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DJAMBARRPUYŊU

A Yolŋu Variety
of Northern Australia

Volume I

Melanie P. Wilkinson

A thesis submitted in fulfilment
of the requirements for the degree of
Doctor of Philosophy

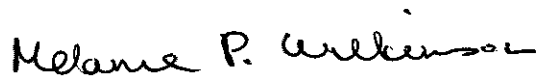
Department of Linguistics

University of Sydney

March 1991

Declaration

Except where otherwise indicated this thesis is my own work



Melanie P. Wilkinson
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ABSTRACT

This thesis is a reference grammar of Djambarrpuyŋu. Djambarrpuyŋu is an agglutinative non-configurational language spoken in north east Arnhem Land in the Northern Territory of Australia. There are perhaps 1000 speakers of Djambarrpuyŋu. Unlike other Australian languages it is being spoken by a greater number of people than would have occurred traditionally. This thesis focuses on the language of older Djambarrpuyŋu clanspeople as occurs in texts. It covers areas of phonology, morphology and syntax as revealed in this corpus and through elicitation. There are numerous examples from the texts throughout the thesis. Phonologically the language is of interest because of the presence of a stop contrast and a glottal stop. Djambarrpuyŋu has been affected by regional morphophonological processes such as lenition and vowel deletion. Demonstratives are used not only to indicate spatial deixis and temporal relations, but also function prominently in referential tracking in texts. There is a specific set of pronominals used to code intraclausal coreference. Case suffixes may have adnominal, relational or complementizer functions. Tense needs to be described in terms of metrical and cyclical factors. The thesis also describes the synchronic relationship of Djambarrpuyŋu to other languages in the area, with particular attention to the closely related clan varieties Djapu, Gupapuyŋu and Gumatj.

ACKNOWLEDGEMENTS

My greatest debt goes to the Yolŋu who accepted me into their world and attempted to teach me about it. In particular I received detailed assistance from Rärrkminy (Wanymuli)* Dhamarrandji, (Galpagalpa)* Dhamarrandji (dec.) and Kathy Guthadjaka. Rurrukunbuy Dhamarrandji, Mälku Dhamarrandji, (Yiŋi)* Gandaŋu, Yurranydjil Dhurrkay and Dipililŋa Bukulatjpi also spent time working closely with me. I would also like to acknowledge the help and support over the years of (Burrminy)* Dhamarrandji (dec.), (Burrnyira)* Dhamarrandji (dec.), Gulipawuy Dhamarrandji, Djalinggirr Bukulatjpi, Malawa Dhamarrandji, and Bumiti and Bunbatjiwuy Dhamarrandji. Yolŋu teachers at Shepherdson College, Galiwin'ku and students of the School of Australian Linguistics and Batchelor College, both in Batchelor, NT, have made invaluable contributions to my knowledge of Yolŋu Matha.

CAUTION: The asterisks indicate names of people who have died. Reference to the names of deceased Aboriginal people can give offence and it is usual for them not to be used for some years following a death. I would urge those using this thesis to take appropriate precautions, particularly in the area of North-east Arnhem Land.

While living at Galiwin'ku for the 9 months during which I carried out research for my PhD I received hospitality from many people. In particular I want to mention Margaret Miller and Dianne Buchanan who have never hestitated to provide me with a place to stay.

The Department of Linguistics at the University of Sydney provided a home base for my research and a stimulating environment in which to pursue my interest in linguistics. I wish to thank my supervisor Michael Walsh for his support and advice from start to finish. I also wish to thank Bill Foley, Barbara Horvath and Jane Simpson who also provided encouragement and advice.

My fellow post-graduate students were a constant source of support. Special thanks go to Lea Brown, Arlene Harvey, Mark Harvey, Nerida Jarkey, Trevor Johnston, Graham Lock, Christopher Nesbitt, Mari Rhydwen, Agneta Svalberg and Ann Thwaite.

Whilst in the field, and back in the Department, I received technical backup and a range of practical assistance. In particular I would like to thank Ted Atkinson, Joy Bailey, Diane Ferari, Jafta Kooma and Virginia Mayger.

My trips to the field were made possible by a grant from the University of Sydney and two grants from the Australian Institute of Aboriginal Studies (now the Australian Institute of Aboriginal and Torres Strait Islander Studies). The Department of Education of the Northern Territory provided opportunities for linguistic research before I began my post-graduate degree at the University of Sydney.

Through the Darwin Institute of Technology (now the Nothern Territory University) I spent a year teaching techniques of linguistic analysis and related subjects to Aboriginal and Torres Strait Islander students at the School of Australian Linguistics (now the Centre for Australian Languages and Linguistics) and at Batchelor College. This was an excellent opportunity to get first hand knowledge from native speakers of Yolŋu varieties and I thank them for their assistance.

Other opportunities were provided by the Northern Territory Department of Education in 1987, 1988 and 1989 for contact with Aboriginal people at Galiwin'ku. In each of these years I participated in courses of two weeks for teacher trainees in which a range of issues were addressed: developing vernacular literacy skills; recording linguistic/cultural materials; discussing broader language issues relevant to the community. This enabled me to keep abreast of ongoing developments in the Aboriginal community and to follow up on specific linguistic enquiries related to my research.

I could not have completed this task without the constant encouragement and practical support of members of my family, notably my parents and my brother - Anne, Dick and Justin Wilkinson - and my grandmother Mrs P. Cooper.

My gratitude is also extended to many other people who, while not individually named, have contributed in various ways to the successful completion of this thesis.

For: Rärrkminy Dhamarrandji

In thanks for her friendship and sisterhood
and her endeavours to teach me this
language

TABLE OF CONTENTS

LIST OF MAPS AND TABLES

ABBREVIATIONS AND CONVENTIONS

A	Ergative case
ABL/Abl	Ablative
ABS	Absolutive
ACC	Accusative
Accomp	Accompaniment
ADD	Additional
ADV	Adverb
Adv	Adverbial
ALL/All	Allative
alt	alternative
ANA	Anaphor
AP	Addressee Propositus
ASS/Ass	Associative
B	brother
Benef	Benefactive
BVR	Bare Verb Root
C	1. Consonant 2. child
CAUS	Causative
Caus	Causal function
CFACT	Counterfactual
COMPL	Completive
cf	compare
D	daughter
DAT	Dative
Dh	Dhuwa
Dict(YM)	Yolŋu-Matha Dictionary (Zorc 1986)
DIS	Distal
ditr	ditransitive
Djamb.	Djambarrpuyŋu
DL/dl	Dual number
EMPH	Emphatic (particle or pronominal suffix)
EmphPro	Emphatic pronominal
ERG	Ergative
F	father
foss redup	fossilized reduplicated stems
FUT	Future
GEN	Genitive (used in descriptions of other Yolŋu varieties)
Gup.	Gupapuyŋu
HAB	Habitual
HYP	Hypothetical
+hu	"human"
-hu	"non-human"
IMP	Imperative
IMPV	Imperfective
INCH	Inchoative
INDEF	Indefinite
INDEFP	Indefinite Proximal
Instr	Instrumental
INT	Interjection
INTENS	Intensifier
Intens	Intensifying function
inter	intermorphemic
Interrog	Interrogative

intra	intramorphemic
intr	intransitive
IO	Indirect object
IR/Irreg	Irregular
IRR	Irrealis
KINDYD	Kinship Dyadic
KINPROP	Kinship Proprietive
KINPROPAP	Kinship Proprietive Addressee Propositus
L	1. Liquid
	2. Lesson
LOC/Loc	Locative
M	mother
Man	Manner
MATCOLL	Matriline collective
MED	Medial
MOIC	Moiety collective
MVTAWY	Movement away
MVTTWD	Movement toward
N	Nasal
NEG	Negative
NEGQ	Negative quantifier
NOM	Nominative
O	Accusative case
OBL	Oblique
OBLS	Oblique stem
opp	opposite
OR	Originative
OWNR	Ownership
p	page
pp	pages
PAN	Proto-Austronesian
PERL	Perlative
PL/pl	plural number
Poss	Possessive
PRES	Presentative
PRIV	Privative
PROM	Prominence
PROP	Proprietive
PROX	Proximal
PRT	Particle
R/R	Reflexive-mutualis-reciprocal
REDUP	reduplicated
Recip	reciprocal
Rel	relative
Rith	Ritharrŋu
S	1. Nominative case
	2. son
semitr	semitransitive
SemiV	Semivowel
SEQ	Sequence
sg	singular
Sub	Subordinator
Temp	Temporal
TEXD	Text Deictic
TMA	Tense-modality/mood-aspect
tr	transitive
TRANS	Transitivizer
V	Vowel

VBZR	Verbalizer
vs	versus
Y	Yirritja
Z	sister

Where both upper case and lower case forms are shown together, upper case is used for particular morphemes and lower case for a particular function.

Upper case symbols are regularly used to indicate the initial consonant of morphemes that undergo morphophonemic alternation. In chapter 2 upper case symbols are used to represent non-contrastive stops.

Numbers follow certain abreviations for some morphemes:
LOC_2 is used for the suffix *-(ŋu)mi*
TRANS1 is used for the transitivizer *-ku-*
TRANS2 is used for the transitivizer *-ya-/-Tha-*
INDEF2 is used for the indefinite particle *ŋula*

1st	FIRST
2nd	SECOND
3rd	THIRD
4th	FOURTH

#	word boundary
+	morpheme boundary

Conventions in regard to examples:

General:

[ ]	subordinate clause in numbered examples; the morpheme by morpheme gloss in the body or the text
" "	direct quote
.....	a section of text that has not been included
x---y	a proper name
/ x.....y	
C-----	drawing out of a final vowel in a word (a common stylistic device)

The letters and numbers found on the far right hand side of examples locate its source. The bulk of the material is available through the Australian Institute of Aboriginal and Torres Strait Islander Studies with the coding indicated. The reader could contact the author for further details.

Vernacular line:

+	transparent morpheme boundary
=	opaque morpheme boundary
-	morpheme boundary in compounds and reduplications (this follows the orthographic convention)
\	a major pause or intonation break in the speech stream. It often correlates with a clause boundary
,	a minor break in the speech stream

Interlinear gloss line:

The same conventions regarding "+", "=","-" and "[ ]" and " "...." " apply as in the vernacular line. In addition

- is used to link the glosses of a root and its function for forms which are not shown with a morpheme boundary in the line above

[ ] surrounds the literal gloss for compounds

"..." free translation of compounds or phrases or the gloss for a grammatical morpheme with a range of meanings/functions, only one of which is given

( ) the specific case function of a case marker; the right hand constituent of a phrase

The unmarked form of particular word classes is not glossed for case. Thus demonstratives and nomens (noun-adjectives) with no case indicated are in S or O function. Pronouns with no case indicated are in S or A function.

Conventions in regard to glosses for kinship terms:

M mother
F father
Z sister
B brother
C child
D daughter
S son

(Z)X X for female ego; ZX for male ego
(B)X X for male ego; BX for female ego

Conventions in regard to pronominal glosses:

1 1st person (speaker)
2 2nd person (addressee)
3 3rd person
1+2 1st+2nd person (i.e. "inclusive"). "Exclusive" pronouns are indicated by "1dl" and "1pl"
sg singular
dl dual
pl plural

Case is not indicated for the unmarked (S/A) forms in pronominal glosses.

CHAPTER 1

1.1 Introduction to the language context

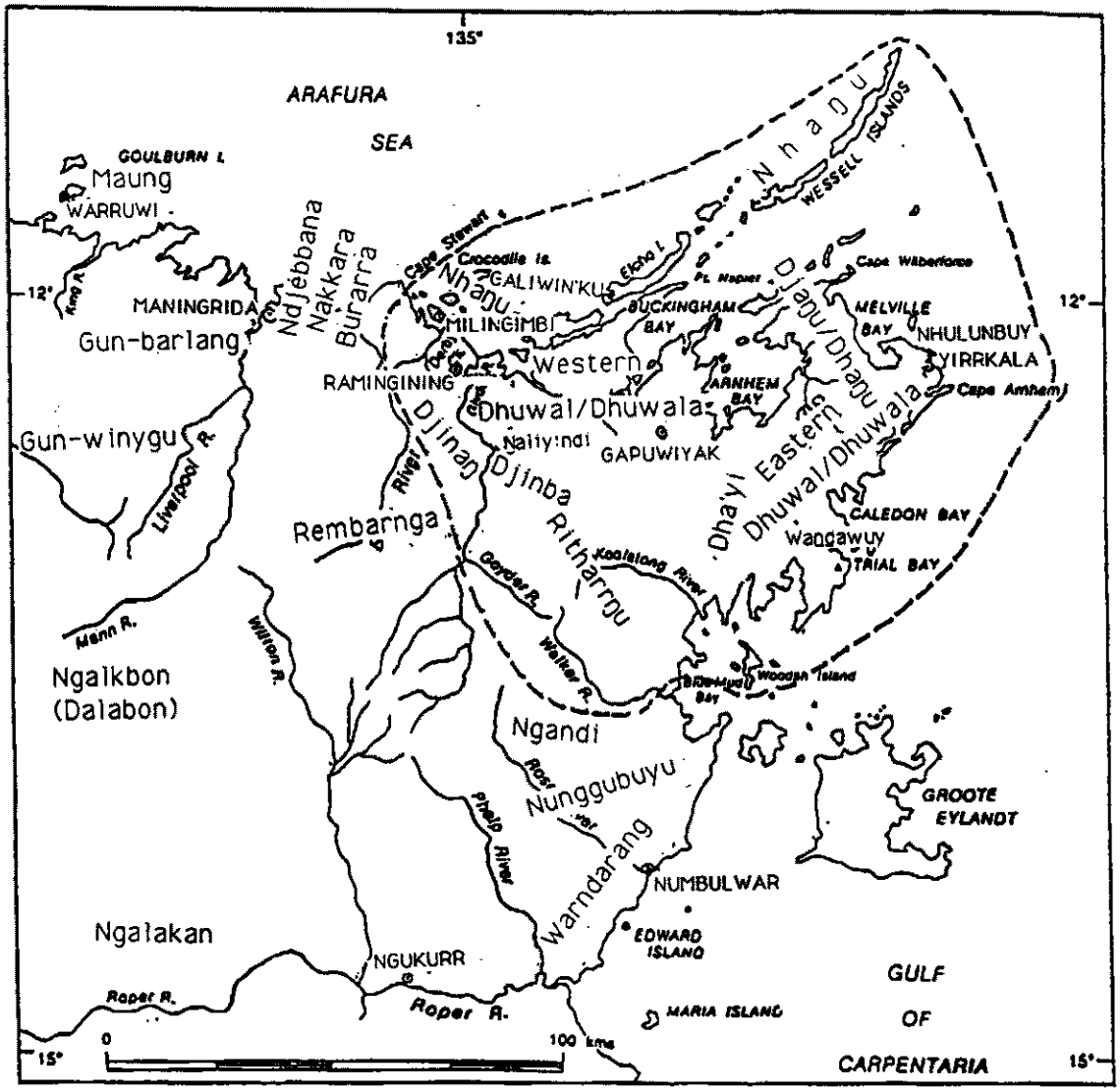
Djambarrpuyŋu is one of some 40-60 clans of a socio-cultural bloc/language family of people generally referred to as Yolŋu. The word *yolŋu* occurs in most of the language varieties within the Yolŋu bloc. However on the western boundaries non-identical but clearly cognate forms occur i.e. *yol* or *yul* (with alternates *yolŋu/yulŋu)* in Ritharrŋu (Heath 1980b), *yul* in Djinaŋ and *yulŋi* in Djinba (Waters 1989). It is used both generally for "person" as well as with increasing specificity for "dark-skinned person" and "Aborigine".

In earlier literature the Yolŋu, or sub-groups of them, have been described by a variety of terms including Murngin (Warner 1969 [1937]), Wulamba (Berndt 1955) and Miwuyt (Shapiro 1981). Morphy (1983 p 2) attributes the first use of Yolŋu to the linguist Schebeck writing during the sixties. However, a book by Wilbur S. Chaseling, a missionary who lived in the north-east Arnhem Land community of Yirrkala from 1934, is titled *Yulengor, Nomads of Arnhem Land.* The term Yulengor is described as being a local expression used by people of east Arnhem Land of themselves and other people of their race i.e. Aborigines. It is clearly an earlier spelling of Yolŋu. Since the sixties the term Yolŋu has been generally adopted by non-Aboriginal people living, working or studying in the region. The reference to language in particular may be indicated by the collocation of Yolŋu with *matha* "tongue/language" or *dhäruk* "word/language" i.e. Yolŋu Matha or Yolŋu Dhäruk.

The general area encompassed by the Yolŋu and the main linguistic distinctions at the level of "language" are indicated on Map 1.

The correlation between linguistic variety and geographical and social "space" in the Yolŋu area is complex. While each individual has a primary affiliation to particular territory with which is also allied a particular linguistic variety, the residential groups in which Yolŋu traditionally lived were multilingual. Membership fluctuated and included people with distinct linguistic affiliations. They also spent time in territories which were not always their "own". There is thus no simple correspondence between a particular area or group in which a person moved on a day to day basis and a single variety.

Map 1: General land-language correlations for Yolŋu varieties and surrounding languages



The broken line encircles the Yolŋu language varieties.

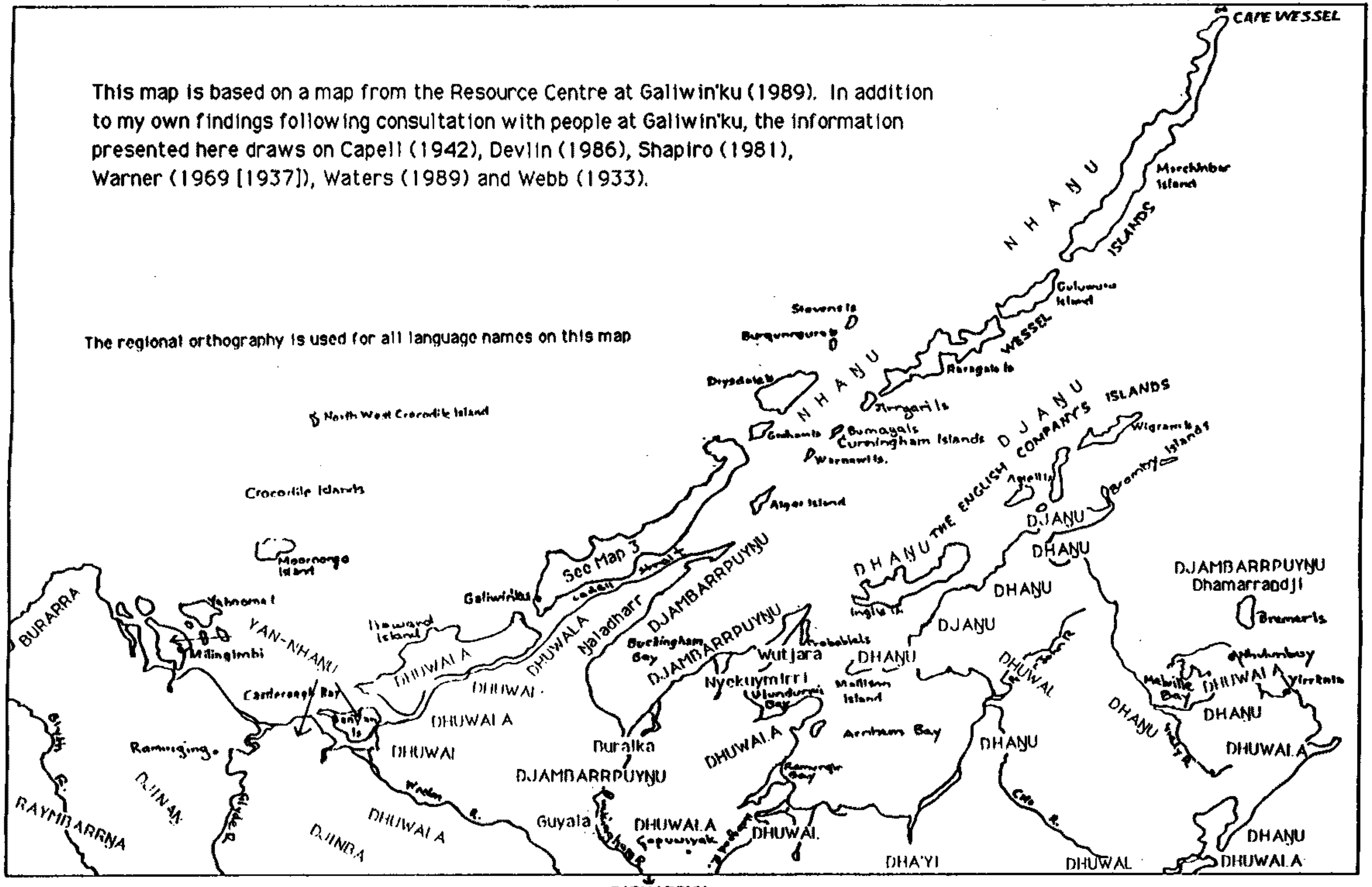
This is a modified version of Map 5 in Thomson (1983) and draws on information provided in Morphy (1983), Amery (1985), Waters (1989), Heath (1980b), McKay (1975), Merlan (1983) and Eather (p.c.).

In this part of Australia however there is an important social correlation between one's inherited territorial affiliation and a particular language variety. In terms of Yolŋu language ideology this affiliation is paramount. There is a single variety considered one's "own" and which should ideally be acquired by all its members. Furthermore each of the named land owning groups, which I will refer to here on as clans, is held to speak a variety distinct from that of any other.

This kind of complexity is not unique to the north-east Arnhem Land situation. For descriptions and discussions of this and other Australian situations see Schebeck (1968), Berndt (1976), Sutton (1978), Merlan (1981), Brandl and Walsh (1982, 1983). Rather than unravelling the relationship between language and social identity in the Yolŋu context, I will be focusing on describing the linguistic variety called Djambarrpuyŋu by speakers. I will, however, where possible, be comparing this clan variety with certain other closely related clan varieties, with the goal of discovering how the ideological Yolŋu perspective and that of linguistic anaylsis relate. For a broader perspective on the relationship of language and social categories within the region I refer the reader to Schebeck (1968), Berndt (1976) and Williams (1986). For comments on comparisons at a comparable "micro"-level I refer the reader to Waters' work on Djinaŋ (1989). By "micro" I loosely denote distinctions correlating with dialectal or sociolectal variation in linguistic terms. For findings in relation to diffusion between Yolŋu varieties and typologically distinct neighbouring languages I refer the reader again to Waters (1989) and also to Heath (1978a, 1981).

Djambarrpuyŋu is a large clan whose main territorial affiliations are to lands surrounding Buckingham Bay to the west of Galiwin'ku. I have not investigated in detail the land affiliations of the clan but in informal discussions speakers talked of a number of distinct sub-groups associated with distinct tracts of land. Such structuring of clans is common within north east Arnhem Land (see Morphy (1983 p116-7)). The maximum number of sub-clans that I have heard attributed to Djambarrpuyŋu is six. At my last attempt to seek clarification on this point six "surnames" were given as denoting the different groups i.e. Wutjara, Nyekuymirri, Guyula, Buralka, Ŋaladharr and Dhamarraŋdji. The general localities of these groups are indicated in Map 2. From the point of view of linguistic affiliation the clan as a whole is said to speak the same variety.

Map 2: Approximate locations of main Djambarrpuyŋu territories and surrounding land-linguistic variety distribution



The bulk of my text corpus is from older people whose primary land is on the Napier peninsula on the eastern side of of Buckingham Bay. These are recognized as one particular sub-group, although within this group further territorial-lineage affiliations are identified i.e. the Wutjara and Nyekuymirri. Warner's Djirin (1969 [1937]), Webb's Djumbarpingo (1933) Shapiro's Djawalnga-Djambarrpuy (1981) , Devlin's Dhurili or Malawuku (1986) would all seem to have been used to denote this group. I, myself, am uncertain as to what term may appropriately designate the sub-group[1]. For further discussion and information on the Yolŋu use of names to designate social categories and land affiliation beyond those used to denote linguistic affiliations see Williams (1986).

Clan names such as Djambarrpuyŋu designate social groups made up of one or more patrilines with particular land-sacred/ceremonial-linguistic affiliations. However, it is not possible to identify clans with a single stretch of territory nor a unique language. We have already seen that a clan such as Djambarrpuyŋu recognize certain patrilines as having major responsibility for particular localities within the clans estate and that there is also no requirement that the tracts of land with which a clan is affiliated be contiguous. The linguistic affiliation for a named clan is claimed to be uniform and there is as yet no counter-evidence for this on the basis of linguistic analysis. It is also claimed to be unique. However, from the perspective of linguistic analysis the "difference" between clan varieties is qualitatively variable. It ranges from that of distinct languages to that of very closely related dialects/sociolects. The minimal linguistic correlations between the most similar clan varieties have yet to be fully examined but lexical differences attributable to different land ownership and rights in the sacred/ceremonial sphere will always exist. At the level of "language" no clan variety is unique. "Language" distinctions in the Yolŋu family subsume several clan varieties (see below for details). The existence of similarities between clan varieties is in fact recognized by Yolŋu and underlies their eponymic use of proximal demonstratives in grouping particular varieties together (see section 1.1.2).

Finally, it is important to know that each clan also has links with other clans in the sacred/ceremonial sphere. These are complex and of great social significance. I

---

[1] While numerous words have been recorded in association with the various sub-groups I do not have a clear understanding as to the specific designations of them nor to the kinds of connections with other groups that many convey. In fact I consciously chose not to probe areas, many of which are well known from the literature, that might extend into the sacred/ceremonial realm outside of the speaker's rights to tell about or which might be judged inappropriate for general dissemination.

refer the reader to the anthropological literature of the area for further explication. The justification for the land-sacred/ceremonial-linguistic affiliations is in fact grounded in religion. People, their rituals, songs, paintings and language varieties were all bestowed by Ancestral beings during the course of their travels through the area. Each land owning group is minimally connected with others through the travels of at least one major set of Ancestral beings (see Williams 1986 p41).

The named clans, with their own particular combination of land-sacred/ceremonial-linguistic affiliations provide the Yolŋu with a basis according to which they can identify both their uniqueness and their connections with others in various domains, including language.

Clan affiliations are still held to unquestioningly. In concluding this overview of the place of the clan I quote from the anthropologist Howard Morphy who conducted research in the area during the 1970s:

"The clan lies at the heart of Yolŋu society. From the clan an individual's network stretches out to include members of clans with established links to his own, and beyond to an area where links are no longer based on precedent, where connections are more tenuous and less binding, until finally they peter out altogether. Over time the network changes; clans die out, lands are alienated, new alliances are forged which will create the precedents of the future. Yet always the emphasis, at least publicly, is on maintaining the existing network, for the channels that have been opened in the past make the flow of communication easier, and ensure that there are safe places to go..." (Morphy 1984 p13).

It is on the strength of the identification with the clan and the ideology that this identification is marked linguistically that the maintenance of "differences" between varieties is dependent.

I will now consider generally the context in which these differences were maintained.

Berndt (1976 p159) attributes to Waterman and others the observation that in north-east Arnhem Land the "every day socio-economic" groups were made up of 20 -120 people with a probable maximum of 200-250 gathered at one time for ritual purposes. These groups would always have been linguistically diverse. Exogamous[2] marriage rules and patrilineal descent coupled with the linguistic-land affiliations

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2 Marriage rules require that people marry outside of their own clans. In fact the general requirement is that people who marry are of the opposite moieties. Since clans are always of one moiety it follows that marriage partners will belong to different clans.

just described meant that even such closely linked kin as spouses and mothers and children had different linguistic affiliations. Folk theory has it that children acquired their mother's language first and were expected to learn their father's variety around puberty. Language skills were, and still are, highly valued. Warner, who conducted field work in the area between 1926-9, observed that "Linguistic ability is very marked among all these people. It would be difficult to find a Murngin adult who could not speak three or four languages, and frequently men speak seven or eight" (1969 p37).

Patterns of marriage described in Warner (1969) and Shapiro (1981) for the 1930s and the 1960s respectively reveal longstanding alliances between clans or sub-clans whose territories are located near each other. These alliances together with kin relationships were important factors in determining marriages (see Shapiro (1981) and Morphy (1978) for details and discussion). White (1977) identifies five marriage clusters within the Yolŋu area on the basis of genetic differentiation and notes the correlations of such clusters with the location of territories of intermarrying dialect units, i.e. clans and with drainage areas. He concludes that for the genetic differentiation to have occurred the intermarriage must have occurred over several generations. Three of these clusters are located in the northern area, one west of Arnhem Bay, one to its south and another in the Melville Bay area. This gives further support to the findings of Shapiro and Warner.

Djambarrpuyŋu speakers would have lived on a day to day basis in a multilingual group, not in a group bound by a single variety. Djambarrpuyŋu would have been known by others with close ties to these clanspeople and in return speakers of Djambarrpuyŋu would have known other varieties.

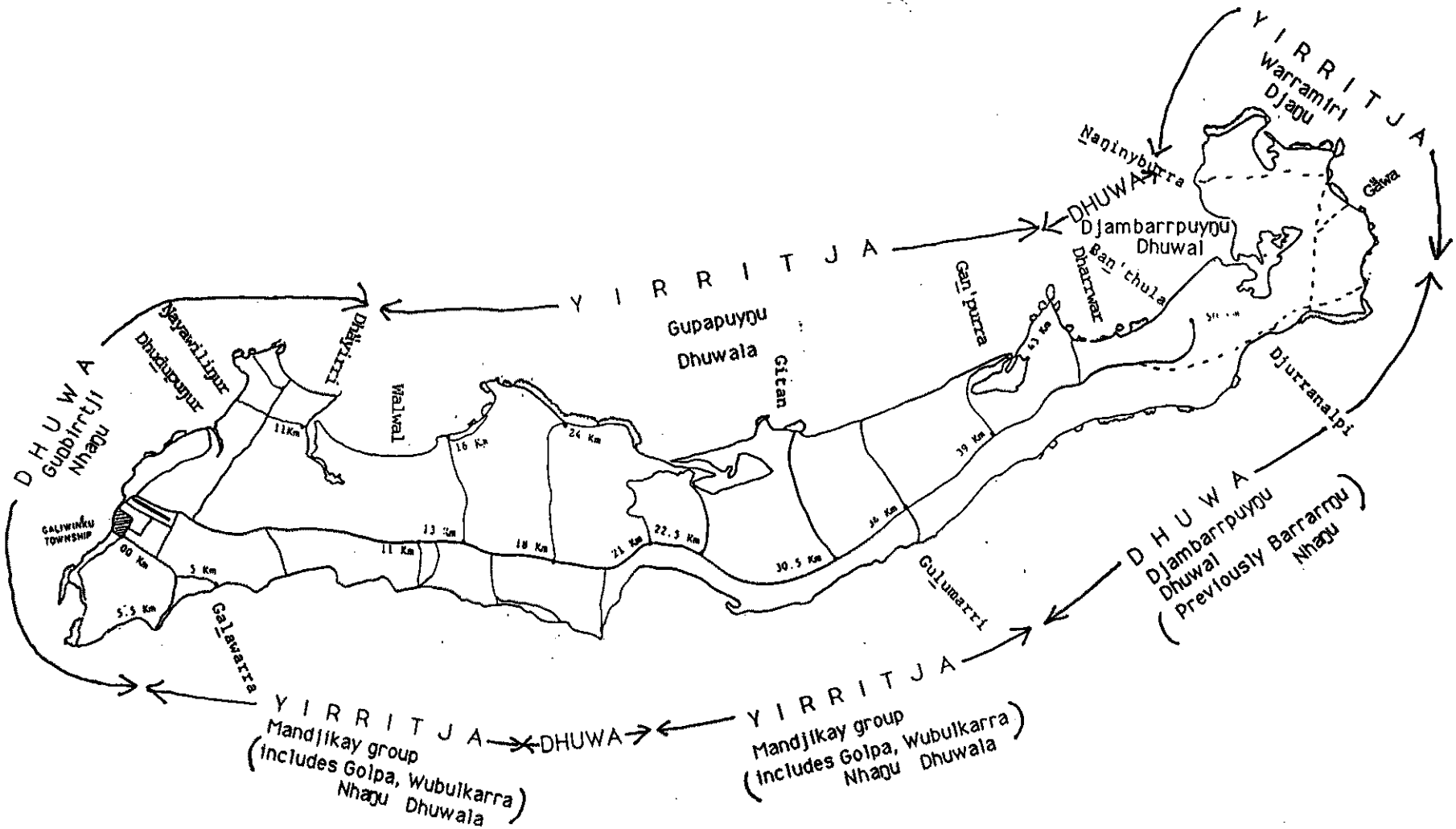
The context in which I have conducted field work is not one that I have been describing as traditional. While a traditional hunter-gatherer existence prevailed for Aborigines in this part of Australia much longer than many other parts of the country, the first half of this century saw the establishment of three mission settlements by the Methodist (now Uniting) Church. These were Milingimbi, Yirrkala and Galiwin'ku, established in 1922, 1934 and 1942 respectively. An earlier attempt to establish a mission on Elcho Island in 1922 was abandoned in favour of Milingimbi following the arrival of the Napha Petroleum Company in search - unsuccessfully so it proved - of oil.

Arnhem Land was declared an Aboriginal reserve in 1931 and freehold title was granted following the passing of the NT Land Rights Act in 1976. In the early seventies the Australian Government adopted a policy of self-determination and official control of the settlements passed from the missions to elected Town Councils. Until this time the missions provided the most intensive European contact for people in the area.

The three original mission settlements remain the largest Aboriginal communities within the region. However, various outstations were established during the mission era and a smaller mission at Gapuwiyak (Lake Evella) was begun in 1969. Today the three communities of Milingimbi, Yirrkala and Galiwin'ku as well as Gapuwiyak and Ramingining, an outstation which developed rapidly during the seventies, are permanently occupied by several hundred residents. Many of the earlier outstations - Gaṯtji, Dirrpuŋura, Mirŋatja, Gaŋgaŋ, Ḏonydji, Maṯamaṯa, Gurrumuru, Mäpuru, and Ŋaliyindi - remain (see Shepherdson (1981) and Shapiro (1981p7). Now more commonly referred to as homeland centres the arrival of autonomy in the seventies has seen their number grow as more people choose to live in smaller groups on lands with which they are closely connected. A major impetus to the homeland movement in recent times was the establishment of a bauxite mine and the mining town of Nhulunbuy on the Gove Peninsula. This seems to have affected the Yirrkala area first but as the infrastructure to support the movement developed it has spread to other areas. The most recent count I have for homeland centres associated with the Resource centre at Galiwin'ku is 27 (dating from 1989). Those on Elcho Island itself are indicated on Map 3. Baŋ'thula in the north western part of the island is a Djambarrpuyŋu homeland centre, with permament residents and its own school.

With the arrival of permament settlements in the region and the movement of many people to them, the size of the social group in daily contact increased dramatically and there have been linguistic repercussions. In each of the larger communities a single variety has arisen as the one productively acquired by younger people and which functions as a lingua franca. At Galiwin'ku, where my own fieldwork was based, the variety is referred to as Djambarrpuyŋu. The community is however one in transition. The linguistic repertoire of older individuals in the community still reflects the traditional diversity and several other clan varieties are regularly heard. The traditional values placed on a breadth of language knowledge and on speaking one's own clan variety are still maintained. While many younger people do not appear to be gaining a productive knowledge of their own variety, many have a

Map 3: Galiwin'ku (Elcho Island) showing Homeland Centres and moiety-land-clan-language variety affiliations



passive knowledge of it or other varieties, and there remain some younger people who acquire a productive knowledge of other varieties. Of course the community remains minimally bilingual as younger people will all learn at least the Galiwin'ku community lingua franca and English. The first language remains a Yolŋu variety and the three larger settlements have bilingual education programmes in their schools.

In the contemporary setting then, Djambarrpuyŋu is the name of the variety associated with the Galiwin'ku community as well as with the Djambarrpuyŋu clan. Clanspeople are also found in substantial numbers at Milingimbi, Gapuwiyak and Ramingining. Djambarrpuyŋu is also reported to be evolving as the the main variety spoken at Milingimbi and Gapuwiyak. It is also the official "language" of the bilingual programme at the school on Galiwin'ku.

Below I will provide an overview of the situation at Galiwin'ku but before that I will outline the place of Djambarrpuyŋu in relation to other Yolŋu varieties from a linguistic perspective.

1.1.1 Linguistic distinctions in the Yolŋu Matha varieties

The Yolŋu language group is an isolate of the Pama-Nyungan group of Australian languages. Surrounding them to the west and south are various members of the prefixing non-Pama-Nyungan languages.

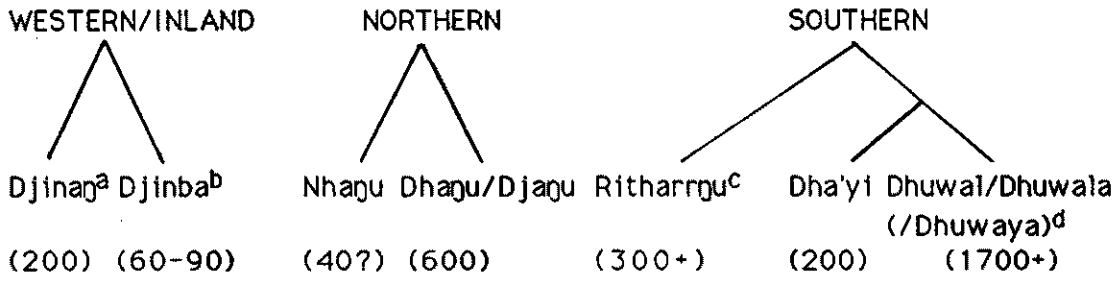
A basic sub-grouping of different varieties has been generally agreed upon following work by Capell (1942), Schebeck (1968), Wood (1978), Zorc (1978, 1979), Heath (1978a) and Waters (1989). There has never been any dispute over the Yolŋu bloc as a distinctive group as a whole, except for the question as to whether the Djinaŋ and Djinba varieties were part of this larger grouping. Waters (1984, 1989) has shown that in fact they are.

Basically this is supported by lexicostatistical analysis (Schebeck (1968) and Wood (1978)), functor analysis (Zorc 1978,1979)) and, for varieties along the border of the Yolŋu and prefixing languages, detailed comparative studies (Heath (1978a, 1981) and Waters (1989)).

There has been a general consensus in these studies that there are three major sub-groupings, described as Western/Inland, Northern and Southern. At this level there

are no vernacular equivalents, but for all further sub-classifications vernacular terms for linguistic groupings are generally adopted. These occur at two levels. The least inclusive linguistically is that of the clan. Higher level linguistic groupings are associated with the morpheme used for the proximal demonstrative. This amalgamates certain clan varieties and correlates with comparative studies to the extent that all varieties which share the same form for this particular demonstrative are found within one of the three major sub-groupings. Furthermore, branching within subgroups is also generally associated with these categories. However, the actual details of the linguistic relationships between clan varieties within the sub-branches has still, in many cases, to be determined. I will be giving some attention to the relationships between four clan varieties within a particular sub-group. For a regional perspective on the relationships between clan varieties I refer the reader to Schebeck (1968) and Waters (1989).

The alignment of the "here/this" varieties with the main linguistic subgroupings are as follows (see Heath 1980b and Tchekhoff and Zorc 1983):



Except for the terms marked with superscript all these words are the ABS/LOC form of the proximal demonstrative used in contemporary varieties. The figure in brackets indicate the (approximate) number of people with these linguistic affiliations. The Djinaŋ and Djinba figures are from Waters (1989) and the rest from Black (1983).

a. Waters (1989 p xiv) observes that *djinaŋ* is an archaic form, retained in only one dialect. In other dialects the contemporary variant is *djiniŋ(i)*.

b. Djinba is both a term for a specific clan and a general term designating a group of clan varieties which have the proximal demonstrative *djininy*. Waters (1989 p276) suggests that the use of the term may be an artifact of European researchers. There are very few people of these clans at Galiwin'ku. However one Ganalbiŋu teacher at Galiwin'ku voluntarily used this as a designation for her language variety, Ganalbiŋu being one of the Djinba speaking clans. If it is a western researchers artifact this indicates it has received some acceptance.

c. Ritharrŋu, like Djinba, also designates a specific clan name as well as the language of a group of clans. Sometimes the terms *yakuy* or *dhiyakuy* have been used to designate this group (see Wood (1978) and Schebeck (1968)). However, at Galiwin'ku I have found that this group is more generally referred to by the clan name. This is in accord with comments in Heath's Ritharrŋu grammar (1980b p2) and Wood (1978) who found that people in surrounding groups used the term

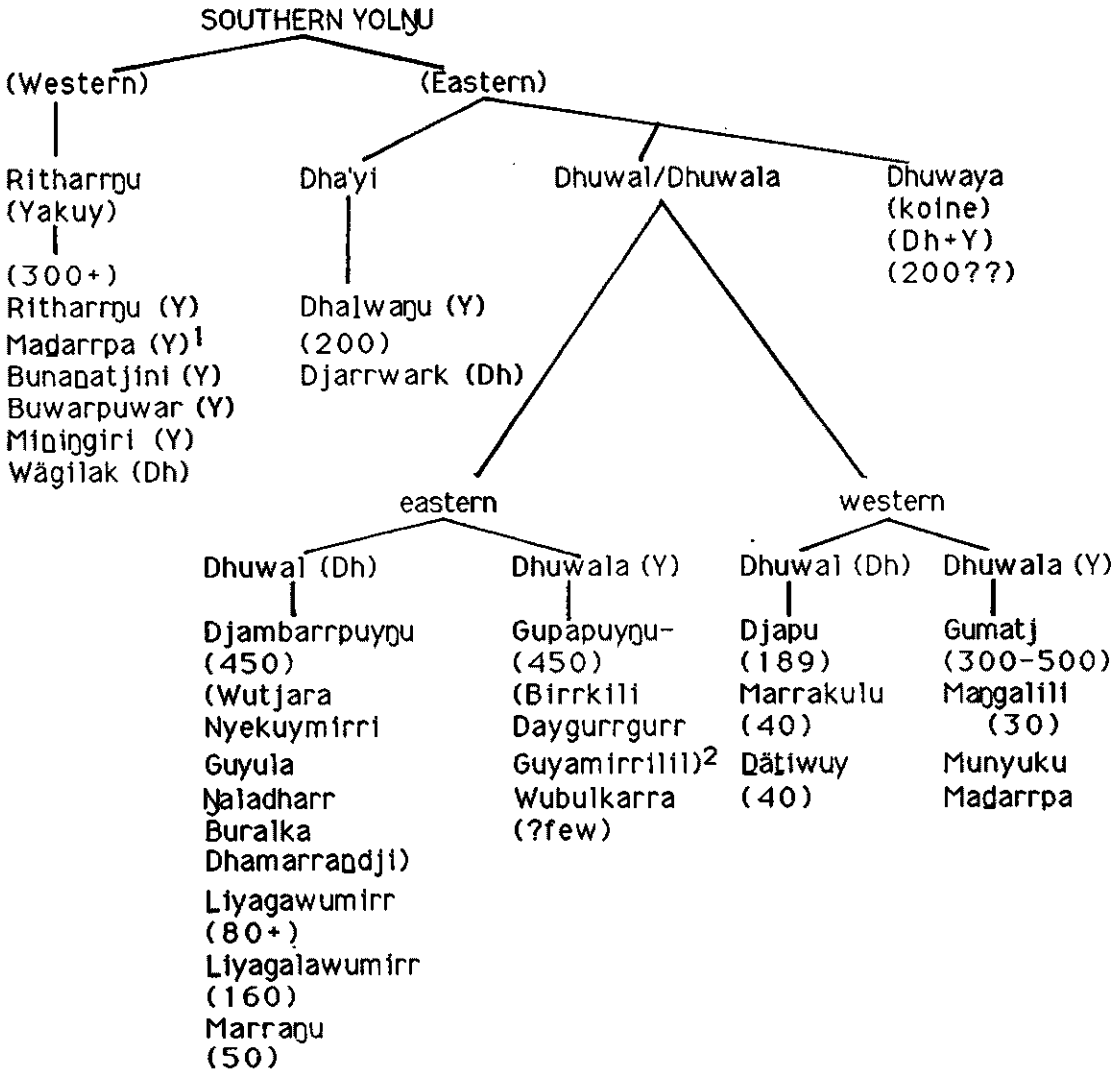
Ritharrŋu to refer to the language group. The contemporary proximal demonstrative is *yaku(y).*

d. Dhuwaya is a term which has come to signify two different varieties in the last few years Both are aligned with the Dhuwal/Dhuwala subgrouping. The traditional use is in reference to the variety spoken by one group of the Madarrpa clan. More recently it has been adopted as the name for the koine which has developed at Yirrkala.

Waters (1989 p176) proposes that the Western/Inland and Northern group together consititute a Northern Yolŋu subgroup. He indicates Nhaŋu-Dhaŋu-Djaŋu, Djinaŋ and Djinba as separate subgroups within this larger subgrouping.

As Djambarrpuyŋu is one of the Dhuwal varieties in the Southern sub-group the following Table presents the linguistic sub-branching within this group. The clan or sub-clan terms used at the lowest tier of vernacular linguistic classification are also shown.

Table 1: The Southern Sub-group



(Y) Yirritja moiety
(Dh) Dhuwa moiety
Figures in parentheses are taken from Black (1983) with the exception of the Liyagawumirr figures which are based on data from Galiwin'ku.

[1]The Madarrpa clan appears to consist of two groups, one of which speaks traditional Dhuwaya , and another which speaks Ritharrŋu. Amery (1985) reports the Dhuwaya speaking group as Moŋuk Madarrpa ("saltwater" Madarrpa) while in Heath (1980b) the Ritharrŋu speaking group is described as *mala-barrtjaray* "group-paperbark".

[2]Sub-clans for the western Dhuwal and Dhuwala clans Djambarrpuyŋu and Gupapuyŋu are indicated in parentheses. I have not listed here any of the sub-clans for eastern Dhuwal/Dhuwala and Dha'yi but it should be noted that both Djapu and Dhalwaŋu have two sub-clans and that Gumatj has three (see Morphy (1983) and Morphy (1984)).

The letters Y and Dh in the chart denote the moiety to which a particular clan belongs. Languages and clans, along with almost all phenomena in the Yolŋu world,

are associated with one or other of the moieties. These are referred to as Yirritja or Dhuwa in most Yolŋu varieties. The moiety names are also used by Yolŋu to talk about different varieties. It will be noted that this is of particular significance to the Dhuwal and Dhuwala groups, since all Dhuwal clans are Dhuwa and all Dhuwala clans are Yirritja.

The chart also incorporates some areal labelling. The labelling of the first split within the Southern group as western and eastern is found only in Heath (1980b) and is not one I will be using, since for my purposes the use of the terms eastern and western to distinguish between Dhuwal and Dhuwala varieties, originally noted in Morphy (1977, 1983), is the most relevant. When using geographical terms in relation to clans or smaller sub-groups I do so from the perspective of Djambarrpuyŋu and its main territories within the Yolŋu bloc. Thus I refer to Ritharrŋu as southern, Djinaŋ and Djinba as western and Gumatj and Djapu as eastern. These uses are to be distinguished from the labels for the main sub-groupings as Southern and Western.

1.1.2 Linguistic-land affiliations

Map 2, besides showing the general territorial affiliations of the Djambarrpuyŋu clan, also presents a general picture of the linguisitic affiliations of other tracts of land according to the traditional land-clan-language affiliations. Even though locations are only approximate it reveals clearly that similar or even identically speaking clans or sub-clans do not have contiguous territories. This is also the situation in regard to Elcho Island (see Map 3).

The information depicted on the maps is drawn from a number of sources. This includes information contained in language descriptions, such as Morphy (1983), Amery (1985) and Waters (1989), as well as in the anthropological literature, particularly that in Warner (1969 [1937]) and Shapiro (1981). The community schools and resource centres at Yirrkala and Galiwin'ku also provided maps and information regarding the location of homeland centres and their linguistic affiliations. Consultation with Yolŋu at Galiwin'ku both provided additional information and confirmed the general situation I have indicated in the maps presented here.

A glance at the maps will reveal that contiguous tracts of land may have linguistic affiliations that are closely related, such as between Dhuwal and Dhuwala, or

distantly related, such as between Nhaŋu and Dhuwal. On the basis of Map 2 it is also possible to see how the general "language" level groupings depicted in Map 1 were derived. However, while territories of clans affiliated with similar varieties are not contiguous they do fall within general regions. Thus Dhaŋu/Djaŋu is centered in the north-east and Nhaŋu in the islands to the north-west. These gross correlations, and the fact that marriage alliances were predominantly between groups not widely separated geographically, suggest that over time particular varieties within the Yolŋu bloc more regularly featured in the make up of every day socio-economic groups in particular localities. In a similar fashion particular clans are found in differing numbers at each of the main communities in the area today. It is expected that these will reflect traditional alliances.and/or the location of main territories of the groups concerned although the details of this have not to my knowledge been rigorously investigated. The regular marriage partners for Djambarrpuyŋu reported by Shapiro (1981) based on work in the late 1960s concur with those reported by Warner a generation before (1969 [1937]). Clans with which Djambarrpuyŋu are reported as regularly marrying are Warramiri (Djaŋu), Wanguri (Dhaŋu), Gupapuyŋu (Eastern Dhuwala), Dhalwaŋu (Dha'yi) and Ritharrŋu (for details of the sub clans involved and the relative symmetry of clans as wife-bestowers or takers see Shapiro (1981)).

These correlate with the clans found in greater numbers at Galiwin'ku today. They suggest regular interaction between western Dhuwal/Dhuwala, Dha'yi and Ritharrŋu speaking clans of the Southern subgroup, and the Dhaŋu/Djaŋu speaking clans of the Northern subgroup, may have occurred over a long period of time. Particuarly notable is the absence of regular intermarriage between eastern and western Dhuwal and Dhuwala clans. There are not insubstantial numbers of Gumatj at Galiwin'ku today, but they have tended to marry with other clans, the Gälpu (Dhaŋu) clan in many instances. I am not able to say whether marriages contracted since the 60s have been in accord with traditional alliances. It is the case that European contact has introduced pressures for, and effected changes in, the way marriages are contracted in the region.

From a linguist's perspective the traditional alliances suggest a likely domain for diffusion, given the close continuous contact between particular varieties that they provided. However much more work in the region is required to establish what networks existed and what linguistic correlations these might have had. It will be noted that the intermarrying clans connected with the Djambarrpuyŋu clan are drawn from the Southern and Northern language groups. Other known connections

between groups in the area also occur in the ritual domain and Thomson (1949) describes traditional trading networks. Heath (1981) documents extensive lexical diffusion between languages in south-eastern Arnhem Land. His description of the socio-linguistic factors giving rise to this diffusion portrays a situation which is, not surprisingly, parallel to that further in the north within the Yolŋu bloc, except that he is considering relations between distinct languages. Further north varieties may be distinguished at the level of 'language', but often the differences are dialectal/sociolectal.

1.1.3 Clans and language varieties at Galiwin'ku

Having given some context for the place of Djambarrpuyŋu in terms of its formal linguistic relations and a brief overview of the social place of clan varieties in the traditional context, I would like to now place Djambarrpuyŋu in the context of the contemporary situation regarding clans and language use/knowledge at Galiwin'ku since this is the context in which I did my field work.

There are some 27 Yolŋu clans represented at Galiwin'ku. 8 have 50 or more members, 4 between 10 and 50 and 12 less than 10. The language groups with the greatest representation are from the Southern and Northern sub-groups, the majority of people being from clans traditionally speaking Dhuwal/Dhuwala and Dhaŋu/Djaŋu. These numbers correlate with the shifts evident in the contemporary situation in which Dhuwal and Dhaŋu have become the predominant varieties learnt by younger people. For several clans there are not enough people with knowledge of the varieties to make use of them viable. This would include Djinaŋ, Djinba and Ritharrŋu speakers who have much larger populations elsewhere. The Nhaŋu speaking clans at Galiwin'ku are also represented in small numbers but this seems to be indicative of their relatively smaller population with respect to the Yolŋu group as a whole.

The list of clans represented at Galiwin'ku to be given below and the comments as to language use are drawn from various sources. Figures for the clan populations have been collated at various times by residents in the community. Devlin (1986p106) cites figures resulting from a local community survey by S Reaburn in 1981. I have also received the results of a survey in 1986 by B Gullick and M Pitman who were involved in work on clan records in the community. While not totally co-extensive they are in essential agreement. The comments on language use are drawn from Devlin's study of language maintenance at Galiwin'ku (1986) and a report on

the language situation at Galiwin'ku by Yolŋu teachers (Gondarra et al (1987)). The latter, while not a formal or quantified study of language use, is based on observations and investigation by long term Aboriginal residents in the community, generally aged in their thirties and from a variety of clan backgrounds. It is comprehensive of the community and provides information as to the current state of particular varieties not available elsewhere.

Table 2 indicates the populations for particular clans at Galiwin'ku as well as a preliminary findings as to the current status of their affiliated language varieties.

Figures in bold face indicate totals for each language group. Those in parentheses preceded by * in the first column are Black's figures for clan/language populations throughout the Yolŋu speaking area (1983).

The clans covered in the population counts are not totally overlapping. A "?" indicates that no information was available for that clan.

The terms used in the columns concerning fluency indicate whether there are fluent speakers, either children or adults, in the community.

The discrepancy in the numbers for the Gälpu clan is commented on in the discussion of Dhaŋu/Djaŋu clans at Galiwin'ku below.

Table 2: CLANS AT GALIWIN'KU

Language group	Clan name	Clan numbers From 1981	Clan numbers From 1986	Fluency children	Fluency adults	Population elsewhere
SOUTHERN						
Dhuwal	Djambarrpuyŋu					
	-Dhamarrandji	132	149	yes	yes	yes
	-Ŋaladharr		1	-	yes	most
	-Guyula	76	100	yes	some	yes
	Liyagawumirr	85	86	no	some	yes
	Dätiwuy	55	53	no	some	yes
	Marraŋu	6	20	no	some	yes
	Liyagalawumirr	3	?	no	yes	most
	Djapu	1	3	no	some	most
#(750+)		358	412			
Dhuwala	Birrkili	74	155	no	some	yes
	Gupapuyŋu Daygurrgurr Gupapuyŋu	35		no	some	yes
	Guyamirrilil	15	?	no	some	yes
	Wubulkarra	6	4	no	some	yes
	Gumatj					
	-Yunupiŋu	106	55	yes	some	yes
	-Burarrwaŋa		56	no	some	yes
	Maŋgalili	?	1	-	yes	most
#(800-1000)		236	271			
Dha'yi	Dhalwaŋu	51	57	no	some	yes
#(200)		51	57			
Yakuya	Ritharrŋu	16	22	no	some	most
	Wägilak	1	2	?	?	most
#(300+)		17	24			
NORTHERN						
Dhaŋu	Ŋaymil	11	10	no	some	yes
	Wangurri	126	114	no	some	yes
	Gälpu	197	97	some	yes	yes
	Golumala	54	53	no	some	yes
	Lamami	1	1	-	yes	no
	Rirratjiŋu	?	1	-	yes	most
		389	276			
Djaŋu #(600)	Warramiri	100	127	no	some	few
Nhaŋu	Golpa	7	8	no	some	no
	Gamalaŋga	?	8	no	some	yes
	Gunbirrtji	?	3	?	?	yes
	Murruŋun	1	?	?	?	yes
#(40?)		8	19			
WESTERN						
Djinba	Ganalbiŋu	6	21	no	some	most
Djinaŋ #(300+)	Manydjalpiŋu	2	?	?	?	most
	Totals	1167	1206			

Devlin studied language use at Galiwin'ku in the early 1980s for a doctoral dissertation (1986). It is focused on predominant language use and is not a detailed investigation of the extent of knowledge and use of clan varieties. He found a major correlation between the age of speakers and the predomiant varieties used, the use of speakers' own clan varieties and, in regard to Djambarrpuyŋu, some differences in nominal morphology.

The sample of 113 speakers from 16 clans was selected by stratified random sampling. The domains in which language use were considered were those of "home", "school" and "friendship".

The study confirmed the existence of a shift in the languages in predominant use. Djambarrpuyŋu was the variety with the widest use. Devlin suggests the number of regular speakers at Galiwin'ku and associated homeland centres is about 1000. He also showed that there was a threshold point around 40–45 as to whether a person regularly spoke their own clan variety. This correlates strikingly with the establishment of the mission 44 years prior to Devlin's study. He found that 83.3% of those aged over 40 regularly spoke their own variety while 73.7% of those under 40 did not. Of the younger group that could claim to regularly use their own variety, the majority belonged to the Djambarrpuyŋu clan. This distribution clearly reflects one of Devlin's findings, namely that the traditional clan affiliations are no longer reflected in productive language knowledge amongst those who were under 40 at the time of his study.

There were two parameters that went against these trends. The first was a difference in the use of one's own variety according to gender. In the sample overall only 21% of women had acquired their own variety compared to 46% of men. Even amongst older women in their fifties and sixties there were some who had adopted Djambarrpuyŋu for every day use. The second was the maintenance of Gälpu, although children of this clan also acquired Djambarrpuyŋu.

This overall distribution is intriguing and I am not in a position to comment on why this should be so on the basis of detailed investigation. However, factors that may be have contributed to this situation are the proportionately higher number of Dhuwal and Dhaŋu speaking clans at Galiwin'ku, exogamous marriage practice may explain why certain older women have switched varieties - assuming that they married Dhuwal speaking men and switched to using their husband's language rather than their own) and the reputed ostracism of the Gälpu clan associated with events in the past.

For further consideration of the process of, and reasons for, the shift to Djambarrpuyŋu I refer the reader to Devlin (ibid pp225-234). Particular emphasis is given to the role of the peer group whose contemporary existence and influence had been the subject of a study at Galiwin'ku by Williams during the sixties (see Williams 1971). This identifies a new and significant social grouping which evolved following the establishment of the mission with which the development of a single dominant variety could reasonably be connected (see also p196, p204)).

Devlin also posits a continuum in regard to Djambarrpuyŋu "from the traditional, to the widely spoken modern variety now generally being acquired as a first language, to developmental variants spoken by young children" (p239). The basis for the distinctions are confined to a consideration of the nominal morphology used by different speakers. Most of the specific alternations studied indicate child-adult variation. The distinctions between the traditional and modern varieties are based on tendencies relating to the degree to which particular phenomena occur i.e. frequency with which initial *ŋV-* syllables were deleted and the simplification in case marking allomorphy and compound suffixation. The traditional or "Good" Djambarrpuyŋu category is specifically allied with the language which appears in Bible translation work and is also characterized by the use of a greater range of lexical items. Modern Djambarrpuyŋu is the unmarked variety used in regular interaction at Galiwin'ku and in the school. I have little to say about these distinctions in this thesis which is largely based on the speech of older Djambarrpuyŋu clan members but does include material from Djambarrpuyŋu speakers in the late twenties and thirties. I suspect the material bridges both traditional and modern varieties in Devlin's continuum, a distinction that I believe warrants more detailed research.

I will now comment on the situation from the perspective of individual clans, drawing on Devlin (1986) and the Yolŋu teachers' account (Gondarra et al 1987). While Devlin focussed on the regular use of particular varieties, the Yolŋu teachers were focussing on the knowledge of particular varieties. Furthermore Devlin's sample included only 16 clans while the teachers were attempting to canvas the whole community. They thus present complementary as well as overlapping information. Devlin like myself recognised that even among younger speakers there is extensive passive knowledge of other varieties within the community. Working with Yolŋu ranging from their late teens to their thirties, I have been continually

surprised at their ability to write in their own varieties even if they do not regularly speak it.

The shift towards the use of a single variety in the main settlements is by no means complete and there are certain contemporary developments that raise questions as to the extent and/or rate at which this can shift might be expected to proceed. These centre on the continuing move to homeland centres, the "aboriginalization" of communities, in particular in the schools, the value placed on multilingualism and the maintenance of the ideology regarding the clan-language association. It has been made particularly evident to me by Yolŋu teachers' choice of language projects in their training programmes over the last five years that the ideology is maintained. Each year the majority choose to work with their "own" variety, or where this is a variety of wider use, choose to work on another in which they are interested. A group even presented a paper expressing their concerns at the declining use of varieties at the Cross Cultural Issues in Educational Linguistics Conference held at Batchelor N.T. in 1987.

In connection with clan identity it should be noted that even if clan members do stop using the variety with which they are traditionally affiliated, this does not destroy the importance of clan affiliation. The ties both to land and in the sacred/ceremonial sphere still remain.

In the following sections I consider each of the language groups and their representative clans at Galiwin'ku and summarize what I know of their linguistic status.

1. Dhuwal/Dhuwala/Dha'yi[3]

a) Dhuwal - Djambarrpuyŋu (132/150)
Guyula (Liya-dhalinymirr) Djambarrpuyŋu (76/100)
Liyagawumirr (85/86)
Dätiwuy (55/53)
Marraŋu (6/20)
Liyagalawumirr (3)
Djapu (1/3)

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[3] In some works this language is spelt *dhay'yi*. However the demonstrative paradigm indicates a root *dha-* not *dhay-*. There is some variation in the pronunciation of the sequence of a vowel plus a glottal stop and a semivowel. One variant is for an off glide to occur on the vowel preceding the glottal stop. For these reasons I have chosed to adopt the spelling *dha'yi*.

By far the majority of traditional Dhuwal speakers at Galiwin'ku are from the Djambarrpuyŋu and Liyagawumirr clans. There are quite a number of Dätiwuy but only a few Liyagalawumirr, Djapu and Marraŋu clanspeople. Greater populations of these groups are found in other areas. Liyagalawumirr are found further west (e.g. at Milingimbi and Ramingining), and Djapu people are found further east (Waŋŋawuy homeland centre and Yirrkala). Dätiwuy are also found at Yirrkala and various homelend centres.

The Galiwin'ku clan population surveys only recognized three Djambarrpuyŋu groups. The groups referred to simply as Djambarrpuyŋu or as Dhamarraŋŋji in the table largely consist of people affiliated with territory on the eastern side of Buckingham Bay, i.e. the Wutjara and Nyekuymirri subclans (see Map 2).
One of the problems in interpreting the descriptions of Djambarrpuyŋu is that a single "surname" is commonly used for all the sub-clans, namely Dhamarraŋŋji. Note that in the six Djambarrpuyŋu groups described above the term Dhamarraŋŋji was allied with the eastern most sub-clan. The general use of this term as a "surname" is a practice adopted following contact. I suspect that the figure given for 1986 is used to distinguish the Wutjara and Nyekuymirri sub-clans from the Guyula.

It is noteworthy that the report (Goŋŋarra et al 1987) only distinguishes Liya-dhalinymirr (Guyula) Djambarrpuyŋu separately from other Djambarrpuyŋu. These are presumably the two largest subclans within the Djambarrpuyŋu population living at Galiwin'ku. The Guyula sub-clan is affiliated with the southern-most Djambarrpuyŋu territory, south of Buckingham Bay. Comments were made that this group had musical links with both Djambarrpuyŋu and Liyagawumirr. The person writing the report on the Liya-dhalinymirr claimed they spoke similarly to both Djambarrpuyŋu and Liyagawumirr. In turn the report on Liyagawumirr speech described it as being *galki* "close" to both Djambarrpuyŋu and Liyagalawumirr. Just what this closeness means linguistically is not yet known, although speakers claim different pronunciation patterns and distinct open class lexical items. The distinctions between these three clan varieties and possibly also between the two Djambarrpuyŋu groups needs further clarification. It should be noted that Liyagawumirr and Liyagalawumirr territories are to the west of those belonging to Djambarrpuyŋu, those of Liyagalawumirr being the most westerly.

I know of only a single Ŋaladharr Djambarrpuyŋu person at Galiwin'ku, which agrees with the figures given for 1986. Larger numbers of this subclan are said to live at Ramingining.

Neither survey mentions the Buralka and the eastern most Dhamarrandji sub-clans. It is not clear whether they have been subsumed in the "Djambarrpuyŋu" or "Guyula" figures or not. There are a few Buralka Djambarrpuyŋu living at Galwin'ku.although I am not sure of the size of the group. Other members of this group live at Gapuwiyak. It is associated with land to the south of Buckingham. I believe that the small group of clanspeople referred to as Dhamarrandji, and associated with Bremer Island, live in the Yirrkala area.

Another factor which needs further consideration is whether the term Djambarrpuyŋu has been applied to the lingua francas developing at various communities beyond its association with the Djambarrpuyŋu clan. It is possible this usage may reflect the "western Dhuwal" grouping rather than the spread of one particular clan variety throughout the region. An older speaker once stated to me that some speakers of Dhuwal at Galiwin'ku follow Djambarrpuyŋu and some Liyagawumirr while at Milingimbi they follow Liyagalawumirr. This is a different perspective from those that describe all three as the same. An examination of the particular varieties would no doubt be illuminating in respect to understanding the basis for these comments.

The other Dhuwal clans on the list have lands further west, those of Marraŋu and Dätiwuy in the Arnhem Bay area and those of Djapu even further to the west and south. These all have features distinct from the western Dhuwal varieties. The differences between Djapu and Djambarrpuyŋu will be a major focus of this thesis. The distinctiveness of Marraŋu and Dätiwuy from other Dhuwal varieties is indicated in Schebeck (1968). In the limited data I have seen for both these varieties I can identify certain morphemes which are distinct from those found in Djambarrpuyŋu but the full extent of the relationships has yet to be documented.

It will be noted in Table 2 that the children of all the Dhuwal clans except Djambarrpuyŋu are described as not speaking their own variety. For those with substantial numbers at Galiwin'ku it may represent a shift in variety used by the clan as a whole, while for those with smaller numbers, their own variety may still be viable amongst larger populations elsewhere. However, more needs to be known about the relationship between the western Dhuwal varieties, as well as about the

use of particular varieties by children in other areas before one can be more precise about the current state of linguistic affiliations of whole clans.

Adults in all Dhuwal speaking clans at Galiwin'ku were attributed with knowledge of their own variety. In Devlin's sample adults of the Djambarrpuyŋu and Liyagawumirr clans, but not Dätiwuy or Marraŋu, were found to regularly use their own varieties.

b) Dhuwala - Gupapuyŋu (Daygurrgurr) (35)
Gupapuyŋu (Birrkili) (74)(older people at Galiwin'ku speak Djaŋu)
Gupapuyŋu (Liyalanmirr/Guyamirrilil) (15)
Wubulkarra/Wolkarra (6/4)
Gumatj (106/111)
Maŋgalili (1)

The first three Gupapuyŋu clans are well represented at Galiwin'ku and despite a number of adults who know their own languages, the younger clanspeople are speaking Djambarrpuyŋu. The shift of clans traditionally affiliated with Dhuwala to a Dhuwal variety appears to be an ongoing one. The "official" language of the bilingual programme at Milingimbi is Gupapuyŋu but shifts to Dhuwal by younger people have prompted discussion about changing the programme there.

The linguistic affiliation of the Birrkili group posed a problem for those compiling the report (Goŋdarra et al 1977). After some research it was agreed that the original variety had been Dhuwala but that for those members of the clan now at Galiwin'ku there had been a switch to Djaŋu sometime in the past. As I understand it the shift was associated with the death of one man and the raising of his children by a Djaŋu speaker. The shift was justified in relation to the travels of Ancestral beings which linked the relevant groups. This is evidence of a shift in linguistic affiliation occurring prior to the changes that brought about the larger scale shift to Djambarrpuyŋu.

Gupapuyŋu clans are also well represented at communities and outstations in a general area basically to south and west of Galiwin'ku - Milingimbi, Gapuwiyak, Mäpuru, Ramingining. Their territories are found between the Woolen River and the western shores of Arnhem Bay.

As for Dhuwal a distinction exists between eastern and western Dhuwala varieties. Gupapuyŋu and Wubulkarra are western varieties. I have not come in contact with Wubulkarra but Schebeck (1968) suggests it it is distinct from Gupapuyŋu. The

only representatives of the eastern group at Galiwin'ku are Gumatj and Maŋgalili. The Gumatj are found in substantial numbers and both groups include children who are speaking Dhuwala. Their main land affiliations are much further east where a much larger population of these clans is located. Gumatj was for many years the official variety of the bilingual programme at Yirrkala. However, there has been major shift in language use at Yirrkala and many younger people now use a koine, often referred to as Dhuwaya, described in Amery (1985). It has become so widely spoken at Yirrkala that, once problems with it being given recognition within the community were overcome, it has been introduced into the early years of the bilingual programme (see Amery 1985). The variety I have heard used at Galiwin'ku, and that reported in Gondarra et al (1987) as being spoken by Gumatj residents at Galiwin'ku, is Gumatj, not the koine Dhuwaya.

Knowledge of Gupapuyŋu was confined to adults, but some children were attributed with a knowledge of Gumatj and Maŋgalili. In Devlin's sample which included Gumatj and Gupapuyŋu, only Gumatj was found to be used regularly.

c) Dha'yi - Dhalwaŋu (51)

There are several members of this clan at Galiwin'ku. The clan is also represented at communities and outstations to west, south and east of Galiwin'ku - Milingimbi, Gapuwiyak, Gurrumuru, Gaŋgaŋ and Yirrkala. At Galiwin'ku older people still use their own variety but again younger people are speaking Djambarrpuyŋu. In Devlin's study it was not a variety that was regularly used.

This variety has not been described in detail but its traditional land affiliations are interestingly placed between the western and eastern Dhuwal/Dhuwala groups. Zorc's findings on the basis of his functor analysis suggested this was a "well marked" dialect within his proposed Southern sub-group and even suggests it might prove to be an independent subgroup (Zorc 1979).

2. Dhaŋu/Djaŋu

a) Dhaŋu - Dhuwa

Gälpu (197/97)
Golumala (54/53)
Ŋaymil (11/10)
Rirratjiŋu (1)

Yirritja

Wangurri (126/114)
Lamamirr (one living member)

Dhaŋu is the variety most extensively acquired by children at Galiwin'ku other than Dhuwal. It is however, chiefly associated with the Gälpu clan. The number of speakers was such that for a while a special Gälpu class was established in the school. This is the only case of which I am aware in which a variety from outside the Dhuwal/Dhuwala sub-grouping was formally incorporated into an education programme. A large scale movement of the clan away from Galiwin'ku in the mid-eighties brought it to a halt. This movement also explains the large discrepancy in the figures for the Gälpu clan in 1981 and 1986 given in Table 2.

All Dhaŋu lands, as far as I know, are to the east of Galiwin'ku. Dhaŋu clanspeople are also found in many communities and homelend centres to the east of Galiwin'ku. Some Golumala are also found at Milingimbi. In the movement that saw Gälpu leave Galiwin'ku in the early eighties, quite a number went to Goulburn Island, an island much further to the west outside the Yolŋu area.

According to Gondarra et al (1987) there were adults in all Dhaŋu clans who spoke Dhaŋu. Gälpu was also described as being in regular use amongst some family groups, including the children. However, in others Djambarrpuyŋu was the variety regularly used. It was also noted that at Yirrkala some children were using Dhuwaya. Knowledge of Golumala and Wangurri is attributed to adults while younger people, some of whom could "hear" their own language, regularly speak Djambarrpuyŋu.

In Devlin's sample only Gälpu and Ŋaymil were found to be used regularly. The other Dhaŋu clans included in his sample were Wangurri and Golumala.

b) Djaŋu - Warramiri (100/127)

There are several members of this clan resident at Galiwin'ku. According to Gondarra et al (1987), while older people can be heard speaking it on occasions, younger people are speaking Djambarrpuyŋu. Some of the younger adult men also use their own variety. Devlin also found Warramiri was a variety still in regular use.

Their lands are found in an area extending from Elcho Island eastward to the English Company Islands and the mainland south of them. Like Dhaŋu clanspeople they are also found in communities and homeland centres to the east of Galiwin'ku.

Dhaŋu and Djaŋu are closely related. One of the key markers of difference is the alternation between the interdental and palatal stops reflected in the proximal demonstratives, which are used eponymously for these varieties.

3. Nhaŋu

Dhuwa	Yirritja
Gamalaŋga (8)	Golpa (7/8)
Murruŋun/Guŋbirrtji (1/3)	

The Nhaŋu group, at least as represented at Galiwin'ku, is in the most precarious state of all the language groups. The numbers are very small and knowledege of the language confined to the few older clan members and to older people who are related to Nhaŋu clans matrilineally. There are a few people in this latter category for the Bararrŋu and Barrarrpararr clans, two Nhaŋu speaking clans with no living members. Except for the Golpa, whose last remaining family group is centred at Galiwin'ku, most Nhaŋu clans are more strongly represented further west, around Milingimbi and Maningrida. Murruŋun (Guŋbirrtji) are the traditional owners of the land where the settlement of Galiwin'ku is found, but there are very few residents.

Traditional Nhaŋu clan territories are found in an area extending from the Crocodile Islands eastward along to the Wessel Islands.

The younger Golpa clan members, in a shift unique to them as far as I know, generally speak Gälpu (dhaŋu) in everyday interaction and have a passive knowledge of their own variety as well as a knowledge of Djambarrpuyŋu. Attempts to use it are made during stays at their homeland centres in the Wessel Islands. This is the only case of which I am aware in which the contemporary shift of younger people at Galiwin'ku has not been to Djambarrpuyŋu. Included in Devlin's sample, it was not found to be a variety in regular use.

