 27% were reduplicated using the initial CV of the verb root.

In the case of (b) above, 92% of the verb roots were totally reduplicated, 4% were reduplicated using the final VC of the verb root, and 4% were reduplicated using the initial CV of the verb root.

There appear to be no hard and fast rules why some verb roots are totally reduplicated and others are only partially reduplicated, but the following observations have been made:

1. Verb roots with a CV or combination of CV patterns (i.e. CVCV, CVCVCV, etc.) are always totally reduplicated.

EXAMPLES:

(16a) thay ngani-la-nu
tree I(sg.)-climb-t.
'I'll climb the tree.'

(16b) thay ngani-lala-nu
tree I(sg.)-climb(R)-t.
'I'll climb the trees.'

(17a) ma-m-nintha-wiye
(3rd p.)-t.-du.m.-err
'Those two men did it wrong.'

(17b) ma-m-nintha-wiyewiye kanam
(3rd p.)-t.-du.m.-err(R) HA
'Those two men always do it wrong.'

2. Closed syllable verb roots, of any pattern, where the initial and final C's are obstruents, nasals, or combination obstruent/nasal, nasal/obstruent, are in most cases, totally reduplicated.

EXAMPLES:

(18a) ngunga pani-num-nu
sun he-set-t.
'The sun will set.'

(18b) ngunga pani-numnum-nu purru
sun he-set(R)-t. HA
'The sun will always set.'

- (19a) mi yidi nga-mpa-mut-nu
 NC wild apple I(sg.)-you(sg.-IO)-give-t.
 'I'll give you a wild apple.'
- (19b) mi yidi nga-mpa-mutmut-nu
 NC wild apple I(sg.)-you(sg.-IO)-give(R)-t.
 'I'll give you many wild apples.'
- (20a) nanthi ngila-tum-nu
 NC I(sg.)-dry-t.
 'I'll dry the thing.'
- (20b) nanthi ngila-tumtum-nu
 NC I(sg.)-dry(R)-t.
 'I'll dry many things.'
- (21a) ku lawarnka punu-kert-nu
 NC wallaby he(sg.)-hop-t.
 'The wallaby will hop (once).'
- (21b) ku lawarnka punu-kertkert-nu
 NC wallaby he(sg.)-hop(R)-t.
 'The wallaby will repeatedly hop.'

3. Verb roots, other than those accounted for in 1. and 2. above, are normally partially reduplicated, by either using the initial CV of the verb root in the preceding position, or the verb root plus the final VC of the verb root in the following position.

EXAMPLE USING THE INITIAL CV OF THE VERB ROOT:

- (22a) mi ma-larr-nu
 NC I(sg.)-wrap-t.
 'I'll wrap the food.'
- (22b) mi ma-lalarr-nu
 NC I(sg.)-wrap(R)-t.
 'I'll wrap all the food.'

EXAMPLE USING THE FINAL VC OF THE VERB ROOT:

- (23a) ku thithay ma-rlart-nu
 NC sugarbag I(sg.)-extract-t.
 'I'll extract the sugarbag.'
- (23b) ku thithay ma-rlartart-nu
 NC sugarbag I(sg.)-extract(R)-t.
 'I'll extract all the sugarbag.'

7.1. EXCEPTIONS

Two exceptions need to be pointed out here.

1) Some verb roots when reduplicated to form a noun or adjective, for some unknown reason, take the prefix *ni-*.

EXAMPLES:

Verb Root

<i>ye</i>	<i>niyeniye</i>	<i>'a promise'</i>
<i>yith</i>	<i>niyithniyith</i>	<i>'a story'</i>
<i>ngke</i>	<i>ningkeningke</i>	<i>'jealous'</i>

2) When a verb root is made up from more than one morpheme, only the last morpheme of the root is reduplicated, either totally or partially. This reduplicated part is then positioned immediately preceding the last morpheme.

EXAMPLES:

The verb root in the following example is made from the morphemes *ti + birl = tibirl*.

(24a) *da-n-tibirl*
he(sg.)-t.-light
'He lit (the fire).'

(24b) *da-n-tir**l**birl*
he(sg.)-t.-light(R)
'He lit (the fires).'

The verb root in the following example is made from the morphemes *winhi + marda + pak = winhimardapak*.

(25a) *ngarra tin kura patha pa-winhimardapak-nu*
in tin water good he(sg.)-pour into-t.
'He'll pour the fresh water into the tin.'

(25b) *ngarra tin kura patha pa-winhimardak**pak**-nu*
in tin water good he(sg.)-pour into(R)-t.
'He'll pour the fresh water into the tins.'

NOTE: The reduplicated part of the verb in these examples is *irl* and *ak* respectively. However, because there are no VV clusters in the language the vowels have been deleted in both instances.

APPENDIX 1

PARADIGM OF INCORPORATED OBJECT AFFIXES

A complete paradigm of incorporated object affixes are here given using the verb *'to wave'*. The incorporated subject prefix *'he'* (third person singular) has been used in these examples.

verb root is -ngkarlay-

subject prefix is ma-

tense (future) is -nu-

In this paradigm the incorporated object affixes are in upper-case for clarity.

ma-NGI-ngkarlay-nu	<i>'He will wave to ME.'</i>
ma-NGANKU-ngkarlay-nu-NINTHA	<i>'He will wave to US.'</i> (dual male)
ma-NGANKU-ngkarlay-nu-NGINTHA	<i>'He will wave to US.'</i> (dual female)
ma-NGANKU-ngkarlay-nu	<i>'He will wave to US.'</i> (dual sibling)
ma-NGANKU-ngkarlay-nu-NEME	<i>'He will wave to US.'</i> (paucal male)
ma-NGANKU-ngkarlay-nu-NGIME	<i>'He will wave to US.'</i> (paucal female)
ma-NGAN-karlay-nu	<i>'He will wave to US.'</i> (paucal sibling and plural)
ma-NHE-ngkarlay-nu	<i>'He will wave to US.'</i> (dual inclusive)
ma-NHE-ngkarlay-nu-NEME	<i>'He will wave to US.'</i> (paucal male inclusive)
ma-NHE-ngkarlay-nu-NGIME	<i>'He will wave to US.'</i> (paucal female inclusive)
ma-NHI-ngkarlay-nu	<i>'He will wave to YOU.'</i> (singular)
ma-NANKU-ngkarlay-nu-NINTHA	<i>'He will wave to YOU.'</i> (dual male)
ma-NANKU-ngkarlay-nu-NGINTHA	<i>'He will wave to YOU.'</i> (dual female)
ma-NANKU-ngkarlay-nu	<i>'He will wave to YOU.'</i> (dual sibling)
ma-NANKU-ngkarlay-nu-NEME	<i>'He will wave to YOU.'</i> (paucal male)
ma-NANKU-ngkarlay-nu-NGIME	<i>'He will wave to YOU.'</i> (paucal female)
ma-NAN-karlay-nu	<i>'He will wave to YOU.'</i> (paucal sibling and plural)

ma-∅-ngkarlay-nu	'He will wave to HIM/HER.'
ma-NKU-ngkarlay-nu-NINTHA	'He will wave to THEM.' (dual male)
ma-NKU-ngkarlay-nu-NGINTHA	'He will wave to THEM.' (dual female)
ma-NKU-ngkarlay-nu	'He will wave to THEM.' (dual sibling)
ma-NKU-ngkarlay-nu-NEME	'He will wave to THEM.' (paucal male)
ma-NKU-ngkarlay-nu-NGIME	'He will wave to THEM.' (paucal female)
ma-N-karlay-nu	'He will wave to THEM.' (paucal sibling and plural)

For third person only, the incorporated object affixes in the perfect tense (Street 1975:24-6), have a different form from the imperfect incorporated object affixes shown above. This remaining paradigm is given below. (The perfect tense is marked by -m-.)

ma-m-∅-karlay	'He waved to HIM/HER.'
ma-m-PUNKU-ngkarlay-NINTHA	'He waved to THEM.' (dual male)
ma-m-PUNKU-ngkarlay-NGINTHA	'He waved to THEM.' (dual female)
ma-m-PUNKU-ngkarlay	'He waved to THEM.' (dual sibling)
ma-m-PUNKU-ngkarlay-NEME	'He waved to THEM.' (paucal male)
ma-m-PUNKU-ngkarlay-NGIME	'He waved to THEM.' (paucal female)
ma-m-PUN-karlay	'He waved to THEM.' (paucal sibling and plural)

REDUPLICATION IN MURINBATA

APPENDIX II

LIST OF VERB ROOTS THAT REDUPLICATE

Below is a non-exhaustive list of verb roots that can be reduplicated, either totally or partially.

English of Verb	Verb Root	Reduplicated Verb Verb Root
<i>to throw/shoot</i>	bat	batbat
<i>to fail</i>	bay	baybay
<i>to vomit</i>	be	bebe
<i>to bark (dog)</i>	bek	bekbek
<i>to plant/bury</i>	birr	birrbirr
<i>to drink</i>	guduk	guduguduk
<i>to call out</i>	kay	kaykay
<i>to hop</i>	kert	kertkert
<i>to collect</i>	kut	kutkut
<i>to climb</i>	la	lala
<i>to give</i>	mut	mutmut
<i>to bark (dog)</i>	ngarl	ngarlngarl
<i>to set (sun)</i>	num	numnum
<i>to yell</i>	pa	papa
<i>to put</i>	pak	pakpak
<i>to be frightened</i>	part	partpart
<i>to take off</i>	pit	pitpit
<i>to pluck (bird)</i>	purl	purlpurl
<i>to remove</i>	puth	puthputh
<i>to hit</i>	rde	rderde
<i>to enter</i>	rdi	rdurdi
<i>to remove (dog)</i>	rte	rterte

<i>to undo</i>	tereth	terethtereth
<i>to tighten</i>	te	tete
<i>to blow didjeridu</i>	thu	thuthu
<i>to send</i>	thuk	dhukthuk
<i>to descend</i>	thut	dhutthutthut
<i>to dry</i>	tum	tumtum
<i>to roll up</i>	wekarl	wekarlwekarl
<i>to err</i>	wiye	wiyewiye
<i>to turn off</i>	wuteth	wutethwuteth
<i>to rain</i>	yel	yelyel
<i>to turn head around</i>	birl	bibirl
<i>to stand against</i>	dal	dadal
<i>to fill up</i>	dhalet	dhaletet
<i>to light (tobacco)</i>	dhawibu	dhawibubu
<i>to fold</i>	guruk	guguruk
<i>to wrap</i>	larr	lalarr
<i>to stick</i>	let	letet
<i>to hang up</i>	ngkale	ngkalele
<i>to wave</i>	ngkarlay	ngkarlarlay
<i>to go early</i>	pap	pawap
<i>to lay (tr.)</i>	pup	puwup
<i>to find</i>	rdurt	rdurturt
<i>to turn over</i>	rduy	rdurduy
<i>to extract</i>	rlart	rlartart
<i>to cut</i>	rtal	rtartal
<i>to pull</i>	rurr	rurrurr
<i>to touch</i>	thap	dhadhap
<i>to drag (net)</i>	tuth	tututh
<i>to dig</i>	tuy	tutuy
<i>to lay (egg)</i>	wak	wawak
<i>to pour into</i>	winhimardapak	winhimardapak
<i>to pour/spill</i>	winhipak	winhepak
<i>to whistle</i>	winh	winhin
<i>to arise</i>	wirnturt	wirnturturt
<i>to erase</i>	yerrarr	yerrarrarr

REDUPLICATION IN MURINBATA

APPENDIX III

LIST OF VERB ROOTS THAT DO NOT REDUPLICATE

Below is a non-exhaustive list of verb roots that do not reduplicate but rather substitute for another verb root to convey the meaning of plurality or repetitive action.

English of Verb	Verb Root	Verb Root conveying Plurality or Repetition
<i>to fall</i>	bat	wat
<i>to take/bring</i>	bath	ngkadhuk
<i>to shut</i>	dhap	dhawup
<i>to open</i>	dhal	dhalul
<i>to be bogged/stuck</i>	dharrkat	dharrarr
<i>to cut hair</i>	kat	yerrarr
<i>to cross river</i>	kath	kawurrk
<i>to get into</i>	mardap	mardapup
<i>to extinguish fire</i>	ngkan	ngkarrarr
<i>to replace</i>	ngkarl	ngkalath
<i>to provoke</i>	ngurru	ngurrath
<i>to tear</i>	ngurruduk	ngurrurduk
<i>to get</i>	rt	kut
<i>to catch</i>	rta	ngawurt
<i>to jump</i>	wal	lal
<i>to fit handle</i>	wengkay	wengkawurr
<i>to pick up</i>	winterl	winterlparl
<i>to sleep</i>	wit	rrit
<i>to turn on</i>	wum	mum
<i>to sit</i>	wup	pup

<i>to get water</i>	wurl	lurl
<i>to exit</i>	wuy	wurr
<i>to drop</i>	yegarl	yimpurr
<i>to listen</i>	yepup	yewup
<i>to look out</i>	yerr	yelerr
<i>to go</i>	ø	wat

BIBLIOGRAPHY

BERLIN, Brent

- 1963 'Some Semantic Features of Reduplication in Tzeltal'. *IJAL* 29:211-218.

CAPELL, A.

- 1938 'Word-building and Agglutination in South-Eastern Papua'. *Bull. of the School of Oriental and African Studies* 9:765-80.

CODRINGTON, R.H.

- 1885 *The Melanesian Languages*. Oxford: Clarendon Press. (Refer pp. 147, 191).

DOUGLAS, W.H.

- 1964 *An Introduction to the Western Desert Language*. *Oceania Linguistic Monographs* 4. University of Sydney. (1st edn 1958.)

GERSON, Stanley

- 1969 *A Glossary of Grammatical Terms: An Aid to the Student of Languages*. St. Lucia, Queensland: University of Queensland Press.

JOHNSTON, Raymond L.

- 1977 Rationales for Reduplication: An Oceanic Case. Paper presented at the Linguistic Society of Australia 9th Annual Conference, Melbourne.

KEY, Harold

- 1965 'Some Semantic Functions of Reduplication in Various Languages'. *Anthropological Linguistics* 7/3(2):88-102.

RAY, S.H.

- 1907 *Reports of the Cambridge Anthropological Expedition to Torres Straits*, vol.3: *Linguistics*. Cambridge: Cambridge University Press.

STREET, C.S.

- 1975 The Verb in Murinbata, Part A. Manuscript.
- 1977 The Relationship of Verb Affixation and Clause Structure in Murinbata. Manuscript.

TRYON, D.T.

- 1970 *An Introduction to Maranungku (Northern Australia)*. PL, B-15.

VOEGELIN, C.F. and F.M. VOEGELIN

- 1977 *Classification and Index of the World's Languages*. New York/Amsterdam: Elsevier.

CONTINUOUS AND DISCONTINUOUS NOUN PHRASES IN NYANGUMARDA

Helen Geytenbeek

0. PREFACE

The Nyangumarda language is spoken by about 700 Aborigines along the northwest coast of Australia, between Port Hedland and Broome, and inland around Marble Bar. Of this number, about 500 claim it as their own or their first language, while the rest are from other much smaller language groups who use Nyangumarda as a lingua franca.

Nyangumarda is a member of the Marngu sub-group of the Southwest Group of the Pama-Nyungan language family. It is coded as A61 by the Australian Institute of Aboriginal Studies. References to it are made in *A Revised Linguistic Survey of Australia* (Oates and Oates, ed.) 1970: 87; the 1973 *Supplement to the Revised Linguistic Survey*, vol. I:129-30; and in *Classification and Index of the World's Languages* by Vogelin and Vogelin 1977:223.

The data on which this paper is based was collected at Marble Bar, between February 1972 and March 1973, and at 'Twelve Mile' (now the Tjalku Wara Community Inc.), near Port Hedland, between July and October 1973, and between February 1976 and June 1977.

While many members of both communities have contributed to our knowledge of the language, our main helpers have been Mrs Lily Darby, formerly of Marble Bar and now of South Hedland, and Mr. Jack Horace of Tjalku Wara. We are greatly indebted to them.

This paper was written at a workshop run by the Summer Institute of Linguistics, in Darwin in August 1977. I am grateful for consultant help from Noreen Pym and Alan Healey.

0.1. ABBREVIATIONS

1	first person
2	second person
3	third person
conj	conjunction
dat	dative
dest	destination
du	dual
erg	ergative
ex	exclusive
loc	locative
nf	non-future
nom	nominative
poss	possessive
pl	plural
rep	repetitive
s	singular
sce	source
vb	verbaliser
+	joins two or more English words representing one Nyangumarda morpheme in morpheme-by-morpheme translation

0.2. ORTHOGRAPHY

The orthography used for this paper is the one which is being used in literacy materials for the Nyangumarda language. The following symbols are used: bilabials p, m; lamino-dentals j, ny, ly; apico-alveolars t, n, l, rr; apico-domals rt, rn, rl; velars k, ng; semi-vowels w, y, r; and vowels i, a, u.

In word initial position the contrast between t and rt, between n and rn, and between l and rl is neutralised. The apico-alveolar series has been chosen to represent these neutralised consonants.

When two apico-domals e.g. rn + rt occur in a cluster they are symbolised thus: rnt.

0.3. INTRODUCTION

The purpose of this paper is to describe the basic types of noun phrase in Nyangumarda and to show how some types may be expressed as discontinuous phrases.

There are four types of noun phrase in Nyangumarda:

Head - Modifier, Co-ordinate, Relator - Axis, Appositional.

Relator - Axis phrases occur only in locative constructions. The other three types are found filling several clause level slots. Only Head - Modifier phrases occur in a Time slot.

1. HEAD - MODIFIER PHRASES

A Head - Modifier noun phrase consists of a head - usually a noun, but sometimes a noun phrase - together with up to three modifiers. A noun without any modifiers can be considered to be a phrase if it has the potential of being modified.

1.1. MODIFIERS

The types of words which may modify a noun are:

adjectives
demonstratives
possessives
nouns
pronouns
numerals

1.1.1. Adjectives

Adjectives include such words as wirtu 'big', ngalypa 'good', and nurta 'blunt'. They possibly also include derivatives of nouns such as kurlu-jartiny 'badness-having' i.e., 'bad', and kurlurlu-marti 'dust-like' i.e., 'dusty'.

kurlu-jartiny-ju malyarninyi kaju-lu
bad-having-erg chopping axe-erg
'He is chopping with a useless axe.'

However when examples of these derived words in text are considered, not enough is understood of their function to state categorically that some are acting as modifiers of nouns.

