Topics in Nyiyaparli morphosyntax

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This thesis represents the original work of the author, and does not contain the work of any other individual, except where acknowledged.

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Aboriginal and Torres Strait Islander people are advised that this thesis contains the names of deceased persons.

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Abstract

Nyiyaparli is a Pama-Nyungan language spoken by a small number of Nyiyaparli and Palyku people in the Pilbara region of Western Australia. While lexicographic materials have been produced, there is little literature that investigates the grammar of the language. In making a contribution towards addressing this gap, this thesis provides a description of the major aspects of the morphosyntax, focusing on describing the forms and functions of major nominal and verbal suffixes and clitics. The research is based on the repatriation and analysis of narratives told by Gordon Mackay and recorded by Carl von Brandenstein in the 1960s, and translated by Nyiyaparli speakers, primarily David Yandicoogina Stock. The research also draws on the fieldwork and analysis carried out by Allison Kohn with Charlie Stream.

Chapter 1 provides an overview of Nyiyaparli and its speakers, comments on its relations with neighbouring languages including Panyjima, and explains how this research was conducted. In Chapter 2, I give an overview of the phonology of Nyiyaparli, providing the phonemic inventory, commenting on the unconfirmed laminal contrast, and outlining the phonotactics of the language. In Chapter 3, I discuss (personal, demonstrative, and interrogative/indefinite) pronouns and pronominal clitics and demonstrate that the case alignment system of Nyiyaparli is tripartite. I examine nominal morphology in Chapter 4, describing and illustrating the forms and functions of the cases and other major nominal morphemes. Verbal inflectional and derivational morphology is described in Chapter 5, including discussing various types of predicates, transitivity types, and case frame and argument structure alternations. Chapter 6 briefly discusses some syntactic topics, including inter-speaker variation in case marking within nominal phrases, case stacking, agreement, and major subordinate verb forms and their behaviour. Finally, Chapter 7 provides a summary of the thesis and offers directions for future research.

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Abbreviations and conventions

Conventions

.	Separation of elements in gloss of one morpheme
-	Suffix boundary
=	Clitic boundary
#	Word boundary
*x	Ungrammatical
x*	0 or more
ø	Zero/null morpheme
ˈ	Primary stress
ˌ	Secondary stress
/	In the environment of
/ /	Phonemic representation
[ ]	Phonetic representation
( )	Optional

Phonological abbreviations

C	Consonant
N	Nasal
S	Stop (oral), plosive
V	Vowel

Morphosyntactic abbreviations

1	1st person
2	2nd person
3	3rd person
A	Agent-like argument of transitive clause
ABL	Ablative
ACC	Accusative
ALL	Allative
AVERS	Aversive mood

CAUS	Causative
COMPAR	Comparative
CONJ	Conjunction
CONT	Continuous aspect
DAT	Dative-genitive
DIM	Diminutive
DSBJ	Different subject
DU	Dual
DUB	Dubitative
EMPH	Emphatic
ERG	Ergative
EXCL	Exclusive
FUT	Future tense
HAB	Habitual aspect
IMP	Imperative mood
INCH	Inchoative
INCL	Inclusive
INT	Intensifier
ITER	Iterative aspect
-L	L class verb
LOC	Locative
MB	Mother's brother
NEG	Negative
NMLZ	Nominaliser
NOM	Nominative
O	Object
OBL	Oblique (argument or adjunct)
OBSC	Obscured by
P	Patient-like argument of transitive clause
PERF	Perfect
PL	Plural
POSS	Possessive
PRIV	Privative
PROP	Proprietive
PRS	Present tense
PST	Past tense
PURP	Purposive
RECIP	Reciprocal
REDUP	Reduplication
REFL	Reflexive

S	Subject; sole argument of intransitive clause
SD	Son's daughter
SEMBL	Semblative
SG	Singular
SIM	Simultaneous
SPP	Spouse's parents

Other abbreviations

AIATSIS	Australian Institute of Aboriginal and Torres Strait Islander Studies
CvB	Carl von Brandenstein
F1, F2	First formant, second formant
IBN	Yinhawangka, Banyjima and Nyiyaparli Group
IPA	International Phonetic Alphabet
JB	Jacqueline Battin
NP	Noun Phrase or Nominal Phrase
UNESCO	United Nations Educational, Scientific and Cultural Organization

Chapter 1

Introduction

1.1 Introduction

This thesis investigates a number of topics regarding the morphosyntax (the ways that words and sentences are formed) of Nyiyaparli. It primarily concerns the forms and functions of the most common nominal and verbal inflections and derivations. As Nyiyaparli has not been adequately explicated in the literature, this thesis contributes towards addressing this gap by focusing on the major aspects of the morphosyntax. The research is based on the repatriation and analysis of legacy narratives told by Gordon Mackay and recorded by Carl von Brandenstein in the 1960s. These narratives were translated by Nyiyaparli speakers, primarily David Yandicoogina Stock, a Nyiyaparli elder with exceptional knowledge of the language and the law. The research also draws on the fieldwork and analysis carried out by Allison Kohn with Charlie Stream.

This thesis aims to offer an atheoretical description of the language as much as possible, although it is informed by theory. I hope that this approach will result in a description that may be further used to investigate the language and to develop pedagogical resources. I have also aimed to reduce unnecessary jargon as far as possible. While this thesis is a technical paper and intended for a linguistic audience, I have aimed to write it such that it may be read by others who have some understanding of linguistics, such as experts in language teaching. If the reader requires further explanation of the linguistic terms and concepts that this thesis uses, I recommend referring to the relevant section of Dixon (2019 or 1980).

The remainder of this chapter discusses the Nyiyaparli and Palyku people and their country in §1.2, outlines previous research on the language in §1.3, discusses the methodology used in this research in §1.4, and provides an overview of Nyiyaparli, its parts of speech and its relation to its neighbours in §1.5.

In Chapter 2, I briefly describe the phonology of Nyiyaparli, providing the

phonemic inventories of consonants and vowels and discussing the phonotactics of the language. In Chapter 3, I discuss pronouns and pronominal clitics and demonstrate that the case alignment system of Nyiyaparli is tripartite. I examine nominal morphology in Chapter 4, illustrating the forms and functions of the major suffixes and clitics that attach to nominals (or derive nominals). Verbal inflectional and derivational morphology is described in Chapter 5, including a discussion of various types of predicates and case frame and argument structure alternations. Chapter 6 gives a brief overview of some syntactic topics, including case marking in nominal phrases and case stacking, and major subordination strategies. Finally, Chapter 7 provides a summary of the thesis and offers directions for future research.

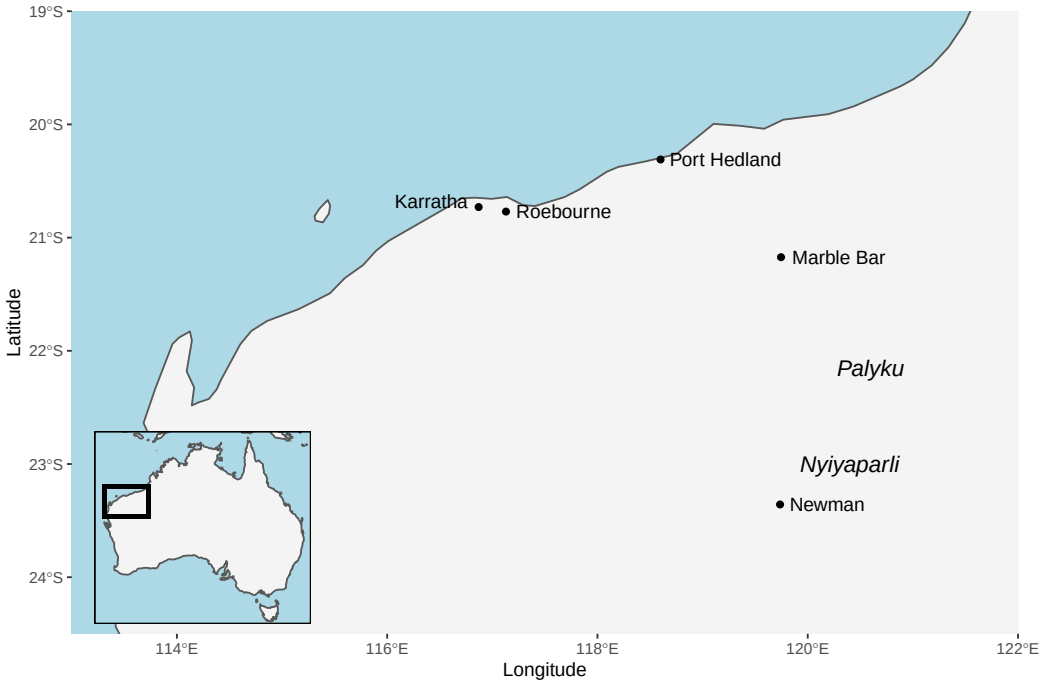
1.2 The people and their country

Nyiyaparli (usually pronounced [ɲijɐpɐl̪i] or [ɲi̯ɐpɐl̪i]) is the language of the Nyiyaparli and Palyku people, the traditional owners of Nyiyaparli and Palyku lands and waters in the eastern Pilbara of Western Australia. The two groups maintain distinct identities, but have long shared a close bond and speak varieties of the same language. For this reason, the language is also known as Palyku or as Nyiyaparli/Palyku. The word *nyiyaparli* itself comes from a compound of *nyiya* 'this' and an unknown suffix *-parli*. von Brandenstein (n.d., p. vii) suggests *-parli* possibly means 'bent, soft, pliable'. As some people refer to the varieties of the language as 'soft' or 'hard', it may be that Nyiyaparli was originally the name for the 'soft' variety.

Nyiyaparli country is around the headwaters of the Fortescue river and includes the township of Newman. Palyku country lies around the upper Fortescue and extends to the Nullagine River divide. The approximate location of these regions is shown in Figure 1.1. It is believed that ancestral spirits formed these lands and waters long ago, putting the law and the language in the land. For over 40,000 years Aboriginal people have looked after these lands, but from the 19th century, pastoralists claimed them. Nyiyaparli and Palyku people began to work for these pastoralists, living at camps near pastoral stations like Roy Hill and Ethel Creek. From the 1960s, many families had to move away from their lands to larger towns in the Pilbara for work. Today, many Nyiyaparli and Palyku people live in towns such as Port Hedland and Marble Bar, as well as Newman and other places on country. They continue to maintain connection with their country and with the law. Stories and songs in Nyiyaparli carry the law and knowledge, and are passed on from generation to generation.

Both groups have a four-section system that governs the social life and relations with all other people, as illustrated in Figure 1.2. Everyone has one of four 'skin names': a Purungu marries a Milangka, and a Panaka marries a Karimarra, and

Figure 1.1: Map of Palyku and Nyiyaparli country

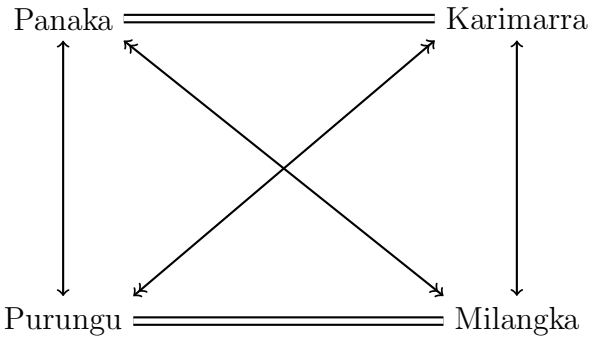


the generations alternate. Someone of one skin name relates to all others that share that skin in their generation as their siblings. Thus, a Purungu is siblings with all other Purungus of their generation, all Panaka women in the generation above are their mothers or mother's sisters, while Karimarra men are their fathers or father's brothers, and so on. They are *nyupa* with Milangkas of their generation, meaning that they are 'cousins' and suitable for marriage if of the opposite sex. Relations with others may be further defined by significant events, such as the avoidance relationship between a man who puts a boy through the law and certain relatives of that boy. Another relationship mentioned in the examples throughout this thesis is the relationship between a woman's child and the man who hunted the meat that made her first vomit in her pregnancy; the child and the man call one another *urruru*.

Nyiyaparli is spoken by a very small number of people.[1] All fluent speakers are

[1] It is difficult to estimate the exact number of speakers, as Nyiyaparli and Palyku people have dispersed over a large region (mostly in remote areas) and figures vary considerably depending on the definition of speakerhood. For example, there are many people who understand the language but do not speak it. Some of these people are elderly members of other Aboriginal groups who are multilingual in many Pilbara languages, and could converse in Nyiyaparli if the situation required it, and others are young Nyiyaparli and Palyku people who understand their parents or grandparents speaking the language, but do not speak it themselves. If we define 'speaker'

Figure 1.2: The subsection system



Double lines represent marriage
Vertical lines represent mother/daughter relations
Diagonal lines represent father/son relations

in the grandparental generation or older, as the language is not being transmitted to younger generations. There is very little in the way of documentation of the language or resources for language learners. These factors indicate that the language is 'endangered' and in urgent need of support for revitalisation and documentation (UNESCO Ad Hoc Expert Group on Endangered Languages, 2003).

However, the Nyiyaparli and Palyku people that I have spoken to place great value in their language and wish to see it spoken more. The loss of this language would result in the loss of unique knowledges and weaken connection to country, family and identity. This thesis seeks to provide some documentation of the language as one of the first steps towards supporting Nyiyaparli and Palyku people revitalise their language. Further research is urgently required, as well as the development of educational programs and resources.

1.3 Previous research

In comparison with other languages in Australia, there has been very little linguistic research conducted with Nyiyaparli and/or Palyku people.

In the 1960s and 1970s, Carl von Brandenstein recorded several speakers of Nyiyaparli, including Gordon Mackay, Roy Mackay, Hickey (Ikipangu), and Jack Forrest (von Brandenstein, 1964, 1967, 1967–1970, 1971–1976). He recorded these people singing songs, telling narratives, sending messages, and having conversations. This formed a part of his investigation into the languages of Western Aus-

in the most narrow sense to only include Nyiyaparli or Palyku people who can express almost anything in the language, I estimate there are less than a dozen speakers of Nyiyaparli.

tralia (see von Brandenstein, 1970). From this research, von Brandenstein analysed the language and produced translations of many of the stories he recorded as well as a summary of his morphological analysis (von Brandenstein, n.d.). This work has been the most significant research to be conducted on the language, but it remains unpublished.

In addition, Brian and Helen Geytenbeek conducted research with Nyiyaparli speakers and produced a word list (Geytenbeek & Geytenbeek, 1973). Geoffrey O'Grady has also researched the language and produced a word list (O'Grady, 1967) as well as work to survey the language and its neighbours (O'Grady, Voegelin & Voegelin, 1966). Similar surveys have been conducted, but they have not examined the language at a deep level (e.g. Dixon, 2002; Oates, 1975).

In 1995, 1996 and 2004, Allison Kohn worked with several speakers of Nyiyaparli, including Charlie Stream, Dolly Swan, Daisy Yuline, and Gordon Yuline. Kohn made significant progress in analysing the language (see Kohn, 1996), but she did not complete this work.

Finally, research has been conducted by the regional language centre, Wangka Maya Pilbara Aboriginal Language Centre. They have worked with the speakers to record the language and through this work, as well as von Brandenstein's work, they produced a dictionary (Swan & Hill, 2012).

While the above research has produced valuable lexicographic materials, there are no published descriptions of the grammar of Nyiyaparli. This thesis aims to contribute towards addressing this gap by providing a description of the major aspects of the morphosyntax.

1.4 Methodology

The research conducted for this thesis was centred around the return of von Brandenstein's recordings (see above) to Palyku and Nyiyaparli people, as they did not have access to these recordings or any associated written materials. Nyiyaparli elder David Stock has conveyed the significance of these legacy recordings for people to listen to and learn from, while Nyiyaparli women Margaret Yuline and Cheryl Yuline expressed their desire for the stories to be written down and translated.

Together with these Nyiyaparli people, we worked to transcribe and translate several of the legacy recordings in June and July, 2019. I recorded these sessions, resulting in data from both the legacy recordings and the commentary on those recordings. I also recorded a story David Stock told me as a way to teach me the language, as well as conducting some standard elicitation sessions with other speakers.[2]

[2] These speakers wish to remain anonymous and are referred to as A1 and A2 in the example

In addition to these audio data, Allison Kohn gave me a copy of her fieldnotes from her own research (see above). These fieldnotes were mostly of elicited sentences and hence complemented the data from the legacy recordings. They also provide many sentences that illustrate morphosyntactic behaviour more clearly, as they contain much less null anaphora than the narrative texts, and so feature prominently in this thesis. The fieldnotes consist of sentences in Nyiyaparli with free translations; the interlinear glosses of the sentences in this thesis are my own. Any edits I have made to the translations are in brackets.

This has resulted in a dataset of multiple genres and speakers, across three periods of time. While this enriches the data, it also makes the data more complex. In order to keep the project manageable, I have only analysed the data from Gordon Mackay, Charlie Stream, and David Stock. These three men speak different varieties and were recorded in different time periods (the 1960s, 1990s and 2000s, and 2019 respectively), and so the variation between them may be due to dialectal differences, change over time, or standard inter-speaker variation. Yet, they all produce many of the same morphosyntactic structures, and it is their similarities that are the focus of this thesis. As the thesis is based on the speech of only three people, it can only cover a small subset of the language. There may be other varieties of Nyiyaparli that are quite different to the varieties represented here.

The audio data was orthographically transcribed using *ELAN* (Max Planck Institute for Psycholinguistics, 2017) and morphologically analysed using *FieldWorks Language Explorer* (SIL International, 2018). Some phonetic analysis was also conducted using *Praat* (Boersma & Weenink, 2018).

The sources of each example sentence throughout the thesis are indicated after the translation. Sentences from von Brandenstein's recordings are referenced by the AIATSIS archive number (abbreviating 'von-Brandenstein_C' to 'CvB'), sentences from Kohn's fieldnotes are referenced by the date, and recordings that I made are referenced by my initials (JB) with the date and number of the recording.[3]

1.5 Overview of Nyiyaparli

Nyiyaparli is relatively typical for a Pama-Nyungan language. It is a non-configurational, agglutinative, suffixing language with free word order. The pronominal system distinguishes three persons, three numbers, and inclusivity/exclusivity for non-singular first person forms. There is a complete set of

sentences.

[3] The materials made as part of this research are currently in the process of being archived at AIATSIS and IBN.

cross-referencing pronominal clitics (subject, object, and oblique), while several of Nyiyaparli's neighbours only have limited sets of pronominal clitics.

The case alignment system is tripartite and the language has a large case inventory. Some speakers distribute case to all elements of a nominal phrase (NP), while others mark one element with case. This results in the possibility of one word taking multiple cases, marking both the relation of the NP to the predicate and the adnominal relationships to other elements of the NP. Like many other Australian languages, NPs are frequently omitted, usually due to context.

Nyiyaparli also has two verbal conjugation classes (Ø and L). Verbs inflect for tense, aspect, and/or mood, and may take other morphemes that alter its argument structure. It has a phonemic inventory with five to six points of articulation (depending on whether the laminal contrast is present) and three vowels.

There are several varieties of Nyiyaparli, which do not have widely-known names. The most common names my teachers use are 'high' and 'low', referring to the topological environments of where these varieties come from, but they also speak of other varieties in addition to these. Currently, very little is known regarding the differences between these varieties.

In addition to the these varieties of Nyiyaparli, there is a respect register called Pathupathu. It is primarily intended to be used between people in avoidance relationships, such as a mother-in-law and a son-in-law, although it is rarely spoken among Nyiyaparli and Palyku people today. Further research is required to articulate the differences between standard Nyiyaparli and Pathupathu, and between Nyiyaparli's Pathupathu and the other respect styles in the region.

1.5.1 Parts of speech

The following have been identified as parts of speech in Nyiyaparli:

Nominal	Class of words that may inflect for case, including the subclasses of nouns (open), adjectives (open), and pronouns (closed).
Verb	Open class of words that inflect for tense, mood, and/or aspect.
Minor parts of speech	Uninflected words, particles and clitics, including temporal markers, exclamations, ideophones, and interjections.

The formal definitions of nominals and verbs are discussed in more detail in §4.1 and §5.1 respectively.

1.5.2 Neighbouring languages

The Nyiyaparli language is positioned on the border of several subgroupings of languages. The classification of Nyiyaparli and its neighbours remains contentious as different scholars propose different subgroups and criteria for genetic classification (Dench, 2001). It is outside the scope of this thesis to investigate which subgroup the language belongs to, but Nyiyaparli exhibits similarities (and differences) with languages in many of the proposed subgroups, such as the Ngayarta and Wati groups, as well as the Kartu group (whether due to inheritance or contact).

Nyiyaparli shares much of its lexicon with the neighbouring language of Panyjima (also commonly spelled Banyjima), with a cognate density of 79% (O'Grady et al., 1966, p. 121). O'Grady and Laughren (1997) argue the two languages also share morphosyntactic similarities, such as shared pronominal clitic forms, some shared nominal suffixes, the renanalysis of monomoraic verbs, and identical conditioning of ergative[4] allomorphs. However, Dench (1991, 1998) argues there are also many morphosyntactic differences between the languages, particularly in the paradigms of pronominal clitics and the case alignment systems (Panyjima is nominative-accusative while Nyiyaparli is tripartite), which results in other features in Panyjima that Nyiyaparli does not exhibit, such as the active/passive voice distinction and shifts in case forms.

Further comparison of the morphosyntax of the two languages has received little attention. While O'Grady and Laughren (1997, p. 147) mention some shared nominal suffixes (the possessive *-tharntu/-jarntu*, the allative *-wali*, and the dative/accusative *-ku/-yu*),[5] other suffixes have not been compared. Therefore, when discussing each suffix or clitic throughout this thesis, I comment on the cognate in Panyjima if it exists and if it serves a similar function (according to Dench, 1981, 1991), unless the forms are common throughout Pama-Nyungan languages generally (such as the core cases).

From this comparison, I have found that of the suffixes and clitics discussed in this thesis, 20 (57%) have a cognate form in Panyjima with the same or similar function. This includes 13 nominal suffixes (68% of nominal suffixes discussed) and 7 verbal suffixes (44% of verbal suffixes discussed). However, these figures only cover a small subset of all the suffixes and clitics that these languages contain. Many of these suffixes are also common to other languages of the region and Pama-Nyungan languages more broadly. While Nyiyaparli and Panyjima undoubtedly share many lexical items and forms of suffixes, and are thus related to some extent,

[4] In Nyiyaparli the *-lu/-ngku/-ku* forms are the allomorphs of the ergative case; in Panyjima these are the allomorphs of the agentive case (used in passive clauses), which also has an instrumental function.

[5] These are my terms for these suffixes. The forms *-ku/-yu* are dative in Nyiyaparli and accusative in Panyjima (a reanalysis due to case alignment shift).

they also diverge in many respects that are not apparent in this thesis.

Further research is required to comment further on the relations and genetic affiliations Nyiyaparli shares with its neighbouring languages. Several languages in the region have received little descriptive or documentary attention, such as Ngarlawangga to the south of Nyiyaparli, and further research on these languages may reveal insights into the genetic classification of the languages of the greater Pilbara.

Chapter 2

Phonology

2.1 Introduction

In this chapter I provide an overview of the phonology (the sound system) of Nyiyaparli. As morphosyntax is the focus of this thesis, the phonology is only addressed briefly here so as to provide sufficient background for the discussion of morphosyntactic topics.