The Gamalaŋga were not included in either the teachers' report or Devlin's sample, so I am unable to comment on its status.

4. Others

There are representatives of a few other clans from the Yolŋu bloc but in the Gondarra et al (1987) they are attributed with too few clan members at Galiwin'ku for them to use their own varieties. While they may be speakers of their own

varieties, they have adopted Djambarrpuyŋu as the variety for every day interaction at Galiwin'ku. These are also included in Devlin's sample as not being in regular use.

Dhuwa	Yirritja
Wägilak (Yakuy) (1/2)	Ritharrŋu (Yakuy) (16/22) Ganalbiŋu (Djinba) (21)

Wägilak and Ritharrŋu are clans from the southern part of the Yolŋu area while Ganalbiŋu territory is further west. According to Heath (1980b) Ritharrŋu is spoken by substantial numbers, including children, at Ngukurr, Lake Evella (Gapuwiyak) and a number of homeland centres. Ganalbiŋu is still spoken by clanspeople found in communities further west in the Ŋaliyindi and Ramingining area.

Aborigines from outside the Yolŋu area, usually coming to the community through marriage, are also often in a similar situation. Other Aboriginal people resident at Galiwin'ku during my visits have included Warlpiri, Arrernte, Luritja, Murrinh-Patha, Ndjébbana, a Torres Strait Islander and a Kriol speaker from Ngukurr.

In addition there are some 70-100 English speaking *balanda* residents in the community. *Balanda* is a local term often used to refer to Europeans. It is a Macassan loan derived from *balanda* "Holland/Hollander" (see Zorc 1986). The English generally heard is targeted at standard Australian English. Kriol or perhaps some pidgin variety is heard occasionally, particularly from older people who worked as drovers or on the ships that travelled between Darwin and Arnhem Land in the past. Younger people who have had contact with Aborigines from other areas may also acquire some Kriol, but it is not a variety found in every day interaction. There are some Kriol loans which are commonly used in the community.

The current situation both at Galiwin'ku and in the region generally, is highly complex and still in a state of transition following the major social changes of the last half century. While we do not have the details of actual language knowledge and use throughout the region it would seem likely that the shift to dominant varieties in the major settlements will continue. However, with increasing autonomy and control within communities and school, the general movement of people to homeland centres with their smaller and more traditional social groups, and the retention of the clan-language ideology, the potential for maintenance of additional varieties would also not appear to be unrealistic. The key factor would seem to lie in th-

strength and viability of the clan-language ideology in the face of the social changes taking place.

There is one final influence on Yolŋu languages that needs to be mentioned before concluding this description of the general background to Djambarrpuyŋu. For two or more centuries Macassan traders made annual visits to this part of Australia primarily to collect trepang (*bêche de mer*). Macassar (Udjung Pandang) was a major trading centre in what is now southern Sulawesi Indonesia. The impact on the language and culture of this part of Australia is reasonably well documented (see MacKnight (1976), Urry and Walsh (1981), Walker and Zorc (1981), Warner (1969 [1937])) and Cooke (1987). Austronesian languages which have been identified as source languages for a substantial number of loans in Yolŋu varieties are Makassarese and Buginese (see Walker and Zorc (1981)). However the range of languages spoken by these northern traders was not confined to these two. Urry and Walsh (1981) have suggested that a pidgin, referred to as 'Macassar language' was used by people of north Australia, both to interact with Macassans and with Aboriginal groups with whom they did not share a common language. The trepang industry was halted by the Australian Government in 1906 and today knowledge of Macassans and "Macassan" in the Yolŋu speaking area is generally confined to stories people recall being told by their parents or grandparents (see Cooke (1987) for some examples).

1.1.4 Dhuwal/Dhuwala

Within this linguistic area a fundamental classification of language varieties is made according to the form of the term which is roughly translated as "this or here" (the proximal demonstrative). It is part of the local idiom to described some linguistic varieties as Dhuwal and others as Dhuwala, *dhuwal* and *dhuwala* being the proximal demonstratives in the relevant varieties. As indicated in section 1.1.1 Djambarrpuyŋu is one of the Dhuwal/Dhuwala varieties of the Southern Yolŋu sub-group. There are seven traditionally Dhuwal speaking clans and six traditionally Dhuwala speaking clans in the region. Dhuwal/Dhuwala appears to have the most extended range and the greatest number of speakers of all the Yolŋu sub-groups.

One of the goals of this thesis is to extend the descriptions of the relationships between these varieties. Given the fact that they are closely related varieties, fairly detailed information is required to determine the areas of difference. However, it should not be forgotten that while the focus here is on differences, the

varieties are closely related. It is assumed that all varieties are mutually intelligible, although this is problematic given that the speech community is multilingual. It is also likely that mutual intelligibility could be graded according to the relative geographical locations. The comparative work by Zorc (1978, 1979)), Capell (reported in O'Grady et al (1966)), Wood (1978) and Schebeck (1968) all attest to a close relationship between these particular varieties.

There is information available to attempt a comparison for four Dhuwal/Dhuwala varieties, Djambarrpuyŋu and Gupapuyŋu in the west and Djapu and Gumatj in the east. Given the current level of description the comparison is more extensive for phonology and morphology than for syntax, discourse and the lexicon. For Djapu material I rely on Morphy (1983), for Gupapuyŋu on Lowe (n.d.a) and for Gumatj sketch by Ross (n.d.) and information in Amery (1985) which is also attributed to Joyce Ross, a Uniting Church linguist who worked at Yirrkala for many years.

Fortunately the distribution of these four varieties enables a comparison between Dhuwal/Dhuwala varieties which are spoken in quite different locations. In regards to both traditional land affiliations and alliances and current population centres, Gupapuyŋu and Djambarrpuyŋu are geographically located in the west of the Dhuwal/Dhuwala areas and Djapu and Gumatj in the east. It thus becomes possible to identify the features that are common to Dhuwal or Dhuwala varieties and those which are shared between Dhuwal/Dhuwala varieties spoken in the same general region.

Morphy (1977) has identified a particular process as being common to Dhuwal varieties. It is clear that a vowel deletion process has applied to selected morphemes in all Dhuwal varieties in the past. The following Gupapuyŋu clauses and their Djambarrpuyŋu counterparts will give a preliminary indication of what this involves:

Gup.	*dhuwala+nydja*	*yätjkurru*	*mirithirri*	*bili+na*	*ŋarra dhipuŋuru+nydja*
Djamb.	*dhuwan=dja*	*yätjkurr*	*mirithirr*	*bili+n*	*ŋarra dhipuŋur+nydja*
	"this/here"+PROM	bad	Intensifer	COMPL+SEQ	1sg "this/here"-ABL+PROM
	This is really bad. I'm finished here				

Gup.	*ga balanya*	*dhäwu+nydja*	*limurru=ŋgu*	*ŋarra+kuŋu*
Djamb.	*ga balanya*	*dhäwu+ny*	*limurru=ŋ*	*ŋarra+kuŋ*
	and such	story+PROM	1+2pl=DAT	1sg+OR
	And such is our story from me			

Morphy highlights the social basis for this distinction, and the importance speakers attribute to it over that of geographical differences. One clear social correlate in this instance is that between the variety spoken and moiety. Thus all Dhuwal speaking clans belong to the Dhuwa moiety and all Dhuwala speaking clans belong to the Yirritja moiety (see Table 2). There is never any overlap in the areas of land or sacred/ceremonial lore associated with the two moieties, but links do occur between clans within each moiety.

The nearest parallel to this in other groups is in the Dhaŋu/Djaŋu sub-group where all the Djaŋu clans are Yirritja. However Dhaŋu clans are both Dhuwa and Yirritja, so it is not possible to make the same categorical alignment with the two moieties as is possible for Dhuwal/Dhuwala. Nhaŋu and Djinaŋ speaking clans are also of mixed moieties.

Morphy (1977, 1983) presents some data for Djapu, Gumatj and Gupapuyŋu. In section 2.4.6 I present an overview of the morphemes affected by vowel deletion in Djambarrpuyŋu. There, and where relevant in other sections of the grammar, I also consider the relationship between the four varieties.

A number of linguistic correlations with geographical locations have come to light. They are phonological (e.g. the presence or not of a stop contrast), morphological (e.g. differences in pronominal stems, ERG suffix allomorphy and stems used for the CAUS suffix), syntactic (e.g. the coding of non-finite (relative) clauses and the presence or not of metrical tense distinctions) and pragmatic (e.g. the presence or not of a contrastive discourse suffix).

There are also certain linguistic features which occur in only one of the four clan varieties considered here. For instance, Gumatj has a distinct imperative verb inflection that does not occur in the other three, Djapu has a distinct set of Dative pronominals and Djambarrpuyŋu uses the form *nhäkurr* as its Allative interrogative (v *wanhamal/wanhawal*). Compared to Gupapuyŋu, Djambarrpuyŋu has a much more restricted domain for the stop contrast. Djapu and Djambarrpuyŋu, while both Dhuwal varieties display some variation in the morphemes to which vowel deletion applied as well as in the allomorphy associated with it. Further research may find that certain of these features are held in common with other Dhuwal or Dhuwala varieties spoken within the same region. It is also possible some seemingly unique features will be shared with a Yolŋu variety outside of the Dhuwal/Dhuwala group.

Some evidence for this occurs in regard to final vowel deletion, which is also evident in cognates from Dha'yi and Dhagu varieties and thus not confined to Dhuwal.

One area I make very little comment on is the association of open class lexical items with particular varieties. It is clear that people from Yirrkala and Galiwin'ku do not have a completely overlapping lexicon and speakers can readily attribute specific lexical items to one region or another. Furthermore I have found speakers agreeing on similar claims in regard to which of two Dhuwal varieties spoken at Galiwin'ku specific lexical items belong. However, it is also apparent that there is a large overlapping lexical pool within the region. Much more fine grained lexicographical work will be required before the situation can be clarified. A problem for work in this area is that the distribution of lexical items appears to have been affected by the recent socio-linguistic changes. Comments by older speakers point to the the loss of particular words or particular senses from general use, as well as to the general "mixing" of lexical items from different varieties in younger people's speech.

While there is still much scope for refining our understanding of the relationship between different Dhuwal/Dhuwala varieties it is clear that the linguistic situation is not captured neatly as either a series of geographical dialects or of socially defined sociolects. Nevertheless people have used these terms to account for this situation (Schebeck (1968), Heath (1981) and Morphy (1977) for example). Following Gregory (1967) I use the term 'varieties' to refer to recognizably different forms of speech in this area. In Gregory's usage 'varieties' can be used for a wide range of contextual categories which includes what have elsewhere been termed dialect, sociolect and so on.

1.2 Previous investigations

The earliest known published work is that of Rev. J.C. Jennison's *Notes on the language of the Elcho Island Aborigines* (1927). This contains some short general notes in regard to the sounds such as the presence of a glottal stop and the absence of fricatives and the evidence for Malay influence. He presents a short list of Malay cognates and an extensive list of words and some clauses attributed to the Kokalango Aborigines at Elcho Island (around 800 entries). I am not aware of Kokalango as a general term for the people of Elcho, although Devlin (1986) attributes it to a derivation based on the English word "God" plus the OBLS-*kalagu*). Jennison does include "Jambarapi" and "Kopapiungu" as sections of this tribe. These last words

are recognizable as Djambarrpuyŋu and Gupapuyŋu. In fact many of the examples he gives appear to be from a Dhuwala variety of which Gupapuyŋu is one.

In more recent times the the Uniting Church Bible Translator at Galiwin'ku has published an article on Djambarrpuyŋu Clauses (Buchanan 1978) using a tagmemic framework. She has also developed some materials for language lessons for people working in the community and in earlier years was closely connected with work in the school. In more recent years the focus of her attention has been on translation. Language analysis materials, including text transcriptions, were kindly made available and have been useful resources for my own work.

The typologist, C. Tchekhoff, has collobarated with D. Zorc on the study of syntactic and discourse patterning in Djambarrpuyŋu. One result of this collaboration is a detailed account of discourse strategies in Djambarrpuyŋu (1983).

Rudder's (1983) examination of the classificatory system in Djambarrpuyŋu draws on his long term knowledge of the language and he is now engaged in a broader study for a PhD at the Australian National University dealing with cosmology.

There is also a collection of texts and a sketch grammar for both Djambarrpuyŋu and the Dhuwal variety, Djapu, by Heath (1980a) collected from four speakers living at or visiting Numbulwar and Ngukurr. Both these communities are well to the south of the traditional Djambarrpuyŋu speaking areas and it is not a variety regularly spoken in them. This sketch provides an accompaniment to the texts rather than a thorough analysis of the grammar of the two varieties. One off shoot of this text collection is a study of kin terms in Dhuwal (1982). Heath has presented the most comprehensive account of the Southern Yolŋu variety Ritharrŋu (1980b). On the basis of detailed investigation of a range of languages and varieties in this region Heath has also considered the effects of linguistic diffusion (1978a, 1981).

There is however some extensive material available for other Dhuwal/Dhuwala varieties. The first detailed work of any Yolŋu variety was undertaken by Beulah Lowe, a Methodist (now Uniting Church) linguist working at Milingimbi during the 1950s and 60s. From 1958 she was involved in full time language work producing Gupapuyŋu materials for the school and for language learning programs for mission staff. Unlike other areas of Australia, language learning was mandatory for those who came to work on the mission. Her most extensive work was a pedagogical grammar consisting of 100 lessons to cover a two year course of study. All aspects

of the grammar are outlined. A 'temporary' dictionary of some 3,000 entries was compiled at Milingimbi in the mid seventies based essentially on Beulah Lowe's work. Also building on the work of Beulah Lowe are pedagogical materials prepared by Williams (1981) for use in Australian schools.

Morphy's (1983) study of Djapu is among the more detailed grammatical accounts for the languages of this area. She has also drawn attention to the intricacies of sociolectal variation in north-east Arnhem Land (1977).

The language situation in the Yolŋu area has been described by Schebeck (1968) and Amery (1985). Devlin (1986) focuses on language maintenance at Galiwin'ku. Schebeck has also produced a number of studies on syntactic and semantic aspects of Yolŋu varieties (1976a and b, 1978). In a series of studies Waters has concentrated on Djinaŋ and Djinba (1980a and b, 1983, 1989). Wood has examined phonological patterns in Gälpu (1977, 1978) and has provided the most extensive account of aspects of the grammar (n.d.).

In a number of studies Stephen Harris has discussed Yolŋu rules of interpersonal communication and their implications for education (1977, 1980, see also 1990). Christie has also considered the role of language in Aboriginal education drawing on research carried out at Milingimbi (1985).

Dictionary and ethnographic publications in connection with work in education at Galiwin'ku include Rudder's Introduction to Yolŋu Science (1977) and Galpagalpa et al's Djambarrpuyŋu Wordlist (1984). There are of course many publications in Djambarrpuyŋu produced in connection with the Bilingual programme as well as in connection with the Bible translation work.

Much of the dictionary work done within the Yolŋu area over the previous two decades was amassed and extended by Zorc (1986) in the Yolŋu-Matha Dictionary. This has proved an exceedingly useful compilation. It is a dialect dictionary including and marking as such many varieties.

Detailed linguistic research for their doctoral dissertations is now in progress on two Yolŋu varieties; Anita van der Wal on Gupapuyŋu and Maralyn McClelland on Wangurri.

1.3 Fieldwork and data collection

My first direct exposure to Yolŋu varieties was a ten month appointment with the Northern Territory (NT) Department of Education at Galiwin'ku in 1980. My task was to compile dictionary materials in Djambarrpuyŋu and to explore areas of linguistic research with implications for Aboriginal education.

I carried out further dictionary work on Djambarrpuyŋu at Yirrkala for nine months in 1984, again under the auspices of the NT Department of Education.

I had thus spent about a year and a half in a Yolŋu speaking environment before I began my doctoral research at Galiwin'ku in late 1985. This short trip of two and a half months was followed by a period of six months of linguistic research in 1986.

Because the basic facts of linguistic structure of Djambarrpuyŋu and a number of closely related varieties were already available I was able to focus on eliciting text material and considering to what extent the existing grammatical summaries were reflected in actual occurring Djambarrpuyŋu discourse.

But the impetus for this approach was not merely that reasonably detailed grammatical descriptions were extant. Heath (1984) has argued cogently for the value of a text based approach as the essential underpinning for a reference grammar of an unfamiliar language (ibid p4). The work of Waters on Djinaŋ (1989), produced while I was in the process of analysis and writing, confirms the value of a text-based approach.

Since 1986 I have maintained contact with my language consultants through a number of short visits back to Galiwin'ku. These have been in the capacity of Linguist involved in the community-based language component of the Batchelor College teacher training programme. This enabled me to return in 1987, 1988 and 1989.

A number of times Aboriginal people from the Yolŋu area visited me in Sydney and shared their linguistic experience. In between these visits we exchanged long and very profitable telephone calls.

In all I assembled a textual corpus of some twelve and half hours on tape. The texts are all from elders of the Djambarrpuyŋu clan. More specifically they are all from members of the Nyekuymirri and Wutjura sub-clans, except for one tape which is a conversation between elders in the Nyekuymirri and Guyula sub-clans.

Speakers were allowed a reasonably free hand in the choice of subject matter. The range of topics is quite diverse and includes life histories, descriptions of rituals associated with circumcision and death, behaviour/practices associated with particular kin or social roles, hunting procedures, traditional medicines, descriptions of clan groupings and comments on various features of contemporary life, such as the current state of various outstations or the activities of managers associated with a particular place that is being visited, recent hunting trips and overseas travel. Various topics of historical interest arose, including descriptions of relatively recent family histroy, the trading, collection and preparation of trepang (bêche de mer), droving, and work on boats travelling the northern coast during mission days. These often drew comments on the contact between Yolŋu and Europeans and the changes that had been/were occurring. Topics which have figured more prominently in anthropological and ethnographic literature of the area, such as myths and traditional stories, songs and descriptions of highy sacred/closed rituals do not feature prominently in the corpus, if they occur at all. In fact I can recall only two texts which were primarily concerned with the activities of ancestral beings. One domain that does figure somewhat largely, and which stemmed from my earlier dictionary work, was that of word meanings. In providing descriptions of the use/meaning of words in the vernacular, speakers invariably introduced a wide range of valuable ethnographic information. A few texts other than narrative, descriptive, procedural monologues were also recorded. There are two quite extended texts from the main consultants regarding access to their material which are concerned with future events and addressed to unknown audiences. In two shorter texts I am addressed directly, in one the speaker suggests to me alternative ways in which I may have gone about linguistic research in the community and in another exhorts me not to cut my hair. There is also one twenty minute tape in which two older women conduct a question/answer exchange on hunting techniques.

Most speakers were concerned that what was recorded on tape was "proper" Djambarrpuyŋu and the taped material must be viewed as being monitored to some extent. For the purposes of this description the speech of these older speakers, who often spoke for at least ten minutes without requiring a halt in the recording, is

assumed to represent a standardized version of Djambarrpuyŋu. It should be noted that none of the older speakers were reticent about being recorded and, unless they were tired, never seemed to have any difficulty in producing material for the tape.

Each tape was transcribed but only a proportion (amounting to about nine and a half hours) of the corpus has been worked through in detail. In this the ideal was to provide a morpheme by morpheme analysis. Inevitably this process threw up details of linguistic structure which were not present in linguistic descriptions and which required further investigation.

In elicitation work concerning tense-modality/mood-aspect I used a prepublication questionnaire on the details of tense-aspect systems prepared by Östen Dahl (details of the questionnaire and the results of his survey apear in Dahl (1985)).

Extant transcriptions and documentation concerning the tape recordings are lodged with the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), GPO Box 553, Canberra ACT 2601.

1.4 Typological overview.

Typical of Pama-Nyungan languages, Djambarrpuyŋu is a highly agglutinating, suffixing language. It is typologically quite distinct from the prefixing languages surrounding the Yolŋu bloc. For example, it does not show noun classification, another prominent feature of the surrounding languages.

Phonologically it is unexceptional for an Australian language, except that, like a number of languages in this region, it shows a phonemic contrast in stops. The presence of a phonemically distinct glottal stop is also relatively unusual in the phonology of Australian languages.

Parts of speech can be grouped into three broad categories, nominals, verbals and particles.

The language possesses rather complex morphology, both nominal and verbal. Pronominal morphology is particularly rich. There are separate paradigms for basic and emphatic pronouns. One of the main uses of the latter is to code coreference between intra-clause participants. Like many Australian Aboriginal languages case marking on nominals is according to a pattern of split-ergativity.

There is an elaborate array of case distinctions marked on nominals. Many of these case markers are also employed to mark non-finite clauses and distinguish among them on semantic grounds.

The class of particles is heterogeneous and its members are particularly difficult to specify semantically. The substantial textual corpus on which this description is built indicates that particles play a very significant role in textual cohesion.

Word order is not strict and it is not unusual for constituents which can be regarded as a functional unit to be formally discontinuous.

CHAPTER 2

SOME PHONOLOGICAL PRELIMINARIES

In this chapter I give a brief overview of Djambarrpuyŋu segmental phonology and phonotactics. These are in keeping with other Yolŋu varieties whose phonology has received some attention in the literature: Schebeck (1976 (I refer the reader also to Schebeck 1972)), Wood (1977, 1978), Lowe (1975), Morphy (1983), Heath (1980b), Waters (1980b and 1989). The most detailed presentations are those by Wood (1978) for Gälpu, a Dhaŋu variety based on field work at Galiwin'ku, Morphy (1983) for Djapu and Waters (1980b) for Djinang.

Somewhat more attention will be given to specific (morpho-)phonological phenomena which correlate with social and/or dialect variation within the Yolŋu group and which have distinctive realizations in Djambarrpuyŋu.

For other chapters of this thesis I use the regional orthography which was originally developed by Beulah Lowe at Milingimbi for the Dhuwala variety, Gupapuyŋu. It has since become well established throughout the Yolŋu speaking area. It is used in all educational institutions where vernacular literacy is taught as well as in bible translation programmes.

2.1 Segmental phonology

Djambarrpuyŋu has a fairly characteristic Australian phonemic inventory but there are a couple of unusual features. Quite characteristic are the contrast of six points of articulation for stops and nasals and a two way contrast for laterals, rhotics and semi-vowels. There are also three long and three short vowels, with the length contrast confined to the first syllable of the word. The less usual features are the existence of a stop contrast and a glottal stop. The glottal stop behaves differently from the other segmental phonemes. While it can be contrastive it has a distinct pattern of distribution. The contrast in stops is confined to certain morpheme medial contexts. The distinction has often been referred to in the Yolŋu literature as a "fortis/lenis" distinction and I will continue to use these terms. This is in contrast to various analyses for surrounding languages which argue that the distinction is one of length. It is my belief that the problem with descriptive terms for the contrast can be attributed to the fact that the contrast is of an inherently different nature to the contrast of languages such as English, where the voiced/voiceless distinction is phonetically linked with voice-onset times. A more

detailed examination of the phenomena is necessary to confirm this however. Djambarrpuyŋu is not a particularly appropriate variety on which to make such an examination since the contrast, already constrained to certain medial positions has been lost in all but a few lexemes by a process of lenition affecting the lenis stop series. The contrast is more prevalent in Gupapuyŋu, the closely related western Dhuwala variety.

Djambarrpuyŋu, and the Yolŋu Matha bloc more generally, also allow a relatively full range of consonant clusters and a wider ranger options for syllable final position than many other Australian languages.

There are 24 contrastive consonant phonemes, assuming that the stops in non-contrastive positions can be aligned with the contrastive stops. This latter system underlies the orthographic representation of the stops. However, below I raise some points which are problematic for such an analysis and propose that a perspective in which there are three series of stops may more accurately reflect what is happening in Djambarrpuyŋu. This would require two series to account for the contrastive stops and a third for those which are not contrastive.

Table 3: Consonant Phonemes and their Orthographic Representation

	bilabial	apico-alveolar	apico-domal (retroflex)	lamino-dental	lamino-palatal	velar	glottal
STOPS							
fortis							
IPA	p	t	ʈ	t̪	c	k	
Orthography	p	t	ṭ	th	tj	k	
lenis							
IPA	b	d	ɖ	d̪	ɟ	g	
Orthography	b	d	ḍ	dh	dj	g	
neutral non-contrastive	P	T	Ɪ	TH	TJ	K	
(glottal) - IPA							ʔ
Orthography							·
NASALS IPA	m	n	ɳ	n̪	ɲ	ŋ	
Orthography	m	n	ṇ	nh	ny	ṇ	
LATERALS IPA		l	ɭ				
Orthography		l	ḷ				
RHOTICS -continuant IPA			ɹ				
Orthography			r				
-trill/tap IPA		ɾ					
Orthography		rr					
SEMI-VOWELS IPA	w			y			
Orthography	w			y			

In the orthography all stops are represented using the the two voiced/voiceless stop symbols. The voiced symbol is used in the noncontrastive environments of word initial position and following nasals, while the voiceless symbol is used in the noncontrastive environments of syllable final position and following stops and glottal stop. In this chapter I will be using the orthography with two modifications. Capital letters designate stops in non-contrastive position, and a colon following a

vowel indicates length. This is so as to make these features more transparent to readers unfamiliar with the orthography. Other symbols used in the orthography are commonly found in relation to Australian languages and adopting them here, rather than the IPA symbols, allows for greater continuity with the representations in the rest of the thesis. The one orthographic representation retained in this chapter which is somewhat unconventional is the use of the apostrophe for the glottal stop.

The fortis/lenis stop contrast is confined to intercontinuant position. It is neutralized word initially, finally and following nasals, stops and glottal stop. A process leniting peripheral and laminal intramorphemic stops to /w/ and /y/ respectively, has applied extensively in Djambarrpuyŋu, further reducing what was originally a limited contrast.

The contrast between two apico-alveolar stops is marginal. I have not found any more examples with a medial [d] than the one cited in Wood (1978) i.e. *KuruduT* "Peaceful Dove" and this could be explained in its being a bird name, many of which are onomatopoeic. The symbol *d* is however found in the orthography so that the pattern of two sets of stop symbols is consistent for all of the stops. It is primarily required for use in noncontrastive contexts i.e. for those apico-alveolar stops occurring syllable initially and following nasals.

The most widely occurring stop contrast therefore is the retroflex series. However this is itself constrained to intervocalic environment. Clusters in which an apical stop occurs as the second consonant never occur intra-morphemically. There are three exceptions and these are all in fossilized reduplicated stems which often display somewhat different patterns from non-reduplicated roots. The combinations that occur are /yḍ/ /rṛḍ/ and /kṯ/. The lenis member of this pair /ḍ/ is frequently realized as flap, perhaps a correlate of the weakening of the closure of the articulators associated with the lenition of other lenis stops to semivowels.

Despite the differences between the apical stops and the peripheral and laminal stops described, they form a natural class with respect to certain morpho-phonological processes, most notably as a conditioning environment for suffix allomorphy.

The following words provide evidence for the stop contrast in Djambarrpuyŋu:

bilabial

/b/		/p/	
/Pa:ba/	gall	/Pa:pa/	father
/Pu:bu/	nickname	/Pu:pu/	voice box
/Kabulay/	joker, clown	/Kapu/	water, liquid
/Kuliba/	tea/ coffee	/Parrupu/	tobacco
		/Kulipawuy/	proper name

lamino-dental

/dh/		/th/	
/Kadharra/	coral	/Pathala/	big
		/watharr/	white
/ludhuludhu/	attractive inedible shells	/Puthulu/	bottle
/ra:gudha/	shellfish sp	/Pi:rratha/	rice
/Paldhurr'yun/	mark out with foot, kick	/Kulthawala/	shellfish sp

lamino-palatal

/dj/		/tj/	
/wurrdjara/ or /wurryara /	Cabbage Palm	/murrtjumun/	plant sp

velar

/g/		/k/	
/ra:ga/	White Berry Bush	/ra:kay/	Eleocharis dulcis
/Tjugu nha:ma/ or /Tjuwu nha:ma/	see song/dances	/Tjuku/	lice, fleas
/warraga'/	cycad	/warrakan'/	animal, meat
/warrgar/	spittle (?archaic)	/wa:rrkarr/	White Sand Lily
/Palgabalga/	hammerhead shark		
/Iaygurrgurr/	Gupapuyŋu clan name		

apical

/d/		/t/	
/wadawada/	tree species	/wata/	single woman
/Pidila/	liver	/Pita/	Burney vine
/Padikupa/	proper name	/Pati/	spear type

The contrast between alveolar and retroflex apicals and laterals is almost neutralized word initially. Apico-alveolars occur in only a restricted number of words. Many of them are loan words (from Macassan, English or Kriol) or words in which the initial apico-alveolar is clearly derived from forms in which it was word internal. Some examples include *Ti:tuŋ* "buffalo" (from Makassarese) *lipalipa* "dugout canoe", (from Makassarese), *TuraTJ* "dress", *napurr* "1pl" (cf the alternative *ŋanapurr*) and *li* HAB/HYP (cf the alternative *ŋuli*). Amongst the entries in Zorc's Yolŋu Matha dictionary the domain which contains the largest

number of words with initial apico-alveolars is that of personal names. It is not known if this can be attributed to extensive borrowing or not.

There are six vowels, contrasted by features of height, backness and length, i.e. the high front vowels /i/ and /i:/, low vowels /a/ and /a:/ and high back vowels /u/ and /u:/. In the regional orthography these are written as i, e; a, ä; and u o respectively.

Table 4: Vowel Phonemes and their Orthographic Representation

	front		back	
	short	long	short	long
high	/i/	/i:/	/u/	/u:/
	i	e	u	o (In orthography)
		short	long	
low		/a/	/a:/	
		a	ä	(In orthography)

Long vowels are confined to syllable initial position e.g. /wi:ɻi/ "wallaby" (vs /wiɻiTj/ "snake sp."), /Ku:rrum/ "to be high (1st)" (vs /Kurrum'/ "soft") and /Ka:na/ "alone"(vs Kana' "enough"). Monosyllables may have both long and short vowels e.g. /ka:rr/ "spider" and /Ka/ "and" or the FIRST form of the imperfective auxiliary.

2.1.1 Comparison with surrounding languages

The phonemic inventory is essentially common to all Yolŋu varieties. Surrounding non-Pama-Nyungan languages are also similar in many respects. Some of the key differences between Yolŋu varieties themselves and between Yolŋu varieties and surrounding languages are listed below:

1. It was observed above that there was little evidence for an apico-alveolar stop contrast in Djambarrpuyŋu. This is also the case for Djapu (Dhuwal) and Gälpu (Dhaŋu). It is however recorded for Djinaŋ, Djinba and Ritharrŋu, the western most Yolŋu varieties which have the two stop series most strongly. It is also found in the non-Pama-Nyungan languages bordering these varieties, namely Ngalakan, Ngandi and Burarra.

2. Non-Pama-Nyungan languages in the north west, including immediately bordering Rembarrŋa and Burarra only distinguish five places of articulation

rather than six, lacking the lamino-dental series. Ngandi and Nunggubuyu, non-Pama-Nyungan languages in the south west recognize six places of articulation however. One of the distinctive facts about the western Yolŋu varieties of Djinaŋ and Djinba is that they also lack the lamino-dental series which is found in all other Yolŋu varieties. This is just one instance of diffusion between the Yolŋu group and non-Pama-Nyungan languages to their west (Waters 1989 p286).

3. The vowel inventories are somewhat more varied. All Yolŋu varieties share a basic three way distinction in terms of dimensions of height and backness. In most varieties this is doubled in word initial syllables by a further distinction in terms of length. Djinaŋ and Djinba however only have a three vowel system. There is no length contrast. Ritharrŋu has the regular six vowel distinction but Heath (1980b) notes that two mid vowels /e/ and /o/ are occasionally found in loan words from neighbouring languages.

Mid vowels are a feature of most languages bordering the Yolŋu bloc. Most of them have a five or six vowel system, but whereas the Yolŋu system derives from a three way distinction doubled by length, these systems result from a three way height distinction. Ngandi is the only neighbouring language which has a length distinction and, this is in addition to a basic five vowel system with mid vowels.

2.2 Phonotactics

2.2.1 Syllable structure

The minimal syllable shape is CV. This can be maximally expanded to CV(C)(C)('). The only context of which I am aware where a word is not C initial is associated with a baby talk register which permits word initial consonants to be dropped e.g. *othuthu* (cf *yothu* "child") and *amala* (cf *ŋama* "mother").

All consonants can occur syllable initially although there are very few words with initial apico-alveolars. The majority of these seem to be Macassan loans or pronominals that have lost their initial syllable, resulting in a medial apico-alveolar being placed in word initial position. Word initially there is no stop contrast.

Syllable finally all consonants are possible except the lamino-dentals. The only exception to this is that lamino-dental nasals occur syllable finally in intramorphemic lamino-dental nasal + stop clusters. The glottal stop is found

syllable finally after any vowel or consonant except a stop. Syllable finally there is no contrast in stops.

The stop contrast is confined to word internal syllable initial position. It requires the juxtaposition of syllables, being confined to intramorphemic position between a vowel, liquid or semivowel and another vowel.

2.2.2 Clusters

In the following sections the permissible clusters are documented. Syllable final clusters will be considered first and then those occurring word medially.

2.2.2.1 Syllable final clusters

Clusters only ocur in the coda of a syllable. There are distinct possibilities as to possible combinations, according to whether a glottal stop is involved or not. A glottal stop is always the last member of any cluster. It is also unique in the range of syllable coda positions in which it can occur. It can be the only segment in the coda or it may follow one or two consonants. No other segment can do this. If it follows a single consonant this may be any nasal, liquid or semivowel. If it follows two consonants the last consonant will be a velar or lamino-palatal nasal. The maximum number of segments permitted in a coda is thus three. Two member clusters without a glottal stop combine continuant consonants i.e liquids and semivowels with either a velar stop or a nasal. Only if the second member is a nasal can a final glottal stop occur so that the possibility for three member clusters to occur syllable finally is highly constrained.

This range of syllable final clusters is found in three distinct kinds of roots - nominal roots, fossilized reduplicated stems and in *-Thu-* verb roots. In the latter two cases syllable final clusters feed three member word medial clusters. The following are some examples:

nominal roots	fossilized reduplicated stems	*-Thu-* verb roots
ŋi:rrK	PalarrKPalarrK	warrK+Thu-N
Tholŋ'	malŋ'malŋPunu-Ny	milŋ'+Thu-N
	ThiwKThiwK	PawK+Thu-N

Table 5: Syllable Final Clusters
(excluding single C plus glottal stop combinations)

Initial segment	Final segment: nominal roots			fossilized reduplicated stems			-*Thu*- verb roots		
	k	ŋ	ŋ'	k	ŋ	ŋ'	k	ŋ	ŋ'
rr	**rrk**		**rrŋ**	**rrk**	**rrŋ**		**rrk**		**rrŋ'**
r	**rk**	**rŋ**		**rk**			**rk**		**rŋ'**
l	**lk**	**lŋ**	**lŋ'**	**lk**	**lŋ**	**lŋ'**	**lk**	**lŋ**	**lŋ'**
l	lk			lk			lk		lŋ'
w				wk			wk		
y							yk		

Bold face designates the most commonly occurring clusters
Sources: My own materials and those compiled in Zorc (1986).

Some examples:		
	KarminyTjarrk	sand, earth, ground; sugar
	Tuyuwurk	Grewia retusifolia
	warKThu-N	to work,do
	ŋirrŋŋirrŋ'	windpipe
	Thurŋ'Thu-N	to withdraw, be folded, curled up
	Thu:lŋ'	bladder, bowel
	malŋ'Thu-N	to appear, happen
	milKmilK	mosquito
	TjulKThu-N	to go ahead
	KurrulK	baby, child
	ThiwKThiwK	wet, muddy
	KuyKThu-N	to spit out, spurt

A similar distribution is found in all three categories of roots. The most frequent final clusters involve liquids and velar stops. The combination of retroflex lateral and nasal is restricted to -*Thu*- verb roots and there are only three occurrences of final clusters with semivowels. These all occur word medially and have a velar stop as the second consonant. One interesting difference in distribution is that most clusters with a velar nasal in the -*Thu*- verb class occur with a final glottal stop, while combinations without the glottal stop predominate in the other two cateogries of roots.

Intermorphemically certain clusters are produced which are not found morpheme internally. These arise in connection with the five suffixes that have initial clusters. Two involve a homorganic nasal plus stop cluster i.e. the PROMinence suffix -*nyTJa* and the pronominal DATive suffix -*ŋKu*-. The others all have an initial glottal stop i.e. KINship PROPrietive -*'mirriŋu*, KINship DYaDic -*'manyTji* and the VeRbaliZeR -*'Thu*.

The first member of these clusters will always become part of the coda of the preceding syllable. The glottal stop initial suffixes all have a restricted range of stems to which they attach, none of which, provide any problems for syllabification since all the stems involved are sonorant final. The resulting syllable codas are the same as those occurring elsewhere. However some novel syllable codas do occur in connection with the PROM suffix. This suffix only occurs word finally and when the *-nyTja* allomorph occurs following stem final continuant consonants it can result in syllable final clusters not found anywhere else. These are /wny('), /yny(')/, /lny(')/, /lny(')/, /rny(')/ and /rrny(')/. The glottal stop will occur when the root has a final glottal. For instance the root *Kalpaw'* "boil" suffixed with the PROM has the form /Kal.pawny'.Tja/ (the dots indicate syllable boundaries).

2.2.2.2 Word medial clusters

Clusters occur both medially and finally in a word, the word final options being identical to those outlined in the previous section for syllable final clusters. There is quite a range of two member medial clusters arising from the juxtaposition of a closed syllable with another syllable. It is also possible to get three or four member clusters between syllables, given the juxtaposition of a syllable with a final cluster and another syllable. Again the longest permissible cluster, i.e. that with four members is associated with the occurrence of glottal stop. A monomorphemic disyllabic template of CV(C)(C)(')CV(C)(C)(') can be posited for which all possible combinations occur, the only constraint being that there can only be a single glottal. For monomorphemic words of more than two syllables the occurrence of clusters is much more sporadic. They do occur in all but initial position and more than a single cluster may occur in such roots although it is not very common. The maximum number of clusters noted in a root morpheme is three e.g. *KarminyTjarrK* "sand, ground; sugar".

1. Parameters affecting the range of possible clusters

There is a difference in the clusters that are possible intramorphemically (i.e. between syllables in single morpheme) and intramorphemically (i.e across morpheme boundaries). There are also differences in the relative frequencies of those that are common to both environments.

Processes which produce clusters at morpheme boundaries are suffixation and reduplication. It is a straightforward matter to determine what clusters can be expected by suffixation. After a stem final C or C', suffix allomorphs occur with

initial peripheral and laminal stops or nasals, an apical lateral or a semivowel. The apical lateral, occurring in the ALLative suffix *-lil* is somewhat unique in being the only apical consonant and the only liquid. It is the source of some of the less common clusters.

The possibilities for clusters resulting from reduplication would require a detailed examination of roots with the potential to undergo the process. As it is not a process associated with the regular coding of a major morpho-syntactic category, I have not been able to examine this in such detail and its occurrence in the texts, while not uncommon, does not canvas the full range of possible cluster combinations. However, there is no evidence to suggest that there are any phonological constraints on clusters produced by reduplication, except those having to do with the glottal stop+stop and stop+stop combinations (see section 2.4.3.2 and 10.2).

There are also a large number of fossilized reduplicated stems. Some of the clusters occurring in these stems do not occur in root morphemes or as the result of suffixing e.g. /KI/, /yl/, /ŋɒ/, /r'P/. It is also possible that some of the combinations that occur in the fossilized stems might, given an appropriately shaped root, occur in forms resulting from the synchronically productive reduplication process. In most of the table detailing clusters below the fossilized reduplicated stems are considered with the intramorphemic clusters. This is because from a synchronic perspective they function as single root morphemes.

In the descriptions below the distributions of clusters intramophemically and intermorphemically are indicated separately. Distinctive distributions within the set of fossilized reduplicated stems are also shown.

The occurrence of glottal stop in medial clusters is limited. In the two sections dealing with two member clusters and three member clusters below the glottal stop is considered in relation to its interaction with other two and three consonant combinations. The actual clusters described in each of these sections are the occurring combinations of two and three segments, excluding the glottal stop. The details of three member clusters with a glottal stop are given in the section on two member clusters respectively. The maximum length of a cluster word medially is one involving 4 segments, the last of which is a glottal stop. The details of these are given in the section headed three member clusters.

In regard to syllable final clusters it was observed that a glottal stop can follow any single consonant that is [+sonorant]. It can follow two consonants if the second is a velar or lamino-palatal nasal, these being the only permitted sonorant second member segments in combinations without a glottal stop. In effect, the glottal can occur after any sonorant consonant that is phonotactically permitted as the final segment of a coda which consists of one less segment than the number contained in the coda in which the glottal stop occurs. The glottal stop thus fits in with the phonotactic constraints affecting other cluster combinations and simply adds the possibility of an additional combination for those with final sonorants. It is this characteristic of the glottal stop that motivates the presentation of two and three member clusters as described.

In medial clusters the glottal stop is most frequently found following a nasal. The range of of nasal+glottal+stop clusters is particularly extensive. Combinations with liquids or semivowels are much less frequent. In the tables to follow he clusters with a glottal stop are only indicated if there is a wide variety of combinations intramorphemically. Less common occurrences are listed in the descriptions that follow each table.

2. Two member clusters

The following table presents an overview of possible two member clusters that do not contain a glottal stop.

Table 6: The Overall Distribution of Two Member Clusters

Initial Consonant	Second Consonant				
	NASAL	STOP	LATERAL	RHOTIC	SEMIVOWEL
NASAL					
intra	+	+			
foss redup				(+)	(+)
inter	+	+	+		
STOP					
intra	(+)	+			+
foss redup			(+)	(+)	(+)
inter	+	+	+		
LATERAL					
intra	+	+			+
foss redup		+			
inter	+	+	+		+
RHOTIC					
intra	+	+			+
foss redup			(+)		
inter	+	+	+	+	
SEMIVOWEL					
intra	+	+			+
foss redup					
inter	+	+	+		+

The chart lists only occurring clusters. The"intra" line indicates the intramorphemic clusters, the "foss redup" line those occurring in fossilized reduplicated stems and the "inter" line indicates the intermorphemic clusters. Outlined plus signs indicate the most commonly occurring medial intramorphemic combinations while parentheses indicate those cluster for which there are only a few examples.

The main categories of intramorphemic two member clusters permitted in Djambarrpuyngu are nasal+nasal or nasal+stop, stop+stop, and liquid or semivowel+nasal, stop or semivowel.

While any sound class has the potential to be the initial member of a cluster, liquids do not occur as second members and semivowels do not follow nasals or stops. These constraints do not apply intermorphemically. Suffixation with the ALL *-lil* results in clusters with a final lateral. However, reduplication can potentially provide other combinations than those listed here. The fossilized reduplicated stems with

combinations not found elsewhere morpheme internally, presumably reflect their derivational history.

A glottal stop can also occur between the initial and final member of some of these clusters. Intramorphemically it is possible between a nasal, a liquid or a semivowel and a following stop or nasal. After /r/ and /y/ there are isolated examples with a following semivowel. Most examples have initial nasals. Next most common are initial liquids and there are only two examples with an initial semivowels, both with /y/. The examples with initial nasals and semivowels are clearly intramorphemic clusters while clusters with initial liquids occur predominantly in the fossilized reduplicated stems.

It is noteworthy that the permissible clusters within a morpheme reflect a hierarchy of sonority, despite the fact that the clusters are not within a single syllable. The possible combinations are set out below according to the sonority hierarchy.

V...	semivowel	liquid	nasal	stop	V
				stop x 2	
			nasal x 2		
	semivowel x 2				
			[nasal +	stop]	
		[liquid +	nasal]		
		[liquid	+	stop]	
	[semivowel +	liquid]			
	[semivowel	+	nasal]		
	[semivowel		+	stop]	

In any one combination the syllable boundary will fall before the last C in the cluster sequence. This means that syllables following clusters begin with a C of equal or less sonorance than the C with which the preceding syllable ends. This holds for all morpheme internal syllables morpheme. There are a few exceptions in 3-member clusters which end with a stop+nasal combination (see point 3 below). This is also a common intermorphemic combination resulting from suffixing with nasal initial suffixes. Most suffixes however, are stop initial and thus even across morpheme boundaries the pattern in which sonority falls continuously between nuclei and a syllable boundary is marked by a rise in sonority is prevalent. The main sources of consonant sequences that are counter to this pervasive pattern would be suffixing with the ALLative lateral initial suffix *-lil* and reduplication of appropriately shaped roots. However these variant patterns only affect the last

member of a sequence and thus confine a rise in sonority between segments to those either side of a syllable boundary.

(2a) Nasal initial clusters

Table 7: Nasal+Stop Clusters

NASAL	STOP											
	p	'p	T	'T	d	't	Th	'Th	Tj	'Tj	K	'K
/m/												
intra	***	+							<+>	+		
inter	+	+					+	+	+	+	+	+
/n/												
intra	*	+	*	+	<+>				*	+	**	+
inter	+	+					+	+	+	+	+	+
/ɲ/												
intra	*	+			**	+	+		*	+	*	+
inter	+	+					+	+	+	+	+	+
/nh/												
intra							***	+				
/ny/												
intra	*					<+>			**	+	*	+
inter	+	+					+	+	+	+	+	+
/ŋ/												
intra	+	<+>			<+>	<+>			<+>	<+>	***	+
inter	+	+					+	+	+	+	+	+

The "intra" line indicates the intramorphemic nasal+stop clusters and those which occur in fossilized reduplicated stems. Where the cluster only occurs in these reduplicated stems it is enclosed in angled brackets. The "inter" line indicates the intermorphemic clusters.

The asterisks indicate something of the number of occurrences intramorphemically: * 10-20, ** 20-30 and *** more than 30

Some examples:

Thum'Thum	wallaby	Pu:nDi	quickly
KunTjaK	freshwater pandanus	yawunKu	yesterday/recently
buŋPu	house	maŋda	3dl
ThamarraŋTji	clan surname	PiŋKal	small pointed stick
PinhTha	ribs	PunyPu	Mud Welk (shellfish)
lukanyTja	rich, plentiful	munyKu-Ny	to crush, cover
PuŋPulyu-N	to rise (smoke)	PuruŋKurr	pelican

For more examples with the glottal stop see the list in section 2.4.3.1.

Homorganic clusters are the most numerous, but there are many heterorganic clusters consisting initial nasals followed by lamino-palatal and peripheral stops. Apical stops are only found as the second consonant in a heterorganic cluster in a few fossilized reduplicated stems.

The nasal+stop combination is one in which a medial glottal stop is common. Although there are only a few examples in each case, the pattern of nasal+stop combinations with and without the glottal stop is quite consistent. There seems to be no constraint on the glottal stop appearing between any nasal+stop combination.

The main contrast in the distribution between inter- and intramorphemic nasal+stop clusters is in the much wider occurrence of a lamino-dental as the second consonant intermorphemically. This can be largely attributed to the *-Thu-* augment on many verbs and the ERGative suffix *-Thu*.

The homorganic interdental nasal+stop cluster is the only environment in which an interdental can be found syllable finally. It can be realized as either an apico-alveolar or an interdental.

Table 8: Other Nasal Initial Clusters

	nasal						semivowel		liquid			
nasal	m	n	ṇ	nh	ny	ṇ	w	y	rr	r	l	ḷ
m												
intra						✱		+		<m'r>		<+>
inter	+			+		+					+	
n												
intra	✱			<+>	<+>	✱						
+glottal	✱					✱						
inter	+			+		+					+	
ṇ												
intra	✱					✱						
inter	+			+		+					+	
ny												
intra	✱					✱						
inter	+			+		+					+	
ṇ												
intra	✱		<+>	✱								<+>
inter	+			+		+					+	

The"intra" line indicates the intramorphemic clusters and those which occur in fossilized reduplicated stems. Where the cluster only occurs in these reduplicated stems it is enclosed in angled brackets. The "inter" line indicates the intermorphemic clusters. Outlined plus signs indicate the most commonly occurring combinations.

Some examples:

Tjinmir'	edge/outer boundary	Tjaŋŋarr	hungry
nhaŋgu	3sg DAT	manymaK	good
maŋmunda	long yam	Kuŋman	woman with children

By far the most prevalent intramorphemic combination is nasal+nasal (there are some 50 examples). There is only one case of a nasal+semivowel and a handful of fossilized reduplicated stems that have a second retroflex liquid. The majority of the nasal+nasal clusters have a peripheral nasal as the second member. There are no clusters with an apical as the second member, except for one fossilized reduplicated stem.

Various suffixes with initial peripheral nasals or the lamino-dental nasal extend the intermorphemic possibilities. Like the nasal+stop clusters the major extension is in the possibilities of a lamino-dental as the second consonant. The ALL suffix *-lil* also creates nasal+alveolar lateral clusters which do not occur intramorphemically.

I have not investigated the full potential of intermorphemic nasal combinations with a medial glottal stop. There are various processes which would extend the range of clusters beyond those indicated in the table above. These include reduplication of nasal initial and/or nasal final roots e.g. the *-Thu-* verbs *nyim'-nyim+Thu-*N *mam'-mam+Thu-*N, *larraŋ'-larrwaŋ+Thu-*N; combinations of nasal, liquid or semivowel final roots and suffixes with initial glottals e.g. *Kurruŋ-'mirriŋu* and *maralkur-'manyTji* and combinations of stem final nasal plus glottal and nasal or *l*-initial suffixes e.g. *mam'+mara-*N, *Kulun'+lil.*

2 (b) Stop initial clusters

The only intramorphemic stop clusters that occur are stop+stop combinations. Various other combinations occur intermorphemically.

Table 9: Stop+Stop Clusters

Initial consonant		Second consonant: bilabial	apico-alveolar	apico-domal	lamino-dental	lamino-palatal	velar
bilabial	intra				⟨+⟩		✚
	inter	+			+	+	+
apico-alveolar	intra	✚ ⟨+⟩			⟨+⟩	✚	
	inter	+			+	+	+
apico-domal	intra	✚			?	✚ ⟨+⟩	⟨+⟩
	inter	+			+	+	+
lamino-palatal	intra	✚ ⟨+⟩			✚ (English loans)	✚ ⟨+⟩	
	inter	+			?	+	+
velar	intra	✚ ⟨+⟩		⟨+⟩	⟨+⟩	⟨+⟩	
	inter	+			+	+	+

The"intra" line indicates the intramorphemic clusters. Angle brackets indicate clusters occur in fossilized reduplicated stems. The "inter" line indicates the intermorphemic clusters. Outlined plus signs indicate the most commonly occurring intramorphemic clusters. "?" indicatesclustersthat occur in other Yolŋu varieties but have not been attested for Djambarrpuyŋu.

Some examples:

ThuPThuP	mosquito, sandfly	ThaTPiryu-N	to give up, become resigned
KiTKiTThu-N	to smile, laugh	IuTTji	firesticks
PaIPa	reef, rocks under water	KiIThu-N	to move (over), shift
KurrumaITji	magpie goose	KuIKuI	cone of cycad palm (in songs)
milmiTjPa	afternoon	Tja:TjThi	Thursday (English loan)
maTjKa	string used for body decoration	PuruKPili	Morinda citrifolia

TjuKTjuKŋaniŋ Small bush - Hibiscus meraukensis, Hyptus suaveolens

As with nasal initial clusters, apicals are disfavoured as the second member of a stop+stop cluster. The only occurrences are of /kt/ in a few fossilized reduplicated stems.

There is a much wider range of options possible intermorphemically than intramorphemically. The only intermorphemic clusters with an apical as a second consonant occur in reduplication stems. Across morpheme boundaries it is possible to get homorganic stop sequences but although these can have a separate articulation in a very slow, careful articulation they are normally realized as single fortis stops.

Table 10: Other Stop Initial Clusters

STOP		2nd consonant												
		Nasal						Liquid				Semi-vowel	
		m	n	ṇ	nh	ny	ŋ	l	ḷ	r	rr	w	y
bilabial	intra						<+>						
	inter	+			+	+	+	+					
apico-alveolar	intra						<+>						
	inter	+			+	+	+	+					
apico-domal	intra					<+>							
	inter	+			+	+	+	+					
lamino-palatal	intra						<+>		<+>			<+>	
	inter	+			+	+	+	+				<+>	
velar	intra	<+>				<+>	<+>		<+>	<+>		<+>	
	inter	+			+	+	+	+					

The"intra" line indicates the intramorphemic clusters. Angle brackets indicate clusters occur in fossilized reduplicated stems. The "inter" line indicates the intermorphemic clusters.

Some examples:

nyiKnyiK	rodent
ŋuTjŋuTj	Common Shovel-Nosed Ray
wa:KwaK	waterlily
ḷa:TjḷaTj	Northern Rosella

None of these clusters occurs within root morphemes. A few occur in fossilized reduplicated stems, but they are not very common. They are much more common intermorphemically, since there are several suffixes with nasal initials, as well as the /l/ initial ALLative suffix. All stops except the lamino-dental can occur as the first consonant. Generalizing on the limited data the second consonant is limited to peripheral nasals, retroflexes and /w/ intramorphemically. The lack of any examples with apicals as the second consonant is not surprising given the trend indicated for stop+stop clusters and nasal initial clusters.

2 (c) Liquid initial clusters

Liquids occur intramorphemically and intermorphemically before stops, nasals and semivowels. Intermorphemically they can also occur before other liquids.

Table 11: Liquid+Stop Clusters

	Stop																
Liquid	p	b	'P	t	d	'T	t	d	'I	th	dh	'Th	tj	dj	'Tj	k	g	'K
/l/																		
intra	+	<+/ w>							<+>	+	+	<+>	+	+			+/w <+>	<+>
inter	+ /w									+								+
/l/																		
intra	+		<+>							+		<+>	+			+	<+ /w>	+
inter	+ /w																	+
/r/																		
intra	+		<+>						<+>	+	+ /y	<+>.	+	+ /y		+	+	<+>
inter	+ /w												+					+
/rr/																		
intra	+		<+>					<+>		+		<+>	+		<+>	+	+w	<+>
inter	+ /w								+				+					+

The"intra" line indicates the intramorphemic clusters. Angle brackets indicate clusters occur in fossilized reduplicated stems. The "inter" line indicates the intermorphemic clusters. A /w/ or /y/ indicates that alternations occur between a the stop and a semivowel (see section 2.4.2 for details).

Some examples:

Parrku	far	lirrgi/lirrwi	ashes, coals
ŋurrthali	fish sp	IarrtjalK	clean
Tjarrpi	crooked	wurrdjara/wurryara	Fan Palm
Parkuma	Northern Quoll	mardhakal/maryakal	one's things, clothes etc
martjanPa	place name	Parpuru	yesterday/recently
Pulka'	body hair	ŋalthiri	liver
ŋalparr(')	cough, cold	Paldhurry'yu-N /Palyurr'yu-N	to kick, make a mark with foot
Iiltji	back, bush	Iil'Iil	spot, dot
nya:lka	bag, basket	Kulthuwala	shellfish sp
Kalpaw'	boil	Pa:ltji	long yam

Liquid+fortis stop combinations are the most common. As with nasal and stop initial clusters the only examples with an apical as the second consonant occur in reduplicated stems (with the exception of nasal+stop homorganic clusters).

Examples with a medial glottal are few and always occur between the two segments of a fossilized reduplicated or partially reduplicated stem. However there are also many fossilized reduplicated stems which do not have a glottal stop.

This particular group of clusters is interesting in light of the two stop series, since this is one of the possible environments for the contrast (see section 2.4.1). None of the intramorphemic liquid+lenis stop clusters occurs in more than a couple of examples and there are none involving the bilabial stop. It will also be noted that most of the clusters with lenis stops allow alternations in which the stop is lenited to semivowel. This pattern of distribution highlights the fact that the fortis/lenis contrast is nearly lost in Djambarrpuyŋu

Table 12: Other Liquid Initial Clusters

	2nd Consonant														
Liquid	nasals								semivowels		liquids				
	m	ˈm	n	ɳ	nh	ny	ŋ	ˈŋ	w	y	l	l	r	rr	
/l/ intra	+	<+>			+	+	+	+	+	?ˈ					
inter	+	+			+	+	+	+	+/w	+	+				
/l/ intra	+	+				+	+	+	+	<+>					
inter	+	+			+	+	+	+	+/w	+	+				
/r/ intra	+	ɨ				+	+		+	+					
glottal									rˈw	rˈy					
inter	+	+			+	+	+	+	+	+	+				
glottal													ˈr		
/rr/intra	+	<+>			+	+	+		+	+		<+>			
inter	+	+			+	+	+	+	+	+	+				
glottal												rrˈl	rrˈr		

The"intra" line indicates the intramorphemic clusters. Angle brackets indicate clusters occur in fossilized reduplicated stems. The "inter" line indicates the intermorphemic clusters. Examples with glottal stops are shown on separate lines beneath the appropriate environment. "?" indicates clusters that occur in other Yolŋu varieties but have not been attested for Djambarrpuyŋu.

Some examples:

PiyarrmaK	funny, amusing	murrnhuruŋ	hole (in tooth, wood); tooth decay
mirrŋatja	place name	warrnyu	flying fox
murnyaŋˈ	root food	KarminyTjarrK	sand, earth; sugar
Kaŋa	skin	Pulnha	slowly
mulmu	grasses	milnyaŋˈThu-N	dislike, not want
PaŋunTa	long yam	Pilma	clapsticks

Once again combinations with an apical as the second consonant are restricted. In these clusters there are no intramorphemic examples. There are also no examples of intramorphemic liquid+liquid clusters. Combinations of liquids result from reduplication e.g. *lirrˈlirr+yu-* or suffixing the ALL *-lil* to a liquid final stem. As with sequences of identical stops a sequence of two apico-alveolar laterals is realized as a single segment.

A medial glottal is possible intramorphemically although there are only a few examples. Most occur with /m/ as the second consonant. Intermorphemically the possibilities increase since there are stems which in any of the four liquids and a glottal stop. Suffixing would allow sequences of liquid+glottal stop+/m/, /nh/, /ny/, /ŋ/, /w/, /y/ or /l/.

2 (d) Semivowel initial clusters

Semivowels occur intramorphemically and intermorphemically before stops, nasals, semivowels and laterals but there not many examples. Nor is the range of possible combination as extensive as for other clusters.

Table13: Semivowel+Stop Clusters

Semivowel	Stop										
	p	b	t	ṭ	d	th	dh	ṭh	ḍh	k	g
/y/ intra	+	+			<+>		+			+	<+>
glottal	y'p										
inter	+/w				+					+	
/w/ intra											+
inter	?										+

Table 14: Other Semivowel Initial Clusters

Semivowel	Second Consonant									
	nasals						semivowels		liquids	
	m	n	ṇ	nh	ny	ṇ	w	y	l	ḷ
/y/ intra	+	+		+		+	+		+	<+>
glottal							y'w			
inter	+			+	+	+	+	+	+	
/w/ intra					<+>					
inter	?			+	+	+	+	+	+	

The"intra" line indicates the intramorphemic clusters. Angle brackets indicate clusters occur in fossilized reduplicated stems. The "inter" line indicates the intermorphemic clusters. A /w/ in the first column indicates that it can alternate with /P/ (this is a due to the allomorphs of the ASSociative suffix -*Puy*). "?" indicates clusters that occur in other Yolŋu varieties but have not been attested for Djambarrpuyŋu.

Some examples:

Ṯaykun'	sun, time	ḏaypa	other side
Pa:ydhi	never mind	Kaḏayma-N$_L$	to fetch someone/something
ḏaynhawuy	proper name	Pa:yŋu	NEG
Kay'wu	string bag		

Intramorphemic semivowel initial clusters are not common. /y/ is strongly favoured over /w/ as an initial, and peripherals are the most common second consonants. There are no cases of rhotics as second members and only two examples with laterals. Apicals are again restricted as second members. Both /yn/ examples occur in Macassan loans. All /yŋ/ examples are in one of three categories. They occur in personal names with a final segment *-ŋu* or *-ŋa*, or in personal names of Macassan origin. The latter forms are recognizable because of the initial element *dayŋ* (cf Makassarese Daeng).as in *TayŋKgipu* (see Zorc 1986, Cooke 1987). The cluster also appears in the morpheme *-yŋu* which appears on a few verb stems (see section 4.8.6).

Intermorphemically the possibilities become much more extensive, particularly for initial /w/.

There are only two examples with intramorphemic clusters with a medial glottal i.e. /y'p/ and /w'y/. There are however, stems with glottal following both /y/ and /w/ so that intermorphemically the possibilities are more extensive. Potential final members from suffixing are /p/,/k/,/m/,/nh/,/ny/,/ŋ/,/w/ and /y/.

3. Three member clusters

Three member intramorphemic clusters are restricted to combinations of continuant consonants, nasals and stops. All known combinations for Djambarrpuyŋu are listed in the chart below.

Table 15: Three Member Clusters

Second consonants	First Consonant				
	semivowels		liquids		
	w	y	l	l	r	rr
nasal+stop		ymP yŋK	lŋK		rmP rŋK	rrmP rrŋK rrŋ'K
stop+nasal					rKm	rrKm rrKŋ
stop+stop			lTjP			rrTjP rrKP

Some examples:

parrŋKul	freshwater weed	ParŋKiTJ	type of bee/honey
rirrKminy	sick person	KurrTjPi	type of stingray
ThirmPuK	root food sp	karKman	frog
yalŋKi	soft		

The initial consonant is always a continuant, most commonly a rhotic. Nasal+stop, stop+nasal and stop+stop combinations may follow, the nasal+stop combination being the most common. The only example with a glottal stop involves a nasal+stop combination i.e. *wurrŋ'Ka* "shellfish (Cardita semiorbiculata)".

These correlate closely with clusters that can occur intermorphemically. Syllable final clusters are composed of an initial continuant followed by a velar nasal or stop. Suffix initial consonants can be peripheral or laminal stops and nasals or the alveolar lateral. Combinations of the syllable final clusters and the initial C of a suffix thus produce clusters of an initial continuant followed by a nasal+stop, a stop+stop, a stop+nasal or a nasal+nasal. Only the latter combination is not found in intramorphemic clusters. Syllable final clusters with a final glottal stop permit a greater range of combinations than the single example found intramorphemcially. Potentially a syllable final cluster ending with a velar nasal+glottal could occur with any of the suffix initial consonants.

Reduplication will extend the range of possibilities even further since any syllable initial consonant can potentially follow a final cluster if reduplication occurs. Additional final consonants of such clusters occurring in reduplicated stems include /w/ /l/ /ɲ/ /ny/ /th/ and /r/ (found in the clusters /rrkw/, /rrŋl/, /rrkny/, /lɲɲ/, /rrkth/ and /lkr/ respectively).

2.3. Stress

Stress patterning in Djambarrpuyŋu is largely predictable. In many Australian languages there is a regular pattern of stress assignment in which stress falls on the first syllable and every alternating syllable in the word (Dixon 1980 p128).

In Yolŋu languages a number of investigators have used the term stress group to capture a somewhat different system of stress assignment. Each stress group consists of one to three syllables (see Wood 1978 and Waters 1980b). In this approach stress appears on the initial syllable of a stress group and the initial syllable of a word tends to carry primary stress.

The facts of stress patterning in Djambarrpuyŋu require an approach of this kind. In the following examples ' indicates primary stress and " secondary stress.

/'Tja:l/	"want"
/'PuKmaK/	"all
/'Puthuru/	"ear"
/'Thama"rraɳTji/	"clan surname"
/'nhuma"laŋKal/	"2/3pl-OBL"
/'ŋurru"paɳdala/	"Bush Apple"
/'Tjakaɖa"yanPi'	"animal sp."
/'Kuya"ŋanhawuy/	"thoughts" (plus FOURTH plus ASS)
/'Kutharra' "mirriŋu/	"(Z)DC" (plus KIN PROP)
/'ŋalapal"mirrinhan/	old people (plus PROP+ACC+SEQ)
/'lithan"mara"nhamirr/	dry (plus CAUS+FOURTH+PROP)

As with other Yolŋu varieties morpheme boundaries affect the patterning. In reduplications stress occurs on the initial syllable of both morphemes e.g. /'warala"warala/ and /'PinKi"PinKiyun/. Particularly in words involving reduplication, adjacent syllables can be stressed e.g. /'ŋal' "ŋalyun/ "rise, climb-REDUP+FIRST" and /'Pak"Pak/ "broken". Compounds can also produce a phonological environment where stress falls on adjacent syllables e.g.'mi:l-"Ia:l [eye - hard] "staring".

2.4 Key (morpho)phonological distinctions and processes in Djambarrpuyŋu

Having given an overview of segmental phonology and phonotactics I would now like to describe various (morpho)phonological phenomena in Djambarrpuyŋu and consider them in relation to other Yolŋu varieties. The phonological phenomena to be considered are the two stop series and the glottal stop. The variation in the presence of the two stop series correlates directly with the way in which the morphophonological process of lenition applies within a particular variety. As with segmental phonology many morphophonological processes are common to the Yolŋu bloc. Those that occur in Djambarrpuyŋu include lenition, final vowel deletion, initial syllable deletion, vowel assimilation, glottal stop deletion, degemination and vowel shortening. The suffix allomorphy associated with several suffixes featuring an unmarked *-nha* allomorph (the ACC, SEQ and a verb inflection/nominalizer) also varies across varieties. All these processes occur in other members of the Southern sub-group.

Glottal stop deletion, vowel shortening and degemination in Djambarrpuyŋu do not differ from similar processes in other Yolŋu varieties. Glottal stop deletion is described in section 2.4.3.1 below. This rule prevents more than a single glottal stop occurring in a word.

It will be recalled that long vowels are only contrastive in the first syllable of a word. Monosyllables may have long or short vowels. It may also affect the first syllable of the second member of a compound but this is not regular. Vowel shortening is regular in the second morpheme of reduplicated stems (see section 10.2.2). Word initial long vowels may also be reduced in connected speech. For example /ma:ri/ "MM(B)" is often heard as [mari]. This means that there is may be no distinction between the minimal pair /ma:ri/ "MM(B)" and /mari/ "trouble".

A process of degemination is required in Yolŋu varieties to account for sequences of identical consonants at morpheme boundaries. In normal speech these are realized as single segments unless a glottal stop intervenes (see Morphy 1983 p30). In very careful speech, such as when speakers are focussing on adding different sufixes, a much longer closure is possible. The process can be roughly formalized as

$$C_i + C_i \rightarrow C$$

"+" represents a morpheme boundary and subscript "i" that the Cs must be identical.

Some examples are:

/Iarrtjalk+ku/	->	/Iarrtjalku/	"clean+DAT"
/Koŋ+ŋur/	->	/Koŋur/	"hand+LOC/ABL"
/rirrakay+yu/	->	/rirrakayu/	"sound+ERG"
/mu:l+lil/	->	/mu:lil/	"black+ALL"

In the regional orthography morphemes are written in full with the result that sequences of identical consonants occur at morpheme boundaries.

There is one process described for Djapu, that has no counterpart in Djambarrpuyŋu. This is a process of Laminal Assimilation (see Morphy 1983 p29). This rule affects two derivational suffixes, the Inchoative *-Thi-* and the Verbalizer, which Morphy refers to as Delocutive, *-(')Thu-* both of which begin with laminodental stops. These assimilate to the place of articulation of a preceding laminopalatal stop or nasal. The resulting contrastive INCH forms in the two Dhuwal varieties are illustrated by the following:

Djapu	Djambarrpuyŋu	
rakuny+Tji-	rakuny+Thi-	"dead +INCH"
madakarritTj+tTji	madakarriTj+Thi-	"angry +INCH"

The Djapu example Morphy provides of the other suffix involved in this process is 'badatj "?"+Dhu DO -> badatj-tju-N "fail to do" ' (ibid p29). The Djambarrpuyŋu stem is identical. I would argue that the /tju/ allomorph here, and in certain other N class verb stems is fossilized (see section 7.5.1.1). However there are more productive uses of the Verbalizer -(')*Thu*- (see section 7.5.1.2.1) and it is possible that with an appropriate root the Laminal Assimilation rule may apply.

It should be noted that even in Djapu this rule does not affect the ERG suffix -*Thu*.

In the following sections the stop series, lenition, glottal stop, -*Nha* suffix allomorphy, initial syllable deletion and vowel deletion will be considered in turn.

2.4.1 The stop series

The presence of a two series of peripheral and laminal stops, and also of a distinctive glottal stop are areal phenomena found in the Yolŋu bloc and in the neighbouring non-Pama-Nyungan languages.

The two stop series are most saliently contrasted in Yolŋu varieties along the western boundaries of the Yolŋu bloc, such as Djinaŋ and Ritharrŋu. However a process of lenition eroding the stop contrast has been widely effective within many other Yolŋu varieties and has made serious inroads into the contrast in Djambarrpuyŋu.

The contrast in these languages has been variously treated as voiced/voiceless, geminate/simple, tense/lax and fortis/lenis. More recent descriptions, if they do not assume a geminate analsyis, have tended to characterize the contrast as fortis/lenis (see Heath (1980a, b), Merlan (1983),Wood (1978), Jaeger (1983), Waters (1989) and McKay (1978)). The terms fortis/lenis are adopted for this distinction in Djambarrpuyŋu, following Jaeger (1983).

The phonetic cues that signal a stop contrast in languages can be of quite distinct types. Jaeger (1983) studied the phonetic realization of fortis/lenis consonants in

the western Arnhem land language Jawoyn and a Mexican language Zapotec. She found that the contrast did correlate with a set of phonetic cues distinct from the differences in voice onset time used to distinguish voicing in English. The kind of contrast Jaeger proposes for Jawoyn and Zapotec is most appropriately described by the traditional terms "fortis/lenis" until more is known about their phonetic characterization. (For a more detailed discussion of the uses of the terms fortis/lenis in other contexts see Jaeger (1983)). The phonetic factors which were found pertinent to the contrast in Jawoyn were duration, glottal width and closure width. It was also found that in any single realization at least two of the relevant factors were present.

Auditory based observations that have been made in regard to the realization of the stops in Yolŋu languages concur with Jaeger's findings as to the pertinent phonetic factors of a fortis/lenis distinction. Voicing, duration and less than full closure of the articulators have all been mentioned (see in particular Heath (1980a,b), Waters (1979) and Wood (1978)). There is every reason to assume that the contrast is appropriately characterized as fortis/lenis according to Jaeger's typology of consonant constrasts.

Given that the contrast is marginal to Djambarrpuyŋu I decided not to undertake a major phonetic study of the stop stop series. This would be more appropriately undertaken for Yolŋu varieties where the contrast is more pervasive, such as Gupapuyŋu, Djinaŋ or Ritharrŋu. However, I did some spectrographic analysis of the stop contrast. The material for the spectrograms was selectively chosen from texts. The data was not such as to allow a statistically adequate analysis covering the relevant tokens in all contexts for a range of speakers. The infrequent occurrence of the lenis stops was particularly restricting.

On the basis of this spectrographic work and my auditory impression I made the following observations. In contrastive contexts the Djambarrpuyŋu fortis stops appear to be consistently voiceless and long relative to the lenis stops. The interconnection between length and voicing seems particularly close in this context. The fortis realization of intercontinuant stops is retained, even though the lenis stops are uncommon.

In non-contrastive contexts final stops and intervocalic suffix initial stops are voiceless and relatively long. Final stops are also generally unreleased. Initial

stops vary as to voicing. After nasals stops are voiced and short. After a stop a following stop is always voiceless.
The features distinguishing the contrastive stops are also realized in the non-contrastive stops and offer a basis for establishing underlying phonemes.

"lenis" stops			"fortis" stops		
{vowel, liquid, semivowel}	____	V	{vowel, liquid, semivowel}	____	V
nasal	____		stop	____	
*	____			____	$

* represents a word boundary, $ a syllable boundary

The only combination not presented above is that involving glottal stop. Following a glottal stop there is no stop contrast. However there is a definite opposition between sequences of a nasal+stop and those with a nasal+glottal stop+a stop (e.g. *KanyTJarr* "power" and *Kany'TJaragay* "mangrove sp"). This is analogous to that between the lenis and fortis stops between continuants and the most plausible alignment is between the stop and lenis stops and the glottal stop+stop and fortis stops. However the "fortis" like realization is attributed to the combination of two segments rather than the single stop. The stop following a glottal stop varies as to voicing.

The orthography essentially represents this series of alignments, with the voiced symbol used for the lenis stops and the voiceless symbols used for the fortis series, including stops following a glottal stop.

Djambarrpuyu in fact shows every indication of being in the process of shifting from a system with two series of peripheral and laminal stops to one with a single series. It is thus a moot point as to whether an underlying series of two stops is appropriate. Given the extent of the changes wrought by lenition a single series may be indeed be more indicative of the synchronic system. In relation to this the remaining lexemes with lenis stops can be viewed as a restricted group within the lexicon with a marked phonology, similar to that associated with loanwords in many languages (see section 2.1 for examples).