1.1.2. Demonstratives

There are three demonstratives:

nyungu 'this'
pala/palama 'that' (mid distance)
ngurnungu 'that' (far)

Each of the demonstratives may take the dual suffix -jirri and the plural -rrangu.

pala-jirri partany-jirri
that-du child-du
'those two children'

nyungu-rrangu kakaji-rrangu
this-pl uncle-pl
'these uncles'

1.1.3. Possessives

Possessives consist of nouns or personal pronouns with the possessive suffix *-mili*. The relationship between the possessive and the head is either one of ownership or of kin relationship.

walypila-mili kari
white+man-poss beer
'the white man's beer'

kanyjayi ngaju-mili
grandmother 1+s-poss
'my grandmother'

1.1.4. Nouns and Pronouns

Unaffixed nouns and pronouns modify other nouns when inalienable possession is involved.

ngaju milya
1+s nose
'my nose'

maruntu jina
goanna foot
'goanna tracks'

1.1.5. Numerals

There is a small group of numerals comprised of:

waraja *'one'*
 kujarra *'two'*
 kujarra-pa waraja *'two-and one' i.e., 'three'*
 marlu *'many'*
 kurrngal *'many'*
 wirr *'all'*

waraja-nga karrpu-nga
one-loc sun-loc
'on one day'

marlu yukurru
many dog
'many dogs'

1.2. RESTRICTIONS ON MODIFIERS

It is unusual to find more than two modifiers in one phrase. The maximum expansion that has been found is head plus three modifiers, which are a possessive and two adjectives.

maya jana-mili nganimarta kararr
house 3+pl-poss tall tough
'their tall, strong building'

Two adjectives can occur in one phrase.

wirtu-karti talakarr-karti maya-karti
big-dest strong-dest house-dest
'into a big, strong house'

Demonstratives, adjectives and possessives can each co-occur with one of the other two word types.

Demonstrative and Adjective

pala partany-ju wupartu-lu
that child-erg little-erg
'that little child'

Possessive and Demonstrative

ngaju-mili ngurnungu mamaji
1+s-poss that+far older+brother
'that older brother of mine'

Possessive and Adjective

partany-ju ngaju-mila-lu wupartu
child-erg 1+s-poss-erg little
'my little child'

In phrases where the head is modified by an unaffixed noun or pronoun no other modifiers have been found.

maruntu jina *'goanna foot'* i.e., *'goanna tracks'*

There seems to be no reason why numerals should not co-occur with any of the other types of modifiers. An example is given below of a numeral with a possessive. A speaker of the language may be persuaded to allow their use in combination with two other modifiers, but the resulting examples sound artificial. In practice, numerals are not used extensively as modifiers, especially in combination with other modifiers. Some of the functions of the small group of numerals can be

taken care of in the noun morphology. The dual suffix -jirri can be used instead of the free form kujarra 'two', and the plural suffix -rrangu covers numbers above two when there is no need to be specific. Absence of a free form numeral, together with absence of suffixation indicates singular.

muwarr ngaju-mili waraja
talk 1+s-poss *one*
'my one story'

wupartu-jirri partany-jirri
little-du child-du
'two little children'

1.3. WORD ORDER

Demonstratives usually precede the head, but a few examples have been found where a demonstrative follows the head.

muwarr-arrangu palama-rrangu
word-pl that-pl
'those words'

When either an adjective or possessive is the only modifier in a phrase it may precede or follow the head. With adjectives it is difficult to decide whether or not the use of a particular word order places the adjective in focus. With possessives there is no obvious reason for one or the other word order to be chosen. One speaker in the one text will use both word orders for the same expression.

ngaju-mili pipi or pipi ngaju-mili
 1+s-poss *mother* *mother* 1+s-poss
'my mother'

If a possessive and demonstrative co-occur, either of the modifiers may be contiguous to the head.

ngaju-mili ngurnungu mamaji
 1+s-poss *that+far* *older+brother*
'that older brother of mine'

nyungu walypila-mila-lu kari-lu
this white+man-poss-erg beer-erg
'this beer of the white man'

If a possessive and adjective co-occur, the possessive is contiguous to the head.

partany-ju ngaju-mila-lu wupartu
child-erg 1+s-poss-erg little
'my little child'

1.4. CASE AND CONCORD

In Head - Modifier phrases where the head is marked for case and/or number there is agreement between the head and modifiers. Nyangumarda is a nominative - ergative language (Hale 1970:759). The ergative case (subject or agent of a transitive verb) is marked by -lu ~ -ju. The nominative case (subject of an intransitive verb and object of a transitive verb) is, in Nyangumarda, unmarked. The lack of marking with nominative case tends to obscure the concord, but it is quite obvious when other cases are used.

Ergative Case and Dual Number

wupartu-lu-jirri partany-ju-jirri
little-erg-du child-erg-du
'two little children'

Locative

waraji-nga karrpu-nga
one-loc sun-loc
'on one day'

Destination

wirtu-karti talakarr-karti maya-karti
big-dest strong-dest house-dest
'into a big, strong house'

Dative

wirtu-ku ngapa-ku
big-dat water-dat
'(listen) for a lot of rain'

Sometimes when two modifiers are used, only the head and one of the modifiers are inflected for case. This may be the result of careless speech as the agreement usually appears on each word in the phrase.

pala partany-ju wupartu-lu
that child-erg little-erg
'That little child'

1.5. THE HEAD

The head of a Head - Modifier phrase is a noun or a Head - Modifier noun phrase marked either for locative case or by -jartiny 'having'. This is an area of phrase construction which needs more investigation. It seems that other case suffixes besides locative could be used in this way, but if this is so they have yet to be found.

pala murtaka *'that motor car'*

palama murtaka-jartiny wupartu-jartiny
that car-having little-having
'that person with the little motor car'

pala murtaka-nga wupartu-nga
that car-loc little-loc
'that person in the little car'

Sometimes an adjective may be used as a substantive where a noun would normally be expected. At this stage it is not known whether or not an adjective used in this way has the potential of being modified and can be said to be acting as the head of a phrase.

wirtu kamarnanganaku
big called+to+us
'The important (man) called out to us.'

2. CO-ORDINATE PHRASES

An indefinite number of nouns or short phrases may be strung together in a co-ordinate construction with or with-out the conjunction -pa. When the conjunction is used it may appear on every item in the construction or only on some of them.

ngaju-mili-ja pipi-ja japartu-ja mamaji-ja jamuji-ja
 l+s-poss-sce mother-sce father-sce brother-sce grandfather-sce
 yaku-ja
 cousin-sce
'(I learned) from my mother, father, older brother, grandfather and cousin.'

Anna+Plain-ji-pa Mantuny-ju-pa Wallal-ji-pa
 name-loc-conj name-loc-conj name-loc-conj
'at Anna Plains, Mandorah and Wallal Downs'

3. RELATOR - AXIS PHRASES

Five adverbs have been found which occur with nouns to form Relator - Axis phrases in locative constructions. They are:

wangka 'near'
 yakujani 'this side'
 ngunarri 'the other side', 'far away'
 kaniny 'under'
 kanka 'up', 'above'

When they occur in Relator - Axis phrases all but wangka take the destination suffix -karti (or -kurti) which normally denotes movement towards the referent to which it is suffixed. But when it appears in

combination with these four adverbs it is sometimes difficult to discern any idea of movement.

Instead of being suffixed with *-karti*, *kanka* often takes *-ni*, the meaning of which has not been found. Note that *kaniny-kurtti* means '*inside*' as well as '*underneath*'.

The axis of the phrase is marked for location. The relator may precede or follow the axis.

maya-nga wangka

house-loc near

'near the house'

yakujani-karti milimili-ngi

this+side-dest paper-loc

'on this side of the paper'

kankani warnku-nga

above stone-loc

'on top of the stone'

kaniny-kurtti maya-nga

under-dest house-loc

'inside the house'

The four cardinal points of the compass behave in a similar way to these adverbs, but take *-kurnu* (or *-kurtti*) instead of *-karti*.

yalinyji-kurnu 'on the north side'

kakarra-kurnu 'on the east side'

kurila-kurnu 'on the south side'

kara-kurnu 'on the west side'

4. APPOSITIONAL PHRASES

Two nouns may occur in apposition in a generic specific relationship where one item in the phrase gives more specific information than the other; or they may be in apposition when one is used to amplify the other.

In phrases showing a generic specific relationship either the generic or specific item may be first in the phrase. But where one noun amplifies the other the amplification must come last.

generic specific

ngunarri-ngi pirra-nga

far-loc desert-loc

'far away, in the desert'

specific generic
marrngu nganarna

Aborigine l+pl+ex
'we *Aborigines*'

statement amplification
ngapi-karti kukilikang-karti

what's+it-dest place+name-dest
'to that place, what's its name, to Coogligong'

Mapirri Mervyn 'Mapirri, that is Mervyn'

Not only nouns, but two or more phrases with a wide variety of fillers may be in apposition to give amplification.

nganin-nganin mayi nyungu nyungu mayi yija marrngu-mili mayi
all+kinds food this this food truly Aborigine-poss food
'(She brought me) all kinds of food, this food, truly food belonging to the *Aborigines*.'

5. DISCONTINUITY

It is not uncommon to find discontinuous phrases. All types of noun phrase except Relator - Axis phrases may be affected. In the examples given below the words which interrupt the phrase are placed in parenthesis and verb morphology has not been marked except where it helps to clarify an example.

Perhaps the most commonly found type of discontinuous phrase is the Appositional. With these the statement precedes the verb (or verb phrase) and the amplification follows the verb. Sometimes it is more than just a verb which interrupts the phrase.

nganin-nganin kuyi (wirlarnakinyija) rawal-pa nganin-nganin
all+kinds meat (killed+for+me) goanna-conj all+kinds
manganya-pa kuyi-rrangu

echidna-conj meat-pl
'(She killed) all kinds of meat (for me), goanna, all kinds, echidna, and different meats.'

mamaji (waninyirri Fitzroy+Crossing-ju) Limericki
brother (staying Fitzroy+Crossing-loc) Limerick
'My brother, Limerick (is staying at Fitzroy Crossing).'

The following example is more complicated in that the words which precede the verb complex themselves form an appositional phrase. The amplification which follows the verb is expanded to include a second actor and is itself another appositional phrase.

partany-ju ngaju-mila-lu wupartu Lenaji-lu (japam ji-ni-kinyi-pulu)
child-erg l+s-poss-erg little name-erg (stop vb-nf-rep-3+du)
 Lenaja and Leonard kujarra
 name and name two
 'My little child, Lena, Lena and Leonard, the two of them (were
 stopping him).'

Discontinuous Head - Modifier phrases occur in a variety of forms. Most of the examples found in the data consist only of a head with one modifier. The head may precede or follow the verb. There are examples of adjectives possessives and demonstratives acting as modifiers. One example shows two modifiers, one on each side of the verb. While it is usually a verb which interrupts the phrase, the first example given below shows 'might be' as the interruption.

wirtu (might be) karrpu
 big (might be) sun
 '(it might be) a long time'

marlu (kalkurnan) yukurru
 many (you+keep) dog
 '(Do you have) many dogs?'

jurnti-nga (ngalpa-ngalpanyayirni) walypila-mili-ngi
 cave-loc (we+are+entering) white+man-poss-loc
 '(We are going into) the white man's gaol.'

nyungu (ngawu jininganinyi) walypila-mila-lu kari-lu
 this (mad making+us) white+man-poss-erg beer-erg
 'This beer of the white man (is making us silly).'

Co-ordinate phrases may occasionally be discontinuous. In the following example the verb is affixed to show dual actor with one free form actor preceding it and the second following. It is further complicated by the fact that the first half of the co-ordinate construction is in apposition to the preceding phrase.

ngaju-mila-lu mirtawa-lu Yanti Nayi-lu-pa (japam ji-ni-kinyi-pulu)
 l+s-poss-erg woman-erg Aunty name-erg-conj (stop vb-nf-rep-3+du)
 Minyjun-ju
 name-erg
 'My wife Aunty Nayi, and Minyjun (were stopping him).'

6. SUMMARY

Four types of noun phrase have been described for Nyangumarda. They are Head - Modifier, Co-ordinate, Relator - Axis, and Appositional. The Relator - Axis phrases are the most restricted in length, permitted fillers and in distribution. There are restrictions on the length of Head - Modifier phrases. Theoretically there is no limit to the length of Co-ordinate phrases. Appositional phrases, because they may contain other phrase types (including co-ordinate constructions), may also be quite long. All but Relator - Axis phrases may be discontinuous.

BIBLIOGRAPHY

HALE, Kenneth L.

- 1970 'The Passive and Ergative in Language Change: The Australian Case'. In: S.A. Wurm and D.C. Laycock, eds *Pacific Linguistic Studies in Honour of Arthur Capell*. PL, C-13.

HUDSON, Joyce

- 1976 'Walmatjari: Nominative-Ergative or Nominative-Accusative?'. *Papers in Australian Linguistics* 9:1-30. PL, A-42.

- 1978 *The Core of Walmatjari Grammar*. Canberra: Australian Institute of Aboriginal Studies.

O'GRADY, Geoffrey N.

- 1964 *Nyangumata Grammar*. *Oceania Linguistic Monographs* 9. University of Sydney.

RICHARDS, Eirlys

- 1979 'The Walmatjari Noun Phrase'. In: Christine A. Kilham, ed. *Work Papers of SIL - AAB*, 93-128. Darwin: Summer Institute of Linguistics, Australian Aborigines Branch.

CLAUSE-LEVEL TAGMEMES OF BURARRA

Kathleen Glasgow and Mark Garner

0. INTRODUCTION

Burarra is spoken by some 600 Australian Aborigines living in the Maningrida-Blyth River vicinity, on the coast of Arnhem Land.

The present paper is an analysis of the structure and function of the elements of Burarra clauses within a tagmemic framework. The authors intend to examine other aspects of the language in later publications.

The authors would like to make the following acknowledgments. Kathleen Glasgow is indebted to her husband, David, for his assistance in gathering and analyzing the data; also to Eunice Pike for her guidance as consultant on the original draft of this paper during the linguistic workshop conducted by the Summer Institute of Linguistics, Brisbane, 1967-68; and she is indebted to her co-author for his part as catalyst and consultant in bringing this paper to publication.

Mark Garner is indebted to the Summer Institute of Linguistics, Australian Aborigines Branch for facilitating his trip to Maningrida through their Research Fund, providing an excellent introduction into the Burarra language and enabling the fruitful co-operation of which this paper is evidence.

We are both indebted to the many Burarra people who have contributed so freely, and to Chris Kilham for her editorial work in the preparation of the final draft. We also wish to acknowledge the helpfulness of Longacre's work (1964) in the analysis for this paper; and also Engel and Longacre's article (1963), which in many respects served as a pattern for this paper.

0.1. ABBREVIATIONS AND SYMBOLS

1	first person
2	second person
3	third person
A	Aspect Tagmeme
acc	accompaniment prefix
adv	adverb
asp wd	aspect word
att wd	attention word
Aux ₁	Auxilliary One
Aux ₂	Auxilliary Two
sAux	Stative Auxilliary
away	away
BEN	Benefactive Tagmeme
Ben	benefactor in predicate phrase
borr	borrowed (words)
Cl	clause
cl	class marker
Compar Phr	Comparison Phrase
Conj	Conjunction (sentence-level)
cont	continuous aspect
ctf	contrary to fact
d (subscript)	descriptive
dat	dative
Decl	declarative
dems	demonstrative
Descr	Descriptive (clause)
descr	descriptive word
Descr P Phr	Descriptive Predicate Phrase
dl	dual
emph	emphatic (form of attention word)
excl	excluded person
F	From Tagmeme
f	feminine
gen n	general noun
H	head (of a construction)
Hab Phr	Habitat Phrase
Iden Phr	Identifier Phrase
i (subscript)	intransitive
incl	included person
indic	indicative

Imp	imperative clause
imp	imperative person-number prefix
imperf	imperfect aspect
INDT	Indeterminate Tagmeme
indt	indeterminate (word classes)
intr	intransitive
Intr Phr	Intransitive Predicate Phrase
Intr St Phr	Intransitive Stative Predicate Phrase
IO	Indirect Object Tagmeme
is (subscript)	intransitive stative
kin term	kinship term
Lat	lateral tagmemes
LI	Location-Instrument Tagmeme
loc	locative
Loc Interrog Phr	Locative Interrogative Phrase
M	modifier (of a construction)
masc	masculine
MD	Mood Tagmeme
md wd	mood word
MNR	Manner Tagmeme
n	noun
ndes	non-desiderative (aspects)
nom	nominative
O	Object Tagmeme
P	predicate tagmemes
Part	participant tagmemes
perf	perfect aspect
Peri	peripheral tagmemes
Phr	phrase
pl	plural
prn	pronoun
prop n	proper noun
Prox Phr	Proximity Phrase
punct	punctiliar aspect
RA Time Cl	Relator-Axis Time Clause
Ref Phr	Referent Phrase
rep	repetition
restr adv	restricted adverb
S	Subject Tagmeme
s (subscript)	stative
s	singular
st	stative (word classes)

Subj	subjunctive
T	Time Tagmeme
t (subscript)	transitive
Tr Phr	Transitive Predicate Phrase
Tr St Phr	Transitive Stative Predicate Phrase
ts (subscript)	transitive stative
V	Vocative Tagmeme
vb	verb
+ (in general formulas)	obligatory element
(in specific examples)	additional component
±	optional element
{ }	a class of morphologically alternating allomorphs
- (hyphen in language)	orthographical device separating prefix from stem
: (in formulas)	dividing construction on the left from manifestation on the right
(in literal translation)	dividing the meanings carried by a single morpheme
. (in language and literal translation)	morpheme breaks, except occasionally in language where it is an orthographical device distinguishing n + g from the digraph ng
...	the cut off or resumption of an interrupted tagmeme

1. OVERVIEW

1.1. CLAUSE TYPES - SUMMARY

The following table outlines the classification of clauses which is used in this paper; it contains three orders and five series of clauses, and the clause types which occur are indicated by a plus symbol.

TABLE 1

SERIES	Intrans.	Trans.	Intr. Stative	Tr. Stative	Descriptive
ORDERS					
Declarative	+	+	+	+	+
Subjunctive	+	+	+	+	
Imperative	+	+	+	+	

Clause types are defined by the nature of the predicate tagmeme. For example, declarative intransitive clauses have the predicate head manifested by a declarative form of an intransitive verb; subjunctive transitive clauses have the predicate head manifested by a subjunctive form of a transitive verb; imperative intransitive stative clauses have the predicate head manifested by an imperative form of an intransitive

stative verb; etc. Descriptive clauses have the predicate head manifested by other than a verb, hence the limitation of descriptive clauses to the declarative order only.

The terms 'transitive' and 'intransitive' are used in their generally accepted senses; that is, they are distinguished by the presence of the optional Object Tagmeme in the transitive clauses, and by its obligatory absence in the intransitive clauses. In Burarra the object is also a high ranking element in the transitive verb person-number prefixes (see Glasgow and Kerr 1964).