In §2.2 I outline the phonemic inventory of consonants and their phonetic realisations, including a comment on the unconfirmed laminal contrast. In §2.3 I provide the phonemic inventory for vowels and demonstrate the variation of their phonetic realisations. In §2.4 I give an overview of the syllable structure, permissible word-initial and word-final sounds, the epenthetic *-pa*, morphologically conditioned nasal dissimilation, and stress.

2.2 Consonants

Nyiyaparli has a typical Pama-Nyungan phonemic inventory. There are five or six (see below for a discussion on the laminal contrast) places of articulation for oral and nasal stops and three or four laterals at the non-peripheral places of articulation. As is typical for Pama-Nyungan languages, there are two rhotics and two semi-vowels, no voicing contrast, and a lack of phonemic fricatives. These phonemes are illustrated in Table 2.1, assuming a lack of a laminal contrast. The orthographic symbol is provided for each phoneme and if the IPA symbol is different, it is provided next to it in slashes. The labial-velar approximant is placed in the velar column.

The orthography used in this thesis follows the orthography used by local language and cultural organisations, although it may vary slightly when the pronunciation of a word is never pronounced the way it is written by these organisations.

Table 2.1: Consonant inventory

	Bilabial	Alveolar	Retroflex	(Alveo)-palatal	Velar
Oral stop	p	t	rt /ʈ/	j /c/	k
Nasal	m	n	rn /ɳ/	ny /ɲ/	ng /ŋ/
Tap		rr /ɾ/			
Approximant		r /ɹ/		y /j/	w
Lateral approximant		l	rl /ɭ/	ly /ʎ/	

For example, I have chosen to not place a semi-vowel before a vowel-initial word when that word is not pronounced with the semi-vowel (such as *urruru*, which is always pronounced vowel-initial, although the dictionary of the language centre writes it as *wururu* (Swan & Hill, 2012)). Literacy in Nyiyaparli is not widespread, and Nyiyaparli and Palyku people may choose to use different writing systems than the one presented here.

There is no conclusive evidence on whether a laminal contrast exists in Nyiyaparli (a contrast between palatal and dental laminals). It is outside the scope of this thesis to investigate the existence of a laminal contrast, although there is a lack of minimal pairs in the data that contrast between these places of articulation. It is possible that the contrast previously posited was offered inaccurately due to the similarity of the two sounds for each manner of articulation (as some neighbouring languages do have a laminal contrast). A laminal consonant may appear to be dental as one can often see protrusion of the tip of the tongue at the teeth, but there may simultaneously be an occlusion behind the alveolar ridge with the blade of the tongue.

If we assume there is no contrast, the lamino-palatal phoneme may have realisations at the teeth. For example, /ɲ/ may be realised as [ɲ] or [n̪], or as [ɲ] with a slow enough release that the place of articulation shifts from the palate to the teeth. This variation in phonetic realisation seems to occur frequently for oral stops, where different speakers often produce varying realisations for the same word, such as the word for 'big', pronounced with an alveo-palatal laminal stop (usually realised as [c] or [t̠]) in Gordon Mackay's speech and a dental laminal stop ([t̪]) in David Stock's speech, as shown in (2.1).

(2.1) a. karnapuka mirta walarta-pa, jurta-ntarri
cloud NEG small-CONJ big-PL
'The clouds were not small; they were big ones.' (Gordon Mackay in CvB-02-000447A)

b. thurlay-pi=ø=ru, wiya-lpi=ø karnapuka-ø thurta-ntari-ø
wake-PST=3SG.S=NOW see-PST=3SG.S cloud-ACC big-PL-ACC
'Then he woke up and saw the big clouds.' (David Stock in JB-20190621-02)

As we cannot rule out the existence of a laminal contrast, these differences in pronunciation are preserved in the orthography, where the dental consonants are represented by *th*, *nh*, and *lh*. This results in many common words, such as pronouns, sometimes being spelt with a lamino-palatal consonant and at other times with a dental consonant.

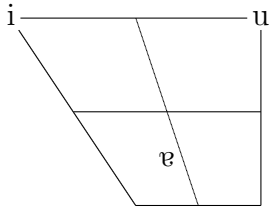
The above example also shows that the 'rhotics' (*r* and *rr*) may be interchanged, as in the plural suffix *ntar(r)i*. The 'now' clitic *=(r)ru* often appears with either rhotic. However, they cannot be interchanged in all words. There are minimal pairs that contrast the sounds, such as *waru* 'heat' and *warru* 'black', and *nyaru* 'river' and *narru* 'dance'. Further, in fieldwork my pronunciation of words with rhotics was often corrected to the correct rhotic. For example, I first pronounced *urruru* with two approximants; this was corrected to a tap/trill and then an approximant. It may be that the variation between the rhotics, as well as the laminal consonants, are due to rapid language change.

There are also varied phonetic realisations for many of these consonants. For example, *r* may be realised as [ɹ] or [ɻ], while *rr* may be realised as a tap or a brief trill. The lack of a voicing contrast means there is varied voicing and voice onset times for oral stops. There may also be frication at the place of articulation of stops, as there are no phonemic fricatives to contrast with.

2.3 Vowels

Nyiyaparli has three monophthongs: a high front vowel, a high back rounded vowel, and a mid-low central vowel (*a* in the orthography), as illustrated in Figure 2.1. There are two diphthongs: /aɪ/ and /aʊ/, which are written in the orthography as *ay(i)* and *aw* respectively. Other combinations of vowels and semi-vowels are usually pronounced as two syllables (such as *awu*, *iya*, and *iyu*), but sometimes may be reduced to diphthongs.

Figure 2.1: Vowel inventory



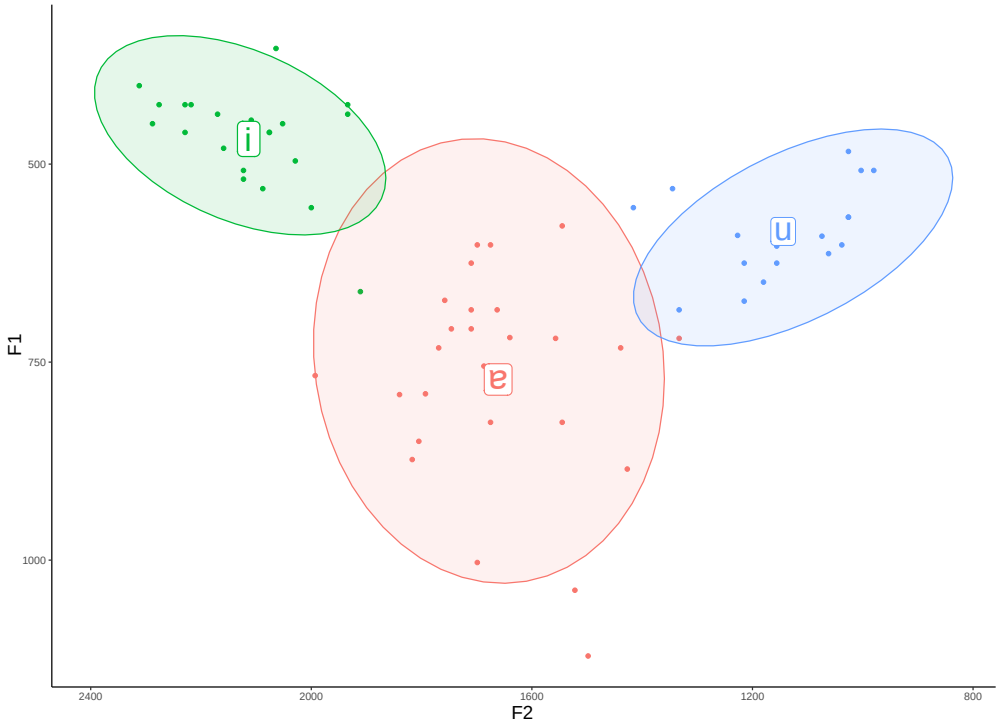
The phonemes for the monophthongs are evidenced by various minimal pairs, such as those in (2.2). There is little evidence of a length contrast, with no minimal pairs in the data contrasting a short and long vowel.

(2.2)

kulka ‘mind’	kalka ‘root’
mulya ‘nose’	milya ‘mud’
nyala ‘that’	nyila ‘tea’

The phonetic realisations of these phonemes are highly varied, as there are only three monophthongs and thus they have space to move without being perceived as a different phoneme. This is demonstrated by an analysis of the vowels from a narrative told by David Stock (JB-20190626-02). The first two formant frequencies (in Hertz) of the monophthongs with clear formants are illustrated in Figure 2.2. The vowel label is positioned at the means of the frequencies, and the ellipses indicate two standard deviations.

Figure 2.2: The first two formant frequencies of the vowels of David Stock



This graph shows there is a wide range of phonetic realisations for each vowel, particularly /ɐ/. However, it is only an approximation of the vowel space of David Stock. It only uses 64 tokens, all from one recording with limited phonological environments, and was recorded using XY unidirectional microphones rather than a microphone designed for detailed phonetic analysis.

2.4 Phonotactics

The syllable structure of Nyiyaparli is (C)V(C). This means there cannot be more than two consonants in a consonant cluster (borrowings from English with clusters of more than two consonants typically involve vowel insertion). A Nyiyaparli word has the structure of (C)V(C)(CV(C))^n. I have recorded monomorphemic words of up to 6 syllables, but this is rare. Typically, verb roots are 2 or 3 syllables (never monosyllabic; disyllabic inflected forms have been generalised).

Words may be vowel initial (although most words are consonant initial), and some words may be pronounced with or without an initial consonant, such as *(y)inya* 'give'. All consonants except for retroflex consonants, rhotics and laterals may be word-initial, although there are very few examples of alveolar stops/nasals as word-initial.

There are no consonant-final words, although a morpheme can (rarely) be consonant-final, such as *yurnturn* 'push' (which must have an overt verbal inflection). The epenthetic syllable *-pa* is often added to consonant final borrowings, such as *rayinspa* 'reins' (fricatives from borrowings may be retained or replaced with a stop). There are also some words, such as *mangunpa* 'law', that may optionally lose the final syllable *pa* when they take suffixes.

There are two forms of nasal dissimilation in Nyiyaparli. One involves the deletion of a nasal if preceded by a syllable with a nasal-stop cluster (e.g. *wa**ngk**a-**k**a* 'story-LOC' rather than **wangka-ngka*). The other appears with present tense, where a stop is deleted if followed by a syllable that begins with a nasal (e.g. *kalku-**m**a=**rn**a* 'keep-PRS=1SG.S' rather than **kalku-mpa=rna*). Both these processes are morphologically conditioned; the former occurs with suffix forms like the ergative and locative, and the latter occurs with present tense forms. Thus, while **wangka-ngka* is not permissible, a sequence of two syllables with nasal-stop clusters elsewhere, such as *panti-mpa* 'sit-PRS', is permissible.

Finally, stress in Nyiyaparli is typical for an Australian language. Primary stress almost always falls on the first syllable of a word, characterised by an increase in loudness. Secondary stress usually falls on every odd-numbered syllable. The last syllable that would receive secondary stress may optionally be unstressed. The examples in (2.3) illustrate this pattern.

(2.3) a. ˈkanti˛purrku 'mob' (Gordon Mackay in CvB02-000447B)
b. ˈintin˛malpi 'rain-PST' (David Stock in JB-20190621-02)
c. ˈthungku˛wayi˛laka˛lay 'cooked-INCH-WHEN'
(David Stock in JB-2019062-02)
d. ˈnyupa˛ngarni˛thakuru 'spouse-PROP-CAUS-SIM=NOW'
(Gordon Mackay in CvB02-000447B)

Chapter 3

Pronominals

3.1 Introduction

In Nyiyaparli, as in many Pama-Nyungan languages, there are two forms of pronominals: free and bound. Bound pronominals attach to other words (usually finite verbs) and indicate the person, number and exclusivity of the grammatical functions.

Free pronouns, on the other hand, stand alone as words to either substitute for a nominal or modify a nominal within an NP. They are formally similar to nominals (see §4.1), but the forms of some cases on pronouns are different to the forms on nominals. Free pronouns may be personal, indicating the person, number and exclusivity of an argument or adjunct; they may be demonstrative, indicating the deixis of an argument or adjunct; or they may be interrogative/indefinite, and represent an argument that has an unknown or non-specific referent. See §4.1 for an explanation of the terms 'argument' and 'adjunct'.

This chapter provides an overview of pronominals. In §3.2 I discuss free personal pronouns and their morphology, as well as how they demonstrate that Nyiyaparli's underlying case system is tripartite. In §3.3 I discuss bound pronominals and the rules they follow, while justifying their analysis as clitics and as indicating grammatical functions. Finally, I briefly describe demonstrative and interrogative pronouns in §3.4.

3.2 Personal pronouns

Free personal pronouns form a closed subset of forms that vary according to person (first, second, or third) and number (singular, dual, and plural), as well as exclusivity or inclusivity for first person non-singular forms, and case.

The free pronoun forms reveal that Nyiyaparli's case system is tripartite; i.e.

that three core cases are recognised: nominative (S, the sole argument of an intransitive clause), ergative (A, the agent-like argument of a transitive clause) and accusative (P, the patient-like argument of a transitive clause). There are separate forms of non-singular pronouns for each of these cases, as shown in Table 3.1 (Swan and Hill, 2012; Kohn, 1996; checked in fieldwork).

Table 3.1: Forms of free personal pronouns

	Nominative	Ergative	Accusative	Dative
1SG	ngaja	ngaja-lu	**ngaja**	**ngajuku**
1DU.INCL	ngali	ngali-lu	ngali-nha	ngali-mpa
1DU.EXCL	ngaliya	ngaliya-lu	ngaliya-nha	ngaliya-mpa
1PL.INCL	nganyula	nganyula-lu	**nganyu(la)-nha**	nganyula-mpa
1PL.EXCL	nganartu	nganartu-lu	nganartu-nha	nganartu-mpa
2SG	nyinta	nyinta-lu	**nyinta**	**nyinku(pa)**
2DU	nyumpalu	nyumpalu-lu	nyumpalu-nha	nyumpalu-mpa
2PL	n(y)uwalu	n(y)uwalu-lu	**n(y)uwanha**	**n(y)uwa(lu)-mpa**
3SG	paluwa	paluwa-lu	**paluwa**	paluwa-mpa
3DU	piyalu	piyalu-lu	**piya(lu)-nha**	**piya(lu)-mpa**
3PL	thana	thana-lu	thana-nha	thana-mpa

While tripartite marking occurs on non-singular pronouns, the nominative and accusative forms are homonymous for singular pronouns (and nominals); that is, they follow a pattern of ergative-absolutive case marking. In this explanation I am taking care not to confuse Nyiyaparli's case system with its case forms. I follow Goddard (1982) in describing the case forms as marking three underlying cases (or substitution classes), as non-singular free pronouns have three separate forms. As Goddard (1982, p. 178) argues:

> Given the existence of a nominal subclass with three formally distinct case categories, and the principle that the case value of any other nominal can be determined by substituting for it a nominal from the subclass with tripartite marking, it follows that on the traditional concept of case, such languages must be regarded as having three core cases — ergative, accusative and nominative.

The ergative, accusative, nominative, and dative-genitive forms of each pronoun are illustrated in Table 3.1. While most follow a regular pattern of taking *-lu* for ergative, *-nha* for accusative, and *-mpa* for dative-genitive (and *-ø* for nominative), there are several irregularities, as indicated in bold (including homonymy

between nominative and accusative forms in singular pronouns). Examples of the usage of these pronouns are provided throughout this thesis.

There are several variants of these forms, indicated with parentheses where practicable. Other variants include the alternation between *j* and *th*, and *ny* and *nh* (see §2.2), *nganarnu* for the 1PL.EXCL forms, and *palinya* for the 3SG forms.

Pronouns (personal as well as demonstrative) may also take cases other than the four illustrated above. The form of the case may be identical or distinct from the case form on nominals. Table 3.2 provides the forms of several cases, as well as some other morphology. The functions and uses of these cases are described in Chapter 4.

Table 3.2: Forms of common pronoun and nominal suffixes

	Nominal	Pronoun
Locative	-ka, -ngka, -la	-la
Near	-LOC+ji	
Allatives	-karta(yi) or -wali[1]	
Possessive	-tharn(t)u	-DAT+tharn(t)u
Dual	-kutha[2]	
Plural	-purtayi	-rni[3]
Only	-ka(r)nu	
Semblative	=kumpa	

3.3 Bound pronominals

Bound pronominals are clitics that appear on finite verbs to indicate the person, number, and exclusivity of the grammatical functions of the clause. Table 3.3 illustrates the subject, object, and oblique forms of the pronominal clitics. Examples of their use may be found throughout this thesis.

There is less regularity in the bound forms than the free forms, although the pattern of *-nha* for object and *-mpa* for oblique does emerge in some sets, particularly in the 1st and 2nd person non-singular forms. The absence of subject or object pronominal clitics on a finite verb indicates the argument is 3rd person

[1]Personal pronouns take the dative form and then *-karta(yi)* or *-wali*, while demonstratives and interrogatives may directly take *-karta(yi)* or *-wali*.

[2]Nominals and demonstrative pronouns only.

[3]Demonstrative pronouns only.

Table 3.3: Forms of bound pronominals

	Subject	Object	Oblique
1SG	=rna	=ja	=ju
1DU.INCL	=(nga)li	=linha	=limpa
1DU.EXCL	=liya	=liyanha	=liyampa
1PL.INCL	=la	=nganyulanha	=nganyulampa
1PL.EXCL	=kurta	=ngurna	=ngurnimpa
2SG	=npa	=nta	=ngku
2DU	=npurla	=npurlunha	=npurlumpa
2PL	=n(y)u	=nyunha	=nyumpa
3SG	=ø	=ø	=kura
3DU	=purla	=payinha	=payimpa
3PL	=ya	=thanha	=thanampa

singular, as are both arguments in (3.1) for example, unless the verb is followed by a pronoun indicating otherwise.

(3.1) nyiya-ngku jilya-ngku thunpaka-lu kanuwa-lpi=ø=ø
this-ERG child-ERG small-ERG kick-PST=3SG.S=3SG.O
ngathuku-ø yukurru-ø
1SG.DAT-ACC dog-ACC
'This little kid kicked my dog.' (Charlie Stream in Kohn fieldnotes, 11/05/2004)

There are a few variants of these forms in my data, again indicated with parentheses where practicable, and the laminal pairs (*j* and *th*, and *ny* and *nh*) are interchangeable. Interestingly, a variant of *=kurta* '1PL.EXCL' is *=kartu*, suggesting a process of metathesis has occurred either way. It is unlikely this variation is dialectal, as David Stock offers both forms and explained that one can use either and their meanings are identical. It is also not phonologically conditioned, as Mr Stock used both forms in the same environment (*yana-pi=kurta* and *yana-pi=kartu* 'go-PST=1PL.EXCL.S' in JB-20190626-02).

The syntactic role that bound pronominals play combined with the similarities in form with many free pronouns suggests that they are clitics rather than suffixes. Most bear some phonological resemblance to their free counterparts, and some forms are identical (*(=)ngali*, *(=)nganyulanha*, *(=)nganyulampa*, and *(=)thanampa*). They may also be replaced by an immediately following free pronoun, and they follow a different set of rules than verbal suffixes.

The bound pronominals are analysed as representing grammatical functions (subject, object, and oblique) rather than cases (ergative/nominative, accusative,

and dative-genitive), primarily due to the range of cases that the oblique pronominal cross-references. Most often the oblique clitic agrees with an NP in dative case (as in (3.2)), but the data also contains instances of the oblique pronominal agreeing with an NP in locative case (see (3.3) and (3.4)). This poses no problem for an analysis that views the pronominal clitics as indicating grammatical function unlike an analysis that views them as cross-referencing case.

(3.2) ngunha-ø patha-yi-mpa=ø=thu ngathuku
that-NOM angry-INCH-PRS=3SG.S=1SG.OBL 1SG.DAT
'That fella's getting angry with me.' (Kohn, 1996, p. 3)

(3.3) wartayi yarnta-ø paka-lpi=ø, wangka-pi=ø=kura
morning sun-NOM come-PST=3SG.S, talk-PST=3SG.S=3SG.OBL
ngarti-ngka, "jilya-ø kapukarri-ma-lpi=rna=ø..."
mother-LOC child-ACC dream-CAUS-PST=1SG.S=3SG.O
'Next morning when the sun came up, he told my mother "I dreamed (of) a child..."' (Charlie Stream in Kohn fieldnotes, 28/05/2004)

(3.4) wiya-lpi=ø=thu mulya-ngka ngarti-ngku jitilpa-ø
look-PST=3SG.S=1SG.OBL nose-LOC mother-ERG seed-ACC
pampakin-ø ngarti-ngku puwi-lpi=ø, waya
pumpkin-ACC mother-ERG pull-PST=3SG.S nothing
'Mum had a look up my nose, pulled at the pumpkin seed but nothing.' (Charlie Stream in Kohn, 1996, p. 4)

In (3.3), the addressee is *ngarti-ngka* 'mother-LOC' and is cross-referenced by the oblique 3SG pronominal *=kura*. In (3.4), the oblique 1SG pronominal clitic *=thu* refers to the possessor of the nose. As the possessor of inalienable possessions such as body parts (more accurately described as a part-whole relation) always takes the same case as the possession, if the possessor were explicit as an NP it would be in locative case.

Rather than bound pronominals indicating case, the verb primarily determines the case frame of a clause and this allows the pronominal clitics to map on to the appropriate case (subject to nominative or ergative; object to accusative; oblique to the case of the oblique argument or the adjunct).

Subject and object pronominal clitics for animate referents are obligatory on finite verbs unless a free pronoun directly follows the verb. For example, in (3.5a), the speaker omits the bound pronominal for the subject and instead says the free pronoun after the verb. She then offers the alternative sentence in (3.5b) with the bound pronominal. The free pronoun is omitted in this example, but both the pronoun and the pronominal clitic may be said, as in (3.2). Oblique pronominals are usually obligatory in the same way, but further research is required to confirm when they may be omitted.

(3.5) a. janyja-la panti-kana-pi ngaja-ø
sun-LOC sit-CONT-PST 1SG-NOM

b. janyja-la panti-kana-pi=rna
sun-LOC sit-CONT-PST=1SG.S

'I was sitting in the sun.' (A1 in JB-20190608-01, elicited)

While animate subjects and objects must be cross-referenced (unless the verb is followed by a free pronoun), pronominal clitics are not obligatory for inanimate entities, and are used variably. For example, in (3.6), the object is dual but is not cross-referenced by the 3DU.O pronominal clitic (*=payinha*) as it is inanimate. The variation of using pronominals for inanimate entities may be further researched with more data that includes additional 3rd person non-singular inanimate subjects and objects, and 3rd singular oblique arguments/adjuncts (see Meakins, 2015 for likely findings).

(3.6) mutuka-ø kujarra-ø ngathuku minjuma-npi=ya
car-ACC two-ACC 1SG.DAT steal-PRS=3PL.S

'They are stealing my two cars.' (David Stock in own fieldnotes, elicited)

As these clitics are only obligatory on finite verbs, derivations such as the purposive, the imperative mood or the habitual aspect result in the omission of bound pronominals, as these morphemes do not occur with tense (see Chapter 5).

3.4 Demonstrative and interrogative pronouns

Demonstrative pronouns are illustrated in Table 3.4.[4] They may be translated to 'that; those; there' or 'this; these; here' depending on the spatial deixis as indicated (how far away the entity is from the speaker). The definiteness of each pronoun has not been tested, but in the current dataset they appear to all be definite except for *ngurla*, which may be definite or indefinite (i.e. it may also be translated to 'somewhere').

