

NGAN'GITYEMERRI

A language of the Daly River region
Northern Territory of Australia

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Unless otherwise acknowledged in the text
this thesis represents the original work of the author

A handwritten signature in black ink, reading "Nicholas Reid". The script is cursive and fluid, with the first name "Nicholas" and last name "Reid" clearly distinguishable.

NICHOLAS REID

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Abstract

This thesis is a study of Ngan'gityemerri, a language spoken primarily in and around the two communities of Nauiyu Nambiyu and Peppimenarti in the Northern Territory.

Chapter One provides an introduction to the names by which speakers of this language have been referred to, comments on the relationship between the two dialects, and establishes my use of the term Ngan'gityemerri as a language name. Also included in this chapter is a brief account of the history of these people since European invasion of their country began late last century, some comments on social organisation, cultural affiliations, Wangga and Lirrga songstyles, and a description of their country. The current status of the language is reviewed, and the language variety presented in this work is clearly identified. A survey of previous work on Ngan'gityemerri, and a description of my fieldwork methodology are additionally included.

Chapter Two presents the segmental phonology, phonotactics, stress patterns and morphophonological processes. Particular attention, in the form of a detailed acoustic study, is given to the mechanism by which the contrast between two series of stops is maintained.

Chapter Three presents an overview of 'simple' and 'complex' verb structures, then identifies the morphological make-up of the verbal elements labelled 'auxiliary' and 'complex verb stem'. The mechanisms that interact to mark categories of tense, aspect and mood, namely auxiliary root inflection, verbal enclitics, verb root reduplication and the serialisation of posture/motion auxiliaries, are all addressed in this chapter. The incorporation into the verb of bodypart noun roots is also investigated here. A distinction between 'lexical' and 'syntactic' incorporation is invoked, and the differences in the effect of both these types of incorporation is dealt with. A list of incorporable terms is presented, and their literal and classificatory semantics explored.

Chapter Four investigates the semantic contribution that the auxiliary makes to the meaning of a full verb. The 31 auxiliaries are broken down into six groups on the basis of their functional roles, which are described in detail.

Chapter Five deals with the role played by both freeform and bound generics in classifying the Ngan'gityemerri nominal world. The morphology of these generics is surveyed with regard to the typological distinction drawn between 'noun class' systems on the one hand, and

'classifier' systems on the other. The semantics of noun class categories are also examined here.

Chapter Six examines the set of enclitics, some of which have scope over NPs and others over clausal propositions. The semantic functions of this clitic set varies widely, some marking such case-like roles as 'agent' or 'instrument', others encoding the kinds of meanings, like speaker attitude, that are commonly attributed to free particles. The class of free particles is treated in Chapter Seven.

Chapter Eight provides a brief presentation of space, time and number expression, and Chapter Nine deals with the freeform pronominal system, demonstratives and interrogatives.

Appendices to this grammar include the full subject-auxiliary sequence paradigms for both Ngan'giwumirri and Ngan'gikurunggurr, as well as four texts. Cassette tapes of the textual material included in the appendices have been submitted with this thesis, and copies of these will gladly be made available by the author to any interested readers.

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Abbreviations and Conventions

General Abbreviations

eg.	'for example'	ie.	'that is..'
cf.	'compare with..'	lit.	'literally'

Reference Abbreviations

ibid.	'in the same section'
op. cit.	'in the above mentioned work'
loc. cit.	'on the same page of the above mentioned work'

Phonological Conventions

[]	phonetic representation
/ /	phonemic representation
C	consonant
V	vowel
N	nasal
#	morpheme/word boundary
ˈ	primary stress
ˌ	secondary stress
()	optional element
→	is realised as...
/	in the environment of...

Morphological and Syntactic Conventions

S	subject of intransitive
A	subject of transitive
O	object of transitive
N	noun
NP	noun phrase
V	verb
VP	verb phrase
()	optional
*	ungrammatical
(*)	ungrammatical if bracketed element included
*()	ungrammatical if bracketed element excluded
{ }	underlying form
=	boundary between 'auxiliary' and 'Complex Verb Stem'
-	boundary between complex verb morphemes

Kinterm Abbreviations

F	father	M	mother
S	son	D	daughter
B	brother	Z	sister
H	husband	W	wife

Interlinear Gloss Abbreviations

1	first person
2	second person
3	third person
M	masculine
F	feminine
sg	singular
dl	dual
pl	plural
inc	inclusive
ex	exclusive
SU	subject
DO	direct object
IO	indirect object
Pres	present
Perf	perfective
PImp	past imperfective
Irr	irrealis
Past	past
Pres	present
Fut	future
redup	reduplicated
Mp	manipulative
Val	valence increaser
Neg	negative
IMP	imperative
HITH	hither, towards speaker
THITH	thither, away from speaker
FOC	temporal or spatial focus
INCH	inchoative
REFL	reflexive
RECIP	reciprocal
REL	relativiser

AGENT	agent
INSTR	instrumental
PURP	purposive
LOC	locative
SOURCE	source, ablative
CAUS	causative
ASSOC	associative
UNSATIS	unsatisfactory
LEST	lest, for fear of
PROHIB	prohibitive
INAB	inability
WARN	warning
SEMBL	semblative, looks like...
KIND	a kind of...
INTENT	intentional, just about to...
CORRECT	corrective, its meant to be...
COTEMP	cotemporaneously, just at that time
DESPITE	despite X, even though X
IMPL	implicated argument
ALSO	as well, again, too, still
EMPH	emphatic
SUGG	suggestive, 'how about it ?'
INDEF	indefinitiser
INSTEAD	in place of..., in preference to...
JUST	only, no more than...
ONO	onomatepeia

Noun Classes

cl	noun class
M	male
F	female
Hg	human group
A	animal
Pf	plant food
Bp	bodyparts
Tr	tree/thing
C	canine
Bsp	bamboo spears
Csp	canegrass spears

Structure of Examples

Examples are structured as four lines. The first line is the Ngan'gityemerri sentence/word in **bold script**. Loanwords are treated in one of two ways. English loans which essentially retain their English phonemicisation and meaning are given in the first line of examples in plain rather than bold script, to denote their status as loan words (or in some cases, code-switching). Loans from English which have been phonemicised into Ngan'gityemerri, or have acquired new or extended meanings as loanwords are given in bold script and provided with an interlinear gloss on lines two and three (i.e. in accordance with Ngan'gityemerri speakers' perception of such words, I have treated them as 'proper NgK or NgW'). The second and third lines of examples, in *italic script*, provide an interlinear gloss. I've found the use of two lines necessary simply because of the morphological density of the verb in particular. Lines 2 and 3 are meant to be read jointly from left to right, rather than sequentially. For instance, the gloss to the example given below should be read as;

wuddumbuny-ngerr -mi -wul -nime-pagu
3pl Shove -dl/1sg-Val-return- tr -HITH
SU Perf SU/DO SU
 They (three) brought me back here.

"third plural subject, 'shove' auxiliary in perfective inflection, portmanteau dual subject and first singular direct object, valence increaser, return (verb root), trial subject, hither directional"

As evident in the above example, I use a slash / between the glossed elements of a portmanteau morpheme. Another minor convention is the inclusion, below the verb root, of the meaning of the verb. This is given only in those verbs whose meaning is unpredictable from the combination of the auxiliary and verb root semantics.

Auxiliary roots are glossed by name (e.g. 'Shove' in the example above). The semantic nature of auxiliary verbs is discussed in detail in chapter 5, and readers seeking explanation of auxiliary root glosses are referred to this section. The 31 auxiliary names are listed below.

<u>Simple</u>	<u>Complex</u>	<u>Detransitivised</u>
sit	hands	handsDtr
lie	feet	feetDtr
stand	mouth	mouthDtr

go	poke	pokeDtr
go*	slash	bashDtr
say	bash	sayDtr
hang	heat	heatDtr
take	shove	shoveDtrS
see	suck	shoveDtrD
arrive	pull	seeDtr
	snatch	

The fourth line of examples, in plain script, provides an English translation. I've been fairly free with translations, attempting, in addition to an accurate rendition, to convey something of the speech style. To this end, in a few cases I have translated using expressions that are characteristic of the English of Ngan'gityemerri speakers, but which may be less well known in standard Australian English.

The use of brackets () in the fourth line of examples either provides contextual information which is missing from the given example, but established within the wider discourse, or clarifies implications of the example. e.g. I brought it for her (to give to her), (on her behalf), (at her request) etc. A bracketed sentence below the line-4 translation is an alternative translation.

Example numbers are of the form 3-56, where 3 denotes the chapter number, and 56 denotes the example number within that chapter. Examples in each chapter are renumbered from 1. Ngan'gikurunggurr examples are marked by 'NgK' below the example number. All examples not designated as NgK should be understood to be Ngan'giwumirri, unless specified in the text as some other language.

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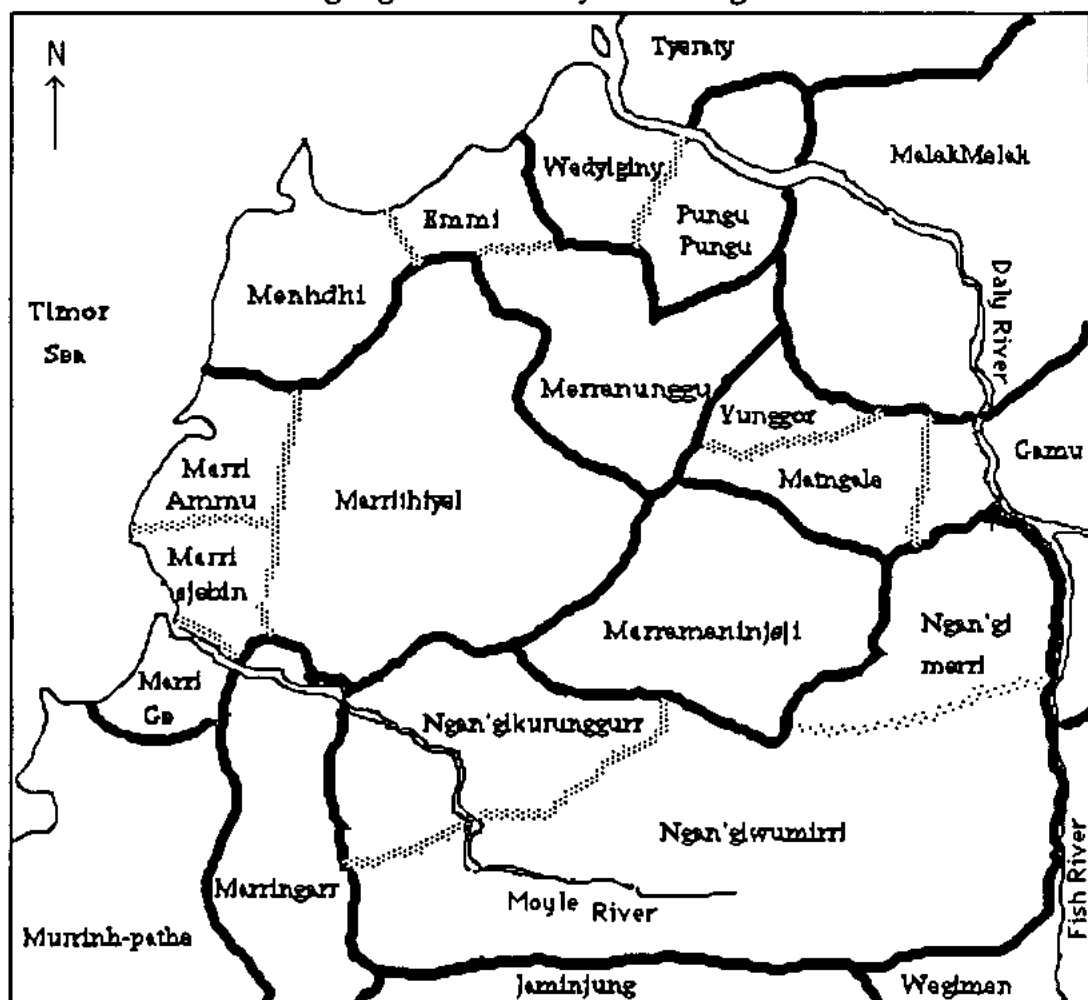
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MAP 1

Languages of the Daly River Region



This map has been hand drawn with MacIntosh Superpaint graphics. While it is intended to represent language and dialect boundaries as accurately as possible, it is not drawn strictly to scale. The boundaries of Ngan'giwumirri, Ngan'gimerri and Ngan'gikurungurr countries are based on my own fieldwork. The northern half of the map is based primarily on Green (1989). The orthographies adopted for language names are given in 1.1.

Chapter 1

Ngan'gityemerri: the language, the speakers, the culture.

1.1 Language Names¹

The names Ngan'gikurunggurr and Ngan'giwumirri are etymologically compounds of **ngan'gi** 'language/story/word' and **kurunggurr** and **wumirri**. **Kurunggurr** is both the name of a particular billabong in the **muyil** marshland west of Peppimenarti, and also the general term, in both Ngan'gikurunggurr and Ngan'giwumirri, for deep, dark water, as found midstream in a river. Ngan'gikurunggurr people do not prefer either one of these referents, as opposed to the other, as the source of the language name. The etymology of **wumirri** is not clear. In response to my queries, some Ngan'giwumirri people have remarked upon the similarity with **wumirr** 'the resinous substance found among the roots of the ironbark tree'. There is however no general agreement about the relevance of this similar term to the language name, nor any supporting morphological evidence (i.e. the final **-i** is otherwise unattested as any sort of derivational suffix).

Ngan'giwumirri and Ngan'gikurunggurr are, on linguistic criteria, dialects of a single language. They share an identical phonemic inventory (though realisation and stress rules differ); share identical verbal structure - the number and semantics of their systems of auxiliary verb appear to map onto each other perfectly; they share a cognacy rate of about 85%; and are mutually intelligible. Speakers of these dialects refer to them as 'languages', and acknowledge their subgrouping by comparing their degree of similarity with other pairs of dialects - "NgK and NgW go level, like Marrithiyel and Marrisjebin go level". Speakers of both dialects agree that NgK is 'light/smooth' while NgW is 'heavy/rough'. To judge from their

¹In referring to the names of other languages I use those that stem from what I consider to be the most comprehensive studies available (whether published, manuscript or personal communication). I employ Green's (pers. comm.) orthography for Marrithiyel, Marrisjebin, Marringarr, Marri Dan, Marri Ammu, Marri Ge:, Marramaninjsji, Merranunggu, and Menhdha. I have also adopted Green's spelling for Matngela (though without the superscript **y** following the **ng**, denoting a palatal off-glide). Gamu is written in the orthography of Harvey (pers. comm.), (who incidentally believes the final vowel of Matngela to be **i**, e.g. Matngeli). Murrinh-patha is written in the orthography used by the Port Keats school. Jaminjung follows Chadwick (1984 ms), and Wagiman follows Cook (1987). Emmi follows Ford (pers. comm.). At certain places in the text I give the variant spellings of other authors. In these cases I have adopted the practise of enclosing such language names within single quotation marks, e.g. 'Nengomeri'.

comments, this distinction would appear to be based primarily on the strict maintenance in NgW of hetero-organic nasal/nasal and nasal/stop clusters at the boundary between the auxiliary root and whatever follows it. The same underlying clusters in NgK are subject to assimilation rules, e.g.

1-1	NgW meny-nge	NgK meng-nge	'he told her'
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Also contributing to this perception are NgW voiced stops corresponding to NgK voiceless stops;

1-2	NgW wedi minbadi	NgK weti minati	small big
-----	--------------------------------------	-------------------------------------	--------------

NgW nasal/stop clusters corresponding to NgK single nasals (as in 'big' above) or single stops;

1-3	NgW ngeningge	NgK ngenike	sister
-----	-------------------------	-----------------------	--------

and NgW high+back vowels corresponding to NgK high+front vowels (especially in word-final position); . e.g.

1-4	NgW kuru funggulu	NgK kuri fungguli	water sugarbag
-----	---------------------------------------	---------------------------------------	-------------------

The language that these two dialects constitute, has no name. Here, as in most parts of the country, the Aboriginal perception of 'language'² names and relationships are not necessarily based on distinctive linguistic attributes (Dixon 1980:43). For the purposes of this grammar, I have used the name Ngan'gityemerri to represent this linguistically defined language. This should be clearly understood to be a linguistic abstraction of my own

2 I distinguish between linguistically defined language, and Aboriginally defined 'language', by placing the latter in quotation marks.

Note also that the practice of forming 'language' names through a compound with the word for 'language', does not in any convincing way suggest that the primary reference of these names is to language rather than people. This is a region where languages are spoken in continuous blocs of country. If you know someone's country, then you know their language, and vice versa. Within this environment, names that formally define languages, also define their collective speakers and the country they belong to.

fabrication³, and one that does not reflect universal native speakers usage of the term.

The etymology of **Tyemerri** is unclear. Ngan'gityemerri speakers claim that just as they refer to the Marrithiyel as 'Ngan'gikamu', so they are referred to by the Marrithiyel as 'Marrityemerri'. Green (pers. comm.) reports that 'Marri Sjemerri' is the name by which Marrithiyel speakers refer to Ngan'gikurunggurr (though he further notes that at least one Marrithiyel speaker uses it as a cover term for both NgK and NgW). One might assume from this that speakers of NgW and NgK have calqued this term, borrowing **Syemerri** from Marrithiyel and substituting **ngan'gi-** for **marri-**, deriving **Nan'gityemerri**. However, Green suspects that 'Sjemerri' is probably not a Marrithiyel word because the standard Marrithiyel practice for referring to surrounding languages/dialects, is to compound **Marri** 'language' with a word from the language being described, rather than with a Marrithiyel descriptive term (cf. **Marri Wuda**, **Marri Wumirri** etc.).

The etymological obscurity of the term 'Ngan'gityemerri' is matched by the varying reference with which it is used. Some speakers (both NgK and NgW) use it in reference to both NgK and NgW, but others (both NgK and NgW) use it to refer to NgK only. I use the term **Ngan'gityemerri** in reference to the language only, and so throughout this work I am careful to refer to 'Ngan'gityemerri speakers', but not 'Ngan'gityemerri people'.

Hoddinott and Kofod and also Tryon began work on Ngan'gikurunggurr around about 1967 and are the first writers to have used this name for the language. Up until then all reference to this language, in works such as Laves (1931), Stanner (1933), Davidson (1938), Capell (1963), and Oates (1970), is given as **Moil/Moil/Moyle/Moyl**. This term is the Ngan'gityemerri name **muyil** for the vast area of marshland, stretching from the mouth of the Moyle River some 35kms inland to Peppimenarti. The English name for the river is presumerably based on this placename. The area referred to as **muyil** is inhabited by the NgK, Marringarr and Marrisjebin (possibly once **Marri Ge**; also); however, as used by Ngan'gityemerri speakers, this term has no reference to people, but simply designates a geographical feature.

³Tryon used 'Tyemerri' as group and sub-group labels in his 1974 classification of the Daly languages. He indirectly alludes to the possible Marrithiyel source of this term, 'It is also known within the Daly area as Tyemerri or Marrityemerri' (Tryon 1974:229). Hoddinott and Kofod also note 'Tyemirri' as an alternative name, but confuse it with the discourse particle **tyamirri** 'finished'. On the basis of this misunderstanding they make the rather fanciful claim that '...the alternative name for the language, Ngankityemirri, means the 'finished' or 'perfected' language' (H&K 1989:2).

Despite its prevalence in the early anthropological, linguistic and 'adventure' literature, there is no evidence that NgK people ever used the name 'Moiil' in reference to themselves. Rather, it seems to have been used by other Daly groups as a dismissive label for those 'bush/myall blacks' from the swamp country who had less ready access to the settled strip along the middle Daly River⁴. How and when the term 'Moiil' came to exclusively refer to the NgK is not altogether clear, though in all probability it is largely attributable to Stanner. What is clear though is that this usage was the artefact of European researchers, and not of the Aborigines of the area. The usage of this non-self-designatory term stemmed simply from the fact that none of the early writers actually had much contact with the NgK. Stanner, for instance, notes that "Bush tribes like Nangor and Moiil, with which the writer had no effective contact⁵, seem on native reports to be very little altered" (Stanner 1933:21). These days NgK people acknowledge that they were the people once designated as 'Moiils', but neither they nor, as far as I am aware, any other Daly groups now use this name.

Stanner refers to two others groups by the names 'Nangimeri' and 'Nangiblerbi'. Ngan'gimerri, a third dialect of the Ngan'gityemerri language, was the name given to the speech variety of the northernmost NgW estate group rak-Merren⁶. Although Ngan'gityemerri speakers give it a 'language' name (i.e. ngan'gi-), they acknowledge its greater similarity with NgW than NgK by using Ngan'giwumirri as a super-ordinate term that embraces Ngan'gimerri as well. Further discussion of the relationship between Ngan'gimerri and NgW can be found in Reid (to appear).

4In this respect 'Moiil' was much like the term 'Beringgin/Brinken' in being a perjorative epithet that had shifting rather than fixed reference. In fact Stanner even quotes Durrmugam (a NgW) as referring to Marringarr and Marrithiyel as "those bloody f___g bastards of Moiils", and noting his "falling into the vulgar European error of lumping both tribes together as Moiils whereas a generation before they had been lumped together as Brinkens". (Stanner 1970:89)

5Stanners's lack of direct contact with the Moiils comes as something of a surprise, for he describes how their camp was situated on the bank of the Daly in relation to the 'Marrithiel' and 'Nangomeri', and the impression one gets from reading his reports is that he moved widely (and fairly freely) up and down the middle Daly.

Stanner's lack of direct contact with the 'Moiils' also perhaps explains his odd language subgrouping (Stanner 1933:387), where he groups Moiil with Marringarr and Marrithiyel, and groups NgW with Marramaninjsji and Merranunggu.

Tryon's claim that Stanner was "one of the few anthropologists to have devoted much time to the study of the Ngangikurrungurr" (Tryon 1974:229), appears to be incorrectly based on Stanners work with the NgW, not the NgK.

6I have also heard this 'language' referred to as 'Ngan'gimerren'

As the speech variety of only a single estate grouping, Ngan'gimerri was probably never spoken by more than thirty or forty people, so the attention it received by European writers was somewhat disproportional to its status. Laves described this speech variety in 1931, Capell later collected some fieldnotes, and it gets a mention in the surveys of Capell (1963), Oates and Oates (1970) and Tindale (1974). In fact 'Ngangimiri' is given as the only member of the 'Ngangimirian Family' in Capell (1963). Although Ngan'gimerri was, between 1930 and 1960, perhaps the most well documented variety of Ngan'gityemerri, it was, as Stanner notes, by this stage no longer actively spoken; "other tribes such as the.....Nangimeri and Nangiblerbi, formerly were in contact with the settlement, but are now either extinct or the few survivors have drifted into the stations and sidings along the railway line" (Stanner 1933:383).

By the time Tryon came to work on NgK and NgW around 1967, Ngan'gimerri seems to have been largely forgotten, or the similarities between its variant spellings and those of NgW had led to the belief that they were one and the same⁷. No-one speaks Ngan'gimerri today. Descendants of the rak-Merren estate can still be found at Naiyu Nambiyu and Peppimenarti, though they now have their primary affiliation in their mother's country, Lafuganying.

Stanner's reference to the Nangiblerbi is mysterious for two reasons. Firstly, no elder Ngan'gityemerri speakers now claim to have ever heard the name, despite their clear remembrance of Ngan'gimerri. Secondly, the morpheme-initial *bl-* cluster and the intra-morphemic *-rb-* cluster are both impermissible within contemporary Ngan'gityemerri phonotactics. A minor reference by Stanner to Nangikadre is equally mysterious.

1.2 Post-invasion History

1.2.1 1876 - 1955 Disintegration and Degeneration

After McMinn, Saunders and Sergison traced the course of the Daly river in 1876, the influx of non-Aborigines into the area was under way. Within a couple of years the Darwin Chinese community had established a farm on Peron Island at the mouth of the Daly, and miners had begun smelting copper at Coppermine, then later gold at Fletchers Gully. 1880 to 1906 were the years of most active mining, though other enterprises were

⁷Tryon for instance suggests that Capell's allocation of separate language numbers to 'Ngengmeri' and 'Nangimeri' is erroneous, "the two names being simply variants" (Tryon 1974:251). However, Tindale notes that both Schebeck and Cleverly, in personal communications, expressed the opinion that the different spellings were significant.

also underway. The Palmerston Sugar Company had the first farm with twenty acres of sugar cane just a few miles from Coppermine on the edge of the Kilfoyle plain.

Another significant European presence on the Daly during these early days were the Jesuits. Between 1886 and 1899 they had three mission sites, Uniya and Serpentine Lagoon on the west bank and New Uniya on the east. The Jesuits had previously had a mission at Rapid Creek in Darwin, but found Darwin Aborigines 'too demoralised' (Pye n.d.). Believing they could only improve the lot of 'unspoiled natives' (loc. cit.), they looked to the inhabitants of the more isolated Daly region. The Jesuits' approach, a combination of protecting the indigenous culture whilst pushing agricultural development, education of children, and medical care, was strongly influenced by the 'reductions' carried out in 17th and 18th century Paraguay to protect the Indians from the Spanish.

"Religion is....primary in our intention, but in a manner secondary in our practise, because we recognise that we must first civilise the blacks before we can Christianise them."

(McKillop 1893)

The Jesuits seem to have fostered the use of local languages, and are said to have developed a Liturgy in Matngela. The floods that had prompted the relocation of their missions several times, and the difficulties in maintaining supply links with Darwin, eventually drove the Jesuits from the NT altogether in 1899.

Stanner (1933:381) estimates that there may have been "well over one hundred" non-Aborigines on the Daly around the turn of the century. However the switch from mining to agriculture, which heralded a succession of failed enterprises over the next twenty years, greatly reduced this number. The government farms established in 1908 and the government-assisted private farms begun in 1912, had virtually all foundered by 1920. A few Europeans battled on, mostly growing peanuts or tobacco and shooting crocodiles, but Stanner (loc. cit.) estimated that by 1933 their number had been reduced to about twenty. From that time until the mid-fifties a few new faces appeared to try their hand at farming, cattle stations took out leases on surrounding country, and a few, like Ridsdale, started reworking the gold mine at Fletchers Gully on a small scale. Their numbers however remained low.

From the accounts of Pye (n.d.), Flynn (1963) and others we can get a reasonable picture of the non-Aboriginal history of the Daly region. Stanner is the only source from which we can build a picture of the Aboriginal history of the same period. Clearly the twenty-odd mile strip of the middle

Daly, around the Jesuit missions and the farms, became the focal point to which Aborigines from as far as Delissaville and the upper Fitzmaurice River were attracted. Stanner's description of the situation that he encountered in 1932 is worth quoting at some length here.

"Between the Crossing and Brown's Creek two points about eighteen miles apart on the middle Daly, forming roughly the extremes of the settlement, are to be found members of such tribes as the Mulluk Mulluk, Madngella, Maranunggo, Nangiomeri, Marithiel, Moil, Maringar, Wagaman, Nangor, Marimanindji and the Ponga Ponga; other tribes such as the Djerait, Wogait, Kamor, Yunngor, Kungarakan, Nangimeri and Nangiblerbi, formerly were in contact with the settlement, but are now either extinct or the few survivors have drifted into the stations and sidings along the railway line such as Pine Creek, Katherine, Brock's Creek, Adelaide river and Rum Jungle. Some Wogait are in Darwin.

Of the above mentioned tribes only the Mulluk Mulluk, Marithiel, Madngella, Marimanindji, Moil, Nangiomeri and Maranunggo are now represented by groups of any size around the settlement. In all, there are probably less than 200 natives of all tribes who live permanently in or near the settlement. Vital statistics appear to point to a steady decline in tribal strengths, although alteration in the level of river population, at all times difficult to estimate, is more than ever obscured by the slow drift of other natives to the settlement and the unobtrusive retreat of some to the bush.

The important point in the foregoing is that a number of tribes, or the remnants of a number of tribes, have been on the one hand thrust together into a situation of conflict, strain, distrust and fear among themselves, and on the other into a harsh, unpleasant and harmful contact with whites and Chinese.the aborigines, by the virtual redivision among themselves of the old Mulluk Mulluk territory (now the common territory of them all), by the disruption of old territorial attachments and the modification of sentiments organised upon them, by the development of a complex series of emotionally-toned attitudes towards both settlers and their own aboriginal neighbours, have to some extent worked out a defensive adjustment to their difficult situation. But the adjustment is at best imperfect and unhappy, and has many elements of dissatisfaction. The aborigines have been without precedent to help shape their attitude. They have no real understanding of what has befallen, or why it has brought disintegration. Added difficulties have been placed in the way of satisfactory adaptation by the inelasticity of their social organisation, which seems rather to have ruptured than to have yielded or accommodated itself to the thrusts of culture contact; by their highly suggestible, imitative and impressionable dispositions; and perhaps by the unusual *incidence* of damage to their societies during the phase of contact." (Stanner 1933:383-4)

By the time Stanner made this report in 1933, the movement of all these people away from their traditional country was essentially complete, and Stanner does not comment on the *process* of this movement. Clearly this would not have happened overnight, and indeed the jostling, dealing and fighting that this territorial shift would have necessarily involved, can fairly readily be assumed to underly the "conflict, strain, distrust and fear" that Stanner describes. The 'inner' Daly people, i.e. the MalakMalak, Matngela, Marramaninjsji and Gamu, are likely to have prized their access to a source of tobacco, flour, tea, rum, clothes etc. and prevented, or at least exploited, attempts by the 'outer' groups, such as the Marrithiyel and Ngan'gikurunggurr, to get a toehold on the riverbank. Some evidence for this is found in the pejorative names, such as 'Moiil' and 'Brinken', used by the inner Daly people in reference to the 'myall blackfellas' from these outlying areas who had not learned to wear clothes or picked up any of the whiteman's language. This kind of process, i.e. those closest to new settlements blocking the access of more distant groups and then stigmatising them for their 'backwardness' and 'sorcery'⁸ seems to have been a component of the pattern of settlement in many parts of the country.

During this period of transition from homelands to the riverbank, the relative positions of the NgW and NgK were probably quite different. For the NgW would have had better access to the river through the narrow corridor of NgW country that reaches right up to the Daly River at Tyiliny (Chilling Creek), only a few miles upstream from the Crossing. In comparison the NgK were much more effectively blocked from access to the settled strip of river, and were probably among the last to make it their permanent camp.

These early years on the Daly riverbank were the most desperate period of their history. Stanner describes widespread fear of sorcery, the indiscriminate killing and rape of unprotected travellers, constant feuding and payback, and people ravaged by grog, opium, tuberculosis, influenza and the syphilis that rendered so many women infertile. The population had declined rapidly as a result of all these factors. The figure of 200 that Stanner gives as actually living on the settled area of the Daly, probably accounted for the majority of these people, as there is little evidence of other permanent settlements. There are no reliable pre-invasion population figures with which this can be compared, but to hazard a guess I would assume that NgW speakers numbered between 200 and 250, and NgK speakers between

⁸Stanner also notes that "most river tribes agree that the Brinken possess a great many sorcerers" (Stanner 1933:25).

150 and 200. This guess is based on two criteria; the superabundant nature of the countryside, and by multiplying the number of estate groups by the figure that present day Ngan'gityemerri speakers regard as normal estate group size⁹.

Tensions between the groups living along the riverbank seem to have subsided during the late thirties and forties. This appears to have resulted, not from improved social cohesion, but rather from further disintegration as the population was split between the farms, cattle stations and the army bases at Adelaide River. It was during these years too, that children of mixed-blood were removed from their camps and sent to Melville and Croker islands. Of the post-war years it can be said that no groups (except possibly the MalakMalaks) were residing on their own land, and that the majority of members of every language group (except possibly the NgK) were not even residing in the Daly river region at all, but were dispersed to the north and the east. This fragmented state continued until in 1952 Joe and Bill Parry, Harry Wilson and John Chapman lobbied Bishop O'Loughlin and the Native Affairs Branch in Darwin to provide educational and medical facilities. Thus began the Daly River Mission.

1.2.2 1955 onwards Daly River Mission

Founded in 1955 by Missionaries of the Sacred Heart (on what is probably Gamu country), the Daly River Mission became the focal community of most of those Aborigines still remaining along the river. Some continued to live and work on cattle stations, but most of the Marrithiyel, Marramaninjsji, Merranunggu, Ngan'gikurunggurr, Ngan'giwumirri, some Marringarr, and the occasional Wagiman, made this their home. Only the MalakMalaks remained apart, as they continue to do today, living around Woolianna.

Protected from outside exploitation, these were the safe years. Despite the continued solidarity of language groups, a sense of community began to emerge. The presence of the mission vastly improved the physical state of these people; however, traditional culture was further eroded. Mission policy was strongly directed towards two goals - the need to inculcate a work

⁹I am unprepared to commit myself to anything firmer than a guess here, because of two potential variables within the second criteria that I have employed. Firstly, as noted in 1.3.3, the number of estate groups presently recognised may possibly be less than were in existence pre-contact. Secondly, the population size that is presently considered by Ngan'gityemerri speakers to be 'normal' for an estate group (30-40), may also have changed over time.

ethic and a western view of stable family life, and the establishment of individual rather than collective responsibility.

"The tribal Aborigine has no real concept of work as we know it. He must, with his past, his attitudes, his inclinations, his total outlook, be educated to our notion of employment in the wage situation"

(Rev J Leary: Policy Statement, in Pye (nd :69))

"Employment should take the Aboriginal from his nomadic tribal hunting, nature dependent existence, to a modern, settled, economically based, individualistic, independent existence. From it must stem concept of home, family-life related to the home (as against the tribal concept), status in the community, responsibility (individual rather than tribal)"

(Rev J Leary: Policy Statement, in Pye (nd :69))

The mission discouraged the use of traditional language among children (see 1.4.1), attempted to stamp out most forms of ceremonial practice, and broke down patterns of social organisation, particularly by arranging marriages they deemed to be appropriate. Their active encouragement of traditional practices was essentially limited to the production of artefacts for sale.

"Apart from aspects such as 'Sunday Business' and the Pukamani¹⁰, there is much by way of native arts and crafts which is very fine, and should be retained and encouraged."

(Rev J Leary in Pye (nd :41))

For the twenty years from 1955 to 1975 the Daly River Mission was the home of almost all the NgK and NgW people. Here the NgK and Marrithiyel established themselves as the dominant groups, and even today NgK is regarded as the lingua franca of the mission. By the early sixties NgK people began to re-establish links with their land. They set up a dry-season camp at Merrim in NgK country and spent a few weeks of their holiday time there each year. They stepped up their efforts in the late sixties, and a small band of people, mostly elderly and also pre-school age children, had a semi-permanent camp at *fepi minati* (Peppimenarti). Their numbers were swelled by those employed on cattle stations, who visited them during off-season periods.

¹⁰Leary is referring to local mortuary ceremony. His use of the Tiwi term stems from his time spent on Bathurst and Melville islands.

By the early seventies when Aboriginal aspirations to leave settlements and establish permanent outstations on their own country, were beginning to gel and gain momentum across the Northern Territory, the NgK and NgW were ready to move. They had resolved to live in and protect their own country, and to determine their own mixture of economic enterprise and traditional cultural practice. An expression of this resolution by Harry Wilson appears in Pye (nd:35-7). I have taken the liberty of quoting excerpts of it below.

"It seems that everyone is telling us what we can do with our land. No one is asking us what we want to do with our land. We want our land and we want to live on it. It is our home as it was before the white man came. We did not spoil our land then, we will not spoil it now. First we want a good life on our land and to live that good life, we want to run our cattle station as a way of living....We are more interested in our way of life than making a lot of money and this is what we are trying to tell people, who seem more interested in just running a cattle station for a few people. We have lived away from our land for too long."

This decision was acknowledged by the mission in this way:

"What people like the Peppimenarti group are saying to us is like: We now accept the goals of socio-economic development you have been holding up before us, but, respectfully, we do not accept your programme. We want to leave the artificial mission centre which saved us and gave us our new vitality; we want to go back to our own country and do it our own way."

(1975 Mission Conference conclusion, in Pye (nd:37))

1.2.3 1975 onwards We are going home: Peppimenarti

NgK and NgW people struck out from the mission in 1975 and set up a permanent settlement at Peppimenarti. They run a cattle station, which was originally given a mustering lease over the Wildlife Reserve and all the Aboriginal land north of the Moyle river. Their hard work was met with government funding, and the community prospered. These were boom years and the employment ratio was very high. They snubbed their noses at unemployment benefits and were extremely proud to do so. In recent years, for many reasons, the high-riding Peppi people have been brought back to earth with a jolt. Once the initial injection of government funding had been reduced, it became impossible to continue expanding at the same pace. Competing leases reduced the area of land that they were entitled to muster, and consequently reduced the scope of the cattle industry. Reliance on unemployment benefits again became a fact of life. Morale was affected, but

the advantages provided by their isolation, of being in a position to control the extent of outside influence, and above all, of living on their own land, have enabled this community to survive.

In an account of his first visit to Peppimenarti in January 1976, John Pye (nd:40) noted that "almost all of the Daly River Moils¹¹ are out there". Some certainly stayed behind and today these two groups are split between the two communities. The majority made the move though. In the 1986 - 1988 period during which I lived at Peppimenarti, the population varied between about 150 and 250. About 65% of these were NgK, about 25% were NgW, and the remaining 10% a mixture of Marrithiyel, Marrisjebin, Marramaninjsji and Jaminjung. During this same period there were about 10 NgW and 40 NgK people at Daly River Mission.

1.3 Traditional life

1.3.1 The Country

The land to which the NgW and NgK belong is wonderfully diverse. The eastern and northern NgW estates of rak-Merren and rak-Lafuganying are situated in the Wingate mountains, and are characterised by deep lush gorges between arid sandstone mesas. Running westwards from the Wingates through the NgW estates of rak-Nudik, rak-Tyingirim, rak-
 α Nganambala, rak-Malfiyin and rak-Papngala, is a sandstone escarpment. Unlike the type of escarpment found around Oenpelli, which breaks off into the coastal plain in great buttress formations, this is a single line of cliff wall, up to a hundred metres in height, that splits the country into two distinct geographical zones. The top of the escarpment **ninymunggurr**, descending gradually southwards towards the Fitzmaurice, is dry and rocky, mostly spinifex and sparse trees stunted by lack of water. It cannot sustain permanent habitation, but was frequently used for east-west travel, particularly during the wet season when the low black soil plains were difficult to cross. The lip of the cliff wall is actually well watered, there being at least thirty permanent springs along a twenty kilometre section of it. Around each of these springs are small rings of thick vegetation, but the water falls straight back down the cliff in spectacular waterfalls.

In contrast to the top of the escarpment, the low level country holds its water and supports a rich diversity of flora and fauna. Flowing from pockets of rainforest along the base of the escarpment wall, through open forests of Eucalypts interspersed with pandanus and cycads, the Moyle river

¹¹Note though that Pye uses the term 'Moi' quite variously. He refers on the same page to the "Ngangikurrungur having similar customs to the Moi".

and its tributaries gently descend westwards into large flood plains of black clay soil before disappearing into the marshland of the vast muyil swamp that stretches from Peppimenarti thirtyfive kilometres to the sea.

The seven NgW estates that are represented by people presently living at Peppimenarti are roughly strung out in an east-west line, each consisting of both high escarpment and low plain country. The boundary of the easternmost state, rak-Lafuganying, runs the whole length of the Fish¹² river, from Kuluy (Collah Spring) northwards to its junction with the Daly river. The northern boundary, between the rak-Merren estate and Gamu/Matngela/Marramaninjsji country, roughly follows the Daly - Peppimenarti road (which in turn follows the old Daly - Port Keats walking track). The southern neighbours, around the Fitzmaurice river, were the Jaminjung, and on the western side the Marringarr. East to west then, NgW country extends just over one hundred kilometres, from the Fish river to the muyil swamp near Wudipuli.

As can be seen from Map 1 (p. xiii), NgK country is much smaller, bordered on the southern and eastern sides by NgW. The northern NgK estates of rak-Fepiminati and rak-NgambuNgambu respectively abut Marramaninjsji country and the Marrithiyel-speaking rak-Marri Dan estate group. The four other NgK estate groups to the south-west of these, NintyiNintyi, Merrepen, Nerintyi and Ngulfe, are located lower in the floodplains. I am told that during the worst of the wet season, rak Nerintyi and rak-Ngulfe people often had to abandon their own estate holdings to the rising floods and camp on the fringes of the rak-Merrepen and rak-Fepiminati estates.

1.3.2 Cultural affiliations

NgW people, particularly those in the eastern estate of Lafuganying, once had close ties with the Wagiman. This was told to me by NgW people, and Cook (1984:3-4) implies that the Wagiman make the same claim. These ties have effectively been disrupted since the turn of the century, as the NgW were drawn northwards to the Daly River Crossing and the Wagiman drifted, or were forcibly removed (Cook 1987:16), southwards to the Pine Creek region. Most elderly NgW, and some NgK, still claim to either speak or 'hear' the Wagiman language. The area around Kuluy has been claimed (Cook 1987:3) to have been 'shared' between these two groups. Cook

¹²Note that it is the Fish river that forms the eastern boundary of NgW country, not the Flora river as claimed by Tindale (1974). The country between the Fish and the Flora belongs, according to the NgW, to the Gamu (in the north) and the Wagiman (in the south).

(1987:4) also notes that both Wagiman and NgW are said to be buried in the cave graves at Bupa (Dead Man's Pocket).

The pre-invasion relationships between the NgW and NgK and their other surrounding neighbours are less readily distinguishable from modern ties, and hence less reconstructable. Genealogical evidence suggests that exogamy with virtually all neighbouring groups was the normal marriage pattern.

The NgW and NgK additionally have strong cultural and trade ties to the south, particularly along the *biyawul/bingarawal*¹³ trade route through Timber Creek, Kunanarra and further south towards Balgo. Indeed the influence from the south, not only in economic life, but also in the spheres of social organisation and ceremonial and ritual life, has been so strong that Stanner refers to it as "the cultural debt that Daly tribes owe to the south and south-west" (Stanner 1933:385). To some extent the NgW were a buffer between this southern influence and the other Daly language groups. The NgW seem to have readily embraced and adapted much of this influence, some of which, like the religious cult described by Stanner (1956:4), flowed through to the rest of the Daly, while others, like the 'Arandic' subsection system, went no further.

1.3.3 Social organisation

The NgK and NgW languages are associated with continuous blocs of land, and so conversely land affiliation can be (and is) identified by language affiliation. Speakers of NgK are a collection of the six estate groups; rak-Fepiminati, rak-NgambuNgambu, rak-Nerintyi, rak-Merrepén, rak-Ngulfe and rak-NintyiNintyi. Speakers of NgW are a collection of the seven¹⁴

¹³In reference to the trade route, the terms *biyawul* and *bingarawal* might be glossed as 'northerners' and 'southerners', respectively. The two groups designated by these terms may form some type of 'patri-moiety', though my understanding of the function of these groupings is very incomplete. This trade route comes up from Timber Creek to Peppimenarti, then forks eastwards to the Daly, and westwards to Nadirri and thence on to Belyuen. Among many other items (ochres, resin/wax, dillybags, pearl shells, armbands, bolts of fabric etc.) bamboo for spear shafts goes southwards, from *biyawul* to *bingarawal*, while boomerangs go northwards from *bingarawal* to *biyawul*. Still today the Peppimenarti men invest considerable time in fulfilling their trade obligations and anticipating the extent, and arranging the delivery, of their due. See also Stanner's comments on 'Merbok' (Stanner 1933:20).

¹⁴The estate numbers given here for NgK and NgW, six and seven, respectively, are those currently recognised. These figures may be conservative. I have recorded two other NgW names that appear to have been estate names; rak-Wulaya and rak-Kadinnyin. Biernoff (1982) also makes reference to a Ngan'giwumirri estate group by the name 'Moilyung', though I have never heard this term. Although estate boundaries, affiliations and names, have

estate groups; rak-Lafuganying, rak-Merren, rak-Nudik, rak-Tyin'girim, rak-Nganambala, rak-Malfiyin and rak-Papangala.

Estate membership is determined patrilineally, and is the main basis for claims to land¹⁵. Land ownership is generally articulated in terms of a collection of totemic sites. All estate members jointly own these sites and therefore all share the same patrilan totems. Stanner (1933:398) noted that the 'Nangiomeri' "once possessed a type of patrilineal totemism, but it is too late now to establish what precise form it took", and goes on to suggest that it was replaced by a new form of matrilineal subsectional totemism that was borrowed with the subsection system. My own observations do not concur with this. The NgW still have a system of patrilineal estate totemism, and there is presently no evidence of the new system Stanner described. This is not to suggest that Stanner was wrong. During the time of his fieldwork the NgW may have been 'toying' with a new southern import, that like the subsection system, gained only a precarious foothold, and then was subsequently passed over.

The NgW were the only Daly group to augment their basically Kariara kinship system with a version of the 'Arandic' subsection system (the NgK have flirted with the names but no-one could explain to me the workings of the system). They refer to this system as *finy* 'sweat', or as 'kin' when speaking Kriol (this is an adaptation of English 'skin', not 'kin'). Stanner (1933:401) implies that the NgW had only recently borrowed it from the south, at the time when he worked with them in 1932 (without being any more specific about the time or source¹⁶). The impression he gives, that

probably always been subject to change, the drastic depopulation of the last one hundred years has almost certainly escalated this phenomenon, leaving some estates unclaimed, through either the extinction of patriline, or switches in land affiliation. This has resulted in some cases, in the responsibility for certain estates being invested with other estate groups. For instance, Robert Daly, the 'boss' of rak-Malfiyin, is now additionally acknowledged to be the 'boss' of both rak-Nganambala and rak-Tyin'girim, which until recently were the estates of his father's half brothers.

¹⁵Other associations are recognised, particularly to ones *nganingetyi* (mother's country), and to a lesser extent to the country of ones mother's mother, and spouse. In a few cases these have become the primary cases for claims to land.

¹⁶McConvell (1985) argues in support of the claim that this subsection system is likely to have originated among the Nungali, or Jaminjung. Assuming this to be correct, the system appears to have diffused for vast distances to the west, south, east and north-east, but its diffusion to the Daly languages directly to the north would appear to have been resisted. The Ngan'giwumirri are the immediate northern neighbours of the Nungali and Jaminjung, but, if Stanner is correct, they only began to show interest in the subsection system early this century. McConvell's claim about the source of the subsection system is based primarily on the existence in Nungali of a productive noun class prefix system with masculine and feminine forms *ja-* and *na-*, respectively. Note that these forms also crop up in the Barkly Tableland

it was fashionable but essentially functionless (Stanner 1933:398-400), would appear to still hold true today, except that the fashionableness too has faded a bit. Pressure to reject the system basically stemmed from problems in meshing it with a Kariera kinship system.

"The Nangiomeri are trying to apply, and have most ingeniously done so, to a Kariera type of social organisation, a subsectional system elaborated by a much more complex society probably related to the Aranda type. That is, a systematisation of a kinship system of the Aranda type has spread to them without the system upon which it is based itself having been adopted." (Stanner 1933:398)

The subsection system was re-organised into two parallel cycles of matrilineal descent. The cycle is four generational, whereby a man's father's father and son's son fall into the same subsection, with a choice in marrying into either or both of two subsections. The ingenuity that Stanner referred to was the development of a mechanism to prevent a man marrying his own daughter's daughter, which was a potential development of the choice in subsection (Stanner 1933:398).

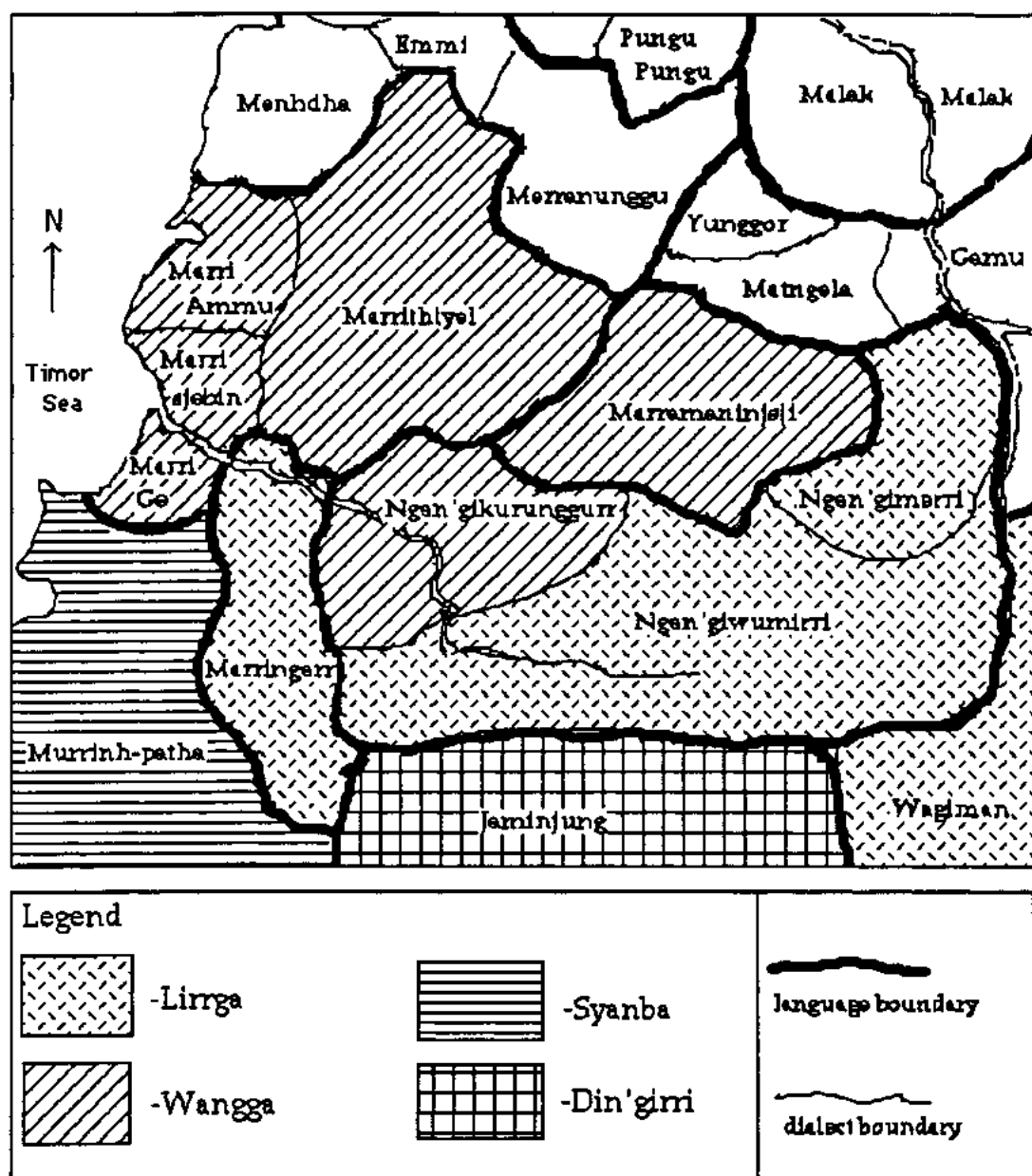
The *finy* system now only exists among the NgW community at Peppimenarti in a very precarious way. While many people, particularly the older ones, still claim to 'have finy', their reckoning of relationships is always carried out in terms of the kinship system.

1.3.4 Wangga and Lirrga

Music plays a central role in the cultural life of Ngan'giwumirri and Ngan'gikurunggurr people. The furtively sung *wudisyu* and *tyarrada* love song styles are now only performed by a few elderly women and men. However all ritual, ceremonial and festive events are accompanied by the performance of *wangga* or *lirrga*, and these dances are now taught as part of the curriculum in the Peppimenarti school.

languages, Jingulu, Binbinga, Wambaya and Gudanji (not as a synchronically productive noun class system, but as relics in the demonstrative paradigm of an earlier noun class prefix) (Chadwick 1984). This does not necessarily weaken McConvell's claim, as there is considerable evidence suggesting that the Barkly languages are the (distant) genetic relations of the Nungali/Jaminjung/Ngaliwurru group, and that proto Jaminjung-Barkly may have been spoken in the lower Fitzmaurice region before a northwards push by the Mutpurra drove Jingulu, Wambaya, Gudanji and Binbinga to the east (see Chadwick 1984).

Map 2
Songstyle Distribution in the Southern Daly Region



This map has been hand drawn with MacIntosh Superpaint graphics. While it is intended to represent language and dialect boundaries as accurately as possible, it is not drawn strictly to scale. The boundaries of Ngean'giwumirri, Ngean'gimerrri and Ngean'gikurunggurr countries are based on my own fieldwork. The northern half of the map is based primarily on Green (1989). The orthographies adopted for language names are as given in 1.1.

As can be seen from Map 2, speakers of NgW, Merringarr and Wajiman inherit the *lirrga* songstyle, while speakers of the Marri

languages¹⁷ and NgK inherit the **wangga** songstyle. Songstyles are inherited through patrilineal descent lines and all estate groups speaking the same 'language' variety share the same style. While songstyle inheritance can be determined by 'language' affiliation, the inheritance of different styles by the NgW and NgK shows that higher linguistic subgrouping is not a relevant factor.

The current status of **wangga** and **lirrga** varies widely. Full performance requires three types of skills; a singing man, a 'bamboo' man (didjeridu), and dancers. At present there is no performance of **wangga** by the NgK, Marrithiyel, and Marramaninjsji, and no performance of **lirrga** by the Wagiman, all of these groups lacking a singing man, a bamboo man, or both. Among the NgW there is at present only a single singing man and a single bamboo man. There are slightly greater numbers of **lirrga** performers among the Marringarr. It is only among the Marrisjebin at Nadirri that a strong band of **wangga** performers can be found. In 1988 they had at least three singing men, as many bamboo men, and numerous dancers.

Singing men have a repertoire of between about five and twenty songs. They build this repertoire in three ways. Firstly, they are taught songs by singers outside their own estate and given the right to sing them in the absence of their original owner. Songs acquired in this way are withdrawn from a singer's repertoire for a year or two upon the death of the original owner. Secondly, they inherit songs from their fathers. These are not subject to withdrawal on the fathers death, so a singer's repertoire can be seen to be the property of a patriclan, that is added to over successive generations. Thirdly, singers acquire their own songs. The creative source to which these songs are attributed varies from singer to singer. Some claim to just make them up themselves, others receive them in dreams from benign spirits. All the Marrisjebin singers receive their songs from what they call **walhakanda**, the little people of the swamp country. They claim a lifelong relationship with the particular **walhakanda** who brings songs to them, and can give details of his family, kin relationships etc.

Both **wangga** and **lirrga** songs employ mostly everyday language, and in this respect appear to differ from the Wongga (sung to the east around Baranga/Bamyili) which consists largely of nonsense vocables¹⁸ (Marret:

17My knowledge of songstyle distribution north of the Marrithiyel and east of the Marramaninjsji, is limited. Although not included in this map, I know that Wangga is also sung at Belyuen, so it is probably also inherited by the Wadjiginj. The Merranunggu may also inherit Wangga.

18The NgW singing man (Long Harry) has two vocable songs in his repertoire, but these were given to him by Jimmy Nott, a Burarra YagYag singer from Maningrida.

and the inheritors of that style, and its attendant responsibilities. As such, it is the favoured way of addressing a young man who was cut in the style inherited by the caller.

1.4 Ngan'gityemerri language today

1.4.1 The status of traditional Ngan'gityemerri and Kriol

Today Ngan'gityemerri is being largely abandoned in favour of Kriol. This switch can be dated fairly precisely. The disintegration and degeneration of traditional life that Stanner reported had long been active, by 1933, had led to drastic depopulation and the disarray of social organisation. Despite this background, the work of Stanner and Laves suggests that the use of traditional language up to the mid-1930's, remained fairly strong. Although the numbers of speakers of each language were far less, those remaining in the riverbank camps, on cattle stations, and clustered around the middle Daly farms, retained their first languages, and in addition to them learnt English from the European settlers.

If any date is really significant in the linguistic history of this area, it is 1955 - the establishment of the Daly River Mission. The mission had two significant impacts on traditional language usage. Firstly, it lumped together speakers of about eight different languages into a single community for the first time. Despite the high level of multilingualism that characterises this area, with speakers of so many different languages living in day to day contact, there would have been considerable pressure towards the development of some kind of communilect. The direction that this seems to have taken is that NgK has become the dominant traditional language of the mission, being spoken by most adults, in addition to, if not as, their first language.

Secondly, the mission staff actively discouraged the children in their care from speaking their languages, as part of a policy directed at the perceived need to educate the young generation in the absence of parental influence.

"The mission was to be primarily a boarding establishment for the young to be educated. At holiday time the children would return to their parents....Adults were not to be encouraged to live at the mission but to remain working at their present state of employment. They would be encouraged to seek employment outside the mission, and even given help to find such employment."

(Rev J Leary 'Daly River Policy' in Pye (nd:67-8))

The significance of the 1955 date is borne out in the marked difference in the fluency in traditional Ngan'gityemerri that is evident between the 'school generation' and those who never went to school. Almost everyone presently over the age of 40 years has full command of their first language, usually in addition to some variety of Aboriginal English. However amongst those people now aged about 40 years (i.e. those who were beginning school in 1956) and younger, there is a marked decrease in their traditional language fluency. Although the degree of fluency amongst this agegroup varies widely, very few have full command. Within this group women tend to have a much higher degree of fluency than do men. As has been noted elsewhere (e.g. for Kayardild in Evans (1985:28)), this is probably in part a reflection of the patterns of social affiliation whereby young men hang around in peer group gangs, while young women spend more time in the company of older women, particularly within the confines of the single women's camp.

This sub-40 generation has effectively lost both its traditional language and the Aboriginal English of their parents. Most sub-40's retain a good passive knowledge of standard Australian English (to which they have quite heavy exposure through school and, especially, television and video). However the commencement of English teaching in the mission school seems to have coincided with (if not actually triggered) a shift away from both traditional languages and Aboriginal/Standard English, towards the Kriol that is now the first and active language of all children living at Daly River Mission and Peppimenarti. The status of Kriol within these communities is recognised neither by the schools, which maintain an English-as-first-language approach to their curriculum, nor by its speakers who denigrate it as a 'rubbish language'.

1.4.2 DRM Communilect

Having noted the universal switch to Kriol as a first language in the sub-40 generation, let me add that there is a perceptible shift back to the re-acquisition of NgK that begins to show, mostly amongst young women in their early twenties. The language variety acquired by these women is referred to by them as 'Ngan'gikurunggurr'. I call it 'New Ngan'gikurunggurr' to reflect some minor differences that exist between it and the traditional NgK of their parents' generation. It has near standard NgK phonology, but both the apical (retroflex/voiced) and laminal fricatives have merged into an apico-alveolar [s], and the minor cluster /-rr + s-/ has reduced to a voiceless alveolar stop [t] (e.g. *ngirrsibem* → *ngitibem*). The lexicon of New Ngan'gikurunggurr is predominantly drawn from NgK and

NgW, but additionally includes a fair amount of Marrithiyel, e.g. *makali* 'MM' (cf. Ngan'gityemerri *kawu*).

One of the most characteristic features of this speech variety is the widespread use of the Marrithiyel nominal semblative postposition *gimin*, replacing the Ngan'gityemerri suffix *-gumu/-gimi(K)*. *Gimin* is used as a temporal clause subordinator in New Ngan'gikurunggurr²⁰, a function that it shares with NgK *-gimi*, but not with Marrithiyel *gimin* (Green: pers. comm.). In recent years I have begun to notice some of these features of New Ngan'gikurunggurr beginning to percolate upwards, creeping into the speech of some older women.

1.4.3 Language variety treated in this grammar

The language described in this grammar is the conservative Ngan'gityemerri spoken by people over the age of forty (most informants' names are listed in the acknowledgements). The language variety referred to in 1.4.2 as New-Ngan'gikurunggurr, is not treated in any detail here.

Throughout this grammar I treat the two dialects, Ngan'giwumirri and Ngan'gikurunggurr, as a single language. However rather than attempt to treat them equally, I have chosen to focus on NgW and refer specifically to NgK only where it differs from NgW in any significant way.

1.5 Fieldwork Methodology and Grammar Writing

1.5.1 Getting started

In 1981 I had just completed a Bachelor degree in linguistics, and found myself inspired by one of Bob Dixon's courses in Aboriginal linguistics to do some real fieldwork of my own. Wary of committing myself to a post-graduate course, I canvassed around the ANU linguistics department to find someone who I could accompany on their fieldtrip. This I felt would satisfy my curiosity, giving me a taste of fieldwork, and at the same time leave me in a position that I could back out of, if need be. Ian Green took me up on my enthusiastic but completely deceitful promises to cook, do the washing, and write up his paradigms and verb cards etc, and took me to the Daly on the first of his Ph.D fieldtrips. Ian was learning Marrithiyel from Bill Parry, so we ended up in Bill's camp on the west side of the Daly river. Three elderly women in Bill's camp (including his wife)

²⁰Several of the features of New Ngan'gikurunggurr that are mentioned here, including this function of *-gimin* (H&K 1988:219), can be found in Hoddinott and Kofod's grammar of Ngankikurunggurr. Their main informant is a 'school generation' New Ngan'gikurunggurr speaker.

were all speakers of NgK. It was Bill's casual suggestion that they teach me their language, that decided my topic of study. I was wildly excited, but having had no previous contact with Aborigines, I had everything to learn. The following year, 1982, I returned to ANU and wrote up the results of this initial trip as an Honours sub-thesis entitled 'The Basic Morphology of ngikurungurr'.

1.5.2 Fieldwork for this thesis

This doctoral study involved two fieldtrips, six months in 1986 and seven months in 1988. On both occasions I was based at Peppimenarti, but additionally spent considerable time in the communities of Wudi Gapil Diyerr and Nauiyu Nambiyu (Daly River Mission). I began with the intention that NgK would again be the main focus of my study, with perhaps some attention given to NgW for comparative purposes. However NgW proved to be so interesting, particularly with respect to auxiliary inflectional categories, that it quickly became my primary focus.

A contributing factor underlying the decision to work on NgW was my meeting up with Robert Daly. Having first questioned me about my work, he quietly appointed himself as my teacher, and quickly became my principal informant. Robert has an affinity for language matters. In addition to being a natural raconteur, he set me high standards of pronunciation and grammatical precision. My failure to meet these standards was met with a polite silence that was more crushing than had he ranted and raved. Taking his role very seriously, he was never vague in responding to my questions - if he needed time, he'd tell me to wait, then surprise me with an answer days or weeks later. Robert was no longer working²¹ and had a fair amount of free time, so we spent most of every day for 13 months in each other's company. Interspersed with the general chatter, chores and business of day-to-day camp life, much of this time was spent in semi-formal elicitation²² and recording and transcribing narratives. We also travelled

²¹Robert was probably born about 1934. I am sure he has a clear idea, but to my surprise is very shy about his age and will not tell me. Like most men in the area he has had a varied career, working on most of the cattle stations in the Daly/Fitzmaurice region, with bouts of fishing and croc-shooting in between.

²²There are two reasons why I do not fully agree with those who query the validity of elicited material and only rely on texts for grammar writing. Firstly, this language has such complex morphological paradigms (over thirteen hundred unique 'bound subject + auxiliary root' sequences), that one might not encounter the spontaneous occurrence of all forms in twenty years of text collecting. Secondly, Aborigines in the Daly region have not only a high degree of multilingualism, but concomitantly, are somewhat accustomed to the abstract discussion of aspects of language use. Much time is given to comparing how the same thing is said in

widely around most of the NgW estates, combining jobs like hunting and collecting ochres/firewood with some site-mapping, fulfilling Robert's custodial role in certain estates, and the odd bit of fishing. Patrick Tyabada frequently accompanied us on these trips, contributing his own stories and general hilarity. While the bulk of my NgW data comes from a small number of informants, I have regularly tested its acceptability within the wider community of NgW speakers (see acknowledgements).

Most of the Peppi community took an interest in my developing language skills, making an effort to avoid speaking English to me, and randomly testing my knowledge of words and expressions. My more spectacular errors (quite unrepeatable) featured regularly in community gossip. This level of interest, though occasionally embarrassing, greatly improved my conversational fluency in NgW.

From the start Ngan'gityemerri people have always been keen to have their language 'written down'. Although I have always been encouraged by this expression of support, initially I felt uneasy about what seemed to be two unstated inferences: that the language would somehow be saved by this process, and secondly that my thesis would constitute some sort of language resource that they could refer to like a dictionary. My explanations of what my thesis would and would not be, produced varied responses. Some people were plainly puzzled; if I was not producing a resource for native speakers, or drills for language learners, just who would use this book? Others were quick to point out my obligations to make available those products of my work that were of more immediate use, texts and wordlists particularly.

At Peppimenarti I was actively encouraged to work in the school, and together with Terry Sam began a school-based language program. Although we did develop and teach the orthography used here and commence wordlists for each child, the main focus of this program has always been on

different 'languages'. Within a single 'language', people listening to a narrative will, in whisper, query the acceptability of unusual auxiliary(+bodypart)+verbroot combinations, and derisively hoot at erroneous or implausible ones. Within this context, my discussions with informants about the acceptability of particular grammatical constructions, was not considered particularly odd by them. Of course the responses I got were subject to all sorts of variables, and where these were uncontrollable, I have avoided relying on this material at all, unless natural contexts could verify them. So while much of the description contained in this thesis is based on the grammar of narrative text, and most of the examples cited are taken from recorded texts, my understanding of such issues as bodypart incorporation and auxiliary semantics in particular, owes a significant debt to the process of solid formal elicitation.

fostering oral rather than written language skills. The school has been building a collection of video resources, with the assistance of the National Aboriginal Languages Program, that one day may be 'patched in' to local television transmission.

1.5.3 Approach to Grammar Writing

My approach to writing a grammar of Ngan'gityemerri falls fairly squarely within the traditions of what Wilkins (1989:58) has referred to as 'The ANU School of Australian Grammatical Description'. This tradition places a high priority on the use of descriptive practices that best reflect the linguistic system in question, and are sensitive to the cultural context of its usage. Grammars written within this tradition are highly eclectic in their use of linguistic theory, drawing on whatever grammatical tools best achieve these descriptive aims, without being overly concerned about, as Evans (1985:xii) puts it, "whether they all come from the same toolkit". Writers within this tradition employ, and acknowledge their use of, whatever theories best handle the particular aspect of the language they are describing. At the same time they are wary of 'fad' theoretical terminology, believing that a grammatical description written in the most straightforward language and containing a large number of natural language examples will best allow the reader to judge the accuracy and internal consistency of the description.

I began this description of Ngan'gityemerri with the intention of providing a full reference grammar of the language. I have been forced to reduce the scope of this work by the realisation that languages having such morphological density as this one does, cannot be adequately treated within the thesis wordlength limitations imposed by the university. This thesis cannot really be called a 'grammar', for it does not adequately cover some aspects of the language, and others not at all. I have given fairly detailed descriptions of the phonology and nominal and verbal morphology. As this is a language in which the verb is "where the action is", I have further chosen to explore two of the most interesting aspects of the verb; the incorporation of bodypart terms into the verbal complex, and the semantics of the auxiliary verbs.

1.6 Previous work on Ngan'gityemerri

Gerhardt Laves

Gerhardt Laves was the first linguist to work on Ngan'gityemerri. In 1931 he collected some 200 pages of vocabulary, auxiliary paradigms, grammatical notes and (largely untranscribed) texts, in Ngan'gimerri, the speech variety of the now extinct rak-Merren patri-line. Laves returned to

the USA later that year, and appears not to have published anything from his Australian data. His works, including detailed studies of Matngela, Karriyarri, Kumbaingir and Nyungar, remained in the basement of the library of the University of Chicago until 1985 when Mark Francillon brought them to the notice of the Australian Institute of Aboriginal and Torres Strait Islander Studies (then AIAS), who obtained copies in the following year.

Of all the previous work on Ngan'gityemerri, this is by far the most exciting, both for the quality of the analysis, and the diachronic evidence it provides for changes within the Ngan'gityemerri verb structure (see Reid, to appear). Laves had a good ear and a reasonable grasp of the phonology. He never really came to grips with the nature of the stop contrast, but had the presence of mind to keep his transcriptions phonetically oriented rather than risk phonemic under-differentiation. His segmentation of, particularly, the partially synthetic verbal morphology was quite perceptive even to the extent that he was able to distinguish between complex strings of morphology that happened to have the same surface form.

Laves' fieldnotes are the only previous work that has made any significant contribution to this thesis.

Arthur Capell

Capell collected some undated fieldnotes on what is probably Ngan'gimerri, but may be Ngan'giwumirri. These have never been published and delays in the organisation of Capell's literary estate have regrettably prevented me from seeing his work.

Darrell Tryon

As part of his survey of the 'Daly Family Languages', Tryon collected NgK and NgW data during six month fieldtrips in 1967 and 1969. This work was primarily aimed at a lexico-statistic classification of these languages, but Tryon also provided the first basic description of the phonology, nominal morphology, noun classification, verbal morphology and auxiliary classes. Tryon's work on NgK and NgW is presented in Tryon 1968, 1970 and 1974.

Bill Hoddinott and Frances Kofod

Hoddinott and Kofod collected a vast amount of data on primarily NgK, but also NgW, between 1967 and 1982. Hoddinott was preparing a grammar of NgK at the time of his death in late 1984. Kofod carried on with the project and a grammar entitled 'The Ngankikurungkurr Language (Daly River Area, Northern Territory)' (Pacific Linguistics, Series D, No. 77), was

published in 1988. My analysis of this language differs from their work in numerous ways (some minor, some major). It is not possible to provide a thorough critique of the Hoddinott and Kofod analysis within this thesis. Consequently, although I've made occasional reference to their work at appropriate places through the text (usually as footnotes), no attempt has been made to rigorously defend my analyses in view of their previous work. To indicate the nature of the difficulties with their analysis, a rather ad hoc selection of four points is given below.

- H&K do not acknowledge that the speech variety they describe is a mixture of the more traditional language of older speakers and the modern variety that I call New-Ngan'gikurunggurr (see 1.4.2.)

- H&K's phonology chapter is clearly a jumbled collation of competing draft analyses. Kofod acknowledges in the preface that she had the difficult task of producing a final draft from assorted earlier versions. However her claim to have done so is not borne out in the text. In the discussion of stop consonants, for example, successive paragraphs jump unannounced from a 'voice' analysis to a 'length' analysis. The claim (p 10) that "voiced and voiceless phonemes contrast initially and medially" is followed (p 11) by the observation that "stops are normally long in medial...position" (the latter claim suggestive of their being no contrast at all).

- Ngan'gityemerri is a head-marking language that obligatorily cross-references core arguments on the verb with bound pronominal affixes. The pattern of core argument crossreferencing is strictly nominative/accusative. Both S and A arguments are cross-referenced by a single set of prefixes to the auxiliary root. Arguments in O function are cross-referenced with another set of suffixes to the auxiliary root. H&K claim that Ngan'gikurunggurr is an ergative language (H&K 1988:205). They base their claim on the function of **-ninggi**, an enclitic which attaches to nouns filling instrumental and agentive roles. Having the primarily discourse function of clarifying agency, **-ninggi** is not an obligatory NP constituent, nor is it precluded from attaching to nouns that are the subjects of low-transitive verbs. To base a claim about ergativity solely on this discourse marker, and ignore the verbal cross-referencing that is the primary mechanism for encoding core participant roles in Ngan'gityemerri, is unsatisfactory.

- H&K's analysis of auxiliary-final nasals is particularly weak. Although they correctly hear nasal gemination across the boundary between the subject number marker and the auxiliary root (H&K p 40), their response to the same phenomenon at the auxiliary-final boundary is to write a morphophonemic rule that reduces underlying geminate nasals to single

nasals (H&K p 28). In fact the maintenance of the single/geminate nasal contrast in this position is crucial. The result of their rule would be to neutralise the primary distinction between realis and irrealis auxiliary categories. Additionally, H&K fail to hear the contrast between auxiliary-final -m (present) and -ny (perfective) in Ngan'giwumirri, listing them (H&K p 238-9) as simply variants. As a consequence of this they miss the important fact that Ngan'giwumirri auxiliaries have four tense/aspect/mood inflectional categories, with two of these (present and perfective) being formally neutralised in Ngan'gikurunggurr.

William Callan

William Callan deposited a manuscript at the AIAS (under heavy access restrictions) entitled 'A grammar of Ngankikurunguru'. This appears to have been collated at the request of the Daly River Mission and in some connection with the NT Arts and Heritage Museum (Callan may have been a teacher at the DRM school at the time). This manuscript contains no date, but quotes Tryon, so it was probably written in the early 1970's.

This is a highly amateurish piece of work based on a very meagre understanding of the phonology and morphology. At a total length of 44 pages, including auxiliary paradigm charts, it does little to fulfil the promise of its title. At best Callan had a poetic turn of phrase generally absent from contemporary grammars, as evidenced in this quote taken from his account of vowel allophony.

"perhaps the consonants are like the rocks on the riverbed
and the vowels are the water spilling through, sometimes
clear and at other times a blend of the sands and silts
upstream"

Robyn Reynolds

As a sister at the Daly River Mission, Robyn Reynolds spent a year (1979-80) developing an orthography and some basic literacy materials in NgK. She apparently was under pressure to complete this project within twelve months, and these materials suffer from being drawn up at a time when her understanding of the phonology and morphology was only just beginning to develop.

School of Australian Linguistics

Karen Courtenay and Barry Alpher collected a little NgK data whilst working at SAL (in the late 1970's ?), with the view to developing an orthography. I have not seen their fieldnotes.

1.7 Word Classes

In Ngan'gityemerri five major word classes can be identified through formal criteria, especially the capacity for certain word class members to bear particular inflectional morphology.

Nominals

nouns
adjectives/numerals
demonstratives
pronouns

Verbs

Adverbs

Particles

Interjections

The open class of nominals are generally identifiable through their ability to take the case inflectional enclitics examined in 6.1. The nominal sub-classes can be distinguished by restrictions on their ability to fill certain positions within the NP. While nouns can function as NP head, adjectives cannot. Within the NP, specific nouns may be preceded by generic nouns, and followed by adjectives, then numerals. Demonstratives and pronouns, when functioning as modifiers, tend to follow adjectives, though its rare to find more than two head modifying elements within a single NP in natural discourse. Ngan'gityemerri has just the single series of free form pronouns treated in 9.1. While sharing the inflectional possibilities of all nominals, pronouns behave like nouns in respect of their capacity to function as the head of an NP, and are like adjectives in respect of their possessive function (see 9.1.2). Demonstratives, like pronouns, can variously function as noun-like NP heads, or adjectivally as modifiers of NP heads. The adjectival function of demonstratives and pronouns is not morphologically distinguished from their head function, except in their ability to show head noun class concord. General adjectives can, in addition to modifying nouns, be used adverbially to modify verbs. Compare **nginifiny** 'true' in 1 and 2.

- 1 **ngan'gi nginifiny dim -tyerrakul**
 story true 3sgSit -talk
 SU Pres
 He's telling a true story.

- 2 **yirrigi -dada-nyine-pe nginifiny**
 2plSit dl-sing -FOC -Fut proper
 SU IrrSU
 You two sing it properly now !

Adjectives further differ from the other nominal subclasses in their capacity to form verb stems. Compare the adjectival and verb stem functions of **yubu** 'good' in 3 and 4.

- 3 **mudiga yubu werrmim-baty**
 car good 3plHands-hold
 SU Pres
 They have a good car.

- 4 **deminy -ngi-yubu**
 3sgHands-1sg-good
 SU Perf DO
 (The doctor) made me well.

Note that certain gender-unspecified nouns, like the life- stage/condition terms 'youth', 'cripple', 'orphan' etc, show borderline adjectival properties, in that they cannot function as an NP head in the absence of a gender prefix.

Ngan'gityemerri verbs primarily denote kinds of activity and process. The experience of emotion is thought of as undergoing a process, thus 'being happy or 'being sad' are expressed as transitive verbs in which the undergoer/experiencer is cross-referenced as object.

Verbs in Ngan'gityemerri can formally be identified by the obligatory presence of the auxiliary unit. Verbs can consist of just an auxiliary (simple verbs), or more commonly, of an auxiliary in combination with a verb stem (complex verbs). There are 31 auxiliaries in Ngan'gityemerri and approximately 170 verb roots (not counting adjectives). Ten of the 31 auxiliaries can stand as simple verbs. The few verb roots used in isolation of auxiliaries as imperatives (sit!, get up!,etc), are viewed here as interjections.

Adverbs are readily distinguishable from verbs in having no auxiliary, and from nominals in their inability to bear either noun class or case affixes/clitics. Aspectual adverbs like **wakay** 'completely' and **ferrp** 'continually', and temporal adverbs like **fal** 'all night' and **tyip** 'all day', always follow the verb, but the motional/positional adverbs **kak** 'in motion' and **peyi** 'in place' always precede the verb. Manner adverbs can be freely ordered either before or after the verb, as shown with **musyari** 'slow' in 5.

- 5 **ngaganim musyari** or **musyari ngaganim**
 1sgGo slowly
 SU Pres
 I'm going along slowly.

Note that in their preverbal positioning manner adverbs may be indistinguishable from qualitative adjectives. To example 1 above therefore, we can add another possible translation -'He's telling the story properly'.

Particles, treated in chapter 7, generally precede the particular construction over which they have operational scope. They are normally ineligible for any kind of nominal or verbal inflection, however clause initially the negative particle **minbe/minde(K)** frequently attracts such verbal enclitics as the temporal focus marker **-nyine/-kana(K)** and the past and future tense markers, **-tye** and **-pe/-ngini(K)**. 6 b) is therefore an acceptable equivalent of 6 a).

- | | |
|--|---|
| 6 a) minbe ngambani-nyine-pe
<i>Neg 1dlinc Go -FOC-Fut</i>
<i>SU Irr</i>
Let's not go then ! | b) minbe-nyine-pe ngambani
<i>Neg -FOC -Fut 1dlinc Go</i>
<i>SU Irr</i>
Let's not go then ! |
|--|---|

The small closed class of interjections, listed in 7.11, are independent sentential units that do not interact syntactically with any other word class forms.

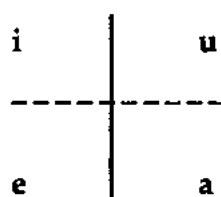
Chapter 2

Phonology

2.1 Segmental Phonology

2.1.1 Vowels

Ngan'gityemerri has four contrastive vowel phonemes, /i/, /e/, /a/, and /u/, divided by the parameters front/back and high/low¹.



Minimal pairs exemplifying these contrasts are set out in Table 1 below.

i	e	a	u
tyi-breastmilk tye - past tense	ebe-marchfly aba-younger brother	wa -paperbark wu-cloud	
adiny-leech adany-shark	wewe -vomit wuwu -dog		
yedi-man yedu-sweet			

Table 2-1

As might be expected of a four vowel system, Ngan'gityemerri's vocalic phonemes allow a range of latitude in their phonetic realisation. However this range is certainly not as great as it could be, in that much of

¹Many of the Daly languages differ from, for instance the Kunwinjku languages, in having /a/ as a phonological back rather than front/central vowel. Tryon (1970) and Birk (1976) give /a/ as a back vowel for Merranunggu and MalakMalak, for example, although Green (1989:15) demonstrates that Marrithiyel /a/ has a significant fronted allophone (see also the footnote on p31).

the 'vowel space', in the sense of Ladefoged(1975:67), remains unexploited. For instance although unstressed vowels tend to be slightly centralised, there are no truly central allophones, all normal phonetic realisation being in the periphery of vowel space. The main opposition found is between sets of tense and lax allophones, conditioned by word position.

/i/ → [i] The tense, more extreme allophone occurs word finally and preceding the laminal semivowel only.

2-1	miyi	-	plant food	[miji]
	aliyi (K)	-	fat, marrow	[ali:]
	aniyen	-	sandfrog	[ani:]
	detyeri	-	ear	[de:]

→ [ɪ] Elsewhere, including preceding the laminal stop, nasal and fricative, we find the lax allophone [ɪ].

2-2	piwari	-	name	[piwari]
	pipiri	-	brain	[pi:]
	animbirmire	-	firefly	[animbirmire]
	piwulil	-	vine	[piwulil]
	ngityirr	-	ground	[ŋi:]
	adiny	-	leech	[adi:]

/u/ → [u] The tense allophone occurs only word-finally;

2-3	nendu	-	horse	[nendu]
	afu	-	whipsnake	[afu]

however where word-final-syllables are reduplicated, the penultimate vowel retains the tense quality.

2-4	awululu	-	pigeon sp.	[awululu]
	dem-bubu	-	-He fetches water	[dembubu]

→ [ʊ] Medially /u/ is realised as the lax allophone [ʊ].

2-4	kuru	-	water	[kʊ]
	muk	-	sore	[mʊk]
	angugutu	-	maggot	[aŋʊgʊtu]

→ [ɔ] Occasionally as free variants of the above allophones, /u/ is realized, with lower tongue configuration, as [ɔ]. This has only been observed

in a small number of words where /u/ is either word-final, or precedes syllable-final r.

2-5	yubu	-	good	[jɔbu~ jɔbɔ]
	yu	-	yes	[ju:~ jɔ:]
	wur-	-	Fem. cl. mkr.	[wɔɹ ~ wɔɹ]

/u/ does not occur word-initially.

/a/ → [ʌ] Word finally (and therefore usually unstressed)
/a/ tends to be weakened to the half open,
central/back ~ mid/low vowel [ʌ].

2-6	walalma	-	hunting	[walalmʌ]
	palada	-	syphilis	[paladʌ]

→ [ɑ] Initially and medially /a/ is an open low back
vowel [ɑ];

2-7	agadirr	-	green ant	[avadir]
	abafa	-	witchety grub	[abaɸʌ]
	adarri	-	liver	[adɑri]

except when it precedes laminal consonants. This
is discussed in 2.1.2.

/e/ → [æ] In certain environments /e/ can be realised
as the lower front vowel [æ]².

2-8	eke	-	uncle	[ækæ]
	wewe	-	vomit	[wæwæ]
	ebe	-	marchfly	[æbæ]
	pendela	-	placename	[pændelʌ]

As a free variant, the occurrence of [æ] cannot be
satisfactorily accounted for in terms of any acoustic
or articulatory conditioning factors. However, as
2-8 demonstrates, note that its occurrence is
frequently associated with the presence in its

²Although [æ] is clearly an allophone of /e/ in Ngan'gityemerri, its phonemic status in other Daly languages is more problematic. In Marrithiyel (Green 1989:15) [æ] is given as an allophone of both front-mid /e/ and open-unrounded /a/. Note though that these same realisations of phonemic /e/ and /a/ in Marrithiyel are environmentally distinguishable and therefore do not represent neutralisation of the contrast between /e/ and /a/.

immediate environment of peripheral consonants.

The majority of examples of this front vowel lowering result from the partial operation of the Vowel Harmony rule (see 2.4.4). When the 'animal' class-marker *a-* prefixes a nominal root of which V_1 is /e/, this rule operates to harmonise /a/ with /e/. In many instances /a/ is fronted to [æ], but fails to be fully raised to the target articulation of [ɛ].

2-9	a-werrmisya	-saltwater crocodile [æwermɪʃɬ]
	a-perperɾ	-Burdekin duck [æperper]

→ [ɛ] Elsewhere /e/ is consistently realised as [ɛ].

2-10	engete	- forest kingfisher [ɛnɛtɛ]
	egeningge	- magpie goose [ɛgenɪŋge]
	merrepen	- Sand palm [mɛrɛpen]

From these observations on vocalic realisation, it is apparent that the conditioned allophony of /e/ is quite different to that of the other three vowel phonemes. /i/, /u/ and /a/ all have as their major allophones a pair of tense and lax realisations, which are essentially conditioned by the feature '± word-final'. In contrast, the only allophonic variant of /e/ appears to be triggered by the rather obscure condition that it be stressed and in the immediate environment of a peripheral non-nasal consonant.

2.1.2 Diphthongs

Of the four Ngan'gityemerri vowels, *e*, *a* and *u* are subject to diphthongisation in certain environments. The environment that triggers this process varies for each vowel, and none of the resultant diphthongs are phonemic. The following discussion of diphthongs as conditioned allophones rightly belongs then, in the previous section 2.1.1. They are treated separately here purely for clarity.

As is common in Australian languages, phonetic diphthongisation primarily affects back vowels. In Ngan'gityemerri these three vowels can be ranked in terms of the frequency of, and the number of environments in which, they diphthongise, in the order *a>u>e*. The low front vowel is only minimally diphthongised, and in only a single narrowly defined environment. The high front vowel is not audibly subject to

diphthongisation at all. As all diphthongisation is triggered by articulatory preparation for laminal tongue configuration in the following consonant, this ranking accords with our expectations, in the sense that it is ordered inversely to the qualities of tongue height and frontedness that are associated with the quality 'laminal'.

In Ngan'gityemerri we find the diphthongs [ai] and [oi] occurring word-finally. Patterning these diphthongs with the behaviour of back vowels occurring before the laminal consonants *ty*, *sy* and *ny*, we analyse them as sequences of /a+y/ and /u+y/ respectively.

/a/ → [ai] -before any syllable-final laminal.

2-11	abatymirri	blackduck	[abaɪcmɪɾi]
	adany	shark	[aɪdaɪɾ]
	wakay	finished!	[wakaɪ]

-intramorphemically before syllable-initial *sy* and *y*.

2-12	wasyan	body hair	[waɪʃan]
	Fayi	girl's name	[faɪji]

-intermorphemically before *y*.

2-13	a-yipiri	bullant	[aɪjɪpɪɾi]
	a-yiwusye	dragonfly	[aɪjɪwɔʃɛ]
	a-yinnimbi	hornet	[aɪjɪnimbi]

but not before *ty*, *sy* or *ny*.

2-14	a-tyambuli	grasshopper	[aɪtɪambɔli]
	a-syi	vagina	[aɪsi]
	a-nyirri	scorpion	[aɪɲɪɾi]

/u/ → [oi] - before any syllable-final laminal;

2-15	yemi-wuty	pour it out!	[jɛmɪwoɪɔ]
	mawuny	ironwood	[maɪwoɪɾ]
	damuy	eye	[daɪmoɪ]

but never before a syllable-initial laminal.

2-16	futyeny	blood	[fɔɪɛɲɪ]
	awuyi	possum	[aɪwoɪji]

/e/ → [eɪ] - before syllable-initial y only.

2-17	efeyi	goanna sp.	[ɛɸeɪji]
	meyeninggi	a hand's worth	[meɪjenɪŋgi]
	peyi	in place	[peɪji]

Nominal classmarking and vowel harmony patterns both have implications for the occurrence of diphthongs. As real appreciation of this requires some understanding of classmarking and vowel harmony, discussion of these implications is deferred to 2.4.4.

In conclusion then we note that all diphthongs in Ngan'gityemerri are allophones of the vowel phonemes, conditioned by following laminal consonants. This conditioning laminal is more likely to be syllable-final rather than syllable-initial, and more likely to be the semivowel y than the stop ty, fricative sy, or nasal ny.

The domains of the four vowel phonemes, their allophones and conditioned diphthongs, are demonstrated in Figure 2-1 below.

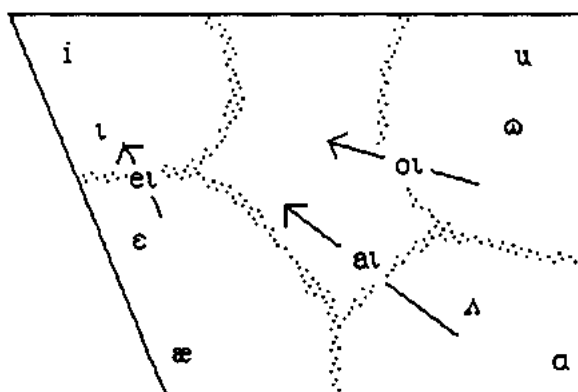


Figure 2-1

2.1.3 Consonants

Ngan'gityemerri has the 19 consonant phonemes set out in Table 2-2 below.

articulator manner	Bilabial	Apical	Laminal	Dorsal
Stop	p b	t d	ty	k
Fricative	f	s	sy	g
Nasal	m	n	ny	ng
Lateral		l		
Flap/Trill		rr		
Continuant		r		
Glide	w		y	

Table 2-2

Sections 2.1.3.2 - 2.1.3.5 below look at the phonetic realisations of these consonant phonemes. First though, I comment on articulatory types.

2.1.3.1 Prominence of Active Articulators

In the descriptions of many Australian languages 'place of articulation' is typically viewed as a significant criterion in the analysis of consonant phonemes. This term puts implicit and, for Ngan'gityemerri, inappropriate focus on the passive articulator. In both Ngan'gikurunggurr and Ngan'giwumirri, which make no contrastive distinction between alveolar and retroflex, or (inter)dental and palatal, there is nothing to be gained by making an analysis in terms of passive articulators. In preference we have four types of 'active articulation', one involving both lips - 'bilabial', and three involving types of tongue configuration - 'apical', 'laminal' and 'dorsal'.

This type of system that focusses on tongue configuration, allows for a wide range of mouth-roof space within which the tongue can make its contact (or approximation). The contact point of apical phonemes thus ranges from alveolar to postalveolar, and that of laminal phonemes ranges from interdental to palatal. It is only at the allophonic level that we need invoke the criterion of 'place of articulation'. Elsewhere throughout this work reference to phoneme types is made only in terms of active articulators.

2.1.3.2 Realisation of Obstruent Phonemes

/p/ - The bilabial stop [p^h] is always voiceless, aspirated and long with no variation in closure type.

/b/ - The bilabial stop [b] is always voiced and unaspirated, and is consistently shorter than the voiceless stop. However it exploits durational difference to a far lesser degree than is found for other articulator types (see 2.2.2). /b/ shows less fluctuation in closure type than do the other voiced stops, being always fully stopped.

/f/ - is a bilabial fricative [ɸ], lightly spread and with a small degree of lip tension. Observation of speakers' lip movement shows this sound to be truly bilabial, in that the teeth are not visible and the upper and lower lips are aligned and make even contact. However this sound has some of the turbulent quality (auditory correlate of energy higher in the spectrum) that is normally associated with labiodental articulation. The presence of this turbulence suggests that the lip spread and tension pulls the top lip sufficiently tightly against the upper teeth that they act as joint articulators in opposing the bottom lip. Even if the upper teeth do not actually come into contact with the lower lip, they at least approach it closely enough to generate wake turbulence. Among the younger speakers of Ngan'gityemerri, (who have been exposed to a considerable amount of Standard English through their schooling and, more recently, through television), this fricative is usually realised as a true labiodental [f].

As has been noted for all other Australian languages that have both a stop contrast and fricatives, the contrast does not extend to the fricatives (Dixon 1980:215). /f/ is always voiceless initially, and varies between voiced and voiceless when intervocalic or post-liquid. /f/ only occurs post-nasally across a morpheme boundary in which environment it remains voiceless.

2-18	funggulu (NgW)	- sugarbag	[ɸɔŋgɔlu]
	fepi	- rock, hill	[ɸepi]
	fenggu	- long	[ɸenggu]

eferri	- bluetongue lizard	[eɸeri] ~ [eβeri]
afatarr	- royal spoonbill	[aɸatar] ~ [aβatar]
mulfang	- sharp	[mɔlɸaŋ] ~ [mɔlβaŋ]
ngulfin	- slope	[ŋɔlɸin] ~ [ŋɔlβin]
werrfe	- over there	[werɸe] ~ [werβe]

This tendency towards voicing assimilation (assuming [ɸ] to be the unmarked allophone), is much stronger in Ngan'giwumirri than it is in Ngan'gikurunggurr. A text count of word medial /f/ indicates about 80% are voiced in Ngan'giwumirri, compared with only about 15% in Ngan'gikurunggurr. Although this variation in the degree of glottal pulsing through the approximation duration of medial /f/ is biased differently in each dialect, it is still 'free' variation in the sense that it is non-contrastive within the phonological system of each dialect³.

Finally, a very minor allophone, a voiceless bilabial fricative with labiodorsal secondary articulation [ɸ^w], has been recorded as a free variant of word initial [ɸ] in a single word only.

2-19 fa (K) - beeswax [ɸa] ~ [ɸ^wa]

³We can further observe a type of 'fixed' variation, whereby certain cognate lexemes are invariably realised with voiceless /f/ in Ngan'gikurunggurr, and voiced /f/ in Ngan'giwumirri.

NgK	NgW	
[aɸui]	[aβidi]	- beetle (gen.)
[eɸekumi]	[eβengumi]	- bandicoot
[baɸon]	[baβon]	- ash, dust

These lexemes (and certain others) seem to be employed as language identificatory markers; that is, the minor phonetic differences between them are strictly and invariably maintained as evidence of the separate identities of the two groups, usually at other levels (eg. political). In discussion of these words, speakers will carefully point out that "we say it this way, but that other mob say it this way". So despite the non-contrastive nature of the feature ±voice among fricatives within the phonological systems of each of these languages, the same feature is employed cross-dialectally, within a subset of the lexicon at least, to flag linguistic identification. How, within the scope of the general lexicon, certain lexemes come to be employed in this manner remains a question for further study. Note though that these kinds of examples nicely illustrate Labov's observation that there is really no such thing as free variation, if social and stylistic variables are considered to constitute part of the conditioning environment.

We can partially account for the occurrence of this minor allophone by noting that this word is already marked as phonotactically odd, being one of only a handful of monosyllables, and one of only two beginning with /f/.

The labiodorsal variant is unlikely to be the reduced form of an underlying disyllabic lexeme /fuwa/, because such a word would be equally phonotactically odd, as the labial semivowel is otherwise unattested between these vowels. And there are no other examples of [ɸ^wɑ] to suggest that all such underlying segments may have undergone reduction of this sort.

- /t/ - is a long voiceless aspirated apical stop [t^h] with no variation in closure type.
- /d/ - is a short voiced apical stop. Both /t/ and /d/, but particularly /d/, exploit a fairly wide range of mouth-roof contact points, from alveolar [d] to post-alveolar [ɖ]. The degree of retroflexion found in apical stops is sensitive to the environment. I perceive initial and intervocalic /d/ to be more retroflex than post-nasal /d/, and /d/ after back vowels to be more retroflex than /d/ after front vowels. Intervocalic /d/ can be very short, especially in unstressed syllables, and in this environment is frequently reduced to an alveolar approximant [ɹ]. This realisation of /d/ can be consistently distinguished from the post-alveolar continuant /r/ (also given below as [ɹ] ⁴) by its shorter duration and lack of retroflexion.
- /s/ - is a voiced retroflex fricative. This sound is described by Capell as a "retroflex rhotic with fricated release"(quoted in H&K 1988:16), and by Hoddinott and Kofod as a "retroflex fricative with rhotic release"(H&K 1988:16). Neither of these descriptions are particularly accurate in articulatory terms, if for no other reason than that neither fricatives nor rhotics have 'release'. I do agree with both authors though, that auditorily there is a definite r-colouring to the realisation of this phoneme. This in itself presents a descriptive problem as the

⁴Note that IPA (1989 update) provides no satisfactory mechanism for differentiating between alveolar and post-alveolar approximants.

feature '± rhoticisation' is normally thought of as an auditory quality of vowels rather than obstruents, acoustically measurable as a marked lowering of the frequency of the third formant (Ladefoged 1975:204). The acoustic correlates of the auditorily perceived r-colouring of this fricative phoneme have yet to be determined, so for this present study the presence of rhoticisation remains an auditorily-based observation only. In the absence of any phonetic conventions for attributing rhotic qualities to consonants, I transcribe this sound as [ɹɪ], using the IPA convention of the following continuant [ɹ] (a convention intended for use with vowels). Note that I use this notation as a digraph representing a single sound, i.e. that the [ɹ] follows the [ɪ] should not be taken to suggest that the rhotic quality represents just a transitional off-glide phase.

I rhoticise this sound by curling my tongue tip in a 'retroflex' fashion, then increasing the concavity in the upper surface of the tongue. I am also aware of slight tongue root retraction. The articulatory correlates of rhoticisation (and retroflexion for that matter) are a complex issue, as a variety of tongue configurational patterns seem to produce similar acoustic effects (Ladefoged 1975:71). While the rhoticisation of the fricative that I achieve in this way is quite acceptable to native speakers, I cannot claim that I do it the same way as native speakers, or indeed that all native speakers achieve this quality similarly.

Rhoticised obstruents are uncommon in Australian languages, reported outside the Daly area only by Busby (1979:25) for Yandruwandha and Evans (1985) for Kayardild (in Green 1989:18). However they have been noted in the phonological systems of several of the southern and western Daly languages, namely Marrithiyel (Green 1989:18), Merranunggu (Tryon: 1970:10) and Marrisyebin (Tryon 1974:95).

/s/ has an extremely low functional load in Ngan'gityemerri, appearing in my data in only a dozen lexemes. It cannot appear word initially, and in this restriction it contrasts with the other fricatives. All recorded instances of /s/ are intervocalic, either morpheme initial or morpheme internal. Morpheme initially it contrasts with /d/, /t/, /ty/ and /sy/;

2-20	a-si-minmin	-bat sp.
	a-dityibi	-bandicoot
	a-syi	-vagina
	a-ti	-cod
	a-tyindirrity	-shortnecked turtle

but morpheme internally it occasionally appears as a variant of the apical tap /rr/.

2-21 **madiwirri** -play [madɪwɪri]~[madɪwɪɹɪ i]

In the 'stand' auxiliary [ɹɪ] occurs anomalously where underlyingly two flap segments are ordered contiguously. Compare the singular and plural forms of the verb 'to be standing' in 2-22 below.

2-22 **ngi-rribem - tyalak** -I'm standing up
1sg Stand -upright
SU Pres

→ -rr- 'plural subject number' insertion gives underlying
 {ngi-rr-ribem-tyalak}
1sg -pl Stand -upright
SU SU Pres

→ **ngirr-sibem -tyalak** -We (pl ex) are standing up
1plex-Stand -upright
SU Pres

This example raises the possibility that this fricative has developed diachronically from a cluster of flaps, ie /rr/ + /rr/. Its restricted word position potential and low functional load are additionally suggestive of fairly recent development. However within the contemporary phonemic system we need to accord /s/ phonemic status to account for its contrastive use in such examples as **asiminmin** in 2-20 above.

/ty/- is a laminal stop; voiceless aspirated [c^h] in word initial position and intervocally, and short and voiced [j] postnasally. For those articulator types having a contrast between two series of stops, the post-nasal environment is 'neutralised'. For the laminals however, in the absence of a contrastive voiced laminal phoneme, we would specify [j] as a post-nasally conditioned allophone of /ty/.

2-23	wuntyerr	canegrass	[wɔŋjer]
	tyentyirri	turtle bubbles	[cæŋɾri]
	adentyi	death adder	[ɔdɛŋji]

The only other environment where voiced laminal stops are found is in a small set of borrowed male subsection names.

2-24	Tyulama ⁵	[ɬolama]
	Tyanama	[ɬanama]
	Tyangari	[ɬaŋari]
	Tyabada	[ɬabada]
	Tyangala	[ɬaŋala]
	Tyimity	[ɬimic]
	Tyalyerri	[ɬaɬjeri]
	Tyabityin	[ɬabityin]

The fact that this initial occurrence is restricted to eight borrowed words is insufficient to motivate any attempt to account for voiced laminal stops within the allophonic rules, let alone accord them phonemic status.

Like the apical series /ty/ displays wide variation in its range of passive articulator. Most frequently it is palatal [c], though contact can be made at any point forward of there to a fully interdental [t̪] (or [d̪] postnasally). Text transcriptions suggest that dental realisation of /ty/ is most frequent when it is both word-medial and morpheme-initial;

2-25	a-ngan-tyamu	[aŋaŋcamu]~[aŋaŋtamu]
	bush turkey	
	da-tyamu	[dacamu]~[daɬtamu]
	cheek	
	a-tyambuli(K)	[acambɔli]~[aɬambɔli]
	grasshopper	

though, as 2-25 shows, it remains in free variation with [c].

In this position it occurs within a wide range of phonetic environments - stressed and unstressed, postnasally, framed by all four vowels, etc. It seems then that this dental as opposed to

⁵As these word initial voiced laminals are restricted to a finite set of well known terms, it has been decided not to introduce a new symbol to represent them in the practical orthography.

laminal articulation of /ty/ cannot be satisfactorily described in terms of either environmental or articulatory conditioning⁶. Finally, we note a dialectal difference in the treatment of word and morpheme final /ty/. In Ngan'gikurunggurr word- and morpheme-final /ty/ is released, but in Ngan'giwumirri it remains unreleased.

- 2-26 a) **ngerim - baty** (K) [ŋɛɲmbatɕ]
1sg Hands- hold (W) [ŋɛɲmbatɕ̚]
SU Pres
I hold it
- b) **winni - batybity -tye** (K) [winɲbatɕbɪtɕɛ]
3plSit -hold hold-Past (W) [winɲbatɕ̚bɪtɕ̚ɛ]
SU Imp =sew
They were sewing

/sy/ - is a laminal fricative. It has none of the rounded labial secondary articulation that is found in English [ʃ,ʒ]. Initially and intervocalically this phone varies freely between voiceless [ɕ] and voiced [ʒ]. While we can observe a definite preference for initial /sy/ to be voiceless and intervocalic /sy/ to be voiced, these are not firm realisation rules. Like /f/, /sy/ only occurs postnasally across morpheme boundaries where it is always voiced.

- 2-27 **syunggun** - grey hair [ɕoŋŋoŋ] - [ʒoŋŋoŋ]
asyarra - willywagtail [aɕaɾa] - [aʒaɾa]
ngupun-syurr - I plucked it [ŋoɔɔŋzɔɾ]

Word initially, /sy/ is sometimes heard to be prestopped, ie. its realisation is the voiceless laminal affricate [ɕɕ]. So to the two variant realisations given in the first example of 2-27 above, we can add a third;

- 2-28 **syunggun** - [ɕɕoŋŋoŋ]

Note that this allophone [ɕɕ] formally differs from the stop /ty/ only in the speed with which the tongue is withdrawn from the mouth roof, (a contrast that is very difficult for the

⁶Furthermore, a single lexeme *atya/ ngatya*(K) - 'father', is universally realised with [t], without [c] ever appearing as a free variant.

native English speaker to hear). In normal (non-citation) utterances the release of /ty/ in word initial position is often indistinct, and can be indistinguishable from the affricate allophone of /sy/. This potential partial phonemic overlap can only be disambiguated by testing for acceptance of the other free variants of /sy/. Thus, in the examples in 2-29 below, we can determine that the initial phoneme is /sy/ by the acceptance of the free variant allophones [ç] and [ʒ]. Likewise in the examples in 2-30 below, we can determine that the phoneme is /ty/ only by the non-acceptance of these variants.

2-29	syirre	behind	[cçure]– [çure]– [zure]
	syiri	weapon	[cçuri] – [çuri] – [zuri]
	syewe	sea	[cçewe]–[çewe]–[zewe]
2-30	tyulut	hook spear	[colot]– [cçolot] * [çolot / zolot]
	tyagani	what ?	[cagani]–[cçagani] * [çagani / zagani]
	tyi	breast	[ci]– [cçi] * [ç / zi]

/k/ - is a long voiceless aspirated dorsal stop [k^h] with no variation in closure type.

/g/ - is a dorsal obstruent with both stop and fricative allophones. Previous studies of this language have tended to treat /g/ as a stop, though in section 2.2, in an investigation of the stop contrast mechanism, I provide reasons for analysing /g/ as a phonological fricative. /g/ is predominantly realised as [ɣ] in intervocalic and post-liquid environments, and as [g] postnasally. Fully stopped [g] has been recorded intervocalically only very rarely. In word-initial position /g/ is always realised as a fricative, freely varying in glottal activity between voiceless [x] and voiced [ɣ].

The following minimal and sub-minimal pairs illustrate the phonemic contrasts between the obstruents discussed in 2.1.3.2.

Bilabial	pi	head
	bi	thigh
	fi	twine
Apical	ati	cod sp.
	adi	spouse (address term)
	asiminmin	bat sp.

tyung	wet	danguri	penis
tyuny (K)	woomera	damurri	testicles

2.1.3.4 Realisation of Liquid Phonemes

- /l/** - is an apical lateral aproximant [l] which has 'darkened' velarised articulation when syllable final. Like /n/ its realisation is increasingly post-alveolar in the environment of back vowels and when preconsonantal.
- /r/** - is an apical rhotic. Intervocally it is realised as the flap/tap [ɾ], word finally and preconsonantally it is the trill [r]. Voicing of the trill is usually dependant on the voicing of the following phone. Preceding voiced obstruents and nasals it is always voiced, but preceding voiceless obstruents the trill is usually devoiced. Word final [r] takes its voicing from the following phone in fast speech, but utterance finally or in careful speech it is usually devoiced.