Stative clauses, transitive and intransitive, are those in which the predicate head is manifested by a stative verb, a restricted class of verbs including verbs of 'being' with reference to posture, which function elsewhere as auxiliaries, and verbs of 'making to be'.

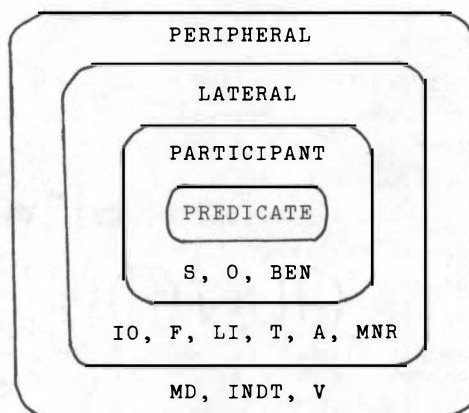
The descriptive clause, with its non-verbal predicate, expresses a complement relationship rendered as some form of 'to be' in English.

The various verb forms are derived morphologically from the non-past subjunctive, which is the simplest verb form. These variations and their functions of imperative, declarative, non-desiderative, contrary to fact, negative, and repeated action are described in Section 6.

1.2. CLAUSE-LEVEL TAGMEMES

Clause-level tagmemes are defined as either predicate, participant, lateral, or peripheral. There is a gradation in the centrality of focus from the predicate tagmeme, which is central, to the participant tagmemes which are obligatorily signalled in the predicate, to the lateral tagmemes which convey specific information about the circumstances of the action expressed in the predicate, but are not marked in the predicate itself, to the peripheral tagmemes, which relate to the clause as a whole. This is summarised in the diagram below:

DIAGRAM 1



Predicate tagmemes vary between clause types, and may be interrupted only by Aspect manifested by barra 'future', following the modifier or the head (see example 1, Section 1.3.). The participant, lateral and peripheral tagmemes are the same in all clause types, and are optional in all clause types except for Object, which only occurs in transitive clause types; and the From, Time, and Indeterminate Tagmemes, which do not occur in imperative clauses. Participant tagmemes and lateral tagmemes, except Aspect, may be interrupted by other tagmemes (see examples ii, iii, iv, Section 1.3.) as well as repeated (see examples i, iii, iv, vi, vii, Section 1.4.). Peripheral tagmemes and the Aspect Tagmeme may not be interrupted, but they may be repeated (see examples 1, v, Section 1.4.).

1.3. INTERRUPTED TAGMEMES

Interrupted tagmemes are interrupted by another clause-level tagmeme and are defined as those in which the second manifestation completes the phrase and/or adds additional factors. Some examples of interrupted tagmemes are as follows:

- 1) jal barra a-ni
 Decl_{is}Cl = +_{is}P:Intr St Phr. . . +A:asp wd . . .is^P
desire future 3s-do
 'he will want'
- ii) bugula ngu-ba.rra ngu-bamu.na rrapa
 Decl_tCl = +O:Serial Phr. . . +_tP:Tr Phr .O
water ls:3s-eat.punct ls-move.perf and
 gornabula jambaka
 wallaby tobacco
 'I kept partaking of water and wallaby and tobacco'
- iii) bambay nipa Borroloola wenga rrapa misses
 Decl_iCl = +S:Serial Phr. . . +F:From Phr .O
old:woman she Borroloola from and misses
 awurriny-ji.rra.pa rrapa an-ngardapa an-gugaliya
 S
 3:dl:f-be.punct.rep and cl¹-alone cl-person
 awurr-be.ya Mt. Isa 6 o'clock
 +_iP:Intr Phr +LI:prop n +T:borr wd²
 3:pl-arrive.cont Mt. Isa 6 o'clock
 'little girl and her mother and two misses and one
 Aboriginal man arrived at Mt. Isa from Borroloola at
 6 o'clock'

¹There are four noun classes in Burarra. They are obligatorily marked by agreement in the person prefixes on the verbs and in the class prefix on descriptives, and in the accompaniment prefix.

²'Borrowed' throughout the text refers to words borrowed from English.

- iv) yi-gurrepa nyirri-ninya.rra gun-nigipa
 Decl₁Cl = +LI:Prox Phr. . . +₁P:Intr Phr . . .LI
close excl:dl-sit.punct cl-his
 gapal America
country America
'we are close to his country, America'

1.4. REPEATED TAGMEMES

Repeated tagmemes are defined as those in which the second manifestation is either identical, or a synonym, or the same expanded, or a clarification of the first manifestation. Some examples of repeated tagmemes follow.

- i) minypa barra an-nerranga a-yinda barra
 Decl₁Cl = +MD:md wd +A:asp wd +S:descr +₁P:Intr Phr +A:asp wd
like future another 3s-say future
'like another will say'
- ii) gomunga ngu-bu arrkula manakarda
 Decl_tCl = +O:gen n +_tP:Tr Phr +O:gen n
geese 1s:3s-hit for:you:and:me geese
'geese I will hit for us, geese'
- iii) yi-gaba barra ngulam barra
 Decl₁Cl = +IO:dems loc +A:asp wd +T:temp +A:asp wd
away-there:unseen¹ future morning future
 nguurr-boy manakarda ji-many
 +₁P:Intr Phr +IO:Hab Phr
 incl:pl-go geese acc-all:the:time
'tomorrow we will go over there where the geese are all the time'
- iv) ana-munyagaba ana-munyagaba m-banga
 Decl_tCl = +T:temp +T:temp +_tP:Tr Phr
morning morning 3s:3s-eat.imperf
 gorrngunya
 +O:gen n
grass
'in the morning, in the morning he ate grass'
- v) a-lay gu-yinpa barra nguurr-boy
 Decl₁Cl = +V:att wd +INDT:indt vb +A:asp wd +₁P:Intr Phr
hey:masc:indic 3s-how:do:rep future incl:pl-go
 a-lay
 +V:att wd
hey:masc:indic
'hey, when will we go, hey'

¹For a full description of Burarra demonstratives, see Glasgow 1977b.

- v1) nipa a-nirra welanggan
 Decl_{1s}Cl = +S:nom prn +_{1s}P:Intr St Phr +S:gen n
 3s 3s-remain.punct owner
 'he remains, the owner'
- vii) gapa awurri-be.na rrawa
 Decl₁Cl = +LI:dems loc +₁P:Intr Phr +LI:gen n
 there:far¹ 3:dl-arrive.perf camp
 'there they arrived, at the camp'

1.5. MAXIMAL AND MINIMAL CLAUSES

The maximum number of tagmemes observed in a clause is seven. The minimal clause is one tagmeme - the predicate. In a count of 751 clauses 39% were minimal, 35.6% had two tagmemes, 16.1% had three, 7.6% had four, 1.3% had five, .3% had six, and .1% had seven tagmemes. All clause types may have up to four tagmemes. Only declarative clauses of the transitive and intransitive series may have more than four tagmemes.

The balance of tagmemes within a clause includes the predicate (although fragmentary utterances without predicate do occur), up to three participant tagmemes, three lateral tagmemes and three peripheral tagmemes, except that no more than two participant, lateral or peripheral tagmemes may occur in an imperative clause.

Examples of minimal and maximal clauses follow.

- i) a-bo.na
 Decl₁Cl = +₁P:Intr Phr
 3s-go.perf
 'he went'
- ii) nguwurr-boy
 Subj₁Cl = +₁P:Intr Phr
 incl:pl-go
 'let's all go'
- iii) nguna-wu
 Imp_tCl = +_tP:Tr Phr
 2s:ls-give:to
 'give (it) to me'

¹For a full description of Burarra demonstratives, see Glasgow 1977b.

- iv) walkur nginyipa gala barra
 Decl₁Cl = +V:kin term +S:nom prn +MD:md wd +A:asp wd
offspring 2s negative future
 gu-werrapa barra ny-boy
 +IO:gen n +A:asp wd +₁P:Intr Phr
acc-different:place future 2s-go
 'son, you will not go to another place'
- v) boporanga nguurr-bengga barra gorlpurda
 Decl₁Cl = +IO:gen n +₁P:Intr Phr +A:asp wd +IO:gen n
open:place incl:pl-arrive future *grassland*
 yarlanga jimarnjaparna marlgaway
 +IO:gen n +IO:gen n +IO:gen n
open:place *mud:flats* *grassland*
 'we will arrive in the open place, the grassland, the
 open place, the mud flats, the grassland'
- vi) gala barra ngardapa ngu-bay ngu-ni
 Subj_tCl = +Md:md wd +A:asp wd +MNR:adv +_tP:Tr Phr
 negative future alone 1s:3s=eat 1s-do
 'I mustn't eat it alone'
- vii) a-lay nginyipa gornabula gana
 Imp₁Cl = +V:att wd +S:nom prn +IO:gen n +₁P:Intr Phr
hey:masc:indic 2s *wallaby* 2s:imp:watch
 bamba
 2s:imp:move
 'hey, you go along watching for wallaby'

1.6. ORDERING OF TAGMEMES

The ordering of tagmemes within the clause is free, although the lateral tagmeme Manner always occurs adjacent to the predicate. Other tagmemes may be stylistically emphasised by being placed in the position receiving clause stress, which for the predicate is clause initial and for the participant, lateral, and peripheral tagmemes is immediately preceding the predicate. A clause final tagmeme occurring immediately after the predicate receives a secondary clause stress, and has the effect of an important parenthetical addition.

When Subject and Object co-occur, S precedes O in two thirds of the examples, the normal order being SOP, but OSP also occurs. The second of these participant tagmemes may also follow P, resulting in SPO or OPS. When either S or O is repeated, the patterns SOVS and OSVO have been observed. These patternings all concur with the stylistic emphasis

described in the preceding paragraph.

The occurrence of Benefactive with either S or O is much less frequent, and the ordering of these in relation to each other is again a matter of emphasis.

2. CLAUSE TYPES AND THEIR PREDICATE TAGMEMES

2.1. INTRANSITIVE

The Burarra Intransitive clause may be formulated as

$${}_1Cl = +{}_1P \pm \text{Part} \pm \text{Lat} \pm \text{Peri}$$

in which ${}_1P$ represents the Intransitive Predicate phrase; Part, the participant tagmemes, includes Subject and Benefactive but not Object (see Section 3); Lat, the lateral tagmemes, and Peri, the peripheral tagmemes, represent all the tagmemes in those classifications.

${}_1P$ is defined by the formula

$${}_1P = \pm{}_1M + {}_1H \pm \text{Toward} \pm \text{Ben} \pm \text{Aux}_1 \pm \text{Aux}_2$$

which is to be understood as follows:

${}_1M$, the modifier of the intransitive head, is manifested by body part words - both stative nouns¹ and general nouns, as a component of a verbal idiom with fixed position immediately preceding or following the head.

${}_1H$ is the head of the Intransitive Predicate Phrase. It may be manifested by any intransitive verb except the stative verbs and *workiya* 'to do habitually'.

Toward expresses direction toward the point with which the speaker identifies himself (see example iii, Section 3.2.). Toward is manifested by *gurda* 'hither', occurring optionally in the position indicated in the formula above, except with intransitive verbs having a singular subject or with transitive verbs where singular subject acts on third person singular object, in which case direction is expressed by a first-order verb prefix. (Compare examples iii and iv, also example v, Section 2.2.)

Ben expresses the benefactor of the predicate phrase. Ben is manifested by dative pronouns, which agree with the nominative pronouns or other manifestations of BEN, the clause-level Benefactive Tagmeme.

Aux_1 denotes auxiliary verb₁; it expresses continuous action, and may be manifested by intransitive stative verbs and by five verbs of

¹The term 'stative' is applied to nouns which denote most, but not all, body parts, and which require, except when manifesting the modifier of a predicate phrase, grammatical agreement with the possessor, expressed either by the person prefix on the stative verb in the Intransitive Stative Predicate Phrase in which it generally occurs, or by the accompaniment prefix with which it occurs when manifesting the Location-Instrument Tagmeme.

motion noted to date. All of the verbs manifesting Aux₁, as well as Aux₂, occur with full affixation, except jarl¹ 'hasten' which is an abbreviated form of jarlabiya and takes no suffixes. The auxiliary jarl also manifests ₁H.

Aux₂, the Auxiliary verbs₂, expresses prolonged or habitual action; it may be manifested by either of two intransitive verbs.

As a summary of the foregoing, the Intransitive Predicate Phrase may be displayed in this way:

₁ P = ± ₁ M	± ₁ H	± Toward	± Ben	± Aux ₁	± Aux ₂
st n	intr vb	gurda	io prn	ji 'be (standing)'	bamba 'go steadily'
gen n				ni 'be (sitting)'	workiya 'do habitually'
				yu 'be (lying)'	
				boy 'go'	
				yurcha 'run'	
				gomarrya 'circle'	
				rrigirrga 'walk about'	
				jarl 'hasten'	
				rrika 'crawl'	

Examples of the Intransitive Predicate Phrase follow.

- i) mipala ng-gana
 Intr Phr = +₁M:st n +₁H:intr vb
 eye ls-have:eyes:open
 'I could be alert'
- ii) ng-gana mipala
 Intr Phr = +₁H:intr vb +₁M:st n
 ls-have:eyes:open eye
 'I could anxiously await a loved one'
- iii) ji.na-bo.ya ji-na-workiya
 Intr Phr = +₁H:intr vb +Aux₂:intr vb
 3s.toward-go.cont 3s.toward-do:habitually:cont
 'she always comes'
- iv) awurr-bo.na gurda nula
 Intr Phr = +₁H:intr vb +Toward +Ben:dat prn
 3pl-go.perf hither to:3s
 'they came here to him'

¹Throughout the text Burarra verbs are given in the non-past subjunctive with the zero second person singular imperative prefix, which is the simplest form (see section 6.3.).

- v) a-rrrik.nga a-rrrigirr.nga
 Intr Phr = +_tH:intr vb +Aux₁:intr vb
 3s-crawl.imperf 3s-walk:about.imperf
 'he crawls, going about'
- vi) ng-garlaji.nga ngu-yurchu.nga ngu-bambu.rda
 Intr Phr = +_tH:intr vb +Aux₁:intr vb +Aux₂:intr vb
 ls-paddle.imperf ls.run.imperf ls-move.punct
 'I paddled quickly on'

2.2. TRANSITIVE

The transitive clause can be expressed in the form

$${}_tCl = {}_tP \pm Part \pm Lat \pm Peri$$

where ${}_tP$ represents the Transitive Predicate Phrase, and Part, Lat, and Peri represent all of their respective tagmemes. The Transitive Predicate Phrase is defined by the formula

$${}_tP = \pm {}_tM \pm {}_tH \pm Toward \pm Ben \pm Aux_1 \pm Aux_2$$

which is to be interpreted as follows:

${}_tM$, modifier of the transitive head, is manifested by body part words - both stative nouns and general nouns - and by restricted adverbs which include onomatopoeia words, as a component of a verbal idiom with fixed position immediately preceding or following the head.

${}_tH$ is the head of the Transitive Predicate Phrase; it may be manifested by all non-stative transitive verbs.

The other elements of the Transitive Predicate Phrase (Toward, Ben, Aux₁, and Aux₂) are manifested by the same items as those of the Intransitive Predicate Phrase (see Section 2.1.).

The above formula can thus be displayed as shown:

${}_tP = \pm {}_tM$	$\pm {}_tH$	$\pm Toward$	$\pm Ben$	$\pm Aux_1$	$\pm Aux_2$
st n	tr vb	gurda	io prn	ji	bamba
restricted adv				ni	workiya
				yu	
				boy	
				yurcha	
				gomarrya	
				rrigirrga	
				jarl	
				rriika	

Examples of the Transitive Predicate Phrase follow:

- i) lak gu-ga.nja apala
 Tr Phr = +_tM:restr adv +_tH:tr vb +Ben:dat prn
 completely 3s:3s-take.cont for:ls
 'he did it completely benefiting me'

- ii) gochula nguna-rra.na
 Tr Phr = +_tM:st n +_tH:tr vb
 stomach 3s:ls-spear.perf
 'it is promised to me'
- iii) ngu-bu.na lorr
 Tr Phr = +_tH:tr vb +_tM:restr adv
 ls:3s-hit.perf hard
 'I hit him hard'
- iv) dak a-bu.na
 Tr Phr = +_tM:restr adv +_tH:tr vb
 thud! 3s:3s-hit.perf
 'thud! he hit him'
- v) ngi.ya-ga.nja
 Tr Phr = +_tH:tr vb
 ls:3s.awy:from:me-take.cont
 'I am bringing it to you'
- vi) m-ba.rra a-ni a-bamu.na
 Tr Phr = +_tH:tr vb +Aux₁:intr st vb +Aux₂:intr vb
 3s:3s-eat.punct 3s-be:sitting 3s-move.perf
 'he kept on sitting there eating it'

2.3. INTRANSITIVE STATIVE

The intransitive stative clause can be formulated as

$${}_{1s}Cl = +{}_{1s}P \pm Part \pm Lat \pm Peri$$

where ${}_{1s}P$ is the Intransitive Stative Predicate Phrase, and Part includes Subject and Benefactive, but not Object, and Lat and Peri include all of their respective tagmemes. ${}_{1s}P$ has the structure and fixed order shown in the formula

$${}_{1s}P = \pm {}_{1s}M \pm {}_{1s}H \pm Ben \pm {}_sAux.$$

${}_{1s}M$, modifier of the intransitive stative head, may be manifested by general nouns, stative nouns, restricted adverbs, descriptives, and borrowed verbs¹, as a component of a verbal idiom, with fixed position immediately preceding the head. ${}_{1s}M$ manifested by a stative noun always co-occurs with ${}_{1s}H$ manifested by *ji 'be vertical'* (see example ii below). This manifestation of ${}_{1s}P$ has a noun rather than predicate function, manifesting S or O, or in the Referent or From Phrase.

${}_{1s}H$ is the head of the Intransitive Stative Predicate Phrase, which may be manifested by the three intransitive stative verbs, and a fourth

¹The standard method of adapting English verbs for Burarra usage is as modifier in either the Transitive or Intransitive Stative Predicate Phrase, depending on the transitivity of the borrowed verb (see Sections 2.3., example v, and 2.4., example iv).

derived from the transitive stative verb.

_sAux, the stative auxiliary, may be manifested by five verbs of motion noted to date. (The verb *workiya* 'do habitually' is literally a verb of motion 'to throw self about'.)

Ben is the same as described for the Intransitive Predicate Phrase (see Section 2.1.).