The process of lenition has completely eliminated the peripheral and laminal stop contrast in certain eastern Dhuwal/Dhuwala varieties i.e. Djapu and Gumatj as well as in Gälpu a Dhaŋu variety spoken today at Galwin'ku, although traditionally from further east.

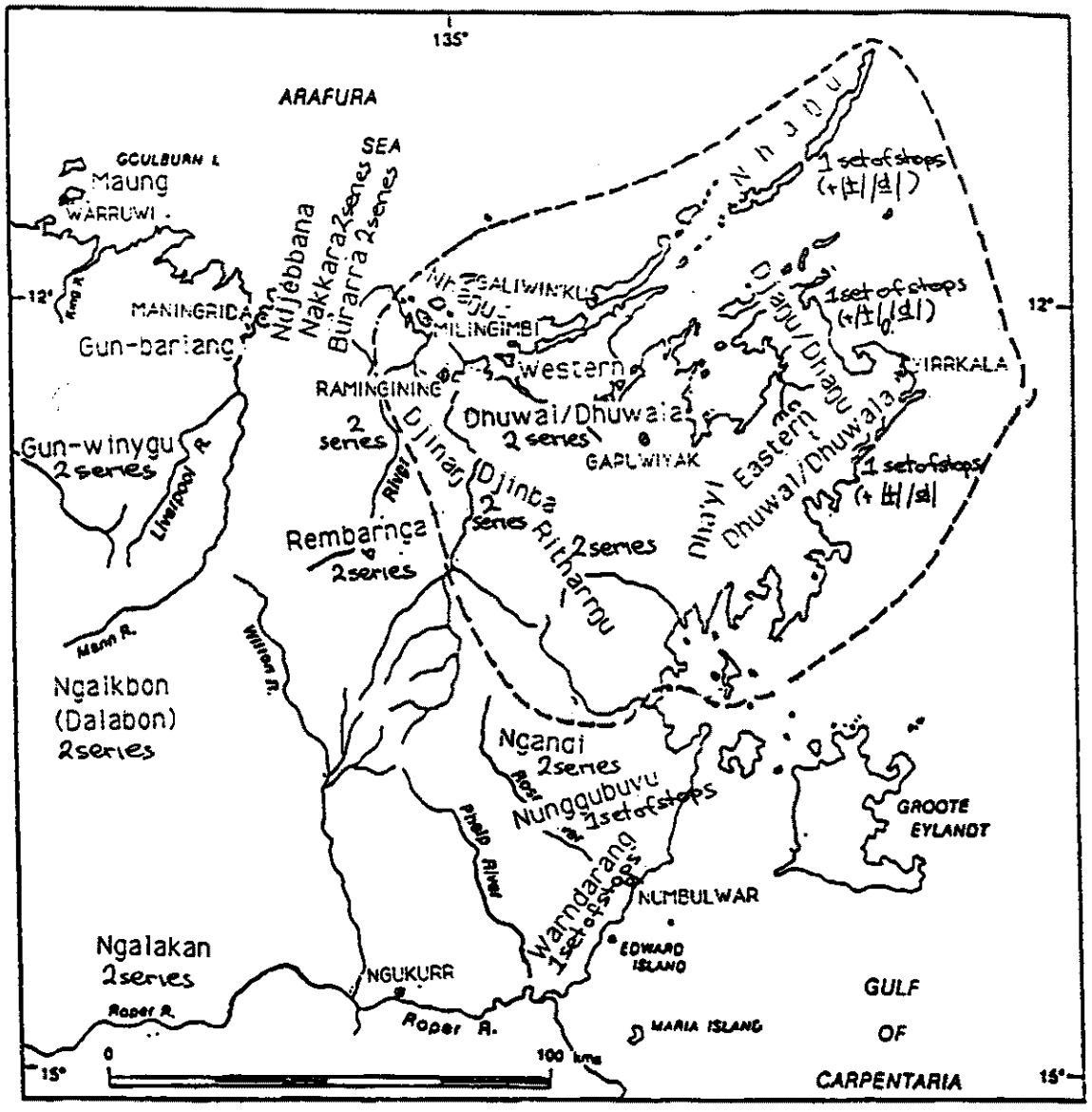
The contrast is retained in Gupapuyŋu, Djinaŋ and Ritharrŋu however. In Djinaŋ the contrast is confined to intervocalic contexts, since fortis consonants do not occur elsewhere (Waters 1989). In Gupapuyŋu and Ritharrŋu the restriction is confined to word medial position between vowels, liquids, semivowels and vowels (see Lowe n.d.b, Heath 1980b). The stop contrast is similarly constrained in neighbouring non-Yolŋu languages of Ngandi (Heath 1978b) and Rembarnga (McKay 1980). See Map 4 for a regional perspective on the distribution of the stop series.

The contrast in Rembarnga is analysed as one between geminates. Geminiate analyses have been proposed for other languages west of the Yolŋu group. It has also been proposed for Yolŋu varieties by Schebeck and in an early analysis of Wood's (1977) (Wood (1978) describes the distinctions as fortis/lenis). However, a geminate analysis of the contrast in Djambarrpuyŋu would produce the anomalous situation in which geminates are the unmarked realization, since most medial single stops have been lenited. Furthermore this would require certain syllable final combinations that are not attested elsewhere. Firstly while syllable final clusters combining liquids and semivowels are possible, only a final velar stop is ever attested word finally. A geminate analysis would require bilabial and laminal stops to occur in this position as well. Secondly this would be the only context in which the lamino-dental stop occurred syllable finally. The phonotactic constraint against syllable final lamino-dentals is otherwise very rigid (with the exception of homorganic nasal+stop clusters).

I have found no obvious phonological motivation for positing these stops as geminates rather than fortis segments, other than one of phoneme economy. Counteracting that is the unnaturalness of positing geminate stops as the unmarked realization. The correlate of the fortis stop in other languages is described as the more marked stop with various constraints on its occurrence. It may be linked with stress as in Nakkara (Eather p.c.) or to distance from other fortis stops as in Ngalakan (Merlan 1983) and Rembarnga (McKay 1975).

It does thus appear that the place of the stop contrast within the phonological system of the different languages in the region can be quite different.

Map 4: Distribution of the Stop Contrast



This map draws on information from Amery (1985), Eather (p.c.), Harvey (p.c.) Heath (1978b, 1980b, 1984), McKay (1975), Merlan (1983), Morphy (1983), Waters (1989) and Wood (1978).

2.4.2 Lenition

A lenition rule by which peripheral stops become /w/ and laminal stops become /y/ is evident in several contexts in Djambarrpuyŋu. The following rule captures some of its essential characteristics although its application is never completely predictable on phonological grounds alone.

$$\begin{array}{lll} /b/ & \rightarrow & /w/ \\ /g/ & & \end{array} \Big/ \left\{\begin{array}{l}\text{vowel}\\ \text{liquid}\\ \text{semivowel}\end{array}\right\} \_\_ \text{ vowel}$$

$$\begin{array}{lll} /dh/ & \rightarrow & /y/ \\ /dj/ & & \end{array}$$

i.e. $\begin{bmatrix}-\text{sonorant}\\ -\text{apical}\end{bmatrix} \rightarrow [+\text{sonorant}] / [+\text{continuant}] \_\_ \begin{bmatrix}+\text{continuant}\\ +\text{vocalic}\end{bmatrix}$

The contexts in which it occurs are firstly, in connection with morpheme internal lenis stops, secondly in relation to stop initial suffixes and thirdly in connection with word initial stops when these occur as the second morpheme in reduplications and compounds.

2.4.2.1 Lenition of lenis stops morpheme internally

Lenition of stops morpheme internally is only a marginal rule in the synchronic context. However it has been highly productive in the past and is the process by which lenis stops have been deleted from the phonemic inventory of several Yolŋu varieties. The best evidence for it is found in comparative data, some of which is presented for Dhuwal/Dhuwala in the following table:

Table 16: Comparative Data for the Stop Contrast in Dhuwal/Dhuwala

Western Dhuwala/Dhuwal		Eastern Dhuwala/Dhuwal	
Gupapuyŋu	Djambarrpuyŋu	Gumatj	
Pabala+mirri Pawala+mirri	Pawala+mirr	pawala+mirri	any/everything
Ɪaba'+yu-N Ɪawa'+yu-N	Ɪawa'+yu-N	Ɪawa'+yu-N	to look back, to side
ma:buga ma:wuga ma:wuwa ma:buwa	ma:wa[1]	ma:wa[1]	dream
mardhakal	mardhakal maryakal	maryakal	things
ra:gudha	ra:gudha ra:wudha	ra:wiya	shellfish sp (Geloina coaxans)
Pudju'+yu-N Puyu'+yu-N	Puyu'+yu-N	(Djapu: puyu'+yu-N)	to rub smooth
Purgu Purwu	Purwu	purwu	flower, blossom
Ɪu:gu Ɪu:wu	Ɪu:wu	Ɪu:wu	wave

The Gupapuyŋu material is taken from Lowe (n.d.b) and the Gumatj material is from Walker (p.c.). N.B. The only stop contrast in Gumatj is between t̪ and d̪

[1]where lenition to /w/ produces a sequence of three back continuants there is a further process of syllable reduction (cf wuburr/wuwurr : wu:rr : wu:rr "sweat")

In many instances the lenited variants are given as the 'correct' Djambarrpuyŋu equivalents. However there are some examples where the lenis stop is the norm and yet others where variation is tolerated (see other examples in section 2.1). A lenition rule that operates on lenis stops is therefore still necessary to account for the examples of variation.

2.4.2.2 Lenition of stop initial suffixes

There is no evidence in Djambarrpuyŋu that stop initial suffixes are ever realized as lenis other than following nasals, indicating that the stop contrast has been lost in this environment. However, 13 of 15 stop initial suffixes have allomorphs with initial semivowels reflecting the lenition process just described for lenis stops.

Like the latter it involves the lenition of peripheral stops to /w/ and laminal stops to /y/. It also only occurs between continuants.

It is furthermore much more pervasive than the lenition of lenis stops. This results from the distribution of initial consonants in Djambarrpuyŋu suffixes. Excluding verb inflections where an initial liquid and/or apical is common, the ALLative *-lil* and the *-a* allomorph of the SEQ *-Nha*, all suffixes begin with a peripheral or laminal stop or nasal. That amounts to some 25 suffixes, 15 of which are stop initial and 10 of which are nasal initial. The fact that all stop initial suffixes are peripherals or laminals means they are all potential candidates for lenition, and as I have just noted there are only two which never lenite.

However, the pattern of lenition is far from uniform for all suffixes that do lenite and many suffixes allow either stop initial or semivowel initial allomorphs in a particular environment. While the intercontinuant environment generally confines the process, there are only three suffixes for which this categorically conditions their allomorphs (i.e. the ERG *-Thu* and DAT *-Ku* suffixed to nomens and the verb augment *-Thu-*). Other general factors that appear to influence the process are the word class of the stem, the length of the stem and the preceding suffix.

The stop initial suffixes are listed below. Initial capitals denote those that lenite. According to the conventions regarding the use of capitals described earlier in this chapter all these stops should have capitals since they are all non-contrastive. However, in the rest of the thesis I will be using capitals as introduced here, namely to indicate those suffixes (morphophonemes) that have a range of allomorphs.

nominal stop initial suffixes		verbal stop initial suffixes	
ERGative	-Thu	Verb augment	-Thu-
DATive	-Ku	VerBaliZeR	-(')Thu-
OBLique	-Kal	INCHoative	-Thi-
OBLiqueStem	-Kalaŋa/u-	TRANSitivizer 1	-ku-
ORiginative	-Kuŋ(u-)	TRANSitivizer 2	-Tha-/-ya-[1]
PERLative	-Kurr		
ASSociative	-Puy		
MATCOLlective	-pulu		
PLural	-Kurruwurr(u-) /-Kurr(u-)		

[1]The distribution of the TRANS2 is restricted. It is posible that *-ya-* is the only synchronically productive form.

The following chart shows the forms of these suffixes in particular phonological environments. The use of capitals in this chart is in accordance with the conventions used in this chapter. They thus indicate non-contrastive stops. In the orthography they are represented by voiced symbols following nasals and word initially, and by voiceless symbols word medially except after nasals and word finally.

Table 17: Stop initial Suffix Allomorphs

Suffix	after stops, nasals, nasal+glottal stop	after liquids and semivowels, these plus glottal stop	after vowels, vowel+glottal stop
ERG	-Thu	-yu	-y
DAT	-Ku	-wu	-w
ASS	-Puy	-Puy/-wuy	-wuy/-Puy
OR	-Kuŋ(u-)	-wuŋ(u-) after liquids -Kuŋ(u-)/-wuŋ(u-) after semivowels	-wuŋ(u-)
OBL	-Kal	-wal/-Kal	-wal
OBLS	-Kalaŋa/u-	-walaŋa/u-	-walaŋa/u-
PERL	-Kurr	-Kurr/-wurr	-Kurr/-wurr
MATCOLL	-Pulu	-Pulu	-Pulu
PL	-Kurruwurr(u-) /-Kurr(u-)		-wurr(u-) /-kurruwurr(u-)
TRANS1	-Ku	-Ku-	-Ku-
Verb augment	-Thu- (a few stems with -tju)	-yu- (six stems with-thu- and a few with -tju-)	-yu- (a few stems with -thu-)
VBZR	-(')Thu	-'yu-	-'yu-
INCH	-Thi-	-Thi-/-yi-	-Thi-/-yi-
TRANS2	-	-ya- (one stem with -tha-)	-ya- (few stems with -tha)
ANA	-Thi	-Thi/-yi	-Thi/-yi

Lenited forms are strongly favoured following vowels and for many suffixes only a lenited allomorph has been noted in this context. Even for those suffixes that permit alternations in this environment the lenited form is the most common with the

exception of the PERL. For the PERL the stop initial allomorph is common and occurs in citation forms. Speakers accept variation in citation forms with the other suffixes that vary after a vowel. It is clear from the table that the range of allomorphs is in part determined by the function of the suffix. Thus DAT *-Ku* and TRANS1 *-ku* have distinct allomorphy, as do ERG *-Thu*, VBZR *-(')Thu* and the verb augment *-Thu-*.

The last suffix in Table 17 is the ANAphor *-Thi* which has been recorded on a variety of word classes and is thus classed as a discourse suffix (see section 6.3.2).

I will now briefly outline other factors that appear to correlate with the occurrence of lenited allomorphs.

1. Within the pronominal and demonstrative paradigms it is possible to isolate the nomen (=noun/adjective) suffixes in many of the stems. However, within these paradigms the form of the suffix is generally fixed according to the position of the word in which it occurs. For those pronominals where the suffix directly follows the root the suffix is always stop initial, even if in an appropriate phonological environment for lenition e.g. /nhu:+kal/ [2sg+OBL] "with, near, to you". Where the suffix follows another morpheme such as the OBLS however, only the lenited form has been recorded, with the exception of the PERL e.g. /nhu:+kalaŋa+wal/ [2sg+OBLS+OBL] "with, near, to your (X)". The PERL occurs with both lenited and stop initial forms in this context e.g. /ŋanapurruŋ+Kalaŋa+kurr/ [1pl+OBLS+PERL] "through our (X)". Essentially the same distribution of stop initial and lenited forms is found in the demonstratives. Stops are retained close to the root e.g. /ŋuru+kal/ [DIS+OBL] "with, near, to that" and lenited forms at some remove e.g. /ŋunha+ŋu+wuy / [DIS+ŋu augment+ASS] "in association with that".

2. The distribution in the pronominal and demonstrative paradigms also correlates with a tendency found in other words for a lenited allomorph to occur following stems of three or more syllables. However it should be stressed that in other contexts this is only a tendency and alternations are found on both shorter and longer stems. The INCH suffix is the one for which most variation occurs. Some examples demonstrating the alternations are given below:

2 syllables or less		3 syllables or more	
PamPay+Thi-	blind+INCH	*Ia:mPumiriw+Thi-*	four+INCH
ma:rrma'+yi-	two+INCH	*IarraIa+yi-*	still+INCH
Tjarrpi+Thi- /*Tjarrpi+'yi-*	crooked+INCH	*Kuyiŋarr+Thi-* /*Kuyiŋarr+yi-*	cold+INCH

The extent to which alternations in individual stems are permitted in connection with this suffix is not known. In the examples listed in my data sample however, *-thi-* predominates with one or two syllable stems and *-yi-* with longer stems.

Another context in which these suffixes are common on longer stems is when they attach to deverbal stems. The only unlenited allomorph I have ever noted on these stems is the ASS *-Puy* and this in only a handful of examples e.g. /Pu+nha+Puy / or /Pu+nha+wuy / [hit/strike+4th+ASS] "in connection with hitting".

3. There is a little evidence that the lenition process may be affected by an intermediary suffix. Thus following the PROP suffix the INCH is always *-yi-* e.g. /rrupiya+mirri+yi-/ [money+PROP+INCH] "to get/have money". It is also the case that the lenited forms in pronominals occur after the OBLique Stem. However it is difficult to know to what extent this can be disassociated from stem length.

2.4.2.3 Lenition of word initial stops in compounds and reduplicated stems

Lenition of peripheral or laminal stops to a semivowel can occur with root initial stops if they are word internal, as in compounds and reduplications. The process is much more sporadic than in suffixation. There appear to be some compound stems for which lenition is probably categorical but I am not aware of it being anything other than an optional alternative in reduplicated stems. Some examples are:

1. Compounds

a) in which the non-lenited form has not been recorded:

mi:l-wu:rum	"boy ready to be circumcised" (cf/mi:l/ "eye/seed" /Porum/ "edible fruit; ripe/ cooked)
Thulmu-waK	"woman who has lost a child" (cf /Thulmu/ "stomach" /PaK+Thu-N/ "to break")

b) in which both lenited and non-lenited forms occur:

Puthuru ma:kiri-witjun/Pitju-N Thuli'na	"to listen" (cf /Puthuru/, /mäkirri/, /Thuli'na/ synonyms for "ear"; the second part of this compound no longer occurs as an independent stem)
Tha:-wirrka'yu-N (less often /Tha:-Pirrka'yun/)	"to ask" (cf /dhä/ "mouth" /Pirrka'yu-N/ "to test try; think")

ma:rr-yulKThu-N (less often/ ma:rr-TjulKThu-N/)
"to take no notice, disbelieve"
(cf /ma:rr/ "spirit/faith" /TjulK+Thu-N/"to pass")

maranhu-wa:-ɲ (less often /maranhu-Ka:-ɲ/)
"to hunt" (cf /maranhu/ "something to satisfy hunger", /ka:-ɲ / "to get/take")

Thawal-wuyaŋa / Thawal-Kuyaŋa
"to give birth" (cf /Thawal/ "place/ place of birth" /Kuyaŋa/ "to think")

2. Reduplications

Tjudu+yuɖuP+Thu+	from TjuɖuP^{2}+Thu- "to enter"
Thawa+yawaI+Thu-	from ThawaI^{2}+Thu- "to emerge, come out"
Puɖa+wuɖaP+Thu+n	from PuɖaP^{2}+Thu- "to cross over"

Very occasionally I have noted lenition of word initial stops in connected speech. It is far from being a regular process. The following are some examples from the text corpus:

Thuwurr wulKmaram	(cf /Thuwurr /"law", /KulK+mara+m/ cut+CAUS+1st")
Thiyal wothin	(cf /Thiyal/ "PROX-LOC", /Pothi+n/ "tell a lie+3rd"
luku yurrparam	(cf / luku/ "foot", /Thurrpara+m/ "cover+1st")
wiripu wulkuy	(cf /wiripu/ " other", /Kulku+y/ " group +ERG")

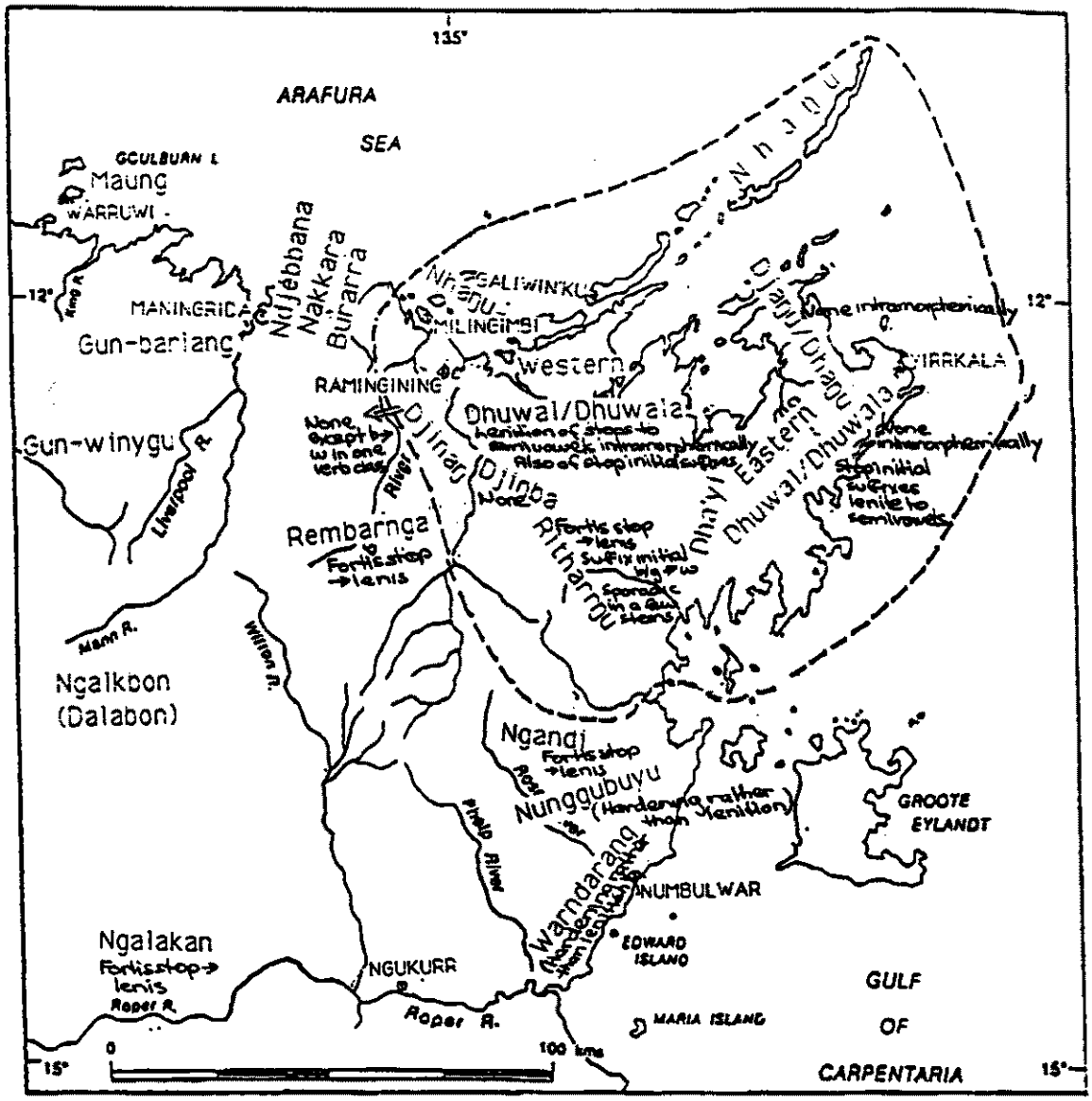
Three of these involve the juxtaposition of a nominal and a verb reflecting the verbal compound order and although they are not compounds, it may be a factor contributing to lenition in these forms. The last example is distinctive in that only the second noun is case marked. Furthermore it was transcribed with a hyphen by one speaker. This lends the sequence a compound like constituency which I have just suggested as a possible contributing factor in the previous examples.

2.4.2.4 Lenition in other Yolŋu varieties

1. Intramorphemic lenition

It would appear that the process of morpheme internal lenition was widespread - see Map.5 for a regional perspective. Of course for many eastern varieties there is no intramorphemic lenition synchronically, all lenis stops having been lenited under earlier applications of the rule. The Gupapuyŋu dictionary material reveals

Map 5: Distribution of Lenition



This map draws on information from Amery (1985), Eather (p.c.), Harvey (p.c.) Heath (1978b, 1980b, 1984), McKay (1975), Merlan (1983), Morphy (1983), Waters (1989) and Wood (1978).

that even for Gupapuyŋu an alternation between lenis stops and semi-vowels was often permitted (Lowe n.d.b). The alternations and occurrences of the lenis stop listed for Gupapuyŋu are however much more extensive than in Djambarrpuyŋu. Waters (1989) does not report a similar lenition process for Djinaŋ although it does have two stop series. Lenition does occur in Ritharrŋu but it is described as optional and not regular (Heath 1980b). The variety for which, on available evidence it is synchronically most extensive is thus Gupapuyŋu. Djambarrpuyŋu is in an intermediary position between the situation in Gupapuyŋu and that of more eastern varieties. Outside the Yolŋu bloc, to the west and north-west I have seen no evidence of lenition to a semivowel, except for Ngandi, where it is described as rare and unproductive Heath (1978 p21). Lenition processes are described for the phonologies of western languages but usually between fortis and lenis stops, not between stops and semivowels.

2. Lenition of stop initial suffixes

Lenition of stop initial suffixes is synchronically much more widely occurring and equally widely distributed as intramorphemic lenition. It is reported for all Dhuwal/Dhuwala varieties, Dha'yi and Ritharrŋu as well as Dhaŋu. However, again it does not appear to occur in Djinaŋ. It occurs in other varieties with a stop contrast as well as those varieties with only a single stop series. The lenition process is thus independent of the existence of a stop distinction. Presumably there was originally a single lenition process affecting all lenis stops. This correlation is neatly demonstrated in Ritharrŋu where only lenis initial suffixes lenite (see Heath 1980b). Furthermore any lenited variants can always alternate with a stop initial allomorph. The lenis stops appear in Gupapuyŋu allomorphs but lenition is not confined to them. In Djambarrpuyŋu and other eastern varieties there is no longer any evidence of a stop contrast in this context and lenition is simply associated with initial stops. Cognate suffixes in Ritharrŋu that do not lenite correspond with the PERL, ASS, TRANS2 and INCH suffixes in Dhuwal/Dhuwala. Lenition is possible with the ERG, DAT, OR and OBL. If we assume that this reflects an earlier distinction between fortis stop initial and lenis stop initial suffixes in other Yolŋu varieties we have a basis for suggesting that lenition of the earlier fortis suffixes has occurred by analogy with the lenition of the earlier lenis stop initial suffixes. This would offer an explanation for the fact that the PERL, ASS and INCH suffixes are the only ones where a stop initial allomorph is still possible intervocalically. The fact that only these suffixes permit the stop initial allomorph intervocalically and

the extensive variation they display suggest they have undergone lenition more recently.

The occurrence of lenited allomorphs is generally confined to intercontinuant position. However the details for its occurrence for particular suffixes show variation both within varieties and across varieties. Of most relevance to Djambarrpuyŋu is the fact that the range of allomorphs I have presented above and those described for Djapu (Morphy 1983) do not completely overlap. The details are not consistent and may reflect the need for a consideration of a larger corpus than has yet been undertaken. For five suffixes Djambarrpuyŋu appears to lenite more extensively or categorically than Djapu (i.e. ERG, DAT, PERL, ASS and INCH) but there are two suffixes for which the inverse appears true (i.e. OR and OBL). This difference in distribution is another indication of geographically based distinctions betwen the two Dhuwal varieties.

3. Lenition in compounds and reduplications

Lenition in compounds and reduplications has been noted for Djapu and Gupapuyŋu. Wood (1978) also describes it for compounds in Gälpu (a Dhaŋu variety spoken at Galiwin'ku). However there is not yet enough data available to know if there are any differences between varieties associated with it.

No mention is made of lenition in these contexts in Ritharrŋu and examples in relevant sections all have a stop initial second consonant. If a weakly leniting variety such as Ritharrŋu does not lenite in these contexts, then there is an interesting correlation between its occurrence in compounds and reduplications and the absence or marginalization of the two stop series and lenition of stop initial suffixes. The domain of productive lenition in languages such as Djambarrpuyŋu, Gupapuyŋu and Djapu appears to have been reinterpreted as affecting morpheme initial stops that occur word medially. This would offer natural grounds for extending lenition to compounds and reduplications. Where the lenition is still tied to the fortis/lenis stop contrast one would not expect these stops to lenite. If they did lenite it would offer phonological evidence of a link between word medial lenis stops and word initial stops.

In conclusion it is clear that lenition does provide linguistic difference between varieties, although, between closely related varieties it has more to do with the distribution of the process rather than whether the process occurs or not.

The following chart summarizes the occurrence of the two stop series and lenition in various Yolŋu varieties

	Stop contrast		Lenition	
	Intramorphemic	Suffix initial	Intramorphemic	Suffix initial
Gupapuyŋu	+	+	+	+
Djambarrpuyŋu	+	–	+	+
Djapu	–	–	–	+
Gumatj	–	–	–	+
Gälpu (Dhaŋu)	–	–	–	+
Ritharrŋu	+	+	+	+
Djinaŋ	+	+	–	–

2.4.3 Glottal stop

The glottal stop is represented in the Yolŋu orthography with an apostrophe '. I use this symbol for the glottal stop throughout this thesis.

Like the lenis /fortis stop contrast, the data concerning the glottal stop is hard to account for, partly because the phenomenon is not widespread, and partly because it has a unique distribution compared to other segmental phonemes. The question as to whether it should be treated as a segmental phenomenon or as a prosodic phenomenon is one that has often been addressed in earlier descriptions. Schebeck (1979), Wood (1978) and Morphy (1983) writing on Yolŋu varieties have all argued for a prosodic interpretation. McKay (1975) for neighbouring non-Yolŋu Rembarnga where the distribution is very similar argues for its being a phonemically distinctive syllabic feature, while Merlan (1983) argues that in Ngalakan, another non-Pama-Nyungan language from further to the west, it is segmental with distributional restrictions in terms of the syllable.

There is no question that the occurrence of the glottal stop is bound to the syllable. It is this constraint that prompts the prosodic analyses. However the realization of the glottal stop differs from that of other suprasegmentals such as pitch and stress in that it is not relative in value nor distributed over segments. Despite its restricted occurrence with respect to the syllable, it can be contrastive in a manner parallel to other segmental phonemes. The 'peculiarities' of its distribution indicates that an autosegemental treatment would be revealing. The theoretical status attributed to the syllable and the existence of distinct autosegmental tiers offer apparatus for describing this phenomenon which avoids the problem of earlier

analyses as to the prosodic or segmental status of the glottal stop. However my goal in this section is simply to present the facts as to the distribution of the glottal stop and demonstrate its unique character. For a formal analysis of glottal stops of languages in this region within an autosegmental approach I refer the reader to Harvey (to appear).

2.3.3.1 The distribution of glottal stop in Djambarrpuyŋu

The glottal stop is unique amongst Djambarrpuyŋu phonemes, in that it has a highly restricted distribution. It can only occur syllable finally and unlike other consonants, it may follow any sonorant and precede any non-syllabic. It never occurs intervocalically nor following stops.

It is most commonly found at a morpheme boundary but does also occur intramorphemically, most frequently in clusters (examples are given below).

That the glottal stop is realized syllable finally is best illustrated by the placement of a root final glottal stop in connection with certain suffixes. These suffixes are either single phonemes or cluster initial, and thus contain segments that can be resyllabified with the last syllable of the root. When this occurs the glottal stop is realized after these segments, at the end of the syllable. In a suffix consisting of a CV the C is never incorporated into the preceding syllable in this way, a clear reflection of the fact that syllables in Djambarrpuyŋu are C initial. The range of realization of root final glottal stops is demonstrated by the following:

Tju:rra'	"paper, book"	ma:rrma'	"two"
Tju:rra'+lil	+ALL	ma:rrma'+lil	+ALL
Tju:rra'+ŋur	+LOC/ABL	ma:rrma'+ŋur	+LOC/ABL
Tju:rra+y'	+ERG	ma:rrma+y'	+ERG
Tju:rra+w'	+DAT	ma:rrma+w'	+DAT
Tju:rra+ny'	+PROM	ma:rrma+ny'	+PROM
Tju:rra+y+ny'Tja	+ERG+PROM	ma:rrma+w+ny'Tja	+DAT+PROM

Despite this constraint on its distribution the glottal stop is contrastive. This is illustrated by the following minimal pairs:

warr+yu-	push/pull	warr'+yu-	take out
lurr+yu-	flow	lurr'+yu-	clap
Tjawar+yu-	be tired, bored	Tjawar'+yu-	spear, stab, pierce
nyim+Thu-	reduce in size	nyim'+Thu-	to poke, pierce the ground, a number of times
Pala	directional particle (movement away)	Pala'	house (Macassan)
Palaŋ	irrealis particle	Palaŋ'	Subsection name

The glottal stop occurs with particular classes of morphemes. It occurs in the open nominal classes but not pronominals, demonstratives or grammatical particles (e.g. conjunctions and those coding tense-modality/mood-aspect). It is particularly common in the largest verb class. This is a class where roots require an augment *-Thu-* before an inflection. However, these are the only verb roots which occur with a glottal stop. Another class of lexemes where it is common is interjections. Finally, glottal stop occurs as the initial segment in a few derivational suffixes.

A glottal stop can also be introduced into a word by two morphological processes. One is suffixation of the glottal stop initial suffixes just mentioned and the other is reduplication (see section 10.2). There is, however, an almost categorical constraint that a word have only a single glottal stop.

The various characteristics outlined in the previous paragraphs will now be considered in turn.

1. Occurrence of the glottal stop morpheme medially

There are three categories in which glottal stop occurs medially. Firstly there are the handful of nominal roots in which it occurs following a vowel. Of the three recorded from Djambarrpuyŋu speakers two are possible Austronesian loans:

Tji:'la	salt (Macassan (Walker and Zorc 1981))
ma:ri'mu	kin term FF, FFZ
Thuli'na	ear (?Austronesian cf PAN *taliŋa (p.c. B Foley))

All other occurrences of morpheme medial glottal stop are between consonants. Some of these occur in fossilized reduplicated stems. However in a sample of 300 such stems only 20% retained the glottal stop. This is in contrast to its regular

presence in reduplicated stems resulting from the synchronically productive reduplication process. This process is described more fully in section 10.2 but some examples demonstrating the insertion of a glottal stop following the prefixed reduplicated morpheme are given below:

		Reduplicated stem
nhina-$\emptyset_a$	sit(intr)	nhina'+nhina-$\emptyset_a$
nhirrpa-N_L	put(tr)	nhirrpa'+nhirrpa-N_L
yu:ŋgu	person	yu:ŋgu'+yuŋgu

The other (i.e. those not associated with reduplication) clusters in which the glottal stop occurs are described in detail in section 2.2.2. Some examples are given below, together with examples of otherwise identical clusters without the glottal stop:

Iar'Iar+yu-N	to sing, play instrument
Iil'Iil	spot, dot, freckle
Tjuŋ'Tjuŋ	nasal ridge

Pul'manyTji	shark	wulman	old man
Iar'man	Dwarf Paperbark	Karma	ceremonial shade
Kal'ŋu	real, true	yolŋu	person
Kay'wu	stringbag	Ka:ywarr	seawasp
mar'waK+Thu-	to pass through	marwanTa	tree/shrub sp

ŋim'Pu	lower back	ŋirrimPu-	walk, go
Pam'Pala	sand dune, bank	PamPay	blind
Tha:n'Pala	shellfish type	TjanPi	heap, pile
Thun'Tjirr	skill, prowess e.g. at hunting	KunTjaK	freshwater pandanus tree
Kaliwin'Ku	place name	ThumunKur	kin term FZDDC
Tjaŋ'Pa	Ficus sp	waŋPana	rain
Puŋ'Iaŋu	snake	KuŋIirr	antbed, anthill
waŋ'Tjurr	cleansing ceremony	PaŋTjurr	mangrove tree
Thuŋ'Ku	shellfish type	Tju:ŋKu-	collect, gather together
Kayanh'Tha	blanket, sheet	rarranhTharr	dry season
wunh'Thiŋ	banana	rra:nhThiŋ	chain, handcuffs
miny'Tji	colour, design, drawing	TjinyTjalma	mud crab

2. Occurrence of the glottal stop morpheme initially

Four suffixes have an initial glottal stop: -*'manyTji* the KINship DYaDic, -*'mirriŋu* the KINship PROPrietive, -*'mirr* a variant of the PROPrietive and -*(')Thu-* the VerBaliZeR. They are all suffixed to nonverbal roots and are restricted in the range of stems to which they attach. The first two suffixes are restricted to kin terms or nouns designating social categories e.g. *yapa+'mirriŋu* [Z(MD, FD) +KINPROP] "someone's sister" and *yapa+'manyTji* [Z (MD,FD)+KINDYD] "two or more in a

dyadic relationship associated with *yapa* (i.e. two or more sisters, or two or more brothers and sisters)". The third only occurs with the unmarked PROX demonstratives of the different varieties indicating the different linguistic groups e.g. *dhuwal+'mirr* [PROX+'PROP] "clan varieties using the PROX *dhuwal*", *dhaŋu+'mirr* [PROX+'PROP] "clan varieties using the PROX *dhaŋu* ". The verbalizer *-(')Thu-* is productive as a delocutive and may also be (semi-) productive in other functions (see section 7.5.1). With a few non-verbal stems a glottal stop is not present, but in Delocutive function it always is, e.g. *yapa+'yu-*N [Z+VBZR] " to call someone Z"; *dhuwal+'yu-*N [PROX+VBZR] "to speak *dhuwal.*"

The PROP *-'mirr(i-)* and the VerBaliZeR are both homophonous, and not unrelated in function, with two widely occurring suffixes, the PROP *-mirr(i-)* and the *-Thu-* augment respectively. The glottal stop appears to distinguish specialized functions in each instance. The PROP *-'mirr(i-)* designates linguistic groupings using the PROX forms of demonstratives and the *-(')Thu-* is a delocutive (and possibly additional verbalizing functions) distinct from that of the verb augment.

Many of the suffixes with a glottal stop have to do with social and linguistic classification. It is interesting to note in this regard that one of the few cases of glottal insertion reported for Ngalakan, a non-Yolŋu language to the west of the Yolŋu speaking area, is to code the meaning "to call someone X" where X is a kin term (Merlan 1983 p27, 69).

2. Occurrence of the glottal stop morpheme finally

With nominal roots the final glottal is often deleted. The strongest evidence for a final glottal is provided by its appearance when a suffix is attached. For many stems its appearance in this context is reasonably consistent. However, for others there is considerable variation, with suffixed forms with and without a glottal occurring. e.g. *Kuḻun'+Puy* and *Kuḻun+Puy* "stomach/waterhole + ASS". This suggests such stems are in the process of losing the root final glottal stop. The extent of variation of such root final glottal stops has yet to be exhaustively considered.

It is with *-Thu-* verb class roots that morpheme final glottal stops are most consistently evident. Many roots in this class have final glottal stops. Evidence that the glottal stop is part of the root is found in the stems from this class which also occur with the CAUS *-mara-*. These always retain the glottal stop e.g. *ŋal'+yu-*N "rise, climb" and *ŋal'+mara-*Ṉ "raise". However, in verbalizing function the glottal stop appears to be part of the VerBaliZeR *-(')Thu-* suffix since in its most productive delocutive function it always introduces a glottal stop (see section

7.5.1). Its common occurrence in the -*Thu*- verb roots may reflect a past situation in which these verbs were derived by a glottal initial -*'Thu*- suffix.

The loss of a glottal stop from these stems can be attributed in the main to regular processes associated with reduplication (see section 10.2 and the examples in 1. above). Occasionally glottal stop is also lost in connected speech.

The glottal stop is never deleted in morphemes in which it occurs medially.

Finally I would like to note the appearance of glottal stop at the end of words which do not usually have them. This seems to be pragmatically motivated. It has been noted following a focused lexical item in a text, on citation forms and on address terms.

3. Glottal stop deletion

With a single class of exceptions one single glottal stop is permitted in a word. There is a rule of glottal stop deletion that removes any occurrences of glottal stop after the first in a word. This operates after morphological processes of suffixing and reduplication.

/ʔ/ -> Ø / #...../ʔ/..... _____ #

This rule affects underlying roots with glottal stops which are affected by a morphological process introducing glottal stops. Examples of it applying in the context of reduplication are:

Simple stem		Reduplication	Glottal Deletion
ŋal'+yu-N	climb, rise(intr)	ŋal'+ŋal'+yu-N	>ŋal'+ŋal+yu-N
yamana'+yu-N	poke out tongue, flash (lighting in distance)	yama'+yamana'+yu-N	> yama'+yamana+yu-

Examples of glottal stop deletion in connection with suffixing are:

		Suffixing	Glottal Deletion
ma:ri'mu	FF(B/Z)	ma:ri'mu+'mirriŋu (+KINPROP)	> ma:ri'mu+mirriŋu
		ma:ri'mu+'manyTji (+KINDYD)	> ma:ri'mu+manyTji.

Quite in keeping with this deletion process is the fact that there are no roots with more than one glottal stop. One context in which this is particularly evident is in the -*Thu*- verb class where potentially a glottal stop could occur both in a

reduplicated stem and between the root and the *-Thu-* augment. However, this never happens, although by what means this occurred is not clear.

The exceptions to this constraint are the result of an alternative reduplication strategy permitted with *-Thu-*verb stems with an underlying glottal stop. These prefix the first two syllables of the stem and retain the root glottal stop in both reduplicated morphemes. For example:

		Reduplication
miŋ'+Thu-N	flash(of lightning)	miŋ'Thu+miŋ'+Thu-N
rarr'+yu-N	take/put down	rarr'yu+rarr'+yu-N

In this context no glottal stop is inserted after the prefix, which is the regular pattern. For further examples and discussion see section 10.2

Another rule of glottal stop deletion is posited in section 2.4.3.2 to prevent sequences of stop+glottal stop.

2.3.3.2 Glottal stop and the other stops

From the preceding outline of the distribution of glottal stop it should be clear that it plays a unique role in Djambarrpuyŋu phonology. I shall now consider its interaction with one class of segmental phonemes, namely the stops, with which glottal stop might potentially be expected to form a natural class.

Firstly, there are certain characteristics which clearly distinguish glottal stop from stops. These include its restricted occurrence with respect to the syllable and the unique way in which it extends the syllables permitted in the language (see section 2.2.1). Furthermore there is no constraint that only a single stop, either lenis or fortis, occurs per word, parallel to that of the glottal stop. A constraint on the distance with which fortis stops can follow each other occurs in Ngalakan (Merlan 1983) and Rembarnga (McKay 1975). Fortis stops within two syllables of another are lenited to lenis stops. There is nothing comparable to this in Djambarrpuyŋu.

Another striking feature of root final glottal stops is that they are not a phonological conditioning factor for suffix allomorphs. The conditioning factor is the sound preceding the glottal stop. Thus stems with a final glottal stop have identical

allomorphs to other stems which end with the same sound as that preceding the glottal stop. Some examples are given below:

root	+ERG	+DAT	+INCH	+PROM	
nasal(')+: warrakan' raŋan	warrakan'+Thu raŋan+Thu	warrakan'+Ku raŋan+Ku	warrakan'+Thi- raŋan+Thi-	warrakan'+Tja raŋan+Tja	animal paper-bark
semi vowel(')+: galpaw' galay	galpaw'+yu galay+yu	galpaw'+wu galay+wu	- -	galpaw+ny'Tja galay+nyTja	boil MBC
vowel(')+: märrma' dharrwa	märrma+y' dharrwa+y	märrma+w' dharrwa+w	märrma'+Thi- dharrwa+Thi-	märrma+ny' dharrwa+ny	two many

This evidence points to the glottal stop as an autonomous category of segment in Djambarrpuyŋu.

Presumably glottal stop placement must apply to a syllabification which occurs after the morphophonological processes of suffixing and reduplication have taken place, otherwise the correct placement of the glottal could not occur. If its placement were a later occurring phenomenon then this might also explain why it is "invisible" to the suffix allomorphy.

However there are certain contexts in which glottal stop and the stops intersect with each other. Sequences of glottal stop and stop occur both intra- and inter-morphemically and in both contexts these sequences contrast with those in which a stop follows an identical sound to that preceding the glottal stop.

The intramorphemic occurrences are in clusters, of which examples were given above and detailed in section 2.2.2. The intermorphemic occurrences are between a root with a final glottal stop and a stop initial suffix allomorph. The realizations in both contexts are identical and result in contrasts between a single consonant C and glottal stop plus an identical consonant, henceforth depicted as C and 'C.

In Gupapuyŋu there is a commonly cited set of examples that depict the three way contrast between lenis and fortis stops and the sequence of a glottal stop and a stop,

i.e.	Purrburr+yu-	sing for deceased
	Purrpurr+yu-	be stuck, bogged
	Purr'Purr+yu-	bear a load of things which fall, spill

However there is no known corresponding set occurring in Djambarrpuyŋu. In the cognates to these examples the lenis stop has been lenited to /w/, although the others are identical. Alongside the /P/ /'P/ contrast evident in the last two examples and which are identical in Djambarrpuyŋu, there are a few examples of the stop contrast e.g. *Thurrthurr+yu-* "cover" and *Thurrdhurr+yu-* "stamp (feet)" which provide indirect evidence that a three way contrast still remains. However, the predominant contrast involving stops in Djambarrpuyŋu is that between the single occurrence of a stop and the sequence of a glottal stop and a stop. This is the only contrast in other varieties where intramorphemic lenition has removed the lenis/fortis stop distinction.

Interestingly the occurrence of the contrast intramorphemically almost overlaps with that of the fortis and lenis stops. It will be recalled that the latter contrast is confined to intercontinuant environments, while the glottal stop only follows sonorants. The following chart depicts the overlap:

	'C	lenis stop	fortis stop		C
/V_	x	x	x	>	x
/SemiV_	x	x	x	>	x
/L_	x	x	x	>	x
/N_	x	-	-		x

V = vowel, SemiV =semivowel, L =liquid and N =nasal

The first three columns depict the situation from which the phonological system is apparently shifting, with the exception of the contrast after nasals. With the lenition of the lenis stops to semivowels the fortis stops are becoming the unmarked realization of a single stop series designated by the fourth column. However, as the first and fourth column reveal that a contrast, albeit with a slightly different realization, is being retained in the system. Particularly after nasals the quality of the distinction is not very different from that between the lenis and fortis stops, with the single stop always being heard lenis and the combination of the glottal stop and a stop being relatively longer and having at least a period of voiceless closure. However it should be stressed that a fortis like realization must be attributed to the sequence of glottal stop +stop. It is interesting that this correlation between glottal stop and fortis stops is reflected in Djinaŋ cognates for words with a glottal stop in other Yolŋu varieties in that the Djinaŋ cognate generally has a fortis stop (see Waters 1989).

The alternative sequence of stop+glottal stop is also potentially possible as the result of suffixation and reduplication. It is never realized on the surface. One of the relevant contexts is the suffixation of a stop final stem with a glottal initial suffix. In fact there is only one such suffix for which appropriate stems might occur and that is the VBZR *-(')Thu-*. Only one such stem has been recorded and that is based on an English loan, *bep+thu-* "to beep (car horn)". The other relevant context is the occurrence of a stop final initial morpheme in a reduplicated stem. These are not so uncommon:

base stem		reduplicated stem
waP+Thu-	hop, jump	waP+waP+Thu-
luP+Thu-	be in/with water	luP+luP+Thu-

This requires a second rule of glottal stop deletion, deleting a glottal stop introduced by morphological processes. i.e.

/ʔ/ -> Ø / [-sonorant]__

I hope that I have demonstrated in this section that any treatment of the glottal stop in Djambarrpuyŋu needs to account for its relationship to the syllable and to its autonomy in relation to other distinctive segments.

2.4.3.3 The glottal stop in other Yolŋu varieties

The glottal stop is present in all Yolŋu varieties. On the basis of the entries in Zorc (1986) and other descriptions there is some evidence of variation in the extent of its occurrence. Thus in Djinaŋ it is noncontrastive and only occurs at morpheme boundaries (Waters 1989).

In other varieties its distribution appears similar to that described for Djambarrpuyŋu - occurring in clusters both intramorphemically and inter-morphemically as well as root finally. Golpa, a Nhaŋu variety, has nasal+glottal stop+ stop sequences in some pronominal stems, the glottal stop thus evident in a closed class in which it does not occur in other varieties. There is a tendency for Ritharrŋu words (Zorc 1986) cognate with other Yolŋu varieties to have a final glottal stop not present in the others. On the other hand Heath observes that stem internal glottal stops are less common in Ritharrŋu than in Dhuwal and Dha'yi (1980b p10). There are also several Gumatj and Djapu stems that have a final glottal which does not occur in other varieties. This suggests some regional

variation and, at least within the Southern Yolŋu sub-group the differences appear to be in terms of tendencies rather than occurrence in different environments. The data has yet to be quantified.

The distribution of glottal stop in languages in the area is similar, although not completely overlapping, to that of the the two stop series. Like the two stop series it also occurs in both Yolŋu and non-Yolŋu languages in the area (see Map 6).

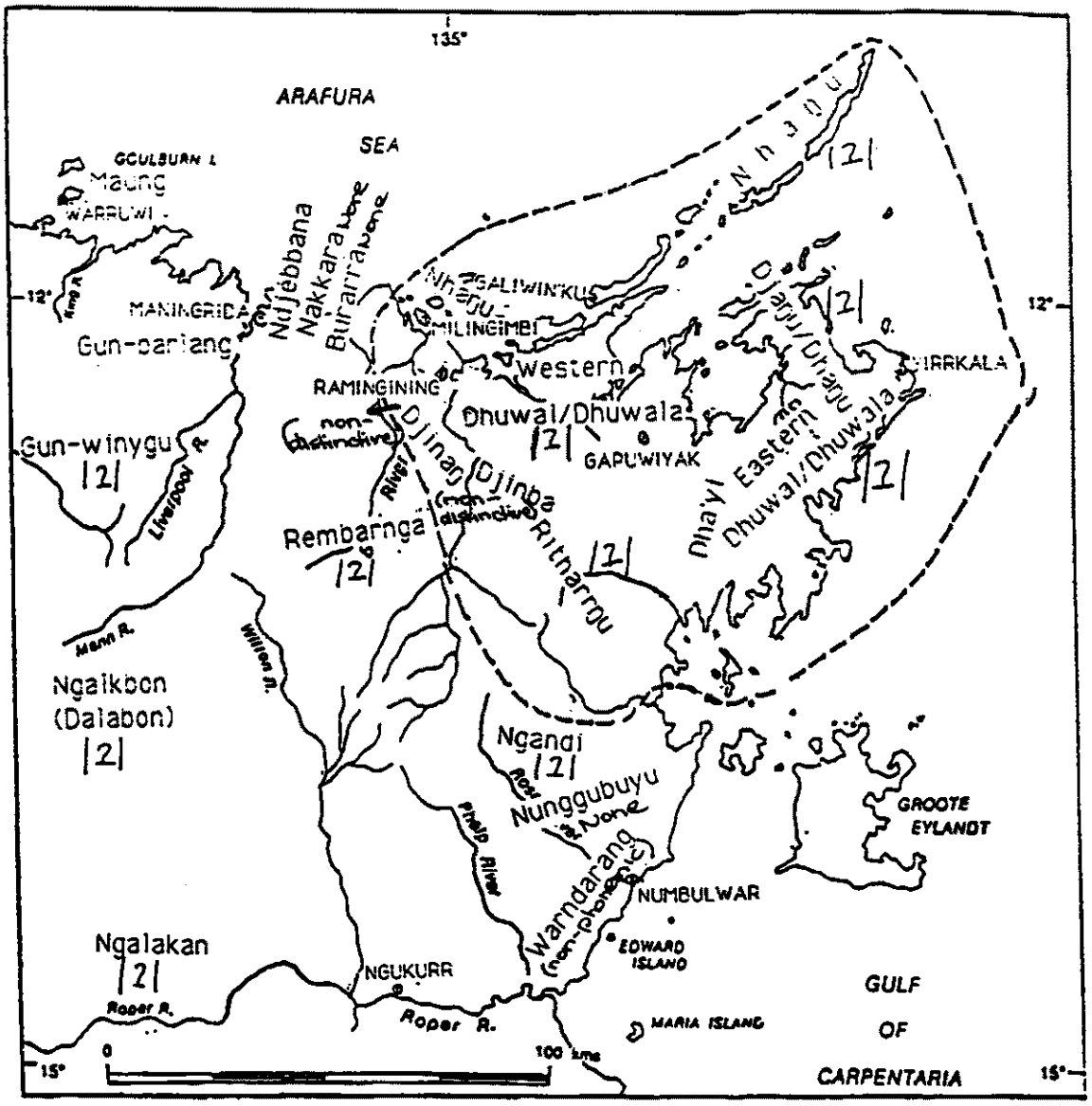
The origins of the glottal stop have not been traced. Given its restriction to syllable final position and its most common occurrence at morpheme boundaries, it has been suggested it was orginally a junctural phenomenon (Heath 1980b).

There are some characteristics of the glottal stop and the stop contrast in Austronesian contact languages (e.g. Makassarese and Buginese) and Yolŋu languages which are very similar and point at least to the potential for the contact to have had an influence on their realization in Yolŋu languages. This is suggested on the basis of comparisons of the general phonological systems rather than on direct correspondences in cognates. These languages are described as having both voiced and voiceless stops as well as geminates. The latter are found with both series of stops and confined to medial position. The geminate stops may be realized as either [ʔC] or [C:] (although in Makassarese a geminate voiced stop is only realized as [ʔC]) (see Mills 1975). Other parallels are found (drawing on Makassarese) in the non-occurrence of the glottal stop intervocalically and the occurrence of gottal stop plus non-vocalic sonorant clusters Makassarese also optionally geminated certain stem final consonants before certain suffixes. Potential areas of influence are the presence of glottal stop in intramorphemic clusters and the fortis realization of suffix initial stops.

I am drawing here on the work on Southern Sulawesi languages by Mills (1975), and work on the linguistic repercussions of Macassan contact in northern Australia described in Walker and Zorc (1981) and Urry and Walsh (1981). Walker and Zorc (1981) detail Macassan loans in Yolŋu languages.

The number of relevant cognates in regard to the stops and glottal stop listed in Walker and Zorc (1981) are limited, and show variable correspondences both as to the glottal stop and the two stop series. This range of correspondences combined with widespread occurrence of glottal stop and stop contrast in inland languages well away from areas where the Macassans had the greatest contact do not offer any

Map 6: Distribution of Glottal Stop



This map draws on information from Amery (1985), Eather (p.c.), Harvey (p.c.) Heath (1978b, 1980b, 1984), McKay (1975), Merlan (1983), Morphy (1983), Waters (1989) and Wood (1978).

simple resolution to the possibility of Macassan influence on these areas of Yolŋu phonology. It is quite possilbe that both the two stop series and the glottal stop were present prior to Macassan contact.

2.4.4 *-Nha* allomorphs

There are two homophonous *-Nha* suffixes, the ACCusative *-Nha* and the SEQuence discourse suffix *-Nha*. Both suffixes are realized as *-nha* after non-continuants and may be found after non-syllabic continuants. However there are some distinct patterns in their allomorphy. The SEQ has an alternative *-a* possible after non-syllabic continuants while ACC is always *-nha*, and they both have quite distinct allomorphs after vowels when they occur word finally. ACC *-Nha* has a post-vocalic word final allomorph *-ny* while the SEQ *-Nha* post vocalic allomorph is *-n*.

The allomorphs of the ACC and SEQ are indicated in the chart below:

	stop	nasal	semivowels	liquids	vowels
SEQ	-nha	-nha(/a)[1]	(?-a/)-nha	-a/-nha	-n
ACC	-nha	-nha	-nha	-nha	-ny

[1] Only found following the 1st inflection *-n-* of all N class verbs

In Djambarrpuyŋu the ACC word-final post-vocalic allomorph *-ny* is identical with the PROMinence discourse suffix *-NyTja* in the same environment.

The alternations in Djambarrpuyŋu are somewhat different to Djapu, the eastern Dhuwal variety. In Djapu both *-Nha* suffixes occur but the post-vocalic allomorph is *-n* in both. This results in overlap between allomorphs of the SEQ and ACC, rather than the PROM and ACC as in Djambarrpuyŋu.

Allomorphs found in Dhuwal/Dhuwala varieties for the SEQ and ACC:

	western Dhuwala Gupapuyŋu	eastern Dhuwala Gumatj	western Dhuwal Djambarrpuyŋu	eastern Dhuwal Djapu
ACC	-nha	-nha	-nha-/-ny	-nha-/-n
SEQ	-nha(?/-na)	?	-nha/-a/-n	-nha/-na/-a/-n

The main point of interest here is that the variation seems to revolve around the vowel deletion process distinguishing Dhuwal and Dhuwala varieties. This is the topic of a section 2.4.6 below. However, in this case the resulting allomorphy in the Dhuwal varieties is more complex than for many other morphemes which

undergo this process. This stems from the avoidance of /nh/ syllable finally and the option of deleting the initial segment rather than the final vowel. This and the details of the Djapu allomorphy are discussed further in section 4.2.6.8.

The second *-Nha* suffix is the SEQuence discourse suffix whose post vocalic allomorph is an apicoalveolar nasal /-n/, assimilating to the passive articulator in contrast to the palatal allomorph of the ACC, /-ny/. Djapu again regularly shows /-n/ in this environment (Morphy, 1983 p49).

The FOURTH form of verb stems shows alternations between final/-na/ /-nha/ and /-nya/ across the various verb classes. This suffix has a similar alternation in initial nasals to those found on the two suffixes just considered. However this suffix always has a following vowel so that the nasal is never in syllable final position. Again /-nha/ appears to be the basic allomorph. In the Ø conjugation /-nya/ occurs following /i/ and /-nha/ elsewhere. However this phonological conditioning does not extend to other conjugations (see section 7.3.4).

Before certain nominal suffixes a longer form with an additional syllable occurs on these allomorphs: /-nara-/, /-nhara-/ or /-nyara-/. In Djapu this can be argued to be a Nominalizing suffix distinct from the FOURTH inflection *-Nha*. However, in Djambarrpuyŋu the evidence is not so strong (see sections 7.3.4 and 12.1.2).

2.4.5 Initial syllable deletion

This process is confined to certain pronominals, and *ŋuli* the HAB/HYP particle. It entails the optional deletion of the initial syllable /ŋa/ or/ ŋi/. Amongst pronominal stems it is largely confined to those of three or more syllables. It is common with the 1st person dual, *ŋalinyu/ŋilinyu/linyu*, and both 1st person plural forms i.e. *ŋalimurr/ŋilimurr/limurr* 1pl and *ŋanapurr/napurr* 1+2pl. Its application and a comparison of pronominal forms in Dhuwal/Dhuwala is considered in more detail in section 5.1.2.1. The HAB/HYP particle occurs both as *ŋuli* and *li*. The reduction here is clearly not constrained by considerations of syllable length.

Despite its restricted occurrence it is yet another linguistic marker that correlates with the regional distribution of particular Dhuwal/Dhuwala varieties. It is confined, in the Dhuwal/Dhuwala group to western varieties, i.e. to Djambarrpuyŋu and Gupapuyŋu, and does not occur in the eastern varieties Djapu and Gumatj. The only other variety for which this process has been reported is Ritharrŋu and there

it has applied even more extensively than in the western Dhuwal/Dhuwala varieties (see Heath 1980b and section 5.5 below).

2.4.6 Vowel deletion

One very noticeable distinguishing feature of the Dhuwal varieties relative to their Dhuwala counterparts is the numerous cognates in which Dhuwala has a final vowel that does not appear in the Dhuwal forms. The terms for the proximal demonstrative used to designate these linguistic groupings are a case in point. The vowel deletion in Dhuwal may be categorical relative to forms in Dhuwala. However in many instances the vowel appears in Dhuwal allomorphs. The most common environment conditioning such allomorphs is non word-final position. A process of vowel deletion must thus be posited for Djambarrpuyngu to account for the alternations. The essential characteristics of this rule are captured by the following:

$$(C)_1V \rightarrow \emptyset \;/\; (V+C)_1 \_\_\_\_ \#$$

The options designated with the subscript "$_1$" must co-occur. This is to account for two homorganic nasal+stop initial suffixes which delete the final CV of the suffix rather than just the final vowel: PROM *-NyTja* which is realized as *-ny* word finally following a vowel and the DAT suffix on pronominals *-ŋKu-*, which is realized as *-ŋ* word finally.

It is clearly a morphophonological process as it affects word final vowels of a restricted set of morphemes. There are some phonological environments which it seems to favour, but only in limited contexts do these totally constrain its occurrence. Furthermore there are no general morphological categories to which it is confined or to which it uniformly applies. The rule must thus be specified for the particular morphemes to which it applies.

The morphemes affected by vowel deletion are predominantly closed class morphemes - verbal inflections, nominal case suffixes, pronominal and demonstrative stems, certain TMA particles and conjunctions, temporals and a few adjectival nomens with final trills. The most extensively affected by vowel deletion are the verbal and nominal inflectional suffixes. All suffixes having a Dhuwala cognate with a final vowel have been affected by vowel deletion unless they are preceded by a lamino-dental. The latter can be explained by the phonotactic constraint against syllable-final lamino-dentals. However, the effect of vowel

deletion in the Dhuwal inflectional suffixes varies as to whether it is categorical in relation to Dhuwala or not.

Each of these morphological categories will be exemplified below.

2.4.6.1 Vowel deletion in nomens with final trilled rhotic.

western Dhuwala Gupapuyŋu	eastern Dhuwala Gumatj	western Dhuwal Djambarrpuyŋu	eastern Dhuwal Djapu	
Iumurru	Iumurru	Iumurr	Iumurr	"big"
Iilkurru	Iilkurru	Iilkurr	Iilkurr	"big, old(person)"
ŋamakurru	-	ŋamakurr	-	"good"
ya:TjKurru	ya:TjKurru	ya:TjKurr	ya:TjKurru	"bad"
mirithirri	mirithirri	mirithirr	mirithirr	INTENSifier

It is very striking that these all involve the trill rhotic as their final consonant and are commonly occurring nominal modifiers. It should also be noted that the Djapu cognate for "bad" has not undergone vowel deletion.

While the Djambarrpuyŋu stems listed are those regularly found with case inflections, there are a few forms associated with these lexemes where a stem final vowel identical to that which occurs in Gupapuyŋu appears. Two instances are *Iumurruŋu* "big one, week" and *Iilkurruwurr* "old people". Both these forms involve derivational suffixes of restricted productivity. The form *-ŋu-*(possibly a substantivizer in this context) does not appear to be synchronically productive (see section 4.8.6) and only a handful of stems can occur with the the PLural suffix *-wurr/-Kurruwurr* (see section 4.8.8). There are also two instances in one text of the stem *ya:TjKurru* (rather than *ya:TjKurr*) before two different case suffixes: *ya:TjKurru+lil* "bad" +ALL and *ya:TjKurru+ŋur* "bad" +LOC/ABL. There is no obvious explanation for the speaker to use these forms and they may be "slips of the tongue". One possible explanation would be that the speaker is using Dhuwala in quoted speech according to a stylistic practice in which the speech variety appropriate to the person being quoted is used. However this is not the context in which these particular forms occur. The many occurrences of this stem recorded from the same speaker elsewhere have the expected stem *ya:TjKurr* and this is the form given in citation. Another explanation would be to attribute the variation to the fact that it is a relatively recent addition to the class of nomens affected by vowel deletion. The fact that Djapu does not delete the vowel in this stem offers this some support.

2.4.6.2 Vowel deletion in Temporals

western Dhuwala Gupapuyŋu	eastern Dhuwala Gumatj	western Dhuwal Djambarrpuyŋu	eastern Dhuwal Djapu	
PuŋKuŋu	Pu:ŋKuŋu	Pu:ŋKuŋ	Pu:ŋKuŋ	"tomorrow"
ŋa:thili	ŋa:thili	ŋa:thil	ŋa:thil	"prior"
Ka:thura	Ka:thura	Ka:thur	Ka:thur	"today"

There are some Djambarrpuyŋu forms with the suffix/augment *-ŋu* which retain the vowel in Djambarrpuyŋu e.g. *ŋa:thiliŋu* "old" and *Ka:thuraŋuwuy* "today+ASS " "to do with these times/today". Otherwise the vowels are categorically deleted.

2.4.6.3 Vowel deletion in 'particles'

western Dhuwala Gupapuyŋu	eastern Dhuwala Gumatj	western Dhuwal Djambarrpuyŋu	eastern Dhuwal Djapu	
maku	?	maK	maK	"maybe"
yurru	yurru	yurr	yurru	ADD "but"
Palaŋu	?	Palaŋ	Palaŋ	IRR
nhakuna	nhakuna	nhakun	nhakun	"like, such as"
ya:na	ya:na	ya:n(a-)	ya:n	EMPH
yanapi	?	yanPi	ya:nPi/yanbi	CFACT

Except for the EMPHatic particle *ya:n(a-)*, vowel deletion in the Djambarrpuyŋu forms is categorical. The CounterFACTual cognates also indicate vowel deletion. However the morphological analysis of the form as *ya:na+Pi* is problematic given that there is no productive *-Pi* morpheme. The only other place in which this form can be isolated is in few emphatic pronominal stems and there is no obvious semantic connection between the two. It should also be noted that the Djapu form of the ADD "but" has not undergone vowel deletion.

Pronominal and demonstrative paradigms are described in detail in chapter 5 and chapter 6. Here we will be concerned with just those stems that are affected by vowel deletion.

2.4.6.4 Vowel deletion in pronominal stems

The distinctions attributable to final vowel deletion are confined to the NOM stem. These are listed below.

	western Dhuwala Gupapuyŋu	eastern Dhuwala Gumatj	western Dhuwal Djambarrpuyŋu	eastern Dhuwal Djapu
1+2dl	(ŋa/i)linyu	ŋilinyu	(ŋa/i)linyu	ŋiliny(u-)
1pl	(ŋa)napurru	ŋanapurru	(ŋa)napurr	ŋanapurr
1+2pl	(ŋa/i)limurru	ŋilimurru	(ŋa/i)limurr	ŋilimurr
3pl	walala	walala	walal	walal

The vowel found in the Dhuwala forms in fact occur in the Dhuwal stems for other case forms (see section 5.5). Note that Djapu allows deletion in the 1+2dl form *ŋiliny* when it is not followed by any other suffixes. This never occurs in Djambarrpuyŋu.

2.4.6.5 Vowel deletion in demonstrative stems.

There are four demonstrative stems in Dhuwal/Dhuwala but only two, the PROXimal *dhuwal/dhuwala* and the DIStal *ŋunha*, are affected by vowel deletion. Unlike pronominals it is not confined to a single case form.

	western Dhuwala Gupapuyŋu	eastern Dhuwala Gumatj	western Dhuwal Djambarrpuyŋu	eastern Dhuwal Djapu
PROX *dhuwal*				
ABS/LOC	dhuwala	dhuwala	dhuwal	dhuwal
ERG	dhiyaŋu	dhiyaŋu	dhiyaŋ(u-)	dhiyaŋ(u-)
DAT	dhiyaku	dhiyaku	dhiyak(u-)	dhiyak(u-)
LOC	dhiyala	dhiyala	dhiyal	dhiyal
ALL	dhipala	dhipala	dhipal	dhipal
DIS *ŋunha*				
ERG	ŋuruŋu	ŋuruŋu	ŋuruŋ(u-)	ŋuruŋ(u-)
DAT	ŋuruku	ŋuruku	ŋuruk(u-)	ŋuruk(u-)
LOC	ŋunhala	ŋunhala	ŋunhal	ŋunhal
ALL	ŋunhawala	ŋunhawala	ŋunhawal	ŋunhawal

Parentheses indicate specific case forms for which the final vowel appears before following suffixes, namely the post-inflectional discourse suffixes.

The above table only shows the stem contrasts attributable to vowel deletion. In contrast with the pronominal stems it is notable that there are some forms where the vowel may still be present, namely the ERG and DAT case forms. On the other hand, comparable to pronominals forms is the existence of other Dhuwal case forms whose stem retain the final vowel e.g. *ŋunhaŋuwuy* "DIS+ASS", *dhuwalaŋuwuy* "PROX+ASS" and which are thus identical to the Dhuwala counterparts.

2.4.6.6 Vowel deletion in suffixes found on nominals

All nominal case suffixes that are vowel final in Dhuwala have been affected by vowel deletion in Dhuwal. However only some show categorical deletion relative to the Dhuwala forms. In others the vowel is retained in non-word final allomorphs and there are few suffixes where the presence of a vowel is conditioned by the preceding sound. There is also some variation between the two Dhuwal varieties.

1. ABL, OBL and OR suffixes

There are three suffixes common to nominals, i.e. nomens, pronominals and demonstratives which are affected by vowel deletion. These are the ABLative, OBLique and ORiginative and their forms in the four varieties are compared below:

	western Dhuwala Gupapuyŋu	eastern Dhuwala Gumatj	western Dhuwal Djambarrpuyŋu	eastern Dhuwal Djapu
ABL	-ŋuru	-ŋuru	-ŋur	-ŋur
OBL	-kala/-wala	-Kala/-wala	-Kal/-wal	-Kal/-wal
OR	-kuŋu/-guŋu/ -wuŋu	-Kuŋu/-wuŋu	-Kuŋ(u-)/ -wuŋ(u-)	-Kuŋ(u-)/ -wuŋ(u-)/-ŋ(u-)

The distribution of particular allomorphs will be detailed in later sections. What is important here is that the pattern regarding the final vowel. Vowel deletion is categorical for the ABL and OBL but with the OR only occurs when the suffix is also word final. Djapu also has a unique OR allomorph for nomen vowel final stems i.e. *-ŋ(u-)*. Djambarrpuyu never reduces the initial syllable of this suffix in this way.

2. LOC, ALL and PERL

For nomen and pronominal stems the LOCative, ALLative and PERLative suffixes also have regular correspondence with Dhuwala forms that have final vowels. However, the final vowel never appears in any Dhuwal forms. The forms are shown below:

	western Dhuwala Gupapuyŋu	eastern Dhuwala Gumatj	western Dhuwal Djambarrpuyŋu	eastern Dhuwal Djapu
LOC	-ŋura	-ŋura	-ŋur	-ŋur
ALL	-llil	-llil	-lil	-lil
OR	-kurru/-wurru	-Kurru/-wurru	-Kurr/-wurr	-Kurr/-wurr

One of the features that both Dhuwal varieties share is the loss, resulting from final vowel deletion, of distinct forms for the LOC and ABL suffixes on nomens. This is marked in Dhuwala by *-ŋura* and *-ŋuru* respectively, but Dhuwal has only the single LOC/ABL form *-ŋur*.

Locative and Allative demonstrative case forms are associated with distinct stems rather than suffixation. They are however affected by vowel deletion as is evident from the forms in the table for demonstrative stems under 3 above.

Other nomen suffixes show a range of possibilities regarding vowel deletion according to the word class to which they are suffixed, the sound preceding the suffix, the particular case form and which clan variety is involved. The ACC, DAT, ERG, PROPrietive and Plural suffixes will be considered in turn.

3. ACC

The ACCusative *-Nha* in both Dhuwal varieties have allomorphs that are conditioned both by the preceding sound, as well as according to whether the suffix is word final or not. In both Djapu and Djambarrpuyŋu an allomorph without the final vowel occurs following vowel final stems when word final. The Dhuwala varieties in contrast have only one form for this suffix. The allomorphs across varieties are compared below:

	western Dhuwala Gupapuyŋu	eastern Dhuwala Gumatj	western Dhuwal Djambarrpuyŋu	eastern Dhuwal Djapu
ACC	-nha	-nha	-nha-/-ny	-nha-/n

The difference in the realization of the word final allomorph in Djambarrpuyŋu and Djapu is discussed in section 2.4.4.

4. DAT

The form of the DATive varies somewhat across different word classes. The alternations found in DAT marking in the four Dhuwal/Dhuwala varieties are listed below:

	Nomens	Pronominals/Plurals	Demonstratives
Gupapuyŋu	-ku/-gu/-wu/ -wa	-ku/-ŋgu-/-ŋu	-ku/-ki
Gumatj	-Ku/-wu	-Ku/-ŋKu/-ŋu	-Ku/-Ki
Djambarrpuyŋu	-Ku/-wu/-w	-Ku/-ŋ(Ku-)/-ŋu	-K(u-)/-Ki
Djapu	-Ku/-wu/-w(a-)	-K(u-)/-ŋ(Ku-)/-ŋu	-K(u-)/-Ki

These DAT markers are variously affected by vowel deletion. The situation in regard to Djambarrpuyŋu is the following.

1. The vowel is categorically lost in the nomen suffix only in the allomorph found after vowels i.e. *-w* e.g. *yothu+w* [child +DAT].
2. It is deleted word finally in certain demonstrative forms i.e. the proximal and distal DAT forms *dhiyak (u-)* and *ŋuruk(u-)*.
3. In many pronominal forms the word final DAT marker is *-ŋ*, a reduced form of the homorganic cluster initial suffix *-ŋKu-* found only on (non-word final) pronominal and derived plural forms e.g. *walala+ŋKu+ny* [3pl+DAT+PROM] and *walala+ŋ* [3pl+DAT]. This is one of two cluster initial suffixes which undergo CV deletion rather than final vowel deletion.