2-35	firri	-	dream	[ɸiri]
	ngurp	-	emu	[ŋɔɾp]
	yerrden	-	coolibah	[jɛɾden]
	yewirr	-	tree	[jewɾ]-[jewɪɾ]

- /ɹ/** - is the post-alveolar approximant [ɹ]. It has no other significant allophones.

Minimal and sub-minimal pairs exemplifying liquid phoneme contrasts are given in 2-36.

2-36	firri	dream
	fili	roll along (verb root)
	piri	pus

2.1.3.5 Realisation of Semivowel Phonemes

- /w/** - is the labiodorsal semivowel [w].
- /y/** - is the laminal semivowel [j].

The semivowels are minimally paired in 2-37.

2-37	wani-pe	He'll go.
	yani-pe	You'll go.

2.2 The Stop Contrast⁷ in Ngan'gityemerri

2.2.1 Introduction

Although a rare phenomenon among Australian languages as a whole, a fair number of Northern Territory languages have been described as having a contrast between stops at some places of articulation and in some word-positions. NT languages for which a stop contrast has been recorded are summarised in Cook (1987:28-40) and Austin (1988) as including Djinang (Waters 1980), Gupapuyngu (Lowe), Dhuwal (Heath 1980b), Ritharrngu (Heath 1980a), Ngandi (Heath 1978), Djapu (Morphy 1983), Ngalakan (Merlan 1983), Kunwinjku (Carroll 1976), Rembarrnga (McKay 1975), Wagiman (Cook 1987), Murrinh-patha (Walsh 1976), Ngan'gikurunggurr (Tryon 1974) and Warumungu (Simpson & Heath 1982)⁸. Additionally, two stop series have been reported for Burarra (Glasgow 1967), Ndjebbana (McKay 1979), Nاکarra (Eather 1990), Gurrugoni (Green, R. in preparation), Jawony (Jaeger 1983) and Marrithiyel (Green, I. 1989).

The distribution and functional load of stop contrasts varies widely within these languages. For instance among the Yolngu and Kunwinjkuan languages, the distribution of the stop contrast is generally limited to medial position following sonorants. In all other environments the contrast is neutralised. In Murrinh-patha, Ngan'gityemerri and, to a lesser extent, Marrithiyel, the contrast is additionally found word-initially.

The nature of the stop contrasts in these languages have been variously described as voiced/voiceless, fortis/lenis, short/long, tense/lax, single/geminate etc. Some phonological analyses of these contrasts, including prosodic, geminate and segmental, are summarised in Cook (1987:38-48). Though briefly summarised below, interested readers are referred to Cook for a fuller description.

⁷The manner in which a contrast between two series of stops is maintained in Ngan'gityemerri poses some unusual problems. Confusion over the issue of how the dorsal obstruents fitted into what otherwise seemed to be a straightforward VOT contrast prompted me to leave a full phonology chapter out of my honours thesis on Ngan'gikurunggurr. In writing up this chapter, I have been fortunate in having the opportunity to discuss my methodology and results with Andy Butcher. His input has significantly fashioned and improved my approach to this issue. Some minor discrepancies between his data and mine are discussed at appropriate places in the text. I gratefully acknowledge his contribution and duly note that any errors are mine, not his.

⁸Cook and Austin include Mangarrayi in their lists, but Merlan in the source they cite states that "Mangarrayi differs from some neighbouring Arnhem Land languages (Ngalakan, Ngandi) in that there is no significant fortis-lenis stop contrast" (Merlan 1982:178).

The **prosodic analysis** suggests that different stop types represent different underlying syllable types, one containing a glottal stop, and the other without. The phonetic glottal stop is a prosodic feature of the syllable, and is thus always syllable final. Fortis syllables contain an underlying syllable final glottal stop, to which the following stop assimilates and so also becomes fortis. Lenis syllables contain no glottal stop, and the following stop is thus lenis. The apparent fortis/lenis opposition results from the emergence of fortis stops in an environment originally restricted to lenis stops.

This analysis has some neat advantages for Yolngu (Walker 1984). It accounts for the distributional restriction of the contrast to the intercontinuant position, accounts for restrictions on certain types of consonant clusters, and also ties the distribution of the apparently separate feature 'glottal stop' into the same analysis as the stop contrast. It also requires only a single series of stops in the phonemic inventory, although as Cook points out, this is no real economic gain as the contrast still has to be marked on the syllables, and marking the syllables is really no more economical than marking the consonants themselves.

The **geminate analysis**, (based on McKay's description of Rembarrnga (1975)), assumes that every voiceless intercontinuant stop is actually an underlying homorganic voiced stop + stop cluster. From this cluster two rules are required to produce a simple voiceless stop: 1) a degemination rule, and 2) a subsequent devoicing rule. Like the prosodic analysis, the geminate analysis requires only a single series of stops in the phonemic inventory, the apparent contrast between stops on the surface resulting only from the application of the degemination and devoicing rules.

McKay's main evidence for this analysis is that both degemination and devoicing are observable phenomena across morpheme boundaries. McKay takes the devoicing and degemination of stop clusters that occurs across morpheme boundaries and, analogously, extends them to morpheme medial position.

The geminate analysis also explains the restriction of the apparent contrast to intervocalic and word medial position. By setting up clusters as the basis for the distinction, the resulting contrast is represented as reflecting phonotactic constraints that operate elsewhere in the language; ie. the stop contrast, like consonant clusters, is not permitted word initially and word finally; and the postnasal neutralisation of the contrast reflects the general constraint on clusters of nasal + stop + stop.

Merlan (1983:9) argues against McKay's extension of intermorphemic degemination and devoicing phenomena to the analysis of

morpheme-medial position clusters on the grounds that it has unjustified implications for medial consonant cluster distribution. Similar arguments make a geminate analysis untenable for Ngan'gityemerri stops. The main complications are firstly, that word-initial homorganic stop clusters would be allowable, but no other clusters are permitted in this position. Secondly, contrastive gemination of both voiced and voiceless stops, resulting from the application of the apical assimilation rule, operates as an independent phenomenon (see 2.2.2.2).

Segmental analyses define a phonemic distinction on the basis of articulatory differences. A distinction between two phonetically different types of stop is directly reflected by phonemic symbols, making the segmental analysis less abstract than either the prosodic or geminate analyses.

While segmental analyses vary widely, they tend to fall into one of two categories: languages for which 'voice onset time' is a consistent perceptual cue for the distinction of the contrast, and languages for which it is not. In the Australian literature 'fortis/lenis' has been widely used as a cover term for these latter type of languages. Descriptions falling into this category broadly seek to find some other phonetic property that will serve as a basis for the contrast. In some of the literature this property is given as 'fortis/lenis' or 'force of articulation', but without much attention being given to the actual phonetic data.

Jaeger, in her paper based on data from Zapotec and Jawony (Jaeger 1983), examines the phonetic factors involved in producing the distinction in these two languages, and seeks to find out whether "these phonetic properties are indeed a result of some unified and independently controlled phonetic dimension for which 'force of articulation' is the correct explanation" (loc. cit.). She concluded that for both of these languages it is 'duration', or the timing of the gestures involved in speech production, that is the independently controlled variable. As the only way in which any extra 'force' is required to sustain a gesture for a longer period of time, is in the circular sense that the overall energy expended by a muscle will be more if it fires for a longer period of time, she concludes that 'duration' is a phonetically more explanatory term than some vaguely defined notion of 'force of articulation'.

2.2.2 The Ngan'gityemerri Data

2.2.2.1 Single Stops

Phonologically the stop contrast in Ngan'gityemerri differs from the type of contrast found in Kunwinjku, Burarran and Yolngu languages in

two important ways. Firstly, the contrast is active in word-initial position. Secondly, the contrast between two series of stops needs to be viewed within the wider frame of a three-way obstruent contrast (for bilabials and apicals). For the bilabials and apicals the distinction between stop and fricative is unproblematic, however this is not so clear when it comes to the dorsal series. This section deals with the stops at all places of articulation in Ngan'gityemerri, with particular focus on the phonetic parameters underlying the dorsal contrast, and their implications for the phonological analysis of /g/ as either a stop or a fricative.

Looking briefly at previous work on the Ngan'gikurunggurr stop contrast, Tryon's (1974:230-1) account is puzzling in that he tentatively suggests that there is no phonemic contrast between voiced and voiceless stops, yet accounts for the existence of minimal pairs by suggesting that intervocalic voiceless stops should be interpreted as geminate. The inference seems to be that there is a phonemic contrast but it is maintained phonetically in terms of duration rather than VOT. However Tryon then goes on to note that Hoddinott believes that there "may exist a phonemic contrast"(opp. cit.). His bracketed inclusion of a voiced stop series in the phonemic inventory gives /g/ as a stop.

Hoddinott & Kofod (1988:10-14) recognise the existence of a contrast in Ngan'gikurunggurr, but provide an even more confusing analysis. Beginning with the claim that "Stops are normally long in medial...position", they go on to describe a contrast in terms of 'voicing'. Medially they find voiceless /k/ phonetically [k], contrasting with /g/, phonetically [g] ~ [x] ~ [ɣ]. Initially they find /k/, phonetically [k], contrasting with /g/, phonetically [k] ~ [g] ~ [x], (i.e. initial [k] violates the bi-uniqueness requirement of classical phonemics in being equally attributable to either /k/ or /g/). They additionally claim the initial occurrence of [ɣ] but do not attribute it to any phoneme (H&K 1988:13). H&K note the possible analysis of the dorsal contrast as one of stop vs fricative, but reject this possibility, again confusingly, citing "the widespread occurrence of the stop allophone...has led to a decision to describe the contrast as between /k/ and /g/ for the purposes (sic) of this study even though the most common realisation of /g/ in initial position is wither (sic) [k] or [x]" (H&K loc. cit.).

In short, accounts of the (particularly dorsal) stop contrast in previous investigations of Ngan'gityemerri are confused, lacking phonetic and acoustic data, and are clearly inadequate. My own auditorily-based impressions are that while VOT appears to be a consistent perceptual cue for the distinction of the labial and apical stops, this does not appear to hold

true for the dorsal stops. While /k/ is always long and voiceless, the obstruent /g/ is rarely made with full closure. Medially /g/ is predominantly realised as the voiced fricative [ɣ], very rarely as a fully stopped [g]. Initially /g/ is always a fricative, varying freely between voiced [ɣ] and voiceless [x].

To test this auditorily-based impression, I have made measurements of the primary acoustic features, 'voice onset time' and 'duration'. (Note that for the purposes of this study I treat /g/ simply as a second dorsal obstruent, without referring to it as either a stop or a fricative. Given the variation in the realisation of /g/, its allocation to either of these manner classes is a phonological decision that will be addressed later.) A sample of words spoken in isolation by an adult Ngan'giwumirri⁹ male was recorded on high quality tape on a Uher Report Monitor 4200 in a quiet room. Wide-band spectrograms were produced on a Voiceprint Lab. series 7000 spectrograph. Spectrograms were analysed for stricture type, i.e. to see whether they were made with full closure or just approximation of the articulators. Initial stops were measured for voice onset times and initial fricatives for duration. Initial voiced stops were measured from the onset of glottal vibration, as perceivable by the first prerelease striations on the baseline of the spectrograph, to the point of release. Initial voiceless stops were measured from the release spike to the first signs of energy at the formant frequencies. Initial fricatives were measured from the onset of energy higher in the spectrum to the commencement of vowel formant bars.

⁹For this study I chose to collect data on Ngan'giwumirri rather than Ngan'gikurunggurr for two reasons. The first, simply practical, was that I was working with an extremely good NgW informant at the time. Secondly, having previously made similar recordings and measurements with NgK data, this represented an opportunity to draw a comparison between the two dialects. Broadly speaking the acoustic characteristics of obstruent realisation in NgK and NgW are quite similar. The major difference evident in my data lies in the continuation of glottal pulsing through the approximation duration of medial /f/. Recall that, like all other Australian languages having fricatives, in Ngan'gityemerri there is only a single series of fricatives. In both dialects initial /f/ is usually voiceless [ɸ]. Medially there is free variation between predominantly voiceless [ɸ] and predominantly voiced [β]. The higher statistical occurrence of the predominantly voiced allophone in NgW can be seen in Table 3 where medial /f/ is characterised by glottal activity for 76% of approximation duration. In comparison NgK medial /f/ is characterised by glottal activity for 45% of approximation duration. (These figures are a mean percentage, calculated by measuring glottal pulsing as a percentage of approximation duration for all tokens of medial /f/-both predominantly voiced and predominantly voiceless.) This significant difference in glottal activity in the realisation of /f/, is a contributing factor in the perception by Ngan'gityemerri speakers of NgW being a 'heavier/rougher language'.

The mean stop VOT and fricative durations of initial obstruents in Ngan'giwumirri are given in Figure 2-2.

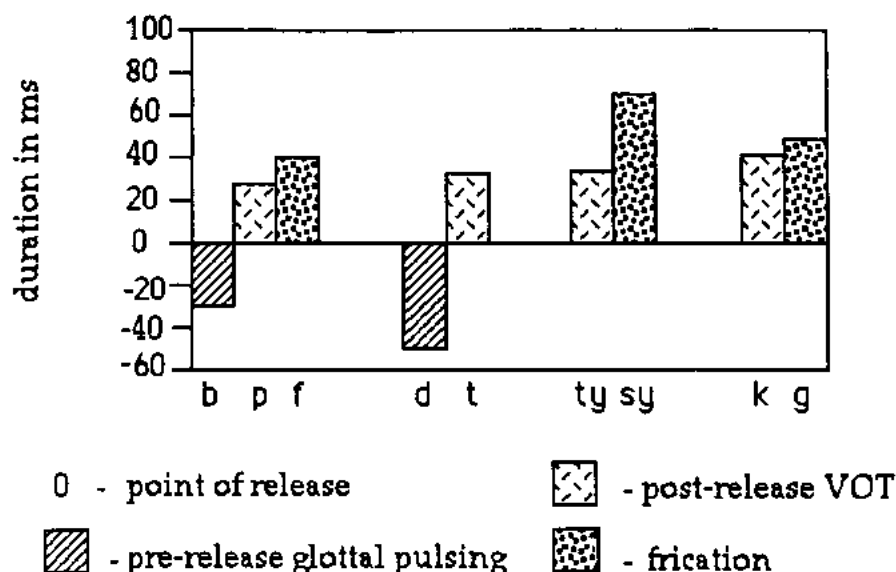


Figure 2-2

Medial obstruents were measured for constriction duration. Duration of medial stops was measured from where energy at formant frequencies is cut off, up to the point of release. Some tokens of medial /d/ were realised without full closure as a flap or approximant of some kind, with vowel formants clearly visible throughout the constriction phase (see *adamuy* in spectrogram 1.). In these instances duration measurements were made from the lower transition points of F1. Duration of medial fricatives was measured from the cessation of formant bars (in the few tokens of voiceless medial /g/), and from the transition of formant bars (in the tokens of voiced medial /g/). The mean constriction durations of medial obstruents in Ngan'giwumirri are given in Figure 2-3.

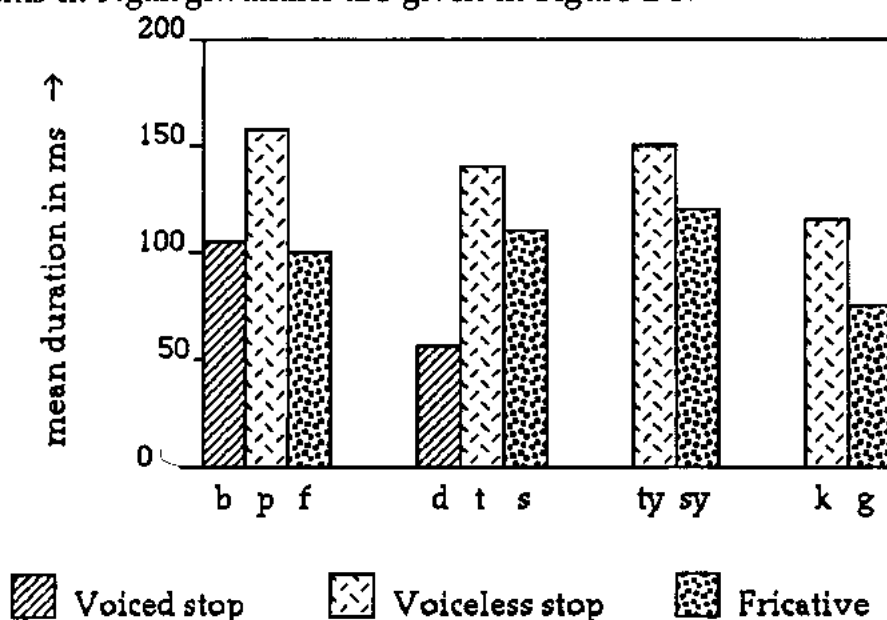


Figure 2-3

Measurements were also made of glottal activity throughout the duration of medial obstruent constriction. Figure 2-4 below gives the mean duration of glottal pulsing as a percentage of the mean duration of medial obstruent constriction phase (calculated from the figures given in Figure 2-3).

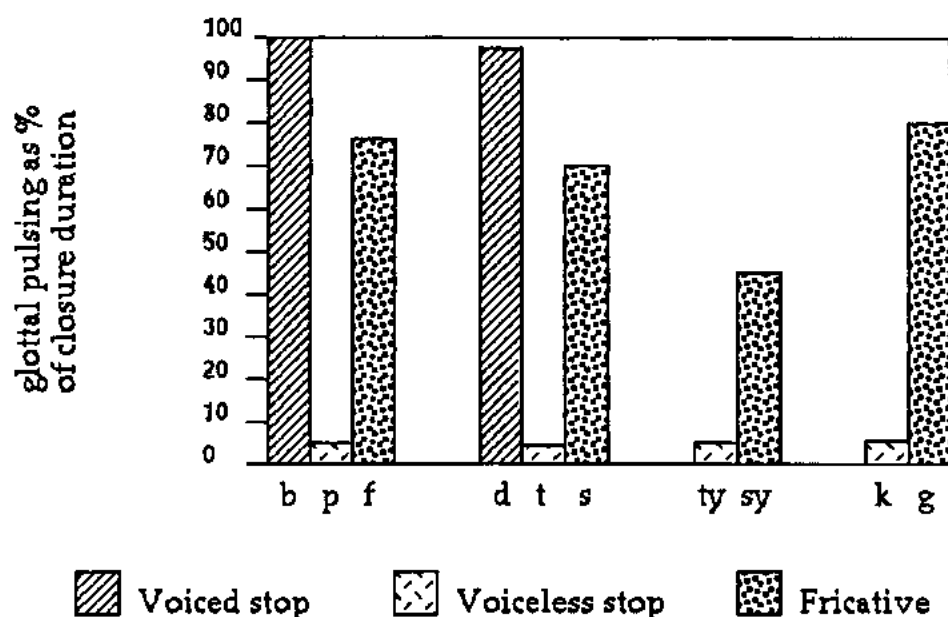


Figure 2-4

It can be seen from Figure 2-4 that for medial obstruents the mean constriction duration ratio for both /b/ (105ms) and /p/ (160ms), and /g/ (75ms) and /k/ (115ms), is close to 1:1.5. For the apical stops (/d/ - 55ms and /t/ - 140ms) this ratio is much greater¹⁰ at 1:2.5. Setting aside the apicals for

¹⁰Butcher (1990:23) notes the greater constriction duration ratio of apical /t/ and /d/ in my measurements, and suggests that this may result from a higher frequency of flapped realisations of /d/ in my data. I agree - these flapped tokens of /d/ (see adamuy spectrogram 1, p 61) have probably lowered the mean duration value given for /d/ in Table 2, and should at least partially account for the significant difference between the mean durations of medial /d/ (55ms) and /b/ (105ms). This is the only real discrepancy between Butcher's measurements and mine, though my measurements for all obstruents except /t/ are generally between 5%-10% less than Butcher's measurements. Given that I have essentially employed the same measurement criteria as he, both these factors (the higher incidence of flapped /d/ and the overall shorter duration values for most obstruents) probably reflect differences in our data bases. Although we both collected citation forms from the same speaker (Robert Daly), recordings were made on different occasions, and Robert may have simply varied his delivery speed between these sessions, for a variety of reasons. However despite minor differences between our respective duration values for Ngan'giwumirri obstruents, note that Butcher's study and my own generally concur in terms of both the duration ratios for stops at the one place of articulation, and also in the significance of the timing of glottal gestures in the maintenance of the contrast.

the time being and looking at the bilabials and dorsals, note that the ratio of 1:1.5 is far less than the ratio of short to long stops reported by Butcher (1990:6) in those languages for which he concludes that closure duration is the only consistent cue to the stop contrast. Among such languages treated in his study, (including Burarra, Gurrogoni, Kunbarlang, Nakkara, Rembarrnga, Jawony, Djinang, Djininy, and possibly Marrithiyel), Butcher (1990:43), reports that "The single consistent characteristic of the mechanism is that long stops are two to three times as long as short stops" (op. cit.). There are few other comparative studies that point towards a particular duration ratio value being a critical minimal requirement for the maintenance of a contrast between long and short stops. Lisker and Abramson note that languages with apparent VOT contrasts generally have a duration ratio of about 1:1.5, and that languages analysed as having a short/long contrast generally have a duration ratio of between 1:2 and 1:3. The 1:1.5 ratio found here for Ngan'giwumirri medial bilabial and dorsal stops certainly does not exploit the constriction duration time scale as efficiently as has been reported for the Burarran and western Yolngu languages and for Marrithiyel (Butcher, op. cit.).

On the other hand, Figure 2-4 shows that in medial position /p/, /t/, /ty/ and /k/ are all characterised by the early cessation of glottal pulsing (average 4% of constriction duration), probably achieved by active abduction of the glottis. In clear contrast, /b/, /d/ and /g/¹¹ are characterised by continued glottal pulsing throughout the greater part of constriction duration (average 94%). (Compare the tokens of medial /k/ (spectrogram 2), medial /g/ (spectrogram 3), medial /p/ (spectrogram 4), and medial /b/ (spectrogram 5)).

In initial position there is a clearly discernible difference between the voice onset time of the voiced and voiceless bilabial and apical stops. There is no range of values common to both series. The range, as measured from the release spike, is about -60 to -30 m/sec for the voiced stops, and +20 to +60 m/sec for the voiceless. Average figures, as given in Figure 2-2, are /b/ -35ms, /p/ +35ms, /d/ -50ms and /t/ +30ms. The 'poles' of the contrast here clearly exploit the VOT continuum maximally, in the sense that the contrast is always one of *lead* versus *lag* ¹². Taking the bilabials as an example,

¹¹In my spectrograms of words with medial /g/ there is only a single token of [g] with full stop closure. While this instance of /g/ as a stop does not fit my classification in Table 3 of /g/ as a fricative, it does not effect the 'glottal pulsing as a percentage of constriction duration' value that this Table demonstrates.

¹²This contrasts with the findings of Lisker and Abramson's (1964) study of VOT in initial stops (in Dutch, Tamil, Cantonese, Puerto Rican Spanish and English). They posit three VOT

Figure 2-5 below demonstrates how /p/ and /b/ fall into modal values in respect to their frequency of distribution. Baseline figures are in milliseconds.

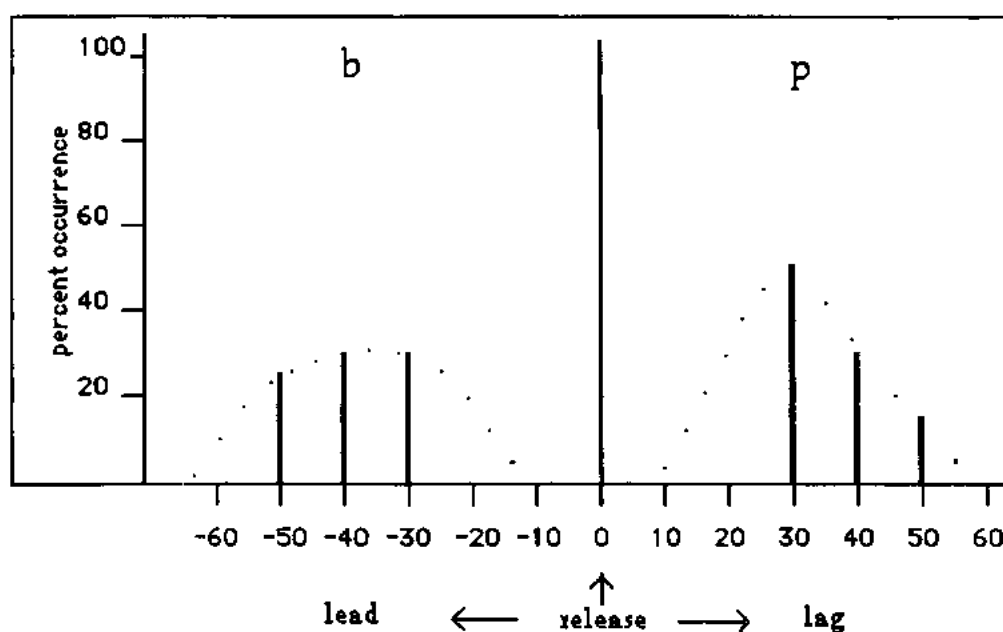


Figure 2-5

Initial /k/ is uniformly voiceless and has an even longer VOT than either /p/ or /t/¹³. Initial /g/ is always realised as a fricative and varies freely in the activity of the glottis. Most tokens of initial /g/ are

modal values for the stop categories in these languages, -100ms, +10ms and +75ms. They found that in no language which had a contrast between two sets of stops, were the locations of the two sets of stops at opposite ends of the voice onset time scale. That is, the contrast was always lead(-100) vs small lag(+10), or small lag(+10) vs big lag(+75), never lead(-100) vs big lag(+75). Lisker and Abramson additionally found that three-stop-category languages, like Armenian and Thai, also had these categories distributed over ranges centering on -100, +10 and +75 ms. Noting that the variation in boundaries between categories along the VOT continuum is far from random, they speak of "three general phonetic types from which the categories of a particular language are selected", and suggest that VOT may be a "predictable consequence of differences in the relative timing of events at the glottis and at the place of oral occlusion"(1967:402). The VOT mechanism in Ngan'giwumirri clearly differs from the languages they studied in having clear lead(-40) vs lag(+35) modal values for initial bilabial and apical stops. Note though that the Ngan'giwumirri lead and lag values are mid-range, i.e. the lead value (-40) is a little less than half that reported by Lisker and Abramson (-100), and the NgW lag value (+35) lies between their small (+10) and big (+75) lag values. In this respect the NgW data accords with their observation that "in the phonetic realisation of phonemic contrasts human beings fall considerably short of utilising all the phonetic space available to them (1964:407).

¹³This is, of course, is not unexpected; VOT is generally sensitive to place of articulation and it has been observed by Lisker and Abramson (1964:399) that velars have notably longer VOT initially.

characterised by the absence of voice bars on the baseline of the spectrogram until the onset of vocal energy at the formant frequencies (ie [x]). However in some tokens voice bars co-occur with the higher frequency noise pattern of the fricative (ie [ɣ]). Clearly though, glottal pulsing is not a consistent perceptual cue in the contrast between initial /k/ and /g/. The only relevant parameter in the contrast between initial dorsal obstruents would appear to be stricture type, i.e. fricative vs stop. Recall that stricture type also differentiates most instances of medial /k/ and /g/, though medial /g/ is occasionally realised with full closure.

In acoustic terms, initial dorsal fricatives are characterised by a wider spread of higher spectrum energy with highest concentrations of this energy at formant frequencies, and a mean constriction duration of 50ms (see spectrogram 6). The initial dorsal stop /k/, on the other hand, is characterised by a clearer release spike, a lower concentration of energy burst, and a mean VOT lag duration of 40ms (see spectrogram 7).

2.2.2.2 Gemimates

Intra-morphemically there is no systematic contrast in Ngan'gityemerri between single and geminate stops. Geminate nasals and stops do occur across morpheme boundaries, mostly, in the case of nasals, at the auxiliary-final boundary, as in 2-38, and in the case of voiceless stops, as a result of reduplicative processes, as in 2-39. In this position they contrast with single nasals and stops.

2-38	a)	ngemengge-ne <i>1sgArrive -3sgM</i> <i>SU Irr IO</i> I'll come up to him.	b)	ngemenggen¹⁴-ne <i>1sgArrive -3sgM</i> <i>SU Perf IO</i> I came up to him.
2-39	a)	ngagadi-pap -tye <i>1sgGo -climb-Past</i> <i>SU PImp</i> I climbed up.	b)	ngagadi-pappup-tye <i>1sgGo -climb -Past</i> <i>SU PImp redup</i> I was climbing up and up.

The voiceless geminate stops, /pp/, /tt/, /tyty/ and /kk/, are realised by significantly longer closure duration (- sample token 190ms for /pp/). In

¹⁴H&K not only fail to perceive the contrast between geminate and single consonants in the case of auxiliary-final nasals, but specifically claim that "If the initial consonant of the following morpheme in the verb phrase is a nasal, the final nasal of the auxiliary is deleted e.g. ngupun-ne-fili → ngupu-ne-fili " (H&K 1988:28)

addition to the voiceless stops, the voiced apical stop /d/ is geminated as a result of the apical assimilation rule (see Morphophonemic processes 2.4.2) applying to the underlying -rr+d- cluster formed at the boundary between the plural subject marker -rr- and auxiliaryroot-initial -d-. The contrast in resultant surface forms is shown in 2-40.

2-40	a)	ngudeny	-fel	b)	nguddeny	-fel
		<i>1sgShoveDtr-bounce</i>			<i>1plexShoveDtr-bounce</i>	
		<i>SU Perf</i>			<i>SU Perf</i>	
		I jumped.			We (plex) jumped.	

Geminate /dd/ is also realised by significantly longer closure duration; compare a sample token (see spectrograph 8) at 100ms with the mean duration value of 55ms given for single medial /d/ in Figure 2-3. While geminate /dd/ has a duration value approaching that of single /t/, as can be seen from spectrogram 8, it is however clearly distinguishable from /t/ in having glottal pulsing continuing throughout the full 100ms of closure. Glottal pulsing for such a duration after full oral closure could only be achieved by active enlargement of the supraglottal cavity. Ohala (1983:197) distinguishes 'passive' enlargement of the vocal tract (resulting from the natural compliance of the walls of the oral cavity), from 'active' enlargement (achieved through lowering the larynx, the mandible, etc.). From a neat test to determine how long glottal pulsing could last if only passive enlargement of the oral cavity took place, Ohala provides these figures; [b] - 82ms, [d] - 64ms, [g] - 52ms. In view of his results, the 100ms of glottal pulsing through the full closure of a geminate /dd/ (as in spectrogram 8), would almost certainly require active enlargement of the oral cavity to delay equalisation of the oral and sub-glottal air pressures. Furthermore, the same assumption can be extended to /b/, which shows full glottal pulsing through a mean closure duration of 105ms (see Figure 2-3). My own observations of the production of geminate /dd/ by Ngan'gityemerri speakers suggests that this is achieved primarily through the lowering of the larynx.

In Ngan'giwumirri then, phonemic geminates can be distinguished separately from the mechanisms that underly the contrast between single voiced and voiceless stops. In addition, the fact that maintenance of glottal pulsing through the long closure duration of geminate /dd/ requires active supraglottal cavity enlargement, is strongly suggestive of the critical role that glottal timing plays in the stop contrast.

2.2.3 Summary of the Phonetic Data

Summarising for each place of articulation:

For the bilabial stop series, although medial /p/ is regularly one-and-a-half times as long as /b/, 'duration' is an insufficiently exploited feature to be the likely basis of the contrast. In both medial and initial position glottal timing is always a reliable cue, and seems more likely to be the basis of the contrast.

For the apical series, medial /t/ is long and has clear lag VOT, and medial /d/ is short and has clear lead VOT. For medial apicals then, both glottal timing and duration are equally consistent cues for stop differentiation. Initial /t/ and /d/ are distinguished only in terms of glottal timing.

For the dorsal series, medial /k/ is long and fully stopped, whereas medial /g/ is predominantly a fricative that has glottal pulsing through 87% of approximation duration. Medial /k/ and /g/ are therefore equally distinguishable in terms of both glottal timing and stricture type. Initial /k/ has clear lag VOT, and initial /g/ is a fricative that varies freely in degree of glottal activity. Glottal timing is not a reliable cue in the contrast between initial dorsals, which can only be distinguished in terms of stricture type.

The mechanisms by which a contrast could be maintained are set out for each place of articulation in Table 2-3 below.

	Bilabial	Apical		Dorsal	
		initial	medial	initial	medial
Glottal timing	√	√	√	×	√
Duration	×	×	√	×	×
Stricture type	×	×	×	√	√

Table 2-3

2.2.4 Phonological Solution

The contrast in Ngan'gityemerri is based on glottal timing, and can be characterised phonetically as a contrast between voiced and voiceless stops.

The uncharacteristically short duration of medial /d/ (that would make possible a contrast between medial apical stops in terms of constriction duration) results from the frequent realisation of /d/ as either a tap or approximant. Within the parameters of a voiced/voiceless analysis, these instances of shortened or incomplete articulatory closure are quite explicable as an active mechanism intended to facilitate the continuation of glottal pulsing. We have already noted that another mechanism (the

enlargement of the supraglottal cavity, in the case of geminates) is employed by Ngan'gityemerri speakers to achieve the same result.

Dorsal /g/ has traditionally (i.e. in previous work) been analysed as a voiced stop. In spite of the fact that medial /g/ is predominantly realised as a fricative, this analysis could be maintained here. Thus for the medial dorsals the contrast could also be characterised as one of voiced vs voiceless, with the predominant fricative realisation of /g/ being accounted for, as for /d/, in terms of an active mechanism intended to facilitate continued glottal pulsing. Such an account would be quite plausible in articulatory terms because the further back in the mouth that closure is made, the smaller the supraglottal cavity. The smaller the supraglottal cavity, the more difficult it is to continue glottal pulsing throughout closure duration, and thus the tendency to fricate increases.

However, an analysis of /g/ as a voiced stop becomes increasingly difficult to justify in the case of initial dorsals. The inadequacy of glottal timing as a consistent cue in the realisation of initial /g/, makes the contrast in this position only explicable in terms of stricture type. Within a voiced/voiceless analysis, the initial dorsal contrast would have to be separately specified as based on the parameter 'stop vs fricative'. Although variance in the mechanism by which a contrast is maintained is not implausible¹⁵, the alternative phonological analysis of /g/ as a fricative offers a much neater solution.

15 No previous writers on stop contrasts in Australian languages appear to allow for the possibility of shifting contrast parameters. All the literature presupposes that of the bundle of features associated with the production of a stop (VOT, aspiration, duration, stricture type, etc), one and only one of these features serves as the basis of the contrast for a given language, and all the others are merely phonetic by-products of that feature, and functionally redundant in the maintenance of the contrast. Heath, in his grammar of Ngandi, claims that both 'voice' and 'duration' serve equally well as the basis of the contrast, but offers no further explanation, or reasons for his choice of the terms 'fortis/lenis'. Most other work on the nature of stop contrasts treat languages as either 'VOT languages' or 'fortis/lenis languages'. This is implicit in Jaeger's article (1982), and stated explicitly by Cook - "Segmental approaches vary widely, and a choice *must* be made between analysing the contrast directly as one of voicing,or as fortis stops contrasting with lenis stops" (Cook 1984:45)(emphasis mine).

I see no compelling reasons why contrast mechanisms should necessarily be uniform within the phonological system of a single language. Potentially contrasts could be maintained in terms of the shape of the whole bundle of the phonetic features that are associated with stop production, without any one of them necessarily being *the crucial feature* at all places of articulation. The profile of this bundle of features could vary from one place of articulation to another, because individual features can be made prominent by articulatory factors associated with the size of the supraglottal cavity. For Ngan'gityemerri, if the option of patterning /g/ with the fricative class were not available, this is the type of analysis I would have opted for. I would have argued that within the

Analysing /g/ as a fricative has the following advantages. Firstly, it is a better reflection of the predominant allophony of this obstruent. As noted above, in initial position /g/ is always a fricative, and medially it is predominantly a fricative, and only very rarely realised with full stop closure.

Secondly, the phonemic inventory is slightly simplified in that the dorsal series patterns with the laminals. We now have only two types of obstruent pattern, rather than three.

- | | | | |
|---|-------------------|---|--------------------|
| 1 | Bilabial + Apical | - | stop + stop + fric |
| 2 | Laminal + Dorsal | - | stop + fric |

The stop contrast is now restricted to the bilabials and apicals only. As the contrast for both these articulatory types is readily explicable in terms of the feature 'glottal timing', there is no longer any need to postulate variant phonetic features underlying the contrast.

Thirdly, the allophony of /g/ is generally consistent with that of the laminal and bilabial fricatives (the apical fricative does not occur word-initially).

- | | | | | |
|------|------|---|-----------|-------------------|
| 2-41 | /g/ | → | [x] ~ [ɣ] | /#_ |
| | | → | [ɣ] ~ [g] | /V _ V, /Liquid _ |
| | /sy/ | → | [ʃ] ~ [ʒ] | /#_ |
| | | → | [ʃ] ~ [ʒ] | /V _ V |
| | /f/ | → | [ɸ] | /#_ |
| | | → | [ɸ] ~ [β] | /V _ V, /Liquid _ |

Fourthly, in terms of phonotactic distribution, the occurrence of /g/ after liquids, e.g.

- | | | | |
|------|------------------|---|----------|
| 2-42 | malgin | - | spinifex |
| | marrgu | - | new |
| | midirgurr | - | nut |

bundle of phonetic features associated with the realisation of Ngan'gityemerri stops, 'glottal timing' is made prominent in the contrast between the bilabial stops, both 'glottal timing' and 'duration' are equally prominent in the contrast between apical stops, and stricture type' is made prominent in the contrast between dorsal stops.

is anomalous if /g/ is analysed as a stop, as no other voiced stops can occur intramorphemically in this type of cluster. However the fricative /f/ clusters with liquids;

2-43	ngulfin	-	slope
	werrfe	-	over there

so we would achieve greater phonotactic neatness in re-stating the two anomalous cluster types ;

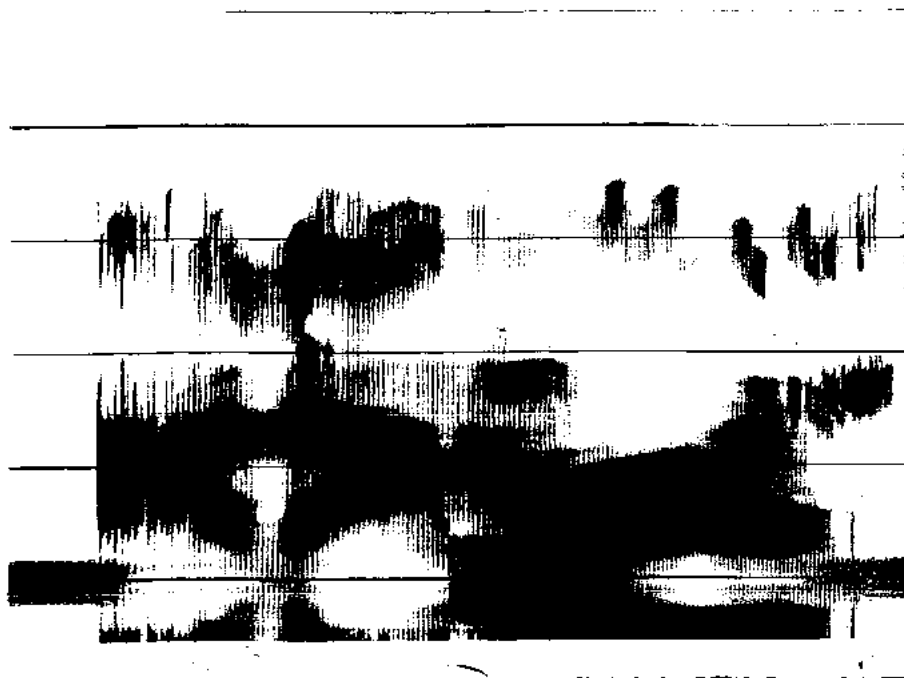
- 1 "/g/ is the only voiced stop to occur intramorphemically after liquids"
- 2 "/f/ is the only fricative to occur intramorphemically after liquids"

as,

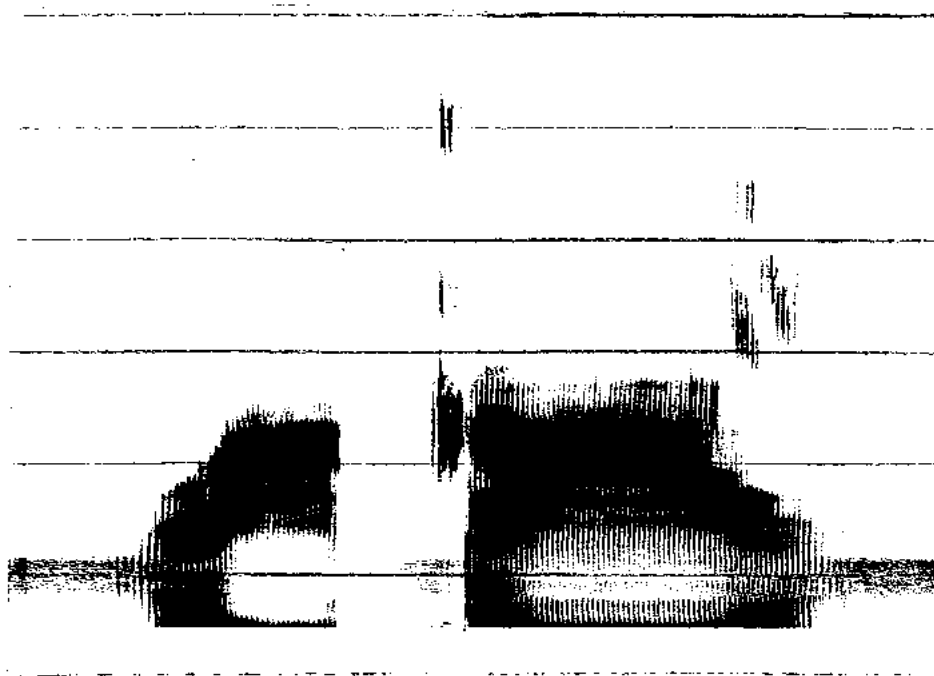
- 3 "both peripheral fricatives occur intramorphemically after liquids".

For these reasons I find the analysis of /g/ as a fricative to be a neater solution.

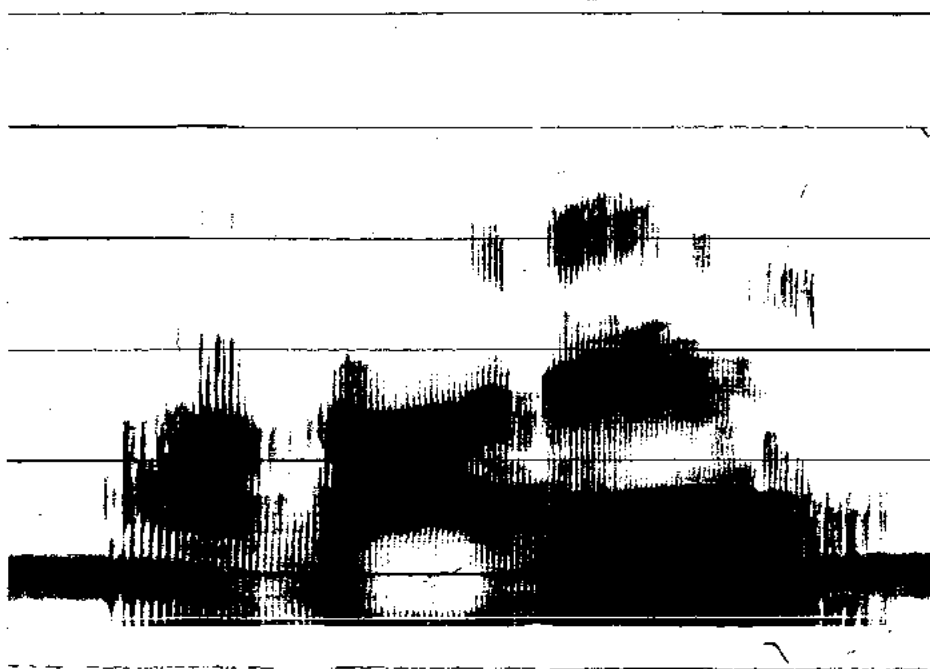
Spectrograms



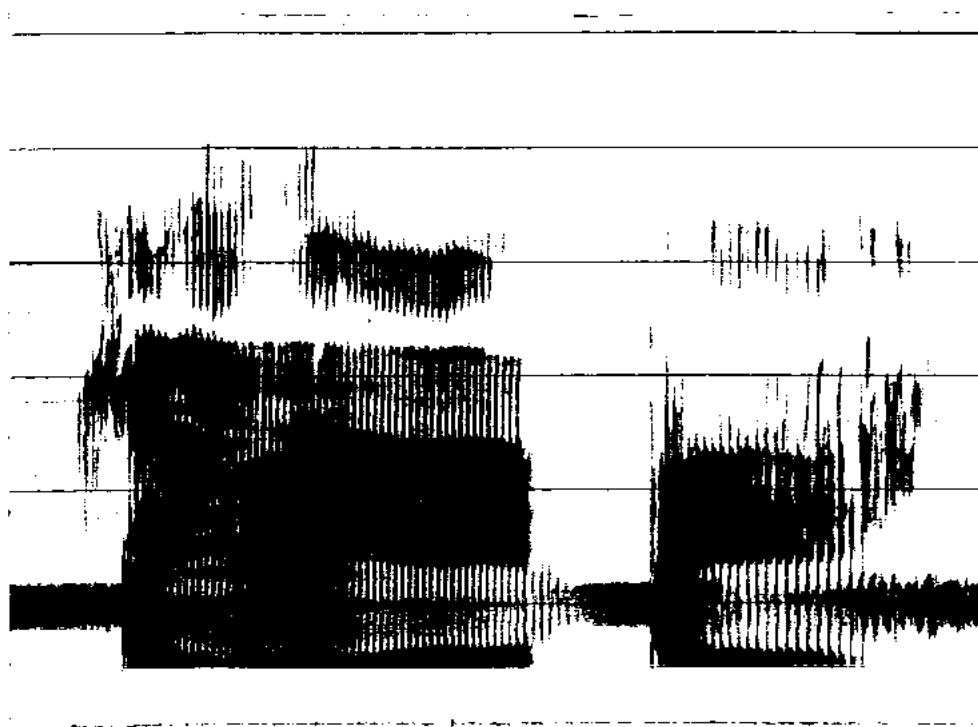
Spectrogram 1: **adamuy** 'clitoris', showing the realisation of /d/ as a flap or approximate with 1st and 2nd formants clearly visible throughout the 'closure' duration.



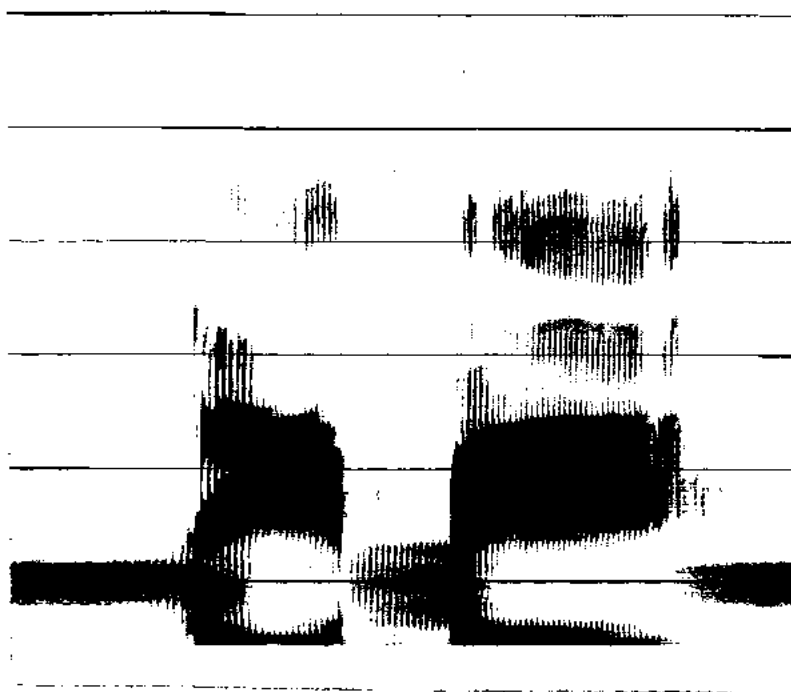
Spectrogram 2: **wakay** 'finished', showing the abrupt cessation of glottal pulsing into closure, typical of medial voiceless stops.



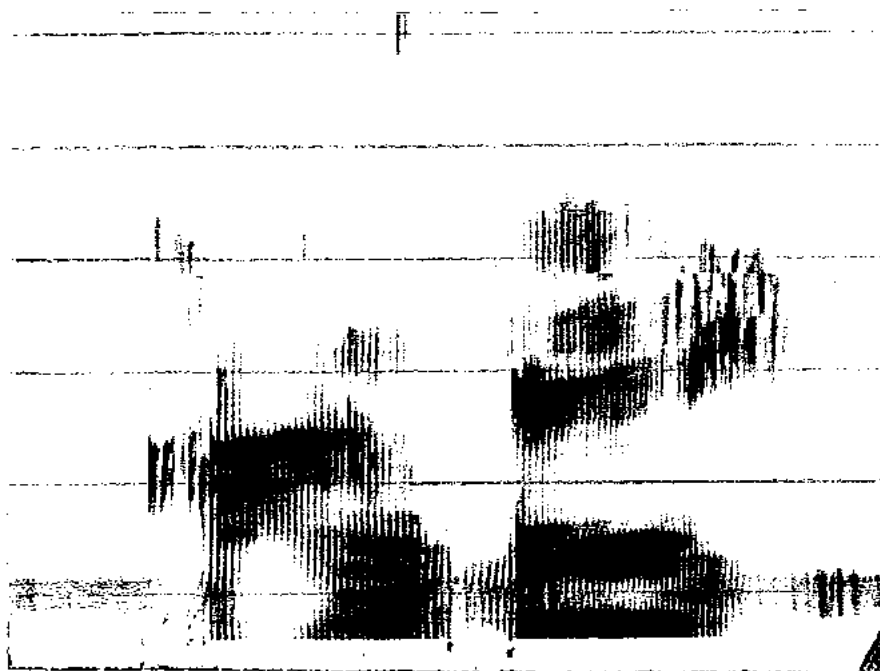
Spectrogram 3: **agadirr** 'green ant', showing the lack of complete closure and typical duration of medial /g/.



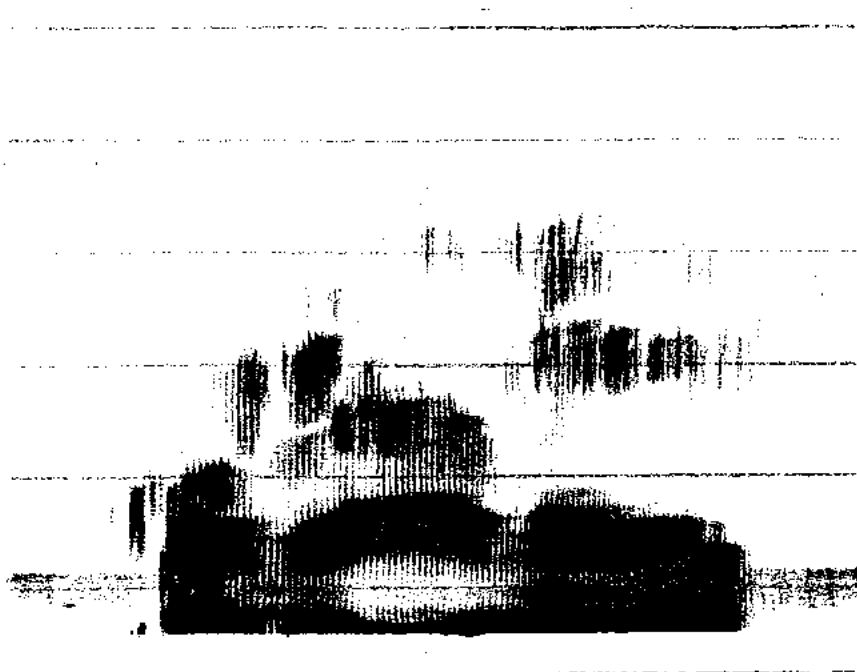
Spectrogram 4: **kengarapa** 'lung', showing the abrupt cessation of glottal pulsing into closure, and typical duration of medial /p/.



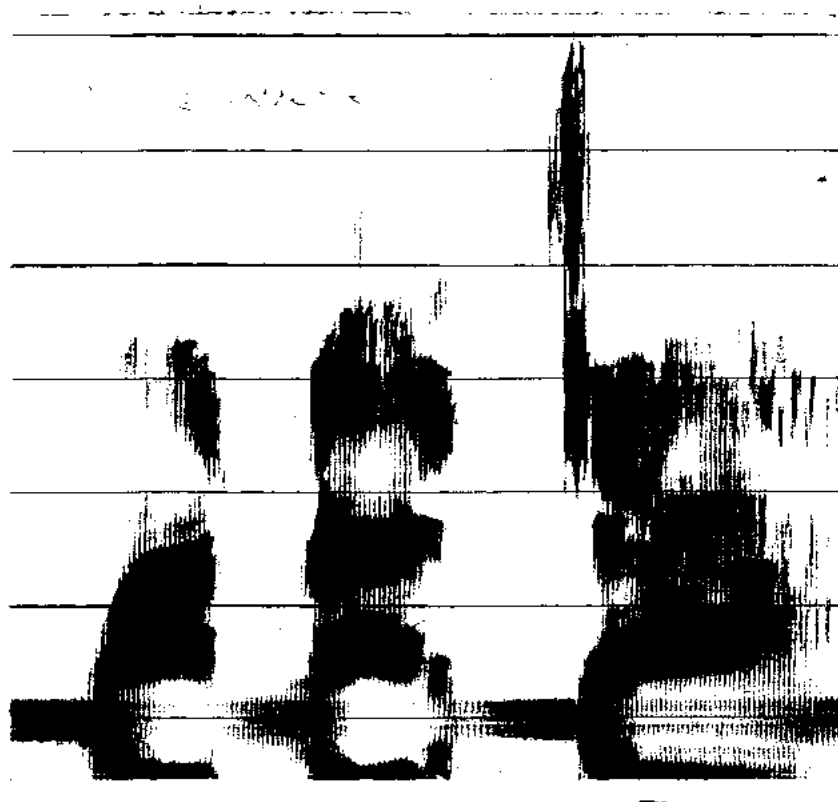
Spectrogram 5: **daba** 'arm', showing the continuation of glottal pulsing through 110ms of medial /b/ closure.



Spectrogram 6: **ganbi** 'didjeridu', showing the typical realisation of initial /g/, as the voiceless fricative [x].



Spectrogram 7: **kuderri** 'billabong', showing initial /k/ as the voiceless stop [k].



Spectrogram 8: **wadde-tye** 'they (dl) went', showing glottal pulsing throughout 100ms of closure duration for geminate /dd/, probably maintained through active enlargement of the supraglottal cavity.

2.3 Phonotactics

2.3.1 Syllable Structure

The five syllable types found in Ngan'gityemerri are exemplified by monosyllabic words in 2-44 below.

2-44	V	-	e	clause connective
	VC	-	ep	perhaps
	CV	-	bi	axe
	CVC	-	finy	sweat
	CVCC	-	ngurrrp	emu

Setting aside the two vowel-initial syllable types which have rather restricted possibilities, on the basis of the other three syllable types we can propose the following formula.

$$2-45 \quad C_1V_1((C_2)C_3) (C_4V_1((C_2)C_3))^*$$

The formula needs to be two-syllable, as not all consonants found in position C_4 , can also fill C_1 . The second syllable is bracketed, to allow for monosyllables, and recursive* to allow for words of more than two syllables. Monosyllables are not common, the following list of 35 words are all the examples in my corpus of data, but this is unlikely to be completely exhaustive.

2-46	V	e 'and'-clause connective
	VC	ep 'perhaps'
	CV	bi 'axe, fi 'string', ki 'fighting', wu 'cloud', wa 'paperbark', fa 'wax', yu 'yes', yi 'Oh yeah!', tyi 'breastmilk'.
	CVC	wung 'country love', tyiny/tyuny (W/K) 'woomera', nem 'he', wurr 'grass', finy 'sweat', muk 'sore', Monosyllabic simple verbs - ngim 'I say', yim 'you say', meny/mem (W/K) 'he said', dim 'he's sitting', Verb roots that can be isolated as imperatives - wap 'sit!', puy 'keep going!', pat 'get up!', Onomatopeia- winy 'whistle', ngar 'bark', tal 'thump', dat 'crack joints'.
	CVCC	ngurrrp 'emu', yirrrng 'sea turtle', Onomatopeia- nyurrrng 'sniff, snort', ngarrp 'crunching', ngirrk 'growling', yarrp 'scraping', berk 'farting', purrk 'clap'.

Other than this fairly small set of monosyllabic words, monomorphemic words typically have 2 or 3 syllables, nominal compounds

can be up to 6 or 7 syllables, and the verbal complex, which functions as a unitary phonological word, can vary from a monosyllable, up to about 12 syllables.

Looking back at the two vowel-initial syllable types, we find that allowing for them within this formula is slightly problematic. Although the occurrence of vowel-initial words in Ngan'gityemerri is quite high (several hundred easily), these are almost entirely attributable to a single morpheme - the animal classmarker /a-/, eg: **a-matyi** 'kangaroo'. Vowel-initial words other than those derived by prefixation of this classmarker are sufficiently scarce that they can be listed here in their entirety.

2-47	apma	-shut up!
	anemuni	- sweetheart
	apuderri	- pubescent girl
	andirrk	- nya nya you can't catch me
	agatyintyi(W)/angalin(K)	-fishing
	ambirri(W)/apirri(K)	- before
	apukek(K)	-underneath
	ityi¹⁶	-what
	(i)ngga	-take it!
	etye	-when
	errike	-how many
	epe	-perhaps

There are no words beginning with /u/.

To include these words into our syllabic formula we could modify it by preposing an optional initial vowel.

$$2-48 \quad (V)C_1V_1((C_2)C_3)(C_4V_2((C_2)C_3))^*$$

This, however raises additional complications as not all consonants following an initial vowel can also be word initial. The apical fricative /s/ occurs following initial /a/ in the examples below;

2-49	asiminmin	- flying fox sp.
	asikarrak	- masked plover

¹⁶These two examples are rather marginal. There is some minor evidence that both **ityi** and **ingga** (often further reduced to **ngga**) are underlyingly /y-/ initial.

but cannot occur initially. As /s/ in the above examples patterns more like a C₄ consonant, it seems more appropriate that we view initial vowels as V₁ rather than the preposed initial (V) of the formula in 2-48. As an alternative then we can revise our original formula by bracketing C₁ as optional.

$$2-50 \quad (C_1)V_1((C_2)C_3) (C_4V_2((C_2)C_3))^*$$

Certain possibilities allowed for by this revision, such as monosyllabic V₁ and V₁C₃, are exemplified by only single examples (e and ep in 2-44 above). Rare exemplification is, however, simply a distributional fact, and therefore not one that should motivate change to a template of permissible word shape. There are two further observations to be made though. Firstly, word-initial V₁ is essentially restricted to /a/ and /e/, whereas non-initial V₁ can be any vowel. Secondly, one possibility allowed for within the revised template given in 2-50 has never been attested; no monosyllabic word has the structure V₁C₂C₃.

There are slightly more V₁C₃ syllables to be found as the initial syllable of multi-syllabic words, as shown in 2-51.

2-51	anggalifen	-	lizard sp.
	anggirrgimi	-	rib bone
	alfugarri	-	jabiru

In such examples the patterning of the resultant clusters, each of type C₃C₄, validates the decision to view word initial vowels as V₁ rather than a preposed (V).

2.3.2 General Restrictions on Vowel Occurrence

As already discussed in the section on vowel realisations, /u/ is the only vowel which is never found word initially, and the few /i/ initial words can be considered to be underlyingly /y-/ initial.

All vowels are found medially and their occurrence percentages are as follows.

$$/i/ - 33\% \quad /a/ - 28.3\% \quad /u/ - 21.7\% \quad /e/ - 17\%^{17}$$

63% of nominals end in vowels, and all four vowels have been recorded contrastively in word final position. Though the hierarchical ranking of their occurrence here is the same as it is medially, their percentage of occurrence is less evenly distributed.

$$/i/ - 65\% \quad /a/ - 19\% \quad /u/ - 9\% \quad /e/ - 7\%$$

¹⁷Percentages calculated from a list of 500 vowel final nominals.

2.3.3 General Restrictions on Consonant Occurrence

2.3.3.1 Distribution of single consonants

Initially -

t	ty	p	k
d		b	
s	sy	f	g
n	ny	m	ng
l			
rr			
r	y	w	

Figure 2-6

C₁ cannot be either of the rhotics /r/¹⁸ or /rr/, nor can it be the apical fricative /s/. In view of the rhotacised quality attributed to /s/ in 2.1.3.2, this shared failure to appear initially may suggest re-analysis of the fricative as a rhotic. Such an analysis is however ultimately unfruitful as /s/ fails to form a natural class with the two rhotics in all other occurrence positions.

As is typical for Australian languages, initial stops and nasals are far more likely to be peripheral than non-peripheral. Initial /t/ and /n/ each account for less than 1% of the lexicon, and initial /ny/ is attested in two words only - *nyinyi* 'you sg.', and *nyurring* 'sniff,snort'. The voiced apical stop /d/ has a far higher percentage of occurrence than we would predict for a non-peripheral stop. This results from its initial occurrence on the bodypart and 3sg subject prefixes, both of which have a high functional load. Generally though, voiced stops are far less common word initially than voiceless stops.

¹⁸There is a single exception to this restriction. *rak* - the patrician marker, prefixes estate names to denote all people inheriting that estate through their father eg: *rak-Malfiyin*. Cognates of this lexeme (*rak*, *dak*, *lak* etc) are widespread in the languages of the Daly region and further eastwards, and are marked as phonotactically odd in many of them.

Intervocally-

t	ty	p	k
d		b	
s	sy	f	g
n	ny	m	ng
l			
rr			
r			
	y	w	

Figure 2-7

Intervocalic C₄ can be any consonant.

Finally -

t	ty	p	k
d		b	
s	sy	f	g
n	ny	m	ng
l			
rr			
r			
	y	w	

Figure 2- 8

Word and syllable final C₃ can be any consonant except a voiced stop¹⁹ or a fricative.

¹⁹There is one exception to this general statement that we have already encountered in example 2-40. Within the auxiliary verb, syllable-final -rr-, denoting non-singular subject number, assimilates to the the manner of auxiliary-root-initial -d-, e.g. nguddeny-fel 'we (pl ex) jumped'. This morphophonological rule is discussed in more detail in 2.4.2. Otherwise voice stops do not occur in syllable-final position.

2-52	ngirwat	-namesake	mayarung	-cockrag
	anguty	-ghost	yawul	-spear
	ngurp	-emu	yewirr	-tree
	muk	-sore	adigar	-Aust. pratincole
	wasyan	-body hair	damuy	-eye
	detyeny	-tongue	kakaw!	-come here!
	nem	-he		

In 2.3.2 we noted that 63% of all words are vowel final. From the remaining 37% of consonant final words we can make the following observations. The apical trill at 12.6%, and the apical nasal /n/ at 8.3% account for over half of all word-final consonants. The pattern suggested by these figures, that word finally non-peripherals are more common than peripherals, is not borne out by the stops. The dorsal /k/ is the most frequent final stop (3.6%), followed by the non-peripherals /t/ (2.3%) and /ty/ (1.3%). Bilabial /p/, the least frequent (0.6%), appears finally in nominals, only in the C₂C₃ cluster /rrp/, eg: **ngurp** 'emu' and **ferrp** 'often', and in a couple of verb roots, eg: **wap** 'sit', **pap** 'climb' etc, which in the absence of verbal enclitics, can be word final.

The continuant /r/ has only been recorded word finally in a single Ngan'gikurunggurr word, and three Ngan'giwumirri words, **adigar** (W/K) 'Australian pratincole', **amugar** (W) 'bony bream' and **awugur** (W) 'small fish sp. used for livebait'. However it is found more commonly syllable finally on a number of bound prefixes **wur-** 'female', **ngur-** 'penis' etc.

The labiodorsal semivowel /w/ has only been recorded finally in a single word, the exclamation (ka)kaw 'come here!'. The possible elision of a final vowel, or some other form of phonological aberrance, would not be particularly unexpected in a member of the imperative/ejaculatory wordclass, however in this instance its occurrence is contrastive with a vowel final word.

2-53	kaw	-	come here!
	kawu	-	dyadic kin term MM/DD

The occurrence of final /y/ needs to be established to account for word final diphthongisation of /u/ and /a/.

2-54	wakay	-	finished	[wakat]
	damuy	-	eye	[damoi]

The failure of /y/ to occur finally after front vowels prompts an alternative analysis of the above forms as elisions of eg: /wakayi/ and /damuyi/.

However a wider examination of the lexicon shows that not all -ayi- and uyi- sequences follow this pattern.

2-55	ngayi	-	I	[ŋaɪji]
	awuyi	-	possum	[awɔji]

On the basis of this data, I interpret word final diphthongs as a sequence of vowel + semivowel. Semivowels are thus included in the list of consonants appearing word finally though, as in many Australian languages, their distribution is restricted to following back vowels only.

2.3.3.2 Consonant Clusters

The discussion below deals with three types of consonant cluster.

- 1) Syllable final disconsonant clusters: C_2C_3
- 2) Inter-syllabic disconsonant clusters. We further break this section down, comparing those clusters which can only occur intramorphemically, with those which can occur across morpheme boundaries (marked by +): C_3C_4 and C_3+C_4
- 3) Triconsonant clusters: $C_2C_3+C_4$

Syllable final Clusters : C_2C_3

C2 —	t	ty	p	k
C3 —	d		b	
	s	sy	f	g
	n	ny	m	ng
	l			
	rr			
	r			
		y	w	

Figure 2-9

C_2 can only be one of the liquids, usually the trill /rr/. I have recorded only one example of the lateral /l/ and two of the continuant /r/.

C_3 can only be of the voiceless peripheral stops /p/ or /k/, or the dorsal nasal /ng/.

2-56	ngurp	-	emu
	wandirrk	-	raft pole
	yirrng	-	sea turtle
	musyulng	-	swag
	perperkngini	-	soft
	berk	-	farting noise

Intersyllabic Intra-morphemic Clusters C₃C₄

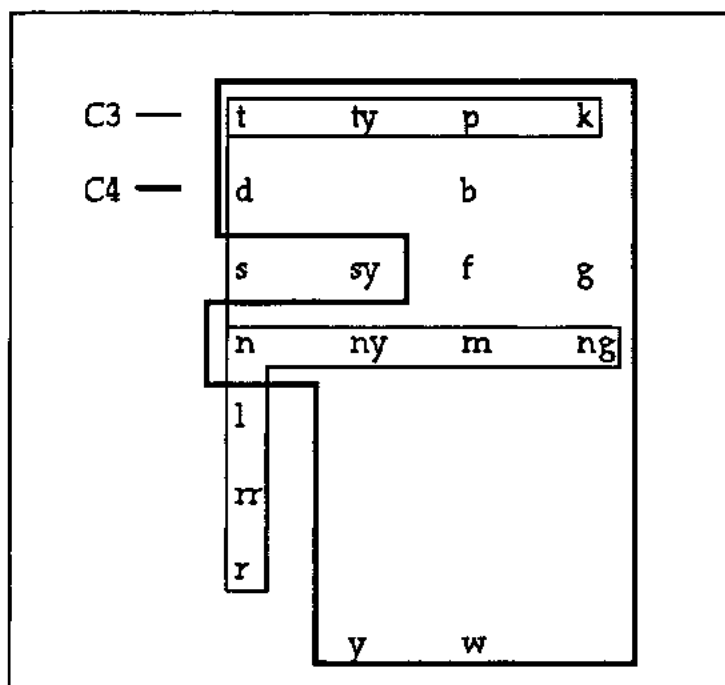


Figure 2-10

Syllable final preconsonantal C₃ can be any voiceless stop, nasal or liquid. Syllable initial postconsonantal C₄ can be any stop, any nasal, the peripheral fricatives /f/ and /g/, and either semivowel. These are only general statements of distribution, not all conceivable combinations being attested. Three more precise statements of the types of cluster found intramorphemically are set out below.

1) Stops and Stops

A non-peripheral voiceless stop followed by a peripheral voiceless stop.

2-57	ngatypirr	-	distant
	watkuwatku	-	frog

(tp and tyk remain unattested)

2) Stops and Nasals

Any homorganic nasal/stop cluster.

2-58	membirr	-	child
	wendili	-	Grevillia pteridifolia
	kunintyin ²⁰	-	Boab tree
	wangga	-	dance style

The only heterorganic nasal/stop clusters to occur intramorphemically are the apical /n/ followed by a peripheral stop.

2-59	kanbi	-	bamboo, didjeridu
	ngan'gi	-	language, story, word

No homorganic nasal/nasal clusters occur within morphemes. The single heterorganic cluster that occurs here is /n + m/.

2-60	panmi	-	fork, crotch
	minmi	-	no !

Stop/nasal clusters likewise reflect this pattern, consisting only of a voiceless stop plus /m/.

2-61	tyatma	-	straight
	apma	-	shutup!

(km and tym are unattested)

3) Liquids

The lateral /l/ followed by any of /p k m f g w y/.

2-62	melpe	-	flat
	ngilmil	-	semen
	ngulfin	-	slope
	milwadi	-	waist
	delyek	-	woman who has borne a child
	walkity	-	flower
	malgin	-	spinifex

The trill /rr/ followed by any of /m f g w/.

2-63	durrrmu	-	paint(ing)
	agarrfuru (W)-	-	skin
	malarrgu	-	longnecked turtle
	darrwa	-	raft

²⁰The contrast in Ngan'gityemerri between apical nasal **n** and laminal nasal **ny** is neutralised in intramorphemic nasal stop clusters with the laminal stop **ty**. In the practical orthography used here, this cluster is represented as **-nty-** not **-nyty-**, although the nasal is phonetically realised as laminal [ɲ].

The continuant /r/ has only been recorded in intramorphemic clusters with the dorsal obstruents, i.e. /r+g/ and /r+k/.

2-64 midigurr - nut sp.
 ngirkik - breathlessness

From these three statements we can observe that C₃ cannot be a fricative, a semivowel or a voiced stop. C₄ cannot be a liquid, the laminal fricative /sy/, or a voiced stop, except postnasally - a position in which, morpheme-medially, the stop contrast is neutralised. We can also perceive the significance of the feature '±peripheral'.

Intersyllabic Intra-morphemic Clusters

second element →

← first element

	p	b	f	t	d	s	ty	sy	k	g	m	n	ny	ng	l	rr	r	w	y
p											x								
b																			
f																			
t									x		x			x					
d																			
s																			
ty	x																		
sy																			
k																			
g																			
m		x																	
n		x			x				x		x								
ny							x												
ng									x										
l	x		x				x		x	x	x			x				x	x
rr	x		x						x	x	x	x		x				x	
r									x	x								x	
w																			
y																			

Figure 2-11

Intersyllabic Inter-morphemic Clusters. C₃+C₄

We can now address the C₃C₄ clusters that occur across morpheme boundaries. As an essentially agglutinating language, Ngan'gityemerri displays widespread compounding, full and partial root reduplication, and extensive affixation and cliticisation. A far greater range of clusters is

produced by these morphological processes than those selective few exploited intra-morphemically.

Now, with one extension and one minor exception, any C_3 can be followed by any C_1 , ie: any word final consonant can be followed by one which can occur initially. The extension is that the continuant /r/ which has an extremely rare final occurrence, can now be followed by any C_1 consonant. The one exception is that no voiced stop or fricative can follow a voiceless stop. This is merely a theoretical constraint though, as Ngan'gityemerri morphemes are so structured that such impermissible clusters are not produced (ie: no morpheme ends in a voiceless stop, no suffix begins with a voiced stop, no prefixes end in a voiceless stop).

Triconsonant Clusters: $C_2C_3 + C_4$

Triconsonant-clusters do not occur intra-morphemically. They are produced only across morpheme boundaries, as the result of two morphological processes: reduplication and affixation. Triconsonant-clusters resulting from each of these processes are examined separately here, as there are differences in the number of clusters they generate, and the types permitted in surface forms.

In Ngan'gityemerri there are a small group of monosyllables having final C_2C_3 clusters (see 2.3.1), e.g. *purrk* 'clap'. The reduplication of such syllables generates triconsonant-clusters of the form $C_1VC_2C_3C_1VC_2C_3$. C_3 , as we saw above, is restricted to the peripheral stops/nasal /p k ng/. The C_1 can be any of /p k m ng/.

Triconsonant Clusters

C2 —	t	ty	p	k
C3 —	d		b	
C4 —	s	sy	f	g
	n	ny	m	ng
	l			
	rr			
	r			
		y		w

Figure 2-12

However, as the examples below show, /p/ has not been recorded in C₃ in a triconsonant cluster, and /k/ has not been recorded in C₁. Given that /p/ appears as C₃ in C₂C₃ clusters in unreduplicated syllables, eg **ngurp** 'emu', and /k/ otherwise appears in C₁, these gaps appear to be accidental rather than in any way systematic.

2-65	purrngpurrng	-	boiling
	ngirrkngirrk	-	dog's growl
	purrkpurrk	-	little things, clapping
	marrngmarrng	-	happy-go-lucky

Not only are triconsonant-clusters resulting from reduplication heavily restricted by the small number of monosyllabic C₁VC₂C₃ words, but where C₃ and C₄ share the same manner of articulation they are subject to a morphophonological rule that deletes C₃ (see 2.4.1).

In contrast the process of affixation generates a far wider number of triconsonant-clusters, all of which are permitted (i.e. clusters where C₃ and C₄ share the same manner of articulation are not affected by the rule discussed in 2.4.1).

Monosyllabic verb roots ending in C₂C₃ clusters are typically followed by consonant initial verbal enclitics.

2-66 a)	ngi - purrk - pe	-	I'll dance, clap.
	<i>1sgSit-dance - Fut</i>		
	<i>SU Irr clap</i>		
b)	dini -parrng -tye	-	He was snoring.
	<i>3sgSit-snore -Past</i>		
	<i>SU Imp</i>		

And monosyllabic nominals ending in C₂C₃ clusters can be followed by consonant-initial nominal suffixes.

2-67 a)	yirng-ne	-	..for sea turtles..
	<i>sea -PURP</i>		
	<i>turtle</i>		
b)	ngurp-pefi	-	..towards the emu..
	<i>emu -THITH</i>		

Theoretically any of the C₂C₃ clusters that we have noted could be followed by any consonant that appears initially on nominal and verbal

enclitics/suffixes. From the forms of such enclitics/suffixes in each language we can predict that the possible types of third consonant would be:

NgW	-	/ty p g ny n ng m w/
NgK	-	/ty p k g n ng w/

2.4 Morphophonological Processes

There are four morphophonological processes operating in Ngan'gityemerri to avoid undesirable phonological patterns.

2.4.1 Triconsonant Cluster Reduction

In section 2.3 we discussed a small group of monosyllables having final C_2C_3 clusters, e.g. **purrk** 'clap'. We noted that the reduplication of such syllables generates triconsonant-clusters of the form $C_1VC_2C_3C_1VC_2C_3$. The consonants that can theoretically fill the three positions in such clusters are:

C_2	-	any liquid, but nearly always /rr/
C_3	-	/p/, /k/, or /ng/
C_1	-	/p/, /k/, /ng/, or /m/

However not all possible combinations are permitted. Where C_3 and C_1 of this cluster have different manners of articulation, ie: /liquid + stop + nasal/ or /liquid + nasal + stop/, then the tricluster is permitted, as in 2-68.

2-68	purrngpurrng	-	boiling
	ngirrkngirrk	-	dog's growl

However where C_3 and C_1 have the same manner of articulation (i.e. are both stops or both nasals), this process operates to delete C_3 , as in 2-69.

2-69	purrkpurrk	→	purrpurrk	-	little things
	marrngmarrng	→	marrmarrng	-	happy-go-lucky

The tri-consonant cluster reduction process affects only those tri-consonant clusters that are generated by reduplication of syllables having final diconsonant clusters. It does not operate to reduce those triconsonant-clusters resulting from enclitics/suffixes to such syllables. Thus in example 2-66a, reproduced below as 2-70, the triconsonant-cluster retains its full form.

2-70	ngi - purrk - pe	-I'll dance, clap.
	<i>1sg Sit-dance- Fut</i>	
	<i>SU Irr clap</i>	

2-76	yerr-den	→	yed-den	-	Coolibah
	yerr-derri	→	yed-derri	-	log
	yerr-dininy	→	yed-dininy	-	Sandalwood
	yerr-depi	→	yed-depi	-	hat

There are no 'tree/thing' class member terms in my data which have /t/, /n/ or /l/ as initial consonant, so the generalisation of this as 'apical' assimilation, while quite logical, is untestable. Note though that the single 'tree/thing' class member term that has an initial laminal stop (the term for 'chewing tobacco', formed by prefixing **tyerrawu** 'saliva' with the 'tree/thing' class generic), additionally triggers the assimilation of rr to both the manner and place of that laminal stop.

2-77	yerr-tyerrawu	→	yetytyerrawu	-	chewing tobacco
------	---------------	---	--------------	---	-----------------

2.4.3 Deletion

2.4.3.1 i deletion

The vowel *i* is subject to deletion in two environments. The first is where morphological processes result in the ordering of an unstressed *i* between apical nasals. In these circumstances *i* is deleted leaving a geminate nasal. Consider the examples set out in 2-78.

2-78	a)	tyágani-nĩmbi	→	tyagan-nimbi <i>what</i> -CAUS from what ?
	b)	tyágani-nàwa	→	tyagan-nawa <i>what</i> -INDEF whatever
	c)	wúni-nàpa	→	wun -napa <i>there</i> -JUST right there
	d)	ngámbani-nime-pe	→	ngamban-nime-pe <i>Ins Go</i> -plinc-Fut <i>SU Irr</i> SU Let's go !

Secondly, the compounding of nominal roots, and the attachment of enclitics to nominal roots, can potentially result in the ordering of contiguous vowels. Such occurrences are rare within noun phrases and impossible within the verbal complex because Ngan'gityemerri morphology is generally constructed of CV(C) syllables. Wherever two nominal roots forming a single phonological word, be it through compounding (as in 2-79

2.4.4.1 Nominal Roots to Classmarkers

As discussed in section 5.5, bound class generics are predominantly proclitics, but a subset of them have been re-interpreted as prefixes when they are attached to class member terms (but not modifiers of those class members). Prefixes, unlike proclitics, are generally subject to phonological processes, and two of this subset of bound class prefixes, the 'bodypart' classmarker **dV-** and the 'animal' classmarker **a-**, undergo vowel harmony.

The 'bodypart' class prefix selects its vowel quality by the following rule (# as morpheme boundary);

$$\begin{array}{ll} V & \rightarrow e / _ \#CV_{[-back]} \\ & \rightarrow a / _ \#CV_{[+back]} \end{array}$$

as is demonstrated by the examples in 2-81²².

2-81	de-pi	head	da-tyamu	cheek
	de-syi	nose	da-muy	eye
	de-tyeny	tongue	da-wayirr	forehead
	de-tyeri	ear	da-ba	arm
	de-me	hand	da-madi	chest
	de-firr	foot	da-purr	bum

The V of the 'animal' class prefix also varies between /a/ and /e/, although as 2-82 below reveals, the conditioning environment is in this case slightly different.

2-82	e-men'giny	goanna sp.	a-minyalak(K)	bony bream
	e-ferri	bluetongue	a-tyalmerr(K)	barramundi
	e-fekimi	bandicoot	a-ti	cod
	e-lele	curlew	a-furra	mussel
	e-fekityerr	long tom	a-winy	bream
	e-pelen	rifle fish	a-murriyi	crab
	e-melpe(K)	stingray	a-manbi	nail fish

Here the rule by which the vowel quality of the class prefix is determined, requires the specification of an additional feature in the differentiation of its conditioning environment. In addition to the feature '±back' we now also require '±high'.

²²Present data reveals two examples, **detyunmi** 'back of the head', and **denunbi** 'sacrum', which remain unaffected by this process and are consistently realised as [dɛɔɲmi] and [denɔɲbi].

$$\begin{aligned} V &\rightarrow e / _ \# CV_{[-back, -high]} \\ &\rightarrow a / _ \# CV_{[+back], [-back, +high]} \end{aligned}$$

In this instance we would probably have little hesitation in positing /a/, on distributional grounds, as the underlying form and rewrite this simplification into our rule.

$$\begin{aligned} V &\rightarrow e / _ \# CV_{[-back, -high]} \\ &\rightarrow a / \text{elsewhere} \end{aligned}$$

Note however that rewriting the rule for the bodypart prefix as either;

$$\begin{array}{llll} V & \rightarrow & e / _ \# CV_{[-back]} & \text{or} & V & \rightarrow & a / _ \# CV_{[+back]} \\ & \rightarrow & a / \text{elsewhere} & & & \rightarrow & e / \text{elsewhere} \end{array}$$

remains unmotivated as both of these alternatives attribute the status of an underlying form to the unmarked realisation, when in reality we have no real criteria, distributional or otherwise, upon which to base such a judgement.

The 'bodypart' and 'animal' class prefixes are the only two that are subject to metaphony. All other classmarkers fail to show any variation in their realisation, regardless of the quality of V_1 of any nominal root to which they may be attached, and regardless of whether, as discussed in 5.5, they function as prefixes or proclitics.

2-83	wa - yedi (K)(*weyedi)	man
	<i>M</i> <i>man</i>	
	<i>cl</i>	
	mi - muy (*mamuy)	yam
	<i>Pf</i> <i>eye</i>	
	<i>cl</i>	
	wu - pidirri (*wepidirri)	dingo
	<i>C</i> <i>dingo</i>	
	<i>cl</i>	

Note also that where the 'animal' bound class generic is copied onto modifiers of class members, it functions as a proclitic, not a prefix (cf. 5.5). As a proclitic it remains phonologically independent of its host, and is therefore unaffected by the vowel harmony process. This is demonstrated in 2-84 below.

2-84	e -melpe	a -yeyi	another stingray
	<i>A-flat</i>	<i>A-other</i>	
	<i>cl =stingray</i>	<i>cl</i>	
	(i.e. a-melpe → e-melpe, but a-yeyi → *e-yeyi)		

We can therefore conclude, assuming a dynamic model for morphology, that vowel harmony is ordered after prefixation but before procliticisation.

Having established that a subset of bound classmarkers have been de-cliticised and function as prefixes, and having noted the implications of this function for the process of vowel harmony, I will return to the implications of this same opposition for the process of diphthongisation. This discussion has been deferred from 2.1.2.

The examples in 2-85 are 'animal' class member terms. On the nominal roots, each beginning with 'ye-', the 'animal' classmarker *a-* functions as a prefix (as established above). The examples in 2-86 are modifiers of 'animal' class members (also beginning with 'ye-') and therefore copy the classmarker as a proclitic not a prefix.

2-85	<i>a-yerrsyā</i>	-	bush cockroach	[aɪjɛɾʃʌ]
	<i>a-yerrkinwari</i>	-	saltwater crocodile	[aɪjɛɾkinwari]
2-86	<i>a-yeyi</i>	-	another (animal)	[aɪjɛɪji]
	<i>a-yenim-walalpi</i>	-	clickbeetle	[aɪjɛnimwalalpi]

From the phonetic realisation forms of the phonemic forms in 2-85 and 2-86, it is evident that the classmarker *a-* is subject to diphthongisation where it functions as a prefix, but is blocked from this process where it functions as a proclitic. This accords with the different levels of phonological dependency operating between prefix/proclitic and host, as discussed in 5.5. We can conclude then, that the process of diphthongisation, like vowel harmony, is ordered after prefixation but before procliticisation.

We can further see, comparing 2-85 and 2-86 with 2-84 above, that diphthongisation precedes and blocks the application of the vowel harmony rule, e.g.

2-87 *a-yerrsyā*--diphthongisation→ [aɪjɛɾʃʌ]

Were this not so, we would expect to find:

2-88 *a-yerrsyā*--vowel harmony→ *eyerrsyā*--diphthongisation → [eɪjɛɾʃʌ]

2.4.4.2 Vowel Harmony in the Complex Verb

We can now turn our attention to the operation of vowel harmony throughout the verbal morphology. Verbal structure is examined in 3.1, though to facilitate this discussion, let me briefly summarise it here.

The structure of the Ngan'gityemerri verb can be represented as:

SU	-	SU	-	Aux	-	dl /D/ I	-	Mp	-	Val	-	Body	-	Verb	-	Misc. enclitics
Pers. No.		Root		SU/O/O								part		Root		

The first four morpheme positions (the subject person and number prefixes, the auxiliary root and the object suffixes) make up a constituent referred to as the 'auxiliary', and the following four morpheme positions form a constituent referred to as the 'complex verb stem'. Note that not all slots will necessarily be filled for any given verb.

Unlike the harmonic influences which operated consistently on the vowels of the two class prefixes discussed in 2.4.4.1, the same process within the verbal complex occurs both randomly and variably. What both these types of vowel harmony share is that they operate regressively from what can be perceived as the nucleus of the word. For the classmarkers this harmonic source is V_1 of the nominal root, and in the verbal complex, it is generally the verb root. Vowel harmony within the verb then can be broadly characterised in this way: vowels to the left of the verb root assimilate to the front/back quality of the stressed vowel of the verb root (occasionally we also find assimilation with respect to tongue height - see 2-94 for example).

Having established the verb root as the source of metaphonic influence, we can also note that the range of this process extends as far left as the auxiliary root. That is, vowel harmony can operate from the verb root leftwards across incorporated bodypart terms, the valency increasing and manipulative prefixes, the object suffixes and the auxiliary root. Vowel harmony never affects the vowel quality of the subject person and number prefixes.

We have already noted that not all morpheme positions of the verb need be filled. For example, not all verbs incorporate bodypart terms, and only transitive verbs with higher animates as non-subject arguments will have overt object suffixes. In its minimal form a verb consists simply of a subject prefix, an auxiliary root and a verb root. Under these conditions the auxiliary and verb roots are juxtaposed and vowel harmony can therefore

- 2-89 a) ngudem-wul → **ngudam** -wul
 NgK 1sgShoveDtrD-return
 SU Perf
 I returned
- NgK b) ngudupun - tidi → **ngudipin** -tidi
 1sgShove-push
 SU Perf
 I pushed it

Example b) above is a good example of the variation found in the range of application of this process. It has been variously recorded as;

- 2-90 ngudupun - tidi
 ngudupin - tidi
 ngudipin - tidi

Example 2-91 below demonstrates regressive vowel harmony from the verb root onto an incorporated bodypart.

- 2-91 ngupun-me-fakurr → **ngupun-ma-fakurr**
 1sgSlash-hand-break
 SU Perf
 I smashed it

And example 2-92 demonstrates regressive vowel harmony from the verb root onto both the indirect object suffix, and the auxiliary root.

- 2-92 ngude-mbi-wul-ngini → **nguda** -mbu-wul -ngini
 NgK 1sgShoveDtrD-2sg -return-Fut
 SU Irr IO
 I'll return to you.

Finally, and in contrast to the generalisation given above, note the sporadic occurrence of vowel harmony originating not from the verb root, but from a position to the left of it. In 2-93 and 2-94 below, the vowel of the direct object suffix, and the bodypart term, respectively serve as the harmonic source.

- 2-93 ngubu-nyi-da-merrendi → **ngubi** -nyi-da-merrendi
 1sgBash-2sg-hit-WARN
 SU Irr DO
 I might hit you !
- 2-94 ngumbudu-madi-fili-nana → **ngumbuda** -madi-fili-nana
 NgK 1plincShove-chest-roll-WARN
 SU IRR
lest we all tip over !

2.5 Word Stress

In Ngan'gityemerri, we need to operate with three stress rules; a syllable-timed stress rule for monomorphemic nominals; a second morpheme-timed stress rule for multi-morphemic nominals; and a third for the verbal complex in which stress serves to signal the auxiliary - complex verb stem constituency. These three stress rules are examined below in 2.5.1 - 2.5.3.

The analysis presented here deals in the concepts of both primary and secondary stress. In perceptual terms word stress is correlated with two factors; pitch contour (stressed syllables are pitched higher than unstressed syllables, in the absence of secondary stresses the pitch contour falls evenly over subsequent syllables); and amplitude (stressed syllables are generally 'louder' than unstressed syllables).

2.5.1 Stress on Mono-morphemic Nominals

Stress placement on monomorphemic nominals and free form grammatical particles and postpositions is relatively straightforward. They bear primary stress on their initial syllable, and secondary stress on every second subsequent syllable unless that syllable is word-final. The final syllables of a mono-morphemic nominal can never bear stress.

2-95	fépi	rock, hill
	mípuur	man
	dágum	dew
	gánggi	high, upstream
	détyengi (K)	today
	mínati (K)	big
	ápudèrri	pubescent girl
	ánemùni	sweetheart

2.5.2 Stress on Multi-morphemic Nominals

2.5.2.1 Reduplication

In Ngan'gityemerri reduplication of verbal roots is a widespread and productive process, but reduplication of nominal roots is essentially restricted to a finite number of words, mostly animal names, derived through onomatopoeic representation of their cries.

Nominals are always reduplicated in full rather than partially, and such reduplication involves the copying of full stress marking onto both elements.

2-96	mákmák	white sea eagle
	wílikwílik	galah
	wátkuwátku	frog (gen.)
	tyúnguttyúngut	frogmouth owl
	bárrabárra	placenta
	mágumágu	left handed

Only monosyllabic and disyllabic stems have been found to reduplicate in Ngan'gityemerri. There is no obvious reason why stems with a greater number of syllables would be precluded from this process, but as no examples have been found, we have no need to consider how secondary stress may have been treated in reduplications.

Although the examples in 2-96 above now formally have the stress characteristics of two phonological words, they cannot sustain a pause between them, and they behave as single words in respect of such grammatical criteria as their occurrence with nominal enclitics (2-97 a) and noun class proclitics (2-97 b).

- 2-97 a) **wátkuwátku-nínggi**
frog -AGENT
 (*wátku-ninggi wátku-ninggi)
- b) **wa-márrmárrng**
Mcl- extrovert
 (*wa-marrng wa-marrng)

2.5.2.2 Compounds

Compounds are like reduplications in that grammatically they behave as single words. However, unlike nominal reduplications which bear primary stress on each of the reduplicated elements, compounds have the stress pattern of single phonological words, in the sense that they bear a primary stress and subsequent secondary stresses. Stressmarking on compounds, though, differs from that on simple nominals by being morpheme-determined rather than syllable-determined.

The dimorphemic compounds in the following examples carry primary stress on the initial syllable of the initial morpheme, and then secondary stress on the initial syllable of the second morpheme, without regard to the syllable count between stresses.

2-98	pí - pìri	brain	wántyirr - finy	armpit sweat
	<i>head pus</i>		<i>armpit sweat</i>	
	fírr - ngàri	toenail	tyéri - wùndi	ear wax
	<i>foot shell</i>		<i>ear wax</i>	
	yénggi - dàwan	smoke		
	<i>fire - smoke</i>			

2.5.2.3 Stress Marking on Classmarked Words

Section 5.5 details the conditions under which the bound noun class generics function as either proclitics or prefixes. The implications of this distinction for the application of vowel harmony and diphthongisation rules were examined in 2.4.4.1. This section examines the implications of this same phenomenon for the marking of word stress.

Where class generics function as proclitics, they are phonologically independent of their hosts (cf. 5.5). Their hosts, which may be simple nominals (noun/adjective roots, pronouns, demonstratives), reduplicated nominal roots, compounds, complex NP's, or complex verbs, constitute independent meaningful elements on their own. In accordance with this phonological independence, generic proclitics are not interpreted as part of the phonological word for the purpose of stress placement²³. The words to which they are attached are stressed in the same way that they would be in the absence of the proclitic. This is demonstrated in 2-102 to 2-106 below, where each type of host (simple nominal, reduplicated nominal, compound, complex NP and complex verb) is given with and without a class marking proclitic.

Simple nominal

- 2-102 a) **kérre** big
 big
 b) **yerr-kérre** a big tree
 Tr- big
 cl

Reduplicated nominal

- 2-103 a) **márrmárrng** happy-go-lucky
 happy-go-lucky
 b) **wur-márrmárrng** a happy-go-lucky woman
 F-happy-go-lucky
 cl

Compound

- 2-104 a) **wásangari-pì** bald
 clean -head
 b) **wa-wásangari-pì** a bald man

²³At least one exception to this statement is the word for 'policeman' - **wamumu**, coined by prefixing **mumu** - 'taboo', with the male class-marker **wa-**, which carries stress on the class-marker. This is not an example of a stressed proclitic, as **wamumu** appears to have been lexically re-analyzed as a baseform. As supporting evidence for this re-analysis we find that a 'policewoman' is not a **wur-mumu**, but a **wur-wamumu**.

Complex NP		
2-105 a)	détyerr wúnggume <i>mouth one</i>	one mouth
b)	a-détyerr-wúnggume <i>A-mouth-one</i> <i>cl</i>	a swordfish
Complex verb		
2-106 a)	yénim-wàlal-pi <i>3sgGo-shake-head</i> <i>SUPres redup</i>	It (habitually) shakes its head.
b)	a-yénim-wàlal-pi <i>cl-3sgGo-shake-head</i> <i>SUPres redup</i>	a clickbeetle

On the other hand, bound noun class generics function as *prefixes* to those hosts that have no freeform status. The hosts to generic prefixes can be simple nominals, reduplicated nominals and compounds. Obviously they cannot be complex NP's or verbs, as these are always independent units. As prefixation precedes stress marking, these generic prefixes are therefore interpreted as part of the phonological word for the purpose of stress placement. The generic prefix, as the initial syllable of the phonological word, now carries the primary stress. Secondary stress is determined in the manner described in sections 2.5.1 to 2.5.2. For simple nominals, secondary stress falls on the second subsequent syllable, unless it is word-final, as in 2-107. On reduplicated nominals, secondary stress is copied onto both elements, as in 2-108. And in the case of compounds, secondary stress falls on the initial syllable of the second subsequent morpheme as in 2-109.

Simple nominal		
2-107 a)	á-kulèmbi	water rat
NgK b)	wú-pidirri	dingo
Reduplicated nominals		
2-108 a)	á-pèrrpèrr	burdekin duck
b)	é-mèn'gimèn'gi	grey goshawk
Compounds		
2-109 a)	syíri-garrityìn-muy	boomerang
b)	á-tyeri-wùsye	frill-necked lizard

Note that where such nouns (i.e. those that are *prefixed*) are modified by an adjective, demonstrative or pronoun, the class generic will be copied onto that modifier as a *proclitic*. i.e the same class generic can be both prefix to class member terms, and proclitic to their modifiers.

2-110	á -kulèmbi	a-kérre	a big water rat
	<i>A-water rat</i>	<i>A-big</i>	
	<i>cl</i>	<i>cl</i>	
	mí-muy	mi-lálirr	an edible long-yam
	<i>Pf -yam</i>	<i>Pf- edible</i>	
	<i>cl</i>	<i>cl</i>	
	wú-pidirri	wu-mákarri	a bad dog
	<i>C -dingo</i>	<i>C- bad</i>	
	<i>cl</i>	<i>cl</i>	
	yérr-gi	yerr-kínyi	this pandanus
	<i>Tr -pandanus</i>	<i>Tr -this</i>	
	<i>cl</i>	<i>cl</i>	

We can conclude from this that not only the attachment of proclitics, but also the clitic copying rule, are ordered subsequent to stress assignment. Within a dynamic morphological model we could thereby order these operations in the following way.

prefixing > stress placement > clitic attachment > clitic copying

2.5.3 Word Stress on Verbs

The structure of the Ngan'gityemerri verb is described in detail in chapter 3 and has been briefly sketched out in 2.4.4.2. Readers are referred to either of these sections for definitions of 'auxiliary' and 'complex verb stem', and for descriptions of the constituency of these elements of the verb.

The discussion below looks firstly at the stress placement rules on 'simple verbs', then 'complex verbs', and concludes with some comments about the function of stress marking patterns within the synchronic verb structure.

2.5.3.1 Simple Verbs

Simple verbs show an interesting split between syllable-timed stress marking and morpheme-timed stress marking. Verbs of up to four syllables

pattern with simple nominals in bearing primary stress on their initial syllable, which will always be the bound subject pronoun²⁴, and secondary stress on the third syllable if it is penultimate. Secondary stress cannot fall on a final syllable.

- | | | |
|----------|--|----------------------|
| 2-111 a) | yé-menggeny
2sg-Arrive
SU Perf | You arrived. |
| b) | yérr-menggèny-gu
2pl - Arrive - dl
SU Perf SU | You (dl) arrived. |
| c) | ngí-nyinggin
1sg-See
SU Pres | I'm looking. |
| d) | ngíny-nyinggìn-gu
1pl -See -dl
SU Pres SU | We're looking at it. |

In the few examples of four-syllable and five-syllable simple verbs, we find examples like 2-112 below, which follow this pattern;

- | | | |
|-------|---|----------------------------|
| 2-112 | géntye-mèngge-gu
2pl -Arrive -dl
US Irr SU | You (dl) shouldn't arrive. |
|-------|---|----------------------------|

but we also find examples like 2-113 below.

- | | | |
|----------|---|---------------------|
| 2-113 a) | yé-menggeny-ngiti
2sg-Arrive -1sg
SU Perf IO | You came to me. |
| b) | ngí-nyingginy-nyì
1sg -See -2sg
SU Pres DO | I'm looking at you. |

²⁴The 'Arrive' and 'Say' auxiliaries (see auxiliary paradigms in the appendices A and B) have suppletive zero 3 sg bound pronouns in their present inflections. This is demonstrated for 'Arrive' below.

eg.	ngé-menggeny -	I arrived
	yé-menggeny -	You arrived
	ménggeny -	He arrived

In the case of these 3sg subject examples, the primary stress obviously falls on the initial syllable of the auxiliary root.

In 2-112 the secondary stress on the initial vowel of the second morpheme happens to be coincident with the third syllable of the word, so our syllable-timed stress rule is unproblematic here. However in 2-113 secondary stress falls not on the third syllable, but on the fourth. What may be happening here is that the psychological saliency of the morphology of the verb is overriding the normal stress rule, a process we have earlier seen to operate in stress placement on complex nominals. It seems in Ngan'gityemerri that there is a preference for marking stress on morpheme-initial syllables, where this does not disrupt the general principles of stress marking in a major way. In 2-113 a) and b) above, the bound direct and indirect object pronominal suffixes appear to be sufficiently 'salient' to motivate this preference.

2.5.3.2 Complex Verbs

Complex verbs carry primary stress on the initial syllable of the auxiliary, and secondary stress on the initial syllable of the Complex Verb Stem, regardless of their internal constituency. While the initial syllable of the auxiliary will always be the bound subject pronoun (though see footnote on previous page), the CVS may begin with a verb root, an incorporated bodypart, or a manipulative or valence increasing prefix. Using the symbol '=' to mark the boundary between the auxiliary and the CVS, the following examples show the application of this rule over a variety of CVS types. Tense and aspect markers that encliticise the CVS never bear stressmarking. Note also that in the absence of enclitics, stress can fall on the final syllable of a complex verb.

- 1-114 a) **yéniny** = **pàp**
 3sg Go - climb
 SU Perf
 He climbed up.
- b) **wírring - gu** = **dàdà**
 3nsSit - dl - sing
 SUPres SU redup
 They (dl) are singing.
- c) **yénim** = **mì - wap-nyine**
 3sg Go - Val - sit - FOC
 SU Pres
 She's camped with (him) / She's married now.
- d) **ngárim** = **fì - tyat**
 1sgPoke - Mp-place
 SU Perf
 I built it.
- e) **yú** = **tyèrr -dum**
 2sgSlash- mouth-bury
 SU Irr
 Shut the door !

- f) **wánni -ngi = fi -mi -tyatit-tye**
3nsPoke-1sg -Mp-Val -place- Past
SU PImpDO redup
 They used to show me how to do it.

2.5.3.2.1 Stress Marking on Reduplicated Verb Roots

The morphology and semantics of verb root reduplication is discussed in detail in 4.2.3.2. There are basically two ways that verbal roots can reduplicate, fully or partially. Partial reduplication always involves leftwards reduplication of only the initial open syllable of disyllabic roots.

2-115	kuluk	cough	→	kukuluk
	palak	drop	→	papalak
	purity	slip	→	pupurity
	fityi	roll	→	fifityi

Full reduplication, on the other hand, is always to the right, and involves the whole mono- or di-syllabic unit. The reduplicated syllable may be subject to vowel quality change (see 3.3.4.2).

2-116	da	hit/shoot	→	dada
	wa	pick up	→	wawu
	firkity	spin	→	firkityfirkity

Where either type of reduplicated verb root fulfils the conditions under which it will be stress marked (i.e. is the initial constituent of the CVS), secondary stress is copied onto both elements. This is demonstrated for partially reduplicated verb roots in 2-117 and 2-118, and for fully reduplicated verb roots in 2-119 to 2-121.

- 2-117 **ngíni = kùkùluk -tye**
1sg Sit - cough -Past
SU PImp
 I was coughing.
- 2-118 **yémi -ngiti =fifityi-pagu -pe**
2sgHands-1sg - roll -HITH- Fut
SU Irr IO
 Roll me some (smokes) !
- 2-119 **résyin wáddi = wàwù -tye**
ration 3pl Go - pick up -Past
SU PImp redup
 They used to collect rations.

- 2-120 **múdiga wírribem = mîrmîrr-nyine**
car 3sg Stand - thunder -FOC
 SU Pres redup
 The car's running now.
- 2-121 **ngúdum = firrkityfirrkity e ngúdum = bàtbit**
1sgShove - spin and 1sgShove -knock prone
 SU Perf redup SU Perf redup
 I swung (the goanna) round 'n round, and wacked it
 on the ground.

2.5.3.3 Stress Marking on Serialised Auxiliary Verbs

As discussed in 3.4.6, the low-transitive posture/motion auxiliaries, 'sit', 'lie', 'stand' and 'go', can be serialised to complex verbs. In this capacity they, at least partially, lose their lexical semantics and become grammaticised as aspectual operators. These serialised auxiliaries cannot be offset by a pause, but must follow the complex verb in a single breath group. Their initial syllable carries a secondary stress, so verbs of this form are stressmarked in three places, 'primarily' on the auxiliary and 'secondarily' on the initial syllables of the CVS and the serialised auxiliary verb, respectively.

- 2-122 **wárrgudu wárrri = bàtybity - tye - wírri**
dillybag 3plPoke- sew - Past-3pl Sit
 SU Irr redup SU Irr
 They were trying to sew up dillybags.
- 2-123 **wúnni -wùtyit - tye -wàddi a-bilirri-ne**
3sgSlash-throw - Past-3plGo A-alive -PURP
 SU Plmp redup SU Plmp cl
 They were throwing (a net) for livebait
- 2-124 **ngan'gi ngéme -nbi-yènggi -tye -ngìni**
story 1sgHands-2sg-tell story-Past-1sg Sit
 SU Imp IO SU Plmp
 I was telling you the story then.

2.5.3.4 Comment

Summarising stress patterns in Ngan'gityemerri:

-We have seen that simple (monomorphemic) nouns, and 'simple verbs' (those consisting minimally of 'subject-auxiliary root' sequences) have a syllable-timed stress pattern with primary stress on the first syllable and secondary stress on the third syllable if it is not word-final.

-Complex nominals, such as reduplications and compounds, have a morpheme-timed stress marking pattern. We also noted that as 'simple verbs' became increasingly complex (i.e. as direct and indirect object bound pronouns were suffixed to the 'subject-auxiliary root' sequence), then secondary stress began falling on the initial syllable of the pronoun, rather than the third syllable (see 2-99). I noted that for morphologically complex words there seems to be a preference for allocating stress marking in a way that reflects morphemic constituency.

- For complex verbs though, I find that stress is neither syllable-timed, nor morpheme-timed, but falls on the initial syllables of the auxiliary and the CVS, regardless of their syllabic or morphemic constituency. Put another way, stress patterns in the Ngan'gityemerri verb have the synchronic function of signalling the boundary between the auxiliary and the CVS. In a fixed-ordered, synthetic/agglutinative verbal structure, why should there be this higher-level grouping of a string of morphemes into two 'halves', and why should this have such saliency for the application of stress rules? The Ngan'gimerri data collected by Laves (1931) provides a historical viewpoint that suggests an explanation. A detailed comparison of the verbal structures exemplified in Laves' Ngan'gimerri data and my own data on contemporary Ngan'giwumirri, can be found in Reid (to appear). Just a brief summary is given here.