The Intransitive Stative Predicate Phrase, then, may be displayed as follows:

$is^P = +_{is}M$	$+_{is}H$	$+Ben$	$+_{s}Aux$
gen n	ji	dat prn	boy
stat n	ni		gomarrya
restrict adv	yu		jarl
descr	negiya 'to make self be'		bamba
borrowed vbs			workiya
Comparison Phr			

Some examples of the Intransitive Stative Predicate Phrase follow:

- i) jama jiny-ji.rra jiny-yorkiya
 Intr St Phr = $+_{is}M$:gen n $+_{is}H$:intr st vb $+_{s}Aux$:intr vb
work 3s-do.punct 3s-do:habitually:cont
 'she works all the time'
- ii) bama a-ji.rra
 Intr St Phr = $+_{is}M$:st n $+_{is}H$:intr st vb
head 3s-is.punct
 'his head'
- iii) nawanawa arr-ni nula
 Intr St Phr = $+_{is}M$:restr adv $+_{is}H$:intr st vb $+Ben$:dat prn
ready incl:s-do for:3s
 'let's you and I make things ready for him'
- iv) arr-delapa arr-ni
 Intr St Phr = $+_{is}M$:descr $+_{is}H$:intr st vb
 incl:s-little incl:s-be:perf
 'you and I were little'
- v) satisfied a-ni.rra
 Intr St Phr = $+_{is}M$:borr vb $+_{is}H$:intr st vb
satisfied 3s-be.punct
 'he is satisfied'
- vi) gurdijarra michpa arr-ni
 Intr St Phr = $+_{is}M$:Compar Phr $+_{is}H$:intr st vb
fish like incl:s-be:perf
 'you and I were like fish'

vii) ngu-ji.rra ng-gomarrya
 Intr St Phr = +_{ts}H:intr st vb +_sAux:intr vb
 ls-do.punct ls-circle:cont
 'I did it circling'

2.4. TRANSITIVE STATIVE

The transitive stative clause is expressed by the formula

$${}_{ts}Cl = +{}_{ts}P \pm Part \pm Lat \pm Peri$$

in which ${}_{ts}P$ is the Transitive Stative Predicate Phrase, and Part, Lat, and Peri include all of their respective tagmemes. ${}_{ts}P$ has the structure and fixed order shown in the formula

$${}_{ts}P = \pm {}_{ts}M + {}_{ts}H \pm Ben \pm {}_sAux$$

where ${}_{ts}M$, the modifier of the transitive stative head, may be manifested by general nouns, kinship terms, descriptives, borrowed verbs¹, and the Comparison Phrase, as a component of a verbal idiom in fixed position immediately preceding the head.

${}_{ts}H$, the head of the Transitive Stative Predicate Phrase, is manifested by the transitive stative verb.

Ben is the same as described for the Intransitive Predicate Phrase (Section 2.1.), and ${}_sAux$ is the same as described for the Intransitive Stative Predicate Phrase (Section 2.3.).

The Transitive Stative Predicate Phrase, then, may be displayed as follows:

${}_{ts}P = \pm {}_{ts}M$	$+ {}_{ts}H$	$\pm Ben$	$\pm {}_sAux$
gen n	nega 'to make be'	dat prn	boy
kin term			gomarrya
descr			jarl
borrowed vb			bamba
Compar Phr			workiya

Examples of the Transitive Stative Predicate Phrase follow:

i) marn.gi burr-nega boy
 Tr St Phr = +_{ts}M:gen n +_{ts}H:tr st vb +_sAux:intr vb
 understanding 2s:3pl-make:be 2s:imp:go
 'go teaching them'

ii) jachacha ay-ne.nga
 Tr St Phr = +_{ts}M:kin term +_{ts}H:tr st vb
 mother's:brother incl:s:3s-make:be.imperf
 'you and I call him uncle'

¹The standard method of adapting English verbs for Burarra usage is as modifier in either the Transitive or Intransitive Stative Predicate Phrase, depending on the transitivity of the borrowed verb (see Sections 2.3., example v, and 2.4., example iv).

- iii) an-nerra a-nega.rra
 Tr St Phr = +_{ts}M:descr +_{ts}H:tr st vb
 cl-bad 3s:3s-make:be.punct
 'he made him bad'
- iv) teachim a-ne.nga
 Tr St Phr = +_{ts}M:borr vb +_{ts}H:tr st vb
 teach 3s:3s-make:be.imperf
 'he teaches him'
- v) gun-nerra minypa gu-ne.nga a-ni.rra
 Tr St Phr = +_{ts}M:Compar Phr +_{ts}H:tr st vb +_sAux:intr st vb
 cl-bad like 3s:3s-make:be.imperf 3s-do.punct
 'he is making it bad like'

2.5. DESCRIPTIVE

The Descriptive clause in Burarra is expressed by the formula

$${}_dCl = + {}_dP \pm Part \pm Lat \pm Peri$$

in which ${}_dP$ is the Descriptive Predicate Phrase, and Part includes Subject and Benefactive, but not Object, and Lat and Peri include all their respective tagmemes. ${}_dP$ has the structure and fixed order shown in the simple formula

$${}_dP = + {}_dH \pm Ben$$

where ${}_dP$, the head of the Descriptive Predicate Phrase, may be manifested by general nouns, kinship terms, dative pronouns, descriptives, demonstrative descriptives, the indeterminate descriptive {gun-}nga 'what', locatives, adverbs, noun and descriptive phrases¹, and the Intransitive Stative Predicate Phrase expressing body parts (see Section 2.3.).

Ben, the benefactor of the descriptive predicate, is manifested by dative pronouns.

Accordingly the Descriptive Predicate Phrase is displayed as follows:

$$\begin{array}{ll}
 {}_dP = + {}_dH & \pm Ben \\
 \text{gen n} & \text{dat prn} \\
 \text{kin term} & \\
 \text{dat prn} & \\
 \text{descr} & \\
 \text{dems descr} & \\
 \text{indt descr} & \\
 \text{loc} & \\
 \text{adv} & \\
 \text{Compar Phr} & \\
 \text{Ref Phr} &
 \end{array}$$

¹A forthcoming paper on the non-predicate phrases of Burarra is in first draft form.

Examples of the Descriptive Predicate Phrase follow:

- i) nguyumbula arrkula (jarlakarr)
 Descr P Phr = +_dH:gen n +Ben:dat prn (+S:gen n)
 snake for:incl:s (road)
 '(the road) is the snake to us'
- ii) nyinya
 Descr P Phr = +_dH:kin term
 daddy
 'there's (your) daddy'
- iii) (bama a-ji.rra) nula
 Descr P Phr = (+S:Intr St Phr) +_dH:dat prn
 (head 3s-be.punct for:3s
 '(the head) is for him' (re dividing wallaby)
- iv) an-mola arrburrwa
 Descr P Phr = +_DH:descr +Ben:dat prn
 cl-friendly to:incl:s
 'he is friendly to us'
- v) an-guna
 Descr P Phr = +_dH:dems descr
 cl-this
 'this is it'
- vi) (gala) ana-nga arrkula
 Descr P Phr = (+MD:md wd) +_dH:indt descr +Ben:dat prn
 (negative) acc-who for:incl:s
 'there isn't anyone for us'
- vii) wuparnana
 Descr P Phr = +_dH:loc
 inside
 'it's inside'
- viii) (mun-ngaypa) ngardapa
 Descr P Phr = (+S:descr) +_dP:adv
 (mine) alone
 '(mine) is by itself'
- ix) minypa wangarra
 Descr P Phr = +_dH:Compar Phr
 like devil
 'he's like a devil'

- x) girnamirrnga nula
 Descr P Phr = +_dH:Ref Phr
 mosquito for:3s
 'it's for mosquitoes'

3. PARTICIPANT TAGMEMES

The participant tagmemes denote the central participants in Burarra clauses: subject, (direct) object of transitive verbs, and benefactor. When semantically present these are obligatorily signalled in the predicate phrase, and only optionally co-occur as participant tagmemes, specifying the identities of subject and/or object and/or benefactor, and sometimes adding emphasis or resolving ambiguity present in the person prefix of the verb. (For a study of Burarra verb prefixes, see Glasgow and Kerr 1964.)

3.1. SUBJECT

The Subject Tagmeme, S, optionally occurs in all clause types. It answers the questions ana-nga 'who?' and an-nga 'what?', and may be manifested by proper nouns, general nouns (including terms of respect, such as bambay 'old woman'), stative nouns in the Intransitive Stative Predicate Phrase (see Section 2.3.), nominative pronouns, kinship terms, descriptives, demonstrative descriptives, the indeterminate descriptive {gun-}nga 'what', most noun phrases¹ and all series of declarative clauses (see Table 1, Section 1.1.). Three is the maximum number of tagmemes observed in an embedded clause manifesting S.

The accompaniment prefix {gu-} has been observed in rare co-occurrence with manifestations of S which name or describe an animate being, emphasising S as agent (see example vii below), and sometimes serving to clear up ambiguity between third person singular subject and object where both belong to the same noun class. Such ambiguity is more often cleared up by the Actor Phrase (see example viii below).

Some examples of S in clauses follow:

- i) lipalipa mu.na-bambu.rda
 Decl₁Cl = +S:gen n +₁P:Intr Phr
 canoe 3s.toward-move.punct
 'the canoe is coming'
- ii) rrepara ngu-ji.rra ngu-wurkurchi.nga
 Decl₁Cl = +S:Intr St Phr +₁P:Intr Phr
 foot 1s-be.punct 1s-pain.imperf
 'my foot hurts'

¹See footnote p.52.

- iii) nipa an-gapa
 Decl_dCl = +S:nom prn +_dP:dems descr
 3s cl-there:far
 'he is way over there'
- iv) an-ngardapa a-be.ya arrburrwa
 Decl₁Cl = +S:descr +₁P:Intr Phr
 cl-alone 3s-arrive.cont to:lp1
 'one man came to us'
- v) nguna-anya waykan a-ni.rra a-bupiya.na
 Decl₁Cl = +S:Decl_{is}Cl +₁P:Intr Phr
 my:masc-father high 3s-be.punct 3s-descend.perf
 'my father in heaven came down'
- vi) mun-narda nguna-wu.cha mu-wulebiya.na
 Decl₁Cl = +S:Decl_tCl +₁P:Intr Phr
 cl-that:known 2s:ls:give.cont 3s-be:finished:up.perf
 'that which you gave me is all gone'
- vii) rrawa gu-jarlapu.na ji-moch
 Decl_tCl = +O:gen n +_tP:Tr Phr +S:gen n
 country 3s:3s-make.perf acc-dreaming
 'the dreaming made the country'
- viii) an-gugaliya ana-nyala a-na.na gornabula
 Decl_tCl = +S:Actor Phr +_tP:Tr Phr +O:gen n
 cl-person acc-actor 3s:3s-see.perf wallaby
 'the man as actor saw the wallaby'
- ix) gala ana-nga bijirrinny-dimarrma.nga.rna
 Subj_tCl = +MD:md wd +S:indt descr +_tP:Tr Phr
 negative acc-who 3s:3dl:f-hold.imperf.ctf
 'no one held them (back)'

3.2. OBJECT

The Object Tagmeme, O, optionally occurs in transitive and transitive stative clauses. O answers the same questions and, except for the Actor Phrase,¹ has the same manifestations as S. O is distinguished from S semantically and by its agreement with object obligatorily signalled in the person prefixes on the verb.

Some examples of O in clauses follow:

- 1) bala gu-rra.cha
 Decl_tCl = +O:gen n +_tP:Tr Phr
 house 3s:3s-nail.cont
 'he is building a house'

¹See footnote p.52.

- iii) gun-narda ngu-borrwu.ja nula nguna-jachacha
 Decl_tCl = +O:dems descr +_tP:Tr Phr +BEN:kin term
cl-that:known ls:3s-think.cont for:3s my:masc-uncle
'that's what I'm thinking about for him, my uncle'

4. LATERAL TAGMEMES

There are six lateral tagmemes which add to and refine the meaning of the predicate by adding information about the indirect object, place or event from which the action originates, location or instrument, time, completeness, or manner of the action. Up to three lateral tagmemes may occur in all clause types in any combination, except that where more than two occur, at least one is always Aspect.

Lateral tagmemes, unlike participant tagmemes, are not reflected in the predicate, the 'toward' element of the predicate phrase being semantically independent of the Indirect Object, Location-Instrument, and From Tagmemes (see following sections).

4.1. INDIRECT OBJECT

The Indirect Object Tagmeme, IO, optionally occurs in all clause types expressing the goal or medium of the action, and answering the questions gun-nga 'what?' and gun-nga nula 'what for?'. IO may be manifested by proper nouns, general nouns, descriptives, demonstrative descriptives and demonstrative locatives, locatives, and by noun phrases including the Descriptive, Habitat, and Referent Phrases¹.

The occurrence of the accompaniment prefix {gu-} with manifestations of IO is infrequent and carries connotations of identification of the subject with the indirect object (see example x below).

Examples of IO in clauses follow:

- i) Gupanga a-bo.na
 Decl₁Cl = +IO:prop n +₁P:Intr Phr
place:name 3s-go.perf
'he went to Gupanga'
- ii) nginyipa boy manakarda
 Imp₁Cl = +S:nom prn +₁P:Intr Phr +IO:gen n
2s 2s:imp:go geese
'you go for geese'

¹See footnote p.52.

- iii) rrupiya nguburr-wu.na
 Decl_tCL = +IO:gen n +_tP:Tr Phr
 money ls:3pl-give:to.perf
 'I gave them money'
- iv) jaruk ngu-wengga barra gun-ngayburrrpa
 Decl₁Cl = +IO:gen n +₁P:Intr Phr +A:asp wd +IO:descr
 story ls-speak future cl-lpl
 'I'm going to tell a story, ours'
- v) boy gun-gaba
 Imp₁Cl = +₁P:Intr Phr +IO:dems descr
 2s:imp:go cl-there:unseen
 'go to that place'
- vi) yi-gaba a-bo.na
 Decl₁Cl = +IO:dems loc +₁P:Intr Phr
 awy-there:unseen 3s-go.perf
 'he went that way'
- vii) a-bo.na waykan
 Decl₁Cl = +₁P:Intr Phr +IO:loc
 3s-go.perf on:top
 'he went to heaven'
- viii) awurri-ji.rra.pa wengga nguburr-we.na
 Decl₁Cl = +IO:Descr Phr +₁P:Intr Phr
 3dl-be.punct.rep story incl:pl-speak.perf
 'we told two stories'
- ix) a-bo.na gornabula ana-many
 Decl₁Cl = +₁P:Intr Phr +IO:Habitat Phr
 3s-go.perf wallaby acc-all:the:time
 'he went where the wallabies are all the time'
- x) ji-minjak awurr-bo.na
 Decl₁Cl = +IO:gen n +₁P:Intr Phr
 acc-wild:game 3pl-go.perf
 'they went to participate in the ceremony' (the ceremony
 is referred to by the word for wild game, and the
 accompaniment prefix indicates participation or
 identification)
- xi) balaja nula nyiwurr-bo.na gurda
 Decl₁Cl = +IO:Ref Phr +₁P:Intr Phr
 food for:3s excl:pl-go.perf hither
 'we came here for food'

4.2. FROM

The From Tagmeme, F, is optional in all clause types, and answers the question *yina gaya wenga* 'whence, from what place?'. F is manifested by the From Phrase, in which the preposition *wenga* 'from' is obligatory, except where context makes it redundant¹ (see examples i and iii below).

The accompaniment prefix {gu-} is obligatory in the From Phrase except that it is optional where the axis is manifested by locatives such as *waykan* 'high', or by general nouns with connotations of place such as *rrawa* 'camp', and it is obligatorily absent where the axis is manifested by a proper noun.

Examples of F in clauses follow:

- i) *lungurra gu-gaba gu.na-jek.nga*
 Decl₁Cl = +S:gen n +F:From Phr +₁P:Intr Phr
north wind acc-there:unseen 3s.toward-return.imperf
'the north wind blows from there'
- ii) *Darwin wenga a-jek.nga Maningrida*
 Decl₁Cl = +F:From Phr +₁P:Intr Phr +LI:prop n
Darwin from 3s-return.imperf Maningrida
'he returned to Maningrida from Darwin'
- iii) *Darwin ngujutpa ngu-be.na*
 Decl₁CL = +F:From Phr +LI:dems loc +₁P:Intr Phr
Darwin here 1s-arrive.perf
'I arrived here from Darwin'
- iv) *gu-gata wenga gun-nerra gu-ni*
 Decl_{1s}Cl = +F:From Phr +_{1s}P:Intr St Phr
acc-there:seen from cl-bad 3s-be:perf
'from that time on things were bad'

4.3. LOCATION-INSTRUMENT

The Location-Instrument Tagmeme, LI, is optional in all clause types, and answers the questions *yina gaya* 'which place?', *gu-yinga* 'with what?', and *gu-guyinmiya* 'with the thing that does what?'. LI expresses the location in, on, or at which, or the instrument with which the predicate is performed. The concepts of location and instrument are united in the LI Tagmeme on the basis of complementary and mutually exclusive distribution; on the basis of ambiguity as, for example, whether a thing is being cooked on the fire or with the fire, and whether a thing is being bagged in a bag or using a bag; and on the basis of similar

¹See footnote p.52.

manifestations, differing only in that locatives and demonstrative locatives do not express the instrument concept; and on the basis of the frequent co-occurrence of the accompaniment prefix {gu-} with the manifestations of locational and instrumental concepts, in contrast to the rare occurrence of {gu-} in other tagmemes.

LI may be manifested by proper nouns, general nouns, stative nouns, descriptives, demonstrative descriptives, demonstrative locatives, locatives, and noun phrases including the Descriptive, Classifying, Identifier, Source Content, Proximity, and Relative Location Phrases.¹

The accompaniment prefix {gu-} occurs obligatorily with stative nouns manifesting LI, distinguishing such occurrences from S, O, F, and ₁M.² As well, {gu-} occurs optionally with general nouns, descriptives,

¹See footnote p.52.

²Four tagmemes are used in Burarra to express the semantic concept of location-instrument involving body parts: S, F, LI and ₁M of the Intransitive Predicate Phrase. Contrastive examples of a stative noun manifesting these tagmemes, as well as O, follow.

- i) bama ngu-ji.rra ngu-borrwu.ja
Decl_tCl = +S:_sCl +_tP:Tr Phr
 head_s ls-be.punct lš:3s-consider.cont 'my head considers it'
- ii) bama ngu-ji.rra wupa ngu-borrwu.ja
Decl_tCl = +S:Source Content Phr +_tP:Tr Phr
 head ls-be.punct inside lš:3s-consider.cont 'from my head considers it'
- iii) bama wupa a-ji.rra
Decl_{is}Cl = +S:Source Content Phr +_iP:Intr St Phr
 head inside 3š-be(vertical).punct
 'just his head was sticking up'
- iv) bama ngu-ji.rra wenga ngu-borrwu.ja
Decl_tCl = +F:From Phr +_tP:Tr Phr
 head ls-be.punct from lš:3s-consider.cont 'just my head I consider it'
- v) ngu-bama ngu-yina.nga
Decl_iCl = +LI:st n +_iP:Intr Phr
 acc-head lš-say.imperf 'in my head I say. . .'
- vi) bama ngu-yina.nga
Decl_iCl = +_iP:Intr Phr
 head ls-say.imperf 'I think'
(the semantic concept of location-instrument being expressed here by _iM of the Intr Phr)
- vii) bama ngu-ji.rra nguna-bu.na
Decl_tCl = +O:_sCl +_tP:Tr Phr
 head_s ls-be.punct 3š:ls-hit.perf 'he hit my head'

And the following are examples in which the body part is a general noun.