Basically the alternations are the same across stem classes for all varieties. As expected the Dhuwala forms always have a final vowel. One point of variation is in the nomen suffix allomorph found after a vowel - the last alternate listed for nomen stems - where there is some variation in the final vowel. Gupapuyŋu has /a/ where Gumatj has /u/, and strikingly the optional Djapu vowel is also /a/ rather than /u/, which we would not expect given the consistency of the eastern/western Dhuwal/Dhuwala patterning so far. Dha'yi also has /-wa/ as a DAT allomorph, and so the Djapu link with the Gupapuyŋu form may be mediated by Dha'yi, which is geographically centered between the two. The /wa/ alternate seems to be restricted to these three varieties. In all other documented varieties that have a lenited variant the vowel is /u/ (this includes Ritharrŋu, Gälpu/Rirratjiŋu (Dhaŋu) and Djinba). The Djambarrpuyŋu post-vocalic allomorph, unlike Djapu has categorically lost its final vowel. On internal grounds one would posit a final /u/. However, given its geographical location near Gupapuyŋu and Dha'yi and the links with Djapu, the possibility that the original form of the Djambarrpuyŋu vowel was /a/ rather than /u/ cannot be discounted.

Another difference between the two Dhuwal varieties occurs in relation to the pronominal forms. Djapu deletes the vowel from the word final stems of the 1sg DAT pronoun i.e. *ŋarrak(u-)*. This does not occur in Djambarrpuyŋu where a final

vowel is always preserved (cf *ŋarraku* or *rraku*). This is another instance in which Djapu has extended vowel deletion in the pronominal paradigm further than Djambarrpuyŋu (cf Djapu 1+2dl *ŋiliny(u-)* but Djambarrpuyŋu *ŋalinyu/ŋilinyu/linyu*).

5. ERG

The ERGative has been affected by vowel deletion similarly to the DAT. However ERG marking is confined to nomen and demonstrative stems. It has the following allomorphs:

	on Nomens	on Demonstratives
Gupapuyŋu	-Thu/-yu/-y	-ŋu/-ŋi
Gumatj	-Thu/-yu	-ŋu/-ŋi
Djambarrpuyŋu	-Thu/-yu/-y	-ŋ(u-)/-ŋi
Djapu	-Thu/-yu/-y	-ŋ(u-)/-ŋi

Again, the final alternate listed under nomen stems is that found after vowels. Analogously to the DAT markers in Djambarrpuyŋu, the nomen ERG suffix has an allomorph without a final vowel which is conditioned by the preceding sound. Ergative demonstratives only permit deletion word finally on the PROX and DIS stems, again patterning identically to the DAT markers. However, unlike the DAT marking there are no differences in the ERG marking between the two Dhuwal varieties. The most striking fact about this particular set of allomorphs is that the Gupapuyŋu nomen allomorphs are identical to those for Djapu and Djambarrpuyŋu. This is the only instance of which I am aware where a Dhuwala variety shows vowel deletion similar to that in Dhuwal.

There are two other nominal suffixes affected by vowel deletion. These are the adnominal case PROP suffix *-mirr(i-)* and the derivational PL suffix *-Kurruwurr(u-)/-wurr(u-)*. These two suffixes share a final trilled rhotic and both permit some variation in the stem found before certain suffixes.

The adnominal PROP suffix *-mirr(i-)* is regularly treated as consonant final before the discourse and nominal case suffixes. But in combination with the verbalizing suffixes INCH-*Thi*- and TRANS -*Tha*- the PROP suffix varies between vowel final and consonant final stems e.g. *-mirri+yi-* or *-mirr+yi-*. The /y/ initial allomorph of both these suffixes is quite unexceptional after either the vowel or the rhotic.

The PLural suffix *-Kurruwurr(u-)/-wurr(u-)* can similarly be treated as either consonant final or vowel final by following suffixes. The consonant final stem occurs before discourse suffixes, but, in contrast to the PROP suffix, the vowel final stem is favoured before case suffixes. With the ERG suffix however, I have recorded the stem as both consonant final (thus *-wurr+yu*) and vowel final (thus *-wurru+y*). The form of the ERG suffix reflects the stem variation *-yu* is the allomorph following liquids and semivowels and *-y* the post-vocalic allomorph.

One result of the variation in the stem before different categories of suffix is that it permits a distinction between the PROM suffix *-NyTja* and the ACC suffix *-Nha* which both have a post-vocalic allomorph *-ny*. With the PL suffix the PROM discourse suffix attaches to the consonant final stem *-wurr-* (thus *-wurr+nydja)* while the ACC attaches to the vowel final stem i.e. *-wurru-* (thus *-wurru+ny).*

A final point to note about the PL suffix is that it is the only derivational suffix to undergo vowel deletion. Other derivational suffixes such as KINPROP *-'mirriyu* and KINDYD *-'manyTji* are not affected.

2.4.6.7. Vowel deletion in verbal suffixes

Vowel deletion has affected three of the four inflectional suffixes that occur across the various verb classes. As for nominal suffixes there are instances where the vowel has been categorically deleted relative to Dhuwala forms and others where the vowel appears only when the suffix is followed by another suffix. The affected forms are presented in the table following. As the overlap between the two Dhuwal varieties Djapu and Djambarrpuyngu and the two Dhuwala varieties Gupapuyngu and Gumatj is extensive, the comparison is made between the two groups. There is some variation in the conjugation categories between varieties, but this is not of concern in considering the incidence of vowel deletion. Further details on the verbal morphology are found in chapter 7.

Dhuwala	Dhuwal	
-rri	-rr	FIRST inflection of $Ø_{rr}$ class verbs and for FIRST and SECOND inflection of $Ø_{mirr}$ class verbs
-n(a-)	-n(a-)	THIRD inflection of $Ø_{a/i/rr/mirr}$ class verbs
-rru	-rr	SECOND inflection of N class verbs
-lu	-l	SECOND inflection of N_L class verbs
-ku	-k(u-)	SECOND inflection of N_K class verbs
-rruna	(Djamb)-rr (Djapu)-nan	THIRD inflection of N class verbs
-ra	-r	THIRD inflection of N_L class verbs
-rra	-rr	THIRD inflection of N_K class verbs
-ma	-m(a-)	FIRST inflection of Ŋ class verbs
-ŋu	-ŋ(u-)	SECOND inflection of Ŋ class verbs
-ŋala	-ŋal	THIRD inflection of Ŋ class verbs and Djambarrpuyŋu $ŊK_a$ class verbs
	(Djapu)-ŋ(al-)	THIRD inflection Djapu $ŊK_a$ class verbs
bumara	bumar	THIRD inflection for Irreg *bu*-"hit/strike"
ŋäkula	ŋäkul	THIRD inflection for Irreg *ŋä*-"hear/listen"

Clearly Djapu and Djambarrpuyŋu have for the most part applied vowel deletion identically. There are three areas in which they are distinct. Firstly, Djapu reduces the suffix *-ŋal* to *-ŋ* word finally in the THIRD inflection of the class of verbs I designate Ŋ (see section 7.2.4.12). There is no correlate of this in Djambarrpuyŋu. Secondly, the THIRD inflection of the N class verbs where Dhuwala has a disyllabic suffix *-rruna* has been reduced differently in the two varieties. Djambarrpuyŋu has *-rr* and Djapu *-nan*. The third difference has to do with the extended form of the nominalized verb with the suffix *-Nhara*. Djapu again reduces the stem differently from Djambarrpuyŋu. The reduction takes the form of vowel deletion in the word final stem producing *-nhar* in Djapu compared to *-Nhara* in Djambarrpuyŋu and Dhuwala.

A parallel alternation is found on a lexeme which in Djambarrpuyŋu and Gupapuyŋu most commonly occurs as *balanya* "such". The Djapu cognate is *balanyar* and the Gumatj cognate *balanyara* (Amery 1985 p39). The stem *balanyara-* occurs occasionally in Djambarrpuyŋu (see section 13.14.1).

4.2.6.8 Vowel deletion in discourse suffixes

The PROMinence and SEQuence suffixes are post-inflectional suffixes which are always word final and can be added to words of any class except TMA particles and conjunctions. Both have post-vocalic allomorphs in which the vowel evident in

other allomorphs is missing. In Djambarrpuyŋu this is *-ny* for the PROM suffix *-NyTja* and *-n* for the SEQ suffix *-Nha*.

In the table that follows I present the available data for the distribution of allomorphs of the two suffixes in Dhuwal/Dhuwala varieties:

	Preceding consonant					
PROM	stop	nasal	semivowel	lateral	rhotic	vowel
Gupapuyŋu	-Tja		-nyTja	-nyTja	-nyTja	-nyTja
	-Tja		-nyTja	-nyTja	-nyTja	-nyTja
Djamb.	-Tja		-nyTja	-nyTja	-nyTja	-ny
Djapu	-Tja		-ny	-ny	-ny	-ny
SEQ						
Gupapuyŋu	-nha	-nha	-nha	-nha	-nha	-na
Djamb.[1]	-nha	-nha (/ -a)[2]	-nha (?/ -a)	-nha/-a	-nha/-a	-n
Djapu[3]	-na/-nha	-na/-nha	-a/-nha	-a/-nha	-a/-nha	-n/-nha

[1]Heath (1980a p21) recorded -na (C(')/_), -n (V(')/_) and -a (after liquids) for Djapu and Djambarrpuyŋu. [2] -a is only found on verbs which have -n as their 1st inflection i.e. all verbs in N classes. [3]Data is based on Morphy (1983 p49).

Reduction of these suffixes shows quite distinctive patterns in the two Dhuwal varieties. In the PROM suffix Djapu no longer has any reflex of the longer *-nyTja* form found in the other Dhuwal/Dhuwala varieties represented here. Furthermore in contrast to Djambarrpuyŋu, where it only occurs following vowels, the *-ny* allomorph is found following any continuant.

The extension of the environment in which this allomorph occurs in Djapu greatly increases the word final cluster possibilities in this variety. Continuant consonant plus lamino-palatal nasal word final clusters are not attested in Djambarrpuyŋu, nor elsewhere in Djapu. However continuant consonants plus velar stop or nasal are possible final clusters in both varieties. In Djambarrpuyŋu a continuant plus lamino-palatal syllable final cluster can occur intermorphemically. When a stem with a final continuant is suffixed with the PROM the syllable boundary falls between the initial nasal and stop of the suffix. This is clearly revealed by stems stems with a final glottal stop since the glottal stop appears in just this position e.g. *warraw'+NyTja*-> /wa.rraw+ny'.Tja/ [shade +PROM] ("." indicates a syllable boundary). Djapu has been innovative only to the extent that these clusters are now free to occur in word final position rather than intermorphemically.

The differences in connection with the SEQ suffix focus on the range of alternation permitted in particular contexts. Djapu allows *-nha* to alternate freely with all

other allomorphs (Morphy 1983 p49). Djambarrpuyŋu does not allow any alternation after vowels, nor after non-continuants, with the exception of the *-a* allomorph found following the FIRST inflection (i.e. -n) of all N class verbs. Alternation does occur after continuants.

The SEQ is also distinct in that the reduction of the suffix is of two types. The postvocalic allomorph *-n* is that expected from vowel deletion. However the *-a* allomorph suggests the initial consonant has been deleted. This allomorph occurs in two contexts. Firstly it occurs following continuants. This can be explained on the grounds that vowel deletion in this instance would produce prohibited syllable final clusters. Neither /nh/ nor /n/ occur following continuants syllable finally. The quite general constraints against lamino-dentals syllable finally and against intramorphemic cluster with apicals as the second consonant also add weight to this. The second context in which the *-a* allomorph occurs is with the FIRST inflection of Djambarrpuyŋu N class verbs. This inflection is *-n* and one way to account for it would be to attribute it to assimilation of the initial laminodental nasal suffix to the preceding nasal of the stem. However there is no other evidence of such assimilation following nasals in Djambarrpuyŋu. What this vowel does reflect however, is the Dhuwala cognate for the FIRST inflection, *-na*. An alternative explanation for the vowel would be to attribute it to the reanalysis of the Dhuwala form as *-n+a* [FIRST inflection +SEQ].

2.4.6.9 Overview of vowel deletion

The table below summarizes the contexts in which vowel deletion occurs in Djambarrpuyŋu and indicates whether or not it is categorical with respect to Dhuwala cognates.

Morpheme Category	Categorical Deletion	Deletion Applies Synchronically
'Particles'	X	with *ya:n(a-)* EMPH only)
"rr" final adjectivals	X	
Temporals	X	
NOM pronominals	X	
Demonstrative stems	X i.e ABS/LOC, ALL ABL	X i.e. DAT and ERG

MorphemeCategory	Categorical Deletion	Deletion Applies Synchronically
Nominal suffixes	X i.e. ABL, OBL, LOC,	X i.e. ACC, OR, DAT, ERG, PROP, PL
Verbal suffixes	X most	X i.e. Ø THIRD inflection Nk SECOND inflection NJ FIRST and SECOND inflection
Discourse suffixes		X

The occurrence of vowel deletion is constrained by both morphological and phonological factors. Reviewing the situation for the synchronic process of vowel deletion in Djambarrpuyŋu we find the most general constraint, given that a morpheme is subject to the rule, is that the vowel only appears word finally. An alternative environment constraining vowel deletion is found with the nomen DAT and ERG suffixes and the PROM and SEQ discourse suffixes. For these suffixes the conditioning factor is the preceding sound, with the vowel-less allomorph only occurring following a vowel. Finally there is the ACC suffix allomorph *-ny* which occurs only when both factors are present, namely when preceding a vowel and when the suffix is word final.

The general process that has been identified is that of final vowel deletion. However, in certain morphemes other sounds are affected. This includes the final CV of the two cluster-initial suffixes, PROM *-NyTja* and the pronominal and derived plural DAT suffix *-ŋKu-*. An exception to vowel deletion is the SEQ-*Nha* suffix. This has an allomorph /a/ which can be attributed to phonotactic constraints on certain syllable final clusters that would result from vowel deletion.

There are three other factors that would seem to have a role to play in constraining vowel deletion. These are reflected in both Dhuwal varieties. The first is the fact that vowel deletion most commonly occurs following a liquid. This is also the environment in which categorical deletion is most prevalent. Thus there are no morphemes with a final /r/ where deletion is not categorical and the only /rr/ final stems where this is not the case are the PROP and PL suffixes. Of these two suffixes PROP-*mirr(i-)* has very nearly lost the final vowel, showing no evidence of it except as a stem before TRANS2 *-ya*. PL *-wurr(u-)* would seem to be the most conservative in that only the ERG and PROM/ACC suffixes permit vowel deletion. Most deletion following /l/ is also categorical, presence of a vowel being confined to particular demonstrative and pronominal stems. The general correlation between categorical instances of vowel deletion and a preceding liquid may explain in part

why the small number of modifying nominals that have undergone vowel deletion all end with a trill. The controlling factor in regard to deletion following nasals and the velar stop on the other hand, seems to the occurrence of the morpheme in word final position.

A second factor constraining the application of vowel deletion appears to limit its application so as to minimally affect distinctions within paradigms. This is clearly connected with the fact that the rule focuses on potential word final environments. This would explain the restriction of the process in the pronominal paradigm to the NOM case forms. Deletion of the vowel from the underlying stems in other case forms does not occur. A somewhat different strategy in the demonstrative paradigm has isolated only two of the four demonstratives to undergo vowel deletion. This allows the four way distinction to be maintained. Vowel deletion can also apply more extensively in the demonstrative paradigm than the pronominal paradigm, given that suppletive roots allow case distinctions to be maintained. The only instance in which vowel deletion has resulted in the loss of a formal distinction is in the *-ŋur* LOC/ABL suffix, which has Dhuwala cognates LOC *-ŋura* and ABL *-ŋuru*.

One further constraint that has been described as affecting the vowel deletion process, notably by Morphy (1983) in regard to Djapu, is that it cannot reduce a morpheme to a monosyllable. Thus the 1st sg pronominal *ŋarra* is never found reduced to **ŋarr* despite the favoured deletion environment of a preceding liquid and a perfectly permissible resulting syllable. There is no reason therefore not to believe that the original vowel deletion process was so constrained in Djambarrpuyŋu. However there are certain particles in Djambarrpuyŋu that have categorically deleted a final vowel resulting in a monosyllable e.g. *maK* "maybe" and ADDitional *yurr* "and/but" which suggest the constraint was, or is, not general. Furthermore, the constraint on monosyllables in the pronominal paradigm is not as strong in Djambarrpuyŋu as it evidently is in Djapu. Djambarrpuyŋu *walal* "3pl" is frequently reduced to *wal* and, while stigmatized, *ŋarra* "1sg" is occasionally recorded as *rra*. However, these do seem to be reasonable contemporary alternations, and they are not produced by vowel deletion. A final point to note in respect this constraint is that all Yolŋu varieties permit monosyllabic words. In Djambarrpuyŋu they are predominantly nomens, bare verb roots and 'particles'.

It should be evident by now that while vowel deletion rules and the morphemes to which they apply are essentially the same for both Djapu and Djambarrpuyŋu, they are not identical. They both appear to have been independently innovative. Djapu

has extended vowel deletion within the pronominal paradigm to the 1sg DAT and the 1dl NOM forms. Furthermore, only in Djapu is the nominalized verb augment i.e. *-ra-* subject to vowel deletion. It has also further reduced some suffixes, notably the OR suffix post-vocalic allomorph *-ŋ(u-)* and the THIRD inflection on Nka class verbs *-ŋ(al-)*. In all the cognates to the forms just cited for Djapu, Djambarrpuyŋu either retains the vowel or does not permit the further reduced allomorph. On the other hand Djambarrpuyŋu has deleted the final vowel on two forms where this has not occurred in Djapu i.e. *yurr* "ADD" and *ya:TjKurr* "bad". Djambarrpuyŋu has also categorically deleted the vowel from the post-vocalic DAT allomorph, while Djapu only does so word-finally.

We have seen that vowel deletion is confined to a select number of morphemes, many of which occur with high frequency. The combined effect of vowel deletion is to produce quite distinct utterances in Dhuwal and Dhuwala. Matched word for word, or morpheme for morpheme, the individual differences may seem minimal, but their force over a whole string is more dramatic.

Amery (1985) aptly refers to the class of morphemes affected as "dialect sensitive morphemes". A further indication of the saliency of this set of morphemes is the fact that in the koine Dhuwaya the same set of morphemes is affected by processes other than the vowel deletion with which they are associated in the Dhuwal/Dhuwala distinction.

Vowel deletion is clearly critical as a process whereby very closely related varieties are kept distinct. As Morphy (1977) argues, the distinction is sociolectal rather than dialectal. Firstly it correlates with the groupings of clan varieties subsumed under the terms for the proximal demonstrative. Secondly, in the case of Dhuwal/Dhuwala, it also correlates with the moiety division. All Dhuwal varieties are Dhuwa and all Dhuwala varieties are Yirritja. The vowel deletion rules are thus allied with both particular clan/language varieties, e.g. Dhuwal and a particular moiety, e.g. Dhuwa.

It should be noted that while vowel deletion is critical to the Dhuwal/Dhuwala distinction it is not unique to these varieties in the Yolŋu bloc. Dhalwaŋu (Dha'yi), another member of the Southern sub-group which belongs to the Yirritja moiety, has cognate suffixes without final vowels that are identical to those in Dhuwal. Futhermore the nasal final case suffixes in Gälpu and Rirratjiŋu (both Dhaŋu varieties) also show allomorphs without the final vowel. Final vowel loss is also

evident in certain Djinba case suffixes. Thus vowel deletion is clearly not confined to the Dhuwal/Dhuwala varieties, nor aligned solely with clans of the Dhuwa moiety.

Another area in which vowel deletion is salient to differences between varieties is reported by Waters for Djinaŋ dialects (1989). He describes the presence or not of non-initial vowels in cognate morphemes as one of the key variables in the "pronunciation" differences between different Djinaŋ dialects.

Vowel deletion thus seems to be a case of a (morpho)phonological process found in many parts of the Yolŋu bloc. In two language groups, Dhuwal/Dhuwala and Djinaŋ, it is vital to distinctions between varieties. However the non-linguistic factors with which the vowel deletion is correlated are different. In Djinaŋ Waters found a correlation with geographical proximity for those varieties that do and do not delete vowels, rather than one based on intermarriage or moiety. This "dialectal" correlation is thus distinct from the Dhuwal/Dhuwala correlation with moiety and clan varieties. Intermarriage is not a factor since members of Dhuwal clans, being all of the same moiety, cannot intermarry. Furthermore, while they can intermarry with Dhuwala clans we see the distinction being maintained despite such close social relationships. Similarly it is maintained between Dhuwal and Dhuwala clans whose territories are contiguous.

Another difference between the role of vowel deletion in distinguishing varieties within the Dhuwal/Dhuwala group and those within the Djinaŋ group is the extent to which they are categorical. Waters claims that for Djinaŋ the difference in the application of the process between dialects is only a statistical tendency while specific morphemes in the Dhuwal/Dhuwala varieties are always affected.

However, we have seen evidence that the vowel deletion process is not identical for Djambarrpuyŋu in the west and Djapu in the east. The differences do appear to correlate with the basic geographical separation of the majority of their speakers. We thus see in connection with the single process of vowel deletion, the intersection of geographical and socially based variation which results in each Dhuwal and Dhuwala variety being unique, at least for the four varieties - Djambarrpuyŋu, Djapu, Gumatj and Gupapuyŋu- on which this study is based.

2.5 Overview of (morpho)phonological differences in Dhuwal/Dhuwala

It is doubtful that there is any (morpho)phonological distinction or process that is unique to varieties at the level of the clan. However, in this section we have seen evidence for linguistic correlations with clusters of clan varieties, some of which correlate with geographical location, and some with social factors. The complex of such correlations associated with a particular variety can thus serve to distinguish it from others closely related to it. Thus Djambarrpuyŋu has been shown to have (morpho)phonological characteristics that are distinct from both its sociolectal counterpart Djapu and its geographical neighbour Gupapuyŋu. It is not yet possible to assess to what extent these complexes might vary between Dhuwal varieties geographically closer to Djambarrpuyŋu, as the details of the (morpho)phonological phenomena are not available.

The fact that a whole complex of factors are involved, some of which are much more pervasive than others, means that it is possible for a linguistic contrast to be associated with something that is fairly marginal, such as deletion of initial syllables on certain pronominals. However this has the potential to be highly significant to speakers of two closely related varieties if it represents a linguistic difference between two clans.

Not all linguistic features which vary across varieties are necessarily allied with clan-land-language allegiance nor perceived of as such. The salience of vowel deletion in relation to the distinction between Dhuwal and Dhuwala but not Dha'yi is a case in point.

At the level at which a comparison is currently possible it appears that a particular phenomenon is rarely unique to a single variety. On the other hand, it appears likely that the whole complex of processes associated with a particular variety will constitute a unique set.

The (morpho)phonological distinctions in the four Dhuwal/Dhuwala varieties are summarized below:

Potentially distinguishes:	Parameter
The two Dhuwal varieties	Distinct allomorphs associated with V-Deletion for certain verb inflections.
	Differences in the pronominal stems to which vowel deletion has applied.
	Distinct allomorphs for the two discourse suffixes
	Djapu permits word final clusters with /ny/ which cannot occur in Djambarrpuyŋu
East vs west	Laminal assimilation (This occurs in Djapu and Gumatj but not in Djambarrpuyŋu and Gupapuyŋu)
	The number of bilabial, velar and laminal stops (Djapu and Gumatj have a single stop series while Djambarrpuyŋu and Gupapuyŋu have two).
	Intramorphemic lenition (This does not occur in Djapu and Gumatj but does occur in Djambarrpuyŋu and Gupapuyŋu)
	Deletion or not of the first syllable of certain pronominal stems. (This only occurs in western varieties, Djambarrpuyŋu and Gupapuyŋu)
Dhuwal vs Dhuwala	Vowel deletion (This affects Djapu and Djambarrpuyŋu but not Gumatj and Gupapuyŋu)

CHAPTER 3

MORPHOLOGICAL OVERVIEW

3.1 Word classes

Word classes can be determined readily along traditional lines on the basis of the suffixing potential of individual lexemes. At the broadest stroke one can posit two major classes, verbals and nominals. Each is associated with a distinct set of derivational and inflectional suffixes and except for two sub-classes of verbs, stems in these classes are obligatorily inflected, nominals for case and verbs for tense-modality/mood-aspect. A third group of words are formally characterized as being non-inflecting and I will refer to them generally as particles. However it is made up of a number of functionally distinct closed classes. There is also a small class of nominal stems which occur as predicates requiring a particular case array, they are referred to as "adjectival" predicates. On functional grounds I also distinguish an interrogative/indefinite proform class. This includes nominal and verbal stems, some of which have patterns of inflections identical to those of other word classes.

3.1.1 Nominal word classes

The class of words that inflects for case, i.e. nominals includes a number of subclasses -nomens, pronominals, demonstratives, locationals, and temporals. Each of these subclasses has a unique range of case inflections. The nomen class, which subsumes the more familiar categories of noun and adjective, itself has a number of subclasses, distinguished on morphosyntactic grounds. It is an open class where all other nominal classes are closed. There are two paradigms associated with the pronominal and demonstrative classes, both of which show a derivational relationship to each other.

While most words belong to one or other of these major classes, there are a limited number of stems which occur across these classes and which, while syntactically distinct, do not have unrelated senses.

The general distinguishing characteristics of each of these classes are outlined below.

3.1.1.1 Pronominals

Pronominals have an Nominative/Accusative case marking pattern. They occur in the following case forms- NOM (S/A), ACC (O), DAT, OBL (Loc/Abl/All/), OR, ABL PERL and ASS. There is a special Oblique stem augment (OBLS) which occurs before ABL, PERL and ASS suffixes and in the coding of possessors. They distinguish singular, dual and plural number and 1st (speaker), 2nd (addressee), 1st+2nd (speaker plus addressee) and 3rd person. There are two distinct paradigms, one for regular pronominal reference and another for a set of pronouns used emphatically and for intraclausal coreference (see chapter 5).

3.1.1.2 Demonstratives

Demonstratives inflect according to an Ergative/Absolutive pattern. They can all be marked for ABS (S/O), ERG (A/Instr/Temp) and DAT. There is then a split in the range of case marking according to whether the referent is "human" or not. "Human" referring demonstratives are distinguished by their occurrence with the OBL, the OR and the OBLS suffixes. The "non-human" referring demonstratives are distinguished by having distinct LOC, ABL and ALL case forms. Unique to demonstratives are PERL stems which are formally verbs.

There are four demonstrative stems, the PROXimal "here/this close to/at the speaker", the MEDial "there/that mid-distance/not far from speaker or speaker/addressee; near/at addressee", the DIStal "there/that far from speaker" and the TEXt Deictic. Spatial, temporal and text based oppositions occur between these stems, but there is no single dimension on which all four participate (see chapter 6).

There is a distinct plural demonstrative paradigm in which the plural suffix *-Kurr(u-)/Kurruwurr(u-)* is identifiable. The case distinctions occurring on these stems is distinct from those regularly found on demonstratives (see section 6.3.1).

The locational indefinite/interrogative proform occurs with a range of suffixes parallel to those which occur with locationals, but the forms correspond to those found in the demonstrative paradigm (see section 8.3).

Allied to the demonstrative class by form and to some extent by function are two stems with indefinite reference, the INDEFinite Proximate *dhika* and the INDEFinite

be. However they both also have functions quite distinct from other demonstrative stems (see section 6.5).

3.1.1.3 Nomens

This is a large open class which includes words for entities, qualities, quantities, proper names, kin, subsection and moiety terms, body parts, the determiner *balanya* "something like/such as" and *nhawi* "whatsit/whosit". The "humanness" of the referent determines distinct patterns of case marking for most members of this class.

"Human" nomens have distinctive case marking for transitive subject (A), intransitive subject (S), and transitive object (O). The occurrence of ACC, OBL, OBLS, OR case markers are distinctive of this class.

The human interrogative/indefinite pronominal *yol* has an identical pattern of case marking (see section 8.1).

"Non-human" nomens inflect according to an Ergative/Absolutive pattern. The occurrence of the LOC/ABL is distinctive of this class.

The interrogative/indefinite proform allied with this class is *nhä* "what, something" (see section 8.2).

Adjectives are a distinct sub-class on the grounds that they have no inherent "humanness" and take case inflections appropriate to the "humanness" of the particular referent. They also do not occur with adnominal suffixes in regular adnominal case functions (see section 4.3.2.2).

Body Parts are a distinct sub-class on the grounds that they never inflect according to the "human" case marking pattern, even when the referent of the whole to which it belongs is human. Like adjectives however, they do not occur with adnominal suffixes in regular adnominal case functions (see section 9.4). They are also distinct as a class of words that predominates as the initial lexeme in compounds (see sections 4.3.2.6, 9.1.1.4, 9.4.5, 10.1).

The lexeme *balanya* "such" functions as a nominal determiner and as such takes suffix marking in agreement with the "humanness" of the referent (see section 13.14.1).

Lexemes denoting social categories such as kin and moiety are distinguished on the grounds that certain derivational suffixes deriving nominals from nominals occur with them (see section 4.8). They also figure in a restricted set of adnominal relations expressed through apposition rather than suffixing (see section 9.4.4). While both are closed classes there are other nomens denoting social categories which occur with certain of the same derivational suffixes or which can occur in adnominal apposition.

Numerals and a few other quantifiers can be distinguished from adjectives on the grounds that they do not occur with degree modifiers (see section 4.3.2.4).

3.1.1.4 Locationals

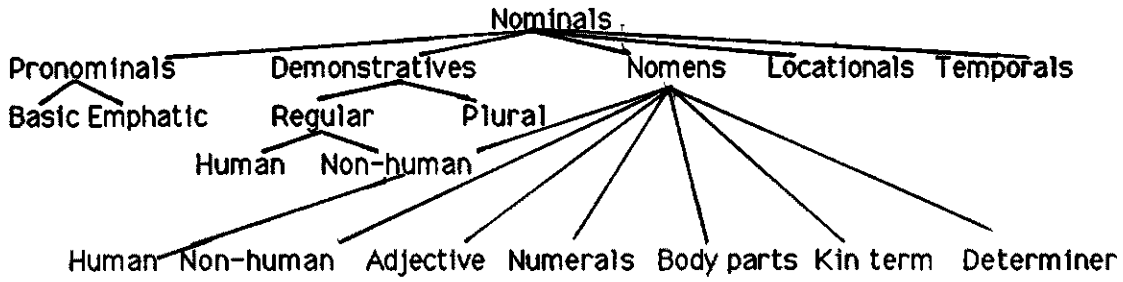
Locationals occur as the bare root in Locative case where other nominals require a LOC or LOC/ABL. It is a closed class including general locationals such as *galki* "near" and *barrku* "far", as well as certain place names e.g. *Galiwin'ku*. Distinctive to the locationals is the restricted range of cases in which they occur i.e. Locative, Ablative, Allative, Perlative, Dative and Associative. Place names are distinguished by optionally having the Allative case marked by the ERG case marker.

The locational indefinite/interrogative proform occurs in a similar range of cases as these Locationals but individual inflected stems are formally closer to demonstrative stems (see section 8.3).

3.1.1.5 Temporals

Temporals occur in the bare root in Temporal case, where other nominals require the ERG case form. They occur with the most restricted range of case inflections, namely the ABL, DAT and ASS. It is a closed class. The interrogative/indefinite proform corresponding with this class is *nhätha* "when".

Table 18: Nominal Word Classes



3.1.2 Verbals

There are three subclasses in this group - Verbs, Bare Verb Roots and Auxiliary Verbs. Verbs and Auxiliary Verbs are fully inflecting, except for one verb class whose stems do not inflect. However they co-occur with other TMA lexemes exactly like fully-inflecting verbs. Bare Verb Roots never inflect and do not occur with other TMA lexemes. According to the formal criteria by means of which the major classes were defined they are 'particles', since they do not inflect. However they function as verbs, although for particular stylistic purposes.

3.1.2.1 Verbs

Fully inflecting verbs generally occur in four forms. There are four inflections corresponding with the four forms. These inflections interact with certain other lexemes to code tense, modality, mood and aspect. Each inflection is multifunctional in regard to the overall TMA system. Two of the four forms also function as stems to which nominal case suffixes or derivational suffixes are attached. There is some variation in the forms of the inflections found with different groups of verb stems, the maximally distinct number of groups being 15. There are no overt conjugation markers, but on the basis of the pattern of inflections and the quality of the stem final vowel it is possible to posit 4 "super" classes or conjugations. These include one group of non-inflecting (NI) verbs and 3 groups of inflecting verbs designated as Ø, Ŋ and N.

Verbs occur with four distinct core case arrays i.e. S (case marked with ABS/NOM) (intransitive), S (ABS/NOM) and IO (DAT) (semitransitive), A (ERG/NOM) and O (ABS/ACC) (transitive) and A (ERG/NOM) and O (ABS/ACC) and IO (DAT) (ditransitive). While many stems have a fixed transitivity, there are some stems which occur with more than one of the core case arrays. There are also some stems which only function adverbially and thus are not associated with any particular case array.

There is a verbal interrogative/indefinite stem which is fully inflecting. The inflections are formally identically to stems in one of the smaller verb classes which I designate N_K (see sections 7.2.4.10 and 8.6).

3.1.2.2 Bare verb roots

Member of this word class do not occur with inflectional or derivational suffixes and do not co-occur with the TMA lexemes. They are distinct from the non-inflecting conjugation verb class in their non -participation in the TMA system and also in the fact that they do not also occur as nominal roots. They are not associated with core constructions but provide an alternative "short-hand" device for denoting situations which can also be expressed by regular verbs, or provide stylistic "spice" when co-occurring with fully inflecting verbs. They are used in both commands and statements. When they occur alone the relevant TMA and participants are generally clear from the context.

There are a limited number of stems which constitute this class. While formally distinct, they are closely associated with particular fully inflecting verb stems and it is not uncommon for the bare verb root and associated fully inflecting verbs to co-occur. These fully inflecting verbs are also the means by which the meaning of a bare verb root is indicated by language consultants, e.g. *dharr* "see" (cf regular verb *nhä-ŋ*), *dhut* "sit" (cf regular verb *nhina-*$\emptyset_a$) (see section 7.2.2).

There is another large class of stems which can function as BVRs, and that is the verb roots of the major class in the N conjugation i.e. the *-Thu* class, e.g. *yarrup* (cf *yarrupthu*-N "(to) go down, descend") and *buḏap* (cf *buḏapthu*-N "(to) cross over").

3.1.2.3 Auxiliary verbs

This class is marginal in Djambarrpuyŋu but is recognized so as to enable comparison with other Yolŋu varieties. In many Yolŋu languages a small class of stance and motion verbs are used as auxiliaries to indicate durative aspect (see Waters 1989 pp131-136, Morphy 1983 p19-90, Heath 1980b p113). In Djambarrpuyŋu (and Gupapuyŋu) a verb stem *ga-*$\emptyset_a$ occurs which functions as a general imperfective marker. Functionally it is one of the TMA lexemes and tends to occur together with other TMA particles. Unlike the stance and motion verbs of other Yolŋu varieties this stem does not also occur as a main verb (see section 7.4.4.1).

The verb stem *marrtji* "go/come, walk" does occur in Djambarrpuyŋu with an aspectual meaning, although it is not clear how it is distinct from the IMPerFective

auxiliary *ga-Øa*. However, its use clearly has parallels with the use of stance and motions verbs as auxiliaries in other varieties (see section 7.4.4.4).

3.1.3 Interrogative/indefinite proforms

In addition to the interrogative/indefinite proforms mentioned in connection with particular word classes above there are a few additional stems which cannot be so readily allied with a particular word class. These all appear to be derived from the "non-human" stem *nhä* "what/something" i.e. *nhäthinya* "what like/what kind of" which can be decomposed as *nhä* plus the nominalized form of the inchoative *-Thi*; *nhämirr* " how are you/is something" which can be decomposed into *nhä* plus the PROP suffix *-mirr* and finally *nhämunha'/nhämuny'* "how many". Although the *nhä* segment is recognizable I can find no cognate morpheme for *-muny/-munha*.

As a class these stems are unified in their dual functions as interrogatives and as indefinite proforms. The latter function is syntactically distinguished from the former by the presence of one of the lexemes *ŋula, dhika* or *be* before the stem. e.g. *ŋula yol* "someone(S)", *dhika nhä* "something (S/O)", *ŋula wanha* "somewhere (Loc)" *be nhätha* "sometime (Temp)" *ŋula nhaltja-N* "do/be something" (see chapter 8).

3.1.4 'Particle' word classes

The definition "non-inflecting" lexemes brings together a fairly disparate group. They include "manner" adverbs, degree qualifiers, directionals, tense -modality/mood-aspect particles, connectives, conversational particles, interjections and negatives. There are various other lexemes which may be further subcategorized according to considerations such as function and scope, but they have yet to be considered in detail and are listed individually.

One criterion that distinguishes the TMA, connective particles, conversational particles and interjections from the others is the fact that they do not occur with the discourse suffixes SEQuence *-Nha* and PROMinence *-Nydja*. These suffixes can occur on words from any other word class, and for this reason it has not been necessary to mention them as a factor up to now.

Some of the adverb stems, the directional particles and negatives occur in derived verb stems. Other particles have strictly grammatical functions and do not occur as stems with derivational suffixes.

Most particles are discussed in chapter 13 but TMA particles and negatives are described in relation to the TMA system in section 7.4 and subordinating conjunctions are described in section 12.2.3.

3.1.5 Overlap between different word classes

While most lexemes belong to one class or another, there are a few instances of roots that are multifunctional.

3.1.5.1 Between verbals and nominals

1. "Adjectival" predicates

There is one particular group of words that stands midway between these classes. It is a closed class that includes *marŋgi* "know", *djäl* "want/like" and *dhuŋa* "ignorant/don't know". They can occur with nominal case and derivational suffixes as well as predicates commanding particular case arrays. These predicates, however, do not take any verb inflection and do not co-occur with other TMA lexemes (see section 11.1.6).

2. Several of the non-inflecting verb conjugation forms also occur as nominal roots taking regular nominal inflections. Examples are:

djäma	"to work, make, do"; "work"
wukirri	"to write"; "school, writing"
beriya	"to pray"; "Church/Church service"

Given that these are non-inflecting stems, it might be argued that the nominal forms are simply "derived nominals" similar to nominals derived from verb stems with the FOURTH form. Each of these is a loan from non-Aboriginal language (see section 7.2.4.1). However, such derived stems never appear as the bare stem (composed of the verb stem and the FOURTH inflection), but must be followed by suffix. In an unmarked case (S) the ASS *-Puy* or PROP *-mirri(i-)* suffixes occur e.g. *guyaŋa-Øa* "think", *guyaŋanhawuy* "thoughts/thinking" and *marŋgiku-ɲ* "teach", *marŋgikunhamirr* "teacher". Furthermore one of the non-inflecting verb stems is inflected by younger speakers. This has involved a reanalysis of the form to produce a distinct verb root i.e. *djä-ɲ* "to work, make", but the form *djäma* "work" has been retained as the nominal. It would seem that separate but homophonous lexical items are involved, one for the nominal and one for the verb.

3. There are also instances of verbs where it is possible to identify a nominal root and a verbal derivational suffix. However it is not always clear that the derivational relationship between the nominal root and the verb stem is synchronically viable and that the verb stem should not be considered a (homophonous) verb root. The situation is one of gradation. The problem arises because the synchronically productive derivational suffixes are also evident in clearly fossilized stems. For those stems where there is no evidence of fossilization such as distinct meaning or phonological differences from synchronic nominals or suffix allomorphs it is difficult to determine whether the root should be considered as a derived nominal or a verb root homophonous with the nominal (see sections 7.2.4.3, 7.5.2 and 7.5.1).

4. There are also verbal and nominal INTENSifiers which are homophonous when the verb is in the FIRST inflection. The nominal is *mirithirr* and the verb is *mirithi-*$\emptyset_{rr}$ which has the four inflected forms: *mirithi+rr*, *mirithi*, *mirithi+n*, *mirithi+nya* (see section 13.3).

3.1.5.2 Between other word classes

1. Other instances of cross-class membership occur between nominals and adverbial particles e.g. *dhunupa* "right (hand side), correct"; "do straight away".

2. Some of the demonstrative stems also function as modal/aspectual particles, e.g. *ŋuli-*, *ŋula-* and *be-* occur as DIS/TEXD demonstrative stems. *Ŋuli* is the HABitual/HYPothetical TMA particle, *ŋula* and *be* occur independently (i.e. without inflections) with interrogative/indefinite proforms indicating indefinite reference (amongst other functions - see 6.5.2.3 and13.13.2).

3. There is also some overlap between subclasses of the major categories. For instance there are instances of nomens functioning to denote an entity as well as a quality, e.g. *borum* "fruit"; "ripe" and the directional particle *bala* indicating "movement away"(see section 13.2) is homophonous with the interclausal connective "then"(see section 13.5.1.2).

The instances of cross-class membership are not particularly extensive and suggest diachronic developments rather than synchronically productive relationships.

3.2 Word formation strategies

The basic word building strategy in Djambarrpuyŋu, as in other Pama-Nyungan languages, is suffixation. Morpheme boundaries are generally transparent, as expected in agglutinative languages. The foci for alternation are those segments affected by phonological processes described in Chapter 1 - lenition, final vowel deletion or the choice of allomorph given the phonotactic constraint preventing syllable final lamino-dentals. These result in different allomorphs for many stop initial and laminal-nasal initial suffixes, as well as suffix allomorphs with or without a final vowel. Some suppletive roots and less clear morpheme boundaries occur in the pronominals and demonstratives paradigms.

Other word building strategies are reduplication and compounding. They occur with both verbals and nominals. Reduplication is a productive morphological process although with limited application. There are however, a substantial number of fossilized reduplicated stems. Compounding is also common and characterized by the predominance of body part terms as the first lexeme (see Chapter 10).

All three processes are reflected in both productive and fossilized stems.

3.3 Discourse suffixes

These will not receive any detailed consideration in this thesis although their pervasiveness will soon become clear from the examples. They are clealy a vital component of the textual/pragmatic areas of Djambarrpuyŋu and other Yolŋu varieties. They have received some attention in the literature and I refer the reader to Morphy (1983), van der Wal (1985), Waters (1989), and most pertinently Tchekhoff and Zorc's paper *Discourse and Djambarrpuyŋu: Three Features* (1983).

There are three suffixes I refer to as discourse suffixes: *-Nydja* (PROMinence), *-Nha* (SEQuence) and *-Thi* (ANAphor). They all occur with stems from the three major word classes - nominals, verbals and particles. The ANAphor suffix has the most restricted distribution only occurring with demonstratives or nominals with a determiner function. Its use with verbs and particles is much less frequent in the corpus than with demonstratives. It appears to have an anaphoric/emphatic function (see section 6.3.2).

In their article Tchekhoff and Zorc identify three key discourse strategies in Djambarrpuyŋu, fronting and the use of the suffixes *-Nydja* (PROM) and *-Nha* (SEQ). I follow Morphy's (1983) labelling in regard to the former suffix (Tchekhoff and Zorc refer to it as OPPosition/SPECific) but Tchekhoff and Zorc in regard to the latter (which Morphy refers to as the IMmediacy clitic).

Tchekhoff and Zorc found that "of the traditional discourse dichotomies, topic vs comment, given vs new (Chafe 1976 p28), theme vs rheme (Bossong 1980), definite vs indefinite, none obtain in Djambarrpuyŋu" (1983 p864).

Fronting and the PROMinence suffix are optional but they found that the SEQ suffix was obligatory "IF the sentence is to be construed as forming an integral part of and relationship to the discourse at hand" (ibid p867). According to their analysis it is used to code logical or chronological sequence. Both suffixes can occur on a single word or a syntactically complete phrase (which can be discontinuous), although the occurrence of the PROM is confined to one constituent per clause. I refer the reader to the article for the details of their analysis and exemplification.

Waters (1989 pp160-165) presents an alternative interpretation for the equivalent to the SEQ suffix in Djinaŋ. He argues that it provides Temporal Focus making "*the time frame of the event prominent.* The time frame it highlights is contextually or situationally determined" (ibid p162). The temporal relationship between clauses may be sequential or contemporaneous. He also considers some data presented in Tchekhoff and Zorc which he finds problematic for their analysis of this suffix as coding sequence.

I am not in a position to comment in detail on the various analyses that have been proposed, nor do I not believe that everything has been said about these suffixes and Djambarrpuyŋu discourse strategies. However in order to extend our understanding of them it would be necessary to undertake a highly focused study. A prerequisite to that, and indeed one of the goals of this thesis, was a fuller description of morpho-syntactic phenomena in Djambarrpuyŋu. The text corpus however, should provide a rich source of data for any further consideration of discourse strategies.

CHAPTER 4

NOMINAL MORPHOLOGY

This chapter describes the general structure of nominal words and then considers the nomen, locational and temporal classes. Pronominals are described in chapter 5 and demonstratives in chapter 6.

4.1 Introductory comments

4.1.1 General approach to case

In describing case in Djambarrpuyŋu I have adopted the case function typology proposed for Australian languages in Dench and Evans (1988). This typology was motivated by the need for a more unified treatment of homophonous morphemes which operated at different syntactic levels, only some of which were associated with traditional notions of case. The term, case, is thus used with wider reference than is generally assumed in linguistic literature.

They propose five major functional categories:
1. Relational - the prototypical function of case markers to indicate the role of a nominal in a clause
2. Adnominal - case markers which indicate relations between nominals
3. Referential - case markers which indicate an NP or adverbial in agreement with another NP
4. Complementizer - case markers which have a clause as one of their arguments
5. Associating - case marking of arguments of nominalized verbs.

In Djambarrpuyŋu case markers may function relationally, adnominally and as complementizers. There is little overlap in the case marking which occurs in the first two functions. However, they may co-occur on the same root/stem and do so according to their relative scope, with the adnominal case markers occurring before the relational ones. There are eight suffixes that are predominantly relational in function (ERG, DAT, ACC, LOC, ALL, ABL, OBL and PERL) and three that are predominantly adnominal (ASS, PROP and PRIV). The adnominal cases of possessive, proprietive and privative feature in many Australian languages. The associative case is less common. Only in coding the possessive case is there any

homophony between relational and adnominal case suffixes. This involves the use of the DAT and OBL (see section 9.5).

However, homophonous multi-functional case suffixes are a striking feature of non-finite subordinate clauses. There is complete syncretism between the suffixes that occur in complementizer function and a subset of the adnominal and relational suffixes.

In recognizing adnominal case Dench and Evans are proposing an alternative analysis to the treatment of many suffixes as derivational in Australian languages. i.e. the proprietive and the possessive. They argue for the syntactic status of adnominal case as opposed to derivation, on the grounds that

1. these case markers have phrasal rather than lexical scope
2. they are fully productive
3. the meaning of the case marked stems is generally predictable (ibid pp10-12).

Amongst the characteristics of non-configurational languages displayed by Djambarrpuyŋu is the lack of strict ordering conventions and adjacency requirements in regard to possible "noun phrase constituents". Because of the close connection between the notion of a noun phrase and adjacency/ordering, I will adopt the term "nominal expression ". I reserve the term "phrase" for those few constructions where adjacency and ordering are relevant. The general principle which formally connects coreferring lexemes at different levels is that of case concord. This applies to all three case functions and they all share the word as the case marking domain. In clauses with verbal predicates, the range of words over which adnominal suffixes can occur pertains to a level below that of the clause, while relational suffixes are functioning at the level of the clause. A suffix in adnominal function never bears a direct relation to a verbal predicate but to some other nominal (the head) which is not adnominally case marked. Furthermore relational cases include adnominally case marked words within their scope and domain, and this is reflected in their relative ordering. Complementizer case is somewhat different in that it can function at either clause or sub-clausal level. However, it is consistently associated with non-finite subordinate clauses.

The distinction between adnominal and relational functions is thus vital to the grammar of Djambarrpuyŋu since these case markers identify distinct levels as well as particular relationships between constituents in a clause. This is realized

in conjunction with the principle of case concord and the relative ordering of adnominal and relational suffixes.

Adnominal suffixes in equational clauses can also function at the level of the clause, however then one of the nominal expressions functions as the main clause predicate.

It should also be noted that there are some constructions where the domain of adnominal case is the final word in a two word sequence. I interpret these as 'adnominal' phrases. It is a restricted construction, only occurring when a nominal within a nominal expression is being modified (see sections 9.1.3 and 9.2.3).

One of the results of recognizing adnominal case in Djambarrpuyŋu as syntactic rather than derivational, is that the number of derivational suffixes that occur with nominal stems becomes highly restricted. There are only five that appear to be productive, and all are concerned with human social classification or social roles (see section.4.8).

4.1.2 Nominal expressions

The possible constituents in a nominal expression in Djambarrpuyŋu are essentially identical to those described for Djapu in Morphy (1983 pp82-87). The minor differences have to do with whether the temporals are aligned with nominals or not, and in the recognition given the various "phrase" types. The possible constituents in Djambarrpuyŋu thus include one or more nomen, a locational or a temporal, a basic or emphatic pronominal or pronominal phrase, a demonstrative or demonstrative phrase, an adnominally case marked nominal or phrase, a non-finite subordinate clause and a finite subordinate clause.

The constituents can be discontinuous. Only the "phrases" have fixed ordering requirements. Discontinuity is particularly a feature of nominal expressions coding core roles. Those coding peripheral roles have a greater tendency to be juxtaposed. Elements of subordinate clauses are also usually juxtaposed, although the relative ordering is not fixed.

Nomens, pronouns and demonstratives can, and frequently do, co-occur in the one nominal expression. It is also common for a particular role to have no overt mention in a clause or for it to be coded by a single lexeme. This could be from any of the nominal classes.

Djambarrpuyŋu also show the same range of options for expressing number as described for Djapu (Morphy 1983 p47) and which are also described for Gupapuyŋu (Lowe n.d.). In all these varieties the marking of number is optional. It may be lexically, morphologically or syntactically expressed. While most lexemes are unmarked for number there are certain lexemes that are expressly plural e.g. *djamarrkuli'* " children" (cf yothu "child"), and *wäŋga-Ŋ* "go, walk (pl)" (cf *marrtji* "go, walk"). Morphologically number can be indicated by reduplication (see section 10.2) or with the PLural suffix (see section 4.8.8). Syntactically number can be indicated using certain pronominals or the nomen *mala* "group" (see section 5.7.1.1). A plural marking not described in Djapu is the use of the PROP on quality denoting adjectives (see section 9.1.1.7.1).

4.2 Nominal words

Nominal words minimally consist of the bare root if they are from the nomen, locational and temporal classes as this is required for certain cases. All other nominal words and many case forms of these three classes minimally consist of a root and a case inflection. The nominal word can be further extended by derivational suffixes or adnominal cases which occur between the root and the relational case inflection and by discourse suffixes which occur after the case inflection.

The structure of nominal words from the nomen, locational and temporal classes is presented in part by the following formula:

root	- (derivational)*	- (Plural)	- (Oblique)	- (adnominal)	- (relational)	- (discourse)
	suffix	suffix	stem suffix	case suffix	case suffix	suffix

*This notation is used to indicate that a number of nominalizing derivational suffixes can occur in this structural position.

There are some eleven major derivational suffixes which can be suffixed to nominal roots but only six derive nominals (see section 4.8). The others are all verbalizers (see section 7.5). Only the former category are included in this formula. Strictly speaking the Plural suffix is also derivational, but it can occur after certain other derivational suffixes. The situation becomes more difficult to represent categorically when verbalizing derivational suffixes are present. The structure is essentially the same but they can occur in other positions than directly following the root. They frequently occur following certain adnominal sufixes and there are also isolated examples of a verbalizing suffix occurring after the ALL relational suffix. Precisely what allowable combinations of all the elements might be has yet

to be exhaustively determined. The Oblique Stem is an augment required before particular oblique case suffixes on certain stems ("human" referring nomens, pronominals and possessors).

Below are some examples of nominal words in which the nomens *dhäwu* "story, news, information" or *wäwa* "brother" occurs as the root:

dhäwu	S or O case (relational) case
dhäwu+ny	S or O case (relational) + PROM (discourse suffix)
dhäwu+w	+ DAT suffix (either adnominal or relational)
dhäwu+w+nydja	+DAT suffix +PROM (discourse suffix)
dhäwu+wuy	+ASS case (adnominal) in S or O case (relational)
dhäwu+wuy+yu	+ ASS case (adnominal)+ERG suffix (relational)
dhäwu+wuy+yu+ny	+ ASS (adnominal)+ ERG (relational)+PROM (discourse)
wäwa+'manydji+kurruwurru+ny	"brother" + KINDYAD (derivational) + +Plural (derivational) +ACC (relational)

It is also quite possible to have other types of stems in the root position. These include compounds and reduplicated stems as well as deverbal nominals.

Words with suffixes in complementizer function are of essentially similar structure to other nomens with the complementizer suffix filling the adnominal or relational slot.

In pronominal and demonstrative words the pattern of clearly distinct morphemes ordered according to their scope is not as regular as with other nominals. There are certain stems where it is not possible to clearly segment a root and an affix, although part of the stems are cognate with other words in the paradigm. There are also a few completely suppletive forms. In the "derived" pronominal and demonstrative paradigms the stems themselves often bear an indication of the case of the final word, thus blurring the ordering of derivational suffixes prior to inflectional suffixes. However the tendency for this ordering to prevail is reflected in the fact that in most of the "derived" pronominal and demonstrative words, an inflectional suffix does follow the derivational suffix, even though this reduplicates information available from the stem. There is also no evidence for the sequence of adnominal and relational case suffixes that occurs with other nominals. Either one or the other occurs. The coding of possession is somewhat complex, since the suffix appearing on the possessor is clearly sensitive to the relational case marking of the

possessee. However it is never coded as a sequence of adnominal and relational case suffixes. Demonstratives, given the appropriate contexts, might occur with such a sequence since they show the greatest tendency to formally parallel a nominal which they are modifying. I have not noted any examples.

The general structure of pronominal words is depicted in the following formulae. Portmanteau stems have been ignored in the basic pronominals and regular demonstratives.

Basic pronominals:

root-(oblique)-adnominal/relational-(discourse)

e.g. *ŋarra=ku* "1sg-DAT", *nho+kalaŋa+wuy+nydja* "2sg+OBLS+ASS+PROM

Emphatic pronominals:

root/stem-EMPH-(oblique)-(adnominal/relational)-(discourse)

e.g. *ŋarraku+wuy* "1sg-DAT+EMPH", *nho+kiyin+galaŋa+wuy+nydja* "2sg+EMPH+OBLS+ASS+PROM"

The form that precedes the EMPH suffix in emphatic pronominals may be either a root morpheme or an analyzable stem, depending on the case of the pronominal. For the details refer to sections 5.1.3 and 5.3.

Regular demonstratives

root-(*ŋu*)-adnominal/relational-(discourse)

e.g. *dhipal+a* "PROX-LOC+SEQ", *dhiya+kal* "PROX+OBL" *dhuwala+ŋu+wuy* "PROX+ŋu+ASS"

The morpheme *ŋu* appears in a various stems as an augment (see section4.8.6)

Plural demonstratives

stem-PL-(adnominal/relational)-(discourse)

e.g. *dhuwala+wurr* "PROX+PL-ABS", *dhuwala+wurru+ŋ* "PROX+PL+DAT".

4.2.1 Nominal roots

Nominal roots may range from one to six syllables, although the majority have two to four. There are in the vicinity of 100 monosyllables that are not verb roots and of these three quarters are nominals. All unbound nominal monosyllabic roots have long vowels. They may be open or closed. For example *nhe* "2sgNOM", *dholŋ'*

"bladder", *ŋerrk* "Sulphur Crested Cockatoo", *läy* "temple, side of head; edge", *yol* "who/someone". A few monosyllabic bound roots occur in the pronominal paradigm.

There are few roots of more than four syllables that do not have elements that suggest some kind of morphological derivation historically. Amongst the few non-segmentable examples are *wurraŋatjarra* (a very general term denoting someone who flouts/breaks the law or convention such as a naughty child or a person who is in and out of jail), *djakaŋayanbi* "small lizards, skinks", *galawaŋamun* "Water Goanna".

Possible frozen compounds include *ŋurrupaŋŋala* "fruit of Bush Apple" and *milparrambarr* "eyebrow" (cf *ŋurru* "nose, point" and *mel* "eye"). There is no evidence of the second constituent as a synchronic free form in either of these words. Possible frozen suffixal forms include the *-(wa)lkur* element in certain kin terms e.g. *ŋinitjiwalkur* "MMMBS, WMMB (addressee propositus)". There are also several five syllable words in which the final suffixes *-ŋu, -ŋaniŋ* or ASS-*Puy* appears. The ASS is a highly productive suffix, not uncommon in lexicalized stems (see section 9.3.5). The current status of *-ŋu* is still unclear but it is fossilized in many roots and suffixes (see section 4.8.6). *-ŋaniŋ* does not appear to be productive (see section 4.8.7). Finally, there are instances in which a reduplicated element is present e.g. *bamburuŋburuŋ* "brain", *bungarrikarri* "mullet", *gawuŋalpuŋal* "Spangled Drongo".

The handful of six syllable nominal roots all involve reduplications and seem confined to names for flying creatures e.g. *djirribitjirribi* "Willy Wagtail", *gurruwirpawirpa* "Red-tailed Black Cockatoo". Onomatopoeia and reduplication are characteristic of many bird names.

4.2.2 Nominal suffixes

There is a reasonable degree of similarity, even identity, amongst case forms coding the same function across different nominal classes. Local cases show the most variation.

Suffixes that occur on nominals are case suffixes, derivational suffixes and augments. Case suffixes function adnominally, relationally and as complementizers. Derivational suffixes may derive other nominals (see section 4.8) or verbs (see section 7.5). The augment OBLS *-Kalaŋa/u-* is the one most consistently found with

nominal stems. The morpheme *-ŋu-* can often be identified in nominal stems and suffixes but it does not appear to be either productive or consistent in its occurrence. Its function in many instances thus seems to be that of an augment (see section 4.8.6).

Nominal suffixes are predominantly mono- or disyllabic and monomorphemic. Those that are longer (three derivational suffixes and the OBLique Stem) appear to be morphologically complex. The OBLS *-Kalaŋu/a*, KINPROP *-'mirriŋu* and OWNR *-waṯaŋu* and all share the final syllable *-ŋu* which is found as an augment/fossilized suffix in numerous stems. The alternate on the OBLS with a final /a/ may be explained by progressive assimilation. Cognate with the remainder of the OBLS is the OBL suffix *-Kal* (*-Kala* in Dhuwala). The PROP *-mirr(i-)* is clearly cognate with the remainder of the KINPROP. There is no synchronic evidence of a cognate "waṯa" for the OWNR suffix in Djambarrpuyŋu but Heath (1980b p82) describes a Comitative compounding initial *baṯa-* found on verbs in Ritharrŋu, and a derivative suffix *-baṯaŋu* "owner" found on nouns. The Plural suffix occurs with a range of allomorphs, one of which looks like a reduplication i.e. *-Kurruwurr(u-)* (cf *-Kurr(u-)/-wurr(u)*).

4.2.3 An overview of nominal case suffixes - their form and main grammatical functions

This section is an overview of nominal case suffixes and their functions in terms of the Dench and Evans typology. Relational functions of these suffixes are discussed in section 11.2, adnominal functions in chapter 9 and section 11.1 and complementizer functions in section 12.1 and section 9.3.4.

Bare roots or unmarked stems in the demonstrative and pronominal paradigms are associated with various cases. With pronominals the bare root or unmarked stem is associated with NOM case marking for A and S function. With "non-human" nomens and demonstratives it is associated with ABS case marking for S and O function. With locationals and demonstratives it is associated with Locative case. With temporals it is associated with Temporal case. Bare nomen stems are also used as address terms or vocatives.

The fact that certain adnominal relations, such as that between an entity and a quality or a generic and a specific, are not marked with an adnominal suffix may also be considered "unmarked" in regard to adnominal relations (see section 9.4).

4.2.3.1 Ergative case marking

On all word classes except demonstratives the productive ERG marker is the suffix *-Thu*. It has three allomorphs:

-thu after stops and nasals

-yu after liquids and semivowels

-y after vowels

As described in chapter 2.4.3.1, a root final glottal stop is ignored for the purposes of allomorphy[1].

Demonstrative stems have non-cognate ERG suffixes. *-ŋ(u-)* and *-ŋi* (see section 6.1.2). The interrogative/indefinite "human" proform *yol* uses the unlenited ERG allomorph *-thu*, while the ERG of the "non-human" proform *nhä* is the suppletive stem *nhaliy*.

In relational function ERG marking codes the core Ergative(A) case with transitive and ditransitive verbs. It is also used to mark the non-core cases, Instrumental and Temporal. The Instrumental is distinct from the Ergative case in that it can occur with intransitive, semitransitive and reflexive/reciprocal verbs, as well as transitive and ditransitives. It codes Temporal case on non-temporal nominals. It is also used to mark Allative on Place Names.

The ERG is also used in complementizer function to code causal/instrumental and temporal situations.

4.2.3.2 ACCusative *-NHa*

The ACC *-Nha* has two allomorphs:

-ny after vowels word finally

-nha elsewhere.

It is obligatory on nomens denoting humans, and pronominals marking Accusative (O) case (see section 4.2.4.1 and 12.2.1.6).

[1] In the orthography, stop initial suffixes are written with a voiced symbol after nasals and with the voiceless symbol following a glottal stop

4.2.3.3 DATive *-Ku*

There are three regular allomorphs found on most nominal stems:

-ku after stops and nasals

-wu after liquids and semivowels

-w after vowels

Like other stop initial suffixes the form of a suffix following a root with a final glottal stop is determined by the preceding phoneme.

Pronominals have the allomorphs *-ku* and *-ŋ(gu-)* and demonstratives *-k(u-)* and *-ki* (see sections 5.2 and 6.1.2). After the OBLS both these classes use the lenited DAT allomorph *-w*. Pronominals, interrogative/indefinite proforms and demonstratives all retain the stop initial allomorph after vowels in un-augmented stems.

In relational function this marks the core case of indirect object with ditransitive verbs, semitransitive verbs and 'adjectival' predicates. It also marks non-core cases such as Benefactive, Malefactive and Purpose with verbs of all transitivity types (see sections 11.2.1 and 11.2.2.2).

Adnominally this marks Possessive (see section 9.5). It is also used in complementizer function to code purposive clauses and complements (see section 12.1.9).

4.2.3.4 LOCative/ABLative *-ŋur*, ABLative *-ŋur* and Locative case marking

There is only the single allomorph *-ŋur*. In relational function this form may strictly code Ablative case, or, either Locative or Ablative case. The range of cases it code depends on the word class of the stem (see section 11.2.2.3).

The syncretism of Locative and Ablative case is confined to "non-human" nomens. On demonstratives, "human" nomens, locationals and temporals the suffix *-ŋur* only occurs as an Ablative case marker. Except for the temporals, each of these classes has distinct LOC marking. Temporals do not occur with Locative case. "human" nomens use the OBL to mark Locative case (with the ABL suffix they require the OBLS augment). Locationals use the bare stem. The demonstrative forms involve suppletive stems.

The syncretism of Locative and Ablative case in a single marker is a feature of Dhuwal varieties. It will be recalled from the preceding chapter that cognates in Dhuwala have distinct final vowels (i.e. LOC *-ŋura* vs ABL-*ŋuru*) (section 2.4.6.6).

The suffix *-ŋur* is also used as a complementizer, seemingly with both locative and ablative related functions (see sections 12.1.5 and 12.1.6).

It appears to have a limited adnominal function denoting an originating locale (see section 11.1.3).

4.2.3.5 ALLative *-lil*

The single allomorph *-lil* occurs on "non-human" nomens, locationals and place names. ALL marking on "non-human" demonstratives involves the suffixes *-pal, wal* and *-wili* (see section 6.1.2).

The ALL suffixes code the relational Allative case on "non-human" nomens and demonstratives, locationals and place names (see section 11.2.2.3.3).

It is not used in adnominal function. However in relational function its scope appears to be confined to locations pertaining to S and O arguments (see section 11.2.2.3.3).

This suffix also is used in complementizer function, coding motion to a situation or a situation in which an O or IO arguments is engaged (see section 12.1.7).

4.2.3.6 OBLique *-Kal*

This suffix has two productive allomorphs:

-kal after stops and nasals and optionally after liquids and semivowels

-wal after vowels and optionally after semivowels and liquids

Consistent with other stop initial suffixes, a root final glottal stop does not affect this allomorphy.

Pronominal, interrogative/indefinite and demonstrative stems all occur with only the stop initial suffix following vowels in un-augmented stems. After the OBLS the regular lenited allomorph occurs.

This suffix syncretizes the Locative, Allative local relational cases, human Accompaniment and optionally also the Ablative. It only occurs with "human" referring nomens and demonstratives, and pronominals.

Adnominally it marks the Possessor of an ERG or local case marked (i.e. ALL, LOC, ABL or PERL) nominals (see section 9.5).

It occurs in complementizer function (but only on arguments with a "human" referent) of predicates with ERG and local case complementizers (see section 12.1).

4.2.3.7 PERLative *-Kurr*

This suffix has two allomorphs:

-kurr following nasals and stops and optionally following liquids, semivowels and vowels.

-wurr is an alternative found after liquids, semivowels and vowels.

As expected a root final glottal stop is not pertinent to this allomorphy, the conditioning segment being the preceding phoneme.

This is only directly suffixed to "non-human" nomens. With "human" nomens and demonstratives and pronominals the OBLS augment must occur. Then the lenited allomorph is most common but the stop initial allomorph can occur.

This codes relational Perlative case. This case designates motion within/about/over or along. Some extended location is always implied but it may be a continuous path or region or a number of discrete locations within/amongst which the same action occurs (see section 11.2.2.3.4).

It is also used in complementizer function to code a concurrent situation or means (see section 12.1.8). It does not occur with adnominal function.

4.2.3.8 ASSOCiative *-Puy*

The ASS suffix has two allomorphs:

-puy after stops and nasals, and optionally after liquids, semivowels and vowels.

-wuy optionally after liquids, semivowels and vowels.

A root final glottal stop does not affect this allomorphy, the preceding phoneme being the relevant conditioning factor.

On "human" referring nomens and demonstratives the OBLS may occur before the ASS. However its occurrence with the OBLS on "human" nomens is not particularly consistent.

This suffix functions adnominally. It codes a range of relations between entities, such as habitual location, being "about" something, purpose and so on (see section 9.3).

It also functions as a complementizer, coding non-finited subordinate clauses in adnominal function. These clauses are referred to as "reduced relative clauses" by Morphy (1983 p135) (see section 9.3.4).

4.2.3.9 PROPrietive *-mirr(i-)*

The PROP suffix has two allomorphs. The vowel final form usually occurs before a further suffix. The PROM and SEQ discourse suffixes display some variation, occurring with either the vowel final or consonant final stem. Word finally the root final vowel never appears.

It has strictly adnominal functions (see section 9.1). While it does not occur in complementizer function, it does occur with one of the few constructions in the language that display adjacency and ordering requirements. In these phrases the PROP occurs on only the rightmost constituent (see section 9.1.3).

The PROP also has certain derivational functions (see section 9.1.4).

4.2 3.10 PRIVative *-miriw*

This has the single allomorph *-miriw*. It has strictly adnominal functions as a case inflection (see section 9.2). The phrase types mentioned in connection with the PROP are also possible with the PRIV (see section 9.2.3). PRIV suffixed stems can also be used adverbially (see section 9.2.4)).

4.2.3.11 ORiginative *-Kuŋ(u-)*

There are four allomorphs associated with this suffix. Two are conditioned by the presence or not of a following suffix. When word final, a final vowel does not appear. The phonologically conditoned alternations are as follows:

-kuŋ(u-) occurs following stops and nasals and optionally after semivowels

-wuŋ(u-) following liquids and vowels and optionally after semivowels.

Again a root-final glottal stop is ignored for the purposes of suffix allomorphy.

This suffix seems confined to entities that can be interpreted as creators, providers or originators - all in some sense original non-local sources - in whom resides the original or conscious power/ability to act in these ways. Basically this restricts it to "human" referring nominals ("human" nomens and demonstratives as well as pronominals) (see section 9.6).

It is somewhat distinct from other suffixes in that it is not formally parallel with other suffixes in either relational or adnominal function. It can occur with both intransitive and transitive verbs, suggesting a possible peripheral relational function. However in all known examples it refers to the origins of an S or O argument. It is closely associated with the ASS suffix in complementizer function in that A and S roles in ASS marked complements can be marked with the OR suffix. The connection with the ASS suggests it may also be adnominal in function rather than peripheral relational in its use with intransitive and transitive verbs described above. It is also not uncommon in equational clauses, a domain in which adnominal case markers also feature strongly. However, unlike other adnominal suffixes it never occurs with a following relational case marker. Thus while it is possible to determine the status of the ASS by its marking in other case roles this is not possible with the OR.

4.2.3.12 OBLique Stem *-Kalaŋu/a-*

This suffix has two phonologically conditioned allomorphs:

-kalaŋa/u- after stops and nasals

-walaŋa/u- after liquids, semivowels and vowels.

A root final glottal stop is ignored for the purposes of suffix allomorphy.

When another suffix follows the final vowel may be either *-a* or *-u*. In cognates in other varieties often only the vowel *-u* is reported (see Morphy (1983 p35,52)

for Djapu, and Lowe (n.d.a L29, 39, 53) for Gupapuyŋu). However a note in Lowe (n.d.a L39) reports the possibility of a final /a/ in this suffix in relation to pronominal stems. It is not clear which stem is innovative. A case for progressive assimilation can be argued on the grounds that the original stem is *-Kalaŋu-* and the final /a/ the result of assimilation to the preceding vowel(s). On the other hand there is also a case for regressive assimilation affecting an original stem *-Kalaŋa-*. This is on the grounds that a final /u/ can be accounted for by the prevalence of high back segment(s) in the suffixes that follow the OBLique Stem e.g -w, *-ŋur, -wuŋ(u-), wurr* and *-wuy*. I am not aware of any evidence that would clarify the situation. In section 4.2.2 above I suggested the OBLS could be analyzed as an earlier dimorphemic stem and linked the final */ŋu /* with the *-ŋu* augment /fossilized suffix found on numerous stems. However, the Dhaŋu Locative suffix is *-ŋa* and this is another potential source for the second morpheme in the OBLS stem. Some support for considering this as a diachronic source for this suffix is found in Ritharrŋu which requires a Locative increment *-Kala* before locative suffixes on "human" nouns (Heath 1980b p38).

This suffix generally functions as an augment. In a very restricted context it can occur word-finally. This is when making reference to the parents of children by attaching the form *-Kalaŋa* to the name of the child. It is one strategy permitting indirect reference to kin in avoidance categories. In this use it always occurs with a final /a/.

As an augment this suffix is obligatory on "human" referring nomens marked with the PERL or ABL relational suffixes. It also occurs on "human" nomens with ASS and PROP adnominal case markers, but it is by no means consistently used in this context. The Ablative may also be coded alternatively with the OBL on "human" referring nominals. At this point I am unable to explain the variation associated with the use of the OBLS augments in relation to the coding of "human" reference. "Human" referring demonstratives pattern like "human" referring nomens. However, pronominals do not have this variation and obligatorily require the OBLS before the PERL, ABL or ASS suffixes.

In the Possessive construction the OBLS is required on the possessor if the head has DAT, OBL, OR, ASS or PROP marking. It may also occur when the head has PERL or ABL marking, but the OBL is a possible marking for the posssessor here as well (see section 9.5).

It only occurs in non-finite subordinate clauses on "human" arguments to predicates with ABL and PERL complementizer suffixes (see section 12.1.6 and 12.1.7).

A summary of case functions is given in Table 19 following.