The 1931 Ngan'gimerri data suggests that the precursor to the contemporary Ngan'gityemerri verb structure, was a phrasal verb, consisting of a 'finite verb', and a freeform 'participle' (that shared at least some features of nominals). These two major elements of the phrasal verb appear to have formed separate phonological words. They could be ordered variably with respect to each other, and verbal enclitics could be copied onto both elements of the phrasal verb. Compare Laves' example below where the first word corresponds to the contemporary auxiliary, and the second word to the contemporary CVS.

- 2-125 Laves: Warrangitipe piparlandipe
 Cont : Wár-ra - ngiti = fi - pal - endi - pe
 Gloss: 3plPokeDtr-1sg - Tr - return- AGAIN-Fut
 SU Irr IO
 Trans: They'll come back for me later.

Laves' division of the elements of the phrasal verb into two phonological words, accords perfectly with our division of the same elements in the contemporary fixed-constituent structure into auxiliary and CVS. In Laves' data bound object pronouns are suffixes to the 'finite verb',

whereas in contemporary Ngan'gityemerri they are suffixes to the auxiliary. Likewise in Laves' data, the applicative prefixes *fi-* and *mi-* are incorporated bodyparts attached to the 'participle', whereas in contemporary Ngan'gityemerri they are prefixes to the verb root. In Reid (to appear) I suggest that within the last few generations the Ngan'gityemerri verb has undergone radical change. The 'finite verb' and 'participle' found in Laves' data, which functioned as separate phonological words, developed a fixed ordering and were 'glomped' together into a single phonological word. Verbal enclitics can no longer be copied onto both elements, as in 2-125 above, but are now attached to the complex verb unit.

If we accept that the 'finite verb' and 'participle' of the phrasal verb were separate phonological words, we can further presume that each of these two words would have borne primary stress on its initial syllable. In the contemporary Ngan'gityemerri verb, where these two 'halves' have been collapsed into a single phonological word, this pattern is essentially retained with primary and secondary stresses falling on the initial syllables of the auxiliary and CVS respectively. In conclusion then, the 'salience' of the boundary between the auxiliary and the CVS for the application of stress rules in contemporary Ngan'gityemerri can be accounted for in terms of the structural developments that the verb has (only recently) undergone.

Chapter 3

Morphology of the Ngan'gityemerri Verb

3.1 Overview of Verb Structure

3.1.1 Simple and Complex Verbs

There are two types of verb in Ngan'gityemerri: simple and complex. These are defined with respect to the constituent units 'auxiliary' and 'complex verb stem'. The presence of an auxiliary is a factor common to both verb types, though simple verbs consist minimally of just an auxiliary and are characterised by the absence of a complex verb stem.

The ten auxiliaries that form simple verbs are likewise referred to as 'simple auxiliaries'. The 'simple auxiliary' 'sit', forming a simple verb, is demonstrated in 3-1.

- 3-1 **ngirim**
 1sg Sit
 SU Pres
 I'm sitting.

The other 21 auxiliaries can only form verbs in combination with a verb stem. These auxiliaries are labelled 'complex auxiliaries' and the verbs they form are likewise known as complex verbs. The 'complex auxiliary' 'Hands', in combination with the verb stem **-wurity** 'make/fix', forming a verb meaning 'to make/fix something with one's hands', is demonstrated in 3-2.

- 3-2 **ngerim -wurity**
 1sgHands-make
 SU Pres
 I'm making it.

The 21 'complex auxiliaries' cannot form simple verbs. Thus 3-3, an attempt to form a simple verb consisting minimally of the 'Hands' auxiliary, is nonsensical.

- 3-3 ***ngerim**
 1sgHands
 SU Pres

However the 10 'simple auxiliaries' can, in addition to their role in forming simple verbs, also form complex verbs¹. Compare the use of the 'simple auxiliary' 'Sit' in 3-4 where it forms a complex verb, with 3-1 above where it forms a simple verb.

- 3-4 **ngirim-tyerrakul**
 1sgSit - talk
 SU Pres
 I'm talking.

Other than the 10 simple verbs then, all Ngan'gityemerri verbs are of the complex type, consisting of the two major units, the auxiliary and the complex verb stem. The complex verb constitutes a single phonological word (having only a single primary word stress, cf. 2.5.3) and are typically ordered with the verb stem following the auxiliary, as in 3-2 and 3-4. There are however two subclasses of verbs that are ordered inversely with the verb root preceding the auxiliary. These subclasses are:

- 1 The verb 'to want/like' formed with the 'Hands' auxiliary, e.g.

- 3-5 **derrigidi- wurrum-ngi**
 want - 3plHands -1sg
 SU Pres DO
 They want/like me.

- 2 All complex verbs formed with the 'Say' auxiliary, e.g.

- | | |
|---|---|
| <p>3-6 perrety-meny
 <i>die - 3sgSay</i>
 <i>SU Perf</i>
 He died.</p> | <p>3-7 parrng-yumum
 <i>snore - 2sgSay</i>
 <i>SU Pres</i>
 You're snoring.</p> |
|---|---|

Regardless of their ordering with respect to each other, the meaning of any complex verb results from the combination of these two verbal units. The 31 Ngan'gityemerri auxiliary verbs are listed in Table 3-1. The semantics of these auxiliary verbs, and the patterns of their combination with verb stems, are examined in more detail in chapter 4. The following sections, 3.2 and 3.3, respectively deal with the morphological make-up of the auxiliary

¹In using the labels 'simple' and 'complex' to describe the two auxiliary types, I follow Green (1989). I appreciate that in at least one respect these labels might be considered counter-intuitive. That is, in their capacity to not only combine with verb stems (what I treat as the basic verb form), but additionally to stand independently as full verbs, the 'simple auxiliaries' could be viewed as functionally more complex than those 'complex auxiliaries' that only combine with verb stems. Despite this I have found Green's labels otherwise useful and have retained them here.

and the complex verb stem. 3.4 brings together the various ways in which tense, aspect and mood distinctions are made in Ngan'gityemerri, and 3.5 explores the syntactic constraints upon, and semantics of, the incorporation of bodypart terms into the complex verb.

Ngan'gityemerri Auxiliary Verbs

Simple		
	Sit	Arrive
	Lie	Hang
	Stand	Say
	Go	See
	Go*	Take
.....		
Complex		
	Hands	Suck
	Feet	Pull
	Mouth	Snatch
	Poke	Shove
	Slash	Heat
	Bash	
	Hands oneself	Say/Do oneself
	Mouth oneself	See oneself
	Poke oneself	Heat oneself
	Shove oneself (dyn)	Bash oneself
	Shove oneself (stat)	Feet oneself

Table 3-1

3.2 Auxiliary Structure and Function

The auxiliary not only contributes to the overall lexical meaning of the verb, as mentioned in 3.1 and examined in chapter 4, but further, it indicates the person and number categories of core verbal arguments, and inflects for tense/aspect/mood categories.

The internal morphological constituency of the auxiliary can be characterised as four sequential slots. In the first of these, and thus generally word-initially, appear bound subject pronominal person markers. In the second slot we find subject number markers. The third slot is that of the auxiliary root, and the final auxiliary slot is filled by bound non-subject pronominal markers and further categories of subject number markers. As demonstrated in 3-8 below, and implicit in the notion of a linear string of slots, this four-part constituency is generally of a straightforward agglutinative nature.

- 3-8 **wi - rr - nyirri - ngi**
 3 - pl - See - 1sg
 SU SU Perf DO
 They saw me.

Most of the affixing and compounding processes that build the complex verb in Ngan'gityemerri are in fact of this structural type and their segmentation is unproblematic. However the morphology of certain auxiliaries is more synthetic than agglutinative, and this kind of neat segmentation is not possible. As a consequence of this, other than throughout this discussion of auxiliary morphology, in all examples and texts throughout this work the auxiliary unit is glossed as a single element, without attempting to use hyphens to exemplify its internal constituency. Two of the difficulties in auxiliary segmentation are briefly listed here.

1 Consider the subject person, subject number and auxiliary root forms in 3-9.

3-9		1sg	1pl ex	1pl inc
	Bash	nge-Ø-bem	nge-rr-bem	nge-mbe-bem
	Pull	ngi-Ø-syem	ngi-rr-syem	ngi-mbi-syem

The position of the subject number markers (-Ø- sg, -rr- pl ex, and -mbV- pl inc) reveals the auxiliary roots to have the syllabic form CVC (-bem and -syem), and the subject person markers to have the syllabic form CV (nge- and ngi-). Across the auxiliary person/number paradigms (listed in appendices A & B) the majority of subject-auxiliary sequences fit this syllabic pattern. However consider the first person singular subject, present tense sequences of the 'sit', 'hands' and 'poke' auxiliaries in 3-10 (where the singular subject number marker is Ø).

3-10	1sg-Sit	ngirim
	1sg-Hands	ngerim
	1sg-Poke	ngarim

As these subject-auxiliary sequences are distinguished by V₁, the analysis clearly suggested by these examples is to segment the bound subject person as C and the auxiliary root as VCVC.

3-11	ng-irim
	ng-erim
	ng-arim

As V_1 is not uniform across all subject-auxiliary sequences, and cannot be predicted in terms of vowel harmony rules operating regressively from V_2 , this analysis is initially attractive, but ultimately it creates more complexity than it solves. For instance, returning to the non-singular examples in 3-9, were we to accept C-VCVC as a pattern for subject-auxiliary sequences, to account for the occurrence of *-rr-* and *-mbV-* after the initial V_1 , we would have to propose a discontinuous auxiliary root (underlined in 3-12) within which *-rr-* and *-mbV-* were infixed.

3-12	ng - <u>e</u> - rr - <u>bem</u>	ng - <u>e</u> - mbe - <u>bem</u>
	ng - <u>i</u> - rr - <u>syem</u>	ng - <u>i</u> - mbi - <u>syem</u>

The complexity engendered here by a C-VCVC analysis clearly surpasses its value in dealing better with the three examples given in 3-10.

2 Dual subject marking, which is normally encoded by *-gV* in the fourth and final auxiliary slot (as described in 3.2.1.2.2), is suppletively marked in the Past Imperfective inflections of certain auxiliaries by vowel change in the auxiliary root (see for instance suppletive *nginne* 'we were sitting' instead of the predicted form *nginnigu* in the Past Imperfective dual forms of the 'sit' auxiliary in Appendices A and B).

3.2.1 Subject Cross-referencing

In Ngan'gityemerri subjects are obligatorily cross-referenced by bound pronouns on the verb. Subject person is marked in the initial position of the auxiliary, (and thus generally is the initial morpheme of the verb), and subject number is marked in the second position of the auxiliary.

3.2.1.1 Subject Person Marking

In addition to the neutral subject marking described in 3.2.1.1.1, in Ngan'gityemerri there are two additional, though restricted, categories of bound subject pronoun. 'Remote' subjects are dealt with in 3.2.1.1.2 and 'Undesirable' subjects are treated in 3.2.1.1.3.

3.2.1.1.1 Neutral Subjects

In general subject person marking is very regular. 1st person is universally *ngV-*, and 2nd person is universally *yV-*.

3-13 a)	ngayi	ngi-rim	-	I'm sitting.
	1sg	1sg- Sit		
	PRO	SU Pres		

- b) **nyinyi yi-rim** - You're sitting.
 2sg 2sg-Sit
 PRO SU Pres

The vowel of the subject person marker is, for many subject-auxiliary sequences, identical with, and presumably harmonically influenced by, the vowel of the following auxiliary root. For certain subject-auxiliary sequences however, like those listed in 3-10, the vowel of the subject person prefix must be lexically specified.

It is only with 3rd person singular subjects that irregular and suppletive subject person forms occur, and there only in subject-auxiliary sequences that are inflected for the realis tense/aspect categories Present, Perfective and Past Imperfective. All 3rd singular Irrealis subjects, and 3rd non-singular subjects are universally **wV-**.

- 3-14 **wi -ri -pe**
 3sg-Sit-Fut
 SU Irr
 S/He will be sitting.

For the 3rd singular subjects of realis Auxiliaries, we find three types of variation from the neutral **wV-** marking exemplified in 3-14.

- 1- Suppletive **yV-** initial forms
- | | | | |
|------|-----|--------------------|--------------------------|
| 3-15 | | <u>Actual form</u> | <u>Expected 3sg form</u> |
| | 1sg | ngaganim | |
| Go | 2sg | yaganim | |
| | 3sg | yenim | waganim |
| | 1sg | ngagantyin | |
| Take | 2sg | yagantyin | |
| | 3sg | yentyin | wagantyin |
| | 1sg | ngerrimbin | |
| Go* | 2sg | yerrimbin | |
| | 3sg | yirrimbin | werrimbin |
- 2- Irregular zero forms
- | | | | |
|--------|-----|---------------------|--------------------------|
| 3-16 | | <u>Actual forms</u> | <u>Expected 3sg form</u> |
| | 1sg | ngu-mum | |
| Say | 2sg | yu -mum | |
| | 3sg | mem | wumum |
| | 1sg | nge-men'gem | |
| Arrive | 2sg | ye -men'gem | |
| | 3sg | men'gem | wemen'gem |

	1sg	ngu-munggin	
Snatch	2sg	yu -munggin	
	3sg	menggin	wumunggin

- 3- The most frequently found variation where 3sg subject is marked as dV-.

3-17		<u>Actual form</u>	<u>Expected 3sg form</u>
Sit	1sg 2sg 3sg	ngi-rim yi -rim dim ²	wirim
See	1sg 2sg 3sg	ngi-nyinggin yi -nyinggin di -nyinggin	winyinggin
Hands	1sg 2sg 3sg	nge-rim ye -rim dem	werim
Pull	1sg 2sg 3sg	ngi-syem yi -syem di -syem	wisyem
PokeDtr	1sg 2sg 3sg	nga-ram ya -ram da -ram	waram
HandsDtr	1sg 2sg 3sg	nge-mem ye -mem de -mem	wemem

3.2.1.1.2 'Remote' Subjects

In the immediately preceding section we noted that the 3rd person subject marker is basically wV-, though 3rd singular subjects show a variety of suppletive and irregular forms. Treating all four of the attested realisations (wV-, yV-, Ø-, dV-) as a single system called 'wV- marking', this system contrasts with another 3rd person bound subject marker of the form gV-, referred to as 'gV- marking'.

The functional nature of the contrast between 'wV- marking' and 'gV- marking' has been problematic for me, and appears to have been so for previous investigators of the language, for each has drawn different conclusions.

²This form and dem in 'Hands' are underlyingly dirim and derim, respectively. They undergo contraction in accordance with regular morpho-phonological rules (see 2.4.2 and 2.4.3).

Gerhardt Laves (193? fieldnotes) notes this variation in Ngan'gimerri, and suggests that the basis for the contrast is one of deixis, ie proximate versus distant, and gives the following example.

3-18 Qu **djide³ wibem** - Where is it ?
where 3sg Lie
SU Pres

Ans **ginji gibem** - It's here.
here 3sg Lie
SU Pres

Laves does not indicate which of **wV-** and **gV-** is proximate and which distant, though from his example I would presume that he intends **gV-** 'proximate' and **wV-** 'distant'.

Hoddinott and Kofod (1989:113) describe this variation as one of aspect, giving examples such as the Ngan'gikurunggurr one quoted below.

3-19 a) **wa -weti gudem -fel dirrpederr-nide**
C(iv)little 3sIMP VC 10-dive river -LOC
 The little boy is diving into the river.

b) **wa -weti wudem -fel dirrpederr-nide**
C(iv)little 3sP VC 10 -dive river -LOC
 The little boy dived/dives into the river.

They attribute **gV-** marking to 'Present Incompletive' aspect, and **wV-** marking to 'Present (including Immediate Past) Completive' aspect. The main failure of H&K's analysis is that it leaves us with two conflicting aspect marking systems. Aspectual information is normally marked in Ngan'gityemerri through the combination of auxiliary root inflection (cf. 3.4.1) and through the strategy of serialising posture/motion auxiliaries to the complex verb (cf. 3.4.5). It is auxiliary serialisation that specifically marks imperfective, progressive aspect, as in the example below.

3-20 **warrgudu ngerim -wurity -ngirim**
dillybag 1sgHands -make -1sgSit
SU Pres SU Pres
 I am (as I speak, in the process of) making a dillybag

3Retaining Laves' orthography. Ngan'gimerri **djide**- 'where' is **kide** in both Ngan'giwumirri and Ngan'gikurunggurr, a minor bit of evidence suggesting that voiced laminals may have shifted to dorsals in the current phonological systems of the latter two dialects which lack voiced laminals.

H&K (1989:134) note the imperfectivity marked by auxiliary serialisation, but offer no account of how this might tie in with the aspectual significance they attribute to **gV-** versus **wV-** marking. In fact their own data on serialised auxiliaries⁴ conflicts with the perfectivity they attribute to **wV-** marking. They give examples like those quoted in 3-21 below, where both **gV-** and **wV-** subject forms appear on verbs that are marked for imperfective, progressive aspect through the serialised auxiliary strategy .

- 3-21 a) **aliyi** **gawam** **pudup girim**
 C(iv)fat 3sIMP-VC26-PRES melt OA:3sIMP-sit-PRES
 The fat is melting.
- b) **Bi** **dem** **baty wirribem**
 axe 3sP-VC13-PRES have OA:3sP-stand-PRES
 He has an axe in his hand.

In terms of H&K's analysis, 3-21 b) above is marked for both perfectivity and imperfectivity; perfectivity denoted by the **dV-** subject marker, and imperfectivity by the serialised stance auxiliary **wirribem**.

I find the variation between **gV-** and **wV-** subject marking to be a contrast between *remote* and *proximate*, not simply in deictic terms, as Laves has suggested, but also in conceptual terms. In my data the vast majority of present tense verbs showing **gV-** subject marking employ stative auxiliaries, either the postural 'sit', 'lie', and 'stand' auxiliaries, as in examples 3-22 to 3-25, or the motional 'go' and 'go*' auxiliaries, as in examples 3-26 to 3-28. With stative auxiliaries **gV-** marking denotes states that are remote from the speaker, either spatially distant or conceptually distant - activities or states that are in some way outside the speaker's immediate world, perhaps out of sight as in 3-23 and 3-24 below, or perhaps beyond the speaker's firsthand knowledge. In the example glosses **wV-** subjects are given as **SU** (Subject), and remote **gV-** subjects as **SR** (Subject Remote).

- 3-22 **...peyi-pefi** **girrim, nginyirri-wurr**
 in -THITH 3plSit 1sg See - 3pl
 place SR Pres SU Perf DO
 (We went) over there where I could see them sitting.

4 The label they use is 'Orientation Auxiliaries'.

- 3-23 Yu wetimbi kinyi gibem
 yes FINE here 3sgLie
 SR Pres
 Yeah OK!, (the didjeridu) is here (inside the house/out of sight).

- 3-24 Tyemeny girim -tyerrakul yi -tyerr -gat -pe
 3sgSit -talk 2sgSit-mouth-answer-Fut
 SR Pres SU Irr
 It's Tyemeny talking (on the phone), will you speak ?

- 3-25 Yu Darwin kine, wembem yaga, buy -gumum-derri-gaganim
 yes this house DEM white-3sgDo -back-3sgGo
 place SR Pres SR Pres
 Yes, this is Darwin alright, the houses are standing out white in the distance.

With the two motional auxiliaries 'Go' and 'Go*' 3sg gV- marking also implies motion or activity 'at a distance', often 'approaching from a distance'.

- 3-26 light fil -gumum-muy-ganantyerri
 shine-3sgDo -eye -3sgGo*
 SR Pres SR Pres
 (From the plane we could see the Adelaide) lights coming on/getting closer.

- 3-27 kanbi -mbirri gaganim-garrmadi nginnyirri
 didjeridu-first 3sgGo -approach 1plexSee
 SR Pres SU Perf
 We saw that the didjeridu was coming up first (on the airport luggage conveyor belt).

- 3-28 Wur-nurse kinyi dini -tye fepi minbadi, mudiga-werre gagantyerri
 F - here 3sgSit-Past hill big car -ASSOC 3sgGo*
 cl SU PImp SR Pres
 That nurse, who used to live here at Peppimenarti, was approaching in a car.

Other than the stative posture/motion auxiliaries, remote gV- subject marking has only been recorded with the two 'transitive' auxiliaries (cf. 4.2.1) 'Feet' and 'Mouth'. 3-29 and 3-30 are the only such examples in my data.

- 3-29 ngayim mityity minbe fenggiderrri gana -garrmadi mudiga-werre
 3sgF white Neg long time 3sgFeet-approach car -ASSOC
 PRO woman SR Perf
 Before long that white woman came along in a car.

- 3-30 a miyi nyin gerrminy-didi -ganniny,
 finally plant ANA 3plHands-push-3plGo
 food SR Perf SR Perf
 They (hostesses) came pushing the food(trolley),
 wanni -wurr-fi -me -lali -tye -waddi ngan-ngagurr warrakma
 3plPoke -3pl -Mp-hand-around-Past-3plGo LOC- 1plex three
 SU PImp DO SU PImp PRO
 handing it around to them all, then finally to us three.

3.2.1.1.3 'Undesirable' Subjects

In Ngan'gityemerri irrealis verbs with 2nd or 3rd person subjects can, through the selection of specific subject pronominal forms, be marked as representing propositions that the speaker would not wish to reach fruition.

There are several important observations to be made here. Firstly, the 'undesirable' evaluation conveyed by these variant subject prefixes, is the evaluation of the speaker, not the subject. Secondly, the 'undesirable' evaluation of the speaker is an evaluation of the entire verbal proposition, not simply of the subject identity. Thirdly, the undesirability of the development of a proposition that is marked in this way, can only be encoded on verbs with 2nd and 3rd person subjects.

The forms of the 2nd and 3rd person 'Undesirable' subjects are gVntyV-/gVtyV-(K) and gV- respectively (where -V- has the same quality as the -V- of the corresponding neutral bound subject marker, as given in 3.2.1.1.1 above). In the examples throughout this section they are glossed as US 'Undesirable Subject', in contrast to SU 'neutral SUBject' and RS 'Remote Subject'. Before looking at some examples, Table 3-2 below sets out the full Ngan'giwumirri Irrealis subject-auxiliary sequences of the 'Sit', 'Go' and 'Hands' auxiliaries, showing the 2nd person subject variation between neutral yV- and 'Undesirable' gVntyV-, and the 3rd person subject variation between neutral wV- and 'Undesirable' gV-.

'Undesirable' subject person pronouns can be used to mark the undesirability of any event that is expressed in irrealis verbal forms. This may be straightforward conjecture, as in 3-31.

- 3-31 nimbi ginnyirrigu, dede -ne ga -wurrki-tyeri-tyirr
 CAUS 3pl See dl country-PURP 3sgPoke -3dl -ear -squeeze
 US Irr SU US Irr DO =feel longing
 If they two were to watch it (a video containing footage of a recently deceased person), it would make them sorry for their country.

3-36 below contains both a 'prohibitive' *-merrendi* clause and a clause of undesirable conjecture. In both clauses the subject is pronominally cross-referenced with the 'Undesirable' subject person forms.

- 3-36 **kanbi** **yaga** **minbe-merrendi** **ganyawam** airplane-**nide**,
didjeridu DEM Neg -PROHIB 2sgTake -LOC
 US Irr
 You can't take that didjeridu on the plane,
nimbi **gani** **-lala** **ngarapa-wurru**,
 CAUS 3sgGo-split fragile-UNSATIS
 US Irr
 it might split, it's too fragile.

3.2.1.2 Subject Number Marking

Where subject *person* is marked fairly straightforwardly in the initial position of the auxiliary, the task of marking subject *number* falls on a variety of verbal positions, both within, and outside of, the auxiliary unit. This diverse multi-marking system reflects the hierarchical system of number category formation. Increasingly marked number categories are derived by taking simpler number categories as a base and adding additional morphological marking in new verbal slots. We need to deal here with two separate hierarchical structures, for subject number marking shows the same split between 1st inclusive and non-1st inclusive that requires the separate description of these two categories in the discussion of free form pronouns (cf. 9.1.1). From the examples and discussion in the following sections it will become apparent that 1st inclusive subject number operates in terms of the markedness hierarchy;

/singular < dual < plural/

whereas non-1st inclusive operates in terms of the markedness hierarchy:

/singular < plural < dual < trial/

In section 3.2.1.2.1 below I deal first with 1st inclusive subject number marking, then in section 3.2.1.2.2 with the non-1st inclusive.

3.2.1.2.1 1st Inclusive Subject Number Marking: *-nime*

Taking the first person singular subject-auxiliary sequences as the base form (assuming the singular number marker to be Ø), the first person dual inclusive is formed by adding *-mbV-* in the auxiliary position immediately following the subject person marker and preceding the auxiliary root. The plural, which is a more marked number category than the dual for first inclusives, is marked by the additional suffixing of the restricted plural marker *-nime* to the verb. The singular, dual and plural subject forms of the 'Lie' auxiliary are set out in 3-37 below.

- 3-37 a) **ngayi** **ngi - Ø - bem** I'm lying.
 1sg 1st sg Lie
 PRO SU SU Pres
- b) **nayin** **ngi - mbi - bem** We (dlinc) are lying .
 1dl 1st dlinc Lie
 PRO SU SU Pres
- c) **nayin-nime** **ngi - mbi - bem -nime** We (plinc) are lying.
 1dl - pl 1st dlinc Lie pl
 PRO SU SU Pres SU

From 3-37 b) and c) it can be seen that the suffix **-nime** derives 1st inclusive plurals from 1st inclusive duals on the freeform as well as the bound pronouns.

Suffixed to simple verbs, **-nime** appears in the position immediately following the auxiliary unit, and preceding any other enclitics that can attach to the verbal complex, such as the past tense marker in 3-38.

- 3-38 **ngi-mbi -nge -nime-tye**
 1 -dlinc-Lie -pl -Past
 SU SU Plmp SU
 We (plinc) were lying down.

Suffixed to complex verbs, **-nime** appears in the position immediately following the verb root, as shown in 3-39 where the 'Pull' auxiliary forms a complex verb in combination with the verb root **-wurr** 'extract'.

- 3-39 a) **ngi- Ø -syeny-wurr** I pulled it out.
 1st -sg -Pull-extract
 SU SU Perf
- b) **ngi-mbi -syeny-wurr** We(dlinc) pulled it out.
 1 -dlinc-Pull -extract
 SU SU Perf
- c) **ngi-mbi -syeny-wurr -nime** We(plinc) pulled it out.
 1 -dlinc-Pull -extract-pl
 SU SU Perf SU

Examples 3-37 to 3-39 show that the **-V-** of **-mbV-** is determined progressively from the bound subject person prefix, not regressively from the auxiliary root. The same observation was made regarding the vowel quality of the 2nd person 'Undesirable' subject pronouns in 3.2.1.1.3. Note that this progressive harmony contrasts with the general vowel harmony process that operates at the surface level on verbs (cf. 2.4.4.2), which is always clearly regressive.

While the underlying form of the 1st inclusive non-singular marker **-mbV-** occurs in about 90% of surface forms, various phonological rules operating on the sound sequences formed across the boundary between the subject number marker and the auxiliary root, result in surface variation that needs to be accounted for.

Firstly, consider the unsegmented present tense 1st singular and 1st dual inclusive forms of the 'Sit', 'Hands' and 'Poke' auxiliaries in 3-40 to 3-42, where **-mbV-** prefixes an auxiliary root that is **r** - initial.

3-40	a)	ngirim <i>1sgSit</i> <i>SU Pres</i>	I'm sitting.
	b)	ngindim <i>1dlincSit</i> <i>SU Pres</i>	We (dlinc) are sitting.
3-41	a)	ngerim -pul <i>1sgHands-wash</i> <i>SU Pres</i>	I'm washing it.
	b)	ngendim -pul <i>1dlincHands-wash</i> <i>SU Pres</i>	We (dlinc) are washing it.
3-42	a)	ngarim -pawal <i>1sgPoke-spear</i> <i>SU Pres</i>	I'm spearing it.
	b)	ngandim -pawal <i>1dlincPoke-spear</i> <i>SU Pres</i>	We (dlinc) are spearing it.

These dual surface forms are explicable in terms of the apicalisation and deletion rules described in 2.4.2 and 2.4.3. Taking 3-40 as an example, we can see that this **r**-initial auxiliary root triggers apicalisation of the **-mbV-** subject number prefix;

3-43 {ngi-mbi-rim} → {ngi-ndi-rim}

then a morphophonological process that reduces contiguous apical syllables, triggers the deletion of **-ri-**.

3-44 {ngi-ndi-rim} → **ngi-ndi-m**

Secondly, the single auxiliary root that is **g**-initial also triggers velarisation, deletion and some vowel change. Consider the 1st singular and 1st dual inclusive forms of the 'Go' auxiliary below.

3-45	nga-ganim	-	I'm going
	<i>1sg Go</i>		
	<i>SU Pres</i>		
→	{nga-mba-ganim}		
→	{nga-ngga-ganim}		
	nga-nggi-nim	-	We(dlinc) are going
	<i>1st dlinc Go</i>		
	<i>SU SU</i>		

Note that in all examples of dual inclusive surface forms that result from the application of assimilation and deletion rules (3-40 to 3-42 and 3-45), the **-V-** of underlying **-mbV-** is no longer predictable in terms of the vowel quality of the **-V-** of the bound subject person prefix.

Thirdly, auxiliary roots that are n-initial, or have the minimal form **-N-**, show considerable variation in the surface forms that result from their **-mbV-** prefixation. While 3-46 and 3-47 below trigger apicalisation, and in 3-48 we find both apicalisation and deletion, in 3-49 and 3-50 neither of these processes occur.

3-46	a)	ngi-N	I said.
NgK		<i>1sg-Say</i>	
		<i>SU Perf</i>	
	b)	ngi-ndi-N	We (dlinc) said.
		<i>1st-dlinc-Say</i>	
		<i>SU SU Perf</i>	
3-47	a)	nge-N -baty	I chewed it.
NgK		<i>1sg -Mouth-chew</i>	
		<i>SU Perf</i>	
	b)	nge-nde-N -baty	We (dlinc) chewed it.
		<i>1st-dlinc-Mouth-chew</i>	
		<i>SU SU Perf</i>	
3-48	a)	ngi-nem-bulbul	I cooked it.
NgK		<i>1sg-Heat-boil</i>	
		<i>SU Perf</i>	
	b)	ngi-nde-m-bulbul	We (dlinc) cooked it.
		<i>1st-dlinc-Heat-boil</i>	
		<i>SU SU Perf</i>	
3-49	a)	nga-nam-baty	I kick it.
		<i>1sg-Feet-kick</i>	
		<i>SU Pres</i>	
	b)	nga-mba-nam-baty	We(dlinc) kick it.
		<i>1st-dlinc-Feet-kick</i>	
		<i>SU SU Pres</i>	

- 3-50 a) **ngi -m -garri-fityi** I'm sitting cross-legged.
1sg -ShoveDtrS-leg -roll
SU Pres
- b) **ngi-mbi -m -garri-fityi** We(dlinc) are sitting
1st-dlinc-ShoveDtrS-leg -roll cross-legged.
SU SU Pres

3.2.1.2.2 Non-1st Inclusive Subject Number Marking: -rr-, -gu and -nime

Turning our attention to the marking of subject number for 1st exclusive, 2nd and 3rd person subjects, recall that we have an additional number category, trial, and that the number markedness hierarchy is;

Singular < Plural < Dual < Trial

While dual was the unmarked non-singular number category for the 1st-inclusives, for the non-1st-inclusives it is the plural category that is least marked.

Again taking the singular forms as a base, and assuming the singular subject number marker to be zero, we find that each number category is formed by augmenting the category below it on the hierarchy, with additional marking in a new verbal slot. Plural subjects are marked by -rr- in the auxiliary position immediately following the subject *person* marker.

Dual subject number is marked by (in addition to the plural -rr-) -gV in the fourth position within the auxiliary, i.e. immediately following the auxiliary root. Note that this same slot within the auxiliary can also be filled by non-subject bound pronouns which outrank -gV for access. Dual subject -gV is therefore generally restricted to occurrence in intransitive verbs, or transitive verbs with 3rd singular Ø object pronouns. There is however a set of portmanteau bound pronouns that encode subject duality in addition to object person and number. These are discussed in more detail in 3.2.3.2.

Trial subjects further augment the dual form with -nime in the position immediately following the auxiliary unit in the case of simple verbs, or immediately following the verb root in the case of complex verbs. Note then that while the addition of the suffix -nime derives plural from dual 1st-inclusive forms, in the case of non-1st-inclusive subjects, the same suffix form derives specifically trial forms. The formation of these three non-singular number categories is demonstrated in 3-51.

- 3-51 a) **ngayi** **nge -Ø -beny -da** I hit it.
1sg 1 -sg -Bash -hit
PRO SU SU Perf
- b) **ngagurr** **nge -rr -beny -da** We (plex) hit it.
1pl 1 -plex-Bash hit
PRO SU SU Perf

- c) **ngarrgu** **nge -rr -beny -gu -da** We (dlex) hit it.
 1dl 1 -plex-Bash -dl - hit
 PRO SU SU Perf SU
- d) **ngarrgu-nime nge -rr -beny -gu -da -nime** We (trex) hit it.
 1dl -tr 1 -plex-Bash -dl -hit- tr
 PRO SU SU Perf SU SU

As can be seen from these examples, morphological markedness parallels semantic markedness. That is, increasingly restricted and specific number categories are increasingly morphologically complex. The trial number category, being so highly marked in both senses, tends not to be exploited where such high markedness is pragmatically unwarranted. So Ngan'giwumirri and Ngan'gikurunggurr speakers, in a discourse involving three subject persons, would tend to employ plural subject marking, unless the subjects' 'threesomeness' is perceived to be significant.

Turning our attention to the morphology of these subject number morphemes, the remainder of this section looks at the phonological processes operating on the clusters formed when **-rr-** prefixes the auxiliary root, commenting on the vowel quality of **-gV** and presenting some examples of suppletive dual subject number formation.

Plural exclusive **-rr-**

As auxiliary roots are always consonant-initial, the occurrence of the non-1st inclusive non-singular subject number marker **-rr-**, in the auxiliary position immediately preceding the auxiliary root, always produces a **-rrC-** cluster. Five undesirable cluster types resulting from this affixation trigger some of the phonological rules that we have already seen to operate in 2.4.2.1.

1 Where the auxiliary root initial consonant is an apical oral or nasal stop, eg. **-rrC/N[+apical]**, then **-rr-** assimilates in manner, producing a geminate stop cluster. This is demonstrated by the 1st person singular and plural forms of three Present tense auxiliaries in 3-52 below.

3-52	<u>singular</u>	<u>underlying plural</u>	<u>plural</u>
a) Feet	nganam	{nga-rr-nam}	ngannam
b) Shove	ngudum	{ngu-rr-dum}	nguuddum
c) ShoveDtr	Dngudem	{ngu-rr-dum}	nguuddum

In Ngan'giwumirri -rr- additionally assimilates in both manner and articulatory type when it precedes the laminal nasal **ny**, producing geminate laminal nasal clusters as in the plural forms of 'See' and 'SeeDtr' in 3-53 below.

3-53		<u>singular</u>	<u>underlying plural</u>	<u>plural</u>
	a) See	nginyinggin	{ngi-rr-nyinggin}	nginnyinggin ⁵
	b) SeeDtr	nginyerrem	{ngi-rr-nyerrem}	nginnyerrem

Laminal assimilation of -rr- is not triggered in this same environment in Ngan'gikurunggurr, where the cluster **rrny** is maintained. Compare the plural surface forms of 3-53 and 3-54.

3-54		<u>singular</u>	<u>plural</u>
NgK	a) See	nginyinggin	ngirrnyinggin
	b) SeeDtr	nginyerrem	ngirrnyerrem

2 Where the auxiliary root is r-initial, the continuant **r** is deleted and the underlying cluster **rr + r** is realised simply as **rr**. this is demonstrated in the plural forms of Sit, Poke and PokeDtr in 3-55 below.

3-55		<u>singular</u>	<u>underlying plural</u>	<u>plural</u>
	a) Sit	ngirim	{ngi-rr-rim}	ngirrim
	b) Poke	ngarim	{nga-rr-rim}	ngarrim
	c) PokeDtr	ngaram	{nga-rr-ram}	ngarram

3 Where the auxiliary root is rr-initial, the underlying cluster **rr + rr** is treated quite differently in Ngan'giwumirri and Ngan'gikurunggurr. In Ngan'giwumirri it is realised as a clearly geminate voiced apical stop, in Ngan'gikurunggurr the second element of the cluster is realised as the voiced apical retroflex fricative, ie. **rr + s**. This difference in the plural surface forms in the two languages is shown in 3-56.

3-56		<u>singular</u>	<u>underlying plural</u>	<u>plural</u>
	a) NgW Stand	ngirribem	{ngi-rr-rribem}	ngiddibem
	b) NgK Stand	ngirribem	{ngi-rr-rribem}	ngirrsibem

⁵In the practical orthography the geminate laminal nasal cluster is written as **nny** rather than **nyny**, because the contrast between **n** and **ny** is neutralised pre-consonantly.

4 For some subject-auxiliary sequences, note the appearance of a vowel between rr + C. The occurrence of this vowel cannot be predicted from all the same underlying forms across the auxiliary class paradigms. For instance, rr + n in 'Feet' (in 3-52 a) above) is realised as a geminate apical nasal, but in 'Go' (Irr) in 3-57 below, the same underlying cluster involves the insertion of a vowel between -rr- and the initial consonant of the auxiliary root.

3-57		<u>singular</u>	<u>underlying plural</u>	<u>plural</u>
	a) Go	ngani	{nga-rr-ni}	ngarrani

See also the NgK 'Slash'(Pres) subject-auxiliary sequence in 3-36.

3-58		<u>singular</u>	<u>underlying plural</u>	<u>plural</u>
NgK	a) Slash	ngupuN	{ngu-rr-puN}	ngurruN

This kind of vowel insertion would appear to be the normal way of deriving the plural forms of those few auxiliary roots that consist minimally of a nasal consonant. The examples below show the surface plural forms of Mouth and ShoveDtrS (Pres).

3-59		<u>singular</u>	<u>underlying plural</u>	<u>plural</u>
	a) Mouth	ngem	{nge-rr-m}	ngerrem
	b) ShoveDtrDngim		{ngi-rr-m}	ngirrim

One possibility suggested by the appearance of these vowels here, is that an historical form of the plural exclusive subject number morpheme was -rrV-. It could be argued that although this form is still evidenced in minor parts of the auxiliary paradigms (as in 3-57 to 3-59), generally the vowel has been lost, this reduction resulting in consonant clusters at the boundary between subject number marking and the auxiliary root.

5 Three auxiliary root-initial phonemes of weak consonantal status (ie. without radical vocal tract obstruction), g, sy and w, are sporadically found to be deleted following -rr-. In 3-60 below, both plural forms are underlyingly rr + w. In 'Take' (Irr) the cluster is maintained, but in 'SayDtr' (Pres) the w is lenited.

3-60		<u>singular</u>	<u>underlying plural</u>	<u>plural</u>
	a) Take	ngawam	{nga-rr-wam}	ngarrwam
	b) SayDtr	ngiwem	{ngi-rr-wem}	ngirrem

Lenition of *g* following *-rr-* is more common in Ngan'gikurunggurr than in Ngan'giwumirri. See their corresponding forms for 'Take' (Pres) in 3-61.

3-61		<u>singular</u>	<u>underlying plural</u>	<u>plural</u>
a) NgW Take	ngagantyin	{nga-rr-gantyin}	ngarrgantyin	
b) NgK Take	ngagatyin	{nga-rr-gatyin}	ngarratyin	

In Ngan'giwumirri the two auxiliary roots that are *sy*-initial ('Pull' and 'Suck'), frequently lenite the *sy* as a free variant of the full cluster.

3-62		<u>singular</u>	<u>underlying plural</u>	<u>plural</u>
a) Pull	ngisyem	{ngi#rr#syem}	ngirrsyem/ngirrem	
b) Suck	ngusyum	{ngu#rr#syum}	ngurrsyum/ngurrum	

Dual Subject Marker *-gV*

The vowel of the dual subject number marker is realised as either *i* or *u*. It is always *u* when it occurs word finally (ie. in simple verbs where an auxiliary can stand alone without a verb root) and where the following syllable vowel is *u*. It is realised as *i* where the following syllable vowel is *i*, *e* or *a*. I would posit *u* as its underlying form on the basis of its word-final realisation, and allow for its realisation as *i* in terms of the following vowel harmony rule.

/u/	→	<i>i</i> / _CV[-back],[+back, -high]
	→	<i>u</i> / _CV[+back, +high]
		<i>u</i> / _# [wordfinal]

The following examples demonstrate the realisations of *-gV* in these environments. Normal glossing practice is to write the auxiliary as a single unit, without using hyphens to show auxiliary-internal segmentation. In the following examples I have used a hyphen to mark off the dual subject number marker from the rest of the auxiliary unit, simply for clarity.

3-63	yerr-wirimbi	-firr	wirrim-gu
	<i>Tr</i>	<i>-whitegum-foot</i>	<i>3plSit - dl</i>
	<i>cl</i>		<i>SU Pres SU</i>
	They (dl) are sitting at the foot of the whitegum.		

- 3-64 **kuru ngerrminy -gu-bubu**
water 1plexHands-dl -fetch water
SU perf SU
 We (dlex) brought water.
- 3-65 **kanbi -nuwurr ngerrmi -gi -baty -pe?**
didjeridu-briefly 1plexHands-dl -hold -Fut
SU Irr SU
 Can we (dlex) have your didjeridu for a little while ?
- 3-66 **wirrim -gi -fifi atyat**
3plSit -dl -smoke outside
SU PresSU Eng loan
 They (dl) are having a smoke outside.
- 3-67 **warram -gi -pek**
3plPokeDtr-dl -drip
SU Pres SU
 They (dl) are painting up.

Suppletive dual subject number marking.

While the general observation that dual subject number is marked by -gV in the final position within the auxiliary accounts for the vast majority of dual subject auxiliary inflections, for four auxiliaries ('Sit', 'Go', 'Poke' and 'Slash') dual subject number is marked suppletively in the Past Imperfective inflection by a change in vowel quality of the auxiliary root form. The 1st person singular, 1st dual exclusive, and 1st plural exclusive Past Imperfective forms of these four auxiliaries are given in 3-68 below.

3-68	<u>singular</u>	<u>dual</u>	<u>plural</u>
Sit	ngini	nginne	nginni
Go	ngagadi	ngadde	ngaddi
Poke	ngani	nganne	nganni
Slash	nguni	ngunne	ngunni

For 'Go' we additionally find this suppletive dual subject marking in the Irrealis inflection.

3-69	Go	ngani	ngarrene	ngarrani
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'Go*' is completely anomalous in marking plural with -tyirri for the Present and Perfective, and -yirri for the Irrealis, and it marks dual with -girri. These forms are unattested elsewhere within the auxiliary paradigms. A glance at the 1st person exclusive forms for all four inflectional categories, set out in the example below, shows the Past Imperfective category to be

further anomalous in switching these suffixes, and having -yirri marking the dual, and -girri the plural.

3-70	<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
1sg	ngerrimbin	ngerrim	ngerrini	ngirri
1dlex	ngarringgirri	ngarringgirri	nganneyyirri	ngannigirri
1plex	ngarrintyirri	ngarrintyirri	ngannigerri	nganniyirri

3.2.2 Auxiliary Root

The verbal systems of Ngan'giwumirri and Ngan'gikurunggurr both employ 31 auxiliary roots. In terms of their number, and apparently also their semantics, the two auxiliary systems appear to map perfectly onto each other. However there is a major, pervasive difference between them in terms of the number of tense/aspect/mood categories for which they subcategorise.

This section just deals briefly with the syllabic structure of auxiliary roots as a preliminary to the evidence for historical auxiliary tense suffixes that is presented in 3.4.2. The semantics of auxiliary roots, their transitivity, their distribution, and their co-occurrence with verb stems, are taken up in chapter four. The nature of auxiliary root inflection for categories of tense, aspect and mood is dealt with in 3.4.1.

Based on their Present and Perfective inflectional forms the 31 auxiliary roots can be divided into the three following syllabic types.

3-71	<u>Syllabic Structure</u>	<u>No. of auxiliaries</u>
	N	2
	CVN	18
	CVCVN	11

Examples demonstrating each of these auxiliary structural types are set out in 3-72 to 3-74.

3-72	nge	-n	-du
	1sg	-Mouth	-touch
	SU	Perf	
	I tasted it.		

3-73	nge	-riny	-du
	1sg	-Hands	-touch
	SU	Perf	
	I touched it.		

3-74	ngu	-dupun	-du
	1sg	-Shove	-touch
	SU	Perf	
	I tested it out/ had a feel of it.		

3.2.3 Non-Subject Cross-referencing

3.2.3.1 Direct and Indirect Objects

In Ngan'gityemerri two types of non-subject argument are cross-referenced in the final slot of the auxiliary with bound pronominal suffixes. These categories of participant type are labelled 'Direct Object' and 'Indirect Object' (DO and IO in the example glosses). Before looking at the morphology of these two sets of pronouns, I comment on the nature of these categories of participant role.

Other than the minor use of IO forms in reflexive verbs (see 3.2.3.4), only higher animate participants are generally eligible for cross-referencing with DO and IO forms. On the animacy hierarchy humans, spirits and ancestral beings are placed high. On the other hand, insects, birds, mammals etc clearly hold a low position. Certain domesticated animals (dogs and horses for instance) can be variously viewed as higher or lower on the scale, perhaps not always qualifying for verbal cross-referencing, but clearly being eligible where they are addressed as second persons, included in the reference of first person forms, or within certain contexts play a sufficiently salient role within a discourse that they need to be referenced within the verb.

Indirect Object forms cross-reference higher animates that are: the implied locatives of intransitive motion verbs (3-76); the goals of speech act verbs (3-77); the targets of cognitive and perceptual verbs⁶ like 'forget' (3-78), 'remember', 'recognise', 'listen', 'hear'; and entities that are the less affected 'objects', beneficiaries or goals of transitive verbs (3-79).

Direct Object forms, on the other hand, cross-reference those non-controlling patient-like participants that are acted upon by a transitive agent, including the recipient of 'give' (3-80 to 3-83).

It is the semantic nature of Ngan'gityemerri verbs that determines whether they cross-reference participants with DO or IO forms. Although we can make the general observation that DOs are highly affected patients, and IOs are less affected targets and goals, participants in a given verb cannot be variously coded with either set of forms. That is, the difference between DO and IO marking does not constitute a grammatical device that can be manipulated to allow for different degrees of patient affectivity.

⁶Verbs of visual perception (like 'see') and emotion verbs like 'be jealous' that, through auxiliary selection, are viewed as being experienced through the visual senses, cross-reference their non-subject participants as Direct Objects.

Table 3-3 below gives the singular, dual and plural forms of the bound Direct and Indirect Object suffixes for Ngan'giwumirri and Ngan'gikurunggurr. As is evident from the table, 3rd singular is the only 'person/number' category that is specified for gender. Differences between the two dialects are only minor, and restricted to the 1sg IO (**ngiti** vs **ngindi**), the 2non-sg (**dirr(ki)** vs **nirr(ki)**), and the 3rd non-sg (**wurr(ki)** vs **wirr(ki)**).

Ngan'gityemerri Bound Object Pronouns					
		Ngan'giwumirri		Ngan'gikurunggurr	
		<u>DO</u>	<u>IO</u>	<u>DO</u>	<u>IO</u>
Singular	1	-ngi	-ngiti	-ngi	-ngindi
	2	-nyi	-mbi	-nyi	-mbi
	3m	-Ø	-ne	-Ø	-ne
	f	-Ø	-nge	-Ø	-nge
Dual	1inc		-nin		-nin
	1ex		-ngirrki		-ngirrki
	2		-nirrki		-dirrki
	3		-wurrki		-wirrki
Plural	1inc		-nin-nime		-nin-nime
	1ex		-ngirr		-ngirr
	2		-nirr		-dirr
	3		-wurr		-wirr

Table 3-3

Two of the forms listed here have minor allomorphs. The 2sg IO suffix **-mbi**, as it appears following vowels, has an allomorph **-bi** following nasals. This is demonstrated in the examples below.

- 3-75 a) **ngemen'ge-mbi**
1sg Arrive -2sg
SU Irr IO
 I'll come to you.
- b) **ngemen'gem-bi**
1sg Arrive -2sg
SU Pres IO
 I'm coming to you.

Note that in the above examples, this allomorphy results in the sacrifice of tense/mood marking. The auxiliary root in 3-75 a) achieves its Irrealis inflection by dropping its final nasal (cf. 3.4.2), but the 2sg IO allomorphy reinstates it, and as a consequence the present and irrealis inflected verbs both end up with the same surface form.

The other allomorphy is to be found in the 3rd non-sg forms, where the same environments, ie. post-vocalic and post-nasal, produce variation between *-wurr(ki)* and *burr(ki)* respectively. This is demonstrated nicely in 3-82 below.

The following Ngan'giwumirri examples 3-76 to 3-79 demonstrate the occurrence of indirect object pronouns in the auxiliary final position, and 3-80 to 3-83 demonstrate direct object pronouns.

- 3-76 **yibe yemen'ge-ngiti**
later 2sgArrive-1sg
SU Irr IO
 Come to me later !
- 3-77 **mamak ngiminy-nge**
goodbye 1sgSay -3sgF
SU Perf IO
 'Goodbye!' I said to her
- 3-78 **minbe tyip -yumu -ngiti-tyeri**
Neg dark-2sgSay -1sg -ear
SU Irr IO
 Don't forget me !
- 3-79 **miyi nyinnin warriny -ngirr -fi -derri-tyutyuk**
food ANA 3plPoke -1plex-Mp-back -place
SU Perf IO redup
 They laid out the food for us (pl).
- 3-80 **minbe demim -nirrki-pi -yiri ?**
Neg 3sgHands -2dl -head-numb
SU Pres DO
 You two aren't feeling embarrassed, are you ?
 (lit: it's not numbing your (dl) heads, is it?)
- 3-81 **deminy -ngirrki-dudu, e deminy -ngirrki-ba -walal**
3sgHands-1dlex -touch and 3sgHands- 1dl -arm-shake
SU Perf DO redup SU Perf DO redup
 He woke us up and shook hands with us.
- 3-82 **yawam -burrki-pe-yani, yudu -wurrki-mi-wul -pe kinyi**
2sgTake-3dl -Fut-2sgGo 2sgShove-3dl -Val-return-Fut here
SU Irr DO Su Irr SU Irr DO
 Bring these two (kids) with you, bring them back home here.

- 3-83 *ya* *-ngi-fi* *-me* *-Ø*
 2sgPoke-1sg-Mp-hand-IMP
 SU Irr *DO*
 Give it to me !.

It is also apparent from Table 3-3 that there is currently complete neutralisation of the Direct Object and Indirect Object non-singular pronouns. Evidence from the Ngan'gimerri data collected by Gerhardt Laves in about 1930 suggests that the current paradigm results from the collapse of an earlier system where the contrast between Direct and Indirect Object bound pronouns was additionally made in the 1st exclusive, 2nd and 3rd person dual forms. From Laves' work we can reconstruct the following forms for Ngan'gimerri, a now extinct dialect of Ngan'gityemerri.

<u>Ngan'gimerri Bound Object Pronouns</u>				
		DO		IO
Singular	1	<i>-ngi</i>		<i>-ngiti</i>
	2	<i>-nyi</i>		<i>-mbi</i>
	3m	<i>-Ø</i>		<i>-ne</i>
	f	<i>-Ø</i>		<i>-nge</i>
Dual	1inc		<i>-nin</i>	
	1ex	<i>-nginggi</i>		<i>-ngirrki</i>
	2	<i>-ninggi</i>		<i>-nirrki</i>
	3	<i>-wunggi</i>		<i>-wurrki</i>
Plural	1inc		<i>-nin-nime</i>	
	1ex		<i>-ngirr</i>	
	2		<i>-nirr</i>	
	3		<i>-wurr</i>	

Table 3-4

Hoddinott also collected some Ngan'giwumirri data, presumably in the early 1970's⁷, and the bound object pronouns provided in Hoddinott and Kofod (1989:103), concur with Laves' Ngan'gimerri data in showing the same distinction between dual Direct and Indirect Object pronouns. The complete absence of distinct dual DO and IO pronouns in the speech of the Ngan'giwumirri people that I worked with between 1986 and 1988, suggests that this distinction has only been lost in very recent years. I never heard

⁷According to Kofod he collected Ngan'gikurunggurr material during four fieldtrips, in 1967, 1972, 1973 and 1982. His Ngan'giwumirri data was presumably also collected on one or more of these trips.

the dual direct object forms (given by Laves and Hoddinott & Kofod) spontaneously uttered.

In conclusion I would suggest that there has been a general process of neutralisation of the non-singular bound Direct and Indirect Object pronominal paradigms. As the data of Laves and Hoddinott & Kofod suggest that there was in recent times a contrast between DO and IO in both the singular and dual number categories, we could hypothesize that at an even earlier stage the contrast may have also been found in the plural forms. The hypothetical neutralisation of the plural pronouns would have predated Laves' 1930 work, and the neutralisation of the dual forms would appear to have taken place over the last few decades. Note that this neutralisation has involved the loss of the Direct Object forms, and that it is the Indirect Object forms that have been retained.

3.2.3.2 Dual Subject/Object Portmanteau Pronominals.

In 3.2.3.1 above we have seen how object suffixes fill the final auxiliary position immediately following the auxiliary root. In section 3.2.1.2.2 we saw that subject duality is encoded primarily by the suffix -gV, also in this same position. That is, both morpheme types compete for access to the same verbal slot.

The dual subject marker -gV can only appear when this position is otherwise empty of overt object morphology. This condition is met where either a verb is intransitive and has no object argument, as in 3-84 a), or is transitive but has a 3rd sg direct object, which is cross-referenced by - Ø, as in 3-84 b).

3-84 a) **werrmen'geny-gu**
 3plArrive -dl
 SU Perf SU
 They (dl) have arrived.

b) **warriny- Ø /gu -pawal**
 3plPoke -3sg/dl - spear
 SU Perf DO/SU
 They (dl) speared him.

Where this condition is not met, and the dual subject marker competes with overt object markers for access to the final auxiliary slot, Ngan'giwumirri and Ngan'gikurunggurr employ a set of portmanteau morphemes that encode both subject duality, and the person and number of singular Direct and Indirect objects. These portmanteau forms are listed in

Table 3-5 below. The only difference between the two languages is in the form of the dl sub+1sg IO. The NgK form is given in brackets.

Dual Subject + Singular Object Portmanteau Bound Pronouns

		DO	IO
Singular	1	-ngerr	-ngeterr(ngindir NgK)
	2	-nyerr	-mberr
	3m		-nerr
	f		-ngerr

Table 3-5

Examples exploiting these portmanteau bound pronouns are set out below. Compare 3-85 and 3-86 with 3-84 a) and b) above.

- 3-85 **werrmen'geny-ngeterr**
3plArrive -dl/1sg
SU Perf SU/IO
 They (dl) came to me.
- 3-86 **warriny-nyerr -pawal**
3plPoke-dl/2sg-spear
SU Perf SU/DO
 They (dl) speared you (sg).
- 3-87 **ngamban -nime -tyutytyurr ba!** **ngirrminy-nerr**
1plincGo- pl -swim HORT 1plSay -dl/3sgM
SU Irr SU redup SU Perf SU/IO
 'Come on, let's go swimming!' we (dl) said to him.
- 3-88 **winy -wirrminy-ngeterr**
whistle-3plSay -dl/1sg
SU Perf SU/IO
 They (dl) whistled at me.

Where Direct and Indirect Objects are plural (and recall that, cf. 3.2.3.1, their formal marking is neutralised here), dual subject number marking is sacrificed to the cross-referencing of the object. Thus, as in 3-89 below, in verbs with dual subjects acting on non-singular objects, the subject can be marked for plural number in the slot preceding the auxiliary root, but number categories that are higher than plural on the markedness hierarchy, cannot be overtly represented.

- 3-89 **warriny -ngirr-tyerr -pu, nyinyi tyagani derrigidi-yerim**
3plPoke -1plex-mouth-ask 2sg what want -2sgHands
SU Perf DO PRO SU Pres
 They (dl or pl)(airline hostesses) asked each of us (pl), 'What would you like (to drink)?'

In section 3.2.1.2.2 we saw that four auxiliaries marked subject duality, not by -gV in the final auxiliary position, but suppletively by a change in the

quality of the vowel of the auxiliary root. For these few auxiliaries there is no competition between dual subject marking and non-singular object marking for access to the post-auxiliary root position. So verbs selecting these auxiliaries can encode both their subject duality and the person and number of their object.

- 3-90 **ngarre-ne-nyi-mi-wap-pe kinyi**
1dlexGo -2sg-Val-sit -Fut here
SU Irr DO
 We (dl) will come up here and sit with you.
- 3-91 **wanne -ngirr-fi -mi-tyatit-tye agatyintyi-ne**
3dlPoke -1plex-Mp-Val-place-Past fishing -PURP
SU Plmp DO redup
 They (dl) were showing us (plex) how to prepare fishing tackle.

3.2.3.3 -Nime as Non-Subject Marker

We have seen how **-nime** in the post-verb root position marks both the subject number categories '1st inclusive plural' (cf. 3.2.1.2.1) and '1st exclusive, 2nd and 3rd person trial' (cf. 3.2.1.2.2). **-Nime** additionally marks these same categories for bound object pronouns, as in the examples below.

- 3-92 **nga -wurrki-tyerr -pu-nime-pe**
1sgPoke- 3dl -mouth-ask- tr -Fut
SU Irr DO DO
 I'll ask them three.
- 3-93 **gagu money-ne yedi -nin -kayki-nime-tye**
animal -PURP 3sgGo -1dlinc-call -pl -Past
generic SU Plmp IO IO
 He was calling out to us all for money.

Having **-nime** marking number categories for both subject and object would appear to be potentially very confusing, and begs the question - 'what happens when you get, for example, a 1st person plural inclusive subject acting on a 3rd person trial object, or vice versa?'. Consider the following example where **-nime** could denote either 'plural subject' or 'trial object'.

- 3-94 **ngandim-wurrki-fi -me -nime gagu**
1dlPoke - 3dl -Mp-hand-pl/tr animal
SU Perf DO SU/DO generic
 1- We (dlinc) gave them (trial) some beef.
 2- We (plinc) gave them (dual) some beef.

Devoid of context, this example is, admittedly, quite ambiguous. A Ngan'giwumirri or Ngan'gikurunggurr speaker, if offered this example, would probably try to disambiguate it by including numerically specific freeform NPs. However, in the context of normal speech, this double function of *-nime* presents no referential problems, for two reasons. Firstly, given the high semantic markedness of both the 'exclusive trial person' category, and the '1st inclusive plural' category, their co-occurrence as subject and object of the same verb is extremely rare. Secondly, recall the comments made in 3.2.1.2.2 about the tendency to employ plural subject marking on verbs with trial subjects, unless the subjects' 'threesomeness' has sufficient pragmatic salience to warrant its specific morphological marking. As a corollary to this, trial subjects are typically introduced to a discourse carrying full trial marking in their bound verbal morphology, but once reference to their 'threesomeness' has been established, they continue to be tracked by plural forms, in preference to the more highly marked trial ones. Thus the cross-referencing of two highly marked arguments as the subject and object of a single verb is generally avoided.

- 3-95 **wadde -nime-tye nyinnin tyutytyurr-ne winni-tyutytyurr-tye**
 3dlGo -tr -Past ANA swim -PURP 3plSit -swim -Past
 SUPImpSU SU PImp
 The three of them went there and they (plural) swam about.

3.2.3.4 Reflexives and Reciprocals

The primary means by which the reflexive and reciprocal functions are encoded within the Ngan'gityemerri verb is through a mechanism of auxiliary substitution. A 'transitive' auxiliary (cf. 4.2) is replaced by a corresponding 'detransitivised' auxiliary. The resultant verb retains a verb stem denoting a 'transitive' activity, but is made monovalent through the selection of the 'detransitivised' auxiliary. It is in having both the actor and undergoer roles mapped onto the single argument of the verb, that leads to the reflexive/reciprocal interpretation. Compare the 'transitive' 'Hands' auxiliary in 3-96 with the substitution of the corresponding detransitivised 'HandsDtr' auxiliary in 3-97.

- 3-96 ngeriny - Ø-pul
1sgHands-3sg-wash
SU Perf DO
I washed him/her/it.

- 3-97 **ngemeny -pul**
1sgHandsDtr-wash
SU Perf
 I washed myself.

The semantics of 'detransitivised' auxiliaries, and the consequences of their selection in marking reflexivity and reciprocity, are taken up in more detail in 4.5.2.

Note though that reflexives and reciprocals can additionally be more explicitly encoded with indirect object pronominal forms in the final position of the auxiliary. In this function they differ from the other 'goal-like' functions of the Indirect Objects in that they encode the reflexive/reciprocal relationship for both higher and lower animates. That is, the animacy restrictions that determine the eligibility of goal arguments for cross-referencing within the verb (cf. 3.2.3.1), do not apply to reciprocals and reflexives. Thus the lower animate subject of the reflexive verb formed with the 'detransitivised' 'Poke' auxiliary in 3-98 takes Indirect Object pronoun **-ne**.

- 3-98 **e-fenggu darany -ne -fi -dudu**
A-long 3sgPokeDtr-3sgM-Mp-coil
cl =snake SU Perf IO
 The snake coiled itself up.

The 3rd singular masculine indirect object form is the unmarked reflexive for lower animates, as in 3-98, regardless of their number. Feminine indirect object forms are also available, though as demonstrated in 3-99, their selection constitutes a marked claim about the gender of the lower animate(s).

- 3-99 **wuwu diwen -nge -firr -lak**
dog 3sgMouthDtr-3sgF-foot-lick
SU Pres IO
 The bitch is licking herself on the foot.

Given that these verbs are monovalent, and that the person and number of the single argument is unambiguously encoded in the bound subject marker, the occurrence of indirect object pronouns in the final position of the auxiliary in reflexive/reciprocal verbs is essentially redundant. It generally carries no new information (although note that **-nge** in 3-99 does include gender information whereas the subject pronoun does not), and can be included or omitted with no significant difference to the meaning of the verb. The inclusion of bound indirect object pronouns in

detransitivised auxiliaries, may be largely governed by practical considerations, such as distinguishing between those 'transitive' and 'detransitivised' auxiliaries that are similar in form, like 'Bash' and 'BashDtr' in 3-100 and 3-101, which are distinguished only by the quality of the auxiliary root vowel. Within the context of the harmonic processes that regressively influence vowel quality in the verb complex (cf. 2.4.4.2), the inclusion of the indirect object pronoun in 3-101 does serve to draw attention to the 'detransitivised' (and therefore reciprocal) status of the auxiliary.

3-100	ngerrben-Ø-lulu	3-101	ngerrbin -ngirr-lulu
	<i>1plexBash-3sg-swear</i>		<i>1plexBashDtr-1plex-swear</i>
	<i>SU Perf DO</i>		<i>SU Perf IO</i>
	We swore at him.		We swore at each other.

3.2.3.5 Implicated Arguments

In addition to Direct and Indirect Objects, there is another set of bound pronominals that can be marked within the verb, not, as is the case for DOs and IOs, within the auxiliary, but following the CVS and non-singular marker **-nime**, and preceding the final tense enclitics. These pronominals are labelled 'implicated' and are glossed in the examples as IMPL.

Ngan'gityemerri Implicated Pronominals

		Ngan'giwumirri	Ngan'gikurunggurr
Sg	1	-ngidde	-nginde
	2	-kide	-kide
	3m	-nide	-nide
	3f	-ngide	-ngide
Dl	1inc	-ninde	-ninde
	1ex	-ngirrkide	-ngirrkide
	2	-nirrkide	-dirrkide
	3	-wurrkide	-wirrkide
Pl	1inc	-ninde nime	-ninde nime
	1ex	-ngidde	-ngirrse
	2	-nidde	-dirrse
	3	-wudde	-wirrse

Table 3-6

As can be seen from Table 3-6, the implicated pronouns can be segmented into person/number morphemes and a role marker *-de*. The person/number stems generally resemble the IO bound pronominals given in Table 3-3. In fact the non-singular person/number morphemes are identical with IO forms. The differences between the Ngan'giwumirri and Ngan'gikurunggurr implicated pronouns can be seen to mirror the differences found in their respective IO pronominal paradigms. For instance, in the 2nd person non-singular forms we find the same variation between initial *d-* in Ngan'gikurunggurr and initial *n-* in Ngan'giwumirri, and in the 3rd person non-singular forms we find the same variation between the vowel *-i-* in Ngan'gikurunggurr and *-u-* in Ngan'giwumirri.

The differing treatments in Ngan'giwumirri and Ngan'gikurunggurr of the underlying *rr + d* cluster at the boundary between the person/number morpheme and *-de* have been covered in 3.2.1.2.2. Briefly, in Ngan'giwumirri application of the apical assimilation rule (cf. 2.4.) produces a geminate stop cluster, (e.g. *-ngirrde* → *-ngidde*). However the underlying *rr#d* cluster in Ngan'gikurunggurr undergoes frication of the apical obstruent, (e.g. *-ngirrde* → *-ngirrse*).

Among the singular implicated forms, the appearance of *k-* as a marker of second person is encountered nowhere else in Ngan'gityemerri, and the third person masculine and feminine forms have a different vowel to their corresponding IO forms (*-ni-de* / *-ngi-de* vs *-ne* / *-nge*).

The implicated pronouns allow for the verbal cross-referencing of an entity that is adversely affected by the activity of a verb. The animacy constraints on eligibility for cross-referencing within the verb, noted for DOs and IOs in 3.2.3.1, also apply here. We can distinguish two usages of the implicated pronominals. Firstly, in their general function they cross-reference entities that are adversely affected by the activity of intransitive (including detransitivised) verbs.

- 3-102 **peke kinyi yenim-me -syirr -ngidde**
tobacco this 3sgGo -hand-extinguish-1sg
SU Pres IMPL
 This tobacco's always going out on me.

- 3-103 **naga ngayi dagam -felfil -nginde**
NgK husband 1sg 3sgFeet-run -1sg
PRO SU Pres away IMPL
 My husband has run out on me.

The only constraint is that the implicated entity cannot be co-referential with the intransitive subject. Thus the cross-referencing of first singular person with implicated pronouns in 3-104 is unacceptable.

- 3-104 **palak-ngumum (*-ngidde)**
tired -1sgDO -1sg
SU Pres IMPL
 I'm tired.

General adversative marking is restricted to intransitive verbs. Thus adversely affected entities cannot be cross-referenced in transitive verbs, regardless of whether they may be coreferential with the DO, as in 3-105, or constitute a non-core argument, as in 3-106.

- 3-105 **warriny-ngi-pawal (*-ngidde)**
3plPoke-1sg-spear -1sg
SU Perf DO IMPL
 They speared me (*on me) (i.e. adversely affecting me).

- 3-106 **warriny-nyi-pawal (*-ngidde)**
3plPoke-2sg-spear -1sg
SU Perf DO IMPL
 They speared you (*on me) (i.e. adversely affecting me).

Note however, that for those intransitive verbs that allow the cross-referencing of goals or targets with IO pronouns (like the verbs of cognition and perception noted in 3.2.3.1), the alternative of cross-referencing those goals or targets with implicated pronominals is an available option.

- 3-107 a) **yerrimbin-tyety -wudde**
3sgGo -afraid-3pl*
SU Pres IMPL
 He's afraid of them.
- or b) **yerrimbin-wurr-tyety**
3sgGo -3pl -afraid*
SU Pres IO
 He's afraid of them.

The construction type whereby implicated entities are cross-referenced within the verb can be paraphrased by having the implicated entity marked with free pronouns outside of the verbal complex. Thus 3-102 above could be reworded as:

- 3-108 **peke kinyi yenim-me -syirr ngayi**
tobacco this 3sgGo -hand-extinguish 1sg
SU Pres PRO
 This tobacco's always going out on me.

Note though that there is no form of case marking available to external implicated pronouns, corresponding to the implicated role morpheme *-de* discussed above.

The examples below demonstrate the cross-referencing in the post verb root position of entities adversely affected by the activity of intransitive verbs, in 3-109 and 3-110, and a detransitivised verb in 3-111.

- 3-109 **yeniny -pal -ngidde, minbe-nyine-tye ngi -wurr-tyerrakul**
3sgGo-break-1sg Neg -FOC -Past 1sgSit-3pl -talk
SU Perf IMPL SU Irr IO
 (The radio) broke down on me, so I was unable to talk to them then.

- 3-110 **yenim -purity-wirrkide**
3sgGo-hide -3dl
SU Pres IMPL
 He's in hiding from them two.

- 3-111 **ngambara -mentyi-gerrgirr-nide -pe, wamanggal nyin**
1plincPokeDtr-neck -cut -3sgM-Fut wallaby ANA
SU Irr redup IMPL
 Let's circle around on it, so that wallaby will
ngarrnguweri-nyine wiri -pe, nyinyi werrfe-ninggi,
between -FOC 3sgSit-Fut 2sg mid -INSTR
SU Irr PRO distant
 be between us. You (go) that way, and
ngayi kin-ninggi ngana-gulirr-pe
1sg this-INSTR 1sgFeet-circle-Fut
PRO SU Irr
 I'll go around this way.

The second identifiable function of implicated pronominals is to mark those entities whose bodyparts are adversely affected in the activity expressed in transitive verbs. In examples like 3-112 and 3-113 below where bodyparts are acted upon by external agents, the bodyparts function as direct objects (cross-referenced by Ø) and their bodypart possessors are cross-referenced with implicated pronouns.

- 3-112 **wusye deminy -Ø-firr⁸-tit -ngidde**
hair 3sgHands-3sg-foot-pluck-1sg
SU Perf DO IMPL

She plucked out a hair from my head on me.

- 3-113 **marrawuk-ninggi wumbun-Ø-matati-kide detyerr nyinyi**
dry season-AGENT 3sgSlash -3sg -split -2sg mouth 2sg
wind SU Perf DO IMPL PRO

The dry season wind has split your lip on you.

The effect of 'implicated' coding here is to construe the bodypart, rather than its possessor, as the undergoer, thereby decreasing the degree to which the possessor as a whole is felt to be affected.

This implicated construction type clearly treats the relationship between a person and their inalienable bodyparts in a different manner to the 'possessor ascension' construction discussed in section 3.5 on bodypart incorporation. There we saw that inalienably possessed bodyparts as objects of transitive verbs are generally incorporated within the verb where they function in apposition to their possessor which is obligatorily cross-referenced as direct object.

- 3-114 **menggin -ngi-ba -wa**
3sgSnatch-1sg-arm-pick
SU Perf DO up
 She picked me up by the arm.

In 3-114 the whole is perceived to be affected by the action and the incorporated bodypart simply provides additional information about the location, within the possessor's body, of that contact. Contrastively, cross-referencing the possessor as an implicated argument, as in examples 3-112 and 3-113 above, has the effect of lessening the degree to which the possessor can be thought of as wholly affected by the activity directed towards a part of it. Indeed, the innate relationship between a whole and an inalienable bodypart is sufficiently disengaged by having the whole construed as an implicated argument, that this construction type allows a bodypart, as an intransitive subject, to engage in activity that adversely affects the 'implicated' possessor, e.g.

⁸firr - 'foot' is a lexical rather than syntactic incorporation (cf. 3.5.2). - firr-tit is thus a lexically compounded verb root meaning 'to pluck something up by its base', in this case denoting that the hair was removed from the follicle, not broken somewhere along its length. The construction type discussed here, where a bodypart is treated as a separate entity to its possessor, is not permissive of syntactic incorporation of that bodypart into the verbal complex.

3-115 **depi yenim-purity-ngidde**

head 3sgGo -hide -1sg
SU Pres MPL

My mind has slipped away on me.
 (lit: My head is hiding on me)

3-116 **ngayi watyerrmusye ngaganim, minde-nana ngal -nging -nguri,**

NgK *1sg old man 1sgGo Neg -INAB erect-1sgDo-penis*
PRO SU Pres SU Pres

I'm an old man, I can't get it up any more.

danguri-ngayi misyi yenim-nginde wakay

penis -1sg die 3sgGo -1sg finished
PRO SU Pres IMPL

My cock's died on me.

3-117 **akumifi daram -fi -dudu-ngidde**

tendon 3sgPokeDtr-Mp-curl -1sg
SU Pres IMPL

My tendons are cramping on me.

3-118 **kultyinimbi depi ngayi nyinyi-ne demeni -meyenggi-ngidde-tye**

yesterday head 1sg 2sg -PURP 3sgHandsDtr-talk -1sg -Past
PRO PRO SU PImp IMPL

Yesterday I was thinking about you.

(lit: My head was talking to itself about you, on me.)

3.3 Structure of the Complex Verb Stem

In 3.1.1 we noted that there are two types of auxiliary. Those which can stand as independent verbs, we called 'simple auxiliaries', and those which cannot stand as independent verbs we called 'complex auxiliaries'. 'Complex auxiliaries' are dependent on another verbal constituent, the Complex Verb Stem, and it is the structure of this constituent that we will examine in this section.

Minimally, and indeed probably most frequently, a CVS may be represented by a simple verb root, such as **-wap** 'sit' in the following example.

3-119 **ngaganiny-wap**

1sg Go -sit
SU Perf

I sat down.

Additionally, within the CVS and preceding the verb root, we find two types of applicative prefix, divisive prefixes, and incorporated bodyparts. The applicative prefix *fi-* encodes 'manipulation'.

- 3-120 **ngariny-nyi-fi-wap**
1sgPoke-2sg-Mp-sit
SU Perf DO
 I left you sitting / I sat you (somewhere).

The applicative prefix *mi-* raises the valence of the verb root's associated argument structure.

- 3-121 **ngaganiny-nyi-mi-wap**
1sg Go -2sg-Val-sit
SU Perf DO
 I sat down with you.

The divisive prefixes provide information about the spatial divisions of objects. e.g. *gen-* 'middle'.

- 3-122 **ngebeny-gen-ket**
1sgBash-mid-cut
SU Perf
 I chopped it in half/two.

And bodypart terms can also be incorporated into the verb.

- 3-123 **mudiga ngaganiny-madi-wap**
car 1sg Go -chest-sit
SU Perf
 I sat inside the car.

The incorporation of bodypart terms into the verb is taken up and discussed as a separate section in 3.5. Each of the remaining CVS constituents are examined in the following subsections.

3.3.1 Applicative Prefixes *Fi-* and *Mi-*

In Ngan'gityemerri there are two applicative prefixes *fi-* and *mi-* that can be applied to verb roots. Of these two prefixes, *mi-* is clearly related to the 'eye' bodypart which has the freeform *da-muy*. When it is incorporated within the verb *da-muy* drops the class prefix and the root *muy* is irregularly reduced to *mi*. That the applicative prefix is related to this bodypart can be clearly demonstrated by showing that it too resumes the

form **muy** when it is not prefixed to the verb root. Within the current verbal structure of Ngan'giwumirri with its fixed constituent ordering, this situation cannot arise. However in the Ngan'gimerri data of Gerhard Laves, where verb roots frequently precede the auxiliary, we find the applicative prefix **mi** appearing word-finally, in which position it retains the form **muy**. Compare both the variant orderings given by Laves in examples a) and b) below, with the same verb in 3-121 above.

- 3-124 a) **yenim-mi-wab**⁹
 3sgGo-Val-sit
 SU Pres
 He sits with him.
- b) **wab yenim-muy**
 sit 3sgGo-Val
 SU Pres
 He sits with him.

-Fi-, on the other hand, is not demonstrably related to any freeform bodypart lexeme. If we were to assume that applicative **-fi-** is derived from some other form, there are three candidates to be considered. **Fi** does occur both as a freeform nominal meaning 'string/spun twine', and as a verb root meaning 'breathe/exhale', however neither of these seem a likely source. A better candidate would be **-pi** - 'head', as it would both pattern with **-mi-** in developing its applicative function as a further development of its incorporation within the verb as a bodypart, and the semantics of **-pi-** might perhaps be compatible with the notion of 'manipulation' that is conveyed by applicative **-fi-**. There are however no obvious environmental or other factors that would motivate a shift from $p \rightarrow f$, unless we were to consider the hypothesis that the development of applicative **-fi-** from the incorporated bodypart **-pi-** predated the probably recent development of phonemic fricatives within the phonological system of Ngan'gityemerri. I conclude that if applicative **-fi-** had its source in a cognate form in another word class, then the class of bodypart terms would be the most likely candidate, noting though that the relationship is no longer transparent.

3.3.1.1 **-Fi-** Manipulation

-Fi- is applied to verb roots in verbs that can be thought of as involving, not merely an agent operating on an object, but more specifically *manipulating* that object from a position of control.

⁹ Retaining Laves spelling.

In verbs having inanimate objects, the sense of manipulation brought to the verb by the application of *-fi-*, is directly with regard to the physical location/shape of that object. This is apparent in 3-125 below, where in a) and b) it is the location of the object that is manipulated, and in c) and d) where it is the spatial arrangement.

- 3-125 a) **ngariny -fi -garri-tyat yawurr**
 1sgPoke -Mp-leg -place tree
 SU Perf
 I placed it against the trunk of the tree.
- b) **ngariny -fi -madi-tyuk entpek**
 1sgPoke-Mp-chest-place suitcase
 SU Perf (Eng:handbag)
 I placed them inside my suitcase.
- c) **ngariny -fi -dudu fi**
 1sgPoke -Mp-swell string
 SU Perf
 I coiled the string up.
- d) **ngariny -fi -tyerr -pek yawul**
 1sgPoke-Mp-mouth-drip spear
 SU Perf
 I rejoined the (broken) spear shaft.

In verbs having human objects, the sense of manipulation and control of the object that the application of *-fi-* encodes is not so much in terms of the physical location of the object (though this interpretation is frequently also allowed), but rather in terms of the human object being under the psychological, or authoritative control of the agent.

- 3-126 a) **wuni -yirre ngariny-Ø -fi -wap**
 there-CORRECT 1sgPoke-3sg-Mp-sit
 SU Perf DO
 I left her sitting back there.
- b) **dangim -ngi -fi -mi -lit**
 3sgPoke-1sg-Mp-Val-cover
 SU Pres DO
 He's blocking the view from me.
- c) **dam -ngi-fi -derri-sul**
 3sgPoke-1sg-Mp-back-arise
 SU Pres DO
 He kept me awake all night.

The encoding of an object as being under the physical or psychological control of an agent need not always bear the malevolent connotation that the above examples may suggest, though this is frequently the case. In the example below, the 'controlled' status of the object results from the context in which he is receiving direction or instruction, and is not imbued with any sense of menace or malevolence.

- 3-127 **dangim -ngi-fi -mi -tyatit** Ngan'giwumirri-ne
3sgPoke-1sg-Mp-Val-place -PURP
SU Pres- DO redup
 He's teaching me to speak Ngan'giwumirri.

Two verbs selecting the 'Mouth' auxiliary (associated with activity at the mouth generally, and speech particularly) select -fi-, and both entail the manipulation and control of an object argument by means of oral direction. In 3-128 below, the application of -fi- to the verb root -gulgul 'stir' (as one would stir sugar into tea) and combining it with 'Mouth' produces a verb meaning 'to manipulatively stir someone up through speech/to incite someone to do something they wouldn't otherwise do'. In 3-129 the application of -fi- to the verb root -ket, and its combination with 'Mouth' produces a verb meaning 'to deceive someone through speech/to lie to someone'.

- 3-128 **ngem -ne-fi -gulgul-nimbi, danginy-nyi-nguru-waty**
1sgMouth-3sg-Mp-stir -CAUS 3sgPoke-2sg -penis -consume
SU Perf IO SU Perf DO
 He only fucked you because I incited him to do it.

- 3-129 **dendi dingim -bi -fi -ket**
lie 3sgMouth-2sg-Mp-cut
SU Perf IO
 He lied to you.

Detransitivised auxiliaries (cf. 4.5.2) involve the manipulation by a subject of parts or the whole of his own body. They combine with verb roots that denote 'transitive-like' activities in that they treat a bodypart as an object, e.g.

- 3-130 **ngudeny -garri-fityi**
1sgShoveDtrD-leg -roll
SU Perf
 I crossed my legs.

However, in terms of formal criteria (cf. 4.2) verbs formed with 'detransitivised' auxiliaries are intransitive, being unable to cross-reference an O within the verb. Each of the 'detransitivised' auxiliaries can be thought of as the 'inherently reflexive' equivalent of another 'transitive' auxiliary. This is demonstrated below where 3-131 a) is a transitive verb formed with the 'Poke' auxiliary and 3-131 b) is an intransitive verb formed with the 'PokeDtr' auxiliary.

- | | | | |
|----------|---|----|--|
| 3-131 a) | ngariny -Ø -pek
<i>1sgPoke-3sg-drip</i>
<i>SU Perf DO</i>
I painted dots on it/him. | b) | ngarany -pek
<i>1sgPokeDtr-paint</i>
<i>SU Perf</i>
I painted dots on myself |
|----------|---|----|--|

A large proportion of the verbs selecting detransitivised auxiliaries, because they entail manipulation of the shape or location of the bodypart object, combine these auxiliaries with -fi- applied verb roots. The a) and b) pairs in the examples below demonstrate both transitive and corresponding detransitivised auxiliaries, in combination with the same -fi- applied verb roots.

- | | | | |
|----------|--|----|---|
| 3-132 a) | ngariny -fi -tit mudiga
<i>1sgPoke-Mp-raise car</i>
<i>SU Perf</i>
I raised (jacked up) the car. | b) | ngarany -fi -tit
<i>1sgPokeDtr-Mp-raise</i>
<i>SU Perf</i>
I raised myself/ I got up. |
|----------|--|----|---|

- | | |
|----------|---|
| 3-133 a) | fi ngariny -fi -dudu
<i>twine 1sgPoke-Mp-swell</i>
<i>SU Perf</i>
I coiled up the rope. |
|----------|---|

- | | |
|----|--|
| b) | ngarany -fi -dudu
<i>1sgPokeDtr-Mp-swell</i>
<i>SU Perf</i>
I curled myself up (into foetal position). |
|----|--|

- | | |
|----------|---|
| 3-134 a) | ngariny -fi -garri-tyat
<i>1sgPoke-Mp-leg -place</i>
<i>SU Perf</i>
I placed it against the tree trunk. |
|----------|---|

- | | |
|----|--|
| b) | ngarany -fi -gimi-tyat keninggisyi
<i>1sgPokeDtr-Mp-side -place canoe</i>
<i>SU Perf</i>
I placed/positioned myself on the side of the boat. |
|----|--|

3.3.1.2 -Mi- Valency Increasing

Verb roots, in Ngan'gityemerri, bear an associated argument structure; that is, verb roots are either monovalent or bivalent (see 4.2.2). -Mi- is applied to verb roots to allow the introduction of a new object argument to the base verb. -Mi- can therefore be said to derive a new verb root with a unit-augmented argument structure. This is exemplified in the examples below, where **-wap** and **-tyerr**, verb roots with monovalent argument structures in a), are prefixed with **-mi-** in b) to allow for the promotion of thematic comitative arguments to core direct objects, qualifying for cross-referencing within the verb.

- 3-135 a) **ngaganiny - wap**
 1sg Go -sit
 SU Perf
 I sat down.
- b) **ngaganiny-nyi-mi-wap**
 1sg Go -2sg-Val -sit
 SU Perf DO
 I sat down with you.
- 3-136 a) **yeniny -tyerr**
 3sgGo - stop
 SU Perf
 He pulled up/ came to a halt.
- b) **yeniny -ngi-mi -tyerr**
 3sgGo -1sg-Val -stop
 SU Perf DO
 He pulled up at me/ alongside me.

All -mi- applied objects are cross-referenced within the verb as direct objects, regardless of their thematic role.

As might well be anticipated from its valence-raising function, -mi- is generally implicated in the derivation of transitive verbs from intransitive ones. Recall (cf. 4.2) that auxiliaries with different transitivity values can be combined with the same verb root. Where a transitive auxiliary combines with a verb root that has a monovalent argument structure, that verb root requires the application of -mi- to raise its valency and allow for the promotion of an applied object argument. This is evident in the pairs of verbs in the examples below. Examples a) are intransitive verbs with monovalent verb roots. In examples b), where the transitive

(causative) equivalents of a) are derived by the substitution of transitive auxiliaries, the verb roots are correspondingly made bivalent by *-mi-* prefixation.

- 3-137 a) **ngiriny-di**
1sgSit-cry
SU Perf
 I cried.
- b) **ngum -nyi-mi-di**
1sgSlash-2sg-Val-cry
SU Perf DO
 I made you cry.
- 3-138 a) **ngaganiny-fafa**
1sgGo -scream
SU Perf
 I screamed.
- b) **ngebeny -Ø -mi-fafa**
1sgBash -3sg-Val-scream
SU Perf DO
 I made her scream.
- 3-139 a) **ngudeny-wul**
 NgK *1sgShoveDtrD -return*
SU Perf
 I returned.
- b) **ngudupuny-nyi-mi-wul**
1sg Slash -2sg-Val-return
SU Perf DO
 I took you back / I returned you.
- 3-140 a) **ngirim-bubu**
1sgSit -sleepy
SU Pres
 I am sleepy.
- b) **ngeriny -nyi-mi-bubu**
1sg Hands-2sg-Val-sleepy
SU Perf DO
 I made you sleepy.
 (by, for instance, rubbing your back with my hands).

Similarly *-mi-* can be applied to bivalent verb roots to augment their associated role structure and allow for the promotion of a third argument to direct object. Applied object arguments raised in this way, typically have the thematic role of maleficiary.

- 3-141 a) **ngeriny -Ø -dum**
1sgHands-3sg-bury
SU Perf DO
 I buried it
- b) **ngeriny -nyi-mi-dum**
1sgHands-2sg-Val-bury
SU Perf DO
 I stole it from you.
 (lit: I buried it on you)
- 3-142 a) **yenim -Ø -lit**
3sgGo -3sg-cover
SU PresDO
 He's blocking it/ covering it.
- b) **dangim -ngi-fi -mi -lit**
3sg Poke-1sg-Mp-Val-cover
SU Pres DO
 He's covering it from me/He's blocking my view of it.

As applicative **-mi-** and incorporated bodyparts cannot co-occur as prefixes to the verb root, it is not always apparent which role **-mi-** is playing in a given verb. That is, there are verbs employing **-mi-** in which not only is an association with 'eye' quite plausible in semantic terms, but in which **-mi-** could also be analysed as an applicative prefix augmenting the valence of the verb root. Consider 3-143 and 3-144.

- 3-143 a) **ngirim -bubu**
1sgSit -sleepy
SU Pres
 I'm sleepy.
- b) **ngerim -mi-bubu**
1sgHands-Val-sleepy
SU Pres
 I'm making him sleepy / I'm putting him to sleep.
- 3-144 a) **ngeriny -mi -wat**
1sgHands-eye-hook
SU Perf
 I hooked it up.
- b) **ngeriny -syi -wat**
1sgHands-nose-hook
SU Perf
 I hooked it up.

In 3-143 b) *-mi-* could conceivably be an incorporated object bodypart, as an association with 'eye', in a verb meaning 'to put someone to sleep', would be quite plausible. However by comparison with the intransitive verb in 3-143 a) it is apparent that *-mi-* in 4-25 b) has been applied to the verb root *-bubu* to augment its associated monovalent argument structure, to make its compositional valency compatible with its lexical transitivity.

In 3-144 a) *-mi-* could conceivably be an applicative prefix augmenting the valency of the verb root *-wat*. We could determine this with certainty if, as in 3-143 above, we could contrast it with an intransitive verb employing the same verb root. No such verb in fact exists, however we can show that in this case *-mi-* is functioning as an incorporated bodypart patterning with *-syi-* 'nose' in 3-144 b). The verb in 3-144 means 'to hang up an object by passing some sort of hook through it'. The incorporation of *-mi-* in 3-144 a) focusses on the 'eye-like hole' through which the hook is inserted. The incorporation of *-syi-* in 3-144 b), on the other hand, focusses on the 'nose-like hook' that is inserted through the hole.

For non-native speakers this method of comparison can be employed to disambiguate the particular function of *-mi-* in potentially ambiguous instances. Needless to say, for native speakers who acquire an implicit feel for the associated argument structure of verb roots, such a test is needless. We should also consider the possibility that in verbs like 3-143 a) above, where an eye association is compatible with the verbal semantics, that *-mi-* encodes both grammatical and lexical meaning. Green (1989) notes in Marrithiyel that applicative prefixes clearly retain their bodypart semantics.

3.3.2 Divisive Prefixes

In addition to the major bodypart terms that are incorporated into the verb, there are three supplementary divisive prefixes filling slot 7 that are also incorporable. These prefixes convey spatial/divisional information about an argument of the predicate. The prefix *-gen-* broadly means the 'middle', or perhaps less specifically 'in two', as there seems to be no strong suggestion of division into equal parts. *-Gen-* prefixes a couple of verb roots, most frequently the verb root *-ket* 'cut', as in the following examples.

3-145 *yawurr ngebeny-gen-ket*
tree 1sgBash-mid-cut
SU Perf
 I chopped the tree in two.

3-146 *wamanggal ngupun-gen-ket*
wallaby 1sgSlash-mid-cut
SU Perf
 I cut the wallaby in the middle /
 I gutted the wallaby.

- b) **yeniny-ngirr-gen -ge -tyerr**
 3sgGo-1plex-mid-belly-stop
 SU Perf IO
 She pulled up alongside us (standing beside the car
 door, i.e. at our car's 'middle').

Thirdly, as their limited occurrence may suggest, divisives are lexically incorporated as elements of a verb root compound, and do not appear to be productive. In particular, they fail the main test for productive, syntactic incorporation, that of paraphrase as external nominals. Thus, example 3-150 below (based on 3-145 above) would be quite ungrammatical with the divisive morpheme extracted from within the verb.

- 3-150 ***yawurr ngebeny-ket gen**
 tree 1sgBash -cut mid
 SU Perf
 I chopped the tree in two

3.3.3 Verb Root Morphology

Ngan'giwumirri and Ngan'gikurunggurr employ about 160 verb roots that combine with 30 auxiliary roots in forming complex verbs. In addition to these 160-odd verb roots, there are probably another 50 derived verb roots. These include bodyparts functioning as verb roots, denominalised locative and associative verb roots, and adjectives. In this section I will examine each of these types of verb root, dealing firstly with the class of true verb roots.

I will begin by commenting on the phonotactics and reduplication of verb roots. As both these areas of concern are useful in defining verb roots as a wordclass, I will draw comparison with the phonotactics and reduplication of freeform nominals.

3.3.3.1 Verb Root Phonotactics

One criterion by which verb roots are distinguishable from nominals is in terms of their syllabic structure. Slightly more than half of the verb roots are monosyllabic (85/160), compared with only 15-odd monosyllables recorded in the entire nominal lexicon.

Additionally, the phonotactic constraints that apply to verb roots differ from those that apply to nominals. The initial consonant of a verb root patterns more like a C₄ than a C₁, (cf. 2.3.3). For instance, unlike free nominals, verb roots can have the apical fricative /s/ word-initially.

- 3-151 a) **ngeriny -madi-si**
1sgHands-chest-break
SU Perf
 I bent it (the sapling) over.
- b) **dangim -fi -sul**
3sgPoke-Mp-light
SU Pres
 It's becoming light (daybreak).

However where nominals can be vowel-initial, verb roots cannot. The difference between the phonotactic possibilities for these two wordclass types would appear to stem from their capacity to occur word-initially. Unlike free nominals, verb roots in the contemporary Ngan'gityemerri verb structure are fixed in non-initial word position. Intriguingly, this was not always the case. The 1930 data of Gerhardt Laves clearly show that at a previous stage in Ngan'giwumirri, verb roots functioned as independent phonological words, and indeed often preceded the auxiliary verb. Laves' data include no examples of word-initial verb roots beginning with /s/, but then I have only recorded two. The scarcity of such examples is suggestive of their recent development, i.e. once verb roots were fixed within the post-auxiliary position, they may have expanded the phonotactic possibilities of their initial consonants from C₁ to the less restricted possibilities for C₄.

3.3.3.2 Verb Root Reduplication

In section 2.5.2.1 we noted that all nominals reduplicate in full, as in the following example.

- | | | | | |
|-------|----|-----------------------|---|------------------|
| 3-152 | a) | ngunngun | - | percussion flint |
| | b) | marrimarri | - | knife (NgK) |
| | c) | nintyinintyi | - | bush / scrub |
| | d) | a-melmel | - | cockatoo's crest |
| | e) | wirritywirrity | - | rainbow lorikeet |

All Ngan'gityemerri reduplicated nominals are inherently reduplicated, not derived in any productive manner from single roots. They constitute two phonological words with respect to their stress marking, but a single morphological word in terms of their interaction with class markers and post-positions. This kind of disparity in word status is a

common feature of reduplicated nominals in non-Pama Nyungan languages (Ann Dineen: pers. comm.)

In contrast the morphology of verb root reduplication is quite complex. Monosyllabic verb roots reduplicate in full, as in 3-153.

3-153	a)	-pu	→	-pupu	-	ask
	b)	-we	→	-wewe	-	vomit
	c)	-da	→	-dada	-	strike

We know that this reduplication is to the right, (i.e. the reduplicated form follows the stem), because the reduplicated syllable generally undergoes vowel change. The target vowel for the reduplicated syllable is the high front vowel, and all four phonemic vowels can be seen to select /i/ in their reduplicated forms. The three examples given in 3-153 are in this respect exceptional. However consider the reduplicated monosyllabic verb roots in 3-154 below.

3-154	a)	-tip	→	-tiptip	-	grab
	b)	-pek	→	-pefik	-	drip
	c)	-baty	→	-batybity	-	hold
	d)	-wuty	→	-wutyity	-	pour

This process is given as a 'tendency' rather than a firm rule because of the examples like those in 3-153 above, and also because where some monosyllables with back vowels /a/ and /u/ are reduplicated, the reduplicated vowel is sometimes raised without necessarily being fronted. Thus, in addition to their stated target of /i/, as in 3-154 above, /a/ and /u/ have both been found to reduplicate as /u/, as in the examples below.

3-155	a)	-wa	→	-waw<u>u</u>	-	pick up
	b)	-pap	→	-papp<u>u</u>p	-	climb
	c)	-bul	→	-bulb<u>u</u>l	-	burn

We can therefore summarise the reduplication of monosyllabic verb roots by the following rule;

$$C_1V_1(C_3) \rightarrow C_1V_1(C_3)C_1V_2(C_3)$$

noting the general tendency for V_2 to be [+ high] and usually also [+ front].

As is evident from 3-154 b) and d) above, some of the $C_3 + C_1$ clusters that result from the reduplication of verb roots, are subject to certain morphophonological processes¹¹.

Di-syllabic verb roots with an initial closed syllable are very rare, but appear to reduplicate in full in the same way as nominals.

3-156 **-filkity** → **-filkityfilkity** - spin round

However di-syllabic verb roots with initial open syllables reduplicate the initial syllable only, i.e. they reduplicate partially and to the left.

3-157 a) **-kilik** → **-kikilik** - cough
 b) **-palak** → **-papalak** - wink
 c) **-kuduk** → **-kukuduk**¹² drink
 d) **-fala** → **-fafala** - show
 e) **-purity** → **-pupurity** - hide
 f) **-fityi** → **-fiftyi** - roll
 g) **-gulirr** → **-gugulirr** - encircle

¹¹These morphophonological processes are discussed in detail in 2.4, but three examples are given below.

1- w deletion

a) **-wap** → **-wapup** - sit
 b) **-wul** → **-wulil** - return
 c) **-winy** → **-winyiny** - whistle
 d) **-waty** → **-watyity** - consume

2- rr assimilation

a) **-tyerr** → **-tyetytyirr** - stop
 b) **-tyurr** → **-tyutytyurr** - swim

3- nasal assimilation (in NgK only)

NgK **-tum** → **-tuntum** - bury
 NgW **-dum** → **-dumdum** - bury

¹²Both **-palak** and **-kuduk** have been recorded once in their reduplicated form by a single, young speaker, as **-palakpalak** and **-kudukkuduk**. This is suggestive of reanalysis of the somewhat complex reduplication rules for di-syllabic verb roots, to the simpler rule whereby all roots, both nominal and verbal, reduplicate in full. I cannot comment here on whether this phenomenon may reflect a stage in either language acquisition or language death.

Verb root reduplication can therefore be summarised in the following way.

Monosyllables	-	Full Reduplication to the right (target value of reduplicated vowel is [+high] / [+front])
Disyllables		
Initial Open	-	Partial left reduplication of C ₁ V ₁ -
Initial Closed	-	Full Reduplication

The aspectual consequences of verb root reduplication are discussed in 3.4.6.

3.3.3.3 Isolate Verb Roots

The closed class of verb roots is dependent on main verb morphology, that is, verb roots can generally only co-occur with auxiliary verbs in the formation of a complex verb. Under a single specific condition, a small subset of verb roots are found occurring in isolation, independent of an auxiliary verb. The construction that is permissive of independent verb roots is where they stand as imperatives. Isolated verb roots functioning as imperatives can be found in all the Daly region languages sharing this verbal typology. Cook (1984) also observes that imperatives are one of only two construction types in Wagiman that allow 'participles'¹³ to appear in isolation from 'finite verbs'.

Only six verb roots have been recorded functioning as isolated imperatives, though this list is certain not to be exhaustive. The verb roots that are used in this way are all semantically transparent, in the sense that in their combination with various auxiliaries, an invariant core semantic component is always attributable to them. We would not, for instance, anticipate the use of a highly polysemous verb root, such as *-baty*, as an isolated imperative.

¹³Given certain typological differences between the two languages, these terms of Cook's are the broad equivalents of 'verb roots' and 'auxiliary verbs', respectively. Cook eschews the labels of 'verb root' and 'auxiliary' in Wagiman on the grounds that the former not only occur in isolation as imperatives, but can also be case marked in clausal complement constructions, and the latter because it is suggestive of the lexically empty Warlpiri-type 'auxiliary' that cannot stand as a finite verb by itself.

3-158	wap	-	sit !
	karrbu	-	get down !
	pat	-	get up ! (from lying)
	puy	-	keep going !
	tyerr	-	stop !
	pirr	-	leave it !

These examples can all be viewed as contractions of fully finite regular imperative constructions, that are formed with the 'Go' auxiliary. Some of these forms are listed below, with *yani-*, the 2nd person singular subject/Irrrealis inflection of the 'Go' auxiliary.

3-159	yani-wap	-	sit !
	yani-karrbu	-	get down !
	yani-pat	-	get up !
	etc.		

The six verb roots listed in 3-158 all form dynamic action verbs with the 'Go' auxiliary, and this appears to be the common feature that permits deletion of the auxiliary verb.

The major difference between fully finite imperatives, and isolated imperative verb roots, is that the latter have greater illocutionary force. Being typically either mono-syllabic, or di-syllabic, the brevity of verb roots is conducive to their imperative use with strong articulatory force. Within normal discourse constraints they are generally used only to children and dogs. Syntactically, of course, isolated verb roots differ from finite imperatives in their inability to be explicitly associated with a nominal argument through the normal means of pronominal cross-referencing. However given the role of imperatives within discourse, subject reference is typically very clear.

Where isolated verb roots, functioning as imperatives, follow full finite verbs within a single breath group, as in 3-160 below;

3-160	wembem	ngayi-nide	ya	-fi	-tyuk	pirr
	<i>house</i>	<i>1sg -LOC</i>	<i>2sgPoke-Mp-place</i>			<i>leave</i>
		<i>PRO</i>	<i>SU Irr</i>			
	Put it down in my house and leave it !					

they appear to constitute examples of multiple verb roots being governed by a single auxiliary. Again, I analyse such examples as two independent verbs, with auxiliary deletion in the latter VP. The tendency for the latter verb root to bear stress marking, and be set off by a pause, supports such an

analysis Example 3-160 above, is therefore treated as a contraction of 3-161 below.

- 3-161 **wembem ngayi-nide ya -fi -tyuk, yani -pirr**
house 1sg -LOC 2sgPoke-Mp-place 2sgGo-leave
PRO SU Irr SU Irr
 Put it down in my house and leave it !

Note that the auxiliary deletion permitted in the latter VP of 3-160 is facilitated by the shared imperative structure of the two VPs. An isolated imperative verb root cannot tail a declarative VP in this manner, but would require being set off as an independent breath group. Thus, 3-162 below is impermissible.

- 3-162 ***nga -fi -tyuk-pe pirr**
1sgPoke-Mp-place-Fut leave
SU Irr
 I'll place it down, and you leave it !

3.3.3.4 Derived Verb Roots

3.3.3.4.1 Adjectival Verb Roots

In addition to the closed class of 160-odd verb roots, most Ngan'gityemerri adjectives can function as verb roots without any particular morphological marking of their denominalised status. Consider the underlined forms in 3-163 to 3-165, functioning as adjectives in the a) examples, and as verb roots in the b) examples.

- 3-163 a) **yubu yirim ?**
good 2sgSit
SU Pres
 Are you well ?
- b) **wamanggal deminy-ngi-yubu wakay**
doctor 3sgHands-1sg-good finish
SU Perf DO
 The doctor cured me / made me good.
- 3-164 a) **lamurity yenim-madiwirri**
happy 3sgGo-play
SU Pres
 He's playing happily.
- b) **bengim-ngi-lamurity**
3sgBash-1sg-happy
SU Pres DO
 He makes me happy.

- 3-165 a) **wurr yerifun-kana, wa -pul -ngini**
 NgK *grass dry -FOC 3sgHeat-burn-Fut*
SU Irr
 The grass is dry now, it'll burn.
- b) **wurr marrawuk-ninggi wumbun-yerifun**
grass dry season -AGENT 3sgSlash -dry
wind SU Perf
 The dry season wind has dried the grass out now.

3.3.3.4.2 Derived Bodypart Verb Roots

A small number of the major bodyparts have been found to occur in verbs that have the overall structure of complex verbs, but no verb root. That is, they consist of an auxiliary of the type that only co-occurs with verb roots, (ie. 'complex auxiliaries'), and a bodypart, but the expected verb root is simply missing. In these examples the bodypart appears to act as a verb root, in the sense that it fills the condition that the auxiliary requires another verbal constituent with which to co-occur. Verbs of this type have only been found to employ those auxiliaries that can be said to have a fairly clear-cut, overt semantic component attributable to them, and in this sense the auxiliary can be seen to take over some of the role normally performed by the verb root.

- 3-166 a) **door ngum -bi -derri**
1sgSlash-2sg-back
SU Perf IO
 I knocked on the door for you.
- b) **tyi dangim-tyerr**
breast 3sgPoke-mouth
SU Pres
 She's breastfeeding it.
- c) **ngariny -nyi-fi -me**
1sgPoke-2sg-Mp-hand
SU Perf DO
 I gave it to you.
- d) **da-madi ngubum-madi**
Bp-chest 1sgBash -chest
cl SU Perf
 I cut his chest cicatrices.

3.3.3.4.3 Ngan- Derived Locative Verb Roots

Ngan- occurs as a locative proclitic to nouns and verbs, and can take either its immediate host or an entire clause within its scope (see 5.3.4). Additionally **ngan-** prefixes major bodyparts to derive locational verb roots. Such verb roots can only co-occur with the intransitive 'stative' auxiliaries, 'sit', 'lie', 'stand', and 'go'. The resultant verbs specify the orientation of the subject by the choice of auxiliary, and the location of the subject by the derived verb root. That is, the subject is located in relation to a literal bodypart, as in 3-167;

- 3-167 a) **nendu dini -ngan-derri-tye**
 NgK *horse 3sgSit -LOC -back -Past*
SU PImp
 He was sitting on the horse's back.
- b) **ngiriny -nyi-ngan-wantyirr**
1sgSit -2sg-LOC -side/armpit
SU Pres DO
 I'm sitting at your side.

or in a place that can, in a classificatory sense, be thought of as a bodypart.

- 3-168 a) **bude wibem -ngan-madi**
nest 3sgLie -LOC -chest
SU Pres
 (The bird) is lying in (the concave hollow of) the nest.
- b) **ngi -mbi-ngan-mentyi-pe**
1sgSit -2sg -LOC -neck -Fut
SU Irr IO
 I'll wait for you.
 (lit: I'll sit on the neck/track for you)

3.3.3.4.4 Garr- Derived Motional Verb Roots

Garr- prefixes two bodyparts **madi** - 'chest' and **derri** - 'back', to derive verb roots of motion towards and motion away, respectively. This prefix is otherwise unattested within either the nominal or verbal morphology of Ngan'gityemerri. **Garr-** derived verb roots have only been found to co-occur with the stative 'Go' auxiliary.