- viii) mu-mamama ngu-borrwu.ja
Decl_tCl = +LI:gen n +_tP:Tr Phr
 acc-brain lš:3s-consider.cont 'I consider it with (my) brains'
- ix) mu-mamama wupa ngu-borrwu.ja
Decl_tCl = +LI:Source Content Phr +_tP:Tr Phr
 acc-brain inside lš:3s-consider.cont
 'I consider it just with (my) brains'
- x) mamama wupa ngu-borrwu.ja
Decl_tCl = +O:Source Content Phr +_tP:Tr Phr
 brain inside lš:3s-consider.cont 'I think just about brains'

demonstrative descriptives, and the Descriptive and Classifying Phrases; but not with proper nouns, locatives, or demonstrative locatives.

Examples of LI in clauses follow:

- i) motor car Darwin gapa nyirri-bawa
 Decl_tCl = +O:borr n +LI:Iden Phr +_tP:Tr Phr
motor car Darwin there:far excl:dl:3s-leave:it
'we could leave the motor car there in Darwin'
- ii) a-barrngumi.ya gu-mannga
 Decl₁Cl = +₁P:Intr Phr +LI:gen n
3s-enter.cont acc-jungle
'he entered the jungle'
- iii) a-yalpu.rda gu-bol
 Decl_tCl = +_tP:Tr Phr +LI:gen n
3s:3s-cook.punct acc-fire
'he cooked it on the fire'
- iv) ana-japalana a-yalpu.rda
 Decl_tCl = +LI:gen n +_tP:Tr Phr
acc-drum 3S:3s-cook.punct
'he cooked it in a drum'
- v) ana-bama gu-bu.na
 Decl_tCl = +LI:st n +_tP:Tr Phr
acc-head 3s:3s-hit.perf
'he hit it with his head'
- vi) janguny ny-bama ng-gurrmu.rra
 Decl_tCl = +O:gen n +LI:st n +_tP:Tr Phr
story acc-head 1s:3s-put.punct
'I put the story in your head'
- vii) gu-yigipa gu-rrawa nguburr-ni.pa barra
 Decl_{1s}Cl = +LI:Descr Phr +_{1s}P:Intr St Phr +A:asp wd
acc-his acc-country incl:pl-be.rep future
'we will live in his country'
- viii) borndok mu-guyinda bama a-ji.rra
 Decl_tCl = +LI:Class Phr +O:Decl_{1s}Cl
spear:thrower acc-that:does:like head 3s-be.punct
a-bu.na
 +_tP:Tr Phr
3s:3s-hit.perf
'he hit him in the head with something like a spear
thrower'

- ix) Darwin nguwurr-bo.ya ana-motor car or aeroplane
 Decl₁Cl = +IO:Prop n +₁P:Intr Phr +LI:Serial Phr
 Darwin incl:pl-go.cont acc-motor car or aeroplane
 'we go to Darwin in a motor car or an aeroplane'

4.4. TIME

The Time Tagmeme, T, is optional in all clause types, and answers the questions gu-yinpa 'when?' and gu-yinmiyapa 'how many?' (referring to days, months, etc.). T may be manifested by temporals, ordinals, the descriptive ana-munya 'night', the Count Phrase, and the Relator-Axis Time Clause, which may be defined as having an axis manifested by the following: waypa 'at that time', nuwurra 'later', and nuwurra waypa 'later when'.

The accompaniment prefix {gu-} has only been observed in the T Tagmeme occurring with the descriptive ana-munya 'night', where it is obligatory, or in the_dP in a RA Time Clause (see example v below).

- i) geka a-bo.na
 Decl₁Cl = +T:temp +₁P:Intr Phr
 today 3s-go.perf
 'he went today'
- ii) mu-nguyurra balanda ngika
 Decl_dCl = +T:ordinal +_dP:gen n +MD:md wd
 at:first white:man no
 'at first there was no white man'
- iii) a-bupiya.na ana-munya
 Decl₁Cl = +₁P:Intr Phr +T:descr
 3s-descend.perf acc-darkness
 'he came down at night'
- iv) waygaja awurri-ji.rra.pa awurri-ji.rra.pa
 Decl₁Cl = +MD:md wd +T:Count Phr
 maybe 3dl-be.punct.rep 3dl-be.punct.rep
 nyiwurr-jeka barra
 +₁P:Intr Phr +A:asp wd
 excl:pl-return future
 'maybe in four months we'll return'
- v) waypa barra ji-gabi yi-rrana
 Decl₁Cl = +T:RA Time Cl +T:temp
 at:the:time future acc-there:unseen evening
 arr-bamba
 +₁P:Intr Phr
 incl:s-move
 'when the sun's over there, in the evening, we'll go'

- vi) nuwurra ngulam nguwurr-boy
 Decl₁Cl = +T:RA Time Cl +₁P:Intr Phr
later morning incl:pl-go
'later when it's morning we'll go'
- vii) nuwurra waypa barra a-bengga
 Decl₁Cl = +T:RA Time Cl
later at:the:time future 3s-arrive
 nguburr-wengga barra nguburr-ni
₁P:Intr Phr. . . +A:asp wd . . . ₁P
incl:pl-speak future incl:pl-do
'later when he arrives we will talk'

4.5. ASPECT

The Aspect Tagmeme, A, is optional in all clause types, expressing the extent to which the action of the predicate is realised. A reflects the concepts of the repetition and completive aspect suffixes which occur on verbs (see Glasgow 1977a), but as may be seen in examples i and ii below, manifestations of A are compatible with, but semantically independent of the verbal suffixes.

A is semantically distinct from T (compare example iv below with Section 4.4., example ii).

A may be manifested by one of the following aspect words: gipa 'already', burdak 'yet', barra 'future',¹ mu-nguy 'further', and mola 'again'.

Examples of A in clauses follow:

- i) gipa wola a-ni
 Decl_{1s}Cl = +A:asp wd +T:temp +_{1s}P
already long:ago 3s-be:perf
'he lived long ago'
- ii) gipa yi-rrawa mbi-ba.nga
 Decl_tCl = +A:asp wd +T:temp +_tP:Tr Phr
already yesterday 3pl:3s-eat.imperf
'they ate it already yesterday'

¹The Aspect Tagmeme, when manifested by barra 'future', can occur following any other clause level tagmeme and interrupting the predicate phrase following the modifier or head, allowing stylistic emphasis by the relationship of barra to the various elements of the clause. When it occurs clause initially, barra functions as a purposive conjunction on the sentence level.

- iii) ngayburrpa burdak gun-nyagara
 Decl_dCl = +S:nom prn +A:asp wd +_dP:descr
 1:pl yet cl-nothing
 'we were not here yet'
- iv) mu-nguy a-bo.ya.pa
 Decl₁Cl = +A:asp wd +₁P:Intr Phr
 further 3s-go.cont.rep
 'he kept going further'
- v) mola jurdach a-wengga barra
 Decl₁Cl = +A:asp wd +T:ordinal +₁P:Intr Phr +A:asp wd
 again last 3s-speak future
 'he will speak again, the last time'

4.6. MANNER

The Manner Tagmeme, MNR, is optional in all clause types. It denotes the manner in which the action of the predicate is performed, and always occurs adjacent to the predicate phrase. MNR is distinguished from the modifiers of predicate phrases by the more general distribution of its manifestations, which contrast with the idiomatic combinations of predicate modifier and head.

MNR may be manifested by adverbs, the locatives waykan 'high' and wupa 'under' with verbs of speech indicating degree of loudness, and by intransitive verbs, and by declarative and subjunctive transitive clauses with Aux₂ obligatorily absent, and by descriptive clauses with _sAux obligatorily absent. The verbal and clause manifestations of MNR are recognised as MNR, rather than a separate clause, by their function of modifying the predicate, by intonation, and by restrictions on their expansion.

Examples of MNR in clauses follow:

- i) borijipa ngu.na-bo.na
 Decl₁Cl = +MNR:adv +₁P:Intr Phr
 for:nothing 1s.toward-go.perf
 'I came for no particular reason'
- ii) burr-jong jiny-bo.ya jiny-yorkiya
 Decl₁Cl = +MNR:adv +₁P:Intr Phr
 with:stick 3s-go.cont 3s-do:habitually:cont
 'she goes with a walking stick all the time'

- iii) waykan wengga
 Imp₁Cl = +MNR:loc +₁P:Intr Phr
 high 2s:imp:speak
 'speak loudly'
- iv) a-mardaworbu.rda a-we.ya
 Decl₁Cl = +MNR:intr vb +₁P:Intr Phr
 3s-do:inadequately.punct 3s-speak.cont
 'he only told half of it'
- v) joborr gu-yopa a-boy a-wengga
 Subj₁Cl = +MNR:Subj_tCl +₁P:Intr Phr
 plan 3s:3s-talk:about 3s-go 3s-speak
 'he could speak, talking about the plan'
- vi) jambaka gun-nyagara nyirri-ninya
 Decl₁Cl = +MNR:_dCl +₁P:Intr Phr
 tobacco cl-nothing excl:dl-sit:perf
 'we were without tobacco'

5. PERIPHERAL TAGMEMES

There are three peripheral tagmemes which express an attitude or an inquiry about, or call for attention to the content of the clause.

5.1. MOOD

The Mood Tagmeme, MD, is optional in all clause types, expressing negation, certainty, supposedness, comparison, 'nevertheless', or instruction. MD is semantically distinct from MNR, and may be manifested by any one of the following mood words noted to date, and by the descriptive gun-burrall 'true'.

gala	'negative'	minypa/michpa/	'it's like'
ganapa ¹	'stop'	galngu/marunga	
jarra	'rather'	ngardawa	'because'
jimarna	'supposedly'	ngika	'no'
marrban/wurpiya	'even though'	waya	'certainly'
marrka	'try'	waygaja	'perhaps'
minja ¹	'if, isn't it so?'	wuriya	'anyway'
		wurpa	'finality'

¹The indicative forms of ganapa and minja, ganapiya 'it is finished' and minjiya 'it is so' respectively, manifest _dP, functioning on sentence, paragraph and discourse levels.

Examples of MD in clauses follow:

- i) burraya waya nyi-na barra
 Decl_tCl = +T:temp +MD:md wd +_tP:Tr Phr +A:asp wd
soon certainly 2s:3s-see future
'you will certainly see it soon'
- ii) jarra ngu-ni
 Decl_iCl = +MD:md wd +_iP:Intr Phr
rather 1s-be:perf
'but rather I stayed'
- iii) wuri jarra ngu-wenyag.nga.rna
 Subj_tCl = +MD:md wd +MD:md wd +_tP:Tr Phr
even:though rather 1s:3s-hang:up.imperf.ctf
'but I though I'd hung it up'
- (Note that the final syllable of wuriya is dropped in this combination.)
- iv) ganapa burr-gala ga
 Imp_tCl = +MD:md wd +_iP:Intr Phr
stop with-noise 2s:imp:take:it
'stop making noise'
- v) gala yapa jiny-bu
 Subj_tCl = +MD:md wd +INDT:indt part +_tP:Tr Phr
negative can:also 3s:3s-hit
'lest he hit her'
- vi) gun-burral jiny-burrmanybu.na
 Decl_tCl = +MD:descr +_tP:Tr Phr
cl-true 3s:3s-call:by:kin:name.perf
'he really treated her as kin'

5.2. INDETERMINATE

The Indeterminate Tagmeme, INDT, is optional in all clause types except imperative clauses, where it is obligatorily absent. INDT expresses indeterminateness about the non-peripheral elements of a situation, and is used largely to elicit information in the form of specific clause-level tagmemes (see Sections 3.1.-4.4.), or co-occurring with negative in the MD Tagmeme it expresses what must not occur (see example v, Section 5.1.).

INDT may be manifested by the indeterminate descriptives:

{gun-}nga 'what' (See ordinary descriptive derived from {gun-}nga, Section 3.2., example v.)

{gun-}an.gaya 'which one?'

{gu-}yinga 'with it that does what?'

{gu-}guyinmiya 'with it that does how?'

and by the indeterminate particles:

ya (interrogative)

yama 'can?, why not?'

yapa 'can also?'

yina 'which?'

and by variations of the indeterminate verb:

-yinmiya/-yin 'how do'

-yinmiyapa/-yinpa 'how many?, when?'

and by the Locative Interrogative, Referent, and Why Phrases.¹

Examples of INDT in clauses follow:

- i) an-nga nyi.na-bo.na
Decl₁Cl = +INDT:indt descr +₁P:Intr Phr
cl-what 2s.toward-go.pref
'what did you come for?'
- ii) ana-nga ny-bu.na
Decl_tCl = +INDT:indt descr +_tP:Tr Phr
acc-who 2s:3s-hit.pref
'who did you hit?'
- iii) mun-an.gaya jal nyi-ni
Decl_{is}Cl = +INDT:indt descr +_{is}P:Intr St Phr
cl-cl.place desire 2s-be:perf
'which one did you want?'
- iv) gu-yinga barra nguburr-boy
Decl₁Cl = +INDT:indt descr +A:asp wd +₁P:Intr Phr
acc-that:does:what future incl:pl-go
'by what means shall we go?'
- v) gu-guyinmiya ng-gornda
Subj_tCl = +INDT:indt descr +_tP:Tr Phr
acc-it:that:does:how 1s:3s-cut
'what could I cut it with?'

¹See Appendix B, Conjunctions.

- vi) gun-burrall ngarripa marn.gi ya
 Decl_dCl = +MD:descr +S:nom prn +_dP:gen n +INDT:indt part
 cl-true incl:s understanding interrogative
 'you and I really know, don't we?'
- vii) yama nguna-wu
 Subj_tCl = +INDT:indt part +_tP:Tr Phr
 why:not 2s:ls-give:to
 'why don't you give it to me?'
- viii) ngu-yinmiya barra ngu-yarlapa
 Decl_iCl = +INDT:indt vb +A:asp wd +_tP:Tr Phr
 ls-how:do future ls:3s-fix
 'how can I fix it?'
- ix) gu-yinmiya.pa barra nyi-ni
 Decl_{is}Cl = +INDT:indt vb +A:asp wd +_{is}P:Intr St Phr
 3s-how:do.rep future 2s-be
 'how long will you stay?'
- x) gu-yin.pa barra a-bengga
 Decl_iCl = +INDT:indt vb +A:asp wd +_iP:Intr Phr
 3s-how:do.rep future 3s-arrive
 'when will he arrive?'
- xi) yina gaya barra ngubi-yalpa
 Decl_tCl = +INDT:Loc Interrog Phr +A:asp wd +_tP:Tr Phr
 which place future incl:pl:3s-cook
 'where will we cook it?'
- xii) yina gaya wenga a.na-bo.na
 Decl_iCl = +INDT:Loc Interrog Phr +_iP:Inyr Phr
 which place from 3s.toward-go.perf
 'where did he come from?'
- xiii) an-jarral yina an-gaya
 Decl_dCl = +S:descr +INDT:indt part +_dP:dems descr
 cl-whisker which cl-place
 'where is old man?'
- xiv) an-guna ana-nga an-guyindawa nggula
 Decl_dCl = +S:dems descr +INDT:indt descr +_dP:Descr P Phr
 cl-this acc-who cl-relationship to:2s
 'what relation is this man to you?'

- xv) gun-nga nula awurr-bachi.na
 Decl₁Cl = +INDT:Ref Phr +₁P:Intr Phr
 cl-what for:3s 3pl-fight.perf
 'what were they fighting about?'

(Note that the Ref Phr here has the same function as the descriptive manifesting IND_T in example 1.)

- xvi) gu-yinga rraka awurr-bachi.na
 Decl₁Cl = +INDT:indt descr +Conj¹ +₁P:Intr Phr
 acc-that:does:what and:so 3pl-fight.perf
 'why did they fight?'

5.3. VOCATIVE

The Vocative Tagmeme, V, is optional in all clause types specifying or calling for the attention of the person addressed. V may be manifested by proper nouns, nouns and descriptives which are used as terms of respect, kinship terms, and the attention word with its variations for masculine and feminine indicative, a-lay, a-jay respectively 'hey'; negative, a-la, a-ja, used when showing disagreement; and emphatic with reference to something previously mentioned, ngarla, ngaja.

Examples of V in clauses follow:

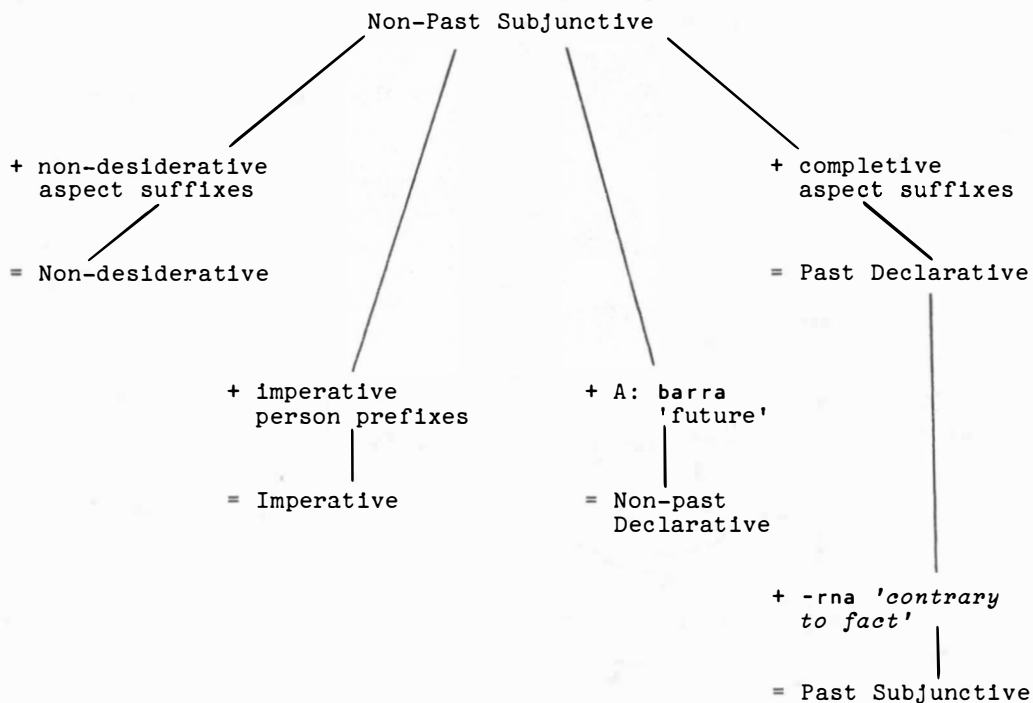
- i) bambay a-jay nguna jambaka
 Imp_tCl = +V:gen n +V:att wd +_tP:Tr Phr +IO:gen n
 old:woman hey:fem:indic 2s:1s:(give:to) tobacco
 'hey, old woman, give me tobacco'
- ii) gala jal ngu-ni a-la
 Subj_{1s}Cl = +MD:md wd +_{1s}P:Intr St Phr +V:att wd
 negative desire 1s-do hey:masc:neg
 'hey, no, I don't want to'
- iii) ngu-bu.na ngarla
 Decl_tCl = +_tP:Tr Phr +V:att wd
 1s:3s-hit.perf emph:hey:masc
 'I hit him, indeed'

6. VARIETIES OF VERB FORM AND THEIR FUNCTIONS

The basic form of the Burarra verb is the non-past subjunctive. The diagram below shows how non-desiderative, imperative, the various declarative forms, and past subjunctive are derived. As well, imperative and past and non-past subjunctive may be multiplied by negative, and all forms may be multiplied by repeated action. The function of these forms is outlined in 6.1.-6.8.