The data contains many phonological variants of these pronouns, particularly in the place of articulation of the laterals and nasals (excluding the velar nasal). The use of each of these pronouns is illustrated in (3.7)–(3.10). They may act as substitutions for nominals or as modifiers in an NP. As with other singular pronouns, the nominative and accusative forms are homonyms.

(3.7) nyiya-ø=marna wangka-ø thuna-ma=rna
this-ACC=THEN word-ACC put-PRS=1SG.S

'So I am putting these words down.' (Gordon Mackay in CvB-02-000008A)

[4] *jiti-ngka* 'near-LOC' may also be used to indicate a proximal location, but is not a pronoun.

Table 3.4: Demonstrative pronouns

Pronoun	Deixis
nyiya	Proximal
palangunya	Proximal
ngunya	Distal
nyala	Distal
ngurla	Not visible

(3.8) palangunha-warra, wiya-nma, jina-ngkaji nyinta-laji
this-EMPH? see-IMP foot-NEAR 2SG-NEAR
'That's the one, look, near your foot.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

(3.9) ngunya=marna ngayi-mpa=ø yurtupa-ø paja-ngarni! nyala=marna
that=THEN lie-PRS=3SG.S snake-NOM wild-PROP that=THEN
yurtupa-ø!
snake-NOM
'There's a wild snake there! A snake is there!' (A2 in JB20190609-02, elicited)

(3.10) ngula-ngku marnta-puru-lu wiya-lpi=ø nganyula-nha
that-ERG rock-OBSC-ERG see-PST=3SG.S 1PL.INCL-ACC
'That one behind the rock was watching us.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

A number of interrogative pronouns (which may also act as indefinite) appear in the data. The most prominent of these are *tha(r)ni* and *thangunya-la* for 'where' or 'somewhere' (literally, 'which-LOC'), *thanina* for 'what' or 'how', and *ngana(na)* for 'what', 'who', or 'someone'. Examples of their typical use are provided in (3.11) and (3.12).

(3.11) jani-nguru paka-lpi=npa?
where-ABL come-PST=2SG.S
'Where have you come from?' (A1 in JB20190609-02, elicited)

(3.12) a. ngunha-ø ngana-ø yana-mpa=ø?
that-NOM who-NOM go-PRS=3SG.S
'Who's that going?'

b. thangunhala?
where
'Where?'

(Charlie Stream in Kohn, 1996, p. 6)

These pronouns may also be used in declarative complements. For example, in (3.13), *thanina* is used to express an indefinite manner of living. In (3.14), *thani* takes the allative case to express an indefinite destination.

(3.13) jilya-purtayi-lu, wiya-la=ya milimili-la, panti-la thanina
child-PL-ERG see-FUT=3PL.S paper-LOC be-LOC how
'But our children will see on paper how we were.' (Gordon Mackay in CvB02-000008A)

(3.14) wangka-ø kalku-pi=ya thani-wali marlurlu-ø yana-pi=ø
talk-ACC hold-PST=3PL.S where-ALL initiand-NOM go-PST=3SG.S
'They held a discussion on where the boy would go.' (Gordon Mackay in CvB-02-000447B)

These pronouns may also be negated with the negation suffix *-yapa*. For example, in (3.15), the indefinite *ngana* takes ergative case and then *-yapa* to indicate the subject of the clause is 'nobody'.

(3.15) ngana-ngku-yapa=ru kalku-la=ø waya=rru
who-ERG-NEG=NOW keep-FUT=3SG.S no-NOW
'Now nobody will keep it, no.' (Gordon Mackay in CvB-02-000008A)

Chapter 4

Nominal morphology

4.1 Introduction

Nominals are words which may inflect for case; they may be an argument, or be an element of an argument, or they may act as a predicate. Nominal predicates are discussed in §5.2.1. Within the class of nominals there are three subclasses: nouns (open), adjectives (open), and pronouns (closed). Pronouns are discussed separately in Chapter 3. While nouns and adjectives belong to different classes in many other languages, in Australian languages the two are usually treated as members of the same class because they are formally identical (see Dixon, 1980). Adjectives not only modify nouns (as in other languages), but they can function as the sole element of an NP.

All non-predicatory nominals take case to indicate the grammatical function it bears in the clause, as well as the relationship it has with the other elements of the NP. In my analysis, nominals in the same case are of the same grammatical function and are elements of one NP. Nouns which modify another noun take the case that reflects the relationship between the nouns, as well as the case of its head. NPs are further discussed in §6.2.

The morphological structure of the Nyiyaparli nominal is represented in (4.1). Only the root is obligatory, and case is obligatory if the nominal is an argument of a predicate.

(4.1) Root + (Number) + Case* + Other suffix* + Agreement marker* + Clitic*

In order to discuss the various NPs in a sentence, adjuncts and arguments must be distinguished. An argument is a syntactic element that a predicate requires. An adjunct, on the other hand, is a syntactic element that the predicate does not require; it is optional. (A predicate is the part of a clause that makes the

proposition.) For example, in (4.2), the predicate *witama* 'wait' requires a subject (the entity that waits), so *mani* 'some' is an argument. *witama* does not require another argument that describes what the subject is waiting with, so *tampa-ngarni* is an adjunct.

(4.2) mani-ø=marna tampa-ngarni witama-kana-pi=ya
some-NOM=THEN damper-PROP wait-CONT-PST=3PL.S
'Some were waiting with damper.' (David Stock in JB-20190626-02)

However, determining whether an element of a given clause is an argument or adjunct is sometimes difficult due to frequent omission of NPs in Nyiyaparli. As in many Australian languages, arguments are not required to be overt. NPs are often omitted if they are clear from context, or from the bound pronominals. For example, in (4.3), the verb is the only overt element of the sentence, but we know that the subject is 1DU.EXCL due to the bound pronominal, and thus an overt NP containing the corresponding free pronoun is not necessary.

(4.3) wirtama-npa=liya=kura
wait-PRS=1DU.EXCL.S=3SG.OBL
'We're waiting for him.' (Charlie Stream in Kohn fieldnotes, 26/05/2004)

The forms of common nominal suffixes and clitics are provided in Table 4.1. See the relevant section below for details on the allomorphy of each suffix.

It is worth noting that there are several overlapping functions of the cases. For example, both the locative and the dative may be used to mark the addressee of a speech event, or the cause of some event. The causal (*-mari*, not discussed here) and the ablative may also indicate the cause of an event. Due to the versatility of the locative case, it may also share the canonical functions of the ablative, allative, or 'near' cases. The dative and possessive cases also both serve the same genitive function.

In the rest of this chapter I discuss the form(s) and function(s) of each major nominal suffix or clitic. While it is outside the scope of this thesis to discuss all nominal morphology found in the data, I cover the most prominent cases and inflections. In §4.2 I discuss the ergative, accusative, nominative, and dative-genitive cases. In §4.3 I discuss cases that function to reflect the location or direction of an entity or event in space or time—the locative, the compound 'near' case, the 'obscured by' case, two allatives, and the ablative. In §4.4 the proprietive, possessive and privative cases are discussed, including a discussion of the proprietive also taking the case of the possessor. I discuss other nominal morphology in §4.5, including plurality, duality, the 'only' suffix, and the clitic *=kumpa* which functions as a comparative, semblative, and diminutive. Finally, in §4.6 I discuss the suffix that derives nominals from verbs. Note that verbalisers are discussed in Chapter 5.

Table 4.1: Forms of common nominal suffixes and clitics

Morpheme	Form
Ergative	-lu, ngku, -ku
Accusative	-ø
Nominative	-ø
Dative-genitive	-ku, -yu
Locative	-la, -ngka, -ka
Near	-LOC+ji
Obscured by	-puru
Allative_1	-karta(yi)
Allative_2	-wali
Ablative	-nguru
Proprietive	-ngarni, -ngara
Possessive	-tharn(t)u
Privative	-pati
Dual	-kutha
Plural	-purtayi, -ntarri
Only	-ka(r)nu
COMP/SEMBL/DIM	=kumpa
Nominaliser	-(la)nthalpa

4.2 Common cases

4.2.1 Ergative and accusative

The ergative case marks the most agent-like argument of transitive (or ditransitive) clauses. It takes the form of *-ku* when following a disyllabic stem that contains a nasal-stop cluster preceding the final vowel (nasal dissimilation). When following all other disyllabic stems it takes the form of *-ngku*. When following stems of three or more syllables, it takes the form of *-lu*. This allomorphy is illustrated in Table 4.2. The latter two forms are typical of a Pama-Nyungan language. The form *-ku* is not typical due to homophony with the dative *-ku*, but the dative in Nyiyaparli only takes the form *-ku* when on a stem of three or more syllables, removing the problem of ambiguity. It takes the form of *-lu* on pronouns.

The accusative case does not take phonetic form on nominals; the uninflected form of the nominal stem in transitive clauses signifies the most patient-like argument. On non-singular free pronouns, the accusative case takes the form of *-nha* (see §3.1). The most patient-like argument of a ditransitive clause can be either

Table 4.2: Ergative allomorphy

-ku	/ #(C)VNSV__
-ngku	/ elsewhere following disyllabic stem
-lu	/ elsewhere

the recipient or theme (see §4.2.3).

A typical example of these two cases is provided in (4.4), where the ergative argument is *mani* 'other(s); some', taking the suffix *-ngku*, and the accusative argument is the unmarked 'kangaroo' (a borrowing from English). The two arguments are also cross-referenced by the pronominal clitics on the verb. Many other examples of the ergative and accusative cases appear throughout this thesis.

(4.4) kangkaru-ø karta-lpi=ya=ø, mani-ngku=marna
kangaroo-ACC kill-PST=3PL.S=3SG.O other-ERG=THEN
'Another lot got a kangaroo.' (David Stock in JB-20190626-02)

While the ergative often also has an additional function of marking the instrumental in Pama-Nyungan languages, in Nyiyaparli an instrument is usually marked by the proprietive (see §4.4.1). Yet, there are a few instances of the ergative being used to mark an instrument, as in (4.5). As the reflexive makes the subject nominative (see §5.7.1), this example demonstrates that *mara* 'hand' is in ergative case as an instrument, rather than to agree with the subject as a body part (as *thunturtu* 'head' does).

(4.5) marlpa-ø pungka-lpi=ø=nyina thunturtu-ø mara-ngku
man-NOM hit-PST=3SG.S=REFL head-NOM hand-ERG
'The man hit himself in the head with his hand.' (Charlie Stream in Kohn fieldnotes, 02/12/1996)

4.2.2 Nominative

When the clause is intransitive or semi-transitive (see §5.2.2), the entity unmarked for case signifies the sole argument of the clause in nominative case, which is usually the agent or experiencer. The nominative subject *mani* 'some' in (4.6) may be compared with the ergative subject in (4.4). It is left unmarked as *witama* 'wait' is an intransitive verb.

(4.6) mani-ø=marna tampa-ngarni witama-kana-pi=ya
some-NOM=THEN damper-PROP wait-CONT-PST=3PL.S
'Some were waiting with damper.' (David Stock in JB-20190626-02)

When the subject of an intransitive clause is an experiencer, it is also marked with nominative case, as in (4.7). When the secondary argument of a clause is not affected by the subject (as with semi-transitive verbs) the subject is in nominative case, as in (4.8).

(4.7) ngunha-ø marlpa-ø pilanha-yi-mpa=ø yurtupa-la
that-NOM person-NOM scared-INCH-PRS=3SG.S snake-LOC
'That man's scared of the snake.' (Charlie Stream in Kohn fieldnotes, 08/09/1995)

(4.8) ngatha-ø wathayi-pi=rna nhumpalu-mpa, tharni yana-pi=npula?
1SG-NOM look-PST=1SG.S 2DU-DAT where go-PST=2DU.S
'I've been looking for you two, where were you going?' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

Numerous other examples of the nominative case appear throughout this thesis.

4.2.3 Dative-genitive

The dative-genitive case, henceforth the dative case, appears on a wide range of oblique arguments or adjuncts, as well as indicating the genitive of alienable possessions and kin. It takes the form of *-yu* when following disyllabic stems, and *-ku* elsewhere. See §3.1 for dative forms of pronouns. These are typical forms for a Pama-Nyungan language.

The semantic role of the nominal in dative case largely depends on context and the verb it occurs with. The possible semantic roles include the beneficiary, cause, purpose, sought entity, addressee, and topic of cognition. Examples of each of these roles are provided below, followed by examples of the use of the dative in marking the theme or recipient in ditransitive clauses, and the dative's genitive function.

In (4.9), the people who benefit from the event each take the dative case, and this agrees with the oblique pronominal on the verb, *pukanpi* 'hunt'.

(4.9) pukanpi-ma-lpi=ø=janampa yartilpa-ku, jirni-ntari-ku,
hunt-ITER-PST=3SG.S=3PL.OBL man-DAT old.man-PL-DAT
yungkutharra-ku
SPP-DAT
'He hunted for them, the men, the old men, his parents-in-law.' (Gordon Mackay in CvB-02-000447B)

Similarly, the dative may indicate that the associated entity is the maleficiary of the event. In (4.10), the first person singular in dative case may be interpreted as the maleficiary.

(4.10) ngunha-ø patha-yi-mpa=ø=thu ngathuku
that-NOM angry-INCH-PRS=3SG.S=1SG.OBL 1SG.DAT
'That fella's getting angry with me.' (Kohn, 1996, p. 3)

Alternatively, the first person singular could be interpreted as the cause of the event, which the dative also covers. In (4.11), *marntu* 'meat' is the cause of the woman vomiting, and so receives the dative case. This function of the dative case does not seem to be different to *-mari* 'causal', which also indicates the cause of an event.

(4.11) marntu-yu karupay-pi=ø
meat-DAT vomit-PST=3SG.S
'She vomited from (eating) the meat.' (David Stock in JB-20190618-01)

The dative case may also indicate the purpose of an event. For example, in (4.12), *wangka-yu nyiyaparli-ku* is in dative case to indicate that the purpose of the event (coming) is the Nyiyaparli language.

(4.12) nyiya-ø paka-lpi=ya wangka-yu nyiyaparli-ku
this-NOM come-PST=3PL.S language-DAT Nyiyaparli-DAT
'They are coming for Nyiyaparli language [to talk in Nyiyaparli].' (A1 in JB20190608-01)

Additionally, the dative may indicate an intensional object, an entity whose existence is not presupposed. In a transitive clause, the object may be demoted from accusative to dative case to indicate that the event is not necessarily successful or that the object is intensional. For example, (4.13) indicates a sense of seeking, and may be translated as 'hunt for' rather than 'hunt'. This can be compared to (4.14), where the successfully hunted *marntu* 'meat' is in accusative case. Similarly, with the semi-transitive *wathayi* 'look for', the secondary entity takes dative case, as in (4.15).

(4.13) nyala-ngka marntu-yu-pa pukanpi-lpi=ø
there-LOC meat-DAT-EMPH? hunt-PST=3SG.S
'While there, he hunted for meat.' (Gordon Mackay in CvB-02-000447B)

(4.14) marntu-ø=marna pukanpi-lpi=ø
meat-ACC=THEN hunt-PST=3SG.S
'He hunted meat.' (Gordon Mackay in CvB-02-000447B)

(4.15) papa-yu=rru wathayi-pi=ø
water-DAT=NOW look-PST=3SG.S
'He was looking for some water now.' (David Stock in JB-20190626-03)

The dative case may also be used to express secondary entities in morphological processes that demote objects from accusative case to dative case. For example, in the perfect clause in (4.16), the secondary entity of *karta* 'kill' is the kangaroo, and it appears in dative case.[1] This can be compared with (4.17), where the verb is finite and the kangaroo is in accusative case. See §6.3 for further discussion of arguments taking dative case when the verb is subordinate.

(4.16) karta-rlala=marna marlpa-ø kangkaru-ku
kill-PERF=THEN man-NOM kangaroo-DAT
'The man who killed the kangaroo.' (David Stock in JB-20190618-01)

(4.17) kangkaru-ø karta-lpi=ya=ø, mani-ngku=marna
kangaroo-ACC kill-PST=3PL.S=3SG.O other-ERG=THEN
'Another lot got a kangaroo.' (David Stock in JB-20190626-02)

Further, the dative is used to indicate that the nominal it attaches to is an addressee of a speech event. For example, in (4.18), the addressee of *wangka* 'talk' is *ngali-mpa* '1DU.INCL-DAT'.

(4.18) ngunha-ø wangka-pi=ø ngali-mpa yana-rta-ku
that-NOM talk-PST=3SG.S 1DU.INCL-DAT go-PURP-DAT
yurlu-kartayi-ku
camp-ALL-DAT
'That fella told us to go home.' (Charlie Stream in Kohn, 1996, p. 3)

The dative case is also used for topics of cognition. In (4.19), the subject of the nominal predicate is in nominative case and the topic of knowing takes the dative case. While the NPs are not expressed in (4.20) and (4.21), we can assume that the referents of the oblique pronominals would be in dative case. These examples also illustrate different ways of expressing cognition, where the speaker may use the nominal predicate *miyanu* 'knowing', or a verb with *ku(r)lka* 'mind' (using a part-whole construction), and different verbs seem to signify different types of cognition ('thinking' versus 'knowing').

(4.19) kakunhu, nyinta-ø miyanu piyampa?
don't.know 2SG-NOM knowing 3DU.DAT
'I don't know, do you know those two?' (Charlie Stream in Kohn field-notes, 17/05/2004)

[1] The example in (4.16) is translated as a sentence fragment as it follows the sentence in (5.71) to clarify who the *urruru* is.

(4.20) kulka-ø yana-pi=rna=payimpa
mind-NOM go-PST=1SG.S=3DU.OBL
'I was thinking about them.' (Gordon Mackay in CvB-02-000445B)

(4.21) kulka-ø panti-pi=ya=kura
mind-NOM be-PST=3PL.S=3SG.OBL
'They knew [that she's pregnant].' (Gordon Mackay in CvB-02-000445B)

In addition to taking on the above assortment of semantic roles, the dative is also used to mark an argument of the ditransitive *yin(y)a* 'give'. For example, in (4.22), the dative appears on the theme (*mani-yu*) and the recipient (*marlpa*) is in accusative case. However, in (4.23), the dative case appears on the recipient (*piyampa jilya-kutha-ku*) and the accusative on the theme (*marnta*). Ambiguity is not a problem due to context, as the theme tends to be inanimate and the recipient animate. In fact, there are rare instances of two accusative arguments, as in (4.24).[2]

(4.22) mani-yu=marna marlpa-ø ina-pi=kurta=jana
some-DAT=THEN person-ACC give-PST=1PL.EXCL.S=3PL.O
'We gave some (fish) to the people.' (David Stock in JB-20190626-02)

(4.23) marnta-ø yinya-pi=rna piyampa jilya-kutha-ku
money-ACC give-PST=1SG.S 3DU.DAT child-DU-DAT
'I gave those two kids some money.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.24) yinya-ma=tha ngamari-ø
give-IMP=1SG.O tobacco-ACC
'Give me some tobacco!' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The dative attaching to either entity does not seem to be due to dialectal or inter-speaker variation, as each speaker in this dataset (Gordon Mackay, David Stock,[3] and Charlie Stream) offers the dative on either semantic role. Table 4.3 shows the number of distinct instances the dative occurs on the theme and the recipient with *yinya* 'give', by speaker.

However, this excludes all examples that are ambiguous (largely due to omitted NPs), or where other morphology may effect the cases of arguments (such as

[2] In (4.24) I assume the 1SG.O clitic *=tha* refers to an accusative argument, as object clitics are always mapped to arguments in accusative case.

[3] When repeating sentences from the recordings of Gordon Mackay, David Stock shows no hesitation in using the same cases as Mr Mackay uses, including the dative on the recipient. I have not included these instances in Table 4.3 as they are repetitions of Gordon Mackay's speech. Mr Stock is recorded using *yin(y)a* twice outside the context of listening to the legacy recordings; these are the instances included in the table.

Table 4.3: Dative occurrences with *yinya* 'give'

	GM	DS	CS
Theme	2	2	11
Recipient	1	0	14

subordinate markers that make both arguments dative). As most of the data from Gordon Mackay are from narratives or other long texts, he often omits arguments and thus many of these examples are not included. In most of the instances of an omitted theme, it is highly likely that it would be in dative case were it overt. For example, in (4.25), the recipient is accusative (both overtly and cross-referenced by the object bound pronominal), which means the theme should be dative. For this reason, I argue that in the majority of instances of *yin(y)a*, the theme takes dative case and the recipient takes accusative. Yet, due to the grammaticality of sentences like (4.24) which have two different accusative arguments, we cannot be certain that the case of the omitted theme is dative in sentences such as (4.25).

(4.25) ina-pi=purla=thana, marlpa-ø palparri-ø
give-PST=3DU.S=3PL.O person-ACC everybody-ACC
'They gave (the seeds) to everyone.' (Gordon Mackay in CvB-01-000007B)

Finally, the dative case also covers the genitive function for alienable possessions and kin. For example, in (4.26), the dative case appears within the accusative NP as attached to the possessor (*ngathuku*) of the *yukurru* 'dog' (see §6.2 for further on NPs). Similarly, possessors of kin take the dative case, as in (4.27), where *ngajuku* is the possessor of *kanyjay* 'son's daughter; father's mother'.

(4.26) nyiya-ngku jilya-ngku thunpaka-lu kanuwa-lpi=ø=ø
this-ERG child-ERG small-ERG kick-PST=3SG.S=3SG.O
ngathuku-ø yukurru-ø
1SG.DAT-ACC dog-ACC
'This little kid kicked my dog.' (Charlie Stream in Kohn fieldnotes, 11/05/2004)

(4.27) nyiya=marna ngajuku kanyjay
this=THEN 1SG.DAT SD
'This is my granddaughter.' (A2 in JB20190609-02, elicited)

This may be compared to the expression of inalienable 'possessions' (except for kin) or part-whole relations, such as body parts. In these cases, the possessor takes

the same case as the body part, as in (4.28). This split between types of possession constructions is shared among most Pama-Nyungan languages, where kin relations and alienable possessions are expressed with adnominal genitive marking and part-whole relations are expressed by both entities taking the same case and syntactic role (Ponsonnet, in preparation).

(4.28) ngaja-ø karrara-y-ma=rna ngarlu-ø
1SG-NOM sick-INCH-PRS=1SG.S stomach-NOM
'I am sick in the stomach.' (A1 in JB-20190609-01, elicited)

There are likely to be more functions of the dative case not attested in the data, due to the flexible semantic interpretations associated with it.

4.3 Locations and directions

4.3.1 Locative

The locative case signifies that the entity it attaches to is the location of some other entity or event. There is considerable versatility in how the entity or event may be positioned in relation to the locative nominal. The entity may also be static or in motion, and the dependency may be spatial or temporal.

The locative case form is phonologically conditioned similarly to the ergative case (§4.2.1). It takes the form of *-ka* when following a disyllabic stem that contains a nasal-stop cluster preceding the final vowel. When following all other disyllabic stems it takes the form of *-ngka*. When following stems of three or more syllables, it takes the form of *-la*. Each of these forms appear in (4.29). These forms are typical of Pama-Nyungan languages.