- 3-169 a) **ganim-garr-madi**
3sg Go -MOT -chest
SU Pres
 He's coming up.

- b) **ganim-garr-derri**
 3sg Go -MOT -back
 SU Pres
 He's going away.

It is presumed that the point of reference for 'motion towards' or 'motion away' is based on the location of the speaker. However it remains unclear how this differs from the directional verbal enclitics **pagu -HITHer** and **pefi -THITHer** (see 6.2.2).

- | | | | |
|----------|---|----|---|
| 3-170 a) | ganim-pagu
3sg Go -HITH
SU Pres
He's coming up. | b) | ganim-pefi
3sg Go -THITH
SU Pres
He's going away. |
|----------|---|----|---|

3.3.3.4.5 Werr- Derived Associative Verb Roots

Of the class of nominal enclitics in Ngan'gityemerri, the ASSOCIative enclitic has the form **-werre/werri(K)** (cf. 6.1.4).

- 3-171 **de -bi -werre -** trousers
 BP-thigh-ASSOC
 cl

A few examples of nominal compounds employ the related associative form **werr-**, as in 3-172.

- | | | |
|----------|--|---|
| 3-172 a) | wur-werr -tyi -
F -ASSOC-breast
cl | a pubescent woman
(lit: woman having breasts) |
| b) | e -werr -balarr -
A-ASSOC-feathers
cl | birds (generic)
(lit: animals having feathers) |

This form of the ASSOCIative plays a minor role in compounding with bodypart terms to derive verb roots, as in 3-173, where in combination with the 'Lie' auxiliary, it forms a verb meaning 'to hear'.

- 3-173 **ngibem -bi -werr -tyeri**
 1sgLie -2sg-ASSOC-ear
 SU Pres IO
 I can hear you.
 (lit: I lie having ears for you)

3.4 Tense, Aspect and Mood

The auxiliary root is only one of several parts of the entire verbal complex that carry information about tense, aspect and mood. Tense is additionally encoded by enclitics to the verb, and the intransitive auxiliaries can be serialised to the verb where they function as aspect operators. The tense/aspect/mood information packaged within a full verb can therefore be seen as a product of several interacting systems, that partially overlap, as can be seen in the following example;

3-174 **ngeme -baty -tye -ngagadi**
 1sgHands-hold -Past -1sg Go
 SU PImp SU PImp
 I was going along carrying it.

where the 'Hands' auxiliary root is inflected for 'Past Imperfective', the verbal enclitic *-tye* denotes 'Past' tense, and the serialised auxiliary *-ngagadi* concords with the auxiliary root in its 'Past Imperfective' inflection, and conveys imperfective aspect. The significance of this, at times, redundant marking, will become apparent when we look at the Ngan'gikurunggurr data.

This section investigates these several mechanisms that interact to determine the tense, aspect and mood coding in the Ngan'gityemerri verb. The tense/aspect/mood categories for which the auxiliary verb inflects, are dealt with in 3.4.1. In 3.4.2 we return to the discussion of the auxiliary root morphology, noting some evidence of what appear to have been regular auxiliary root final suffixes. The auxiliary inflectional categories additionally interact with tense enclitics to the verb. The form of these enclitics and the nature of their auxiliary combinations are looked at in 3.4.3. Other verbal enclitics that precede the final tense enclitics, such as the focus marker *-nyine/-kana(K)*, and *-gumu/-gimi(K)* 'while', *-ne/-ngini(K)* 'just about to' and *-pefi* 'beginning to', are examined in 3.4.4. The posture/motion auxiliaries can be serialised to certain categories of complex verb denoting progressive aspect. The serialisation of these auxiliaries is dealt with in 3.4.5. Finally, 3.4.6 examines the aspectual nature of verb root reduplication.

3.4.1 Auxiliary Tense/Aspect/Mood Categories

Ngan'giwumirri auxiliaries have four inflectional tense/mood/aspect categories, labelled 'Present', 'Perfective', 'Past Imperfective' and 'Irrealis'. In example 3-175 below, the Ngan'giwumirri 'Sit' auxiliary is inflected through these four categories.

- 3-175 a) **ngirim-fifi** -I'm smoking/ I smoke.
1sgSit -smoke
SU Pres
- b) **ngiriny-fifi** -I had a smoke.
1sgSit -smoke
SU Perf
- c) **ngini -fifi -tye** -I was smoking/ used to smoke.
1sgSit-smoke-Past
SU PImp
- d) **ngi -fifi -pe** -I will have a smoke.
1sgSit-smoke-Fut
SU Irr

'Present'

'Present' auxiliary inflection only combines with the Ø present tense enclitic to form the present indicative tense. The present indicative generally marks the activity expressed by the verb as being in progress at the moment of the speech act, e.g.

- 3-176 **gagu ngirim-lalirr**
animal 1sgSit -eat
generic SU Pres
 I'm eating meat.

However the extension of the present indicative to form statements about habitual or universal (in the sense of Lyons (1968:306)) activity, requires that the notion of 'in progress' allow for activity that is ongoing in a more general sense, without that activity necessarily being underway at the precise moment of speech.

- 3-177 **mipurr walalma wannim**
man hunt 3plGo
SU Pres
 The men are hunting.
 or Men hunt.

'Perfective'

The 'Perfective' auxiliary inflection, like the 'Present', only combines with the Ø present tense enclitic¹⁴, forming the past perfective. Past

¹⁴ 'Present' is thus clearly an inadequate label for this Ø enclitic. The label is only employed because of the natural opposition with 'future' -pe and 'past' -tye.

perfectives have both temporal and aspectual concerns. They establish the timing of an activity as prior to the time of the speech act, and further present that activity as a single completed action, without regard for its internal temporal make-up.

- 3-178 **gagu ngiriny-lalirr**
animal 1sgSit -eat
generic SU Perf
 I ate meat.

'Past Imperfective'

The 'Past Imperfective' auxiliary inflection combines with the 'Past' tense enclitic *-tye*, to form a category that also has both temporal and aspectual concerns. The Past Imperfective establishes activity as temporally prior to the moment of speech, that is, not only the inception of the activity, but also the completion of the activity, is located as temporally prior to the reporting of that activity. So an activity or event marked in this way can no longer hold true at the moment of speech. The Past Imperfective category is also aspectually progressive or imperfective, in the sense that the activity is presented as having been, at that time, in progress and non-completed.

- 3-179 **gagu ngini-lalirr-tye**
animal 1sgSit-eat -Past
generic SU Perf
 I was eating meat.

Consistent with this progressive aspect, the Past Imperfective is also employed in statements about habitual or universal activity. In contrast to the Present habituals discussed above, Past Imperfective habituals no longer hold true at the moment of speech.

- 3-180 **ration wa-mumu-nimbi wurmu -wawu-tye**
M-taboo -SOURCE 3plSnatch-pick -Past
cl =police SU Plmp up
 They used to collect their rations from the policeman.

'Irrealis'

The 'Irrealis' auxiliary category differs from the three realis categories ('Present', 'Perfective' and 'Past Imperfective') in having only modal, not temporal, concerns. Verbs having auxiliaries inflected for 'Irrealis' can only encode temporal reference through exploiting other tense marking mechanisms, such as the verbal enclitics *-tye* 'Past' and *-pe/-ngini(K)* 'Future'.

'Irrealis' auxiliary inflection simply establishes that the activity has not come about, or been undertaken, prior to the moment of speech, or that it will, might or should come about, or be undertaken, subsequent to it. The combination of 'Irrealis' auxiliary inflection and 'Future' tense enclitic *-pe/-ngini(K)* forms claims about subsequent events, as in 3-181;

- 3-181 **ngani -pe**
1sgGo-Fut
SU Irr
 I will go/might go.

and the combination of 'Irrealis' inflection and the 'Past' tense enclitic *-tye*, claims the non-realisation of prior events, as in 3-182.

- 3-182 **ngani -tye**
1sgGo-Past
SU Irr
 I would've/should've gone.

Unlike Ngan'giwumirri, Ngan'gikurunggurr auxiliaries have only three inflectional tense categories. The glosses for these are listed below with their tense/aspect/mood values.

- | | | |
|------|---|--|
| Pres | - | present/past perfective/habitual |
| PImp | - | past imperfective/distant past/past habitual |
| Irr | - | irrealis (i.e. future /past negative) |

In example 3-183 below, the Ngan'gikurunggurr 'sit' auxiliary is inflected for these three available categories.

- | | | |
|----------|---------------------------|--------------------------------|
| 3-183 a) | ngirim-fifi | -I'm smoking/ I smoke/ |
| NgK | <i>1sgSit-smoke</i> | I had a smoke. |
| | <i>SU Pres</i> | |
| b) | ngini -fifi -tye | -I was smoking/ used to smoke. |
| | <i>1sgSit-smoke-Past</i> | |
| | <i>SU PImp</i> | |
| c) | ngiwi -fifi -ngini | -I will have a smoke. |
| | <i>1sgSit-smoke-Fut</i> | |
| | <i>SU Irr</i> | |

The 'Irrealis' and 'Past Imperfective' categories in Ngan'gikurunggurr have the same tense, aspect and modal elements as their corresponding Ngan'giwumirri counterparts. However the two categories which are

glossed as 'Present' and 'Perfective' in Ngan'giwumirri, appear to have been collapsed in Ngan'gikurunggurr into a single inflectional category labelled 'Present'. The range of tense/aspect/mood values covered by the Ngan'gikurunggurr 'Present' appears to be the sum of the range of tense/aspect/mood values of the two distinct Ngan'giwumirri inflectional categories 'Present' and 'Perfective'. This is demonstrated in a comparison of the range of meanings given in 3-175 a) and b), and 3-183 a). The motivation for, and consequences of, the merging of these auxiliary inflectional categories in Ngan'gikurunggurr is addressed in the following section.

3.4.2 Historical Auxiliary Tense Suffixes

So far we have seen that Ngan'giwumirri auxiliary roots inflect for the four tense/aspect/mood categories Present, Perfective, Past Imperfective, and Irrealis (cf. 3.4.1), and that the auxiliary root forms, can be characterised as having the syllabic structure 'N', 'CVN' or 'CVCVN' (cf. 3.2.2). More accurately we can characterise the auxiliary root templates as Ø-, CV-, or 'CVCV-' followed by an element (-N or -NV or Ø) that has fairly regular formal correspondences across the four tense/aspect/mood categories. In 3-184 below, the 1st singular subject-auxiliary sequences of these four categories are set out, for the 'Sit', 'Say', 'Hands', 'ShoveDtrD', 'PokeDtr', 'HandsDtr' and 'FeetDtr' auxiliaries. The final -N or -NV element of the auxiliary root is set apart and given in bold script.

3-184	<u>Sub</u>	<u>Aux</u>	<u>Root</u>	
	ngi	ri	m	-Pres
Sit	ngi	ri	ny	-Perf
	ngi	Ø	ni	-PImp
	ngi	Ø	Ø	-Irr
	ngu	mu	m	-Pres
Say	ngi	mi	ny	-Perf
	ngi	Ø	me	-PImp
	ngu	mu	Ø	-Irr
	nge	ri	m	-Pres
Hands	nge	ri	ny	-Perf
	nge	Ø	me	-PImp
	nge	Ø	mi	-Irr
	ngu	de	m	-Pres
ShoveDtrD	ngu	de	ny	-Pres
	ngu	de	ni	-PImp
	ngu	de	Ø	-Irr

PokeDtr	nga	ra	m	-Pres
	nga	ra	ny	-Perf
	nga	ra	ni	-PImp
	nga	ra	Ø	-Irr
HandsDtr	nge	me	m	-Pres
	nge	me	ny	-Perf
	nge	me	ni	-PImp
	nge	me	Ø	-Irr
FeetDtr	nga	nawa	m	-Pres
	nga	nawa	ny	-Pres
	nga	nawa	ni	-PImp
	nga	nawa	Ø	-Irr

From a comparison of these forms we would have little hesitation in proposing a di-morphemic constituency for the verbal component that we have up until now labelled 'auxiliary root'. For each auxiliary listed we find a fairly stable auxiliary root component (though there is some alternation in 'Sit', 'Say' and 'Hands' between overt forms and Ø forms, and some variation in vowel quality). And as regular suffixes to these we find the tense/aspect/mood markers set out in Table 3-7.

Ngan'gityemerri Historical Auxiliary Root Suffixes

	Realis		Irrealis
Present	Perfective	Past Imperfective	Irrealis
-m	-ny	-ni	-Ø

Table 3-7

We would need to note certain irregularities, such as *me* instead of the predicted *ni* in the Past Imperfective forms of 'Hands' and 'Say', and *mi* instead of Ø in the Irrealis form of 'Hands'. Generally though, on the basis of the data presented in 3-54, we would want to acknowledge the Table 3-7 forms as a synchronically productive suffix system.

Testing the regularity of these putative suffixes across the four Ngan'giwumirri categories of inflection for all 31 auxiliary roots (see the auxiliary paradigms listed in Appendices A and B), we find evidence of Present -m, Perfective -ny, Past Imperfective -ni and Irrealis -Ø in about 74% of subject-auxiliary sequences. The remaining 26% of subject-auxiliary sequences are either suppletive forms or irregularities like those noted for

'Say' and 'Hands' above. The picture is even less clear in Ngan'gikurunggurr where, as we shall see in the following section, the distinction between the two inflectional categories, Present and Perfective, has been neutralised.

I conclude that at a previous stage in Ngan'gityemerri there was probably a fully productive system of tense/aspect/mood suffixation to the auxiliary root, with the morphological forms as given in Table 3-5. A fairly high rate of suppletion and Ø realisation mean that the variation in auxiliary root inflectional forms are not synchronically conditioned, and any attempted segmentation is currently unprofitable. In view of the evidence that the contemporary Ngan'gityemerri synthetic/agglutinative verbal structure has developed from a phrasal verb consisting of an independent verb root and a finite auxiliary verb (see Reid, to appear), we might assume that the auxiliary suffixes in Table 3-7 once functioned as the primary mechanism for encoding tense/aspect/mood categories in this phrasal verb, and that the verbal tense enclitics **-tye** and **-pe/-ngini(K)** (see 3.4.3) have developed comparatively recently.

In view of the evidence presented above for Ngan'gityemerri having once had productive auxiliary suffixes, with labial **-m** marking 'Present', and laminal **-ny** marking 'Perfective', we will return to the discussion of the merging of the 'Present' and 'Perfective' auxiliary tense/aspect/mood categories in contemporary Ngan'gikurunggurr. In Ngan'giwumirri, the hetero-organic nasal + consonant clusters formed at the morpheme boundary between the auxiliary root and whatever verbal constituent immediately follows it, must necessarily be strictly maintained, for the very reason that the quality of the nasal is the crucial determinant of the tense/aspect/mood inflectional category. This is apparent in 3-185 where Present **-m** and Perfective **-ny** form hetero-organic clusters with following labial, apical, laminal and dorsal consonants, respectively.

- | | | | |
|----------|------------------------|---|---------------------|
| 3-185 a) | ngisyem-wurr | - | I'm pulling it out. |
| | ngisyeny-wurr | - | I pulled it out. |
| b) | ngerim-du | - | I'm touching it. |
| | ngeriny-du | - | I touched it. |
| c) | ngaganim-tyerr | - | I'm stopping. |
| | ngaganiny-tyerr | - | I stopped. |
| d) | mem-ngiti | - | He's telling me. |
| | meny-ngiti | - | He told me. |

In contrast, the final nasal of the Ngan'gikurunggurr auxiliary root is a morpho-phonemic N, a class of the alternating phonemes /m, n, ny/ and /ng/. The phoneme is selected in terms of assimilation rules conditioned by the place of articulation of the following consonant. Compare 3-186 with 3-185 above.

- 3-186 a) ngisyeN-wurr → ngisyem-wurr -I pull/pulled it out.
NgK
b) ngeriN-du → ngerin-du -I touch/touched it.
c) ngaganiN-tyerr → ngaganiny-tyerr -I'm stopping/ I stopped.
d) meN-ngindi → meng-ngindi -He's telling/He told me.

As the morpho-phonemic N of 'Present' Ngan'gikurunggurr auxiliary roots, results from the collapse of hetero-organic clusters at this morpheme boundary, we can see that the final nasal of the auxiliary root can no longer encode a distinction between tense/aspect/mood categories. Assuming that Ngan'gikurunggurr once also maintained a distinction between 'Present' and 'Perfective' categories, we could go further and hypothesize that the neutralisation of this distinction resulted from the pressure towards homorganic clusters at the boundary between the auxiliary root and the verb stem.

In support of this hypothesis it should be noted that the neutralisation is one of formal marking, and is not intended to imply that the underlying categories themselves have been neutralised. The distinction between Present and Past Perfective can still be encoded on Ngan'gikurunggurr verbs by exploiting the other tense marking strategies noted in introduction to 3.4. It is because of the overlap in the mechanisms that mark tense/aspect categories, that the loss of the overt morphological marking of the distinction between auxiliary root Present and Perfective inflections in Ngan'gikurunggurr, does not result in the loss of these underlying categories, nor does it prevent these temporal distinctions from being overtly encoded by other strategies. Example 3-187 below demonstrates how the distinction between Present Imperfective and Immediate Past Perfective is marked in Ngan'gikurunggurr, through the use of a serialised auxiliary in a), and by a temporal focus marker in b).

- 3-187 a) ngerim -wurity-ngirim
NgK 1sgHands-fix -1sgSit
 SU Pres SU Pres
 I'm fixing it.

The examples below demonstrate the shift of verbal tense enclitics to clause-initial constituents.

- 3-190 **ngayi-pe ngumu -syarr keninggisyi**
1sg -Fut 1sgSlash-scrape canoe
PRO SU Irr
 I'll bale out the boat.

- 3-191 **kuderri wune-tye wiri -palak pikinduwung**
billabong that -Past 3sgSit-drop placename
place SU Irr
 She (Pelican) had intended to lay (her egg) at that billabong, Pikinduwung.

- 3-192 **wun -ambirri-pe ngumu -nirrki-wa Batchelor**
there-ahead -Fut 1sgSnatch -2dl -pick
SU Irr IO up
 I'll get (some beers) for you up ahead at Batchelor.

As noted above, tense marking is achieved accumulatively through the exploitation of several systems, most particularly the auxiliary inflectional categories and the enclitic tense markers. These systems cannot conflict, thus for instance, verbs with Past Imperfective auxiliary inflections cannot select either Present tense enclitic $-\emptyset$, or Future enclitic **-pe/-ngini(K)**. Likewise verbs with Present auxiliary inflections cannot select either Past Imperfective tense enclitic **-tye**, or Future enclitic **-pe/-ngini(K)**. The unacceptability of such conflicting tense category combinations is demonstrated in the ungrammatical examples in 3-193 and 3-194.

- 3-193 a) ***nganggidi - \emptyset**
1plincGo-Pres
SU Plmp
- b) ***nganggidi -pe**
1plincGo-Fut
SU Plmp
- 3-194 a) ***ngangginim-tye**
1plinc Go -Past
SU Pres
- b) ***ngangginim-pe**
1plinc Go -Fut
SU Pres

Recall however (cf. 3.4.1), that the auxiliary inflectional category labelled 'Irrealis' is a strictly modal category that differs from other auxiliary inflections in conveying no temporal information. Consequently it should be noted that the combination of Irrealis auxiliary inflection and Past tense enclitic *-tye*, as found in examples 3-195 and 3-196 below, does not constitute a violation of the constraint on conflicting tense marking systems. Indeed this is the way in which all past unreal constructions are typically structured.

- 3-195 **ngambani-tye tawun**
1plincGo -Past Darwin
SU Irr
 We should have gone to Darwin.
- 3-196 **awa-purrrpurrrk -pagu waddi-tye**
Hg -little'uns -HITH 3plGo-Past
cl SU PImp
 The kids came along,
minbe-nyine-tye warri -batybity-wirri
Neg -FOC -Past 3plPoke-sew -3plSit
SU Irr redup SU Irr
 and they were unable to be sewing then.

3.4.4 Other Verbal Enclitics

3.4.4.1 *-nyine/-kana(K)* Focus 'now/then'

Ngan'giwumirri *-nyine* and Ngan'gikurunggurr *-kana* are temporal focus markers that can combine with any auxiliary inflection, and are variously glossed as 'now' and 'then'. Like most of the enclitics discussed here they generally appear after the verb root, as in example 3-197, but also display a preference in selecting clause initial words as their host. Consequently, where the verb is preceded by an overt nominal, as in examples 3-198 and 3-199, it is this constituent to which the temporal focus marker attaches itself.

- 3-197 **pat -Ø meny-ngirrki dangim -fi -sul -nyine**
arise-IMP 3sgSay-1dlex 3sgPoke-Mp-shine-FOC
SU Perf IO SU Pres
 'Get up !' he told us, 'its daybreak now'.
- 3-198 **ngarranygi -fi -tit, miyi-nyine**
1plexPokeDtr dl -Mp-arise plant-FOC
SU Perf SU food
 We (dl) got up, and his wife
gagu mityity fry-meyi -tye -yedi
animal white -3sgDo-Past-3sgGo
generic woman SU PImp SU PImp
 was frying breakfast then.

- 3-199 **miyi-nyine yurrsyugu -waty -pe, meny -ngirrki**
food-FOC 2plSuck dl-consume-Fut 3sgSay -1dlex
SU Irr SU SU Perf IO
 'You can eat your breakfast now', she told us.

Although they generally pattern with the nominal and verbal enclitics, **nyine** and **kana** (K) have the capacity to occur as independent freeform particles. In 3-200 below **nyine** occurs clause-initially, and in 3-201 as a separate phonological word that plays host to the copied verbal directional and tense enclitics.

- 3-200 **nyine ngaram -fi -pal**
FOC 1sgPokeDtr-Mp-return
SU Pres
 I'm on my way back home now.

- 3-201 **ngerrmigi -pat -pe, nyine-pefi -pe**
1plexHands dl-arise-Fut FOC -THITH-Fut
SU Irr SU
 We (dl ex) are just about to set off,...now !

3.4.4.2 -gumu/-gimi(K) 'while'

In 6.2.6 I described the use of **-gumu** as a semblative enclitic to nominals. **-Gumu** additionally functions, in a completely unrelated sense, as a marker of progressive/incompletive aspect. In this capacity **-gumu** functions at clause level, i.e. having scope over the entire clause, not merely the constituent that happens to host it. As noted for other clause level enclitics, **-gumu** can either select the verb as its host, or may appear on negatives, interrogatives, or verbal arguments that immediately precede the verb.

As a marker of progressive/incompletive aspect **-gumu** interacts differently with the modal categories realis and irrealis. In the two realis incompletive mood/aspect auxiliary inflectional categories, Present and Past IMPerfective, **-gumu** denotes a subordinate clause as the temporal frame for a main clause. To employ the terms used by Chung and Timberlake (1985), **-gumu** designates the clause over which it has scope, as the 'event frame' with respect to which the main clause proposition is evaluated. The 'event frame' is progressive/incompletive and therefore designates an interval of time. The main clause predicate, which must be a telic, perfective verb, falls within this temporal frame. This construction type, where an imperfective clause subordinated by **-gumu** serves as the temporal frame for a perfective

main clause, is exemplified in the examples below. In 3-202 and 3-203 the **-gumu** subordinated predicate is in the Past IMPerfective, and in 3-204 it is in the Present. Both these auxiliary inflectional categories are inherently progressive.

3-202 **winni -ngiti-ngidi-gumu -tye, taya wunu ngeriny -wurity**
3plSit - 1sg -wait -WHILE-Past tyre that 1sgHands-fix
SU Imp IO SU Perf
 While they waited for me, I fixed that tyre.

3-203 **firri winge-gumu -tye, darany -fi -tit**
dream 3sgLie-WHILE-Past 3sgPokeDtr-Mp-raise
SU P Imp SU Perf
 While he was dreaming, he got up (sleep-walking).

3-204 **warmadi yu -ket-Ø, minbe-gumu dinyinggin-nin -kerrety**
quick 2sgSlash-cut-Imp Neg -WHILE 3sgSee -1dinc-watch
SU Irr SU Pres DO
 Cut it quickly !, while he's not looking.

The irrealis modal category interacts with the aspectually progressive **-gumu** to derive the conative sense of 'try and do X'. This use of **-gumu** has only been recorded with 2nd person subjects in utterances that are otherwise structured as imperatives. In pragmatic terms the force of this construction is in softening imperatives.

- 3-205 a) **yinyirri -gumu-Ø**
2sgSee -TRY -IMP
SU Irr
 Have a look !
- b) **peke yemi -ngiti-fityi-gumu-Ø**
tobacco 2sgHands-1sg -roll -TRY -IMP
SU Irr IO
 Try 'n roll me a smoke !
- c) **yim -werr -tyeri-gumu-Ø**
2sgLie-ASSOC-ear -TRY -IMP
SU Irr
 See if you can hear !

Note that **-gumu** marked clauses can only stand as main clauses in the future. Non-future **-gumu** clauses can only designate a temporal frame for another, main clause. Thus the unclosed potentiality of the conative construction cannot be allowed within non-future predicates in

Ngan'giwumirri. The typology of mood is such that events are either actual or non-actual, and are morphologically so marked as realis or irrealis respectively. As all non-future expressions are relatively certain as to their actuality they must be explicitly marked as being either actual or non-actual. In the non-future an event has either happened or it has not. This certainty with respect to actuality mitigates against the conative interpretation in non-future predicates.

3.4.4.3 -ne/-ngini(K) 'just about to'

6.1.3 deals with the purposive case marking function of the nominal enclitic -ne / -ngini (K). This enclitic also has a verbal function, where it is glossed as 'INTENTive'. In combination with the irrealis auxiliary inflectional category and past tense verbal suffixes, it encodes the deontic modal sense of the subject's intention to realise an event. That this event was ultimately unrealised is encoded by the irrealis auxiliary inflection. In 3.4.1 we saw that the combination of irrealis auxiliary mode and past tense marking denotes general non-realisation, as in example 3-206 below.

- 3-206 ngarrani -tye
 1plexGo-Past
 SU Irr
 We were going to go....(but didn't).

The addition to this construction type of the 'intention' enclitic specifies that the subject's resolve to carry out that event, was good leading up to the moment of execution, but was thwarted at the last moment by some external imposition.

- 3-207 ngan'gi ngumu-ne -tye, epe wunu-pagu
 word 1sgSay -INTENT-Past BUT there -HITH
 SU Irr
 warrmadi wudum -ngi-tyerr -palak,
 quick 3sgShoveDtrD -1sg-mouth-drop
 SU Perf DO
 I was about to speak out, when someone from over there
 quickly prevented me.
- 3-208 gagu wunu ngubu -da -ne -tye, epe nginyirri
 animal there 1sgBash-shoot-INTENT-Past BUT 1sgSee
 generic SU Irr SU Perf
 emebe -werre, ngaganiny-pirr
 young'un-ASSOC 1sgGo -leave
 SU Perf be
 I was about to shoot that (wallaby), but I saw that it had a
 young'un, so I left it alone.

- 3-209 **ngani -fili -ngini -tye, epe wetimbi yemenggeng-ngindi**
 NgK 1sgGo-wander-INTENT-Past BUT FINE 2sgArrive -1sg
 SU Irr SU Perf IO
 I was about to wander off, but fortunately you just turned up.

3.4.4.4 -pefi Co-temporal, Durative, Inchoative

-Pefi encliticises stative verbs that can inflect for the two auxiliary tense/aspect categories, Past Imperfective and Present, that are incomplete. Past Imperfectives, as in 3-210 below, are by definition (cf. 3.4.1) aspectually durative.

- 3-210 **ngini -tye**
 1sgSit-Past
 SU PImp
 I was sitting

On such verbs the encliticisation of -pefi exaggerates this inherent durativity, denoting the excessively prolonged duration evidenced in the glosses of the examples below. Within narrative discourse the delivery of these kinds of verbs typically involves exaggerated lengthening of the final vowel, (so it is the past tense marker that is lengthened, not the durative marker.)

- 3-211 **yarany -fi -pal kinyi, yini -pefi -tye,**
 2sgPokeDtr-Mp-return here 2sgSit-DUR -Past
 SU Perf AP SU PImp
 You returned here and were hanging abooooout...,
yini -wurrkama-tye peyipa nyinyi
 2sgSit-work -Past paper 2sg
 SU PImp PRO
 working on your papers.

- 3-212 **ngarany -fi -tit, ti ngiriny-kuduk**
 1sgPokeDtr-Mp-arise tea 1sgSit -drink
 SU Perf SU Perf
 I got up, drank some tea,
ngini -pefi -tye dengini yubu depi ngayi pipiri
 1sgSit-DUR-Past body good head 1sg brain
 SU PImp PRO
 and sat aroooooound..... 'til my hangover cleared.

- 3-213 **ngambanigerri-pefi -tye, karrawa kine ngiminy-bi**
 1plincGo -DUR-Past place this 1sgSay -2sg
 SU PIMp name place SU Perf IO
 We kept traavaavelling, 'this place here is Karrawa' I told you.

Attached to stative verbs bearing Present auxiliary inflections, **-pefi** in combination with the temporal focus marker **-nyine/-kana (K)**, makes these into inceptive process verbs. Contrast 3-214 to 3-218 a) with the inchoative examples in 3-214 to 3-218 b).

- 3-214 a) **yenim-fuy**
3sgGo-smell
SU Pres
 It smells.
- b) **yenim-fuy -nyine-pefi**
3sgGo-smell-FOC -INCH
SU Pres
 It's beginning to smell now.
- 3-215 a) **dudu -mem -gen -ge**
swell -3sgDo-middle-belly
SU Pres
 His guts are swollen.
- b) **dudu -mem -gen -ge -nyine-pefi**
swell-3sgDo-middle-belly-FOC -INCH
SU Pres
 (The carcass) is beginning to bloat now.
- 3-216 a) **misi-yenim**
die -3sgGo
SU Pres
 He is dead.
- b) **misi-yenim -nyine-pefi**
die -3sgGo-FOC -INCH
SU Pres
 He is beginning to die now.
- 3-217 a) **ngaganim-du**
1sgGo -sleep
SU Pres
 I'm asleep.
- b) **ngaganim-du -nyine-pefi, yerim -ngi-du**
1sgGo -sleep-FOC -INCH 2sgHands-1sg-touch
SU Pres SU PresDO
 Just as I'm starting to fall asleep, you're waking me up !
- 3-218 a) **dangim -tyip -nyine**
3sgHands-dark-FOC
SU Pres
 It's dark now.

- b) **dangim -tyip -nyine-pefi**
3sgHands-dark-FOC -INCH
SU Pres
 It's beginning to get dark now.

More rarely **-pefi** is found encliticised to punctual dynamic verbs. These are verbs which cannot select Past Imperfective auxiliary inflection on account of their inherent punctuality. Describing events that are anterior to the speech act, these verbs can only select Perfective auxiliary inflection. Here **-pefi** conveys the notion "just as I was in the very act of..." or "at the precise moment that I..". This usage clearly corresponds with the inceptive focus noted above with **-pefi** marked stative verbs, though in punctual verbs which are conceived of as having no duration, the notion of co-temporality is more appropriate than inception. Consider the examples below.

- 3-219 **ngeriny -pal -pefi, dinyirri-ngi**
1sgHands-break-COTEMP 3sgSee -1sg
SU Perf SU Perf DO
 Just as I broke it, he looked at me.

- 3-220 **club-nimbi menggeny-tasat -pefi,**
-SOURCE 3sgArrive -emerge-COTEMP
SU Perf
wa-mumu-ninggi deminy -tip
M-taboo -AGENT 3sgHands-grab
cl SU Perf
 Just as he stepped out of the club, the policeman grabbed him.

3.4.5 The Serialisation of Posture/Motion Auxiliaries

As noted in the introduction to 3.4, the four Ngan'giwumirri and three Ngan'gikurunggurr auxiliary root inflectional categories represent only one of several systems exploited to encode verbal aspect. Of these auxiliary inflectional categories I noted that the category labelled 'Irrealis' is strictly a modal category. The 'Past Imperfective' inflection combines distant past tense and imperfective aspect. The Ngan'giwumirri 'Perfective' inflection combines past tense and perfective aspect. The inflectional category labelled 'Present' in Ngan'giwumirri combines present tense and progressive aspect, whereas the category labelled 'Present' in Ngan'gikurunggurr represents the aggregate of the Ngan'giwumirri 'Present' and 'Perfective' categories. It should be apparent that the labels for these categories have been chosen to best represent their tense/mood/aspect values.

Ngan'gityemerri additionally employs a second aspect marking system; the serialisation of the intransitive auxiliaries, 'sit', 'lie', 'stand', 'go', and 'go*' as aspectual operators. The aspectual differences that can be encoded by main auxiliary substitution in intransitive verbs are dealt with in 4.4. The serialisation of auxiliaries as aspectual operators is not permitted on intransitive verbs of this type (i.e. on verbs constructed with an intransitive auxiliary as its main auxiliary). In this section I deal with the serialisation of intransitive auxiliaries on transitive verbs (i.e. verbs constructed with transitive auxiliaries). Other than the partial encoding of the aspectual categories 'perfective' and 'imperfective' by their respective main auxiliary inflections, as mentioned above, a basic transitive verb consists of an auxiliary, a verb stem and a tense marker, as in examples 3-221 and 3-222 below.

3-221 **wemi -wurity-pe**
3sgHands- fix -Fut
SU Irr
 He'll fix it.

3-222 **wubu -da -pe**
3sgBash-shoot-Fut
SU Irr
 He'll shoot it.

Before examining the function of serialised auxiliaries in any detail it is necessary to comment on the two natural classes, 'punctual verbs' and 'neutral verbs' into which all Ngan'gityemerri verbs fall. Punctual verbs, like 'hit', 'consume', 'arrive', 'see', 'die', 'cut' etc, express activities conceived of as single actions that have no internal temporal constituency. Neutral verbs express activity that can also be thought of as single actions, but which have the capacity to be variously thought of as extended over time.

Punctual verbs can only be punctual and are therefore blocked from selecting the Past Imperfective auxiliary inflection, which, as noted above, overtly encodes imperfective aspect. A punctual verb like 'shoot' can only select the perfective auxiliary inflection, as in 3-223 below, and is unacceptable with the past imperfective auxiliary inflection, as in 3-224.

3-223 **egeningge wubum -da -Ø**
goose 3sgBash -shoot-Pres
SU Perf
 He shot a goose.

- 3-224 ***egeningge webe -da -tye**
 goose 3sgBash-shoot-Past
 SU PImp
 He was shooting a goose.

Note though that a punctual verb can be made amenable to an 'extended over time' interpretation by some other means. In 3-225, the notion of iteration, morphologically encoded by the reduplication of the verb root, makes possible an 'extended over time' interpretation, and is permissive of imperfective auxiliary inflection.

- 3-225 **egeningge webe -dada -tye**
 goose 3sgBash -shoot-Past
 SU PImp redup
 He was shooting geese.

Contrastively, neutral verbs have the capacity to select either perfective or imperfective auxiliary inflection. Consider the verb 'to eat' in 3-226 and 3-227 below.

- 3-226 **ngiriny-lalirr-Ø**
 1sgSit -eat -Pres
 SU Perf
 I ate it.

- 3-227 **ngini -lalirr-tye**
 1sgSit-eat -Past
 SU PImp
 I was eating it.

Regardless of whether a transitive verb belongs to the punctual or neutral class, in the absence of any overt morphology specifying its internal temporal constituency, its unmarked form is conceptually perfective in the sense that it is perceived of as a single event. Examples 3-226 and 3-227 above, for instance, though the first is neutral and the second punctual, are expressed as single events with no information given regarding their aspectual make-up. To this extent, 'perfectivity' can be said to be the unmarked aspectual category in Ngan'gityemerri.

Imperfective/progressive aspect is encoded in transitive verbs by the serialisation of the intransitive posture / motion auxiliaries. Morphologically, these serialised auxiliaries function as enclitics to the complex verb stem. Phonologically, as their morphological status might

suggest, these enclitics are assigned no primary stress, and fall within the pitch contour assigned to the verbal complex as a single phonological word.

Serialised auxiliaries must fill the final slot of the verb following the tense markers. In this respect Ngan'gityemerri contrasts with Marrithiyel, a neighbouring language that also marks imperfective aspect on transitive verbs through the strategy of serialised posture/motion auxiliaries. In Marrithiyel the major tense/mood suffixes shift rightwards from the transitive verb to appear on the post-posed intransitive auxiliary (Green 1989:175). The ordering of these serialised auxiliaries as the final element of the verbal complex in Ngan'gityemerri, further stands as a counter-example to two of the general claims made by Foley and Van Valin about the relationship between aspectual operators and the verb nuclei over which they have scope. Foley and Van Valin (1984:210) claim that *aspect* is a nuclear operator while *tense* is a peripheral one. They argue that this difference in scope is reflected in ordering constraints in those languages that mark tense and aspect as separate inflectional categories. Quoting examples from Kewa (Franklin 1971) and Tiwi (Osbourne 1974) they note that aspect is always marked closer to the verb nuclei than tense, and add that 'they know of no cases of the inverse ordering in which tense is closer to the stem than aspect'(Foley and Van Valin 1984:210). In contradistinction to this claim Ngan'gityemerri clearly marks tense closer to the verb nucleus than imperfective aspect. This is demonstrated in 3-228 below, where the Past tense enclitic *-tye* immediately follows the verb root, and is in turn followed by the serialised 'Sit' auxiliary.

3-228 wanni -batybity-tye -winni warrgudu
 3plPoke -sew -Past-3plSit dillybag
 SU PImp redup SU PImp
 They were sewing dillybags.

Secondly, Foley and Van Valin describe the relationship between directionals and aspectual markers (both nuclear operators) in the following way. "Kewa also has directional suffixes and provides evidence that of the two nuclear operators aspect and directionals, aspect is the more inner. For when a verb is inflected for both aspect and directionals, aspect occurs immediately following the verb stem, followed by the directional, followed in turn by tense" (Foley and Van Valin 1984:212). Unlike Kewa, in Ngan'gityemerri we find the directional enclitics, as described in 6.2.2, 'inside' the serialised aspect enclitics.

in 3-233 to 3-236 where a non-volitional patient is cross-referenced as the direct object of an unspecified 3rd singular subject, subject marking on the serialised auxiliary copies the 3rd singular subject marking.

- 3-233 **dani -ngi-kada-tye -dini**
3sgPoke -1sg-sad -Past-3sgSit
SU Plmp DO SU Plmp
 I was feeling sad / It was making me sad.
- 3-234 **danging -ngi-fulful -yenim**
 NgK *3sgPoke -1sg-twinge-3sgGo*
SU Pres DO SU Pres
 I keep feeling this 'twinge'.
- 3-235 **deme -nyi-mi-dit -tye -dini kuru-nimbi**
3sgHands -2sg-eye-ache-Past-3sgSit liquid-CAUS
SU Plmp DO SU Plmp generic
 You still had a headache from the beer.
- 3-236 **fidi-nide wa -ngirrki-syalat-pe -wiri**
heat-LOC 3sgHeatb-1dlex -warm-Fut-3sgSit
SU Irr DO SU Irr
 We'll get warm in the sunshine.

Serialised auxiliaries concord only for the subject marking that is cross-referenced on the main auxiliary, and cannot play host to non-subject marking. As is evident from example 3-238 below, this constraint extends even to the copying of the indirect objects of reflexive verbs, where the IO is co-referential with the subject.

- 3-237 **ngeme -mbi-yen'gi-tye -ngini (*-mbi)**
1sgHands -2sg -tell -Past-1sgSit -2sg
SU Plmp IO story SU Plmp IO
 I was telling you a story then.
- 3-238 **demen -ne -dundum-yenim (*-ne)**
3sgHandsDtr-3sg-bury -3sgGo -3sg
SU Pres IO redup SU Pres IO
 (The sandfrog who) habitually buries himself in the sand.

Likewise, the subject of the serialised auxiliary cannot represent the aggregate of the subject and object arguments of the main verb, as in example 3-239 below.

- 3-239 ***ngirim -ne -tyerr -baty -ngannunggu**
1sgHands-3sg-mouth-hold-1plexGo dl
SU Pres IO SU Pres SU
 *I am leading him along.

Any violation of the requirement that the subjects of the main auxiliary and the serialised auxiliary be fully coreferential, are quite ungrammatical. Note that an example like 3-239 above could plausibly be interpreted as "I'm leading him, we (dlex) are going along", though to fulfil the phonological requirements of an independent clause **ngannunggu** (an enclitic in 3-239) would have to be set off on its own intonation contour with primary stress marking on its initial syllable.

As imperfective markers, the 'sit', 'lie', 'stand', 'go' and 'go*' auxiliaries have the same sort of classificatory role with regard to posture/motion that they display as main auxiliaries in general intransitive verbs. 'Sit', 'lie' and 'stand' classify the action of the verb with respect to the posture of the subject, e.g.

- 3-240 **yawul karrityinmade ngebem-wurity-ngirim tyatma**
spear bent 1sgBash -fix -1sgSit straight
SU Pres SU Pres
 I'm sitting straightening this bent spear.

- 3-241 **yawul karrityinmade ngebem-wurity-ngibem tyatma**
spear bent 1sgBash -fix -1sgLie straight
SU Pres SU Pres
 I'm lying straightening this bent spear.

- 3-242 **yawul karrityinmade ngebem-wurity-ngirribem tyatma**
spear bent 1sgBash -fix -1sgStand straight
SU Pres SU Pres
 I'm standing straightening this bent spear.

As noted for the postural classification of main auxiliaries, although the serialised 'sit' auxiliary can function literally to denote a sitting postural orientation, especially when contrasted with 'lie/stand', in general it is the unmarked choice for imperfective actions performed within a single location. Thus examples 3-241 and 3-242 above can be said to be highly marked with respect to posture. The non-literal posturally unmarked usage of 'sit' results in its serialisation on verbs that are not necessarily performed in a sitting posture. This is evident in the example below, uttered by a woman standing over a boiling billy.

- 2-243 **nginem-purrngpurrng-nyine-ngirim**
1sgHeat -boil -FOC -1sgSit
SU Pres redup SU Pres
 I'm boiling it right now!

In addition to the encoding of imperfective aspect, the serialisation of the 'go' and 'go*' auxiliaries achieves a variety of different meanings, again parallel to the range of meanings brought about by substitution of the 'go' and 'go*' main auxiliaries. Primarily, in contrast to the postural auxiliaries, serialisation of the 'go' auxiliaries classifies an activity as aspectually imperfective, with the subject in motion. Indeed the 'extended over time' perspective can be seen to result logically from the fact that the activity is performed while the subject is in motion.

- 3-244 **werrmim -ne -tyerr -baty -wannim**
3plHands-3sg-mouth-hold-3plGo
SU Pres IO SU Pres
 They are leading him along.

- 3-245 **wasangari-kana wirribem, yerim -fityi-pefi -yaganim**
NgK clean -FOC 3sgStand 2sgHands-roll-THITH -2sg Go
SU Pres SU Pres SU Pres
 (The car) is clean now, you can drive it away.

Additionally, and as noted by Green (1989:181) probably extending from the general sense of motion from place to place, serialisation of the 'go' auxiliaries can categorise verbs within several subtypes of the imperfective aspect; repetitive, progressive and habitual, i.e. 'to keep doing X, to do X again and again, to always do X'. For repetitive and progressive aspect, as noted in the discussion above on literal motion, 'go*' (in 3-248) tends to differ from 'go' in implying more motivated activity directed towards a specific goal.

- 3-246 **miyi-nyine gagu mityity fry-meyi -tye -yedi**
plant-FOC animal white -3sgDo -Past-3sgGo
food generic woman SU Plmp SU Plmp
 His wife was cooking breakfasts then (in shifts as people arose).
- 3-247 **ngamban -nime-pe egeningge-ne**
1plincGo-pl -Fut goose -PURP
SU Irr SU
 Let's all go for goose,

malarrgu -werre -pe yarri -ket -pe -yarrini
 long necked-ASSOC-Fut 2plPoke-poke-Fut-2plGo
 turtle SU Irr SU Irr
 (to the place) with turtles (that you women) can be poking
 around for.

- 3-248 kala ngem -puppup-nganmerr warrgadi
NgK dye 1sgMouth-place -1sgGo* dillybag
SU Pres redup SU Pres
I kept putting more 'n more dye on the dillybags.

- 3-249 **yerr -ngini -warrgudu-gumu**
Tr -KIND -dillybag -SEMBL
cl
 They were repeatedly throwing a thing like a dillybag
wunni -wutyity-tye -waddi a-bilirri-ne
3plSlash -throw -Past-3plGo A-alive -PURP
SU Plmp redup SU Plmp cl
 (a throw net) in order to catch live bait.

The habitual reading of 'go' serialisation differs from the progressive and repetitive subtypes of imperfective in that it is available to 'go' but not 'go*':

- 3-250 madewetimbi wa-mumu-nimbi ration wurrmu-wawu -tye -waddi
 long ago M -taboo -SOURCE 3plSnatch -pick up-Past-3plGo
 cl SU PImp redup SU PImp
 In the old days they used to collect rations from the policeman.

- 3-251 **nagam -fi -tal -kana-yenim, wupun -ker -yenim**
 NgK *3sgFeet-Mp-grow-FOC-3sgGo 3sgSlash-cheeky-3sgGo*
SU Pres SU Pres SU Pres SU Pres
 As he grows older, he gets more cheeky.

- 3-252 **detyeri-werri -yenim dem -wurity-yenim mudiga**
ear -ASSOC-3sgGo 3sgHands-fix -3sgGo car
SU Pres SU Pres SU Pres
 He knows how to fix cars.

- 3-253 **Gagu a-niyen a-yaga menyirr nganimuy-nide**
animal A-sandfrog A-DEM sand loose -LOC
generic cl cl
 The sandfrog, that one who always buries himself in the loose sand,
demem -dundum-yenim, kine puty -meny-me niyen
3sgHandsDtr-bury -3sgGo this create-3sgDo-hand placename
SU Pres redup SU Pres place SU Perf
 he made this place, Niyen.

3.4.6 The Aspectual Nature of Verb Root Reduplication

Essentially verb root reduplication is iconic of duration, though, as will become apparent, other interpretations are possible depending on the semantics of the verb. Ngan'giwumirri and Ngan'gikurunggurr verbs bear an associated aspectual framework. That is, any activity is conceived of as being either strictly punctual, or as being amenable to a durative interpretation. Verb root reduplication in non-punctual verbs is interpreted as an aspectual marker of duration.

- 3-254 a) **ngi -tyutytyurr-pe minbe fenggiderrri**
1sgSit -swim -Fut Neg long time
SU Irr redup
 I'll keep swimming a bit longer.
- b) **kuru nyin nginni -kukuduk-tye wakay**
liquid ANA 1plexSit -drink -Past finish
generic SU Plmp redup
 We (plex) sat around drinking those beers up.
- c) **wun-endi ngunni -mbi-fifili -tye -ngaddi**
there-SAME 1plexSlash-2sg-search-Past-1plexGo
SU Plmp IO redup SU Plmp
 We've been searching for you over there!
- d) **ya lirmem beyin -ngi-perrety**
hey cold 3sgBash-1sg-cold/stiff
SU Pres DO
marrawuk-werre wibem -fuyfuy
dry season-ASSOC 3sgLie -blow
wind SU Pres redup
 Hey, I'm getting cold from this wind blowing.

Verb root reduplication in punctual verbs, on the other hand, can only be interpreted as a marker of iteration, not duration. The reason for this is that verbs that are thought of as strictly punctiliar can only be durative in the sense that they can be iterative. Put another way, punctiliar verbs can only be seen to extend over a period of time, in the sense that they can be thought of as a series of repeated actions.

In this analysis I have chosen to describe iteration in terms of duration, not the other way round. It intuitively seems more plausible to view an iterative activity like 'coughing', in terms of duration, rather than attempt to account for a durative activity, like 'sitting', in terms of 'a series of repeated events'.

Examples of reduplicated verb roots in strictly punctiliar verbs, are set out in 3-255 below.

- 3-255 a) **warrany -gi-tyerr -pupu**
3plPokeDtr -dl-mouth-ask
SU Perf SU redup
 They (dl) questioned each other.
- b) **strap ngerrminy -gagarrarr wakay**
1plexHands -roll finish
SU Perf redup
 We (plex) all fastened our seatbelts.
- c) **ticket kinyi minbe lose'im- yurmu-gu**
this Neg -2plDo -dl
SU Irr SU
yerrmigi -mi -fafala -pe kinnimbi
2plHandsdl -Val-wave-Fut here-SOURCE
SU Irr SU redup
 Don't lose this (plane) ticket, you'll have to keep showing it from here (on each leg of the flight).
- d) **nail wum -pi -dumdum**
3sgSlash-head-bury
SU Perf redup
 He hammered in the nail.

The split between the iterative and aspectually durative interpretations of reduplicated verb roots that is governed by the punctual/non-punctual conception of an activity, can best be demonstrated by looking at the interaction between these verbs and the auxiliary inflection system. One of the Ngan'giwumirri auxiliary inflectional categories, labelled Past Imperfective, is strongly associated with imperfectivity. Verbs denoting activities that are conceived of as being strictly punctual, cannot select the Past Imperfective auxiliary inflection unless their verb stems are reduplicated. Thus the inherently punctual verb 'to cough' in 3-256 a) below is acceptable because the verb root is reduplicated, but 3-256 b), with an unreduplicated verb root is not.

- 3-256 a) **nginni -kikilik-tye**
1plexSit -cough -Past
SU PImp redup
 We (plex) were coughing.
- b) ***nginni -kilik -tye**
1plexSit -cough-Past
SU PImp
 We (plex) were coughing.

The unacceptability of 3-256 b) stems from the incompatibility of a conceptually punctual activity, subcategorising for an auxiliary inflectional category that is inherently imperfective. 3-256 a) is acceptable because a punctual activity like 'coughing' can be compatible with imperfective / durative auxiliary inflection, only where it is explicitly marked as iterative by reduplication of the verb root.

Returning to the issue of additional interpretations that fall under the umbrella of iteration, we have already seen in 3-255 b) above, that verb root reduplication in punctiliar verbs can be suggestive of many subjects performing the same action. In punctiliar transitive verbs, the implication of object plurality is even stronger. Compare the difference brought to the following pairs of sentences by the reduplication of the verb root.

- 3-257 a) **wamanggal werrbeny-da**
 wallaby 3pl Bash -shoot
 SU Perf
 They shot a wallaby.

- b) **wamanggal werrbeny-dada**
 wallaby 3pl Bash -shoot
 SU Perf redup
 They shot wallabies.

- 3-258 a) **amatyi wum -tyirri -tu**
 kangaroo 3sg Slash-navel-cut
 SU Perf
 I gutted a kangaroo.

- b) **amatyi wum -tyirri -tutu**
 kangaroo 3sg Slash-navel-cut
 SU Perf redup
 He gutted some kangaroos.

Note that object plurality/iteration is in some instances lexically specified in the selection of verb roots. The verb roots **-tyat** 'place a thing in position', and **-ket** 'chop' in 3-259 a) and 3-260 a) below, require singular objects and cannot be reduplicated. The 'placing', and 'chopping' of multiple objects requires the selection of the verb roots **-tyuk** and **-gerrgirr**, respectively, as in 3-259 b) and 3-260 b).

- 3-259 a) **ya -fi -firr -tyat -Ø**
 2sg Poke-Mp-foot-place-IMP
 SU Irr
 Put it down at the foot of the tree !

- b) **ya** **-fi -firr -tyuk -Ø**
 2sgPoke-Mp-foot-place-IMP
 SU Irr
 Put them down at the foot of the tree !
- 3-260 a) **gagu** **ngebeny-ket**
 animal 1sgBash -chop
 generic SU Perf
 I chopped the meat.
- b) **gagu** **ngebeny-gerrgirr**
 animal 1sgBash -chop
 generic SU Perf redup
 I chopped the meat up into bits.

Such verb roots that entail plural objects as part of their lexical semantics may still be reduplicated to stress object number.

- 3-261 a) **ngarriny -fi -tyityuk fepi**
 1plexPoke-Mp-place rock
 SU Perf redup
 We (plex) placed a lot of rocks down (as a border for
 a garden bed).
- b) **.....ngan-gagu warrim-fi -tyityuk-wannim**
 LOC -animal 3plPoke-Mp-place -3plGo
 REL generic SU Pres redup SU Pres
 to the place where they put many animals (the zoo).

Finally, it should be noted that another interpretation of the 'durativeness' conveyed by verb root reduplication, is that of habitual activity. Verbs that are specifically marked as 'habitual', by the selection of the 'Go' auxiliary, either as a complex or serialised auxiliary, frequently bear reduplicated verb roots. Indeed this is a plausible interpretation of the relative locational clause (see 5.3.4) in 3-261 b) above: 'to the place where they habitually place animals'. See also the examples in 3-262 below.

- 3-262 a) **watypela missionhouse yenim-wapup**
 whitefella 3sgGo - sit
 SU Pres redup
- ring'up-ngirrminy-nerr**
 -1plexDo -dl/3sgM
 SU Perf SU/IO
- We (dlex) rang up the bloke who lives at the mission house.

- b) ration **wa-mumu-nimbi** **waddi** **-wawu** **-tye** **-waddi**
 M -taboo *-SOURCE* *3plGo* *-pick up-Past-3plGo*
 cl =police *SU PImp redup* *SU PImp*
 (In the old days) they used to collect their rations from the
 policeman.

3.5 Bodypart Terms within the Verb

In Ngan'gityemerri bodypart terms have a widespread and productive role in the structure of the lexicon. The role played by bodyparts in nominal compounding is discussed in 5.2.4. This section addresses the incorporation of bodypart terms into the pre-verb root position, as exemplified in 3-263.

- 3-263 **deme** **-mentyi-baty** **-tye**
 3sgHands-neck *-hold-Past*
 SU PImp
 He was holding it by the neck.

After dealing briefly with the morphology of incorporated bodypart terms in 3.5.1, I then look, in 3.5.2, at the distinction between productive, syntactic incorporation which allows for predicate arguments to be expressed within the verb, and lexical incorporation which derives a new predicate from a combination of bodypart and verbroot. Finally, in 3.5.3, an examination of their semantics shows how incorporated bodyparts have a wider range of meaning than their corresponding freeforms, and how for certain lexicalised bodypart + verbroot compounds, the bodypart functions as a classifier in respect to perceived shared qualities of entities which can fill the role of arguments to that derived predicate.

In addition to bodyparts this section notes two other nominals that have been found incorporated within the verb. That the section heading is 'Bodypart Incorporation' rather than 'Nominal Incorporation' reflects the minor role that these other nominals play.

3.5.1 Morphology of Incorporated Bodyparts

One of the ten formal noun classes in Ngan'gityemerri is made up of bodyparts. A fuller discussion of the semantics of this class, and the patterns of class marking can be found in 5.2.4. Briefly, members of this class are marked by the obligatory class prefix **dV**¹⁵ when they appear as free forms.

¹⁵The quality of V of this prefix is metaphonically determined by the following rule:

V → e/_#CV[-back]

3-264	depi	-	head	daba	-	arm
	dederri	-	back	datyamu	-	cheek
	dege	-	belly	dapurr	-	bum
	defirr	-	foot	damadi	-	chest
	deme	-	hand	danguru	-	penis
	detyerr	-	mouth	damuy	-	eye
	debi	-	thigh	dawayirr	-	forehead
	deyedirr	-	hip	dagarri	-	lower leg

This class prefix is dropped from bodypart terms when they are incorporated into the complex verb, as in 3-265 below.

- 3-265 a) **ngudeny -garri-fityi** (cf. da-garri)
1sgShoveDtrD-leg -roll
SU Perf
 I crossed my legs.
- b) **dangim -firr -pawal** (cf. de-firr)
3sgPoke-foot -spear
SU Perf
 He speared him in the foot.

Only a single bodypart root **muy** 'eye' undergoes a minor change in form, to **mi**, when incorporated into the verb, as in 3-266.

- 3-266 **ngeriny -nyi-mi-ta**
1sgHands-2sg-eye-open
SU Perf DO
 I opened your eye.

This same root behaves somewhat anomalously within the morphology of nominal compounds, appearing as **muy**, **mity**, and possibly **mu**, in the examples below.

- 3-267 **muy-wasyan** - eyebrow/lash
eye - hair
mity-kuru(W) - tears
eye -water
mu -dirr - eyebrow ridge
eye?-teeth/edge

Both these features, the dropping of affixes from incorporated bodyparts, and the existence of reduced or suppletive forms, are as Mithun

(1984) notes, common typological features of noun incorporation. For Ngan'gityemerri though, it must be noted that other than the dropping of the class prefix and the minor reduction of **muy** to **-mi-**, the correspondence in form between free and incorporated bodyparts is absolute.

While essentially it is only members of the bodypart class that can be incorporated into the verb, there are two non-bodypart terms that have been recorded in this position. **Misyin** - 'hearth', found in the freeform nominal;

3-268 **misyin-muy** - fireplace
 hearth - eye

incorporates into a small number of verbs involving placing objects onto a fireplace.

3-269 **miringgi yu** -fi -**misyin-wurity**
 leaf *2sgSlash-Mp-hearth-place*
 SU Irr
 Throw the tealeaf into (the billy on) the fire!

The incorporation of **misyin** is a strictly lexical process (cf. 3.5.2), and it cannot be freely incorporated into any verb that describes activity that takes place in/at a hearth. Thus the attempt to incorporate **misyin** into the verb 'to hook something' (as in a billy off a fire) in 3-270, is unacceptable.

3-270 **ngumbun-(*misyin-)wat** **misyin-muy-nimbi**
 1sgSlash - (hearth -)hook *hearth-eye -SOURCE*
 SU Perf
 I hooked it off the hearth.

Several verbs in Ngan'gityemerri involving activity associated with water, employ the verb root **bu/buy**.

3-271 **ngaganim-buy** - I'm going along underwater
 ngerim-bubu - I fetch water
 deminy-bubu - It(turtle) is blowing bubbles

In a single verb this same form appears incorporated into the pre-verbroot slot, as in the example below.

3-272 **kuru wibem-bu** -tyerr
 water *3sgLie-water-stop*
 SU Pres
 Water is lying (along the road).

This single example is lexically determined, *bu* being unavailable for any kind of productive syntactic incorporation. Evans (to appear) discusses the incorporation of *bo* as a generic for 'water' in Mayali, and other cognate forms in various Gunwingguan languages. He further notes that for Mayali and Ngalakan, at least, it is the only suppletive incorporated nominal.

3.5.2 Syntactic versus Lexical Incorporation

In characterising the grammatical relations holding between a verb and the bodypart terms that can be incorporated into it, Evans (to appear) has shown how a distinction between syntactic and lexical incorporation is beneficial in the analysis of bodypart incorporation in Mayali, a Kunwinjkuan language of south-west Arnhem Land. Syntactic incorporation is optional, fully productive and constrained to certain predictable grammatical relations between the incorporated nominal and predicate. Lexically incorporated nominals, on the other hand, may bear a wider variety of grammatical relations to the incorporating verb and are not fully productive. Their meaning, which may be compositional or non-compositional, cannot generally be paraphrased by omitting the incorporated nominal, or by having it appear as an external nominal (*loc. cit.*).

This kind of analysis can usefully be applied to Ngan'gityemerri, where syntactic incorporation also operates under fairly rigid constraints on the nature of the grammatical relations that hold between a bodypart and a predicate. Lexical incorporation, on the other hand, allows a wide variety of grammatical relations to hold between a bodypart and a predicate, although the nature of these relations is typically vague or variable, as lexically incorporated bodyparts tend to lose the semantic characteristics associated with their freeform occurrence, and function to narrow the scope of the verb rather than retaining their identity as verbal arguments. For certain bodyparts we show how their effect on the scope of a verb shows signs of developing into a quasi-classificatory system whereby they are incorporated in a general sense to qualify verbs that are directed at particular types of entities. Both these types of incorporation are treated in the following sections.

Only a single slot is available within the verbal structure for incorporated bodyparts, both syntactic and lexical incorporations competing for this position. As a consequence of this, the syntactic incorporation of verbal arguments is blocked where the verbroot is a lexicalised bodypart - verb root compound.

- b) **dangim - Ø -tyi -pawal**
 3sgPoke-3sg-breast-spear
 SU Perf DO
 He speared her in the breast.
 (*Breasts have speared her)

Verbs involving the manipulation by a subject of his own bodyparts, are formed with 'detransitivised' auxiliaries (cf. 4.5.2). While verbs formed with 'detransitivised' auxiliaries are formally intransitive, being unable to cross-reference the undergoer bodypart with bound object pronouns, they do pattern with transitive verbs in having object-like arguments that can be included as freeform nominals. Compare formally intransitive 3-278 a) with transitive 3-278 b) below.

- 3-278 a) **diwen -lak de-firr**
 3sgMouthDtr-lick Bp-foot
 SU Pres cl
 (The dog) is licking its foot.
- b) **nganam-nyi-baty de-firr**
 1sgFeet -2sg-hold Bp-foot
 SU Perf DO cl
 I trod on your foot.

While we have already seen that bodypart terms that are the objects of transitive verbs are eligible for incorporation into the verb, the same is true of bodypart terms that are the subjects (or parts of subjects) of 'detransitivised' verbs. Thus 3-79 a) and b) are the externally paraphrased versions of 3-278 a) and b).

- 3-279 a) **diwen -firr -lak**
 3sgMouthDtr-foot-lick
 SU Pres
 (The dog) is licking its foot.
- b) **nganam-nyi-firr-baty**
 1sgFeet -2sg-foot-hold
 SU Perf DO
 I trod on your foot.

Further examples demonstrating how 'detransitivised' verbs allow for the syntactic incorporation of 'bodyparts-of subject' are set out in 3-280.

- 3-280 a) **ngin -garri-fityi**
1sgShoveDtrS-leg -roll
SU Pres
 I'm crosslegged.
- b) **ngemen -nintyi-pal**
1sgHandsDtr- knee -fold
SU Perf
 I bent at the knees.
 (ie. kneel)
- c) **ngudem -dirr -fulirr**
1sgShoveDtrD-teeth-rub
SU Pres
 I grind my teeth.
- d) **ngudeny -syi -wul**
1sgShoveDtr-nose-return
SU Perf
 I turned (my nose)
 for home.
- e) **ngemem -madi-baty**
1sgHandsDtr -chest -hold
SU Pres
 I'm holding myself by
 the chest. (ie. arms
 folded across chest)

Thirdly, verbs formed with the 'Say' auxiliary also allow for the incorporation of bodyparts that are a part-of-subject. Recall (cf. 3.1.1) that these verbs have inverted verbroot-auxiliary ordering. Bodypart terms incorporated into these verbs are positioned after the auxiliary and are therefore word-final unless followed by overt non-present tense markers.

- 3-281 a) **dudu -meny -firr**
swollen-3sgDo -foot
SU Perf
 He had a swollen foot.
 (he was swollen-footed)
- b) **papalak-mem -muy**
drop -3sgDo-eye
redup SU Pres
 She blinks her eyes (habitually).
- c) **tyip -ngiminy-tyeri**
dark-1sgDo -ear
SU Perf
 I forgot.

The type of strictly syntactic incorporation presented here shows different characteristics to the incorporation in languages discussed by Mithun (1984). Using Mohawk as an example, she argues that all predicates bearing incorporated nouns are lexicalised, regardless of how productive the process may be.

"NI may appear to be a syntactic process simply because of its tremendous productivity; the number of combinations that occur seems unlimited. However, speakers are keenly aware of the lexical status of all such combinations. They know not only which constructions are possible, but also which of these actually exist--ie. which are lexicalised. They immediately recognise those which are not. Speakers immediately remember who uses a word not used by others, even when it is a perfectly transparent combination of two highly productive stems."

Having made this claim that speakers of incorporating languages remember all combinations of 'incorporated noun + verb' as a lexicalised unit, Mithun uses this as a basis to draw a distinction between noun incorporation and other truly syntactic processes. Speakers of non-incorporating languages, she argues, do not remember all possible combinations of verb and object.

Although any claims about the degree of lexicalisation of combinations of incorporated noun and verb are bound to be impressionistic, the examples like those in 3-275 a) - e) above suggest that in Ngan'gityemerri at least, bodypart incorporation can be a purely syntactic process. In fact Mithun indirectly acknowledges this possibility in the discrepancy between "constructions which are possible, and those that actually exist -ie. which are lexicalised"(loc. cit.). In Ngan'gityemerri, bodypart-verb root combinations that 'exist' (ie. are lexicalised) can be negatively tested for in terms of the criteria *productivity* and *optionality*. Likewise those combinations that do not 'exist', in the sense that they are not lexicalised, can be distinguished by their full syntactic productivity. There seems to be no real basis to say of these types, as Mithun does, that "If speakers use a new combination, they are creating a new word and are aware of the fact" (loc. cit.).

It should be pointed out that this distinction between syntactic and lexical incorporation in Ngan'gityemerri is purely based on the *grammatical criteria* of productivity and optionality. No attempt has been made to draw lines, based on the intuitions of native speakers, between those combinations that 'exist' and those which do not. My own experience of exploring the productiveness of bodypart incorporation with informants suggests that no such clearcut lines exist. The degree of productivity brought to the incorporation of bodyparts is a stylistic variable that some speakers exploit more than others. Combinations which are rejected outright as not 'existing', can always be found to 'exist' where a sufficiently imaginative mind can establish a plausible context. In fact it is the

exploitation of the more marginal 'non-existent' combinations that is widely held to be the mark of someone who is 'good with words'.

Variation in the perception of the degree of lexicalisation of some combinations would be anticipated if the incorporation of bodyparts is an evolving process. This is particularly true where, as Mithun notes, lexicalisation develops from noun + verb combinations that are, in cultural terms, especially nameworthy.

Lexical incorporation, on the other hand, differs from syntactic incorporation in not being productive. While there are many instances of the same verb root compounding lexically with different bodypart terms, as in 3-282, this is not to be confused with productiveness. Lexical incorporation is a compounding process that derives a new verb root from the combination of a bodypart and a verb root. (eg. Bodypart - Verb root 1 --> Verb root 2).

- 3-282 a) **ngibem-tyeri-baty (*detyeri)**
1sgLie -ear -hold
SU Pres
 I'm listening.
- b) **ngibem-syi-baty (*desyi)**
1sgLie-nose-hold
SU Pres
 I'm smelling (intrans).

Lexical incorporation also differs from syntactic incorporation in that bodyparts cannot be omitted from the verbal complex or appear as external nominals, as evidenced by the impermissible freeforms in the 3-282 above.

The range of bodypart terms found in lexical compounds is significantly smaller than those which incorporate syntactically. Whereas any member of the bodypart noun class can be syntactically incorporated, it is only those major bodypart terms listed in Table 3-8 that can compound with verb roots to derive new verb roots.

What then of the grammatical relations allowed to hold between the bodypart and verb root members of a lexical compound? The majority of examples of lexically incorporated bodyparts fall within the general restrictions on predicate relations given above for syntactic incorporation, ie transitive objects and locatives, and intransitive subjects with certain auxiliaries. Other examples allow for a wider range of relations, including some disallowed for syntactic incorporation. Thus in 3-282 above we find bodyparts as part-of-S in verbs with stative intransitive auxiliaries.

Additionally we find lexically incorporated bodyparts being construed with the subjects of transitive verbs, as in 3-283 below.

3-283 **nga -nyi-tyerr -pu -pe**
 1sgPoke-2sg-mouth-ask -Fut
 SU Irr DO
 I'm going to ask you.

In many examples though, the relationship between the elements of a lexical compound verb is compositional and implicit, and not amenable to description in terms of syntactic rules. Sapir makes similar observations on noun incorporation in American languages;

"it is often just as difficult, at least in some American languages, to draw the line between the objective and non-objective use of an incorporated noun as it is to determine the precise syntactic value of the qualifying member of a compound...In both cases the grammatical expression of a logical relation, in other words a syntactic process, is sacrificed to a compositional process in which the logical relation is only implied." (Sapir 1911:257)

3.5.3 Semantics of Incorporated Bodyparts

Incorporated bodyparts take on a semantic range that extends beyond their freeform usage. Thus we find that **nguru** - 'penis' comes to denote the genitals of both sexes, **muy** - 'eye' is extended to include the face, and **ge** - 'belly' covers the 'middle' of a body, not just the front, lower torso. Additionally, there is a preference for incorporating higher-level general terms over lower-level specific ones. Thus verbs involving activity at the 'elbow' or 'calf muscle', for instance, are more likely to incorporate 'arm' or 'leg', respectively, than the more specific bodypart. So the division of the body into parts, for the purpose of incorporation, is a broader, grosser division than it is for free forms. Of the 35 odd members of the bodypart noun class, any of which can theoretically be syntactically incorporated into the verb, a subset of 16 of these tend to function in this quasi-generic capacity, taking over the role of cross-referencing specific bodyparts once they are textually established. This subset of quasi-generic bodyparts, listed below in Table3-8, are termed 'major bodyparts' in this work.

Among these major bodyparts we further find evidence of the development of a classificatory system whereby certain major bodyparts compounded with certain verbroots, lose their independent semantic and syntactic qualities. Here they qualify the verb by classifying the arguments towards which the verb is directed, in terms of some qualitative functional or

physical feature of the bodypart. This can be seen particularly with **mentyi** - 'neck' and **tyirri** - 'navel'.

Specific and Extended Meanings of Major Bodypart Terms

madi	-chest	-front of body/underside/direction one faces /smoothed surface /concave shape/protected and contained
derri	-back	-back of body/topside/exposed,raised surfaces
tyirri	-navel	-bladder/things that rupture and leak
dirr	-teeth	-edges
pi	-head	-raised, rounded shapes
mentyi	-neck	-tracks and pathways
syi	-nose	-parts of things that jut out
nguru/nguri(K)	-penis	-male and female genitals/wind & rain?
panmi	-crotch	-fork of tree
ba	-arm	-creeks and branches/nurturing and directing
muy	-eye	-face/orifice/spot
purr	-bottom	-tail end/finish
tyerr	-mouth	-end face of a cylinder/openable things /points of entry/speech
ge	-belly	-guts/middle/seat of emotions
firr	-foot	-base of tall, upright things
minmi	-elbow	-turn-offs

Table 3-8

3.5.3.1 **madi** chest

In its most literal form **madi** denotes the surface of the body over the front of the ribcage, between the narrow **mentyi** 'neck' and the soft **dege** 'belly'. This literal bodypart sense is reflected in the nominal lexicon in examples such as,

3-284	da-madi	-	chest
	pi-madi-mi	-	sternum
	madi-wanggi	-	chest cicatrices

and incorporated into verbs as in 3-285

3-285 a)	ngemem -madi-baty <i>1sgHands-chest-hold</i> <i>SU Pres</i> I fold my arms across my chest. (lit: I chest-hold myself	b)	wurrbum-ngi-madi <i>3plBash -1sg-chest</i> <i>SU Perf DO</i> They cut chest cicatrices on me.
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Further, **madi** denotes the underside or frontside expanses of the body;

3-286 **firr -madi** - sole of foot
 foot-chest

de -tyerr -madi - lower jaw
 Bp-mouth-chest

and by extension comes to represent the orientation of a body, the way that it is facing;

- 3-287 a) **ganggi - meny -madi wiben**
 up - 3sgDo -chest 3sgLie
 SU Perf SU Perf
 He lay facing upwards (ie. on his back).
- b) **aya, minde ngudum-madi-fili mudiga,**
 Hey! neg 1sgShove-chest-roll car
 SU Perf
 Hey look! I didn't roll the car over,
 mudiga wudeny -madi-fili -ngidde
 car 3sgShoveDtrD-chest-roll -1sg
 SU Perf IMPL
 it was the car that just rolled over on me.
- c) **mudiga Palumba nem ngumbudum-madi-gat**
 truck 3sg 1plincShove -chest-meet
 PRO SU Perf
 We met the Palumba truck head on.

From the sense of flat expanses and the underside of bodies, **madi** comes to be associated with clear expanses of ground, and smooth unblemished surfaces.

- 3-288 a) **wurru -madi-fuy ngurrbun**
 3plSlash-chest-sweep ceremony
 SU Perf ground
 They swept the ceremony ground.
- b) **weri ngudumbun-madi-syusyu**
 hole 1sgShove -chest-restore
 SU Pres
 I'm filling in/smoothing over the hole.
- c) **fepi -ninggi dangim-madi-syarr**
 stone-INSTR 3sgPoke -chest-scrape
 SU Pres
 He's sanding/smoothing it with a stone.

From the front/underside of our prototypical body, **madi** comes to be associated with the hollow, enclosed, containing and by further extension, protective qualities of any entity that is thought of as being concave. Thus **madi** incorporates into verbs involving entry or insertion into containers.

- 3-289 a) **ngaganiny-madi-wap mudiga**
1sgGo -chest-sit car
SU Perf
 I climbed into the car.
- b) **ngambaty yenim-madi-pap -nyine**
tide 3sgGo -chest-climb-now
SU Pres
 The tide is coming up now.
 (within the containing shape created by the two banks)
- c) **musyulng yana -ngiti-madi-kuli mudiga**
swag 2sgFeet-1sg -chest-throw car
SU Irr IO
 Throw my swag into the car for me!
- d) **ngingini nga -madi-bang-pe**
coolamon 1sgPoke-chest-poke-Fut
SU Irr
 I'll hollow out this coolamon.
- e) **yana -madi-purity-merrendi dirrkuru**
2sgFeet-chest-slip -LEST riverbank
SU Irr
 ...lest you slip down the riverbank.

In this increasingly metaphoric usage it can be seen to compliment the extended meanings of **derri** 'back', which by way of contrast is associated with the top, exposed, humped shape of an entity that is thought of as being convex. See 3.5.3.2.

3.5.3.2 **derri** back

Firstly **derri** incorporates in its literal form to denote the 'back' as a simple bodypart.

- 3-290 **ngemeny -derri-pal**
1sgHandsDtr-back -fold
SU Perf
 I bend at the back (ie. forwards from my waist).

From the 'back' of a prototypical body, **derri** comes to be incorporated in verbs in which take place on, or in relation to, a raised flat surface.

- 3-291 freezer **wirribem-ngan-derri**
 3sgStand -LOC -back
 SU Pres
 The freezer is standing up (on a platform).

This raised 'hump' is somehow bare and exposed, complimentary to the way in which **madi** 'chest' conveys the sense of enclosed protectedness. In the following example this sense of both **madi** and **derri** are contrasted in the verb meaning 'to clear ground'.

- 3-292 a) **wurribu -madi-pul -pe** **wangga-ne**
 3plBash-chest-clear-Fut dance -PURP
 SU Irr style
 They're going to clear an area for dancing.
 (ie. create a designated space with a specific boundary to
 be a focal point for human activity)
- b) **miyi-ne** **wurribu-derri-pul -pe** **D9-ninggi**
 grain-PURP 3plBash-back-clear-Fut -INSTR
 SU Irr
 They'll clear (this paddock) with a D-9 (caterpillar)
 for (planting) sorghum.
 (ie. strip away the covering vegetation and expose the
 soil for planting)

The dominant geographical features of Ngan'giwumirri country are mesa formations - flat topped elongated ridges. As classic examples of flat, raised surfaces, these are also known as **derri**. Verbs involving the traversing or climbing of ridges incorporate **derri**, as in the following examples.

- 3-293 a) **nagan -derri-pappup**
 3sgFeet-back -climb
 SU Perf redup
 He's climbed up onto the ridge.
- b) **yemi** **-derri-birr -pe**
 2sgHands-back -travel-Fut
 SU Irr
 Travel along the top of the ridge!

General verbs of concealment such as 'hiding', 'finding' and 'covering' also incorporate **derri**. This seems to be based both on the 'exposure'

component, and on the 'back' as the external topside of a body that remains visible when one is huddled to escape detection.

- 3-294 a) **kide yubum -derri-du**
where 2sgBash-back -touch
SU Perf
 Where'd you find it?
- b) **bengim -ne -derri-lit** blanket
3sgBash-3sg-back-cover
SU Perf IO
 He covered himself with a blanket.
- c) **ngeriny -derri**
1sgHands-back
SU Perf
 I hid it.

3.5.3.3 **tyirri** navel/bladder

Although **tyirri** can incorporate in its literal sense;

- 3-295 **wur-tyatyamurr yemi -tyirri -pul -tye**
F -newborn 2sgHands-navel-wash-Past
cl SU Irr
 You should have washed her navel (properly) when she was just newly born.

it is primarily incorporated as a lexicalised compound with the verb root -tu 'break', and it is in the form of this derived verb root that it achieves a highly classificatory function. '**tyirri-tu**' denotes the breaking of objects that are conceived of as being 'bladder-like' in that they are containers that because they are gassy, or brittle, or under internal pressure, when ruptured tend to burst plosively and leak their contents. The type of objects classified in this way include - intestines, pimples, uncooked eggs, car tyres, sausages, footballs and balloons or inflated bladders used as such, bottles and waterbags.

- 3-296 a) **de-yedirr yeniny -tyirri -tu -ngidde**
Bp-hip 3sgGo -navel-break-1sg
cl SU Perf IMPL
 The car tyre has punctured on me.
- b) **wamanggal wunni -tyirri-tu -tye**
fem. Agile 3plSlash-navel-break-Past
wallaby SU PImp
 They were gutting wallabies.

- c) **yakay! kagu -yaga wannim-tyirri-tu**
lookout! animal-DEM 3plGo -navel-break
generic SU Pres
 Lookout! the sausages are bursting!
- d) **amurru wudumbun-tyirri-tu**
egg 3sgShove -navel-break
SU Pres
 She's just broken the eggs.
- e) **finy ngeme -tyirri-tutu -tye**
pimple 1sgHands-navel-touch-Past
SU Plmp
 I was squeezing my pimples.

3.5.3.4 **dirr** teeth

Dirr incorporates literally as 'teeth'.

- 3-297 **wudeni -dirr -fulirr**
3sgShoveDtrD-teeth-rub
SU Plmp
 He was grinding his teeth.

and further implies that actions are performed on the long, thin edges of things, such as riverbanks and the edges of essentially two-dimensional things like knives, planks of wood, iron/bark sheeting etc..

- 3-298 a) **marrimarri kinyi yudi -ngiti-dirr -fulirr**
knife this 2sg-Shove-1sg -teeth-rub
SU Irr IO
 Sharpen this knife for me!
- b) **dideninggi nganggininy-dirr -tyerr**
opposite side 1plincGo -teeth-stop
SU Perf
 We pulled up on the opposite bank.

3.5.3.5 **pi** head

Pi incorporates literally to denote the 'head', excluding the face;

- 3-299 a) **a -da-wayirr bengim-pi -baty**
A-Bp-forehead 3sgBash-head-tie
cl cl SU Perf
 He tied a headband around his head.

- b) **deminy -ngi-pi -yiri**
3sgHands-1sg -head-numb
SU Pres DO
 It made me ashamed.
 (lit: it head-numbered me)

but including the hair.

- 3-300 **ngubu -nyi-pi -ket-pe wusye**
1sgBash-2sg-head-cut-Fut hair
SU Irr DO
 I'll cut your hair.

Incorporated **pi** is extended to denote the 'head-like' ends of long, thin, upright things;

- 3-301 **ngerrbe -pi -dundum-tye nel**
1plexBash-head-bury -Past nail
SU PImp redup
 We were hammering in nails.

and rounded and raised (parts of) objects generally.

- 3-302 a) **angantyamu weme -pi -dudu-tye -yedi bude-ne**
bush turkey 3sgHands-head-touch-Past-3sgGo nest-PURP
SU PImp redup SU PImp
 The bush turkey was heaping up (a mound) for a nest.
- b) **yerr-da-garri-werre yeniny-pi -wap mudiga**
Tr -Bp-leg -ASSOC 3sgGo -head-sit car
cl cl SU Perf
 He sat up on top of the cabin of the car with a rifle.
- c) **peke bafun yemi -ngiti-pi -lali yetyerrawu-ne**
tobacco ash 2sgHands-1sg -head-round chewing-PURP
SU Irr IO tobacco
 Roll some tobacco and ash into a chewing ball for me.

3.5.3.6 **mentyi** neck

Mentyi incorporates literally;

- 3-303 **eferri deme -mentyi-baty -pagu -tye -yedi**
bluetongue 3sgHands-neck -hold-HITH -Past-3sgGo
lizard SU PImp SU PImp
 He was coming up carrying a bluetongue by the neck.

and further acts as a classifier for verbs of movement or activity along tracks. This classificatory usage seems to employ the notion of *intersection*, ie. crossing pathways, cutting a track through a ridge, waiting for someone (being in a place where you anticipate the intersection of your paths) etc.

- 3-304 a) **ngambani-mentyi-fel -nime-pe, pikirri!**
 1plincGo -neck -bounce-pl -Fut quickly
 SU Irr SU
 Quickly! let's cross the road.
- b) **ngarrini-mbi-mentyi-tyerr-pe ngan-kagu**
 1plexGo-2sg-neck -stop -Fut LOC -animal
 SU Irr IO =wait generic
 We'll wait for you, where that
- a-nerrerr dangim-mentyi-ket**
 A-chicken 3sgPoke-neck -cut
 cl hawk SU Perf
 chickenhawk cut a track (through the ridge).
- c) **mumba Port Keats-ne nganggininy-mentyi-tyerr**
 track -PURP 1plincGo -neck -stop
 SU Perf
 We turned off onto the Port Keats' road.
- d) **yana -mentyi-baty mumba**
 2sgFeet-neck -hold track
 SU Irr
 Follow the track!

3.5.3.7 syi nose

Syi incorporates literally;

- 3-305 a) **wudem -syi -dudu-dim**
 3sgShoveDtrD-nose-touch-3sgSit
 SU Pres SU Pres
 She's picking her nose.
- b) **yibem -syi -baty?**
 2sgLie-nose-hold
 SU Pres
 Do you smell it?

and, in a lexical compound with the verb root **-ket** 'cut', further denotes the parts of things that protrude, particularly with regard to the necessity to

move around them. This sense of *syi* appears to be an extension of the physical property of a nose as 'jutting out' from a face.

- 3-306 a) **mudiga ngundum -syi -ket**
car 1dlin Slash-nose-cut
SU Perf
 We went around the end of the car.
- b) **fepi wunu wumbun-syi -ket-nyine**
hill that 3sg Slash -nose-cut -now
SU Pres
 He's just gone around the point of that hill now.

In 3-306 a) *syi* does not necessarily imply the front end of a car, either end being classifiable as a 'nose'. In other verbs entailing activity at the 'back end' of things we find *purr* - 'bottom' syntactically incorporated to convey the sense of this location.

- 3-307 **ngaganim-purr-wap mudiga**
1sgGo -bum-sit car
SU Pres
 I'm sitting up on the tailgate of the car.

Here however '*-syi-ket*' is a lexical compound implying 'movement around the end of things that jut out' and is not amenable to bodypart substitution in any productive manner.

3.5.3.8 nguru/nguri(K) penis

Nguru incorporates into verbs as a literal bodypart;

- 3-308 a) **demeni -nguru-walal -tye**
3sgHandsDtr-penis -shake-Past
SU PImp
 He was masturbating.
- b) **demeni -nguru-dudu-tye**
3sgHandsDtr-penis -touch-Past
SU PImp redup
 She was masturbating.
- c) **kukuk nga -nyi-nguru-waty ambirri**
wait! 1sgPoke-2sg -penis -consume first
SU Irr DO
 Hang on!, I'm going to fuck you first.

though as 3-308 b) demonstrates, as an incorporated form its semantic range is widened to include the sexual organs of both sexes.

Nguru also occurs in a lexical compound with the verb root **ket** - 'cut' to denote the sudden cessation of the meteorological features wind and rain.

- 3-309 a) **marrawuk wum -nguru-ket-nyine**
 dry season 3sgSlash-penis -cut -FOC
 wind SU Perf
 The wind has died now.

- b) **kuru bem -nguru-ket-nyine**
 rain 3sgBash-penis -cut -FOC
 SU Perf
 The rain has stopped now.

3.5.3.9 **panmi** crotch

Panmi incorporates literally as the 'fork' between the back or lower limbs, and is extended to cover other 'fork-like' places, such as the junction between the branches and trunk of a tree.

- 3-310 a) **yemi -panmi-ta!**
 2sgHands-fork -open
 SU Irr
 Break (the goose's crotch) open.
 (to prepare it for roasting)
- b) **yerr-fini ya -ngiti-fi -panmi-tyat**
 Tr-blood 2sgPoke-1sg -Mp-fork -place
 cl wood SU Irr IO
 Leave it in the fork of the bloodwood tree for me!

In contrast to **nguru**, the incorporation of **panmi** provides for a polite, euphemistic way to refer to activity located at the genitals, as in 3-11.

- 3-311 a) **ngudumbun-panmi-tu ngilmil**
 1sgShove -fork -touch semen
 SU Perf
 I ejaculated inside her.
- b) **bengim -ngi -panmi-baty**
 3sgBash-1sg -fork -kick
 SU Perf DO
 He kicked me in the crotch.

3.5.3.10 **ba** arm

Ba incorporates literally as a bodypart and is extended to cover tree branches and creeks - ie. 'long thin things that extend off something bigger'. This usage is also reflected within the nominal lexicon, as in 3-312 b) below.

- 3-312 a) **afungi dangim-ngi-ba -dap**
mosquito 3sgPoke -1sg -arm-spear
SU Pres DO
 A mozi has bitten me on the arm.
- b) **ba -wedi yeyi nganggininy-ba -fel**
arm-little other 1plincGo -arm-jump
SU Perf
 We crossed another little creek.
- c) **mimenem ngerrminy -ba -ket**
billygoat 1plexHands-arm-cut
plum SU Perf
 We picked plums from the branches.

Ba also plays a classificatory role in incorporating into verbs concerned with directing people, particularly in a nurturing, caring sense. The notions of responsibility and concern are strongly suggested here, most examples involving mature adults directing children or those frail through age or illness.

- 3-313 a) **wurruke kinyi wuddung-ngerr -ba -tal**
3dl this 3plShove -dl /1sg-arm-raise
PRO SU Perf SU/DO
 These two people here (not my parents) raised me.
- b) **falmi yenim-ba -kurr -nyine**
woman 3sgGo -arm-acquire-now
SU Pres
 He's taken a wife now.
- c) **Tawun-nimbi ngumu -ba -wa -pe**
Darwin-SOURCE 1sgSnatch-arm-pick-Fut
SU Irr up
 I'll fetch her from Darwin.

3.5.3.11 **tyerr** mouth/lips

Tyerr incorporates literally as a bodypart;

- 3-314 **dangim-ngi -tyerr -da dafi**
3sgPoke-1sg -mouth-itch 'cheeky'
SU Pres DO
 It's burning my mouth.

and is extended to denote the parts of things that are 'mouth-like', in that;
1) they resemble a mouth in being the circular face of the flat end of a cylinder (cross-section through bamboo, tip of a cigarette etc.);

- 3-315 a) **yawul ngayi dangim-ngiti-fi -tyerr -pek**
spear 1sg 3sgPoke-1sg -Mp-mouth-drip
PRO SU Perf IO
 He rejoined my (broken) spear for me.

- b) **yine -ngiti-tyerr -ket -pagu**
2sgHeat-1sg -mouth-cut -HITH
SU Irr IO
 Light a cigarette for me!

2) they can open or be opened (doors, car bonnets, drawers, lids of containers, openings of bags);

- 3-316 a) **mudiga yu -tyerr -dum de-syi**
car 2sgSlash-mouth-bury BP-nose
SU Irr cl
 Shut the bonnet of the car!
- b) **wayiki ngayi deminy -nin -tyerr -ta**
son 1sg 2sgHands-1plinc-mouth-open
PRO SU Irr IO
 My son opened (the gate) for us.
- c) **mengginy -tyerr -wurr fi -ninggi**
3sgSnatch-mouth-enter string-INSTR
SU Perf
 He tied up the mouth of the bag with string.

Note that in example 3-316 a) above, the bonnet of the car is its 'nose' (ie. the front part that juts out), but that this 'nose' is treated as a 'mouth' in its functional ability to be 'opened up'.

And 3) they can be an opening or point of access (entrance or beginning point of a track, as at a turn-off).

- 3-317 a) **yariny -tyerr + palat -ngidde**
2sgPoke-mouth-pass -1sg
SU Perf IMPL
 You went past the turn-off on me.

Needless to say, some examples will fit more than one of these categories. For instance, **tyerr** in 3-316 c) above could equally well be 'the part of the bag that is openable' or 'the point of entry into the bag'. Furthermore I have some examples which I am unsure how to interpret. In the following example, the bog may be 'mouth-like' in that it is a moist spot with a defined lip-like rim, or it may hold the car fast, as one holds something in one's mouth.

- 3-318 **mudiga ngudumbun-tyerr + ket ngityirr abarri**
 car 1sgShove -mouth-cut ground bog
 SU Perf
 I've bogged the car.

Tyerr also incorporates into some verbs involving speech, as in the 3-319.

- 3-319 a) **ngudupun-tyerr -palak**
 NgK *1sgShove -mouth-drop*
 SU Perf
 I prevented him from talking.
- b) **ngunyininggi nguddu -nyi-tyerr -pe ngurru-ka**
 tomorrow 1plexShove-2sg-mouth-Fut so -eh!
 SU Irr DO
 So, tomorrow we'll be farewelling you then, eh!
- c) **minbe-tye we -ngi-tyerr -gat**
 Neg -Past 3sgMouth-1sg-mouth-answer
 SU Irr DO
 He wouldn't answer me.
- d) **ngumbun-tyerr -fa**
 1sgSlash -mouth-scream
 SU Perf
 I made him scream (by hitting him).

3.5.3.12 **muy** eye

Muy, which has the reduced incorporated form **mi**, denotes the literal bodypart.

- 3-320 **dingin -ngi-mi-wul**
 3sgMouth-1sg-eye-water
 SU Pres DO
 It makes my eye(s) water.

- 3-324 a) **bengim -ngi-ge -pek**
3sg Bash-1sg-belly - drip
SU Pres DO
 It makes me angry.
- b) **yebem -ngi-ge -dum**
2sg Bash-1sg-belly-bury
SU Pres DO
 You make me happy.
- c) **ngara -ne-fi -pal -pe, nge -ge -kubuk-pe**
1sg PokeDtr-3sg-Mp-return-Fut 1sg Mouth-belly-soak -Fut
SU Irr IO SU Irr
 I'm going back to him, to pacify him.

3.5.3.15 **firr** foot

Firr incorporates as a literal bodypart and is extended to include the base of any 'tall, upright thing'. 'Tall, upright things' (i.e. those which select the 'stand' stative auxiliary in its copula function (cf. 4.4.1.1)), are essentially things whose vertical dimension is perceived to exceed their horizontal dimension (trees/houses etc).

- 3-325 **ya -ngiti-firr-tyat -pe mawuny**
2sg Poke-1sg -foot-place-Fut ironwood
SU Irr IO tree
 Leave it at the foot of the ironwood tree for me.

3.5.3.16 **minmi** elbow

Minmi is a minor member of the bodypart noun class, eg. **de-minmi** - 'elbow' and otherwise occurs within the nominal lexicon as an element in compounds, e.g. **minmi-pi** (*elbow-head*) 'funnybone'. **Minmi** is never found incorporated as an object or locative verbal argument. Normally verbs entailing activity at the 'elbow' would incorporate **ba** - 'arm' as a major generic bodypart. **Minmi** is incorporated into the verb only as a lexical compound with the verb root **ket** - 'cut'. The verb formed with the 'Go' auxiliary and the derived verb root **-minmi-ket** means 'to turn off a track at (roughly) a ninety degree angle' (envisaged as the crook of one's arm?).

- 3-326 **ngambani-minmi-ket-pe kinyi**
1plincGo -elbow -cut -Fut here
SU Irr
 Let's turn off down this way.

Finally to give some idea of the textual frequency of bodypart incorporation, the example below is a short excerpt from a text by Robert Daly describing a trip we had made the previous day through his country. In this sample seven consecutive verbs contain incorporated bodyparts. While this particular excerpt has been specifically selected for its high density of bodyparts, and thus should be regarded as a higher than normal frequency of incorporation, it does provide a good example of the pervasive and productive role that this process plays in Ngan'gityemerri. The high rate of incorporation in this example results largely from the genre of the text itself. For with such associated and classificatory meanings of bodyparts as *madi/derri* - 'hollows/humps', *ba* - 'creeks', *dirr* - 'riverbanks', *mentyi* - 'tracks', *minmi* - 'turn-offs', and *tyerr* - 'gates/entrances', it is in description of travel across countryside that bodypart incorporation reaches its height as a tool for tracking one's progress through and across these kind of landscape features.

3-327 *wa-yiki ngayi deminy -nin -tyerr -ta*
M-son 1sg 3sgHands -1plinc-mouth-open
cl PRO SU Perf IO
 My son opened that gate for us,

wuny -tyerr -dum gate nyinnin,
3sgSlash-mouth-bury ANA
SU Perf
 then shut it (after us).

nganggininy-ba -fel, nganggininy-madi-pap,
1plinc Go -arm-bounce 1plincGo -chest -climb
SU Perf SU Perf
 We crossed a creek, drove up the bank,

mumba Port Keats-ne nganggininy-mentyi-tyerr,
road -PURP 1plincGo -neck -stop
SU Perf
 and pulled up onto the Port Keats' road.

ba -wedi yeyi nganggininy-ba -fel,
arm-little other 1plincGo -arm-bounce
SU Perf
 We crossed another little creek,

kinyi-pefi ngambani-minmi-ket-pe, ngiminy-bi,
this -THITH IdlincGo -elbow -cut -Fut 1sgSay -2sg
SU Irr SU Perf IO
 and I told you to turn off this way.

Chapter 4

Auxiliary Verb Semantics

4.1 Auxiliary Function within the Verb

As has been outlined in 3.1, the auxiliary is an obligatory constituent of the Ngan'gityemerri verb. Typically, it combines with a complex verb stem (CVS) in forming a 'complex verb'. Those auxiliaries that can only occur in combination with CVSs are thus referred to as 'complex auxiliaries'. Some auxiliaries, however, in addition to their combination with CVSs, can function independently as full 'simple verbs', and these are referred to as 'simple auxiliaries'. Compare the complex auxiliary 'hands' in 4-1 with the simple auxiliary 'sit', in its simple and complex functions, in 4-2 a) and b) respectively.

- 4-1 **ngeriny -wurity**
 1sgHands-fix
 SU Perf
 I fixed it.
- 4-2 a) **ngini -tye**
 1sgSit -Past
 SU PImp
 I was sitting.
- b) **ngini -lalirr-tye**
 1sgSit -eat -Past
 SU PImp
 I was (sitting) eating.

As is suggested by the 'simple' function of the auxiliary in 4-2 a) above, and as is equally true of complex auxiliaries, the Ngan'gityemerri auxiliary has a specific semantic component which it contributes to the overall meaning of the verb. In this respect the Ngan'gityemerri auxiliary, indeed the auxiliary in most if not all the Daly languages, differs from the semantically empty verbal unit sometimes described as an 'auxiliary' in other Australian languages, that merely plays host to bound pronominal and tense morphemes¹. It is this semantic character of the auxiliary that is

¹In 3.2 we examined the four-part structure of the auxiliary, noting the problems in segmentation that arose, particularly at the juncture between the bound subject pronoun and the auxiliary root. There we concluded that treating the whole 'bound subject + auxiliary root' as a minimal contrastive unit was more felicitous for synchronic analysis. Likewise

to be examined in this section. I have adopted the practise of allocating each auxiliary a name; e.g. 'sit', 'see', 'poke' etc, throughout the discussion and employ these names in the example glosses in preference to simply allocating each auxiliary a number.

In terms of formal contrastive paradigms I can identify 31 auxiliary verbs in contemporary Ngan'gityemerri², distinguishable on the basis of unique subject-AVR (auxiliary verb root) sequences. The paradigms of these sequences have been listed in appendices A and B, and readers will find reference to these useful in following this section. Not all auxiliary subject-AVR sequences are unique across the full person/number/tense paradigm. A number of auxiliaries partially overlap in sharing some identical subject-AVR sequences, though no auxiliaries show full convergence of form. For instance, 'mouth' and 'mouth Dtr (detransitive)' share irrealis dual exclusive, and past imperfective non-singular exclusive forms, and the 'sit' present plural exclusive forms are identical with both the 'stand' irrealis singular forms and the 'shoveDtrS (stative)' present plural exclusive forms. In addition there are several auxiliaries that appear to lack any obvious semantic connection with each other, but are formally quite similar. 'Sit' and 'mouthDtr' for instance, differ primarily in the final vowel, 'sit' having /i/ and 'mouthDtr' having /e/. 'Hands' and 'poke', are likewise primarily differentiated by a single vowel. These are a few examples only; further similarities and correspondences will be evident from examination of the appendices.

All of these 31 auxiliaries combine with verb stems to form complex verbs. 10 of the 31 are 'simple auxiliaries', that is, in addition to their verb stem combination, they can stand independently, without a verb stem, functioning as a simple verb. The remaining 21 auxiliaries can not stand independently and obligatorily require the presence of a verb stem. These 21 are referred to as 'complex auxiliaries'. It should be understood then that

throughout this section, and in the auxiliary paradigms given in appendices A and B, auxiliaries are discussed in terms of 'bound subject + auxiliary root' sequences.

²Although not very likely, it is not impossible that further work will reveal additional auxiliary verbs. Increasing fieldwork in recent years has resulted in the upgrading of auxiliary counts in Marrithiyel (Green 1989) and Gamu/Matngeli (Harvey : to appear). The actual numbers of auxiliaries in all Daly languages are probably considerably higher than the figures given in Tryon (1974). The current figure of 31 for Ngan'giwumirri and Ngan'gikurunggurr is also an increase from the figure of 26 given for Ngan'gikurunggurr in Reid (1982). The potential for auxiliaries to be missed by researchers stems primarily from the occurrence of low frequency auxiliaries that may only combine with a single CVS. Any residual auxiliaries in Ngan'gityemerri would almost certainly be of this type.

'simple auxiliaries' share the capacity of 'complex auxiliaries' to combine with verb stems, and can, in addition, stand on their own.

Ngan'gityemerri auxiliaries then, constitute 31 unique sets of semantically based verbal inflectional categories, with which verb stems combine. The combination of auxiliaries and verb stems is, in the main, a productive process. The extent of this productivity is an issue that we will return to throughout this section. The point to be made here though, is that auxiliaries do not form 31 rigid, mutually exclusive verb classes to which verb stems belong. This view of auxiliaries, as found for instance in Tryon (1974), implies some sort of logical linkage between the semantics of each auxiliary and the semantic properties inherent in those CVSs which select them. However it is not the case that each CVS selects a single auxiliary, or can be said to belong to a single auxiliary class. The productivity of auxiliary - CVS combination varies widely. While some auxiliaries are in fact only found in combination with a single CVS, others select a wide number of CVSs. It will become apparent from the discussion of each auxiliary later in this section, that independent semantic characteristics can be attributed to both auxiliaries and CVSs, and that the productive manipulation of these characteristics supports the view that both auxiliaries and CVSs are separate entities, each maintaining their own semantic integrity and having some sort of psychological reality in the minds of Ngan'gityemerri speakers.

In order to present the Ngan'gityemerri auxiliary system in the clearest possible way, we can divide the 31 auxiliaries up in terms of several criteria. We have already divided the 10 simple auxiliaries from the 21 complex auxiliaries. They can be further divided in terms of whether they are predominantly transitive or intransitive, and in terms of the degree of productivity they bring to CVS combination. As a preliminary to this investigation of the semantics of the Ngan'gityemerri auxiliaries, these two issues, the transitivity of both auxiliary verbs and CVSs, and their degree of productivity, are addressed in the following two subsections.

4.2 Transitivity

In addition to the semantic characteristics attributable to auxiliaries and CVSs, both can be assigned associated transitivity values. That is, on the basis of the majority of verbs formed with each auxiliary, and the number of core arguments those verbs are able to cross-reference, auxiliaries and particular CVSs can be labelled essentially 'transitive' or essentially 'intransitive'. These values, that are independently attributable to auxiliaries and CVSs, are not formally marked on them in any way, nor do they absolutely correspond with the transitivity of a given verb that may be

formed with them. Throughout this discussion I refer to the transitivity values of auxiliaries and CVSs as either 'transitive' or 'intransitive' (using quotation marks), whereas I refer to verbal transitivity, that is, the transitivity value that can be assigned to a full complex verb, as either transitive or intransitive (without quotation marks).

4.2.1 Auxiliary Transitivity

Among the 'intransitive' auxiliaries we find the major posture/motion auxiliaries 'sit', 'lie', 'stand', 'go' and 'go*', and the minor auxiliaries 'say', 'arrive' and 'hang'. These eight auxiliaries are always intransitive in their simple verb function, and typically form intransitive verbs in their complex function. This is demonstrated with the 'sit' and 'go' auxiliaries in 4-3 and 4-4 below.

- | | | | | |
|-----|----|--|----|---|
| 4-3 | a) | ngini-tye
<i>1sgSit-Past</i>
<i>SU PImp</i>
I was sitting. | b) | ngini-lalirr-tye
<i>1sgSit-eat -Past</i>
<i>SU PImp</i>
I was eating. |
| 4-4 | a) | yeniny
<i>3sgGo</i>
<i>SU Perf</i>
He went. | b) | yeniny-fili
<i>3sgGo-roll</i>
<i>SU Perf</i>
He wandered off. |

Among the 'transitive' auxiliaries we find the two simple auxiliaries 'see' and 'take', the major complex instrumental auxiliaries 'hands', 'feet', 'mouth', 'poke', 'slash', 'bash', 'shove', and 'heat', and the minor complex auxiliaries 'suck', 'pull' and 'snatch'.

'See' and 'take' are always transitive in both their simple and complex functions.

- | | | |
|-----|----|---|
| 4-5 | a) | nginyirri-nyi
<i>1sgSee -2sg</i>
<i>SU Perf DO</i>
I saw you. |
| | b) | nginyirri-nyi-kerrety
<i>1sgSee -2sg -grasp</i>
<i>SU Perf DO</i>
I watched over you. |

The complex instrumental auxiliaries typically form transitive verbs. This is demonstrated with 'hands' and 'shove' below.

- 4-6 **deminy -ngi-tip**
3sgHands-1sg-grab
SU Perf DO
 He grabbed me.
- 4-7 **wudum -ngi-pap**
3sgShove-1sg-climb
SU Perf DO
 He pushed me up.

However it must be stressed that the associated transitivity value that can be attributed to auxiliaries is ultimately not a consistent indicator of verbal transitivity. There are, for instance, 'intransitive' auxiliaries selected in clearly transitive verbs that cross-reference direct object arguments. Consider the transitive verbs in the examples below which employ the 'intransitive' auxiliaries 'go' and 'sit', respectively.

- 4-8 **ngani -nyi-mi -wap-pe**
1sgGo-2sg-Val-sit -Fut
SU Irr DO
 I'm going to camp with you.
- 4-9 **ngi -nyi-ngan-wantyirr-pe**
1sgSit-2sg-LOC -armpit -Fut
SU Irr DO REL
 I'll sit down at your side.

Conversely, 'transitive' auxiliaries are found in single-argument intransitive verbs. The intransitive verbs in 4-10 and 4-11 below are formulated with the 'hands' and 'feet' auxiliaries respectively.

- 4-10 **deminy -pat, yirrini-pagu -tye fepi minbadi**
3sgHands-arise 3sgGo-HITH-Past hill big*
SU Perf SU Plmp
 He arose and came here to Peppimenarti.
- 4-11 **awa-purppurk-nyine wannam-felfil**
Hg -littl'uns -FOC 3plFeet -bounce
cl SU Perf redup
 All the kids raced out then.

Before returning to the relationship between auxiliary transitivity and verbal transitivity, let's look at the CVS.

4.2.2 CVS Transitivity

Complex verb stems in Ngan'gityemerri fall broadly into two groups which, as for auxiliaries, can be labelled transitive and intransitive.

Describing similar phenomena in Marrithiyel verbs, Green (1989) uses the terms 'neutral' and 'transitive' as labels for these two CVS classes. I have followed his practise in using these same terms here.

The neutral class consists of both monovalent CVS and bivalent CVS that have a low transitivity value. Among the monovalent CVSs we find -**wurr** 'enter', -**pap** 'climb up', **gulirr** 'spin', -**tyurr** 'bathe', -**syirr** 'sweat', and -**purity** 'hide'. The combination of these monovalent CVSs with 'intransitive' auxiliaries, resulting in intransitive verbs, is demonstrated in the examples below.