¹See Appendix B, Conjunctions.

DIAGRAM 2



X Negative (Past or non-past subjunctive, descriptive clauses, and non-past declarative + MD: *gala* 'negative' or *ngika* 'no').

Also imperative + MD: *ganapa* 'stop' or *ngika* 'no'.)

X Repeated Action (All forms + repetition suffix *-pa*.)

6.1. NON-PAST SUBJUNCTIVE

The non-past subjunctive expresses a current potentiality which functions in the English senses of 'could in the future' or 'could have recently' (see the section on tense, Glasgow 1977a).

Some examples of non-past subjunctive follow:

i) *burraya* *nguwurr-boy*
 Subj_iCl = +T:temp +_iP:Intr Phr
 soon *incl:pl-go*
 '*we could go soon*'

ii) *ana-gujarrcha* *jin-da*
 Subj_tCl = +LI:descr +_tP:Tr Phr
 acc-for:cutting *3s:3s-spear*
 '*he could have stabbed her with a knife (yesterday)*'

- iii) minja nguwurr-boy
 Sentence = +Subj₁Cl
 if incl:pl-go
 an-gata ngubi-na
 +Subj_tCl
 cl-there incl:pl:3s-see
 '*if we had gone (yesterday), we would have seen him*'

6.2. NON-DESIDERATIVE

The co-occurrence of a non-desiderative aspect with non-past subjunctive expresses warning about a future contingency. Non-desiderative often co-occurs with the simultaneous manifestation of MD by gala 'negative', and INDT by yapa 'can also', with the total meaning 'lest also' (see example iii below).

Some examples of non-desiderative follow:

- i) gu-derda ny-ma.n
 Subj_tCl = +O:gen n +_tP:Tr Phr
 sickness 2s:3s-get.ndes
 '*you might get sick*'
- ii) galang a-ga.njin a-bo.ga
 Subj_tCl = +O:gen n +_tP:Tr Phr
 hook 3s:3s-take.ndes 3s-go.ndes
 '*(a fish) might take the hook away*'
- iii) gala yapa ana-werranga a-na.n
 Subj_tCl = +MD:md wd +INDT:indt part +S:descr +_tP:Tr Phr
 negative can:also acc-other 3s:3s:see.ndes
 '*lest someone else see him*'

6.3. IMPERATIVE

Imperative expresses a command to a second person or persons.¹ Imperative verb forms are derived by the co-occurrence of the imperative person prefixes with the non-past subjunctive. All intransitive imperative person prefixes and the transitive imperative person prefixes where second person acts on third person singular are distinct from normal intransitive and transitive person prefixes (see Glasgow and Kerr 1964) as follows, except that the 'normal' prefix instead of the zero second person imperative prefix co-occurs with the first order verb prefixes which express direction (see example vii below).

¹The concept of first person imperative '*let us go*', etc., is expressed by the non-past subjunctive.

2nd pers sg (intr or with 3rd sg 0):	zero
2nd pers dl (intr or with 3rd sg 0) masc:	birri-
	fem: birriny-
2nd pers pl (with intr verbs):	buburr-
(with tr vbs 3rd sg 0):	bubu-/bubi-/buwu-
	(phonologically conditioned variants)

Where the object is other than third person singular, the imperative person prefixes are the same as for other transitive clauses (see example v below).

The maximum of four tagmemes in an imperative clause has been described in Section 1.5., and the absence of the F, T, and INDT Tagmemes from imperative clauses has been mentioned in Section 1.2. As well, the only manifestations of MD which occur in imperative clauses are those which make the command a negative one, that is, *ganapa* 'stop' and *ngika* 'no', or *gun-burral* 'true', which adds intensity.

Examples of imperative clauses follow:

- i) a-lay nyiburr-werranga ngujuta
 Imp_tCl = +V:att wd +S:descr +LI:dems loc
 hey:masc:indic excl:pl-other here
 bubi-yalpa
 +_tP:Tr Phr
 2pl:3s:imp-cook
 'hey, you others cook it here'
- ii) birri-wengga birri-ni
 Imp_iCl = +_iP:Intr Phr
 2dl:imp-speak 2dl:imp-do
 'you two keep talking'
- iii) boy
 Imp_iCl = +_iP:In-r Phr
 2s:imp:go
 'you go'
- iv) buburr-boy
 Imp_iCl = +_iP:Intr Phr
 2pl:imp-go
 'you all go'
- v) gun-burral murna njirri-wu jarlakarr
 Imp_tCl = +MD:descr +_tP:Tr Phr +IO:gen n
 cl-true hand 2s:excl:dl-give:to road
 'really give the way into our care'

- v1) ganapa nguna-rrenja
 Imp_tCl = +MD:md wd +_tP:Tr Phr
 stop 2s:ls-be:on
 'stop stepping on me'
- vii) bol nyi.na-ga
 Imp_tCl = +O:gen n +_tP:Tr Phr
 firewood 2s:3s.toward-bring
 'bring firewood'

6.4. NON-PAST DECLARATIVE

The non-past declarative is derived by the co-occurrence of barra 'future' with the non-past subjunctive. It expresses a situation which in the mind of the speaker will occur, fulfilling a function similar to that of the English future tense, and having connotations of certainty absent in the subjunctive. Compare the declarative statement of a possibility in example 1 below, with the subjunctive possibility expressed in example 1, Section 6.1.

- i) burripa waygaja jichicha awurr-boy barra
 Decl₁Cl = +S:nom prn +MD:md wd +IO:gen n +₁P:Intr Phr +A:asp wd
 3pl maybe seafood 3pl-go future
 'perhaps they'll go for fish'
- ii) ngaypa jama ngu-ji barra
 Decl_{1s}Cl = +S:nom prn +_{1s}P:Intr St Phr +A:asp wd
 ls work ls-do future
 'I am going to work'
- iii) gala barra a.na-boy
 Decl₁Cl = +MD:md wd +A:asp wd +₁P:Intr Phr
 negative future 3s.toward-go
 'he's not going to come'

6.5. PAST DECLARATIVE

The past declarative is derived by the co-occurrence of completive aspect suffixes with the non-past subjunctive. It expresses the completeness of an action begun in the past or perfect, punctiliar, continuous, or imperfect, the completive aspects which may occur with particular verbs being a major distinguishing feature of the verb classes. (For a full description of aspect and how it relates to tense, see Glasgow 1977a.)

Examples of past declarative follow:

- i) m-ba.nga
Sentence = +Decl_tCl
3s:3s-eat.imperf 3s-go.cont
mu-wuleba.rda
+Decl_tCl
3s:3s-finish.punct
'he kept on eating it and finished it up (recently)'
- ii) gu.na-ga.nja a.na-bo.na
Decl_tCl = +_tP:Tr Phr
3s:3s.toward-take.cont 3s.toward-go.perf
'he brought it (today or long ago)'

6.6. PAST SUBJUNCTIVE

The past subjunctive is derived by the co-occurrence of the second order verb suffix -rna 'contrary to fact' with the past declarative, in effect negating the co-occurring completive aspect.

Examples of past subjunctive follow:

- i) jimarna a.na-bo.ya.rna
Subj₁Cl = +MD:md wd +₁P:Intr Phr
supposedly 3s.toward-go.cont.ctf
'I supposed he would have come (today)'
- ii) yama nyi.na-bo.ya.rna
Subj₁Cl = +INDT:indt part +₁P:Intr Phr
can 2s:toward-go.cont.ctf
'couldn't you have come (why didn't you)'

6.7. NEGATION

Negation is derived by the co-occurrence of the MD tagmeme manifested by gala 'negative' and/or ngika 'no' with the past subjunctive in the sense of 'did not', with the non-past subjunctive and in descriptive clauses with the sense of 'is not', and with non-past declarative in the sense of 'will not'. (For negated command see Section 6.3., example vi.)

Examples of negation follow:

- i) gala japalana nyi.na-ga.nja.rna
Decl_tCl = +MD:md wd +O:Gen n +_tP:Tr Phr
negative drum 2s:3s.toward-take.cont.ctf
'you didn't bring the drum (today)'

- ii) gala jambaka ngu-bay ngu-workiya
 Decl_tCl = +MD:md wd +O:gen n +_tP:Tr Phr
 negative tobacco 1s:3s-eat 1s-do-habitually
 'I don't smoke'
- iii) gun-burrall ngika
 Decl_dCl = +_dP:Descr P Phr +MD:md wd
 cl-true no
 'it isn't true'
- iv) gala barra a-boy ngika
 Decl₁Cl = +MD:md wd +A:asp wd +₁P:Intr Phr +MD:md wd
 negative future 3s-go no
 'he's not going to go, no siree'

6.8. REPEATED ACTION

Repeated action expresses an action as being repeated or frequent, in contrast to habitual action expressed by the Aux₂ verb *workiya*. (Note connotations of 'ever' where these two co-occur, examples iv and v below.) Repeated action is manifested as the optional third order verb suffix *-pa* on all forms.

Some examples of repeated action follow:

- i) ny-ba.rda.pa ny-juwu.n
 Sentence = +Subj_tCl +Subj₁Cl
 2s:3s-eat.ndes.rep 2s-die.ndes
 'if you eat that one also, you will die'
- ii) boy.pa
 Imp₁Cl = +₁P:Intr Phr
 2s:imp:go.rep
 'go as always'
- iii) a-ba.rra.pa a-wuleba.na
 Sentence = +Decl_tCl +Decl_tCl
 3s:3s-eat.punct. rep 3s:3s-finish.perf
 'he kept eating it and finished it up'
- iv) a-ni.pa barra a-workiya
 Decl_{1s}Cl = +_{1s}P:Intr St Phr . . . +A:asp wd . . . _{1s}P
 3s-be.rep future 3s-do:habitually
 'he will live forever'
- v) gala a-we.ya.rna.pa a-workiya.rna
 Subj₁Cl = +MD:md wd +₁P:Intr Phr
 negative 3s-speak.cont.ctf.rep 3s-do:habitually.ctf
 'he didn't ever speak'

7. CONCLUSION

In this paper we have dealt with all the elements of Burarra clauses, bringing them into a unified description. And as the clause is the central, most productive Burarra construction, its description serves to clarify the adjacent levels of phrase and sentence as well.

Something of the Burarra world view is also seen in the importance given to the participant tagmemes, S, O, and BEN, which are obligatorily signalled in the predicate; and the importance of locational concept which is present in three of the lateral tagmemes, IO, F, and LI.

And finally, an awareness of the frequency with which clauses of different numbers of tagmemes occur is valuable for communication, particularly translation.

APPENDIX A
 OUTLINE OF BURARRA PHONOLOGY AND ORTHOGRAPHY

The following are the Burarra phonemes and orthography used in the accompanying paper. They are based on an unpublished revision (Glasgow 1974) of an earlier paper (Glasgow 1967).

1. CONSONANTS

Burarra contains twenty consonant phonemes, as shown in Table 1.

TABLE 1

	Bilabial	Alveodental	Alveolar	Retroflex	Velar
Stops	p	tj	t	ɖ	k
	b	dj	ɖ	ɖ̌	g
Nasals	m	ɲ	n	ɳ	ŋ
Laterals			l	ɭ	
Non-syllabic vocoids	w	y		ɻ	

The orthographic representations of these phonemes are shown, in corresponding positions, in Table 2.

TABLE 2

p	ch	t/d*	rt	k
b	j	rr	rd/d [#]	g
m	ny	n	rn/n [#]	ng
		l	rl/l [#]	
w	y		r	

*d after alveolar nasals; [#]d, n, l stem initial, and d after retroflexed nasals.

NOTE: The symbol n.g is used to distinguish the orthographic combination n+g from ng.

2. VOWELS

There are five emic vowels in Burarra, as shown in Table 3.

TABLE 3

	Front	Central	Back
High	i		u
Mid	æ		ɔ
Low		a	

These are represented orthographically, as shown in Table 4.

TABLE 4

i		u
e		o
	a	

3. ALPHABET

Accordingly the approved Burarra alphabet used for all publications is:

a b ch d e g i j k l m
 n ng ny o p r rd rl rn rr rt
 t u w y

APPENDIX B
CONJUNCTIONS

Conjunctions will be described more fully in a subsequent paper on sentence-level, but they are given here in summary for reference with the accompanying paper.

Six Burarra conjunctions have been noted to date operating on one or more levels as follows:

gugu	'first', 'immediately'	(sentence level)
lika	'then'	(sentence level and above)
nuwurra	'later'	(clause and sentence levels)
rraka	'and so'	(sentence level and above. For an example of rraka functioning above sentence level, see Section 5.2., example xvi.)
rrapa	'and'	(phrase and sentence levels and above)
warrika	'immediately'	(sentence and/or paragraph level)
waypa	'at that time'	(clause level)
wurra	'but'	(phrase and sentence levels and above)
wurriya	'and why is it?'	(discourse level)

For examples of nuwurra and waypa on the clause-level, see Section 4.4., examples v, vi and vii. Examples of conjunctions joining clauses on the sentence-level follow.

- i)
- | | | |
|---|---------------------|-------|
| awurriny-jarlmuna | gurda | lika |
| Sentence = +Decl ₁ Cl | | +Conj |
| 3dl:fem-get:up.perf | toward | then |
| rrawa awurriny-be.na | | |
| +Decl ₁ Cl | | |
| camp | 3dl:fem-arrive.perf | |
| 'They got up to come, and then they arrived at the camp.' | | |

BIBLIOGRAPHY

ENGEL, Ralph and Robert E. LONGACRE

1963 'Syntactic Matrices in Ostuacan Zoque'. *IJAL* 29/4:331-44.

GLASGOW, David

1966 *Notes on the Burera Sound System (North Arnhem Coast)*.
Darwin: Education Section, Welfare Branch, N.T. Administration.

GLASGOW, David and Kathleen GLASGOW

1967 'The Phonemes of Burera'. *PL*, A-10:1-14.

GLASGOW, David and Harland B. KERR

1964 'Burera Verb Prefixes'. In: R.B. Pittman and H.B. Kerr, eds
Papers on the Languages of the Australian Aborigines, 119-128.
AAS 3, L2. Canberra: Australian Institute of Aboriginal
Studies.

GLASGOW, Kathleen

1964a 'Four Principal Contrasts in Burera Personal Pronouns'. In:
Pittman and Kerr, eds 1964:109-117.

1964b 'Frame of Reference for Two Burera Tenses'. In: Pittman and
Kerr, eds 1964:118.

1970 Non-Predicate Phrases in Burarra. Manuscript. Darwin:
Summer Institute of Linguistics.

1974 Burarra Phonemes. Manuscript. Darwin: Summer Institute of
Linguistics.

GLASGOW, Kathleen

1977a Aspect in Burarra Verbs. Manuscript. Darwin: Summer Institute of Linguistics.

1977b Burarra Demonstratives. Manuscript. Darwin: Summer Institute of Linguistics.

LONGACRE, Robert E.

1964 *Grammar Discovery Procedures*. The Hague: Mouton.

THE RELATIONSHIP OF VERB AFFIXATION AND CLAUSE STRUCTURE IN MURINBATA

Chester S. Street

0. ABBREVIATIONS

a-pal.	alveo-palatal
Appos.	Appositional
Ben.	Benefactive
Caus.	Causative
Co-ord.	Co-ordinate
Dem.	Demonstrative
du.	dual
excl.	exclusive
f.	female
gen.	generic
hab.	habitual
imp.	imperative
incl.	inclusive
Instr.	Instrument
interr.	interrogative
Interr.	Interrogative
Intrans.	Intransitive
IO	Indirect Object
IVP	Intransitive Verb Phrase
Lit.	Literally
Loc.	Locative
m.	male
Mod.	Modified
NC	Noun Class
NM	Number Marker

NP	Noun Phrase
O	Object
P.	Phrase
pc.	paucal
Per.	Periphery
pl.	plural
Poss.	Possessive
Pr.	Predicate
Pred.	Predicate
ref.	reflexive
sb.	sibling
sg.	singular
subjunc.	subjunctive
t.	tense
Trans.	Transitive
TVP	Transitive Verb Phrase
VP	Verb Phrase

1. INTRODUCTION

The purpose of this paper is to give a detailed description of some Clause types in the Murinbata language, namely, the Transitive, Di-Transitive, Intransitive, Reflexive and Stative Clauses in the Declarative Indicative mode.

Murinbata belongs to the Garaman language family which is a member of the Australian Macro-phylum family (Voegelin and Voegelin, 1977:135). It is spoken by approximately 900 people, the majority of whom live at Port Keats, Northern Territory, 250 kilometres to the south-west of Darwin. A small number live on nearby cattle stations, with the largest groups at Auvergne Station N.T. and Kununurra W.A.

This paper has been written after approximately three years of study of this language. The analysis of this particular paper was done during a five week Linguistic Workshop at the Summer Institute of Linguistics (S.I.L.), Berrimah, N.T., from 12th July - 18th August, 1977, conducted by Alan Healey.

The author is very grateful for the willing and able help given at the Workshop by language helper Peter Kumyep Bunduck and for the consultant help given by Alan Healey and Mike Ray also of S.I.L. Thanks is also given to Harry Palada Kulampurut, who has given me a large quantity of language material during my stay at Port Keats, much of which was also used for the analysis of this paper.

The previous work done on this language by Michael Walsh has also greatly helped and encouraged me in the study of Murinbata.

The language spelling used throughout this paper is the literacy orthography, which is explained more fully in Tables 1 and 2 below.