(4.29) nyiyaparli-la marlpa-ngka wangka-ka panti-mpa=ø urruru-ø
Nyiyaparli-LOC person-LOC language-LOC be-PRS=3SG.S urruru-NOM
'Urruru is in the Nyiyaparli people's language.' (Gordon Mackay in CvB-02-000445B)

A typical example of the locative is illustrated in (4.30). The subject *ngunha* 'that (fella)' is described as sitting *jiya-ngka walyi-ngka* 'on the bad chair'. That is, the *jiya walyi* (the ground) takes locative case to describe the spatial location of the subject (the figure). In this case, as the verb is a posture verb, the locative phrase may also be analysed as the location of the event.

(4.30) ngunha-ø panti-mpa=ø jiya-ngka walyi-ngka warni-ya=ø
that-NOM sit-PRS=3SG.S chair-LOC bad-LOC fall-FUT=3SG.S
'That fella [is] sitting on the no-good chair [and] will fall.' (Charlie Stream in Kohn fieldnotes, 28/05/2004)

The sentence in (4.31) illustrates the use of the locative on two participants with different semantics. While *papa* 'water' is the location of the object (*thakurra* 'net'), *maluwa* 'night' is the (temporal) location of the event. This demonstrates that it is not necessary to morphosyntactically distinguish between the location of an entity and that of an event (unlike in some other Australian languages; see McConvell and Simpson, 2012).

(4.31) thakurra-ø thuna-pi=kartu papa-ngka maluwa-la yurta-yu
net-ACC put-PST=1PL.EXCL.S water-LOC night-LOC fish-DAT
mana-arta
get-PURP
'We put the net in the water at night to get fish.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

This example also shows that the locative may be used for a temporal sense of location. Similarly, in (4.32), *yarnta* 'sun, day' and its modifier *kutharra* 'two' take locative case to express that the event occurred 'two days ago'.

(4.32) ngunha-kutha-ø nyupa-tha-layi-mpa=pula,
that-DU-NOM nyupa-CAUS-RECIP-PRS=3DU.S
karti-lpi=pula=ø jilya-ø ngathuku-ø ngaru-kartayi
take-PST=3DU.S=3SG.O child-ACC 1SG.DAT-ACC Hedland-ALL
kutharra-la yarnta-ka
two-LOC day-LOC
'Those two, nyupa to each other, took my kid to Hedland two days ago.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The locative may also be used to express the endpoint of some motion described by the verb. In (4.33), the locative serves a similar function to the allative, as evidenced by (4.34), when David Stock repeated the sentence upon listening to Gordon Mackay but uses the allative instead of the locative. In (4.33), the subject is described as in motion (*paka* 'come') and arrives at the place that the nominal in locative case denotes, *(y)irrangkaji* 'Nullagine'. Similarly, in (4.35), the locative marks the endpoint *karla* 'fire' of the object of *ngayi-L* 'throw'.

(4.33) kuthunguru-nguru paka-lpi=rna irrangkaji-la, kuwayi wartayi
seaside-ABL come-PST=1SG.S Nullagine-LOC today morning
'I came from the coast to Nullagine this morning.' (Gordon Mackay in CvB-02-000445B)

(4.34) kuthunguru-nguru paka-lpi=rna yirrangkaji-karta, kuwayi wartayi
seaside-ABL come-PST=1SG.S Nullagine-ALL today morning
'I came from the coast to Nullagine this morning.' (David Stock in JB-20190621-02)

(4.35) ngayi-lpi=kurta=ø karla-ngka
throw-PST=1PL.EXCL.S=3SG.O fire-LOC
'We put him [the kangaroo] in the fire.' (David Stock in JB-20190626-02)

In (4.36), the locative is used on a pronoun (*ngatha* '1SG') to describe the point from which the subject (*ngunha yukurru* 'that dog') moves (*murti* 'run away'). This interpretation conveys a similar meaning to the ablative. Another interpretation is that the locative marks the cause of the event, as the dog is frightened of the speaker. This use of the locative is seen in (4.37), where the locative is attached to the cause (*yurtupa* 'snake') of the event (*pilanha-yi* 'become scared').

(4.36) ngunha-ø yukurru-ø murti-pi=ø ngatha-la, pilanpa-ø,
that-NOM dog-NOM run.away-PST=3SG.S 1SG-LOC frightened-NOM
wiya-lpi=ø=tha karnti-ngarni
see-PST=3SG.S=1SG.O stick-PROP
'That dog ran away from me frightened, he saw me with a stick.' (Charlie Stream in Kohn fieldnotes, 28/05/2004)

(4.37) ngunha-ø marlpa-ø pilanha-yi-mpa=ø yurtupa-la
that-NOM person-NOM scared-INCH-PRS=3SG.S snake-LOC
'That man's scared of the snake.' (Charlie Stream in Kohn fieldnotes, 08/09/1995)

The locative also appears in sentences that do not involve location, but describe some other relationship between two entities. For example, in (4.38), the locative marks what the subject is singing. It may be that the locative is used because the dative (omitted but cross-referenced by the clitic *=kura*) is used to refer to the person going through the initiation. In (4.39), where the initiand is not referred to, the dative case is used on *yathu* rather than the locative.

(4.38) inma-lpi=ya=kura yathu-ngka
sing-PST=3PL.S=3SG.OBL initiation.song-LOC
'They sang a song for him to come home.' (Gordon Mackay in CvB-02-000447B)

(4.39) inma-lpi=ya yathu-yu
sing-PST=3PL.S initiation.song-DAT
'They sang initiation songs.' (Gordon Mackay in CvB02-000445B)

There are other instances where the locative is used in place of a dative, as in (4.40) where the locative appears on the addressee (*ngarti* 'mother') of the event (*wangka* 'talk'). Addressees of the verb *wangka* may be in either locative or dative case (e.g. see (4.41)).

(4.40) wartayi yarnta-ø paka-lpi=ø, wangka-pi=ø=kura
morning sun-NOM come-PST=3SG.S, talk-PST=3SG.S=3SG.OBL
ngarti-ngka, "jilya-ø kapukarri-ma-lpi=rna=ø..."
mother-LOC child-ACC dream-CAUS-PST=1SG.S=3SG.O
'Next morning when the sun came up, he told my mother "I dreamed (of) a child..."' (Charlie Stream in Kohn fieldnotes, 28/05/2004)

(4.41) mirta wangka-pi=ø=thu ngathuku
NEG talk-PST=3SG.S=1SG.OBL 1SG.DAT
'He didn't say anything to me.' (Charlie Stream in Kohn fieldnotes, 28/11/1996)

Finally, the locative case is also used to indicate the subject in aversive constructions (see §5.6.2). For example, in (4.42), the subject *wangkurna* 'crow' takes locative case due to the aversive suffix on the verb.

(4.42) wangkurna-la ngarna-puru witha-ø
crow-LOC eat-AVERS tucker-ACC
'The crow might eat the food.' (Charlie Stream in Kohn, 1996, p. 6)

4.3.2 Near

The 'near' suffix indicates that some entity is in proximity to the entity referred to by nominal that the suffix attaches to. In my data it takes the form of *-laji* or *-ngkaji*. There are too few examples to confirm the phonological environments of these allomorphs, however they seem to be a compound of the locative case and *-ji*. Thus, it is likely that the suffix follows the same phonological rules as the locative.

Like the locative, it may attach to pronouns or nominals. In (4.43), it attaches to both *jina* and *nyinta* ('your foot') to express that *palangunha* 'this, that' is near to the addressee's foot. Another example of the suffix is in (4.44), where *ngkaji* appears on *karla* 'fire' to describe that the object (*ngurrinpa* 'swag') is 'too close' to the fire.

(4.43) palangunha-warra, wiya-nma, jina-ngkaji nyinta-laji
this-EMPH? see-IMP foot-NEAR 2SG-NEAR
'That's the one, look, near your foot.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

(4.44) ngurrinpa-ø wantha-lpi=npa karla-ngkaji kampa-ya=ø=karta
swag-ACC leave-PST=2SG.S fire-NEAR burn-FUT=3SG.S=DUB
'You left the swag too close to the fire, it might burn.' (Charlie Stream in Kohn fieldnotes, 03/12/1996)

The 'near' suffix is also used to form nominals such as place names, for example *(Y)irrangkaji* for the township of Nullagine, which literally means 'edge-NEAR'.

4.3.3 Obscured by

This suffix, 'obscured by', attaches to an entity that is obscuring something or someone. It takes the form of *-puru*, which is cognate with similar forms in other Pama-Nyungan languages, including Panyjima (Dench, 1981, p. 36; Dench, 1991, p. 143).

It may signify that something or someone is behind (e.g. 'behind the rock' in (4.45)) or covered by (e.g. 'covered with sweat/dust' in (4.46)) the referent, or in some similar spatial configuration so that some entity is hidden.

(4.45) ngula-ngku marnta-puru-lu wiya-lpi=ø nganyula-nha
that-ERG rock-OBSC-ERG see-PST=3SG.S 1PL.INCL-ACC
'That one behind the rock was watching us.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

(4.46) ngunha-ngku marlpa-ngku marnta-yu yinya-pi=ø=tha
that-ERG man-ERG money-DAT give-PST=3SG.S=1SG.O
ngatha-ø-karnu, nyinta-ø waya, warrkamu-pati panti-kana-pi=npa,
1SG-ACC-ONLY 2SG-ACC NEG work-PRIV sit-CONT-PST=2SG.S
ngatha-ø-karnu wiya-lpi=ø=tha warrkamu yalpala-puru,
1SG-ACC-ONLY see-PST=3SG.S=1SG.O work sweat-OBSC,
tharlpa kurnturupa-puru
body dust-OBSC
'That man only gave me money, not you, not working, you've been sitting down, [that man] only saw me working, covered with sweat, body's covered in dust.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

It can also refer to non-spatial obscuring, as in (4.47), where the noise obscures the addressee's voice.

(4.47) mirta kuliya-nma=rna=nta nguntirri-puru
NEG hear-PRS=1SG.S=2SG.O noise-OBSC
'I can't hear you over the noise.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

Note that *-puru* on a verb is the aversive suffix. See §5.6.2.

4.3.4 Allatives

The allatives are used to indicate the intended endpoint of some motion. They take the form of *-karta(yi)* or *-wali*. These morphemes are in contrastive distribution, as evidenced by (4.48) and (4.49), and both are commonly used.

Dench (1981, p. 34), Dench (1991, p. 142) analyses the Panyjima morphemes *-karta* and *wali* as direct and indirect allatives, respectively. He argues *-karta* indicates that the destination is reached or will be reached, while *-wali* marks motion towards some point without indicating whether the point is reached or not. The English translations given from Nyiyaparli do not provide this level of nuance, but in (4.50), we can see that the positive clause uses *-kartayi* and the negative clause uses *-wali*. There are no instances in the data of *-kartayi* being used in a negative clause. This suggests that the distinction between indirect and direct allatives in Panyjima may also true for Nyiyaparli.

(4.48) thungku-ø karti-pi=kurta, thungku-ø, yurlu-wali
cooked-ACC take-PST=1PL.EXCL.S cooked-ACC camp-ALL
'We took the cooked ones home.' (David Stock in JB-20190626-02)

(4.49) ngunha-kutha-ø yana-mpa=pula yurlu-kartayi=ru
that-DU-NOM go-PRS=3DU.S camp-ALL=NOW
'Those two are going home now.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.50) nhala-ø yukurru-ø yana-mpa=ø paluwa-mpa-kartayi-karnu, mirta
that-NOM dog-NOM go-PRS=3SG.S 3SG-DAT-ALL-ONLY NEG
paka-npa=ø ngathuku-wali
come-PRS=3SG.S 1SG.DAT-ALL
'That dog only goes to him, never comes to me.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The intended point of motion for either suffix may be a point in space, such as a location (e.g. (4.51), as well as (4.48) and (4.49)), or in a direction (e.g. *kankarla-karta* 'upwards' in (4.52)). These are the most common uses of the allatives.

(4.51) kuthunguru-nguru paka-lpi=rna yirrangkaji-karta, kuwayi wartayi
seaside-ABL come-PST=1SG.S Nullagine-ALL today morning
'I came from the coast to Nullagine this morning.' (David Stock in JB-20190621-02)

(4.52) thuna-pi=rna mulya-ngka, yurnturn-pi=rna kankarla-karta
put-PST=1SG.S nose-LOC push-PST=1SG.S up-ALL

mulha-ngka
nose-LOC
'I put it [a seed] in my nose, pushed it up to the top of my nose.' (Charlie Stream in Kohn, 1996, pp. 4–5)

The allative may also indicate a purpose or endpoint of some event. For example, in (4.53b) the speaker asks for the purpose of going.

(4.53) a. mana-mpa=li, nyinta-ø paka-nma, yana-mpa=li
get-PRS=1DU.INCL.S 2SG-NOM come-IMP go-PRS-1DU.INCL.S
'We're getting it, you come, we're going.'

b. ngananha-kartayi?
what-ALL
'What for?'

c. jurnpa-yu mana-arta
ashes-DAT get-PURP
'To get ashes.'

(Charlie Stream in Kohn fieldnotes, 18/05/2004)

Swan and Hill (2012) indicate that *-kartayi* may also be used as a verbaliser, as in (4.54a). However, this is not attested in any of the other data sources. An alternative analysis is provided in (4.54b).

(4.54) a. kulka-kartayi-mpi=ya=thu
mind-ALL-PRS=3PL.S=1SG.OBL
'They are impressing on me (bringing to my mind).'

b. kulka-karta-yi-mpi=ya=thu
mind-ALL-INCH-PRS=3PL.S=1SG.OBL

(Swan & Hill, 2012, p. 13)

When attached to a pronoun, the allative does not alter in form. If a personal pronoun, the pronoun must be in dative form in order to take the allative. For example, in (4.50) above, both allatives appear on dative pronouns (3SG-DAT and 1SG.DAT) to describe the points of motion of the dog. If the pronoun is an interrogative or demonstrative it can directly take the allative case.

4.3.5 Ablative

The ablative is used to indicate the source or starting point of some motion. It takes the form of *-nguru*. This is cognate with the ablative in various other Pama-Nyungan languages, including other languages in the Pilbara (e.g. Panyjima,

Ngarluma, and Martuthunira) and Western Desert varieties. Unlike many Australian languages, the ablative in Nyiyaparli does not need to follow the locative suffix, but usually attaches directly to the entity it is associated with.

Most typically, the ablative is used to indicate the location in space from which the motion of an entity originates. For example, in (4.55), the ablative attaches to *kuthunguru* 'seaside, coast' to indicate the origin from which the subject came. In this example, the reader can also see that the ablative may be used to form a nominal which can then take the ablative case, as *kuthunguru* is formed from *kuthu* 'side' in the ablative case. In (4.56), the speaker asks for the origin of the motion of the meat by attaching the ablative to *tharni* 'where'.

(4.55) kuthunguru-nguru paka-lpi=rna yirrangkaji-karta, kuwayi wartayi
seaside-ABL come-PST=1SG.S Nullagine-ALL today morning
'I came from the coast to Nullagine this morning.' (David Stock in JB-20190621-02)

(4.56) tharni-nguru mana-pi=npa mantu-ø
where-ABL get-PST=2SG.S meat-ACC
'Where'd you get the meat from?' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The locative may be optionally used with the ablative, as in (4.57), where the billycan takes locative and ablative cases to indicate it is the source from which the speaker will drink water. Similarly, in (4.58), the locative and ablative attach to *mara* 'hand' to indicate it is the location from which the firestick is moved. There may be a semantic difference between sentences with and without the locative ('from in x' rather than 'from x'), but more data is required to confirm this.

(4.57) papa-ø ngantha-ø=rna nyiya-ngka-nguru pilikanpa-la-nguru
water-ACC drink-FUT=1SG.S this-LOC-ABL billycan-LOC-ABL
'I'll drink water out of this billycan.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

(4.58) mana-pi=ø=kura karla-ø mara-ngka-nguru
get-PST=3SG.S=3SG.OBL fire-ACC hand-LOC-ABL
'He grabbed the firestick from his hand.' (David Stock in JB-20190626-03)

The ablative may also indicate a temporal source. In (4.59), the ablative attaches to *wartayi* 'morning' to indicate that the event has been occurring since the morning. It may also attach to a nominal that indicates an attribute, to convey a sense of 'from/after the time of' that attribute. This can be seen in (4.60) and (4.61).

(4.59) ngunha-ø jilya-purtayi-ø ngayi-pi=ya wartayi-nguru
that-NOM child-PL-NOM lie-PST=3PL.S morning-ABL
'Those kids have been sleeping since this morning.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

(4.60) thunpaka-nguru jilya-ø palangunya-ø wiya-lpi=rna=ø,
small-ABL child-ACC this-ACC see-PST=1SG.S=3SG.O
thuta-yi-pi=ø=rru thunpaka-nguru
big-INCH-PST=3SG.S=NOW small-ABL
'I've seen that child since he was little, he's got big now from when he was little.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

(4.61) manthalpa-nguru marnu-wayi-pi=rna
weak-ABL good-INCH-PST=1SG.S
'After being weak I got better.' (Charlie Stream in Kohn fieldnotes, 25/09/1995)

Finally, the ablative may be attached to the cause of some event, as the dative and the causal suffixes do. For example, in (4.62) the horse riding is the cause of the speaker's hands being sore.[4]

(4.62) mara-ø karrara-yi-pi=rna thalingka-nguru
hand-NOM sore-INCH-PST=1SG.S horse.riding-ABL
'My hands are sore from riding.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

However, it is not always grammatical to use the ablative in place of the causal. For example, in (4.63), *manthalpa* 'weak(ness)' may take the causal *-mari*, but not the ablative *-nguru*. This may be because with *-nguru* the sentence could be interpreted as 'I couldn't get up after being sick'. This suggests that the ablative may only mark the cause of some event if that event occurs after the event or state described by the nominal the ablative attaches to.

(4.63) a. karlpa-pati-pi=rna manthalpa(-mari)
rise-PRIV-PST=3SG.S weak-CAUSAL
'I couldn't get up from weakness.'
b. * karlpa-pati-pi=rna manthalpa-nguru
rise-PRIV-PST=3SG.S weak-ABL
(Charlie Stream in Kohn fieldnotes, 25/09/1995)

[4] *thalingka* 'horse riding' seems to be borrowed as a whole from 'on horseback' from coastal Ngayarda languages, and may act as a nominal in locative case (*thali-ngka*) or an unmarked nominal (*thalingka*).

4.4 Possessors and properties

4.4.1 Proprietive

The proprietive case *-ngarni* indicates that the referent of the nominal to which the suffix is attached is a property of some entity. I call this latter entity the 'possessor', but the relationship between the two entities is not required to be that of asymmetrical ownership; the proprietive case encompasses a range of relationships, including, for example, the relationship between a person and their kin.

I use the word 'property' as it may be interpreted as a possession, or in the sense of an attribute of some entity. The proprietive case in Nyiyaparli may indicate the referent of the nominal it attaches to is a property in either sense of the word. For example, in the first clause of (4.64), the *yurtupa* 'snake' is referred to as *paja-ngarni*, meaning 'wild' in Standard Australian English or 'cheeky' in some Aboriginal Englishes. *Paja* takes the proprietive to indicate that the snake has the attribute of being wild.

(4.64) ngunya=marna ngayi-mpa=ø yurtupa-ø paja-ngarni! nyala=marna
that=THEN lie-PRS=3SG.S snake-NOM wild-PROP that=THEN
yurtupa-ø!
snake-NOM
'There's a wild snake there! A snake is there!' (A2 in JB20190609-02, elicited)

Alienable possessions such as *maruntu* 'goanna' in (4.65) may also be marked with the proprietive. In this case, the subject has hunted and now possesses the *maruntu*. It is also used to refer to kin, as in (4.66), where each word referring to 'one mother' and 'one father' takes *-ngarni*. This example also demonstrates that NPs in proprietive case may be predicative, as opposed to examples where the proprietive attaches to nominals in arguments or adjuncts.

(4.65) marlaku-yi-mpa=ø maruntu-ngarni
back-INCH-PRS=3SG.S goanna-PROP
'He comes back with a goanna.' (Gordon Mackay in CvB-02-000445B)

(4.66) wirtama-nma=rna piyampa kurta-kutha-ku ngathuku-ku,
wait-PRS=1SG.S 3DU.DAT elder.brother-DU-DAT 1SG.DAT-DAT
nganartu-ø yikamarta-ngarni ngarti-ngarni yikamarta-ngarni
1PL.EXCL-NOM one-PROP mother-PROP one-PROP
mama-ngarni
father-PROP
'I'm waiting for my two brothers, we've all got the one mother and the one father.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The proprietive seems to be a verbaliser in some instances. For example, in (4.67), *wiyurrpa-ngarni* 'feeling-PROP' takes verbal morphology to express that the subject 'got a feeling'. Alternatively, it may be that *wiyurrpa* can be either a nominal or verb (as is the case for *wangka*, for example), and that the proprietive can attach to either part of speech.

(4.67) kurlka-yi-pi=ø, wiyurrpa-ngarni-pi=ø
mind-INCH-PST=3SG.S feeling-PROP-PST=3SG.S
'He thought about it, got a feeling.' (Charlie Stream in Kohn fieldnotes, 28/05/2004)

Depending on the semantics of the clause, the property may be used in the event as if it is a participant, and thus the proprietive gives the sense of an instrumental. For example, in (4.68), the subject has a knife and uses it to cut.

(4.68) ngananha-yi-pi=npa mara-ø, wirnta-lpi=npa=nyina
what-INCH-PST=2SG.S hand-NOM cut-PST=2SG.S=REFL
wirnta-lanthalpa-ngarni, ngana-yu wirnta-lku?
cut-NMLZ-PROP what-DAT cut-SIM
'What's wrong with your finger, you cut yourself with a knife, what have you been cutting?' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

Previously (Swan & Hill, 2012, p. xiii), *-ngarnilu* has been proposed as the instrumental case. However, it seems that a better explanation is that the entity marked with *-ngarni* (the property) also takes the case of its possessor. In the above examples, the possessors are in nominative case, and so do not take a further case (or take -ø), obscuring this fact.[5] Yet, in (4.69), the possessor is in dative case, and the property appears with *-ngarni-ku* (proprietive and dative). In (4.70), the possessor is in ergative case, and the property appears with *-ngarni-lu* (proprietive and ergative). Indeed, as the property in (4.70) is an attribute, *-ngarnilu* cannot be interpreted as the instrumental.

(4.69) marnu-ngku karti-mpi=ya=tha ngalka-pati-lu, patha-ngarni-ku
good-ERG take-PST=3PL.S=1SG.O argue-PRIV-ERG wild-PROP-DAT
winjiyayi-ma=rna nhuwampa, ngalka-kana-pi=nhu=tha
dislike-PRS=1SG.S 2PL.DAT argue-CONT-PST=2PL.S=1SG.O
'Good fellas that don't argue took me. I don't like you cheeky fellas, you've been arguing with me.' (Charlie Stream in Kohn fieldnotes, 18/05/2004, my translation)

[5] In (4.68), the subject (the possessor) is nominative due to the reflexive; see §5.7.1.

(4.70) mara-ø nhantha-lpi=ø=ø thapita-lu
hand-ACC bite-PST=3SG.S=3SG.O bearded.dragon-ERG
patha-ngarni-lu
wild-PROP-ERG
'The cheeky thapita [bearded dragon] bit his hand.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The data contains 106 instances of *-ngarni*. The form *-ngarni(-ø)* always appears with a nominative or accusative possessor. The form *-ngarniku* always appears when the possessor is in dative case. In all instances of ergative possessors, the property takes *-ngarnilu*.