- 4-12 **ngaganim-du**
1sgGo -sleep
SU Pres
 I'm sleeping.
- 4-13 **yani -wurr-pagu**
2sgGo-enter-HITH
SU Irr
 Come in !
- 4-14 **ngini -tyutytyurr-tye**
1sgSit - bathe -Past
SU Plmp redup
 I was bathing.
- 4-15 **yenim-purity**
3sgGo-hide
SU Pres
 He's hiding.
- 4-16 **wirribem-gulirr-nyine**
3sgStand-circle -FOC
SU Pres
 (The tape recorder) is spinning now.

Monovalent CVS can, subject to the requirement of semantic plausibility, be productively combined with the major 'transitive' instrumental auxiliaries, resulting in transitive causative readings. In this respect 'transitive' auxiliary selection can be seen as a valence increasing process. Compare 4-12 to 4-16 above, with 4-17 to 4-21 below.

- 4-17 **ngirrngirr ngudum -burrki-du**
sleep 1sgShove-3dl -sleep
SU Perf DO
 I put the two (kids) to sleep.

4-18 **malarrgu yudi - Ø -wurr yerr-wasyanderri-nide**
long necked 2sgShove-3sg -enter Tr -hessian -LOC
turtle SU Irr DO cl bag
 Put the turtles in the hessian bag !

4-19 **walipan ngudum - Ø -tyurr kuru**
cloth 1sgShove-3sg-bathe water
SU Perf DO
 I dipped the rag in water.

4-20 **ngudu -nyi-purity-pe kakaw !**
1sgShove-2sg-hide -Fut come
SU Irr DO here
 I'll hide you, come here !

4-21 **door ngeriny - Ø -gulirr**
1sgHands-3sg-circle
SU Perf DO
 I turned the doorhandle.

Monovalent neutral CVSs additionally combine with the detransitivised auxiliaries that are the reflexes of the major 'transitive' instrumental auxiliaries. We have just seen how the combination of 'transitive' auxiliaries with monovalent neutral CVSs has a valence increasing effect and gives a causative reading. These causative verbs can be valence decreased and be given a reflexive reading by selection of one of the detransitivised auxiliaries. The combination of monovalent CVS *-wurr* 'enter' with 'intransitive', 'transitive' and 'detransitivised' auxiliaries respectively, and the resultant intransitive, causative and reflexive verbs are set out in 4-22 below.

- 4-22 a) **ngaganiny-wurr wembem**
1sgGo -enter house
SU Perf
 I went into the house.
- b) **ngudum - Ø -wurr**
1sgShove-3sg -enter
SU Perf DO
 I put it in the house.
- c) **ngudeny -wurr debi-werre**
1sgShoveDtrD-enter leg -ASSOC
SU Perf
 I pulled on my trousers.
 (lit: I put myself into trousers.)

Among bivalent neutral CVSs we find **-mi-wap** 'sit with', **-pirr** 'leave alone', **-lit** 'block', **-wuty** 'discard' **-pup** 'rub', and **-tip** 'grab'. Bivalent neutral CVSs can combine with 'intransitive' auxiliaries producing 'low transitive' verbs. That is, verbs that are formally transitive, but are characterised by a low degree of patient affectivity.

- 4-23 **ngani -nyi-mi -wap-pe**
1sgGo-2sg-Val-sit -Fut
SU Irr DO inc
 I'll camp with you.
- 4-24 **ngaganiny- Ø -pirr**
1sgGo -3sg-leave
SU perf DO alone
 I left it alone
- 4-25 **minbe nginyinggin- Ø yenim - Ø -lit**
Neg 1sgSee -3sg 3sgGo -3sg -block
SU Pres DO SU Pres DO
 I can't see it, he's blocking it.
- 4-26 **ngaganiny- Ø -wuty kuru**
1sgGo -3sg -discard water
SU Perf DO
 I've poured out the water.
- 4-27 **palayin ngirim- Ø -pup**
firesticks 1sgSit -3sg -rub
SU Pres DO
 I'm rubbing the firesticks.
- 4-28 **yerr-kinyi wirribem- Ø -tiptip ngan'gi nyinyi**
Tr -this 3sgStand -3sg-grab word 2sg
cl SU Pres DO redup PRO
 This (tape recorder) is picking up your words.

Bivalent neutral CVSs can additionally combine with the major transitive auxiliaries, resulting in more highly transitive verbs. Compare 4-26 to 4-28 with 4-29 to 4-31 below.

- 4-29 **gagu ngum - Ø -wuty**
meat 1sgSlash-3sg-discard
SU Perf DO
 I threw the meat away.

- 4-30 **palayin ngariny-Ø-pup yenggi-ne**
firesticks 1sgPoke-3sg-rub fire -PURP
SU Perf DO
 I rubbed up the firesticks for a fire.

- 4-31 **wa-mumu-ninggi dem -burr-tiptip**
M-taboo -AGENT 3sgHands-3pl -grab
cl SU Pres DO redup
 The policeman is nabbing them,

Looking at 4-27 and 4-30 more closely we see that both verbs are transitive, (taking firesticks as O), but differ in their focus. 'Intransitive' auxiliary selection, in 4-27, focusses on the subject's posture and activity, whereas 'transitive' auxiliary selection, in 4-30, focusses on the instrumental means by which the agent manipulates the undergoer. This distinction could be brought out more clearly by respectively glossing these examples as; 'I'm sitting firestick-rubbing' and 'I rubbed the firesticks in a 'poke' classificatory manner' (see discussion of 'poke' in 4.5.1.2). This choice between 'intransitive' and 'transitive' auxiliaries thereby allows for varying degrees of transitivity to be attributed to an activity.

The second group of CVSs are those labelled 'transitive'. With one specific exception addressed below, 'transitive' CVSs combine only with the major 'transitive' auxiliaries. Among 'transitive' CVSs, we find *-pawal* 'spear', *-ket* 'cut', *-bang* 'pierce', *-kerrety* 'grasp', *-fityi* 'roll' and *-pul* 'clean'. The combination of these CVSs with 'transitive' auxiliaries is given in 4-32 to 4-37 below.

- 4-32 **dam -burrki-pawal**
3sgPoke-3dl -spear
SU Perf DO
 He speared both of them.
- 4-33 **wum -ngi-pi -ket**
3sgSlash-1sg-head-cut
SU Perf DO
 She cut my hair.
- 4-34 **dam -ngi-syi -bang tyiginin -ne**
3sgPoke-1sg-nose-pierce nostestick-PURP
SU Perf DO
 He pierced my nose for a nostestick.
- 4-35 **yemi -ngi-me -kerrety**
2sgHands-1sg-hand-grasp
SU Irr DO
 Take me by the hand !

- 4-36 **wulmen ngudu -nyi-madi-fityi ngunu**
oldman 1sgShove-2sg -chest-roll how about it
SU Irr DO
 Oldman ! I'm going to turn you over, is that alright !
- 4-37 **alayi warrakma kinyi werme -ngi-pul -nime-tye**
mother three this 3plHands-1sg-clean- tr - Past
SU Plmp DO SU
 These three mothers of mine used to wash me.

These highly transitive CVSs cannot be freely combined with 'intransitive' auxiliaries to produce a less transitive verb, as was noted above for monovalent CVSs. Thus an attempt to combine **-kerrety** 'grasp', for instance, with 'intransitive' auxiliary 'sit' to mean 'I am (sitting) grasping (it)', is unacceptable.

- 4-38 ***palamurru ngirim-kerrety**
clapping 1sgSit -grasp
sticks SU Pres
 I am sitting grasping the clapping sticks.

However, two 'transitive' CVSs, **-pal** and **-fakurr** both meaning 'break', have been recorded in an exceptional combination with the 'intransitive' auxiliary 'go'. The contrastive combinations of **-pal** with the 'hands' and 'go' auxiliaries are shown in 4-39.

- 4-39 a) **yerr-ba ngeriny-pal**
Tr- arm 1sgHands-break
cl SU Perf
 I broke off a branch.
- b) **yerr-ba yenim-pal**
Tr-arm 3sgGo-break
cl SU Pres
 The branch is broken off.

The construction shown in 4-39 b) functions as an agentless counterpart to 4-39 a). Following Green (1989:369) I refer to this construction type as the 'anticausative' (c.f. Comrie 1981:161). This construction type allows what is underlyingly the undergoer of a highly transitive verb to function as the subject of an intransitive verb. This is not a passive type construction where an agent is demoted and an undergoer raised to subject position. The argument structure of anticausatives allows for no controlling agent, either formally cross-referenced on the verb or appearing

as an oblique free nominal. Rather, the semantic effect of the anticausative is simply to encode a change-of-state without attributing this event to any agent at all.

Comparing 4-39 with 4-27 and 4-30 above, note that there is an important difference between the capacity to combine a 'transitive' CVS like *-pal* with both 'intransitive' and 'transitive' auxiliaries, and the same phenomenon noted in the discussion of bivalent neutral CVSs. The choice between combining bivalent neutral *-pup* '-rub' with 'intransitive' and 'transitive' auxiliaries respectively, allowed for variation in the degree of transitivity attributed to the activity. 'Intransitive' auxiliary selection focussed on the posture and activity of the controlling agent, whereas 'transitive' auxiliary selection focussed on the instrumental manipulation of the undergoer in the hands of the agent. Contrastively, where 'intransitive' auxiliaries combine with 'transitive' CVSs in the anticausative construction, their subjects are the thematic undergoers, not agents, of the transitive counterpart construction.

As noted above, only two CVSs have been recorded in this construction type. While others may be possible, there appears to be at least two constraints operating against the combination of 'intransitive' auxiliaries and 'transitive' CVSs. Firstly, CVSs representing activities that are inherently agentive, i.e. cannot conceivably come about through spontaneous forces, appear to be blocked from this construction. Secondly, the anticausative seems to be restricted to 3rd person singular inanimate subjects.

In summary then, although general transitivity values are independently attributable to both the auxiliary and the CVS, verbal transitivity in Ngan'gityemerri can only be formally defined in terms of the requirement that Direct Objects be cross-referenced within the verb under the appropriate person/number conditions.

4.3 Auxiliary - CVS Productivity

Some auxiliaries are capable of combining with a large number of CVSs, and likewise, some CVSs combine with a large number of auxiliaries. The substitution and interchangeability of these highly productive auxiliaries results in fairly predictable meaning changes. By way of example, consider the 'transitive' CVS *-pul* '-to clean' in combination with the auxiliaries 'hands', 'bash', 'heat' and 'hands oneself', in example 4-40 below.

- 4-40 a) **ngeriny -Ø-pul**
1sgHands-3sg-clean
SU Perf DO
 I washed it.
 (I hands#cleaned it)
- b) **wurr ngubum-Ø-madi-pul**
grass 1sgBash -3sg-chest-clean
SU Perf DO
 I cleared the grass.
 (I bash#cleaned the grass, cutting a swathe through it using a broad surface, such as the front of my body, or the blunt front of a bulldozer.)
- c) **wurr wayiny-Ø-pul -pagu**
grass 3sgHeat-3sg-clean-HITH
SU Perf DO
 The fire is burning the grass this way.
 (The fire is heat#cleaning the grass this way.)
- d) **ngemeny -pul**
1sgHandsDTr-clean
SU Perf
 I washed myself.
 (I hands#cleaned myself.)

In contrast the CVS **-biny** 'suck' has only ever been recorded in combination with two auxiliaries, 'heat' and 'suck' (see 4-244 to 4-246), and appears not to be amenable of productive interchangeability.

Although in reality auxiliary productiveness is probably best modelled as a continuum, I have chosen to follow Green's approach to the same issue in Marrithiyel (1989) by dividing auxiliaries broadly into two groups, major and minor, in an attempt to capture this difference. The major auxiliaries are those that combine with ten or more CVSs. The most prolific of the major auxiliaries is 'hands' which has been recorded with over ninety CVSs. Typically the substitution of different major auxiliaries with a given CVS results in fairly predictable meaning changes, as shown in 4-40 above. The minor auxiliaries, on the other hand, are those that have been recorded in combination with less than six CVSs (none happen to combine with between six and ten), and are in some cases these combinations are characterised by semantic opacity. Although a quite arbitrary distinction, this provides a general guide to the number of CVSs a particular auxiliary made be expected to combine with, and further gives a general indication of the predictability of the meaning of an auxiliary-CVS combination.

The division of the auxiliary system, in terms of these three criteria; simple/complex, 'transitive'/'intransitive' and major/minor, is set out in Table 4-1 below.

Ngan'gityemerri Auxiliary Categorisation		
Simple	-Intransitive	<u>Major</u> Sit Lie Stand Go Go*
	-Transitive	<u>Minor</u> Say/Do Arrive Hang See Take
Complex	-Transitive	Hands Feet Mouth Poke Slash Bash Shove Heat
	-Detransitivised	Suck Pull Snatch Say/Do oneself See oneself Heat oneself Bash oneself Feet oneself

Table 4-1

To best facilitate their discussion I divide up the 31 auxiliaries into six groups. The simple auxiliary verbs are discussed in 4.4. I treat their simple verb function in 4.4.1, and their complex verb function in 4.4.2. The discussion of their simple function is further broken down into three subsections, 4.4.1.1 to 4.4.1.3, which respectively deal with, the major intransitives 'sit', 'lie', 'stand', 'go' and 'go*', the minor intransitives 'say', 'arrive' and 'hang', and the minor transitives 'see' and 'take'.

The complex auxiliary verbs are discussed in 4.5. The 'transitive' complex auxiliaries are dealt with in 4.5.1 and the 'detransitivised' complex auxiliaries in 4.5.2. Among the 'transitive' complex auxiliaries there is a core group of eight major auxiliaries. Three of these, 'hands', 'feet' and 'mouth',

are bodypart instrumental. They are dealt with in section 4.5.1.1. Another group of three, 'poke', 'slash' and 'bash', are primarily concerned with the shape, contact and movement of instruments. These are addressed in section 4.5.1.2. The remaining two major transitive auxiliaries, 'shove' and 'heat', are dealt with in 4.5.1.3. Subsection 4.5.1.4 deals with the three minor transitive auxiliaries; 'suck', 'pull' and 'snatch'.

The 'detransitivised' complex auxiliaries, discussed in 4.5.2, are all patently reflexes of other (mostly transitive) auxiliaries, but are formally intransitive, being unable to crossreference their thematic undergoers as direct objects. Detransitivised verbs have only a single syntactic argument role, and are generally interpreted as reflexives involving the subjects manipulation of his own body. The five major and five minor 'detransitivised' auxiliaries are discussed in 4.5.2.

4.4 Simple Auxiliaries

4.4.1 The Simple Function of Simple Auxiliaries

4.4.1.1 The Major 'Intransitives'

There are five 'intransitive' auxiliaries that form simple intransitive verbs; 'sit', 'lie', 'stand', 'go' and 'go*'. These auxiliaries are all 'major', in the sense defined in 4.3, combining productively with a large number of CVSs. In structural terms, these five auxiliaries fill three main roles; functioning as simple intransitive verbs, functioning as the auxiliaries in low-transitive complex verbs, and functioning as serialised auxiliaries marking aspect. The serialised aspect marking function of the 'intransitive' auxiliaries has been discussed in 3.4.1, and is not treated further in this section. Their complex verb function is dealt with in 4.4.2. Here we look at their simple verb function.

Functioning as simple verbs, the five major 'intransitive' auxiliaries can be divided into two groups. The postural auxiliaries 'sit', 'lie' and 'stand', are stative, having an inherently imperfective aspect. That is, any activity described with one of these stative auxiliaries must be viewed as having internal temporal constituency. As a consequence of this, the postural auxiliaries cannot, in their simple function, be inflected for the Ngan'giwumirri tense/aspect/mood category that I have labelled 'Perfective'. Inflection for this category entails the viewing of an event as strictly punctual, an interpretation this is incompatible with the imperfectivity inherent in the stative auxiliaries. Thus in 4-41 a) - c) below, 'sit' can be inflected for the categories 'present', 'irrealis' and 'past imperfective'. However an attempt to inflect inherently imperfective 'sit' for the 'perfective' category, in 4-41 d), is unacceptable.

- 4-41 a) **ngirim** b) **ngi -pe** c) **ngini -tye**
 1sg Sit 1sg Sit-Fut 1sg Sit-Past
 SU Pres SU Irr SU Plmp
 I am sitting. I'll be sitting. I was sitting.

but not;

- d) ***ngiriny**
 1sg Sit
 SU Perf

Not only must the situation described by an 'intransitive' simple verb be understood aspectually to continue for a period of time, but the particular posture marked by the auxiliary must also be understood to remain unchanged throughout this period. Stative verbs then cannot be used to mark motion or change-of-posture. The dynamic correspondences of the stative postural verbs are formulated with dynamic 'go' (discussed below). Compare the simple stative 'sit' verb in 4-42 with the dynamic complex verb employing 'go' in 4-43 below.

- 4-42 **kinyi ngi-pe**
 here 1sgSit-Fut
 SU Irr
 I'll sit here (and be sitting here).

- 4-43 **kinyi ngani-wap-pe**
 here 1sgGo-sit-Fut
 SU Irr
 I'll sit down here.

The motional auxiliaries 'go' and 'go*', forming the second group, are dynamic and may be used to describe activities with either imperfective or punctual aspect. Consequently 'go' and 'go*' can avail themselves of all four Ngan'giwumirri auxiliary inflectional categories. This is demonstrated for 'go' in 4-44.

- 4-44 a) **ngaganim** b) **ngani -pe**
 1sgGo 1sgGo-Fut
 SU Pres SU Irr
 I'm going. I'll go / be going.
- c) **ngagadi-tye** d) **ngaganiny**
 1sgGo -Past 1sgGo
 SU Plmp SU Perf
 I was going along. I went.

these verbs is essentially restricted to reference to higher animates, particularly humans, for it is only with these subjects that the capacity to contrast postures(/motion) has any real discourse significance. 'Sit' then, is only used literally to describe the posture of the kind of higher animates having legs which they can fold up, resting their behinds on the ground, keeping their torso upright. For humans the least marked interpretation would be sitting in a cross-legged fashion, though squatting, kneeling or any stance between lying and standing can be described as 'sitting'. 'Lying' and 'standing' can, I think, be taken as understood. The examples below then, draw attention to the literal stance of the subject.

- 4-49 **ngayi nginge-tye deminy -ngi-du pat meny -ngiti**
1sg 1sgLie -Past 3sgHands-1sg-touch arise 3sgSay -1sg
PRO SU Plmp SU Perf DO SU Perf IO
 I was lying down (asleep) when she woke me, 'Get up !' she told me.

- 4-50 **yini-pefi-tye peyipa nyinyi yini-wurrkama-tye**
2sgSit-DUR-Past paper 2sg 2sgSit-work -Past
SU Plmp PRO SU Plmp
 You sat around a while working on your papers.

- 4-51 **mityity wagarri pey-endi widdibemgu**
white two there-EMPH 3plStand dl
woman SU Pres SU
 There were two women (airport metal-detector operators) standing
yerr-tyagani-merrendi gentyermigi-baty knife
Tr-what -LEST 2plHands dl-hold
cl SU Irr SU
 there, lest the two of you might have a knife.

In their copula functions 'sit', 'lie', 'stand' 'go' and 'go*' are used to encode the existence/location of, or ascribe attributes to their subjects. 'Existential' clauses are simply statements about the existence of entities with respect to space and time. 'Ascriptive' clauses employ the simple intransitive auxiliaries to ascribe certain characteristics to their subjects. These characteristics can be expressed as either adjectives or through attributive NP's. As copulas 'sit', 'lie', 'stand', 'go' and 'go*' are used for both inanimate and animate subjects, necessitating a rather broader view of each posture. The discussion of posture below is exemplified with existential clauses.

In addition to animates that are in an obviously prone/supine posture, any inanimate that is not raised off the ground, and is conceived of

as having significantly greater breadth than height, is said to 'lie' rather than 'stand'. Thus, rivers, billabongs, roads, canoes, hills, felled trees, rocks etc. all 'lie'.

- 4-52 **kanbi kide yu yu kinyi gibem**
didjeridu where yes yes here 3sgLie
 SUPres

Where's the didjeridu ?, oh yes it's (lying) here.

- 4-53 **nelen wunu-pefi wibem malfiyin nem nintyi wunggume yenim**
road there -THITH 3sgLie placename 3sg knee one 3sgGo
 SU Pres PRO SU Pres

Where that road to Malfiyin is (lies), as you go round that corner.....

- 4-54 **ya eferri gibem-nyine meny -nin**
hey bluetongue 3sgLie-FOC 3sgSay-1dlinc
lizard SU Pres SU Perf IO
 'Hey there's a bluetongue (lying) here' he told us.

Anything that is either raised above the ground on legs, or leg-like supports, or is conceived of as having significantly greater height than breadth, is said to 'stand'. Of these two criteria leg-having is predominant. Both centipedes and cars, for instance, despite their height to breadth ratios, 'stand' by virtue of their having 'legs'. Other inanimates that 'stand' include buildings (and by extension, cities), trees, fridges, antbeds, billys and jerrycans.

- 4-55 **ngambinigerri-tye ngan-mawuny yerr-minbadi girribem**
1plincGo -Past LOC -ironwood Tr -big 3sgStand*
SU Pimp REL cl SU Pres
 We went to where that big ironwood tree is (stands).

- 4-56 **light ngimbinyirri dede town-mirri wirribem start-mem-pagu**
1dlinc See country -EMPH 3sgStand -3sgDo-HITH
SU Perf SU Pres SU Pres
 (From the plane) we saw the lights, from where the town starts
 (ie. the outskirts of Melbourne).

- 4-57 **car nem-nyine girribem**
3sg -FOC 3sgStand
PRO SU Pres
 There's his car (standing) there now.

- 4-58 **room spare one widdibenggu**
3plStand dl
SU Pres
 Have you got two spare rooms ?

interpretation of movement about the place, without any implication that the activity in question is necessarily in progress at all times. Given the requirement of unchanged stance, stative verbs describe temporary states whereas dynamic simple verbs have an association with semi-permanent states through their habitual and iterative readings. This opposition between transitory and permanent perspectives provided by the distinction between stative and dynamic simple verbs, is also exploited in their copula functions. Examples 4-61 and 4-62 above both have 'sit' marking transient existential states. Compare them with the permanent perspective conveyed by the dynamic simple verb 'go' in existential function, in 4-63.

- 4-63 **yu mem-nimbi mipurr gagu wadditye**
 yes 3sgDo-CAUS men animal 3plGo-Past
 SU Pres generic SU PImp
 = in the beginning
 Long ago men were totemic animals.

Note that the copula use of simple verbs with inanimate subjects does not exploit this opposition between dynamic/permanent, on the one hand, and stative/transient on the other. This of course is unsurprising as the capacity for inanimates to undertake dynamic activity is typically low. All existential statements with inanimate subjects select the stative 'sit', 'lie' and 'stand' simple verbs, taking the particular verb that its postural configuration determines.

Ascriptive clauses, attributing particular characteristics to their subject, are exemplified below. In 4-64 and 4-65 this characteristic is attributed to inanimate subjects through an adjectival expression, in 4-66 through an attributive NP. Inanimate subjects do not take the dynamic simple auxiliaries in this function. They only employ the stative verbs, and the choice between 'sit', 'lie' and 'stand' is made in terms of the criteria set out above.

- 4-64 **afirr bubungini winge -tye**
 corpse decomposed 3sgLie -Past
 SU PImp
 The corpse was decomposed.
- 4-65 **mudiga wasangari wirribem-nyine**
 car clean 3sgStand-FOC
 SU Pres
 The car's clean now.

- 4-66 **nginyirri yerr-wunu petrol nem halfway-mirri wirringe-tye**
 1sgSee Tr -that 3sgM -EMPH 3sgStand-Past
 SU Perf cl PRO SU PImp
 I noticed that that petrol thing (gauge) was halfway down.

In ascribing attributes to animate subjects, the choice between stative and dynamic simple verbs is also exploited to distinguish transitory versus permanent perspectives. This can be seen in 4-67 and 4-68 in which the same adjectival characteristics are attributed to both stative and dynamic simple verbs respectively.

- 4-67 a) **lamurity dim**
 happy 3sgSit
 SU Pres
 She's happy (at the moment).

- b) **lamurity yenim**
 happy 3sgGo
 SU Pres
 She's happy (by nature).

- 4-68 a) **felfi dim**
 alone 3sgSit
 SU Pres
 He's alone.

- b) **felfi yedi -tye fenggiderrri**
 alone 3sgGo-Past long time
 SU PImp
 He lived alone for a long time.

The attribution to subjects of characteristics can be expressed, not only with adjectives, but with attributive NP's. In 4-69 the attributive NP is a simple nominal, in 4-70 it is a noun + modifier, and in 4-71 it is a nominalised clause (cf. 5.3.3).

- 4-69 **merretmen -nyine wannunggu**
 person of -FOC 3plGo dl
 married status SU Pres SU
 Those two are married now.

- 4-70 **depi kinyi ngagadi-tye ngatya ngayi peanut dingim -pup-tye -yedi**
 NgK head here 1sgGo -Past father 1sg 3sgMouth-rub -Past-3sgGo
 SU PImp PRO SU PImp =plant SU PImp
 When I was this high (accompanied by hand gesture) my father used to plant peanuts.

- 4-71 **ngenike nyinyi wur-ngani -ngagurr-detl -gimi yenim**
 NgK sister 2sg Fem-KIND -1plex -SAME-SEMBL 3sgGo
 PRO cl PRO SU Pres
 Your sister is a woman just like us (behaves like a
 Ngan'gikurunggurr woman).

4.4.1.2 The Minor 'Intransitives'

This section looks at the simple function of the minor 'intransitive' auxiliaries 'say', 'arrive' and 'hang'.

In its simple function the 'Say' auxiliary means "say", "do" or "think". It takes only higher animate subjects, in fact in addition to humans, it has only ever been recorded with ghosts or ancestral beings as subject. I refer to the auxiliary, as a morphological category, as 'say', but in the examples gloss it variously as 'Say', 'Think' or 'Do'. While speech and deed are contextually, not formally, distinguished from each other, they differ from 'think' in their capacity to cross-reference indirect objects. That is, speech and deed can be directed towards a goal NP, but thought cannot. This is apparent in the examples given below, where 'Say' refers to speech in 4-72, thought in 4-73, and deed in 4-74.

- 4-72 **ala ngayi wagarri wirrminy-ngeterr funggulu ngamban-nime-Ø**
 mother 1sg two 3pl Say -1sg/dl honey 1dl Go -pl-HORT
 PRO SU Perf IO/SU SU Irr SU
 My two mothers said to me 'Lets go for sugarbag'.

- 4-73 **ngayi-nyine-pe ngarre-ne-madiwirri ne ngayi ngiminy**
 1sg -FOC -Fut 1dlexGo -play SUPP 1sg 1sgThink
 PRO SU Irr PRO SU Perf
 Maybe I could play with him now, I thought to myself.

- 4-74 **ngayi-ne yumu-ngiti were**
 1sg -PURP 2sgDo-1sg brother
 PRO SU Irr IO
 Do it for my sake, brother !

Being formally indistinguished, the speech and deed interpretations of 'say' are frequently equally applicable, as indicated by the glosses in 4-75.

- 4-75 **wananggal ityi meny-bi**
 doctor what 3sgSay/Do-2sg
 SU Perf IO
 What did the doctor say to you/do to you.

The minor simple verb 'arrive', means to reach, or come upon, some goal, usually a place or person. As noted for 'Go' and 'Say', 'Arrive' allows

for the cross-referencing of a human goal with indirect object bound pronominals on the verb. This is shown in 4-77 below.

- 4-76 **kultyinimbi werrmen'geny**
yesterday 3plArrive
SU Perf
 They arrived yesterday.

- 4-77 **yibe ngara -fi -pal -pe ngemen'ge-nbi-pe**
later 1sgPokeDtr-Mp-break-Fut 1sgArrive -2sg -Fut
SU Irr =return SU Irr IO
 I'll return later and come to you.

'Hang' differs from 'sit', 'lie' and 'stand' in that, in terms of its productivity in combining with CVs, it is quite minor. In other respects though 'hang' forms a natural class with these three auxiliaries; sharing their static, as opposed to dynamic, interpretation; being in aspectual terms, inherently imperfective; and sharing their capacity to be serialised to the verb as an aspectual operator (cf. 3.4.5); and, as evident in 4-79, being used in existential function.

'Hang' essentially describes animates being raised off the ground, supported in that position by something other than a part of themselves. The vast majority of examples of 'hang' in my text database refer to birds perched in trees. Less frequent examples include humans perched in trees to escape floodwaters, or for hunting purposes, and one example of serialised 'hang' used to describe a clown walking about on stilts at a fair. I have recorded no examples of inanimate objects sitting in trees, described with 'hang'. This may be because they are specifically precluded, or simply due to the increased likelihood that they be treated as the patients of transitive verbs, rather than the subjects of 'hang'.

- 4-78 **darrwa wirrtyinge-tye egeningge-ne**
platform 3plHang -Past magpie -PURP
SU PImp goose
 They were 'hanging' on a hunting platform (in the tree),
 (waiting) for geese.

- 4-79 **kudede wani -nimbi ewerrbalarr wirrtiyim-pe**
wet 3sgGo-CAUS birds 3plHang -Fut
season SU Irr SU Irr
 When the wet comes, (these trees) will be full of birds.

4.4.1.3 The Minor 'Transitive' Auxiliaries

Only two 'transitive' auxiliaries, 'see' and 'take', function as simple verbs and both of these are minor (in terms of their productivity in combining with CVSs in their complex function). Two other 'transitive' auxiliaries, 'poke' and 'slash' have been recorded in the absence of a CVS, but I have chosen to analyse these as complex rather than simple. (Reasons for this decision are set out in 4.4.4)

As a simple verb 'see' has the straightforward sense of visual perception. It takes agent subjects and its undergoers (in the sense of Foley and Van Valin:1984) are cross-referenced as direct objects.

- 4-80 **ngityirr minbe-nyine-tye nginnyirrigu kuru wu -wurru**
ground Neg -FOC -Past 1pl See dl rain cloud-UNSATIS
SU Irr SU

We (dl) were unable to see the ground (from the plane) because of the rainclouds.

- 4-81 **ngeriny -pal -pefi dinyirri-ngi**
1sgHands-break-COTEMP 3sg See -1sg
SU Perf SU Perf DO
 Just as I broke it, he saw me.

- 4-82 **yerr-kinyi signboard yinyirri-Ø law kinyi**
NgK Tr -this 2sg See -IMP this
cl SU Irr
 Look at this (Sacred Sites Authority) signboard ! This isn't the
minde ngagurr-nimbi ngerrim -wurity law nagurr-ninggi
Neg 1plex -CAUS 1plHands-make 2pl -AGENT
PRO SU Perf PRO
 law that we (ex) made, it's your (whitefellas') law.

In Ngan'gityemerri, as in English, the use of the verb 'see' with human objects carries a strong implication of, not merely visual perception of an object, but of social interaction with that object. This is obvious in 4-83, often used as an expression of farewell.

- 4-83 **yibe nginyirri-nyi-pe**
later 1sg See -2sg-Fut
SU Irr DO
 I'll see you later !

The other transitive simple verb, 'take', also takes agent subjects and cross-references its undergoers as direct objects. 'Take' has the sense of 'carrying' with inanimate objects (4-84), and 'accompanying' with higher animate objects (4-85 to 4-87). Being unmarked for direction, the distinction

between 'bring' and 'take', where relevant, being marked through addition of the HITHer and THITHer enclitics.

- 4-84 **ngayi-nyine ngawam-pe**
 1sg -FOC 1sgTake -Fut
 PRO SU Irr
 I'll take it then.

- 4-85 **yentyi -ngi-tye dede mendi wudum -ngi-mi-tyuk**
 3sgTake-1sg-Past camp close 3sgShove-1sg-val-send
 SU PImp DO SU Perf DO inc
 He took me up close to camp, then sent me on from there.

- 4-86 **warrgantyi-tye Fannie Bay exercise yard-nide**
 3pl Take -Past -LOC
 SU PImp
 They took him to the exercise yard at Fannie Bay jail.

- 4-87 **ala nem meny-nge, abayi kinyi ngagantyi-tye, piwari nem Ilyere**
 mother 3sg 3sgSay-3sgF little here 1sgTake -Past name 3sgM name
 PRO SU Perf IO brother SU PImp PRO
 He said to his mother 'I've brought my little brother, his name's Ilyere'.

4.4.2 Complex Function of the 'Simple' Auxiliaries

The role of the simple 'intransitive' auxiliaries in complex verbs is broadly consistent with their function as simple verbs. The posture/motion auxiliaries 'sit', 'lie', 'stand', 'go', 'go*' and also 'hang', primarily categorise the posture/motion of the subject, and additionally encode the aspectual distinction between stative and dynamic activity. As noted in 4.1.1.2, 'intransitive' auxiliaries combine only with neutral CVSs, a class comprised of both monovalent and low-transitive bivalent CVSs. These neutral CVSs are also broadly divisible into two groups; those having an inherently dynamic character, and those that do not. Dynamic CVSs are those describing a change of location (eg. -**pap** 'climb'), change of state (eg. -**bubu** 'sleepy'), or change of posture (eg. -**wap** 'sit').

In general these dynamic CVSs are restricted to combining with the dynamic motion auxiliaries, 'go' and 'go*'. The resultant complex verbs are aspectually perfective, that is, they are presented as single whole events without regard for their internal temporal constituency.

- 4-88 **ninymunggurr wanniny-pap**
 escarpment 3pl Go climb
 SU Perf
 They climbed up onto the escarpment.

- 4-89 **yenim -bubu -nyine**
 3sg Go -sleepy-FOC
 SU Pres
 He's become sleepy.

- 4-90 **ngannunyu-wap belt ngirrmenygi -wurr**
 1plex Go dl -sit seatbelt 1plexHandsDtr dl -enter
 SU Perf SU SU Perf SU
 We sat down and fastened our seatbelts.

The stative postural auxiliaries do not productively combine with these dynamic CVSs. However the change of location CVS **-pap**, and the change of state CVS **-bubu**, in 4-88 and 4-89 above, have both been recorded with the stative auxiliary 'sit'. This combination of stative auxiliary with dynamic CVS gives a 'resultant state' reading. That is, it allows staticity and dynamicity to co-exist by construing the static state as the result of dynamic activity - implying that the subject is in the stative posture (described by the auxiliary) that was achieved through the dynamic change-of-location activity (described by the CVS). Thus, compare 4-88 and 4-89 above with 4-91 and 4-92 below.

- 4-91 **winni -pappup-tye**
 3plSit -climb -Past
 SU Plmp redup
 They were sitting up on top (having climbed up).

- 4-92 **ngirim-bubu -nyine**
 1sgSit -sleepy-FOC
 SU Pres
 I'm sleepy now (having become sleepy).

The combination of a stative auxiliary with a change-of-posture CVS does not lend itself to a resultant-state reading. Attempts to combine 'sit' auxiliary with the change-of-posture CVS **-wap** have been rejected outright.

- 4-93 ***ngirim-wap**
 1sgSit -sit
 SU Pres
 I'm sitting (having sat down).

The second identifiable group of neutral CVSs are those that do not have any inherently dynamic character that restricts their capacity to combine with stative auxiliaries. Rather, CVSs from this unmarked set freely combine with both stative and dynamic auxiliaries, forming low-

transitive complex verbs. Complex verbs formed through combination of these unmarked neutral CVSs with stative auxiliaries have an aspectually imperfective interpretation. They are understood to mark the activity as taking place within the one continuous time span throughout which the subject's posture remains unchanged.

- 4-94 **ngini -fifi -tye peke**
1sg Sit-smoke-Past tobacco
SU Plmp
 I was smoking a cigarette.

- 4-95 **werrintyinim-wulil-tye**
3pl Lie -swim-Past
SU Plmp
 They were swimming.

- 4-96 **wirribem-ngiti-falmuy**
3sg Stand -1sg -stare
SU Pres IO
 He's staring at me.

- 4-97 **asyinme wirrtiyibem-kayki**
sulphur-crested 3pl Hang -call
cockatoo SU Pres redup
 Sulphur-crested cockatoos are crying out (hanging in the trees).

The postural classification provided by the stative auxiliaries in their complex function is consistent with the comments made about their simple function in 4.2.1. 'Sit', 'lie', 'stand' and 'hang' all overtly describe the subject's specific posture, though as is the case in the serialised and existential functions of the simple intransitives, 'sit' is generally the unmarked choice for the stative auxiliaries in complex function, having a primarily aspectual, rather than posture classifying, role.

Not all the CVSs in this second unmarked set necessarily have a durative aspectual nature. Some, like **-kilik/-kuluk(K)** '-cough', are inherently punctual and must be marked as iterative, through verbroot reduplication, to be amenable to imperfective interpretation.

- 4-98 **ngini -kikilik-tye**
1sg Sit -cough -Past
SU Plmp redup
 I was coughing.

The combination of unreduplicated punctual CVSs of this group with stative auxiliaries is not a favoured construction. It is however possible and results in a semulfactive reading (ie. one instance only of something typically iterative).

- 4-99 **ngiriny-kilik**
 1sg Sit -cough
 SU Perf
 I gave a cough.

This example raises a major difference between the simple and complex functions of the stative auxiliaries. Recall that the inherent imperfectivity of the stative auxiliaries in their simple function prevented their inflection for the auxiliary tense/aspect/mood category labelled 'Perfective'. Thus I noted in 4-41 d) that the perfective inflection of the 'sit' auxiliary cannot stand meaningfully as a simple verb (eg. *ngiriny). Contrastively, in their complex function the stative auxiliaries can be inflected for either imperfective or perfective tense/aspect/mood categories. Thus a durative activity like smoking can either be described as an imperfective event (4-100 a)), or be construed as a single perfective event without regard to its internal temporal make-up (4-100 b)).

- 4-100 a) **ngini -fifi -tye**
 1sgSit-smoke-Past
 SU Plmp
 I was smoking.
- b) **ngiriny-fifi**
 1sgSit -smoke
 SU Perf
 I had a smoke.

And a punctual activity like drinking (or coughing) can either be described as an imperfective event (4-101 a)), which will require reduplication of the verb root, or be given as a single perfective event (4-101 b)).

- 4-101 a) **ti nginni -kukuduk-tye**
 tea 1plexSit- drink -Past
 SU Plmp redup
 We (plex) were drinking tea.
- b) **ti ngirriny-kuduk**
 tea 1plexSit -drink
 SU Perf
 We drank tea.

This second set of neutral CVSs that are not specifically dynamic, can also form complex verbs in combination with the dynamic 'go' and 'go*' auxiliaries. These mark action as performed while moving about from place to place, or activity that is renewed at different places and on subsequent occasions.

- 4-102 **waddi -kayki-tye**
 3pl Go -call -Past
 SU Plmp redup
 They called out (while going along).
 or They called out (at different places they went to).

It is through this association with renewed activity, in contrast to the single unchanged timespan associated with stative auxiliary selection, that dynamic auxiliaries combined with these neutral CVSs can convey habitual activity. This can best be demonstrated by pairing the same CVSs with both stative and dynamic 'intransitive' auxiliaries.

- 4-103 a) **ngirim-fifi**
 1sgSit -smoke
 SU Pres
 I'm smoking.
- b) **ngaganim-fifi**
 1sg Go -smoke
 SU Pres
 I smoke (as a habit).
- 4-104 a) **ngirim -kukuduk kuru**
 1sgSit -drink beer
 SU Pres redup
 I'm drinking beer.
- b) **minbe ngaganim-kuduk kuru lenggirr**
 Neg 1sg Go -drink water bad
 SU Pres generic
 I don't drink beer.
- 4-105 a) **ngambaty dini -pappup-kana-tye**
 NgK tide 3sgSit -climb -FOC -Past
 SU Plmp redup
 The tide was high then.
 (lit: ..was sitting up having climbed up. (resultant state)).
- b) **ngambaty wani -pappup-ngini**
 NgK tide 3sg Go-climb -Fut
 SU Irr redup
 When the tide comes up..(as it habitually does)...

I will now turn my attention to the complex function of the remaining minor simple auxiliaries, 'Say', 'Arrive', 'See' and 'Take'.

As noted in 3.1.1 the complex function of the 'say' auxiliary is quite anomalous in having the auxiliary ordered after the verbroot, rather than in the regular verb-initial position. This irregular ordering is exemplified in 4-106 and 4-107. Further, the CVS no longer operates as a single functional unit; incorporated bodyparts, for instance, do not shift to the pre-auxiliary position along with the verb root, but remain in the post-auxiliary position, as shown in 4-108 and 4-109.

- 4-106 **ngambanam-palat mumba winy -meny -nin Tyarambu**
1dlinc Feet -pass road whistle-3sgDo -1dlinc name
SU Perf SU Perf IO
 As we went past the turnoff, Tyarambu whistled at us.

- 4-107 **kukuk nuwurr ngirrkik -ngumum**
wait a little breathless-1sgDo
while SU Pres
 Hang on a minute ! I'm out of breath.

- 4-108 **afunggarri buy -mem -derri-wirribem**
brolga white-3sgDo-back -3sgStand
SUPres SU Pres
 There's a brolga standing out whitely on the river bank.

- 4-109 **minbe tyip -yumu-ngiti-tyeri**
Neg dark-2sgDo -1sg -ear
SU Irr IO
 Don't you forget me !

'Arrive' has a very minor complex function, having been recorded in combination with only a single CVS **-tasat** 'emerge' in Ngan'giwumirri. In Ngan'gikurunggurr 'arrive' has no complex function.

- 4-110 **mirri men'gen -tasat -nyine**
sun 3sgArrive-emerge-FOC
SU Pres
 The sun's coming out now.

- 4-111 **nintyinintyi-nimbi ngermen'gen-tasat palat**
scrub -SOURCE 1plexArrive -emerge plain
SU Perf
 From the scrub we emerged onto the open plain.

Here the semantics of 'Arrive' appear to be compatible with those associated with its simple function.

The 'See' auxiliary has been recorded forming complex verbs with the four CVSs, *-kerrety* 'grasp', *-yilil* 'recognise', *-tisit* 'be jealous of' and *-fiway* 'be unable to', shown in 4-112 to 4-115 below. 'See', consistent with its simple function, is selected in complex verbs where activity is achieved through visual perception.

- 4-112 **wetimbi nginyirrini-Ø -kerrety-tye**
good 1sg See -3sg-grasp -Past
SU Plmp DO
 It's OK, I was keeping an eye on him.

- 4-113 **ngayi yinyinggin-ngi-yilil**
1sg 2sg See -1sg-recognise
PRO SU Pres DO
 Do you recognise me ?

- 4-114 **dinyinggin-nyi-tisit**
3sg See -2sg-be jealous
SU Pres DO
 She's jealous of you.

- 4-115 **wirnyinggin-ngi-fiway**
NgK 3pl See -1sg -be unable
SU Perf DO
 They were unable to see me.

The 'take' auxiliary forms complex verbs with about eight CVSs. In some of these verbs 'take' maintains its simple verb sense of 'taking' or 'bearing' objects in the hand, or leading/accompanying people.

- 4-116 **yentyi -Ø -lali -tye**
3sgTake-3sg-around-Past
SU PlmpDO
 He was carrying it around

- 4-117 **ngani -kide-nawa nagatyin-fel**
NgK KIND-how-INDEF 3sgTake -bounce
SU Perf =lift
 How on earth can he lift that !

- 4-118 **wawam -nin -firr -ngini**
NgK 3sgTake-1plinc-foot-Fut
SU Irr DO =lead
 He'll lead us out.

'Take' has however additionally been recorded with the verb root **-si**, meaning 'to cut', and with two verb roots **-genket** 'break in two' and **-melp** 'flatten'. In these latter combinations it describes the 'breaking' or 'flattening' as performed by sitting on the object. In this limited respect 'take' can be said to function as an instrumental bodypart auxiliary, akin to 'hands', 'feet' and 'mouth', but in this case marking activity achieved through the instrumental use of the buttocks.

4-119 **ngagatyng-ngindi-si**
1sgTake -1sg -cut
SU Perf IO
 I cut myself.

4-120 **yenin-derri-wap yetyin -Ø-melp**
3sgGo-back -sit 3sgTake-3sg-flatten
SU Perf SU Perf DO
 She sat down and squashed it.

4-121 **yawul yagany -gen-ket**
spear 2sgTake-mid-cut
SU Perf DP
 You've broken the spear (by sitting on it).

4.5 Complex Auxiliaries

4.5.1 The 'Transitive' Complex Auxiliaries

The role of the major 'transitive' auxiliaries is to classify the verb with respect to the instrumental means of execution. The principles underlying this instrumental classification can be revealed by asking three questions about the nature of the activity.

- 4- Is the activity effected through the use of a bodypart, an implement, or fire?
- 2- If the body, is it the hands, the feet or the mouth ?
- 3- If an implement;

-what is its shape ?	-long and cylindrical
	-long and flat
	-lumpy and rounded
-what sort of contact does it make ?	
	-point
	-edge
	-blunt faced
-what is its trajectory ?	-arcing
	-linear

primary function of grasping and holding. Consequently, 'hands' does not combine with verb roots like 'hit', 'flick', 'slap', 'prod' and 'clap' etc. that, even though they can be specified as being performed with the hands, are verbs that denote momentary impact and consequent propulsion, without the object being held. This grasping, containing function of hands is shown in 4-125, which contrasts the combination of 'hands' and 'shove' with the verb root **-didi** 'push'.

- 4-125 a) **ngeriny -Ø -didi**
1sgHands-3sg-push
SU Perf DO
 I pushed him along (holding onto him)
- b) **ngudum-Ø -didi**
1sgShove-3sg-push
SU Perf DO
 I gave him a shove.

In 4-125 b) 'shove#didi' implies impact and propulsion, whereas the grasping component underlying the selection of the 'hands' auxiliary in 4-125 a) is shown by the resultant interpretation of the object being pushed along whilst being maintained in the grasp of the agent.

Further examples exemplifying this notion of 'holding within the hands' are set out below.

- 4-126 **ngemi -ne-tyerr -baty-pe**
1sgHands-3sg-mouth-hold-Fut
SU Irr IO = lead
 I'll lead him along.
- 4-127 **werrmegu -me -kerrety-tye**
3nsHandsdl-hands-grip -Past
SU PImpSU
 They (dl) were holding hands.
- 4-128 **yemi -ngiti-tada-pagu**
2sgHands-1sg -peel-HITH
SU Irr IO
 Peel (this orange) for me !
- 4-129 **werrfe deminy -wurrirr**
mid- 3sgHands-move
distant SU Perf
 He moved it over there.

- 4-130 **minbe-tye ngemi -kerrety**
Neg -Past 1sgHands-grip
SU Irr
 I couldn't hold on.

Among the verbs that are formulated with the 'hands' auxiliary, there is a subset of verbs that have 3rd singular, but non-recoverable, agents and cross-reference their patients as direct objects. Consider the examples below.

- 4-131 **minmipi demim -ngi-yiri**
funnybone 3sgHands-1sg-numb
SU Pres DO
 My funnybone is numb.
 (lit: It is making my funnybone numb.)
- 4-132 **kikilik deminy -ngi-tip**
cough/flu 3sgHands-1sg-grab
SU Perf DO
 I had the 'flu.
 (The flu had grabbed me. ?)
- 4-133 **deminy -ngi-tyerr -tati**
3sgHands-1sg-mouth-open
SU Perf DO redup
 I yawned.
 (lit: It repeatedly opened me at the mouth.)
- 4-134 **demim -ngi-ge -bul**
3sgHands-1sg-belly-heat
SU Pres DO
 I'm getting angry.
 (lit: It is heating me in the belly.)

The obvious question to ask of these impersonal verbs is 'why are they constructed with the 'hands' auxiliary?'. Certainly, despite the above noted, and independently establishable, psychological reality of the semantic components of auxiliaries, there is no compelling evidence to suggest that Ngan'gityemerri speakers view verbs such as 'to be (made) angry' in terms of any literal notion of 'grasping hands'. While speakers will readily invoke the instrumental use of hands and feet in explaining the difference between pairs of verbs such as given in 4-122 above, they make no recourse to 'hands' imagery in explaining the selection of the 'hands' auxiliary in impersonal verbs. However, for at least some impersonal verbs we can establish equivalent active verbs with clearly identifiable subjects. Compare, for instance, 4-135 below with 4-132 above.

- 4-135 **wa-mumu-ninggi deminy -ngi-tip**
M -taboo -INSTR 3sgHands-1sg-grab
cl SU Perf DO
 The policeman grabbed me.

Here the instrumental use that the policeman makes of his hands in grabbing me, is unquestionably compatible with the 'grasping hands' notion that is central to the 'hands' auxiliary. That 'grabbing' is primarily viewed as a 'hands'-type activity, would then appear to be the basis of the selection of the 'hands' auxiliary even in examples where metaphorical 'grabbing' is effected by non-animate, or indeed non-specified 'agents'. Having the 'flu', for instance, is viewed metaphorically as being 'grabbed by the flu' in the sort of way that one is 'grabbed by a person'. Auxiliary selection in 'agentless' impersonal verbs thus appears to be predicated on the auxiliary found in the active verb to which it is metaphorically linked.

Impersonal verbs have been found to select the 'hands', 'poke', 'bash' and 'feet' auxiliaries, and are listed as subsets in the respective discussions of each auxiliary. While not all examples can be linked to active equivalent verbs in contemporary Ngan'gityemerri, I would presume that auxiliary selection in all impersonal verbs was originally based on metaphorical extension from an active verb, even where the equivalent active verb has since undergone change.

'Feet'

Verbal classification by the 'feet' auxiliary marks verbs as performed specifically through activity of the agent's feet. Several verbs of motion select 'feet', as shown in the examples below.

- 4-136 **minbe-merrendi gantyana-felfil-ninde**
Neg -PROHIB 2sgFeet -jump-1dlinc
SU Irr redup IMPL
 You shouldn't run away on us !

- 4-137 **ngana-nyi-garri-pat-pe**
1sgFeet-2sg-leg-catch-Fut
SU Irr DO
 (Go on ahead) I'll catch you up !

- 4-138 **dagam-madi-purity dirr-kuru**
3sgFeet-chest-slip teeth-water
SU Perf = riverbank
 He slipped down the riverbank.

- 4-139 **tyepe dagam-fili**
just 3sgFeet-wander
SU Pres
 He's just wandered off.

However, the majority of 'feet' verbs focus more specifically on the instrumental transitive use of feet, and as such can be contrasted with 'hands' effected activities. In 4-122 above we have already exemplified this kind of contrast, and further examples can be found below.

- 4-140 a) **yanna -tyek defirr**
2plFeet-erase footprints
SU Irr
 (Be careful to) erase your footprints (by smudging your feet sideways at each step).
- b) **yemi -tyek**
2sgHands-erase
SU Irr
 Wipe it off (with your hands).
- 4-141 a) **nganam-tyerr -dum**
1sgFeet -mouth-bury
SU Perf
 I drowned it (by holding it underwater with my feet).
- b) **ngeriny -tyerr -dum**
1sgHands-mouth-bury
SU Perf
 I drowned it (by holding it underwater with my hands).
- 4-142 a) **nganam-baty**
1sgFeet- hold
SU Perf
 I trod on it.
- b) **ngeriny -baty**
1sgMouth-hold
SU Perf
 I held it

A small subset of 'feet' verbs are not strictly 'feet-instrumental'. For instance, 4-143 and 4-144 below are patently effected through the use of the hands.

- 4-143 **yana -fufu mumba e-fenggu-nana**
 NgK *2sgFeet-shine path A-long -LEST*
SU Irr cl
 Shine (the torch) on the path, in case there's snakes !

- 4-144 **mi-dirwi wannam-madi-way ganggi-wurru**
Pl-green 3plFeet -chest-thwart high -UNSATIS
cl plum SU Perf
 They were unable to reach the greenplums, being so high.

For both these examples the 'holding of the torch' and the 'attempt to pick the plums' are, in a strictly instrumental sense, typical 'hands'-type activities. 'Feet' auxiliary selection in this case appears to be formulated, not instrumentally, but rather on a highly salient association with 'feet on the ground'.

'Mouth'

Verbal classification by the 'mouth' auxiliary marks verbs as performed instrumentally with the mouth, either the physical manipulation of objects by the tongue, teeth, lips or gums, or through the medium of speech.

'Mouth' selection in verbs like 'lick' and 'taste' are shown in 4-145 and 4-146.

- 4-145 **yakay wuwu-yaga dingim -lak**
excl dog -DEM 3sgMouth-lick
SU PImp
 Lookout ! the dogs been licking it !

- 4-146 **a-wedi ye -du -pe**
A-small 2sgMouth-taste-Fut
cl SU Irr
 Try and taste a little bit.

And the contrastive combination of 'mouth', 'hands' and 'feet' with the CVS **-baty** 'hold' is demonstrated below.

- 4-147 **kukuk-nuwurr ngem -baty -ngirim**
wait - a little 1sgMouth-hold-1sgSit
while SU Pres SU Pres
 Hang on a minute, I'm in the middle of chewing.

- 4-148 **e-ferri demim -baty -pagu -yenim**
A-blue-tongue 3sgHands-hold-HITH-3sgGo
cl lizard SU Pres SU Pres
 He's coming up holding a blue-tongue.

- 4-149 **wanni -ngi-baty -tye**
3plFeet -1sg-hold-Past
SU PImp DO
 They were kicking me.

In addition to the manipulable parts of the human mouth, 'mouth' also covers the instrumental use of the beaks of birds, as in 4-150 and 4-151 below.

- 4-150 **wurr weyim -pi -ket bude nyinnin demim -wurity**
grass 3sgMouth-head-cut nest ANA 3sgHands-make
SU Pres SU Pres
 (Bush turkey) heaps up grass (with his beak) and in that way makes his nest.

- 4-151 **e-men'gimen'gi dingim -mi-syarr -dim**
A-grey 3sgMouth-eye-scatter-3sgSit
cl goshawk SU Pres SU Pres
 The goshawk is scattering seed (as it feeds)

As a classifier of speech 'mouth' selection is found in verbs of 'storytelling', 'persuasion' and 'mistaken/false speech'. Consider the examples below.

- 4-152 **nge -mbi-yilil -pe ngan'gi**
1sgMouth-2sg -story-Fut story
SU Irr IO tell
 I'll tell you a story

- 4-153 **tyerrakul wakay ngem -purr -ket-nyine**
talking finished 1sgMouth-bum-cut-FOC
SU Pres = cease
 That's it ! I've finished talking now !

- 4-154 **ngem -fi -ket were ngiminy-ne,**
1sgMouth-Mp-cut brother 1sgSay -3sgM
SU Perf = lie SU Perf IO
 I mistakenly called him 'brother'
epe yeti-yirre ngumbumum-ne
BUT son-CORRECT 1dlincSay -3sgM
SU Pres IO
 but you and me are supposed to call him 'son'.

- 4-155 **weyim -ngiti-fi -gulgul**
3sgMouth-1sg -Mp-stir
SU Perf IO redup
 He stirred me up/ talked me into it.

- 4-156 **ngara -ne-fi -pal -pe nge -Ø -ge -kubuk-pe**
1sgPokeDtr-3sg-Mp-return-Fut 1sgMouth-3sg -belly- soak -Fut
SU Irr IO SU Irr DO =pacify
 I'm going back to him, to settle him down.

4.5.1.2 'Poke', 'Slash' and 'Bash'

In discussing these three auxiliaries I want to return to the questions asked earlier regarding the shape, contact and trajectory of instruments wielded by an agent in effecting an action, for these issues form the central components of these three auxiliaries. I will discuss 'poke', 'slash' and 'bash' in terms of underlying shape, contact and trajectory schema.

'Poke'

Verbal classification by the 'poke' auxiliary entails activity effected instrumentally at the end point of a long thin cylindrical implement manipulated by the subject. Inextricably linked to this shape schema is a contact schema; that the end point of long thin implements are employed in an 'end-on' poking type of contact. 'Poke'-type implements have no significant surfaces other than their point. Unlike 'slash' and 'bash', there is no trajectory schema associated with the 'poke' auxiliary. A good prototype for 'poke' implements is the spear, but as shown in the examples below, digging sticks, painting sticks, firesticks, nit crackers³, spoons, fenceposts, screwdrivers and sewing needles are all implements conceptualised as having shape and contact schemas of the 'poke' type.

- 4-157 *tyulut-ninggi dam -pawal*
hook -INSTR 3sgPoke-spear
spear SU Perf
 He speared him with a hook-spear.

- 4-158 *amimbi manarrk dani -ngi-pi -dada-tye -dini*
nit nit eggs 1sgPoke-1sg-head-crack-Past-3sgSit
SU PImpDO SU PImp
 She was cracking the nits in my hair for me.

- 4-159 *palayin nga -pup-pe yenggi-ne*
firesticks 1sgPoke-rub -Fut fire -PURP
SU Irr
 I'll rub the firesticks to start a fire.

- 4-160 *malarrgu -ne wanni -ket-tye -waddi*
longnecked-PURP 3plPoke-cut-Past-3plGO
turtle SU PImp SU PImp
 They were poking about for longnecked turtles.

³A nit cracker 'milmilma' is a small stick, about 20 cms long, that is used in the Daly region to squash nit eggs in the hair, and for other cosmetic purposes such as scraping off dry sunburned skin or removing earwax.

- 4-161 post warrim -fi -tyat -wannim
 3plPoke-Mp-place 3pl Go
 SU Pres SU Pres
 They're erecting a fence.

- 4-162 screwdriver-ninggi ngariny-fityi
 -INSTR 1sgPoke-roll
 SU Perf
 I did it up with a screwdriver.

- 4-163 durrmu-nyine warrim-pek
 paint -FOC 3plPoke-drip
 SU Pres
 They're painting it now.

That several verbs involving the instrumental use of rope also select the 'poke' auxiliary, suggests that long thin implements need not necessarily be rigid. Although rope is not normally employed in a poking fashion, it is long and thin and does have salient end points that are typically the part of it that is manipulated in tying objects up.

- 4-164 fi ya -fi -dudu-Ø
 twine 2sgPoke-Mp-curl -IMP
 SU Irr
 Coil the twine up !

- 4-165 dam -ngi-gu-baty bandage
 3sgPoke-1sg-?-hold
 SU Perf
 He bandaged (my arm for me)

The salient 'point' of an implement will typically be its 'front' end, e.g. the sharpened end of a digging stick or the fashioned tip of a spear, but 'poke' classification also encompasses the butt end of long thin implements, and, as the example below shows, the exposed ends of a spear broken at a point along its length.

- 4-166 yawul dangim-fi-tyerr-pek
 spear 3sgPoke-Mp-mouth-drip
 SU Pres
 He's rejoining the (broken) spear shaft.

That the focus here is on the exposed endpoints, as opposed to the length of the shaft, is confirmed by the incorporation of the bodypart 'mouth' in reference to the mouth-like rim created by the cross-sectional sever through the hollow bamboo shaft.

In addition to implements of material culture, 'poke' classification can also embrace certain bodyparts where these share the long thin shape schema, and are also manipulated within the end-on poking contact schema. As shown in the following examples, bodyparts that can be viewed in this way include: arms, legs, breasts/nipples, beaks, fingers, penis, whiskers, the proboscis of a mosquito etc.

- 4-167 **falmi wunu wur-werr -tyi, tyi dangim-pawal-nyine**
woman that F -ASSOC-breast breast 3sgPoke-spear-FOC
cl SU Pres

That pubescent woman is getting breasts now.
 (lit: ...is being speared by breasts (from the inside out)).

- 4-168 **yibe nga -nyi-nguru-waty-pe**
later 1sgPoke-2sg-penis-consume-Fut
SU Irr DO = fuck

I'm gonna fuck you later.

- 4-169 **tyerr-wasyan dam-ngi-pawal**
mouth-hair 3sgPoke-1sg-spear
SU Perf DO

I've got a beard now.
 (lit: whiskers have speared me)

- 4-170 **a-dawurr-ninggi dangim-tal-pi wakay**
A-butcher -AGENT 3sgPoke-tap-head finish
cl bird SU Pres

The butcherbird tapped (the finch) on the head... finished!

- 4-171 **a-funggi-ninggi warrim-ngi-dap**
A-mosquito-AGENT 3plPoke-1sg-stab
cl SU Pres DO

Mosquitos are biting me.

- 4-172 **membirr dangim-tyerr-dim**
child 3sgPoke-mouth-3sgSit
SU Pres SU Pres

She's breastfeeding the child.

- 4-173 **dede ngayi nga -mbi-du -pe**
estate 1sg 1sgPoke-2sg -touch-Fut
PRO SU Irr IO

I'll point out my country to you (with my arm).

There is a minor but distinguishable subset of 'poke' verbs concerned with activities effected from a position of physical or psychological dominance and control. As shown in the examples below, verbs of 'giving people things', 'leaving people behind', 'teaching people things' etc. are

constructed with the 'poke' auxiliary, and morphologically encoded as 'controlling' by the presence of the manipulative verb root prefix -fi-.

- 4-174 **nem kinyi ngan'gi wariny -ngi-fi -mi -tyatit**
3sg this language 3sgPoke-1sg-Mp-Val-place
PRO SU Perf DO redup

This bloke taught me his language.
 (lit: ...placed his language in me)

- 4-175 **kinyi nga -nyi-fi -me -pe**
this 1sgPoke-2sg-Mp-hand-Fut
SU Irr DO

I'll give you this.

- 4-176 **wuni-yirre ngarim -Ø-fi -wap**
there-CORRECT 1sgPoke-3sg-Mp-sit
SU Pres DO

I've left her sitting back there.

- 4-177 **kinyi nga -nyi-fi -me -tyat ngunu**
this 1sgPoke-2sg-Mp-hand-place how about it
SU Irr DO

I'm leaving this in your care... alright?
 (lit: I'm placing this in your hands)

There is no clear evidence to suggest that the activity denoted by these verbs is conceived of in terms of either the 'Poke' shape or contact schema. Conceivably the use of the agents arms in these verbs of 'placing' and 'giving' could fall within the range of 'arm as long thin instrument' as discussed above. However none of these examples appear to fulfil the poking type of contact generally associated with instrumental 'Poke' verbs.

Additionally, there are several impersonal verbs, without recoverable agents, that are constructed with the 'Poke' auxiliary. These are also concerned with the notion of dominance and control, in that their patients are construed as being victims of events or emotions beyond their control.

- 4-178 **dam-ngi-fi-derri-sul**
3sgPoke-1sg-Mp-back-arise
SU Perf DO

I was kept awake all night

- 4-179 **dangim-ngi-ngini tyagan-nimbi-nawa**
3sgPoke-1sg-shudder what-CAUS-INDEF
SU Pres DO

I've got this creepy feeling..from something or other.

- 4-180 *dangim-ngi-nguru-yilil falmi wun-ne*
3sgPoke-1sg-penis-talk woman that-PURP
SU Pres DO
 I'm horny for that woman over there.
- 4-181 *dangim-ngi-madi-ket*
3sgPoke-1sg-chest-cut
SU Pres DO =thwart
 I've wasted my time/ done something to no avail.
 (lit: It has chest-cut me.)

Again, the semantic relationship between these verbs and the central instrumental 'poke' verbs remains unclear. As noted for impersonal 'hands' verbs, auxiliary selection in these 'poke' verbs is presumably based on processes of metaphor and mental imagery, the origins of which are contemporarily obscured by processes of lexicalisation and language change.

'Slash'

Verbal classification by the 'Slash' auxiliary marks activity effected instrumentally in terms of the following schema.

Shape schema- Like 'Poke', 'Slash' instruments are typically long and thinnish, but rather than having only an endpoint, they have a 'face' along their length. 'Slash' instruments can therefore be said to have breadth in addition to length. The kind of instruments that fall within 'Slash' classification include; paddles, flat-faced fighting sticks, brooms, knives and the palm of the hand.

Contact schema- The shape schema of 'Slash' instruments, being flat faced, allows for two types of contact. 'Slash' instruments like brooms (in sweeping), or the palm (in slapping), make two-dimensional contact with their undergoer through direct contact with the broad flat face. Other 'Slash' instruments, like knives and flints (in cutting), make a one-dimensional contact with their undergoer by virtue of the fact that it is their edge/blade rather than face through which contact is made. 'Slash' instruments, then, can be employed either edge-on or face-on.

Trajectory schema- A major component of 'Slash' is the notion of lateral trajectory. 'Slash' instruments, like shovels, paddles, fans etc., are swung through the air/water in an arcing trajectory. Similarly bladed instruments, like knives and flints, are not simply pressed against an object, but have to be wielded in a lateral sweeping motion to effect cutting.

In verbs with bodypart instruments, 'slash' typically covers the lateral sideswiping trajectory of the arms. The combination of 'slash' with the verb root *-ta* 'hit', as in 4-182 a), thus implies a stiff-armed roundhouse swing of

the arm, as opposed to a punch effected by extending the arm outwards in a linear trajectory, which would require the 'Bash' auxiliary (discussed below), as in 4-182 b).

- | | | | |
|----------|---|----|--|
| 4-182 a) | ngu -nyi-ta -pe
<i>1sgSlash-2sg-hit-Fut</i>
<i>SU Irr DO</i>
I'll swipe you ! | b) | ngebe -nyi-da -pe
<i>1sgBash-2sg-hit-Fut</i>
<i>SU Irr DO</i>
I'll punch you ! |
|----------|---|----|--|

However it seems to be the sideways movement of the whole body that determines the selection of 'slash' in the 4-183.

- 4-183 **ngumbu -ne -madi-baty -pe**
1dlinSlash-3sg-chest-hold-Fut
SU Irr IO
 Let's get out of his way !

4-184 a) and b) below contrast the combination of 'slash' and 'hands' with the CVS **-me-syirr** 'extinguish'.

- | | |
|----------|--|
| 4-184 a) | peke ngeriny-me -syirr
<i>tobacco 1sgSlash-hand-scratch</i>
<i>SU Perf = extinguish</i>
I stubbed out the cigarette (by squishing it under my thumb). |
| b) | yenggi ngum -me -syirr
<i>fire 1sgSlash-hand-scratch</i>
<i>SU Perf =extinguish</i>
I put out the fire (through a 'slash' activity - beating it with branches/a wet hessian bag etc.). |

The flat shape, edge or plane contact, and sweeping trajectory associated with 'slash' selection, can be seen in the following examples.

- | | | | |
|-------|--|-------|--|
| 4-185 | gagu ngu -mbi-ket-pe
<i>animal 1sgSlash-2sg -cut -Fut</i>
<i>generic SU Irr IO</i>
I'll cut you a slice of meat. | 4-186 | yenggi yu -filfil-Ø
<i>fire 2sgSlash-fan -IMP</i>
<i>SU Irr redup</i>
Fan the fire ! |
| 4-187 | elifela deminy -pat dede wum -madi-fuy
<i>early 3sgHands-arise camp 3sgSlash-chest-sweep</i>
<i>SU Perf SU Perf</i>
She got up early and swept camp. | | |

- 4-188 **minbe-tye wu -tyerr -dum**
Neg -Past 3sgSlash-mouth-bury
SU Irr
 He didn't close the door.

- 4-189 **keninggisyi yurrugu -mi-syarr -Ø**
canoe 2plSlashdl-eye-scrape-IMP
SU Irr SU
 You two bale out the boat !

- 4-190 **wumbun-kurr menyirr wirribem-palak-nyine**
3sgSlash-dig sand 3sgStand-drop -FOC
SU Pres SU Pres
 (Crocodiles) dig in the sand, then lay their eggs.

Verbs expressing the movement of wind, or states resulting from the effect of wind, also select the 'slash' auxiliary. This selection would appear to be predicated on the conceptualisation of wind as a meteorological feature sweeping across the ground in a lateral motion, akin to such activity as sweeping, wiping etc, and is consistent with the trajectory schema of instrumental 'slash' verbs. Several wind-agentive 'slash' verbs are given below.

- 4-191 **marrawuk-ninggi wumbun-matati-ngidde detyerr**
dry season-INSTR 3sgSlash-split -1sg mouth
wind SU Pres redup IMPL
 The dry season wind has split my lip on me.

- 4-192 **gagu kinyi wum -tal -nyine**
meat this 3sgSlash-dry-FOC
SU Perf out
 This meat has dried out (from exposure to the wind)
 (lit: It (wind) has dried out this meat.)

- 4-193 **debi -werre tyawurru-pefi wumbun-yerifun-nyine**
thigh-ASSOC now -INCH 3sgSlash-dry -FOC
= trousers SU Pres
 My trousers are starting to dry now (from exposure to the wind)
 (lit: It (wind) is starting to dry my trousers now.)

Correspondingly, rain is associated with the up-and-down linear trajectory schema of the 'bash' auxiliary. Thus the combinations of 'slash' and 'bash' with the CVS **-nguru-ket** 'cease' are understood to refer to the cessation of wind and rain, respectively.

- 4-194 a) **marrawuk wum -nguru-key-nyine**
dry season 3sgSlash-penis -cut -FOC
wind SU Perf =cease
 The wind has just let up.

- b) **kuru bem -nguru-ket-nyine**
rain 3sg Bash-penis -cut-FOC
SU Perf =cease
 The rain has stopped now.

Finally, there are a few impersonal (agentless) verbs constructed with 'Slash'.

- 4-195 **wumbun-ngi-gurr-gurr**
3sg Slash -1sg -stir
SU Pres DO redup
 I have diahorrea.
 (lit: It is stirring me)

'Bash'

Classification by the 'Bash' auxiliary, like 'Poke' and 'Slash', is concerned primarily with instrumentality. Several 'bash' components can be identified, including shape, contact and trajectory schema. For the respective activity types selecting the 'Poke' and 'Slash' auxiliaries, we have noted that all three schemas tend to correlate. Thus for a 'Poke' verb like 'spear', the long thin cylindrical shape of the implement is inextricably bound to the end-on point contact. Likewise for a classic 'Slash' verb like 'slice', the long flat shape of the knife is bound to both the blade contact and the slashing trajectory. For 'Bash' however, although shape, contact and trajectory schemas are available, logical semantic linkages between them are not always apparent. For many 'Bash' verbs the selection of the 'Bash' auxiliary can only be formulated in terms of a single schema, without satisfying the criteria for all the components.

Shape schema- 'Bash' instruments are heavy and rounded, having a large surface area. In contrast to long thin spears and long flat knives, this shape schema marks clubs, axes, rocks and hammers as the typical instruments of 'bash' verbs.

Contact schema- Consistent with the broad surface area and rounded shape of 'Bash' implements, their contact with objects is a blunt full contact, as opposed to a blade or point type contact. 'Bash' contact typically smashes, indents or bruises a surface rather than pierces or cuts it. Note that axes, despite having a bladed-type edge, and despite the fact that their chopping contact has a cut-like effect, are classified as blunt rounded instruments.

The rounded shape and blunt contact of 'Bash' can be seen in the following examples.

- 4-196 **bi -ninggi ngebe -gerrgirr-tye yed-derri**
axe-INSTR 1sgBash-cut -Past Tr -back
SU PImp redup cl
 I was chopping the log with an axe
- 4-197 **yawurr bengim-gen -ket fepi-ninggi**
stick 3sgBash-middle-cut rock-INSTR
SU Perf DP
 He broke the stick by dropping a rock on its middle.
- 4-198 **ngini -ngayi ngimin yebe -dada-Ø nail**
NgK KIND - 1sg 1sgDo 2sgBash-hit -IMP
PRO SU Pres SU Irr redup
 Hammer the nail like I do it.

Trajectory schema- Another identifiable component of 'Bash' is an up-and-down, backwards-and-forwards trajectory, as opposed to the lateral sideways trajectory of 'slash'. The association of rain with verticality has already been noted in the discussion of 'Slash' above. Activity within a broadly vertical trajectory schema can also be seen in the examples below.

- 4-199 **yawurr-nimbi bem -baty**
tree -SOURCE 3sgBash-fall
SU Perf
 He fell from the tree.
- 4-200 **debi -werre yubu -wul-Ø**
thigh-ASSOC 2sgBash-pull-IMP
= trousers SU Irr
 Pull your trousers up !
- 4-201 **miyi kinyi bengim -tyerr -fal -nyine**
plant this 3sgBash-mouth-open-FOC
SU Pres
 These seedlings are sprouting up now.

Vertical direction alone is not the critical element of 'bash' trajectory. More importantly, 'bash' activities are carried out by movement backwards and forwards along a single linear trajectory. While the direction of this line may be vertical, as in the above examples, backwards/forwards movement along a line parallel to the ground, as in punching, hammering, chopping etc. is equally acceptable. Note that the trajectories of both 'bash' and 'slash' can therefore be parallel to the ground. The difference between them is that 'bash' has a linear trajectory, whereas 'slash' has an arcing trajectory.

In addition to the typical 'bash' implements listed above, note that the typical 'bash' instrumental bodyparts include the fist, teeth and

belly/chest. The 'bash' classification of fist stems from its compatability with the shape schema. Fists, like axes and clubs, are the large, rounded, blunt ends of things. That teeth are 'bash' bodyparts stems from their compatability with both the chopping contact schema and the up/down trajectory schema. Note that their conceptualisation as axe-like chompers rather than knife-like cutters would appear to be based on the function of the side molars rather than the front incisors. The belly and chest, used instrumentally as in 4-204 below, are compatible with the notion of 'a broad extended two-dimensional surface'. The front of the body is also seen to be instrumentally employed in verbs of confrontation and evoking emotional response (see 4-212 and 4-213). The 'bash' instrumentality of fists, teeth and belly/chest are demonstrated in 4-202 - 4-204 below.

4-202 **wurrbum-wurrki-dada**

3nsBash -3dl -hit

SU Perf IO redup

They (dl) were punching each other

4-203 **mumba bem -madi-pul wuntyerr**

path 3sgBash-chest-clear canegrass

SU Perf

He cut a swathe through the canegrass (with the front of his body).

4-204 **yakay gubu -nyi-tasat-merrendi**

lookout 3sgBash-2sg-bite -LEST

SU Irr DO

Lookout ! It might bite you !

A further component of 'bash' which should be noted here is an underlying association with sexual activity. That is, verbs like 'make someone scream', 'get a headache' or 'insert', in the absence of particular instrumental information to the contrary, will tend to be interpreted as effected through sexual activity specifically, as opposed to other more typical 'bash' activities such as punching , hammering etc. Recall that the principle verb of sexual activity 'to fuck' is not a 'bash' verb, but rather is constructed with the 'poke' auxiliary.

4-205 **dam -burcki-nguru-waty**

3sgPoke-3dl -penis -consume

SU Perf DO =fuck

He fucked them both.

Here the penis as bodypart instrument clearly fills the long thin cylindrical shape schema, and the poking contact schema attributed to 'poke' classification. So on what sort of imagery, we may ask, is the sexual association of 'bash' constructed? Firstly, the penis-as-bodypart-instrument imagery still holds good here, for the classification of the penis, not as a long thin spear-like instrument, but as a club-like instrument with a distinct 'head', is encountered elsewhere (c.f. 3.5.3.5).

- 4-206 **waga ngudum-pi -syarr**
piss 1sgShove-head-squeeze
SU Perf
 I cut off my piss in midstream (by squeezing the 'head' of my penis).

- 4-207 **ngudum -Ø-pi -dum asyi**
1sgShove-3sg-head-bury vagina
SU Perf DO
 I was 'chockablock' up her vagina.

Secondly, contact made by the broad flat expanse of the belly/chest, which as noted above (e.g. 4-203), is a type of bodypart-instrument that is covered by 'bash', is clearly a salient feature of some types of sexual activity. Thirdly, the repetitive up-and-down, backwards-and-forwards trajectory schema of 'bash' may also constitute imagery on which the sexual association of 'bash' is formulated.

Another group of verbs appears to select 'bash' solely on the basis of 'broad extended surface contact', without fulfilling the trajectory or shape schema. These are verbs in which a film or cover, having a broad two-dimensional expanse, is laid over or removed from an object. Note that in most of these examples the incorporation of *-derri* 'back' contributes to the focus on activity at the broad external surface of the undergoer.

- 4-208 **calico-ninggi ngurrbum-derri-lit musyulng kuru-merrendi**
-INSTR 1plexBash -back -cover swag water-LEST
SU Perf
 We (plex) covered the swags with a calico, so they they wouldn't get wet.

- 4-209 **kuderri bengin-derri-lit ngani-bafun-gimi**
NgK billabong 3sgBash-back-cover COMP-dust -SEMBL
SU Pres
 There's a film of something like dust over the billabong.
 (lit: It is covering the billabong over with something like dust.)

- 4-210 **nem wunu bengim -dudu damuy dengini**
 3sg there 3sgBash-spotty face body
 PRO SU Pres
 That bloke's covered in spots, his face and his whole body.
- 4-211 **yubu -derri-pul -pe yenggi padudu yimu -wa -pe**
 2sgBash-back-clear-Fut fire potato 2sgSnatch-pick-Fut
 SU Irr SU Irr up
 Clear the covering of coals off the fire, so you can pick out the potatoes.

Another minor subset of 'bash' verbs are the causative emotion verbs 'to make happy' and 'to make angry'. These verbs, set out in 4-212 and 4-213 below, both incorporate the bodypart **-ge** 'belly', which is regarded by Ngan'gityemerri speakers as the seat of the emotions. The selection of the 'bash' auxiliary in these verbs would appear to be formulated on the notion of confrontation between the facing belly/chest orientation of two people.

- 4-212 **bengim -ngi -ge -dum men'gen -ngiti**
 3sgBash-1sg-belly-bury 3sgArrive-1sg
 SU Pres DO =make happy SU Perf IO
 He's made me happy (by) coming to see me.
- 4-213 **yubum -ngi -ge -pek-nyine-pefi**
 2sgBash-1sg-belly-drip-FOC -INCH
 SU Pres DO=make angry
 You're starting to make me wild now !

To exemplify the contrastive shape, contact and trajectory schema of 'poke', 'slash' and 'bash', consider the examples below in which each is combined with the verbroot **-gurr-gurr** 'to miss an attempted contact'. The interpretations attributable to these examples, although context dependent, are revealing of the type of activity that was attempted.

- 4-214 **ngariny- Ø -gurr-gurr**
 1sgPoke-3sg-miss
 SU Perf DO
 I missed it.
 e.g. I tried to spear it , but I missed
 poke it
 stab it
 prod it
 twist it with a screwdriver etc.

4-215 **ngum-Ø-gurr-gurr***1sg Slash-3sg-miss**SU Perf DO*

I missed it

e.g. I tried to slap it with my palm , but missed.

whip it with a stick/spear

sweep/wipe it

paddle (but missed the water)

close the door

etc.

4-216 **ngubum-gurr-gurr***1sg Bash-miss**SU Perf*

I missed it.

e.g. I tried to punch it , but I missed

shoot it

bash it with a rock

club it

etc.

Before moving on to examine the other major instrumental auxiliaries, I want to make some comments on the nature of instrument classification. Firstly, by contrasting the 'Poke', 'Slash' and 'Bash' auxiliaries we have revealed three categories of instrument type. 'Poke' instruments are long and thin, and make contact at their end point. 'Slash' implements have a flat surface associated with their length, and make contact with either the face or edge of that surface. 'Bash' implements are, or have a salient part that is, large and rounded, and make contact in a blunt bashing manner.

The arsenal of traditional weapons and tools used by Ngan'giwumirri and Ngan'gikurunggurr people fall fairly clearly within the distinctive parameters of these categories.

-Spears, digging sticks, nit crackers, threading sticks, canoe poles and fire sticks all fit the 'poke' shape, contact and trajectory schemas.

-Fighting sticks, hand-held boomerangs, canoe paddles, flints and knives all fit the 'slash' shape, contact and trajectory schemas.

-And clubs, fists, rocks and axes fit the 'Bash' shape, contact and trajectory schemas.

Secondly, it should be noted that the kind of implement classification that we can see operating amongst these instrumental auxiliaries, is found nowhere else in the lexicon. The system of nominal classification (c.f. 5.2.7 to 5.2.11) broadly divides hand-held implements from spears, and further divides spears into subcategories. The schema I have invoked to elucidate

the instrumental auxiliaries; shape, contact-type and trajectory, play no part in the nominal classification of weapons and tools in Ngan'gityemerri.

Thirdly, the categorisation of any implement is based partly on inherent physical properties, but also on the particular part of an implement that is functionally salient. The principal underlying allocation of implements to these categories is based therefore on what is perceived to be their typical function. However the use of any implement in an atypical manner, which conflicts with its associated schema, will generally require classification by a different auxiliary. A spear for instance, which is a typical 'Poke' implement having a highly salient end point, can be wielded atypically by being held in the hand and slashed through the air in a whipping motion. Such an activity is shown in 4-218 below. Note that such a highly marked activity type, in contrast to the typical spear use in 4-217, requires overt instrumental case marking.

4-217 **wamanggal ngariny-pawal**
wallaby 1sgPoke-spear
SU Perf
 I speared a wallaby.

4-218 **wamanggal ngum-ta yawul-ninggi**
wallaby 1sgSlash-hit spear-INSTR
SU Perf
 I hit a wallaby with a spear (swung like a cane).

Likewise a bladed implement like a knife is a typical 'Slash' implement. Within Ngan'gityemerri instrumental auxiliary classification it has this status because proto-typically its flat face is used edge-on in a swinging cutting motion. Knives of course can be wielded differently. A stabbing action, piercing something by poking a knife end-on into it, would conflict with the 'Slash' schema and require marking by the 'Poke' auxiliary. Again, as 4-219 shows, the markedness of this activity requires overt instrumental case-marking.

4-219 **marrimarri-ninggi ngariny-bang**
knife -INSTR 1sgPoke-pierce
SU Perf
 I stabbed it with (the tip of) a knife.

Finally, to complete the discussion of 'Poke', 'Slash' and 'Bash', I will look at how this instrument classificatory system has coped with the introduction of one particular non-traditional implement. Within the parameters of traditional instrument classification, as exemplified by the

shape/contact/trajectory schema, the use of a chisel (as used in conjunction with a hammer) is a completely anomalous activity type. For a chisel, like a screwdriver, is long and thin and objects are manipulated at its endpoint. However chisels have blades that slice, and this violates the poking contact schema of 'poke' classification. Likewise the slicing blade of a chisel fits the contact schema of 'slash', but violates the 'slash' sweeping trajectory schema by being used end-on. Ngan'gityemerri speakers have resolved this anomaly by selecting the 'bash' auxiliary. Their traditional classificatory system requires that 'hammering a chisel' be viewed as being like 'hammering a nail'. The chisel must be treated as undergoer, not instrument. Thus one can 'hammer a chisel' in Ngan'gityemerri, but one cannot 'chisel wood'.

4.5.1.3 'Shove' and 'Heat'

'Shove'

Where 'Poke', 'Slash' and 'Bash' are concerned with the details of contact and limb movement, the focus of 'shove' is not so much on these 'means of execution' as on the 'effect of execution'. 'Shove' classifies activity that affects its undergoer by projecting it into motion, or in some way re-arranging its spatial configuration. The undergoers of 'shove' verbs can always be said to have been affected by being 'moved'. Consider the examples below.

4-220 **musyulng wudum-ngiti-fityi**

swag 3sgShove-1sg-roll
SU Perf IO

He rolled up my swag for me.

4-221 **mudiga wudum -syi -wul**

car 3sgShove-nose-return
SU Perf

He turned the car for home.

4-222 **marrawuk-ninggi wudumbun-pi -wulil**

dry season -INSTR 3sgShove -head-return
wind SU Pres redup

The dry season wind is blustering (the clouds) back and forth.

4-223 **wudumbun-tyerr -ket mudiga nyinyi**

3sgShove -mouth-cut car 2sg
SU Pres PRO

He's bogged your car.

- 4-224 **emengginy wudum -firrkityfirrkity e wudum -bat**
goanna 3sgShove-swing round CONJ 3sgShove-knock
SU Perf redup SU Perf down
 He swung the goanna rond 'n round and knocked it on the ground.
- 4-225 **perrick wuddumbun-pek**
fence 3plShove -drip
SU Pres
 They're building a fence.
- 4-226 **yudu -panmi-wele-pe kanggi**
2sgShove-fork -hang-Fut high
SU Irr
 Stick it up high in a fork (of the tree).
- 4-227 **wuddum -ngi-mi -wul -pagu**
3plShove-1sg-Val-return-HITH
SU Perf DO
 They brought me back home.
- 4-228 **yudu -madi-fili -Ø**
2sgShove-chest-roll-IMP
SU Irr
 Turn it over !

The focus of 'shove' is contrasted with 'poke' and 'hands' in the pairs of verbs in 4-229 and 4-230 below.

- 4-229 a) **ngariny -didi**
1sgPoke-push
SU Perf
 I prodded it (with a stick).
 (Focus on instrumental contact with long thin implement)
- b) **ngudum -didi**
1sgShove-push
SU Perf
 I gave it a shove.
 (Focus on projection of undergoer)
- 4-230 a) **ngeriny -fityi peke**
1sgHands-roll tobacco
SU Perf
 I rolled a cigarette.
 (Focus on the manipulation of the undergoer in the hands)

- b) **ngudum -fityi musyulng**
1sgShove-roll swag
SU Perf
 I rolled up the swag.
 (Focus on the spatial re-arrangement of the undergoer)

For highly transitive verbs then, 'Shove' acts as a type of default auxiliary, ignoring the mechanical details of contact and limb movement, focussing instead on the 're-arranged' status of the undergoer.

'Heat'

Classification by the 'Heat' auxiliary marks actions as performed through the instrumental use of heat. The example below shows the contrastive combination of the 'Heat', 'Hands' and 'Feet' auxiliaries with the CVS -tittit 'straighten'.

- 4-231 a) **yawul nginem-tittit-ngirim**
spear 1sgHeat-straighten-1sgSit
SU Pres SU Pres
 I'm straightening the spear (by bending it after having warmed it in sand that has been heated by being shovelled onto hot coals).
- b) **yawul ngerim-tittit-ngirim**
spear 1sgHands-straighten-1sgSit
SU Pres SU Pres
 I'm straightening the spear (by bending it using my hand as fulcrum).
- c) **yawul nganam-tittit-ngirim**
spear 1sgFeet-straighten-1sgSit
SU Pres SU Pres
 I'm straightening the spear (by bending it using my foot as fulcrum).

The notion of heat, central to this auxiliary, should be understood as primarily the heat given off by any form of fire, including the sun, and extended to sun-associated forms of heat such as solar power (but see 4-242 and 4-243 a) below). Given the central role that fire plays in Aboriginal life, higher animate controlled usage of 'Heat' typically involves fire-as-instrument.

- 4-232 **peke yine -ngiti-tyerr -ket-Ø**
tobacco 2sgHeat-1sg -mouth-cut-IMP
SU Irr IO
 Light me a smoke !

- 4-233 **gagu ngine-mbi-mi-ferr-pe**
meat 1sgHeat-2sg-Val-warm-Fut
SU Irr IO inc
 I'll warm the meat up for you.

- 4-234 **kuru ngine-purrngpurrng-pe**
water 1sgHeat-boil -Fut
SU Irr redup
 I'll boil the water.

Activities such as starting a fire by concentrating the sun's rays through a piece of thick glass, or placing clothes in the sunshine to dry them, are examples of the controlled instrumental use of the sun's heat.

- 4-235 **yine -fuyfuy fidi -nide**
2sgHeat-dry sun's-LOC
SU Irr heat
 Dry them in the sunshine!

The 'Heat' auxiliary stands apart from all the other instrumental auxiliaries in showing a split between the marking of the roles of heat-as-instrument and heat-as-agent. For verbs involving higher animate controlled instrumental use of heat, there exists the normal full paradigm of 'Heat' subject-auxiliary sequences. However, verbs involving the more autonomous heating processes effected through the non-controlled combustion of fire and the sun, are marked by a distinct set of subject-AVR sequences. These latter sequences are obviously restricted to 3rd person singular forms. In purely paradigmatic terms, rather than treat this as two separate auxiliaries, one of which consists simply of 3sg forms, I have chosen to view this phenomenon as a single auxiliary with a formal split among the 3sg forms between 'higher animate controlling agents' and 'heat as agent'. The full 'heat' subject-auxiliary paradigm showing this split, can be found in appendices A and B.

3rd singular higher animate controlled instrumental heat use is contrasted with heat-as-agent in the examples below.

- 4-236 a) **dinem -purrngpurrng kuru**
3sgHeat- boil water
SU Pres redup
 He's boiling water.
- b) **wayim -purrngpurrng kuru**
3sgHeat- boil water
SU Pres redup
 The water is boiling.
 (The heat of the fire is boiling the water)

- 4-237 a) **dineny -pudup e-dewi**
3sgHeat-melt A-fat
SU Perf cl
 He melted the fat (intentionally, by placing it near the fire/in the sunshine).
- b) **e-dewi waniny -pudup fidi -ninggi**
A-fat 3sgHeat -melt sun's-AGENT
cl SU Perf heat
 The sun's heat has melted our butter.

Construing the agent as 'Heat', as opposed to a higher animate controlling 'Heat', has the detransitivising effect of negating agentive focus altogether. Although formally transitive, unless, as in 4-237 b), the heat of the sun or fire is overtly agent-marked, heat-as-agent verbs are generally interpreted without agent focus. Thus Ngan'gityemerri speakers would gloss 4-236 b) as 'the water is boiling' rather than 'the fire is boiling the water'. Further examples of heat-as-agent verbs are given below.

- 4-238 **wurr wayim -pul -pagu -nyine**
grass 3sgHeat-burn-HITH-FOC
SU Pres
 The grass is burning this way now.
- 4-239 **kuderri wayim -biny-nyine**
billabong 3sgHeat-suck-FOC
SU Pres
 The billabong is drying out now.
- 4-240 **kuru yu -syusyu-napa -ndi -pe musyari-nyine wa -fuyfuy**
water 2sgSlash-splash-JUST-SAME-Fut slow -FOC 3sgHeat-dry
SU Irr SU Irr redup
 Keep on wetting (the cement) so it'll dry out slowly,
- ga -fuyfuy-merrendi warrmadi, lala -gumu**
3sgHeat-dry -LEST quick crack-SEMBL
SU Irr
 should it dry out quickly, it would sort of crack up.
- 4-241 **gagu wayim -bubu -nyine**
animal 3sgHeat-soften-FOC
generic SU Pres
 The meat is cooked now.

Finally, having stated above that 'Heat' is primarily viewed as the property of fire and sun, there are a handful of verbs for which the selection of the 'Heat' auxiliary appears to be based on a less specific conceptualisation of heat. The stinging heat-like sensation associated with a 'slap on the

cheek', appears to be viewed as an instrumental usage of 'Heat' in 4-242 below.

- 4-242 **dineny-ngi-tyamu-baty**
3sgHeat-1sg-cheek-hold
SU Perf DO
 He slapped me on the cheek.

In addition, 'anger' appears to be viewed as a kind of 'Heat' in 4-243 a) below, where it is contrasted with the same verb specifically marked as sun-agentive in 4-243 b).

- 4-243 a) **wayim -ngi-baty ki -ne**
3sgHeat-1sg-hold fight-PURP
SU Pres DO
 I'm hot for a fight
 ('Anger?' is heating me up for a fight)
- b) **wayim -ngi-baty fidi -ninggi**
3sgHeat-1sg-hold sun's-AGENT
SU Pres DO heat
 I'm sunburned/sunstruck.

4.5.1.4 The Minor Transitive Complex Auxiliaries 'Suck', 'Pull' and 'Snatch'

These three auxiliaries have highly limited capacities to productively combine with verbroots. 'Suck' has been recorded with only three CVS, 'Pull' with only five, and 'Snatch' also with five.

'Suck'

Classification by the 'suck' auxiliary marks activity in which things are ingested or sucked in. Where the focus of the 'mouth' auxiliary was primarily on the manipulation of objects by the teeth, tongue, lips etc, the focus of 'suck' is on the consumption of objects. The undergoers of 'suck' verbs can be said to have 'disappeared' and been 'used up'. The most frequently encountered 'suck' verb is 'suck#consume', a general verb of ingesting, covering eating, drinking, smoking etc.

- 4-244 **gagu miyi kuru ngumbusyiny -waty**
animal plant liquid 1plincSuck -consume
generic food generic SU Perf
 We all ate meat, vegies and (drank) beer.

'Suck#biny' describes the activity of a baby sucking milk from a breast, or the sea sucking tidal water from a river.

- 4-245 **tyi wusyum-biny**
breast(milk) 3sgSuck -suck
SU Pres
 She's sucking at the breast.
- 4-246 **ngambaty wusyum-biny -nyine**
tide 3sgSuck -suck-FOC
SU Pres
 The tide is low now.
 ((The sea) has sucked the tide out now)

And 'suck#mouth#biny' describes 'kissing'.

- 4-247 **wurrunggi-tyerr -binybiny**
3nsSuckdl-mouth-suck
SU PresSU redup
 They're kissing.

'Pull'

All five verbs selecting 'pull' involve pulling, pushing, or extension of limbs.

- 4-248 **a-ngekin ngisyeny-ge -wurr**
A-shit 1sgPull -belly-enter
cl SU Perf
 I pulled its guts out.
- 4-249 **disyeny-ngi-firr -tit**
3sgPull-1sg-foot-tug
SU Perf DO
 It tugged at my foot.
- 4-250 **disyem-ge -medada membirr-nyine wubu-baty-pe**
3sgPull-belly-labour child -FOC 3sgBash-fall-Fut
SU Pres SU Irr
 She's pushing it in labour, the child will be born soon.
- 4-251 **wari -fi -mi -tyatit-pe dengini wisye -burrburr-pe**
3sgPoke-Mp-Val-place-Fut body 3sgPull-stretch -Fut
SU Irr =teach SU Irr redup
 (The physiotherapist) will teach her to stretch her body.
- 4-252 **ngisyeny-ngan-derri-tal**
1sgPull -LOC -back -crack
SU Perf REL
 I cracked my vertebrae (by stretching my back).

'Snatch'

The central component of 'snatch' classification is the notion of snatching at, or latching onto, something. Where the focus of the 'hands' auxiliary is on the stative holding of something within the grasp of the hand, the focus of 'snatch' is on the dynamic act of grasping something. The five 'snatch' verbs occurring in my data are listed below.

- 4-253 **fepi yimu -wa -Ø**
rock 2sgSnatch-pick-IMP
SU Irr up
 Pick up that rock !

- 4-254 **yumu -ngi-garri-wat**
2sgSnatch-1sg-leg -hook
SU Perf DO
 You tripped me up (by snatching at my leg with your hand).

- 4-255 **wurmu -ngi-kal**
3plSnatch-1sg-chase
SU Perf DO
 They chased and caught me.

- 4-256 **yumu -tyerr -wurr -Ø wasyanderri**
2sgSnatch-mouth-enter-IMP hessian
SU Irr sack
 Tie up the mouth of the hessian sack !

- 4-257 **adiny menggin -ngi-garri-tyap**
leech 3sgSnatch-1sg-leg -stick
SU Pres DO
 A leech is stuck to my leg.

The verb 'snatch#pick up' in 4-253 above, forms the basis of several other common verbs. Firstly, as a phrasal verb with the nominal **dege** 'belly' (seat of the emotions) it forms the verb 'to like', as in the examples below.

- 4-258 **minbe dege tyawurru yumunggin-wa,**
Neg belly today 2sgSnatch -pick
SU Pres up
 You may not like (school) now,
epe yibe dege yumu -wa -pe
BUT later belly 2sgSnatch-pick-Fut
SU Irr up
 but you'll get to like it later.

4-259 dede kinyi minde dege ngiminggin-wa
NgK camp this Neg belly 1sgSnatch-pick
SU Pres up
I don't like this camp anymore.

Secondly, the bodyparts **-ba** 'arm' and **-me** 'hand' are incorporated into 'snatch#pick up' as lexical compounds with the verb root **-wa**. As noted elsewhere (c.f. bodyparts section), incorporated **-ba** carries, in addition to its literal interpretation, a strong sense of directing people (especially children) in a nurturing caring way. Both senses are evident in 4-260, and the non-literal in 4-161.

4-260 *membirr-weti ngiminggin-Ø-ba -wa*
child -small 1sgSnatch -3sg-arm-pick
SU Perf DO up
 I picked the small child up.

4-261 wa-magurrerri kidin fagarri yani -ngini
 NgK M-widower year two 2sgGo-Fut
 cl SU Irr
 You should stay a widower for about two years,
 falmi yeyi yimu -ba -wa -ngini
 woman other 2sgSnatch-arm-pick-Fut
 SU Irr up
 and then take another wife.

The lexical incorporation of *-me* 'hand' into the verb 'snatch#hand#pick up' in addition to its literal interpretation as 'to pick up from the hand', also means 'to catch onto something/to become aware of something'.

4-262 ngan'gi ngayi minbe-tye wumu -ngi-me -wa
 words 1sg Neg -Past 3sgSnatch-1sg-hand-pick
 PRO SU Irr DO up
 She didn't catch on to what I said.

Additionally 'snatch#hand#pick up' can mean 'to unquestioningly accept someone's words/actions at face value', as shown in the examples below.

4-263 minbe-pagu yumu-ngiti tyagan-ne,
Neg -HITH 2sgSay-1sg wha t-PURP
SU Irr IO
Don't ask me why,
tyepe ngan'gi ngayi yumu -ngi-me -wa
JUST word 1sg 2sgSnatch-1sg -hand-pick
PRO SU Irr DO up
just accept what I tell you.

- 4-264 apma yi -Ø gagu awakul wumunggin-ngi-me -wa
 silent 2sgSit -IMP animal fish 3sgSnatch -1sg -hand-pick
 SU Irr generic SU Pres DO up
 Sit quietly ! The fish are accepting me.
 (i.e. The fish are not yet suspicious of me.)

4.5.2 The 'Detransitivised' Complex Auxiliaries

In addition to the 21 auxiliaries discussed so far, the Ngan'gityemerri auxiliary system includes a subgroup of ten auxiliaries that are the detransitivised reflexes of established auxiliaries⁴. While there are few formal similarities, in terms of their semantics each of these ten auxiliaries can be linked to one of the auxiliaries we have already examined. Three are reflexes of the bodypart instrumental auxiliaries 'Hands', 'Feet' and 'Mouth'. Five are reflexes of the instrumental auxiliaries 'Poke', 'Bash', 'Shove' and 'Heat'. The remaining two are reflexes of the 'Say' and 'See' simple auxiliaries.

The 'detransitivising' nature of these auxiliaries requires some comment. All verbs employing these auxiliaries are formally intransitive, being unable to cross-reference their undergoers as direct objects. Being primarily reflexes of major instrumental auxiliaries ('Hands', 'Feet', 'Mouth', 'Poke', 'Bash', 'Shove' 'Heat' etc.) verbs formed with these detransitivised auxiliaries involve activity by the subject that is directed towards a part/whole of him/herself. This reflexive interpretation of detransitivised auxiliary selection is shown in the following two examples. 4-265, contrasts 'Shove' with 'ShoveDtr'. In 4-265 b) it is the whole of the subject that is also the 'undergoer' of the activity. 4-266, contrasts 'Hands' and 'HandsDtr'. In 4-265 b) it is a part of the subject that the activity expressed in the verb is directed towards.

- | | | | |
|----------|---|----|--|
| 4-265 a) | ngudum -fel ball
1sgShove-bounce
SU Perf
I bounced the ball. | b) | ngudeny -fel
1sgShoveDtr-bounce
SU Perf
I jumped.
(lit: I bounced myself.) |
|----------|---|----|--|

⁴Walsh notes that the Murrinh-patha auxiliary verb system also includes a subclass of auxiliaries that are 'of the reflexive type'(Walsh 1989:2). As is the case in Ngan'gityemerri, it seems that in Murrinh-patha the encoding of reflexivity is handled in two separate ways; inherently within the subclass of reflexive auxiliaries, and by overt morphological marking on those verbs selecting the remaining auxiliaries. It is unclear whether the Murrinh-patha 'reflexive' auxiliaries are the reflexes of major transitive auxiliaries as they are in Ngan'gityemerri.

- 4-266 a) **walipan ngeriny -yerr**
rag 1sgHands-soak
SU Perf
 I soaked the rag.
- b) **ngemeny -me -yerr**
1sgHandsDtr-hand-soak
SU Perf
 I soaked my hands (in order to remove the flour stuck to them).

The 'self-directedness' conveyed by detransitivised auxiliary selection is most clearly demonstrated by pairing them with the auxiliaries of which they are reflexes. The sections below, contrasts such pairs for each auxiliary.

'See Dtr'

- 4-267 a) **naga ngayi minde dinyingging-ngi-kerrety**
husband 1sg Neg 3sgSee -1sg -grasp
PRO SU Pres DO
 My husband doesn't look after me.
- b) **ala ngatya yenim-burki-pirr**
mother father 3sgGo -3dl -leave
SU Pres IO
me -nem-nyine dinyerrem-kerrety
hand-3sg -FOC 3sgSeeDtr -grasp
PRO SU Pres
 He's left his mother and father, he's looking after himself now.

'Hands Dtr'

- 4-268 a) **ngeriny -Ø-syirr**
1sgHands-3sg-scratch
SU Perf DO
 I scratched him.
- b) **ngemeny -syirr**
1sgHandsDtr-scratch
SU Perf
 I scratched myself.
- 4-269 a) **menyirr nganimuy-nide deminy -dum**
sand soft -LOC 3sgHands-bury
SU Perf
 He buried it in the soft sand.

- b) **gagu aniyen a-yaga menyirr nganimuy-nide**
meat A-sand A-that sand soft -LOC
cl frog cl
demem -dundum-yenim
3sgHandsDtr-bury -3sgGo
SU Pres redup SU Pres
 The sandfrog, that one that habitually buries himself in
 the soft sand.

- 4-270 a) **ngeriny -Ø-pul**
1sgHands-3sg-wash
SU Perf DO
 I washed her.

- b) **ngemeny -pul**
1sgHandsDtr-wash
SU Perf
 I washed myself

- 4-271 a) **ngeriny -Ø-madi-baty**
1sgHands-3sg-chest-hold
SU Perf DO
 I held him by the chest.

- b) **ngemeny -madi-baty**
1sgHandsDtr-chest-hold
SU Perf
 I folded my arms across my chest.
 (lit: I held myself by the chest.)

- 4-272 a) **yerr-ba ngeriny -pal**
Tree-arm 1sgHands-break
cl SU Perf
 I broke off a branch.

- b) **ngemeny -nintyi-pal**
1sgHandsDtr-knee -break
SU Perf
 I knelt down.
 (lit: I broke myself at the knees.)

'Mouth Dtr'

- 4-273 a) **wuwu weyim -lak**
dog 3sgMouth-lick
SU Perf
 The dog licked it.

- b) **wuwu diweny -firr -lak**
dog 3sgMouthDtr-foot-lick
SU Perf
 The dog licked its (own) paw.

- 4-274 a) **weyim -ngiti-fi -gulgul**
 3sgMouth-1sg -Mp-stir
 SU Perf IO redup
 He talked me into it.

- b) **diweny -fi -gulgul**
 3sgMouthDtr-Mp-stir
 SU Perf redup
 He psyched himself up/talked himself into it.

'Poke Dtr'

- 4-275 a) **ya - Ø -fi -gimi-tyat - Ø**
 2sgPoke-3sg-Mp-side-place-IMP
 SU Irr DO
 Put it down on the side !

- b) **minbe yarra -fi -gimi-tyat - Ø**
 Neg 2plPokeDtr-Mp-side -place-IMP
 SU Irr
 Don't all sit on the one side,
ngumbudu - Ø -madi-fili -merrendi keninggisyi
 1plincShove-3sg-chest-roll-LEST canoe
 SU Irr DO
 lest we roll the boat over !

- 4-276 a) **fi ngariny- Ø -fi -dudu**
 twine 1sgPoke-3sg-Mp-coil
 SU Perf DO
 I coiled the rope up.

- b) **ngarany -fi -dudu**
 1sgPokeDtr-Mp-coil
 SU Perf
 I curled myself up (into foetal position).

- 4-277 a) **ngariny - Ø -pek durrmu**
 1sgPoke-3sg-drip dot style
 SU Perf DO painting
 I painted him up.

- b) **ngarany -pek durrmu**
 1sgPokeDtr-drip dot style
 SU Perf painting
 I painted myself up.

- 4-278 a) **ngariny - Ø -gu-baty da-ba**
 1sgPoke-3sg-? -hold Bp-arm
 SU Perf DO cl
 I bandaged his arm.

- b) *ngarany -gu-baty da-ba*
1sgPokeDtr-? -hold Bp-arm
SU Perf DO cl
 I bandaged my arm.

'Bash Dtr'

The 'BashDtr' auxiliary has only been recorded with a singular subject in a single example.

- 4-279 a) *beyim -dirr -nyine*
3sgBashDtr-teeth?-FOC
SU Pres
 He's died now.