TABLE 1
VOWELS

	Front	Non-front
High	i	u
Non-high	e	a

TABLE 2
CONSONANTS

	Labial	Apico- alveolar	Retro- flexed	Lamino- a-pal.	Velar
Voiceless Stops	p	t	rt	th	k
Voiced Obstruents *	b	d	rd	dh	g
Nasals	m	n	rn	nh	ng
Laterals		l	rl	ly	
Medians	w	rr	r	y	

* dh is a fricative, b, d, rd and g are stops

The Lamino alveo-palatal voiceless stop, voiced obstruent and nasal each have two allophones as follows. The dental allophones [t, d, n] only precede the non-front vowels a and u. The Lamino alveo-palatal allophones [ʈ, ɖ, ɳ] only precede the vowels i and e.

Examples showing the allophones:

thapak	[<u>t</u> apak]	'fog/dew'
thimu	[<u>ʈ</u> imu]	'nose'
madhalnu	[ma <u>d</u> alnu]	'I'll open it.'
dhekdek	[<u>ɖ</u> ek <u>ɖ</u> ek]	'to play'
punhu	[pu <u>n</u> u]	'liver'
kanhi	[ka <u>ɳ</u> i]	'this/here'

1.1. PERIPHERAL TAGMEMES

Peripheral tagmemes occur in all Bi-dimensional Arrays for the clause types of this paper, and many types are also given in the

accompanying examples. However, little information is given about peripheries in this paper, other than the fact there are five types of peripheral tagmemes which are:-

- i. Time
- ii. Instrument
- iii. Accompaniment
- iv. Reason
- v. Location

1.2. SUBJECT, OBJECT AND INDIRECT OBJECT TAGMEMES

At least a Subject, Object, or Indirect Object is shown in the Bi-dimensional Arrays for the clause types in this paper. The fillers of these slots have been merely shown as 'Various Noun Phrases', the reason being that Phrase Level as such has not been analysed to date. However, many of the Phrase types possible are shown in the examples.

1.3. PREDICATE

Each Clause type in this paper shows in the Bi-dimensional Array an obligatory Predicate. The Predicate slot can be filled by various types of Verb Phrases.

A Verb Phrase consists of an obligatory verb (which is the verb root plus affixes), plus optional auxiliary verbs which determine continuous, non-continuous and habitual aspects, and optional modal words of various types.

All Verb Phrases can be negated by the addition of the negative word *mere*, which precedes the Verb Phrase.

1.4. VERB AFFIXES

The verb can be affixed with the following:

1. Subject affixes - these are not listed in this paper (Refer Street 1978, Appendix 2)
2. Object A affixes - (see appendix)
3. Object B affixes - (see appendix)
4. Incorporated body part prefixes - (see appendix)
5. The Source prefix *ma-*

The function of these affixes and how they show agreement with the Clause structure, will be described in each Clause type.

Other affixation to the verb includes Tense (Street 1975:24-6). This is not dealt with in this paper, however the examples will give a good coverage of the possible tenses.

Verb affixation follows a set order, and the full potential of this affixation is shown in Table 3.

TABLE 3
VERB AFFIXATION ORDER

Subject	Object A	ma-	verb root	Subject
	Object B	Incorporated body part (IBP)		Object A
				Object B

Table 13 in Section 11 shows (apart from tense) the affixation of the verbs for each Clause type. Note that in Table 13 no affixation is shown following the verb root, this has been omitted for clarity. Affixation will only follow the verb root when the subject is in the paucal number or when the object is in the dual or paucal number.

1.5. CLAUSE TYPES

Table 13 in Section 11 also shows the close relationship of the verb affixation with the clause structure. For this reason it has been necessary to posit four Transitive Clauses, a Di-Transitive, a Stative and three Intransitive Clauses.

Quite a number of the same verb roots can manifest themselves in all four Transitive Clauses. However, the majority of Di-Transitive and Stative Clauses uses a different set of verbs for each particular Clause type.

The Intransitive Clause verbs are manifested by only a small number of verbs, whereas the Intransitive Source and Intransitive Benefactive/Goal Clauses use a large variety of verbs which are mostly interchangeable.

1.6. REFLEXIVE CLAUSES

Clause types 2, 3, 4, 5, 7, 9 and 10 can all be reflexive in action. One reflexive example has been included at the end of the other examples given for each clause type.

A verb maybe transformed into a reflexive verb by one of the following rules:

a) Many verb classes have a corresponding reflexive verb class (Street 1978 - refer Appendix 2) which is used when a reflexive action is required. (See examples 27, 57, 84 and 86.)

b) Verb classes which do not have a corresponding reflexive verb class use the prefix $\begin{Bmatrix} nu- \\ ni- \end{Bmatrix}$ positioned in the verb adjacent to, or in the place of the object prefix (see examples 17, 37, 45, 73 and 80).

This $\begin{Bmatrix} \text{nu-} \\ \text{ni-} \end{Bmatrix}$ prefix can also be used with verb types mentioned in a) above, but is optional (see examples 27, 57 and 84), whereas it is an obligatory prefix for verbs belonging to verb classes without a corresponding reflexive verb class.

2. THE TRANSITIVE GOAL/INSTRUMENT CLAUSE

The Transitive Goal/Instrument Clause consists of an obligatory Predicate and optional Subject, Object and Goal or Instrument Tagmemes (both cannot occur in the same clause).

The verb of the Transitive Goal/Instrument Clause has obligatory subject and optional object, goal or instrument affixation. The subject affix shows agreement with the Subject Tagmeme, the object affix shows agreement with the Object Tagmeme and the goal/instrument affix shows agreement with the Goal or Instrument Tagmemes.

The object affixation is normally only manifested in the verb when the object is human, (although sometimes it is manifested for non-human objects) in which case the set of Object A affixes are used. (Examples 5, 6, 14, 15 and 16 show no object affixation for non-human objects within the verb.) Although the Object Tagmeme in the Clause and the object affixation in the verb are both optional, it is obligatory to have one of these manifested in the Clause structure.

The goal/instrument affixation can only be manifested in the verb if the goal or instrument of the action is a body part, in which case the Incorporated set of body parts are used. (Examples 4, 11, 12, 13 and 17.)

Note: See Appendix for full list of Incorporated body parts and Object A affixes.

Transitive Goal/Instrument verbs consist of such verbs as: to get, to leave, to cut, to lay, to follow, to kick, to replace, to make, to draw, to hit, to bite, to roll up, to eat, to bring, to put, to chase, to catch, etc.

TABLE 4
BI-DIMENSIONAL ARRAY FOR TRANSITIVE GOAL/INSTRUMENT CLAUSE

± Per.	± Subject	± Object	+Pred.	± Goal/ Instr.	± Per.
	Various NP	Various NP	Trans. VP	Goal P. Poss. Goal P. Instr. P. Poss. Instr. P.	

- 8) Pr:TVP O:NP Per:(Loc.)
 i ba-n- ϕ -pak Land-Rover-yu ngamimarda wangu
and he-t.-it-put Land-Rover-(focus) otherside way
'...and he put (parked) the Land-Rover on the otherside.'
- 9) O:NP Pr:TVP Per:(Loc.)
 nukunu ngudu- ϕ -ngkarl-nu ngarra kale nukunu
he I(sg.)-him-replace-t. to mother his(poss.)
'I'll take him back to his mother.'
- 10) O:NP Pr:TVP Per:(Loc.)
 kardu ma-n-berti-nu Wadeye wangu
NC(human) I(sg.)-them(pl.)-take-t. Wadeye way
'I'll take the people to Wadeye.'
- 11) Pr:TVP Goal:Poss. Goal P. Per:(Instr.)
 nga-nhi-me-warl-nu ngarra me nhinhi thamul-re
I(sg.)-you(sg.)-foot-spear-t. at foot your spear-with
'I'll spear your foot with the spear.'
- 12) O:NP Pr:TVP Goal:Poss. Goal P.
 nanthi du-ngi-ma-pak-nu ngarra mange ngay
NC(thing) you(sg.)-me-hand-put-t. in hand my(poss.)
'You will put the thing in my hand.'
- 13) S:NP Pr:TVP O:NP
 Deta-ka nu-ngam- ϕ -me-rtal mi
Deta-(focus) she-t.-it-foot-pick NC(food)
 Instr:Poss. Instr. P.
 yidi me nigunu-re
wild apple foot her(poss.)-with
'Deta picked the wild apple with her foot.'
- 14) Per:(Loc.) O:NP
 i kanganu pana-wa ku kananganthan
and half way there-(emphasis) NC(animal etc.) emu
 Pr:TVP Per:(Instr.)
 nguma-m-ka-tha-neme nanthi truck ngarra
we(excl.)-t.-NM-chase-we(pc.m.) NC(thing) truck with
 kaka ngay nukunu
uncle my(poss.) his(poss.)
'...and half way there we chased some emus with my uncle's truck.'

TABLE 5
BI-DIMENSIONAL ARRAY FOR TRANSITIVE SOURCE CLAUSE

± Per.	± Subject	+ Object	+ Pred.	± Source	± Per.
	Various NP	Various NP	Trans. VP	Source P. Poss. Source P.	

PERMUTATION RULES:

1. Object can also follow the Predicate.
2. Source can also precede the Predicate.
3. Source can also precede the Object.

Examples:

- 18) O:Dem. NP Pr:TVP
 nanthi pana thani-*ngi-ma-part-nu*
 NC(*thing*) that you(sg.)-*me-source-leave-t.*
 'You'll leave that thing with me.'
 (NOTE: The source of 'that thing' in this case is 'me')
- 19) Per:(Time) O:NP Pr:TVP
 kunginira mi lawam wuda-*n-ngi-ma-ngkarl*
 yesterday NC(*food*) damper he-*t.-me-source-replace*
 'Yesterday he took back the damper from me.'
- 20) O:NP Pr:TVP
 mi thathangadhay me-*nhi-ma-yingap-nu*
 NC(*food*) wollybutt flower I(sg.)-*you(sg.)-source-smell-t.*
 'I'll smell the flower that you are holding.'
 (Lit: 'I'll smell the flower from you.')
- 21) O:NP Pr:TVP
 nanthi nga-*m-nintha-φ-ma-wirnturt*
 NC(*thing*) we(excl.)-*t.-we(du.m.)-him-source-lift*
 'We two men lifted it from him.'
- 22) O:NP Pr:TVP
 kura patha thi-*φ-ma-marda-wurl-nu*
 NC(*water*) good you(sg.)-*him-source-in-get water-t.*
 Source:Poss. Source P.
 ngarra billy can nukunu kathu
 at billy can his from
 'You'll get the fresh water from in his billy can.'

- 23) S:NP O:NP Pr:TVP
 ngay nanthi football mere
 I(sg.) NC(thing) football negative
 Source:Source P.
 ngunu-nhi-ma-rida-nukun nhinhi-yu
 I(sg.)-you(sg.)-source-kick-t. you(sg.)-(focus)
 'I won't kick the football from you.'
- 24) O:NP Pr:TVP Source:Source P.
 nanthi karlay ngana-m- ϕ -ma-part John
 NC(thing) net I(sg.)-t.-him-source-leave John
 'I left the net with John.'
 (NOTE: The source of 'the net' in this case is 'John'.)
- 25) O:NP Per:(Time) Pr:TVP
 wakal ngay nakurlnu ma-nanku-ma-bert-nu-ngintha
 child I(sg.) after I(sg.)-you-source-get-t.-you(du.f.)
 'I'll get my child from you two women after.'
- 26) O:NP Pr:TVP Source:Source P.
 thamul waya puma-ngan- ϕ -ma-rt kaka nukunu nukun
 spear wire they(pl.)-t.-him-source-get uncle his belong
 'They got the fish spear (wire spear) from his uncle.'
- 27) O:NP Pr:TVP
 mi thathangadhay me-nu-ma-yingap-nu
 NC(food) woolybutt flower I(sg.)-ref.-source-smell-t.
 'I'll smell the flower that I'm holding.'
 (Lit: 'I'll smell the flower from myself.')

4. THE TRANSITIVE BENEFACTIVE/GOAL CLAUSE

The Transitive Benefactive/Goal Clause consists of an obligatory Predicate and Object and optional Subject and Benefactive or Goal Tagmemes (both cannot occur in the same clause).

The verb of the Transitive Benefactive/Goal Clause has obligatory subject and benefactive/goal and optional object affixation. The subject affix shows agreement with the Subject Tagmeme and the benefactive/goal affix shows agreement with the Benefactive or Goal Tagmeme, and the object affix shows agreement with the Object Tagmeme.

The benefactive/goal affixation uses the Object B set of affixes, and the object affixation can only be manifested in the verb if the object is a body part, in which case the Incorporated set of body parts are used (example 31).

In many of these clauses where a benefactive or goal do not occur as

separate tagmemes it is difficult to know if the actual meaning is benefactive or goal - in such cases the context is needed to provide this information.

Note: See Appendix for full list of Object B affixes and Incorporated body parts.

Transitive Benefactive/Goal verbs consist of such verbs as: to take down, to replace, to lay, to hang, to turn around, to throw, to tell a story, to catch fish, etc.

TABLE 6
BI-DIMENSIONAL ARRAY FOR TRANSITIVE BENEFACTIVE/GOAL CLAUSE

± Per.	± Subject	+ Object	+ Pred.	± Ben./Goal	± Per.
	Various NP	Various NP	Trans. VP	Ben. P. Poss. Ben. P. Goal P. Poss. Goal P.	

PERMUTATION RULES:

1. Object can also follow the Predicate.
2. Benefactive/Goal can also precede the Object.

Examples:

- 28) O:NP Pr:TVP
marluk pa-ngarru-thut-nu-nintha
didgeridoo he-we(excl.)-take down-t.-we(du.m.)
'He'll bring the didgeridoo down to/for us two men.'
- 29) O:Poss. NP Pr:TVP
nanthi yi ngay mere wudi-nga-ngkarl-dha
NC(thing) dilly bag my negative he-me-replace-t.
da ngatha
yet
'He hasn't brought my dilly bag back to/for me yet.'
- 30) Per:(Time) O:NP Pr:TVP
nakurlnu nanthi yi ma-mpa-ngkale-nu
after NC(thing) dilly bag I(sg.)-you(sg.)-hang-t.
Per: (Loc.)
ngarra thay pangu
at tree over there
'After I'll hang the dilly bag on that tree over there for you.'

- 31) O:NP Pr:TVP Goal:Goal P.
 pelpith thudu-nga-we-rduy-nu ngarra ngay
 head you(sg.)-me-head-turn around-t. to me
 'You'll turn your head around to me.'
- 32) O:NP Pr:TVP Ben:Poss. Ben. P.
 piru ma-m-na-watha ngem ngathan ngay nukun
 bark I(sg.)-t.-him-make aspect brother my belong
 'I'm making a bark (painting) for my brother.'
- 33) O:Mod. NP Pr:TVP
 ku ngurimirl ngala nge-m-ge-ku
 NC(animal etc.) fish(gen.) big I(sg.)-t.-her-catch fish
 Ben:Poss. Ben. P.
 kale ngay
 mother my
 'I caught a big fish for my mother.'
- 34) S:Poss. NP O:NP Pr:TVP Per:(Time)
 kale ngay murrinh wuda-n-nga-yith da ngarra
 mother my story she-t.-me-tell story time at
 yile ngay-te ba-ngam- ϕ -lele ku kananturturt
 father I-when he-t.-him-bite NC(animal etc.) crocodile
 'My mother told me a story about the time when my father was
 bitten by a crocodile.'
- 35) O:NP Pr:TVP Goal:Goal P.
 thu palyerr nu-ngam-na-ku ngarra ku were
 NC(weapon) stone he-t.-him-throw at NC(animal etc.) dog
 'He threw the stone at the dog.'
- 36) PR:TVP O:Dem. NP Goal:Goal P.
 punu-na-bat-nu thamul pana ngarra ku lawarnka
 he-him-throw-t. spear that at NC(animal etc.) wallaby
 'He'll throw that spear at the wallaby.'
- 37) O:NP Pr:TVP
 thamul punu-nu-bat-nu
 spear he-ref.-throw-t.
 'He'll throw the spear at himself.'

5. THE TRANSITIVE BENEFACTIVE SOURCE CLAUSE

The Transitive Benefactive Source Clause consists of an obligatory Predicate and Object and optional Subject, Benefactive and Source Tagmemes.

The verb of the Transitive Benefactive Source Clause has obligatory subject, benefactive and source affixation. The subject affixation shows agreement with the Subject Tagmeme, the benefactive affixation shows agreement with the Benefactive Tagmeme and the source affixation shows agreement with the Source Tagmeme.

The benefactive affixation uses the Object B set of affixes, and the source affixation is derived in the same way as for the Transitive Source Clause (Section 3), except that with this clause type the source can only be in the third person singular (he/she) which is manifested by the ϕ affix.

Note: See Appendix for full list of Object A and Object B affixes.

Transitive Benefactive Source verbs consist of such verbs as: to collect, to get, to replace, to get water, to listen, etc. (They are the same set of verbs that occur in the Transitive Source Clause.)

TABLE 7

BI-DIMENSIONAL ARRAY FOR TRANSITIVE BENEFACTIVE SOURCE CLAUSE

± Per.	± Subject	+ Object	+Pred.	± Ben.	± Source	± Per.
	Various NP	Various NP	Trans. VP	Ben. P. Poss. Ben. P.	Source P. Poss. Source P.	

PERMUTATION RULES:

1. Object can also follow the Predicate.
2. Source can also precede the Predicate.
3. Source can also precede the Object.
4. Source can also precede the Benefactive.

Examples:

- 38) Per:(Time) O:Dem. NP Pr:TVP
 nakurlnu nanthi pana ngani-mpa- ϕ -ma-kut-nu
after NC(thing) that I(sg.)-you(sg.)-him-source-collect-t.
'After I'll collect those things from him for you.'
- 39) Per:(Time) O:NP Pr:TVP
 kunginira ku dumdum ngadi-nge- ϕ -ma-kut-tha
yesterday NC(animal etc.) egg I(sg.)-her-him-source-collect-t.
 Source:Source P. Ben:Ben. P.
 ngarra nukunu kathu palngun ngay-nu
at him from wife my-for
'Yesterday I collected eggs from him for my wife.'

type of clause are Psychological or Impersonal (Tryon:1974).

The Verbal Stative Clause consists of an obligatory Predicate and optional Object and Causative Tagmemes.

The verb of the Verbal Stative Clause has obligatory subject and object affixation. The subject prefix shows agreement with the Subject Tagmeme and the Object affix (which translates into English as Subject) shows agreement with the Object Tagmeme.

The only possible subject prefixation is the third person singular form. The object affixation uses the Object A set of affixes.

The incorporated body part prefixes can couple with the object to form a possessive type object (example 51).

Note: See Appendix for a complete list of Object A affixes and Incorporated body parts.