The sentence in (4.71) is unusual as the property is an argument (the subject) of *pungka* 'hit' and the property's possessor is another argument (the object). As the subject of *pungka* 'hit' is referred to in terms of being the property of its possessor ('the children's other father'), it does not take ergative case as would be expected, but it takes *-ngarni* and the case of the possessor—the accusative case.

(4.71) jilya-kutha-ø palangunha-ø yikamarta-ngarni ngarti-ngarni
child-DU-NOM this-NOM one-PROP mother-PROP
parta-ngarni mama-ngarni pungka-lkana-mpa=ø piyanha
other-PROP father-PROP hit-CONT-PRS=3SG.S 3DU.ACC
parta-ngarni mama-ngarni
other-PROP father-PROP
'Those two kids have the one mother, different father. The other father's always giving them a hiding.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

Therefore, rather than analysing *-ngarnilu* as the instrumental, I analyse it as the proprietive with the case of an ergative possessor, as the proprietive covers the instrumental function.

The form *-ngara* may be a variant of the proprietive case. When listening to the legacy recordings, David Stock repeated a sentence that Gordon Mackay said with *-ngarni* rather than *-ngara* and provided the same translation, given in (4.72). This indicates that the two forms are the same case with two variants, or that they are different morphemes with overlapping functions or synonymy. The data contains few examples of *-ngara* and thus is insufficient to determine which of these possibilities is the correct one. The only other instance where *-ngara* occurs is in sentences with the word *warlparrangara* 'man', which is literally 'spear.thrower-PROP' (for example, in (4.73)). As there is currently no evidence that *-ngara* behaves differently or has different functions to *-ngarni*, I have treated them as variants of the same case, but this may be disproved upon further research.

(4.72) a. nyupa-ngara=ru
spouse-PROP=NOW
'with his wife' (Gordon Mackay in CvB-02-000447B)

b. nyupa-ngarni=ru
spouse-PROP=NOW
'with his wife' (David Stock in JB-20190626-03)

(4.73) jurlaju-pi=purla=ø jilya-ø, warlpara-ngara
give.birth-PST=3DU.S=3SG.O child-ACC spearthrower-PROP
'They had a son.' (Gordon Mackay in CvB-02-000445B)

The form *-ngarni* is cognate with Panyjima's 'having' suffix (Dench, 1981, p. 45) or comitative (Dench, 1991, pp. 150–151), but Panyjima does not have the form *-ngara* as a proprietive suffix.

4.4.2 Possessive

The possessive indicates that the entity it attaches to is the possessor of some property, or that the entity is associated with some argument. It takes the form of *-tharn(t)u*, which is cognate with the Panyjima genitive (Dench, 1981, p. 37; Dench, 1991, pp. 144–145).

As a possessor of some property, the possessive acts similarly to the genitive function of the dative. However, it always follows with further case marking. The similarity of these two cases is illustrated by the full sentence in (4.74), which uses the possessive on *karrapa* 'spider', and the sentence fragment in (4.75), which uses the dative on *karrapa*.

(4.74) warrari-ø warli-lpi karrapa-tharntu-lu maya-ngku parramparra-lu
fly-ACC hold-PST spider-POSS-ERG house-ERG transparent-ERG
'A fly got caught in the spiderweb.' [Or, 'a spider web caught a fly.'] (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.75) parramparra karrapa-ku maya
transparent spider-DAT house
'Spiderweb.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

Again like the genitive function of the dative, the possessive may refer to a possessor of alienable possessions (as above) or of kin, as in (4.76). Here it is used to refer to the embedded possessor (see §6.2 for a discussion of the syntax of this construction), attaching to a pronoun in dative case. It may be that the possessive is used when the use of the dative could lead to ambiguity or a sequence of three datives (note that a sequence of two datives is grammatical, as in (4.66)).

(4.76) ngathuku-tharntu-ku-ø mama-yu-ø thurtu-ø
1SG.DAT-POSS-DAT-NOM father-DAT-NOM elder.sister-NOM
'My father's older sister.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The possessive may also indicate an entity that is associated with an argument. For example, in (4.77), *yukurru* 'dog' takes the possessive to indicate its association with *marnta* (usually 'stone, hill', but here refers to 'trap' according to the translation provided). Similarly, in (4.78), the *wangka* 'story' is associated with *mangun(pa)* 'law'. Alternatively, *mangun(pa)* may be translated as 'god', in which case the possessive indicates that the god is the possessor of the story.[6]

(4.77) ngunha-ngku thurna-kana-pi=ø marnta-ø yukurru-tharntu
that-ERG put-CONT-PST=3SG.S trap-ACC dog-POSS
'That fella has been putting traps for the dogs.' (Charlie Stream in Kohn fieldnotes, 22/11/1996)

(4.78) mangun-tharnu wangka pilyupa-ku
law-POSS story right.woman-DAT
ina-yi-pi=ya=ø
give-INCH-PST=3PL.S=3SG.O
'This is a law story on giving a right woman (for marriage).' (Gordon Mackay in CvB-02-000447B)

The associative sense of the possessive is also the sense indicated when the possessive is used to form neologisms. For example, Charlie Stream coins the word *wangka-tharntu* to refer to a tape recorder, as in (4.79). Here, the referent of the entire nominal is what is associated with the referent of the nominal to which the possessive attaches.

(4.79) ngunha-ø mana-ø=rna wangka-tharntu-ø (thunpaka-ø)
that-ACC get-FUT=1SG.S talk-POSS-ACC small-ACC
'I'll get that (little) tape recorder.' (Charlie Stream in Kohn fieldnotes, 11/05/2004)

It may be that this associative sense of the possessive case is a vague association as described, but in all of these instances, one could also interpret the associated argument as containing or holding the entity that takes the possessive (the trap contains the dog, the story contains law, the tape recorder contains speech).

[6] David Stock translates *pilyupa* as 'right woman', referring to the woman one has been arranged to marry.

4.4.3 Privative

The privative indicates a lack of the entity denoted by the stem it attaches to. It takes the form of *-pati* and it may attach to nominals or verbs. It is cognate with Panyjima's privative, which may also appear on nominals or verbs (Dench, 1981, p. 46; Dench, 1991, p. 151).

On nominals, the privative usually indicates that another entity lacks something, often in terms of possession. For example, in (4.80), the subject does not have any *marntu* 'meat' or *witha* 'food'. Similarly, in (4.81), the subject does not possess *ngamari* 'tobacco'.

(4.80) yuu, ngatha-ø kamu-ø, warni-ma=rna, witha-pati mantu-pati
yes 1SG-NOM hungry-NOM fall-PRS=1SG.S food-PRIV meat-PRIV
'Yeah, I'm hungry, I'm dying, no tucker, no meat.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.81) waya, ngatha-ø ngamari-pati
no 1SG-NOM tobacco-PRIV
'No, I don't have any tobacco.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The privative may also indicate the lack of some entity without reference to another entity or possession. For example, in (4.82), the situation is such that *warlpa* 'wind' is absent. Similarly, in (4.83), the privative attaches to the nominal *marlpa* to describe a lack of people. In (4.84), the privative and locative combine to form a temporal adjunct, as the subject gets up *yarnta-pati-la*—when there is no sun, or 'before sunrise'.

(4.82) warlpa-pati yitarru
wind-PRIV calm
'There's no wind, it's calm.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.83) kuwayi=marna waya=ru marlpa-pati=ru
now=THEN no=NOW person-PRIV=NOW
'Soon there will be no people.' (Gordon Mackay in CvB-02-000008A)

(4.84) kankayi-pi=ø yarnta-pati-la
rise-PST=3SG.S sun-PRIV-LOC
'He woke up before sunrise.' (Charlie Stream in Kohn fieldnotes, 21/05/2004)

In a negative clause, the privative may appear on an argument to agree with the negative particle. For example, in (4.85), the negative particle *mirta* with the

verb *yinya* 'give' and the object *mantu-pati* 'no meat' indicates that the subject did not give any meat to the dogs.

(4.85) yana-pi=rna=piyampa ngathuku-kuthaa-ku yukurru-kuthaa-ku
go-PST=1SG.S=3DU.OBL 1-SG.DAT-DU-DAT dog-DU-DAT
yinya-pi=rna=piyampa mantu-ø, mirta nyinkupa yinya-pi=rna
give-PST=1SG.S=3DU.OBL meat-ACC NEG 2SG.DAT give-PST=1SG.S
mantu-pati, ngathuku-kuthaa-ku karti-pi=rna piyampa
meat-PRIV 1SG.DAT-DU-DAT take-PST=1SG.S 3DU.DAT
thunpaka-ø mantu-ø
small-ACC meat-ACC
'I went for [my] two dogs, gave them some meat, not yours, I didn't give him any, for my two I took a little bit of meat.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

As for verbs, the privative may or may not derive a nominal. When it does derive a nominal, the privative indicates an entity that does not do what the verb describes. For example, in (4.86), *ngalka-pati-lu* 'argue-PRIV-ERG' refers to the subject of *karti* 'take', the people who do not argue.

(4.86) marnu-ngku karti-mpi=ya=tha ngalka-pati-lu, patha-ngarni-ku
good-ERG take-PST=3PL.S=1SG.O argue-PRIV-ERG wild-PROP-DAT
winjiyayi-ma=rna nhuwampa, ngalka-kana-pi=nhu=tha
dislike-PRS=1SG.S 2PL.DAT argue-CONT-PST=2PL.S=1SG.O
'Good fellas that don't argue took me. I don't like you cheeky fellas, you've been arguing with me.' (Charlie Stream in Kohn fieldnotes, 18/05/2004, my translation)

When the privative does not derive a nominal and the verb remains as a verb, the privative seems to indicate negation of the verb. This is evidenced by the two grammatical sentences in (4.87), where either the negation suffix[7] or the privative may be used and they have identical meanings. Similarly, in (4.88), the privative negates the event, indicating that the subject cannot perform the action.

(4.87) a. ngarna-wuru-yapa
eat-HAB-NEG
b. ngarna-wuru-pati
eat-HAB-PRIV

[7] Note that O'Grady analyses *-yapa* as a privative (O'Grady & Laughren, 1997). I have analysed *-yapa* as a negation suffix as it most commonly appears on verbs to negate the verb, and is not used to indicate a lack of an entity in my data.

'I never eat.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.88) karlpa-pati-pi=rna manthalpa(-mari)
rise-PRIV-PST=3SG.S weak-CAUSAL
'I couldn't get up from weakness.' (Charlie Stream in Kohn fieldnotes, 25/09/1995)

4.5 Other nominal morphology

4.5.1 Number

Nominals in Nyiyaparli may inflect for dual or plural number. Like in many Pama-Nyungan languages, it is not obligatory for nominals to inflect for number, so a nominal unmarked for number does not mean it is necessarily singular.

The dual inflection *-kutha* may be used on nominals and (demonstrative) pronouns. It comes from the word *kutharra* 'two' and is cognate with the dual suffix in Panyjima and some other Pama-Nyungan languages. For example, in (4.89), *jilya* 'child' inflects for duality and then takes dative case. In (4.90), the dual suffix attaches to the pronoun *ngunha* 'that'.

(4.89) marnta-ø yinya-pi=rna piyampa jilya-kutha-ku
money-ACC give-PST=1SG.S 3DU.DAT child-DU-DAT
'I gave those two kids some money.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.90) ngunha-kutha-ø yana-mpa=pula yurlu-kartayi=ru
that-DU-NOM go-PRS=3DU.S camp-ALL=NOW
'Those two are going home now.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

For plurality, the productive inflection *-purtayi* may be used on nominals, while *-rni* may be used on pronominals.[8] These are both illustrated in (4.91), and agree with one another.

(4.91) ngunha-rni-ø marlpa-purtayi-ø wathayi-mpi=ya=ngku nyinkupa
that-PL-NOM person-PL-NOM look-PRS=3PL.S=2SG.OBL 2SG.DAT
'That mob are looking for you.' (Kohn, 1996, p. 3)

The plural *-nta(r)ri* is used with a restricted set of nominals, such as *thurta* 'big' and *jirni* 'old man', as illustrated in (4.92) and (4.93). This suffix is cognate

[8] Note that *-rni* on nominals has a different meaning; it indicates association or provenance.

with the Panyjima *-ntharri*, an idiosyncratic plural that only appears on *palya* 'woman', *jilya* 'child' and *jini* 'old man' (Dench, 1981, p. 42).[9] In Nyiyaparli, the productive plural is used with *jilya*, and there is no cognate for the Panyjima *palya* in my data. Cognates of *-nta(r)ri* also appear in other languages of the region for plurality on restricted sets of nominals, including Wajarri (Marmion, 1996, p. 53), Nyangumarta (Sharp, 2004, p. 151), and Ngarla (Westerlund, 2015, p. 17).

(4.92) karnapuka mirta walarta-pa, jurta-ntarri
cloud NEG small-CONJ? big-PL
'The clouds were not small; they were big ones.' (Gordon Mackay in CvB-02-000447A)

(4.93) pukanpi-ma-lpi=ø=janampa yartilpa-ku, jirni-ntari-ku,
hunt-ITER-PST=3SG.S=3PL.OBL man-DAT old.man-PL-DAT
yungkutharra-ku
SPP-DAT
'He hunted for them, the men, the old men, his parents-in-law.' (Gordon Mackay in CvB-02-000447B)

4.5.2 Only

The nominal suffix *-ka(r)nu* indicates that the speaker is referring to 'only' the referent and no other entity. It may attach to nominals or pronouns. It is cognate with the Panyjima 'only' clitic (Dench, 1981, p. 133).

For example, in (4.94), the nominative subject *ngaliya* '1DU.EXCL.NOM' is marked with *-karnu*, meaning that only 'we two' are sick. In (4.95), the object *kurraru* 'bone(s)' is marked with *-karnu*, meaning that the subject left only bones (for the speaker to eat).

(4.94) ngaliya-ø-karnu karrara-yi-npa=liya
1DU.EXCL-NOM-ONLY sick-INCH-PRS=1DU.EXCL.S
'Only us two are getting sick. (Charlie Stream in Kohn fieldnotes, 25/05/2004)

(4.95) ngathuku wantha-lpi=npula kurraru-ø-karnu
1SG.DAT leave-PST=2DU.S bone-ACC-ONLY
'You two left only bones for me.' (Charlie Stream in Kohn fieldnotes, 18/05/2004)

[9] While Dench does not find the root *jini* without the plural in his data, *jirni* appears several times in the Nyiyaparli data without the plural. Thus it is likely *jini* means 'old man' in Panyjima.

-karnu may also appear on participants other than the subject or object. In (4.96), it appears with the adjunct *paluwa-mpa-kartayi* '3SG-DAT-ALL' to indicate that the dog goes only 'to him'.

(4.96) nhala-ø yukurru-ø yana-mpa=ø paluwa-mpa-kartayi-karnu, mirta
that-NOM dog-NOM go-PRS=3SG.S 3SG-DAT-ALL-ONLY NEG
paka-npa=ø ngathuku-wali
come-PRS=3SG.S 1SG.DAT-ALL
'That dog only goes to him, never comes to me.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

4.5.3 Comparative, semblative, diminutive *=kumpa*

The clitic *=kumpa(na)* appears on nominals and may act as either a comparative, semblative, or diminutive. It is analysed as a clitic as it is also a nominal meaning 'face', and as a clitic it is preceded by the nominal's case marking. Due to its three fairly distinct meanings, I have glossed it according to the function it carries in each sentence. In Panyjima, the clitic *=kumpa* serves the semblative function (Dench, 1981, p. 141).

When indicating comparison, it attaches to an attribute. This attribute takes the case of the entity that is considered to have more of that attribute. For example, in (4.97), *jurra-ngku=kumpa* indicates the referent of the ergative argument (*nyinta-lu marlpa-ngku* 'you person') is bigger. In (4.98), *thurra-ngka=kumpa* indicates the referent of the locative argument (*parta-ngka* 'other') is the bigger one.

(4.97) nyinta-lu karti-ma marlpa-ngku jurra-ngku=kumpa
2SG-ERG take-IMP person-ERG big-ERG=COMPAR
'You take them, you're bigger than us.' (Charlie Stream in Kohn fieldnotes, 18/05/2004)

(4.98) mirta palangunha-la thuna-ø=npa, ngunha-ø parta-ngka
NEG this-LOC put-FUT=2SG.S that-ACC other-LOC
thurra-ngk=kumpa
big-LOC=COMPAR
'Don't [you won't] put it in that, (put) that in the other bigger one.' (Charlie Stream in Kohn fieldnotes, 17/05/2004)

As a semblative, *=kumpa* indicates that the nominal it attaches to is similar to some other entity. For example, in (4.99), the dog is said to be like a horse (*yawarta=kumpa*) as it has a big head. Similarly, in (4.100), the dog is said to be

as big as a horse. The metaphorical use of this clitic is further illustrated in (4.101), where the subject drinks alcohol 'like water' or 'as if it is water' (*papa=kumpa*).

(4.99) ngunha-ø yukurru-ø yawarta-kumpa, thunturtu-ø thuta-ø
that-NOM dog-NOM horse=SEMBL head-NOM big-NOM
'That dog looks like a horse, got a big head.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.100) ngunha-ø yukurru-ø thuta-ø yawarta=kumpa
that-NOM dog-NOM big-NOM horse=SEMBL
'That dog's big like a horse.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.101) ngantha-npa=pula papa=kumpa
drink-PRS=3DU.S water=SEMBL
'They drink it [alcohol] like water.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

As a diminutive, *=kumpa* attaches to attributes. For example, in (4.102), it attaches to *jiti* 'near', and in (4.103), it attaches to *nhampa* 'quick(ly), hurry'. There are no instances of *=kumpa* as a diminutive attaching to a nominal that denotes an entity. It seems that when the nominal denotes an entity, other suffixes are used, such as *-wala* on *puyu* 'smoke' in (4.104).

(4.102) jiti=kumpa yana-ø=mpula
near=DIM go-FUT=2DU.S
'You can go a bit close.' (Charlie Stream in Kohn fieldnotes, 26/05/2004)

(4.103) ngatha-ø panhapanha-yi-ma=rna yana-arta karlinpa yurlu-kartayi
1SG-NOM ready-INCH-PRS=1SG.S go-PURP back camp-ALL
nhampa=kumpa
quick=DIM
'I'm getting ready to go [back to camp], hurrying a bit.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.104) yalkangi-pi=ø puyu-yu-wala nganta-lala wartayi
dry-PST=3SG.S smoke-DAT-DIM drink-PERF morning
'He stayed in the sun, having consumed a little smoke in the morning.' (Gordon Mackay in CvB02-000447B)

4.6 Nominalisation

The nominaliser attaches to verbs to derive nominals. It takes the form of *-nthalpa* on Ø class verbs and *-lanthalpa* on L class verbs (see §5.3).

-(la)nthalpa is most commonly used to form neologisms. For example, the words in (4.105) are some of the neologisms said by Charlie Stream throughout Kohn's fieldnotes. It is unknown how widespread these words are among Nyiyaparli speakers.

(4.105)

wirnta 'cut'	wirnta-lanthalpa 'knife'
ngarna 'eat'	ngarna-nthalpa 'spoon'
thuwa 'chop, hit'	thuwa-lanthalpa 'hammer'
kampa-L 'cook'	kampa-lanthalpa 'pot'

This is a process of true nominalisation—the derived nominal can act as an argument of a predicate, function as the head of an NP, and is fully productive and declines as nominals do. For example, in (4.106), *wirnta-lanthalpa* 'knife' takes dative case to indicate it was what was asked for. In (4.107), the knife is in proprietive case to indicate the knife was the instrument used in the event.

(4.106) yina-pi=npa=thu parta! thayinma-lpi=rna=nta
give-PST=2SG.S=1SG.O other ask-PST=1SG.S=2SG.O
wirnta-lanthalpa-ku
cut-NMLZ-DAT

'You gave me the wrong thing, I asked [you] for the knife!' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(4.107) ngananha-yi-pi=npa mara-ø, wirnta-lpi=npa=nyina
what-INCH-PST=2SG.S hand-NOM cut-PST=2SG.S=REFL
wirnta-lanthalpa-ngarni, ngana-yu wirnta-lku?
cut-NMLZ-PROP what-DAT cut-SIM

'What's wrong with your finger, you cut yourself with a knife, what have you been cutting?' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

Several other suffixes involved in subordinate clauses may be described as nominalisers, but the resulting words do not function as an argument of a predicate or the head of an NP, and they cannot inflect in all the ways nominals can, and thus the processes caused by these morphemes cannot be described as true nominalisation. However, they do share many similarities with nominalisation, and may be considered as processes of nominalisation in an 'Australian-specific sense' (Nordlinger, 2002). I discuss these morphemes in §6.3.

Chapter 5

Verb morphology

5.1 Introduction

Verbs are words that inflect for tense, mood, and/or aspect. They function as predicates and have an argument structure. All verbs fall into one of two conjugation classes. There does not seem to be any irregular verbs in Nyiyaparli.

(5.1) shows the morphological structure of the verb in Nyiyaparli. Only the root is obligatory, although the verb must take either tense or a suffix in the aspect/mood slot. The aspect/mood slot includes not only the aspects and moods discussed below, but it is also the slot for subordinate suffixes (see §6.3), as well as the reciprocal suffix. The derivational suffix slot may be filled by a causative, inchoative or similar suffix (as they may attach to either verbs or nominals). As discussed in §3.3, the verb may also take pronominal clitics, which may be then followed by other clitics. If a subordinate verb, it may take a relative case marker.

(5.1) Root + Derivational suffix* + (Aspect/Mood) + (Neg) + (Tense) + Pronominal clitic* + Other clitic* + (Switch reference) + (Relative case)

As a predicate, the verb root determines the case frame of its arguments. However, other verbal morphology may alter this case frame. These morphological processes are summarised in Table 5.1, where the change in verbal morphology (the addition of the indicated suffix for all except the first, which is instead a change in conjugation class) alters the cases indicated in the second column to those in the third column. This is not to say that the previous cases are always those indicated in the second column, as the original case frame is determined by the verb root, but these are the changes that are attested in the data. For example, the habitual aspect may also attach to intransitive verbs and not alter the case frame.

In this chapter I discuss the form(s) and function(s) of major verbal suffixes and clitics. I first examine the types of predicates that occur in Nyiyaparli in §5.2,

Table 5.1: Case altering verbal morphology

Verbal morph	Previous cases	Resulting cases
L class	NOM	ERG-ACC
Habitual	ERG-ACC	NOM-DAT
Aversive	ERG-ACC	LOC-ACC
Reflexive	ERG-ACC	NOM
Reciprocal	ERG-ACC	NOM
Causative *-ma*	NOM-DAT	ERG-ACC
Put	NOM	ERG-ACC

including various nominal predicates, and avalent, intransitive, semi-transitive, transitive and ditransitive verbs. In §5.3 I describe the two conjugation classes and their relation with transitivity, as well as providing an overview of the forms of verbal suffixes. In §5.4 I comment on the present, past, and future tenses. I then discuss two aspects in §5.5—the continuous aspect on finite verbs and the habitual aspect on non-finite verbs. In §5.6 I explore the imperative mood, which is used for not only commands and requests, but also expressions of desirability and obligation; as well as the aversive mood which expresses an undesired event that might happen. I then turn to reflexive and reciprocal constructions in §5.7, which are both also intransitivisers. Finally, in §5.8 I discuss morphemes that alter the argument structure, and that may attach to either verbs or nominals (and are therefore verbalisers). These are the causatives *-ma* and *-tha*, the 'put' causative, and the inchoative.