Examples with non-singular subject marking entail reciprocal 'Bash' activity, as in 4-280.

- 4-280 a) *werrbemgu-dada*
3nsBash dl -hit
SU Pres SU redup
 They (dl) are punching him.
- b) *werrbimgi -dada*
3nsBashDtr dl-hit
SU Pres SU redup
 They (dl) are punching each other.

'Shove Dtr'

The 'shove' auxiliary stands apart in having two detransitivised auxiliaries that are reflexes of it. Labelled 'ShoveDtrD' (dynamic) and 'ShoveDtrS' (stative), these both share the semantics of 'Shove', but differ in terms of aspect and dynamicity. The dynamic reflex of 'shove' marks the 'self directedness' of those 'Shove' verbs that express dynamic, and typically also punctual, activities. 'Shove' and ShoveDtrD' are contrasted in the examples below.

- 4-281 a) *mudiga ngudum - Ø -madi-fili*
car 1sgShove-3sg-chest-roll
SU Perf DO
 I rolled the car.
- b) *mudiga wudeny -madi-fili-ngidde*
car 3sgShoveDtrD-chest-roll-1sg
SU Perf IMPL
 The car rolled on me (ie. to my disadvantage).

- c) **ngudeny -madi-fili**
1sgShoveDtrD-chest-roll
SU Perf
 I rolled (myself) over.
- 4-282 a) **kuru ngudum - Ø -tyerr -wuty**
water 1sgShove-3sg-mouth-pour
SU Perf DO
 I poured out the water.
- b) **wudeny -fi -tyerr -wuty**
3sgShoveDtrD-Mp-mouth-pour
SU Perf
 (The toilet) overflowed.
 (lit: It poured itself out.)
- 4-283 a) **wudumbun- Ø -dirr -fulirr**
3sgShove -3sg-teeth-rub
SU Pres DO
 He's grinding the edge (of the knife).
- b) **wudem -dirr -fulirr**
3sgShoveDtrD-teeth-rub
SU Pres
 He's grinding his teeth (in his sleep).
- 4-284 a) **wuddum - Ø -mi -wul**
3plShove-3sg-Val-return
SU Perf DO inc
 They took him back home.
- b) **wuddeny -wul dede**
3plShoveDtrD-return camp
SU Perf
 They returned home.
 (lit: They took themselves home.)

The stative reflex of 'Shove' marks the 'self-directedness' of those 'Shove' verbs that express stative, or potentially durative activities. 'ShoveDtrS' verbs express either states, as in 4-285 c), or punctual actions that (through verb root reduplication) can be made iterative, and thereby amenable to an extended-over-time interpretation, as in 4-287 c). 'Shove' is contrasted with both 'ShoveDtrD' and 'ShoveDtrS' in the examples below.

- 4-285 a) **ngudum- Ø -garri-fityi**
1sgShove-3sg-leg -roll
SU Perf DO
 I crossed his legs.
 (ie. I manipulated the child into a cross-legged position.)

- b) **ngudeny -garri-fityi**
1sgShoveDtrD-leg -roll
SU Perf
 I crossed my legs.
- c) **ngim -garri-fityi**
1sgShoveDtrS-leg -roll
SU Pres
 I'm sitting cross-legged
 (lit: I am (in the state of) having crossed my legs.)
- 4-286 a) **wudum -Ø -didi**
3sgShove-3sg-push
SU Perf DO
 He gave it a push.
- b) **wudeny -didi**
3sgShoveDtrD-push
SU Perf
 He pushed himself off (from the bank).
- c) **win -dididi**
3sgShoveDtrS-push
SU Pres redup
 (The bird) is flying along.
 (lit: It is (in the state of) repeatedly pushing itself.)
- 4-287 a) **wudini -ngirr-felfil -tye -yedi**
3sgShove-1plex-bounce-Past-3sgGo
SU Plmp DO redup SU Plmp
 (The road) was bouncing us.
- b) **wudeny -fel**
3sgShoveDtrD-bounce
SU Perf
 He jumped.
 (lit: He bounced himself once.)
- c) **win -felfil -wirribem trampoline**
3sgShoveDtrS-bounce-3sgStand
SU Pres redup SU Pres
 He's jumping on the trampoline.
 (lit: He's (in the state of) repeatedly bouncing himself.)

'Say/Do Dtr'

Although a full paradigm of subject-AVR sequences is recoverable for this auxiliary, I have only recorded its occurrence within a text on a single occasion (eg. 4-289 below), and stress therefore that its usage is very rare. The

simple auxiliary 'say/do' as its label suggests, covers both speech and actions, its interpretation as either being context dependent. eg.

- 4-288 *ityi -yim meny -ngiti*
what-2sgDo 3sgSay -1sg
SUPres SU Perf IO
 'What are you doing?' he asked me.

The detransitivised reflex of 'say/do' refers only to speech, and specifically to the kind of 'self-directed' speech that one engages in in the absence of other people. eg.

- 4-289 *nem wunu meyim -yenim ngan'gi*
3sgM that 3sgSayDtr-3sgGo speech
PRO SU Pres SU Pres
 That man always talks to himself.

Clearly the function of 'detransitive' auxiliary selection here is not to detransitivise, but to mark an intransitive activity that is typically perceived to be directed at others, as strictly self-directed.

Marked for plural subject, detransitivised 'Say' marks reciprocity, particularly in the sense of conferring out of earshot of others. eg.

- 4-290 *ngan'gi wurrmenigi-tye -widdingegu*
speech 3nsSayDtr dl-Past-3nsStand dl
SU PlmpSU SU PlmpSU
 They (dl) were conferring with each other.

'Heat Dtr' and 'Feet Dtr'

The remaining two detransitive auxiliaries are rare, non-productive and, despite the fact that they are formally reflexes of 'Heat' and 'Feet', have resultant meanings that are somewhat anomalous. 'Feet Dtr' has only been recorded once, functioning as a simple verb (though with an obligatory serialised auxiliary), meaning 'to mutter threateningly under one's breath'. eg.

- 4-291 *dagawam -wirribem wayim -Ø-baty ki -ne*
3sgFeetDtr-3sgStand 3sgHeat-3sg-hold fight-PURP
SU Pres SU Pres SU Pres DO
 He's muttering under his breath, he's building up for a fight.
 (lit: Its heating him up...)

'Heat Dtr' has only been recorded in combination with three CVSs. Marked for plural subject, it conveys reciprocity, as shown in contrast with 'heat' in 4-292.

4-292 a) **ngimbineny-Ø-tyamu-baty**
1plincHeat -3sg-cheek -hold
SU Perf DO
 We (plinc) slapped him on the cheek.

b) **ngimbineweny-tyamu-baty**
1plincHeatDtr -cheek -hold
SU Perf
 We (plinc) slapped each other.

However, note that in at least one verb '-heatDtr#karrbu' it appears not to be 'self-directed', but rather combines the semantic components of 'heat' and 'Go*', to mean 'to go along lighting fires'. eg.

4-293 **ngimbineweny-karrbu wurr**
1plincHeatDtr-come grass
SU Perf down
 We (plinc) came down (-hill/-stream) burning the grass.

Chapter 5

Noun Classification

Ngan'gityemerri speakers employ a system of nominal classification that divides the nominal world into fifteen categories. Section 5.1 examines the manner in which membership within these categories is signalled, and section 5.2 deals with the semantics of these categories. 5.3 looks at the types of modifying element that can be classmarked. 5.4 details the suffixation of class generics to *minbe* 'negative' and *tyen* 'what'. Finally section 5.5 examines the phonological status of the set of bound class generics, which varies between proclitics and prefixes.

Ngan'gityemerri Nominal Generics			
Freeform Classifiers	Bound Class Markers	Class	Gloss
Group 1	wa- wur- dV- wu- awa-	male female bodyparts canine human group	M F Bp C Hg
Group 2 gagu miyi yawurr / yewirr (K) yawul	a- mi- yerr- yeli-/yali(K)	animal plant food tree/thing bamboo spears	A Pf Tr Bsp
Group 3 kurum / kurim (K) syiri / yuri (K) yenggi kuru / kuri (K) kini tyin / tyun (K)		canegrass spears strickers fire liquid digging sticks large woomeras	

Table 5-1

5.1 Morphology of Nominal Classification

5.1.1 Descriptive Preliminaries

The classification of nouns in Ngan'gityemerri into fifteen separate categories is signalled through the use of both freeform and bound generics. While most nouns can be assigned to at least one class, there are some nouns, mostly terms for natural objects such as sun, rocks, ground, stars,

clouds etc. that belong to no overtly marked class. I have chosen to analyse these as belonging to no class rather than to a sixteenth Ø-marked class; a decision that carries no significant consequences.

On the whole, this system of noun classification is neither homogenous nor internally consistent. Of the fifteen classes, six are denoted by only freeform generics, five by only bound generics, and four employ both bound and freeform generics. Furthermore, among the class categories having bound generics, there is considerable diversity regarding the phonological status of those generics (see 5.5), and the types of modifiers to which they may be attached (see 5.3).

Another important feature of the Ngan'gityemerri noun classificatory system that will be treated here, concerns the grammatical status of the mechanisms that signal class categories. As this has implications for the terminology used in this section, I will begin with a review of Dixon's (1982) comparison of the noun classification phenomena in Yidiny and Dyirbal.

Dixon (1982: chpt 5-8) compares the different systems in Yidiny and Dyirbal that have the semantic function of classifying nouns, and contrasts the grammatical status of these two systems. He provides criteria for determining whether a language has a system of noun classes (like Dyirbal) on the one hand, or noun classifiers (like Yidiny) on the other.

"In summary, noun classes constitute a closed grammatical system, with a finite (usually fairly small) and determinable number of choices involved; each noun belongs to one class and few (or none) will correspond to more than one class. Noun class is shown by morphological processes which can apply to the noun itself and must apply to some other constituent; they sometimes combine information about noun class and number, case or definiteness. The morphological process most often involves adding an affix or clitic to constituents of a number of specified grammatical types. Classifiers comprise a largish (often semi-open) set, whose members may not be exhaustively listable; each classifier is either a free form or else a root, to which a numeral affix or clitic may be added. Not every noun may take a classifier; many nouns may occur with one of a number of different classifiers, sometimes with a difference in meaning and sometimes not. Classifiers, but not noun classes, may be used in different ways in different speech styles within a language."

(Dixon 1982:217-8)

Dixon goes on to speculate about the origins of these different mechanisms in Yidiny and Dyirbal, suggesting both may have developed from a small set of about half a dozen classifiers. The few classifiers in pre-Yidiny were augmented to yield the larger modern classifier set, and those in pre-Dyirbal developed into an obligatory morphological category of noun classes. He does give examples of a few languages (Micronesian and Athapaskan) which combine noun class and classifier features, but on the whole he finds that the vast majority of 'classifying' phenomena fit the criteria by which they can be labelled as either 'noun classes' or 'classifiers'

(loc. cit: 226). In view of his speculation about the development of the Yidiny and Dyirbal systems, he notes that those languages which show a combination of noun class and classifier features (e.g. Mokilese) "may be in the first stages of change into a grammatical system of noun classes"(loc. cit: 221).

In light of the noun class versus classifier debate, it must be said that the phenomena of nominal classification in Ngan'gityemerri (and probably other Daly languages) do not fit these criteria well. As we shall see in the following section, while the freeform generics have more of the features of classifiers, and the bound generics have more of the features of noun classes, none are good exemplars of either type. Despite this, to make the discussion throughout this section as clear as possible, I have divided the fifteen generics in Table 3 into three groups. Groups 1 and 2 have bound generics and by this criterion are viewed as 'noun classes'. Groups 2 and 3 have freeform generics that are viewed as 'classifiers'. Note that Group 2 has both noun class markers and classifiers. The differing usages of these are discussed in 5.1.4 below. Where there are differences in the semantics of corresponding nounclass markers and classifiers, these are examined in the appropriate sections of 5.2. Finally, I additionally use 'noun classification' as a cover term for the system as a whole (i.e. embracing both noun classes and classifiers).

Noun classes are defined as those sets of terms whose membership within a class is signalled grammatically by the attachment of bound class generics, either to the member noun itself, or to nominals that may modify it. For most of the 'noun classes' examined in section 5.1.3 and 5.1.4 there are identifiable subsets of nouns which do not bear class signalling prefixes. For instance, while the vast majority of animal terms bear the *a-* prefix that signals membership in the 'animal' class, e.g. *a-matyi* 'kangaroo', a few cannot be classmarked in this manner, e.g. *(*a-)wamanggal* 'wallaby'. However the class membership of nouns like *wamanggal* is still formally revealed through the attachment of *a-* to any adjective, pronoun or demonstrative modifying them, e.g. *wamanggal a-wedi* 'a little wallaby'. Those class member terms that do not themselves bear class marking, but which can be shown to belong to a particular class through this strategy of modifier concord, are referred to as *defacto* class members. Throughout this section all reference to formally defined 'noun class' should be understood to refer to the set of classmarked and *defacto* noun class members.

It should also be kept in mind that disparities exist between formally defined noun classes, on the one hand, and semantically defined classes on the other. We require the notion of 'semantically defined class' to account

for, for instance, those bodypart terms like **kekulkul** 'heart' that do not bear the bodypart class prefix. As the bodypart prefix is not attached to nominals modifying bodyparts, **kekulkul** cannot be shown to be a defacto 'bodypart' class member through the strategy of modifier concord. Words like **kekulkul** then, belong to the semantically defined, but not the formally defined, 'bodyparts' class.

5.1.2 Group 3 Classifiers

The six generics, **syiri** 'strikers', **kurum** 'canegrass spears', **yenggi** 'fire', **kuru** 'water', **tyin** 'woomeras' and **kini** 'digging sticks' are freeforms that optionally precede nouns in generic - specific constructions.

- 5-1 (syiri) magulfu dem -wurity-dim
 striker cylindrical 3sgHands-make -3sgSit
 fighting stick SU Pres SU Pres
 He's making a cylindrical fighting stick.
- 5-2 (yuri) yewirr me -wa
 NgK striker stick 3sgSnatch-pick
 SU Pres up
 He snatched up a fighting stick.
- 5-3 (kurum) yiliyili (kurum) ngayi kide
 canegrass mangrove 1sg where
 spear tipped spear PRO
 Where's my mangrove-tipped kurum spear ?
- 5-4 (tyin) gan'guna nganam-garri-fulirr-ngirim gugarra
 woomera fish spear 1sgFeet -leg -rub -1sgSit red
 gen. woomera SU Pres SU Pres ochre
 I'm rubbing ochre into the length of this 'fish spear-type'
 woomera.
- 5-5 (kini) manggini-ninggi wupun-kurr
 digging digging -INSTR 3sgSlash-dig
 stick gen. stick-type SU Pres
 She's digging with a 'manggini' digging stick
- 5-6 (kuru) beer ngimbi -kuduk-pe
 liquid 1dlincSit-drink -Fut
 generic SU Irr
 Let's have a beer !
- 5-7 (yenggi) tawan wunu yinyirri
 fire smoke there 2sgSee
 generic SU Irr
 Can you see the smoke over there ?

5-1 to 5-7 demonstrate the optional inclusion of the generic in addition to the specific noun. Note also that these generics can anaphorically represent contextually established specific nouns, as in the examples below.

- 5-8 **syiri ngu -nyi-ta -merrendi**
 striker 1sgSlash-2sg-hit-LEST
 generic SU Irr DO
 (Look out !) lest I hit you with a stick/boomerang etc. !

- 5-9 **kurum-ninggi wurrbum-Ø-da**
 canegrass-INSTR 3plBash-3sg-hit
 spear SU Perf DO
 They speared it with canegrass spears.

- 5-10 **kuru derrigidi-yerim**
 liquid want -2sgHands
 generic SU Pres
 Would you like a beer ?

- 5-11 **yenggi yudi -ngiti-mi -wul**
 fire 2sgShove-1sg -Val-return
 generic SU Irr IO
 Bring me back some firewood !

As is evident in 5-3 above, these classifier-like freeform generics can optionally precede modifiers of nouns. Typically though, they only do so where the specific noun is omitted. Here the freeform generic functions as the head in a head-modifier construction, as demonstrated in 5-12 and 5-13.

- 5-12 **kuru lirmem derrigidi-yerim**
 liquid cold want -2sgHands
 generic SU Pres
 Would you like a cold beer ?

- 5-13 **yuri wutitmi me -wa**
 NgK *striker heavy 3sgSnatch-pick*
 generic SU Pres up
 He snatched up a heavy fighting stick/boomerang etc.

Various of these classifiers can be found to co-occur with the same noun. This is demonstrated in 5-14 below, where **syiri**, **kini** and **yenggi** all classify the function/use of **yawurr** 'stick'.

- 5-14 **syiri yawurr** stick for fighting
 kini yawurr stick for digging
 yenggi yawurr stick for burning

Returning to Dixon's 'noun class' vs 'classifier' criteria, these six generics can be seen to behave like classifiers in several ways. Firstly, they are freeforms. Secondly, their signalling of function/use categories is not significantly grammaticised. They typically do not occur with any constituent other than the noun. Their occurrence with modifiers is generally restricted to those constructions where the generic anaphorically represents the omitted specific noun (as in 5-12 and 5-13). Thirdly, several of these generics can fairly freely occur with the same noun (as in 5-14).

On the other hand these generics also exhibit a feature that is atypical of classifiers: they represent closed classes with only a few members that can be easily listed.

5.1.3 Group 1 Noun Classes

The five generics, **wa-** 'male', **wur-** 'female', **dV-** 'bodyparts', **wu-** 'canines' and **awa-** 'human group', are bound prefixes. They have no freeform equivalents, and there is therefore no reason to assume that they are the degenerate, contracted forms of any fuller noun (but see footnote 4, p297). All of these five generics are obligatorily attached to nouns that are members of their respective classes, and all but the bodypart prefix can be concordially attached to any modifiers of member nouns.

The maximal structure of NP's belonging to these five classes can be formulated as:

5-15 [class prefix + Noun_{specific}] + [(class prefix) + modifier]*

The obligatory attachment of these noun class bound generics to class member terms, and their optional concordial attachment to modifiers, are demonstrated below.

5-16 **wa-tyerrmusye (wa)-mirrisyarra perrety-meny**
M-old man M -blind die -3sgDo
cl cl SU Perf
 The old blind man has died.

5-17 **wur-wedimuy (wur)-ngayi tyusyuk-mem**
F -child F -1sg sick -3sg Do
cl cl PRO SU Pres
 My little girl is sick.

5-18 **awa-purpurrk (awa)-nyinyi ngunu...**
Hg -little'uns Hg -2sg HOW
cl cl PRO ABOUT
 How about your mob of kids.....?

- 5-19 **wu-pidirri (wu)-wagarri nginyirri**
C -dingo C -two 1sg See
cl cl SU Perf
 I saw a couple of dingos.

- 5-20 **da-muy (*de-)kenggefi yenim**
Bp-eye side on 3sg Go
cl SU Pres
 He's cross-eyed.

So how well do these five generics fulfil the criteria discussed above for noun classes rather than classifiers? Firstly, as bound prefixes they violate the requirement of classifiers that they do not form a morphological unit with the noun. Rather they accord with the observation that noun class membership is typically signalled by affixes/clitics (Dixon 1982:216). Secondly they designate closed classes, with most nouns belonging to only a single class (the few exceptions are mostly human age/stage terms that can be assigned to either the 'male' or 'female' classes).

However these five generics violate Dixon's criteria for noun class markers in one important way. He states that "noun class is shown by morphological processes which *can* apply to the noun itself and *must* apply to some other constituent" (loc. cit.). As the NP structural formula in 5-15 shows, of these five Ngan'gityemerri 'noun class' generics it would be more appropriate to state that the prefix *must* apply to the noun itself and *can* apply to some other constituent.

5.1.4 Group 2 Noun Classes and Classifiers

The two categories of noun classification examined in 5.1.2 and 5.1.3 differ in the major sense that the former are signalled only by freeform generics, and the latter only by bound generics. There remains four 'classes' which are signalled by both freeform and bound generics. As can be seen in 5-21, the bound generics are the degenerate, contracted forms of the freeform generics.

5-21	Freeform	Bound Form	Class
	gagu	a-	animal
	miyi	mi-	plant food
	yawurr/yewirr(K)	yerr-	tree/thing
	yawul	yeli-/yali(K)	bamboo spears

These freeform generics optionally precede nouns forming NP's of the generic - specific type. This construction is demonstrated in 5-22 to 5-25.

- 5-22 (gagu) a-matyi bengin -da
animal A-kangaroo 3sg Bash-hit
generic cl SU Perf
 He shot a kangaroo.
- 5-23 (miyi) mi-meli wurrbun-ba -ket
plant Pf -purple 3pl Slash-arm-cut
food cl plum SU Pres
 They're picking purple plums.
- 5-24 (yawurr) yerr-syinge yubu -ket-Ø
tree/thing Tr -Pandanus 2sg Bash-cut-IMP
generic cl aquaticus SU Irr
 Chop down (these) creek pandanus !
- 5-25 (yawul) tyulut warrim-pawal-wannim
bamboo hook 3pl Poke-spear -3pl Go
spears spear SU Pres SU Pres
 They're throwing hook spears.

Additionally they can anaphorically represent a contextually understood (or intentionally unspecified) specific noun. Compare 5-22 to 5-25 with 5-26 to 5-29 below.

- | | |
|---|--|
| <p>5-26 gagu bengin -da
 <i>animal 3sg Bash-hit</i>
 <i>generic SU Perf</i>
 He shot an animal.</p> | <p>5-27 yawurr yubu -ket-Ø
 <i>tree/thing 2sg Bash-cut-IMP</i>
 <i>generic SU Irr</i>
 Chop down (these) trees !</p> |
| <p>5-28 miyi wurrbun-ba -ket
 <i>plant 3pl Slash-arm-cut</i>
 <i>food SU Pres</i>
 They're picking fruit.</p> | <p>5-29 yawul warrim -pawal-wannim
 <i>bamboo 3pl Poke-spear -3pl Go</i>
 <i>spears SU Pres SU Pres</i>
 They're throwing bamboo spears.</p> |

The degenerate bound generics listed in 5-21 are obligatorily attached to nouns, and concordially to any adjectives, pronouns, demonstratives etc. that modify them. The 'bamboo spear' bound generic *yali-* is exceptional, attaching only to modifiers and never appearing on class member nouns (see 5-33).

- | | |
|--|---|
| <p>5-30 a-matyi a-kerre
 <i>A-kangaroo A-big</i>
 <i>cl cl</i>
 A big kangaroo...</p> | <p>5-31 yerr-syinge yerr-wagarri
 <i>Tr -Pandanus Tr - two</i>
 <i>cl aquaticus cl</i>
 Two creek pandanus...</p> |
| <p>5-32 mi-meli mi-kinyi
 <i>Pf- purple Pf -this</i>
 <i>cl plum cl</i>
 These purple plums...</p> | <p>5-33 (*yali-) tyulut yali-ngayi
 <i>hook Bs -1sg</i>
 <i>spear cl PRO</i>
 My hookspear....</p> |

The maximal structure of NP's belonging to these four classes can be formulated as:

5-34 [Noun_{generic}] + [class prefix+Noun_{specific}] + [(class prefix) + modifier]*

Looking at the generics of the classes 'animal', 'plant food', 'tree/thing' and 'bamboo spears', the freeform generics *gagu*, *miyi*, *yawurr* and *yawul* can be seen to share the classifier-like characteristics attributed to the generics treated in 5.1.2. On the other hand the bound generics *a-*, *mi-*, *yerr-* and *yali-*, in their morphological status and concordial role in attaching to NP constituents other than the noun, share with the bound prefixes examined in 5.1.3 the features characteristic of 'noun classes'. Not only is the system of 16 categories of noun classification split between those classes having freeform classifier-like generics and those classes having bound noun class-like generics, but those four classes signalled by both freeform generics and their degenerate bound equivalents show the same split, i.e. their freeform generics are classifier-like, and their bound generics are noun class-like. In having both nounclass-like generics and classifier-like generics, these four classes do not accord with the observation that 'The Australian languages with noun class systems do not employ classifiers' (Dixon 1982:173).

5.2 Noun Class Semantics

5.2.1 'Male' and 'Female'

These classes are morphologically signalled by the bound proclitics *wa-* 'male' and *wur-* 'female'. Neither of these classes are denoted by freeform generics. Note that I do not consider the nouns *mipurri/yedi(K)* 'man' and *falmi* 'woman' to be generic terms¹. These nouns pattern with other gender-specific member nouns of their respective classes in optionally bearing bound class generics, e.g. (*wa-*)*yedi(K)* 'man' and (*wur-*)*falmi* 'woman' (see 5-35 to 5-37 below). In comparison the freeform generics discussed in 5.1.4, such as *gagu* 'animal', *miyi* 'plant food', *yawurr* 'tree/thing' etc, can never be prefixed by their corresponding bound generics, e.g. (**a-*)*gagu*, (**mi-*)*miyi*, (**yerr-*)*yawurr*.

The classes 'male' and 'female' are concerned purely and simply with categories of human gender. Nouns in these classes designate categories of age, status, condition etc. Personal names and kinterms are not members of these classes. The attachment of the bound class markers to class members is

¹One minor generic-like characteristic of *mipurri/yedi(K)* and *falmi* is noted in 5.4.

normally obligatory, as in 5-35, but can be omitted from those nouns that are inherently gender-specific, as in 5-36 and 5-37.

5-35	wur-mulurru wa -mulurru	female cripple male cripple
	wur-nugumang wa -nugumang	female orphan male orphan
	wur-filfilngini wa- filfilngini	female halfcaste male halfcaste
5-36	(wur-)guniguni (wur-)delyek (wur-)apuderri	old woman woman who has borne a child pubescent woman
5-37	(wa-)tyerrmusye (wa-)dakarrany (wa-)ngangu	old man polygamous man initiated youth

The existence of the 'human group' class (see 5.2.2 below) should not be understood to imply that nouns of the classes 'male' and 'female' are, in contrast, singular in number. All the examples given in 5-35 to 5-37 are numerically unspecified, and equally amenable of plural interpretation.

The bound generics **wa-** and **wur-** cannot be attached to nouns designating non-humans in order to attribute gender characteristics to them. The gender of non-humans can only be specified using the nouns **mipurr** 'man' and **falmi** 'woman', as demonstrated in 5-38².

5-38	e-menggin	mipurr	da -nguru	wagarri	dem	-baty
	<i>A-goanna</i>	<i>man</i>	<i>Bp-penis</i>	<i>two</i>	<i>3sgHands-hold</i>	
	<i>cl</i>		<i>cl</i>		<i>SU Pres</i>	
	A goanna, a man one, has two penises.					

5.2.2 Awa- Human Group

The bound generic **awa-** denotes a collection of humans that can be considered to constitute a 'group' or 'collective' for any practical purpose³.

²Note that certain animal names are inherently gender specific, e.g. **tyirrety** 'male Agile wallaby' and **wamanggal** 'female Agile wallaby'.

³The prefix **rak-** also denotes a group of people, but one with far more specific reference. It refers to a patri-clan, a local land owning estate group determined by patrilineal affiliation, and attaches only to the names of such groups. Cognates of **rak-** (**dak-**, **lak-**, etc.) having the same meaning can be found in most if not all the Daly region languages (Green, Harvey pers. comm.).

Typically glossed as 'mob' in the Aboriginal English of Ngan'gityemerri speakers, **awa-** is attached to placenames to denote their denizens; personal names to mark the group of people associated with, and including, the named individual; demonstratives - indeed any sort of descriptive nominal that can feasibly identify a group of people. **Awa-** cannot be attached to numerals, e.g. ***awa-warrakma**. Although a designated 'group' must consist minimally of, say, three or four people, **awa-** otherwise conveys no information about the size of a group.

5-39	awa-purrrurk <i>Hg -little 'uns</i> <i>cl</i>	a mob of kids
	awa-yeyi <i>Hg -other</i> <i>cl</i>	another mob
	awa-kinyi <i>Hg -this</i> <i>cl</i>	this mob
	awa-fepi minati (K)	the denizens of Peppimenarti
	awa-Tyemeny	Tyemeny's mob (Tyemeny and her kids/friends/family etc.)

5.2.3 Wu- Canines

This minor class consists of only two members **wu-wu** 'dog' and **wu-nganiwurnnimbi/wu-pidirri(K)** 'dingo'. Membership in this class is denoted only by the bound generic **wu-**, there being no corresponding freeform generic⁴. 5-40 below shows the concordance of the **wu-** prefix on modifiers of 'canine' class members.

5-40	wu-wu	wu-mibe	wannam-fili -wannim
	<i>C -dog</i>	<i>C -young 'un</i>	<i>3plFeet -roll-3plGo</i>
	<i>cl</i>	<i>cl</i>	<i>SU Pres SU Pres</i>
	The pups are moving about now.		

rak-fepi minati (K)	The group of patrilineal descendents of Fepi minati estate
rak-nerintyi (K)	The group of patrilineal descendents of Nerintyi estate
rak-malfiyin	The group of patrilineal descendents of Malfiyin estate
rak-nganambala	The group of patrilineal descendents of Nganambala estate

Note that, **awa-** and **rak-** can both attach to estate names. While **rak-fepi minati (K)** describes only the descendants of that estate group, **awa-fepi minati (K)** includes those who have married estate members and anyone else considered to live in, or in some other way be associated with, the estate.

⁴Presumably the nominal root **-wu** in **wu-wu** 'dog' is the source for the canine class prefix. This root however refers only to domesticated dogs and cannot be used generically in reference to both dogs and dingos.

5.2.4 'Bodyparts'

The 'bodypart' class also has no freeform generic (although see the discussion overpage), being denoted only by the bound generic **dV-**. (The rule by which the vowel quality is determined is given in 2.4.4.1). Prototypical 'bodypart' class members are those parts of the body that are external, inalienable and clearly defined⁵.

5-41	de-pi	-	head	da-purr	-	bum
	de-syi	-	nose	de-firr	-	foot
	da-muy	-	eye	da-garri	-	lower leg
	da-ba	-	arm	de-tyeri	-	ear
	da-madi	-	chest	de-nintyi	-	knee
	de-me	-	hand	de-derri	-	back
	etc.					

Of the 90 odd terms for parts of the body that constitute the semantically defined class of 'bodypart' terms, only 33 bear the generic prefix and are therefore members of the formally defined class. Those bodypart terms that are not included in the class are either; alienable bodyparts, e.g. **wusye** 'hair', **fetyen** 'blood', **tyi** 'breastmilk', **finy** 'sweat'; internal bodyparts, e.g. **kekulkul** 'heart', **yirringgu** 'kidneys', **pakalang** 'tibia + fibia'; vaguely defined areas of skin, e.g. **milwadi** 'waist', **ngapa** 'area between shoulder blades'⁶; or are assigned to the animal class (see 5-51 in 5.2.5). Bodypart terms that are the compounds of two or more 'bodypart' noun roots cannot host the class prefix, and are therefore also excluded from the formally defined class, e.g. **pi-piri** (*head-pus*) 'brain', **muy-wasyan** (*eye-hair*) 'eyebrow/lash', **mity-kuru** (*eye-water*) 'tears'. Note that these semantically-defined bodypart terms that do not bear the bodypart class prefix cannot be assigned to the bodypart class by the defacto membership clause noted in 5.1.1, because the bodypart prefix is not concordially attached to modifiers of bodypart nouns.

Before moving on from the 'bodyparts' class, it is worth noting a bound form **dV-**, meaning 'country', that functions as a prefix on the directional modifiers;

⁵This excludes those terms for expanses of skin surface, like **milwadi** '-waist' etc, the boundaries of which are not so readily apparent.

⁶This area is defined with particular reference to it being the 'seat' on which children sit when being carried on the shoulders. **ngapa** also means 'a shoulder-ride' as in;

ngapa	derrigidi-yerim
shoulder want	-2sgHands
ride	SU Pres

Do you want a shoulder-ride?

5-42 **de -kin -ninggi**
Ctry-here-ISTR
 on this side of..

5-43 **da -wun-ninggi**
Ctry-there-ISTR
 on the other side of..

and further patterns with the bound class markers in suffixing the interrogative **tyen-** 'what kind of ?' (see 5.4). e.g.

5-44	tyen-mi	-	what kind of plant food ?
	tyen-ga	-	what kind of animal ?
	tyen-nawurr	-	what kind of tree/thing ?
	tyen-de	-	which country ?

This **dV-** form would appear to be related to the freeform **dede** 'country/camp/estate', though it does not prefix place names (as a cognate prefix in Murrinh-patha does (Walsh 1976:142)). Now this 'country' bound prefix may simply be homophonous with the 'bodypart' bound generic. However looking at the distribution of **dV-** across the range of structural positions in which freeform and bound noun class generics occur, as set out in 5-45, we find that they are in complementary distribution.

5-45	Bodypart	Country
Freeform Generic	×	√
Bound Generic on member	√	×
Bound Generic on modifier	×	√
Suffix on tyen-	×	√

Given this complimentary distribution, and taking into consideration the widespread use of bodypart terms in describing features of the landscape (cf. 3.5.3), the 'country' and 'bodypart' reference of **dV-** could be viewed as a case of polysemy rather than homophony. It is possible that 'bodyparts' and 'country/place' are (or, more likely, once were) based on an underlying whole-part category, of which 'parts of the body' and 'parts of the landscape' are/were the prime prototypes (and only members).

5.2.5 'Animal'

The formally defined 'animal' class consists of non-human animates other than canines (see 5.2.3). Member nouns obligatorily take the bound generic prefix **a-**, which is also obligatorily concordially attached to any modifiers.

5-46	a-matyi	a-minbadi
	<i>A-Antilopine</i>	<i>A-big</i>
	<i>cl wallaroo</i>	<i>cl</i>
	<i>A big 'roo...</i>	

5-47 **a-syensyerrgimi a-tyentyenmuy**
A- white rock- A- tame
cl wallaby cl
 A tame white rock wallaby...

5-48 **a-tyalmerr a-yin'gini**
 NgK *A- barramundi A-raw*
cl cl
 Raw barramundi...

Not all animal names obligatorily take the bound generic. Exceptions include: loanwords for introduced species, - **walfaga** -'buffalo', **nendu** -'horse', **pigipigi** -'pig' and **buliki** -'cattle' etc; reduplicated onomatopoeic names, mostly denoting birds, -**wirritywirrity** -'rainbow lorikeet', **makmak** -'white sea eagle', **tyunguttyungut** -'frogmouth owl' etc; some gender specified names, - **wamanggal** -'female agile wallaby', **tyirrety** -'male agile wallaby' etc; and a few residual terms for which the motivation for lack of bound generic prefixation is not readily apparent, - **burra** -'pelican', **ngurp** -'emu', **dayi** -'catfish sp.', **walpangarri** -'hornet sp.' **budenggu** -'pied cormorant' etc. Although these terms do not fit the defining criteria of the formal 'animal' class (i.e. they fail to bear the bound generic prefix), they can be assigned defacto membership on the grounds that any modifiers of these nouns will concordially select the 'animal' class bound generic, as demonstrated in 5-49 and 5-50.

5-49 **walfaga a-tyentyenmuy**
buffalo A- tame
cl
 A tame buffalo...

5-50 **buliki a-ngayi**
cattle A- 1sg
cl PRO
 My cattle...

Less central members of the 'animal' class include certain bodyparts, corpses, money, playing cards, spirits and ancestral beings. Those bodyparts that belong to this class rather than the bodypart class (see 5.2.4) are listed below.

5-51	a-nggirrgimi	-	ribs
	a-darri/a-darra(K)	-	liver
	a-mi	-	bones
	a-ngini	-	flesh/muscle
	a-garrfuru/a-garrfuri (K)	-	skin
	e-dewi/a-liyi (K)	-	fat/marrow
	a-kumufi/a-kumifi (K)	-	ligaments/veins
	a-murru/a-murri (K)	-	eggs ⁷
	a-gimi	-	tail

⁷The membership of **a-murru** 'egg' and terms for egg parts, e.g. **a-syapul** 'egg white', within this class, is decidedly odd, given their alienable status.

Within a culture where the butchering of animals is a regular practise and the anatomy of most animals is common knowledge, the allocation of most of these bodyparts to the 'animal' rather than 'bodypart' class, may stem from their high salience as parts-of-animals as opposed to parts-of-people.

The terms for female genitalia are also formal members of the 'animal' class. As can be seen in 5-52, these terms are built on facial feature metaphor, a form of semantic extension that is widely attested (Wilkins 1981:108).

5-52	a -syi	vagina
	<i>Acl-nose</i>	
	a -de -syi	clitoris
	<i>Acl-Bpcl-nose</i>	
	a -da -muy	clitoris
	<i>Acl-Bpcl-eye</i>	

The anomalous treatment of female genitals within noun classificatory systems is fairly common among Australian languages (Evans 1988). Dixon (1982:179) also notes that highly important or salient subsets of noun classes can be 'marked' by allocation to a different noun class.

5-53	peke	yerr-weti	ngudupum-panmi-wirr	ngan-gagu	a -syi,
NgK	<i>tobacco</i>	<i>Tr -small</i>	<i>1sgShove</i>	<i>-crotch -insert</i>	<i>LOC -animal A-nose</i>
	<i>cl</i>		<i>SU Perf</i>		<i>gen. cl =vagina</i>
	I slipped a small pellet of tobacco up into her vagina, and when				
	wudem	-fel,	muk-werri	dem	-baty -yenim, ngim,
	<i>3sgShoveDtr-bounce</i>	<i>sore -ASSOC</i>	<i>3sgHands-hold-3sgGo</i>	<i>1sgThink</i>	
	<i>SU Perf</i>	<i>=jump</i>	<i>SU Pres</i>	<i>SU Pres</i>	<i>SU Perf</i>
	she jumped (at the irritation) I knew then that she had an infection.				

The allocation to this class of corpses, ghosts and ancestral beings suggests that there is an association between this class category and features of the spirit world. This may be explicable in cosmological terms; presentday humans and animals are the common descendants of ancestral beings whose outward physical shape could vary between animal and human. Viewing people, animals, spirits and ancestral beings as members of a single macro-class, those that are alive and human are distinguished as male or female, and everything else is 'gagu'.

5-54	yawam -burrki-nuwurr-pe	atyat
	<i>2sgTake-3dl</i>	<i>-a little -Fut outside</i>
	<i>SU Irr IO</i>	<i>while loanword</i>
	Take these two (men) outside (because),	

gagu a -firr -werre video cassette kinyi ngerim-baty
animal A-foot-ASSOC here 1sgHands-hold
cl =corpse SU Pres
 this video cassette I have here has (images of) a deceased person
 on it.

5-55 **gagu a-nguty dinyirri**
animal A-ghost 3sgSee
cl SU Perf
 She saw a ghost !

5-56 **kine ngiminy-ne gagu burra girim**
this 1sgSay -3sg ancestral pelican 3sgSit
place SU Perf IO being SU Pres
 'This place' I told him 'is where Ancestral Pelican lives.'

The terms **fepi** '-rock' (belonging to no class) and **wa** '-paperbark' (belonging to the 'tree' class) are used as terms for coins and banknotes, respectively. Used in this sense these terms (and additionally the loanwords 'money' and 'silver') are members of the 'animal' class, and occur in combination with the freeform generic **gagu**, as in 5-57 below. The assignment of money to the 'animal' class may be based on the physical and functional resemblance (of coins at least) to **a-pelpel**, the pearl shells once brought as trade goods from the west. The **gagu** classification of 'playing cards' is shown in 5-58.

5-57 **gagu money yinnyinggin'gu, gerrim-buy -girrim,**
animal 2plSee dl 3pl ? -light -3plSit
gen. SU Pres SU SU Pres SU Pres
 You (dl) see that money shining brightly ? That's silver coins that
gagu silver-nyine wuddumbun-fi-madi-wurity-wannim kuru -nide,
animal -FOC 3plShove -Mp-chest-make-3plGo water-LOC
gen. SU Pres = throw in SU Pres
 they (whitefellas) always throw into the water (fountain).
a-kinyi-mirri mabuk
A-here-EMPH lots
cl
 There's a lot of money here.

5-58 **ma gagu yeyi pagu**
HORT animal other HITH
generic
 Give me another card !
 (request to dealer in game of kunkad - like gin rummy)

The 'animal' class is one of the four noun classes for which, in 5.1.4, we noted that there are both bound and freeform generics. The freeform

'animal' generic **gagu** occurs with 'animal' class member terms in generic - specific constructions (see 5-46 to 5-48). In classifying those less central class members (like bodyparts and money and playing cards) the freeform generic **gagu** plays a similar semantic role to the bound generic, classifying them as types of **gagu**. However in its occurrence with terms that designate species of animal, the generic **gagu** brings particular focus onto those animals as either sources of meat, as in 5-61, or as ancestral beings, as in 5-60.

The focus on 'edibility' is peculiar to the freeform generic classifier **gagu**, and is never a component of the bound class generic. In fact **gagu** is used, in the absence of a specific noun, to simply mean 'meat' in the same way that **miyi** is used to mean 'vegetables' and **kuru** 'drinks', as in 5-59.

- 5-59 **gagu miyi kuru ngumbusyiny-waty**
animal plant liquid 1plincSuck -consume
gen. food gen. SU Perf
 We ate meat and vegies and had drinks.

These two quite separate senses of **gagu** are rarely if ever confused. A **gagu** classified inedible animal will always be understood to be an ancestral being, as in 5-60.

- 5-60 **gagu a-niyen kine demem -dundum-yenim**
ancestral A-sand this 3sgHandsDtr-bury -3sgGo
being cl frog place SU Pres redup SU Pres
 This is the place where Ancestral Sandfrog buries himself.

Whether a **gagu** classified edible animal is being referred to as a source of meat, on the one hand, or an ancestral being, on the other, will generally be evident from the human-like actor roles accorded the latter. Compare 5-61 and 5-62.

- 5-61 **gagu nendu dam -ngirr-me -ket**
animal horse 3sgPoke-1plex-hand-cut
SU Perf IO
 He divided the horse flesh among us.

- 5-62 **gagu burra fepi nyin -nimbi**
animal pelican hill ANA-SOURCE
gen.
 Ancestral Pelican (came) down from that hill,
darani -titidi-pagu -tye -yedi darrwa-werre
3sgPokeDtr-push-HITH-Past -3sgGo raft -ASSOC
SU Plmp redup SU Plmp
 poling herself along on a raft.

5.2.6 'Plant Food'

This class consists only of vegetable food, as opposed to flesh food. Over 80 member terms of this class have been recorded, of which 20 or so remain unidentified. These are all fruits, seeds, fleshy seedpods, nuts, corms, rhizomes, edible stalks and flowers etc. Unlike the 'animal' class bound classmarker and freeform classifier, the 'plantfood' freeform and bound generics, *miyi* and *mi-*, share the same semantics and have an even stronger focus than *gagu* on the notion of 'edibility'; with a single exception (5-68) all members of this class are plant parts that are eaten.

For those trees that have significant parts other than their edible *miyi*, for instance if their timber is used in the manufacture of some artefact, the term for that plant will belong to both the 'tree' and 'plant food' classes. This is shown in 5-63 where the same roots take both the *mi-* and *yerr-* bound generics.

5-63	<i>yerr-sya</i>	-	<i>Cycas armstrongii</i>
	<i>mi -sya</i>	-	seed nuts of <i>Cycas armstrongii</i>
	<i>yerr-ngugurr</i>	-	<i>Tamarindus indica</i>
	<i>mi -ngugurr</i>	-	edible seed pods of <i>Tamarindus indica</i>
	<i>yerr-furra</i>	-	<i>Ficus scobina</i>
	<i>mi -furra</i>	-	edible fruit of <i>Ficus scorbina</i>

However those plants that have no significant parts other than their edible ones typically belong to the 'plant food' class only, although their *mi-* marked form can be used in reference to the whole tree, as in 5-64. Note though that when it is the whole tree rather than just the edible parts that are being referred to, any adjective modifying the *mi-* marked plant term will take the bound 'tree' class generic, as in 5-66. Compare 5-66 with 5-65 where *mi-menem* refers to the fruit, rather than the whole tree, and its modifier takes the class prefix *mi-*. In 5-66 the bound generic on the modifier is not a copy of the overt 'plant food' class bound generic that is attached to the head. Rather it concords with the 'tree/thing' class to which the head has been referentially assigned. This is not a common phenomenon, but it is for this reason that the attachment of bound class generics to modifiers is not viewed as a 'copying' process, but rather as a strategy for showing concord between head and modifier. As 5-66 demonstrates, it is not impossible for modifiers to show concord with a noun class other than that overtly marked on the NP head.

- 5-64 **wunu girim meringgi mi-kaga -firr**
there 3sgSit shade Pf -Ficus -foot
SU Pres cl racemosa
 She's sitting over there, in the shade at the foot of the fig tree.

- 5-65 **mi-menem mi-biny werrmim-ba-ket**
Pf-Terminalia Pf -ripe 3plHands-arm-cut
cl ferdinandiana cl SU Pres
 They're picking ripe billygoat plums.

- 5-66 **mi-menem kinyi yerr-syari yubu-ket-Ø**
Pf-Terminalia this Tr -dry 2sgBash-cut-IMP
cl ferdinandiana cl SU Irr
 Chop down this withered billygoat plum tree.

The formally defined 'plantfood' class corresponds very closely with the semantically defined class. The following three terms are the only examples in my data that do not take the bound class generic⁸. However any modifiers of these terms will show 'plantfood' class concord, so they are de-facto class members.

- 5-67 **mundupan - bush cucumber**
taktakma - bush passionfruit
kagulkagul - fruit of unidentified vine

The single inedible (de-facto) member of the 'plant food' class is **ngikin/ngekin (K) -'shit'**, which does not take the bound class generic, but can be classified by the freeform generic **miyi**. Any modifiers of this 'plant food' class member will copy the bound generic **mi-**.

- 5-68 **miyi ngikin mi-wetimbi ngunni -fifili -tye**
plant shit Pf -old 1plexSlash-search-Past
food cl SU PImp redup

We were searching about for old (cattle) shit (for lighting a fire).

Additionally, tobacco, which is normally a 'tree' class member (see 2.1.1.5), can be assigned 'plant food' class membership, not because of its 'edibility', but for the reason that it can be colloquially referred to as 'shit'. e.g.

- 5-69 **ngatya ngikin fi -ngumu-pe ya mi-dityunggurr-wurru**
father shit puff-1sgDo -Fut hey Pf -short -UNSATIS
SU Irr cl

Hey daddy, let me have a puff of that shit....oh it's too short now.

⁸In addition to the three terms listed here, a fruit with the common name 'wild gooseberry' is known as **mi-mirrityin** in NgW, but **mirrityin** in NgK. The NgK name may be a further example of an unprefix member term, or may simply be the result of ad hoc haplological reduction.

Finally, note that a number of terms are common to both the 'plant food' and 'animal' classes, distinguished only by their respective bound generics.

5-70	a -werrmisya	-	freshwater crocodile
	mi-werrmisya	-	red plum
	a -furra	-	freshwater mussel
	mi-furra	-	Ficus scorbina
	a -mukun	-	white rock wallaby
	mi-mukun	-	bush tomato
	a -diny	-	leech
	mi-diny	-	bush potato sp.
	a -wisamuy	-	white crane (<i>Ardea alba</i>)
	mi-wisamuy	-	white berry of <i>Flueggea virosa</i>

In some cases these pairings seem to be constructed on the basis of physical resemblances. For instance the bark of the red plum tree looks very much like the skin of the freshwater crocodile, and the vivid white colour of the berries of *Flueggea virosa* makes them stand out as plainly as the white crane. If there is in fact any perceived commonality between these 'animal' and 'plant food' class members, then further work may reveal that quite different features, other than physical resemblances, underlie their similarities in name. It has for instance been shown in other parts of Australia that totemic affiliations, or the relative timing of the developmental or behavioural cycle of plants and animals, form principals of systems of taxonomy and nomenclature (see for instance Chaloupka 1985).

5.2.7 Yawurr/Yewirr (K) Trees and Things

The 'tree/thing' class consists of all trees specifically, tree products and wooden things generally, and is further extended to cover manufactured objects made of any substance. Of the 57 recorded tree species names, only 31 are members of the formally defined class, obligatorily bearing the corresponding bound generic *yerr-*.

5-71	yerr-girrin	-	<i>Acacia difficilis</i>
	yerr-manggi	-	<i>Barringtonia acutangula</i>
	yerr-mirrsyi	-	<i>Callytris intratropica</i>
	yerr-fini	-	<i>Eucalyptus polycarpa</i> + <i>bleeseri</i>
	yerr-syinge	-	<i>Pandanus aquaticus</i>

In comparison to the near uniformity of class marking among members of the 'plant food' class, nearly half of all recorded tree species names do not bear the bound generic. Some examples are listed below.

5-72	kanawarra	-	Acacia holosericea
	kunintyin	-	Adansonia gregorii
	tyemerrmerr	-	Carpentaria acuminata
	dirrinbuk	-	Eucalyptus alba + apodophylla
	wendili	-	Grevillea pteridifolia
	wilit	-	Grewia breviflora

However these unprefixd terms are accorded 'tree/thing' class membership on a de-facto basis, because modifiers of them do show class concord, as in 5-73,

5-73	mawuny	yerr-kerre	wuddum-bat
	ironwood	Tr -big	3plShove-knock
		cl	SU Perf prone
	They've knocked down the big ironwood tree.		

The 'tree/thing' class also consists of the most obvious of tree products, namely any branches, sticks, twigs etc, that trees shed, whether they are in their found state or fashioned into particular artefacts.

5-74	yerr-wunu	yumu	-ngiti-wa
	Tr- that	2sgSnatch-1sg	-pick
		SU Irr	IO up
	Pick up that stick for me !		

5-75	kanbi	yerr-buy	-mem-garri	kide
	didjeridu	Tr -light-3sg	Do-leg	where
		cl	SU Pres	
	Where's that white didjeridu ?			

Terms for tree parts, such as leaves, that are features of trees only, can optionally omit the bound generic;

5-76	(yerr)miringgi	leaf
------	-----------------------	------

but those terms for tree parts that are also members of other classes, do obligatorily require it.

5-77	yerr-finy	sap	('tree sweat' cf. finy -'sweat')
	yerr-panmi	fork	('tree crotch' cf. da-panmi 'crotch')
	yerr-garrfuru	bark	('tree skin' cf. a-garrfuru -'skin')

This class includes two inedible tree products, tobacco and tea leaves; and also honey, which is edible and a tree product at least in the sense that the tree must be cut open in order to get at it. The 'tree/thing' class membership of these three items is shown in 5-78 to 5-80.

- 5-78 **funggulu yerr-kinyi ye -du -gumu**
honey Tr -this 2sgMouth-touch-TRY
cl SU Irr
 Try having a taste of this honey (sugarbag).

- 5-79 **yerr-lengirr yaga tyagani-ngini fi -yimi -ngini**
Tr -bad DEM what -PURP puff-2sgDo-Fut
cl SU Irr
 What do you want to smoke that rubbish for ?

- 5-80 **tea yerr-biny-nyine**
Tr -ripe -FOC
cl
 The tea's brewed now.

In addition to tree species, and the tree parts and products mentioned above, this class contains all man-made products such as clothing, swags, cars and planes, videos and trams etc, as shown in 5-81 to 5-84.

- 5-81 **etye-pe yerr-nugumang wuddi -pup -pe**
when-Fut Tr - deceased's 3plShove-burn-Fut
cl possessions SU Irr
 When are they going to 'burn the rags'
 (i.e. burn the swag and clothing of the deceased person)

- 5-82 **kanbi yerr-kinyi minbe-merrendi ngembimi -baty**
didjeridu Tr -this Neg -PROHIB 1dlinchHands-hold
cl SU Irr
 We're not allowed to take this didjeridu
airplane-nide yerr-minbadi
-LOC Tr -big
cl
 onto these big (interstate) planes.

- 5-83 **yerr-yeyi-nyine yerr-minbadi nga -wurr-fufu -pe**
Tr -other-FOC Tr -big 1sgPoke-3pl -shine-Fut
cl cl SU Irr IO redup
 I'm going to project this other thing (video) on to the big thing
 (screen) for them (audience).

- 5-84 **nganniny-mentyi-tyerr yerr-steel one deyedirr dem -baty**
1plexGo -neck -stop Tr - -hip 3sgHands-hold
SU Perf =wait cl =wheel SU Pres
 We waited for that thing having steel wheels(Melbourne tram).

The allocation of modern manufactured products, such as those listed in the examples above, to the 'tree/thing' class, can be viewed as a natural extension of the allocation to this class of such traditional artefacts as woomeras, spears, shields, coolamons etc, which are all made from the timber of trees. The classification of these traditional artefacts with trees accords with the crosslinguistic generalisation of Allan (1977:300) who observes that 'perhaps the commonest inanimate classifier is one for trees and wooden objects'. Similar classifications have been reported for several Australian languages (see for instance Green (1989:391) and Goddard (1983:95)).

A minor and less central member of the 'tree' class, is **yerr-mentyi** - 'song', formed by prefixing the bodypart root **mentyi** - 'throat/neck' with the 'tree' class bound generic. As 5-86 shows, songstyle names are also assigned to this class.

- 5-85 **mam, meny-ngirrki, yerr-mentyi yerr-yeyi -nyine ngumu -wa,**
more 3sgSay-1dlex Tr -neck Tr -other-FOC 1sgSnatch-pick
SU Perf IO cl =song cl SU Perf up
 'Keep going' he told us, so I launched into another song.

- 5-86 **ngimbi -ne -werr -tyeri-nime -pe, Alan wemi-yen'gi-pe-wirrim**
1dlincSit-3sgM-ASSOC-ear -1plinc-Fut 3sgHands-tell-Fut-3sgStand
SU Irr IO =listen SU SU Irr story SU Irr
 We'll sit (up here) listening to Alan giving his speech
ngan'gi yawurr wangga -ne
story tree songstyle-PURP
gen. name
 about the Wangga songstyle.

5.2.8 Syiri / Yuri (K) - Strikers

Syiri is the generic term for the class of weapon-like things that have in common a striking type of contact. **Syiri** classifies boomerangs, **syiri-garrityinmuy** and **kunyungun** (which are not thrown in this part of the country), and fighting sticks - both those fashioned for this purpose, e.g. **misyamba** 'flat-faced fighting stick' and **magulfu/magulfi(K)** 'cylindrical fighting stick', or any stick snatched up as a weapon in the heat of a fight. **Syiri** also classifies **wanarr** - 'lightning' and the term for 'dry season wind' **marrawuk/fuke(K)**, **syiri-marrawuk** meaning 'cyclone'. The freeform occurrence, and classificatory use of the generic is shown in 5-87.

- 5-87 **syiri kunyungun ngu -nyi-ta -merrendi**
striker boomerang 1sgSlash-2sg-hit-WARN
ype SU Irr DO
 (Look out !) or I'll hit you with a stick/boomerang etc. !

5.2.9 Kurum/Kurim (K) and Yawul Bamboo and Canegrass Spears

Spears fall into two categories that can be distinguished by their size, shaft, and the type of woomera that they are used in conjunction with⁹. Larger spears have bamboo shafts to which are affixed a variety of heads. The generic for these spears is *yawul*, and all *yawul* are used with a short woomera called *yagama*. The size and weight of these spears, combined with the smaller woomera, gives them greater accuracy. They are used for such large game as wallabies, kangaroos and cattle. Spears classifiable as *yawul*, include *tyulut* -'hookspear' and *man'guna* -'flint/glass spear'.

The generic classifier *yawul* optionally precedes specific spear-type terms in a generic - specific construction, and modifiers of these terms take the corresponding bound generic *yeli/yali* (K)¹⁰.

5-88 (yawul) tyulut yeli-wutitmi
bamboo hookspear Bs -heavy
spear cl
A heavy hookspear..

5-89 (yawul) man'guna yali-garrityin
NgK bamboo glass spear Bs -crooked
spear cl
A crooked glass spear..

The second class of spears are small light spears with a canegrass shaft affixed with mangrove or ironwood tips. Generically known as *kurum*, these are used with a large woomera, called *tyin/tyun* (K), which is only slightly shorter than the spear itself. The lightness of *kurum*, coupled with the size of the woomera, makes them extremely fast, although they skip about and their projection is less accurate than *yawul*. They are thrown into flocks of geese etc., rather than at a single specific target. They were also used until fairly recently for the ritual punishment of men¹¹.

⁹Additionally, the throwing of spears from these two classes is described by different verbs. The verb for throwing a *yawul* spear is *ngarim-pawal* or *ngarim-dap*, whereas the verb for throwing a *kurum* spear is *ngubum-da*, the same verb as 'to shoot a gun'.

¹⁰In Ngan'gikurunggurr I have frequently heard the initial semi-vowel elided and the proclitic given as *ali-*.

¹¹An offender was placed in a clear area of ground between two lines of men about 40 metres distant from him and required to dodge volleys of *kurum* spears from either side until he was either struck, or deemed to have held out for a sufficiently long period of time to have paid his due.

The freeform generic use of **kurum** is shown in 5-90, and its classificatory use in 5-91.

- 5-90 **kurum-ninggi wurrbum-Ø-da**
canegrass-INSTR 3plBash-3sg-hit
spear SU Perf DO
 They speared it with canegrass spears.

The generic is proposed to class member terms and copied as a bound generic onto modifiers. As was true for `syiri`, the bound generic has the full unreduced form of the freeform generic.

- 5-91 ep kurum yiliyili ep kurum tulunguk
 GUESS *canegrass mangrove* GUESS *canegrass ironwood*
spear tipped spear spear tipped spear
 Might've been a mangrove kurum spear, or an
 ironwood kurum spear.

5.2.10 Kini - Digging Sticks

Kini, the generic for digging implements, classifies types of digging stick.

- 5-92 kini manggini fashioned digging stick
 kini yawurr makeshift digging stick

5.2.11 Tyin/Tyun (K) - Woomeras

Tyin/tyun (K), the generic for the long woomeras (used in combination with kurum spears), classifies types of woomera.

- | | | | |
|------|------|-----------------------------|---|
| 5-93 | tyin | fenggu | woomera used with unbarbed kurum spears |
| | tyin | gan'gunu/
tyin dityi (K) | woomera used with barbed kurum fish spears |

5.2.12 Yenggi - Fire

Yenggi, the generic for fire, classifies things inherently associated with fire.

- | | | |
|------|------------------------|---|
| 5-94 | yenggi ba | firewood |
| | yenggi syarr/tyen (K) | charcoal |
| | yenggi dawan/tawan (K) | smoke |
| | yenggi misi/-purr (K) | firestick (alight at
one end for
transporting fire) |

classified with respect to its function/use as a member of the 'bamboo spear' class (see 5-88), but consider 5-96.

- 5-96 **tyulut yerr-nem ngerim-wurity-ngirim**
 hook Tr -3sg 1sgHands-fix - 1sgSit
 spear cl PRO SU Pres SU Pres
 I'm fixing his hook spear.

Here the possessive pronoun modifying **tyulut** -'hook spear', bears the 'tree/thing' class bound generic **yerr-** rather than the 'bamboo spear' class bound generic **yeli-**. This shift in class allocation is motivated by focus upon the spear, not as a piece of wood that is being used as a spear, but rather as a piece of wood that is being mended in the way that other wooden objects are.

Similarly, the statement that one 'has no matches', using the negative particle **minbe-** suffixed with a generic, could be given as either 5-97 or 5-98.

- 5-97 **match minbe-yenggi**
 Neg - fire
 I've got no matches

- 5-98 **match minbe-yawurr**
 Neg - tree
 I've got no matches

That is, matches can be classified as 'tree/things' because they are pieces of wood, or as 'fire' by virtue of their function. Most of the examples of crossclassing in Ngan'gityemerri are facilitated by the potential to variously view certain objects with respect to their 'inherent nature' or 'function/use' features. This suggests that the classes of wooden implements 'bamboo spears', 'canegrass spears', 'hand held weapons', 'woomeras', and 'digging sticks', could usefully be organised hierarchically as sub-classes of **yawurr** 'tree/things'. Higher level classification as **yawurr** is based on 'inherent nature' features, whereas lower level classification as **yawul**, **kurum**, **syiri**, **tyiny** or **kini**, is based on 'function/use' features.

5.3 Types of Generic - Modifier Construction

So far we have seen that generics, be they classifier-like freeforms, or noun class-like bound forms, can be used in a variety of NP constructions. Freeform classifiers co-occur with specific nouns in a generic-specific NP type.

- 5-99 **gagu a-nganifinyi winni -lalirr-tye**
animal A-echidna 3plSit -eat -Past
gen. cl SU PImp
 They were eating an echidna.

- 5-100 **miyi mi-ngugurr-nyine yeme -ba -ket -tye -yagadi**
plant Pl -tamarind -FOC 2sgHands-arm-cut -Past-2sgGo
food cl SU PImp SU PImp
 Then you were picking tamarinds.

Specific nouns can be used without classifiers (5-101), and conversely classifiers themselves can constitute complete NPs (5-102).

- 5-101 **ganbi kide?**
didjeridu where
 Where's the didjeridu ?

- 5-102 **yawurr men'gin-wa**
tree/thing 3sgSnatch-pick
gen. SU Perf up
 He picked up the didjeridu.

On the other hand bound generics typically attach to the member terms of their respective classes, and additionally are concordially attached to modifiers (exceptions noted include the 'bodypart' class prefix which attaches to member terms only, and the 'bamboo spear' class prefix which attaches to modifiers only).

- 5-103 **a-matyi a-kerre**
A-kangaroo A-big
cl cl
 A big kangaroo...

An NP can also consist of simply a bound generic attached to a modifying element.

- 5-104 **wur-yubu**
F -good
cl
 A good woman...

The bound class marker in this type of construction is not treated as concordially attached (as it is in an NP which includes a specific class member term), but constitutes the head of the NP. Example 5-104 above, then, is an NP of the head - modifier type. This section examines the range

of modifying elements that can be headed by bound class generics, producing this type of head - modifier construction.

5.3.1 Generics + Simple NP modifiers

Firstly, as evident in the examples of modified nouns in the preceding sections of this chapter, modifiers can be adjectives, pronouns, anaphoric demonstratives, deictics and numerals. These modifier types in head - modifier constructions are demonstrated in 5-105.

5-105	wur-yubu	a good woman
	<i>Fcl -good</i>	
	wur-ngayi	my woman
	<i>Fcl -1sg PRO</i>	
	wur-nyin	that (previously mentioned) woman
	<i>Fcl -ANA</i>	
	wur-kinyi	this woman
	<i>Fcl -this</i>	
	wur-wunggume	a certain woman
	<i>Fcl -one</i>	

5.3.2 Generics + Complex NP Modifiers

Additionally, NPs can be headed by bound generics. As is evident in examples 5-108 and 5-110, the bound generic can head a noun that itself carries a class prefix. As the modifying element is becoming increasingly complex, at this point I will adopt the convention of indicating the scope of the leftmost generic by placing the modifying element over which it operates, in square brackets.

5-106	wa-[Darwin-nimbi]	5-107	wur-[wusye dadirmade]
	<i>M - -SOURCE</i>		<i>F -hair curly</i>
	<i>cl cl</i>		
	A man from Darwin...		A curly haired woman...
5-108	dam -ngi-fi -me yerr-[de-tyerr]		
	<i>3sgPoke-1sg-Mp-hand Tr -Bp-mouth</i>		
	<i>SU Perf DO cl cl</i>		
	He handed me the telephone (the mouth thing).		
5-109	yerr-[meringgi yubu]-nide ngimbi-pe		
	<i>Tr -shade good -LOC 1plincSit-Fut</i>		
	<i>cl SU Irr</i>		
	Let's sit under a good shaded tree.		
5-110	wa-[de-pi kerre] wani-pagu -pe		
	<i>M- Bp-head big 3sgGo-HITH-Fut</i>		
	<i>cl cl SU Irr</i>		
	The boss (big-headed man) is coming !		

5.3.3 Generics + Verbal Clause

Bound generics can also head a clause. The resultant nominalised clause is fully finite, bearing all the pronominal crossreferencing and tense marking morphology that it would as an independent clause.

- 5-111 **wa-[wedimuy]** **yedi -tye wa-[deme -Ø -pi -yiri -tye -yedi]**
M- little boy 3sgGo -Past M -3sgHands-3sg-head-numb-Past-3sgGo
cl SU Plmp cl SU Plmp DO=make shamed SU Plmp
 When he was a young boy he was shy.
 (lit:he was a shy male.)

The clause forming the modifying element can consist of not only just of a complex verb, but can be a fully expanded clause containing nominals, particles, adverbs, etc. Consider the examples below.

- 5-112 **musyulng wudini -fiftyi-tye wakay yerr-[nem]**
swag 3sgShove-roll -Past finish Tr -3sgM
SU Plmp up cl PRO
 She rolled the swags right up, those swags of his,
yerr-[dede peyi-nimbi use 'im-ngirrminygu]
Tr -camp in -SOURCE -1plexDo dl
cl place SU Perf SU
 the ones we'd used from their place.

The nominalisation of clauses by heading them with class generics in this way, is the main strategy for deriving formal relative NPs in Ngan'gityemerri. As noted above, nominalised clauses are fully finite, having the form of independent clauses. It appears that in those Australian languages having a general subordinate clause type, such clauses are typically finite and have a fairly loose paratactic relation to the main clause (see for instance Merlan (1983:135)). In Ngan'gityemerri however relative clauses, though finite, are formally nominalised by the attachment of noun class prefixes. I am unaware of any other Australian language for which this use of noun class markers has been reported. Given their status as nominals, generic-headed clauses need not be considered subordinate to a main verb, but simply as modifiers of arguments of the main verb. Thus in 5-112 above, **musyulng** 'swag' is the O of the verb 'roll up', and the two generic-headed NP's **yerr-nem** 'the thing of his' and **yerr-dede peyi-nimbi use 'im-ngirrminygu** 'the thing we'd used from his house', are both nominals modifying that O NP. Likewise the nominalised clause in 5-113 below modifies the A NP (encliticised with agentive **-ninggi**). Where the specific noun is omitted, as in 5-114 to 5-116, the nominalised clause stands as a head - modifier type NP and fills the argument role of the predicate

rather than modifying an NP in that role. This directly parallels the analysis given for non-verbal modifying elements in 5.2 above (see eg 5-104 *wur-yubu*) where a class prefixed simple nominal modifier can either modify a given noun or, in the absence of a given head noun, constitute a head - modifier NP. There are no constraints on the argument roles that nominalised clauses can either modify, or in themselves constitute. In 5-112 above and 5-113 below the nominalised clauses modify the O and A of the verb, in 5-115 the nominalised clause is an ASSOCIative argument of the verb, and in 5-116 and 5-117, the nominalised clauses are verbal arguments in the local case roles SOURCE and LOCative, respectively.

- 5-113 *ticket kinyi nginimem pay 'im-meny watypela -ninggi*
this already 3sgDo whitefella-AGENT
SU Perf

This (plane) ticket has already been paid for by that whitefella,
wa-[wunu-pefi Melbourne ngadde -nime-tye]
M -there -THITH 1dlexGo -tr -Past
cl SU PImp SU
 that man who went there to Melbourne with us two.
 (lit: that one who the three of us went to Melbourne)

- 5-114 *yerr-[ngini-handbag-gumu] yerr-[wedimuy] yerr-[every room*
Tr -KIND- -SEMBL Tr - small Tr -
cl cl cl
 That whitefella (hotel receptionist) picked up a thing like a kind
 of handbag,
nem key dim-nyine fill 'im up-mem] watypela nyin me -wa
3sgM 3sgSit-FOC -3sgDo ANA 3sgSnatch-pick
PRO SU Pres SU Pres SU Perf up
 a small thing, a thing filled up with the keys to every room.

- 5-115 *mityity wagarri pey-endi widdibenggu*
white two in -SAME 3plStand dl
woman place SU Pres SU
 There are two white women (security guards) standing there
yerr-[tyagani-merrendi gentyerrmigi-baty knife]
Tr - what -LEST 2plHands dl-hold
cl SU Irr SU
 (with) a thing (metal detector) lest you have something like a
 knife.

- 5-116 *ngatya yumu-ne -gumu, yerr-[fepi minbadi nem*
father 2sgSay-3sgM-TRY Tr - hill big 3sg
SU Irr IO cl PRO
 'Daddy, try suggesting to him that he get a jacket

shop-nyine girribem], nyin-nimbi jacket wumu -wa,
 -FOC 3sgStand ANA-SOURCE 3sgSnatch-pick
 SU Pres SU Irr up
 from (the shop) that is Peppimenarti's shop'.
 (the Darwin shop that supplies the Peppimenarti store)

Section 6.1 examines the way in which NPs can be, though are not obligatorily, marked for certain case functions with a set of enclitics (see for instance, 'agentive' -ninggi in 5-113 above). Note though that nominalised clauses functioning as verbal arguments, as in 5-114 to 5-116, cannot have their local or syntactic case roles marked with these enclitics. In the same way that case enclitics are freely omitted from even simple NPs, this is unlikely to result in ambiguous relations with the verb, as the role of the nominalised clause will generally be evident from the thematic content and the meaning of the predicate. Where the role of a nominalised clause requires overt specification, this can be achieved by attaching the case enclitic to the anaphoric demonstrative, as demonstrated in 5-116.

Consistent with the unconstrained roles that nominalised clauses can fill as arguments of the verb, there are likewise no constraints on the types of relations that can hold between the head generic and the verb of the nominalised clause. Thus in 5-113 and 5-116 the head of the nominalised clause is the S of the intransitive nominalised verb, in 5-112 it is the O, and in 5-115 where the generic nominalises a merrendi subordinate clause (cf. 6.2.3), the head is not an argument of the nominalised verb at all.

Finally, having established that head - modifier constructions consist of a noun class generic as proclitic to a wide range of modifier types, ranging from simple nominals such as adjectives, through to fully finite clauses and, as 5-117 below demonstrates, strings of finite clauses, we should ask ourselves 'how do we determine the scope of the head generic ?'.

5-117 yentyi -ngiriki-tye yerr-[watypela nem, wannim-derri-tyerr,
 3sgTake -1dlex -Past Tr - whitefella 3sg 3plGo -back -halt
 SU Plmp DO cl PRO SU Pres
 He took the two of us onto that thing of whitefella's, that they
 stand still on, and
 yentyin -yirrimbin, wannim-fel wun -ambirri]
 3sgTake-3sgGo* 3plGo -jump there-ahead
 SU Pres SU Pres SU Pres
 it takes them and they jump off up ahead there at the top.
 (i.e. escalators)

In an example like 5-117 the string of four clauses (one verbless, three verbal) that is marked (by the square brackets) as falling within the scope of the noun class generic, must be delivered in a single intonation contour,

and without pauses between any of the clauses. If for instance in 5-117 above, there was a pause after **watypela nem**, and the verb **wannim-derri-tyerr** began a new intonation contour, then the scope of the generic head, **yerr-**, would be understood to operate over **watypela nem** only.

5.3.2 Ngan- Relative Locational Clause Marker

Section 2.4 looks at the role played by the morpheme **ngan-** in combining with the major bodypart terms to produce static locative CVSs. **Ngan-** also introduces relative locational clauses. In this capacity **ngan-** functions in a manner similar to the noun class proclitics discussed in the preceding section, and it is for this reason that I have chosen to include the discussion of **ngan-** here.

Relative locational **ngan-**, functioning as a proclitic, introduces clauses that are given as the destination of verbs of motion. The relative locational clause can be a fully finite verbal clause, as in 5-121 to 5-123 below, or can be reduced to simply an NP, as in 5-119 and 5-120. As shown in 5-118 below, reduction of a **ngan-** clause to an NP is the norm where that NP is the subject of an existential clause.

- 5-118 **ngarany -fi -pal ngan-mawuny (girribem)**
1sgPokeDtr-Mp-return LOC -ironwood 3sgStand
SU Perf REL SU Pres
 I went back to (where) the ironwood tree (stands).

Where **ngan-** has scope over a clause that has been reduced to just an NP, the relative locational clause will therefore be translated as 'to the place where NP is'.

- 5-119 **kak -ambirri yedi -tye ngan-Darwin**
in -ahead 3sgGo -Past LOC-
motion SU PImp REL
 He's already gone on to (the place where) Darwin (is).

- 5-120 **darany -fi -pal ngan-dede nem**
3sgPokeDtr-Mp-return LOC -camp 3sgM
SU Perf REL PRO
 He went back to (the place where) his camp (is).

Where **ngan-** has scope over a full verbal clause, the relative locational clause will designate 'the place where CLAUSAL PROPOSITION happens' as the destination of a verb of motion. Again, square brackets indicate the scope of the relative clause.

- 5-121 **ngambanigerri-tye ngan-[rail yaga paint 'im-wurrum-wannim]**
 1dInc Go* -Past LOC- DEM -3plDo -3plGo
 SU Plmp REL SU Pres SU Pres
 We went back to (the place) where they were painting
 fenceposts.
- 5-122 **werrbiny-fili kuderri wunu ngan-[marrguninggi]**
 3plBash-roll billabong there LOC - place already
 SU Perf REL visited
 (The whistle ducks we were hunting rose up and) flew around
ngundum -fili -nyine] wanniny-tyerr
 1dIncSlash-roll-FOC 3plGo -halt
 SU Perf SU Perf
 then landed back at the billabong (that was the place where) we
 had just previously come from.
- 5-123 **ngan-[wudumbun-burr-mentyi-gerrgir] weri nyinnin kuru**
 LOC- 3sgShove -3pl -neck -cut hole ANA water
 REL SU Pres DO redup
 (During Cyclone Tracy the sea washed into Fanny Bay Gaol),
 into that place where they hang people, that pit (that the
 gallows are in) was full of water,
bakuty dini -tye, wunu ngan-[ngarrgu nginni -ngan-madi-tye]
 much 3sgSit-Past there LOC -1dlex 1dlexSit-LOC -chest-Past
 SU Plmp REL PRO SU Plmp
 (it even came right up) into the place where we (prisoners)
 were sitting inside.

Note that the sense of 'destination of a motion verb' that **ngan-** conveys in this relative clause structure is compatible with the 'endpoint location' sense of the nominal enclitic **-nide** (see 6.1.6). Indeed both **ngan-** and **-nide** can co-attach to an NP, as in 5-124

- 5-124 **yagadi -tye ngan-dede ngayi-nide**
 2sg Go-Past LOC -camp 1sg -LOC
 SU Plmp REL PRO
 You came to (the place which is in) my camp.

However **ngan-** cannot be compatible with the 'static location' sense attributed to **-nide** in 6.1.6¹³.

¹³In this respect **ngan-** differs from an otherwise similar morpheme in Marrithiyel. The Marrithiyel form **ni** corresponds very closely to Ngan'gityemerri **ngan-** in both its combination with major bodypart terms to form a CVS, and in its relative clause function (Green 1989:300-7). However Marrithiyel **ni** appears to have a more general relative function, in that it is not restricted to a locative/destination interpretation, and *can* be compatible with static location verbs, as in the example below taken from Green (1989:301). (While I have supplied Green's translation, for comparative purposes I have taken the liberty of providing the interlinear gloss in terms of the conventions used for Ngan'gityemerri).

- 5-125 **wa** **-ngirrki-syalat-pe** **-wiri** (***ngan-**) **fidi** **-nide**
 3sgHeat-1dlex -warm-Fut-3sgSit sun's-LOC
 SU Irr DO SU Irr heat
 We'll warm ourselves in the sunshine.

5.4 Noun Class Generics with **Tyen-** 'what' and **Minbe-** 'negative'.

Noun class generics can be combined with **tyen-** 'what'. The combination of **tyen** and class marker **X**, asks 'what kind of **X** class member is this?'. **Tyen-** has been found to combine with the 'animal', 'plantfood', 'tree' and 'bodypart/country' (see 5.2.4) generics. As listed in 5-126, it is the degenerate bound generics of the 'plantfood', 'animal' and 'bodypart/country' classes that combine with **tyen-**, but the freeform classifier generic of the 'tree/thing' class (with assimilation of initial **y** → **n**).

- 5-126 **tyen-nawurr** - what kind of tree/thing is this ?
tyen-mi - what kind of plant food is this ?
tyen-ga - what kind of animal is this ?
tyen-de - what part of the country/which place?

The particle **minbe/minde** (K) 'negative' also combines with generic terms giving the privative sense of 'the absence of a member of class **X**'. As noted for **tyen-** above, it is the bound degenerate generics of the 'plantfood' and 'animal' noun classes that combine with **minbe** in this way;

- 5-127 **mi-meli** **minbe-mi-nyine**
Pl-purple Neg -Pl - FOC
cl plum cl
 There's no purple plums now !
- 5-128 **gagu** **minbe-ga-wurru** **yenim-way** **-me**
animal Neg -A -UNSATIS 3sgGo -empty-hand
generic cl SU Pres
 He's got no beef, he's emptyhanded.

but the freeform classifier-like generics of all other noun classes/classificatory sets.

- 5-129 **peke** **minbe-yawurr**
tobacco Neg -tree
generic
 (I have) no tobacco.

apu **gangi-ya** **ni** **muku**
there 1sgSit-Past REL woman
SU Realis

I was sitting there, where the women (go).

- 5-130 **minbe-yenggi-wurru** **ngirrim**
Neg -fire -UNSATIS 1plexSit
generic SU Pres
 We're fireless.

- 5-131 **kuru -pagu yumu -ngiti-wa -Ø, minbe-kuru**
liquid-HITH 2sgSnatch-1sg -pick -IMP Neg -liquid
generic SU Irr IO up generic
 'Give me a beer!' 'There's none left'

Although the terms **mipurr/yedi(K)** 'man' and **falmi** 'woman' have not been treated as generics in this chapter (see reasons given in 5.2.1), they do pattern with other generics in combining with **minbe/minde(K)** in this kind of privative construction.

- 5-132 **a minde-yedi**
NgK oh Neg -man
 Oh ..there's no-one here.

- 5-133 **minbe-falmi ngini -tye**
Neg -woman 1sgSit -Past
SU PImp
 I was without a woman (wifeless).

Note that the bound generics in 5-127 and 5-128 are unusual in two respects. Firstly in all the other patterns of their occurrence (discussed throughout this chapter) bound generics function as either proclitics, or in some cases as prefixes (see 5.5). In combination with **tyen-** and **minbe-** however, they appear to function as suffixes. Secondly, as a suffix the 'animal' class bound generic has the form **-ga**, whereas as a proclitic/prefix it has the form **a-**.

5.5 Phonological Status of Bound Class Generics

All the freeform generics listed in Table I function as independent phonological words. Here I am more concerned with the phonological status of the bound generics which are split between prefix and proclitic. This distinction is based on the ordering of phonological processes in Ngan'gityemerri and results in different levels of phonological dependency operating between the host nominal and the bound class generic.

Cliticisation is a late-ordered process in the sense that clitic attachment to a nominal root takes place after all other phonological processes - stress assignment, assimilation, vowel harmony etc. Proclitics

therefore, despite being word initial, do not bear stress, and are not subject to any phonological smoothing processes (see 2.4.4.1).

Prefixation, on the other hand, is ordered before all other phonological processes are applied, resulting in, among other things, the treatment of the prefix as part of the word for the purpose of stress assignment. Prefixes therefore do bear stress and are subject to such phonological smoothing processes as diphthongisation, vowel harmony etc..

With respect to this distinction the nine bound class generics fall into two groups. The first group, consisting of *wa-*, *wur-*, *awa-*, *yeli-*, function as proclitics to the head and are copied as proclitics onto any modifiers. e.g.

- 5-134 *wa-yédi wa-kérre*
M-man M-big
cl cl
 A big man...

- 5-135 *wur-gúnigúni wur-wúnu*
F -old woman F -that
cl cl
 That old woman...

The second group of bound class generics, consisting of *a-*, *mi-*, *yerr-*, *wu-*, *dV-*, function as prefixes to class members, but as proclitics where they attach to modifiers. This can be seen in the stress marking on the examples below.

- 5-136 *á -matyi a-kérre*
A-kangaroo A-big
cl cl
 A big kangaroo...

- 5-137 *yúri -gàrrityìnmuy yuri ngáyì*
striker-boomerang striker 1sg
PRO
 My boomerang...

- 5-138 *yérr-gi yerr-syári*
Tr -pandanus Tr -dry
cl spiralis cl
 A dried up pandanus...

In terms of cross-linguistic generalisations that have been made about the behaviour of clitics (e.g. Klavans 1980), the split phonological status of this second group of class markers is quite anomalous. Looking at the

system as a whole, it seems most likely that these bound generics developed as proclitics to both class member and modifying nominals. This pattern is still manifested among the first group, and is true for group two modifiers. However the attachment of group two bound generics to class members appears to have undergone de-cliticisation, their reanalysis as prefixes evidenced by a shift to phonological dependency on the root that is manifest by both the generic's capacity to bear stress marking and to undergo vowel harmony rules etc.

Chapter 6

Enclitics

6 Overview

Ngan'gityemerri employs a system of sixteen enclitics that form a word class. A single one of these, *ngini-/ngani-(K)* 'KIND' (see 6.2.7 below), is in fact a proclitic, not an enclitic. However, because it patterns with the class of enclitics in all respects other than position, I treat it as a member of the enclitic class. All comments made about enclitics in this section can be taken to be equally applicable to 'KIND'.

The set of sixteen enclitics can be divided into three types defined by the operational scope of the enclitic in a given function. 'Nominal enclitics' have scope over their host NP only. This group consists of the syntactic and local case enclitics, *-ninggi* 'AGENTive/INSTRumental', *-ne/-ngini(K)* 'PURPosive', *-werre/werri(K)* 'ASSOCIative', *-nimbi* 'SOURCE', *-nide* 'LOCative', *-pagu* 'VIA'. The various functions of these six nominal enclitics are discussed in 6.1.

The three 'verbal enclitics', *-ne/-ngini(K)* 'INTENTION', *-pefi* 'INCHoative/DURative/COTEMPoral' and *-gumu/-gimi(K)* 'WHILE', have strictly aspectual functions within the verb. While the verbal use of *-ne/-ngini(K)* signalling 'INTENTION' is clearly related to its nominal usage as a 'PURPosive' case marker, the verbal usages of *-pefi* and *-gumu/-gimi(K)*, appear to bear no similarity to the semantics of their propositional use. These three verbal enclitics are examined in 3.4.4.

The third type of enclitic, termed 'propositional¹ enclitics', have scope over an entire clausal proposition. They can be used adnominally, attached to the final constituent of an NP, or predicatively, attached to the verb stem. In their predicative use they fill the same position as the 'verbal enclitics' discussed in 3.4.4. The propositional enclitics *-nimbi* 'CAUSative', *-pefi* 'THITHer', *-pagu* 'HITHer', *-merrendi/-nana(K)* 'LEST', *-yirre* 'CORRECT', *-yendi* 'SAME', *-gumu/-gimi(K)* 'SEMBLative', *ngini-/ngani-(K)* 'KIND', -

¹I use this term in a slightly different way to some previous writers. For instance Laughren (1982:133) defines 'propositional particles' as having similar scope (i.e. over the whole proposition), but restricts her use of this term to those particles that 'indicate the speaker's attitude to or judgement concerning the proposition expressed by the clause to which the PP is attached'. My use of 'propositional' is concerned solely with the operational scope of the enclitics, some of which, like *-wurru* 'UNSATISfactory', do indicate speaker's attitude/judgement, though others, like *-gumu* 'SEMBLative' and *-nimbi* 'CAUSal', in encoding the relations holding between an NP and predicate, fall within the concerns of what would generally be called 'case'.

napa 'JUST', **-nawa** 'INSTEAD', and **-wurru** 'UNSATISfactory', are examined in 6.2.

Several members of the set of enclitics belong to more than one type. For instance, as a verbal enclitic, **-gumu** has the function of marking temporal subordinate clauses, whereas as a propositional enclitic it indicates that one entity/event reSEMBLES another.

6.1 Nominal Enclitics

6.1.1 **-ninggi** AGENT

As established in 3.2 above, core case relations are obligatorily and explicitly cross-referenced within the verb. Consequently the specification of these relations through case inflections on NP's filling these case functions is not required to clarify the identity of core case roles. Indeed verbal cross-referencing facilitates the widespread omission of contextually established NP's in core roles. No case suffix is available for those NP's that are cross-referenced within the verb as direct objects. NP's cross-referenced as 'goals' can be functioning in peripheral purposive case roles, in which case they can take the purposive enclitic **-ne/-ngini(K)**, or as reflexives, or the goals of predicates (like 'tell', 'give'), in which core roles they can bear no case inflection.

The subject of a verb is the only core syntactic role for which case inflection is available. These can be subjects of either high-transitive verbs or those low-transitive verbs that have a non-subject core argument (cf. 4.2). The agentive enclitic **-ninggi** is not universally applied to transitive subject NP's, but is reserved for those which are semantically or pragmatically 'marked'. NP's can be semantically marked in the sense that their identity in the agentive role contravenes culturally determined expectations regarding actor identity in specific types of activity. In 6-1 below, for instance, markedness results from the low likelihood of an inanimate entity filling the role of a 'controlling agent'.

- 6-1 **waya-ninggi** **dam** **-ngi-syarr**
 wire -AGENT *3sgPoke-1sg* -scrape
 SU Perf DO
 The barbs (of the barbed wire fence) scratched me.

And in 6-2 it results from the culturally determined expectation that women do not use rifles.

woman 3sg -AGENT A-saltwater 3sg Bash-hit -Past-3sgGo
 PRO cl crocodile SU Plmp redup SU Plmp
 His wife used to shoot crocodiles (for a living).

The identity of an actor can require clarification where any of three pragmatically determined conditions hold. Firstly, where the subject and object of a verb are both 3rd person singular, or both 3rd person plural, the bound pronominal morphology on the verb does not suffice to adequately track participant identity. This is especially true where there are switches in the identity of subject/object roles and freeform nouns or pronouns in either role are free to appear in any order with respect to the verb. In 6-3 below the object of the first clause *wa-wunu* 'that man', is the agent of the transitive verb in the second clause and this switch in role is disambiguated through the attachment of *-ninggi*.

- 6-3 *wa-wunu wupun -Ø -ta, e wa-wunu-ninggi dam -Ø -pawal*
M-there 3sgSlash-3sg-hit and M -there-AGENT 3sgPoke-3sg-spear
cl SU Perf DO cl SUPerf DO
 He hit that man, then that man speared him.

Secondly, *-ninggi* is attached to NP's whose identity in an agentive role may be unpredictable because they are either new participants to a text, or are previously introduced participants whose thematic status is judged by the speaker to have waned to the extent that the listener will need explicit re-statement of their identity. This use of *-ninggi* is evidenced in its widespread textual occurrence in after-thought constructions, where a speaker's assessment of his listener's difficulty in tracking subject reference prompts him to add an agentive NP that is typically separated off from the rest of the clause by a distinct pause.

- 6-4 *yarany -fi -pal kinyi yini -wurrkama-tye peyipa nyinyi,*
2sgPokeDtr-Mp-return here 2sgSit-work -Past paper 2sg
SU Perf SU Plmp PRO
 You came back here and were doing your paperwork.
ngayi nginge-tye, deminy -ngi-du ulgumen -ninggi
1sg 1sgLie -Past 3sgHands-1sg-touch old women-AGENT
PRO SU Plmp SU Perf DO
 I was lying (asleep) when she(/he) woke me up...my wife did.
- 6-5 *Aya ngambani-pe, meny-ngiti ... Dianne-ninggi*
hey 1dinc Go -Fut 3sgSay-1sg -AGENT
SU Irr SU Perf IO
 'Hey !, I'm coming with you', she told me...Dianne that is.

Thirdly, **-ninggi** is typically attached to NP's whose agentive role is being stressed in correction of mistaken assumptions about their identity.

- 6-6 **minmi, ngayi-ninggi ngiminy-nge**
 no *1sg -AGENT 1sgSay-3sgF*
 PRO *SU Perf IO*
 No ! it was me that told her.

In summary then, it can be seen that while **-ninggi** fills the general criteria of a 'case' enclitic, in its disambiguation of semantically marked and unpredictable agent identity it functions to meet the requirements of discourse cohesion rather than clause-internal syntax.

NP's in the role of subject of a transitive verb have also been found to occur with the 'cause' enclitic **-nimbi**. This minor phenomenon is discussed in 6.2.1.

6.1.2 **-ninggi** INSTRUMENT

Instrumental case function is also marked with **-ninggi**, homophonous with agentive **-ninggi** discussed above. Homophony of ergative/instrumental case forms is widespread among Australian languages (Dixon 1980:304, Blake 1975:44), and the semantic linkages between their functions have been widely discussed (see for instance, Wilkins 1989:170). Typically two cases are recognised on the basis of distinctive syntactic behavioural characteristics. In Ngan'gityemerri instrumental **-ninggi** can be distinguished from agentive **-ninggi** on a number of grounds. Firstly, they can co-occur.

- 6-7 **ngan'gi kamu-ninggi diny -ngiti-tyerrakul wulmen-ninggi**
 language ? -INSTR 3sgSit -1sg -speak *old man-AGENT*
 =Marrithiyel *SU Perf IO*
 The old man addressed me in Marrithiyel.

And as the above example also demonstrates, agentive **-ninggi** attaches to NP's that are obligatorily cross-referenced within the verb, whereas the peripheral case role of the instrumental NP makes it ineligible for any such pronominal cross-referencing.

In addition to 'the language in which one speaks', as in 6-7, instrumental **-ninggi** marks any entity that the subject uses to perform the

activity described by the verb. These may be bodyparts², as in 6-8 , but are typically objects held in the hands, as in 6-9 and 6-10 .

- 6-8 **deme melpé-ninggi dineny-ngi-tyamu-baty**
hand flat -INSTR 3sgHeat-1sg-cheek -hold
=palm SU Perf DO
 He slapped my cheek with the palm of his hand.

- 6-9 **muy-fintyifintyi-ninggi bengin-kin-wul**
crook -INSTR 3sgBash-? -pull
SU Perf
 She pulled (the central pandanus shoots) within reach with a crook (a long stick with a barbed fork at one end).

- 6-10 **ngunngun-ninggi wupun -tyirri -tu wamanggal**
percussion-INSTR 3sgSlash-navel-cut wallaby
flint SU Perf =burst guts
 He gutted the wallaby with a flint.

Instrumental **-ninggi** can also mark larger and even animate entities used in performing actions, such as cars and dogs and horses, though the less that entity falls within the full control of the subject, the more likely it is to function as a comitative rather than an instrumental NP (see **-werre** 6.1.4).

In contrast with the agentive function of **-ninggi**, instrumental NPs can be peripheral arguments to mono-valent low-transitive verbs, as in 6-11 below.

- 6-11 **crutch-ninggi yenim-lali**
-INSTR 3sgGo -around
SU Pres
 She's getting about on crutches.

Note that the instrumental suffix is frequently omitted from NPs whose instrumental role is predictable through a conventional association with a particular verb.

- 6-12 **yenggi ngi -pup-pe palayin (-ninggi)**
fire 1sgShoveDtrS-rub-Fut firesticks-INSTR
SU Irr
 I'll rub up a fire with firesticks.

The function of **ninggi** as the particle 'DESPITE', is examined in 7.5

²Note that, as discussed in 3.5.2, bodyparts filling an instrumental role can not be syntactically incorporated into the verb complex.

6.1.3 -ne/-ngini(K) PURPOSIVE

The enclitic -ne/-ngini(K) marks the purposive complements of actions or states. That is, purposive marked NP's are given as the stimuli or 'what one has in mind' when one does or feels something. As response to stimuli is dependent on the notion that the respondent is cognizant and sentient, it is uncommon to find purposive complements given as adjuncts to states or activities that have non-human subjects. Lower animates can be said to 'look about for food' etc. but there are few such examples in any texts I have recorded.

What one 'has in mind' may be something one wants to acquire;

- 6-13 **kuru -ne ngambani-pe club**
liquid-PURP 1dinc Go -Fut
generic SU Irr
 Let's go to club for a beer.

an activity one wants to perform;

- 6-14 **ngara -mbi-fi -pal -pe ki -ne ngu -nyi-ta -pe**
1sgPokeDtr-2sg-Mp-return-Fut fight-PURP 1sgSlash-2sg-hit-Fut
SU Irr IO SU Irr DO
 I'm getting back to you, for a fight, I'm going to belt you !

a person on whose account one does something;

- 6-15 **kin-ninggi ngani-pe a-yinimbi-ne**
this-way 1sgGo-Fut A-hornet -PURP
SU Irr cl =mother-in-law
 I'm going round this way for my mother-in-law (in order not to run into her).

- 6-16 **(nyinyi-ne) ngudum (-mbi) -mi -tyuk**
2sg -PURP 1sgShove -2sg -val-send
PRO SU Perf IO inc
 I sent it for you.

a person/thing that induces an emotional response;

- 6-17 **falmi nem-ne dini -di -tye**
woman 3sgM-PURP 3sgSit -cry -Past
PRO SU PImp
 He was crying for his wife.

- 6-18 **ngayi minbe nganmerr-yety (-kide) (nyinyi-ne)**
1sg Neg 1sg Go -be afraid-2sg 2sg -PURP*
PRO SU Pres IMPL PRO
 I'm not afraid of you.
- 6-19 **pipiri demem -meyenggi-ngide membirr ngayim-ne**
brain 3sgHandsDtr-spin -3sgF child 3sg -PURP
SU Pres IMPL PRO
 She's worrying about her child.

or the topics of cognitive or speech acts, i.e. what one knows, thinks, or talks about;

- 6-20 **de-tyeri-werre ngaganim peke-ne**
Bp-ear -ASSOC 1sg Go tobacco-PURP
cl SU Pres
 I'm experienced in cigarette smoking.
 (because it's something that I do, I have an understanding of it)
- 6-21 **ngan'gi kinyi ngimi-mbi-ngini minde detyengi-ngini**
NgK story this 1sgSay-2sg -Fut Neg today -PURP
SU Irr IO
 This story I'm going to tell you about is concerned with distant events.
- 6-22 **yerr-mentyi nyin ngunu yerr-lafuganying-ne**
Tr -throat ANA HOW Tr - placename -PURP
cl =song ABOUT cl
 You know that song... (the one) about Lafuganying.

Note that purposive marked human nouns can be cross-referenced in the verb with the 'indirect object' set of bound pronouns where they are interpreted as benefactives, as in 6-16, and can be cross-referenced with the 'implicated argument' set of bound pronouns where they are interpreted as the source of an (adversative) emotional state, as in 6-18. Normally where a purposive NP is cross-referenced within the verb its freeform equivalent would not also be included. Thus the bracketed elements in 6-16 and 6-18 should be read as either/or.

6.1.4 -werre/werri (K) ASSOCIATIVE

A noun phrase encliticised with **-werre** can convey an attribute that is associated with some entity and is sufficiently prominent or interesting that it can be thought of being characteristic of that entity.

- 6-23 knife **anggirgimi-werre** yimu **-ngiti-wa**
 rib -ASSOC 2sgSnatch-1sg -pick
 SU Irr IO up
 Get me a serrated (rib-having) knife !

- 6-24 **yedi -tyityipi-werri** yenim
 NgK man-many -ASSOC 3sg Go
 SU Pres
 She's promiscuous.

- 6-25 **wurek kinyi, kuru a-yerrkinwari-werre,**
 bad here water A-saltwater -ASSOC
 cl crocodile
 It's no good here, the water's got a saltwater crocodile (in it) !

The attributes that are associated with an entity in this way need not be permanent, as can be seen in 6-26 and 6-27.

- 6-26 **de -ge -werre** yenim
 Bp-belly-ASSOC 3sg Go
 cl SU Pres
 She's pregnant.

- 6-27 **ki - werri dim gu -nyi-ta -nana**
 NgK fight-ASSOC 3sgSit 3sgSlash-2sg-hit-WARN
 SU Pres SU Irr DO
 She's all steamed up (fight-having), she might hit you !

-werre is used derivationally in naming things in terms of such associations, i.e. something is an 'X haver' where X is a characteristic part. e.g. **debi-werre** (leg-ASSOC) 'trousers', **depi-werre** (head-ASSOC) 'hat', etc.

-werre also has a comitative function, marking an entity that accompanies the subject in some activity. Prototypical comitative NPs are humans, as in 6-28, considered to possess a degree of self-will, and although they can be directed and controlled to some extent, they do not fall fully under subject control.

- 6-28 **wa-yeyi nyinnin ambirri ngadde-madiwirri-tye**
 M-other ANA before 1dlexGo-play -Past
 cl SU PImp
 That bloke I used to play with before...
nyin falmi -werre yenim
 ANA woman-ASSOC 3sg Go
 SU Pres
 ...well he's got a wife now.

- 6-29 **nendu-werri -kana wuddini -fifili -tye -waddi gold-ngini**
 NgK *horse -ASSOC-FOC 3plShove-search-Past-3pl Go -PURP*
SU PImp SU PImp
 They were searching about on horseback for gold

- 6-30 **fepi nyin-pagu -nimbi yedi -tye darrwa-werre**
hill ANA-HITH-SOURCE 3sgGo-Past raft -ASSOC
SU PImp
 (Ancestral Pelican) came down from that hill on a raft,
wandirrk-ninggi darani -titidi -pagu -tye -yedi
pole -INSTR 3sgPokeDtr-push-HITH-Past-3sgGo
SU PImp redup SU PImp
 pushing herself along with a pole.

The notion of 'accompaniment', as marked by **-werre**, differs from the notion of 'instrumental use', marked by **-ninggi**, in terms of the degree to which the entity in question falls within subject control. In contrast to comitative NPs, the prototypical instrumental NP is inanimate, devoid of self-will, and in human hands is totally manipulable. In 6.1.2 we saw that speech, tools, weapons etc, are the best examples of instruments, and are the kinds of entities that will be always marked in that role with **-ninggi**.

However, between self-willed humans that one accompanies, on the one hand, and inanimate objects that one uses, on the other, there is a grey area of 'non-human animates' and 'not-very-manipulable inanimates' which can be variously viewed as filling either comitative or instrumental roles. Thus, in view of their self-will, horses are treated as comitative in 6-29. Likewise in 6-30, an inanimate raft is treated as a comitative, in view of its limited manoeuvrability (especially in contrast with the handheld steering pole). Note though that in both these examples the horse or raft could quite acceptably be viewed as functioning in an instrumental role and correspondingly marked with **-ninggi**. 6-31 below demonstrates the acceptability of variously viewing dogs in an accompanying role, or in an instrumental role.

- 6-31 a) **wu-wu-werre waddi -Ø -dudu -tye**
C -dog -ASSOC 3plGo -3sg -track -Past
cl SU PImpDO
 They were tracking him with dogs.
- b) **wu-wu-ninggi waddi -Ø -dudu -tye**
C -dog -INSTR 3plGo -3sg -track-Past
cl SU PImpDO
 They were tracking him with dogs.

The functions of **-werre** and **-ninggi** clearly overlap here. Things that fall fully within subject control, like speech, tools, weapons etc, are most likely to be designated as 'instruments' by being marked with **-ninggi**. On the other hand, things that fall less fully under subject control, things which can be considered to possess a degree of self-will, like humans and higher-animates, are most likely to be treated as comitatives and marked with **-werre**.

6.1.5 **-nimbi** SOURCE

-nimbi has two related functions, glossed as 'SOURCE' and 'CAUSE'. As a marker of 'source' **-nimbi** can only function adnominally as an enclitic to the final constituent of an NP, denoting that NP as a spatial or temporal point of origin. Marking 'cause' however, **-nimbi** can function either adnominally, marking an NP as the cause of some resultant condition, or predicatively, denoting an entire clausal proposition as the cause of some resultant proposition. Functioning predicatively **-nimbi** is an enclitic to the verb root. The adnominal 'source', adnominal 'cause' and predicative 'cause' functions of **-nimbi** are contrasted in 6-32 to 6-34.

- 6-32 **wembem-nimbi menggeny**
house -SOURCE 3sgArrive
SU Perf
 He emerged from inside the house.

- 6-33 **kuru -nimbi ngini -kukuduk-tye dem -ngi-mi-tit**
liquid-CAUS 1sgSit -drink -Past 3sgHands-1sg-eye-raise
generic SUPImp redup SUPPres DO
 I have a headache from the beer I was drinking.
 (Had it not been beer, I'd be alright)

- 6-34 **kuru ngini -kukuduk-nimbi-tye dem -ngi-mi-tit**
liquid 1sgSit -drink -CAUS-Past 3sgHands-1sg-eye-raise
gen. SUPImp redup SUPPres DO
 I have a headache from drinking beer.
 (Had I not been drinking beer, I'd be alright)

Those enclitics that have the capacity to attach to either nouns or verbs are classified as 'propositional enclitics', whereas those that attach only to nouns that stand in core, peripheral or local syntactic relations to the verb are classified as 'case enclitics'. In accordance with this classification, the 'source' function of **-nimbi** is examined in 6.1.5.1 below, but the discussion of the 'cause' function of **-nimbi** can be found in 6.2.1.

6.1.5.1 Spatial Source

With verbs of motion and transfer **-nimbi** marks the NP to which it is attached as the source location of the activity.

- 6-35 **nintyinintyi-nimbi wudeny -fel**
 bush -SOURCE 3sgShoveDtrD-bounce
 SU Perf
 It jumped out from the bushes.
- 6-36 **gagu yudu -ngurr-puty-pe kin -nimbi**
 animal 2sgShove-1plex -chase-Fut here-SOURCE
 gen. SU Irr IO
 You'll scare the (fish) away from us.
- 6-37 **ngirrsye -nyi-wurr-pe ngityirr abarri-nimbi**
 1plexPull-2sg -enter-Fut ground soft -SOURCE
 SU Irr DO
 We'll pull you out of the bog.

6.1.5.2 Multiple Enclitics

In Ngan'gityemerri the minor phenomenon of multiple case enclitics is essentially restricted to combinations of the 'local' case forms, i.e. spatial source **-nimbi** and either or both of the locative **-nide** (see 6.1.6) and the directionals **-pagu** and **-pefi** (see 6.2.2). As **-nimbi** is almost always an element of multiple enclitic constructions³, they will be briefly dealt with here.

Where motion/transfer takes place, not simply *from* a location, but *from inside* a location, then the NP designating that location will bear both locative and source case enclitics in that order.

- 6-38 **yarany -fi -tit musyulng-nide-nimbi**
 2sgPokeDtr-Mp-raise swag -LOC-SOURCE
 SU Perf
 You got up from inside your swag.
- 6-39 **ganbi nyinnin me -wa wembem-nide-nimbi**
 didjeridu ANA 3sgSnatch-pick house -LOC-SOURCE
 SU Perf up
 He picked up the didjeridu from inside the house.

³This general comment does not take into account the 'indefinite' enclitic **-nawa** (see 9.3.3) which can co-occur with most other case enclitics.

With verbs involving activity that is projected outwards from a sourcepoint, that outward projection can be marked by suffixing the THITHer directional enclitic **-pēfi** in addition to the source enclitic, as in 6-40.

- 6-40 kin -nimbi -pefi yaniyerri-pe
 here-SOURCE-THITH 2sg Go* -Fut
 SU Irr
 You'll be going away from here.

The single case I have recorded of three enclitics on a single NP involves a verb of 'outward projection' (to see) *from inside* a location, and consists of the locative, source and thither enclitics in that order.

- 6-41 dede nyinyi-nide-nimbi -pefi yirim
 camp 2sg -LOC-SOURCE-THITH 3sg Sit
 PRO SU Pres
 (Looking out) from (sitting) in your camp,
 yinyinggin fepi wedi nyin wantyirr girribem
 2sg See hill small ANA name 3sg Stand
 SU Pres SU Pres
 can you see that little hill 'Wantyirr'?

Note that in this example the notion of 'outward projection', encoded on the NP 'your camp' by the thither suffix *-pefi*, is given in anticipation of the verb 'to see' in the following clause.

6.1.5.3 Source of Transformation

-nimbi also marks the original form of a thing that is transformed into something else.

- 6-42 **mawuny -nimbi** **werrimim-wurity**
 ironwood-SOURCE *3plHands-make*
 SU Pres
 They make (boomerangs) out of ironwood.

- 6-43 mipurr-nimbi yedi -tye darany -ket gagu -nyine
 man -SOURCE 3sgGo-Past 3sgPokeDtr-cut animal-FOC
 SU PImp SU Perf
 From being a man, (Ancestral Flyingfox) turned himself into
 an animal.

6.1.5.4 Temporal Source

-nimbi is attached to NP's that designate either points in time or timespans, indicating that they are the point at which some activity or event begins.

- 6-44 **gidin wukume apirri -nimbi yenim-Ø -mi -wap**
 NgK *year one before-SOURCE 3sgGo -3sg -val-sit*
SU Pres DO inc

He's been married (habitually sitting with someone) since a year back.

- 6-45 **kak-ambirri-nyine yedi -tye, monday-nimbi deminy -pat**
in -first -FOC 3sgGo-Past -SOURCE 3sgHands-arise
motion SU Plmp SU Perf
 He's already gone, he left on Monday.