Table 19: THE FUNCTIONS OF CASE SUFFIXES IN DJAMBARRPUYŊU

	Function		
Case form	Relational	Adnominal	Complementizer
unmarked stem	S, O, Temp (Temporals only), Loc (Locationals only)	(null marking in the adnominal context is associated with the expression of relations between nomens such as whole-whole-part, quality-entity and quantity-entity)	-
ERG	A, Instr, Temp Allative (place names)	-	Causal/Instrumental/ Temporal non-finite clause
NOM	S, A (pronominals only)	-	-
ACC	O (pronominals and +hu nomens and demonstratives only)	-	-
DAT	IO, Dative,Benefactive	Possessor of S or O	Non-finite complements and purposive clauses
LOC	-hu Locative	-	Non-finite clause
ALL	-hu Allative	-	Non-finite clauses expressing motion to a situation or the situation in which the S or O role is engaged
ABL	-hu Ablative	(limited - codes originating locale (possibly only for S or O roles))	Non-finite clauses expressing motion, cessation, change from a situation, a temporal starting point or prior event

Table 19: THE FUNCTIONS OF CASE SUFFIXES IN DJAMBARRPUYŊU (Continued)

Case form	Function: Relational	Function: Adnominal	Function: Complementizer
OBL	+hu Accompaniment Location Allative Ablative (optional)	Possessor of OBL and ERG marked possessees (?+hu Instr - whole part only)	(+hu arguments of ERG, LOC, ALL and ABL marked non-finite clauses)
PERL	-hu Perlative	-	Non-finite clauses describes a concurrent situation, means by which or manner in which a situation is carried out
OBLS	+hu OBLS +PERL +hu OBLS+ABL (optional)	OBLS+case suffix codes Possessor of 1. DAT and OBL relational case functions 2. Possessors 3. Adnominal cases	(+hu arguments of ABL, PERL and optionally, ASS marked non-finite clauses)
PROP	(Temp)	Proprietive "having" (local coincidence of two entities)	-
PRIV	(Adverbial)	Privative "without/lacking" (non-coincidence of two entities)	-
ASS	-	Associative "associated with" (relations between entities not concerned with coincidence)	Non-finite adnominal (relative) clauses
OR	?	Originative	(Regularly codes A, sometimes S, arguments of ASS marked non-finite clauses, less commonly of other non-finite clauses e.g. ERG)

4.2.4 Nominal suffixes and nominal word classes

The superordinate class of nominals was defined on the basis that all members of this class occur with case inflections. This establishes a distinct word class from verbs and non-inflecting stems or 'particles'. There are certain key areas in which variations in case marking patterns distinguish between various sub-classes of nominals. These are the coding of core participants, local cases and "human" and "non-human" referents.

4.2.4.1 Coding of core participants

The cases associated with core participants are the Ergative (A) ("transitive subject"), Nominative (S) ("intransitive subject "), Accusative (O) ("transitive object") and Indirect Object. The actual marking associated with the first three of these cases is an important means of distinguishing pronominals, demonstratives and "human" and "non-human" referring nomens.

The marking of nominal expressions follows a 'split-ergative' case system (see Silverstein (1976), Dixon (1979)). "Non-human" nomens and demonstratives follow an ergative-absolutive pattern (i.e. distinguishing A vs S/O), pronominals follow a nominative-accusative pattern (i.e. distinguishing A/S vs O) and "human" referring nomens distinctively mark all three functions O, S and A. Following Goddard (1982), the three distinctions made in the case system of the language, as opposed to the case-marking system, will be referred to as Ergative (A), Nominative (S) and Accusative (O). Upper case is used to denote case markers.

Derived plural demonstratives and some "non-human" referring nomens also occur with Accusative marking. The plural suffix may well be derived from an earlier pronominal. This would offer a diachronic explanation for the occurrence of the ACC on these demonstratives (see section 6.3.1). The ACC on "non-human" referring nomens appears to be semantically/pragmatically motivated. It occurs optionally with higher animates such as dogs, and also on inanimates when the referent is salient to the discourse (see section 12.2.1.6). Table 20 summarizes the case marking systems of core participants in A, S and O function.

Table 20: Case Marking of Core Participants in A, S and O function.

	pronominals	+Hu nomens	+Hu+PL demonstratives	'salient' -Hu nomens	+Hu demonstratives	-Hu nomens
A	NOM	ERG	ERG	ERG	ERG	ERG
S	NOM	ABS	ABS	ABS	ABS	ABS
O	ACC	ACC	ACC	ACC	ABS	ABS

The Ergative and Accusative cases are the marked ones in each particular case system. The ERG case marker on nomens and plural demonstratives is *-Thu.* The suffix allomorphs identifiable on demonstrative stems i.e. *-ŋ(u)/-ŋi* are not cognate. However an ACC marker - *Nha* is common to all stems that occur with it. Nominative is the least marked in relation to the system overall, and is the case of unmarked nominal expressions in equational clauses.

Example of "human" referring nominals with ERG and ACC marking in A and O case:

(1) ***yothu+ny dhu ŋändi+'mirriŋu+y*** *gumurr-dhurrpara+m,* ***yoŋu+y***
child+ACC FUT mother+KINPROP+ERG chest-cover+1st person+ERG
the mother shelters the child in her breast T009p1

Example of "human" referring nomens with the bare root (ABS) coding S case:

(2) ***yoŋu*** *dhatthatthu+n,* ***ŋäpaki*** *dhatthatthu+n,..*
Aborigine move fast+1st European move fast+1st T009p20
an Aborigine runs fast, a European runs fast...

Example of "non-human" nomen with ERG marking in A case:

(3) *yoŋu+ny dhu dhurrpara+m* ***dharpa+y***
person+ACC/O FUT cover/go over-1st tree+ERG/A
a tree may cover, go over a person (when it falls) T009p1
(in an explanation of the meaning of *dhurrpara-*)

Example of "non-human" nomen with the bare root in O case:

(4) ***ga dharrwa gapu*** *napurr nhä+ma dhukarr+kurr*
and many/much water 1pl see+1st road+PERL R's diary
and we saw lots of water along the road

Example of "non-human" nomen and demonstrative with the bare root and unmarked stem in S case:

(5) *bäyŋu ŋuli gi dhuwal butjikit+tja nyoyu+rr*
NEGQ. HAB IMPV-2nd PROX cat +PROM howl+2nd T012p10
Cats don't howl

4.2.4.2 Coding of local cases

Pronominals and human referring demonstratives and nomens have syncretised three of the local cases in a single case marker, the OBLique i.e. Locative, Allative and Ablative, although the latter is only optional. Two local cases, the Ablative and Perlative, combine the OBLique Stem with a regular case marker. "non-human" nominals have a three way formal distinction, LOC/ABL, ALL and PERL, while "non-human" referring demonstratives and locationals distinctively mark LOC, ABL, ALL and PERL. Locationals are distinct in using the unmarked stem in Locative case.

Table 21: Case Marking of Local Cases

	pronominals, +Hu nomens and demonstratives	-Hu nomens	-Hu demonstratives	locationals
Locative	OBL	LOC/ABL	LOC	bare stem
Allative	OBL	ALL	ALL	ALL
Ablative	OBL/OBLS+ABL	ABL	ABL	ABL
Perlative	OBLS+PERL	PERL	PERL(verb stems)	PERL

The formal differences in the coding of local cases in the demonstrative paradigm and other nominals are quite extensive so I will not present the details here (see section 6.1).

Example of "non-human" nomens and demonstratives with with LOC/ABL and ALL marking:

(6) *budapthu+na walal ŋuli be+ŋur bala raypiny+ŋur, räli*
cross over+4th 3pl HAB INDEF+ABL (MVTAWY) fresh +LOC/ABL MVTTWD
moŋuk+lil
salt+ALL BurrW/Rp8B
they would cross over from the fresh water region over there, this way to a salt water area

Example of "human" referring nomen with OBL marking in Allative case:

(7)	*bala+n*	*limurr*	*dhu*	*marrtji,*	***märi+wal***	
	MVTAWY +SEQ	1+2pl	FUT	go/walk-1st	MM, MMB +OBL	Burr p4
	we will go to the "*märi* (MM(B)" s					

4.2.4.3 Case marking and the "human" -"non-human" distinction

"Humanness" is a key factor in determining case marking options. It is identified with particular classes of nominals as well as particular cases. The two nominal classes concerned are nomens and demonstratives, while the cases concerned are the Accusative and the local cases Locative, Ablative, Ablative and Perlative.

Both "human" referring nomens and demonstratives code the local cases with the OBL or OBLS. "Human" referring nomens code Accusative with the ACC. Only derived plural demonstratives occur with the ACC. Generally, regular demonstratives and "non-human" referring nomens code the accusative with the ABS. The designation "human" is adopted because this is the category of referents for which the ACC and OBL/OBLS markers are obligatory. However, higher animates such as dogs can optionally occur with these case markers (see section 11.2.2.3.5). The ACC also occurs with certain highly topical/salient "non-human" nomens (see section 11.2.1.6).

The OBL and OBLS also appear on "human" referring nominals occurring as arguments in non-finite clauses, with the ERG or some ("non-human") local case marker in complementizer function on the verb stem. The case agreement of complementizer cases is thus sensitive to the "humanness" of the referent in any co-occurring argument (see section 12.1).

The marking of modifiers and determiners is sensitive to this feature in their referent. Demonstratives and adjectives are the key word classes concerned.

The final case predominantly identified with "humanness" is the Originative. It is not clear to what extent this is determined by "humanness" per se or by other semantic considerations, such as the potential to be the creative or productive origin of something. That this should largely overlap with humans would seem quite natural, but its occurrence in a few texts with inanimates would appear to be on grounds of creative potency rather than an animacy hierachy (see section 9.6.1 for discussion).

The coding of "human" referring nominals and demonstratives is very similar to that found on pronominals, i.e. in marking O with ACC, using the OBL and OBLS for local cases and the occurrence of the OR suffix. However, the marking on pronominals is clearly associated with that particular word class, since all pronominals are case marked NOM-ACC regardless as to whether the referent is "human" referring or not.

In the remainder of this chapter I will be describing the nomen, locational and temporal nominal classes. Pronominals, demonstratives and interrogative/indefinite proforms are considered in chapters 5, 6 and 8. respectively. The range of case inflections with which particular nominals can occur, and according to which most nominal classes are recognized, represents a cline in which the greatest range of inflections are found with those whose function it is to denote entities or to modify them. Less prototypically 'entity' denoting are locationals and temporals and they have a highly restricted case range compared to other nominal classes. At the end of this cline we might consider the adverb 'particle' class. While these do not occur with nominal suffixes in relational or adnominal function, they can occur with nominal suffixes in complementizer function as a result of case concord in a non-finite subordinate clause. However, they require the *-ŋu* augment before the complementizer suffix. Some of the adverbs also occur as verb roots. I have chosen to treat them as a separate class on the grounds that they do not occur with nominal suffixes in adnominal and relational function.

4.3 Nomens

4.3.1 Nomen case suffixes

The eleven case suffixes associated with the nomen class are ERG, ACC, DAT, OR, LOC/ABL, ALL, OBL (and the OBLS augment), PERL, ASS, PROP and PRIV.

The forms of these suffixes are as follows:

ERG	-Thu (-thu, -yu, -y)	OR	-Kuŋ(u-) (-kuŋ(u-), -wuŋ(u-))
ACC	-Nha (-nha-, -ny)	ASS	-Puy (-puy, -wuy)
DAT	-Ku (-ku, -wu, -w)	PERL	-Kurr (-kurr, -wurr)
LOC/ABL	-ŋur	OBL	-Kal (-kal, -wal)
ALL	-lil	OBLS	-Kalaŋa/u- (-kalaŋa/u-, -walaŋa/u-)
PROP	-mirr(i-)	PRIV	-miriw

As described in chapter 2 many suffixes have two or three allomorphs which vary according to a range of phonological and morphological factors. Notably, nearly all stop initial suffixes in the language show some lenited variants. This is particularly evident in the system of nominal case marking where seven of the case marking suffixes are stop initial and they all have lenited allomorphs. However, the occurrence of lenited allomorphs is not generally regular. Table17 shows the variation that has been noted for stop initial suffixes, including all those listed above. To recapitulate briefly, the relevant phonological environment for lenition is following a vowel, a semivowel or liquid. Any of these sounds may be followed by a root final glottal stop but this does not affect the allomorphs which occur. Lenition is only regular with the ERG and DAT suffixes. All others show some variation (see section 2.4.2.2).

Certain nominal suffix allomorphs reflect the process of vowel deletion process (described in section 2.4.6.6). There is a range of conditioning factors. The ERG and DAT regularly lose the suffix final vowel after vowels or a vowel plus a glottal stop. The OR regularly has no final vowel when it is also word final but the vowel appears before any other suffix. The PROP loses the final vowel word finally and usually before the discourse suffixes, but not before other suffixes.

The last factors contributing to nominal suffix allomorphy are a combination of vowel deletion and the phonotactic constraint preventing syllable final lamino-dentals. The word final allomorph of the ACC *-nha* is thus *-ny* (see section 2.4.4).

4.3.2 Nomen sub-classes

4.3.2.1 Grounds on which nomen sub-classes can be distinguished

The notion of "humanness" and the variation in suffixes with which this is associated, is a major factor determining the sub-classes of nomens. A large open class of entity denoting lexemes i.e. nouns can be recognized on the the grounds that they are inherently or lexically either "human" or "non-human". They will always occur with the "human" or "non-human" suffixes.

There are also many lexemes which are not inherently or lexically specified for "humanness". They are lexemes which function as modifiers and whose suffix forms are determined by the "humanness" of the referent involved, even if the referent is not to be lexically expressed in the nominal expression. Five sub-classes of nomens fall within this group, those I refer to as adjectives (denoting qualities and

quantities), those denoting social categories such as kin terms, subsection terms and moiety terms, numerals, the determiner *balanya* and the "whatsit" stem, *nhawi*.

The other grammatical criterion which has a bearing on the nomen class is the potential of a lexeme to occur in apposed adnominal expressions. Certain adnominal relations in Djambarrpuyngu are expressed without an adnominal case marker and I refer to these as apposed adnominals. The nomens concerned must agree in relational case but do not need to be juxtaposed. The kinds of relations that can occur in this construction are considered more fully in section 9.4. While I would not presume that the listing there is exhaustive, it includes the relationship between noun-adjective (entity-quality, entity-quantity), part-whole (entity-entity) and generic-specific (entity-entity), entity-social category (entity-entity) and certain entity-entity combinations I refer to as "narrowing", in which both lexemes jointly specify a referent. The noun-adjective and entity-social category are combinations in which the "humanness" of the entity determines the case marking on the modifying lexemes. Such agreement does not occur with the other combinations. Parts are always "non-human", even though the whole can be "human" or "non-human". Entities in the other relations (generic-specific or "narrowing") generally appose two nouns with the same inherent "humanness".

Adjectives and social categories or numerals can be formally distinguished on the grounds that adjectives, but not social categories or numerals, can occur with degree particles, either the intensifier *mirithirr* or the diminishers *märr* or *märr ganga* (see section 13.3).

4.3.2 Adjectives

I define the adjective class as that class of lexemes which are not inherently specified for "humanness", occur in apposed adnominal constructions and which can be modified for degree.

The following examples demonstrate the first two criteria in relation to the adjectives *yindi* or *ŋalapal* "big" (used predominantly in reference to people, often implying adulthood or "elder" person) and *nyumukuŋiny'* "small":

With "non-human" reference:

(8) *bili ŋayi dhu ŋunhi dhukun marrtji be+ŋur yindi+ŋur*
because 3sg FUT TEXD rubbish go-1st INDEF+ABL big-ABL
munatha+ŋur, ga ŋunhiwili nyumukuniny'+lil munatha+li maŋutji+lil
sand-ALL and TEXD-ALL small+ALL sand+ALL eye/hole+ALL
because the rubbish goes from the big "sand" (i.e. special area created for a ceremony) to the little hole in the sand T016p18

With "human" reference:

(9) *ŋunhi ŋayi ŋäthil ŋalapal+wal nhina+n, ga dhiŋga+ŋal+nydja ŋayi, ŋunhi*
TEXT 3sg prior big+OBL sit/stay+3rd and die+3rd+PROM 3sg TEXTD
ŋalapal+nydja, bala nyumukuniny'+kal+a marrtji+n
big+PROM then small+OBL+SEQ go+1st G1190
she lived with the big (i.e. older (brother)) before and he died, the older (brother). Then (she) went to the small (i.e. younger (brother))

The adjective class includes lexemes which correlate with semantic domains commonly found in the descriptive adjective class of other languages. Of Dixon's (1982) proposals as to possible universal semantic types associated with "descriptive" adjectives we find examples of most categories, i.e. Dimension, Colour, Age, Value, Physical Property and Human Propensity. The only category missing is that of Speed. Speed terms occur but as non-inflecting morphemes in the adverbials class.

Examples of the various categories are given below:

Dimension:	*yindi*	big, also important
	nyumukuniny'	small, little
	binydjitj	thin; skinny; flattened; withered;
	dhamburru	fat, e.g. person, dog
	weyin	long, tall
	gurriri	short
	lilpam	spread, something with wide/flat extent
	wunhdhurr	narrow, something with restricted/confined extent
Age:	*yuta*	new, young
	worruŋu	old (of people)
	ŋäthiliŋu	old (of things other than people)
Value:	*manymak*	good
	yätjkurr	bad
	dhuyu	sacred, secret, holy
	yaraŋu	profane, not taboo or restricted

Physical Property:	*raypiny*	"fresh"(water); good (flavour);itchy
	moŋuk	saltwater, brackish; bitter, sour;
	dhumuk	thick; blunt; blocked up
	djinbulk	sharp; smart, alert;
	guyiŋarr	cold
	gorrmur	hot
	yalŋgi	soft; weak; old/worn; open/loose;
	däl	firm; strong; rigid, taut; difficult

The range within this category is quite extensive. It also includes notions such as the following - heavy/light, clean, crooked/straight, alive/dead, wet/dry, blind/deaf/dumb.

Human Propensity:	*maŋakarritj*	angry, bad tempered; fierce; poisonous
	boŋiny	gentle natured; tame; not poisonous
	ralpa	hard working
	duŋduŋ	lazy
	djambatj	skilled, clever, especially in context of hunting/gathering
	dhapinya	generous, one who gives readily
	lalkal	greedy, selfish

The first pair are readily applicable to "non-human"s such as poisonous plants and animals, but many other terms seem chiefly to refer to people. I have currently some 30 single morphemes listed in this category. There are also a wealth of compounds denoting notions in this category.

Colour:	*watharr*	white, light-coloured
	mol	black, dark-coloured (also black soil)
	miku	red (also dark red-brown ochre)
	buthalak	yellow (also yellow ochre)
	milkuminy	blue/green (also gall bladder)

This particular list covers the basic colour distinctions. A widely used strategy for designating colours is by reference to something quite concrete that has that colour. The multiple use of terms to designate a colour, the ochre, and the rock/soil it is made from is common. Bush fruits are an additional source of analogy for colours. Colour terms appear to constitute a mid point or a sub-class between that of polar entities or qualities, in that most can function as both nouns and adjectives. A correlate of this would appear to be their propensity to occur with the PROP *-mirr(i-)* in adnominal expressions (see section 9.1).

In contemporary speech it is not uncommon to hear English colour terms, for instance, *wurintj* "orange"; *bilu* "blue"; *gurinyguriny* green and *biŋk* "pink".

A study by Davis (1982) reports some interesting findings in regard to the acquisition of these terms by Yolŋu. Following Witkowski and Brown (1977,

1978) which built on Berlin and Kay's (1969) classic cross-linguistic/cultural study of colour terms, he tested Yolŋu associations with the five basic distinctions listed above. He found the initial distinction learnt by children was on the basis of brightness. Young children have a simple binary division between light and dark colours i.e *watharr* and *mol*. The brightness dimension is fully expanded by the inclusion of *buthalak* and *miku* for "less light" and "less dark" respectively. Children then developed a contrast according to hue, giving the five term system above, (hue is the dimension on which distinctions amongst English colour-terms are based). Later on the system is extended by further terms which code saturation, i.e. different 'shades' of these basic terms e.g. *gangul* "dark yellow-orange (ochre)".

The Djambarrpuyŋu adjective class as defined above, also includes lexemes denoting quantity.

Some commonly used quantifiers include:

dharrwa	many, lots, much
dhaŋaŋ	full, lots, plenty (of something for the purpose/space concerned)
lurrkun'	few, a bit, some (also "three")

4.3.2.3 Nomen forms with both entity and quality denoting senses:

While there are clear cases of nominals that only denote entities, and others that only denote qualities, there are also forms which can have dual functions, e.g.

	entity	quality
dirramu	man,husband	male
miyalk	woman, wife	female
maŋutji	eye, seed, hole	kind
borum	fruit	ripe, cooked
bidila	liver	bad
gamunuŋgu	white clay, ochre, paint	white
ŋulwitj	fridge	cold
barrpa'	maggot	rotten
ŋalapal	adult	big, important
yindi	"mother" (in restricted contexts)	big
worruŋu	bustard	old (people)

4.3.2.4 Numerals

Numerals and certain quantity-denoting nominals do no fulfil all the criteria by which adjectives were defined. The lexemes in this group do not occur with degree qualifiers.

The basic numerals are one, two and three. Any others that have been noted are derived or complex expressions. Numerals for one to five are as follows:

widipiya/wangany	one
märrma'/bulal	two
lurrkun'	three (also "a few")
gämbumiriw	four
gon wangany	five

The word for four has the shape of a dimorphemic fossilized stem consisting of the lexeme for head/forehead *gämbu* and the PRIV suffix *-miriw*, but I have no convincing semantic explanation for it. The expression for five is *gon* "hand" plus *wangany* "one". The two lexemes can occur independently, each case marked and in either order. Alternatively only the rightmost lexeme may be case marked. Higher numbers that occur are based on the smaller numbers e.g. *gon märrma'* "ten" and *gon wangany märrma bäythinyawuy* "seven". The latter expression contains a nominalization of the verb *bäythi-*$\emptyset_{rr}$ "to be left over". The expression can be interpreted as "five (and) two extra". The numerals for one to five occur regularly in the texts from older speakers and have been heard in general use by younger people. I have elicited numbers between five and ten but nowadays it would appear that English numerals are generally used, for numbers beyond about five. The extent of the borrowing of English numerals is reflected in the fact that "one" went out of use during 1988 following the death of someone whose name contained that particular syllable. *Widipiya* is the currently favoured term.

Other quantity denoting lexemes which do no occur with degree qualifiers are:

bäyŋu/bithiwul	none (also a negative particle)
gana'	enough, adequate
warrpam'/bukmak/ walaman'	all, every

4.3.2.5 Social categories

The class of lexemes denoting social categories include the closed domains of kin terms, subsection terms and moiety terms. A wide range of phenomena including people, places, songs and flora and fauna can be classified according to these categories.

These lexemes vary their case suffixes according to the "humanness" of the referent. This is demonstrated in the following examples by the case marking (LOC (-hu) and OBL (+hu)) found on the moiety term *dhuwa* "Dhuwa moiety":

(10) \ga yurrnha dhuwathi+na+ny ŋunhal+a
and "and then" moiety name+INCH+4th+PROM DIS-LOC+SEQ
dhuwa+ŋur+a wäŋa+ŋur, galiwin'ku+n
moiety name+LOC+SEQ place+LOC place name+SEQ OMSp36
and then (the ceremony) became Dhuwa there at the Dhuwa place, Galiwin'ku

(11) wark ŋayi gurrupa+r waŋgany+gal worruŋu+wal, mandaŋ+gal
work 3sg give+3rd one+OBL old person+OBL 2dl/pl+OBL
waku'+manydji+wal, dhuwa+wal ga yirritja+wal
(Z)C+KINPROP+OBL Dhuwa moiety+OBL and Yirritja moiety+OBL OMSp16
he gave the work to certain old people, two in the reciprocal relationship of *ŋapipi* (M(Z))- *waku* ((Z)C), (one) Dhuwa and (one) Yirritja

Except for the potential to be modified for degree, this class is very close to that of adjectives. Unlike adjectives however, kin and subsection terms are also widely used as address and reference terms for humans. Kin and subsection terms are more like names than qualities and quantities. The moiety terms are not used for address and reference in the same way and thus appear closer to adjectives.

Kin terms and moiety terms are also distinct in that they provide most of the stems to which the derivational suffixes MATriline COLLective *-pulu*, MOiety Collective,- *kuŋditj/waŋditj*, KINship DYDadic *-'manydji*, KINship PROPrietive *-'mirriŋu* and KINship PROPrietive Addressee Propositus *-ŋali* are attached.

4.3.2.6 Body parts

Body parts are a distinct class grammatically on the grounds that they are lexically "non-human" and thus only ever occur with "non-human" suffixes even if the whole is "human". The part-whole relation is also one of the adnominal relationships that can be expressed by apposition rather than suffixing. However parts can also occur coded quite independently of their wholes in relational case i.e. as independent. This makes the whole-part relation unique among the apposed adnominal relations (see section 9.4.5).

Another grammatical function closely allied with this particular lexical domain is the use of a sub-set of body part terms as the most common compounding initials (see section 10.1).

The extent to which the lexical domain of body part terms and particular grammatical characteristics indicated here are co-extensive has yet to be fully determined.

The lexical domain of human body part terms is itself quite distinctive in Djambarrpuyŋu, and other Yolŋu varieties, because of the range of denotata with which the terms occur. Besides parts of the human body, body part lexemes commonly include among their denotata parts of other entities, geographical features, locations and kin relationships. While not providing the total sum of lexemes in any of these domains it is difficult to escape the observation that in linking person, land and kin this particular lexical domain unites fundamental aspects of Yolŋu society.

Some examples of body part terms commonly used denoting geographical features are *buku* "head; hill", *mayaŋ* "throat; creek", *gumurr* "chest/shore" and *dilţji* "back; the bush". In the extensions to geographical features the body appears to be oriented facing towards the sea. Two key motion verbs also reflect this unmarked orientation, namely *duwaţthu*-N "go up, go towards the bush" and its antonym *yarrupthu*-N "to down, go towards the sea". (see further Schebeck (1978))

All kin categories are linked to specific body parts and are used in sign language to designate these relationships. Some body parts denote specific kin categories e.g. *waku* "(Z)C" is associated with the stomach (*gulun*), but the majority denote reciprocal kin relationships e.g. *märi-gutharra* "MM(B)- (Z)C" both of which are asssociated with the back (*dilţji*). This association is also reflected in various kin referring expressions in the spoken language which make use of the connection of kin with particular body parts. (see further Heath (1982) and Shapiro (1981))

Other extended senses of body part terms suggest particular cultural associations which attribute specific functions to different body parts, e.g. the head with thinking, the hands with work or caring for others (see section 10.1). Relative location and shape also feature in the extension of body part terms e.g. the head with the top or a group, whole; feet with a base or foundation and bottom with below (see section 4.4.2).

4.3.2.7 Nominal determiners

The nominal determiner *balanya* is discussed in section 13.14.1 The adjectival nomens *wiripu* "different, other" and the numeral *waŋgany* "one", also occur with a determiner function. *Waŋgany* indicates something like "a certain X" while *wiripu* indicates something like "other, another". If repeated *wiripu* can convey the sense of " one/some" versus "another/others".

(12) \ŋayi+ny ŋuli **wiripu+ny** yoŋu lurrkun'+nha ŋuli
3sg+PROM HAB "different, certain"+PROM person few+SEQ HAB
marrtji+ny ga **wiripu+ny** ŋuli bäyŋu+n marrtji, dharrwa+ny
go-1st/2nd+PROM and "other"+PROM HAB NEGQ+SEQ go-1st/2nd many+PROM
Certain people, a few, go and others don't go, many (of them). T401p12

Unlike other determiners these do not locate entities in the spatial, temporal or textual domains. They appear to be used when the referents are indefinite. Both *wiripu* and *balanya* are also associated with comparison.

4.4 Locationals and location denoting nomens

4.4.1 Locationals

Locationals are a closed class. The bare roots are used for Locative case. Members of this class occur only with local case suffixes i.e ABL, ALL, PERL and the adnominal ASS:

galki	near
barrku	far
ŋapuŋga/bura	in centre, between
garrwar/garramat	high, above, in/on top of, in/on the top part of
djinawa/dhirripi	inside, in, under - used more generally than English "inside" - location within a defined regions or things, often which are only partially enclosed e.g. area under a house, a fallen tree, within ceremonial ground, the bush, the jungle
warraŋul	outside - of a region, exterior part of something
ŋandja	deep inside, within
laypa	in the other side
ŋurrwu	behind, within (with sense of concealed, hidden or sheltered)

Adnominally and as predicates in equational clauses these words all take null marking when functioning as locationals. In this they are quite distinct from nomens which require LOC or OBL marking. Some examples demonstrating the range of suffixes on Locationals are given below:

Locative:

(13) ŋayi ga dhärra **bura** yoŋu+wal walalaŋ+gal
3sg IMP-1st stand-1st middle-LOC person+OBL 3pl+OBL
S/he is standing amongst the people

(14) ŋunha djanda ga ŋorra, djinawa **guŋda+ŋur**
DIS goanna IMPV-1st lie-1st inside-LOC rock+LOC T023A
the goanna is under the rock

Ablative:

(15) *märra+ŋal ga+n **munatha+ŋur\ ŋula+ŋur djinawa+ŋur***
get/take+3rd IMPV+3rd ground+LOC/ABL INDEF+ABL inside+ABL
(they) took (the bones) from out of the ground T204p23

Perlative:

(16) *wuŋgan **bura+kurr** ga **marrtji** **bimbi+walaŋu+wurr***
dog middle+PERL IMPV-1st go-1st sheep+OBLS+PERL T023A
a dog is running amongst the sheep

Allative:

(17) *ŋayi ŋuli waŋgany+dhu+ny yoŋu+y yurrku+nha+n*
3sg HAB one+ERG+PROM person+ERG lie something down+4th+SEQ
djinawa+lil+a** ŋanya **buŋbu+lil+a
inside+ALL+SEQ 3sgACC house+ALL+SEQ T013in94
one person will lie her down in the house

Associative:

One of the regular functions of the ASS is to indicate an adnominal relation between an entity and a location (see section 9.3). With Locationals it can designate a region of the entity. Thus the middle slice of damper can be referred to as *burapuy/ŋapuŋgapuy* "middle+ASS", or the inner part of the stem as *djinawa'wuy*:

(18) ***djinawa'wuy** ŋunha ŋanak ŋayi ŋunhi watharr*
inside+ASS DIS flesh 3sg TEXD white T014p5
That inner flesh is white OR The flesh from the inside is white

Cardinal directions are not included in this class. They are expressed by attaching the local suffixes to the names of particular winds or rains, e.g. *luŋgurrma* "north(east) wind", *luŋgurrmaŋur* [north+LOC/ABL] "in/from the north".

4.4.2 Locational use of body part terms

Many body part terms have a locational sense in addition to denoting actual body parts. They do generally require LOC case marking with these meanings. The locational sense of these terms can be somewhat restricted, often showing some iconicity with regard to the relative place of the body part on the human body, its shape or function.

bukuŋur	at top, side of; (cf *buku* "head, forehead, face; hill, cliff")
läyŋur	at side, outer edge of; (cf *läy* "temple, side")
likanŋur	at corner, bend;(cf *likan* "elbow; bay; handle")
gandarrŋur/guwalŋur	in the middle, half-way, part way; (cf *gandarr/guwal* "waist")
ŋoyŋur	below, under; (cf *ŋoy* "lower part of abdomen, area associated with emotions")
dhudiŋur/dhurpuŋur	last, at the end, bottom, base, below; (cf *dhudi /dhurpu* "bottom")
dhulmuŋur	inside (with restricted contexts e.g. inside of a plane, house, bag, deep water) (cf *dhulmu* "stomach")
djamurrŋur	side (e.g. wall of house) (cf *djamurr* "rib(s)")
diltjiŋur	behind, at back of; (cf *diltji* "back; bush")
gumurrŋur	in front, in front of (people only); edge; (cf *gumurr* "chest; shore")
ŋurruŋur	at beginning, head of, at pointed end of something; (cf *ŋurru* "nose; headland; point")

Some of these may allow a locational sense without the LOC marker but the full extent of this has yet to be considered. The following examples suggest this is possible for *läy* "temple/side":

(19) *lay+nha ŋayi dhu ga waŋdi+rr+nydja ŋunhi wäyin+dja*
side+SEQ 3sg FUT IMPV-1st run+1st+PROM TEXD animal+PROM T102 Bp2
The animal will run on the other side (i.e. if it should scent the hunter)

(20) *ŋanapurr nhina+n dhalakarr+ŋur+a, yurrkuruwuy läy, yurr dhuwana*
1pl sit+3rd space+LOC+SEQ place name temple/side ADD PROX-SEQ
räli
MVTTWD T012p16
we sat in the open area (between mangroves) on this side of Yurrkuruwuy

Some of these body part terms also occur as initials in locational compound expressions, e.g. *gumurr-* and *buku-* (see section 10.1.3).

The extent to which these can be freely used as locationals is a matter for future consideration. A word such as *ŋoyŋur* would appear to be used very widely to denote "under or below" but the use of *djamurr* "rib" to denote a side may be restricted to entities which can be construed as having something analagous to the rib as a part. The distinction between a part and a location then becomes somewhat problematic.

4.4.3 Location denoting nomens

There are a few lexemes which are commonly used to denote locations which are not formally locationals, and thus require the LOC marker for Locative case. Furthermore they do not appear to have a body part reference as their primary

sense. They include the terms for left-hand side *wiŋ'ku* and right-hand side *dhunupa*. It is not known how many other lexemes pattern like this, but I will mention three others here. The first, *ŋapa*, is frequently found with locational suffixes apparently referring to "the outer surface/exterior part of something (such as cover of book, top of an earth oven). It is also glossed by speakers as *ḏiltji* "back", and this sense would appear to be invoked in the expression *ŋapa-raŋanmirr* ["back" paper bark +PROP] used to describe very young/new born babies (who were traditionally carried in paper bark). However I never observed it with the extended senses of *ḏiltji* such as "the bush", and the two lexemes have quite distinct locational reference (*ḏiltjiŋur* is used locationally with the sense "behind, at the back of").

The second example is *goḏu* "inside". It is often used in contexts when *dhulmu* is used but is not given as a term for "stomach" e.g.*dhulmu-ŋaraka* or *goḏu-ŋaraka* [inside - bone] "empty" (of planes, pannikins, cars); "woman with no children" (Zorc (1986) attributes *goḏu* to a Makassarese source kodo' "shelter (on a boat made of canvas or bamboo)".

The last example is *djinmir'* and its synonym *djin'kayŋu* which is used for the extremity or edge of something. The examples I have are all contexts in which this is a precarious or dangerous position to be in, and it may be that this is part of the meanings of these lexemes. The examples include the upper, weaker branches of a tree, the edge of a cliff, or the edge of the tray back section of a truck.

4.4.4 The fossilized locational suffix *-watj*

This suffix has only been isolated on two locational roots, namely *galki* "near" and *barrku* "far", producing *galkiwatj* and *barrkuwatj* respectively. Its sense is reciprocal, being used to refer to two or more things that are close together or apart from one another respectively

(21) *yol manda ga ŋunhi+ny dhärra* ***galki=watj***
who 3dl IMPV-1st TEXD+PROM stand-1st near=LOC(Recip)
Who are those two standing next to each other/together?

(22) *bala manda ga* ***barrku=watj+nha*** *waŋa*
then 3dl IMPV-1st apart=LOC(Recip)+SEQ talk-1st
then the two will talk at some distance

I have only noted *galkiwatj* in the context of people being physically close to each other. *Barrkuwatj* is also commonly used as an adjective with the sense "separate, different".

Lowe (n.d.a L81) lists *-watjthirri* as a suffix added to nouns to derive temporal (adverbial) verbs with a universal quantifying sense "every X". I have found no evidence for this in Djambarrpuyŋu. Only *barrkuwatj* is listed in the Gupapuyŋu dictionary and the Djapu word list. It would appear to be a fossilized suffix in these varieties. However in Ritharrŋu *-watj* is a productive plural suffix (Heath 1980b).

4.4.5 Other functions of locationals

Some forms which function as locationals also occur in other word classes. For example:

	Locational	Nomen
warraŋul	outside	naked
djinawa	inside	secret-sacred-restricted
garrwar	above, in/on top of	sky

For temporal uses of *galki* "near" see the following section.

4.5 Temporals and nomens denoting time

There is a small closed class of Temporals. They are distinct from other nominals in that the bare stem is used for Temporal case and not the ERG suffix. They also occur with a much more restricted range of case suffixes than any other class of nomens. The only suffixes found on Temporals are the ABL, DAT, ASS and PRIV. The latter two frequently occur with the augment *-ŋu-* between the root and the case suffix.

While the ABL denotes "time from", Temporals in Djambarrpuyŋu, and other Yolŋu varieties, do not occur with a suffix indicating "time until".

The lexemes which strictly belong to this class as defined are those which refer to some point in time (see Dixon 1980 p283). There are however other lexemes which express duration or relative sequence of events, some of which have never been recorded with any inflections and others of which belong to, or have homophonous forms in, other nominal classes. I describe them all in terms of their meanings.

4.5.1 Temporals proper

Of the point-time temporals, one set have "today" as their temporal reference point. These are:

gäthur	today, nowadays
barpuru/yawungu	yesterday, recent time prior to today
boŋguŋ	tomorrow, a time in the future (not today)

These three refer to discrete non-overlapping spans of time, the reference point being today. Neither *barpuru* or *boŋguŋ* can be used to refer to a span that continues to or from a point within today. While the today/yesterday/tomorrow distinction appears to be the unmarked one, these lexemes are also used to refer spans of time wider than a particular day such as "nowadays", a "day or so ago" or "some time" in the future. The relative temporal relations are always maintained.

Two other commonly occurring temporals are *ŋäthil* "in the distant past; prior, before; ahead" and *yalala/yalŋuwa* "later on". *Ŋäthil* appears to code general past time as well the sequential notion of doing something prior to or ahead of something else. The past time reference may denote distant past, in contrast with the recent past time expressed with *barpuru/yawungu*. However its use in some examples, such as describing situations that have not occurred before, appears to indicate any time prior to the speaker's now. I have only noted *yalala* used with reference to time later than now (either later today or in sometime in the future), and not with the sequential notion "after" or "afterwards".

Another lexeme tentatively included in this class is *baman*' "long time ago". It can also be used to denote a long time interval, not necessarily a long time ago. With the sense "long time ago" it often collocates with *ŋäthil* or the particle *birr*" great distance (in time or space)" (see section 13.3.3).

Another group of point-time temporals refers to different times of the day:

goŋarr	(in the) morning; (also "tomorrow" or "next few days" (see section 7.4.1))
milmitjpa/ripurru	(in the) afternoon
djeŋa/rangu	(in the) middle of the night
walupuy	daytime, at/during the day (*walu+puy* "sun/time+ ASS)
munhawu/munhaku	nighttime, at /during the night (cf *munha+wu/ku* "night +DAT")

The range of Temporal case marking on these lexemes is exemplified by the following:

Use of the bare root:

(23) ***yalala ŋayi dhu rur'yu+n***
later 3sg FUT get up+1st T204p11
he will get up later

(24) *ga **gäthur+nydja** ga ŋunhi+yi ŋayatha+m **wiripu+wurru+y+nha***
and today+PROM IMPV-1st TEXD+ANA hold+1st other+PL+ERG+SEQ
and today that (law) is kept by some (people) T015p17

(25) *bäyŋu ŋuli **walupuy** ŋorra ŋanapurr*
NEGQ HAB daytime lie-1st 1pl T101p21
we did not sleep during the day

(26) *dilkurruwurru+y ŋunhi lakara+ŋal ga+n, **ŋäthil baman'***
old people+ERG TEXT tell+3rd IMPV+3rd before long ago T208p28
The old people told about that long ago

(27) ***ŋäthil** ŋarra ŋuli balaŋ liya-ŋamaŋamayunmi+nya ...*
before 1sg HYP IRR think+4th T018p20
Had I thought about it myself previously ...

One example of an ERG marked noun in Temporal case is given here for comparison:

(28) *bala ŋayi **yaryu'-yaryu+n, ŋaŋga+y wäŋa+y***
then 3sg go along water's edge-REDUP+1st, fine+ERG place+ERG T012p4
then he went along the water's edge (hunting) while it was not raining

Temporals with ABL, DAT and ASS case suffixes, namely:

(29) *be+ŋur **bili godarr'+ŋur** ŋunhi nhe marrtji+n bala*
INDEF+ABL COMPL morning+ABL/LOC TEXD 2sg go+3rd MVTAWY
maranhu-gä+nha+lil
hunting+NOM+ALL
(it rained) continually from the morning when you went hunting T009p16

(30) *wiripu+ny **marrtji+nya ŋal'mara+nha+n godarr'+wu***
other+PROM go+4th put up+4th +SEG tomorrow+DAT T102Bp14
and they would put up some (food) for the next day/morning

(31) *ga nhanu+kuŋ ŋayi ŋunhi djäma, captain cook ŋäthiliŋu balanda*
and 3sg+OR 3sg TEXD work persons name old/of the past European
baman'+ŋu+wuy
long time +ŋu+ASS T202p18
and he was the original one to do that (find Australia), Capt. Cook, a European from long ago in the the past

For a description of the the PROP with Temporals refer to section 9.1.4.2). The point-time temporals play an important role in the TMA system (see section 7.4.1).

There are also many temporal expressions combining body part terms and the FOURTH form of certain verb stems with the ERG suffix designating more specific times of day (see section 11.2.2.1).

4.5.2 Other lexemes with temporal functions

Other lexemes used to denote time with the bare stems denote relative sequence or duration rather than points in time. One group of such lexemes have not been recorded with any case inflections and thus are formally adverbials. This includes the following expressions used to express the notion "after" or "to do later". At least the first example appears to be the semantic complement to the "prior" meaning of *ŋäthil*.

dhuɖitj/dhurputj	after, late, last (follow, be last in spatial and temporal sense) (*dhuɖi/dhurpu* "bottom, end")
dhä-dhuɖitj	after (*dhuɖi* "bottom, end", *dhä* "mouth, opening")

(32) *nhe dhu bul'yu+n ŋäthil gät+ɣur\ ŋarra+ny dhu dhurputj nhuŋu*
2sg FUT play+1st prior cards+LOC 1st+PROM FUT after 2sg-DAT
larru+m
look for+1st T007 p2
You (go and) play cards first, I will look for you afterwards

An analogous opposition pertaining to entities rather than situations (i.e. clauses) is that expressed by *ŋurruŋu* "first (one), one/thing in front, beginning (of something) leader, boss" and *dhuɖiŋu* "last(one), one at the end, end (of something)". Another duration denoting adverbial is the compound *gupa-ɖäl* "forever, permanently".

The lexemes for mouth suffixed with the ABL e.g. *dhäŋur/dhurrwaraŋur* "after" are used to link clauses in temporal sequence (see section 6.5.2.1.3).

The temporal duration of a predicate can be expressed lexically with *weyin* "for a long time" and *gurriri* " for a short time". In this function they do not occur with case inflections. However, these lexemes also function as adjectives, with the full

range of a case marking, meaning "long" and "short" respectively. The locational *galki* "near" can also be used to denote the approach of a particular time or event

(33) *weyin ŋayi ga+n dhiyal nhina+n*
long 3sg IMPV-1st PROX-LOC sit+3rd T208p16
S/he lived here a long time

(34) *galki ŋarra dhu wäŋa moma*
near 1sg FUT place forget-1st T208p8
I am close to "forgetting the place" (i.e. dying) OR I will be dying soon

The use of *baman'* to indicate temporal extent appears to be similar to expressions such as *yän bili/linygu* "keep on" used to link clauses. It seems to indicate that a long time interval lapses between the two events.

(35) *dharrwa+mirr ŋayi dhu larru+m nhaŋgu, ga baman'+nha ŋayi*
many/much+PROM 3sg FUT look for+1st 3sg-DAT and long time+SEQ 3sg
dhu malŋ'mara+m, bala ŋayi dhu wutthu+n+a ŋanya
FUT find+1st then 3sg FUT hit+1st+SEQ 3sg-ACC T205p16
S/he looks for him/her many times, and after a long time s/he finds (him/her) and then s/he hits him/her.

(36) *ga nhina+n ga+n \ ga baman'nha märr, bala*
and sit/stay+r3rd IMPV+3rd and long time+SEQ somewhat, then
rirrikthu+rr+nha
get sick+3rd+SEQ T204p37
(we brought (it) back home) and stayed (there), and quite a long time elapsed, then (s/he) got sick

4.5.3 Nouns denoting times

Temporal units which are not concerned with parts of the day or which do not have "today" as their temporal reference point are expressed by nouns and require the ERG case suffix. Examples are *walu* "sun, time, day", *munha* "night", *dhuŋgarra* "year", *waltjaŋ* "rain, 'wet/rainy seasons'/year" and *ŋalindi* "moon, month". The passage of years can be counted in terms of wet seasons. The term *dhuŋgarra* is a in fact a Macassan loan (see Zorc 1986). There are also various terms for particular seasons recognized during the year e.g. *miḏawarr* "time of year when the heavy rains have stopped, winds are from the east, and yams are ready for collecting" (for detailed descriptions of the seasons see Ganambarr and Davis 1982 a, b and c). It would appear that "days" were traditionally counted with the lexeme *munha / gämuk* "night". However, *walu* "day" also serves this function today.

English terms for time units such as hours, days of the week, names of months are frequently heard e.g. Sunday, May, 2 o'clock, *wek* "week", *wekin* "weekend". With point-time reference these have been noted both with and without the ERG suffix.

These nouns can occur in the bare root form to code temporal extent with intransitive and semitransitive predicates (see section 11.2.1.4). This is quite distinct from the use of the bare root to code the S role in these clauses. Another use of these time denoting nouns is with transitive verbs *ŋupa-*N$_L$ "chase, follow"and *ŋurrka-*N$_{ka}$ "throw. The former verb can express duration which is continuous or iterative. The latter has only been recorded with a continuous sense. For example:

(37) *nhakun maŋgithi+rr wal dhu ga Sunday, Saturday, maŋgithi+rr+a*
like learn+1st 3pl FUT IMPV-1st learn+1st+SEQ
yan Monday, djutj-dutj+nha bala, bitjan+a bili dhuŋgarra ŋurrka+m
EMPH continue on+SEQ(MVTAWY) do thus+1st+SEQ (COMPL) year throw+1st
Like that they keep on learning (i.e. attending school) Sundays Saturdays, still going on Mondays, continuing on and on in the same way all year T101p19
(describing 7-day schools in Bali)

(38) *waltjaŋ ŋuli ga nyärr'yu+n dhuŋgarra ŋupa+n*
rain HAB IMPV-1st rain+1st year chase+1st G21189
It rains every year

Time "until" cannot be expressed with a case inflection. The following example illustrates strategies that are commonly used to expressing duration, as well as a temporal end point.

(39) *läy-bilyu+nara+y, ga dhudi-milmitjpa, ga yan linygu djaka ŋupa+n*
side turn+4th+ERG and end-afternoon and EMPH (COMPL) extent chase+1st
munha, yan linygu, ga djadaw'yu+nara+y
night EMPH (COMPL) and o break of day+4th+ERG G
(it was going) when the sun was on the side (about 3 p.m), and late afternoon, and kept on, extending through the night and kept on until the break of day

The points to be noted in this example are:

1. The listing of particular temporal points that are reached, using temporals or expressions in temporal case.
2. The use of the expression *yan linygu* (= *yan bili)* "continues/ keeps on". This is used for both temporal and spatial extent. Other expression used in this way are *bitjan bili* and *djutj-tjutj bala*, which occurred in example 37 above.
3. The expression with *ŋupa-*N$_L$. The nominal *djaka* is used to indicate a spatial or temporal span or extent, and *ŋupa-*N expressions are also used of spatial spans. The reference here is clarified here with *munha* "night", and in fact *djaka* need not be

present. A more literal translation would be "follow, pursue the extent of the night".
4. The use of a temporal expression in temporal case to denote the end point.

This has parallels in the expression of both motion through various locations and spatial extent.

4.6 Proper names

In the following observations on proper names I draw on the large number of names, particularly personal names, collected in a project by D. Zorc and D.L. Yunupiŋu (n.d.) which are included in Zorc (1986). I also use information on person names provided by N. Gondarra and B. Gurruwiri (1988). In addition I have an extensive listing of Galiwin'ku place names collected while working for the NT Education Department in 1980.

Names are given to people, pet animals, houses, cars, boats, places, clans and various other socio-religious groupings, ancestral beings and phenomena associated with them. Morpho-syntactically most proper names are not distinct from nomens or locationals, the case marking options being determined by whether they are names of "humans", "non-humans" or places.

People have several names, some of which are not for everyday use and some of which they are not told the meanings of. Certain names seem to be drawn from song language, while others are identical to, or related to, everyday speech terms. People may also have nicknames. Personal names are used in everyday speech and for address. They are however an area which is associated with some respect. New people to the community are advised to ask others what someone's name is, not the individual directly, and to get assistance in the correct pronunciation before using it. Brothers do not use their sisters' personal names and no one uses the name of someone who has died.

A large proportion of people's names are taken from names of places or phenomena associated with their homeland or that of their *märi* (MM/MMB). Names can be terms or derived from terms denoting places, flora and fauna, geographical and environmental phenomena such as water, winds, clouds, sunset, stars or earth or items created and used by people - fire, parts of shelters, canoes, flags, grave posts, cigarettes/tobacco and bottles. All of these have relevance in the sacred

sphere, which means it is a sensitive area for a linguist to attempt a detailed analysis.

However there are some morphological characteristics which distinguish this group from other word classes.

While there are many names which appear to be simple stems or fossilized reduplicated roots, there are a substantial number which incorporate suffixes as part of the name. They are best treated as lexicalized stems, since other suffixes are added to the stem. For instance, a name which seemingly ends with the ASS *-Puy* is suffixed with the same suffix again in Associative case. e.g *Rurrukunbuy +wuy dhäwu* "a story about Rurrukunbuy".

The ASS *-Puy* appears to be the most common suffix appearing in proper names. Its use in derivng names is not surprising. It seems to be characteristic of names that they relate the named entity to other phenomena with which they are connected. This is quite within the function of the ASS suffix (see section 9.3)

Other suffixes isolable in proper names are the PROP *-mirr* or *-mirri* (Dhuwala), ALL *-lil* or *-lili* (Dhuwala), the occasional Locative form e.g. *-ŋura* (Dhuwala) *-ŋa* (Dhaŋu), and *-puyŋu* a suffix found in other varieties indicating the inhabitant of a place. A few names suggest a compounding derivation.

They are exemplified by the following clan names:

Dätiwuy	Dhuwa clan name
Gupapuyŋu Djambarrpuyŋu	Yirritja and Dhuwa clan names
Guyamirrilil Maŋgalili	Yirritja clan names
Bararrŋu Marraŋu	Dhuwa clan names
Liyadhalinymirr	Djambarrpuyŋu (sub-)clan
(cf *liya* "head", *dhalinybuy* "place name")	
Ŋurruwutthun	Munyuku clan surname
(cf *ŋurru* "nose", *wutthun* "to hit")	

The fossilization of suffixes in stems appears to be much more widespread in names than other classes of words.

All place names share the restricted access to nominal case suffixes of Locationals. However, while many place names pattern with Locationals, occurring with the bare root in the Locative case, there are a number of place names which do not pattern in this way. For these place names the roots are bound and as the "name" of a place

they minimally occur with either the LOC or the ASS suffix. These suffixes are not fossilized as part of the stems however, and case suffixes are attached directly to the root.

The following sets of examples show the different categories of place names. The three examples below demonstrate the unmarked forms of the name that can occur, i.e. those that occur as the bare root, with the LOC and with the ASS:

(40) *dhuwandja wäŋa* ***galiwin'ku***
PROX+PROM place place name
This place is Galiwin'ku T012p5

(41) *dhuwandja wäŋa* ***dhudupuŋur***
This place is Dhudupuŋur (cf LOC/ABL-*ŋur*)

(42) *dhuwandja wäŋa* ***nhulunbuy***
This place is Nhulunbuy (cf ASS-*Puy*)

The second set show the same place names with the ALL suffix attached directly to the root:

(43) *bala limurr dhu marrtji* ***galiwin'ku+lil***
MVTAWY 1+2pl FUT go-1st place name +ALL
We will go to Galiwin'ku

(44) *bala limurr dhu marrtji* ***dhudupu+lil***
We will go to Dhudupu(ŋur)

(45) *bala limurr dhu marrtji* ***nhulun+lil***
We will go to Nhulun(buy)

Younger speakers appear to have weakened the constraint on the use of the bare roots, at least for the two supposed bound forms in these examples, and one does hear the bare forms *Dhudupu* and *Nhulun*. Older Djambarrpuyŋu speakers have always corrected such forms when I have suggested them. The English glosses indicate the problem such names provide in translation and suggest a possible motivation for the forms used by younger speakers.

Table 22: NOMINAL CASE SUFFIX ALLOMORPHS IN TWO WESTERN AND TWO EASTERN DHUWAL/DHUWALA VARIETIES

Suffix	Preceding environment: stop/ nasal(')-	semi- vowel(')_	liquid(')_	vowel(')_
ERG				
Djamb.(Dhuwal)	-thu	-yu	-yu	-y
Gup. (Dhuwala)	-thu	-yu	-yu	-y
Djapu (Dhuwal)	-thu	-thu/-yu	-yu	-y
Gumatj (Dhuwala)	-thu	(.....-yu.....)		
DAT				
Djamb. (Dhuwal)	-ku	-wu	-wu	-w
Gup. (Dhuwala)	-ku	-gu/-wu	-gu/-wu	-wa
Djapu (Dhuwal)	-ku	-ku/-wu	-wu	-w(a-)
Gumatj (Dhuwala)	-ku	(.....-wu.....)		
OR				
Djamb. (Dhuwal)	-kuŋ(u-)			-wuŋ(u-)
Gup. (Dhuwala)	-kuŋu	(.....-guŋu/-wuŋu....)		-wuŋu
Djapu (Dhuwal)	-kuŋ(u-)	(.....-wuŋ(u-).....)		-wuŋ(u-) /-ŋ(u-)
Gumatj (Dhuwala)	-kuŋu	(.....-wuŋu.....)		
OBL				
Djamb. (Dhuwal)	-kal	(.....-kal/-wal.....)		-wal
Gup. (Dhuwala)	-kala	(.....-kala/-wala....)		-wal
Djapu (Dhuwal)	-kal	(..... -wal.....)		
Gumatj (Dhuwala)	-kala	(..... -wala.....)		

Suffix	Preceding environment: stop/ nasal(')_	semi- vowel(')_	liquid(')_	vowel(')-
PERL				
Djamb.	-kurr	(.....	-kurr/-wurr	.....)
Gup.	-kurru	(.....	-kurru/-wurru	.....)
Djapu	-kurr	-kurr	-kurr	-kurr/wurr
Gumatj	-kurr	(.....	-wurr	.....)
OBLS				
Djamb.	-kalaŋu/a			-walaŋu/a
Gup.	-kalaŋu/a	(-kalaŋu/a/-walaŋu/a)		-walaŋu/a..)
Djapu	-kalaŋu	(.....	-walaŋu/a	.....)
Gumatj	?			
ASS				
Djamb.	-puy	(.....	-wuy/-puy	.....)
Gup.	-puy	(.....	-wuy/-puy	.....)
Djapu	-puy	-puy	(.....-wuy/-puy	.....)
Gumatj	-puy	(.....	-wuy	.....)

ACC	"elsewhere"	after a vowel word finally
Djamb.	-nha	-ny
Gup.	-nha	-nha
Djapu	-nha	-n
Gumatj	-nha	-nha

Single allomorph suffixes:

	ALL	LOC	ABL
Djamb. (Dhuwal)	-lil	-ŋur	-ŋur
Gup. (Dhuwala)	-lili	-ŋura	-ŋuru
Djapu (Dhuwal)	-lil	-ŋur	-ŋur
Gumatj (Dhuwala)	-lili	-ŋur	-ŋur

() parentheses around allomorphs indicate the range of environments in which the forms occur

? information not available

4.7 Nomen case suffixes in Dhuwala/Dhuwal varieties

The same case suffixes are found in all varieties and generally the patterns of allomorphy are very similar to those described for Djambarrpuyŋu. However, slight differences in the patterns give each variety a unique inventory of case allomorphy. The main parameters effecting this are the extent to which final vowel deletion has occurred and the specific environments in which lenited and unlenited allomorphs are found.

Table 22 presents the alternations. The material for Gumatj is not as detailed as for the other varieties, but there is some evidence from examples in this material that lenition does occur e.g. that the ASS allomorphs *-puy* and *-wuy* can both occur after vowels (see n.d.).

Detailed material for Dha'yi is not available, although Schebeck (1968 p14) indicates the suffixes are identical to those for Dhuwal.

The suffixes are all clearly cognate. The notable points of difference are:

1. The loss of final vowels in many Dhuwal cognates.

The correspondences show that it is categorical for the PERL, OBL, LOC, ABL and ALL, that is, for all the suffixes in which the last consonant is a liquid. The only suffixes where a final vowel has not been completely lost in both Dhuwal varieties are the nasal final OR and ACC. Both these show a final vowel if the suffix is not word final.

There are a few instances in the table where the alignment of vowel deletion with Dhuwal does not hold, or where the two Dhuwal varieties show some differences. In the ERG we see one instance where a Dhuwala variety has lost a final vowel, namely the *-y* allomorph found after vowels in Gupapuyŋu. In the DAT and OR we see differences between the two Dhuwal varieties. Thus while Djambarrpuyŋu never shows a suffix final vowel in the DAT after a vowel, Djapu still does when the DAT is not word final. Interestingly it shows the vowel /a/ which is found in western Dhuwala (Gupapuyŋu), not the /u/ of eastern Dhuwala (Gumatj) with which it is generally aligned. Djapu is also unique in allowing a further reduced allomorph of the OR after vowels i.e. *-ŋ(u-)*.

Most other Yolŋu varieties for which I have seen documentation do indeed appear to have predominantly vowel final suffixes. However the Dhaŋu varieties Gälpu and Rirratjiŋu are distinct in having consonant final allomorphs in the the ACC (*-nha/-ny*) and the OR (*-kuŋ/-wuŋ*), i.e. in the nasal final suffixes. It would also appear that vowel loss can also occur after the ALL (+/-human). Wood (1978) indicates optional loss of the final vowel for Gälpu suffixes i.e. *-l(i)* (-human) and *-kul(i)/-wul(i)* (+human). Amery (1985 p 74) records these suffixes for Rirratjiŋu as *-li* and *-kul/-wul* respectively. The favoured environment for pattern of vowel deletion would seem to be after nasals in contrast to Dhuwal/Dhuwala/Dha'yi where it is categorical only for those suffixes with final liquid consonants.

The reduction of suffix forms has been particularly drastic in Dhuwaya, the koine spoken by younger people at Yirrkala. There the whole final syllable may be lost from the ALL, PERL and OBL suffixes (see Amery 1985 chapter 3 for details).

2. The two Dhuwal varieties show different options for the word final ACC *-Nha* allomorph found after vowels. It is a widespread Yolŋu Matha phonotactic constraint that lamino-dentals cannot occur syllable finally except optionally in homorganic clusters. Both Dhuwal varieties respond to this in the allomorphy for the ACC. Djambarrpuyŋu shows the lamino-palatal and Djapu the apico-alveolar. The lamino-palatal alternant is also found in Dha'yi and two Dhaŋu varieties, Gälpu and Rirratjiŋu.

3. In regard to lenition Djapu seems to make a distinction between semivowels and liquids/vowels while other varieties tend to group semivowels/liquids together. This is seen with the DAT, ERG and ASS. In the case of the DAT and ERG the only place an unlenited variant may be found in a potential leniting environment, is optionally after a semivowel. Correspondingly in the ASS the non-lenited is obligatory after a semivowels but may occur optionally after liquids and vowels.

The cases for which two distinct forms are associated with semivowels/liquids and vowels respectively in all other varieties occurs with the ERG and DAT suffix. Gupapuyŋu and Djambarrpuyŋu also have it in the OR, OBL and OBLS, and the Djapu PERL also patterns in this way.

All varieties also group together all three classes - semivowels, liquids and vowels for some allomorphs e.g. ASS, PERL (Djambarrpuyŋu, Gupapuyŋu, Gumatj) OBL

(Djapu, Gumatj) ERG, DAT (Gumatj). The distribution of the Gumatj allomorphs requires confirmation.

The patterning over all the varieties suggests that the relative strengths of preceding consonants as environments for lenition are as follows:

semivowels > liquids > vowels

least favoured----------most favoured

Ritharrŋu allows */g/* initial suffixes to optionally lenite after any of these classes of sounds but only allows the ERG *-dhu* to optionally lenite after vowels.

4. The presence of both fortis and lenis stops as well as the semivowel as possible suffix initials in Gupapuyŋu.

This occurs in the DAT and OR after liquids and semivowels. There is thus evidence in this variety for a contrast in suffix initial stops that is not found in Djambarrpuyŋu. However, both fortis and lenis stop initial suffixes have lenited allomorphs. In Ritharrŋu spoken to the south of Gupapuyŋu, which also has both fortis and lenis stop initial suffixes, it appears that lenition is only associated with the lenis stop, and then it is only optional.

4.8 Nominalizing Derivational suffixes

The remaining nominal suffixes range from those that are fully productive on a restricted class of stems to those where a suffix is clearly segmentable but is not known to be productive. The restricted class may be quite substantial such as kin and other human relationship denoting stems or limited to a handful of stems as is the case with the PLural suffix.

Semantically they do not code relations between nominals but give particular information about the stem. Syntactically they are distinct from the productive adnominal suffixes in not requiring concordial marking in co-occurring nominals. All of them provide stems for relational case suffixes, some for adonominal suffixes and still others for further derivational suffixes.

Several of the derivational suffixes have to do with social classification and they will be described first. They have been the subject of much more detailed consideration than I will be presenting here, notably in Heath (1982). His description is based on a substantial corpus of kinship texts by Dhuwal

(Djambarrpuyŋu and Djapu) speakers recorded in the south of the Yolŋu area. I will make some brief notes where the data in my corpus is different to his, without attempting an overall review.

4.8.1 KINship PROPrietive *-'mirriŋu* and the KINship PROPrietive Addressee Propositus *-ŋali*

There are two suffixes used to designate a human relationship category which is pertinent to a particular participant. The most commonly occurring is the KINPROP *-'mirriŋu* used with speaker, addressee or other as propositus. The second suffix, the KINPROPAP *-ŋali*, is used only for an addressee propositus.

Any kin term is a potential stem. A few stems designating human relationships outside of kin categories also occur with the KINPROP. These include *lundu* "friend", *buŋgawa* "boss", *maŋutji* "eye" deriving a term used to refer to girl/boyfriend/lover. Unlike Heath (1982p48) I have found no restraints as to the kin terms to which the KINPROP can be attached.

(46) ***ŋändi+'mirriŋu+ny*** *walal,* ***bäpa+'mirriŋu+ny*** *nyä'yu+rr+a*
M(Z) +KINPROP+PROM 3pl F(B)+KINPROP+PROM cry+3rd+SEQ
yukuyuku+'mirriŋu *walal* ***yapa+'mirriŋu*** *walal*
younger sibling+KINPROP 3pl (elder) Z+KINPROP 3pl T022p17
(her) mothers, (her) father cried/wailed, (her) younger siblings and (her) elder sisters

(47) *bitjan ŋayi* ***maralkur+'mirriŋu*** *waŋa+n,* ***gurruŋ+'mirriŋu+w***
do thus 3sg MMBS+KINPROP say+3rd FZDC+KINPROP+DAT
nhanu=kiyin+galaŋa+w ŋayi
3sg =EMPH+OBLS+DAT 3sg T022p4
thus said the maralkur to his own gurruŋ

(48) *nhuŋu ŋayi dhäwu lakara+ŋ ŋarra+nha+ny* ***dhäruk,***
2sg DAT 3sg story tell+2nd 1sg+ACC+PROM word
ŋäpaki+y+ny'tja nho=kal ŋuriŋiny
white person+ERG+PROM 2sg=OBL TEXD-ERG+PROM
buŋgawa+'mirriŋu+y+nydja
boss+KINPROP+ERG+PROM T008p6
he told you my words, that white person, your boss

Stems with these suffixes are used for reference rather than address and occur with human suffixes e.g. ACC for 0 and OBL for local cases. The interrogative/indefinite stem used with the KINPROP however is the non-human *nhä*. This is to be expected given the fact that kin categories are generally treated as "non-human". It is the derived stem that is "human" referring, not the root.

The KINPROP appears to be derived from the PROP *-mirr(i-)* plus *-ŋu*. Given a function of *-ŋu* which derives agentives/substantives we could interpret a stem plus this suffix as meaning "one having X relationship". This interpretation is close to the current use of the KINPROP. However, the variety of functions of *-ŋu* and the sparcity of clear cases of the productive uses of *-ŋu* as an agentive/substantive suggest that this is its diachronic source, rather than a synchronic morphological derivation (see section 4.8.6 below for more comments on the possible functions of *-ŋu)*.

I know of only one lexeme in which the KINPROP appears to be lexicalized and that is the name for a particular shrimp *daŋ'mirriŋu*. It is said to have distinctive clacking noise. If the *daŋ* is onomatapoeic then this may also reflect a derivation "one having (the noise) *daŋ*".

The KINPROPAP *-ŋali* is homophonous with the 1+2dl pronoun *ŋali*, but the KINPROPAP does not have the inclusive sense. This suffix is rare in the corpus, perhaps because none of the texts focus on an addressee's kin. It is used in conversation but I am not sure to what extent. It is possible that the KINPROPAP may be favoured in contexts in which the speaker is directly addressing someone about something involving a particular kin of theirs, while the KINPROP is used to describe the particular kin relationship one participant bears to another.

In Djapu the KINPROP does not occur with 2nd person reference (Morphy 1983 p45) and Heath (1982 p47) observes that there is much more use of the KINPROP in his Djambarrpuyŋu material than in Djapu. In neither dialect can a 2nd person possessive pronoun occur with the KINPROPAP. The difference in use observed by Heath is supported by my data. This suggests that the sparcity of the KINPROPAP in my corpus may reflect a dialect difference, with each Dhuwal variety favouring different suffixes (i.e. Djambarrpuyŋu, the KINPROP *-'mirriŋu*, and Djapu, the KINPROPAP *-ŋali*).

4.8.2 KINship DYaDic suffix *-'manydji*

This suffix is premised on the existence of reciprocal kin/human relations, and all kin terms are part of reciprocal sets. For instance, a *gäthu* (B)C refers to his father (or father's brother) as *bäpa*, and vice versa. This reciprocal relationship is invoked in the KINDYD based on either of these stems i.e. *bäpa'manydji* or *gäthu'manydji*. While the suffix minimally refers to a relationship holding between two referents, it can also be used of a greater number as long as they can be divided

into two groups between which the relationship holds, eg. a father and two sons could be designated with the two forms just given as well.

Some observations are made in the literature concerning what determines which reciprocal term is used. Morphy (1983) suggests the senior term is used in Djapu, while Merlan and Heath (1982), writing on Dhuwal, claim there is no single rule and describe various uses of particular stems. Heath was unable to elicit the suffix on certain stems. However, I have never had any difficulty eliciting the suffix on any kin term, and have found no preference for using the senior term. However, I am unable to offer further observations as to how a speaker selects a particular stem. I refer the reader to Merlan and Heath (1982) for a more detailed consideration.

Various stems other than kin terms occur with the KINDYD to convey other kinds of reciprocal human relations e.g. *maŋutji+'manydji* "sweethearts/lovers" (cf *maŋutji* "eye"), *djukarrŋu+'manydji* "good/close friends of the same sex" (cf *djukarrŋu* "good/close friend") and *goyurr+'manydji* "friends, companions in the sense that they always go about together" (cf *goyurr* "travels, movements; way of moving").

A KINDYD suffix *-'manydji* is described for other Dhuwal/Dhuwala varieties and Djinaŋ. Ritharrŋu has a cognate form with a distinct, but not totally unrelated, function namely the nominal Dual number marker *-manydji'*.

4.8.3 MATriline COLLective *-pulu*

This suffix occurs with a limited number of stems, all of which designate groups of people and the clans to which they belong matrilineally through ego's ŋändi "M(Z)" up to the fourth ascending generation. It occurs with four kin terms - i.e. *ŋändipulu* M(Z) clan(s), *märipulu* MM clan(s), *wakupulu* MMM clan(s), and *yapapulu* MMMM clan(s). The last two kin stems designate other categories of kin as well, but with *-pulu* the categories I have given are the ones understood (for further details see Shapiro (1981p90)).

The body part term *ŋamini* "breast" associated with *ŋändi* M(Z) also occurs with this suffix as an alternative expression to *ŋändipulu*. The only non-kin associated stem is found in the overall term for clans related to ego matrilineally i.e. *yindipulu* based on the adjective *yindi* "big".

Heath (1982) reports an elicited form based on *bäpa* F but this was not found acceptable with speakers at Galiwin'ku and is not reported in Shapiro's work.

(49) *walal+nydja marrtji+n gä+ŋal ŋändi+pulu+y+nydja ŋanapurruŋ+gal,*
3pl+PROM go+1st carry+3rd M(Z)+MATCOLL+ERG+PROM 1pl+OBL
ŋuriŋi bili yan bäpurru+y märrma+y gurruku+nha+yŋu+y
TEXDP "same" EMPH clan+ERG two+ERG bear+4th+'yŋu' +ERG OMSp28
They, our mother clans "carried" us, those two same clans that "bore" us
(This is describing events during a funeral ceremony)

4.8.4 MOiety Collective *-kuŋditj/-waŋditj*

The moiety names *Dhuwa* and *Yirritja* occur with the above suffixes to denote a group made up of people or clans from a particular moiety. *Dhuwa* occurs with *-kuŋditj* i.e. *Dhuwakuŋditj* while the Yirritja form is reduced to *Yirriwaŋditj*.

Morphy reports a single form of the suffix *-kuŋditj* on both moiety terms in Djapu suggesting it is another instance of dialectal variation.

(50) *walaman'+thu ŋunhi ŋuli ŋanya liyaman+dja, yolŋu+y+nydja walal*
all+ERG TEXD HAB 3sg-ACC sing+1st+PROM person+ERG+PROM 3pl
\ yurr dhuwa+kuŋditj+thu yän, yaka yirriwaŋditj+thu+ny
ADD moiety name+MOIC+ERG EMPH NEG moiety name-MOIC+ERG+PROM
everyone sings about it (a kind of turtle), although only the Dhuwa clans, not the Yirritja clans T019p31

4.8.5 OWNeRship *-waŀaŋu*

This suffix is added to nomens and denotes a person with (socially/culturally sanctioned) rights over what is denoted by the root. It can often be loosely translated in terms of ownership. The suffixes with which it has been recorded - ERG, DAT ACC and OBL(All) clearly point to the fact that it derives a human referring stem.

This is another suffix with a final *-ŋu* but there is no obvious free form/suffix lexeme *waŀa* in Djambarrpuyŋu (cf *waŀa* "girl/woman without a child" *baŀa* "skilled hunter"). However a cognate complex morpheme *-baŀa+ŋu* " (rightful) owner" occurs in Ritharrŋu. *Baŀa* - is described as a Comitative "prefix (or compounding initial)" (Heath 1980bp82).

There appears to be a range of phenomena to which people can be regarded as having rightful access or authority over. In other words there are a range of stems which occur with this suffix. This includes everyday items such as food, clothing and other

personal things. e.g. *ŋatha+waṯaŋu* "(root)food-owner", *girri'+waṯaŋu* "clothes-owner". In the corpus one of its most common functions is to denote "ownership" in the land/sacred/ceremonial domain. This can be done by attaching the suffix to kin/human relationship terms through which the rights exist e.g. *ŋamini+waṯaŋu* "someone with rights to land or other matters associated with their mother clan" or to general terms for song, land or "sacred business" e.g. *manikay+waṯaŋu* "song owner" or *maḏayin+waṯaŋu* "sacred business owner". There are also expressions such as *goŋ+waṯaŋu* "hand owner" which have special senses. This particular form can be used both generally of a person who made/created something (be it a sacred object or a garden), and with a special sense denoting the person directly involved in handling a corpse.

Two examples from the texts are:

(51) *marŋgi+ku+ŋu+n* *ŋunhi+n* *yolŋu+ny* ***dhäruk+waṯaŋu+nha+n***
know+TRANS+2nd+SEQ TEXD+SEQ person+PROM word+OWNR+ACC+SEQ
inform/let know that 'word-owner/producer' T018p7
(this arose in a context in which the speaker is advising those who should want to use her material that they should think about the one who produced the words)

(52) *burr'purrmara+m* *ŋayi dhu* *yolŋuy* *ŋuriŋi* ***girri'+waṯaŋu+y***
take down(pl)+1st 3sg FUT person+ERG TEXD-ERG clothes+OWNR+ERG
The clothes-owner takes down (the clothes from the line) T010p10

I have not seen *-waṯaŋu* reported for eastern Dhuwal/Dhuwala varieties, so this suffix may be another linguistic correlate of regional differences.

4.8.6 *-ŋu*

A *-ŋu* element is isolable in many varied contexts. The most clearly productive homophone *-ŋ(u-)* is found on Ŋ class verb stems as the SECOND inflection/form (see section 7.4.2.11).

Its other uses concern nominal stems. Various functions are suggested by the data available but the diversity of occurrence, the variability associated with its occurrence in some contexts or the rarity of its use in others, make it impossible to make any conclusive statements as to the current or past status of a *-ŋu* suffix or suffixes. This is in line with comments by others who have worked on Yolŋu varieties. I will simply summarize its occurrence here and point to certain threads that could be productive given time for further investigaion.

1. A *-ŋ(u-)* occurs as an "irregular" case suffix form on certain nominal stems, namely in the DAT forms of the 2nd and 3rd person singular pronouns, *nhuŋu* and *nhaŋu* respectively. The DAT pronominal suffix *-ŋ(gu-)* and nominal suffix *-Ku* do not at first sight look unrelated so this *-ŋu* may have an independent source.