The Verbal Stative verbs consist of such verbs as: to long for, to have a headache, to be angry, to be hot, to be thirsty, to have a toothache, and to have various tired body parts, etc.

TABLE 8
BI-DIMENSIONAL ARRAY FOR VERBAL STATIVE CLAUSE

± Per.	± Object	+ Pred.	± Caus.	± Per.
	Various NP	Stative VP	Caus. P. Poss. Caus. P.	

PERMUTATION RULE:

1. Object can also follow the Predicate.

Examples:

- 46) Pr:Stative VP Caus:Caus. P.
de-m-ngi-ralal kura-nu
it-t.-me-thirsty NC(water)-for
'I'm thirsty for water.'
- 47) O:NP Pr:Stative VP Caus:Caus. P.
ngay da-m-ngi-mardathin kaka ngay-nu
I it-t.-me-long for uncle my-for
'I am longing for my uncle.'
- 48) Per:(Time) Pr:Stative VP
kunginira me-ngi-ngkawurl-dha dini
yesterday it-me-have headache-t. aspect
'I had a headache yesterday.'

TABLE 9
BI-DIMENSIONAL ARRAY FOR DI-TRANSITIVE CLAUSES

± Per.	± Subject	+ Object	+ Pred.	± Indirect Object	± Per.
	Various NP	Various NP	Di-Trans. VP	Various NP	

PERMUTATION RULES:

- Object can also follow the Predicate.
- Indirect Object can also precede the Predicate.

Examples:

- 53) O:NP Pr:Di-Trans. VP
 murrinh ma-m-nga- ϕ
 talk he-t.-me-say
 'He said (talk) to me.'
 (Note: The verb root of this verb is ϕ .)
- 54) S:NP O:NP Pr:Di-Trans. VP
 kardu nugarn ku ngen da-m-na-mut
 NC(human) man NC(animal etc.) meat he-t.-him-give
 IO:NP
 kardu kigay
 NC(human) teenage boy
 'The man gave the meat to the teenage boy.'
- 55) IO:NP Pr:Di-Trans. VP O:Poss. NP
 Lakan nga-m-na-mut marluk ngay
 Lakan I(sg.)-t.-him-give didgeridoo my
 'I gave my didgeridoo to Lakan.'
- 56) Pr:Di-Trans. VP O:Dem. NP
 nga-nhi-ngkarr-nu ku pangkuy pana
 I(sg.)-you(sg.)-show-t. NC(animal etc.) snake(gen.) that
 'I'll show you that snake.'
- 57) O:NP Pr:Di-Trans. VP
 ku thithay nge-m-nu-mut
 NC(animal etc.) wild honey I(sg.)-t.-ref.-give
 'I gave the wild honey to myself.'

8. THE INTRANSITIVE CLAUSE

The Intransitive Clause consists of an obligatory Predicate and optional Subject Tagmemes.

The verb of the Intransitive Clause has obligatory subject affixation only. The subject affix shows agreement with the Subject Tagmeme.

The subject affixes have not been listed in this paper as there are far too many of them varying with each verb class.

Intransitive verbs consist of such verbs as: to go, to walk, to sit, to lie, to be aloft, to be, etc.

TABLE 10
BI-DIMENSIONAL ARRAY FOR INTRANSITIVE CLAUSE

± Per.	± Subject	+ Pred.	± Per.
	Various NP	Intrans. VP	

PERMUTATION RULE:

1. Subject can also follow the Predicate.

Examples:

- 58) S:Co-ord. Poss. Appos. NP

Bape i yile nukunu-ka penintha-ka
Bape & father his-(focus) they(du.m.)-(focus)
 Pr:IVP Per:(Loc.)
 na-nintha-dha ngarra darrimun
they go-they(du.m.)-t. to beach
'Bape and his father went to the beach.'

- 59) S:NP Pr:IVP

nekingime thurrini-dha-ngime
we(incl.pc.f.) we go(incl.)-t.-we(pc.f.)
 Per:(Loc.)
 ngarra Ngadinithi da
to Ngadinithi NC(place)
'We women went to Ngadinithi.'

- 60) S:Mod. NP Pr:IVP

i wirrirr ngala wurrini-dha
and wind big he go-t.
'...and a big wind came.'

- 61) Per:(Loc.) Pr:IVP
 kanhi mere pi rrangi-dha
here negative he stand-t.
'He didn't stand here.'
- 62) Pr:IVP Per:(Loc.)
 bere nguna-dha ngini ngarra office ngarra
then I go(sg.)-t. aspect to office where
 ku pule thatpirr dim-ya
 NC(*animal, European etc.*) *boss true he sit-(emphasis)*
'Then I went to the office where the big boss is.'
- 63) Pr:IVP
 mere ngurru- \emptyset da ngatha
negative I go(sg.)-t. yet
'I'm not going yet!'
- 64) S:NP Pr:IVP
 kardu muthingka yibi-m-pup
 NC(*human*) *old woman she-t.-die*
'The old lady died.'
- 65) Per:(Loc.) S:NP Pr:IVP
 kunginira nukunu di-m-e
yesterday he he-t.-vomit
'He vomited yesterday.'
- 66) S:Mod.NP Pr:IVP
 i ku bamam numi-ka wuda- \emptyset -wal
 and NC(*animal, European etc.*) *white one-(focus) he-t.-jump*
 Per.(Instr.)
 warda kathu tharra nanthi parachute-te
then towards fast NC(thing) parachute-with
'...and then one white man jumped out with a parachute.'
- 67) S:NP Pr:IVP Per:(Time)
 kardu bere matha ngadi-birlbirl-dha da
 NC(*human*) *always I(sg.)-wake up-t. NC(time)*
 thipinhi nhini Friday night-yu
night that Friday night-(focus)
'I kept on waking up that night, Friday night.'
- 68) S:Mod. Appos. NP Pr:IVP
 nganki kardu mamay da ngatha ngardi-dha
 we(excl.pc.sb.) NC(*human*) *child yet we are(excl.pc.sb.)-t.*
'We were still children.'

9. THE INTRANSITIVE SOURCE CLAUSE

The Intransitive Source Clause is very similar to the Transitive Source Clause (Section 3), but lacks an Object. It consists of an obligatory Predicate and optional Subject and Source Tagmemes.

The verb of the Intransitive Source Clause has obligatory subject and source affixation. The subject affix shows agreement with the Subject Tagmeme and the source affix shows agreement with the Source Tagmeme.

The source affixation is derived by adding the prefix *ma-* to the Object A affixes, as shown in the examples.

Note: See Appendix for a complete list of Object A affixes.

Intransitive Source verbs consist of such verbs as: to run, to jump, to get up, to fall, etc.

TABLE 11
BI-DIMENSIONAL ARRAY FOR INTRANSITIVE SOURCE CLAUSE

± Per.	± Subject	+Pred.	± Source	± Per.
	Various NP	Intrans. VP	Source P. Poss. Source P.	

PERMUTATION RULE:

1. Source can also precede the Predicate.

Examples:

69) PR:IVP

ngunu-ngam-nhi-ma-winhat
I(sg.)-t.-you(sg.)-source-run
'I ran from you.'

70) Pr:IVP

ngudi-nhi-ma-wal-nu
I(sg.)-you(sg.)-source-jump-t.
'I'll jump down from you.'

71) Per:(Time) Pr:IVP

nakurlnu pe-nganku-ma-wirnturt-nu-nintha
after he-we(excl.)-source-get up-t.-we(du.m.)
'He'll get up from us two men later.'

72) Pr:IVP

buy- ϕ -ma-bat-nu

I(sg.)-him-source-fall-t.

'I'll fall from him.'

73) Pr:IVP

ngunu-ngam-nu-ma-winhat

I(sg.)-t.-ref.-source-run

'I ran from myself.'

(NOTE: Can also carry the meaning, 'I ran by myself.')

10. THE INTRANSITIVE BENEFACTIVE/GOAL CLAUSE

The Intransitive Benefactive/Goal Clause is similar to the Transitive Benefactive/Goal Clause (Section 4), but lacks an object. It consists of an obligatory Predicate and optional Subject and Benefactive or Goal Tagmemes (both cannot occur in the same clause).

The verb of the Intransitive Benefactive/Goal Clause has obligatory subject and optional benefactive/goal affixation. The subject affix shows agreement with the Subject Tagmeme and the benefactive/goal affix shows agreement with the Benefactive or Goal Tagmemes.

The benefactive/goal affixation is normally manifested in the verb when the object is human and is often absent for non-human objects (examples 75, 76 and 77). When it is used it is manifested by the Object B set of affixes.

Note: See Appendix for a complete list of Object B affixes.

Intransitive Benefactive/Goal verbs consist of such verbs as: to go, to descend, to turn around, to look for, to whistle, to call out, to wait for, etc.

TABLE 12

BI-DIMENSIONAL ARRAY FOR INTRANSITIVE BENEFACTIVE/GOAL CLAUSE

± Per.	± Subject	+ Pred.	± Ben./Goal	± Per.
	Various NP	Intrans. VP	Ben. P. Poss. Ben. P. Goal P. Poss. Goal P.	

11. SUMMARY

A close study of the clause types described in this paper will reveal a very close relationship between the verb with its affixations and the clause structure.

Table 13 summarises the verbs of this paper and shows clearly the inter-relationships of each clause type between the verb affixations and the clause structures.

Notes related to Table 13

1. The Clause type numbers listed down the left hand column correspond to the Section numbering throughout the paper.
2. The term 'Oblique Affixes' refers to Object A and Object B affixation. The term 'Oblique Prefixes' refers to Incorporated body parts and the source prefix *ma-*.
3. The cross reference columns show the agreement or relationship between the verbal affixation and the clause structure.
4. The position of the verb root has not been shown within the verb affixation columns, because it is irrelevant to this Table.

12. CLAUSE MODES

Although this paper basically deals with the Declarative or Indicative Clauses, this section attempts to explain briefly, with examples, how these Declarative Clauses can be transformed into the following mode types.

1. Imperative
2. Subjunctive
3. WH- Interrogative
4. Yes/No Interrogative

12.1. THE IMPERATIVE CLAUSE

This clause only occurs in the future tense, second person. In transforming a Declarative Clause into an Imperative Clause only the Predicate is affected.

The positive future tense suffix *-nu* on the verb, and the negative future tense suffix *-nukun* are replaced by the imperative suffix *-ø*, which then forms an Imperative Clause.

Examples:

- 81) O:Dem. Np Pr:TVP
 mi kanhi thula-th-ø
 NC(*food*) *this* you(sg.)-eat-imp.
 '*You eat this food!*'

TABLE 13
THE RELATIONSHIP OF VERB AFFIXATION AND CLAUSE STRUCTURE

CLAUSE TYPE	VERB AFFIXATION					CLAUSE STRUCTURE
	Subject Affixes	Oblique Affixes	Ob. Affixes cross reference	Oblique Prefixes	Ob. Prefix/Affix cross reference	
2	+ Subject	± Object A	Object	± IBP	Goal/Instrument	± S ± O + P ± Goal/Instrument
3	+ Subject	+ Object A	(+) →	ma-	Source	± S + O + P ± Source
4	+ Subject	+ Object B	Ben./Goal	± IBP	Object	± S + O + P ± Ben./Goal
5	+ Subject	+ Object B	Ben.	+ ø (+) ma-	Source	± S + O + P ± Ben. ± Source
6	+ Subject	+ Object A	(±) →	+ IBP	Object	± O + P ± Causative
7	+ Subject	+ Object A + Object B	Indirect Object			± S + O + P ± IO
8	+ Subject					± S + P
9	+ Subject	+ Object A	(+) →	ma-	Source	± S + P ± Source
10	+ Subject	± Object B	Ben./Goal			± S + P ± Ben./Goal

- 82) O:NP Pr:TVP
 lithpurr na-nga-yit- ϕ
 axe you(sg.)-me-hold-imp.
 'You hold the axe for me!'
- 83) Pr:IVP Per:(Loc.)
 thungi-nintha-wuy- ϕ ngathparr wangu
 you(du.m.)-go outside-imp. far way
 'You two boys go outside and far away!'
- 84) Pr:TVP
 ne-ni-ma-purl- ϕ
 you(sg.)-ref.-hand-wash-imp.
 'You wash your hands!'

12.2. THE SUBJUNCTIVE CLAUSE

This type of clause describes a mode that is a potential fact, translating into English expressions like 'might be..', 'could be..' and 'nearly..'.
 In transforming a Declarative Clause into a Subjunctive Clause only the Predicate is affected. The Subjunctive future tense uses the suffix -nukun following the verb root, and the past tense uses the suffix -dha.

Examples:

- 85) Per:(Time) Pr:IVP
 nakurlnu ngurru-nukun
 after I go(sg.)-subjunc.
 'I might go later.'
- 86) Pr:IVP
 ba-na-bat-tha
 I(sg.)-ref.-fall-subjunc.
 'I nearly fell.'
- 87) O:Mod. Np Pr:TVP
 kardu ngala ku-nhi-bat-nukun
 NC(human) big he-you(sg.)-hit-subjunc.
 'The big man might hit you.'

12.3. WH- INTERROGATIVE CLAUSE

This type of clause asks the questions: who?, where?, when?, what?, what for?, (why?), how?, and how many? (There are two interrogative words for 'what?').

For the WH- Interrogative Clause the interrogative word is normally put at the beginning of the clause, and the suffix clitic -yu attaches itself to the last word of the clause.

- 88) Interr. Pr:IVP S:NP
 minthire pa-ruy-nu nukunu-yu
 when he-arrive-t. he-interr.
 'When will he arrive?'
- 89) Interr. Pr:Di-Trans VP
 ngarra puma-m-ngarru- ϕ -ngintha
 what they(pl.)-t.-we(excl.)-say-we(du.f.)
 IO:NP
 ngankungintha-yu
 we(excl.du.f.)-interr.
 'What did they say about us?'
- 90) Interr. Pr:IVP Per:(Loc.)
 ngarra-re thurrini-dha kanhi-yu
 what-means you go(sg.)-t. here-interr.
 'How did you come here?'
- 91) Interr. O:NP Pr:TVP
 thangku numa piru ma-m-patha-yu
 what number bark he-t.-make-interr.
 'How many bark (paintings) did he make?'
- 92) Interr. Pr:IVP
 ngarra wangu pumpa-n-yu
 where way they go(pl.)-t.-interr.
 'Where are they going?'
- 93) Interr. Pr:TVP O:NP
 nangkal yi-nga-wurl kura patha-yu
 who he-t.-get water NC(water) good-interr.
 'Who got the fresh water?'
- 94) Interr. Pr:IVP Per:(Loc.)
 thangku-nu na-n-arri thim kanhi-yu
 what-for you(sg.)-t.-hide aspect here-interr.
 'Why are you hiding here?'
- 95) Interr. O:NP Pr:TVP
 thangku nanthi na-ngan-art-yu
 what NC(thing) you(sg.)-t.-get-interr.
 'What thing did you get?'

APPENDIX
INCORPORATED BODY PARTS

Independent Form	Incorporated Form	Meaning
kamarl	ngka	'face/eye'
wulumu	lu	'forehead'
kaddirrak	kardarri	'eyebrow'
the	ye	'ear'
thimu	yi	'nose'
thathpi	dhawi	'mouth/lips'
themen	thanme	'tongue'
dimu	di	'tooth/teeth'
thamurru	dhamurru	'side of face'
pelpith	we	'head'
pemarr	we	'hair'
thamamay	dhamurru	'beard'
thamarl	dhama	'neck'
lamala	mala	'shoulder'
nithi	be	'arm'
mange	ma	'hand'
marda	marda	'belly'
marda yidi	marda	'chest'
pangkin	darri	'back'
ngurru	ngurru	'side'
lumpu	ri	'buttocks'
lawali	bu	'leg'
pingkarl	wingka	'knee'
me	me	'foot/feet'
nginipunh	∅	'body'

	Freeform Pronoun	Meaning	Object A	Object B	
FIRST PERSON exclusive inclusive	ngay	sg.	ngi	nga	
	ngankunintha	du. m.	nganku-nintha	ngarru-nintha	
	ngankungintha	du. f.	nganku-ngintha	ngarru-ngintha	
	nganku	du. sb.	nganku	ngarru	
	ngankuneme	pc. m.	nganku-neme	ngarru-neme	
	ngankungime	pc. f.	nganku-ngime	ngarru-ngime	
	nganki	pc. sb. and pl.	ngan	ngarra	
	neki	du.	nhe	nhe	
	nekineme	pc. m.	nhe-neme	nhe-neme	
	nekingime	pc. f.	nhe-ngime	nhe-ngime	
	SECOND PERSON	nhinhi	sg.	nhi	mpa
		nankunintha	du. m.	nanku-nintha	narru-nintha
nankungintha		du. f.	nanku-ngintha	narru-ngintha	
nanku		du. sb.	nanku	narru	
nankuneme		pc. m.	nanku-neme	narru-neme	
nankungime		pc. f.	nanku-ngime	narru-ngime	
nanki		pc. sb. and pl.	nan	narra	
THIRD PERSON	nukunu	sg. m.	∅	na	
	nigunu	sg. f.	∅	nge	
	penintha	du. m.	nku-nintha	rru-nintha	
	peningintha	du. f.	nku-ngintha	rru-ngintha	
	piguna	du. sb.	nku	rru	
	peneme	pc. m.	nku-neme	rru-neme	
	peningime	pc. f.	nku-ngime	rru-ngime	
	pigunu	pc. sb. and pl.	n	rra	
THIRD PERSON	PERFECT TENSE ONLY				
	nukunu	sg. m.	∅	na	
	nigunu	sg. f.	∅	nge	
	penintha	du. m.	punku-nintha	pirru-nintha	
	peningintha	du. f.	punku-ngintha	pirru-ngintha	
	piguna	du. sb.	punku	pirru	
	peneme	pc. m.	punku-neme	pirru-neme	
	peningime	pc. f.	punku-ngime	pirru-ngime	
pigunu	pc. sb. and pl.	pun	pirra		

BIBLIOGRAPHY

STREET, Chester S.

1975 The Verb in Murinbata, Part A. Manuscript.

1978 An Introduction to the Language and Culture of The Murinbata.
Mimeo.

WALSH, Michael J.

1976 'The Derivational Affix "having": Murinj-pata'. pp.287-90;
'Ergative, Locative and Instrumental Case Inflections:
Murinj-pata'. pp.405-8; 'The Bivalent Suffix -ku: Murinj-pata'.
pp.441-4. In: R.M.W. Dixon, ed. *Grammatical Categories in
Australian Languages*. AAS, L22. Canberra: Australian
Institute of Aboriginal Studies.

TRYON, D.T.

1974 *Daly Family Languages, Australia*. PL, C-32.

VOEGELIN, C.F. and F.M. VOEGELIN

1977 *Classification and Index of the World's Languages*. New
York: Elsevier.