In 6-46 below a human lifestage expression serves as a term with temporal reference.

- 6-46 **wa-wedimuy-nimbi yedi -tye wa-deme -pi -yiri -tye -yedi**
M-child -SOURCE 3sgGo-Past M-3sgHands-head-numb-Past-3sgGo
cl SU Plmp cl SU Plmp =shamed SUPImp
 From when he was a child he was always shy.

6.1.5.5 Discourse function of **-nimbi**

-nimbi can be attached to the anaphoric demonstrative **nyin**. The resultant form **nyin-nimbi** 'from that' is widely used in narrative to indicate that some previous event is finished and a new temporally sequential event is about to proceed.

- 6-47 **wirriny-me -purrk-ambirri watypela mityity**
3plSit -hand-clap -FIRST white white
SU Perf man woman
 (At the end of the performance) the white men and women clapped first,
nyin -nimbi dam -burr-fi -tyat winnyirri nginifiny
ANA-SOURCE 3sgPoke-3pl -Mp-put 3plSee true
SU Perf IO SU Perf
 and after that he set up (the video) for them, and they watched the real thing.

6.1.6 **-nide** Locative

The case inflection **-nide** has both 'spatial' locative and 'endpoint' locative functions. With stance/posture verbs and dynamic verbs that do not involve movement through space **-nide** indicates that the NP to which it is attached is statically located.

- 6-48 **ngayi malfiyin -nide ngirim-nyine dede**
1sg placename-LOC 1sgSit -FOC camp
PRO SU Pres
 I'm living at Malfiyin now.
- 6-49 **fidi -nide wa -ngirrki-syalat-pe -wiri**
sun's-LOC 3sgHeat-1dlex -warm-Fut-3sgSit
heat SU Irr DO SU Irr
 We'll warm ourselves in the sunshine.
 (lit: the heat will warm us in the sun's heat)

With verbs of motion or other verbs involving movement through space **-nide** is suffixed to NP's that denote the 'endpoint' or position in which an entity comes to be at the completion of the activity of the verb.

- 6-50 **billycan musyulng wanniny-madi-kuli mudiga nyinyi-nide**
swag 3plGo -chest-throw car 2sg -LOC
SU Perf PRO
 They threw the billies and swags into your car.
- 6-51 **wamanggal ngudupun-wele yewirr-nide**
wallaby 1sgShove -hang tree -LOC
SU Perf
 I hung the wallaby in the tree.
- 6-52 **yawam -ngi-pe dede ngayi-nide**
2sgTake-1sg -Fut camp 1sg -LOC
SU Irr DO PRO
 Take me back to my camp.

NP's designating the endpoints of verbs of motion can optionally bear the 'thither' enclitic **-pefi**, in addition to locative **-nide**. Comparing 6-53 and 6-54 below, there appears to be no systematic difference between locative NP's and locative+thither NP's. Certainly 'arrival at' or 'entry into' the designated endpoint location is no more explicitly encoded in 6-53 than it is in 6-54.

- 6-53 **store-nide ngaganim**
-LOC 1sg Go
SU Pres
 I'm going to the store.
- 6-54 **store-nide-pefi ngaganim**
-LOC-THITH 1sg Go
SU Pres
 I'm going to the store.

Note that the locative suffix *-nide* is frequently omitted from NPs where the logical argument structure of the verb unambiguously determines that the NP will be interpreted as a location. Thus NP's in a locative relation to verbs such as 'go', 'take', 'hang', 'throw' etc in the above examples, are quite acceptable without case inflection.

6.1.7 *-pagu* VIA

The propositional enclitics *-pagu* and *-pefi*, indicating activity directed 'towards' or 'away from' the speaker, respectively, are examined in 6.2.2. *-pagu* additionally has a minor role as a local case marker, indicating that the NP to which it is attached represents 'a location passed through', or 'a pathway moved along'. This perlocative usage of *-pagu* is demonstrated in the examples below.

- 6-55 *depi -pagu ngeme -syarr -tye tyet*
head-VIA 1sgHandsDtr-scrape-Past shirt
SU Plmp
 I pulled my shirt off over my head.

- 6-56 *mentyi-kanbi -pagu ngupung-genket ngekin masyapu*
NgK throat -bamboo-VIA 1sgSlash -cut shit big
=windpipe SU Perf redup = large colon
 I pulled its guts out through (a hole in) its windpipe.

- 6-57 *old highway-pagu ngarrany -fi -pal*
-VIA 1plexPokeDtr-Mp-return
SU Perf
 We came home by the old highway.

6.2 Propositional Enclitics

This section looks at ten enclitics which in particular functions are 'propositional' in the sense defined at the beginning of this chapter.

6.2.1 *-nimbi* CAUSE

In 6.1.5 we saw that *-nimbi* as a 'source' marker conveys the notion that some event or entity was temporally *prior* to some other event. In 6-35, something was 'in the bushes' prior to 'jumping out of the bushes'. In 6-47, 'the audience clapping' was prior to 'his setting up the video'. The causal functions of *-nimbi* can be seen to be related to the source functions in terms of this notion, i.e. a causal event must be *prior* to the state or event that it instigates.

The adnominal use of causal *-nimbi* is demonstrated in the examples below.

- 6-58 **dede wunggume-nimbi dim, dengini ngayim**
place one -CAUS 3sgSit body 3sgF
SU Pres PRO
 From sitting in the one place, her body has kind of
ngini -yup-mem -ngide agumufi minbe yenim-lali
KIND-stiff-3sgDo -3sgF tendon Neg 3sgGo -around
SU PresIMPL SU Pres
 stiffened up on her... her tendons, she can't move about.

- 6-59 **ep perrety-meny, ep tyagan-nimbi -nawa**
GUESS die -3sgDo GUESS what -CAUS-INDEF
SU Perf
 They say he's dead, whatever could it be from ?
ep manguyawu-nimbi, ep gagu edewi-nimbi
GUESS sorcery -CAUS GUESS animal fat -CAUS
 might've been from sorcery...might've been from kidney fat.

Where a noun given as the cause of some resultant state or activity is a higher animate, there exists a degree of overlap between the notional roles of 'causer' and 'agent'. -nimbi can be suffixed to NP's that are effectively the subjects of high-transitive verbs, and as such would perhaps be more typically marked in that role by the agentive suffix -ninggi (see 5.2.1). Green (1989:53) and Harvey (1987:210) also note the possibility of 'source' or 'cause' case marking on transitive subjects in Marrithiyel and Warray. There is no significant semantic difference between the pairs of sentences in the examples below.

- 6-60 a) **ngityirr wurek, pigipigi-nimbi waddi -kurrkurr-tye**
ground bad pig -CAUS 3plGo -dig -Past
SU PImp redup
 The ground is rough, dug up by pigs.
- b) **ngityirr wurek, pigipigi-ninggi waddi -kurrkurr-tye**
ground bad pig -AGENT 3plGo -dig -Past
SU PImp redup
 The ground is rough, dug up by pigs.
- 6-61 a) **Billy -nimbi dangim-ngirrki-fi -me**
-CAUS 3sgPoke -1dlex -Mp-hand
SU Perf DO
 Billy gave us some (cartridges).
- b) **Billy -ninggi dangim-ngirrki-fi -me**
-AGENT 3sgPoke -1dlex -Mp-hand
SU Perf DO
 Billy gave us some (cartridges).

An example of the predicative use of causal **-nimbi** was given in 6-34 above. Where **-nimbi** functions predicatively in attaching to verbs that are inflected for the irrealis modal category, the resultant clause of 'potential cause' is interpreted as the 'condition' (versus the 'consequent'), of a conditional proposition. This construction type is demonstrated in 6-62 and 6-63 below.

- 6-62 **mani -nimbi ya -ngi-fi -me,**
money-CAUS 2sgPoke-1sg-Mp-hand
SU Irr DO

If you give me money ,

- peke ngim -bi -fayam⁴-pe**
tobacco 1sgLie-2sg-buy -Fut
SU Irr IO

I'll buy you tobacco.

(i.e. from you giving me money, I'll buy you tobacco)

- 6-63 **mudiga-werre yaniyerri-nimbi, mirri wunggume yemengge,**
car -ASSOC 2sgGo -CAUS sun one 2sgArrive
SU Irr SU Irr

If you went by car, you'd get there in one day,

- epe firr-ngityirr yani -lali -nimbi diwin erreke -nawa**
but foot-ground 2sgGo-around-CAUS month how -INDEF
SU Irr many

but, if you were to footwalk, it'd take ..who knows how many

- yemengge, minbe mendi-wurru**
2sgArrive Neg close -UNSATIS
SU Irr

months to get there, it's really too far away!

(i.e. from going by car..... from going by foot.....)

Past conditionals, being relatively certain of outcome, tend to lack the sense of 'potentiality', and are basically restricted to interpretation as counterfactual hypotheticals. Compare 6-62 above with 6-64 below.

- 6-64 **mani ya -ngi-fi -me -nimbi-tye, peke ngim -bi -fayam-tye**
money 2sgPoke-1sg-Mp-hand-CAUS -Past tobacco 1sgLie-2sg-buy-Past
SUIrr DO SUIrr IO

If you'd given me money, I'd have bought you tobacco.

(i.e. from you having given me money, I'd have bought you tobacco)

⁴The verb root **-fayam** is probably a Kriol loan based on the English 'buy'em'. Elderly Ngan'giwumirri speakers use the verb **nganganim-wawu**-'pick up'in reference to collecting supplies from a store. If this is a loan verb root, it is unusual in its selection of the 'Lie' auxiliary, as all other loan verbs into Ngan'gityemerri are formed with the 'Say' auxiliary.

Note that Ngan'gityemerri requires a sort of harmony of both modal and tense categories between the 'condition' and the 'consequent' of conditional constructions. As non-actual events, both require the irrealis mood, and they must be either both past tense (counterfactual) or both future tense (potential).

In these irrealis conditional structures the propositional use of *-nimbi* carries a strong implication of the notion of conjecture. This semantic correlation between 'conjecture' and 'non-actual cause' is evident in examples 6-62 and 6-63 above. This sense of conjecture or hypotheticality is even more evident in those conditional structure where either the 'condition' or the 'consequent' is not explicitly given. In 6-65 below, the consequent is unstated (but the implied consequent is supplied in the literal translation), and the causal proposition has the effect of a hypothetical suggestion.

- 6-65 toilet *kinyi* *derrigidi-yerrmugu* *-nimbi-pe* *detyirri-ne*
 here *want* *-2plHandsdl-CAUS -Fut* *piss* *-PURP*
 SU Irr *SU*
 The toilet is here, should you (dl) want (it for) a piss.
 (lit: The toilet is here. As a result of wanting it for a piss, (this is where you'd come.))

On the other hand, a small number of examples have been recorded which have *-nimbi* in utterance-initial position. Consider the examples below.

- 6-66 *-nimbi tyawurru wani* *-pagu-pe* *wemengge-nin* *-pe*
 -CAUS today *3sgGo -HITH-Fut* *3sgArrive* *-1plinc-Fut*
 SU Irr *SU Irr* *IO*
 Perhaps he'll arrive here to us today
 (lit:(as a result of X happening), he'll arrive here...)
- 6-67 *-nimbi ngani-pe, -nimbi minmi*
 -CAUS 1sgGo-Fut -CAUS Neg
 SU Irr
 I might go, I might not.
 (lit:(as a result of X happening), I'll go... (but as a result of Y happening), I won't.)

The conjectural sense of these examples arises from the omission of the 'condition' clause to which *-nimbi* is formally an enclitic. The speaker is not being specific about the events X and Y that might cause or instigate the 'consequent' events of his going or not going.

6.2.2 Directionals '-pefi' and '-pagu'

Section 6.1.7 describes the local case function of **-pagu**, glossed as 'VIA'. The main function of the enclitics **-pefi** and **-pagu** is a propositional one, indicating that some activity is performed 'towards' or 'away from' the speaker. This is exemplified in the directional senses implicit in the following examples. Note that because these enclitics have scope over the entire clausal proposition, they freely attach to either the verb or a 'local' NP. The bracketed enclitics in 6-68 and 6-69 should therefore be read as either/or.

- 6-68 a) **kinyi(-pagu) wuddum-Ø -mi -wul (-pagu)**
here-HITH 3plShove-3sg-val-return-HITH
SU Perf DO inc
 They brought him back here.
- b) **wunu(-pefi) wuddum-Ø -mi -wul (-pefi)**
there -THITH 3plShove -3sg-val-return-THITH
SU Perf DO inc
 They took him back there.
- 6-69 a) **etye kinyi(-pagu) yara -fi -pal (-pagu)-pe**
when here-HITH 2sgPokeDtr-Mp-return-HITH-Fut
SU Irr
 When are you coming home ?
- b) **etye wunu(-pefi) yara -fi -pal (-pefi) -pe**
when there-THITH 2sgPokeDtr-Mp-return-THITH-Fut
SU Irr
 When are you going home ?

The reference point with respect to which motion is marked as 'towards' or 'away' need not strictly be the physical location of the speaker, but can be a location or person with which/who the speaker aligns or identifies himself⁵. Thus in the example given below, the speaker (in Peppimenarti) employs **-pagu** 'HITHer' to describe the return of his daughter from Katherine to Darwin (roughly equidistant from Peppimenarti) where she will return to the care of relatives.

- 6-70 **wara -fi -pal -pagu -pe tawun**
3sgPokeDtr-Mp-return-HITH-Fut Darwin
SU Irr
 She's coming back to Darwin

⁵As one might expect of such a system these enclitics are widely exploited in Ngan'gityemerri discourse as flags for one's social and political affiliations.

Propositional **-pagu** is widely employed in requests and imperatives where the speaker is the goal of transfer verbs. As is evident in 6-71 a) to c) below, **-pagu**, having scope over the entire clause, is free to appear on either the verb or the object NP. As c) shows, in requests and imperatives where there is a logical or conventional association between the verb and the object, the verb will typically be omitted.

6-71 a) **peke yudi -ngindi-fityi-pagu**
 NgK *tobacco 2sgShove-1sg -roll-HITH*
 SU Irr IO
 Roll me a smoke !

NgK b) **peke -pagu yudi -ngindi-fityi**
 tobacco-HITH 2sgShove-1sg -roll
 SU Irr IO
 Roll me a smoke !

c) **peke -pagu**
 tobacco-HITH
 Give me/roll me a smoke !

6-72 **mam -deti yimi -ngindi-pagu**
 NgK *more-SAME 2sgSay-1sg -HITH*
 SU Irr IO
 Tell me again ! (I couldn't hear you)

6-73 **yana -ngiti-kuli -pagu**
 2sgFeet-1sg -throw-HITH
 SU Irr IO
 Toss it here !

A specifically aspectual function of **-pefi**, as a verbal enclitic, rather than a propositional enclitic, is examined in 3.4.4.4.

6.2.3 **-merrendi/-nana** (K) LEST, WARNIng, PROHIBition, INABility

Historically, **-merrendi** is dimorphemic, consisting of the enclitic **-merre**, which in turn is encliticised by **-yendi** 'same' (see 6.2.5). In contemporary Ngan'giwumirri however, the rarity of the use of **-merre** in isolation of the 'same' enclitic, suggests that **-merrendi** has been essentially reanalysed as a simple form. In consequence I have chosen to treat **-merrendi** in the examples given here as a single enclitic without attempting to exemplify this dimorphemic constituency.

-merrendi/-nana(K) can attach to either an NP or a verb root. This freedom stems from its having scope predicatively over an entire clausal proposition, not merely its immediate lexical host. **-merrendi/-nana**(K) has

four related functions glossed here as 'LEST', 'WARNIng', 'PROHIBition' and 'INABility'.

6.2.3.1 LEST

A **-merrendi** clause subordinate to a simple declarative clause indicates a potential adversive proposition.

- 6-74 **wa-wetimuy yenim-wurrsimuy, ngemi -palak-nana**
 NgK M -little 'un 3sgGo -afraid 1sgHands-drop -LEST
cl SU Pres SU Irr
 The little boy is afraid, lest I drop him.

- 6-75 **kuru gana -nin -garri-pat -nime-merrendi**
rain 3sgFeet-1plinc-leg -catch-pl - LEST
SU Irr DO DO
 Before the wet season catches up with us,
warmadi-pe ngumbu -wurrki-dudu
quick -Fut 1plincSlash-3dl -cut
SU Irr DO redup
 we'll have to circumcise those two (boys) quickly.

6.2.3.2 WARNING

Warnings are structured as imperative clauses, and a subordinate **-merrendi** clause. The clause subordinated by **-merrendi/-nana** (K) denotes a proposition that is bad and should be avoided. The implication is that by heeding the advice given in the imperative clause, the bad outcome can be avoided.

- 6-76 **minbe yarra -fi -gi -mi-tyat,**
Neg 2plPokeDtr-Mp-side-Val-place
SU Irr
 Don't all sit on the (one) side (of the boat)
ngumbudu -madi-fili -merrendi,
1plincShove-chest -roll- WARN
SU Irr
 lest we roll it over.
- 6-77 **minbe pulpulmuy yi -ngiti**
Neg humbug 2sgSit-1sg
SU Irr IO
 Don't annoy me,
syiri -ninggi ngu -nyi-ta -merrendi
striker-INSTR 1sgSlash-2sg -hit-WARN
generic SU Irr DO
 or I'll hit you with a stick !

6.2.3.3 PROHIBITION

Prohibitives are structured like negative imperatives, with, in addition, **merrendi** encliticised to the pre-verbal negative particle **minbe/minde(K)**. Prohibitives differ from negative imperatives in two important ways. Firstly, where imperatives are issued on the authority of the speaker, prohibitives appeal to the authority of legal, social or ritual conventions. Compare 6-78 and 6-79.

- 6-78 **minbe dendi-yumu-ne** father
 Neg lie 2sgSay-3sg priest
 SU Irr IO
 Don't lie to the priest !
 (I'm telling you this)

- 6-79 **minbe-merrendi dendi-yumu-ne** father
 Neg -PROHIB lie 2sgSay -3sg priest
 SU Irr IO
 You shouldn't lie to the priest !
 (Everyone knows this)

Secondly, unlike imperatives, prohibitives can take first and third person subjects in addition to second person subjects.

- 6-80 **kuru kinyi** pub,
 liquid this
 generic
 This is a pub.
awa-purpurrk minbe-merrendi girri - Ø kinyi,
 Hg -littl'uns Neg -PROHIB 3plSit-IMP here
 cl SU Irr
 Little kids aren't allowed in here.

- 6-81 **minde-nana wiri -kukuduk kuri** beer,
 NgK Neg -PROHIB 3sgSit-drink liquid
 SU Irr redup generic
 He's not allowed to drink beer.

- 6-81 **nem wunu ngirrwat ngayi yenim,**
 3sgM that namesake 1sg 3sgGo
 PRO PRO SU Pres
minbe-merrendi ngarrene-ngirrk-tyerrakul
 Neg -PROHIB 1dlexGo-1dlex -talk
 SU Irr IO
 He is my namesake, we're not allowed to talk to each other.

6.2.3.4 INABILITY

There are examples where the structural pattern of prohibitives is sometimes found to express inability without necessarily the implication of prohibition from some external source. As in English and many other languages, the distinction between these different senses of the deontic mode is not encoded morphologically.

- 6-84 **ngayi wa-mirrisyarra-ngi**
 NgK 1sg M - blind -1sg
 PRO cl DO
 I'm blind,
minbe-nana mudiga kinyi ngemi -baty
 Neg -INAB car this 1sgHands-take
 SU Irr
 I can't drive this car.

- 6-85 beer **minbe-merrendi kinyi ngumu-wa**
 Neg -INAB here 1sgSnatch-pick
 SU Irr up
 I'm unable to get beers here,
tyandi -wurru closed wirribem store-ne
 sunday-UNSATIS 3sgStand -PURP
 SU Pres
 because being sunday, the store is closed.
 (lit: it's closed for the purpose of being a store)

- 6-86 **yerr-makarri freezer wunu minbe-merrendi girim-mirrmirr**
 Tr -bad that Neg -INABIL 3sgSit-rumble
 cl SUPres
 That freezer's no good, (the motor) can't/won't run.

6.2.4 -yirre CORRECT

-yirre attaches to NP's marking them as the correct entity, in contrast to some given, assumed or intended erroneous referent, i.e. 'It's not X, as given, but Y-yirre that is the correct entity'.

- 6-87 **ngem -fi -ket were ngiminy-ne,**
 1sgMouth-Mp-cut brother 1sgSay -3sg
 SU Perf =speak falsely SU Perf IO
 I mistakenly called him 'brother',
epe yetyi-yirre ngumbumum-ne
 but son -CORRECT 1dlincSay -3sg
 SU Pres IO
 but it's 'son' that you 'n me correctly call him.

- 6-88 **gagu a-lalawuty-yirre -ne -tye wubu -nin -da**
animal A-edible -CORRECT-INTENT-Past 3sgBash-1dlinc-hit
generic cl SU Irr IO

It was something edible that he was going to shoot for us,

- epe minmi mentyinimba-wurru bem -da**
BUT Neg diving shag -UNSATIS 3sgBash-hit
SU Perf
 but no, he's gone and bagged a diving shag !

- 6-89 **minmi, wunu-yirre yenim-wap dede**
Neg there-CORRECT 3sgGo -sit camp
SU Pres

No, (he's not where you think he is) he's actually there in his camp.

6.2.5 -yendi SAME

-yendi has a range of meanings, transcending a single-word English translation. Given as 'SAME' in the interlinear gloss, -yendi is variously translated in specific examples as 'same', 'again', 'as well', 'still' etc.

-yendi indicates that an event is considered in some way to be a 'copy' or 'repetition' of some other event. Like 'same' in English, this notion of 'sameness' allows for two types of linkage between these two events. It can link two instances of a single thing at two points in time, in which case the glosses 'again' and 'same' are likely to be used.

- 6-90 **dede nyin-nendi yawam -ngi - Ø**
country ANA-SAME 2sgTake-1sg -IMP
SU Irr DO

Take me back to that same place again.

If the two events are points within the frame of a progressive unchanged state, then the gloss 'still' will be appropriate.

- 6-91 **a-nyin -nendi minbe-tye wanni -fili**
A-ANA-SAME Neg -Past 3plGo -wander
cl SU Irr
 That's still the same (bullocks), they haven't wandered.

Where an event is viewed, not just as a copy of another single event, but as one of a series of 'same' events, then it is likely to be glossed as 'always'.

- 6-92 **kuru -nimbi dim -kuduk, yenim-lali,**
liquid-CAUS 3sgSit-drink 3sgGo -around
SU Pres SU Pres
 Whenever he gets drunk, he wanders around and abuses

bengim -burr-peperrety, ngini -mem -napa -ndi -yenim
3sgBash-3pl -swear KIND-3sgDo-JUST-SAME-3sgGo
SU Pres DO redup SU Pres SU Pres
 everyone. He always behaves in that same kind of manner.

The second type of linkage between one event/entity and its 'copy', is where two separate event/entities at the same point in time are considered to be instances of the 'same' thing. These will be glossed as 'as well', 'also', 'more', 'same', etc.

- 6-93 **ya lirmem beying -ngi -perrety,**
hey cold 3sgBash-1sg -cold
SU Pres DO

Hey, I'm feeling cold.

nem bengim-Ø - perrety-yendi
3sg 3sgBash-3sg -cold -SAME
PRO SU Pres DO

And he's cold as well (in addition to me being cold).

- 6-94 **peke mam-mendi-pagu**
tobacco more-SAME-HITH

Give me some more of that same tobacco ?

- 6-95 **dede yeyi pey-endi wibem, detyeri-werre ngaganim**
camp other in -SAME 3sgLie ear -ASSOC 1sg Go
place SU Pres SU Pres

I know another place that's the same.

(an equally good fishing spot in the same vicinity)

- 6-96 **minb-endi ya -ngi-tyerr -pu, minbe-pagu yumu-ngiti**
Neg -SAME 2sgPoke-1sg-mouth-ask Neg -HITH 2sgSay-1sg
SU Irr DO SU Irr IO

Don't ask me more of the same questions. Don't question my

tyagan-ne, tyepe ngan'gi ngayi yumu -ngi-me -wa,
what -PURP just word 1sg 2sgSnatch-1sg -hand-pick
PRO SU Irr DO up

intentions. Just take my word for it !

Of all the enclitics discussed in this section, **-yendi** stands apart in having two features that are more suggestive of the status of suffix than of enclitic. These features, the ability to carry secondary stress marking, and the tendency in certain environments to undergo phonological assimilation and reduction, are discussed below.

-yendi only retains its full form following roots that are stop final, as in 6-93 above.

Following roots that are nasal final, the initial semivowel of **-yendi** assimilates to both the place and manner of that nasal, as in 6-94 above.

Where **-yendi** attaches to vowel-final roots, the resultant **-V#yendi** sequence that lies across the morpheme boundary is subject to reduction. Either **ye** is elided and the root final **V** is suffixed by **-ndi**, or **Vy** is elided and the truncated root is suffixed by **-endi**. Put another way, the initial semivowel /y/ and one of the two vowels will be elided. The choice of which vowel is retained is determined by stress placement. Recall that, on nominals, primary word stress falls on the initial syllable and secondary stress on the third syllable of words that have more than three syllables. So where **-yendi** suffixes disyllabic roots, secondary stress thus falls on the first syllable of **-yendi**, and it is this vowel that is retained.

6-97	mínbe - yendi <i>Neg - SAME</i>	→	mínbèndi
	gúmu - yendi <i>SEMBL- SAME</i>	→	gúmèndi
	péyi - yendi <i>in place - SAME</i>	→	péyèndi
	ngáyí - yendi <i>1sgPRO -SAME</i>	→	ngáyèndi

However where **-yendi** suffixes trisyllabic roots, secondary stress falls not on **-yendi** but rather on the third syllable of the root, and it is this root final vowel that is retained, taking the **-ndi** allomorph as a suffix.

6-98	wárrmadi - yendi <i>quick - SAME</i>	→	wárrmadìndi
	nyín - napa - yendi <i>ANA-JUST-SAME</i>	→	nyínnapàndi

-yendi has not been recorded suffixed to nominal open monosyllables.

Given the pattern of stress placement on verbs (see 2.5.3), the attachment of **-yendi** to vowel-final verb roots will always result in its reduction to **-ndi**, as in the example below.

6-99	darany -ngiti-fi -pal	bem -ngi -da -ndi
	<i>3sgPokeDtr -1sg -Mp-return</i>	<i>3sgBash-1sg -hit-SAME</i>
	<i>SU Perf IO</i>	<i>SU Perf DO</i>
	He came back and hit me again.	

The allomorphy of **-yendi** can be accounted for by the following two rules.

- 1) Initial **y** is elided after non-stops, leaving a **VV** sequence.

- 2) Whichever V secondary word stress falls on is retained, the other is elided.

From the examples in 6-97 and 6-98 it is evident that the phonological processes at work here are ordered in the following way.

suffixation > stress placement > elision

That **-yendi** attaches to its host *prior* to stress placement conflicts with the general behaviour of class and case marking enclitics noted elsewhere. It is on the basis of this factor, together with the propensity to undergo elision/reduction, that **-yendi** can be seen to have the status of suffix rather than enclitic.

6.2.6 -gumu/gimi(K) SEMBLative

Glossed as SEMBL, the enclitic **-gumu** indicates that something 'resembles' the NP to which it is attached. As is evident in examples 6-100 to 6-102, **-gumu** typically co-occurs with the proclitic **ngini-/ngani-(K)** 'KIND' (discussed in 6.2.7 below).

- 6-100 knife-pagu ngini-kinyi-gumu yumu -ngiti-wa -pe wagarri
 -HITH KIND-this-SEMBL 2sgSnatch-1sg -pick-Fut two
 SU lrr IO up

Get me two knives like this kind !

- 6-101 kuderri bengin -derri-lit ngani-bafun-gimi
 NgK billabong 3sgBash-back -cover KIND-dust -SEMBL
 SU Perf

The billabong was covered (in a film of something) like a kind of dust.

- 6-102 detyeny wulek, yudupun-fityi ngani-musyulng-gimi,
NgK tongue bad 2sgShove-roll KIND-swig -SEMBL
SU Pres

Your tongue's badly (positioned), you've rolled it up like it was a kind of swag !

(author being chastised for over-retroflexed articulation)

The role of **-gumu-/gimi-(K)** as a verbal enclitic is examined in 3.6.6.

6.2.7 ngini-/ngani-(K) KIND

Of the class of clitics that have nominal, verbal and propositional functions, **ngini-** stands apart in being the only proclitic. In fact, other than the noun class markers (cf. 5.5) and relative location **ngan-** (cf. 5.3.4), **ngini-** is the only productive proclitic in Ngan'gityemerri. This is of interest

because, like the noun class markers, **ngini-** is also concerned with classification.

Ngini- can be attached to NP's, (where, as in 6-100 to 6-102 above, it frequently co-occurs with the SEMBLative enclitic) indicating that some entity is 'of the same kind' as another. The controlling factors as to what constitutes 'KIND', are typically context dependent; for example, in 6-100 above the speaker is requesting two knives with a thin curved blade, unserrated and about ten inches long, like the one he is holding. He is unconcerned whether they be the same brand or colour etc, rather his concern is that they are the same kind of knife from a functional point of view, i.e. that they are 'skinning' knives.

However, **ngini-** also interacts with noun class generics so that 'KIND' is understood to refer specifically to species within that designated genus.

- 6-103 **yerr-ngini-kinyi minbe derrigidi-ngerim**
Tr -KIND-this Neg want -1sgHands
cl SU Pres
 I don't like this kind of (tree class member) tobacco,
warmadi wayim -waty -ngidde
quickly 3sgHeat-consume-1sg
SU Pres IMPL
 It burns up too quickly on me.

- 6-104 **gagu a-ngini-kide derrigidi-yerim ?**
animal A-KIND-which want -2sgHands
generic cl SU Pres
 Which kind of meat (beef/pork/fish) do you want ?

Compare 6-104 above with 6-105 below, which, in the absence of **ngini-**, simply enquires about 'which ?' of a number of entities.

- 6-105 **gagu a-kide derrigidi-yerim ?**
animal A-which want -2sgHands
generic cl SU Pres
 Which of these cuts/pieces of meat do you want ?

As a proclitic to verbs **ngini-** indicates that an activity or event is of the same general kind as another. The concern here is in comparing kinds of action with regard to such details as 'how the limbs are moved' and 'the position of the hands' etc. These details of execution are the aspects of an activity in terms of which they can be viewed as 'one of a kind'. Predictably then, the attachment of **ngini-** to verbs is most frequently encountered in

speech acts that are intended as instructions, as in 6-106, or which recount details of execution, as in 6-107.

- 6-106 **deme kinyi yirimi-ngini ngani-ngeben-dada**
 NgK *way this 2plDo -Fut KIND-1sgBash-hit*
SU Irr SU Pres redup
 Do it this way, in the kind of way that I do it !

- 6-107 **syiri yawul ngumu -wa, ngariny-Ø -pawal ngini-yiminy,**
Hhw spear 1sgSnatch-pick 1sgPoke-3sg-spear KIND-2sgDo
gen. SU Perf up SU Perf DO SU Perf
 I picked up a spear and (holding it in the hand) poked him in
 just the same kind of way as you did.
minbe-tye ngana -ne-kuli, ngeriny-tyerr, ngariny-pawal dege,
Neg -Past 1sgFeet-3sg-throw 1sgHands-stop 1sgPoke-spear guts
SU PImp IO SU Perf SU Perf
 I didn't throw it at him, I restrained myself, and just poked
 him in the guts.

6.2.8 -napa JUST/UNTIL

The propositional enclitic **-napa** attaches to both NP's and verbs, as a type of 'limiting' emphatic. Attached to NP's it designates them as 'X and only X', and is glossed as JUST.

- 6-108 **yenggi wayim -waty -yenim, bafun-napa wibem,**
 NgK *fire 3sgHeat-consume-3sgGo ash -JUST 3sgLie*
SU Perf SU Perf SU Pres
 The fire has consumed (the whole log), it's nothing but ash.

- 6-109 **nyinyi-napa-deti felfi derrigidi-ngeriny -nyi**
 NgK *2sg -JUST-SAME alone want -1sgHands-2sg*
PRO SU Pres DO
 It's still only you that I love⁶.

- 6-110 **egeningge-nimbi yubu -da -pe, egeningge-napa derrigidi-ngerim**
goose -CAUS 2sgBash-hit-Fut goose -JUST want -1sgHands
SU Irr SU Pres
 If you happen to shoot some geese, then it's just a goose that I want
 (rather than money, in return for giving you the cartridges).

Attached to verbs **-napa** signals 'a limit reached', i.e. it has the essentially aspectual function of marking the 'perfect of result' (in the sense

⁶Ngan'gityemerri speakers do not make these kinds of romantic vows. This example from a narrative was given in parody of a hen-pecked whitefella (not the author) who is obliged to say this to his wife on regular occasions.

of Comrie 1976:56-7) where a proposition is presented as the resultant state of past activity. In this capacity *-napa* is glossed as UNTIL.

- 6-111 *yedi -wurrkama-tye palak-meny -napa*
3sgGo-work -Past tired -3sgDo -UNTIL
SU PImp SU Perf
 He worked until he was tired.

- 6-112 *ngariny-syi -bang mawuny-ninggi, e wupun -tyen-napa*
1sgPoke-nose-pierce ironwood-INSTR and 3sgSlash-dry-UNTIL
SU Perf SU Perf
 I'd pierced my nose with an ironwood lance. (It has been healing slowly until now) it has dried right out.

6.2.9 *-nawa* INSTEAD

The enclitic *-nawa* attaches to NP's identifying that entity/activity 'instead of' or 'in preference to' some other thing (which may be unstated).

- 6-113 *yedi -nawa wannim-fifi falmi minmi*
man-INSTEAD 3pl Go -blow woman Neg
SU Pres
 It's men who blow didjeridu's, women don't.

- 6-114 *yerr-mentyi minbe ngaganim-dada, walamarra-nawa*
Tr -throat Neg 1sg Go -sing women's -INSTEAD
cl =song SU Pres dance style
 I don't sing songs, but I do 'walamarra' instead.

- 6-115 *syiri damuy yerim -baty ?, minbe-yawurr, meny-nin*
Hhw eye 2sgHands-hold Neg-tree/thing 3sgSay-1dlinc
gen=cartridge SU Pres gen. SU Perf IO
 "Got any cartridges ?", "No, nothing" he told us.
wun -nawa wulmen-nide yanneyerri,
*there-INSTEAD oldman -LOC 2sg Go**
SU Irr
 "but go over there (instead of here) to the old man,
nyin -nawa demim -baty,
ANA-INSTEAD 3sgHands-hold
SU Pres
 he (instead of me) has got some".

The 'indefinite' sense of *-nawa* is treated in the discussion of interrogatives in 9.3.3.

6.2.10 -wurru UNSATISfactory

-wurru is an enclitic that has the propositional function of indicating that the speaker finds either the proposition as a whole, or a particular element of the proposition, to be unsatisfactory. It expresses a negative evaluation of a proposition, or some entity's role in a proposition, because it impacts on the speaker in some disadvantageous way.

Attached to adjectives and expressions of quantity -wurru apportions the unsatisfactoriness of the proposition to the excess of that attribute or quantity.

- 6-116 **funggulu ngamban-nime,**
honey 1dlinc Go -pl
SU Irr SU
 Let's go get honey.
kinyi-pefi ngambani-madi-pap -nime-pe madiket-wurru
this-THITH 1dlincGo -chest-climb-pl -Fut hungry-UNSATIS
SU Irr SU
 Let's climb up this way, I'm too hungry !

- 6-117 **tea kinyi wurek-wurru**
this bad -UNSATIS
 This tea's too weak !

- 6-118 **firr -ngityirr-nimbi yani -lali,**
foot-ground -CAUS 2sgGo-around
SU Irr
 If you were to go on foot,
diwin erreke-nawa yemengge, minbe mendi-wurru
moon how-INDEF 2sgArrive Neg close -UNSATIS
SU Irr
 it'd take you months to get there...it's too far !

This notion of excessive quantity can also be seen to operate in negated expressions where -wurru signals the speaker's feeling that the amount is insufficient.

- 6-119 **minbe-mi-wurru ngirim**
Neg -Pf -UNSATIS 1sgSit
cl SU Pres
 I haven't enough food (to spare you any).
- 6-120 **gagu minmi-wurru a-minbadi money**
animal Neg -UNSATIS A-big
generic cl
 (I don't have) enough money, it's too expensive !

Note that **-wurru** can be used in a particular way which is consistent with the evaluation of 'excessive quantity', but which is not presented as an 'unsatisfactory' proposition. Consider 6-121 below, where the speaker is extending a polite invitation to someone to feel free to contravene normal conventions. Effectively the speaker is saying 'Please sit here talking for (what would otherwise be considered as) too long a time'.

- 6-121 **fenggiderrri-wurru** **yi** **-tyerrakul-pe kinyi**
long time -UNSATIS 2sgSit-talk -Fut here
SU Irr
 (Please) stay here talking as long as you like.

The 'unsatisfactory' evaluation of a proposition (or, more especially, an individual's role in a proposition), that is conveyed by **-wurru**, can interact with the semantics of the verb and the general context of the discourse in a way that leads to the interpretation of the speech act as an expression of compassion or an expression of criticism. For instance, a **-wurru** marked NP that is portrayed as the victim of some verb of adverse effect, as in 6-122, is understood to be the object of the speaker's compassion. On the other hand, a **-wurru** marked NP that is portrayed as the perpetrator of some adverse proposition (or even potentially adverse proposition), is understood to be the object of the speaker's criticism, as in 6-123.

- 6-122 **minbe-wurru** **kene** **yannunggu-madiwirri**
Neg -UNSATIS who 2plGo dl -play
SU Pres SU

You (poor thing) have no-one to play with.

- ngayi-nyine ngambani-madiwirri-pe**
1sg -FOC 1dlinc Go -play -Fut
PRO SU Irr

I'll play with you from now on.

- 6-123 **nyinyi-wurru** **medicine minde-tye yemi -baty**
2sg -UNSATIS Neg -Past 2sgHands-hold
PRO SU Irr

You (are to blame because you) neglected to take your medicine with you !!!

Chapter 7

Particles

Particles differ from enclitics in being independent freeform phonological words, and generally occurring clause-initially. Otherwise they share broadly similar semantic functions to the enclitics discussed in the preceding chapter. Wilkins (1989:347) has drawn attention to the 'significant degree of agreement between the stocks of meanings encoded through the particle/clitic grouping' in Australian languages generally. Most of the particles discussed here have scope over an entire clausal proposition. The three forms examined in 7.10 have the function of conjoining nouns and clauses under certain, fairly limited, conditions. Particles cannot take any form of inflection. 7.11 lists the class of interjections, which differ from particles in constituting complete utterances on their own.

7.1 **Tyepe** JUST

Tyepe indicates that some proposition is the only thing within the context that can be done. Nothing else can be done, simply because no other alternatives exist.

- 7-1 **tyepe dede kinyi dinyirri-mi-yubu,**
 JUST camp this 3sgSee -Val-good
 SU Perf

(Ancestral Pelican, going into labour whilst travelling) only just had time to observe that this was a suitable place.

kine ngani-wap, ngi -palak-pe amurru, meny,
 this 1sgGo-sit 1sgSit-dro p-Fut A-egg 3sgSay
 place SU Irr SU Irr cl SU Perf
 "I'll camp here and lay my egg", she said.

- 7-2 **tyepe nganniny-fili firr-ngityirr-nyine**
 JUST 1plex Go -wander foot-ground-FOC
 SU Perf

(Being unable to restart the car) we just set off on foot then.

- 7-3 **minbe-pagu yumu-ngiti tyagan-ne**
 Neg -HITH 2sgSay-1sg what -PURP
 SU Irr

Don't question my intentions,

tyepe ngan'gi ngayi yumu -ngi-me -wa,
 JUST word 1sg 2sgSnatch-1sg -hand-pick
 PRO SU Irr DO up
 just take my word for it.

7.2 Ngunu HOW ABOUT IT ?

The particle **ngunu** forms a question that asks 'how about it?' with respect to some given proposition. It's characteristic use is in polite speech, seeking information. The usage of **ngunu** as an interjection is noted in 7.11.

7-4 **ngunu** ready-yurrmugu-nyine

HOW -2plDo dl -FOC

ABOUT SU Irr SU

'How about it ?, are you two ready to go now ?'

7-5 **watypela yirrini-tye tyawurru, dam -tyerr -pu**

whitefella 3sg Go*-Past today 3sgPoke-mouth-ask

SU PImp

SU Perf

The whitefella(physiotherapist) came here today and asked her,

de-ngini nyinyi ngunu, mumba yaganim-lal -endi,

Bp-body 2sg HOW walk 2sg Go -around-SAME

cl PRO ABOUT SU Pres

"Well how's your body then?, are you moving around again?"

7.3 Wetimbi FINE

Wetimbi indicates that something is agreeable, or meets with your expectations or approval. It typically prefaces a positive response to a query, and can be translated as 'OK', 'fine', 'sure thing', 'no problem' etc. (see also 7.11).

7-6 **yubu yirim ?, wetimbi yubu ngirim,**

good 2sgSit FINE good 1sgSit

SU Pres

SU Pres

'Are you OK ?', 'Sure, I'm fine'

7-7 **ganbi kinyi ngawam-pe, meny -ne, wetimbi yawam-pe,**

didjeridu this 1sgTake -Fut 3sgSay-3sgM FINE 2sgTake-Fut

SU Irr

SU Perf IO

SU Irr

'Can I take this didjeridu (onto the plane ?)', he asked him.

'Sure, you can take it on'.

darany -ngirrki-fi -pal, yu wetimbi ngambawam-pe

3sgPokeDtr-1dlex -Mp-return yes FINE 1dlinc Take -Fut

SU Perf IO

SU Irr

he came back to us (and reassured us) 'Yeah there's no problem, we can take it on'.

7-8 **ulgumen ngayi wetimbi ngiminy-nge**

old woman 1sg FINE 1sgSay -3sgF

PRO

SU Perf IO

I've cleared it with my wife.

(She's approved of my going on the trip)

Where proposition X has been clearly contextually established, it too can be omitted, leaving *ninggi* simply prefaced to proposition Z, as in 7-14.

- 7-14 **ninggi ngambani-pe**
DESPITE 1dlinc Go-Fut
SU Irr
 Despite (all the objections you've raised) you and me are still going to go.

7.6 **Gumungini/Gimingini (K) SUPPOSE**

Gumungini conveys the speaker's assertion that the clausal proposition is 'supposed to happen', attributing the source of this expectation to some higher external (but generally unidentified) authority.

- 7-15 **gumungini ngambani-pe meeting**
SUPPOSE 1dlinc Go-Fut
SU Irr
 You 'n me are supposed to go to this meeting.

Gumungini is also frequently used where the authority behind a proposition stems only from the speaker him/herself, but the speaker attributes the source to some ill-defined authority to make their case more convincing.

- 7-16 **gumungini kuru wagarri yani-ngiti-kurr-tye**
SUPPOSE liquid two 2sg Go-1sg-pick-Past
generic SU Irr IO up
 You were supposed to get me two (cartons) of beer !
- 7-17 **wurruke, gumungini apma yirrigu**
3dl SUPPOSE quiet! 2nsSit dl
PRO SU Irr SU
 You two !, you're supposed to be quiet !

7.7 **Tyamennapa DISMISSIVE**

Tyamennapa is (at least historically) dimorphemic, **-napa** being the JUST enclitic discussed in 6.2.8. However *tyamen* never occurs as a freeform and **tyamennapa** appears to be synchronically treated as an unsegmentable unit. As the particle is **tyamennapa** (not *tyamen*), it does not therefore violate the requirement that members of the wordclass 'particle' do not bear productive inflectional enclitics.

In saying **tyamennapa** a speaker downplays the significance of what he is saying, admitting that it is unimportant and unlikely to arouse the addressee's interest.

- 7-18 **....yudum-ngi-karibu kinyi, nyine ngan'gi tyamennapa**
2sgShove-1sg-alight here FOC story DISMISS
SU Perf DO
then you dropped me off here. That's my story then.
- 7-19 **gagu money ngudunu-wutyit-tye-nganggidi tyamennapa**
animal 1dlincShove-pour-Past-1dlincGo DISMISS
gen. SU PImp redup SU PImp
 We were just throwing our money away (by playing those
 sideshow alley games).
- 7-20 **tyamennapa perrety-meny**
DISMISS die -3sgDo
SU Perf
 He just died, that's all (there are no suspicious circumstances).

Note that **tyamennapa** is also used as an interjection meaning 'it's nothing', 'forget it', 'don't bother about it' (see 7.11).

7.8 Epe BUT

Epe prefaces a proposition suggesting that it be considered in contrast to some immediately preceding proposition.

- 7-21 **palamurru nuwurr ngumu -wa -pe, epe ganbi kide,**
clapsticks briefly 1sgSnatch-pick-Fut BUT didjeridu where
SU Irr up
 I'll just get my clapsticks, but where's (your) didjeridu ?
- 7-22 **peyi intyat-yendi wembem nginimem, epe warrifi-mirri,**
in inside-SAME house ALREADY BUT down -EMPH
place
 (The carpark) is still inside the same building, but it's down
 in the basement.
- 7-23 **gagu wirritywirrity dede kinyi nayin-nide yenim e-wedi,**
animal lorikeet country this 1dlinc-LOC 3sg Go A-small
gen. PRO SU Pres cl
 The lorikeets here in our country are small,
epe dede nyinyi nginyirri, minbe e-wedi yenim,
BUT country 2sg 1sg See Neg A-small 3sg Go
PRO SU Perf cl SU Pres
 but (the lorikeets) I saw in your country (Melbourne Zoo)
 are huge (lit: aren't small).
ep dede kide -nimbi -nawa
GUESS country where-SOURCE-INDEF
 I wonder what country they come from ?

7.9 Ep GUESS

Ep prefaces a clause to indicate that the speaker acknowledges that he is guessing. It could be explicated as: 'What I'm saying is based on the information I have, but I don't know for sure that it is true'.

- 7-24 **awa-cooky minbe-fela¹, ep miyi-nyine-ne**
Hg - Neg -fellow GUESS food-FOC -SUPP
cl = no-one
 No hostesses, it might be dinnertime.
 (Said on observing the absence of hostesses in the plane cabin, and assuming that therefore they might be preparing dinner in the galley)
- 7-25 **ep kine Darwin, ngiminy-ne, ep -ne, meny-ngiti**
GUESS this 1sgSay -3sgM GUESS-SUPP 3sgSay-1sg
place SU Perf IO SU Perf IO
 'This place might be Darwin', I said to him. 'Could be' he told me.
 (Said on feeling the plane beginning to lose altitude)

As one might predict from the explication given above, **ep** is widely used in 'hearsay' constructions, where the speaker attributes the source of the proposition to quoted information and is him/herself unable to personally vouch for its veracity.

- 7-26 **ep wur-eneltyi yenim-pagu tyawurru**
GUESS F- 3sgGo-HITH now
cl SU Pres
 They say the Northern Lands Council woman is on her way out here.

Ep can also be used in this kind of 'hearsay' construction when someone wants to enquire about something or make a suggestion, without portraying themselves as the direct source of the quoted proposition.

- 7-27 **ep palada deminy -nyi-tip**
GUESS venereal 3sgHands-2sg-grab
disease SU Perf DO
 They say you've got a dose of the clap ?

¹In the absence of a gender-unspecified human generic in Ngan'gityemerri, *fela* (from English 'fellow,' via Kriol) is now widely used. cf. *minbe-mipurr* 'no men', *minbe-falmi* 'no women'.

- 7-30 **yu ngani-pefi -pe, meny-ngirrki, e yeyi mengge -tasat**
yes 1sgGo-THITH-Fut 3sgSay-1dlex and other 3sgArrive-emerge
SU Irr SU Perf IO SU Perf
 Yes I'm coming she told us, and another(child) came out of the house.

The third connector, *a*, has a narrative function, connecting a punctual activity to a preceding progressive activity in a particular way. Where a clause describing activity that took a long period of time (durative) is followed by a clause describing activity that was momentary (punctual), then the latter clause can be prefaced by *a*. In an example like, 'we were travelling.....*a*, we arrived', the sense of *a* could be explicated as: 'I'm not going to bore you with all the details, but you should understand that the travelling took a long time, then *finally* we were there'.

Clauses connected in this way have a very distinctive intonation contour. The final vowel of the durative verb is exaggeratedly prolonged, with gradually decreasing pitch (iconic of duration). Then the connector *a* has short sharply rising pitch (iconic of punctuality). The translation of 7-31 below, attempts to represent this pitch contour pattern.

- 7-31 **ngarrintyirri-fili, a bitumen nganniny-mentyi-tyerr**
1plex Go -wander finally 1plex Go -neck -stop*
SU PImp SU Perf =turn off
 We kept travellingiiiiiiiiing.....THEN finally we hit the bitumen.

- 7-32 **musyulng-nyine nginnyirrini-kerrety-tye, ganbi-mbirri**
swag -FOC 1plex See -grasp -Past didjeridu-FIRST
SU PImp

We were watching for our swags (to emerge on the airport baggage conveyor belt), I saw that the didjeridu was coming

gaganim-garrmadi nginyirri, tap ngumu -wa
3sg Go -approach 1sg See ONO 1sgSnatch-pick
SU Pres SU Perf SU Perf up

up first, so I picked it up.

a handbag ngayi gaganim, tap ngumu-wa
finally 1sg 3sg Go ONO 1sgSnatch-pick
PRO SU Pres SU Perf up

... then finally my suitcase came, and I picked it up.

- 3- Darwin watch-house **nginni -pefi -tye** three month,
1plexSit-DUR-Past
SU PImp

We sat around in Darwin watch-house for three months,

a wuddum-ngirr-tyuk Alice Springs-pefi,
finally 3plShove-1plex-send -THITH
SU Perf DO
then finally they sent us (prisoners) off to Alice Springs.

7.11 Interjections

Interjections differ from particles in their capacity to constitute utterances on their own. They typically express a reaction to an event, either linguistic or extra-linguistic (cf. Laughren 1982:132). Several of the particles discussed in 7.1 to 7.10 function also as interjections. These include **ngunu** (cf. 7.2), **wetimbi** (cf. 7.3), and **tyamennapa** (cf. 7.7).

yu	yes
yi	oh yeah (mild interest or tentative agreement)
(a)ya	hey !
minmi	no
ma	give it here then
(i)ngga	take it (often a response to ma)
ba	let's get started !
ba	..no no I mean... (correcting a slip of the tongue - differs from ba 'let's get started' in being ingressive)
wakay	finished !
yakay	oh shit !, ouch !, lookout !
yakarra	isn't that terrible !, oh no !
wetimbi	fine !, no worries !, OK !, 'good one !'
tyamennapa	'it's nothing !' 'not worth worrying about !'
ngunu	well, how about it ?

Chapter 8

Space, Time and Number

This chapter examines the way in which spatial deixis, temporal deixis and quantification are expressed in Ngan'gityemerri.

8.1 Space

8.1.1 Demonstratives

There is a primary opposition between the two spatial demonstratives;

- | | | | |
|-----|----------------------|---|--------------|
| 8-1 | kinyi | - | here / this |
| | wunu/wuni (K) | - | there / that |

which place some entity as either close, or distant, with respect to the speaker. **Kinyi** and **wunu** can either stand as independent nominals, as in 8-2 and 8-3, or modify head nominals, as in 8-4 and 8-5.

- 8-2 **yudu** - Ø -mi -wul -pagu -pe **kinyi**
 2sgShove-3sg-Val-return-HITH-Fut here
 SU Irr DO
 Bring her back here !

- 8-3 **ngambani-pe wunu**
 1dlincGo-Fut there
 SU Irr
 Let's go over there.

- 8-4 **nem kinyi dangim-ngi-fi -me**
 3sg this 3sgPoke-1sg-Mp-hand
 PRO SU Perf DO
 This man/the man here gave it to me.

- 8-5 **mipurr wunu kene girribem**
 man that who 3sgStand
 SU Pres
 Who is that man/the man over there.

In addition to these two primary terms, the spatial deixis system is comprised of a third, though statistically much rarer, term **werrfe/yife(K)**, denoting mid-distance. **Werrfe** indicates a position neither close to, nor very distant from, the speaker. Like the two primary deictics, it is concerned simply with relative position, not visibility or any other criteria. **Werrfe** is most frequently employed in opposition to **kinyi**, in distinguishing between

two positions, neither of which is really distant from the speaker. This usage is demonstrated in 8-6.

- 8-6 **werrfe yirrim -pagu, ngayi kinyi ngirrim -pe**
mid 2sgStand-HITH 1sg here 1sgStand-Fut
distant SU Irr PRO SU Irr
 You stand just there, and I'll stand here.
 (leaving only a small space between us for fleeing wallabies
 to run through)

Although **kinyi** and **wunu** can refer to general location with respect to the speaker (as in 8-2 and 8-3 above), there is in Ngan'giwumirri an additional set of terms, **kine** and **wune**, that refer to this/that specific *place*, as opposed to other possible referents such as people, objects etc. They refer to definable, and usually named, places, and are most frequently employed in naming country.

- 8-7 **dede kine atyityulak girim, ngiminy-bi**
country this Australian 3sgSit 1sgSay -2sg
place pratincole SU Pres SU Perf IO
 'This place here is the Aust. pratincole dreaming', I told you.

- 8-8 **wune ya -fi -tyat -Ø**
that 2sgPoke-Mp-place-IMP
place SU Irr
 Set it down in that place !

Kinyi, **werrfe** and **wunu** can fill the full range of syntactic and morphological structural possibilities that are available to all modifying nominals. They can, for instance, bear noun class proclitics and nominal suffixes, as shown with **kinyi** in 8-9 and 8-10.

- 8-9 **yerr-kinyi gagu money mabuk-wurru**
Tr -this animal lots -UNSAT
cl gen.
 This one's too expensive !
- 8-10 **kin -nimbi kide -pefi ngambani-pe**
here-SOURCE where-THITH 1dInclGo -Fut
SU Irr
 Which way do we go from here ?

8.1.2 Nearside/Farside

The three spatial deictics **kinyi**, **wunu** and **werrfe** also take the enclitic **-ninggi**, which we have seen in 6.1.1 and 6.1.2 to mark agentive and

instrumental case roles on other nominals. The resultant terms mark the location of something, not as proximate or distant with respect to the speaker, but as on the nearside or farside of some other referent with respect to the speaker. Thus something that is 'kin-ninggi Darwin', may be quite distant from the speaker, but on the speaker's side of Darwin.

- 8-11 **minbe ngatypirr Amungal-nimbi wun-ninggi nganniny-du**
Neg distant Adelaide -SOURCE there-INSTR 1plexGo-sleep
River SU Perf
 We camped at a place a little the other side of Adelaide River.

- 8-12 **ngambara -mentyi-gerrgirr-nide -pe, wamanggal nyin**
1plincPokeDtr-neck -cut -3sgM-Fut wallaby ANA
SU Irr IMPL
 Let's circle around on that wallaby,
ngarmguweri-nyine wiri -pe, nyinyi werrfe-ninggi,
middle -FOC 3sgSit-Fut 2sg mid -INSTR
SU Irr PRO distant
 so he'll be in the middle. You (go) just that side of him,
ngayi kin -ninggi ngana -gulirr-pe,
1sg here-INSTR 1sgFeet-circle-Fut
PRO SU Irr
 I'll circle around this side of him.

8.1.3. Nearside/Farside of 'Bodyparts'

To provide further specification of this 'other referent' with respect to which location is marked, the three bodyparts **madi** 'chest', **data** 'shoulder', and **dirr** 'teeth', can be prefixed to **kin-ninggi** and **wun-ninggi**. These bodyparts play a broadly classificatory role, portraying the referent as an exemplar of that bodypart, with respect to the landscape as a whole. The extension of bodypart terms to cover the geography and typography of the landscape is discussed in more detail in 3.5 and 5.2.4.

Dirr-kin-ninngi and **dirr-wun-ninggi** denote the near and far sides of riverbanks¹.

- 8-13 **minbe-pe yani -kafarr, dirr-kin-ninggi yana -minmi-ket-pe**
Neg -Fut 2sgGo-cross teeth-this-INSTR 2sgFeet-elbow -cut-Fut
SU Irr SU Irr =turn off
 Don't cross over the river, but turn off on this side of it.

Data-kin-ninggi and **data-wun-ninggi** denote the near and far sides of things, like people, trees and fences, that stand upright on the ground.

¹A third term **dide-ninggi** refers to the 'opposite side of a river' with respect to some given activity, but implies no spatial relationship to the speaker.

- 8-14 **data -kin-ninggi nginyinggin-yilil, nem Tyekpity girribem,**
shou -this-INSTR 1sgSee -recognise 3sgM name 3sgStand
lder- SU Pres PRO SU Pres
 I recognise the one on this side, that's Tyekpity,
data -wun-ninggi nem Pincher, epe ngarrnguweri kene girribem,
shou-there-INSTR 3sg name BUT middle who 3sgStand
lder PRO SU Pres
 and on the far side, that's Pincher... but who's that in between
 them.

Madi-kin-ninggi and **madi-wun²-ninggi** denote the near and far sides of things that have more substantial shape; broad solid objects like hills, houses, cars etc.

- 8-15 **mudiga madi-kin -ninggi ngariny- Ø -fi -tyat**
car chest-here-INSTR 1sgPoke-3sg-Mp-place
SU Perf DO
 I put it down on this side of the car.
- 8-16 **fepi minbadi-nide madi -wun-ninggi fepi wagarri widdibemgu**
hill big -LOC chest-there-INSTR hill two 3plStand dl
SU Pres SU
 On the other side of Peppimenarti hill, there are two
 (other) hills.
de -kin -ninggi wantyirr-nyine piwari,
Ctry-here-INSTR place -FOC name
cl name
 The nearside one is called Wantyirr,
da -wun-ningg -endi nyin Banimbilerri-nyine
Ctry-there-INSTR-SAME ANA place -FOC
cl name
 and the farside one... that's Banimbilerri.

8-16 also demonstrates the capacity for **kin-ninggi** and **wun-ninggi** to bear the **dV-** 'country' bound class marker (cf. 5.2.4).

8.1.4 Other Deictics

In addition to the spatial deictics **kinyi**, **werrfe** and **wunu**, there are nine other terms that are widely used in Ngan'gityemerri to specify relative spatial arrangements. Six of these are the antonymic couplets;

- 8-17 **fangu - front mendi - close ganggi -high/above**
syirre - behind ngatypirr - distant warrifi/apukek (K) -low/under

²I have recorded **madi-ye-ninggi** as an alternative for **madi-wun-ninggi**, in both NgW and NgK. **-ye-** is synchronically unanalysable as any independent morpheme, but note **me-ye-ninggi** 'five' in 8.3.1.

8.1.4.1 Front and Behind

Fangu/syirre can denote either the front/rear part of something, as in 8-18 below, or the position 'in front of' or 'behind' something, as in 8-19.

- 8-18 **wetimbi, syirre -pagu wirrigu -pe, narrgu fangu yirrigu -Ø**
FINE behind-HITH 3plSit dl -Fut 2dl front 2plSit dl-IMP
SU Irr SU PRO SU Irr SU
 It alright, the two (women) can sit in the back (seat), you two sit in the front !

- 8-19 **kintyirri fangu yedi -tye gunugunu-werre**
name front 3sgGo-Past old -ASSOC
SU PImp women
 Kintyirri (name of community truck) was travelling in front (of us) laden with old women.

8.1.4.2 Close up and Far away

Mendi/ngatypirr denote short and long distances, respectively.

- 8-20 **wur-nurse minbe-merrendi gani -lali ngatypirr**
F - Neg -PROHIB 3sgGo-roll distant
cl SU Irr
 The nurse (being on 24 hr call) mustn't wander far away,
kin -napa -ndi wiri -pe mendi
here-JUST-SAME 3sgSit-Fut close
SU Irr
 she has to stay close by here .

- 8-21 **minbe ya -ngi-tipek -Ø mendi, ngatypirr-pagu yaneyerri-ngiti**
Neg2sgPoke-1sg -follow-IMP close distant -HITH 2sgGo -1sg*
SU Irr DO SU Irr IO
 Don't follow so closely, come behind me at a distance !

8.1.4.3 Up and Down

Ganggi/warrifi, variably translated as 'high, above, on top' / 'low, beneath', typically represent poles within the vertical trajectory. Their usage in this sense is demonstrated in 8-22 and 8-23.

- 8-22 **piwulil-nide ganggi dede nginge -tye**
vine -LOC high camp 1sgLie -Past
SU PImp
 I slept up in the vines.
- 8-23 **keninggisyi-nide warifi wibem meringgi**
canoe -LOC low 3sgLie shade
SU Pres
 He's lying in the shade beneath the boat.

However **ganggi** and **warrifi** additionally function as the primary terms in a system of direction marking. As Ngan'gityemerri differs from many Australian languages in not using terms for compass points³, I will briefly sketch out the details of this system here.

Rather than superimposing over their landscape a symmetrical grid of the NSEW compass type, Ngan'gityemerri speakers make use of a network of real lines that are etched into their landscape. Branching out from the major rivers are increasingly smaller tributaries. It is this random grid of the lines of waterflow that Ngan'gityemerri speakers use to make reference to directions. This vast network of lines covers the entire landscape (ie. there is no place from which the flow of water is not predictable) so has the capacity to provide highly specific reference. The primary terms used in respect to this system are **warrifi** and **ganggi**. Normally these are used with reference to vertical trajectory, but within the parameters of the directional system are better glossed as 'upstream' and 'downstream'. Needless to say, given the random nature of the grid, the directions 'upstream' and 'downstream' can have no consistent correspondence to compass directions. In the western side of Ngan'giwumirri country, for instance, the flow of the larger rivers is vaguely SE to NW, whereas in the eastern half it is vaguely SW to NE. Obviously the minor creeks completely violate compass directions by flowing in all directions.

In giving directions to reach any particular place then, a Ngan'gityemerri speaker will tell you something like this: 'follow this creek downstream, turn upstream at the nearside bank of the arm called Kamintyam, follow it upstream crossing two smaller arms, turn upstream at the next arm and you will see it.' In stipulating whether you cross an arm

³There are two clauses used by Ngan'gityemerri speakers that function in a minor capacity as compass directionals. These are:

mirri meng -ge -tet
sun 3sgHandsDtr-belly-arise
SU Pres

The sun comes up.

and

mirri yenim-dum
sun 3sgGo -sink
SU Pres

The sun sinks.

On the few occasions that I have heard these phrases used in this manner, their utterance has been accompanied by hand-pointing in the appropriate direction. There are no terms used for north or south, and the two terms for east and west are so under-exploited that it seems to me that they exist above and beyond the traditional Ngan'gityemerri directional system which is simply not of the compass directional type. **Mirri menggetet** and **mirri yenimdum** may be traditionally employed terms, or they may be calques on either neighbouring languages or indeed English. Either way, in contemporary Ngan'gityemerri they appear to be disfavoured.

then turn up/down on its far bank, or don't cross and turn up/down on its nearside bank, you can govern progress through this network quite simply. A textual example is given in 8-24.

- 8-24 **kamintyam dirr -kin -ninggi yana -minmi-ket -pe,**
creek name teeth-this-INSTR 2sgFeet-elbow +cut -Fut
 = this side of SU Irr =turn off
 Turn off on the nearside bank of Kamintyam,
minbe yani -kavarr dideninggi, dirr -kin -ninggi yana -minmi-ket-pe
Neg 2sgGo-cross otherside teeth-this-INSTR 2sgFeet-elbow-cut-Fut
 SU Irr =this side of SU Irr =turn off
 Don't cross to the otherside, turn off on this nearside,
ganggi-pe yana -minmi-ket-pe, yumu-tyerr -pe ba -wedi nyin
up -Fut 2sgFeet-elbow-cut-Fut 2sgDo-mouth-Fut arm-small ANA
stream SU Irr =turn off SU Irr
 turn upstream and follow that little creek up.

8.1.5 Between, Side by Side, and Single File

The three remaining spatial terms, indicating the positional relationship holding between two/three or more entities, are;

- | | | | |
|------|---------------------|---|--|
| 8-25 | ngarrnguweri | - | between/halfway |
| | melpemelp | - | side by side (cf. melp - flat) |
| | fenggu | - | single file (cf. fenggu - long) |

Ngarrnguweri has been demonstrated in 8-12 and 8-14 meaning 'between two points', and in 8-26 below denotes a point 'halfway round a circle'. Examples of **melpemelp** and **fenggu** are given in 8-27 and 8-28.

- 8-26 **nganggidi-tye ngarrnguweri nyin,**
1plincGo-Past middle ANA
 SU PImp
 We went halfway round that (hill),
epe ngambarany -fi -pal -pagu mumba nyin -endi
BUT 1plincPokeDtr-Mp-return-HITH track ANA-SAME
 SU Perf
 then came back again, the same way.
- 8-27 **melpemelp nganniny-tyerr, ngiddinge -ngan-derri-tye**
side by side 1plexGo -stop 1plexStand-LOC -back -Past
 SU Perf SU PImp
 We halted side by side, standing on it's back (the escalators).

- 8-28 **ngaddi -pefi -tye fenggu, mityity fangu deminy -tyerr -ta**
1plexGo-THITH-Past single white front 3sgHands-mouth-open
SU PImp file woman SU Perf
 We went up in single file, and that white women, in front,
 opened the door.

8.2 Time

This sections lists most of the words and expressions that Ngan'gityemerri speakers use in locating activities and events with respect to time. The temporal categories that are marked by auxiliary verb inflection have been discussed in 3.4.1. Here I look at freeform temporal qualifiers.

8.2.1 Immediate time

- | | | | |
|------|--|---|--------------------|
| 8-29 | kulyi yeyi-nimbi | - | a few days ago |
| | kulyi-nimbi | - | yesterday |
| | tyawurru/detyengi (K) | - | today |
| | wade-ninggi/ngunyine-ninggi (K) | - | tomorrow |
| | kulyi yeyi-ninggi | - | in a few days time |

Amongst these expressions we find **-nimbi** and **-ninggi** (which we have previously encountered as the 'source' case inflection (cf. 6.1.5) and 'agentive/instrumental' case inflections (cf. 6.1.1-2), respectively), apparently functioning as markers of past and future time, respectively. However, other than in these four terms, and the historic time expression **yu mem-nimbi** (see below) and **etye-ninggi** 'later' (cf. 9.3.2), there is little further evidence of **-nimbi** and **-ninggi** being productively exploited in this sense.

8.2.2 Historic time

- | | | | |
|------|------------------------------|---|----------------------------|
| 8-30 | yu mem-nimbi | - | long ago, in the beginning |
| | madewetimbi | - | in the old days |
| | ambirri | - | in the past |
| | tyawurru/detyengi (K) | - | these days |
| | yibe/yiba (K) | - | in the future |

Yu mem-nimbi, formally a clause with the 'say' simple auxiliary, does not inflect, the temporal expression being synchronically unanalysable. Among the texts in my data, stories about the travels and activities of ancestral beings, and those concerned with the arrival of the first Europeans, usually begin with this expression.

- 8-31 **yu mem -nimbi** Captain Cook **yedi -pagu -tye,**
long ago *3sgGo-HITH-Past*
SU PImp
 Long ago when Captain Cook came here...

Madewetimbi generally refers to one's youth (if old), or the youth of the preceeding generation (if young). Its occurrence is typically accompanied by other expressions, such as 'when I was this high...', 'when I was living at...' etc.

- 8-32 **madewetimbi wa-nganggu ngagadi-tye, ngatya ngayi...**
in the old days M -youth 1sgGo -Past father 1sg
cl SU Plmp PRO
 In the old days, when I was a young man, my father used to...

Ambirri refers simply to the past without any time depth reference. It may locate events that occurred minutes, days, weeks, or years ago. An example is given in 8-33 below. In addition to its function as a freeform temporal qualifier, **ambirri** also occurs as a suffix in the ordinal sense 'first'. This is discussed in 8.3.3

Tyawurru, given as 'today' under immediate time, conveys, in its historical time sense, the notion of 'these days' or 'contemporary times', much as 'today' does in English.

- 8-33 **tyawurru kinyi kuru-nyine wannim-kukuduk wa- nganggu,**
these this beer-FOC 3plGo -drink M - youth
days SU Pres redup cl
 These days young men drink beer,
ambirri kuru minbe-tye warrani-kukuduk
in the beer Neg -Past 3plGo -drink
past SU Irr redup
 but in the past they never used to drink beer.

Yibe, like **ambirri**, refers simply to the future without any time depth reference.

- 8-34 **yibe nga -Ø -fi -me -pe, wemi -mbi-kerrety-pe**
later 1sgPoke-3sg-Mp-hand-Fut 3sgHands-2sg -grasp -Fut
SU Irr DO SU Irr IO
 I'll give it to him later, he'll mind it for you.

8.2.3 Time of Day

- | | | | |
|------|---------------------|---|---------------------|
| 8-35 | dam-fi-sul | - | dawn |
| | elifela | - | early morning |
| | mirri-ganggi | - | hot time |
| | mirri-kulyi | - | cool time |
| | panggurra | - | twilight |
| | nganingiyi | - | dark time |
| | ngingipiri | - | middle of the night |

Dawn is described by a verb, **dangim-fi-sul**, of which **mirri** 'sun' is subject.

- 8-36 **nganggidi-purpurk-tye dam -fi -sul -napa**
1plincGo -dance -Past 3sgPoke-Mp-waken-UNTIL
SU PImp redup SU Perf
 We danced until dawn.

Elifela, a loan from 'early fella' (via Kriol), referred to in the past is understood as 'this morning', and in the future as 'tomorrow morning'. I have no evidence that this loan has replaced any other term.

- 8-37 **elifela yemi -ngirrki-du -Ø**
early 2sgHands-1dlex -touch-IMP
morning SU Irr DO
 Wake us early in the morning !

Mirri-ganggi (*sun-high*) covers the period of day from about 11am-3pm, when the sun is overhead, and its heat discourages energetic activity.

- 8-38 **mirri-ganggi men'gen-ngiti**
sun -high 3sgArrive-1sg
SU Perf IO
 He came to me in the middle of the day.

Mirri-kultyi, often glossed by Ngan'gityemerri speakers as 'cool time', covers the period of time from about 3pm, when the sun begins to lose its heat, until dusk.

- 8-39 **fepi minbadi men'gen mirri-kultyi**
hill big 3sgArrive sun -cooltime
SU Perf
 He reached Peppimenarti in the late afternoon.

Nganingiyi simply means darkness, and refers to the whole night.

- 8-40 **ba nganingiyi -nyine-pefi**
HORT dark -FOC -INCHO
 Come on, it's beginning to get dark now!

8.2.4 All day / All night/ Always

Three adverbial particles, **tyip** and **fal** and **ferrp**, follow verbs conveying the senses 'all day' and 'all night' and 'always', respectively.

- 8-41 **firretyi-werre nginge-tye fal lirmem-ne ngerrim-syety defirr**
shoe -ASSOC 1sgLie-Past all cold -PURP 1sgGo-afraid foot*
SU Plmp night SU Perf
 I slept with my shoes on all night, for fear of the cold.
- 8-42 **dini -peyi -tye tyip fidi -nide-napa -ndi**
3sgSit -in -Past all sun's-LOC-JUST-SAME
SU Plmp place day heat
 She just sat there all day, in the full sun.
- 8-43 **ngaganing-gatit kuderri nyinnin ferrp**
 NgK *1sgGo -fish billabong ANA always*
SU Pres
 I always go fishing at that billabong (as a matter of habit).

Naturally these particles can only occur with verbs expressing activities/states that are amenable of extended-in-time interpretations. As discussed in (14), such interpretations may be available through the durative lexical aspectual nature of the verb itself, as in 8-41 and 8-42. For an aspectually neutral verb like 'go' in 8-43 iterative aspect, as allowed for in the habitual reading of the 'present' auxiliary inflection, allows for an extended-in-time interpretation. For an inherently punctual verb like 'cough', in 8-44 below, iterative aspect, as marked morphologically by reduplication of the verb root, allows for an extended-in-time interpretation.

- 8-44 **ngagadi -kikilik-tye fal / tyip / ferrp**
1sgGo -cough -Past all all always
SU Plmp redup night day
 I was coughing all night / all day / all the time.

8.2.5 Weeks and Months

The English weekday and month terms have all been borrowed into Ngan'gityemerri, with the same reference except that *syandi* 'sunday', in addition to its particular weekday meaning, has taken on the sense of 'a week'. This use of *syandi* parallels the use of *diwin* 'moon' to mean 'month', as shown in 8-45 and 8-46.

- 8-45 **ep syandi syirre ngani-pe**
GUESS week behind 1sgGo-Fut
SU Irr
 Maybe I'll go next week.
- 8-46 **diwin ambirri darany -fi -pal**
month before 3sgPokeDtr-Mp-return
SU Perf
 He went home last month/about a month ago.

As shown in these two examples, **syirre** (which we have encountered as the spatial term 'behind') and **ambirri** combine with **syandi** and **diwin** to designate that unit-of-time either preceding or following the present. The word **yeyi** 'other' can be added to these temporal expressions, and here it implies the next consecutive such unit, rather than simply any other one. Thus, **syandi syirre yeyi** 'the week after next', **diwin ambirri yeyi** 'a couple of months ago'. Reference to specific days of the previous or following week can be made by denying the 'this week' interpretation, and designating the weekday as belonging to the preceding/following week. This is demonstrated in 8-47 and 8-48 below.

- 8-47 **minbe wednesday kinyi, syandi yeyi-nawa**
Neg this week next-INSTeAD
 Not this wednesday, but (the wednesday) of next week.

- 8-48 **minbe monday kulyinimbi, syandi ambirri-nawa**
Neg yesterday week before -INSTeAD
 Not the monday (that was) yesterday, but (the monday) of last week.

8.2.6 Time of Year

Kidin 'wet season' is also used to denote a full seasonal cycle between wet seasons, thus 'a year'. In this sense it behaves much like **syandi** and **diwin**, see above. e.g. **kidin syirre yeyi** 'the year after next' etc.

Kudede is that time of year, usually around January or February, when there is monsoonal rain everyday.

Wangi and **marrawuk/fuke** (K) specifically denote the prevailing winds that are associated with the two complete meteorological systems that dominate the local seasonal cycle, i.e. the Wet and the Dry, respectively. **Wangi** blows from the west, bringing mosquitos from the swamps, **marrawuk** brings cool dry air from the east. Both these terms though, can be used more generally in reference to the meteorological system, rather than just its prevailing wind.

Additionally, several full clauses are used to denote times-of-year, e.g.

- 8-49 **wurr wubu -derri-pal -pe**
grass 3sgBash-back-bend-Fut
SU Irr
 (lit: the grass will be knocked flat)
 That time in about May when the long dried out summer grasses are knocked flat by the wind and late showers (known in the English of Ngan'gityemerri speakers' as 'knock 'em down time').

- 8-50 **lirrilirri-mem-nyine**
muggy-3sgDo-FOC
SU Pres
 (lit: it is muggy now)
 the muggy 'build up' in humidity from
 Oct-Dec, preceding the rain.

8.2.7 Short time and Long time

The antonymic pair **nuwurr/wityi(K)** and **fenggiderri/fekiderri(K)** are concerned with time-span duration, not a particular point in time. They indicate 'a brief period of time' and 'a long period of time', respectively.

- 8-51 **wurruke yawam -burrki-nuwurr-pe**
3dl 2sgTake-3dl -a little -Fut
PRO SU Irr DO while
 Take these two outside for a little while.
- 8-52 **ngatya, meny -nin, detyirri nuwurr**
father 3sgSay -1dlinc navel a little
SU Perf IO while
 'Dads !' he said to us, '(I need to stop for a) quick piss'.⁴
- 8-53 **fenggiderri yemen'ge-pe, minbe mendi-wurru**
long time 2sgArrive-Fut Neg close -UNSATIS
SU Irr
 It'll take a long time for you to get there, it's a really long way !
- 8-54 **fenggiderri dini -tye, ngirringirr-ne -nyine dini -bubu -tye**
long time 3sgSit-Past sleep -PURP-FOC 3sgSit-sleepy-Past
SU Plmp SU Plmp
 He was here for too long a time, he was getting sleepy.

Their point-in-time equivalents, indicating 'recent past/future' and 'a long time off in the past/future', employ **tyawurru/detyengi(K)** (discussed in 8.2.2 as 'these days'), and its negated equivalent **minbe tyawurru/detyengi(K)**, respectively.

- 8-55 **yinnyirri-Ø, mipurr defirr tyawurru kinyi-nyine-pagu**
2pl See -IMP man foot today here -FOC -HITH
SU Irr
 Look, there's a man's footprints (made) recently (coming) this way along here !

⁴Detyirri 'navel' and **dege** 'belly' can be euphemisms for 'piss' and 'shit', respectively.

- 8-56 **ngan'gi kinyi ngimi-mbi-ngini minde detyengi-ngini**
 NgK *story this 1sgSay-2sg -Fut Neg today -PURP*
SU Irr IO

This story I'm about to tell you is concerned with distant events.
 (lit: not about today)

- 8-57 **tyamennapa dagum-fi -tal, minbe tyawurru-nimbi**
DISSMIS 3sgFeet-Mp-grow Neg today -SOURCE
SU Pres

(That huge burl on the tree) has just grown like that, it's not a recent thing/it's been like that for a long time.

The adjective **warmadi** 'fast/quick' is generally used with reference to speed in motion. However it can also take on the temporal sense 'soon', as in 8-58.

- 8-58 **kuru gana -nin -garri-pat -nime-merrendi**
rain 3sgBash-1dlinc-leg -arise- pl - LEST
SU Irr DO =overtake DO
 Lest the wet season overtake us,
warmadi-pe ngumbu-wirriki-dudu
quick -Fut 1dlinc -3dl -cut
SU Irr DO

we should circumcise those two boys soon.

Where the notion of 'a short time' is linked, not to the present, but to some other point-in-time reference, (i.e. 'close up to' some designated time), this can be indicated with **mendi** (which we have already discussed as a spatial qualifier meaning 'close').

- 8-59 Christmas **mendi-mirri, nyin-gumu -pe ngara -fi -pal**
close -EMPH ANA-SEMBL-Fut 1sgPokeDtr-Mp-bend
SU Irr

Close up to Christmas time... I'll come back about then.

The terms that qualify space and time in Ngan'gityemerri are, on the whole, quite distinct. Note though that **warmadi** and **mendi** can be said, at least to some extent, to span both the spatial and temporal domains.

8.3 Number

The process of numeration is most widely exploited in Ngan'gityemerri in the tracking of participant number. In addition to person categories and the inclusive/exclusive distinction, the obligatory verbal crossreferencing of core participants within the Ngan'gityemerri verb must include information regarding one of the four number categories;

singular, dual, trial and plural. The full discussion of the morphology of this participant number marking can be found in 3.2.1.2.

8.3.1 Cardinal Numbers

Ngan'gityemerri employs three numeral terms; **wunggume/wukume** (K) 'one', **wagarri/fagarri** (K) 'two', and **warrakma** 'three'. Additionally, **daba** 'arm' or **deme** 'hand' are used for 'five', and **me-ye-ninggi** 'ten' (lit: *hand-other-INSTR*). I have elicited **wagarri-wagarri** for 'four', but never heard it used spontaneously. Some of these cardinal numerals can be found in 8-60.

- 8-60 **gagu ngalwangga nem daba wunggume-ninggi wum -gat,**
animal short-necked 3sgM arm one -INSTR 3sgSlash-hook
generic turtle sp. PRO =five SU Perf
 He caught five short-necked turtles,
nyinyi warrakma yum -gat, ngayi awiny-napa wunggume,
2sg three 2sgSlash-hook 1sg bream-JUST one
PRO SU Perf PRO
 you caught three, and I got just the one bream.

Numerals additionally have a minor use with the prefix **me-**, denoting the duration of a given number of nights. This use of numerals has only ever been found with verbs 'of staying', 'camping' etc.

- 8-61 **me -wagarri ngi -pe** Sydney,
DUR-two 1sgSit-Fut
SU Irr
 I'll be staying in Sydney for two nights.

8.3.2 Definite Determiner

Other than in the recounting of tallies, as in 8-60 above, or with the durative prefix **me-**, Ngan'gityemerri speakers make little use of these cardinal numerals. The most frequent usage of **wunggume/wukume**(K), is not really as a numeral, but as a (definite) determiner, referring to an entity which is definite in the speaker's mind, but not necessarily so in the mind of the addressee. This is very similar to the use of 'particular' and 'certain' in English examples like; 'There was this particular man who...', or 'Certain people think they can...'. Some examples of this usage of **wunggume/wukume**(K) are given in 8-62 to 8-64.

- 8-62 **nintyi wunggume yenim ngundum -syi -ket,**
knee one 3sgGo 1dlincSlash-nose-cut
=corner SU Pres SU Perf =go round a point
 as we went around that particular corner.

- 8-63 **watypela wunggume wa-government Darwin-nimbi**
whitefelle one M- -SOURCE
cl
 This particular government official from Darwin...
- 8-64 **mityity wur-wunggume kine yedi-tye fepi minbadi, meny-ngiti,**
white F - one this 3sgGo-Past hill big 3sgSay-1sg
woman cl place SU Plmp SU Perf IO
 That particular woman, who came here to Peppimenarti, she told me...

In cultural activities requiring more highly refined enumeration, such as the distribution of money in commerce or gambling, Ngan'gityemerri speakers use English numerals and terms for units of measure (pound, mile, pint, dollar, etc.). Some examples are given below.

- 8-65 **three dollar fifty owe-mem -ngiti**
-3sgDo -1sg
SU Pres IO
 She owes me three dollars fifty !
- 8-66 **dam -ngi-fi -me -tyuk ten dollar worth syiri damuy**
3sgPoke-1sg-Mp-hand-place Striker eye
SU Perf DO generic =cartridge
 She gave me ten dollars worth of cartridges.
- 8-67 **lawa mi-half dangim-madi-tyat**
dampier Pf - 3sgPoke-chest-place
cl SU Perf
 He put in half a loaf of bread.

8.3.3 -Ambirri as Ordinal 'First'

Ambirri, the freeform temporal qualifier discussed in 8.2.2, also functions as an enclitic conveying the ordinal sense of 'first'. That is, it denotes a clausal proposition as occurring prior to other conceivable propositions. In this capacity **-ambirri** shows the '2nd position' occurrence preference that, as noted in 6.2, characterises the behaviour of those enclitics that have scope over an entire clause rather than just their immediate host.

- 8-68 **nem-ambirri warriny -Ø-fi -me miyi**
3sgM-first 3plPoke -3sg-Mp-hand plant
PRO SU Perf DO =give food
 They (hostesses) served him his food first (i.e. before me).

- 8-69 **wun -ambirri-pe kuru ngumu -nirrki-wa**
there-first -Fut liquid 1sgSnatch-2dl -pick
generic SU Irr IO up
 I'll get some beers for you up there first (i.e. before doing anything else).

With stative verbs **-ambirri** denotes that clausal proposition as a state that 'already' exists prior to some other proposition.

- 8-70 **wa-yeyi pey-ambirri dini -tye**
M-other in -first 3sgSit-Past
cl place SU PImp
 Another man was already there.
- 8-71 **nem-ambirri ngirrngirr dim -bubu -nyine**
3sg -first sleep 3sgSit-sleepy-FOC
PRO SU Pres
 He's already drifting off to sleep.

8.3.4 Space, Time and Number Emphasis

A favoured construction in Ngan'gityemerri for giving emphasis to expressions of space, time and number, is to negate their opposites. Examples of negated spatial and temporal qualifiers have already been given in 8-11 and 8-56 and 8-57. Although numeric emphasis can be given using the quantifiers **mebuk/mabuk** (K)'many' and **bakuty** 'many', again the favoured construction is to negate an expressed singular quantity. This is demonstrated in 8-72 and 8-73.

- 8-72 **minbe wunggume wanni-pagu -tye**
Neg one 3plGo -HITH-Past
= very many SU PImp
 Hundreds of them came here !!
- 8-73 **falmi minde wukume, awa-fepi minati, awa-Nadirri...**
NgK woman Neg one Hg - hill big Hg - place
= very many cl cl name
 There was a huge crowd of women, those from Peppimenarti, those from Nadirri...

Another strategy (seemingly contradictory to the one just mentioned) in emphasising plural number is to treat a very large group of people as a singular unit. That is, once reference to the size of group has been contextually established, thereafter the group will be cross-referenced by singular pronouns, both freeform and those bound to the verb. This strategy is demonstrated in 8-74 below, where the term **minde-fela-ndi** (Neg-

person-SAME) is used to mean 'what a lot of people!'. The crowd is thereafter referred to as *nem* 'he' and pronominally cross-referenced on the verb as 3rd person singular.

- 8-74 *nganniny-wurr, minbe-fela*⁵*-ndi mityity watypela, ngirminy-gu*
1plexGo -enter Neg-person-SAME white white 1plexThink-dl
SU Perf =no-one woman man SU Perf SU
 We went in..."What a lot of white men and women !!!", we
 thought to ourselves.
epe nem pey-ambirri dini -tye watypela, minbe-nin -tyeri,
BUT 3sgM in -first 3sgSit-Past white Neg -1dlinc-ear
PRO place SU PImp people IO
 All those whitefellas were already in there, we hadn't expected
 that !

⁵The generic *mipurr/yedi* (K) 'man' can also be used at a higher taxonomic level to denote 'person'. Thus 'no-one', in the gender unspecified sense, can be expressed by *minbe-mipurr*. However *fela*, from English 'fellow' via Kriol, has been borrowed into Ngan'gityemerri as a gender unspecified third term.

Chapter 9

Pronouns, Interrogatives and Discourse Demonstratives

9.1 Pronouns

9.1.1 Paradigm

Freeform Pronominal Paradigm				
	Singular	Dual	Trial	Plural
1inc		nayin	dl + -nime	
1ex	ngayi	ngarrgu/ngagarri(K)	dl + -nime	ngagurr
2	nyinyi	narrgu/nagarri(K)	dl + -nime	nagurr
3	nem (m) ngayim (f)	wurruke/wirrike(K)	dl + -nime	wurrum/wirrim(K)

Table 9-1

The paradigm is typical of pronominal systems in Daly region languages, and within prefixing languages generally, in its range of number categories, and in the restriction of the gender distinction to the 3rd singular forms only (as is also true of the bound pronominal paradigm).

However, the paradigm cannot be readily accounted for as a single system. The lack of homogeneity in the categorisation and morphological derivation of the 1st inclusive forms on the one hand, and the rest of the paradigm, on the other, requires that each of these be treated as separate sub-systems.

Looking firstly at the non-1st singular pronouns, there are three basic number categories, singular, dual and plural. While dual may be a more marked category than plural in discourse terms, there is no particular morphological reason to view either the plural or dual forms as more basic. A fourth highly marked category, trial, is derived by suffixing the dual form with **-nime**.

Among the 1st inclusive pronouns however, there are only two number categories, there being no distinction between plural and trial. The 1st inclusive plural/trial pronoun is derived morphologically by adding the suffix **-nime** to the dual form. In this respect, viewed from the perspective of the non-1st inclusive sub-paradigm, **nayin-nime** has the formal structure of a trial form. However given the specifically plural reference of **nayin-nime**, the suffix **-nime** has clearly different meanings within the two sub-systems.

This asymmetry between 1st inclusive and the rest of the paradigm, has been noted in many prefixing languages. For some of these languages this asymmetry is simply the result of their being viewed from a

- 9-6 [mudiga] [wa-wulmen] [wurruke]
car M-oldman 3dl
cl PRO
 The car belonging to those two old men...

- 9-7 [yerr-kinyi] [kene] [nem]
Tr- this who 3sgM
cl PRO
 This thing of who's ?
 (i.e. Who's thing is this ?)

Further discussion of **kene** 'who' and the indefinite pronoun can be found in 9.3.1.

The 3sg masculine pronoun **nem**, can be the gender unmarked pronoun within this structure, where the possessor is inanimate or non-individuated. It is this gender-unmarked usage that accounts for the occurrence of the masculine pronoun **nem** cross-referencing the possessor **falmi** 'women', in 9-8.

- 9-8 shower room kinyi wirribem falmi nem mipurr nem
this 3sgStand woman 3sgM man 3sgM
SU Pres gen. PRO gen. PRO
 This is both a women's and men's bathroom.

The possessor noun is given as optional in the formula set out in 9-3. In fact the most frequently encountered possessive structures consist simply of parts 1 + 3, as demonstrated below.

- 9-9 [awa-derrigidi] [wurruke]
Hg - countryman 3dl
cl PRO
 Them two's countryman...

- 9-10 [dede kinyi] [nayin-nime]
country this 1dlinc-pl
PRO
 This country of our's...

- 9-11 [firretyi] [nyinyi]
shoe 2sg
PRO
 Your shoes...

9.1.3 Vocative use of Pronouns

In Ngan'gityemerri there is an interesting shift between pronominal person categories that is triggered by constraints on the vocative use of other referential terms.

In calling out to someone to attract their attention, Ngan'gityemerri speakers can choose from a wide array of terms. Most commonly they use kinship terms, though they also like to use sub-section terms and nicknames or other names that make indirect reference. The direct use of personal names is disfavoured, and 2nd person pronouns are never used vocatively. When calling out to a group of two or more people, kinship and sub-section terms only suffice where all members of the addressed group either bear the same relationship to the caller, or belong to the same sub-section. Where these conditions are not met, and the group represents mixed kin or subsection categories, the *third* person dual, trial and plural pronouns, **wurruke**, **wurruke-nime** and **wurru**, are used vocatively.

- 9-12 **wurruke**, **ya** **ngingipiri-nyine-pefi**
 3dl hey dark -FOC -INCHO
 PRO
 Hey you two ! it's getting dark now !

- 9-13 **wurru**, **yinyirri-Ø**, **mipurr defirr tyawurru kinyi-nyine-pagu**
 3pl 2plSee -IMP man foot today here -FOC -HITH
 PRO SU Irr
 Hey you mob ! Look, there's a man's footprints (made) recently
 (coming) this way along here !

9.2 Discourse Demonstratives **Yaga** and **Nyin(nin)**

The two demonstratives **yaga** and **nyinnin** have no function as spatial or temporal deictics, but rather function as discourse deictics. Their function is to locate things with respect to their thematic status within a discourse, not with respect to space or time. **Yaga** follows the first mention of referents introduced to a discourse, establishing them as topic, usually where they represent an unpredictable or surprising topic change. **Nyinnin** is an anaphoric demonstrative referring back to any person/thing/notion that the speaker can assume the addressee will understand. This assumption can generally be based on the shared understanding that the intended referent is either currently topical, or is sufficiently well established within the discourse that its restatement would be superfluous. **Nyinnin** is frequently contracted to **nyin**, with no obvious semantic change. A few examples within my texts suggest that the full form may possibly convey more definite reference.

The function and reference of both **yaga** and **nyin(nin)** can only really be understood within the context of a sizable discourse sample. Single sentence examples containing these demonstratives are therefore fairly meaningless. For this reason, although I have included a single example of

each here, readers are encouraged to look at the contextually established occurrences of **yaga** and **nyinnin** in the texts in Appendix C.

9-14 below comes from a text in which Robert Daly is telling me of events concerning various people, all of whom are unknown to me. Taking into account the difficulties he expects me to have in tracking reference correctly, he works **nyin(nin)** overtime to make explicit who is doing what to who. Note that here the context is sufficiently complicated that the anaphoric marker alone does not suffice to disambiguate the actors. Robert has to tag each anaphor to an explicit name or descriptive nominal.

- 9-14 **minmi meny -ne, kanbi yaga minbe-merrendi ganyawam**
No 3sgSay -3sg didjeridu DEM Neg -PROHIB 2sgTake
SU Perf IO SU Irr

No way!', (the airport luggage man) told him, 'you can't take
 airplane-nide, **nimbi gani -lala ngarapa-wurru**
-LOC CAUS 3sgGo-split fragile -UNSATIS
SU Irr

didjeridus on the plane, it might split, it's too fragile'.

- 9-15 **ngawam-nirr-pe wunu ngan-dede ngayi, mityity nyinnin**
1sgTake-2pl -Fut there LOC-camp 1sg white ANA
SU Irr DO PRO woman

'I'll take you all back to my place', he said to that woman...

meny -nge, wa-wulmen nyin -ninggi Doug,
3sgSay -3sgF M -oldman ANA-AGENT
SU Perf IO cl

That oldman, he was the one who said it..Doug.

yityi -ngumbumbu-nime-pe mityity nyin dam -ngi-tyerr -pu
what-1dlinc Do -pl -Fut white ANA 3sgPoke-1sg-mouth-ask
SU Irr SU woman SU Perf DO

'What shall we do?', that woman asked me.

9.3 Interrogatives

9.3.1 Basic Interrogatives

Ngan'gityemerri uses the following basic set of five interrogative forms.

9-16	tyagani	-	what
	kide	-	where, how, which
	kene	-	who
	etye	-	when
	erreke	-	how many/often

These deictics always occur before the verb, typically clause initially, and are favoured hosts for the '2nd position' fronting of verbal tense and

directional enclitics (see 9-19 and 9-24 below). **Tyagani** enquires about the identity of some nameable entity (cf. *yityi* in 9.3.4), and presupposes no knowledge about that entity (cf. *tyen-* in 9.3.4).

- 9-17 **tyagani yirim -lalirr**
what 2sgSit -eat
SU Pres
 What's that you're eating ?

- 9-18 **yerr-kinyi tyagani**
Tr-this what
cl
 What's this thing ?

Kide as an interrogative of location oriented verbs, i.e. verbs of motion and state, enquires about spatial position.

- 9-19 **kide -pe ngambani**
where-Fut 1plinc Go
SU Irr
 Where shall we go ?
- 9-20 **dede kide yaganiny-du**
camp where 2sgGo -sleep
SU Perf
 Where did you camp the night ?

Kide also asks 'which?', in presenting a choice between multiple entities. Where the entities in question are all members of the same noun class, **kide** will bear the appropriate bound class proclitic. This is demonstrated for the 'animal' class in 9-21.

- 9-21 **gagu a-kide derrigidi-yerim**
animal A-which want -2sgHands
generic cl SU Pres
 Which of these animals/bits of meat do you want ?

Kene enquires about the identity of people only, and can be thought of as the human equivalent of **tyagani**. Where **kene** can ask only about living humans, **tyagani** 'what' must be used to ask about inanimates, lower animates, spirits, corpses and ancestral beings. The distinction between humans and non-humans is then quite rigid. The response to a **kene** question will always identify a particular person.

- 9-29 **tyagan-ninggi yariny -Ø -syi -bang**
what -INSTR 2sgPoke-3sg-nose-pierce
SU Perf DO
 What did you use to pierce his nose ?

- 9-30 **kene-ninggi wudum -nyi -mi -wul**
who-AGENT 3sgShove-2sg-Val-return
SU Perf DO
 Who brought you back here ?

Both have also been recorded with the PURPositive, ASSOCIative and LOCative suffixes.

Kide takes the SOURCE and HITHer/THITHer suffixes to enquire about the locational origin, and direction of motion verbs.

- 9-31 **kide -nimbi yagadi-pagu -tye kinyi**
where-SOURCE 2sgGo -HITH-Past here
SU Plmp
 From where have you come here ?

Etye takes the SOURCE suffix, enquiring about either the temporal origin of states, as in 9-32, or the frequency of dynamic activity, as in 9-33.

- 9-32 **etye -nimbi dede yannim-du dideninggi**
when-SOURCE camp 2plGo -sleep other
SU Pres side
 Since when/how long have you been camping on the other side of the river ?

- 9-33 **etye -nimbi yarim -burr-fi -mi -tyatit kuwul-nide**
when-SOURCE 2sgPoke-3pl -Mp-Val-place school-LOC
SU Pres DO =teach
 How often do you teach (the kids) in school ?

Etye and **erreke** can both take the INSTRumental suffix **-ninggi**. In this form neither are really interrogatives, but function as indefinite expressions. **Etye-ninggi**, as in 9-34 denotes some indefinite time in the future. (Here **-ninggi** clearly implies future temporal reference. In 8.2.1 I noted this minor function of **-ninggi** in other temporal expressions such as **wade-ninggi** 'tomorrow' etc.).

- 9-34 **ep etye -ninggi ya -ngi-fi -me -pe**
perhaps when-INSTR 2sgPoke-1sg-Mp-hand-Fut
SU Irr DO
 Perhaps you could give it to me at some later time ?

Erreke-ninggi is concerned with the quantification of some activity (cf. quantification of some entity in 9.3.1). It can be used interrogatively, but is most frequently encountered in the rhetorically exclamatory sense shown in 9-35.

- 9-35 **kanbi ngayi erreke-ninggi ngagadi-fifi -tye**
didjeridu 1sg how -INSTR 1sg Go -blow-Past
PRO many SU PImp redup
 (Well, I don't know) how many didjeridus I blew !
 (i.e. how many songs I accompanied on the didjeridu)

9.3.3 Indefinite Interrogatives

The addition of the INDEFinite suffix **-nawa** to both the basic five interrogatives and the additional interrogatives formed with local case suffixes, gives the following indefinite deictics. (The 'INSTEAD' sense of **-nawa** is discussed in 6.2.9). Note that, in the second group of interrogatives (i.e. those formed through prefixing one of the five basic interrogatives with local case enclitics), it is the rightmost position of **-nawa**, that gives it scope over more 'inner' case enclitics as well as the basic interrogative. It is this scope of **-nawa** that has led me to treat examples like **tyagan-nimbi** 'as a result of what?' as 'local case interrogatives' in 9.3.2 rather than as 'interrogatives plus case suffixes'.

- | | | | |
|------|--------------------------------|---|---|
| 9-36 | tyagan-nawa | - | whatever thing |
| | kide-nawa | - | somewhere, where-ever |
| | kene-nawa | - | whoever |
| | etye-nawa | - | whenever |
| | erreke-nawa | - | however many things |
| | tyagan-nimbi-nawa | - | from whatever cause |
| | tyagan-nawa-ne/ngini(K) | - | for whatever purpose |
| | tyagan-ninggi-nawa | - | using whatever instrument |
| | kene-nimbi/ninggi-nawa | - | at the agency/cause of whoever |
| | kide-nimbi-nawa | - | from where-ever |
| | etye-nimbi-nawa | - | from whenever/
at whatever frequency |
| | etye-ninggi-nawa | - | at whatever future time |
| | erreke-ninggi-nawa | - | however many times |

The indefinite suffix has also been found on the spatial 'distant' deictic **wunu/wuni** (K), as in 9-37.

- 9-37 **wun -nawa yirrim -fili**
there-INDEF 3sgGo -roll*
SU Perf
 He headed off thataway/in that general direction.

9.4 Other Interrogatives, Tyen- and Yityi-

All the interrogatives surveyed in 9.3.1 to 9.3.3 belong to the deictic word class. There remains to be discussed two additional terms that can be defined as interrogatives in terms of their semantic role, but which differ from the deictic interrogatives in their syntactic function and morphological possibilities.

Tyen- 'what kind of ?' has no independent function, occurring only in combination with noun class/classificatory generics. e.g.

12-22	tyen-nawurr	-	what kind of tree/thing ?
	tyen-mi	-	what kind of plant food ?
	tyen-ga	-	what kind of animal/meat ?

Where **tyagani** asks 'what ?' pre-supposing no knowledge about the entity in question (except that it is inanimate), in contrast, '**tyen**+noun class generic' seeks clarification of the species within the genus designated by the noun class marker/classifier. **Tyen-** is discussed in more detail in 5.4.

Yityi¹- differs in word class status from the other interrogatives in being a verb root. **Yityi-** forms a complex verb in combination with only the 'say/do' auxiliary (recall that complex verbs employing this auxiliary have their verb root ordered before the auxiliary). Where **tyagani** asks 'what ?' of entities, **yityi-** 'say/do' enquires about 'what was done or said ?'.

12-23	wananggal-ninggi	yityi -meny	-bi
	<i>doctor</i>	<i>-AGENT</i>	<i>what-3sgSay/Do-2sg</i>
			<i>SU Perf IO</i>
	What did the doctor tell you/do to you.		

12-24	'yawurr yerr-wurumbi yinyinggin', 'yityi -meny -nimbi ?'
	<i>tree Tr- white gum 2sgSee what-3sgDo -CAUS</i>
	<i>gen. cl SU Pres SU Perf</i>
	'You see the (huge burl on the side of that) whitegum tree ?'
	'How did it get like that ?
	(lit: From doing what (did it get to be like that) ?).

Note that where the verb **yityi**-'do' is modified by the negative particle **minbe**, it has the meaning 'nothing to do', as in 12-25 below.

3-	were ngayi wagarri ngayi wuddum-ngirr-dum
	<i>brother 1sg two 1sg 3plShove-1plex-bury</i>
	<i>PRO PRO SU Perf DO</i>
	My two brothers and I were locked up for three

¹I frequently hear this word as **ityi**, with the initial /y/ completely lenited.

three week **wembem nyin-nide, minbe-tye yityi-ngurmu,**
building ANA-LOC Neg -Past what-1plexDo
SU Irr

weeks in that room, we had nothing to do.