2. It also appears in demonstrative ERG forms as either *-ŋ(u-)* or *-ŋi*, which is quite unrelated to the regular ERG nominals suffix *-Thu*.

3. Another context in which *-ŋu* appears is as the final syllable of various suffixes which share in common the fact that they are only/predominantly found with "human" referring nominals. This includes the OBLS *-Kalaŋa/u-*, PROP *-'mirriŋu*, OWNR *-waŧaŋu*, and OR *-Kuŋ(u-)*. The "INHABitant of" suffix *-puyŋu* reported for Djapu and used to denote "a person from X" is another suffix in this category. It is obviously present in the clan/language name *Djambarrpuyŋu* although the suffix is no longer productively used in this variety.

4. A *-ŋu* also appears as an argument in locative and temporal stems. It occurs in the alternative LOC_2 suffix *-(ŋu)mi* found with demonstratives as well as a regular augment before the ASS and PROP in the demonstrative paradigm. The time and place interrogative/indefinite proforms also require *-ŋu* before DAT and ASS suffixes.

Temporal stems generally favour a *-ŋu* before other suffixes but there is some alternation in recorded forms e.g. *baman'puy /baman'ŋuwuy* "associated with long ago". The stems *mala* "group/plural" *bulu* "more", and *wiripu* "other, a certain" may also occur with an *-ŋu* augment. It appears to be favoured with ERG, DAT and local case suffixes.

5. On other nominal stems *-ŋu* appears to behave as a substantive or agentive suffix. An association with "human" referring nominals was noted in point 3.

Amongst the nominals with an apparent agentive *-ŋu* are *ŋamakuli'ŋu* "policeman" (cf *ŋamakuli* "good"), *djambatjŋu* "skilled hunter/provider, murderer" (cf *djambatj* "skilled"), *mel'ŋu* "person who goes to investigate and reports on something/spy" (cf *mel* "eye"), *ŋurruŋu* "leader; first; in front" (cf *ŋurru* "nose") and *dhuḏiŋu* "captain of a craft, one who sits at the back; last, behind" (cf *dhuḏi* "bottom, end").

In other examples the relationship between the root and derived stem is less transparent, the *-ŋu* seems fossilized e.g. *miriŋu* "warrior, soldier" (=*mariŋu* in other varieties cf *mari* "trouble, fight, quarrel"), certain clan names e.g. Ritharrŋu (cf *ritharr* "Spear Grass"), Marraŋu (cf *marra* "hair/leaf"), and Bararrŋu (cf a verb/adjective stem *bararr-* "skin hue when burnt or grazed"). Some further examples include *lirraŋu* "shortcut" (cf *lirra* "tooth"), *yoŋu* "person" (cf *yol* "who/someone") and *bäyŋu* "NEGQ" (cf *bäythirri* "to miss out (on something)"). Note that Ritharrŋu has both stems *yol* and *yoŋu* for person. Only *yol* is found with the Dual and Plural number suffixes (Heath 1980bp24).

A final example is *gärukŋu* "companion, off-sider" in which the cluster, here a stop plus a nasal, is suggestive of a derivational past, although there is no further evidence for the potential root, i.e. **gäruk*.

The glottal stop that appears in certain of the *-ŋu* derived stems is unexplained. However it is worth noting that glottal stop does appear in other derivational contexts e.g. with the KINPROP *-'mirriŋu*, KINDYD *-'manydji*, the VBZR *-'Thu-* and the PROP form *-'mirr(i-)* used with demonstratives to designate local language varieties.

Evidence for a "substantive" *-ŋu* is found in such examples as *ḏilkurruŋu* "yam species"(cf *ḏilkurr(u-)* older person, important), *ḏumurru(')ŋu* "Sunday, week" (cf *ḏumurr(u-)* "big"), *dharrpaŋu* "sacred one" (cf *dharrpal* "sacred"), and *räli'ŋu* "return" (cf *räli* "movement towards").

These two categorizations, while capturing a lot of forms do not necessarily account for examples such as *ŋäthiliŋu* "old, stale" (cf temporal *ŋäthil* "before, earlier) modifier and *barririŋu* "frightened, cowardly" (cf *barriri* "fear") which are used as adnominal modifiers, and *ḏarrtjalkŋu* "first shot, in one shot" (cf *ḏarrtjalk* "clean") used adverbially. They also do not account for the locative and temporal uses of *ŋurruŋu* "first, in front" and *dhuḏiŋu* "last, behind" although it is possible that these were derived from original agentive uses. It is possible that in all contexts in which these forms are used these can be given a substantive interpretation as "one which is.....".

Heath describes a derivational *-ŋu* in Ritharrŋu as appearing with 'certain nouns, chiefly but not always nouns which would be classified as adjectives in English. Thus *ḏäl* "strong, firm" has a variant *ḏäl-ŋu* with little or no difference in meaning

or usage" '(1980b p24). He also found that it appeared to be obligatory on some stems and rare or totally absent from others.

In the examples to be considered next we find evidence for a meaningful contrast between the apposition of two nominals and a parallel apposition in which one of the stems is suffixed with *-ŋu*.

The apposition of *yindi* "big" and *goŋ* "hand" would presumably be the expected quality-entity relation "big hand". However *yindiŋu* "big-one" apposed with *goŋ* denotes the thumb. In a parallel construction *yothuŋu goŋ* "child-one" hand (cf *yothu* "child") denotes the little finger, in contrast with the apposition of *yothu* and *goŋ* which would indicate a part-whole relation "child's hand".

The next example is taken from a text:

(53) *ga djorra nhaŋgu wukirri ŋi\ ŋurikI+yI dhäruk+ŋu+w*
and paper/book 3sg+DAT write PRT"yes" TEXD-DAT+ANA word+ŋu+DAT
yolŋu+w ŋunhi ŋayi dhu ga waŋa
person+DAT TEXD 3sg FUT IMPV-1st speak-1st T018p18
and write her a letter, OK?, to that speaker (words-one person), who will be talking

In this example speakers would not allow the DAT suffix *-Ku* to be suffixed directly to the stem *dhäruk*. Note that the apposition of *dhäruk* and *yolŋu* is possible in the (part-whole) sense of "a person's words" but this is not the sense required in this particular context.

It is not clear what to conclude from all of this. On the one hand, the *-ŋu* appears to be fossilized in many examples, with no obvious or consistent relation between the stem and the suffix. On the other hand, some uses of *-ŋu* may still be functional as a substantive derivational suffix. We saw a few examples in which identical apposed stems had different interpretations given the presence or not of *-ŋu*. As further support we might consider the fact that some of the lexemes containing *-ŋu* are for relatively recent concepts e.g. those for "policeman" and "Sunday, week". The relationship that the derived stem may have to the root morpheme is a matter that also needs investigation. We have seen that *-ŋu* is found suffixed to both quality and entity type nomens and would appear to derive (at least predominantly) other members of this class. The substantive and agentive senses appear to be the most common.

In Ritharrŋu *-ŋu* has a productive function as a subordinator. This is quite different to subordinating processes found in other Yolŋu varieties, but it is likely the uses of *-ŋu* we find here and the Ritharrŋu use are not unconnected.

6. The forms *-yŋu / -ŋu* have been recorded on few verb stems in the FOURTH form. The Ritharrŋu subordinator *-ŋu* just mentioned occurs on inflected verb stems. The final occurrence of *-ŋu* to be described for Djambarrpuyŋu is in fact one that bears a closer connection with the Ritharrŋu subordinator than those considered hereto. This is a *-ŋu* that occurs with deverbal nominals, usually preceded by a /y/. There are not a great number of examples in the corpus.

Most examples are agentive, derived from either transitive or semi/intransitive verbs. Some instances of this use are:

malthu+na+yŋu "follow(semitr)+4th+yŋu",	"follower, companion
gurruka+nha+yŋu " bear(tr)+4th+yŋu	"one who bore/gave birth to"
gumurr-guwatjma+nara+yŋu meet(tr)+4th+yŋu	"ones who met up

There is also one word with this suffix that is not that uncommon which has a temporal function, namely

dhärra+nha+yŋu stand(intr)+4th+yŋu	"forever"

See also example 49.

I suspect that the agentive use may still be productive, but the temporal example just given would appear to be fossilized. This is also likely to be the status of *ŋupanayŋu* "go after/follow along+4th+yŋu" with the sense "be alike, identical" (cf *ŋupa*-N$_L$ "to follow along something or after someone").

A possible source for the /y/ given the temporal and agentive uses is the ERG, but its occurrence on intransitive/semitransitive stems makes this analysis problematic. Another possible source for the/y/ is a reduced form of the ASS suffix.

Morphy notes the use of *-puyŋu* on verbal stems to derive 'a noun meaning "doer of X" or an adjective meaning "X-ing" '(1983 p110). Her example incorporates an

object, i.e. *wapiṯi warrtju+na+puyŋu+nha+ny* [stingray near+4th+INHAB+ACC+PROM] "the people) who were spearing stingray, OR the stingray-spearing (people)". However, I only have one example in the Djambarrpuyŋu corpus of *-puyŋu*, and I do not know if this is an "intrusion" into Djambarrpuyŋu of an "outside" form or yet another suffix. The combination of ASS+ŋu would conform to other agentive/substantive uses of this suffix.

4.8.7 *-ŋani(ŋ)*

The suffix *-ŋani(ŋ)* is analysable in approximately fifty stems, all but one of which are names for flora and fauna. The exception is *ŋälŋaniŋ* "joint" (cf *ŋäl* "saliva, fluid which lubricates joints").

The most common form of the suffix is *-ŋaniŋ*. It occurs with nomen roots, which are often themselves also names for flora and fauna. However, roots can be other categories of nomens such as *waŋi* "wind" as in *waŋiŋaniŋ* "shellfish sp" and *munhawu* "night time/dark" as in *munhawuŋaniŋ* "gecko".

It is not known if the suffix is currently productive. For one third of the stems there is no record of the root occurring as a free form or with other suffixes. For many of the other two thirds there is no obvious relation between the two stems. However, it is possible to postulate a connection between the root and derived stems in some instances. Consider the following:

mithirri	"Thorny Stingray"	*mithirriŋaniŋ*	"Prickly Tree"

These both share spiky/lumpy outer surfaces.

garrurru	sail, flag	*garrurruŋaniŋ*	various kinds of fish such as Butterfly fish

Here a speaker drew the connection between the tails of the fish and sails on a boat.

ḏuttji	firedrill, firesticks; Premna acuminata, P. obtusifolia	*ḏuttjiŋaniŋ*	shellfish- Large Chinese Fingernail,Knife Finger Oyster

The similarity in shape of a firesticks and the shellfish suggests a connection here.

ḏamba	light(weight)	*ḏambaŋani(ŋ)*	name for various species of tree having a lightweight wood

The lightness of the wood suggests an obvious connection.

It is possible similar connections exist for other examples, presumably featuring socio-cultural perspectives that are not obvious to an outsider. Another piece of evidence that a morpheme boundary is recognized comes from alternations such as *waŋiŋaniŋ* and *wataŋaniŋ* both used to refer to the same shellfish, and which are based on synonyms for "wind". However, the number of forms without associated free forms indicate that it is likely that, like *-ŋu*, even if this suffix is still productive, it is lexicalized in a number of stems.

4.8 PLural suffix *-(Kurru)wurr(u-)*

The plural suffix is one of several ways in which number is expressed in Djambarrpuyŋu. It is a derivational suffix, being confined to a limited number of stems, not requiring number agreement in co-occurring nominals but requiring a distinct array of (relational) case suffixes from those associated with the classes of its roots.

It is primarily found with demonstrative stems. For this reason I will leave consideration of this suffix to the detail in section 6.3.1. Nomen stems with which it has been found are confined to *miyalk* "woman, female" *ŋirramu* "man, male", *ŋilkurr(u-)* "old person, important", relationship terms with the KINDYD *-'manydji* and the KINPROPAP *-pulu*, as well as three nomen stems which, like demonstratives, can have a determiner function - *wiripu* "(an)other, a certain", *waŋgany* "a certain, one" and *balanya* "such a". Examples are presented in Table 38.

CHAPTER 5

PRONOMINAL MORPHOLOGY

Djambarrpuygu has free form personal pronouns pertaining to speaker, addressee, and other participants i.e. for 1st, 2nd and 3rd person in traditional terminology. There are also distinct forms for speaker plus addressee(s) (i.e. "inclusive") glossed as "1+2", as well as for speaker minus addressee but plus another or others (i.e. "exclusive ") which is glossed simply as "1".

Pronouns also specify singular, dual and plural number. All potential person/number combinations occur, with the exception that dual and plural are not formally distinct for the addressee/second person. A single non-singular second person form occurs: *nhuma*. However it is possible to distinguish between dual and plural periphrastically using the third person dual and plural pronouns.

There are two personal pronoun paradigms which I refer to as Basic and Emphatic. The Emphatic paradigm is clearly based on the Basic paradigm. The two paradigms are presented in Tables 23 and 24.

The predominant concerns of the pronouns are with personal deixis, reference tracking and possession, but a few pronouns forms occur with other functions, such as non-singular number markers, interjections and the coding of social deixis.

Emphatic pronouns have two distinct uses, parallel to English "reflexive" pronominal forms. They are used both for pragmatic effect to focus on a particular referent(s) and grammatically to code coreference within a clause.

All pronouns are case marked for core cases according to a nominative-accusative pattern, distinguishing S/A from O. This is unique to pronouns. However, the other cases with which they occur overlap with those found with "human" referring nomens. Notable in this respect are the occurrence of the ORiginative and the marking of local case with the OBL. The other case markers permitted with pronominal stems are the DAT and the OBLique Stem. The latter suffix may itself be suffixed by additional suffixes, some of which do not occur directly attached to pronominal bases. The DAT, ASS, OBL, OR, PERL, ABL and PROP case suffixes are all attested following the OBLS. The OBLS stem forms occur as the regular

Table 23: BASIC PRONOUNS IN DJAMBARRPUYŊU

	NOM	ACC	DAT	OBL	OR	OBLS
1sg	ŋarra	ŋarrany ŋarranha-	ŋarraku	ŋarrakal	ŋarrakuŋ(u-)	ŋarrakalaŋu/a-
	rra	(?rrany)	rraku	rrakal	rrakuŋ(u-)	rrakalaŋu/a-
1+2dl	ŋali	(ŋa/i)litjalany	(ŋa/i)litjalaŋ(gu-)	(ŋa/i)litjalaŋgal)	(ŋa/i)litjalaŋguŋ(u-)	(ŋa/i)litjalaŋgalaŋu/a-
1dl	(ŋa/i)linyu	(ŋa/i)litjalanha- (ŋa/i)linyalany	(ŋa/i)linyalaŋ	(ŋa/i)linyalaŋgal	(ŋa/i)linyalaŋguŋ(u-)	(ŋa/i)linyalaŋgalaŋu/a-
1+2pl	(ŋa/i)limurr	(ŋa/i)linyalanha- (ŋa/i)limurruny	(ŋa/i)limurruŋ(gu-)	(ŋa/i)limurruŋgal	limurruŋguŋ(u-)	(ŋi)limurruŋgalaŋu/a-
1pl	(ŋa)napurr	(ŋa/i)limurrunha- (ŋa)napurruny	(ŋa)napurruŋ(gu-)	(ŋa)napurruŋgal	(ŋa)napurruŋguŋ(u-)	(ŋa)napurruŋgalaŋu/a-
2sg	nhe	(ŋa)napurrunha- nhuna	nhuŋu	nhokal	nhokuŋ(u-)	nhokalaŋu/a-
2dl/pl	nhuma	nhunanha- nhumalany-	nhumalaŋ(gu-)	nhumalaŋgal	nhumalaŋguŋ(u-)	nhumalaŋgalaŋu/a-
3sg	ŋayi	nhumalanha- ŋanya	nhaŋu	nhanukal	nhanukuŋ(u-)	nhanukalaŋu/a-
3dl	maŋŋa	ŋanyanha- maŋŋany	maŋŋaŋ(gu-)	maŋŋaŋgal	maŋŋaŋguŋ(u-)	maŋŋaŋgalaŋu/a-
3pl	walal	maŋŋanha- walalany	walalaŋ(gu-)	walalaŋgal	walalaŋguŋ(u-)	walalaŋgalaŋu/a-
		walalanha-				
		wal	walany	walaŋ	walaŋgal	

Other case forms:

2dl LOC_2 maŋŋaŋumi (see section 5.7.1.1)

Table 24: EMPHATIC PRONOUNS IN DJAMBARRPUYŊU

	NOM	ACC	DAT	OBL	OR	OBLS
1sg	ŋarrapi	ŋarranhawuy ŋarrapinya	ŋarrakuwuy rrakuwuy	ŋarrakiyingal	ŋarrakiyinguŋ	ŋarrakiyingalaŋa/u-
1+2dl	ŋalipi	*(ŋa)litjalanhawuynha	litjalaŋguwuy	ŋalitjalaŋgiyingal	ŋalitjalaŋgiyinguŋ	ŋalitjalaŋgiyingalaŋa/u-
1dl	linyupi linyuwuy	*linyalanhawuynha	linyalaŋguwuy	linyalaŋgiyingal	linyalaŋgiyinguŋ	linyalaŋgiyingalaŋa/u-
1+2pl	limurruwuy limurrupi**	limurrunhawuynha	(ŋa/i)limurruŋguwuy	limurruŋgiyingal	limurruŋgiyinguŋ	limurruŋgiyingalaŋa/u-
1pl	ŋanapurruwuy napurrupi**	ŋanapurrunhawuynha	(ŋa)napurruŋguwuy	napurruŋgiyingal	(ŋa)napurruŋgiyinguŋ	ŋanapurruŋgiyingalaŋa/u-
2sg	nhepi	nhunapinya	nhuŋuwuy	nhokiyingal	nhokiyinguŋ	nhokiyingalaŋa/u-
2dl/pl	nhumapi	*nhumalanhawuynha	nhumalaŋguwuy	nhumalaŋgiyingal	nhumalaŋgiyinguŋ	nhumalaŋgiyingalaŋa/u-
3sg	ŋayipi	ŋanyapinya	nhaŋuwuy	nhanukiyingal	nhanukiyinguŋ	nhanukiyingalaŋa/u-
3dl	maŋdapi	maŋdanhawuynha	maŋdaŋguwuy	maŋdaŋgiyingal	maŋdaŋgiyinguŋ	maŋdaŋgiyingalaŋa/u-
3pl	walalapi ** walalawuy	walalanhawuynha	walalaŋguwuy	walalaŋgiyingal	walalaŋgiyinguŋ	walalaŋgiyingalaŋa/u-

The table is based on forms attested in the text corpus. Forms with and without the initial /ŋV/ are presumably possible alternates but examples in the texts usually occur without it. Where the longer forms have occurred they are indicated.

* forms not yet attested in texts but expected

** forms only appearing when prompted by the linguist in connection with eliciting the paradigm. None have yet appeared in Djambarrpuyŋu texts and I remain somewhat doubtful as to their "acceptability" although speakers did not categorically reject them (see section 5.3.1).

pronominal form for certain cases i.e. the ASS, the PERL and optionally the ABL. They are also required for coding certain possessors (see section 9.5).

The pronominal case distinctions are morphologically coded both by suppletive stems and by stems for which analysis as stem plus suffix is possible. The regularity of stem forms and the correspondence of suffixes to those found on other nominals is greatest for those pronominals coding peripheral roles. Portmanteau forms are centred on the singular forms and core roles. For most person/number series it is possible, however, to identify common roots. Within the paradigm common suffixes are also recognizable, some of which function as augments and others of which are case markers. Some case markers are distinct from those occurring with nomens.

All pronominals in the emphatic paradigm are distinguished from their equivalents in the basic paradigm by the presence of one of three suffixes, namely *-pi-*, *-wuy-* or *-Kiyin-*. These are distinctive to the emphatic paradigm, and each is associated with a different range of case marking. The stem and suffix forms otherwise identifiable in the two paradigms are identical. The regularity of correspondences between the two paradigms is clearly suggestive of derivation, although a single process will not account for all forms synchronically.

The emphatic pronominals in Yolŋu languages have not received much attention in the literature. Full paradigms or exact realizations of forms are not generally provided and little is said about their use.

I will now describe these particular phenomena in more detail, beginning with the pronominal stems and affixes. Then I will discuss the relationship between the basic and emphatic pronouns, and then make a comparison of Djambarrpuyŋu pronouns with those in other Yolŋu varieties. Finally the additional function of the basic pronominals and the functions of the emphatic pronominals will then be described.

5.1 Pronominal stems

In this section the stems isolatable in the two pronominal paradigms will be considered. They are listed in Tables 25 and 26 following

Table 25: PRONOMINAL STEMS FOR THE BASIC PRONOUNS

	NOM	ACC	DAT	OR/OBL/OBLS
1sg	**(ŋa)rra**	**(ŋa)rra-**		**(ŋa)rra-**
2sg	**nhe**	nhuna	nhuŋa	**nho-**
3sg	**ŋayi**	ŋanya	nhaŋgu	**nhanu-**
1+2dl	**(ŋa/i)linyu**	**(ŋa/i)linyala-**		**(ŋa/i)linyala -ŋ-**
1dl	**ŋali**	**(ŋa/i)litjala-**		**(ŋa/i)litjala -ŋ-**
3dl	**maŋda**	**maŋda-**		**maŋda -ŋ-**
1+2pl	**(ŋa/i)limurr**	**(ŋa/i)limurru-**		**(ŋa/i)limurru-ŋ-**
1pl	**(ŋa)napurr**	**(ŋa)napurru-**		**(ŋa)napurru -ŋ-**
2dl/pl	**nhuma**	**nhumala-**		**nhumala -ŋ-**
3pl	**wal(al)**	**wal(al)a-**		**wal(al)a -ŋ-**

Table 26: PRONOMINAL STEMS FOR THE EMPHATIC PRONOUNS

	NOM	ACC	DAT	OR/OBL/OBLS
1sg	ŋarra-	ŋarra- /-ŋarra-nha-	(ŋa)rra-ku-	ŋarra-
2sg	nhe-	nhuna-	nhuŋu-	nho-
3sg	ŋayi-	ŋanya-	nhaŋgu-	nhanu-
1+2dl	linyu-	linyala -nha-	linyala -ŋgu-	linyala -ŋ-
1dl	ŋali-	litjala -nha-	litjala -ŋgu-	linyala -ŋ-
3dl	maŋda-	maŋda -nha-	maŋda -ŋgu-	maŋda -ŋ-
1+2pl	limurru-	limurru-nha-	limurru-ŋgu-	limurru-ŋ-
1pl	napurr-	napurru-nha-	napurru-ŋgu-	napurru-ŋ-
2dl/pl	nhuma-	nhumala-nha-	nhumala-ŋgu-	nhumala-ŋ-
3pl	walala-	walala -nha-	walala -ŋgu-	walala -ŋ-

Stems that are the same for ACC/DAT are listed midway between the two columns ACC and DAT. Bold forms in the basic paradigm stems show what is common to each series of person/number categories.

The full range of initial syllable options are not indicated for the Emphatic pronoun stems. The **ŋV-* initial syllables as indicated for the basic pronouns are permitted, although they are frequently omitte. The shorter 3pl stems also occur.

5.1.1 Basic pronominal stem distinctions

Table 25 shows the basic pronominal stems that are clearly distinguishable from case suffix forms. Most person/number categories have three different stems.

These different stems correlate with certain case marking groupings across the paradigm namely NOM, DAT/ACC and OR/OBL/OBLS. There is a consistent relationship between the last two sets of stems in which the OR/OBL/OBLS stems consist of the DAT/ACC stems plus an *-ŋ-* augment. The ACC/DAT stems are often distinguished from the NOM stems by the presence of a final *-lV-* or *-u-*.

Exceptions to the three stem distinction include the 2sg and 3sg which have distinct forms for ACC and DAT, thus having four distinct stems in all. However, they both have a common stem for the OR/OBL/OBL. Furthermore, this bears more similiarity to the DAT forms than to the NOM forms. The 3sg ACC is closer to the NOM while the 2sg NOM is closer to the DAT and OR/OBL/OBLS forms. Other exceptions to the three stem distinction are the 1sg, which has an identical stem throughout, i.e. for both NOM and non-NOM stems, and the 3dl which also has an identical root/stem throughout, but conforms with the rest of the paradigm in the presence of the the *-ŋ-* augment in OR/OBL/OBLS forms. The 1sg root is the only exception to the presence of the *-ŋ-* augment as the distinguishing factor between the DAT/ACC and OR/OBL/OBLS pronominal stems.

Thus, even in the less regular forms all the non-NOM forms, except for the 3sg ACC have common roots. The proposed non-NOM roots are thus:

Table 27: Non-NOM Pronominal Stems

	number		
person	singular	dual	plural
1	ŋarra-	(ŋa/i)linyala-	(ŋa)napurru-
1+2		(ŋa/i)litjala-	(ŋa/i)limurru-
2	[1]nhU-	nhumala-	nhumala-
3	nhanu-/nhan-	maŋda-	walala-

([1]The vowel designated by U /u/ i.e. short in ACC and DAT forms and /u:/ i.e long in the OR/OBL/OBLS stems)

We will now consider the stems for each of the three categories, NOM, ACC/DAT and OR/OBL/OBLS individually.

5.1.1.1 NOM stems

In most instances this involves the bare stem or a root form found elsewhere in the paradigm. A suppletive form occurs in the 3sg. These NOM stems are C or V final, as are the full pronominal words based upon them. They occur with one to four syllables. Notably the C finals are all liquids, /rr/ or /l/. It is clear that the Dhuwal NOM pronominal forms without a final vowel have undergone final vowel deletion as described in section 2.4. Evidence of the final vowel still remains within the paradigm in other stem forms, and it also occurs in the NOM stems of the Emphatic pronouns. It has been deleted from just those pronominals where this vowel can also occur word finally i.e. the NOM basic pronominals. In the Djambarrpuyŋu forms the vowel has been totally deleted. Like other morphemes that have undergone the strongest degree of vowel deletion the vowel does not appear before other (productive) suffixes. The pertinent suffixes here are the PROM and SEQ discourse suffixes which show the variants expected after liquids and semivowels e.g. *limurr+nydja, walal+nydja*. If the NOM forms did show the vowel when not word final, the PROM forms would in fact be homophonous with the ACC forms e.g. *limurru-ny*. This suggests a functional reason for deleting the vowel in these particular forms, but it is also quite in accord with a tendency to delete such vowels after liquids.

Further evidence of final vowel deletion is found in the following table which compares these C-final pronominals with their counterparts in Dhuwala varieties. The Dhuwala forms all have the final vowel:

	western Dhuwala Gupapuyŋu	eastern Dhuwala Gumatj	western Dhuwal Djambarrpuyŋu	eastern Dhuwal Djapu
1pl	(ŋa)napurru	ŋanapurru	(ŋa)napurr	ŋanapurr
1+2pl	(ŋa/i)limurru	ŋilimurru	(ŋa/i)limurr	ŋilimurr
3pl	walala	walala	walal	walal
1+2dl	(ŋa/i)linyu	ŋilinyu	(ŋa/i)linyu	ŋiliny(u-)

The loss of the final vowel has meant that the 1pl, 1+2pl and 3pl stems for the NOM and ACC in the basic paradigm have become distinct, where once they were not, and are not in the Dhuwala varieties that retain the final vowels. They are the only pronominal stems (other than the 3sg *nhan-* which is unique to the DAT case form) which are consononant final.

Note that the 1sg form has not lost its final vowel despite a preceding liquid /rr/ (see section 2.4.6.1). This is true in both Dhuwal varieties, Djapu and Djambarrpuyŋu. Morphy (1983 p29) describes a general constraint on vowel deletion in Djapu that prohibits its occurrence when this will result in a monosyllable (see section 2.4.6.4). The fact that Djambarrpuyŋu has similarly not reduced this form by vowel deletion suggests the same constraint may have applied. However a reduced 1sg NOM form *rra* does occur, albeit rarely, in Djambarrpuyŋu texts. This is achieved by a process of initial syllable deletion (see section 5.1.2.1) which is widely applied elsewhere in the paradigm.

In fact, it would appear that as a process of reduction of pronominal forms it currently predominates in western varieties such as Djambarrpuyŋu. This process does not appear to be current in eastern varieties such as Djapu, although evidence that these pronominals have been affected by syllable reduction in the past will be given in section 5.1.2 below. The 1+2dl Djapu form in the table above however, does indicate that pronominal forms are still accessible to the vowel deletion process. Thus *ŋiliny* is permitted when no further suffixes follow, although the vowel does appear before the discourse suffixes, contrary to other NOM forms affected by vowel deletion. The contrast in the current status of the applicability of vowel deletion and initial syllable deletion between the two Dhuwal varieties Djambarrpuyŋu and Djapu is reflected in the contrast in the 1+2dl forms. Djambarrpuyŋu retains the final vowel but permits the optional deletion of the initial syllable i.e. *liny(u)*. An identical contrast is also found in the 1sg DAT pair *rraku* and *ŋarrak*, for Djambarrpuyŋu and Djapu respectively.

The two processes we have just mentioned are loss of a syllable or a final vowel. Both Djambarrpuyŋu and Djapu Dhuwal varieties share the last process but the former seems no longer productive in Djapu, although there is evidence that reduction occurred in the past. The contrast in the 1dl forms of Djambarrpuyŋu and Djapu reflect the different application of these processes, Djambarrpuyŋu reducing the pronoun by initial syllable deletion and Djapu by final vowel deletion.

A final note to make in regard to the NOM stems is the distinctiveness of the stem final /u/ to the 1dl form *(ŋa/i)linyu*. In the non-NOM root the equivalent vowel is /a/ *(ŋa/i)linyala-*. A glance at Table 27 will show that all non-NOM roots have identical vowels in the final two syllables. This suggests historically the final vowel may well have been /u/ and that it assimilated to the following vowel by analogy with other non-NOM stems.

5.1.1.2 ACC/DAT stems

All ACC/DAT stems are vowel final with the exception of the 3sg DAT which can be segmented with a unique stem *nhan-* plus a DAT suffix *-ŋu* shared only with the 2sg. On the other hand most minimal independent ACC/DAT pronominals are consonant final. Again the exceptions are the 2sg and 3sg, but it is a feature of the ACC/DAT forms that these particular categories are exceptional. It has already been noted that their ACC/DAT forms are different enough from the rest of the paradigm for them to be considered suppletive portmanteau morphemes. However, they are not so distinct that stem and suffix-like elements cannot be identified. The 2sg ACC can be analysed as *nhu+na* and the DAT as *nhu+ŋu*. The stem is only distinct from the OR/OBL/OBLS stem in having a short vowel. The 3sg ACC can be analysed as *ŋa+nya* and the DAT as *nhan+ŋu*. The ACC stem reflects that found in the 3sg NOM ie. *ŋayi* and the 3sg DAT that found in the OR/OBL/OBLS ie. *nhanu-*. For a discussion of the suffix-like elements refer to section 5.2.

5.1.1.3 OR/OBL/OBLS stems

The non-singular forms have roots identical to the stems occurring in their ACC/DAT counterparts. These OR/OBL/OBLS stems are distinguished from the ACC/DAT forms by the presence of an *-ŋ-* augment. The 2sg and 3sg stems are unique to the OR/OBL/OBLS. This is marginal in the case of the 2sg *nho-* which, except for vowel length, is identical to the first syllable in the ACC and DAT forms. The 3sg stem *nhanu-* is recognisable in the DAT first syllable *nhan-* but is quite distinct from the NOM and ACC which have initial syllable *-ŋa-*. The 1sg form has an identical root/stem in all pronominal forms.

Due to the *-ŋ-* augment all non-singular stems are consonant final, although the singular stems and non-singular roots are vowel final. Free-standing pronominal OR and OBL forms are all consonant final. When stems with the OBLS do stand alone, and this is with a very specific function, they are vowel final.

5.1.2 Syllable reduction of pronominals

There are two kinds of syllable reduction affecting the Djambarrpuyŋu pronominal paradigm in addition to final vowel deletion. The syllables which may be deleted are indicated in Table 23 within parentheses. The most widespread is the loss of an initial syllable consisting of a velar nasal plus vowel i.e. /ŋa/ or /ŋi/. The other type of reduction is unique to the 3pl which allows either *walal(a-)* or *wal(a-)* as

its base forms. They are both optional. Emphatic forms show the same alternations although these are not indicated on Table 24.

5.1.2.1 Initial syllable (*ŋV-) reduction

The /ŋi/ variant is only found in forms where the next syllable nucleus is /i/, an obvious conditioning factor. The deletion is well established with the longer stems, i.e. 1 dl 1+2dl 1pl and 1+2pl, and people readily accept all variants. It is also quite common in the case of longer 1st person forms. However, older speakers reject the 1sg NOM *rra* variant as correct Djambarrpuyŋu. Some people claim it is a characteristic of Milingimbi speakers. I have noted the occasional appearance of *rra* in texts from older speakers, but overall its use must be considered marginal and a feature of continuous speech rather than citation forms.

In light of the /ŋV/ syllable deletion the 1dl NOM form *ŋali* is a notable exception. In section 2.4.6.4 it was suggested that reduction of pronominal forms through final vowel deletion may once have been prohibited in Dhuwal if the result were a monosyllable. However the existence of *rra* in normal speech and a monosyllabic stem in the 2sg, *nhe*, weaken this as an explanation synchronically in Djambarrpuyŋu. There is also a possible functional reason for not reducing this form, and that is that the HABitual morpheme *ŋuli* is frequently reduced to *li*, and both *ŋuli* and *ŋali* are commonly occurring morphemes. The HAB is the only non-pronominal /ŋV/ initial morpheme that allows (optional) initial syllable deletion.

The process of initial syllable deletion appears to be confined to the Dhuwal/Dhuwala/Dha'yi/Ritharrŋu sub-group. Within that sub-group it is further confined to western and southern varieties, having been noted only for Gupapuyŋu, Djambarrpuyŋu and Ritharrŋu. The deletion of the inital syllable is much more extensive in Ritharrŋu than the other two varieties, occurring with both the 1sg NOM and the 1dl NOM. Heath (1978 p176, 1980b p43) attributes the development of reduced Ritharrŋu forms to diffusion from a non-Yolŋu neighbour, Ngandi.

However the *a/i* vowel alternation does not occur in Ritharrŋu. On the basis of current description it appears that the **ŋi-* alternate is confined to Dhuwal/Dhuwala varieties and Djinaŋ (Some data for Dhuwal/Dhuwala is presented in section 5.1.1.1 above). While the western Dhuwal/Dhuwala varieties allow variation in the vowel Gumatj and Djapu (eastern Dhuwala/Dhuwal) only permit *ŋi*

initial elements in the relevant stems. The development of pronominal stems with /i/ throughout appears to have occurred extensively in Djinaŋ, and does not seem to be directly equivalent to what we find in Dhuwal/Dhuwal where the alternation/change is confined to the initial syllable. Affected Djinaŋ roots/stems include 1dl *ŋili-*, 1+2dl *ŋilinyi-*, 1pl *ŋinibi-* and 1+2pl *ŋilimi-*.

5.1.2.2 Reduction of 3rd plural base forms

The other stems that are often reduced in connected speech are the 3rd person plural forms, NOM ***wal/walal***, ACC/DAT ***wala-/walala-*** and OR/OBL/OBLS ***walaŋ-/walalaŋ-***. These seem to be generally accepted although people do not offer them as citation forms.

I have segmented the *walal-* forms as missing the final /al/ but it may be more appropriate to mark the segment as /la/ ie. *wa(la)l*. This is on the basis that the syllable has been deleted by analogy of those NOM and ACC/DAT stems which differ only in the presence of a /la/ syllable in the ACC/DAT. But unlike these others, where the /la/ is absent only in the NOM forms, it is possible to reduce any of the *walal* stems. Below we will see that other varieties have similarly reduced certain of their pronominal stems by loss of a medial *-lV-* syllable (see section 5.5 (ii)). Awareness of this correspondence, given multilectal speakers, may also provide an analogical base for the reduction of the 3rd pl Djambarrpuyŋu forms.

5.1.3 Emphatic pronominal stems

The Emphatic pronominal forms are presented in Table 24, the stem forms in Table 26. The main feature of this paradigm is the similarity between the stems found in the basic pronominal paradigm, suggestive of a derivational relationship. This is discussed more fully in section 5.3. There are a few features of the emphatic stems which distinguish them from the basic pronominals, and these will be outlined here.

The stems presented for the emphatic paradigm are those that precede the EMPHatic pronominal suffixes. In contrast to the basic paradigms this results in a four way distinction for all stems. The ACC DAT distinction, which is confined to the 2sg and 3sg in the basic paradigm, is generalized throughout the emphatic paradigm. This is due to the fact that the stems for these pronouns incorporate ACC and DAT case marking from the basic paradigm.

5.1.3.1 NOM stems

The stems for the emphatic pronouns are essentially identical to the basic paradigm NOM roots. The only differences are due to the presence of a final vowel in those 1pl, 1+2pl and 3pl stems which have undergone final vowel deletion in the basic paradigm. The presence of the EMPHatic suffix means that the vowel is never word final in these forms and thus deletion would not be expected.

5.1.3.2 ACC and DAT stems

Within the emphatic ACC and DAT pronominal stems an element identical to that of ACC/DAT basic pronominal stems is clearly discernible. The 2nd and 3rd person singular stems are in fact common to both paradigms, as is the 1sg stem, *ŋarra-*. Amongst the other stems, namely the non-singulars and the other variant of the 1sg i.e. *ŋarra-nha-*, an additional element is present. This is clearly identifiable as a non-word final variant of pronominal case suffixes, ACC-*nha-* and DAT-*ŋgu-/-ku*. It would seem that Emphatic pronominal stems must minimally convey information about person, number AND case. The suppletive 2nd and 3rd singular forms are interpreted as doing this while the non-singulars require the presence of the case marker on the common ACC/DAT stem. The emphatic paradigm does not require any further distinctions within the stem for the peripheral case markers i.e. the OR/OBL/OBLS. Thus the cases that are distinguished at stem level are NOM, ACC, DAT and the OR/OBL/OBLS.

5.1.3.3 OR/OBL/OBLS stems

These are identical to the basic pronoun stems. They share a common base with the ACC and DAT stems and require the *-ŋ-* augment.

5.2 Pronominal case suffixes

Suffixes which, if they are not identical, show some correlation with equivalent nominal suffixes are identifiable for all the cases suffixes attached to pronominal stems i.e. ACC, DAT, OR, OBL and the OBLS. S and A function are coded with the bare stem. The case suffixes are common to basic and emphatic pronominals.

5.2.1 ACC suffix *-Nha*

This occurs as *-nha-* after consonants and after a vowel when it is not word final. In basic pronominals this allomorph appears before the discourse suffixes as in *ŋarra+nha+ny* " 1sg+ACC+PROM". It also occurs in emphatic pronominal stems where the ACC suffix precedes the EMPHatic suffix as in *ŋarranha+wuy+nha* "1sg+EMPH+ ACC". The ACC suffix has the allomorph *-ny* after a vowel word finally. This allomorphy is identical to that of the ACC on nomens. There are some forms peculiar to the pronominal paradigm however. In the EMPH ACC forms the variant *-nya* is found after the EMPH suffix *-pi*. This is also analysable in the 3sg ACC basic pronoun *ŋanya*. In the 2sg ACC *nhuna* the form *-na* is analysable but there is no evidence of its occurrence anywhere else, although interestingly the Yirrkala koine Dhuwaya has generalized *-na* as the pronominal ACC marker (see Amery 1985).

An ACC form *-Nha* or *-Nya* is widespread in Australian languages (Dixon 1980 p338) (*-nha* occurs in double laminal languages and *-nya* in single laminal languages). Across Yolŋu Varieties *-Nha* predominates, with *-ny* a regular variant after vowels word finally. The regular ACC marker in Dhaŋu and Dha'yi pronominals is *-ny*. The *-nya* also occurs in cognate forms for the 3sg in other Dhuwal/Dhuwala varieties, in Ritharrŋu as well as in the more distantly related Nhaŋu and Djinaŋ/Djinba. Its age is supported by its occurrence in varieties of distinct language groups. It is possible that the *-nya* forms are the final remnants of a time when there was no laminal distinction. It is currently confined to an irregular 3sg basic pronoun and the singular forms of the EMPH ACC pronouns. Its occurrence after the *-pi* EMPH suffix suggests it may have been conditioned by a preceding high front vowel.

The fact that it is possible to attempt an analysis of the 2sg and 3sg forms as stem+affix, as well as the fact that they do not correspond exactly to the rest of the paradigm, is reflected in the different basic pronominal stems that are found when these occur with the discourse suffixes. In the most widely occurring variant in my corpus the "irregularity" of these forms is what is responded to, and the whole ACC pronoun is considered as the stem, just as is the case for the emphatic pronouns. Thus we find forms such as *nhuna+nha+ny* 2sg ACC+PROM and *ŋanya+nha+n* 3sg ACC +SEQ. The 2sg shows some variation in the way in which the discourse suffixes are attached. The forms *nhuna+ny* 2sg +PROM and *nhu+nha+ny* 2sg+PROM have also been noted. The latter indicates that speakers have in fact analysed the form as suggested, and have attached a regular ACC marker in line with current productive allomorphy. It should be noted that the 2sg stem *nhV-* is recognizable throughout the paradigm, while the 3sg *ŋa-* initial stem is confined to the NOM and ACC forms.

This might provide more support for reanalysing the 2sg therefore, than reanalysing the 3sg.

5.2.2 OBL, OBLS and OR suffixes

OBL	*/-kal/*
OBLS	*/-kalaŋa/u-/*
OR	*/-kuŋ(u-)/*

These three suffixes are clearly cognate with nomen suffixes. The only difference is that the pronominal suffixes do not show the same range of allomorphs as their nomen counterparts. While the expected fortis stop occurs after nasals, only the long variants occur after vowels. This is distinct from the lenited *wal/-walaŋu/a-wuŋ(u-)* allomorphs found after vowels on nomen stems.

At variance with this is the fact that after the OBLique Stem on pronominals lenited allomorphs of suffixes predominate. In fact, except for one instance of a PERL *-kurr* only lenited forms have been recorded. Thus *-w(u-), -wuy, -wal, -wuŋ(u-)* for the DAT, ASS, OBL and OR respectively, and usually *-wurr(u-)* for the PERL. The suffixes found after the OBLS are otherwise identical to those on nomens. In section 2.4.4.2 the suggestion was made that length of the stem (/distance from the initial stressed syllable) was a factor affecting the occurrence of lenited allomorphs. These pronominal stems are clearly supporting evidence.

The alternation in the final vowel of the OBLS stem is considered in section 4.2.3.12.

5.2.3 DAT suffix *-ku/-ŋ(gu-)/-ŋgu*

-ku is restricted to the 1st person singular stem *ŋarra-*, although it is the most like the noun/adjective DAT suffix *-Ku* (*-gu/-ku/-wu/-w*). Note that again the lenited form expected on vowel final noun/adjective stems does not occur with pronominals.

-ŋgu is restricted to the 2nd and 3rd singular. Elsewhere *-ŋ* occurs if it is word final and *-ŋgu-* if it is not. The velar nasal is unique to the DAT suffix on pronominals and plural demonstratives.

5.2.4 The Locative suffix *-ŋumi* (LOC_2) with pronominals

There is one instance of the *-ŋumi* LOC_2 suffix occurring with a pronominal stem. It occurs with *maŋda* the 3dl stem. In the example in which it occurs (number 59 below) it is in dual number marking function and the case form can be attributed to case concord with a "non-human" head. The full potential for this suffix to occur with pronominal stems has yet to be determined, but as I indicate in section 5.7.1.1 I expect it to be confined to the non-singular number marking function of pronominals.

5.3 Relationship of the basic and emphatic pronouns

The relevant tables for discussion in this section are Tables 23 (for basic pronouns), 24 (for emphatic pronouns), 25 (for basic pronouns stems) and 26 (for emphatic pronoun stems).

We have already seen that the emphatic pronouns involve stems that are directly relatable to the basic pronoun stems (section 5.1.3). There are two closely related strategies by which the emphatic pronouns can be seen as derived from the basic pronouns. One strategy simply adds an EMPHatic suffix to the basic pronominal form. Thus a fully inflected freely occurring pronominal is made the stem for its emphatic counterpart. This accounts for most of the non-peripheral forms. The second strategy adds an EMPH suffix and a further case marker to a basic pronominal stem. This is thus distinct from the first strategy on two counts, in the occurrence of the final case marker and the use of a basic pronoun stem rather than a freely occurring form. This accounts for the peripheral case forms as well as many ACC forms. One result of these strategies is that all emphatic pronominal stems carry some information about person, number and case.

In fact in the majority of ACC forms there appears to be "double" case marking with the ACC suffix *-Nha*, once in the stem and again following the EMPH suffix. The additional case marking for the OR/OBL/OBLS is to be expected given that the stem is underspecified for these three cases, but the apparent "double" case marking on the ACC forms seems odd.

A similar kind of relationship between closed class paradigms will also be seen in the derived plural forms. Both involve interpreting the basic paradigm at a fairly surface level - thus keeping distinct stems for different case forms which involves recognizing regularities within particular parts of the paradigm rather than a more

abstract approach to the paradigm as a whole. The derived plural forms also involve additional examples of "double" case marking (see section 6.3.1).

There are three distinct suffix-forms used to mark a pronominal as emphatic, namely *-pi*, *-wuy* or *-Kiyin-*. These vary largely according to the case of the pronominal, although there is some overlap of the first two forms with a suggestion of morpho-phonological conditioning. They will be discussed in more detail in the following section.

The case suffixes are identical to those found on basic pronominals: ACC-*nha* after consonants and non-word finally, ACC *-nya* after /i/; DAT *-ku-* on 1sg, *-ŋu-* on 2sg and 3sg and *-ŋgu-* elsewhere; OR *-Kuŋ(u-)*; OBL *-Kal* and OBLS *-Kalaŋa/u-*. The latter four forms are only found with a single allomorph, the DAT *-ŋgu-* because it is non-word final in all EMPH stems and the OR/OBL/OBLS with an initial lenis stop because it always occurs after a nasal.

There is evidence that emphatic pronominals occur in the Yolŋu sub-groups - Dhuwal/Dhuwala/Dha'yi and Ritharrŋu and Dhaŋu. Although some comparisons are possible and will be considered in the following discussion, there is not enough information available to permit a full comparison of either forms or functions. The very fact that these occur in different sub-groups would suggest they are a long established feature of the Yolŋu language group.

5.3.1 EMPHatic pronominal suffixes

EMPH	*-wuy-/-pi*	on NOM and ACC stems
	-wuy	on DAT stems
	-Kiyin-	on OR, OBL, and OBLS stems

The two alternants *-wuy* and *-pi* have cognates in other varieties but *-Kiyin-* appears to be confined to Dhuwal/Dhuwala. Dhaŋu also has *-pi* but the cognate morpheme for *-wuy* is *-Pay*, with *-bay* occurring after nasals and *-way* after vowels.

The *-pi* alternant would appear to be old since it occurs on a similar set of stems in more distantly related Yolŋu varieties such as Dhaŋu, as well as in other Dhuwal/Dhuwala varieties. It is found on NOM forms for the 1sg, 1+2dl, 2sg, and 2dl as well as on 1sg, 2sg and 3sg EMPH pronouns in all these varieties. It should be noted however, that in Ritharrŋu it is the only form of the Emphatic suffix that occurs.

The variation between *-wuy* and *-pi* on the NOM and ACC stems is puzzling. Given the wide ranging alternation of stops and semivowels in Djambarrpuyŋu affixes these alternations are suggestive of an earlier suffix *-Pu(y), in which the *-puy* realization became *-pi*. This has a contemporary correlate in the ASS nominal suffix *-Puy-*. However, there is no obvious syntactic/semantic link between the two forms, despite the identity of the *-wuy* alternant with the ASS allomorph *-wuy*. There is also no synchronic evidence in Djambarrpuyŋu of *pi* being a reduction of *-puy*. Unlike other suffixes, such as the ERG, there is no evidence that they are phonologically conditioned variants as both *-wuy* and *-pi* occur after vowels.

Some interesting comparative data occurs in the Dhaŋu forms where the alternants *-pi* and *-Pay* correlate with the *-pi* and *-wuy* found in Dhuwal/Dhuwala (the main allomorph of the latter form is *-way*, since most stems are vowel final, *-Pay* occurs only on the 3sg where there is a final nasal i.e. *nhanbay*). This is counter-evidence to a link with the ASS since Dhaŋu has no other suffix of this shape, its ASS being identical to that in Djambarrpuyŋu. Nhaŋu has a PROP suffix, *-way*, but I have not seen any data for emphatic pronouns in these varieties. The only relevant factor that I can suggest may be involved is that all the suffixes with which there is some phonological overlap are adnominal suffixes. A Dhaŋu form for the 1+2dl *ŋali-Pi-Pay*, while unique to the paradigm in allowing a sequence of both EMPH affix forms suggests the two suffix forms, may have unique sources rather than a common one. The Dhaŋu cognates do suggest a labial stop as a source for the initial semivowel.

The dictionary entry in Zorc (1986) for these suffixes indicates that number is the conditioning factor for the *-pi/-wuy* alternation, with *-pi* found on sg/dl and *-wuy* on pl stems. This looks to be supported by the forms listed above as occurring with *-pi* across varieties. However, my observations, supported by Morphy's claims for Djapu (1983 p54), are that the length of the stem appears the more relevant factor.

The *-pi* form is basically restricted to stems in the NOM and ACC of two syllables or less, while *-wuy* occurs with longer stems. Evidence against it being a number distinction is the fact that only *-wuy* is ever found on the longer stems of the 1st person dl forms or the 2dl/pl forms in the ACC paradigm, while *-pi* does occur on their two syllable stemmed NOM counterparts e.g. 2dl(/pl) *nhumapi* vs *nhumalanhawuynha*. Furthermore, the Dhaŋu NOM plural form for the 1+2 person has *-pi* (*ŋalmapi*).

In western Dhuwal/Dhuwala the data indicates that this is not a strong synchronic constraint. Both varieties have NOM forms that break this constraint - the 1dl *ŋalinyupi* being a case in point. Other varieties have cognates with *-wuy /-Pay* however. It is thus possible that the *-pi* form here is a result of the potential of the 2dl to have a disyllabic stem through initial syllable deletion, something particular to these varieties. Note that other forms that lose their initial syllables but which do not result in disyllabic stems do not regularly occur with with *-pi*. This is then evidence that the constraint still holds, although its acceptability with the longer 2dl stem in both Djambarrpuyŋu and Gupapuyŋu has weakened it.

It will have been noted that the EMPH paradigm in table 24 has several starred forms. Those with two stars only occurred as directly elicited forms from younger speakers. These permit the unexpected optional use of *-pi* with the trisyllabic or longer stems of the 1pl, 1+2pl and the 3pl forms i.e. *limurru-pi, napurru-pi* and *walala -pi* and of *-wuy* with the disyllabic stems of the 3dl and 1dl i.e. *maŋda-wuy* and *linyuwuy*. However only *-pi* was ever allowed with the 1sg, 1dl, 2sg, 2dl/pl or 3sg i.e. *ŋarrapi, ŋalipi, nhepi, nhumapi* and *ŋayipi*. These latter forms are consistent with the textual data and with cognates in other varieties. The only textual evidence of the "alternative" forms is for the 1dl *linyuwuy*, and it is from an older speaker. This is not so surprising in light of the fact that comparative evidence suggests this is the older form. However on a similar basis the other alternative forms would all appear to be innovations, and suggest that a move to regularize the EMPH marker for NOM forms may be taking place. It is also possible that this variation may be a feature of younger people's speech, and older speakers may evaluate certain forms as "correct" Djambarrpuyŋu.

Across varieties there is also general support within NOM forms for the association of *-pi* with disyllabic or monosyllabic stems, and of *-wuy/-Pay* with longer stems. The Djapu description states that this is categorical, which is in contrast to the variations we have just mentioned for Djambarrpuyŋu and Gupapuyŋu. This is potentially another area of difference between western and eastern Dhuwal/Dhuwala varieties.

The only exceptions to the rule in the Dhaŋu data are the 3sg monosyllabic stem *nhan-* which occurs with *-Pay* in both varieties, and the presence of the *-Pay* suffix with the 2pl form ii.e. *nyeliway*. Otherwise all monosyllabic and disyllabic stems have *-pi*, and longer stems have *-wuy* or *-Pay*. In fact an interesting correlation is found in the 1+2pl forms where Dhuwal/Dhuwala varieties have a

three or four syllable stem and the expected *-wuy* suffix, while the Dhaŋu cognate pronoun has a disyllabic stem and the *-pi* suffix, thus *(ŋa/i)limurruwuy* (Dhuwal/Dhuwala) vs *ŋalmapi* (Dhaŋu).

The fact that the *-pi* is confined to singular ACC forms also correlates with the distribution of disyllabic stems. This holds across varieties for which there is information, namely Djambarrpuyŋu, Gupapuyŋu, Djapu and Nhaŋu. There are two exceptions in Dhaŋu where two disyllabic stems occur without *-pi*, the 1+2dl *ŋali-* and the 2pl *nyeli-*. There is evidence that both these stems may have been reduced from longer stems. The short stem for the 1+2dl is at variance with the longer ACC stem found in other varieties, which involve an extra syllable, *-lV-* or *-tjV-*, or even both e.g. Djambarrpuyŋu *(ŋa/i)litjala-*. It has been proposed that 2pl form is derived from an earlier **nhurruli* (Waters 1989, Zorc 1986). One might therefore speculate that these are both reduced forms whose earlier association with the longer EMPH stem is maintained in the current paradigm. An alternative explanation is suggested by the fact that the ACC EMPH forms have undergone a process of regularization. A single final element *-NHa=y* [-nyay] is common to *all* the ACC EMPH forms, including the singulars. It is unique to the ACC forms however, with *-pi* and *-Pay* occurring in the NOM and DAT forms. (Presumbly the form is a reduction of the ACC suffix *-Nha-* and the EMPH suffix *-Pay* **-Nhaway* > *-Nhay* as suggested by Schebeck (1976 p545)). If this became the accepted strategy for deriving the ACC EMPH pronominals before these two stems became disyllabic, it would explain the absence of *-pi*.

So far the only evidence for the peripheral EMPH affix *-Kiyin-* is from Dhuwal/Dhuwala varieties, and it may be unique to them. However, Dhaŋu is the only other sub-group for which there is a description of peripheral case forms. Future work on other varieties will be helpful, and will hopefully offer some insight into the development of this particular paradigm within the Yolŋu Matha group.

5.4 Emphatic/basic pronoun paradigm correspondences across Yolŋu varieties

Emphatic pronominals are attested for other Dhuwal/Dhuwala varieties i.e. Gupapuyŋu and Djapu, as well as for the less closely related Ritharrŋu and the more distant Dhaŋu varieties. A description of the complete paradigm is available for Gupapuyŋu, Djapu, Ritharrŋu and Dhaŋu, but a full listing of actual forms is only available for Gupapuyŋu. However on available evidence they would all appear to involve essentially the same relations to the basic paradigms as found in

Djambarrpuyŋu. In Ritharrŋu however, only Strategy One appears to apply, in which the EMPH suffix follows the (inflected) basic pronoun which is taken as the stem of the emphatic pronoun. In all other varieties Strategy One applies only to NOM DAT/GEN and ACC forms. Strategy Two in which a basic pronominal stem is suffixed with an EMPH and then is inflected for case, applies for peripheral cases. The Gupapuyŋu and Djambarrpuyŋu paradigms apply the strategies identically but in Djapu and Dhaŋu there is some variation. In Dhaŋu there is no special peripheral EMPH suffix. Strategy Two however, still applies, in that a stem common to the basic paradigm is suffixed by an EMPH suffix followed by a peripheral case marker. The peripheral stem is in fact the GEN/DAT emphatic pronoun (this is the basic GEN/DAT pronoun plus an EMPH suffix), and regular case suffixes are attached directly to that, e.g. 1sg EMPH OR *nyaku-way-wuŋ*. More interesting is the variation in the ACC forms. In Dhaŋu there is no additional case marker in the non-singular forms and thus no "double" case marking as occurs in Djambarrpuyŋu/ Gupapuyŋu. Strategy One predominates, in which the basic ACC pronoun is suffixed with an EMPH suffix e.g. 1dl ACC EMPH *ŋali-Nhay* (*ŋalinyay*). In Djapu non-singular ACC forms are described as being based on the basic pronominal stem, rather than on the full pronoun as in Djambarrpuyŋu/Gupapuyŋu and the ACC suffix is attached after the EMPH suffix. e.g.

	Djapu	Djambarrpuyŋu/Gupapuyŋu
1dl EMPH ACC	ŋinyala+wuy+nha	(ŋa)linyala+nha+wuy+nha

Strategy Two thus applies to the non-singular ACC forms rather than Strategy One, and again there is no apparent "double" case marking although the strategy that has applied is the opposite to that in Dhaŋu.

Singular ACC forms with *-pi* are common to all varieties and show somewhat different patterns to the non-singular forms. Alternative forms exist for some if not all of these forms in Djapu, Gupapuyŋu and Djambarrpuyŋu. The Dhaŋu forms have all been suffixed with *-Nha-y* to conform with other ACC EMPH pronouns. Available information is presented in Table 28 below.

Table 28: Accusative Emphatic Pronominals in four Yolŋu varieties

	Djambarrpuyŋu western Dhuwal	Gupapuyŋu western Dhuwala	Djapu eastern Dhuwal	Dhaŋu
1sg	ŋarrapinya ŋarranhawuynha	ŋarrapinya ŋarranhawuynha	(ŋarrapinya)	nhaaNHa-Pi-NHay
2sg	nhunapinya	nhunapinya nhunapinyawuy	(nhunapinya)	nhunNHa-Pi-Nhay
3sg	ŋanyapinya	ŋanyapinya ŋanyapinyawuy	ŋanyapinya ŋanyapinyawuy	nhanNha-Pi-Nhay

Sources: Gupapuyŋu (Lowe n.d.a L75-78); Djapu (Morphy 1983 p54); Dhaŋu (Schebeck 1976b p517).

All the 2sg and 3sg forms have apparent "double" case marking, since the base is unique to the ACC and possible segmentation into root+ACC suffix is not totally opaque (see section 5.1.1.2). However only the western Dhuwal/Dhuwala varieties (Djambarrpuyŋu and Gupapuyŋu) have the same pattern for their non-singular forms.

In Dhaŋu and certain alternative Dhuwal/Dhuwala forms there is also "double" EMPH marking on singular pronouns. In Dhaŋu this results from the generalization of *-NHa-y* for all ACC forms. The Dhuwal/Dhuwala variants can also be explained by analogical levelling.

Gupapuyŋu and Djambarrpuyŋu share an alternative 1sg form *ŋarranhawuynha*, which is presumably derived by analogy from the non-singular forms and generalizes the strategy of taking the ACC pronoun as the stem and adding an EMPH suffix and the ACC case marker to all ACC forms.

The other Dhuwal/Dhuwala alternative forms are the Gupapuyŋu 2sg and 3sg forms, i.e. *nhunapinyawuy* and *ŋanyapinyawuy*. An identical 3sg alternative is also listed for Djapu but no such forms have been noted for Djambarrpuyŋu. The complete set of singular alternatives for Gupapuyŋu indicates an attempt to make *-wuy* a uniform EMPH marker in the ACC forms. There has been no attempt to analyze the 2sg and 3sg forms however, with the result that these alternatives have both "double" case marking and "double" EMPH marking. Thus "double" EMPH marking here and in Dhaŋu results from moves to generalize the EMPH marking in the ACC forms. Note that the levelling occurs only within the ACC part of the paradigm reflecting what appears to be a general tendency to localize such processes rather than apply them to the paradigm as a whole. Distinct strategies, distinct EMPH markers and distinct stems all serve to maintain the key case distinctions within the paradigm.

The variety with the most uniformity across the paradigm is that reported for Ritharrŋu (Heath1980b p48), which by adopting a single strategy for the whole paradigm, as well as a single Emphatic suffix, avoids any of the "double" marking found in the emphatic pronoun paradigms of other varieties.

The alternative forms in the Djambarrpuyŋu NOM EMPH pronouns and the Gupapuyŋu and Djapu ACC pronouns and the different strategies invoked for the non-singular ACC forms in Djapu and the western Dhuwal/Dhuwala varieties all indicate independent moves to change the ACC and NOM forms. As we have seen, these are the least regular parts of the paradigm, and all the changes can be seen as attempts to regularize them, presumably by analogy from within the paradigm, although analogy with forms from other varieties may also be a factor.

5.5 Djambarrpuyŋu basic pronominals compared to those in other Yolŋu varieties

The comments here will focus on the distinctions within the sub-group including the Dhuwal/Dhuwala/Dha'yi and Ritharrŋu varieties, although a few comments will be made concerning the relation between these and other varieties where there are general distinctions between this subgroup and the others (i.e. Dhaŋu, Nhaŋu, Djinaŋ and Djinba). For comparative comments regarding emphatic pronouns refer to the preceding section 5.4.

The person number distinctions found in Djambarrpuyŋu are identical to those found in other Dhuwal/Dhuwala varieties (Gupapuyŋu, Gumatj, Djapu, Liyagawumirr, Guyamirrilil) and Dha'yi (Dhalwaŋu). However, they are distinct from all other varieties - Dhaŋu (Ŋaymil, Gälpu, Wangurri), Ritharrŋu and Nhaŋu in not having distinct forms for the 2nd person dual and plural. Otherwise the person number distinctions are identical for all Yolŋu Matha varieties.

Most Yolŋu pronominal stem forms have cognates between at least two sub-group(s) if they are not shared by all varieties. There are just a few stems that are distinctive for particular sub-groups, e.g. the 3dl stems *dhupal/dhupali-* are restricted to Dhaŋu, and 3dl *maŋŋa(-)* is restricted to Dhuwal/Dhuwala/Dha'yi and Ritharrŋu. Only very occasionally are there forms that can be said to be distinct for a particular clan. Thus 3pl *wurru* is confined to Dha'yi, today represented only by the Dhalwaŋu clan. The vowel deletion and initial syllable reduction processes have produced forms that are shared by smaller numbers of Dhuwal/Dhuwala varieties. The 1+2pl *limurr*, for example, only occurs in western Dhuwal varieties such as Djambarrpuyŋu and Liyagawumirr.

Pronominal paradigms are generally held in common between varieties of particular sub-groups. However, as we will see below while the stems of the Dhuwal/Dhuwala/Dha'yi are all nearly identical there are also clear distinctions between the pronouns of eastern Dhuwal, eastern Dhuwala, Dha'yi, western Dhuwal and western Dhuwala.

All varieties have varying stems depending on the case with which they occur. All have NOM stems distinct from non-NOM stems and in many non-NOM stems the difference involves an extra syllable. A final syllable *-lV-* is widely occurring. There are also always singular forms with suppletive stems, often showing a greater number of stem distinctions than the non-singular stems. These are all features that have been discussed for the Djambarrpuyŋu pronominals. I will now quickly overview the number of stem distinctions for other Yolŋu varieties.

1. Nhaŋu has only two basic stem distinctions, one for NOM and one for non-NOM, although the 3sg has distinct stems for NOM, ACC and "Others", and the 2sg has distinct stems for NOM/ACC and Oblique.
2. Djinaŋ regularly has four stem distinctions i.e. for NOM, ACC, DAT, GEN/OBL. The occurrence or not of stem final vowels and variation in their quality produce stems quite different to those we have seen in Djambarrpuyŋu. e.g. 1+2dl NOM *ŋili*, ACC *ŋilitj-*, DAT *ŋilitji-* and GEN/OBL *ŋilitja-* (see Waters 1989 p33).
3. Dhuwal/Dhuwala/Dha'yi and Ritharrŋu all share a three way distinction. In Dhuwal/Dha'yi and Ritharrŋu this is between NOM, ACC/DAT and "Others" for non-singulars with an additional distinction between ACC and DAT stems of the 2sg and 3sg, just as we have seen for Djambarrpuyŋu. In Dhuwala the three way stem distinction for non-singulars is between NOM, ACC and "Others", for reasons we will consider more fully below. A final *-lV-* syllable occurs in many non-NOM stems in all these varieties, while the option of a final *-rru-* is confined to Dhuwal/Dhuwala/Dha'yi. The *-ŋ-* augment is found in all varieties as a marker of Oblique stems.
4. Dhaŋu also has a three stem distinction between NOM, ACC and "Others". The DAT stem here is shared with peripheral stems rather than with the ACC as in the southern sub-group. The non-singular ACC and Other stems are all distinguished by a final *ŋ-*, parallel to the ACC/DAT and "Other" stems of Dhuwal/Dhuwala/Dha'yi. In the Dhaŋu subgroup the velar nasal and the suffix *-gu* of DAT pronouns can be distinguished as stem and suffix. In Dhuwal/Dhuwala/Dha'yi and Ritharrŋu sub-group this is only possible for Dhuwala forms. In all the others the velar nasal

either is (part of) the DAT marker, or is a word final allomorph. Some examples are given in the following table:

Table 29: Comparison of some DAT pronominals across Yolŋu varieties

	Dhuwal	Dhuwala	Dha'yi	Ritharrŋu	Dhaŋu
1sg	Djamb: ŋarra+ku Djapu:ŋarra+k(u)	ŋarra+ku	ŋarra+k	(ŋa)rra+ku	nyä+ku
2sg	nhu=ŋu	nhu=ŋu	nhu+ŋu	nhu+ŋu	nhuŋ+gu
3sg	nhan=ŋu	nhan=ŋu	nhan+ŋu	nhan+ŋu	nhan+gu
2dl	nhumala+ŋ(gu-)	nhumalaŋ+gu	nhumala+ŋ	nhumaḍa+ŋu	nhumaliŋ+gu
3pl	walala+ŋ(gu-)	walalaŋ+gu	wurru+ŋ	dhali+ŋu	dhanaliŋ+gu

Sources: Dhuwal - Djambarrpuyŋu (own notes) and Djapu (Morphy 1983); Dhuwala - Gupapuyŋu (Lowe n.d.a.) and Gumatj (Ross n.d.); Dha'yi (own notes); Ritharrŋu (Heath 1980b) and Dhaŋu (Schebeck 1976b, Wood n.d. and own notes)

The other DAT non-singular forms all show the similar correspondences to those for the 2dl and 3p.

In essence the last two sub-groups (Dhaŋu and the Dhuwal/Dhuwala group) have two sets of pronominal bases NOM and non-NOM, with the -ŋ- augment distinguishing peripheral and ACC stems. The interpretation of the DAT suffix determines whether the DAT stems are identified with those of the ACC or the peripheral cases.

NOM, ACC and DAT suffixes occur in all varieties. The strategy for marking peripheral stems does appear to draw a major distinction between Dhuwal/Dhuwala/Dha'yi and other varieties in requiring the OBLS before certain peripheral suffixes. In Dhaŋu and Nhaŋu the majority of peripheral case suffixes are attached directly to the oblique stems, and this is also the situation reported for Ritharrŋu (Heath 1980b p46).

Finally it should be noted that Ritharrŋu through diffusion from neighbouring prefixing Ngandi has developed enclitic pronouns, attached to the first constituent in the clause, and which mark subject and object. The forms with the initial syllable deleted are associated with the enclitics (see Heath 1978p126,1980b p43).

Having generally established the place of Dhuwal/Dhuwala/Dha'yi and Ritharrŋu pronoun paradigms in relationship to less closely related varieties, we will now consider the relationship between Dhuwal/Dhuwala/Dha'yi and Ritharrŋu pronouns in more detail. The relationship is complex with various distinguishing parameters cross cutting different varieties. These parameters include the number of stem

distinctions, different strategies for suffixation for peripheral cases, the existence of quite distinct stems and suffixes, variation in the quality of the vowel in initial *gV-* syllables, the effect on stems of syllable deletion and the effect on stems and suffixes of final vowel deletion.

The NOM and non-NOM pronominal base forms which contrast across these varieties are given in the following table:

Table 30: Comparison of pronominal stems in the Southern Yolŋu sub-group

	western			eastern		southern
	Dhuwal Djambarrpuyŋu	Dhuwala Gupapuyŋu	Dha'yi Dhalwaŋu	Dhuwal Djapu	Dhuwala Gumatj	Ritharrŋu
1sg	(ŋa)rra	(ŋa)rra	ŋarra	ŋarra	ŋarra	(ŋa)rra
3sg	ŋayi	ŋayi	ŋayi	ŋayi	ŋayi	ŋay/ŋa
2dl NOM	nhuma	nhuma	nhuma	nhuma	nhuma	nhumada
2dl non-NOM	nhumala-	nhumala-	nhumala-	nhumala-	nhumala-	nhumada-
1+2dl NOM	ŋali	ŋali	ŋali	ŋali	ŋali	(ŋa)li
1+2dl non-NOM	(ŋa/i)litjala-	(ŋa/i)litjala-	ŋatjala-	ŋitjala-	ŋitjala-	(ŋa)litji- /ŋalitji-
1dl NOM	(ŋa/i)linyu	(ŋa/i)linyu	ŋalinyu	ŋiliny(u-)	ŋilinyu	(ŋa)linyu
1dl non-NOM	(ŋa/i)linyala-	(ŋa/i)linyala-	ŋanyala-	ŋinyala-	ŋinyala-	(ŋa)linyala /ŋalinyala-
1pl NOM	(ŋa)napurr	(ŋa)napurru	ŋanapurr	ŋanapurr	ŋanapurru	(ŋa)napu
1pl non-NOM	(ŋa)napurru-	(ŋa)napurru-	ŋanapurru-	ŋanapurru-	ŋanapurru-	(ŋa)napulu- /ŋanapulu-
1+2pl NOM	(ŋa/i)limurr	(ŋa/i)limurru	ŋalimurr	ŋilimurr	ŋilimurru	(ŋa)lima
1+2pl non-NOM	(ŋa/i)limurru-	(ŋa/i)limurru	ŋalimurru-	ŋilimurru-	ŋilimurru-	(ŋa)limala- /ŋalimala-
3pl NOM	walal	walala	wurru	walal	walala	dhali
3pl non-NOM	walala-	walala-	wurru-	walala-	walala-	dhali-

The alternations following the slash i.e / in Ritharrŋu are the "Oblique" stems while those preceding it are the GEN/DAT stems

Sources: Gupapuyŋu (Lose n.d.); Djapu (Morphy 1983); Gumatj (Ross n.d.) and Ritharrŋu (Heath 1980b).

All varieties share the following stems:

2sg NOM *nhe*, ACC *nhuna*, DAT *nhuŋu* and oblique stem *nho-*
3sg ACC *ŋanya* (except Ritharrŋu *(ŋi)nya*) DAT *nhaŋu*
and oblique stem *nhanu-*)
2dl NOM *maŋda* and non-NOM *maŋda-*
2pl NOM *nhuma* and non-NOM *nhumala-* (Note that only Ritharrŋu has a distinction between 2dl and 2pl)

The suffixes in the various pronominal paradigms compare as follows:

1.The NOM pronoun is the bare NOM stem in all varieties.

2. The ACC forms all derive from *-Nha* ; the 2sg and 3sg irregular forms are common to all varieties. In Gumatj/Gupapuyŋu (Dhuwala) and Ritharrŋu there is a single allomorph *-nha*. Dhuwal varieties have alternants *-n* in Djapu and *-ny* in Djambarrpuyŋu following vowels when these are word final. Only *-ny* is recorded for Dha'yi but all stems are vowel final.

3. The DAT forms are somewhat more varied although the Djambarrpuyŋu variants *-ku/ŋu/ŋ(gu-*) basically incorporate the full range.

All varieties have *-k(u)* in the 1sg, with Djapu allowing the optional deletion of the final vowel. It is totally absent in Dha'yi however. *-ŋu* occurs on the irregular 2sg and 3sg stems of all varieties. It is also the form of the DAT on all other stems in Ritharrŋu, which has no DAT allomorphs with the velar stop. *-ŋ* and *-ŋgu-* are the word final and non-word final allomorphs of Djapu and Djambarrpuyŋu (Dhuwal). The other Gumatj/Gupapuyŋu DAT marker is *-gu*, with the velar nasal analyzable as part of the stem as described above (see Table 29 for examples).

We are now in a position to consider the differences in the pronominal paradigms across these varieties. Seven parameters according to which variation occurs can be identified. These will be reviewed in turn.

i) The effects of vowel deletion

The pronominal stems for Djambarrpuyŋu and Gupapuyŋu are identical, except for the absence of a final vowel in the NOM stem of certain Djambarrpuyŋu forms

(1pl,1+2pl and 3pl). The Djapu and Gumatj pronominal stems are similarly identical except for the absence of a final vowel in the Djapu 1pl, 1+2pl, 3pl and its optional deletion in the 1dl. This thus marks the Dhuwal/Dhuwala distinction. Note however, that Dha'yi has also deleted the final vowel from equivalent NOM forms so that final vowel deletion cannot be said to be unique to Dhuwal.
The ACC and DAT suffixes are also affected in both Dhuwal varieties and Dha'yi by total omission, or conditioned deletion of final vowels (or final syllables where this might result in impermissible final clusters). This is also true of the OBL and OR in Dhuwal. The situation for Dha'yi is not known.