5.2 Types of predicates

5.2.1 Nominal predicates

Before discussing the morphology of verbs, it is important to distinguish two types of predicates that appear in Nyiyaparli: nominal and verbal. While verbal predicates are the most common, verbs are not required to form clauses and a nominal may act as a predicate. Several types of nominal predicates are found in the data, including ascription, possession, and equation nominals, which may form either declarative or interrogative clauses.

Ascription nominals are those that ascribe an attribute to the subject. For example, in (5.2), *mirntipa* 'dry' acts as a nominal predicate, taking *nharu* 'river' as its subject. Knowledge is also a common attribute ascribed through nominal predicates, as in (5.3). The nominal predicate *miyanu* 'knowing, knowledge' takes

the nominative subject *nyinta* and the dative object *piyampa*. However, one exception to this case frame is the sentence in (5.4), where *miyanu* takes an ergative subject, as well as taking the ergative marker itself. This is an unusual example, and it may be that *miyanu* is not the predicate here.

(5.2) waya, nharu-ø mirntipa
no river-NOM dry
'No, the river is dry.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(5.3) kakunhu, nyinta-ø miyanu piyampa?
don't.know 2SG-NOM knowing 3DU.DAT
'I don't know, do you know those two?' (Charlie Stream in Kohn fieldnotes, 17/05/2004)

(5.4) nyinta-lu miyanu-lu wangka-yu ingkiliji-ku
2SG-ERG knowing-ERG wangka-DAT English-DAT
'You know the English words.' (Charlie Stream in Kohn fieldnotes, 28/05/2004)

Nominal predicates may also describe possession. In (5.5), *ngamari-pati* 'no tobacco' acts as a predicate and takes *ngatha* as its subject. In (5.6), the interrogative *ngana-yu* in dative-genitive case is the predicate of the subject *nyiya* 'this'. Kin relations may be similarly described with a nominal predicate, as in the second clause of (5.7), where the NP marked with proprietive case is the predicate and it takes *nganartu* as its subject. An alternative analysis of nominal predicates of this type is that the case (in these examples, privative, dative and proprietive) is the predicate, and it takes the nominals as its arguments.

(5.5) waya, ngatha-ø ngamari-pati
no 1SG-NOM tobacco-PRIV
'No, I don't have any tobacco.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(5.6) ngana-yu nyiya-ø?
who-DAT this-NOM
'Whose is this?' (Charlie Stream in Kohn fieldnotes, 28/11/1996)

(5.7) wirtama-nma=rna piyampa kurta-kutha-ku ngathuku-ku,
wait-PRS=1SG.S 3DU.DAT elder.brother-DU-DAT 1SG.DAT-DAT
nganartu-ø yikamarta-ngarni ngarti-ngarni yikamarta-ngarni
1PL.EXCL-NOM one-PROP mother-PROP one-PROP
mama-ngarni
father-PROP
'I'm waiting for my two brothers, we've all got the one mother and the

one father.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

Equative clauses are those where two nominals that have the same referent are equated. One acts as the nominal predicate and the other as the subject. For example, in (5.8), the *wana* 'walking stick' is the predicate and *nyiya* 'this' is the subject. However, it may be analysed as *nyiya* acting as the predicate of *wana*. In clauses of equation, it is more difficult to determine which nominal is the predicate and which is the subject, as they refer to the same entity. Note that speakers may also utilise posture verbs as copulas to achieve a similar meaning, as discussed in §5.2.2.

(5.8) nyiya-ø wana
this-NOM walking.stick
'This is a walking stick.' (Charlie Stream in Kohn fieldnotes, 11/05/2004)

5.2.2 Verbal predicates

It is more common for a verb to be the predicate of the clause. There are a range of types of verbal predicates and they may be categorised according to their transitivity. As the arguments of any verb are not required to be overt in Nyiyaparli, it is difficult to classify the transitivity of a verb according to the amount of arguments it requires. Instead, the evidence for a verb's transitivity type comes primarily from the cases of the arguments that do occur in the clause. Thus a Nyiyaparli verb may be one of five transitivity types: avalent, intransitive (NOM), 'semi-transitive' (NOM-DAT), transitive (ERG-ACC), or ditransitive (ERG-ACC-DAT). Morphemes that alter the valency of a predicate are discussed in §5.8.

An avalent verb does not take any arguments. Very few verbs are avalent, and they usually describe weather events. For example, *(y)intinma* 'rain' does not require any arguments, as in (5.9). These verbs may be alternatively analysed as intransitive with omitted subjects, but the data does not contain instances of these verbs with an overt subject.

(5.9) intinma-lpi
rain-PST
'It was raining.' (A2 in JB20190609-02)

An intransitive verb takes one obligatory argument (the subject) in nominative case (see §4.2.2). This argument may be overt as an NP, as in (5.10), or not, as in (5.11). The latter example also shows that adjuncts (in non-core cases) may be added to the clause. Intransitive verbs are found throughout this thesis, and may indicate a range of states and events. Posture verbs, such as *panti* 'sit' and *ngayi* 'lie' may also act as existential verbs. For example, *panti* may be used to describe

a sitting posture, as in (5.12), as well as describe the existence of its subject, as in (5.13), which may be analysed as a copula-type construction.

(5.10) ngarti-ø paka-lkana-mpa=ø
mother-NOM come-CONT-PRS=3SG.S
My mother is coming. (A2 in JB20190608-01, elicited)

(5.11) kuthunguru-nguru paka-lpi=rna irrangkaji-la, kuwayi wartayi
seaside-ABL come-PST=1SG.S Nullagine-LOC today morning
'I came from the coast to Nullagine this morning.' (Gordon Mackay in CvB-02-000445B)

(5.12) ngunha-ø panti-mpa=ø jiya-ngka walyi-ngka warni-ya=ø
that-NOM sit-PRS=3SG.S chair-LOC bad-LOC fall-FUT=3SG.S
'That fella [is] sitting on the no-good chair [and] will fall.' (Charlie Stream in Kohn fieldnotes, 28/05/2004)

(5.13) ngaja-ø=marna wijunu-ø=ru panti-ø=rna,
1SG-NOM=THEN hill.kangaroo-NOM=NOW be-FUT=1SG.S
nyinta-ø=marna warrinpa-ø panti-ø=npa
2SG-NOM=THEN plains.kangaroo-NOM be-FUT=2SG.S
'I will be a wijunu [hill kangaroo] now and you will be a warrinpa [plains kangaroo] now.' (David Stock in JB-20190626-03)

'Semi-transitive' is the term I am using for verbs which appear to require two arguments, but the subject is in nominative case and the secondary participant is in dative case. For this reason, these verbs may be alternatively analysed as intransitive that typically appear with adjuncts in dative case. The analysis of these verbs is muddied by what transitivity in fact means. At one level, these verbs are transitive as at least two participants are involved, but at another level they are not transitive as the secondary participant is not necessarily affected by the event. Hence, we may consider 'semi-transitive' verbs to be verbs that are low on the Hopper and Thompson (1980) transitivity continuum, and the 'transitive' verbs to be those high on the transitivity continuum, where the affectedness of the object is the primary parameter by which the transitivity is expressed in the morphosyntax. This morphosyntactic expression of variance along the transitivity continuum is the cases that the participants take.

The data does not contain many verbs of this type, but one verb that always appears with a nominative subject and a dative participant is *wathayi* 'look (for)'.[1] For example, in (5.14), the subject (*ngunha-rni-ø marlpa-purtayi-ø* 'those

[1] This is not including when *wathayi* is a nominal, or when other morphology changes the cases, such as the causative *-ma* changing the subject to ergative case and the object to accusative case.

people') is in nominative case and the pronoun denoting the entity they are seeking (*nyinkupa* 'for you') is in dative case.

(5.14) ngunha-rni-ø marlpa-purtayi-ø wathayi-mpi=ya=ngku nyinkupa
that-PL-NOM person-PL-NOM look-PRS=3PL.S=2SG.OBL 2SG.DAT
'That mob are looking for you.' (Kohn, 1996, p. 3)

The verb *wangka* 'talk' almost always appears with a nominative subject and with an addressee in dative or locative case,[2] but as (5.15) shows, there does not always need to be an addressee or other argument. This example suggests that *wangka* is intransitive but often appears with adjuncts, and it may be that *wathayi* is similarly intransitive. However, an alternative analysis is that *wangka* is polysemous, meaning not only 'talk', but 'make a noise'. The former sense could be analysed as a semi-transitive verb, and the latter as intransitive.

(5.15) ngarlu-ø wangka-ma=rna
stomach-NOM talk-PRS=1SG.S
'My stomach is rumbling.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

Transitive verbs require two arguments: the subject in ergative case and the object in accusative case (see §4.2.1). These are verbs that are generally higher on the Hopper and Thompson (1980) continuum of transitivity, particularly in terms of affectedness of the object. The arguments may or may not be explicit, and adjuncts may be added. For example, in (5.16) both arguments are explicit, and in (5.17) neither are explicit and an adjunct is present. Further examples of transitive sentences are found throughout this thesis.

(5.16) kangkaru-ø karta-lpi=ya=ø, mani-ngku=marna
kangaroo-ACC kill-PST=3PL.S=3SG.O other-ERG=THEN
'Another lot got a kangaroo.' (David Stock in JB-20190626-02)

(5.17) karti-pi=ya=ø=ru puyu-kartay
bring-PST=3PL.S=3SG.O=NOW smoke-ALL
'Now they brought him to the smoke.' (Gordon Mackay in CvB-02-000447B)

Finally, a small number of verbs are ditransitive. These verbs take three obligatory arguments: an ergative subject, an accusative object, and another argument

[2] Again, this is not including when *wangka* is a nominal, or when other morphology changes the cases, such as the transitiviser *-yinya* changing the subject to ergative case and the addressee to accusative case.

in an oblique case (usually dative). As previously discussed in §4.2.3, *yinya* 'give' is a ditransitive with an agent in ergative case, a recipient usually in accusative case, and a theme usually in dative case (as in (5.18)). Due to frequent omission of NPs and the use of the dative case for adjuncts in transitive sentences, it is difficult to determine whether some verbs are transitive or ditransitive.

(5.18) mani-yu=marna marlpa-ø ina-pi=kurta=jana
some-DAT=THEN person-ACC give-PST=1PL.EXCL.S=3PL.O
'We gave some (fish) to the people.' (David Stock in JB-20190626-02)

Kohn (1996) argues there are also middle verbs in Nyiyaparli, which require a subject in ergative case and a secondary argument in dative or locative case. She provides the examples in (5.19) and (5.21). However, in (5.19), the pumpkin seed may be understood as the accusative object for both *wiya* 'see, look' and *puwa* 'pull'. Many other instances of *wiya*, such as (5.20), take an ergative subject and accusative object. As for (5.21), it may be that *wapa* 'tell' is a ditransitive verb, and the accusative object is omitted from this sentence. This is evidenced by (5.22), in which the subject of *wapa* is ergative, the object (what is being told) is in accusative case, and the addressee is omitted but the pronominal clitic indicates it would be in an oblique case. Further research is required to determine whether there are verbs that require a subject in ergative case and an object in an oblique case.

(5.19) wiya-lpi=ø=thu mulya-ngka ngarti-ngku jitilpa-ø
look-PST=3SG.S=1SG.OBL nose-LOC mother-ERG seed-ACC
pampakin-ø ngarti-ngku puwi-lpi=ø, waya
pumpkin-ACC mother-ERG pull-PST=3SG.S nothing
'Mum had a look up my nose, pulled at the pumpkin seed but nothing.' (Charlie Stream in Kohn, 1996, p. 4)

(5.20) ngay-pi=ø kunyanpa, thurlay-pi=ø=ru, wiya-lpi=ø
lie-PST=3SG.S asleep wake-PST=3SG.S=NOW see-PST=3SG.S
karnapuka-ø thurta-ntari-ø
cloud-ACC big-PL-ACC
'He was lying down having a sleep. Then he woke up and saw the big clouds.' (David Stock in JB-20190621-02)

(5.21) yuu, panu, ngana-ngku wapa-lpi=ø=thu=wathi,
yes truly who-ERG tell-PST=3SG.S=1SG.OBL=DUB
kapukuri=wathi
dreaming=DUB
'Yeah, true, I don't know who told me, I might have been dreaming.' (Charlie Stream in Kohn, 1996, p. 4)

(5.22) ngatha-lu wapa-lpi=rna=ngku paluwa-ø yinkarti-ø
1SG-ERG tell-PST=1SG.S=2SG.OBL 3SG-ACC name-ACC
'I told you his name.' (Charlie Stream in Kohn fieldnotes, 28/11/1996)

5.3 Conjugation classes

All verbs in Nyiyaparli belong to one of two conjugation classes. These classes determine the form of various verbal inflections. They are labelled Ø and L, as an additional /l/ often is the difference in form. The other class marker of the L class is /n/, suggesting that perhaps there were three conjugation classes (Ø, L, N) at some point in the past. This is a relatively small number of conjugation classes for a Pama-Nyungan language, although several other Pilbara languages (including Panyjima) also have just two conjugation classes.

There is some correspondence between the transitivity of the verb and the conjugation class that it falls into. As shown in Table 5.2, most intransitive verbs in the data (79%) are in the Ø class, and most transitive verbs (two thirds) are in the L class.[3] However, there are many exceptions to this pattern.

Table 5.2: Verbs by transitivity and conjugation class

	Ø	L
Intransitive	41 (79%)	11 (21%)
Transitive	21 (33%)	42 (67%)

Some verbs appear in either conjugation class, depending on the transitivity of the clause (as transitivity in Nyiyaparli does not display the same rigidity as in many other Pama-Nyungan languages). For example, *kampa* 'burn, cook' is intransitive when in the Ø class, as in (5.23), and transitive when in the L class, as in (5.24).

(5.23) ngurrinpa-ø wantha-lpi=npa karla-ngkaji kampa-ya=ø=karta
swag-ACC leave-PST=2SG.S fire-NEAR burn-FUT=3SG.S=DUB
'You left the swag too close to the fire, it might burn.' (Charlie Stream in Kohn fieldnotes, 03/12/1996)

(5.24) mani-ngku=marna, mani-ngku, karla-ø kampa-lpi=ya
other-ERG=THEN other-ERG fire-ACC burn-PST=3PL.S
'Other people were making a fire.' (David Stock in JB-20190626-02)

[3] This only includes verbs where both the transitivity and conjugation class may be identified with certainty. It excludes avalent, semi-transitive, and ditransitive verbs.

This pattern also occurs with *ngayi*, which means 'lie (down)' as an intransitive Ø class verb, or 'throw' as a transitive L class verb. These two meanings are illustrated in (5.25) and (5.26).

(5.25) kunyanpa ngayi-pi=rna marluwa-la
asleep lie-PST=1SG.S night-LOC
'I was lying asleep at night.' (Gordon Mackay in CvB-02-000447A)

(5.26) ngayi-lpi=kurta=ø karla-ngka
throw-PST=1PL.EXCL.S=3SG.O fire-LOC
'We put him [the kangaroo] in the fire.' (David Stock in JB-20190626-02)

In both of these instances, changing the conjugation class results in a causative construction, as an agentive subject is added to the clause. Note that *ngayi* 'throw' may be thought of as 'cause to lie', as is reflected by David Stock's free translation of (5.26). Thus, changing the conjugation class of a verb is one strategy to alter its valency for a very restricted set of verbs.

Table 5.3 provides a list of the forms of common verbal suffixes according to their conjugation class. Table 5.4 lists the forms of common verbal suffixes and clitics that do not vary according to conjugation class. See the relevant section below for more on the allomorphy of each suffix, and §6.3 for the simultaneous, purposive, and perfect suffixes.

Table 5.3: Forms of common verbal suffixes that vary according to conjugation class

Morpheme	Ø class	L class
Present	-mpa, -ma, -mpi	-npa, -nma, -npi
Past	-pi	-lpi
Future	-ø, -a, -ya	-ø, -la
Continuous	-kana	-lkana
Habitual	-wuru	-luru
Imperative	-ma	-nma
Aversive	-puru	-lpuru
Simultaneous	-ku	-lku

Note that the class marker appears only once in a word. For example, if an L class verb has both aspect and tense, the tense form is the Ø form, as in (5.27).

(5.27) ngarti-ø paka-lkana-mpa=ø
mother-NOM come-CONT-PRS=3SG.S
My mother is coming. (A2 in JB20190608-01, elicited)

Table 5.4: Forms of common verbal suffixes and clitics that do not vary according to conjugation class

Morpheme	Form
Reflexive	=nyina
Reciprocal	-layi
Causative_1	-ma
Causative_2	-tha
Put	-thu
Inchoative	-yi, -wayi, -yayi
Purposive	-rta, -yarta
Perfect	-yila, -lala

5.4 Tenses

5.4.1 Present tense

The present tense indicates that the event occurs at the time of or shortly after the utterance. It is phonologically conditioned by the following syllable. If the following syllable is nasal initial, it takes the form of *-ma* or *-nma* (for Ø and L class verbs respectively). If the following consonant is the palatal approximant *y*, the form of present tense is *-mpi* or *-npi* (assimilation). Elsewhere, it is in the form of *-mpa* or *-npa*. This rule is illustrated in Table 5.5.

Table 5.5: Present tense allomorphy

Ø	L	
-ma	-nma	/ __N
-mpi	-npi	/ __y
-mpa	-npa	/ elsewhere

As the syllable following the present tense is almost always the subject clitic, Table 5.6 provides the forms for each subject clitic.

Examples of the present tense are found throughout this thesis. It often appears in declarative clauses to describe an event that is occurring while the speaker is talking, as in (5.28). As my data contain several narratives, it is also used frequently to describe the events in a story, as in (5.29).

Table 5.6: Present tense allomorphy with subject clitics

	Ø	L	Clitic
1SG	-ma	-nma	=rna
1DU.INCL	-mpa	-npa	=li
1DU.EXCL	-mpa	-npa	=liya
1PL.INCL	-mpa	-npa	=la
1PL.EXCL	-mpa	-npa	=kartu
2SG	-ma	-nma	=npa
2DU	-ma	-nma	=npurla
2PL	-ma	-nma	=n(y)u
3SG	-mpa	-npa	=ø
3DU	-mpa	-npa	=purla
3PL	-mpi	-npi	=ya

(5.28) ngay-kana-mpa=ø karnti-ngka
lie-CONT-PRS=3SG.S tree-LOC
'He is lying under/near the tree.' (A1 in JB20190609-01, elicited)

(5.29) marlaku-yi-mpa=ø maruntu-ngarni. kampa-npi=ya=rru.
back-INCH-PRS=3SG.S goanna-PROP cook-PRS=3PL.S=NOW
'He comes back with a goanna. Now they cook it.' (Gordon Mackay in CvB-02-000445B)

It may also be used to describe states that are generally true, such as the existential meaning in (5.30), or events that generally occur, as in (5.31).

(5.30) nyiyaparli-la marlpa-ngka wangka-ka panti-mpa=ø urruru-ø
Nyiyaparli-LOC person-LOC language-LOC be-PRS=3SG.S urruru-NOM
'Urruru is in the Nyiyaparli people's language.' (Gordon Mackay in CvB-02-000445B)

(5.31) nhala-ø yukurru-ø yana-mpa=ø paluwa-mpa-kartayi-karnu, mirta
that-NOM dog-NOM go-PRS=3SG.S 3SG-DAT-ALL-ONLY NEG
paka-npa=ø ngathuku-wali
come-PRS=3SG.S 1SG.DAT-ALL
'That dog only goes to him, never comes to me.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The present tense may also describe that the event will occur in the very near future. As the exchange in (5.32) shows, the speaker of (5.32a) is not yet getting

the ashes, but uses the present tense on *mana* 'get'. Another example of the present tense indicating a time in the future is provided in (5.33), where *thurlayi-lakalay* 'when he is born' specifies when the event in the main clause will occur.

(5.32) a. mana-mpa=li, nyinta-ø paka-nma, yana-mpa=li
get-PRS=1DU.INCL.S 2SG-NOM come-IMP go-PRS-1DU.INCL.S
'We're getting it, you come, we're going.'

b. ngananha-kartayi?
what-ALL
'What for?'

c. jurnpa-yu mana-arta
ashes-DAT get-PURP
'To get ashes.'

(Charlie Stream in Kohn fieldnotes, 18/05/2004)

(5.33) urruru-ø watha-npa=ø=ø palana-lu, thurlayi-lakalay
urruru-ACC call-PRS=3SG.S=3SG.O 3SG-ERG be.born-WHEN
'He calls him urruru when he is born.' (David Stock in JB-20190618-01)

5.4.2 Past tense

The past tense signifies that the event happened or was happening before the time of the utterance. When attached to a Ø class verb, it takes the form of *-pi*, and when the verb is in the L class, it takes the form of *-lpi*.

Examples of clauses with the past tense may be found throughout the thesis. It may refer to events in the near past, as in (5.34), or in the distant past, as in (5.35). It also commonly appears in narratives, as in (5.36).

(5.34) kuthunguru-nguru paka-lpi=rna irrangkaji-la, kuwayi wartayi
seaside-ABL come-PST=1SG.S Nullagine-LOC today morning
'I came from the coast to Nullagine this morning.' (Gordon Mackay in CvB-02-000445B)

(5.35) ngatha-ø miyanu-ø nyinkupa wiya-lpi=rna=nta thapangu
1SG-NOM knowing-NOM 2SG.DAT see-PST=1SG.S=2SG.O long.time
'I know you, I seen you a long time ago.' (Charlie Stream in Kohn fieldnotes, 04/12/1995)

(5.36) mana-pi=ø=kura karla-ø mara-ngka-nguru
get-PST=3SG.S=3SG.OBL fire-ACC hand-LOC-ABL
'He grabbed the firestick from his hand.' (David Stock in JB-20190626-03)

5.4.3 Future tense

The future tense indicates the event is yet to occur. The form of future tense seems to vary due to dialectal or inter-speaker variation. The overarching pattern, however, is illustrated in Table 5.7. On Ø class verbs, the future tense takes the form of *-ø* or *-a*, or *-ya* if following an *i*. This variation is likely due to the little perceptible difference between *-ø* and *-a* when following an *a* (as most verb stems end in *a*). On L class verbs, if the following consonant is the retroflex nasal, the suffix is absent (or is *-ø*). Elsewhere in the L class, it takes the form of *-la*.

Table 5.7: Future tense allomorphy

Ø		L	
-ya	/ i__	-ø	/ __rn
-ø, -a	/ elsewhere	-la	/ elsewhere

There are many exceptions to this pattern, however, particularly on Ø class verbs when the subject is 3rd person singular (as the pronominal clitic is *=ø*). In these instances, there are examples of the forms *ø* and *-a*, as well as *-ya* both when preceded by an *i* and when preceded by an *a*.

The future tense may indicate that the event will or might happen. The level of certainty varies between examples, often (but not always) depending on the presence of a dubitative clitic or particle. For example, in (5.37), the speaker declares with certainty that he will be a *wijunu* and that the addressee will be a *warrinpa*. On the other hand, in (5.38), the speaker speculates on the possibility of the swag burning. In some instances where the future tense is used with certainty, it may be translated as a command, as in (5.39).