(When prisoners from Fanny Bay gaol were evacuated to
 Alice Springs gaol after Cyclone Tracy)

Appendix A

Ngan'giwumirri Auxiliary Verb Paradigms

Simple Intransitive Auxiliaries

Major

Aux 1	ngirim	- Sit
Aux 2	ngibem	- Lie
Aux 3	ngirribem	- Stand
Aux 4	ngaganim	- Go
Aux 5	ngerrimbin	- Go*
Aux 6	ngumum	- Say

Minor

Aux 7	ngemen'gen	- Arrive
Aux 8	ngagantyin	- Take
Aux 9	ngintyibem	- Hang

Simple Transitive Auxiliaries

Minor

Aux 10	nginyinggin	- See
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Complex Transitive Auxiliaries

Major

Aux 11	ngirim	- Hands
Aux 12	nganan	- Feet
Aux 13	ngem	- Mouth
Aux 14	ngarim	- Poke
Aux 15	ngumbun	- Slash
Aux 16	ngebem	- Bash
Aux 17	ngudumbun	- Shove
Aux 18	nginem	- Heat

Minor

Aux 19	ngusyum	- Suck
Aux 20	ngisyem	- Pull
Aux 21	ngumunggin	- Snatch

Complex Detransitivised Auxiliaries

Aux 22	ngumem	- SayDtr (cf. Aux 6)
Aux 23	nginyerrem	- SeeDtr (cf. Aux 10)
Aux 24	ngemen	- HandsDtr (cf. Aux 11)
Aux 25	nganawam	- FeetDtr (cf. Aux 12)
Aux 26	ngiwem	- MouthDtr (cf. Aux 13)
Aux 27	ngaram	- PokeDtr (cf. Aux 14)
Aux 28	ngebim	- BashDtr (cf. Aux 16)
Aux 29	ngudem	- ShoveDtr (dynamic)(cf. Aux 17)
Aux 30	ngim	- ShoveDtr (stative) (cf. Aux 17)
Aux 31	nginewem	- HeatDtr (cf. Aux 18)

Aux 1 - Sit

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngirim	ngiriny	ngini	ngi
	2	yirim	yiriny	yini	yi
	3	dim	diny	dini	wiri
Dl	1in	ngindim	ngindiny	ngindini	ngimbi
	1ex	ngirringu	ngirringu	nginne	ngirrigu
	2	yirringu	yirringu	yinne	yirrigu
Pl	3	wirringu	wirringu	winne	wirrigu
	1in	ngindim	ngindiny	ngindini	ngimbi
	1ex	ngirrim	ngirringu	nginni	ngirri
	2	yirrim	yirringu	yinni	yirri
	3	wirrim	wirringu	winni	wirri

Aux 2 - Lie

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngibem	ngibeny	ngin	ngim
	2	yibem	yibeny	yin	yim
	3	wibem	wibeny	din	wim
Dl	1in	ngimbibem	ngimbibeny	ngimbige	ngimbim
	1ex	ngerrintyemgu	ngerrintyenygu	ngerrintyinem	ngerrintyegu
	2	yerrintyemgu	yerrintyenygu	yerrintyinem	yerrintyegu
Pl	3	werrintyemgu	werrintyenygu	werrintyinem	werrintyegu
	1in	ngimbibem	ngimbibeny	ngimbige	ngimbim
	1ex	ngerrintyem	ngerrintyeny	ngerrintyinim	ngerrintye
	2	yerrintyem	yerrintyeny	yerrintyinim	yerrintye
	3	werrintyem	werrintyeny	werrintyinim	werrintye

Aux 3 - Stand

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngirribem	ngirribeny	ngirringe	ngirrim
	2	yirribem	yirribeny	yirringe	yirrim
	3	wirribem	wirribeny	wirringe	wirrim
Dl	1in	ngimbidibem	ngimbidibeny	ngimbidinge	ngimbidim
	1ex	ngiddibemgu	ngiddibenygu	ngiddingegu	ngiddingu
	2	yiddibemgu	yiddibenygu	yiddingegu	yiddingu
Pl	3	widdibemgu	widdibenygu	widdingegu	widdingu
	1in	ngimbidibem	ngimbidibeny	ngimbidinge	ngimbidim
	1ex	ngiddibem	ngiddibeny	ngiddinge	ngiddim
	2	yiddibem	yiddibeny	yiddinge	yiddim
	3	widdibem	widdibeny	widdinge	widdim

Aux 4 - Go

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngaganim	ngaganiny	ngagadi	ngani
	2	yaganim	yaganiny	yagadi	yani
	3	yenim	yeniny	yedi	wani
DI	1in	ngangginim	nganggininy	nganggidi	ngambani
	1ex	ngannunggu	ngannunyu	ngadde	ngarre
	2	yannunggu	yannunyu	yadde	yarre
	3	wannunggu	wannunyu	wadde	warre
PI	1in	ngangginim	nganggininy	nganggidi	ngambani
	1ex	ngannim	nganniny	ngaddi	ngarrani
	2	yannim	yanniny	yaddi	yarrani
	3	wannim	wanniny	waddi	warrani

Aux 5 - Go*

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis 1</u>	<u>Irrealis 2</u>
Sg	1	ngerrimbin	ngerrim	ngerrini	ngirri	nganeyerri
	2	yerrimbin	yerrim	yerrini	yirri	yaneyerri
	3	yirrimbin	yirrim	yirrini	wirri	waneyerri
DI	1in	ngemberrinbin	ngemberrin	ngemberrini	ngimbirri	ngambanegeri
	1ex	ngarringgirri	ngarringgirri	nganneyerri	ngarrigirri	ngannegerri
	2	yarringgirri	yarringgirri	yanneyirri	yarrigirri	yannegerri
	3	warringgirri	warringgirri	wanneyerri	warrigirri	wannegerri
PI	1in	ngemberrinbin	ngemberrin	nemberrini	ngimbirri	ngambanegeri
	1ex	ngarrintyirri	ngarrintyirri	ngannigerri	ngarriyerri	nganneyerri
	2	yarrintyirri	yarrintyirri	yannigerri	yarriyerri	yanneyerri
	3	warrintyirri	warrintyirri	wannigerri	warriyerri	wanneyerri

Aux 6 - Say

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngumum	ngiminy	ngime	ngumu
	2	yumum	yiminy	yime	yumu
	3	mem	meny	meyi	wumu
DI	1in	ngumbumum	ngimbiminy	ngumbume	ngumbumu
	1ex	ngumumugu	ngirmiminygu	ngirmegu	ngurmugu
	2	yumumugu	yirmiminygu	yirmegu	yurmugu
	3	wumumugu	wirmiminygu	wirmegu	wurmugu
PI	1in	ngumbumum	ngimbiminy	ngumbume	ngumbumu
	1ex	ngumum	ngirmiminy	ngirme	ngurmu
	2	yumum	yirmiminy	yirme	yurmu
	3	wumum	wirmiminy	wirme	wurmu

Aux 7 - Arrive

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngemen'gen			ngemen'ge
	2	yemen'gen			yemen'ge
	3	men'gen			wemen'ge
DI	1in	ngembemen'gen			ngembemen'ge
	1ex	ngerrmen'gen'gu			ngerrmen'gegu
	2	yerrmen'gen'gu			yerrmen'gegu
	3	werrmen'gen'gu			werrmen'gegu
PI	1in	ngembemen'gen			ngembemen'ge
	1ex	ngerrmen'gen			ngerrmen'ge
	2	yerrmen'gen			yerrmen'ge
	3	werrmen'gen			werrmen'ge

Aux 8 - Take

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngagantyin	ngagany	ngagantyi	ngawam
	2	yagantyin	yagany	yagantyi	yawam
	3	yentyin	yeny	yentyi	wawam
DI	1in	nganggintyin	ngangginy	nganggintyi	ngambawam
	1ex	ngarrgantyin'gu	ngarrganygu	ngarrgantiyigu	ngarrwanggu
	2	yarrgantyin'gu	yarrganygu	yarrgantiyigu	yarrwanggu
	3	warrgantyin'gu	warrganygu	warrgantiyigu	warrwanggu
PI	1in	nganggintyin	ngangginy	nganggintyi	ngambawam
	1ex	ngarrgantyin	ngarrgany	ngarrgantyi	ngarrwam
	2	yarrgantyin	yarrgany	yarrgantyi	yarrwam
	3	warrgantyin	warrgany	warrgantyi	warrwam

Aux 9 - Hang

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngintyibem	ngintyibeny	ngintyinge	ngintyim
	2	yintyibem	yintyibeny	yintyinge	yintyim
	3	wintyibem	wintyibeny	wintyinge	wintyim
DI	1in	ngimbintyibem	ngimbintyibeny	ngimbintyinge	ngimbityim
	1ex	ngirrtyibemgu	ngirrtyibenygu	ngirrtyingegu	ngirrtyinggu
	2	yirrtyibemgu	yirrtyibenygu	yirrtyingegu	yirrtyinggu
	3	wirrtyibemgu	wirrtyibenygu	wirrtyingegu	wirrtyinggu
PI	1in	ngimbintyibem	ngimbintyibeny	ngimbintyinge	ngimbityim
	1ex	ngirrtyibem	ngirrtyibeny	ngirrtyinge	ngirrtyim
	2	yirrtyibem	yirrtyibeny	yirrtyinge	yirrtyim
	3	wirrtyibem	wirrtyibeny	wirrtyinge	wirrtyim

Aux 10 - See

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	nginyinggin	nginyirri	nginyirrini	nginyirri
	2	yinyinggin	yinyirri	yinyirrini	yinyirri
	3	dinyinggin	winyirri	winyirrini	winyirri
Dl	1in	ngimbinyinggin	ngimbinyirri	ngimbinyirrini	ngimbinyirri
	1ex	nginnyinggin'gu	nginnyirrigu	nginnyirriginu	nginnyirrigu
	2	yinnyinggin'gu	yinnyirrigu	yinnyirriginu	yinnyirrigu
	3	winnyinggin'gu	winnyirrigu	winnyirriginu	winnyirrigu
Pl	1in	ngimbinyinggin	ngimbinyirri	ngimbinyirrini	ngimbinyirri
	1ex	nginnyinggin	nginnyirri	nginnyirrini	nginnyirri
	2	yinnyinggin	yinnyirri	yinnyirrini	yinnyirri
	3	winnyinggin	winnyirri	winnyirrini	winnyirri

Aux 11 - Hands

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngerim	ngeriny	ngeme	ngeni
	2	yerim	yeriny	yeme	yemi
	3	demim/dem	deminy	weme	wemi
Dl	1in	ngendim	ngendiny	ngembeme	ngembimi
	1ex	ngerrmingi	ngerrminygi	ngerrmegu	ngerrmigi
	2	yerrmingi	yerrminygi	yerrmegu	yerrmigi
	3	werrmingi	werrminygi	werrmegu	werrmigi
Pl	1in	ngendim	ngendiny	ngembeme	ngembimi
	1ex	ngerrmim	ngerrminy	ngerrme	ngerrmi
	2	yerrmim	yerrminy	yerrme	yerrmi
	3	werrmim	werrminy	werrme	werrmi

Aux 12 - Feet

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	nganam	nganam	nganigi	ngana
	2	yanam	yanam	yanagi	yana
	3	dagum	dagam	dagi	wana
Dl	1in	ngambanam	ngambanam	ngambanigi	ngambana
	1ex	ngannangi	ngannangi	ngannigi	ngannagi
	2	yannangi	yannangi	yannigi	yannagi
	3	wannangi	wannangi	wannigi	wannagi
Pl	1in	ngambanam	ngambanam	ngambanigi	ngambana
	1ex	ngannam	ngannam	nganni	nganna
	2	yannam	yannam	yanni	yanna
	3	wannam	wannam	wanni	wanna

Aux 13 - Mouth

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngem		ngem	nge
	2	yem		yem	ye
	3	weyim		dingim	we
Dl	1in	ngembem		ngimbeni	ngembe
	1ex	ngerremgu		ngirrenugu	ngirregu
	2	yerremgu		yirrenugu	yirregu
	3	werremgu		wirrenugu	wirregu
Pl	1in	ngembem		ngimbeni	ngembe
	1ex	ngerrem		ngirreni	ngerre
	2	yerrem		yirreni	yerre
	3	werrem		wirreni	werre

Aux 14 - Poke

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngarim	ngariny	ngani	nga
	2	yarim	yariny	yani	ya
	3	dangim	dam	dani	wari
Dl	1in	ngandim	ngandiny	ngandini	ngambi
	1ex	ngarringi	ngarrinygi	nganne	ngarrigi
	2	yarringi	yarrinygi	yanne	yarrigi
	3	warringi	warrinygi	wanne	warrigi
Pl	1in	ngandim	ngandiny	ngandini	ngambi
	1ex	ngarrim	ngarriny	nganni	ngarri
	2	yarrim	yarriny	yanni	yarri
	3	warrim	warriny	wanni	warri

Aux 15 - Slash

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngumbun	ngum	nguni	ngu
	2	yumbun	yum	yuni	yu
	3	wumbun	wum	wuni	wu
Dl	1in	ngumbumbun	ngumbun	ngundunu	ngambu
	1ex	ngurrumbun'gi	ngurrunggi	ngunne	ngurrugu
	2	yurrumbun'gi	yurrunggi	yunne	yurrugu
	3	wurrumbun'gi	wurrunggi	wunne	wurrugu
Pl	1in	ngumbumbun	ngumbun	ngundunu	ngambu
	1ex	ngurrumbun	ngurrum	ngunni	ngurru
	2	yurrumbun	yurrum	yunni	yurru
	3	wurrumbun	wurrum	wunni	wurru

Aux 16 - Bash

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngembem	ngubum	ngebe	ngubu
	2	yebem	yubum	yebe	yubu
	3	webem/bengim	wubum/bem	webe	wubu
Dl	1in	ngembebem	ngumbubum	ngembebe	ngumbubu
	1ex	ngerrbemgi	ngurbunggu	ngerrbegi	ngurbugu
	2	yerrbemgi	yurbunggu	yerrbegi	yurbugu
Pl	3	werrbemgi	wurbunggu	werrbegi	wurbugu
	1in	ngembebem	ngumbubum	ngembebe	ngumbubu
	1ex	ngerrbem	ngurbum	ngerrbe	ngurbu
	2	yerrbem	yurbum	yerrbe	yurbu
	3	werrbem	wurbum	werrbe	wurbu

Aux 17 Shove

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngudumbun	ngudum	ngudini	ngudu
	2	yudumbun	yudum	yudini	yudu
	3	wudumbun	wudum	wudini	wudu
Dl	1in	ngumbudumbun	ngumbudum	ngumbudini	ngumbudu
	1ex	nguddumbun'gi	nguddunggi	nguddinigi	nguddugu
	2	yuddumbun'gi	yuddunggi	yuddinigi	yuddugu
Pl	3	wuddumbun'gi	wuddunggi	wuddinigi	wuddugu
	1in	ngumbudumbun	ngumbudum	ngumbudini	ngumbudu
	1ex	nguddumbun	nguddum	nguddini	nguddu
	2	yuddumbun	yuddum	yuddini	yuddu
	3	wuddumbun	wuddum	wuddini	wuddu

Aux 18 - Heat

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	nginem	ngineny		ngine
	2	yinem	yineny		yine
	3	dinem(wayim)	dineny(waniny)	(wani)	wine(wa)
Dl	1in	ngimbinem	ngimbinen		ngimbine
	1ex	nginnemgu	nginnen'gu		nginnegu
	2	yinnemgu	yinnen'gu		yinnegu
Pl	3	winnemgu	winnen'gu		winnegu
	1in	ngimbinem	ngimbinen		ngimbine
	1ex	nginnem	nginnen		nginne
	2	yinnem	yinnen		yinne
	3	winnem	winnen		winne

Aux 19 - Suck

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngusyum	ngusyiny		ngusyu
	2	yusyum	yusyiny		yusyu
	3	wusyum	wusyiny		wusyu
Dl	1in	ngumbusyum	ngumbusyiny		ngumbusyu
	1ex	nguzrungu	ngurrinygu		nguzrugu
	2	yurungu	yurrinygu		yurugu
	3	wurungu	wurrinygu		wurugu
Pl	1in	ngumbusyum	ngumbusyiny		ngumbusyu
	1ex	ngurum	ngurriny		nguru
	2	yurum	yurriny		yuru
	3	wurum	wurriny		wuru

Aux 20 - Pull

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngisyem	ngisyeny		ngisye
	2	yisyem	yisyeny		yisye
	3	disyem	disyeny		wisye
Dl	1in	ngimbisyem	ngimbisyeny		ngimbisye
	1ex	ngirrsyemgi	ngirrsyenygu		ngirrsyegi
	2	yirrsyemgi	yirrsyenygu		yirrsyegi
	3	wirrsyemgi	wirrsyenygu		wirrsyegi
Pl	1in	ngimbisyem	ngimbisyeny		ngimbisye
	1ex	ngirrsyem	ngirrsyeny		ngirrsye
	2	yirrsyem	yirrsyeny		yirrsye
	3	wirrsyem	wirrsyeny		wirrsye

Aux 21 - Snatch

		<u>Present</u>	<u>Perfective + Past Imperf +</u>	<u>Irrealis</u>
Sg	1	ngumunggin	ngumu	
	2	yumunggin	yumu	
	3	menggin	me mey	wumu
Dl	1in	ngumbumunggin	ngumbumu	
	1ex	ngurumunggin'gu	ngurmugu	
	2	yurumunggin'gu	yurmugu	
	3	wurumunggin'gu	wurmugu	
Pl	1in	ngumbumunggin	ngumbumu	
	1ex	ngurumunggin	ngurumu	
	2	yurumunggin	yurumu	
	3	wurumunggin	wurumu	

Aux 22 - SayDtr

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngumem	ngimeny	ngimeni	ngume
	2	yumem	yimeny	yimeni	yume
	3	meyim	meyiny	meyeni	wume
Dl	1inc	ngumbumem	ngumbumeny	ngumbumeni	ngumbume
	1ex	ngurmemgi	ngurmenygi	ngurmenigi	ngurmegi
	2	yurmemgi	yurmenygi	yurmenigi	yurmegi
	3	wyrmemgi	wurmenygi	wurmenigi	wurmegi
Pl	1inc	ngumbumem	ngumbumeny	ngumbumeni	ngumbume
	1ex	ngurmem	ngurmeny	ngurmeni	ngurme
	2	yurmem	yurmeny	yurmeni	yurme
	3	wurmem	wurmeny	wurmeni	wurme

Aux 23 - SeeDtr

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	nginyerrem	nginyerre	nginyerreni	nginyerre
	2	yinyerrem	yinyerre	yinyerreni	yinyerre
	3	dinyerrem	winyerre	inyerreni	winyerre
Dl	1in	ngimbinyerrem	ngimbinyerre	ngimbinyerreni	ngimbinyerre
	1ex	nginnyerremgu	nginnyerrengu	nginnyerrenigu	nginnyerrengu
	2	yinnyerremgu	yinnyerrengu	yinnyerrenigu	yinnyerrengu
	3	winnyerremgu	winnyerrengu	winnyerrenigu	winnyerrengu
Pl	1in	ngimbinyerrem	ngimbinyerre	ngimbinyerreni	ngimbinyerre
	1ex	nginnyerrem	nginnyerre	nginnyerreni	nginnyerre
	2	yinnyerrem	yinnyerre	yinnyerreni	yinnyerre
	3	winnyerrem	winnyerre	winnyerreni	winnyerre

Aux 24 - HandsDtr

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngemem	ngemeny	ngemeni	ngeme
	2	yemem	yemeny	yemeni	yeme
	3	demem	demeny	demeni	weme
Dl	1in	ngembemem	ngembemeny	ngembemeni	ngembeme
	1ex	ngerrmemgi	ngerrmenygi	ngerrmenigi	ngerrmegi
	2	yerrmemgi	yerrmenygi	yerrmenigi	yerrmegi
	3	werrmemgi	werrmenygi	werrmenigi	werrmegi
Pl	1in	ngembemem	ngembemeny	ngembemeni	ngembeme
	1ex	ngerrmem	ngerrmeny	ngerrmeni	ngerrme
	2	yerrmem	yerrmeny	yerrmeni	yerrme
	3	werrmem	werrmeny	werrmeni	werrme

Aux 25 - FeetDtr

		<u>Present</u>	<u>Past Perf</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	nganawam	nganawany	nganigini	nganawa
	2	yanawam	yanawany	yanigini	yanawa
	3	dagawam	dagawany	dagini	wanawa
Dl	1in	ngambanawam	ngambanawany	ngambinigini	ngambanawa
	1ex	ngannawamgi	ngannawanygi	ngannigini	ngannawagi
	2	yannawamgi	yannawanygi	yannigini	yannawagi
Pl	3	wannawamgi	wannawanygi	wannigini	wannawagi
	1in	ngambanawam	ngambanawany	ngambinigini	ngambanawa
	1ex	ngannawam	ngannawany	ngannigini	ngannawa
	2	yannawam	yannawany	yannigini	yannawa
	3	wannawam	wannawany	wannigini	wannawa

Aux 26 - MouthDtr

		<u>Present</u>	<u>Past Perf</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngiwem	ngiweny	ngiweni	ngiwe
	2	yiwem	yiweny	yiweni	yiwe
	3	diwem	diweny	diweni	wiwe
Dl	1in	ngimbiwem	ngimbiweny	ngimbiweni	ngimbiwe
	1ex	ngirremgi	ngirrenygi	ngirrenigi	ngirregi
	2	yirremgi	yirrenygi	yirrenigi	yirregi
Pl	3	wirremgi	wirrenygi	wirrenigi	wirregi
	1in	ngimbiwem	ngimbiweny	ngimbiweni	ngimbiwe
	1ex	ngirrem	ngirreny	ngirreni	ngirre
	2	yirrem	yirreny	yirreni	yirre
	3	wirrem	wirreny	wirreni	wirre

Aux 27 - PokeDtr

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngaram	ngarany	ngarani	ngara
	2	yaram	yarany	yarani	yara
	3	daram	darany	darani	wara
Dl	1in	ngambaram	ngambarany	ngambarani	ngambara
	1ex	ngarramgi	ngarranygi	ngarranigi	ngarragi
	2	yarramgi	yarranygi	yarranigi	yarragi
Pl	3	warramgi	warranygi	warranigi	warragi
	1in	ngambaram	ngambarany	ngambarani	ngambara
	1ex	ngarram	ngarrany	ngarrani	ngarra
	2	yarram	yarrany	yarrani	yarra
	3	warram	warrany	warrani	warra

Aux 28 - BashDtr

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngëbim	ngëbiny	ngëbini	ngëbi
	2	yëbim	yëbiny	yëbini	yëbi
	3	bëyim	bëyiny	bëyini	wëbi
Dl	1inc	ngëmbibim	ngëmbibiny	ngëmbibini	ngëmbibi
	1ex	ngërbimgi	ngërbinygi	ngërbinigi	ngërbigi
	2	yërbimgi	yërbinygi	yërbinigi	yërbigi
	3	wërbimgi	wërbinygi	wërbinigi	wërbigi
Pl	1inc	ngëmbibim	ngëmbibiny	ngëmbibini	ngëmbibi
	1ex	ngërbim	ngërbiny	ngërbini	ngërbibi
	2	yërbim	yërbiny	yërbini	yërbibi
	3	wërbim	wërbiny	wërbini	wërbibi

Aux 29 - ShoveDtr (dynamic)

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngudem	ngudeny	ngudeni	ngude
	2	yudem	yudeny	yudeni	yude
	3	wudem	wudeny	wudeni	wude
Dl	1in	ngumbudem	ngumbudeny	ngumbudeni	ngumbude
	1ex	nguddemgi	nguddenygi	nguddenigi	nguddegi
	2	yuddemgi	yuddenygi	yuddenigi	yuddegi
	3	wuddemgi	wuddenygi	wuddenigi	wuddegi
Pl	1in	ngumbudem	ngumbudeny	ngumbudeni	ngumbude
	1ex	nguddem	nguddeny	nguddeni	ngudde
	2	yuddem	yuddeny	yuddeni	yudde
	3	wuddem	wuddeny	wuddeni	wudde

Aux 30 - ShoveDtr (stative)

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngim			ngi
	2	yim			yi
	3	wim			wi
Dl	1in	ngimbim			ngimbi
	1ex	ngirringu			ngirrigu
	2	yirringu			yirrigu
	3	wirringu			wirrigu
Pl	1in	ngimbim			nimbi
	1ex	ngirrim			ngirri
	2	yirrim			yirri
	3	wirrim			wirri

Aux 31 - HeatDtr

		<u>Present</u>	<u>Perfective</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	nginewem	ngineweny	ngineweni	nginewe
	2	yinewem	yineweny	yineweni	yinewe
	3	dinewem	dineweny	dineweni	winewe
Dl	1in	ngimbinewem	ngimbineweny	ngimbineweni	ngimbinewe
	1ex	nginnewemgu	nginnewenygu	nginnewenigu	nginnewegu
	2	yinnewemgu	yinnewenygu	yinnewenigu	yinnewegu
	3	winnewemgu	winnewenygu	winnewenigu	winnewegu
Pl	1in	ngimbinewem	ngimbineweny	ngimbineweni	ngimbinewe
	1ex	nginnewem	nginneweny	nginneweni	nginnewe
	2	yinnewem	yinneweny	yinneweni	yinnewe
	3	winnewem	winneweny	winneweni	winnewe

Appendix B

Ngan'gikurunggur Auxiliary Verb Paradigms

Simple Intransitive Auxiliaries

Major

Aux 1 ngiriN	- Sit
Aux 2 ngibeN	- Lie
Aux 3 ngirribeN	- Stand
Aux 4 ngaganiN	- Go
Aux 5 nganmerr	- Go*
Aux 6 ngiN	- Say

Minor

Aux 7 ngemen'geN	- Arrive
Aux 8 ngagantyiN	- Take
Aux 9 ngintyibeN	- Hang

Simple Transitive Auxiliaries

Minor

Aux 10 nginyinggiN	- See
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Complex Transitive Auxiliaries

Major

Aux 11 ngeriN	- Hands
Aux 12 nganaN	- Feet
Aux 13 ngeN	- Mouth
Aux 14 ngariN	- Poke
Aux 15 ngupuN	- Slash
Aux 16 ngebeN	- Bash
Aux 17 ngudupuN	- Shove
Aux 18 ngineN	- Heat

Minor

Aux 19 ngusyuN	- Suck
Aux 20 ngisyeN	- Pull
Aux 21 ngiminggiN	- Snatch

Complex Detransitivised Auxiliaries

Aux 22 ngimeN	- SayDtr (cf. Aux 6)
Aux 23 nginyerreN	- SeeDtr (cf. Aux 10)
Aux 24 ngemeN	- HandsDtr (cf. Aux 11)
Aux 25 nganawaN	- FeetDtr (cf. Aux 12)
Aux 26 ngiweN	- MouthDtr (cf. Aux 13)
Aux 27 ngaraN	- PokeDtr (cf. Aux 14)
Aux 28 ngebiN	- BashDtr (cf. Aux 16)
Aux 29 ngudeN	- ShoveDtr (dynamic)(cf. Aux 17)
Aux 30 ngiN	- ShoveDtr (stative) (cf. Aux 17)
Aux 31 ngineweN	- HeatDtr (cf. Aux 18)

Aux 1 - Sit

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngiriN	ngini	ngiwi
	2	yiriN	yini	yiwi
	3	diN/giriN	dini	wiri
DI	lin	ngindiN	ngindini	ngimbi
	lex	ngirriNgu	nginne	ngirrigu
	2	yirriNgu	yinne	yirrigu
	3	wirriNgu	winne	wirrigu
Pl	lin	ngindiN	ngindini	ngimbi
	lex	ngirriN	ngirri	ngirri
	2	yirriN	yinni	yirri
	3	wirriN	winni	wirri

Aux 2 - Lie

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngibeN	nginge	ngiN
	2	yibeN	yinge	yiN
	3	wibeN	winge	wiN
DI	lin	ngimbibeN	ngimbine	ngimbiN
	lex	ngerrtyeNgu	ngerrtyine	ngerrtyegu
	2	yerrtyeNgu	yerrtyine	yerrtyegu
	3	werrtyeNgu	werrtyine	werrtyegu
Pl	lin	ngimbibeN	ngimbine	ngimbiN
	lex	ngerrtyeN	ngerrtyini	ngerrtye
	2	yerrtyeN	yerrtyini	yerrtye
	3	werrtyeN	werrtyini	werrtye

Aux 3 - Stand

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngirribeN	ngirringe	ngirriN
	2	yirribeN	yirringe	yirriN
	3	wirribeN	wirringe	wirriN
DI	lin	ngimbirribeN	ngimbirringe	ngimbirriN
	lex	ngirrsibeNgi	ngirrsingerrki	ngirrsiNgi
	2	yirrsibeNgi	yirrsingerrki	yirrsiNgi
	3	wirrsibeNgi	wirrsingerrki	wirrsiNgi
Pl	lin	ngimbirribeN	ngimbirringe	ngimbirriN
	lex	ngirrsibeN	ngirrsinge	ngirrsiN
	2	yirrsibeN	yirrsinge	yirrsiN
	3	wirrsibeN	wirrsinge	wirrsiN

Aux 4 - Go

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngaganiN	ngagadi	ngani
	2	yaganiN	yagadi	yani
	3	yeniN	yedi	wani
DI	1in	ngangginiN	nganggidi	ngambani
	1ex	nganniNgi	ngadde	ngarrene
	2	yanniNgi	yadde	yarrene
	3	wanniNgi	wadde	warrene
Pl	1in	ngangginiN	nganggidi	ngambani
	1ex	nganniN	ngaddi	ngarrini
	2	yanniN	yaddi	yarrini
	3	wanniN	waddi	warrini

Aux 5 - Go*

		<u>Present</u>	<u>Past</u>	<u>Imperf</u>	<u>Irrealis 1</u>	<u>Irrealis 2</u>
Sg	1	nganmerr		nganigerri	ngamenerri	nganeyerri
	2	yanmerr		yanigerri	yamenerri	yaneyerri
	3	yirripin		yirrini	wamenerri	waneyerri
DI	1in	ngambenmerr		ngambinigerri	ngambamenerri	ngambinigerri
	1ex	nganneNgerri		nganneyerri	ngannegerri	ngannegerri
	2	yanneNgerri		yanneyirri	yannegerri	yannegerri
	3	wanneNgerri		wanneyerri	wannegerri	wannegerri
Pl	1in	ngambenmerr		ngambinigerri	ngambamenerri	ngambinigerri
	1ex	nganneNyerri		ngannigerri	nganneyerri	nganneyerri
	2	yanneNyerri		yannigerri	yanneyerri	yanneyerri
	3	wanneNyerri		wannigerri	wanneyerri	wanneyerri

Aux 6 - Say

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngiN	ngime	ngimi
	2	yiN	yime	yimi
	3	meN	meyi	wimi
DI	1in	ngindiN	ngimbime	ngimbimi
	1ex	ngirriNgu	ngirmegu	ngirmigu
	2	yirriNgu	yirmegu	yirmigu
	3	wirriNgu	wirmegu	wirmigu
Pl	1in	ngindiN	ngimbime	ngimbimi
	1ex	ngirriN	ngirme	ngirrimi
	2	yirriN	yirme	yirrimi
	3	wirriN	wirme	wirrimi

Aux 7 - Arrive

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngemenggeN		ngemengge
	2	yemenggeN		yemengge
	3	(we)menggeN		wemengge
Dl	1in	ngembemenggeN		ngembemengge
	1ex	ngermenggeNgu		ngermenggegu
	2	yermenggeNgu		yermenggegu
	3	wermenggeNgu		wermenggegu
Pl	1in	ngembemenggeN		ngembemengge
	1ex	ngermenggeN		ngermengge
	2	yermenggeN		yermengge
	3	wermenggeN		wermengge

Aux 8 - Take

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngagatyin	ngagantyi	ngawaN
	2	yagatyin	yagantyi	yawaN
	3	yetyin	yentyi	wawaN
Dl	1in	nganggityin	nganggintyi	ngambawaN
	1ex	ngarratyinNgu	ngarrgantyi	ngarraNgu
	2	yarratyinNgu	yarrgantyi	yarraNgu
	3	warratyinNgu	warrgantyi	warraNgu
Pl	1in	nganggityin	ngangintyi	ngambawaN
	1ex	ngarratyin	ngarrgantyi	ngarraN
	2	yarratyin	yarrgantyi	yarraN
	3	warratyin	warrgantyi	warraN

Aux 9 - Hang

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngityibeN		ngityin
	2	yityibeN		yityin
	2	wityibeN		wityin
Dl	1in	ngimbityibeN		ngimbityin
	1ex	ngirrtiyibeNgu		ngirrtiyinNgu
	2	yirrtiyibenNu		yirrtiyinNgu
	3	wirrtiyibeNgu		wirrtiyinNgu
Pl	1in	ngimbityibeN		ngimbityin
	1ex	ngirrtiyibeN		ngirrtiyin
	2	yirrtiyibeN		yirrtiyin
	3	wirrtiyibeN		wirrtiyin

Aux 10 - See

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	nginyinggiN	nginyirrini	nginyirri
	2	yinyinggiN	yinyirrini	yinyirri
	3	dinyinggiN	dinyirrini	winyirri
Dl	1in	ngimbinyinggiN	ngimbinyirrini	ngimbinyirri
	1ex	ngirmyinggiNgu	ngirmyirrini	ngirmyirri
	2	yirmyinggiNgu	yirmyirrini	yirmyirri
Pl	3	wirmyinggiNgu	wirmyirrini	wirmyirri
	1in	ngimbinyinggiN	ngimbinyirrini	ngimbinyirri
	1ex	ngirmyinggiN	ngirmyirrini	ngirmyirri
	2	yirmyinggiN	yirmyirrini	yirmyirri
	3	wirmyinggiN	wirmyirrini	wirmyirri

Aux 11 - Hands

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngeriN	ngeme	ngemi
	2	yeriN	yeme	yemi
	3	deN	deme	wemi
Dl	1in	ngendiN	ngembeme	ngembimi
	1ex	ngerrinGi	ngerrmegi	ngerrmigi
	2	yerrinGi	yerrmegi	yerrmigi
Pl	3	werrinGi	werrmegi	werrmigi
	1in	ngendiN	ngembeme	ngembimi
	1ex	ngerrinN	ngemne	ngerrmi
	2	yerrinN	yerrme	yerrmi
	3	werrinN	werrme	werrmi

Aux 12 - Feet

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	nganaN	nganigi	ngana
	2	yanaN	yanigi	yana
	3	nagaN/dagaN	dagi	wana
Dl	1in	ngambanaN	ngambanigi	ngambana
	1ex	ngannaNgi	ngannigi	ngannagi
	2	yannaNgi	yannigi	yannagi
Pl	3	wannaNgi	wannigi	wannagi
	1in	ngambanaN	ngambanigi	ngambana
	1ex	ngannaN	ngannigi	nganna
	2	yannaN	yannigi	yanna
	3	wannaN	wannigi	wanna

Aux 13 - Mouth

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngeN		ngi
	2	yeN		yi
	3	dingiN/keN		wi
DI	lin	ngendeN		ngimbi
	lex	ngerreNgi		ngirrigi
	2	yerreNgi		yirrigi
	3	werreNgi		wirrigi
PI	lin	ngendeN		ngimbi
	lex	ngerreN		ngirri
	2	yerreN		yirri
	3	werreN		wirri

Aux 14 - Poke

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngariN	ngani	nga
	2	yariN	yani	ya
	3	dangiN	dani	wa
DI	lin	ngandiN	ngandini	ngambi
	lex	ngarriNgi	nganne	ngarrigi
	2	yarriNgi	yanne	yarrigi
	3	warriNgi	wanne	warrigi
PI	lin	ngandiN	ngandini	ngambi
	lex	ngarriN	nganni	ngarri
	2	yarriN	yanni	yarri
	3	warriN	wanni	warri

Aux 15 - Slash

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngupuN	nguni	ngu
	2	yupuN	yuni	yu
	3	wupuN	wuni	wu
DI	lin	ngumbupuN	ngundini	ngumbu
	lex	ngurupuNgi	ngunne	ngurrigi
	2	yurupuNgi	yunne	yurrigi
	3	wurupuNgi	wunne	wurrigi
PI	lin	ngumbupuN	ngundini	ngumbu
	lex	ngurupuN	ngunni	ngurri
	2	yurupuN	yunni	yurri
	3	wurupuN	wunni	wurri

Aux 16 - Bash

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngebeN	ngebe	ngebi
	2	yebeN	yebe	yebi
	3	webeN/bengiN	webe/beyi	webi
DI	1in	ngembebeN	ngembebe	ngembibi
	1ex	ngerrbeNgi	ngerrbegi	ngerrbigi
	2	yerrbeNgi	yerrbegi	yerrbigi
	3	werrbeNgi	werrbegi	werrbigi
Pl	1in	ngembebeN	ngembebe	ngembibi
	1ex	ngerrbeN	ngerrbe	ngerrbi
	2	yerrbeN	yerrbe	yerrbi
	3	werrbeN	werrbe	werrbi

Aux 17 - Shove

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngudupuN	ngudini	ngudi
	2	yudupuN	yudini	yudi
	3	wudupuN	wudini	wudi
DI	1in	ngumbudupuN	ngumbudini	ngumbudi
	1ex	nguddupuNgi	nguddinigi	nguddigi
	2	yuddupuNgi	yuddinigi	yuddigi
	3	wuddupuNgi	wuddinigi	wuddigi
Pl	1in	ngumbudupuN	ngumbudini	ngumbudi
	1ex	nguddupuN	nguddini	nguddi
	2	yuddupuN	yuddini	yuddi
	3	wuddupuN	wuddini	wuddi

Aux 18 - Heat

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngineN		ngine
	2	yineN		yine
	3	dineN/wayim	/wani	wine/wa
DI	1in	ngindeN		ngimbine
	1ex	ninneNgi		nginnegi
	2	yinneNgi		yinnegi
	3	winneNgi		winnegi
Pl	1in	ngindeN		ngimbine
	1ex	nginneN		nginne
	2	yinneN		yinne
	3	winneN		winne

Aux 19 - Suck

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngusyuN		ngusyu
	2	yusyuN		yusyu
	3	wusyuN		wusyu
DI	1in	ngumbusyuN		ngumbusyu
	1ex	ngurrsyuNgi		ngurrsyugu
	2	yurrsyuNgi		yurrsyugu
	3	wurrsyuNgi		wurrsyugu
Pl	1in	ngumbusyuN		ngumbusyu
	1ex	ngurrsyuN		ngurrsyu
	2	yurrsyuN		yurrsyu
	3	wurrsyuN		wurrsyu

Aux 20 - Pull

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngisyeN		ngisye
	2	yisyeN		yisye
	3	disyeN		wisye
DI	1in	ngimbisyeN		ngimbisye
	1ex	ngirrsyeNgi		ngirrsyegi
	2	yirrsyeNgi		yirrsyegi
	3	wirrsyeNgi		wirrsyegi
Pl	1in	ngimbisyeN		ngimbisye
	1ex	ngirrsyeN		ngirrsye
	2	yirrsyeN		yirrsye
	3	wirrsyeN		wirrsye

Aux 21 - Snatch

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngiminggiN		ngimi
	2	yiminggiN		yimi
	3	menggiN		wimi
DI	1in	ngimbiminggiN		ngimbimi
	1ex	ngirrminggiNgi		ngirrmingi
	2	yirrminggiNgi		yirrmingi
	3	wirrminggiNgi		wirrmingi
Pl	1in	ngimbiminggiN		ngimbimi
	1ex	ngirrminggiN		ngirrmi
	2	yirrminggiN		yirrmi
	3	wirrminggiN		wirrmi

Aux 22 - Say Dtr

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngimeN	ngimeni	ngime
	2	yimeN	yimeni	yime
	3	meyiN	meyeni	wime
DI	1inc	ngimbimeN	ngimbimeni	ngimbime
	1ex	ngirmeNgu	ngirmenigu	ngirmegu
	2	yirmeNgu	yirmenigu	yirmegu
	3	wirmeNgu	wirmenigu	wirmegu
PI	1inc	ngimbimeN	ngimbimeni	ngimbime
	1ex	ngirmeN	ngirmeni	ngirme
	2	yirmeN	yirmeni	yirme
	3	wirmeN	wirmeni	wirme

Aux 23 - See Dtr

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	nginyerreN	nginyerreni	nginyerre
	2	yinyerreN	yinyerreni	yinyerre
	3	dinyerreN	dinyerreni	winyerre
DI	1in	ngimbinyerreN	ngimbinyerreni	ngimbinyerre
	1ex	ngirmyerreNgu	ngirmyerrenigu	ngirmyerre
	2	yirmyerreNgu	yirmyerrenigu	yirmyerre
	3	wirmyerreNgu	wirmyerrenigu	wirmyerre
PI	1in	ngimbinyerreN	ngimbinyerreni	ngimbinyerre
	1ex	ngirmyerreN	ngirmyerreni	ngirmyerre
	2	yirmyerreN	yirmyerreni	yirmyerre
	3	wirmyerreN	wirmyerreni	wirmyerre

Aux 24 - Hands Dtr

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngemeN	ngemeni	ngeme
	2	yemeN	yemeni	yeme
	3	demeN	demeni	weme
DI	1in	ngembemeN	ngembemeni	ngembeme
	1ex	ngerrmeNgi	ngerrmenigu	ngerrmegi
	2	yerrmeNgi	yerrmenigu	yerrmegi
	3	werrmeNgi	werrmenigu	werrmegi
PI	1in	ngembemeN	ngembemeni	ngembeme
	1ex	ngerrmeN	ngerrmeni	ngerrme
	2	yerrmeN	yerrmeni	yerrme
	3	werrmeN	werrmeni	werrme

Aux 25 - Feet Dtr

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	nganawaN	nganawani	nganawa
	2	yanawaN	yanawani	yanawa
	3	wanawaN	wanawani	wanawa
DI	1in	ngambanawaN	ngambanawani	ngambanawa
	1ex	ngannawaNgi	ngannawanigu	ngannawagu
	2	yannawaNgi	yannawanigu	yannawagu
	3	wannawaNgi	wannawanigu	wannawagu
Pl	1in	ngambanawaN	ngambanawani	ngambanawa
	1ex	ngannawaN	ngannawani	ngannawa
	2	yannawaN	yannawani	yannawa
	3	wannawaN	wannawani	wannawa

Aux 26 - Mouth Dtr

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngiweN		ngiwe
	2	yiweN		yiwe
	3	diweN		wiwe
DI	1in	ngimbiweN		ngimbiwe
	1ex	ngirreNgi		ngirregi
	2	yirreNgi		yirregi
	3	wirreNgi		wirregi
Pl	1in	ngimbiweN		ngimbiwe
	1ex	ngirreN		ngirre
	2	yirreN		yirre
	3	wirreN		wirre

Aux 27 - Poke Dtr

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngaraN	ngarani	ngara
	2	yaraN	yarani	yara
	3	daraN	darani	wara
DI	1in	ngambarraN	ngambarani	ngambarra
	1ex	ngarraNgi	ngarranigi	ngarragi
	2	yarraNgi	yarranigi	yarragi
	3	warraNgi	warranigi	warragi
Pl	1in	ngambarraN	ngambarani	ngambarra
	1ex	ngarraN	ngarrani	ngarra
	2	yarraN	yarrani	yarra
	3	warraN	warrani	warra

Aux 28 - Bash Dtr

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngebiN	ngebini	ngebi
	2	yebiN	yebini	yebi
	3	beyiN	beyini	webi
Dl	1inc	ngembibiN	ngembibini	ngembibi
	1ex	ngerrbiNgi	ngerrbinigi	ngerrbigi
	2	yerrbiNgi	yerrbinigi	yerrbigi
	3	werrbiNgi	werrbinigi	werrbigi
Pl	1inc	ngembibiN	ngembibini	ngembibi
	1ex	ngerrbiN	ngerrbini	ngerrbi
	2	yerrbiN	yerrbini	yerrbi
	3	werrbiN	werrbini	werrbi

Aux 29 - Shove Dtr (dynamic)

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngudeN	ngudeni	ngude
	2	yudeN	yudeni	yude
	3	wudeN	wudeni	wude
Dl	1in	ngumbudeN	ngumbudeni	ngumbude
	1ex	nguddeNgi	nguddenigi	nguddegi
	2	yuddeNgi	yuddenigi	yuddegi
	3	wuddeNgi	wuddenigi	wuddegi
Pl	1in	ngumbudeN	ngumbudeni	ngumbude
	1ex	nguddeN	nguddeni	ngudde
	2	yuddeN	yuddeni	yudde
	3	wuddeN	wuddeni	wudde

Aux 30 - Shove Dtr (stative)

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngiN		ngi
	2	yiN		yi
	3	wiN		wi
Dl	1in	ngimbiN		ngimbi
	1ex	ngirriNgi		ngirrigi
	2	yirriNgi		yirrigi
	3	wirriNgi		wirrigi
Pl	1in	ngimbiN		ngimbi
	1ex	ngirriN		ngirri
	2	yirriN		yirri
	3	wirriN		wirri

Aux 31 - Heat Dtr

		<u>Present</u>	<u>Past Imperf</u>	<u>Irrealis</u>
Sg	1	ngineweN	ngineweni	nginewe
	2	yineweN	yineweni	yinewe
	3	dineweN	dineweni	winewe
Pl	1in	ngimbineweN	ngimbineweni	ngimbinewe
	1ex	nginneweNgu	nginnewenigu	nginnewegu
	2	yinneweNgu	yinnewenigu	yinnewegu
	3	winneweNgu	winnewenigu	winnewegu
Pl	1in	ngimbineweN	ngimbineweni	ngimbinewe
	1ex	nginneweN	nginneweni	nginnewe
	2	yinneweN	yinneweni	yinnewe
	3	winneweN	winneweni	winnewe

Appendix C

Texts

Text 1	Trip to Melbourne
Text 2	Strychnine
Text 3	Escape from Fanny Bay Gaol
Text 4	Pelican's Egg

Text 1
Trip to Melbourne

Speaker - Robert Daly

Recorded at Peppimenarti in September 1988

(AIAS Reid NgW Tapes 8 & 9 1988)

This text was given by my main Ngan'giwumirri teacher Robert Daly, shortly after his return from a trip to Melbourne where, as an accomplished 'bamboo man', he and a Marrisyebin singer named Martin Warrigal were invited to perform at an ethnomusicological conference. What is given here is of necessity an extract, for the full text runs for over two hours and 100 pages of transcription. This text contains many features that are typical of Robert's narrative style; extreme detail given to travel, including all stops, and people met with along the way (getting from Peppimenarti to Melbourne takes 38 pages); great care taken to recount events in their correct chronological order; and determination to describe non-traditional things (such as trams and escalators) in his own language where possible, without lapsing into English. At the same time this text is full of new impressions; the Melbourne zoo, trams, escalators, restaurants, performing before large crowds of strangers, and uncertainty of the rules of such aspects of college life as smorgasborg meals and communal bathrooms. We take the story up from their arrival at their lodgings.

- 1 **mipurr kinyi wagarri ngem -burrki-pal -tye dede** Darwin-nimbi,
man this two 1sgMouth-3dl -have-Past country -SOURCE
SU Pres IO
 'I have these two blokes here from Darwin'.

- 2 **meny, deminy -ngirrki-ba -walal, room yeyi spare-one widdibenggu,**
3sgSay 3sgHands-1dlex -arm-shake other 3plStand dl
SU Perf SU Perf DO redup SU Pres SU
 he told him. 'Are there two spare rooms?',

- 3 **dam -tyerr -pu Alan-ninggi, yu spare-one widdibenggu,**
3sgPoke-mouth-ask -AGENT yes 3plStand dl
SU Perf SU Pres SU
 Alan asked him. 'Yes there's two spare ones'.

- 4 **yarrene-du -nyine-pe meny -ngirrki, yu airplane-nimbi-wurru dengini**
2dlGo -sleep-FOC -Fut3sgSay -1dlex yes -CAUS-UNSATIS body
SU Irr SU Perf IO
 'Do you want to rest now?' he asked us. 'Yes, we're feeling tired from the

- 5 **wurek nganninggu ngirrngirr ngerrintyegu-pe, ngirrminy-nerr,**
bad 1plexGo dl sleep 1plex Lie dl -Fut 1plexSay -dl/3sgM
SU Pres SU SU Irr SU SU Perf SU/IO
 plane flight, we'll have a sleep', we told him.

- 6 **key-nyine yerr-ngini -handbag-gumu yerr-wedimuy**
-FOC Tr -KIND -SEMBL Tr -small
cl cl
 He had a small thing like a handbag,

- 7 **yerr-every room nem key dim -nyine fill'im up-mem,**
 Tr - 3sgM 3sgSit -FOC -3sgDo
 cl PRO SU Pres SU Pres
 that was full up with the keys of every room.
- 8 **watypela nyin me -wa, dinyirrini-bebi -tye wembem room nyin-ne,**
whitefella ANA 3sgSnatch-pick 3sgSee -examine-Past house ANA-PURP
 SU Perf up SU Plmp
 That whitefella picked it up and searched through it for the key to our room.
- 9 **nem dam -fi -me wunggume, ngayi wunggume dam -ngi-fi -me,**
 3sg 3sgPoke-Mp-hand one 1sg one 3sgPoke-1sg-Mp-hand
 PRO SU Perf PRO SU Perf DO
 He gave him (Warrigal) one, and he gave one to me.
- 10 **ba, meny -ngirrki, Steve-ninggi, room nyin nga -nirrki-dudu-pe**
 HORT 3sgSay -1dlex -AGENT ANA 1sgPoke-2dl -show-Fut
 SU Perf IO SU Irr IO
 'Come on!', he told us, Steve that is, 'I'll show you those rooms'.
- 11 **yentyi -ngirrki-tye, ngayi kinyi ngibem-dudu dede ngayi room-kinyi,**
 3sgTake-1dlex -Past 1sg this 1sgLie -sleep camp 1sg -this
 SU Plmp DO PRO SU Pres PRO
 He took us up, 'I'm sleeping here, this is my room',
- 12 **meny -ngiti, nyinyi kinyi, key yaga -mirri yerim -baty door kin-ne,**
 3sgSay -1sg 2sg this DEM -EMPH 2sgHands-hold this-PURP
 SU Perf IO PRO SU Pres
 he told me. 'And this is your's, that key you're holding is for this door',
- 13 **meny -ngiti, nem dam -ne -du,**
 3sgSay -1sg 3sgM 3sgPoke-3sg-show
 SU Perf IO PRO SU Perf IO
 he told me. Then he showed him (Warrigal).
- 14 **nyinyi kinyi, everthing readyfella dim musyulng blanket yawurr sheet,**
 2sg this 3sgSit swag tree
 PRO SU Pres generic
 'This one's your's. Everything's ready, your beds, blankets and sheets.'
- 15 **toilet nga -nirrki-du -pe, handbag ngarrinygi -fi -tyuk,**
 1sgPoke-2dl -show-Fut 1plexPoke dl-Mp-place
 SU Irr IO SU Perf SU
 'I'll show you the bathroom', so we put down our suitcases.
- 16 **ba, meny -ngirrki, toilet nga -nirrki-du -pe,**
 HORT 3sgSay -1dlex 1sgPoke-2dl -show-Fut
 SU Perf IO SU Irr IO
 'Come on', he told us, 'I'll show you the bathroom'.

- 17 **yentyi -ngirrki-tye toilet-nide, kinyi, meny -ngirrki,**
 3sgTake-1dlex -Past -LOC here 3sgSay -1dlex
 SU Plmp DO SU Perf IO
 He took us up to the bathroom, and said to us,
- 18 **yarrene-wurr -nimbi-pe detyirri-ne a tyutytyurr-ne,**
 2dlGo -enter-CAUS-Fut navel -PURP or bathe -PURP
 SU Irr =to piss
 'If you come in here for a piss or to wash,
- 19 **minbe-pe loose-one yarrigi -fi -tyat,**
 Neg -Fut 2plPoke dl-Mp-place
 SU Irr SU
 don't leave the door unlocked !
- 20 **toilet kinyi wirribem falmi nem mipurr nem,**
 this 3sgStand woman 3sgM man 3sgM
 SU Pres PRO PRO
 This is both a women's and a men's bathroom.
- 21 **nyin mityity-nimbi wani-wurr, winyirri lock-werre wemi -du**
 ANA white -CAUS 3sgGo-enter 3sgSee -ASSOC 3sgHands-touch
 woman SU Irr SU Irr SU Irr
 If a woman was to come in, she'd see that the lock was engaged,
- 22 **nyinnin wa-mipurr dim -ngan-madi kinyi toilet-nide wumu -ne -nyine,**
 ANA M- man 3sgSit-LOC-chest here -LOC 3sgThink-3sgM-FOC
 cl SU Pres SU Irr IO
 and she would realise then that there is a man inside the bathroom'.
- 23 **yi, ngirrminy-nerr,**
 yes 1plexSay -dl/3sgM
 SU Perf SU/IO
 'yes', we said to him.
- 24 **wudum -ngirrki-mi-wul dede ngagurr-nide wakay, nganninygu-du-nyine,**
 3sgShove-1dlex -Val-return camp 1plex -LOC finished 1plexGo dl -sleep-FOC
 SU Perf DO PRO SU Perf SU
 He took us back to our rooms and we laid down then.
- 25 **nem yeniny-wurr yeniny-du, ngayi ngaganiny-wurr ngaganiny-du,**
 3sgM 3sgGo -enter 3sgGo -sleep 1sg 1sgGo -enter 1sgGo -sleep
 PRO SU Perf SU Perf PRO SU Perf SU Perf
 Warrigal went into his room and lay down, I went and lay down in mine.
- 26 **ngayi boot-werre nginge-tye, lirmem-ne ngerrim-syety defirr,**
 1sg -ASSOC 1sgLie -Past cold -PURP 1sgGo* -afraid foot
 PRO SU Plmp SU Perf
 I slept with my boots on for fear of getting cold feet.

- 27 ngerrintyininim-tye fal, Steve darany -fi -tit elifela-ninggi yirrini -tye
 1dlex Lie -Past all 3sgPokeDtr-Mp-arise early -INSTR 3sgGo*-Past
 SU Plmp night SU Perf SU Plmp
 We slept the whole night through. Steve arose early and came
- 28 deme -ngirrki-dudu-tye, ngay-ambirri wum -ngiti-derri
 3sgHands-1dlex -touch-Past 1sg -first 3sgSlash-1sg -back
 SU Plmp DO PRO SU Perf IO =knock
 and woke us up. He knocked on my door first.
- 29 ngarany -fi -tit ngeriny -mi-ta, miyi breakfast-nyine pat,
 1sgPokeDtr-Mp-arise 1sgHands-eye-open plant -FOC arise!
 SU Perf SU Perf
 I got up and opened the door. 'It's breakfast now, get up !'
- 30 meny-ngiti, damuy yeme -mi-pul -pe, wusye yi -pi -pe,
 3sgSay-1sg eye 2sgHandsDtr-eye-wash-Fut hair 2sgShoveDtrS-head-Fut
 SU Perf IO SU Irr SU Irr =comb
 he told me. 'Wash your face and comb your hair !'.
- 31 nem deminy -du, ngayi ngaganiny-wurr shower room,
 3sgM 3sgHands-touch 1sg 1sgGo -enter
 PRO SU Perf PRO SU Perf
 He woke Warrigal, I went into the shower room
- 32 damuy ngemeny -mi-pul wakay comb'im-ngiminy wakay
 eye 1sgHandsDtr-eye-wash finished -1sgDo finished
 SU Perf SU Perf
 and washed my face and combed my hair.
- 33 nem nginimem-endi demeny -mi-pul damuy wusye yin -pi
 3sgM already -SAME 3sgHandsDtr-eye-wash eye hair 2sgShoveDtr-
 head
 PRO SU Perf SU Perf =comb
 Warrigal had done the same - washed his face and combed his hair.
- 34 wakay, meny -ngirrki, yu, ngirrminy-nerr
 finished 3sgSay-1dlex yes 1plexSay -dl/3sgM
 SU Perf IO SU Perf SU/IO
 'Have you finished ?' he asked us. 'Yes' we told him.
- 35 baka miyi-nyine ngawam-nirrki-pe, yentyi -ngirrki-tye room miyi -ne
 HORT plant-FOC 1sgTake -2dl -Fut 3sgTake-1dlex -Past plant-PURP
 food SU Irr DO SU Plmp DO food
 'Come on, I'll take you down to breakfast'. He took us down to the room
- 36 wannim-lalirr watypela mityity, yeny -ngirrki-wurr,
 3plGo -eat whitefella white 3sgTake-1dlex -enter
 SU Pres woman SU Perf DO
 where the white men and women eat breakfast, and took us in.

- 37 **nyine yarrene-wap-pe, ngadde -tye, nganninygu-wap chair-nide,**
 FOC 2dlGo -sit -Fut 1dlexGo-Past 1plexGo dl -sit -LOC
 SU Irr SU Plmp SU Perf SU
 'Have a seat now', so we went and sat on the chairs.
- 38 **table wunu readyfela-nyine miyi dini -tye, anyone miyi yurrmugu-wa -pe,**
 there -FOC plant 3sgSit-Past plant 2plSnatch-pick-Fut
 food SU Plmp food SU Irr up
 There was a table already laid out with food on it. 'Take anything you like,
- 39 **minbe-merrendi awa-wun-ninggi mityity gurmu-nirrki, yaga yumu -wa,**
 Neg -INAB Hg -there-AGENT white 3plSay -2dl DEM 2sgSnatch-pick
 cl woman SU Irr IO SU Irr up
 those women over there (kitchen servers) can't tell you 'take this or that !',
- 40 **minbe gurmu-nirrki, anyone yumu -wa, miyi nyin yumu -wa**
 Neg 3plSay -2dl 2sgSnatch-pick plant ANA 2sgSnatch-pick
 SU Irr IO SU Irr up food SU Irr up
 they can't tell you that ! Take any food that you want. If there's your
- 41 **dege mi-yubu nyin yumu -wa -Ø,**
 belly Pl -good ANA 2sgSnatch-pick- IMP
 cl SU Irr up
 favourite food here, then take that !
- 42 **gagu -werre -nimbi dege yumu -wa, mi-nyin gagu -werre**
 animal-ASSOC-CAUS belly 2sgSnatch-pick Pl -ANA animal-ASSOC
 generic SU Irr up cl generic
 If you like the kind that has meat with it, then take those breakfasts
- 43 **yumu -wa -Ø, meny -ngirrki,**
 2sgSnatch-pick-IMP 3sgSay -1dlex
 SU Irr up SU Perf IO
 that have meat in them', he told us.
- 44 **minbe guddu -ngirrki-me -palak, ngiminy-ne, wetimbi, yi ngiminy-ne,**
 Neg 3plShove-1plex -hand-drop 1sgSay -3sg FINE yes 1sgSay -3sg
 SU Irr DO =prevent SU Perf IO SU Perf IO
 'Are you sure they can't stop me ?' I asked him. 'No, its fine'. 'OK' I told him.
- 45 **nginni -lalirr-tye wakay, ngerriny -pul, coffee, wakay meny -ngirrki,**
 1plexSit-eat -Past finished 1plexHands-finish finished 3sgSay-1dlex
 SU Plmp SU Perf SU Perf IO
 We ate it all up, finished it right off, and had coffee. "All finished ?" he asked us.
- 46 **yu wakay, ba ngamban-nime-mirri, Alan-ninggi meny -ngirrki,**
 yes finished HORT 1plincGo -pl -EMPH -AGENT 3sgSay -1dlex
 SU Irr SU SU Perf IO
 'Yes, we're finished'. 'Right then, let's go !' said Alan,

- 47 **nem-werr-endi** Steve, **ngaddi -tye mudiga-nide**, **minbe mudiga**, **firr-ngityirr**,
 3sgM-ASSOC-SAME 1plexGo-Past car -LOC Neg car foot-ground
 Pro SU Plmp
 and Steve too. We left in the car....no not the car, on foot.
- 48 **firr-ngityirr ngamban-nime-pe**, **ngawam-nirrki-pe meny -ngirrki**,
 foot-ground 1plincGo -pl -Fut 1sgTake -2dl -Fut 3sgSay -1dlex
 SU Irr SU SU Irr DO SU Perf IO
 'Let's go on foot, I'll show you the way !', he told us.
- 49 **ngerrmen'ge-tasat**, **ngaddi -tye**, **nganniny-mentyi-tyerr peyi-pefi**
 1plexArrive-emerge 1plexGo-Past 1plexGo -neck -stop in -THITH
 SU Perf SU Plmp SU Perf =wait place
 We came out, and went and waited at the place for
- 50 **yerr-steel-one deyedirr dem -baty**,
 Tr - hip 3sgHands-hold
 cl = wheel SU Pres
 one of those things having steel wheels (tram).
- 51 **yerr-nyin -nide-nyine nganniny-madi-wap**,
 Tr -ANA-LOC-FOC 1plex Go -chest -sit
 cl SU Perf
 We climbed inside that thing.
- 52 **warmadi yarrene-madi-wap-Ø move-gumu-merrendi**, **meny -ngirrki**,
 quick 2dlGo -chest-sit -IMP -TRY -LEST 3sgSay -1dlex
 SU Irr SU Perf IO
 'Climb in quickly before it moves off !' he told us.
- 53 **yerrmigi -kerrety-pe yaga ganggi**, **meny -ngirrki**,
 2plHands dl-grasp -Fut DEM high 3sgSay -1dlex
 SU Irr SU SU Perf IO
 'Hold onto this (handrail) up top here !', he told us.
- 54 **nganninygi-madi-wap, ngiddingegu -tyalak -tye**,
 1plexGo dl -chest-sit 1plexStand dl-upright-Past
 SU Perf SU SU Plmp SU
 We climbed on and had to stand up.
- 55 **darany -birr -wurru watypela mityity seat-nide-mirri**,
 3sgPokeDtr-arrest-UNSAT whitefella white -LOC-EMPH
 SU Perf =congested woman
 It was full up, with men and women on every seat.
- 56 **nem Lirrga deminy -tip yerr-nyinnin deme nem, ngayi**,
 3sgM dance 3sgHands-grab Tr -ANA hand 3sgM 1sg
 PRO style SU Perf cl PRO PRO
 Warrigal grabbed hold of that thing with his hand, and I did too.

- 57 move-meny straightaway yirrim -fili, a dede nyin -napa,
-3sgDo 3sgGo*-roll finally camp ANA-UNTIL
SU Perf SU Perf
The tram took off straightaway, and we eventually got to that place.
- 58 yeniny-tyerr, karbu warrmadi, meny -ngirrki, nganninygi-karbu,
3sgGo-stop alight quick 3sgSay -1dlex 1plexGo dl-alight
SU Perf SU Perf IO SU Perf SU
It came to a halt, 'Get out quick !', he told us, so we jumped off,
- 59 nem-endi Alan Steve, firr-ngityirr-nyine-pefi ngaddi -tye
3sgM-SAME foot-ground-FOC-THITH 1plexGo-Past
PRO SU Plmp
and so did Alan and Steve. We set off on foot,
- 60 ngadde -pefi -tye, gagu money wuddumbun-fi -madi -wurity-wannim
1dlexGo-DUR-Past animal 3plShove -Mp-chest-throw-3plGo
SU Plmp generic SU Pres SU Pres
and kept going til (we came to a fountain where) they throw money
- 61 kuru wasangari, gagu yaga yinninggin'gu gerrim -buy -girrim,
water clean animal DEM 2plSee dl 3plStand-bright-3plSit
generic SU Pres SU SU Pres SU Pres
into clear water. 'See that money standing out bright and shiny.
- 62 gagu silver-nyine wuddumbun-fi -madi-wurity-wannim kuru-nide,
animal -FOC 3plShove -Mp-chest-throw -3plGo water-LOC
generic SU Pres SU Pres
People throw silver coins into the water'.
- 63 yi ngirrminy-nerr, a -kinyi-mirri mabuk, yu meny -ngirrki,
yes 1plexSay -dl/3sgM A-here -EMPH lots yes 3sgSay -1dlex
SU Perf SU/IO cl SU Perf IO
'Gee !' we said to him, 'there's a lot of money here'. 'Sure is !' he told us.
- 64 puy ngadde -tye, a wembem nyin -napa, deminy -tyerr -ta
keep 1dlexGo-Past finally house ANA-UNTIL 3sgHands-mouth-open
going SU Plmp SU Perf
We kept going 'til we came to that building. He opened the door,
- 65 nganniny-wurr, ngarrgu ngirrminygu minde-fela-ndi mityity watypela,
1plexGo -enter 1dlex 1plexThink dl Neg-person-SAME white whitefella
SU Perf PRO SU Perf SU woman
and we went in. We thought to ourselves 'what a lot of whitefellas !!'.
- 66 epe nem pey-ambirri dini -tye watypela, minbe-nin -tyeri, ngadde -tye,
BUT 3sgM in -first 3sgSit-Past whitefella Neg -1dlinc-ear 1dlexGo-Past
PRO place SU Plmp IO SU Plmp
They must have all been sitting there already, we hadn't expected it. Anyway
we went on in.

- 67 **wetimbi yannunggu, minbe yannunggu-syisyi, meny -ngirrki,**
 FINE 2plGo dl Neg 2plGo dl-shiver 3sgSay -1dlex
 SU Pres SU SU Pres SU SU Perf IO
 'Are you two OK ?, you're not nervous are you ?' he asked us.
- 68 **yu wetimbi, yu nyine yarrene-wap-Ø chair-nide yirrigu -Ø**
 yes FINE yes FOC 2dlGo -sit -IMP -LOC 2plSit dl-IMP
 SU Irr SU Irr SU
 'We're fine'. 'Right then how about you sit in these chairs'.
- 69 **watypela wa-minbe detyeri-werre wani -ngirrki-tye**
 whitefella M- Neg ear -ASSOC 3sgGo-1dlex -Past
 cl =unknown SU Irr IO
 Then all these unknown whitefellas were coming up to us,
- 70 **wetimbi deminy -ngirrki-ba -walal, wa-chinamen dede muyeyi-nimbi**
 FINE 3sgHands-1dlex -arm-shake M- country foreign-SOURCE
 SU Perf DO redup cl
 and they shook us by the hand. There were Asians, people from foreign countries,
- 71 **mityity deminy -ngirrki-ba -walal, mipurr minbe-wurru -tye**
 white 3sgHands-1dlex -arm-shake man Neg -UNSATIS-Past
 woman SU Perf DO redup
 and women too, they all shook us by the hand. They'd never before
- 72 **winnyirri-bebi -warrani tyawurru-napa winnyirri-ngirrki**
 3plSee -examine-3plGo today -JUST 3plSee -1dlex
 SU Irr SU Irr SU Perf IO
 seen Aborigines, they saw us for the first time !
- 73 **minbe demim -nirrki-pi -yiri?, meny -ngirrki Alan-ninggi,**
 Neg 3sgHands-2dl -head-numb 3sgSay -1dlex -AGENT
 SU Pres DO =shame SU Perf IO
 'This isn't embarrassing you, is it ?', Alan asked us.
- 74 **yu wetimbi ngirrminy-ngerr, nginni -pefi -tye, kin -nuwurr ngani-pe,**
 yes FINE 1plexSay -dl/3sgM 1plexSit-DUR-Past here-a little 1sgGo-Fut
 SU Perf SU/IO SU Plmp while SU Irr
 'We're fine', we told him. We sat around awhile. 'I just have to go up here for a minute'.
- 75 **meny -ngirrki Alan, wurrkama wedi ngi -wurrkama-pe, kine yirrigu -Ø**
 3sgSay-1dlex work little 1sgSit-work -Fut this 2plSit dl-IMP
 SU Perf IO SU Irr place SU Irr SU
 Alan told us. 'I have a little business to arrange, you two stay here !'.
- 76 **nginne -pefi -tye, mityity wur-wunggume kine yedi -tye fepi minbadi**
 1dlexSit-DUR-Past white F -one this 3sgGo-Past hill big
 SU Plmp woman cl place SU Plmp
 We sat around, and that women who came here to Peppimenarti,

- 77 **men'geny-ngirrki, girringgu dinyirri-ngirrki yedi -tye**, hello **meny-ngirrki**,
 3sgArrive-1dlex 3plSit dl 3sgSee -1dlex 3sgGo-Past 3sgSay-1dlex
 SU Perf IO SU Pres SU SU Perf DO SU Plmp SU Perf IO
 she came up to us. She'd seen us sitting there and came over and said hello.
- 78 hello **ngirrminy-ngerr**, Heather **ngayim piwari, ngerrminygu -ba -walal**
 1plSay -dl/3sgF 3sgF name 1plexHands dl-arm-shake
 SU Perf SU/IO PRO SU Perf SU redup
 'Hello' we said to her, Heather her name is, and we shook her by the hand.
- 79 Alan **kide meny -ngirrki, wun -ambirri gaganim**,
 where 3sgSay -1dlex there-ahead 3sgGo
 SU Perf IO SU Pres
 'Where's Alan?', she asked us. 'He's up there having a quick word
- 80 **ngan'gi-nuwurr diny-tyerrakul, yi meny-ngirrki, yeniny-ngirrki-mi-wap**
 word -a little 3sgSit-talk yes 3sgSay-1dlex 3sgGo-1dlex -Val-sit
 while SU Perf SU Perf IO SU Perf DO inc
 with someone'. 'Oh alright', she said to us. She sat down next to us,
- 81 **ngan'gi-nyine nginne -tyerrakul-nime-tye, ngerram -ngerr -yilil -tye**,
 word -FOC 1dlexSit-talk -tr -Past 1plexMouth-dl/3sgF-tell -Past
 SU Plmp SU SU Plmp SU/IO stories
 and the three of us chatted and we told her stories.
- 82 **nyinyi kide yirim ngarrinygi-tyerr -pu**, Canberra **ngirim**,
 2sg where 2sgSit 1plexPoke-mouth-ask 1sgSit
 PRO SU Pres SU Perf SU Pres
 'Where are you living?', we asked her. 'I'm living in Canberra.
- 83 Alan **yaga pag -endi ring up-meny -ngiti** Canberra, **ngiminy-ne**
 DEM HITH-SAME phone -3sgDo -1sg 1sgSay -3sg
 SU Perf IO SU Perf IO
 That Alan rang me up in Canberra, and I told him that
- 84 **yu yibe** meet 'im up-**ngumu-nirr-pe** Melbourne, **detyeri-pefi**
 yes later -1sgDo -2pl -Fut ear -THITH
 SU Irr IO = idea/plan
 yes I would be meeting up with you in Melbourne, I'd had this plan
- 85 **ngeme -baty -tye -ngini, meny -ngirrki, yi ngiminy-nge**,
 1sgHands-hold-Past-1sgSit 3sgSay -1dlex yes 1sgSay -3sgF
 SU Plmp SU Plmp SU Perf IO SU Perf IO
 for a while', she told us. 'Yes', we said to her.
- 86 **nginni -pefi-tye gaganiny-garmadi nem Alan, ma meny-ngirrki**
 1plexSit-DUR-Past 3sgGo -approach 3sgM HORT 3sgSay -1dlex
 SU Plmp SU Perf PRO SU Perf IO
 We sat around, then Alan approached us. 'Let's go!' he said.

- 87 **ngambani-nime-pe wunu room yeyi, nem watypela mityity**
 1plinc Go- pl -Fut there other 3sgM whitefella white
 SU Irr SU PRO woman
 'Let's go through to that other room'. There was a huge number of
- 88 **room nyin-nide dini-tye, room nyin chair nyin darany -me -syu**
 ANA-LOC 3sgSit-Past ANA ANA 3sgPokeDtr-hand-fill
 SU Plmp SU Perf
 whitefellas in that room, the room...the chairs, were full up
- 89 **watypela mityity, nganniny-wurr-pefi nganniny-tyerr**
 whitefella white 1plexGo -enter-THITH 1plexGo -stop
 woman SU Perf SU Perf
 with whitefellas. We went on in and came to a halt.
- 90 **wunu-pe yirrigu -pe ganggi, meny-ngirrki,**
 there-Fut 2plSit dl-Fut high 3sgSay-1dlex
 SU Irr SU SU Perf IO
 'You sit up the top there', he told us.
- 91 **Steve wemi -nirrki-ba -baty -pe -wiri, yen -ngirrki-madi-pap ganggi,**
 3sgHands-2dl -arm-hold-Fut-3sgSit 3sgTake-1dlex -chest-climb high
 SU Irr DO SU Irr SUPerf DO
 'Steve will take you up there'. He took us up to the top.
- 92 **kine ngimbi -nime, ngimbi -ne -werr -tyeri-nime-pe Alan**
 this 1plincSit-pl 1plincSit-3sgM-ASSOC-ear -pl -Fut
 place SU Irr SU SU Irr IO SU
 'We'll sit up here and listen to Alan
- 93 **wemi -yen'gi-pe-wirrim ngan'gi yawurr wangga-ne, wirri -tyeri-baty-pe,**
 3sgHands-talk -Fut-3sgStand talk animal dance-PURP 3plSit-ear-hold-Fut
 SU Irr SU Irr generic style SU Irr
 giving his talk about Wangga, they'll all be listening.
- 94 **Alan-nyine ngan'gi deme -yen'gi-tye -wirringe wakay,**
 -FOC talk 3sgHands-talk -Past-3sgStand finished
 SU Plmp SU Plmp
 Then Alan was giving his talk.
- 95 **ngan'gi nyin ngeme -nirr-yen'gi-tye, meny-burr, video cassette**
 speech ANA 1sgHands-2pl -talk -Past 3sgSay-3pl
 SU Plmp IO SU Perf IO
 'All this that I've been telling you about', he told them, 'I'll show
- 96 **nga -fi -tyat -pe, yinnyirri-pe falmi walararra, kanbi -werre,**
 1sgPoke-Mp-place-Fut 2plSee -Fut woman dance didjeridu-ASSOC
 SU Irr SU Irr style
 on a video. You'll see women's Walararra dancing, the use of didjeridus,

- 97 **mipurr wangga, yerr-mentyi yirri -tyeri-baty-pe yerr-nyin -mirri**
man dance Tr -throat 2plSit-ear -hold-Fut Tr - ANA-EMPH
style cl =song SU Irr cl
 and men's Wangga dancing. The songs you'll be hearing (on the video), these same ones
- 98 **wiri -dada-pe wa-werrfe girim Warrigal Martin, meny,**
3sgSit-sing -Fut M-mid 3sgSit 3sgSay
SU Irr cl distant SU Pres SU Perf
 will be sung live by that man over there -Martin Warrigal', he told them,
- 99 **kanbi Robert Daly wiri -fifi -pe,**
didjeridu 3sgSit -blow-Fut
SU Irr redup
 'and Robert Daly will play the didjeridu'.
- 100 **wa-wedimuy pey-endi yinnyirri-pe dini-purrrpurrrk-tye yerr-nyin video-nide,**
M-little one in-SAME 2plSee -Fut 3sgSit-dance -Past Tr -ANA -LOC
cl place SU Irr SU Plmp cl
 On the video you'll also see a small boy who was dancing as well.
- 101 **yinnyirri-pe wa-wedi detyeri-werre yenim,**
2plSee -Fut M -little ear -ASSOC 3sgGo
SU Irr cl SU Pres
 You'll see that he knows how to dance.
- 102 **ngatya nem-ninggi dangim-fi -mi -tyatit-yenim, meny -burr,**
father 3sgM-AGENT 3sgPoke-Mp-Val-place -3sgGo 3sgSay -3pl
PRO SU Pres redup SU Pres SU Perf IO
 His father is teaching him to do it', he told them.
- 103 **yerr-nyin-nyine video cassette dam -burr-fi -tyat, winy -me -purrrk-ambirri**
Tr -ANA-FOC 3sgPoke-3pl -Mp-place 3sgSit-hand-clap -first
cl SU Perf IO SU Perf
 he turned on that video thing for them... actually they clapped first,
- 104 **watypela mityity, nyin -nimbi dam -burr-fi -tyat,**
whitefella white ANA-SOURCE 3sgPoke-3pl -Mp-place
woman SU Perf IO
 all those whitefellas, and then he turned it on,
- 105 **winnyirri nginifiny-nyine, dam -purrrket, wirriny-me -purrrk**
3pl See true -FOC 3sgPoke-finish 3plSit -hands-clap
SU Irr SU Perf SU Perf
 and they really watched it. Then he switched it off and they all clapped.
- 106 **ba meny-ngirrki, ngambani-nime-pe, yirrigu -dada-nginifiny-nyine-pe,**
HORT3sgSay-1dlex 1plincGo -pl -Fut 2plSit dl-sing -true -FOC -Fut
SU Perf IO SU Irr SU SU Irr SU
 'Right', he said to us, 'let's go, sing with all you've got !,

- 107 **wirri -nirrki-tyeri-baty-pe, ngarrgu ngirrminygu watypela wunggume-ndi**
 3plSit-2dl -ear -hold-Fut 1dlex 1plexThink dl whitefella one -SAME
 SU Irr IO PRO SU Perf SU
 they'll all be listening to you !. We thought to ourselves 'what a lot of
 whitefellas !'.
- 108 **nem pey -ambirri minbe room-nyine dini -tye, yeyi -ninggi winni -tye**
 3sgM in -first Neg -FOC 3sgSit-Past other-AGENT 3plSit -Past
 PRO place SU Plmp SU Plmp
 They had already filled the entire room, some were sitting,
- 109 **yeyi -ninggi tyamennapa widdinge -tyalak,**
 other-AGENT DISMISS 3plStand -upright
 SU Plmp
 others just had to stand up.
- 110 **yeny -ngirrki-wurr ngaddi -tye, wap-nyine yirrugu, meny-ngirrki,**
 3sgTake-1dlex -enter 1plexGo-Past sit -FOC 2plSit dl 3sgSay-1dlex
 SU Perf IO SU Plmp SU Irr SU SU Perf IO
 He took us in and we went over, 'You two sit down here !', he told us.
- 111 **ngan'g-ambirri ngemi -yen'gi-pe -ngirrim,**
 talk -first 1sgHands-story -Fut-1sgStand
 SU Irr tell SU Irr
 'I'll be up here having a talk with someone first'.
- 112 **kuru werrminy-ngiti-bubu ngayi, jug-ninggi fill up-wirrminy-ngiti**
 water 3plHands-1sg -fetch 1sg -INSTR -3pl Do -1sg
 SU Perf IO water PRO SU Perf IO
 They brought on some water for me, and, with a jug, filled up
- 113 **bucket wurrmu -wa plastic one,**
 3plSnatch-pick
 SU Perf up
 a plastic bucket they'd brought.
- 114 **wirriny-tyerrakul wakay, wakay meny -burr, wirriny-ne -me -purrk,**
 3plStand-speak finished finished 3sgSay -3pl 3plSit -3sgM-hands-clap
 SU Perf SU Perf IO SU Perf IO
 He finished speaking, 'that's the end', he told them, and they all clapped him.
- 115 **ma -mirri watypela yeyi wirriny-ne -kay,**
 HORT-EMPH whitefella other 3sgStand-3sgM-call
 SU Perf IO
 'Hey, come here!', he called to that other whitefella.
- 116 **yerr-wunu mat ngambawam-fel -pe, ngumbi -wurrki-bat -pe,**
 Tr -that 1plincTake -bounce-Fut 1dlinclash-3dl -knock-Fut
 cl SU Irr SU Irr IO prone
 'Let's drag out that mat and we'll set it out flat

- 117 **wirrigu -ngan-madi-pe, warranygi-fel wirrigu -pup, wirriny-ngirrki-kay**
 3plSit dl-LOC -chest -Fut 3plTake dl-bounce 3plSit dl-lay 3plStand-1dlex -call
 SU Irr SU SU Perf SU SU Perf SU SU Perf IO
 for them to sit on. They dragged it out, lay it down, and called out to us,
- 118 **ka -mirri ka meny-ngirrki, ngadde-tye wap,**
 HORT-EMPH HORT 3sgSay-1dlex 1dlexGo-Past sit
 SU Perf IO SU Plmp
 'Come on over here !' he told us, so we went over and sat down.
- 119 **ngayi kanbi ngu -madi-syu, ready-yurrmunggu meny -ngirrki,**
 1sg didjeridu 1sgSlash-chest-spray 2plDo dl 3sgSay -1dlex
 PRO SU Perf water SU Pres SU SU Perf IO
 I wet the inside of the didjeridu. 'Are you guys ready ?', he asked us.
- 120 **yu, ma -mirri ka fi -yumu-nyine-pe kanbi meny -ngiti,**
 yes HORT-EMPH HORT blow-2sgDo-FOC -Fut didjeridu 3sgSay -1sg
 SU Irr SU Perf IO
 'Yes'. 'OK then, you can start playing straightaway !', he told me.
- 121 **fi -ngiminy-ne dini -dada-tye, wum -ket larrk larrk larrk larrk larrk**
 blow-1sgDo -3sgM 3sgSit-sing -Past 3sgSlash-cut clapping onomatopoeia
 SU Perf IO SU Plmp SU Perf =cease
 I blew for him, and Warrigal sang. When he finished..clap clap clap..
- 122 **watypela mityity wirriny-ngirrki-me -purrk**
 whitefella white 3plSit -1dlex -hand-clap
 woman SU Perf IO
 all those white men and women applauded us.
- 123 **mam Alan-ninggi meny -ngirrki, yerr-yeyi -nyine me -wa,**
 more -AGENT 3sgSay -1dlex Tr -other-FOC 3sgSnatch-pick
 SU Perf IO cl SU Perf up
 'Keep going !', Alan said to us, so Warrigal launched into another one.
- 124 **nyin minbe tyawurru-ne kukuk-mirri, kanbi erreke-ninggi ngagadi-fifi -tye**
 ANA Neg today-PURP wait -EMPH didj- how -AGENT 1sgGo -blow-Past
 eridu many SU Plmp redup
 That's not enough yet, keep going !. Well, I don't know how many songs I played.
- 125 **tyerr -wasyan-werre -wurru meyi -ngi-tyerr -watyit -tye,**
 mouth-hair -ASSOC-UNSATIS 3sgDo -1sg -mouth-consume-Past
 = beard SU Plmp DO redup
 Annoyingly, my beard kept getting caught between my lips and the didjeridu.
- 126 **tyamirri meny -burr, minmi mam derrigidi-ngerrmim,**
 finished 3sgSay -3pl Neg more want -1plexHands
 SU Perf IO SU Pres
 'That the end', he told the audience. 'No ! we want more', (they called).

- 127 **nyin -nimbi wurriny -ngirrki-kay...ba...** Steve meny -ne,
 ANA-SOURCE 3sgStand-1dlex -call I mean 3sgSay -3sgM
 SU Perf IO SU Perf IO
 After that (Alan) called to us two...no he didn't... he said to Steve,
- 128 **wurruke yawam -burri-nuwurr-pe** outside **yerr-yeyi -nyine yerr-minbadi**
 3dl 2sgTake-3dl -a little -Fut Tr -other-FOC Tr -big
 PRO SU Irr IO while cl cl
 'Take these two outside for a bit. I'm going to project this other (video)
- 129 **nga -wurr-fufu -pe, gagu a -firr -werre** video cassette **kinyi ngerim -baty,**
 1sgPoke-3pl -shine-Fut animal A-foot-ASSOC this 1sgHands-hold
 SU Irr IO generic cl =corpse SU Pres
 onto the big thing (screen) for them (audience), and this video I've got here has
 (images of) a deceased person on it'.
- 130 **meny -burr, nimbi ginnyirrigu dede -ne ga -wurrki-tyeri-tyirr,**
 3sgSay -3pl CAUS 3plSee dl country-PURP 3sgPoke-3dl -ear -worry
 SU Perf IO SU Irr SU SU Irr DO
 He explained to them (audience), 'If they were to watch (this video), they'd feel
 sorry for their country,
- 131 **awa-derrigidi wurruke ginnyirrigu mipurr wa-perrety-meny yaga -ndi,**
 Hg-countrymen 3dl 3plSee dl man M-dead -3sgDo DEM-SAME
 cl PRO SU Irr SU cl SU Perf
 if they were to see their countrymen, especially one who has since died'.
- 132 **yi yi, Steve-ninggi meny -ngirrki ngambani-nime** outside **nuwurr,**
 yes yes -AGENT 3sgSay -1dlex 1dlincGo -pl a little
 SU Perf IO SU Irr SU while
 'Yes of course ! (the audience murmured sympathetically). Then Steve said to
 us, 'Let's go outside for a bit'.
- 133 **yentyi-ngirrki-tye** outside, **peyi nginne -nime-tye, yerr-nyine dam -burr-fufu,**
 3sgTake-1dlex-Past in 1dlexSit -Tr -Past Tr -FOC 3sgPoke-3pl-shine
 SU Plmp IO place SU Plmp SU cl SU Perf IO
 He took us outside, and we hung around there for a bit, while he projected
- 134 **winnyirri syamba wangga walararra, nginne -werr -tyeri-tye,**
 3plSee dance dance women's dance 1dlexSit-ASSOC-ear -Past
 SU Perf style style style SU Plmp
 (the film) and they watched Syamba, Wangga and Walararra. We could still
 overhear it,
- 135 **wakay dam -purr-ket ngagurr nganniny-wurr ngaddi -tye**
 finished 3sgPoke-bum-cut 1plex 1plexGo -enter 1plexGo-Past
 SU Perf =finish PRO SU Perf SU Plmp
 and when he'd finished we went back in, going over to

- 136 ngerrmen'geny-ne, wakay -nyine meny-ngirrki, Heather meny-nge,
 1plexArrive -3sgM finished-FOC 3sgSay-1dlex 3sgSay-3sgF
 SU Perf IO SU Perf IO SU Perf IO
 where (Alan) was. 'We're finished now !', he told us. Then he spoke to Heather,
- 137 e wa-wurrkama yenim-wurrkama Alan nem watypela wa-dityunggurr,
 and M-work 3sgGo -work 3sgM whitefella M-short
 cl SU Pres PRO cl
 and to that employee of Alan's, a whitefella, a short one.
- 138 gagu ya -wurrki-dudu-pe, yawam -burrki-pe, ngayi ngan'gi ngani-pe
 animal 2sgPoke-3dl -show-Fut 2sgTake-3dl -Fut 1sg talk 1sgGo-Fut
 generic SU Irr IO SU Irr DO PRO SU Irr
 'Show them the animals !, take them (to the zoo). I've yet to give my conference paper'.
- 139 ba meny-ngirrki mityity nyin-ninggi Heather, ngadde -nime-tye outside,
 HORT 3sgSay-1dlex white ANA-AGENT 1dlexGo -tr -Past
 SU Perf IO woman SU Plmp SU
 'Let's go !', she said to us... that white woman... Heather. So the three of us went outside.
- 140 Alan-ninggi meny-nge, wun-nimbi yarra -fi -pal -pe,
 -AGENT 3sgSay -3sgF there-SOURCE 2plPokeDtr-Mp-return-Fut
 SU Perf IO SU Irr
 Alan said to her, 'When you come back from there,
- 141 yawam -burrki-pe -yani, yudu -wurrki-mi-wul -pe kinyi,
 2sgTake-3dl -Fut-2sgGo 2sgShove-3dl -Val-return-Fut here
 SU Irr DO SU Irr SU Irr DO
 bring these two blokes with you, and return them to this place here.
- 142 kine yerrmen'ge-ngiti-pe, yu meny-ne, ba meny-ngirrki.
 this 2plArrive -1sg -Fut yes 3sgSay -3sgM HORT 3sgSay -1dlex
 place SU Irr IO SU Perf IO SU Perf IO
 This is where you'll find me'. 'OK!', she told him. 'Let's go !', she said to us.
- 143 ngadde -tye outside, ngiddinge-ngidi-tye taxi gaganim, taxi ngerrminy -tip,
 1dlexGo-Past 1plexStand-wait -Past 3sgGo 1plexHands-grab
 SU Plmp SU Plmp SU Pres SU Perf
 We went outside, and waited around for a taxi to come. We caught one,
- 144 a gagu nyin ngan-warrim-fi -tyityuk-wannim, amatyi
 finally animal ANA LOC -3plPoke-Mp-place -3plGo kangaroo
 generic SU Pres redup SU Pres
 and (went) to the place where they keep those animals - kangaroos
- 145 gagu wirritywirrity awanggi karrwakkarwak gagu mentyinimba budenggu
 animal lorikeet crow kookaburra animal darter bird diving shag
 generic generic
 rainbow lorikeets, crows, kookaburras, Darter birds, diving shags,

- 146 **afiwurr** **gagu** lion tiger elephant **gagu** **abatymirri** **eperrperr** **gagu** **awirrfirr**
cormorant animal animal black Burdekin animal Whistle
generic generic duck duck generic duck
 cormorants, lions, tigers, elephants, black ducks, Burdekin ducks, and Whistle ducks.
- 147 **ninde** **aditymadi** **gagu** **adityibi** **emen'giny** **gagu** **pulyerrk** pussycat,
then pygmy goose animal bandicoot goanna animal wedgetailed
generic generic eagle
 Then there was pygmy geese, bandicoots, goannas, wedgetailed eagles and cats.
- 148 **gagu** **wirritywirrity** **dede** **kinyi** **nayin-nide** **yenim** **e-wedi**,
animal rainbow country here 1dlinc-LOC 3sgGo A-small
generic lorikeet PRO SU Pres cl
 The parrots living here in our country are only small,
- 149 **epe** **dede** **nyinyi** **nginyirri** **minbe** **e-wedi** **yenim** **wirritywirrity**
but country 2sg 1sgSee Neg A-small 3sgGo rainbow
PRO SU Perf cl SU Pres lorikeet
 but the rainbow lorikeets I saw in your country are huge.
- 150 **ep** **dede** **kide -nimbi-nawa**, **gagu** **-mirri** **dapurr** same way,
GUESS country where-SOURCE-INDEF animal-EMPH bottom
generic
 I wonder where they're from. They're the same animal (species), their tails are identical,
- 151 **detyerr** **dengini** yellow one **a-ngini** **-nayin -nide-gumu** **yenim**,
mouth body A-KIND-1dlinc-LOC-SEMBL 3sgGo
cl PRO SU Pres
 and their beaks and bodies are yellow just like the ones that we have.
- 152 **ngaddi -tye** **anunggupana-nide**, **nganniny-wurr**
1plexGo-Past butterfly -LOC 1plexGo -enter
SU Plmp SU Perf
 Next we went to the butterfly (enclosure), and we went inside.
- 153 **anunggupana** **nyinnin** anyway **yedi -ngirr-pap**,
butterfly ANA 3sgGo -1plex-climb
SU Plmp IO
 Those butterflies just climbed all over us.
- 154 **gagu** **kine** **anunggupana** all different different **nginyirri**, **a-nayin-nide** **yenim**
animal this butterfly 1sgSee A-1dlinc-LOC 3sgGo
generic place SU Perf cl PRO SU Pres
 I saw butterflies from this place and all different other kinds. Some from our country,

- 155 **dede muyeyi-nimbi yenim, wunggume-nyine watypela werrminy-baty,**
country foreign-SOURCE 3sgGo one -FOC whitefella 3plHands -hold
SU Pres =thousands SU Perf
 and others from foreign lands. Those whitefellas had thousands of them !
- 156 **ngerrmen'ge-tasat, ngaddi -tye, ya kuru dege yurminggin-wa,**
1plexArrive-emerge 1plexGo-Past hey water belly 2plSnatch -pick
SU Perf SU Plmp SUPres up
 We came outside and wandered along. 'Hey, would you guys like a beer?',
- 157 **mityity nyin -ninggi dam -ngirrki-tyerr -pu, yu, ngaddi -tye,**
white ANA-AGENT 3sgPoke-1dlex -mouth-ask yes 1plexGo-Past
woman SU Perf IO SU Plmp
 that white woman asked us. 'Sure!', so we went over,
- 158 **nganniny-wurr, ngaddi -tye, nganniny-derri-wap**
1plexGo -enter 1plexGo-Past 1plexGo -back -sit
SU Perf SU Plmp SU Perf
 went into (a bar), and went over and sat up (on stools).
- 159 **miyi derrigidi-yerrminggu, minmi dam -ngirrki-tit**
plant like -2plHands dl Neg 3sgPoke-1dlex -fill
food SU Pres SU SU Perf DO
 'Would you two like some food ?'. 'No, we're actually still full up from
- 160 **wun -nimb -endi -yirre mi-mabuk, ngaddi -lali -tye,**
there-SOURCE-SAME-CORRECT Pf -lots 1plexGo-around-Past
cl SU Plmp
 all the food we had while we were wandering around back there before.
- 161 **kuru -napa ngirrigu -kuduk-pe, ngirrminy-ngerr,**
liquid-JUST 1plexSit dl-drink -Fut 1plexSay -dl/3sg
generic SU Irr SU SU Perf SU/IO
 We'll just drink a beer', we two told her.
- 162 **beer yeniny-ngirrki-kurr, ngayi me -wa, nem, watypela nyin**
3sgGo -1dlex -get 1sg 3sgSnatch-pick 3sgM whitefella ANA
SU Perf IO PRO SU Perf up PRO
 She got the beers, she picked up one for me, (one for) him, and (one for) that
- 163 **Alan nem wa-working man nem, nginni -kukuduk-tye wakay,**
3sgM M- 3sgM 1plexSit -drink -Past finished
PRO cl PRO SU Plmp redup
 whitefella of Alan's, his employee. We drank them up...finished.
- 164 **ba kinyi-pefi ngambani-nime meny -ngirrki, kak -endi**
HORT this -THITH 1dlincGo -pl 3sgSay -1dlex in -SAME
SU Irr SU SU Perf IO motion
 'Let's go over this way', she told us. So, on the move again,

- 165 **ngunni -fifili-tye -ngaddi gagu, a ngayi syusyuk ngiminy-nyine**
1plexSlash-roll -Past-1plexGo animal finally 1sg sore 1sgDo -FOC
SU Plmp redup SU Plmp generic PRO SU Perf
= search
 we looked about at a few animals, until eventually I was feeling sore,
- 166 **mumba-nimbi denintyi, ya, ngiminy-nge Heather, wut -ngumum-nyine,**
walk -CAUS knee hey 1sgSay -3sg heavy -1sgDo -FOC
SU Perf IO SU Pres
 in my knees, from all the walking. So I said to Heather, 'My limbs feel heavy'.
- 167 **ngay- werr-endi, nem -pagu wumu-ngiti Warrigal,**
1sg -ASSOC-SAME 3sgM-HITH 3sgSay -1sg
PRO PRO SU Perf IO
 'Yeah me too !', Warrigal told me.
- 168 **ngambara -fi -pal -nime-nyine, yumu-nge mityity,**
1plincPokeDtr-Mp-return-pl - FOC 2sgSay-3sgF white
SU Irr SU SU Irr IO woman
 'Suggest to her that we all go home now !'
- 169 **Heather ngiminy-nge, ya kak -nyine yudu -ngirrki-mi -wul,**
1sgSay -3sgF hey in -FOC 2sgShove-1dlex -Val-return
SU Perf IO motion SU Irr DO
 So I said to Heather, 'How about you take us back now'.

- 7 **menggeny-tasat,**
 3sgArrive -emerge
 SU Perf
 had come out.
- 8 **nyin -kana ngerrme -pul -ngaddi,**
 ANA-FOC 1plexHands-wash-1plexGo
 SU Plmp SU Plmp
 In response to that news we used to wash (the fruit),
- 9 **winnyerrem falmi ngerrme -pul wakay,**
 3plSeeDtr women 1plexHands-wash finished
 SU Pres SU Plmp
 all us women, we used to wash them.
- 10 **mi-garrfuru ngunnu -wuty, miyi damuy nginifiny-napa,**
 Pl-skin 1plexSlash-discard plant eye true -JUST
 cl SU Plmp food
 We would throw away the skin, just (keeping) the fleshy fruit part.
- 11 **fill 'im up-ngirrme-nyine peyik-nide wakay,**
 -1plexDo-FOC bag -LOC finished.
 SU Plmp
 We packed these into bags,
- 12 **e dani -tyerr -batybity,**
 and 3sgPoke-mouth-hold
 SU Plmp =sew
 and he sewed them up,
- 13 **wa-wulmen-ninggi Ridgedale dani -tyerr -batybity wakay,**
 M-old man-AGENT 3sgPoke-mouth-hold finished
 cl SU Plmp = sew
 old man Ridgedale sewed them shut.
- 14 **kak -nyine yentyi wunu ngan-tawun e sell 'im-meyi,**
 in -FOC 2sgTake there LOC -Darwin and -3sgDo
 motion SU Plmp SU Plmp
 Then he used to take them into Darwin and sell them.
- 15 **yerr-nyin tyagan-nawa -ngini,**
 Tr -ANA what -INDEF-PURP
 cl
 I wonder what that stuff was for,
- 16 **ep medicine-werre -ngini -ne, wakay -kana.**
 perhaps -ASSOC-PURP-SUPP finished-FOC
 perhaps it was something to do with medicine. OK thats it!

Text 3

Escape from Fanny Bay Gaol

Speaker - Patrick Tyabada

Recorded at Peppimenarti in September 1988

(AIAS Tape 10 REID 1988)

- 1 **tyamirri, mipurr wunggume Fannie Bay-nimbi diny -fel,**
discourse man one -SOURCE 3sgSit -bounce
break SU Perf
 Well, this certain bloke escaped from Fannie Bay Gaol.
- 2 **yeniny -pap perrik exercise yard-nide,**
3sgGo -climb fence -LOC
SU Perf
 by climbing the fence in the exercise yard !
- 3 **yedi -lali -tye, yerr-nyin dinyirri perrik, ep, meny, ngana -feltil,**
3sgGo-around-Past Tr -ANA 3sgSee fence GUESS 3sgSay 1sgFeet-bounce
SU Plmp cl SU Perf SUPerf SU Irr redup
 He'd been wandering around, sizing up that fence, thinking "maybe I could run it".
- 4 **dagum -feltil nyin -nimbi diny -fel wakay,**
3sgFeet-bounce ANA-SOURCE 3sgSit-bounce finished
SU Perf redup SU Perf
 He raced up, and just jumped right out of there !
- 5 **pey-endi wa-mumu wunni -ne -fifili -tye werminy-tip,**
in -SAME M -taboo 3plSlash-3sgM-search-Past 3plHands-grab
place cl =police SU Plmp IO redup SU Perf
 The police searched around that place for him, and re-arrested him,
- 6 **wuddum -mi-wul court-nide, judge nyin meny -ne,**
3plShove-Val-return -LOC ANA 3sgSay -3sgM
SU Perf SU Perf IO
 and brought him back to the court. He said to the judge...
- 7 **ba dam -tyerr -pu judge-ninggi,**
CORRECT 3sgPoke-mouth-ask -AGENT
SU Perf
 no I mean... the judge asked him,
- 8 **ityi -yimony-pefi yiriny -fel, meny -ne,**
what-2sgDo -THITH 2sgSit -bounce 3sgSay -3sgM
SU Perf SU Perf SU Perf IO
 "How did you jump over ?".

- 9 **tyepe nganam-felfil ngiriny-fel perrik nyinnin,**
JUST 1sgFeet -bounce 1sgSit -bounce fence ANA
SU Perf redup SU Perf
 "I just ran up and jumped the fence".
- 10 **minbe-wurru gintyi-fel, meny -ne, nginifiny ngumum-bi,**
Neg -UNSATIS 3sgSit-bounce 3sgSay-3sgM true 1sgSay -2sg
SU Irr SU Perf IO SU Pres IO
 "You couldn't possibly have jumped it !". "I'm telling you the truth".
- 11 **ngudi -nyi-mi-wul -pe wun -endi Fannie Bay,**
1sgShove-2sg-Val-return-Fut there-SAME
SU Irr DO
 "Well I'm taking you back to Fannie Bay Gaol,
- 12 **ya -ngirr-du -pe dede nyin ngani-kide yiriny -fel,**
2sgPoke-1plex-touch-Fut place ANA KIND-how 2sgSit -bounce
SU Irr DO =show SU Perf
 and you can show us there just how you escaped !".
- 13 **warrgantyi-tye Fannie Bay exercise yard-nide, kide -pefi yiriny-fel,**
2plTake -Past -LOC where-THITH 2sgSit -bounce
SU Plmp SU Perf
 So they took him back to the exercise yard at Fannie bay Gaol. "Where'd you jump out?",
- 14 **wirrminy-ne, kinyi-pefi, ityi -yumu-gumu, wirrminy-ne,**
3plSay -3sgM here -THITH what-2sgDo-TRY 3plSay -3sgM
SU Perf IO SU Irr SU Perf IO
 they asked him. "(I went over) here". "Try doing it for us ?", they told him.
- 15 **dagum -felfil, diny -fel madiyeninggi nyin wakay,**
3sgFeet -bounce 3sgSit -bounce other side ANA finished
SU Perf redup SU Perf
 So he ran up and jumped straight over to the other side again,
- 16 **mumba tyamennapa darany -fi -lirr,**
track DISMISS 3sgPokeDtr-Mp-disappear
SU Perf
 and (as they'd neglected to post a guard on the outside) he hit the road for good.
- 17 **minbe-nyine-tye wanna-garri-pat,**
Neg -FOC -Past 3plFeet-leg -catch
SU Irr up
 They never caught up with him !

Text 4

Pelican's Egg

Speaker - Robert Daly

Recorded at Peppimenarti in September 1986

(AIAS Reid NgW Tape 10 Text 3 1986)

- 1 **ngagantyi-tye nem kinyi Meli Pikinduwung-pefi**
1sgTake -Past 3sgM this personal placename -THITH
SU PImp PRO name
 I was taking this man, Meli, towards Pikinduwung.
- 2 **ngannigi-dirr -ket-tye -ngadde, gagu pigipigi dagum-felfil**
1dlexFeet-teeth-cut-Past-1dlexGo animal pig 3sgFeet-bounce
SU PImp SU PImp generic SU Perf redup
 We were travelling along the bank, when we saw a pig
- 3 **kuderri -nimbi -pagu, nginnyirrigu,**
billabong-SOURCE-HITH 1plexSee dl
SU Perf SU
 race out from the billabong.
- 4 **kinyi-pefi ngambani-pe, ngiminy-ne, ngadde-tye,**
this -THITH 1dlincGo -Fut 1sgSay -3sgM 1dlexGo-Past
SU Irr SU Perf IO SU PImp
 "Lets go this way" I told him, so we kept going,
- 5 **nganniny-karribu ba -wedi, ngadde-tye Malfiyin nganninggu-dirr -tye,**
1plexGo-descend arm-small 1dlexGo-Past place 1plexGo dl -teeth-Past
SU Perf SU PImp name SU Perf SU
 crossed a small creek, and kept going, travelling along the bank to Malfiyin.
- 6 **Malfiyin kine, ngiminy-ne, dede ngayi kine,**
place this 1sgSay -3sgM country 1sg this
name place SU Perf IO PRO place
 "This place here", I explained to him, "is my estate country".
- 7 **kuru nuwurr ngimbi -kuduk, wanin -ngirrki-minyirr,**
water brief 1dlincSit-drink 3sgHeat-1dlex -knock
SU Irr SU Perf DO out
 We had a quick drink, as we both felt knocked out by the heat.
- 8 **kuru nginne-kukuduk-tye wakay, ngambani-pe wunu-pefi,**
water 1dlexSit-drink -Past finished 1dlincGo -Fut there -THITH
SU PImp redup SU Irr
 When we'd finished drinking I said to him, "Let's go over that way."

- 9 **ngiminy-ne, gagu amurru nga -nbi-du -pe burra,**
1sgSay -3sgM animal egg 1sgPoke-2sg-touch-Fut pelican
SU Perf IO generic SU Irr IO
 I want to show you Ancestral Pelican's egg.
- 10 **mudiga ngambani-pe, ngambi -fi -tyat -pe**
car 1dlincGo -Fut 1dlincPoke-Mp-place-Fut
SU Irr SU Irr
 We'll take the car over and park it
- 11 **wun -ambirri mi-menem girribem meringgi-nide wirrim -pe,**
there-first Pf - billygoat 3sgStand shade -LOC leave alone-Fut
cl plum SU Pres
 up ahead there in the shade of that billygoat plum tree, we'll leave it".
- 12 **nganninygi-madi-wap, ngadde-tye, meringgi-nide,**
1plexGo dl-chest-sit 1dlex -Past shade -LOC
SU Perf SU SU PImp
 So we climbed back in and drove over to the shade.
- 13 **kine mudiga wirrim-pe, minbe ngatypirr ngambani-pe,**
this car leave -Fut Neg distant 1dlincGo -Fut
place SU Irr
 "Leave the car here! We don't have far to go.
- 14 **nga -nbi-du -pe, nganninygi-fili wa-membirr ngayi ngiminy-burr,**
1sgPoke-2sg-touch-Fut 1plexGo dl-roll M- child 1sg 1sgSay -3pl
SU Irr IO SU Perf SU cl PRO SU Perf IO
 I'll show it to you!". So we wandered over to my kids and I said to them,
- 15 **kine yirri -ngan-madi, ngarrgu-mbirri ngadde-tye fangu,**
this 2plSit-LOC -chest 1dlex - first 1dlexGo-Past ahead
place SU Irr PRO SU PImp
 "You mob stay here, us two will go on ahead".
- 16 **ngadde -tye, kine gagu burra girim, ngiminy-ne,**
1dlexGo-Past this animal pelican 3sgSit 1sgSay -3sgM
SU PImp place generic SU Pres SU Perf IO
 We went there. "This is the place where Ancestral Pelican lives",
 I explained to him.
- 17 **yi, meny -ngiti nem-pagu Meli,**
yes 3sgSay -1sg 3sgM-HITH personal
SU Perf IO PRO name
 "Oh really ?", he, Meli, replied to me.

- 18 **gagu kinyi yinyinggin, ngiminy-ne, fepi wunu yinyinggin,**
animal this 2sgSee 1sgSay -3sgM hill there 2sgSee
generic SU Pres SU Perf IO SU Pres
 "See this Ancestor here ?", I said to him, "and see that hill over there ?"
- 19 **nyin -pagu -nimbi yedi -tye darrwa-werre**
ANA-HITH-SOURCE 3sgGo-Past raft -ASSOC
SU Plmp
 Well she (Pelican) came down from that hill on a raft,
- 20 **wandirrk-ninggi darani -titidi-pagu -tye -yedi,**
pole -INSTR 3sgPokeDtr -push-HITH-Past-3sgGo
SU Plmp redup SU Plmp
 pushing herself along with a pole.
- 21 **yedi -tye wunu, Yambiying yeniny-palat-pagu, ngiminy-ne,**
3sgGo-Past there place 3sgGo -pass-HITH 1sgSay -3sgM
SU Plmp name SU Perf through SU Perf IO
 She travelled down and passed through Yambiying", I told him.
- 22 **yedi -tye kinyi, putput yedi -tye, ngiminy-ne,**
3sgGo-Past here pregnant 3sgGo-Past 1sgSay -3sgM
SU Plmp SU Plmp SU Perf IO
 And when she reached here she was heavily pregnant", I told him.
- 23 **kuderri wun -ne -tye wiri -palak Pikinduwung, ngiminy-ne,**
billabong there-INTENT-Past 3sgSit-lay place name 1sgSay -3sgM
SU Irr SU Perf IO
 It was her intention to lay her egg further on at the billabong at Pikinduwung", I explained to him.
- 24 **epe amurru nyin-ninggi dam -nge -di,**
BUT egg ANA-AGENT 3sgPoke-3sgF-cry
SU Perf IO
 "But that egg was (bearing down on her and) making her cry.
- 25 **gagu wur-malifirr nyin burra tyepe dede kinyi dinyirri-mi -yubu,**
animal F -female ANA pelican JUST camp here 3sgSee -Val-good
generic cl SU Perf
 That Ancestral Pelican Woman only just had time to observe that this was a suitable place",
- 26 **ngiminy-ne, kine ngani-wap, ngi -palak-pe amurru, meny, wakay,**
1sgSay -3sgM this 1sgGo-sit 1sgSit-lay -Fut egg 3sgThink finished
SU Perf IO place SU Irr SU Irr SU Perf
 I told him. "I'll camp here and lay my egg", she thought. That's it.

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