There is some variation between Djapu, Djambarrpuyŋu and Dha'yi as to which forms are affected by vowel deletion, e.g. 1sg DAT *ŋarrak(u-)*, *ŋarraku* and *ŋarrak* respectively.

ii) The effects of syllable reduction

The initial syllable (*ŋV-) reduction has been described in section 5.1.2.1. It is optional and confined to western Dhuwal/Dhuwala and Ritharrŋu. In Ritharrŋu the reduction is associated with the development of enclitic pronouns based on certain free form pronominals. The enclitic function is confined to NOM, ACC and GEN/DAT cases. However it is not found with oblique cases and these stems do not delete the initial syllable. This contrasts with Dhuwal/Dhuwala where deletion is found with all stems except the two disyllabic NOM stems (*ŋarra* 1sg and *ŋali* 1+2dl).

Other patterns of syllable reduction become evident when considering comparative data for the 1dl and 1+2dl pronouns from different varieties. In the table above it will be seen that the maximal 1dl and 1+2dl stems are *ŋalinyVlV-* and *ŋVlitjalV-*. However, the first, second and final syllable are all affected by syllable deletion in one or more of the varieties we are considering. Deletion of the first syllable is by the optional initial syllable deletion rule just discussed. The second syllable *-li-* is absent in the stems for Gumatj, Djapu and Dha'yi. The third syllable is absent only in one variety, Ritharrŋu, and then only in the 1+2dl stems. (It is also absent in Nhaŋu and Djinaŋ cognate stems).

iii) The different quality of the vowel in initial **ŋV-* syllables

This has been discussed in section 5.1.2.1. The vowel /i/ in this syllable is confined to Dhuwal/Dhuwala. It is obligatory in eastern varieties and optional in western varieties. Dha'yi and Ritharrŋu only permit /a/ in cognate stems and /a/ is also an option in western Dhuwal/Dhuwala. In western Dhuwal/Dhuwala it would appear to be the result of assimilation to a following high vowel /i/in the next syllable, although this is not synchronically evident in certain eastern Dhuwal/Dhuwala stems, namely 1dl and 1+2dl non-NOM stems. These stems have lost a *-li-* syllable evident in other varieties. We can still maintain that the following vowel was the conditioning factor for the /i/ in the inital syllable of the current stems, if we assume that the assimilation took place before the earlier *-li-* syllable was deleted. The assimilation appears to have been confined to trisyllabic or longers stems since it did/does not occur in the 1+2dl NOM *ŋali*.

The occurrence of an /i/ in the 3sg Ritharrŋu ACC *(ŋi)nya* must be classed as an independent development on the grounds that all cognates have /a/ and there is no following high vowel. In fact it appears to be a case of assimilation in height conditioned by the following palatal consonant. In fact in the pronominal paradigms of Ritharrŋu all the pronominal stems with a palatal consonant i.e. 1dl, 1+2dl and the 3sg ACC are preceded by /i/. Except for the 3sg this is also true of Dhuwal/Dhuwala/Dha'yi.

On phonetic grounds it would be plausible to suggest that the change of */a/ > /i/ in eastern Dhuwal/Dhuwala 1dl and 1+2dl(non-NOM) pronouns may have also been conditioned by the following palatal consonant. However, one would still require a process assimilating /a/ to /i/ in the current 1pl *ŋilimurr(u)* and the 1dl NOM stem *ŋiliny(u)*. Without other evidence of assimilation to a following palatal consonant in the eastern Dhuwal/Dhuwala varieties it is simpler to assume a single process produced all the /i/ bearing stems, i.e. assimilation to the following vowel, and that this occurred before the loss of the *-li-* syllable.

iv) The difference in the number of stem distinctions

This was described in section 5.5 above. The key distinction is that the Dhuwala DAT stems correspond to the oblique stems, while in Dhuwal/Dha'yi and Ritharrŋu the DAT stems fall together with the ACC.

v) The existence of completely distinct stems

This does not occur within Dhuwal and Dhuwala varieties, where stem differences can be attributed to final vowel deletion or syllable reduction. The most notable examples of completely distinct stems occur in Dha'yi and Ritharrŋu which have 3pl stems, *wurru* and *dhali* respectively. Ritharrŋu 3sg *ŋay/ŋa* is marginally different to *ŋayi* which is found in other varieties. It is an isolated case of final vowel/syllable deletion in the Ritharrŋu paradigm.

vi) Difference in the quality of non-NOM additional syllables

The stem final syllable *(rr)u-* found in the 1pl and1+2pl pronouns of Dhuwal/Dhuwala/Dha'yi is confined to those varieties. It does not occur in any other Yolŋu varieties, including Ritharrŋu.

vii) A difference in the person/number categories distinguished

The only difference here also involves Ritharrŋu which has a distinction for 2nd person dual and plural. This does not occur in Dhuwal/Dhuwala/Dha'yi although it is widespread in other varieties.

5.6 Summary of parameters distinguishing pronominals in Yolŋu varieties

The differences are numerous and often not do not result in major contrasts. The following chart outlines the varieties distinguished by each of the parameters.

final vowel deletion	Dhuwal + Dha'yi vs Dhuwala+Ritharrŋu
#ŋV- deletion	Eastern Dhuwal/Dhuwala+Dha'yi vs Western Dhuwal/Dhuwala+Ritharrŋu
-li- stem deletion	Eastern Dhuwal/Dhuwala+Dha'yi vs Western Dhuwal/Dhuwala+Ritharrŋu
final *-lV-* stem deletion	Dhuwal/Dhuwala+Dha'yi vs Ritharrŋu
/i/ in initial syllable (non-sing)	Dhuwal+Dhuwala vs Dha'yi+Ritharrŋu
DAT stem equals Oblique	Dhuwala vs Dhuwal+Dha'yi+Ritharrŋu
3pl stem distinctions	Dhuwal+Dhuwala vs Dha'yi vs Ritharrŋu
presence of final -rr(u-)in pl	Dhuwal+Dhuwala+Dha'yi vs Ritharrŋu
presence of 2dl v 2pl forms	Dhuwal+Dhuwala+Dha'yi vs Ritharrŋu
variation in DAT suffix forms	Dhuwal vs Dhuwala vs Dha'yi vs Ritharrŋu

The most notable feature seems to be the fact that clan varieties are distinguished by the effects of parameters overall, rather than by parallel delimitation of clan varieties by several different parameters. It is not generally the case that

parameters simply determine boundaries between particular clan varieties. An exception here is Ritharrŋu which is isolated from all the others by three parameters (although in the larger Yolŋu context it would be isolated only by one of them - the DAT suffix allomorphs). Rather, a whole host of groupings is suggested by the different parameters. Only one parameter in fact distinguishes the four "this" groups, namely the form of the DAT suffix. Of the fourteen grouping possibilities determined by the ten parameters, seven occur more than once - they isolate Ritharrŋu (5 times), Dha'yi (twice), Dhuwala (twice), Dhuwal+Dhuwala (twice), Dhuwal+Dhuwala+Dha'yi (3 times) Western Dhuwal/Dhuwala+Ritharrŋu (twice) and Eastern Dhuwal/Dhuwala+Dha'yi (twice). This reassuringly reflects sub-grouping proposals based on functor analysis (see Zorc 1978, 1979) and lexico-statistical work (see Schebeck 1968, Wood 1978). A much more extensive study of variation between varieties would be needed to determine how much the patterning in relation to the pronominal paradigm reflects the general situation, i.e. that a simple summing of the distribution of all varying parameters would reflect the proposed synchronic and diachronic groupings of different varieties.

5.7 Functions of pronominals

5.7.1 Functions of basic pronominals

Pronominals are essentially concerned with personal deixis and anaphora, although the details of their use in referential tracking is a subject that warrants much more consideration. In particular, the functions of, and relations between, the use of demonstratives and pronominals need further clarifying. Recall that single occurrences or combinations of nominals, pronominals and demonstratives are all possible ways of coding a referent. It is my impression, however, that factors such as animacy, the particular role, and discourse/pragmatic features will feature in any explanation. Humans are strongly associated with pronouns, but not categorically. Single morphemes coding an A are predominantly pronominal while single coding of an O favours a demonstrative. S appears to opt for both. The wide range of options available for coding referents, including "null anaphora", offer a clear challenge for future analysis.

Despite the formal alignment with "human" referring nomens, it should be noted that third person pronouns occur regularly with "non-human" reference. The fact that pronouns generally occur first in a nominal expression would seem to lend them a function as the introducer of the particular participant role. However, more

detailed work is necessary to determine what factors determine the presence of a pronoun, particularly with "non-humans".

The pronouns found in attributive and identifying equational clauses are overwhelmingly NOM forms, reflecting the S case of unmarked nominal expressions in these clauses (see section 11.1). There are a few instances of third person singular ACC forms in these clauses whose function is not clear. One example is given below:

(54) *dhuwandja ḏarrtjalk ŋanya warrpam'*
PROX-PROM clean 3sg-ACC all T202p10
It is all clean!

It is possible the ACC pronoun in this example has an emphatic function.

Another context in which the 3sg ACC form appears is in lists. This is demonstrated in the following example:

(55) *luŋ'thu+rr+a marrtji+n wiripu-wiripu+n bäpurru+n yoŋu*
assembled(intr)+3rd+SEQ go+3rd other-REDUP+SEQ clan/group+SEQ person
dhika djambarrpuyŋu, dhika nhä, ŋaymil+nha ḏäṯiwuy+nha,
INDEFP clan name INDEFP what clan name+SEQ clan name+SEQ
be nhä+n ŋanya gälpu+n, gumatj+nha,
INDEF what+SEQ 3sg-ACC clan name+SEQ clan name +SEQ
be nhä+n ŋanya marraŋu+n, wiripu-wiripu+n
INDEF what+SEQ 3sg-ACC clan name other-REDUP+SEQ OMS p9

people of all different clans assembled, Djambarrpuyŋu, and what - Ŋaymil and Ḏäṯiwuy, and what else - Gälpu and Gumatj, and what else - Marraŋu, all different ones

This example demonstrates two common features of lists. The first is the use of the SEQ suffix on the listed items. The second is the linking of listed items with combinations of the indefinite lexemes and indefinite/interrogative pronouns. The indefinite lexemes involved in this example are INDEFinite *be* (see section 6. and, INDEFinte Proximate *dhika* (see section 6.5). Interrogative/indefinite proforms are the topic of chapter 8. As this example shows, it is also possible to add a 3sg ACC pronoun to the combination of an indefinite lexeme and an interrogative/ indefinite pronoun. Transitivity of the verb in the clause does not appear to be a relevant factor. In this example the main verb is intransitive. In example 377 this combination with the 3sg ACC pronouns occurs in an equational clause.

More tractable are the other uses of the basic pronouns referred to in the introductory summary to this chapter. They are described below.

5.7.1.1 Use of pronouns and the lexeme *mala* to code non-singular number

Three non-quantifier nomen stems are used to indicate non-singular number periphrastically. These are the 3dl *manda*, the 3 pl *walal* and *mala* "group, mob/PL". As number markers they characteristically follow the nominal they are modifying, and do not require case concord. Pronouns in contrast are always case marked and generally occur first in a nominal expression. It is quite possible to have two identical pronominal forms in a clause, each with a distinct function. The first example below for instance, has three occurrences of the 3dl pronoun. I interpret the first two as repeats of the 3dl pronoun and the last as number marker. In such isntances it is not really clear what function should be attributed the second occurrence. In DuaL function the 3dl pronominal can co-occur with the dual pronouns i.e. *ŋali* "1+2dl" and *linyu* "1dl". it can also co-occur with the 2dl/pl pronoun *nhuma* and thus disambiguate the number reference for that particular form. In the interlinear gloss I indicate the number function of these forms with the symbols 'DL' (dual) and 'PL' (plural). The basic gloss for these forms is shown in parenthesis following e.g. *manda* "DL(3dl)"

(56) *walal ga+n nhina+n, manda ga+n nhina+n manda+n ŋamini-*
3pl IMPV+3rd sit/be+3rd 3dl IMPV+3rd sit/be+3rd 3dl+SEQ breast
*gunbala+n' **manda** ga ŋayi+n wangany ŋamini-warramiri*
-clan surname DL(3dl) and 3sg+SEQ one breast-clan name
nyumukuniny+dja
small+PROM Burrp1
(in the law) theywere living, the two were living, the two whose mother was a Gunbala, and the one whose mother was Warramiri, the little one

(57) *wiripu+n dhuwal nhakun ŋali ga nhina **manda**.....*
other+SEQ PROX like 2dl IMPV-1st sit-1st DL(3dl) T009p2
another instance is like here (where) the two of us are sitting.....

(58) *yaka yan ŋunhi ŋanapurru+wuy galiwin'ku+wuy yolŋu walal*
NEG EMPH TEXD 1pl+EMPH place name+ASS person PL(3pl) OMSp13
Not only us Galiwin'ku people

(59) *ŋunhili+n ŋuli manikay+nydja rom+dja bakthu+na+n yindi+ŋur*
TEXD+SEQ HAB song+PROM law+PROM break off +4th+SEQ bid+LOC/ABL
*yän gämurru+ŋur munatha+ŋur **manda+ŋumi***
EMPH nose/point/reason+LOC/ABL sand+ABL/LOC DL(3dl+LOC$_2$) T016p219
There the singing breaks off/ends at that important point/reason of the two (sacred) sand sculpture.

(60) *dhuwan=dja ga mirithirr muka ŋarrmaŋ+gu+m wäŋa*
PROX=PROM IMPV-1st INTENS PRT-OK decoration+TRANS2 +1st place
nhanŋu+wuy ŋayi, girri+y' mala+ŋu+y
3sg-DAT+EMPH (3sg) thing+ERG PL(/group)+ŋu+ERG T009p7
(S/he$_i$) has completely decorated her/his$_i$ place with things

(61) *.....gulyu+rr+a be+ŋur+yi, ŋula nhä+ŋur*
stop+1st+SEQ INDEF+ABL+ANA [INDEF2 what]"something"+ABL/LOC
mala+ŋu+ŋur *larru+nha+ŋur*
PL(/group)+ŋu+ABL/LOC look for+4th+ABL/LOC T009p15
and (you) stop from looking for whatever things (you lost)

The stems and the patterns found in Djambarrpuyŋu are identical to those Morphy describes for Djapu (1983 p47-48). A distinctive feature of Djapu is the ERG marking found on pronominal stems functioning as number markers i.e. *maŋda+l* "DL+ERG" and *walala+y* "PL+ERG". This contrasts with the regular NOM-ACC pattern found with pronouns. This ERG agreement does not occur in Djambarrpuyŋu, the NOM-ACC pattern being consistent for all uses of the pronouns. The only suffix distinctive to the number-marking function of these stems is the alternative LOC_2 suffix *-ŋumi*. It is confined to nomen stems with a determiner-like function e.g. *wiripu* "an(other), a certain; different", and *mala* used as a plural marker, *be* the INDEF (see 6.5.2.2) and *wanha* the place interrogative/indefinite proform (see 8.3). Presumably its use with *maŋda* in the last example can be attributed to case concord with a "non-human" head. I expect this use to be confined to the number marking function.

Malanynha, the special ACC form for *mala*, is common in Djapu, but rare in my corpus. It is confined to a speaker who regularly used Dhaŋu (Gälpu), a variety which also regularly uses this particular form.

In both Djapu and Djambarrpuyŋu it is common for the *-ŋu* augment to appear before case suffixes.

5.7.1.2 Use of pronouns in relation to particular social contexts

Non-singular pronouns are used in place of singular pronouns in contexts which feature special relationships between humans. The contexts for which they are documented include the avoidance relationships associated with the wife's family or a brother's wife's family if ego is female.

The following extract is from a text where the speaker is referring to someone in an avoidance category. His use of the plural pronoun and a special address/reference term are overt linguistic reflections of this relationship.

(62) *ŋunha ŋarra galka'-galka+n* ***walalaŋ*** *maŋawiny'+ku dhäwu*
DIS 1sg put into-REDUP+1st 3pl-DAT term for people in certain avoidance categories story
I recorded that story for her, "maŋawiny'" T205p14

Non-singular pronouns are also used to refer to a deceased person.

In the context of public speaking, or speech addressed to a large audience I have noted the use of dual pronouns for a context where one might expect plural forms e.g. *ŋali* 1+2dl for "us", rather than *ŋalimurr* 1+2pl.

5.7.1.3 Use of pronouns as interjections

The 3rd plural form *walal*, and the 2nd singular DAT form *nhuŋu*, are used like interjections (see section 13.12) as single word exclamations. *Walal!* is uttered when the speaker is surprised at something and may be glossed "Hey, look at that!", "Did you hear that!". It may be confined to situations where the speaker is intending to draw other peoples' attention to something. *Nhuŋu+n!* is used in contexts in which the speaker does not agree with something the addressee has said. It conveys something like "That's what you think!".

5.7.2 Functions of Emphatic pronominals

Two distinct uses of Emphatic pronominals have been recognized, pragmatic focus/emphasis and intraclausal coreference.

The emphatic use and a "reflexive" use are generally recognized in the literature on Yolŋu languages (see Buchanan for Djambarrpuyŋu (1978 p164-5); Morphy for Djapu (1983 p54); Lowe for Gupapuyŋu (n.d.a L75-78)).

The extent of the coreferential use became obvious after considering several hundred examples from the text corpus. On the basis of this data the following generalizations can be made. An emphatic pronoun is used whenever there is coreference between the S or A i.e. the subject and another participant within a clause. There are also several examples where the coreference is to an O, but this is not obligatory and it may prove relevant that they all involve coreference to a Possessor. The coreference is not confined to A and O identity as for reflexives, but occurs with a whole range of other roles including DAT marked indirect objects and beneficiaries, OBL marked accompaniment and Possessors of any case role.

The domain in which the Emphatic pronominals are used to code coreference is confined to the clause. The distribution of these forms indicates non-finite subordinate clauses are included within the clause since coreferential participants

in the subordinate clause are also coded with the emphatic pronominals (see sections under 12.1). They are not used to mark coreference across tensed clauses, including between main and finite subordinate clauses.

5.7.2.1 Pragmatic focus/emphasis

In this use the referent(s) is(are) emphasised, conveying notions such as "just X/ X and nobody else" or "those particular X" which highlight a particular individual or group. In some contexts it can be used to convey overt contrast "X, not Y or Z". This function would seem available for any case role.

Some examples follow. In the first two the pronouns highlight particular individuals or groups:

(63) *Walal+nydja ŋunhi M ga M ga G ga B ga T,*
3pl+PROM TEXD name and name and name and name and name
walala+wuy+nydja \ *bayp+nha yolŋu ŋunhal+nydja*
3pl+EMPH+PROM five+SEQ person DIS-LOC+PROM T101p48
They M and M and G and B and T, that lot, five people were there.

(64) *walal, yaka dharrwa yolŋu, **nhe+pi** waŋgany bili nhuŋu ŋayi*
3pl NEG many person, 2sg+EMPH one because 2sg-DAT 3sg
rumaru \ *ga nhe nhaŋu rumaru*
avoidance and 2sg 3sg-DAT avoidance T023Bp1
"walal" not meaning lots of people, just you, one because you are his avoidance kin and he is avoidance relation to you.
(The speaker is explaining the use of the plural pronoun rather than the singular in a particular social context)

The following example shows the emphatic pronoun in a contrastive context. In the exchange speaker Y is trying to elicit from R the meaning of particular words. Y starts with a cue and R then counters with another form:

(65) *Speaker Y:* *milipa*
Speaker R: *miliwa*
Speaker Y: *milipa yaka miliwa*
"milipa" NEG "miliwa"
"milipa", not "miliwa"
Speaker R: ***nhumalaŋ+gu=wuy,*** *napurruŋ+gu+n miliwa*
2pl+DAT+EMPH, 1pl+DAT+SEQ "miliwa"
(that's) <u>your 's,</u> ours is "miliwa".
(the speaker is explaining that the two forms are different for their respective clan languages)

5.7.2.2 Intraclausal coreference and emphatic pronominal phrases

As described above the Emphatic pronouns are always used when a non-subject role in a clause is coreferential with the subject, i.e. S or A. They occur with all kinds of predicates, including Reflexive-mutualis-Reciprocals and nominal predicates. The most common examples overall involve Possessors, but DAT marked beneficiaries, O patients and companions also occur. ACC forms are common with R/R verb stems, but are not confined to them.

It is not necessary for both roles to be overtly represented in a clause, nor for them to occur in a particular linear order. This is particularly noticeable in imperative clauses where the addressee is not usually present but roles which are coreferential occur with EMPH pronominals.

There is however, a particular construction type that is associated with this use of emphatic pronouns. It is one of the very few constructions in Djambarrpuyŋu in which constituents must occur together in a fixed order. I will refer to them as Emphatic pronominal phrases (EMPHP). The two constituents are an emphatic pronominal and an NOM basic pronominal form.

e.g.	*ŋarra+ku+wuy ŋarra*	"1sg+DAT+EMPH	1sg-NOM"
	nho+kiyin+gal nhe	"2sg+EMPH+OBL	2sg-NOM"

The basic pronominal always follows the emphatic pronominal. Although it agrees with the emphatic pronominal in person and number, it has an invariant case marking, namely that of the NOM (which presumably can be interpreted here as the unmarked stem). Only the emphatic pronominal is case marked for the particular function the phrase has in a clause.

This phrase type never occurs in emphatic function, although a bare emphatic pronoun may occur, rather than the phrase, in coreferential function. The fact that the coreference generally holds to the subject of the clause which would be marked by a NOM pronoun would seem to offer a basis for the presence of the NOM form of a basic pronoun in the phrase. The separate occurrence of a NOM pronoun marking the subject is quite permissable, however. An EMPHP has never been observed to code a subject, either in a main clause or a subordinate clause. However, as can be seen from example 63 above, a subject may be referred to by both a basic pronoun and an emphatic pronoun in a single clause. In the corpus this is confined to

contexts in which the speaker opts to highlight the referent after having uttered a basic pronoun.

Textual examples of coreferential emphatic pronouns and pronominal phrases are given below. Note that in the inter-linear gloss I put parentheses around the gloss for a basic pronoun in an emphatic pronominal phrase.

(1) Coreference with A

(a) A- Benef(DAT)

(66) *nhuma dhu waŋa+nha+mi+rr ga ŋarra dhu guliba batha+n*
2pl FUT talk+4th+R/R+1st and 1sg FUT tea/coffee cook+1st
rra+ku+wuy ŋarra
1sg+DAT+EMPH (1sg) TAPE 1p1
you two talk and I'll make a cup of tea for myself

(b) A -O (Inalienable Poss -O)

(67) *bala dhäruk+nha nhuna=pi+nya nhe nherrul djorra+lil+a*
then word+SEQ/?ACC 2sg=EMPH+ACC (2sg) put-2nd paper+ALL+SEQ
then put your own words to the paper T018p7

(c) A-OBL

(68) *maŋdaŋ+giyin+gal+a maŋda manapa+r ŋanya+nha+n*
3dl+EMPH+OBL+SEQ (3dl) unite+3rd 3sg-ACC+SEQ Burrp14
(the two) brought him together with them

(d) A-ASS

(69) *dhäwu+ny ŋarra nhuŋu dhu lakara+m wark+puy,*
story+PROM/?ACC 1sg 2-DAT FUT tell+1st work+ASS
ŋarra+kiyin+galaŋu+wuy,
1sg+EMPH+OBLS+ASS
I will tell you a story about my own work T008Textp1
OR I will tell you about the work that I did

(ii) Coreference with S

(a) S-PossOBL(All)

(70) *ŋarra-a marrtji ŋarra+kiyin+gal+nha ŋarra wäŋa+lil*
1sg(extended final vowel) go-1st 1sg+EMPH+OBL+SEQ (1sg) place+ALL
I am going to my own country T024Ap6

S-PossOBLS+DAT(DAT)

(71) *yaka ŋayi dhu warwuyu+n+dja yäku+w* ***nhanu+kiyin+galaŋa+w ŋayi***
NEG 3sg FUT worry+1st+PROM name+DAT 3sg+EMPH+OBLS+DAT (3sg)
She mustn't worry about her own name T101p37

(iii) Coreference with O

(a) O-PossOBL(All)

(72) *märr ŋayi nhumalany dhu ŋunhiwill yoŋu+y+nydja nhäma ŋunhiwill*
so that 3sg 2pl-ACC FUT TEXD-ALL person+ERG+PROM see-1st TEXD-ALL
nhumalaŋ+giyin+gal *bed+lil*
2pl+EMPH+OBL bed+ALL T101p13
so that s/he will see you in your own beds

(b) O-PossOBL(A)

(73) *nhuna+nha+ny dhu ŋuriŋi+yi+n nhawi nhakun ŋayaŋu*
2sg+ACC+PROM FUT TEXD-ERG-ANA+SEQ whatsit like feelings/desire/wish
mukmara+m, *djäma+y+nha* ***nho+kiyin+gal nhe***
make quiet/turn off+1st work+ERG+SEQ 2sg+EMPH+OBL (2sg) T012p32
your desire (to do something different) will be suppressed by your own work (i.e. the work to which you are committed)

Conversely it follows from the coreferential use of the Emphatic pronouns that any two third person pronouns within a clause, where one is coding an A or S role, are to be interpreted as non-coreferential. This would appear to be a vital key towards understanding the process of referential tracking in Djambarrpuyŋu

The coreferential function was inadvertently confirmed for me by one speaker when I presented a clause from a text for her to consider. The clause was

(74) *..bala ŋayatha+nha+n dhiyal+a binhdha+n* ***nhaŋu+wuy ŋayi***
MVTAWY hold+4th+SEQ PROX-LOC+SEQ rib+SEQ 3sg-DAT+EMPH (3sg)
then (it the speared animal$_i$) held its$_i$ own ribs T102Bp3

It will be observed that in the original speaker used a coreferential form. Out of context the coreferential interpretation is not the only one possible. Indeed on hearing my reading of this clause the second speaker kept responding with the following

(75) *bala ŋayathan+nha binhdha* ***ŋayi, nhaŋu***
MVTAWY hold+4th +SEQ rib 3sg 3sg-DAT G90
then s/he held its ribs

Note that the last two pronouns were uttered prominently with a pause between them - I was being corrected. At last, realizing that another interpretation was being given, I intervened and provided some more of the context. This required explaining that in the original text the referent of the clause was a wallaby that had been speared. Once this was made clear the original clause was considered perfectly acceptable. In the alternative clause, the second speaker had interpreted the clause as involving two different participants, namely the hunter and the wallaby.

CHAPTER 6

DEMONSTRATIVE MORPHOLOGY

There are four distinct demonstrative lexemes. These are the PROXimal with stems *dhuwal(a-)/dhiya-/dhipa-*; the MEDial with stems *dhuwali(-)/dhiya-/dhipa-*; the DIStal with stems *ŋunha(-)/ŋuru-* and the TEXt Deictic with stems *ŋunhi(-)/ŋuru/i-*. On a purely formal basis these can almost be analysed as two pairs, one for "proximates" with common stems *dhuwal-/dhiya-/dhipa-* and one for "non-proximates" with common stems *ŋunh-/ŋuru-*. This is supported by the fact that a four way distinction does not formally exist for all case forms. In particular there are no distinct PROX and MED stems for certain peripheral cases. The formal distinction between the DIS and TEXD is much more extensive. However this formal dichotomy does not correlate with the fundamental spatial opposition coded by demonstratives. This is a three way distinction involving the PROX, MED and DIS stems. Only in relation to temporal deixis does there appear to be a functional dichotomy. This involves the PROX and TEXD stems but only a restricted sub-set of case forms. Other uses of the demonstratives point to oppositions between the MED and the TEXD, and the TEXD and the other three. The relationship between the stems, given the various functions of the demonstratives, is complex but they indicate that synchronically a four way distinction must be considered basic. The relationship between the "proximate" (i.e. PROX and MED) and "non-proximate" (i.e. DIS and TEXD) stems does suggest that in some time past only a two way distinction existed.

Closely associated with the regular demonstrative paradigm is a set of plural forms. While not confined to demonstrative stems these often occur with them. To stems from the regular demonstrative paradigm is added the plural suffix *-(kurru)wurr(u-)* and a case suffix. In many respects the relationship between the regular demonstratives and the plural forms parallels that between the two pronominal paradigms.

Case marking for core participants follows an ERGative/ABSolutive pattern as for non-human referring nomens. For peripheral cases both "human" and "non-human" options are available. "Human" referring demonstratives, like "human" nomens have a single OBL case marking for Locative, Allative, Ablative and Accompaniment. Non-human referring demonstratives, like "non-human" nomens, have distinct local case markers, but while nomens only distinguish ALL and LOC/ABL, demonstratives have three distinct local case forms for ALL, LOC and ABL.

Of the other key "human" case options ACC and OR, only the latter occurs on demonstratives. There are no specifically ACC demonstrative forms, O being coded by the same forms as S. Quite unique to demonstratives is the treatment of the Perlative case with verbal stems. These demonstratives are verbal in form and inflect to agree with the main verb. However, they function as adnominal determiners and pro-forms just like other demonstratives. The other case forms that occur with demonstratives are DAT, ASS and PROP.

Demonstratives have various syntactic functions. They can be the predicate in an equational clause, or act as demonstrative adverbials in clauses with a verbal predicate. They are also widely used adnominally (demonstrative adjectives), co-occurring with pronominals, nomens, proper names, locationals and temporals. They also occur alone as demonstrative pronouns.

Demonstratives play a vital role in Djambarrpuyŋu deixis and in the one paradigm oppositions can be found that pertain to the deictic domains of speech roles (i.e. those of speaker and hearer), distance, time and the text. The relevant deictic centres are the speaker, the speaker's location, the time and location of the speech event and the current utterance in a text.

Demonstratives are also used to refer, endophorically or exophorically, to something that can be assumed to be shared knowledge. The TEXD stem in particular is identified with an endophoric (usually anaphoric) function.

We will now consider the demonstratives in more detail beginning with a discussion of the forms.

6.1 Demonstrative forms

The demonstrative paradigm is presented in Table 31.

Demonstratives are less easily analysed as having root/stem and suffix components parallel to the majority of other words in the language, since there are not isomorphic correlations between the formal stem-suffix divisions possible and the actual parts of the words which are associated with stems and case marking. However neither are stems completely suppletive and it is possible to associate particular parts of the demonstratives as stem or case-marking related.

Table 31: DJAMBARRPUYŊU DEMONSTRATIVES

	S/O/LOC	A-ERG	DAT	-hu LOC	-hu ALL	-hu ABL
Proximal	dhuwal	dhiya=ŋ(u-)	dhiya=k(u-)	dhiyal dhiyala=(ŋu=)mi (dhiyal=mi)	dhipal	dhipu=ŋur
Medial	dhuwali	dhiya=ŋi	dhiya=ki	dhiyali	dhipali	
Distal	ŋunha	ŋuru=ŋ(u-)	ŋuru=k(u-)	ŋunha=l	ŋunha=wal	ŋula=ŋur
Text Deictic	ŋunhi	ŋuru=ŋi/ ŋuri=ŋi	ŋuri=ki/ ŋuru=ki	ŋunhi=li ŋunhili=(ŋu=)mi	ŋunhi=wili	ŋuli=ŋur/be=ŋur

	OR	OBL	OBLS	ASS	PROP	PERL
Proximal				dhuwala=ŋu=wuy (dhuwala=wuy)	dhuwala=ŋu=mirr	dhuwala=tja-
Medial	dhiya=kuŋ	dhiya=kal	dhiya=kalaŋa-	dhuwali=ŋu=wuy	dhuwali=ŋu=mirr	dhuwali=tja-
Distal	ŋuru=kuŋ	ŋuru=kal	ŋuru=kalaŋa-	ŋunha=ŋu=wuy		ŋula=witja-
Text Deictic	ŋuri=kuŋ(u-)	ŋuri=kal	ŋuri=kalaŋa-	ŋunhi=ŋu=wuy	ŋunhi=ŋu=mirr	ŋuli=witja-

? I have not recorded the form but it is expected to occur
( ) these forms have been noted infrequently and only in texts. They may be fast speech forms.

This situation can be attributed to the fact, that although stem and suffix-like elements can usually be identified, parts of the stem-like component also vary across cases, and in some instances it is in these components that the actual contrast between differently case-marked demonstratives is found (see section 6.1.3).

6.1.1 Demonstrative stems

A stem+suffix distinction is possible for all stems except the PROX and MED S-O-LOC, LOC and ALL case forms. These are shown in Table 31 with the symbol "=".

The canonical outlines below are an attempt to convey what is held in common for each of the demonstrative stems across the paradigm:

PROX **dh** V C V (*l* (*a*))- DIS **ŋu** C *a/u*-

MED **dh** V C V (*l l*)- TEXD **ŋu** C *l u /l*-

While there are not many actual segments common to all demonstrative stems, the overall canonical shape and initial and final syllables are stem bound. On a formal basis it is possible to reduce these four outlines to two, i.e. "proximate" *dh* VCV(*l* (V))- and "non-proximate" *ŋu* CV-. The phonemic options for the variant Cs and Vs also pattern according to this "proximate/non-proximate" distinction. It is in the initial and final syllables that the segments common to all stems occur. The boldfaced segments are those that are consistent across stems, although those in italics are not always present. The presence or not of the final syllable in the PROX/MED stems is determined by particular cases, but the option of an /l/ segment is confined to these two stems. The actual quality of the final vowels in the DIS/TEXD stems and that of the /l/initial syllable of the PROX/MED stems is also stem related. For the DIS/TEXD stems the options available between the two stems is case aligned, thus for the S-O-LOC it is /a/ v /i/ but for the DAT it is /u/ v /u...i/ (see below for a discussion of the latter alternation). For the PROX/MED stems the vowel alternation is consistent but the potential for occurrence of a final vowel in PROX stems is case aligned.

The "proximate" and "non-proximate" stems have identical Cs for any particular case-form. The range of Cs is distinct for each set however, as the following chart reveals:

"proximate" associated Cs:		"non-proximate" associated Cs:	
-w-	for S-O-LOC/ASS/PERL	*-nh-*	for S-O-LOC/ALL/LOC/ASS
-y-	for ERG/DAT/LOC/OR/OBL/OBLS	*-r-*	for ERG/DAT/OR/OBL/OBLS
-p-	for ALL/ABL	*-l-*	for ABL/PERL

The Vs will also be identical for any particular case-form. The "proximate" forms have identical options and these are distinct from the "non-proximates'. However there is some variation in the vowels found in the "non-proximates". It is also notable that the vowel alternations correlate with particular C options in the majority of forms.

	"proximate" stems Vs:		"non-proximate" stems Vs:
uCa	for S-O-LOC/ASS/PERL (all with C /w/)	-a/i	for S-O-LOC/LOC/ALL/ASS/PERL (all with C /nh/ /l/)
iCa	for ERG/DAT/LOC/ALL /OR/OBL/OBLS (all with C /y/ or /p/)	-u...i	for ERG/DAT/ABL/OR/OBL/OBLS (all with C /r/)
iCu	for ABL (with C/p/)		

In the "non-proximate" stems the vowel /i/ is confined to the TEXD stems. The alternation between /a/ and /i/ is clearly conditioned by the stem, /a/ occurring on the DIS stem and /i/ on the TEXD stems. This alternation has already been noted as distinguishing "proximates" and "non-proximates", and is pervasive throughout the demonstrative paradigm. However it is distributed across both stem-like and suffix-like components. The /u...i/ alternations with the TEXD *-r-* stems is restricted to western Dhuwal/Dhuwala. The existence of an alternation such as TEXD ERG *ŋuruŋi/ŋuriŋi* suggests there has been an innovation. Presumably this has been of the /i/ by analogy with the /a...i/ alternation in other TEXD stems. Djapu cognates only show /i/. By marking the stem alternation within the stem-like component it is possible to consistently distinguish between the two "non-proximate" demonstratives. In the ERG example just given the final vowel also codes the distinction, contrasting with the DIS *ŋuruŋ(u-)*. However, in the OR, OBL and OBLS the stem vowel is the ONLY distinguishing feature e.g. OBL DIS *ŋurukal* vs TEXD *ŋurikal*.

Vowel alternations can also distinguish between the two "proximate" stems and again /i/ is associated with one of them, namely the MED. The distinctive PROX vowel is /a/. However the distinction does not occur within "proximate" stems to the same extent as the "non-proximates" and there is no formal distinction at all between the ABL/OR/OBL/OBLS PROX and MED demonstratives.

The factors which suggest a formal superordinate two-way distinction for the demonstratives are summarized below:

1. common initial syllables *dhi/u-* and *ŋu-* for the PROX/MED ("proximates") and DIS/TEXD ("non-proximates") respectively
2. the fact that the possibility of a stem final */l-/* or */l V-/* is confined to the PROX and MED (i.e. "proximate") stems
3. the fact that for any particular case the stems are identical for each of the pairs, except for certain alternations involving the final or penultimate vowel
4. the regular alternation of the vowels */a/* or */u/* (in the PROX and DIS stems) and */i/* (in the MED and TEXD stems) e.g.

	LOC forms				ERG forms		
PROX	*dhiyala*	MED	*dhiyali*	PROX	*dhiyaŋ(u-)*	MED	*dhiyaŋi*
DIS	*ŋunhala*	TEXD	*ŋunhili*	DIS	*ŋuruŋ(u-)*	TEXD	*ŋuri/uŋi*

This suggests that the /i/ demonstratives are derived from their /a/ or /u/ counterparts.

My hypothesis is that, if the four way distinction is in fact based on an earlier two-way distinction, then the vowel alternations were probably originally associated with the final syllable of the suffix-like component. The shift of the vowel distinction to the stems, notably in the OR, OBL/OBLS case forms of the "non-proximates", has enabled a formal distinction which is not possible in the "proximates". In the "proximates" the distinction is still associated only with the final syllable of certain suffix-like component of the *-y-* and *-p-* stems. There is no evidence that the formal distinction is being extended to stems or suffixes of the OR or OBL/OBLS forms.

Heath (1980a) only posits two demonstrative stems *dhuwal* (Proximate) and *ŋunhi* (Distant) for Dhuwal (1980a p34). He does note certain alternations in the Distant forms i.e. *ŋunhi, ŋunha* and *ŋurukal, ŋurikal* but only comments on the former noting their association with different functions - as demonstrative pronouns versus predicate/adverb respectively. He interprets the MED forms *dhuwali, dhiyaŋi, dhiyaki* and *dhipali* as the Proximal plus the ANA suffix *-Thi*. This is clearly not the case for Djambarrpuyŋu spoken at Galiwin'ku. Morphy does not find it a particularly viable option for Djapu either, although, as she suggests, it could have been the historical source of the two *-i* associated stems (Morphy 1983 p60). The lack of distinct MED forms for certain cases would make some sense in this regard. However the semantico-syntax of the MED in Djambarrpuyŋu is too established to treat it as a derived form. Furthermore there

are no restrictions on its occurrence with the ANA suffix (see section 6.3.2) and they occur as distinct stems with the PLural suffix (see section 6.3.1).

6.1.2 Demonstrative suffixes

The following suffixes are those identifiable within the demonstrative paradigm:

Table 32: Demonstrative Suffixes

case form	PROX/DIS stems	MED/TEXD stems	Nominal case form for comparison
ERG	-ŋ(u-)	-ŋi	-Thu
DAT	-k(u-)	-ki	-Ku
LOC	-l	-li	-ŋur
LOC_2 alternative	-(ŋu)mi		-(ŋu)mi
ALL	-l (PROX)	-li (MED)	-lil
	-wal (DIS)	-wili (TEXD)	
OBL	-kal		-Kal
OBLS	-kalaŋa/u-[1]		-Kalaŋa/u-
OR	-kuŋ(u-)		-Kuŋ(u-)
ABL	-ŋur		-ŋur
ASS	-ŋu=wuy		-Puy
PROP	-ŋu=mirr(i-)		-mirr(i-)
PERL	-(wi)[2]tja- (verb stem)		-Kurr

1. All stop initial suffixes found attached to the OBLS occur with lenited allomorphs.
2. *-witja-* with disyllabic stems, *-tja-* with longer stems

Note that capitals indicate those suffixes which lenite. Lower case symbols inidcate the form of the suffix is invariant.

The range of suffixes on demonstratives and nominals are nearly identical. Notably they share a core distinction ERG/ABS and distinct suffixes for "human" and "non-human" referring forms. The differences that occur are:

1. the demonstratives have distinct forms for the LOC and ABL
2. the "proximate" LOC and ALL do not have distinct suffixes
3. there is no ACC suffix for demonstratives
4. the demonstratives express perlative case with a verb stem

The majority of case suffix morphemes are also identical. The notable differences are:

1. Demonstrative ERG *-ŋ(u/i-)* versus nomen ERG *-Thu*
2. Demonstrative LOC *-l(a/i-)* versus nomen LOC *-ŋur*
3. Demonstrative ALL *-wal/-will* versus nomen ALL *-lil*
4. Demonstrative DAT variant with a final vowel -i.e. *-ki*
5. The presence of the *-ŋu-* augment between the stem and the case suffix in the demonstrative ASS and PROP forms
6. The stop initial suffixes attached directly to the demonstrative root are all realized by a fortis stop and not lenited forms, as would be expected from nomen case allomorphy. Demonstratives are parallel to the pronominal paradigm in this respect. The ASS is an exception and always occurs as the lenited variant /wuy/. Lenited variants also occur following the OBLS suffix but the initial stop of the OBLS which attaches to the root is never lenited.

Most of the suffix variation found within the demonstrative paradigm has to do with vowel alternations differentiating the PROX and MED stems from the DIS and TEXD stems. The ERG, DAT, LOC and ALL suffixes all display this contrastive vowel alternation (see Table 32). In each case the final vowel of the non-word final form is /i/ in the DIS and TEXD (i.e. "non-proximates") and /u/ or /a/ in the PROX and MED (i.e. "proximates") as we have seen for demonstrative stems.

The presence of forms without a final vowel or with the option of a non-final vowel can all be directly attributed to the process of vowel deletion.

In Dhuwala varieties the distinction made by the final vowels is even clearer. These will be considered more fully in section 6.2 below. For the moment what is important is that their deletion in Dhuwal has resulted in contrasts between stems due to the presence or not of a vowel rather than the quality of the vowel, thus PROX *dhuwal* vs MED *dhuwali* S-O-LOC forms compare with Dhuwala PROX *dhuwala vs.* MED *dhuwali*. However the vowel alternation is still synchronically important in the Dhuwal demonstrative paradigm. Complete deletion of the final vowel has only occurred in the PROX S-O-LOC, LOC and ALL stems and the DIS LOC and ALL stems. It is retained in non-word final stems based on these, including the plural forms e.g. *dhuwala+wurr*, as well as the ASS and PERL forms within the regular demonstrative paradigm. On the ABL, OBL, PROP and OR demonstratives vowel deletion affects the suffix-like components rather then the stem component. The forms of these suffixes are identical to the nomen suffixes. Thus vowel deletion is categorical for the ABL and OBL but optional for the OR and PROP. The optional deletion of the final vowel of the OR, ERG DAT and PROP depends on whether the

suffix-like component is word final or not. In the DAT case this results in contrasts between otherwise similar suffix forms found on other word classes. The noun/adjective DAT post-vocalic allomorph for instance, has no final vowel. Thus the demonstrative *-k(u-)* or *-ki* contrasts with the nomen post vocalic allomorph-*w* as well as with the *-ku* found on 1st person pronominals.

While not uncommon on demonstratives, the LOC alternative *-(ŋu)mi* has only been recorded on a limited number of non-demonstrative stems. These include the pronominal *maŋda* 2/3dl and *mala* "group/PL" in their number marking function, and *wiripu* "different, other", *balanya* "such" and *ŋäthiliŋu* "old" in adnominal function.

Demonstratives stems with *-(ŋu)mi* were described as alternatives of the other LOC forms but further research may discover semantic differences. In the texts they co-occur with demonstratives with either LOC form as well as with nominals with the regular LOC which suggests they may indeed be alternatives. Morphy however describes a semantic distinction in Djapu with *-(ŋu)mi* being used when "the speaker has a particular named location in mind" (1983 p33). It is also described as only occurring with locational qualifiers.

6.1.3 Demonstrative suppletive stems

We have seen that amongst demonstratives stem and suffix like components are involved in distinguishing case forms e.g. PROX/MED OBL *dhiya+kal* v PROX/MED DAT *dhiya+ki*. We have also seen that within the paradigm particular stem variants are allied with particular cases, so that for many forms indication of case is made by both stem variation and suffixes. The stems provide a broader restriction on the possible case range than the the suffixes. We will now consider that portion of the paradigm where the actual distinction between case forms is borne solely by stem alternations. The stems involved are the PROX and MED S-O-LOC, LOC and ALL case forms. These are listed below, together with the DIS/TEXD forms for comparison:

	S-O-LOC	LOC	ALL
PROX	dhuwa(=)l	dhiya(=)l	dhi(=)pa(=)l
MED	dhuwa(=)li	dhiya(=)li	dhi(=)pa(=)li
DIS	ŋunha	ŋunha=l	ŋunha=wal
TEXD	ŋunhi	ŋunhi=li	ŋunhi=wili

Comparing across case forms for S-O-LOC, LOC and ALL within each stem the common final elements *-l* (PROX) and *-li* (MED) can be identified. The suffix-like component is thus identical for all three cases and the case contrast is thus borne solely by the stem. In the LOC and ALL this falls completely on the medial C, /-y-/ vs /-p-/ while in the S-O-LOC the first vowel is distinct as well, i.e./-uw-/.

Within the "non-proximate" stems the stem-suffix distinction is still maintainable, there being no apparent syncretism of case forms. A comparison between these "proximate" and "non-proximate" forms does raise a question as to the appropriate place to posit a stem-suffix boundary in the "proximate" ALL forms. Across the four demonstrative stems *-pal/-pali/-wal/-wili* are plausible candidates for an ALL suffix-like component. There is some support for this in an isolated ALL form based on the locational *barrku* "far" i.e. *barrku+wal*. This latter use is also reported for Gupapuyŋu (Lowe n.d.a L27) for both *barrkuwal* and *galkiwal* "near +ALL". (This form was not accepted by the two Djambarrpuyŋu speakers I asked). Dhaŋu also has the suffix-like component *-mbal* on its four ALL demonstrative stems.

Thus there are two potential ways of analysing the PROX ALL forms, as shown in the table above. In a synchronic approach to the demonstrative paradigm none of these three PROX stems are functionally segmentable into stem and suffix components, although this is formally possible by analogy with other forms in the paradigm. Note that if we segment the S-O-LOC forms on this basis we reduce the basic stem to *dhuwa-*. Unlike the stems for the LOC *dhipV-* and ALL *dhiya-* which are found in other case forms, this would be unique to the S-O-LOC form. There is no further support for such an analysis and I thus choose to treat these three stems as suppletive.

In regard to this portion of the demonstrative paradigm the developments in the koine Dhuwaya are fascinating. There the suffix-like component has been deleted from these three case forms and the forms *dhuwa* (S-O-LOC),*dhiya* (LOC) and *dhipa* (ALL) are occurring PROX demonstratives. The non-functional formal stem-suffix boundary has been eliminated, and only the meaning-bearing stem component is retained. This has not occurred in other parts of the Dhuwaya demonstrative paradigm where a stem-suffix analysis has been maintained.

The Dhuwaya paradigm has also increased the number of forms which are shared between the PROX and MED. This seems to be connected with the loss of productivity

of the vowel alternation between /a/ or /u/ and /i/. The DIS and TEXD stems have not been quite so strongly affected since the *ŋunha/ŋunhi* and *ŋuru-/ŋuri-* stems have been maintained. The factors affecting the "proximate" forms are the loss of the final /i/ and /ii/ from the S-O-LOC, LOC and ALL stems (i.e. *dhuwa, dhiya* and *dhipa*) and the loss of the vowel contrast from the DAT and ERG suffix-like components which are reduced to the single allomorphs *-ku* and *-ŋu* respectively (cf *dhiya+ku*]PROX/MED+DAT] and *dhiya+ŋu* [PROX/MED+ERG]). An optional ending *-ya* (PROX) *-yi*(MED) is described for several forms by which the distinction is not totally lost e.g. *dhuwa+ya* [PROX-S-O-LOC] and *dhuwa+yi* [MED S-O-LOC]. However, as Amery notes there is a clear suggestion of a two-way distinction emerging in Dhuwaya (see Amery 1983 pp82-89 for data and further discussion).

6.1.4 Perlative forms

Perlative demonstratives are verbal stems which inflect to agree with the main verb. They are members of a small group of verb stems with a somewhat irregular inflection pattern (see section 7.2.4.10). They do not occur as main verbs however but rather function just like other demonstratives. Some examples are given below. In the first two they stand alone, thus functioning adverbially, indicating the location of the event. In this context they look formally very similar to other modifying verb stems. Their use in the second two examples however is identical to that of other demonstratives co-occurring with other nominals. Here they function as determiners.

(76) *ga dhuwandja walal ga+n* ***dhuwali=tja+rr+nydja*** *yän hantiŋ+nha*
and PROX-PROM 3pl IMPV+3rd MED-PERL+3rd+PROM EMPH hunting+SEQ
and they were hunting around here

(77) *waŋdi+rr+a ga--a* \ ***ŋula=witja+n+dhi bili*** *yan*
run+1st+SEQ IMPV-1st DIS-PERL+1st+ANA COMPL EMPH T012p20
(the car) travelled along, the same way (as before)

(78) *ga bitthu+rr ŋanapurr marrtji+n*\ ***ŋuli=witjarr+yi+n***
and grow up+3rd 1plNOM walk+3rd TEXD+PERL+3rd+ANA+SEQ
dhäwu+wurr+a
story+PERL+SEQ
and we grew up amongst those stories T018p3

(79) *ga ŋunha watjpil+ŋur napurr+nydja räli* ***dhuwala+tja+rr***
and DIS hospital+LOC 1pl+PROM MVTTWD PROX+PERL+3rd
yindi+kurr *yan* ***liw'yu+rr,*** ***dhukarr+kurr***
big+PERL EMPH turn+3rd, road+PERL T007p4
and at the hospital we turned this way along the big track

6.2 Comparison of Dhuwal/Dhuwala demonstratives

The four Dhuwal/Dhuwala varieties being considered here for comparative purposes all have a four-way distinction in demonstratives and all have essentially identical forms. However as we have seen elsewhere, each variety has a combination of characteristics which make its particular paradigm distinctive. Again we see Vowel deletion affecting the Dhuwal varieties and thus distinguishing them from the Dhuwala varieties. And again there are areal similarities to be found between Djapu and Gumatj (eastern Dhuwal/Dhuwala varieties) versus Djambarrpuyŋu and Gupapuyŋu (western Dhuwal/Dhuwala varieties).

6.2.1 General comparison

The little data I have for Dha'yi suggests its demonstrative paradigm is much more distinct from Dhuwal/Dhuwala than its pronominal paradigm. The unmarked/ ABS forms should suffice in making this evident - PROX *dha'yi*, MED *dhän*, DIS *ŋunhu* and possibly TEXD *ŋunha(-)*.

It is not possible to make a comparison of Yolŋu demonstratives across as many varieties as considered for pronominals since essential data is not available for Dha'yi and Nhaŋu.

In referring to demonstratives from other varieties I use the labels I have adopted for Djambarrpuyŋu. There is some variation in the literature however, so the correlations are summarized below:

In referring to demonstratives from other varieties I designate them according to the labels I have adopted for Djambarrpuyŋu. There is some variation in the literature however. The correlations are summarized below:

Table 33: Comparison of terms used to label demonstratives in Yolŋu varieties

Djambarrpuyŋu	Proximal "this/here"	Medial "that/there"	Distal "yon/yonder"	Text Deictic "that/there"
Morphy (Djapu)	----------context deixis--		----------	discourse deixis
	"this/here"	"that/there"	"yon/yonder"	"that/there"
Heath (Dhuwal)	----------Proximate---------		----------Distant----------	
Lowe Gupapuyŋu	this/here	that/there if visible or comparatively close	that/there can be used dhuwali or if not	that/there instead of visible
Ross (Gumatj)	this/here	that/there close at hand	that/there further away but in sight	that/there out of sight
		(.... distinction	not always clear	.....)
Heath (Ritharrŋu)	Proximate	Immediate	Far Distant	Near-Distant
	near speaker	near speaker and addressee, addressee alone	regions outside the other two (notes not all his examples consistent with his glosses	
Schebeck (Dhaŋu)	I (speaker)	II (addressee)	III	IV far-distant
Wood (Gälpu)	"this/here"	"that/there"	"that over there"	"that/there"
	close at hand	nearby or just said	medium distance	unseen or abstract
Waters (Djinaŋ)	Immediate-Proximate near speaker	Far-Proximate	Near-Distant	Distant used a lot in discourse
Zorc (Yolŋu)	DEIC 1	DEIC-1+2	DEIC-2	DEIC-3
	close to 1st person	close to 1st and 2nd person	close to 2ndperson	position by 3rd person

The following table presents the S-O-LOC stems in various Yolŋu varieties

Table 34: S-O-LOC Demonstrative Stems Across Yolŋu Varieties

	PROX	MED	DIS	TEXD
Djambarrpuyŋu (Dhuwal)	dhuwal	dhuwali	ŋunha	ŋunhi
Gupapuyŋu (Dhuwala)	dhuwala	dhuwali	ŋunha	ŋunhi
Djapu (Dhuwal)	dhuwal	dhuwali	ŋunha	ŋunhi
Gumatj (Dhuwala)	dhuwala	dhuwali	ŋunha	ŋunhi
Dhuwaya	dhuwa(ya)	dhuwa(yi)	(ŋ)un/nha	(ŋ)un/nhi
Dha'yi	dha'yi	dhän	ŋunhu	?ŋunha
Ritharrŋu	yaku	yiki	ŋuku	ŋuki
Dhaŋu	dhaŋu	dhuwan	ŋunhu	banha
Djinba	djininy	baliny	ŋuniny	ŋuniny
Djinaŋ	djini(ŋi)	djinimi	ŋuŋumi	ŋuŋu(ŋi)

Sources: Gupapuyŋu (Lowe n.d.a); Djapu (Morphy 1983); Gumatj (Ross n.d.); Dhuwaya (Amery 1985); Dha'yi (own notes); Ritharrŋu (Heath 1980b); Dhaŋu (Schebeck 1976b and Wood n.d.); Djinaŋ and Djinba (Waters 1989).

A four way distinction is described for Dhaŋu, Djinaŋ and Djinba. *Dhi-/dji* is a common initial syllable in proximate forms across all sub-groups. *Ŋu-* is a common initial syllable in non-proximate stems in all sub-groups. Dha'yi also has reflexes of these but Ritharrŋu has no reflex of *dhi-/dji-*. The Ritharrŋu stems are based on the four roots. These are *yaku-* (Proximate (PROX)), *yiki-* (Immediate (MED)), *ŋuki-*(Near-Distant (TEXD)) and *ŋuku-* (Far-distant(DIS)). Heath notes that some scholars have used the term *dhiyakuy* to refer to Ritharrŋu. However he observes that this is not used by the language speakers themselves and that the correct form of "this" is *yaku(y)* (1980b p2). However it does suggest the possibility that there was an initial */dhi-/* syllable in the past. We have already seen the prevalence of initial syllable dropping in the Ritharrŋu pronominal paradigm, and a second syllable /-yV-/ is also prevalent among the "proximate" stems of other Dhuwal/Dhuwala varieties.

The pattern of vowel alternation distinguishing between the four stems is found in Dhuwal, Dhuwala and Ritharrŋu. In Djinaŋ the alternation involves a CV syllable rather than just a vowel. This syllable is /mi/ as in NOM *djinimi* (Far-Proximate) vs *djini(ŋi)* (Immediate-Proximate) and *ŋuŋumi* (Near-Distant) vs *ŋuŋu(ŋi)* (Distant) (Waters 1989 p38).

In Ritharrŋu the formal distinction between the four stems is most consistently borne by the vowel alternation, since the *-i* final paradigms are identical as are those of the *u-* final stems (Heath 1980b p50)

The Djinaŋ *-mi* bearing stems are not exactly equivalent to the Dhuwal /i/ bearing stems in respect to the form/function alignments. From Waters' description the Near Distant is based on the Distant forms from which we might expect an alignment with Djambarrpuyŋu TEXD and DIS respectively. However the correlation with Dhuwal forms on the basis of functions described, namely that the Distant is predominantly used in discourse, suggests alignment of the Distant with TEXD and Near-Distant with DIS. He also describes a four-way distinction on the distance dimension which does not occur in Djambarrŋuyŋu.

However in Dhaŋu there is no indication of the four way distinction being borne by this kind of alternation. The equivalent to the TEXD stem has the initial syllable */ba-/* which is quite distinct from the DIS stem with /ŋu-/. The PROX stems are *dhaŋu, djina-/djinha-* [1] and the MED *dhuwa-*. Again there is no evidence of vowel alternation, although the stems are more similar than the "non-proximate" stems, both sharing a laminal initial syllable found in all other varieties. Only the ABS, ALL and ALL forms of the MED are distinct from the PROX however. Hopefully future work on Dhaŋu, Nhaŋu and Dha'yi demonstratives, both as to their forms and functions will allow for a greater understanding of the Yolŋu demonstratives and thus to possible historical developments. One final observation should be made in regard to the Dhaŋu case forms before focusing on Dhuwal/Dhuwala demonstratives. Unlike the Dhuwal/Dhuwala and Ritharrŋu subgroup the distinction between "human" and "non-human" reference is not coded using the OBL or OBLS suffixes. In Dhaŋu there are distinct case suffixes for "human" and "non-human" referents. These have been reported for LOC, ALL, ABL, ASS and PERL cases. There is also an ACC form used for "human" referents. In Djinaŋ the use of the OBL is conditioned by case (i.e. it is required with ACC, DAT, OR and GEN) rather than by the nature of the referent.

6.2.2 Parameters distinguishing particular varieties

There are seven features associated with distinctive demonstrative forms in different Dhuwal/Dhuwala paradigms - the effects of vowel deletion, the existence of distinct Allative, Associative and Perlative forms, the presence of vowel

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[1] The last alternate only appears in Schebeck's data for Ŋaymil (Dhaŋu) (1976b pp518-519). It does nor appear in Wood's Gälpu (Dhaŋu) sketch (n.d.).

alternation in certain forms, the presence of an /i/ in certain stems, the presence of alternative Ablative stems. These will now be considered in turn.

1. Vowel deletion

The forms affected by vowel deletion are given in Table 35 below, which lists the relevant Dhuwal and Dhuwala forms:

Table 35: Vowel Deletion in Dhuwal/Dhuwala Demonstratives

	S-O-LOC	LOC	ALL	ERG	DAT
PROX					
Djambarrpuyŋu	dhuwal	dhiyal	dhipal	dhiyaŋ(u-)	dhiyak(u-)
Gupapuyŋu	dhuwala	dhiyala	dhipala	dhiyaŋu	dhiyaku
Djapu	dhuwal	dhiyal	dhipal	dhiyaŋ(u-)	dhiyak(u)
Gumatj	dhuwala	dhiyala	dhipala	dhiyaŋu	dhiyaku
MED					
All 4 varieties	dhuwali	dhiyali	dhipali	dhiyaŋi	dhiyaki
DIS					
Djambarrpuyŋu	ŋunha	ŋunhal	ŋunhawal	ŋuruŋ(u-)	ŋuruk(u-)
Gupapuyŋu	ŋunha	ŋunhala	ŋunhawala	ŋuruŋu	ŋuruku
Djapu	ŋunha	ŋunhal	ŋunhawal	ŋuruŋ(u-)	ŋuruk(u-)
Gumatj	ŋunha	ŋunhala	ŋunhawala	ŋuruŋu	ŋuruku
TEXD					
Djamb/Gup	ŋunhi	ŋunhili	ŋunhiwili	ŋuru/iŋi	ŋuru/iki
Djapu/Gum	ŋunhi	ŋunhili		ŋuriŋi	ŋuriki
Djapu			ŋunhiwal		
Gumatj			ŋunhiwala		

Demonstrative suffixes:

	Dhuwal	Dhuwala
OBL	-kal	-kala
OR	-kuŋ(u-)	-kuŋu
	/-kiŋ (Djapu DIS stem only)	
ABL	-ŋur	-ŋuru

(Sources: Djapu - Morphy (1983 p57-58); Gupapuyŋu - Lowe (n.d.a L54-58); Gumatj- Ross (n.d.))

Vowel deletion has had the same effect in the two Dhuwal varieties. It has been confined to PROX and DIS stems thus allowing the distinction between the four stems to be maintained. The one exception in Djapu will be discussed in point 2 following. The final vowel has been lost entirely from the PROX and DIS forms of the S-O-LOC, LOC and ALL, but synchronically the vowel is deleted word finally in the ERG and

DAT Dhuwal stems. The OR, OBL and ABL pattern just like the nomen suffixes i.e. the OR has a final vowel when not word final, while the OBL and ABL have categorically deleted the final vowel found in the Dhuwala forms. The optionally occurring final vowels are of course identical to those found in Dhuwala cognates.

2. Distinct ALLative forms

The one exception to the uniform application of vowel deletion occurs in the ALL of the TEXD. Here we find a distinction in the suffix-like component, *-wili* occurring in the western varieties, but *-wal(a)* in the eastern varieties. The western Dhuwal variety, Djambarrpuyŋu, does not permit vowel deletion here, and thus maintains the pattern found elsewhere in the paradigm where a stem or suffix final /i/ is specific to the TEXD forms. The first /i/ in the suffix does appear to be an innovation, given the cognates in other varieties and other forms within the Djambarrpuyŋu and Gupapuyŋu paradigms, all of which have /a/. Factors contributing to this are presumably the /i/ vowel in neighbouring syllables and the general association of /i/ with the TEXD demonstrative stems. In eastern varieties the TEXD stem distinction is borne by the stem-like component alone i.e. *gunhi-*, and the suffixes for both "non-proximate" stems are identical i.e. *-wal(a).* Both Djapu forms have undergone vowel deletion resulting in the only Dhuwal form within the TEXD and MED stems without a final *-i* (i.e. *gunhawal*).

3. Toleration of vowel alternation of the stem final vowel of /u/ final TEXD stems

This again involves an "eastern" vs "western" split, the variation being confined to the TEXD forms of the ERG and DAT in Djambarrpuyŋu and Gupapuyŋu. Djapu and Gumatj only permit /i/,having generalized the /i/ distinction to the stem final vowel in all TEXD forms.

See section 6.1.1above for further discussion of this alternation in Djambarrpuyŋu.

4. Extension of the *-i* vowel to suffix like components

This appears to be most widespread in Djapu, where two suffixes, the ASS and the OR, show allomorphs with an /i/ unique to the demonstrative paradigm. The undoubted source for these is the /i/ vowel alternation in which /i/ is associated with the MED and TEXD forms. The demonstrative ASS suffix has the allomorph *-kiy* in the MED and TEXD forms and *-kuy* in the PROX and DIS forms, exactly

parallel to the distribution of the /i/ vowel alternation found elsewhere. The resulting forms are *dhiyakuy* (Proximate (PROX)), *dhiyakiy* (Near (MED)) *ŋurukuy* (Distant (DIS)) and *ŋurikiy*. (Discourse (TEXD)) (see Table 36).

Unique to Djapu is the distinctive OR suffix *-kiŋ* confined to the TEXD stem, thus *ŋurikiŋ* compared with *ŋurikuŋ(u-)* in the other Dhuwal/Dhuwala varieties. The MED however is described with the regular OR suffix i.e. *dhiyakuŋ(-u)* and is identical to the PROX (see Morphy 1983 p 57).

5. Form of the ASS suffix

Table 36: "Non-human" ASS Demonstratives in Dhuwal/Dhuwala

	PROX	MED	DIS	TEXD
Djambarrpuyŋu	dhuwalaŋuwuy	dhuwaliŋuwuy	ŋunhaŋuwuy	ŋunhiŋuwuy
Gupapuyŋu	dhuwalaŋuwuy	dhuwaliŋuwuy	ŋunhaŋuwuy	ŋunhiŋuwuy
Djapu	dhiyakuy	dhiyakiy	ŋurukuy	ŋurikiy
Gumatj	dhiyakuy	dhiyakiy	ŋurukuy	ŋurikiy

Sources: Gupapuyŋu (Lowe n.d.a); Djapu (Morphy 1983); Gumatj (Amery 1985)

The "non-human" Djapu ASS suffix has an initial /k-/ rather than /p/ or its lenited form /w-/. Again we have a distinction in demonstrative paradigms within Dhuwal/Dhuwala. The Gumatj forms are in need of further clarification. Those in Ross (n.d.) are identical to Gupapuyŋu and Djambarrpuyŋu, while in Amery (1985 p83) the Gumatj forms (which are also attributed to Ross) are identical to Djapu. It is not thus clear if these forms reflect another eastern-western distinction or whether they are a distinctive Djapu feature.

The initial /k/ in the Djapu forms may have resulted from an earlier situation in which a *-wuy* form of the ASS was suffixed to a different base than that used in other varieties. Assuming it was similar to or identical to that occurring with DAT stems i.e. *dhiyaku/i- ŋuriki/u-* the resulting forms would have been **dhiyakuwuy* and **ŋurikiwuy*. Contraction of the last two syllables would explain the current Djapu forms. This has parallels in the reduction that takes place with similar sequences in fast speech utterances of the longer words in Djambarrpuyŋu.

What looks unique in Djapu takes on a different perspective if we consider the Dhaŋu forms. The Djaŋu forms - *djinakuy, dhiyakiy, ŋunhukuy* and *bayikuy* - are

very similar to those in Djapu and Schebeck (1976 p545 fn 15) suggests a parallel development to that just described for both the ASS and OR forms. The ASS demonstrative suffix-like component is consistently *-ku(ru)y* in Dhaŋu (the longer stem occurs with demonstratives with "human" reference). Since the stems are not identical between the two varieties it is possible that the process of deriving the ASS forms was diffused into Djapu from Dhaŋu rather than being loans or a completely independent development.

6. Alternative "non-proximate" ABL stems

While both Dhuwal varieties have only been reported with stems *ŋuli-* and *ŋula-*, forms based on *ŋunha-* and *ŋunhi-* have been noted for the Dhuwala varieties. Lowe (n.d.a L56 p3) includes *ŋunhiŋuru* as an ABL for "from that" in Gupapuyŋu and Ross (n.d.) includes *ŋunhiŋuru* and *ŋunhaŋuru* as alternates for *ŋuliŋuru* and *ŋulaŋuru* respectively in Gumatj.

The *ŋuli-* and *ŋula-* stems are confined to the ABL and PERL demonstratives in all varieties and appear to be particular to Dhuwal/Dhuwala and Ritharrŋu subgroup. Heath notes them in Ritharrŋu as uncommon Near-Distant (DIS) and Far Distant (TEXD) stem forms, *ŋuki-* and *ŋuku-* being the more commonly occurring forms (Heath 1980b p50).

7. Demonstrative forms used to express the Perlative case.

PERL forms described for various Yolŋu varieties are given below:

Table 37: PERL Demonstratives in Dhuwal/Duwala, Ritharrŋu and Dhaŋu

	PROX	MED	DIS	TEXD
Djambarrpuyŋu	dhuwala+tja-	dhuwali+tja-	ŋula+witja-	ŋuli+witja-
Gupapuyŋu	dhuwala+tja-		ŋula+(wi)tja-	
Djapu	dhuwal+witja-		ŋula+witja- (/ŋulakurr)	
Gumatj		dhuwala+tja-	ŋula+tja-	
Ritharrŋu	yaku+kurru'	yiki+kurru'	ŋuki+kurru'	ŋuka+kurru'
Gälpu(Dhaŋu) (-Hu)	dhawitjan	ŋunhuwitjan	bayitjan	

Sources: Gupapuyŋu (Lowe n.d.a L83); Djapu (Morphy 1983 p65); Gumatj (Ross n.d.); Ritharrŋu (Heath 1980b p51); Gälpu (Wood n.d.)

On the basis of this data, Djambarrpuyŋu is unique amongst the Dhuwal/Dhuwala varieties in having a four way distinction for the PERL stems. The Djapu, Gumatj and Gupapuyŋu descriptions only indicate a two way distinction.

The use of verbal stems for the expression of Perlative case is common to all the Dhuwal/Dhuwala varieties, although Morphy reports a less frequent alternative of *ŋulawitja-, ŋulakurr* with the regular nominal PERL suffix in Djapu. Lowe also reports an alternative *wanhaŋuwurr* for the place interrogative/indefinite pronominal *wanhawitja-* in Gupapuyŋu. On trying such PERL forms with the nominal suffix *-Kurr* in Djambarrpuyŋu I have always had them corrected, being told they are children's words.

Ritharrŋu does not have PERL verbal stems, nor are they reported for Djinaŋ or Djinba, but they do occur in Dhaŋu. This is one instance in which Dhuwal/Dhuwala is more closely allied with Dhaŋu than with Ritharrŋu.

Djapu provides the clearest evidence that the PERL forms are derived from compounds built on a demonstrative base and the verb *bitja-* "do thus", and this was indeed pointed out by Morphy (1983 p65). This is also the pattern for the PERL stem of the interrogative/indefinite place pronominal i.e. *wanha-witja-*, which is recorded identically in all four varieties and has its equivalent in Dhaŋu i.e. *ŋala+witja-*. The initial stop of the verb element has been lenited in all instances. In non-Djapu varieties the original verb element has also been contracted to *-tja-* in certain forms. In Djambarrpuyŋu this has occurred when the stem is more than two syllables. In Gupapuyŋu it is an alternative permited with the disyllabic "non-proximate" stem. In Gumatj it appears to have been categorical for both demonstrative stems but not with the interrogative/indefinite pronominal. Dhaŋu has reduced the verb stem only in the "non-proximate" *bayitja-* presumably prompted by the sequence of a semivowel between two identical vowels i.e. *bayi+witjan*. This parameter is one which distinguishes between individual clan varieties to a greater degree than many we have considered.

Djapu is also unique in having *dhuwal-* rather than *dhuwala-* as the Proximal PERL base, the vowel deleted stem no longer being confined to the S-O-LOC form.

The following list is a summary of variable features evident in the demonstratives and the varieties in which they occur. Where this correlates with one of the major linguistic groupings it is indicated in brackets.

Vowel deletion:	Djambarrpuyŋu/Djapu	[Dhuwal]
ALL forms:	Djapu/Gumatj	[Eastern]
-i in suffixes:	Djapu (?Gumatj)	[?Djapu/Eastern]
ASS with *-kuy*	Djapu/Dhaŋu (?Gumatj)	
Alternative ABL stems:	Gupapuyŋu/Gumatj	[Dhuwala]
Number of Perl stems:		
4way	Djambarrpuyŋu/Ritharrŋu	
3way	Dhaŋu	[Dhaŋu]
2way	Djapu/Gupapuyŋu/Gumatj	
Word class of Perl stems:		
verb	Djambarrpuyŋu/Djapu/Gupapuyŋu/ Gumatj/Dhaŋu	
non-verb	Ritharrŋu	

This reflects the situation we saw for the pronominals where a particular parameter rarely proves unique to a single variety. While several parameters do correlate with the major groupings, there are a few that cut across them.

6.3 Other suffixes found on demonstrative stems

There are four suffixes to be considered here, none of which are exclusive to demonstratives. These are the PLural *-(Kurru)wurr(u-)*, the ANAphor *-Thi*, the PROMinence *-NydJa* and the Sequence *-Nha*.

6.3.1 Plural demonstratives

Plural forms are listed in Table 38.

The PLural suffix is confined to demonstratives, nominals which have a deictic function such as *wiripu "a certain(X), other/different"*, *waŋgany* "one", *balanya* "such a", and certain human referring nominals. In the latter category it has been noted only with *miyalk* "woman", *ŋirramu* "man", *ŋilkurr(u-)* "old person" and kin terms with the KINDYD suffix *-'manydji* or the KINPROPAP *-ŋali*.

The form of the PL marker itself is variable although *-wurr(u-)* is most common. Alternative pronunciations in which the sequence /uwu/ is reduced, often to a long vowel, are not infrequent in everyday speech. The variants with the initial stop *-kurruwurr(u-)/-kurru-*, however, are largely confined to the lexeme *miyalk* "woman" and kin terms plus the KINDYD *-'manydji*. The stem *miyalk* has only been recorded with this suffix. However, a kin term with the KINDYD was given as a citation form i.e. *wäwa+'manydji+wurru+ŋ* [B+KINDYD+PL+DAT], although all text examples have the stop initial form. They have also been noted in certain plural demonstrative forms based on DAT stems. Consider for example the

following: *dhiyakurruŋ/dhiyakurruwurruŋ* (PROX-DAT alternates); *ŋurukuwurruŋ* DIS-DAT vs *ŋurukurruŋguŋ* DIS-OR. The alternation appears to be confined to the PROX and DIS stems. Across the paradigm it would appear that the stems for the non-core cases are the DAT forms of the regular demonstratives i.e. *dhiyaku-, dhiyaki-, ŋuruku-* and *ŋuriki-*. However, the variants in the PROX and DIS stems can be explained as allowing alternative stems without the final vowel ie. *dhiyak-* and *ŋuruk-* and then taking the stop initial suffixes. An alternative explanation for the *-kurru-* forms would be that the sequence /uwu/ gets reduced to /u/. This again is confined to the PROX and DIS stems. This would not explain the occurrence of *dhiyakurruwurruŋ* however.