(5.37) ngaja-ø=marna wijunu-ø=ru panti-ø=rna,
1SG-NOM=THEN hill.kangaroo-NOM=NOW be-FUT=1SG.S
nyinta-ø=marna warrinpa-ø panti-ø=npa
2SG-NOM=THEN plains.kangaroo-NOM be-FUT=2SG.S
'I will be a wijunu [hill kangaroo] now and you will be a warrinpa [plains kangaroo] now.' (David Stock in JB-20190626-03)

(5.38) ngurrinpa-ø wantha-lpi=npa karla-ngkaji kampa-ya=ø=karta
swag-ACC leave-PST=2SG.S fire-NEAR burn-FUT=3SG.S=DUB
'You left the swag too close to the fire, it might burn.' (Charlie Stream in Kohn fieldnotes, 03/12/1996)

(5.39) mirta palangunha-la thuna-ø=npa, ngunha-ø parta-ngka
NEG this-LOC put-FUT=2SG.S that-ACC other-LOC
thurra-ngk=kumpa
big-LOC=COMPAR
'Don't [you won't] put it in that, (put) that in the other bigger one.' (Charlie Stream in Kohn fieldnotes, 17/05/2004)

5.5 Aspects

5.5.1 Continuous aspect

The continuous aspect is used to signify events or states that are ongoing or in progress over a period of time. When on a Ø class verb, it takes the form of *-kana*, and when on an L class verb it takes the form of *-lkana*. The form *-(l)karti* also appears in my data, but further research is required to determine whether it is an allomorph or variant of the continuous aspect, or a separate morpheme.

The continuous aspect often appears on verbs such as *paka* 'come', *witama* 'wait', *yanga* 'chase', or *wiya* 'watch' to indicate the action occurs continuously over some period of time. It also appears with posture verbs such as *panti* 'sit, be, live', *ngayi* 'lie (down), be', *kayi* 'stand, be' to indicate that the state occurs continuously. Examples of some of these verbs are provided in (5.40)–(5.42). However, it is not necessary to use the continuous aspect to describe ongoing events or states.

(5.40) mani-ø=marna tampa-ngarni witama-kana-pi=ya
some-NOM=THEN damper-PROP wait-CONT-PST=3PL.S
'Some were waiting with damper.' (David Stock in JB-20190626-02)

(5.41) ngarti-ø paka-lkana-mpa=ø
mother-NOM come-CONT-PRS=3SG.S
My mother is coming. (A2 in JB20190608-01, elicited)

(5.42) nyala-ø=marna ngurra-la panti-kana-mpa=ø
that-NOM=THEN home-LOC sit-CONT-PRS=3SG.S
'That one lives on his country.' (A1 in JB20190609-01, elicited)

Less frequently, the continuous aspect may also indicate that an event occurs over multiple occasions. For example, in (5.43), the speaker uses the continuous aspect with the past tense to convey that the event used to happen on several occasions at some point in the past. The continuous aspect has been previously labelled iterative due to this use (Swan and Hill, 2012; Kohn fieldnotes), but this use is much rarer than those in the examples above.

(5.43) ngarti-ngku karti-kana-pi=ø=thu thawunpa-kartayi
mother-ERG take-CONT-PST=3SG.S=1SG.OBL town-ALL
pipanha-kartayi thukurta-ku mana-rta, ngarta-ngarni-ku
Marble.Bar-ALL fruit-DAT get-PURP peel-PROP-DAT
'Mum used to take me to Marble Bar town to get fruit, oranges.' (Charlie Stream in Kohn fieldnotes, 04/12/1996)

5.5.2 Habitual aspect

The habitual aspect is used to signify events that occur as a characteristic of a period of time. It takes the form of *-wuru* for Ø class verbs and *-luru* for L class verbs, which is cognate with the habitual aspect in Panyjima (Dench, 1981, p. 104; Dench, 1991, p. 173). It causes the verb to be non-finite and the subject to be in nominative case (unmarked).

As with continuous aspect, the habitual aspect may indicate that an event occurs over multiple occasions. After the sentence in (5.43), the sentence in (5.44) is given in Kohn's fieldnotes. This example also illustrates the subject losing the ergative case when the habitual aspect appears on transitive verbs.

(5.44) ngarti-ø ngathuku karti-wuru
mother-NOM 1SG.DAT take-HAB
'My mum used to take me.' (Charlie Stream in Kohn fieldnotes, 04/12/1996)

The habitual aspect is often used in relation to some period of time. For example, in (5.45), the *yakarnu* is said to come *mulyuwa-la* 'at night'.[4] Likewise, in (5.46), the subject is said to have given money *thapangu*, a long time ago.

(5.45) yakarnu-ø paka-luru malyuwa-la jilya-yu wathayi-ku mana-arta
yakarnu-NOM come-HAB night-LOC child-DAT look-SIM get-PURP
'Yakarnu comes [at night] looking for kids, takes them away.' (Charlie Stream in Kohn fieldnotes, 04/12/1996)

(5.46) thapangu yinya-wuru marnta-yu
long.time give-HAB money-DAT
'[He] always used to give us money.' (Charlie Stream in Kohn fieldnotes, 13/09/1995)

When negated, the habitual aspect gives the sense that the event 'never' occurs. For example, in (5.47) the verb *ngarna* 'eat' appears with both the habitual aspect and the negation suffix to indicate that the subject never eats.

[4] A *yakarnu* is an evil being that appears at night to prey on vulnerable people.

(5.47) ngarna-wuru-yapa
eat-HAB-NEG
'I never eat.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

5.6 Moods

5.6.1 Imperative mood

The imperative is a deontic mood, usually used to command or request that the addressee carry out an action. It takes the form of *-ma* (Ø class) or *-nma* (L class), which are also the forms in Panyjima (Dench, 1981, pp. 105–106; Dench, 1991, p. 174). The imperative results in the verb being non-finite. Despite not having tense, imperative verbs may take pronominal clitics, which is not the case for other non-finite verbs.

The imperative is typically used for commands such as those in (5.48) and (5.49). The imperative may also take an oblique pronominal clitic, as in (5.50). In other contexts, these sentences may be translated as requests, as there is no morphosyntactic difference between commands and requests. For example, it is clear that (5.51) is a request due to context and the polite manner in which it was said.[5]

(5.48) nyinta-lu karti-ma marlpa-ngku jurra-ngku=kumpa
2SG-ERG take-IMP person-ERG big-ERG=COMPAR
'You take them, you're bigger than us.' (Charlie Stream in Kohn fieldnotes, 18/05/2004)

(5.49) palangunha-warra, wiya-nma, jina-ngkaji nyinta-laji
this-EMPH? see-IMP foot-NEAR 2SG-NEAR
'That's the one, look, near your foot.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

(5.50) mirra-ma=kura ngunha-yu marlpa-yu
shout-IMP=3SG.OBL that-DAT man-DAT
'Sing out to that man.' (Charlie Stream in Kohn fieldnotes, 03/12/1996)

(5.51) tea yinya-ma=tha
tea give-IMP=1SG.O
'Can you get me a cup of tea?' (David Stock, own fieldnotes)

[5] 'Tea' is glossed here without case as it seems to be in English, rather than a borrowing from English, as it would be expected to be in dative case were it in Nyiyaparli. This is likely due to the fact that David Stock was talking to me, an English speaker, and wanted the word 'tea' to be clear. Moreover, David Stock often uses the Nyiyaparli word *nyila* for tea.

It is unclear whether imperatives can be negated, but there are no instances of negated imperatives in my data. Instead, speakers use the future tense (as in (5.39) in §5.4.3) or the purposive (see §6.3.1).

There are several instances in the data of the imperative indicating a deontic modality in another sense of desirability or obligation, where the speaker expresses that the subject 'should' perform some action. In these cases, the verb takes subject (and sometimes oblique) pronominal clitics. Unlike the typical sense of the imperative, the subject may be any person. For example, see (5.52) and (5.53). Further research is needed to discuss this in greater detail.

(5.52) nhuwalu-ø witama-nma=nhu=kura
2PL-NOM wait-IMP=2PL.S=3SG.OBL
'You mob should wait for him.' (Charlie Stream in Kohn fieldnotes, 26/05/2004)

(5.53) kampa-nma=rna=kura mantu-ø parta-ngka-ma yarnta-la
cook-IMP=1SG.S=3SG.OBL meat-ACC other-LOC-? day-LOC
'I should have cooked it the other day.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

5.6.2 Aversive mood

The aversive is an epistemic mood to express an undesired event might happen to the misfortune of some entity. It takes the form of *-puru* or *-lpuru* for Ø or L class verbs respectively, and also makes the verb non-finite. The transitive subject changes to locative case while the object remains accusative. It is cognate with the Panyjima passive 'might' suffix (Dench, 1981, p. 106; Dench, 1991, p. 175), and may be compared to other aversive or 'lest' suffixes in other Pama-Nyungan languages.

As discussed in Kohn (1996), in (5.54), *ngarna* 'eat' appears in the aversive mood without other verbal morphology, the subject *wangkurna* 'crow' is in locative case, and the object *witha* 'food' is in accusative case. The same construction occurs for the L class verb *nhanta* 'bite' in (5.55).

(5.54) wangkurna-la ngarna-puru witha-ø
crow-LOC eat-AVERS tucker-ACC
'The crow might eat the food.' (Charlie Stream in Kohn, 1996, p. 6)

(5.55) jina-ø nhantha-lpuru yurtupa-la
foot-ACC bite-AVERS snake-LOC
'The snake might bite his foot.' (Charlie Stream in Kohn fieldnotes, 18/05/2004)

The sentence in (5.56) appears similar to that in (5.55), but the subject is unmarked for case. There are several potential analyses of this sentence, and further research is required to determine which analysis is most probable. Kohn (1996, p. 7) argues it may be a 'different type of clause altogether' that indicates possibility without the connotation that the event is undesired. She also explains that the comment was made 'about a spider on the wall, as if to say it might be one that bites or it might not.' Kohn may be correct that this is a different construction, but from this context, it might be that the clause is actually intransitive, or that *nhanta-lpuru* is a relative clause ('a spider that might bite'). In either case, the nominative case of the subject is accounted for (there are no (other) intransitive clauses with the aversive, so we do not know if an intransitive subject alters in case).

(5.56) karrapa-ø nhantha-lpuru
spider-NOM bite-AVERS
'The spider might bite.' (Charlie Stream in Kohn, 1996, p. 7)

Note that *-puru* on a nominal is the 'obscured by' suffix. See §4.3.3.

5.7 Reflexivity and reciprocity

5.7.1 Reflexive

The reflexive *=nyina* is used to indicate that the subject and the object refer to the same entity. It is analysed as a clitic as it occurs after the pronominal clitic(s), and cross-linguistically affixes generally do not attach to clitics. The reflexive acts as an intransitiviser, as the argument of the verb takes nominative case.

Often the reflexive is used to indicate that the subject performs the action on itself. For example, Kohn provides the sentences in (5.57) in her fieldnotes to illustrate the reflexive. As in other parts of the morphosyntax, a person and their body parts take the same case, and may be considered as the same entity.

(5.57) a. yaji-lpi=rna=nyina thurla-ø
poke-PST=1SG.S=REFL eye-NOM
'I poked myself in the eye.'

b. marrkara-ø yaji-lpi=rna=ø thurla-ø
brother-ACC poke-PST=1SG.S=3SG.O eye-ACC
'I poked my brother in the eye.'

(Charlie Stream in Kohn fieldnotes, 09/08/1995)

In (5.58), the reflexive is used to describe a group of people hitting themselves as part of an initiation rite. The subject NP is explicit and clearly nominative, rather than ergative as is usual for *karta* 'hit, kill'. This example also shows that the reflexive verb may take oblique pronominals (in this case indicating the beneficiary of the action).

(5.58) karti-pi=ya=ø=ru puyu-kartay
bring-PST=3PL.S=3SG.O=NOW smoke-ALL
milpa-thu-pi=ya=ø karta-lpi=ya=kura=nyina
around-PUT-PST=3PL.S=3SG.O hit-PST=3PL.S=3SG.OBL=REFL
kanku-ø minali-ø jurtu-ø purla-ø
kanku-NOM own-NOM sister-NOM two-NOM
'Now they brought him to the smoke and passed him around, the law mob (older generation involved in rite) and his two elder sisters hitting themselves for him.' (Gordon Mackay in CvB02-000447B)

The reflexive may also attach to non-finite verbs, even when pronominal clitics may not attach to them. For example, in (5.59), *=nyina* attaches to the non-finite relative clause *malyimalyi-tha-lku*.

(5.59) ngatha-ø yitha-lpi=rna=nyina malyimalyi-tha-lku=nyina
1SG-NOM cover-PST=1SG.S=REFL cool-CAUS-SIM=REFL
karrpu-mari
heat-CAUSAL
'I covered myself with water to cool myself down from the heat.' (Charlie Stream in Kohn fieldnotes, 02/12/1996)

The reflexive does not always indicate that the subject performs an action on itself. It may also be used in other cases where the subject and object have the same reference. For example, in (5.60), the object (the topic) of *wapa* 'tell' is the inalienable possession of the subject (*paluwa yinkarti* 'his name'), so they may be considered as the same referent (and for this reason I gloss *paluwa yinkarti* as nominative). Similarly, in (5.61), the first verb indicates that the object (the topic) of *kapukurri-ma* 'dream' is the subject ('I dreamed about myself').

(5.60) wapa-lpi=ø=thu=nyina paluwa-ø yinkarti-ø
tell-PST=3SG.S=1SG.OBL=REFL 3SG-NOM name-NOM
'He told me his name.' (Charlie Stream in Kohn fieldnotes, 04/12/1995)

(5.61) kapukurri-ma-lpi=rna=nyina pungka-lku=nyina thunturtu-ø
dream-CAUS-PST=1SG.S=REFL hit-SIM=REFL head-NOM
'I dreamed about myself hitting myself in the head.' (Charlie Stream in Kohn fieldnotes, 22/11/1996)

5.7.2 Reciprocal

The reciprocal indicates that two or more entities act as agent and patient to one another. It takes the form of *-layi* and occurs in the mood/aspect slot (there are no examples in the data of it occurring with an aspect or mood suffix). The reciprocal is also an intransitiviser as it results in the subject taking nominative case.

A typical example is provided in (5.62), where the subject *ngunha yukurru-kutha* 'those two dogs' of *nhanta* 'bite' perform the action on one another. The subject takes nominative case (rather than ergative case, as would normally be the case for *nhanta*).

(5.62) ngunha-ø yukurru-kutha-ø nhantha-layi-mpa=pula
that-NOM dog-DU-NOM bite-RECIP-PRS=3DU.S
'Those dogs are biting each other.' (Charlie Stream in Kohn fieldnotes, 13/09/1995)

The subject may refer to more than two entities, where each entity performs the action on each of the other entities. In (5.63), a group of four people (known from context) all leave each other, going their separate ways.

(5.63) wantha~wantha-layi-pi=ya
leave~REDUP-RECIP-PST=3PL.S
'They separated (left each other).' (Gordon Mackay in CvB-02-000447B)

The reciprocal is also used for verbs that do not describe an agent acting on a patient. For example, in (5.64), the subject *ngunha-kutha* 'those two' are described as being a couple (or 'cousins'; see §1.2 for an explanation of the term *nyupa*) through the use of verbalising *nyupa* and the reciprocal suffix.

(5.64) ngunha-kutha-ø nyupa-tha-layi-mpa=pula,
that-DU-NOM nyupa-CAUS-RECIP-PRS=3DU.S
karti-lpi=pula=ø jilya-ø ngathuku-ø ngaru-kartayi
take-PST=3DU.S=3SG.O child-ACC 1SG.DAT-ACC Hedland-ALL
kutharra-la yarnta-ka
two-LOC day-LOC
'Those two, nyupa to each other, took my kid to Hedland two days ago.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

5.8 Verbalisers and argument structure alternations

5.8.1 Causatives

There are two distinct suffixes that may be analysed as causatives: *-ma* and *-tha*. They both indicate that the subject makes x or causes x to occur, where x is the referent of the stem the causative attaches to. They may attach to either nominals or verbs, and when on verbs they usually add an argument to the clause. The two suffixes may appear in the same phonological environments, so are not allomorphs, although only *-tha* appears after a syllable with a nasal-stop cluster. A similar suffix is *-thu*, which I gloss as 'put'. All three of these suffixes appear in Panyjima (Dench, 1981, pp. 112–114, 119, 117–118), as well as in several other languages of the greater Pilbara.

-ma

The form *-ma* is common across Pama-Nyungan languages as the causative suffix. In Nyiyaparli, it always derives a verb in L class, although when attached to a nominal it may derive either transitive or intransitive verbs. A typical example of *-ma* deriving a verb from a nominal appears in (5.65). The nominal *kurlu* 'together' takes the causative *-ma* to express that the subject caused the object, the couple, to come together (that is, the subject married them).

(5.65) juta-y-lakalay kurlu-ma-lpi=ya=payinya
big-INCH-WHEN together-CAUS-PST=3PL.S=3DU.O
'When older, they put the two together.' (Gordon Mackay in CvB-02-000447B)

The causative *-ma* may also act as verbaliser without adding much else semantically. Usually, the meaning of the verb is predictable according to the meaning of the nominal, as in (5.66) and (5.67).

(5.66) kapukurri 'dream' kapukurri-ma 'to dream'

(5.67) kurlka 'mind' kurlka-ma 'to think'

There are also less predictable meanings that result from using *-ma*. For example, in (5.68), *walyi* 'bad' is verbalised with *-ma* to mean 'lose'.

(5.68) walyi-ma-lpi=rna papa-ngka
bad-CAUS-PST=1SG.S water-LOC
'I lost it in the water.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

When it attaches to verbal roots, *-ma* alters the argument structure of the verb, but does not necessarily add an agentive argument. For example, the semi-transitive *wathayi* 'look for' usually has a NOM-DAT case frame, but when it appears with *-ma*, it becomes transitive and its arguments take ergative and accusative cases, as in (5.69). Further research is required to understand how *-ma* alters the argument structure of verbs.

(5.69) ngana-ø wathayi-ma-nma=nhu=ø nhuwalu-lu?
what-ACC look-CAUS-PRS=2PL.S=3SG.O 2PL-ERG
'What are you tracking?' (Charlie Stream in Kohn fieldnotes, 28/05/2004)

-tha

The causative *-tha* appears with more frequency in Nyiyaparli. It may attach to nominals or verbs, may derive verbs in either class and may derive either transitive or intransitive verbs. Typically, however, the causative *-tha* when attached to a nominal creates an L class transitive verb with the meaning 'cause to x'.

For example, in (5.70) the causative *-tha* attaches to the nominal *miyanu* 'knowing, knowledge' to express that the subject will cause the object to know, or 'teach' them. Similarly, in the relative clause in (5.71), the nominal *kurtu* 'dead' takes the causative to express that the subject caused the kangaroo to be dead, that is, killed it (note that this is a transitive verb, but the kangaroo appears in dative case due to the perfect suffix; see §6.3.2). One can clearly see the transitivity of the sentence in (5.72), as the subject takes ergative case and the object accusative case, while the causative *-tha* attaches to *juta* 'big' to mean 'cause to be big'. That is, the subject raised the child, or 'grew them up' in some Aboriginal Englishes.

(5.70) miyanu-tha=npa thana-nha
knowing-CAUS=2SG.S 3PL-ACC
'You'll teach them.' (Charlie Stream in Kohn fieldnotes, 28/05/2004)

(5.71) urruru nyiya=yulu marlpa, kangaroo-ku kurtu-ja-lala
urruru this=EMPH? man kangaroo-DAT dead-CAUS-PERF
'This man is urruru, the one who killed the kangaroo.' (David Stock in JB-20190618-01)

(5.72) jilya-ø ngajulu juta-ja-lpi=rna=ø
child-ACC 1SG.ERG big-CAUS-PST=1SG.S=3SG.O
'I raised the child.' (A1 in JB-20190609-01, elicited)

(5.72) may be compared with the earlier example (5.65) which uses another verbaliser, the inchoative (see §5.8.2). While *juta-tha* means 'cause to be big',

juta-y(i) means 'become big' and is intransitive. Similarly, *karrara-tha* means 'cause to be sore/sick' while *karrara-yi* means 'become sore/sick.' Thus, while the free translations are similar in (5.73) and (5.74), the morphosyntax is quite different. In (5.73), the subject, reins, cause the object, *mara* 'hand(s)', to be sore. In (5.74), the subject, *mara*, became sore due to riding.

(5.73) mara-ø karrara-tha-lpi=ø=tha rayinspa-lu
hand-ACC sore-CAUS-PST=3SG.S=1SG.ACC reins-ERG
'My hands are sore from the reins.' [Lit: 'The reins made my hands sore.'] (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(5.74) mara-ø karrara-yi-pi=rna thalingka-nguru
hand-NOM sore-INCH-PST=1SG.S horse.riding-ABL
'My hands are sore from riding.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

We may also compare how *-tha* and *-ma* affect a nominal. While *-ma* attached to *walyi* 'bad' derives a verb meaning 'lose', as in (5.68), *walyi-tha* means 'cause to be bad'. For example, in (5.75), the subject, *yukurru* 'dog(s)', causes the object, the speaker's *thunturtu* 'head', to be 'bad' (from barking).

(5.75) yukurru-lu walyi-tha-npi=ya=tha thunturtu-ø
dog-ERG bad-CAUS-PRS=3PL.S=1SG.O head-ACC
'The dogs are making my head no good.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

While more rare with *-tha* than *-ma*, the causative may also offer little in the way of semantics to the derived verb. For example, in (5.76), the causative *-tha* attaches to the nominal *nyupa* to mean 'be nyupa' to someone (see §1.2 for an explanation of what *nyupa* means).

(5.76) ngunha-kutha-ø nyupa-tha-layi-mpa=pula,
that-DU-NOM nyupa-CAUS-RECIP-PRS=3DU.S
karti-lpi=pula=ø jilya-ø ngathuku-ø ngaru-kartayi
take-PST=3DU.S=3SG.O child-ACC 1SG.DAT-ACC Hedland-ALL
kutharra-la yarnta-ka
two-LOC day-LOC
'Those two, nyupa to each other, took my kid to Hedland two days ago.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

This example may be compared with (5.77), where *nyupa-ngarni* 'spouse-PROP' or 'have a spouse' is followed by the causative *-tha* and means 'cause to have a spouse; marry.'

(5.77) wangka-ø kalku-lpi=ya=kura nyupa-ngarni-tha-ku=ru
talk-ACC hold-PST=3PL.S=3SG.OBL spouse-PROP-CAUS-SIM=NOW
'They had a talk about marrying him now.' (Gordon Mackay in CvB02-000447B)

Further research is required to understand how the causative *-tha* alters a verb and its argument structure when attached to a verbal root.

-thu

A similar suffix to the causatives is *-thu*, which I gloss as 'put'. There are few examples of this suffix in my data, so I only briefly mention it here. On a posture verb, it means the subject puts the object in the position described by the verb, as in (5.78) where the microphone is stood up. On a nominal, it roughly means that the subject adjusts the location of x, or puts x in some position, where x is the referent of the nominal it attaches to. For example, in (5.79), the nominal *mil(y)a* 'mud' is verbalised with *-thu* to form an L class verb meaning 'to build mud up' in this instance.

(5.78) kayi-thu-lpi=ø=thu
stand-PUT-PST=3SG.S=1SG.OBL
'He stood (the microphone) up for me.' (Gordan Mackay in CvB04-002151A)

(5.79) mila-thu-lpi=ø, mila-thu-lpi=ø
mud-PUT-PST=3SG.S mud-PUT-PST=3SG.S
'He built the mud up (into steps around the water).' (David Stock in JB-20190626-03)

5.8.2 Inchoative

The inchoative indicates some change of state. It derives a verb and may attach to nominals, interrogative pronouns, and verbs. It usually takes the form of *-yi*, but when preceded by a *u* it may become *-wayi*, and when preceded by a *i* it may take the form of *-yayi*. These three forms are provided in (5.81)–(5.83) below. As this allomorphy is solely due to the assimilation effect of *u* and *i*, this rule is not always followed. For example, in (5.80), for which the audio is quite clear, the stem ends in an *u* but is followed by *-yi*. The form *-rri* also occurs in same environments as *-yi* and *-yayi*, but there too few instances in the data to determine when it occurs or if it is a different suffix with a similar function. These forms are common throughout Pama-Nyungan languages for the inchoative.

(5.80) marlaku-yi-mpa=ø maruntu-ngarni
back-INCH-PRS=3SG.S goanna-PROP
'He comes back with a goanna.' (Gordon Mackay in CvB-02-000445B)

When on a nominal, the inchoative derives a verb that describes a subject undertaking, or beginning to undertake, a change towards the state denoted by the nominal root. It always derives a Ø class intransitive verb. Most often, the nominal denotes an attribute. For example, when attached to *marnu* 'good' in (5.81), the subject is described as becoming 'good'. Similarly, it attaches to *walyi* 'bad' in (5.82) to describe having become 'bad, no good'. The attribute may also be an emotion, such as *pilanha-yi* 'getting scared' in (5.83).

(5.81) manthalpa-nguru marnu-wayi-pi=rna
weak-ABL good-INCH-PST=1SG.S
'After being weak I got better.' (Charlie Stream in Kohn fieldnotes, 25/09/1995)

(5.82) walyi-yayi-pi=rna karrpu-mari kampa-rnu
bad-INCH-PST=1SG.S heat-CAUSAL burn-DSBJ
'I got no good, burnt up from the heat.' (Kohn, 1996, p. 9)

(5.83) ngunha-ø marlpa-ø pilanha-yi-mpa=ø yurtupa-la
that-NOM person-NOM scared-INCH-PRS=3SG.S snake-LOC
'That man's scared of the snake.' (Charlie Stream in Kohn fieldnotes, 08/09/1995)

The nominal may also denote concepts other than attributes, such as *kurlka* 'mind' in (5.84) to mean 'think'. In this example, the inchoative seems to verbalise the nominal without adding the semantics of progressing towards some state, as *kurlka-ma* achieves the same meaning. Similarly, in (5.85), the inchoative attaches to *wartara* 'long time' to mean 'be (away) a long time'.

(5.84) kurlka-yi-pi=ø, wiyurrpa-ngarni-pi=ø
mind-INCH-PST=3SG.S feeling-PROP-PST=3SG.S
'He thought about it, got a feeling.' (Charlie Stream in Kohn fieldnotes, 28/05/2004)

(5.85) wartara-yi-pi=ya
long.time-INCH-PST=3PL.S
'They've been gone a long time.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The inchoative may also attach to interrogative/indefinite pronouns to derive Ø class verbs, as in (5.86) and (5.87). The result is an interrogative about what is

happening or what is wrong, or a declarative to express that something non-specific is happening or is wrong.

(5.86) tharnina-yi-mpa=la kuwayi?
how-INCH-PRS=1PL.INCL.S today
'What are we going to do today?' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(5.87) ngananha-yi-pi=npa mara-ø, wirnta-lpi=npa=nyina
what-INCH-PST=2SG.S hand-NOM cut-PST=2SG.S=REFL
wirnta-lanthalpa-ngarni, ngana-yu wirnta-lku?
cut-NMLZ-PROP what-DAT cut-SIM
'What's wrong with your finger, you cut yourself with a knife, what have you been cutting?' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

Further research is required to understand how the inchoative alters a verb and its argument structure.

Chapter 6

Clausal syntax

6.1 Introduction

In this chapter I provide an overview of some syntactic topics. These topics are not the focus of this thesis, and are therefore only addressed briefly to make sense of other topics discussed elsewhere (such as stacked case marking and subordinate verbs that may be considered as nominalised).

I first discuss phrases that are headed by a nominal (NPs), considering the case marking strategies used to identify elements of an NP, discontinuous NPs, case stacking, and agreement, including verbal agreement with a modifying possessor. I then outline the most common morphemes that result in a subordinate clause: the purposive, perfect, and simultaneous suffixes.

6.2 Nominal phrases

Nominal phrases are constituents of a clause headed by a nominal, whose members are all elements of the same grammatical function. The notion of NPs in Australian languages, particularly discontinuous NPs, is not uncontested (e.g. Evans, 2003; Heath, 1978; Mushin, 2012). It is outside the scope of this thesis to explore this topic in detail, but for the sake of this discussion, I assume the existence of nominal phrases (although some sentences may be appositional) based on the approach of McGregor (1990) and the analysis of Sadler and Nordlinger (2010).

In most of the data, the elements of NPs all take the same case; Dench and Evans (1988) call this complete concord. For example, in (6.1), both *ngunha* 'that' and *marlpa* 'person, man' are marked with dative case to indicate they are both elements of the NP that acts as the addressee of the event.

(6.1) mirra-ma=kura ngunha-yu marlpa-yu
shout-IMP=3SG.OBL that-DAT man-DAT
'Sing out to that man.' (Charlie Stream in Kohn fieldnotes, 03/12/1996)

However, not all speakers use complete concord case marking in this way. In David Stock's speech, for instance, only one element of the phrase is marked for case. This is illustrated in (6.2).[1] After hearing Gordon Mackay say the clause in (6.2a), which uses complete concord to mark the elements of the dative NP, David Stock said the clause in (6.2b), only marking *jinintari* 'old men', which is the final element and may be the head of the NP.[2] It is possible this difference in marking elements of NPs is due to dialectal variation.

(6.2) a. marlpa-yu nyiyaparli-ku jini-ntari-ku panti-pi=janampa
person-DAT Nyiyaparli-DAT old.man-PL-DAT sit-PST=3PL.OBL
'It happened to the old Nyiyaparli people.' (Gordon Mackay in CvB02-000447B)

b. marlpa jini-ntari-ku panti-pi=janampa
person old.man-PL-DAT sit-PST=3PL.OBL
'It happened to the old (Nyiyaparli) people.' (David Stock in JB-20190621-02)

NPs may be discontinuous; their elements do not need to be adjacent. For example, in the first clause of (6.3), the two elements of the subject (*marnu-ngku* and *ngalka-pati-lu*) are interrupted by the verb, but as they are both in ergative case, we may interpret them as members of the same NP. Similarly, in the second clause the dative NP is also interrupted by the verb.

(6.3) marnu-ngku karti-mpi=ya=tha ngalka-pati-lu, patha-ngarni-ku
good-ERG take-PST=3PL.S=1SG.O argue-PRIV-ERG wild-PROP-DAT
winjiyayi-ma=rna nhuwampa, ngalka-kana-pi=nhu=tha
dislike-PRS=1SG.S 2PL.DAT argue-CONT-PST=2PL.S=1SG.O
'Good fellas that don't argue took me. I don't like you cheeky fellas, you've been arguing with me.' (Charlie Stream in Kohn fieldnotes, 18/05/2004, my translation)

NPs containing multiple elements may lead to case stacking—when a nominal takes more than one case. This phenomenon appears in some other Australian

[1] There is no (overt) subject in this example, and only an NP in dative case, as this sentence serves as an introduction to a story (comparable to the English 'once upon a time').

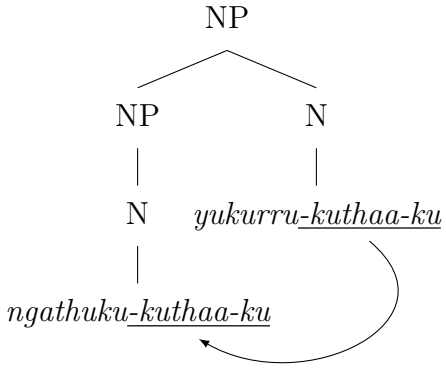
[2] Further research is required to determine whether David Stock uses head-marking or final-marking (or free-marking), as all other examples in his speech of NPs with multiple elements are in nominative or accusative (unmarked) case.

languages, discussed in more detail by Dench and Evans (1988). It occurs in the example provided above in (6.3), where *ngalka* 'argue, swear' takes the privative case *-pati* to convey that the entity does not argue, as well as the ergative case to indicate its grammatical relation to the predicate.

Case stacking occurs often with the genitive function of the dative case. For example, in (6.4), *yukurru-kuthaa* 'two dogs' takes dative case as it refers to the recipient of *yinya* 'give'. It is modified by *ngathuku* '1SG.DAT', which is in dative case to indicate the referent is the possessor of the dogs. As *ngathuku* is a part of the dative NP, it takes dative case again, as well as the dual inflection, to agree with its head. This is illustrated in (6.5), where the arrow represents the head assigning *-kuthaa-ku* to its modifier.

(6.4) yana-pi=rna=piyampa ngathuku-kuthaa-ku yukurru-kuthaa-ku...
go-PST=1SG.S=3DU.OBL 1-SG.DAT-DU-DAT dog-DU-DAT
'I went for [my] two dogs...' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(6.5)

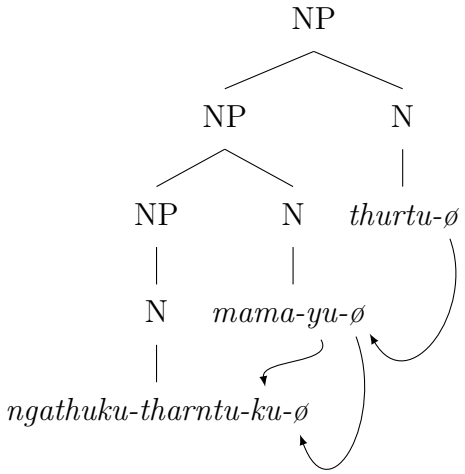


As NPs may be recursively embedded within an NP, a nominal may take several cases. For example, in (6.6), the first person singular pronoun acts as a modifier of a modifier, thus taking three cases: the possessive (pronouns must be in dative form in order to take the possessive case, so the form of the possessive here is *ku-tharntu*), the dative, and the nominative cases.[3] This is illustrated in (6.7), where the arrows reflect the process of assigning case to the other elements.

(6.6) ngathuku-tharntu-ku-ø mama-yu-ø thurtu-ø
1SG.DAT-POSS-DAT-NOM father-DAT-NOM elder.sister-NOM
'My father's older sister.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

[3] We know the NP is nominative due to context. The sentence fragment lacks a predicate as it is an answer to a question.

(6.7)



While discussing embedded possessors in NPs and agreement, it is worth mentioning that there are instances of (optional) verbal agreement with modifying possessors in Nyiyaparli, although it is outside of the scope of this thesis to discuss this in any detail. This has been called 'possessor dissension' by Meakins and Nordlinger (2017). For example, in (6.8), the possessor (*nyinkupa*) of the *yukurru* 'dog' is cross-referenced by the oblique pronominal clitic on the verb (*=ngku*). This is notable as the possessor is a modifier within an NP but is cross-referenced as if it is an argument of the clause, without being raised to the clausal level.

(6.8) yinya-ø=rna=ø=ngku=karta nyinkupa-ø yukurru-ø
give-FUT=1SG.S=3SG.O=2SG.OBL=DUB 2SG.DAT-ACC dog-ACC
'I might give some to your dog.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

The other form of agreement in NPs is in number. The above (6.4) illustrates this, as the dual inflection *kuthaa* appears on both elements of the NP. This is optional, however. In (6.9), a similar construction occurs, but the first person singular possessor agrees only in case with its head, *kurta-kutha-ku* 'for two elder brothers', resulting in one dative case to indicate the genitive relation with the head and another dative case to indicate the grammatical relation with the predicate.

(6.9) wirtama-nma=rna piyampa kurta-kutha-ku ngathuku-ku,
wait-PRS=1SG.S 3DU.DAT elder.brother-DU-DAT 1SG.DAT-DAT
nganartu-ø yikamarta-ngarni ngarti-ngarni yikamarta-ngarni
1PL.EXCL-NOM one-PROP mother-PROP one-PROP
mama-ngarni
father-PROP
'I'm waiting for my two brothers, we've all got the one mother and the one father.' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

6.3 Subordination

Multiple strategies may be used to mark a predicate and its arguments as subordinate. The most salient subordination suffixes in this dataset are the purposive, the perfect, and the simultaneous. These suffixes also form the three ways to encode the relative tense of the subordinate clause: an event occurring after the main clause event (purposive), an event occurring before the main clause event (perfect), and an event occurring during the main clause event (simultaneous). There are several other suffixes that produce subordinate verbs not discussed here.

Depending on one's analysis, these morphemes result in non-finite subordinate verbs or nominals. According to the criteria given in Nordlinger (2002), of these three forms only the perfect verb form may be analysed as a nominal in the usual sense of nominalisation, as only the perfect form may act as an argument, function as the head of an NP or form a phrase with the subject, and can inflect for case the way that nominals do. However, the perfect suffix usually does not derive forms of this kind; usually the form does not act as an argument, but has an adverbial function similar to the purposive and simultaneous.

Yet, as nominals in Australian languages serve adjectival and adverbial purposes, these processes of subordination may be considered nominalisation in an 'Australian-specific' sense of the term (ibid.). Like other non-finite verb forms in Australian languages, each of these suffixes have adverbial functions and their secondary arguments take dative case rather than accusative case.

6.3.1 Purposive

The purposive is used to describe the purpose of the event in the main clause, or an event intended to occur after the main clause event. It takes the form of *-rta*, or *-yarta* following an *i*, and derives a non-finite subordinate verb form. It is cognate with the irrealis future tense in Panyjima, which also has a purposive function (Dench, 1981, 1991). For example, in (6.10), the purpose of the main verb (getting up) is to 'see'. The argument that would be accusative if the subordinate verb were finite is marked dative in a purposive clause, as demonstrated in (6.11), where *yurta* takes dative case.

(6.10) kankayi-pi=rna=ru wiya-rta
rise-PST=1SG.S=NOW see-PURP
'Then I got up to see.' (Gordon Mackay in CvB02-000447A)

(6.11) thakurra-ø thuna-pi=kartu papa-ngka maluwa-la yurta-yu
net-ACC put-PST=1PL.EXCL.S water-LOC night-LOC fish-DAT

mana-arta
get-PURP
'We put the net in the water at night to get fish.' (Charlie Stream in Kohn fieldnotes, 12/09/1995)

As imperatives do not seem to be able to be negated (see §5.6.1), the purposive is also used for negative commands, as in the first clause of (6.12). The resulting verb is non-finite, but is not subordinate.

(6.12) mirta yinha-arta, kurtu warni-ya=ø=karta jinjima-ma-yilha
NEG give-PURP dead fall-FUT=3SG.S=DUB fat-CAUS-PERF
'Don't give it to him, he might die too fat.' (Charlie Stream in Kohn fieldnotes, 17/05/2004)

6.3.2 Perfect

The perfect suffix indicates that the event of the verb it attaches to occurred before the event of the main clause, and that the first event causes or enables the second event. The forms, *-(yi)l(h)a* and *-(r)lal(h)a*, seem to differ due to inter-speaker variation as they appear in the same phonological environments. The latter form is cognate with the past tense in some other Pilbara languages, including Panyjima.

As with the purposive, the secondary argument of the perfect verb form takes dative case rather than accusative case, as demonstrated in (6.13) and (6.14). The latter example also shows that when the subject is overt it takes nominative case. Interestingly, the dative argument of the subordinate verb may be cross-referenced by the main verb, as in (6.15), suggesting this is either a raising construction or that *payimpa* is an ethical dative of the main predicate.

(6.13) yalkangi-pi=ø puyu-yu-wala nganta-lala wartayi
dry-PST=3SG.S smoke-DAT-DIM drink-PERF morning
'He stayed in the sun, having consumed a little smoke in the morning.' (Gordon Mackay in CvB02-000447B)

(6.14) urruru nyiya=yulu marlpa, kangaroo-ku kurtu-ja-lala.
urruru this=EMPH? man kangaroo-DAT dead-CAUS-PERF
karta-rlala=marna marlpa-ø kangkaru-ku.
kill-PERF=THEN man-NOM kangaroo-DAT
'This man is urruru, the one who killed the kangaroo. The man who killed the kangaroo.' (David Stock in JB-20190618-01)

(6.15) wiyurrpa marnu-way-pi=rna=payimpa wiya-lala
feeling good-INCH-PST=1SG.S=3DU.OBL see-PERF
'I was feeling good now that I've seen them.' (David Stock in JB-20190621-02)

This suffix seems to be able to derive a true nominal, as it can act as an argument and can inflect more productively than other subordinating suffixes. For example, in (6.16), the ergative case attaches to a perfect 'verb form' to indicate that it is the subject of the clause. The perfect suffix still retains its notion of causality between the events here, as the clothing is being put on due to him being made sore. However, this is an unusual example as the perfect attaches to a nominal rather than a verb (there is no other evidence that *karrara* 'sick, sore' may be either a verb or nominal) and there is no causative.

(6.16) purnunpa-ø juna-pi=ya=kura karrara-lala-lu
clothing-ACC put-PST=3PL.S=3SG.OBL sick-PERF-ERG
'The ones that made him sore put clothing on him.' (Gordon Mackay in CvB02-000447B)

6.3.3 Simultaneous

The simultaneous suffix indicates that the event of the subordinate verb that it attaches to occurs at the same time of the event in the main clause. It takes the form of *-ku* on Ø class verbs and *-lku* on L class verbs. It seems to be cognate with the present tense in Ngayarta languages (including Panyjima).

For example, in (6.17), the event of the subordinate verb *witama* 'wait' occurs at the same time as the main verb event *panti* 'sit'. As with the purposive and perfect, the secondary argument of the verb with the simultaneous suffix takes dative case, as in (6.18). As a non-finite verb form, a verb with this suffix cannot take pronominal clitics, but as (6.19) shows, it may take the reflexive clitic.

(6.17) kanku-ø=marna puyu-ngka panti-pi=ya=kura intiti
law.mob-NOM=THEN smoke-LOC sit-PST=3PL.S=3SG.OBL already
yurlu-ngka witama-lku
camp-LOC wait-SIM
'The law mob were already sitting in the smoke at camp, waiting for him.' (Gordon Mackay in CvB02-000447B)

(6.18) ngananha-yi-pi=npa mara-ø, wirnta-lpi=npa=nyina
what-INCH-PST=2SG.S hand-NOM cut-PST=2SG.S=REFL
wirnta-lanthalpa-ngarni, ngana-yu wirnta-lku?
cut-NMLZ-PROP what-DAT cut-SIM
'What's wrong with your finger, you cut yourself with a knife, what have

you been cutting?' (Charlie Stream in Kohn fieldnotes, 09/08/1995)

(6.19) kapukurri-ma-lpi=rna=nyina pungka-lku=nyina thunturtu-ø
dream-CAUS-PST=1SG.S=REFL hit-SIM=REFL head-NOM
'I dreamed about myself hitting myself in the head.' (Charlie Stream in Kohn fieldnotes, 22/11/1996)

This suffix was previously posited as a 'generic' suffix, used for statements that are generally true (Kohn, 1996), but there is little data to support this claim, and many examples (such as those given above) do not express generic statements.

Chapter 7

Conclusion

This thesis has investigated a number of topics in Nyiyaparli, covering the major aspects of the language's phonology, morphology, and syntax. It has focused on the forms and functions of the most salient nominal and verbal suffixes and clitics, providing an overview of the grammar of the language. It has described of the inflectional and derivational processes involved in forming nominals and verbs, and the morphological mechanisms that alter a predicate's argument structure and case frame. This work is significant as there is very little literature on Nyiyaparli and this thesis considerably expands the amount of description and documentation of the language.

Chapter 1 introduced the language and its speakers, as well as outlining previous research and discussing the approach taken in this research project. While the genetic affiliation of Nyiyaparli remains contested, this thesis has shown that it bears resemblance to languages from various subgroups of the region, and it shares several morphemes with Panyjima (57% of those discussed in this thesis), particularly nominal suffixes. However, Panyjima and Nyiyaparli also have many morphosyntactic differences, including the forms and functions of many other suffixes, as well as a different case alignment system.

Chapter 2 provided an overview of the phonology of Nyiyaparli, including the consonant inventory, the vowel inventory, and phonotactics. This chapter demonstrated that Nyiyaparli has a fairly typical phonological system, and provided some comments on the unconfirmed laminal contrast.

Chapter 3 discussed (personal, demonstrative, and interrogative/indefinite) pronouns and bound pronominals. It demonstrated that Nyiyaparli's case alignment system is tripartite, with separate patterns of case marking on non-singular pronouns compared to nominals and singular pronouns. I also demonstrated that bound pronominals indicate grammatical function rather than case.

Chapter 4 covered the forms, functions, and uses of the major nominal morphology in Nyiyaparli. This included more accurate descriptions of several suffixes

than previously given, such as the proprietive *-ngarni*, which also takes the case of the possessor and covers the instrumental function. The chapter also examined the versatility and flexibility of some cases, particularly the dative and locative cases, and described the wide range of functions that these cases may have, as well as the overlaps in the functions of several cases. In §4.2.3 I also explored the variation in the semantic roles that the dative may have in ditransitive clauses, finding that the dative usually attaches to the theme rather than the recipient, which is cross-linguistically rare.

Chapter 5 described the major verbal morphology, as well as providing an overview of the types of predicates in the data, including nominal predicates. The discussion of transitivity types shows that Nyiyaparli is an interesting case study in regards to what transitivity entails, and how to determine whether a verb is intransitive, transitive, or something else. This chapter also provided more accurate descriptions of verbal morphemes, such as the continuous aspect, which was previously labelled an iterative. Additionally, throughout the chapter various instances of case frame and argument structure alternations are discussed.

Chapter 6 provided a brief discussion on nominal phrases and subordination. I described the variation between speakers in how they mark elements of an NP, as well as the phenomenon of multiple case marking (case stacking) and possessor dissension. I also provided some comment on whether subordinate non-finite verbs may be analysed as nominalised, as well as offering a more accurate description of these verb forms (particularly the simultaneous suffix) than previously given.

This thesis has also raised many areas for further research. There is a need for research across all varieties of Nyiyaparli, with more than three speakers. The differences between varieties require explication, as well as what changes may have occurred over time. This may untangle the causes of variation between the speakers in this study. Further, the register of Pathupathu needs research, including the differences and similarities between standard Nyiyaparli and Pathupathu, and the similarities and differences between Nyiyaparli Pathupathu and other respect styles of the region. Further research on Nyiyaparli and its neighbours may also shed light onto the subgrouping of the language and its relationships with other languages of the region.

There are many suffixes and clitics not discussed in this thesis. Investigation into other morphology is required to provide a more complete picture of the language. For example, discourse clitics (such as *=marna* and *=(r)ru*) appear throughout the thesis but are not described. Further, all the morphosyntactic topics discussed may be researched at a deeper level, particularly with the addition of various theoretical frameworks. This includes topics in argument structure alternations (particularly resulting from the causatives and inchoative), case frame alternations, transitivity types, and subordinate verb forms as nominalisation.

Further research is also needed to investigate variants of forms (such as *-ngarni* and *-ngara*) that may in fact be separate morphemes with similar functions, additional functions of some forms (such as the imperative), and the variation in the omission of pronominal clitics.

Phonetic and phonological topics also require further research, particularly in determining whether there is a laminal contrast. There is also great scope for work in linguistic areas not mentioned here, such as information structure. Finally, there is a great need for pedagogical resources and programs for Nyiyaparli and Palyku people who would like to learn their language. Nyiyaparli is in need of revitalisation for it to be spoken by future generations.

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