Table 38: DJAMBARRPUYŊU forms with the PLURAL suffix - DEMONSTRATIVES and NOMENS

	S	O	A
Proximal	dhuwala+wurr	dhuwala+wurru+ny	dhiyaŋu+wurru+y
Medial	dhuwali+wurr	dhuwali+wurru+ny	dhiyaŋi+wurru+y
Distal	ŋunha+wurr		ŋuruŋu+wurru+y
Text Deictic	ŋunhi+wurr	ŋunhi+wurru+ny	ŋuriŋi+wurru+y
"certain, some other"	wiripu+wurr	wiripu+wurru+ny wiripu+wurru+nha-	wiripu+wurru+y
"old(people)"	ḏilkurru+wurr	ḏilkurru+wurru+ny	ḏilkurru+wurru+y ḏilkurru+wurr+yu
"woman"	miyalk+kurruwurr	miyalk+kurruwurru+ny miyalk+kurru+ny	miyalk+kurruwurru+y miyalk+kurru+y
kin term+KINDYD (e.g. wäwa+'manydji+)	-kurruwurr	-kurruwurru+ny	
	DAT	OBL	OR
Proximal	dhiyaku+wurru+ŋ(gu-) dhiyak(+k)u(+)rru+ŋ(gu-) dhiyak(+K)urruwurru+ŋ(gu-)	dhiyak(+k)u(+)rru+ŋgal	dhiyaku+wurru+ŋguŋ
Medial	dhiyaki+wurru+ŋ(gu-)	dhiyaki+wurru+ŋgal	dhiyaki+wurru+ŋguŋ
Distal	ŋuruku+wurru+ŋ(gu-)		ŋuruku+wurru+ŋguŋ ŋuruk(+k)u(+)rru+ŋguŋ
Text Deictic	ŋuriki+wurru+ŋ(gu-)	ŋuriki+wurru+ŋgal	ŋuriki+wurru+ŋguŋ
"certain/other"	wiripu+wurru+ŋ(gu-)	wiripu+wurru+ŋgal	
"old(people)"	ḏilkurru+wurru+ŋ(gu-)		ḏilkurru+wurru+ŋguŋ
"woman"	miyalk+kurruwurru+ŋ(gu-)	miyalk+kurruwurru+ŋgal	
kin term+KINDYD	-kurru+ŋ(gu-)/- wurru+ŋ(gu-)		

The fact that the case forms that occur share most in common with pronominal suffixes suggests the PL suffix may be derived from a pronoun. The occurrence of a (partially) homophonous form *wurru* as the 3rd person pronoun in Dha'yi is supportive evidence.

The PL marker is a candidate for a derivational suffix. It is of restricted productivity, and since the expression of number is not required syntactically it does not qualify as an inflection. Furthermore, although they do not derive stems of a strikingly different word class to their stems, they do code additional information and they do take a different range of case markers from the word class on which they are based.

The forms in Table 38 are drawn from occurrences in texts and there are some gaps. However, these are assumed to be accidental and there is enough data to reveal the general patterning of plural forms.

Demonstrative plural forms have a parallel structure to the emphatic pronominals. The basic stem is an appropriate case form of the demonstrative to which is suffixed the PL marker and then a case marker. Non-demonstrative stems do not require such "double" case marking however, and simply take the PL marker before a case marker. This suggests that "double" case marking is a feature of closed class paradigms. In many respects the PL demonstratives are like a distinct paradigm, having distinct forms and functions parallel to the relationship between the two pronominal paradigms.

6.3.1.1 Function of PLural demonstratives

The PL suffix is predominantly used to code plurality with human referents. In my corpus it is used of three or more. Thus with the kin terms plus the KINDYD it refers to 3 or more people in the particular relationship pair, say 2 people in one category and 1 in the other. It is one of several devices by which number may be coded in Djambarrpuyŋu (see section 4.1.2 for a summary of these).

While a few nominals occur with the PL the number of stems appears to be heavily restricted, having only been noted on the few stems listed above. It is much more frequently found on demonstrative stems. In bearing information about the referent (i.e. number which is non-deictic) the plural demonstratives have a unique function. This is most evident when they co-occur with nominals which are not marked for number. The two will agree in case but specification of number is

confined to the demonstrative stems. There is no requirement that the two formally agree in this respect. Thus in both form and function they are distinct from regular demonstratives.

The evidence of the emphatic pronominal and plural demonstratives is that "double" case marking is confined to the "derivation" of one closed class paradigm from another, it being a context in which the multiplicity of stems is not problematic.

6.3.1.2 Plural demonstratives forms

The case range found on plural forms is the same as that found on human referring nominals i.e. S, A and O are each distinctively marked and local cases (i.e. Locative, Ablative and Allative) are coded with the OBL. The range of case marking found on plural forms in the corpus is S, O, A, DAT, OBL, OR, and OBLS+ASS.

In distinguishing O the plural demonstratives are distinct from their base demonstrative counterparts where there is no O marking distinct from S. The stems for the S and O forms are identical however, both being derived from the form which codes S and O function in the regular demonstrative paradigm. There is also no evidence that the LOC function of the unmarked demonstrative stem occurs with the plural demonstrative S forms.

The suffixes are also quite distinct from those occurring in the regular demonstrative paradigms. In the non-core cases they are also distinct from the suffixes found on nominals. Thus both plural demonstrative and nominal stems do not receive the case marking generally associated with their word class.

Plural Demonstrative Suffixes

ERG	-y/-yu
ACC	-ny/-nha-
DAT	-ŋ(gu-)
OBL	-ŋgal
OR	-ŋguŋ
OBLS+ASS	-ŋgalaŋu/a+wuy

The alternations are as expected for these suffixes. The ERG alternation is based on the quality of the final phoneme of the stem, while the ACC and DAT alternation is determined by whether the suffix is word final or not.

The striking fact about the non-core case markers is that they are identical to the forms found on pronominals. Since pronominals are the one word class that

inherently codes number and are also prototypically, at least for 1st and 2nd person, human referring it is possible there is a semantic link underlying the use of these suffixes. It is also possible, given the Dha'yi 3rd person plural *wurru*, that there is historically a formal link between a pronominal and these plural forms. This would explain the pronominal case suffixes that occur with the PLural suffix.

The stems used for the plural demonstratives are as follows. The S and O forms are based on the S-O-LOC stems. The PROX stem requires a stem final vowel that does not appear in the S-O-LOC form itself but does when used as a stem for other case forms. The A forms are based on the ERG demonstratives and all the other cases on the DAT demonstratives (although see the discussion in the following section below). The distinction of stems for S, O, A and DAT and Others also reflects the pronominal paradigm.

6.3.1.3 The Plural suffix in other varieties

A plural suffix is described for Gupapuyŋu *-wurru* and *-urruwurru* (Lowe n.d.a L83 p5) Djapu *-wurr* (Morphy 1983 p47) and Dhuwal *-wurr(u-)* and *-gurruwurr(u-)* (Heath 1980a p22) Gumatj *-wurru* (Amery 1985 p71), Dhuwaya *-wu* (Amery 1985 p71). A cognate is also noted for Dhaŋu *warra* (Wangurri (own notes)) and *-wärra* (Rirratjiŋu (Amery 1985 p74)). All descriptions note that it is restricted in the stems with which it occurs. According to Morphy its use in Djapu is confined to the three stems *dhayka* "woman", *ḏarramu*, "man" and *ḏilkurr(u)* "old man" (1983 p47). There is no mention of it on demonstrative stems, nor any mention of any distinctive case marking. However Heath, writing about Djambarrpuyŋu and Djapu, and Lowe, writing about Gupapuyŋu, do describe its occurrence on demonstratives and also note the distinctive case marking. Heath's corpus appears to have been limited as to the number of demonstratives that occurred and most of his discussion focuses on nominals. He notes it with stems equivalent to those in Djapu i.e. *miyalk* "woman", *ḏirramu* "man" and *ḏilkurr* "elder" as well as a fourth stem *miḏiku* "bad". The Lowe data also includes *wiripuwurru* "others" and *dharrwa wurru* "lots, lots of people " as examples of nominal stems with the plural suffix, in addition to stems for woman, man and elders. There is therefore, a consistent core of nominal stems found across varieties and geographical regions which occur with this suffix.

The distinctive suffixes noted by both Heath and Lowe concur with those I have noted above. Several Gupapuyŋu forms have the final vowel distinctive of Dhuwala varieties (OBL *-ŋgala*, ACC *-nha* and DAT *-ŋgu*). Heath notes the use of ERG, ACC,

GEN-DAT, OBL and OR case suffixes with plural stems. It is not clear if the distinctive suffix forms also occur in eastern varieties.

The pattern of stems found in plural demonstratives indicated in the Lowe data is comparable to that described here for Djambarrpuyŋu, although she does not present a full paradigm. Thus the S and O plural forms are based on the S-O-LOC, the A forms on the A, and the DAT and OBL on the DAT. Lowe also described the same range of variation in the DAT based demonstrative forms that I have found for Djambarrpuyŋu. For Gupapuyŋu the explanation I have proffered concerning the use of the stems without the final vowel is not available since these stems do not occur. One could argue for reduction of /uwu/ or /iwu/ in these cases. Her examples also include one /i/ bearing stem i.e. the TEXD OBL *ŋurikiwurruŋgala/ ŋurikurruŋgala* which I have not noted for Djambarrpuyŋu. However, again this would not explain the alternative with the longer form of the plural suffix which also occurs in Gupapuyŋu e.g. *dhiyakurruwurruŋgu* (PROX DAT). An alternative explanation again would be that the stem may be either the full DAT stem OR the DAT base e.g. PROX *dhiyaku-* or *dhiya-* TEXD *ŋuriki-* or *ŋuri-* with the longer stem taking the suffix *-wurru* and the shorter stem the suffix *-kurruwurru* or *-kurru*. This would hold for both sets of data. A deciding factor for Djambarrpuyŋu would be whether the alternatives with the /i/ stems actually occur. If they did this explanation would be more plausible.

6.3.2 The ANAphor *-Thi* with demonstratives (and other stems)

Strongly associated with demonstratives is the ANA suffix, but an identical form is also found on other classes of stems including the nominal with a determiner function such as *wiripu* "different; certain" and *balanya* "such", verbs and various particles.

This suffix occurs frequently on demonstrative stems. It has allomorphs *-thi* and *-yi*. The allomorph *-yi* occurs after vowels, semivowels and liquids as might be expected. The stop initial allomorph occurs after nasals and stops as well as occasionally after vowels, semivowels and liquids. The lenition process has not categorically applied to this suffix.

The ANA suffix occurs after the case suffixes, usually to the extended stem. However, it is suffixed to the non-extended stem of the S-O demonstratives (i.e. the PROX of the regular demonstratives and to *-wurr-*, not *-wurru-*, in all plural forms) and it may also be suffixed to the non-extended stem of DAT forms.

Superficially it looks like an anaphoric marker of some kind. It is very frequently found on demonstratives having reference to a previously identified participant or circumstance but not all demonstratives with this function are so marked and the suffix is also found without anaphoric reference. In the latter cases I can only describe it loosely as an "emphatic" marker. It is possible it may be best interpreted as emphasising the phoric function of demonstrative stems or it may be more broadly captured as marking something that is highly topical to a text or situation.

There may be a functional parallel with the Emphatic pronominals which mark both emphasis and coreference. The coreferential function of the latter however is clause bound while the the ANA suffix is known to operate extra-clausally.

Some examples of the ANA suffix with demonstratives are given below:

(80) *ŋanapurr+nydja djäl muka walalaŋ dhiya=kurruŋ+dhi+n,*
1pl+PROM want PRT-OK 3pl-DAT PROX=PL-DAT+ANA+SEQ
we want them, those ones (3 people who have been explicitly mentioned in the story already) Burrp12

(81) *dhiya=ŋi+yi+n walal ŋuli garrpi+na+ny däl+ku+nha+ny*
MED=ERG+ANA+SEQ 3pl HAB tie+4th+PROM firm+TRANS2+4th+PROM
they bind (the wound) firmly with that (string - the topic of this particular part of the text) T014p6

(82) *bili rom walalaŋ ga dhärra ŋunha+yi*
because law/custom 3pl-DAT IMPV-1st stand-1st DIS+ANA
burumun'+ŋur wäŋa+ŋur
cheek/island+LOC/ABL place+LOC/ABL T101Bp18
because that is their custom in that island (i.e Bäli which this particular text is about)

(83) *ga ǰarru+ma+ny nhe dhu ŋuri=ki+yi girri+w+ny'tja*
and look for+1st+PROM 2sg FUT TEXD=DAT+ANA things+DAT+PROM
nho+kiyin+galaŋa+w nhe
2sg+EMPH+OBLS+DAT (2sg) T009p14
you look for that thing of yours (the "thing" has been established earlier in the text)

Other examples include numbers 101, 134,135, 154 (with INDEFP *dhika*), 169 and 170 (with INDEF *be*), 222 and 227 (with MVTAWY *bala*), 230, 481, 489, 491, 649, 671, 730, 753, 909, 911, 987 and 1013.

I will also include here some examples of this suffix with verb stems and the negative particle *bäyŋu* (NEGQ):

(84) *ga* ***marŋgi+thi+rr+yi*** *ga djamarrkuli+ny' ŋuri=ki muka*
and know+INCH+1st+ANA IMPV-1st children TEXD=DAT PRT-OK
and the children are learning about that T1023Bp9

(85) *ga* ***nhina+n+dhi*** *ŋunhal märr gurriri*
and sit/be+3rd+ANA DIS-LOC "somewhat" short OMS p12
and (he) was there for a short time

See also example 257 in which the ANA suffix occurs with the verbal determiner *bitja*-N_K "do/be thus".

(86) *mak* ***ŋunha*** *walal+nydja ga ŋuru=ŋu+wurr+y+nydja maypal,*
perhaps DIS 3pl+PROM IMPV-1st TEXD=ERG+PL+ERG+PROM shellfish
bäyŋu+yi *ŋayatha+m*
NEGQ+ANA hold+1st T012p1
maybe those people don't have any shellfish either

Other 'particles' on which the ANA suffix has been recorded are the other negative particle *yaka* (NEG), the directionals *bala* MVTAWY and *räli* MVTTWD (see section13.2), adverbs (see section 13.1), *bulu/biyapul* "again/more"(section 13.6) and *yuwalk* "truly, in fact" (see section 13.4.4).

6.3.3 The PROM and SEQ suffixes with demonstratives

These discourse suffixes both occur on demonstratives with the regular allomorphs described in section 2.4.6.8, except for certain combinations with the PROX and /l/ final stems. The PROX shows assimilation of the initial nasal in both suffixes to the place of the final lateral which is deleted, thus the PROM form *dhuwal+Nydja* > *dhuwandja* and the SEQ form *dhuwal+Nha* > *dhuwana.* Certain parallel fast speech forms of the ALL and LOC PROX with the SEQ suffix have also been noted i.e. *dhiyana* (LOC) (cf *dhiyalnha*) and *dhipana* (ALL)(cf *dhipalnha*), although these are not given as citation forms.

These suffixes always occur word finally. Like the ANA they attach to the unextended stems of the regular demonstratives which have undergone vowel deletion i.e. the S-O-LOC, LOC and ALL of the PROX and the LOC and ALL of the DIS. They are also suffixed to the *-wurr* form of the PL suffix in the unmarked S-O case forms. However elswehere they always attach to the extended stem. In this they contrast with the ANA-*Thi* suffix which can attach to the unextended form of the DAT stems.

6.3.4 Ordering differences involving the ANA suffix and the PROM and SEQ suffixes in Djambarrpuyŋu and Djapu

In Djambarrpuyŋu the ANA suffix always precedes the PROX or SEQ suffixes. In Djapu the regular combinations are :

root-PRO(=PROM)-ANAPH(=ANA)
and root-ANAPH(=ANA)-IM(+SEQ)

However other combinations are also attested, some including two occurrences of the ANA suffix (see Morphy 1983 p61). It is sequences in which the PROM precedes the ANA and examples of two occurrences of the ANA that produce forms that are different to attested Djambarrpuyŋu forms. Some examples of such contrasting forms are given below:

Djapu	Djambarrpuyŋu
ŋunhi+ny+dhi TEXD+PROM+ANA	*ŋunhi+yi+ny* TEXD+ANA+PROM
ŋunhi+yi+ny+dhi TEXD+ANA+PROM+ANA	*ŋunhi+yi+ny* TEXD+ANA+PROM
ŋunhi+yi+n+dhi TEXD+ANA+SEQ+ANA	*ŋunhi+yi+n* TEXD+ANA+SEQ

It is not known if this difference in the ordering of particular discourse suffixes is also found in eastern and western Dhuwala varieties.

6.4 Functions of demonstratives

This section is concerned with identifying and describing various functions of demonstratives. Identifying the function(s) of particular demonstratives in the text corpus has been, and remains, one of the most challenging areas in my learning of Djambarrpuyŋu. They are used extensively and feature prominently in reference tracking. The main challenge at this point of analysis has been to recognize the oppositions which occur within the paradigm and determine which oppositions particular forms can potentially participate.

The first sections will focus on various oppositions that have been recognized. The spatial and temporal are clearly fundamental deictic categories associated with demonstratives, and their use in relation to the text is also unexceptional.

The latter uses in particular are far from fully understood and will undoubtedly provide a rich area for future work. I will be assuming a fundamental distinction between the uses of demonstratives in relation to the situation of the speech event and their use in relation to the text. I adopt Lyons' (1977) terminology in regard to this distinction, namely deixis and anaphora, which correlate with his distinction between context-of-utterance and universe-of-discourse respectively. This distinction is referred to as deixis and non-deixis by Levinson (1983) and exophora and endophora in Halliday and Hasan (1976), the latter correlating with their context of situation and text respectively. The term anaphora, following Lyons, is not to be understood in a restricted directional sense as only involving reference back to earlier text. I use it quite freely at this point for any context in which the reference can be considered by the speaker as "given".

The section ends with a few observations in regard to the use of the demonstratives with gestures as well as their use in combination with pronominals.

A summary of the various oppositions is to be found in Table 39 at the end of section 6.5.2.3.4.

6.4.1 Spatial distinctions coded by demonstratives

While there is a clear three way spatial distinction it only involves the proximal, medial and distal demonstratives. The fourth stem, the text deictic, does not enter into the spatial opposition.

Fillmore (1982) proposes an "etic" framework for describing spatial deixis and since the distinctions in Djambarrpuyŋu are quite in accord with his proposals I have adopted his terminology. His overall approach lies within that of prototype theory. The prototypical dimension associated with demonstratives is distance. According to Fillmore (1982) the maximal number of distinctions made in languages on the basis of distance alone does appear to be a three-way one. Thus despite the formal four way contrast in Djambarrpuyŋu demonstratives, the existence of a functional three way spatial contrast would appear to be unexceptional. The semantic prototypes Fillmore proposes for languages with a three way contrast are D/[Proximal], D/[Medial] and D/[Distal] (where D symbolises the distance dimension), based on distance from the Speaker. The proposals he makes in regard to prototypical features associated with the D/[Medial] also appear perfectly in accord with the findings for Djambarrpuyŋu. He proposes further that distinctions under the prototypical D/[Medial] are based

on two features "(a) being a small distance from the Speaker, and (b) being near the Hearer." (Fillmore1982 p49). Both these are appropriately coded by the Medial in Djambarrpuyŋu, although unlike some languages there is no formal distinction associated with either of these features. In a prototypical speech situation in which a Speaker and Addressee are face to face, the Addressee's locale is designated by the Medial. However, in Djambarrpuyŋu, an Addressee at great distance from the Speaker, such as someone on the telephone in a far place or the far-distant non-present Addressee of a text recorded on a tape recorder are all also appropriately designated by the Medial. Such cases clearly indicate that the Medial can be bound to the Addressee in any speech situation.

It is also the case in Djambarrpuyŋu that the Medial is bound to middle distance from the Speaker. Even if the addressee is present in the speech situation it is quite appropriate to designate a space some distance from the speaker but not in the locale of the Addressee by the Medial. The flexibility of the system is reflected in the context in which a speaker is referring to something close to the addressee but relatively distant from the speaker. Then it is possible to use either the MED (given its location near the addressee) or the DIS (given its relative distance from the speaker).

The elements Fillmore proposes as prototypical of the Distal category are "far from Speaker" and "invisible to Speaker" (1982 p56). In Djambarrpuyŋu only the former is a pertinent parameter. Both the Medial and the Distal can be appropriately used of regions both visible and invisible to the Speaker.

It should also be noted that the appropriate use of demonstratives is according to the relative spatial relationships of the participants in particular situations. Locations which in absolute terms are at quite different distances from the speaker can be indicated by the same term. One can contrast here the use of *ŋunha* "Distal" to refer both to the other side of room in which Speaker and Addressee are present, as well as to a community twenty minutes flight away. Correlated with this is the fact that the domain of the Proximal is itself variable although it will always include the location of the speaker. Beyond its basic association with the speaker's location, it can be extended to the immediate area in which the speech event occurs and further such as to the general locality e.g. Galiwin'ku, or country e.g. Australia.

Summary of distinctions according to distance in Djambarrpuyŋu demonstratives

Proximal	"Speaker/close to Speaker"
Medial	"Addressee/close to Addressee" "relatively mid-distance from Speaker"
Distal	"relatively far from Speaker"

The TEXD from codes temporal and textual considerations rather than distance. It is possible for it to be used in connection with any of these spatial domains (see section 6.4.4).

Examples reflecting the spatial distinctions:

i) Proximal

(87) *\maralkur, guku **dhuwal***
MMBS, honey PROX T204p35
Maralkur, there's honey here
(A *gurruŋ* (FZDC) calls out to his *maralkur* who is in another part of the bush that he has found some honey)

(88) ***dhuwal** nhuma dhu ga märrma'-marrma ŋorra+ny*
PROX 2dl/pl FUT IMPV-1st two-REDUP sleep-1st+PROM T101Bp10
you will sleep here, four (of you)
(The speaker and addressees are together in the room)

ii) Medial

(89) *\yo manymak, ŋali djatthu+n gurruŋ, nhuma dhu galka+n **dhiyali***
yes good 1+2dl chop+1st FZDC 2pl FUT wait+1st MED-LOC T204p35
that's good, we'll (both) chop gurruŋ, you wait there
(This is the response to the first example given for the proximal above. Note that speaker uses a MED demonstrative to refer to the location of the addressee. The use of 2pl pronoun with singular reference is required by rules of speech etiquette concerning this relationship)

(90) *ŋayi balaŋ ḻäwu+ŋ, maḏakarritj **dhuwali***
3sg IRR bite+2nd angry/poisonous MED T102Bp11
it might bite, this is poisonous
(The speaker is an adult warning off children who are present about a snake he is hunting - it is clearly in the domain of them both but in this instant not nearer the children)

iii) Distal

(91) *\djaliŋgirr, ŋunha nhuŋu guthanhur nhina ga*
personal name DIS 2sg-DAT MM(B)(AP) sit-1st IMPV-1s T023Ap6
Djaliŋgirr, your MM(B) is sitting there
(the speaker and addressee are sitting together and the speaker can see the addressee's MM(B) across the street)

(92) *ŋunha ŋayi ŋorra+nha+mirr, ŋunha ga girri+y' ŋuruŋ dhurrpara+m*
DIS 3sg lie+NOM+PROP DIS IMPV-1st things+ERG DIS-ERG cover+1st
dhuwal ga girri+y' dhiya=ŋ nhina+nha+mirri+ny dhurrpara+m
PROX IMPV-1st things+ERG PROX=ERG sit+4th+PROP+PROM cover+1st
there is a bed, that is covered by those clothes, here the chair is covered by these clothes T009p3
(In this instance the bed was in another room, out of sight while the chair was in sight of both speaker and addresee)

6.4.2 Uses of the TEXt Deictic *ŋunhi*

The fourth demonstrative stem, the TEXt Deictic *ŋunhi*, is concerned with non-spatial oppositions. There are three uses which are reasonably clear. Firstly the TEXD is widely used for items with a definite/known/given reference either on the basis of prior mention in the current text or on the basis of assumed shared knowledge of the world. Any referent thus introduced into a text can then be referred to by this particular stem. In its neutrality in the spatial domain it is like the English demonstrative "the". Secondly, the Djambarrpuyŋu TEXD stems also participate in a two-way temporal opposition centred on the speech situation. It distinguishes non-"now" time from "now" which is coded using the PROX. Thirdly it can be used as a Textual deictic referring to an earlier utterance or utterances. In this function it is in opposition with the MED, and possibly the PROX.

The unmarked form of the TEXD, *ŋunhi*, also introduces finite subordinate clauses which may function adnominally or adverbially, correlating with constructions such as English relative, adverbial and conditional clauses (see section 12.2.1.1).

The different uses of the TEXD will be considered in the relevant sections below, which are organized around semantic/pragmatic functions rather than individual forms.

6.4.3 Temporal distinctions coded by demonstratives

6.4.3.1 The present/non-present temporal distinction coded by the PROX and TEXD demonstrative stems

Unlike the three-way distinction on the spatial dimension there is only a two-way distinction coded by demonstratives on the time dimension. This is between a now that includes the time of the speech event and the non-now coded with the PROX and TEXD stems respectively. The MED and DIS stems are not used to directly code temporal reference (for a special case see section 6.4.3.3). There are no temporal demonstratives distinct from those already presented. However temporal deixis is only associated with a sub-set of the demonstrative paradigm. This includes the unmarked (S-O-LOC) form, the ERG, ABL and DAT forms. This is parallel to the case range found on temporals. The temporal use of demonstratives also frequently involves demonstrative phrases where the demonstratives are followed by the particles *bala* or *bili/linygu/lingu* (see section 6.6.2).

Demonstrative forms that have been noted with a temporal function

	unmarked	ERG(Temp)	ABL	DAT
PROX	dhuwal (bala)	dhiyaŋ(u-) (bala) (bili)	dhipuŋur (bala)	dhiyak (bala)
TEXD	ŋunhi (bala)	ŋuriŋi (bala)	ŋuliŋur (bala) /ŋulaŋur (bala)	?
INDEF	be (bala)*		beŋur (bala)	

**be* as an indefinite temporal marker is suggested in collocations such as *be ŋäthil* (*ŋäthil* "first/prior), *be baman'* (*baman'* -long ago) used to refer to before, long ago, but the uses of the unmarked form need further investigation (see section 6.5.2.3)

The question mark denotes an unattested form which I expect does occur.

1) ERG and ABL

ERG and ABL forms can occur both with other nominals with which they corefer in a determiner function, or alone adverbially. In adverbial function I have not recorded the ERG demonstrative without an accompanying particle i.e. *bala* or *bili/lingu/linygu.*

The first set of examples show the present/non-present distinction with ERG marked demonstratives:

(93) *ga* ***dhiyaŋu+ny*** ***bala*** *ŋunhi+yi* *ŋanapurr+nha* *ga*
and PROX+ERG+PROM (MVTAWY)"now" TEXD+ANA 1pl+SEQ IMPV-1st
\bäki *gäthur+nydja*
use "today"+PROM T018p5
and now we are using that (law) today (i.e. these days)

(94) ***dhiyaŋ bala*** *napurr bäpi* *nhäŋal* *gäthur*
"now" 1pl snake see+3rd today T007p5
we saw a snake today

(95) ***dhiyaŋ bala*** *walal dhu buna,* *yalala*
"now" 3pl FUT arrive-1st later T007p10
they are coming later today

(96) *ŋarra* ***marrtji+n*** ***dhiyaŋu+n*** ***bala***
1sg go-1st+SEQ PROX+ERG+SEQ (MVTAW) "now" T007p9
I am going now

Note that the span of time covered by *dhiyaŋ(u-) bala* is independent of the tense on the verb. Present (1st plus IMPV *ga*), Today Past (3rd), Today Future (1st plus FUT *dhu*) and imminent actions (1st plus SEQ) all occur in the preceding clauses together with the phrase *dhiyaŋ(u-) bala.* This gives it a "present" that has a variable span although the reference is always to a kind of 'now'. This may be the time of speech, today or more broadly nowadays/current times. The latter two overlap with the temporal *gäthur.* With specified units of time such as *walu* "sun/time/day", *dumurruŋu* "week", *dhuŋgarra* "year" this phrase will denote the current unit.

Another demonstrative phrase based on the PROX *dhiyaŋ(u-)* with the particle *bili* is also used with a special temporal sense in opposition with *dhiyaŋ(u-) bala.* This is described in section 6.6.4 below.

The TEXD stem marks the non-present or the non-current temporal unit, either in the past or the future.

(97) *ga (yawungu)* ***ŋuriŋi+ny*** ***bala*** *ga* *dhuwal*
and (yesterday/recently) TEXD-ERG+PROM (MVTAWY) "then" IMPV-1st PROX
dumurru'+ŋu+y, *bäyŋu+n* *yoŋu* *walal wukirri,*
[big+ŋu] "week"+ERG(Temp) NEGQ+SEQ person 3pl school
waŋara+n *ga* *dhärra*
empty+SEQ IMPV-1st stand-1st T008p7
Last week there was nobody at school

(98) *ga* ***ŋuri=ŋi+n*** ***bala*** *dhu* *boŋguŋ,* *bäyŋu+n* *goi,*
and TEXD=ERG+SEQ (MVTAWY) "then" FUT "tomorrow " NEGQ+SEQ school
waŋara+n *dhu* *gi* *dhärri*
empty+SEQ FUT IMPV-2nd stand-2nd T008p7
and next (week) there'll be nobody at school, it will stand empty

The next set of examples show the ABL demonstratives with temporal reference:

(99) ***dhipuŋur+nydja dhuŋgarra+ŋur*** *ŋarra+ny dhu marrtji ga djäma*
PROX-ABL+PROM year+LOC/ABL 1sg+PROM FUT go-1st IMPV-1st work-1st
gäwa
place name
After this year I will go and work at Gäwa G490

(100) ***beŋur bili godarr+ŋur*** *ŋunhi nhe marrtji+n bala maranhu-gä+nha+lil*
INDEF+ABL "same" morning+ABL TEXD 2sg go+3rd MVTAWY hunting+4th+ALL
(it rained) from the morning when you went off hunting T009p15

An example with *ŋulaŋur* is found in example number 104 below.

The TEXD/DIS ABL stems often occur in conjunction with a lexeme for "mouth" e.g. *dhurrwara/ dhä* to indicate a sequence "afterwards/after that". For example:

(101) ***dhurrwara+ŋur ŋuli+ŋur+yi+ny dhawar'yu+na+ŋur+a***
mouth+LOC/ABL TEXD+ABL+ANA+PROM finish+4th+LOC/ABL+SEQ
bala nhe+ny dhu ŋuka+n
then 2sg+PROM FUT eat-1st+SEQ T013p11
after that finishes/is finished then you will eat

ii) DATive

The DAT has only been noted in determiner function but I would expect that they can occur alone. I also expect that the TEXD and INDEF stems can occur with the DAT with temporal reference.

The example with the DAT is taken from a local news publication:

(102) *dhuwandja dhäwu+mirr djorra, dhiyak* ***bala*** *dhuŋgarra+w*
PROX-PROM story+PROP paper PROX-DAT (MVTAWY) year+DAT
This is a newspaper for this year (Galiwin'ku News May87)

iii) Unmarked S-O-LOC forms

The following examples show some occurrences of the S-O-LOC forms where a temporal interpretation seems most plausible.

(103) *yurr yaka limurr ŋunhi dhipal+nydja dhuŋupu+lil+nydja wäŋa+lil marrtji*
but NEG 1+2pl TEXD PROX-ALL place name+ALL+PROM place+ALL go-1st
but we did not go to that place Dhuŋupuŋur then T012p6A

(104) *\ŋula+ŋur linygu baman'+ŋu+ŋur,* ***ŋunhi bala*** *yolŋu'-yulŋu,* *baman',*
DIS+ABL COMPL long ago+AUG+ABL TEXD (MVTAWY) person-REDUP long ago
ga gäthur, ***dhuwal bala***
and today PROX (MVTAWY) T204p20
from long ago, people of that time, long ago, and today (in) recent times (kept the Wukundi law)

(105) *ŋunhi nhe ŋäthil ŋorra ga* ***dhuwal*** *nhe gäthur*
TEXD 2sg before lie-1st and PROX 2sg today/nowadays
ŋorra+n\ yawungu
lie-1st+SEQ yesterday/recently T013p22
you slept before and you slept now this time

The temporal use of S-O-LOC forms appears to be confined to a determiner function with S nominals, in either intransitive or equational clauses. It is not clear why this function should be confined to the S role. The answer may lie in the nature of nominal expressions and the distribution of word classes used to track particular roles. The tracking of S often involves both a pronominal and a demonstrative, in contrast to the A which is minimally tracked by a pronoun, and O which is tracked predominantly by demonstratives. The identification of S participants is thus shared between two deictic word classes. Given this and the fact that the deictic centres of demonstratives overlap with those of pronominals e.g. the PROX and 1st person are both speaker based, the particular temporal function of the demonstrative in this context is somewhat more understandable. The co-occurrence of a 1st person pronominal with the TEXD thus places the 1st person outside the time of the current speech situation. This may be a strictly temporal factor, such as a past, or it may be in regard to a hypothetical condition of the referent.

An alternative interpretation of the last two examples 104 and 105 is that the unmarked demonstrative co-refers with the temporal nominal rather than with the pronoun. In attempting to clarify this for example 105 speakers did not easily identify the demonstrative with either the pronoun or the temporal. However in the following example speakers accepted the association with the temporal.

(106) *nhe ga ŋayath+am mutika ŋäthil, ŋäthil* ***ŋunhi*** *dhuŋgarra+y*
2sg IMPV-1st keep+1st vehicle before, before TEXD year+ERG T301p1
you had a car last year

The speaker judgements associated with the latter example are the strongest evidence that the unmarked form of the demonstrative includes a Temporal function in addition to coding S, O and Locative roles.

Another perspective on these examples is that the unmarked demonstratives are used in these examples to highlight a contrast. This is made explicit in examples 104 and 105 above and 107 below. In example 106 the car was stolen so there is a implicit contrast between the past and the present. Example 103 is also taken from a context in which a contrast is made explicit (see example 140), although here the contrast is the identity of the place rather than a temporal one.

One final example will be considered. To a question as to how many times I had been to Galiwin'ku, the following answer was given

(107) *dämbu märrma gi\ **gunhi** gäthil nhe marrtji+n räli, ga bulu*
head two PRT"yes" TEXD first/prior 2sg go+3rd MVTTWD and more
dhuwal yawungu nhe marrtji
PROX yesterday/recently 2sg go-1st T008p5
two times eh? that (time when) you came this way before and again this recent (time when) you came

In an initial judgement on this clause a speaker associated the first demonstrative with the pronoun *nhe* but the second with the temporal *yawungu*, glossing it as *dhiyaŋbala*. The same speaker then reconsidered and thought the first demonstrative referred to both the temporal and the person.

The confusion in speaker judgements in these examples clearly point to the need for more work in clarifying the exact reference and function of these demonstratives.[2] While above I suggested that the judgements in regard to 106 support a temporal determiner function it is possible that the demonstrative is a determiner to the S pronominal but due to its temporal function speaker's associate it with the temporal. Alternatively the "confusion" of speaker judgements may reflect a real ambiguity or a widening in scope. This latter possibility also suggests a link with the use of the unmarked TEXT form to introduce finite-subordinate clauses which themselves often have a temporal or conditional interpetation (see section 12.2.1.1).

[2]The Speaker judgements as to where/what a demonstrative was pointing were not always problematic. It is my general observation that with clear instances of temporal or spatial reference and certain instances of demonstratives as determiners to other nominals there was no problem.

6.4.3.2 A temporal distinction coded by two different local case forms

In this section we will be concerned with a temporal distinction which occurs with the locative demonstratives in clauses with either nominal or verbal predicates. The contrast is formally coded by the use of the S-O-LOC and LOC forms.

With verbal predicates the S-O-LOC form can only be used as a Locative if the clause refers to the current speech time. For non-present time the LOC form must be used. On the basis of this contrast it appears that equational clauses by default refer to current speech time. The S-O-LOC forms are commonly found in equational clauses but they cannot occur with the LOC forms of the demonstrative.

The temporal distinction is again distinct from that expressed by the core TMA markers of verb inflection plus TMA particles. Like the temporal distinction coded directly by the PROX and the TEXD the two different case forms code a present/non-present distinction. However, the unmarked Locative never co-occurs with the 3rd inflection which codes both Today Past and Remote Past. This contrasts with *dhiyaŋ bala* "now" which can co-occur with all tenses referring to "today". The unmarked Locative can co-occur with a verb in the 1st inflection when this refers to the Present but not if it refers to the Yesterday Past. In essence the unmarked forms are associated with the current presence and/or existence of some entity or condition at the time of the speech event.

The following examples show the restrictions of the use of the S-O-LOC forms to the current speech time context and LOC to the non-present:

(108) *ŋunhal (*ŋunha) ŋarra ga+n nhina+n*
DIS-LOC (*DIS S-O-LOC) 1sg IMPV+3rd sit+3rd Rurr
I was there (earlier today in this particular context)

(109) *dhuwal (*dhiyal) ŋarra nhina ga*
PROX-S-O-LOC (*PROX-LOC) 1sg sit-1st IMPV-1st Rurr
I am sitting here

(110) *ŋäthil baman' ŋarra ga+n nhina+n dhiyal (*dhuwal)*
before long ago 1sg IMPV+3rd sit+3rd PROX-LOC (*PROX) Rurr
I was staying here before (a few years ago)

(111) *ga godarr ŋayi dhu gi dhärri ŋunhi+yi mutika*
and tomorrow/near future 3sg FUT IMPV-2nd stand-2nd TEXD+ANA vehicle
*dhiyal (*dhuwal)*
PROX-LOC (*PROX-S-O-LOC) T402p7
and that car will be here tommorrow

(112) *yurr boŋguŋu+n ŋayi dhu dhiyal+nydja*
ADD "tomorrow"+SEQ 3sg FUT PROX-LOC+PROM T012p8
Yet s/he will be here sometime in the future

(113) ***ŋunhi** bili wäŋa+ŋur nhe ga ŋorra*
TEXD "same" place+LOC/ABL 2sg IMPV-1st sleep/stay-1st Rurr
Are you staying in the same place?

(114) *ŋunhili (*ŋunhi) bili wäŋa+ŋur nhe ga+n ŋorra+n*
TEXD-LOC (*TEXD) "same" place+LOC 2sg IMPV+3rd lie+3rd
Were you staying in the same place?

(115) *ga bäyŋu ŋayi gi nhini barpuru dhiyal (*dhuwal)*
and NEGQ 3sg IMPV-2nd sit-2nd yesterday PROX-LOC (*PROX S-O-LOC)
and s/he wasn't here yesterday T012p9

(116) *bäyŋu ŋayi ŋuli ga+nha nhina+nha dhiyal (*dhuwal)*
NEGQ 3sg HAB IMPV+4th sit+4th PROX-LOC (*PROX S-O-LOC) T012p9
s/he never lived here

6.4.3.3 A temporal distinction in the use of the MED and the DIS

This opposition appeared in the course of a discussion in regard to the following example

(117) *gäthur+nydja dhuwali g--i + ny marrtji+n, gunbalanya+lil .....*
today+PROM MED personal name+PROM go+3rd place name (Oenpelli)+ALL
\ga ŋayi+ny g------u+ny, dhuwal, nhina ga
and 3sg+PROM personal name+PROM PROX sit-1st IMPV-1st T024p7
today G---i went to Gunbalanya ..... but G----u is here

Neither person is present in the immediate speech situation the PROX being used with reference to the larger area of Galwin'ku where the speech event took place. What I was interested in was the use of the MED rather than the DIS to refer to Oenpelli, several hundred kilometres away. The explanation provided was that the MED conveyed the relative recency of the shift. It was suggested that this was a general phenomenon, in which any DIS domain location could be designated with the MED if someone had just gone there. The temporal span involved in the explanation was that of a day and it was further explained that if the move was reported the following day then the DIS demonstrative would be used. Another example offered by the consultant was

(118) *dhiyaŋ bili ŋayi marrtji+n ga dhuwali+ny ŋayi Darwin/Milingimbi*
PROX "same" 3sg go+3rd and MED+PROM 3sg place names
s/he went sometime earlier today and s/he is (now) in Darwin/Milingimbi

The speaker has made explicit the relative recentness of the move with the use of the demonstrative phrase *dhiyaŋ bili* (see section 6.6.4).

6.4.4. The "anaphoric" use of the TEXD

I use the terms deixis and anaphora in connection with the placement (spatial or temporal) of referents in the current speech situation and assumed/prior mention in the current text respectively. It should however be noted that once one considers the text as a possible deictic domain rather than just the extra-linguistic context the distinction between anaphor and deixis becomes less obvious. The deictic-like function of anaphora in respect to the text is of course one linked with the temporal dimension rather than the spatial. These latter links would seem important in Djambarrpuyŋu since they offer a grounding for the oppositions in which TEXD demonstrative participates, i.e. in oppositions concerned with time and the text rather than spatial oppositions (see Lyons 1977 p670-1 for further discussion of the temporal perspective in regard to anaphora).

The non-participation of the TEXD in the spatial opposition is most readily observed in its use as a determiner with participants that would spatially be within the domain of the proximal, medial or distal. The following examples should make this clear:

i) *ŋunhi* with speaker a PROX associated domain

(119) *marrtji* ***ŋanapurr*** *ŋunhi* *dhipu+ŋur+nydja* *galiwin'ku+ŋur+nydja*
go-1st 1pl TEXD PROX+ABL+PROM place name+ABL+PROM T101pl
we went from here Galiwin'ku

ii) *ŋunhi* with addressee (MED associated spatial domain)

(120) *ŋäthil+nydja* *baman'* ***nhe ŋunhi*** *bodiny ga* *dhiyaŋ bala*
before+PROM long ago 2sg TEXTD quiet and PROX-ERG MVTAWY"now"
nhe maŋakarritj
2sg angry
you were quiet before but now you are angry

iii) *ŋunhi* used within a DIS spatial domain

(121) ***ŋayi*** *marrtji dhal'yu+n* ***ŋunhi*** *be+ŋur+nydja* *burumun'+ŋur+nydja*
3sg go-1st land+1st TEXTD INDEF+ABL+PROM cheek/island+LOC/ABL+PROM
dikarr
plane
it landed, the plane from the island (Bali) T101p3
(earlier in the text, which was told at Galiwin'ku, Darwin airport was established as the location using the DIS demonstative)

The constraints on when referents can be coded with the TEXD is a matter that warrants much further consideration. In many occurrences it is used to refer to something that has already been introduced into the text – be this a monologue or a conversational exchange. This is nicely demonstrated in example 123 below which is from a monologue, as well as the following conversational exchange:

(122) *Speaker A:* ***yol ŋunha***
who DIS
Who is that there?
Speaker B ***ŋunhi*** *muka yothu ŋäpaki*
TEXD PRT-OK child white person T002p3
That is a white child.

However it also occurs in contexts where the referent must be assumed on the basis of shared knowledge of the world. For instance in example 121 above there has been no prior mention of a plane although its first mention includes the TEXD as a determiner. However the text is about a group of people from Galiwin'ku going to Bali. At this particular point they are waiting at the airport, and so it can clearly be inferred from the context generated by the text.

When participants are present in the speech situation the spatial deictics can be used singly to refer to these participants even after they have been introduced into the text. In this use deictic and anaphoric functions appear to overlap. It is also possible for the TEXD to be used in these contexts (see example 122 above)

It should also be noted that the suffix ANA-*Thi* is also used to code the fact that the referent has had prior mention in the text and it is very commonly found with demonstratives, including the TEXD. It is not yet clear whether this suffix serves to clearly distinguish the deictic and anaphoric roles of demonstratives. While this may be one of its functions it also has an emphatic function which needs further understanding (see section 6.3.4).

6.4.5 A "presenting/current topic marker" function

This is a function which is predominantly associated with the PROX in the corpus. This may be attributed to it being the default demonstrative stem used to establish and re-establish participants within a text, without concern for their spatial or temporal location nor for their actual presence in the the speech situation. The MED and DIS may also have this function if the relevant spatial parameters pertain.

The introduction of a "new" referent or topic does not require the presence of a demonstrative and further investigation should consider the possibility that the PROX is used only with participants that may be generally prominent in a particular text and/or deemed topical or prominent with regard to the current stage of the text or the proposition being expressed.

The following extract depicts a clear instance of the "presenting" and "anaphoric" uses of the PROX and TEXD respectively.

(123) *yiŋdiṭi+ny* *dhuwal* *dharpa*
plant name+PROM PROX tree/shrub-generic
\ luka+nha+miriw
eat+4th+PRIV
\yiŋdiṭi *ŋunhi* *gulumunyu-ya*
plant name TEXD plant name-ya
\lukanhamiriw ŋayi ŋunhi dharpa+ny
eat+4th+PRIV 3sg TEXD tree/shrub+PROM
\ga mirithirr ŋayi ŋunhi yätjkurr
and INTENS 3sg TEXD bad
\litjalaŋ rumbal+wu+ny
1+2dl-DAT body+DAT+PROM
\yurr ŋayi ŋunhi mirritjin+dja, yiŋdiṭi+ny
but 3sg TEXD medicine+PROM, plant name+PROM T014p10
This tree is Yiŋdiṭi. (Its) inedible. That Yiŋdiṭi is (also called) Gulumunyu. That tree is inedible and it's really bad for our bodies (if we eat it), but it is (used as) a medicine, that yiŋdiṭi

In this example the tree was present in the speech situation. However in the following examples we see the PROX co-occurring with nominals in generic propositions that do not have referents in the current speech situation.

(124) *bäyŋu ŋuli gi* *dhuwal butjikit+tja nyoyu+rr*
NEGQ HAB IMPV-2nd PROX cat+PROM howl+2nd T012p10
Cats don't howl

(125) *weṭi+ny* *ŋuli ga* *dhuwal waŋdi+rr muka mirithi+rr*
wallaby+PROM HAB IMPV-1st PROX run+1st OK INTENS+1st T024p4
Wallabies move quickly

In the following examples the PROX co-occurs with pronominals whose referents are present in the speech situation, but the temporal setting of the clause is not "now" or "nowadays':

(126) *ŋali+ny dhu dhuwal bala marrtji boŋguŋ bay,*
1pl+PROM FUT PROX MVTAWY go-2nd "tomorrow" PRT-OK/"you know"
goḏarr', maṇḏa+ŋ malthu+n
"morning" follow+1st 2dl+DAT T024p6
We will go away tomorrow, follow them in the morning

(127) *ŋäthil+nydja ŋarra ga+n* ***dhuwal*** *ga miltjiri marrtji+n*
before+PROM 1sg IMPV+3rd PROX and blind go+3rd T402p4
I was blind before

(128) *nhe+ny maṇḏgi muka* ***yaka*** *nhe dhu* ***dhuwal*** *marrtji*
2sg+PROM know PRT-OK NEG 2sg FUT PROX go-1st
ŋärra+mirri+lil wäṇa+lil
sacred ceremony+PROP+ALL place+ALL T301
You know you don't/must not go to places used for sacred ceremonies

A temporal interpretation of the PROX is clearly precluded in those examples set in the past or future since these are contexts in which the TEXD or the LOC forms would be expected, given the present-non-present distinctions described above.

The PROX in these examples appears be to highlighting the pronominal referents as those about which the rest of the proposition pertains, i.e. those which are most topical.

In fact in many instances when the PROX co-occurs with pronominals in present time contexts it may well be this textual "highlighting" function that is relevant rather than the temporal one.

(129) *way, ŋalimurr dhuwal djaṇḏarrthi+na+n*
Hey 1+2pl PROX hunger+INCH+3rd+SEQ T102Bp1
Hey, we're all hungry/Hey we are hungry now

6.4.6 Textual deixis

There are numerous examples of what is referred to by Lyons as textual deixis, i.e. when the referents are either linguistic entities of some kind or when they refer to ideas, propositions or utterances expressed earlier in the text (see Lyons 1977 pp667-8). Halliday and Hasan's Extended reference and Text reference would also appear to be concerned with similar phenomena (1976 p52). Either the MED or

TEXD stems can be used in this way. The MED is apparently restricted to closely preceding utterances which may be uttered by the speaker or someone else. TEXD seems to be used quite generally for any preceding utterance(s) and while more investigation is needed, there is evidence that it subsumes the MED.

In the following exchanges speaker A is prompting B for the meaning of words. The particular words are picked up by various demonstratives in the course of the exchange:

(130) *Speaker A:* *barapiyal*
Speaker B: *marapiyal, ŋula nhä* ***dhuwali*** *mayali'+miriw*
"some/anything" MED meaning+PRIV
dhäruk, dharaŋa+nha+miriw
word understand+4th+PRIV Tape 2
"marapiyal" whatever is that, a meaningless word, not understandable

(131) *Speaker A:* *ŋaŋ'kabakarra*
Speaker B: *ŋaŋ'kabakarra muka, borum* ***ŋunhi,*** *bili nhe maŋgi*
tree PRT- OK, fruit TEXD COMPL 2sg know
"ŋaŋ'kabakarra", that's an edible fruit, you already know Tape 2

The following examples are isolated clauses from various texts where the reference is no more than a single word:

(132) *ga yan napurr* ***dhuwali,*** *ŋäkul*
and EMPH 1pl MED hear-3rd Burr p8
and we've just now heard that (i.e. the news of a ceremony someone has just told about)

(133) ***ŋunhi+ny*** *gäna, bulnha ga marrtji* ***yoŋu***
TEXD+PROM separate, slowly IMPV-1st go-1st person T009p21
those (i.e. a list of words) are separate, (they mean) people move slowly

This is taken from a text in which the speaker is talking about the meaning of certain verbs. The TEXD here refers to a list of verbs for walking which she has just given and which contrast with those for running which she had spoken about previously.

(134) *bawalamirr* ***dhiya=ki+yi+ny***
anything/one MED=DAT+ANA+PROM T009p20
anything is for that

The reference of the demonstrative is to the activity expressed by the verb *dhatthatthu-* "to run, exert energy in motion". Immediately following is a list of animals which are capable of such an action.

The next two examples suggest that the PROX can also be used for textual deixis:

(135) *märr nhuma dharaŋa+n* ***dhuwalatja+n+dhi***
so that 2pl understand-1st PROX-PERL+1st+ANA T022p20
so that you understand by this

(136) *Speaker A:* *ga milipi*
and "milipi"
Speaker B: *milipi+ny* ***dhuwal*** *lambarr, garaŋa ....*
shoulder+PROM PROX shoulder shoulder Tape 2
This "milipi" is "lambarr" or "garaŋa"....

While the PROX in both these examples is referring either to earlier utterances or a lingustic entity, that is, they function as textual deictics, they both also permit the PROX to be interpreted in relation to its "presenting or 'topic' establishing/highlighting" function.

In the first example the PROX appears to be referring to the prior text in which the speaker has been telling a story and explaining its significance. However since the motivation for the text has been to provide such understanding it is clearly highly topical and it may be for this purpose that the speaker chose the PROX stems. It should be noted that the ANA suffix occurs on this stem and it may be possible to attribute an anaphoric role to it in this context.

In the second example the PROX occurs in conjunction with the word rather than anaphorically. The speaker appears to be establishing or highlighting the word *milipi* as the topic for her additional comments. It is thus possible that the PROX here, unlike the MED and TEXD in examples 130 and 131 from the same text above, does not refer back to the previous utterance.

The relationship between the functions of the PROX as a textual deictic, spatial deictic and temporal deictic and its "presenting" function clearly warrant a closer study.

6.4.7 Gestures with demonstratives

It is also possible to use a single demonstrative stem with accompanying gestures to designate different locations. This may pertain to the speech situation or require a shift in perspective, whereby something other than the narrative based locus is used to designate location. Two examples follow:

(137) *maŋda ga* *marrtji ga dhut galki+wal, yapa* ***dhiyal,*** *ga* *wäwa* ***dhiyal***
2dl IMPV-1st go-1st and sit near+OBL Z PROX-LOC and B PROX-LOC
the two go and sit close, the sister here and the brother here T204p14

The speaker is talking about a hypothetical/generic situation which could apply equally well in the speech situation as anywhere else.

(138) *ga* *ŋayi ŋuli djambatjŋu+y+nydja* *märra+nha* ***dhuwal*** *doṯurrk* *ga*
and 3sg HAB hunter+ERG+PROM take/get+4th PROX heart and
dhuwal binhdha
PROX rib
and the hunter takes/gets the heart and the ribs T102Bp37

In this example the speaker uses the PROX demonstrative together with gestures to the speaker's own body to refer to two different body parts. In the text from which this is taken the actual referent is an animal.

It should be noted that gestures were a regular accompaniment to many of the texts and this brief mention of them by no means does them justice. Their use with demonstratives to denote shifts in perspective has been noted by Heath (1984 p330) and Dench (1987 p244) for speakers of Nunggubuyu and Martuthunira respectively. Gestures also frequently accompany demonstratives in the speech situation to specify a location. The lips, rather than the hands, are commonly use to "point" to the location.

6.4.8 The presence of more than one unmarked demonstrative in a single clause

It is quite permissible to have several unmarked demonstrative forms in a single clause. Usually they have independent functions and do not co-refer.
However, it is also possible to have two different unmarked demonstrative forms co-referring with the same nominal. An example is the following:

(139) ***dhuwal*** *ŋarra dhu* *ŋunhi* ***dhäwu*** *lakara+m*
PROX 1sg FUT TEXD story tell+1st
I will now tell that story

I am reasonably confident on the basis of discussions with consultants and the patterns of case concord, that both demonstratives in this clause refer to *dhäwu* "story". I assume that the speaker is announcing (i.e. presenting) what they are about to do, as well as indicating that the story, or what it is about, is known to the addressee. Note that this indicates that the presenting and anaphoric functions of the PROX and TEXD respectively do not themselves constitute an opposition.

In the following example a particular destination is clarified. While both clauses are concerned with a past event, the PROX stem co-occurs with the TEXD in the contrasting clause. This may point to a contrastive function for PROX but I am not very sure about how this particular combination should be interpreted.

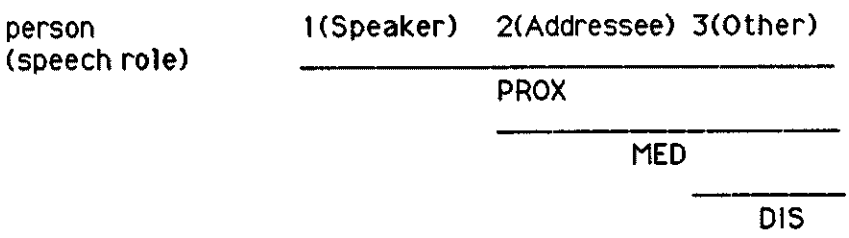
(140) *yurr yaka limurr ŋunhi dhipal+nydja dhuḏupu+lil+nydja wäŋa+lil*
but NEG 1pl TEXD PROX-ALL+PROM place name+ALL place+ALL
marrtji\ ŋunhi+ny dhuwal limurr\ŋayawili+lil warray
go-1st TEXD+PROM PROX 3pl place name+ALL PRT- "indeed"
marrtji+ny wäŋa+lil+nydja
go-1st+PROM place+ALL+PROM T012p6A
but we didn't go to Dhuḏupuḏur then, then we went to Ŋayawili

6.4.9 Demonstrative and pronominal co-occurrence constraints

All the demonstratives can co-occur with other nominals in a determiner function. They can also all stand alone as pro-forms. Unlike many other languages demonstratives are not precluded from coexpression with pronouns. In fact, the presence of co-referring pronouns and demonstratives in the one clause is very common.

Certain demonstrative and pronominal combinations are not permitted however, due to the overlapping co-ordinates of person and spatial deixis which make certain combinations impossible. Thus the 1st person forms do not co-occur with the MED or DIS demonstratives (e.g. *ŋarra dhuwali/*ŋarra ŋunha), nor the 2nd person pronouns with the DIS (e.g. *nhe ŋunha). These reflect the fact that the speaker cannot be relatively near or far from her/himself and the close association of the MED with the addressee which does not allow the addressee to be located in the DIS region.

This potential co-occurrence between pronominals and demonstratives is represented as follows:



The lines show the range of co-occurrence of the demonstratives with respect to different speech roles.

The association of the PROX and MED with the Speaker's and Addressee's locales respectively is reflected in the fact that only the PROX collocates with the Speaker and the fact that the MED can collocate with the Addressee. Only the 3rd person is free to appear in all three localities designated by the PROX, MED and DIS demonstratives.

The range of the PROX allows anyone to enter into the speaker's spatial domain. Interestingly in this respect, the Sp+Adr (dl and pl) pronominals collocate only with the PROX not the MED, i.e. the Addressee can impinge on the Speaker's domain but not vice versa.

(141) *bodiny* ***dhuwali nhe (*ŋarra),*** ...
gentle/tame MED 2sg (1sg)
you are gentle, ...

(142) ***ŋarra dhuwal (*dhuwali) marrtji***
1sg PROX (MED) go-1st
I am going

The interaction of demonstratives and pronominals is an area that warrants much more detailed examination but in the course of working with the texts certain tendencies in relation to their co-occurrence have been observed.

There appears to be a general correlation in Djambarrpuyŋu between core case-roles and the deictic word class used to minimally code them. By "minimally code" I mean the favoured choice of deictic lexemes used to track particular roles. The A (Ergative) case favours pronominals, regardless of whether the referent is human or not. In a survey of three texts it was noteworthy that no single occurrence of ERG forms was in A (Ergative) case. With Os there is a split according to animacy and person. 1st and 2nd persons and "human" 3rd persons will be predominantly tracked with pronominals and "non-human" 3rd persons by demonstratives. In the 3rd person at least these are not binding associations and both human and inanimate 3rd person referents occur designated with demonstratives and pronominals respectively. With S a combination of both pronominals and demonstratives seems to be most common.

The use of single demonstratives to track O participants, especially non-human ones, is noteworthy given the fact that Djambarrpuyŋu does have a full set of 3rd person pronominals. It is possible that the use of the demonstratives to track the O participant is a remnant of a past in which there were no third person pronouns. This would require that the 3rd person forms are innovations, something which was

suggested previously on the basis of the variation in 3rd person forms across Yolŋu varieties, compared with forms for 1st and 2nd persons. The use of demonstratives for 3rd person reference is not uncommon in Australian languages which have no independent 3rd person pronouns.

6.4.10 Some comments on demonstratives as adverbials and pro-forms

One area of indeterminacy with regard to the demonstratives that should be mentioned is that in certain contexts there is no formal way of distinguishing between whether the demonstrative has an adverbial or pronominal function.

This is particularly a feature of the S-O-LOC forms since they are commonly found as single forms designating either an entity or a location. The indeterminacy associated with these particular forms is confined to the present tense since the Locative use of these forms only occurs in this context (see section 6.4.3.2). However, there is similarly no distinction in the local cases, e.g. *dhiyal* PROX-LOC between "here" or "on this", and this is not confined to any particular tense.

Heath (1980b pp98-101) discusses a similar overlap in Ritharrŋu. Like Djambarrpuyŋu the unmarked demonstrative form can be used as a locative adverb. He is able to point to some evidence in Ritharrŋu that the demonstrative referent in equational clauses is in fact the location. Ritharrŋu demonstrative pronouns are usually marked to agree with the number of the head and thus demonstratives that do not show such agreement can be interpreted as having locational function. This is most frequently the case in the Ritharrŋu locational equational clauses equivalent to Djambarrpuyŋu *dhuwal ŋayi* PROX 3sg "s/he is here".

I am aware of no equivalent syntactic evidence in Djambarrpuyŋu. Semantically of course it is clear that the same forms can refer to either a location or an entity and in context do not present any real problems.

Below are two examples in which the demonstratives have a deictic function in regard to items/regions in the immediate external context. Note the indeterminacy between local and entity reference.

(143) yaka ŋayathul dhuwali
NEG touch+tr-2nd MED
Don't touch that/there (a hot stove)

(144) *yaka dhipali djäma, yaka dhuwali blackboard wo djorra'*
NEG MED+ALL work(tr)-1st NEG MED or paper Rurr
Don't work (i.e. draw/scribble) on there/that, that is not a blackboard or paper

6.5 Other demonstrative stems

Other stems with demonstrative functions include *dhika* INDEFinite Proximate and *be* INDEFinite, both used for indefinite reference. Although the case forms in which they occur are much more restricted than other demonstratives, their distribution and the potential suffix and particle combinations ally them with this word class. In some functions however they are more like uninflecting modal particles.

One distinctive feature they share is the fact that the bare stem of both these forms occurs with interrogative/indefinite pronominals to code indefinite reference. The DIS demonstrative stem *ŋula(-)* also has a homophonous free form which occurs in this function. The extended homophony found between distant demonstrative stems and lexemes used to code indefinite reference would appear to indicate a general semantic link between indefiniteness and spatial and temporal distance. Another stem that also appears to pattern in this way is the TEXD stem *ŋuli* (-) which has a homophonous free form counterpart in the HABitual/HYPothetical particle *ŋuli* which functions within the tense-modality/mood-aspect system (see section7.4). The link between temporal distance (see section 6.4) and irrealis events (see section 7.4) is suggestive here.

The use of these stems share a link in that they concern places, times or events at some distance from the speaker. Another semantic component that can be aligned with the use of these stems to code indefinite reference and spatial and temporal distances is introduced by certain uses of *dhika* and *be* to be described below. This is the use of these stems to code knowledge or beliefs about which the speaker is uncertain.

be and *dhika* do not appear to have complementary functions in respect to one other. They are best viewed as distinct stems which have some overlapping functions. We will consider the INDEFP *dhika* first.

6.5.1 The INDEFinite Proximal *dhika*

Two uses of the form *dhika* have been isolated which are distinct from its use in combination with the interrogative/indefinite pronominals or other nominals where

it is concerned with the indefinite identity of participants. The first is its use in regard to the indefinite locality of referents and the second its use as an intensifier.

Dhika occurs only as the base form or with the LOC_2 suffix *-gumi*. I have not been able to elicit it with other case markers and none occur in the text corpus. Of course, when it co-occurs with an interrogative/indefinite pronominal stem the latter are case marked.

Dhika can occur as a locative argument of a clause with a verbal predicate and as the locational predicate of a verbless clause. It can also occur in O and S function, but always with the function of providing the referent with a vaguer location/identity than one of the four basic demonstrative stems would do.

Its formal similarities with other demonstratives are reflected in the co-incidence of three cases S, O and LOC in a single form. Its occurrence with the ANA and SEQ discourse suffix as well as with the particles *bala* and *lingu* (see section 6.6.2 and 6.6.3) is also parallel to demonstratives.

In terms of functions, it is like demonstratives in that it has a primary concern with location. This particular focus is reflected in the fact that the only suffix with which it can occur is the LOC_2 suffix *-gumi*.

However *dhika* does not solely code locative information. In addition it conveys information about the speaker's knowledge and belief system. *Dhika* is used when the speaker does not have the knowledge to precisely locate something. While the full range of parameters which can be considered as evidence is a matter for further study, the locational use of *dhika* usually correlates with a lack of visual evidence. However in its use in relation to indefinite participant identity, the indefiniteness is not confined to the absence of visual evidence. It can be attributed to a broad range of circumstances - when the speaker cannot recall something, or when they simply do not know the identity of the participants, even if they were sighted or when there is a range of entities associated with a particular role and the speaker chooses not to be specific.

An opposition in which the form *dhika* is often found is with the PROX demonstrative *dhuwal*. This particular opposition is based on the speaker's knowledge and belief system at the time of the speech situation. The PROX is used to express speaker certainty and the INDEF uncertainty. There would seem to be parallels here with

the use of the PROX as the form associated with the deictic centre in regard to spatial, temporal and speech role distinctions. While the opposition suggests some kind of evidential modality I would not want to claim at this point that *dhika* is an evidential modal, rather it is best characterized as a special kind of spatial demonstrative which can have an evidential function. This would be even more appropriate in the case of the PROX demonstrative.

Note that *dhika* is used when locating or identifying something, the existence of which is only partially in question. In using *dhika* the speaker is revealing that the proposition has some foundation as far as the speaker is concerned but not enough for her/him to be certain of the particular identities or locations of the relevant participants.

While I have only described the opposition between *dhika* and the PROX *dhuwal* in this introduction, the range of *dhika* appears to be the "proximate" i.e. incorporating the MED *dhuwali* as well. Evidence for this will be presented and discussed below.

6.5.1.1 The Locational use of *dhika*

In its locative use *dhika* can be roughly glossed as "somewhere about". Some common contexts in which it is appropriate include the location of someone/thing on the basis of non-visual evidence. The latter might be a verbal report from someone else or other kinds of sensory evidence e.g. auditory or olfactory. Some examples follow:

(145) *dhika ŋayi buna+n*
INDEFP 3sg arrive+3rd Gu390
she's arrived here (so I've heard but I haven't seen her for myself)

(146) *ŋal'yu-ŋal'yu+rr gi nhäŋu-nhä+ŋu bäpa+w \ dhika*
climb-REDUP+2nd IMPV-2nd look for-REDUP-2nd F+DAT INDEFP
bäwarraŋ'+mirri+w
meat providing animal+PROP+DAT T102Bp7
climb up and look about for father, (he's) somewhere with the meat
(The father has been heard but not sighted)

(147) *...nhuma+r ŋarra dhika wurrpaŋ, warrpuru*
smell+3rd 1sg INDEFP emu smell T102Bp41
I smelt the emu's smell somewhere
(Note here evidence of something by smell)

(148) ***dhika+ŋumi*** *walal ga* *ŋarrtju+n+mi+rr*
INDEFP+LOC$_2$ 3pl IMPV-1st argue+R/R+1st
they are arguing somewhere there (speaker can hear but not see them)

In the following question-answer exchange *dhika* is a locative predicate in an equational clause:

(149) *wanha ŋayi*
where 3sg
where is s/he? Rup2

(150) *dhuwal ŋayi*
PROX 3sg
here s/he is

(151) *dhika ŋayi*
INDEFP 3sg
S/he is somewhere here (but speaker doesn't know exactly where)

Much of the available evidence suggests *dhika* is concerned with the "proximate" region i.e with spatial domains of the PROX and MED demonstratives. Its opposition with the PROX *dhuwal* seems quite a general phenonemon and speakers will readily accept attempts to alternate *dhika* with expressions involving PROX forms. However they generally reject parallel attempts with DIS forms. For example while accepting both *dhika ŋayi Galiwin'ku* "she/he is here somewhere at Galiwin'ku" and *dhuwal ŋayi Gal'win'ku* " he/she is here at Galiwin'ku" which contrast in the knowledge upon which the statements are based, speakers reject parallel attempts to elicit an analogous alternation in a distant context e.g. *ŋunha ŋayi Darwin* " he/she's there in Darwin" but **dhika ŋayi Darwin* "he/she's somewhere there in Darwin".

However one speaker did produce a context which allowed a construction close to that just starred i.e. ***dhikayi*** *ŋayi Darwinnha* "he/she is there somewhere in Darwin". But the opposition here was one concerning the MED. In the context in which this was permissible, two people were speaking on the phone between Galiwin'ku and Darwin. The person in Darwin is expecting someone to arrive from Galiwin'ku and is asking the person in Galiwin'ku if they know anything about it. The Galiwin'ku person could respond appropriately with the utterance just given. The association of the MED with the addressee, particularly in the context of phone calls, indicates the opposition in this context is in fact between the MED *dhuwali* and *dhika*. The speaker describing this context went on to explain further with an irrealis clause using the MED demonstrative to refer to Darwin:

(152) ŋuli balaŋ ŋayi dhuwali
HYP IRR 3sg MED
if he/she (the one being talked about in the phone call) is there (i.e. in the addressee's locale)

Example 147 is problematic since the speaker is not located in the place where the story of the hunt is being told. This is in fact from a story within a general descriptive text about hunting. It is attributed to a hunter on his return from a successful expedition. It seems unlikely that the spatial relations between the place of the hunt and the place of the story is within the "proximate" region. Furthermore the indefinite location in this example appears to be in regard to the the two participants. This relationship is clearly one of proximity. In the example of the telephone conversation the proximity would appear to hold between the addressee and some third party. This suggests that the spatial reference point for the use of *dhika* need not include the speaker.

I know of no context in which *dhika* can be completely disassociated from speaker based judgement as to the indefiniteness of the location. However, without further investigation I cannot be conclusive about this.

The association of *dhika* with knowledge based on whether something is or has been sighted or not would appear to be compatible with the restriction of *dhika* to the "proximate" range, since this would be the region within which such evidence would be viable. Whether *dhika* is in fact grounded in a spatial domain or a wider domain determined by "areas" (spatial or conceptual) over which the speaker can be expected to have grounds for expressing degrees of certainty, or a combination of the of the two, is a matter for more detailed investigation.

6.5.1.2 *dhika* in S or O function

In O or S function *dhika* also contrasts with the determiner /pronominal functions of the PROX *dhuwal*. Again the opposition is between something about which the speaker cannot be quite certain and thus cannot fully specify, and something which is fully specifiable. However the visual basis for certainty is not as prominent as it was with the Locative use of *dhika*. As with other demonstratives a spatial sense is never completely absent in the determiner or pronominal uses of *dhika*.

1. As an O argument

In the following example I have interpreted *dhika* as an O demonstrative pronominal in O case. It refers to something that was known to have occurred or to exist but could not be recalled. It was given in response to a request to retell a story told the day before:

(153) *yuw,* ***dhika*** *meŋgu+ŋal+a* *ŋarra*
INT INDEFP forget+3rd+SEQ 1sg T004p5
"I'm unable to fulfill your request", I've forgotten it (that which has existence but which I cannot specify)

In another context a speaker uttered *dhika* in reference to the name of a particular homeland centre they were unable to recall while listing the names of a particular group of homeland centres. These examples would also seem to involve indefinite reference to something that is known to exist but which cannot be "located" in the speaker's mind rather than a visible locale.

2. As an S argument

In the following examples *dhika* co-occurs with pronominals. In the first it indicates indefinite reference. This is similar to its use with the interrogative/indefinite pronominals (see following section).

(154) ***dhika+yi*** *walal* *dhu* *ŋo'yu+rr* *yuwalk+tja,* *yurr* *bäyŋu* *ŋarra+ny* *walal*
INDEFP+ANA 3pl FUT arrive+2nd really+PROM, ADD NEGQ 1sg+ACC 3pl
maŋgi+ku+ma+ny *nhaliy* *walu+y* *walal* *dhu* *ŋo'yu+rr*
know+TRANS+1st+PROM what-ERG sun/time+ERG 3pl FUT arrive+3rd
dhiyal+nydja
PROX-LOC+PROM T007p12
They (some people I cannot exactly identity) are coming but they have not let me know what time they will arrive here.

In this instance lack of identity was associated with the speaker being unable to specify the people who were coming. If the speaker could, then *dhuwal* would be used.

Another perspective on the opposition between *dhuwal* and *dhika*, which has so far been expressed as in terms of certainty and lesser certainty, is suggested by the following examples. They involve the speaker being attributed with a particular bodily state. A distinction in the degree to which the condition is experienced is

associated with these two determiners. The greater degree is associated with the PROX *dhuwal* and the lesser degree with INDEFP *dhika*.

(155) *ŋarra* ***dhuwal*** *djawaryu+rr/rerrikthu+rr/djaŋŋarrthi+n*
1sg PROX be tired+3rd sick+3rd hungry+3rd
I am tired, sick, hungry

(156) *ŋarra* ***dhika*** *djawaryu+rr/rerrikthu+rr/djaŋŋarrthi+n*
1sg INDEFP be tired+3rd sick+3rd hungry+3rd G490
I am feeling a bit tired, sick, hungry

A context in which an expression with *dhika* would be appropriate would be to decline a request to go hunting. It implies that if you went you would become truly tired or sick.

This distinction is not fundamentally different from that between certainty and uncertainty. Presumably the speaker can be assumed to be certain about their own bodily states. In this context a shift in the sense to one concerning the degree the condition is experienced is not surprising.

6.5.1.3 *dhika* with interrogative/indefinite pro-forms

1. To code indefinite participants/circumstances

Dhika can co-occur with any interrogative/indefinite pronoun to indicate indefinite reference. In this function it always immediately precedes the pro-form and is never case marked.

The use of *dhika* to mark indefinite identity of a participant, time or place can be naturally related to its use in relation to the speaker's knowledge or belief at the time of speech. The identity may be indefinite because the speaker is unable to recall exactly what/who/where/when something is, or because they do not have access to such knowledge or because a whole range of participants are involved. Combined with the interrogative/indefinite pronominals it is possible to indicate the relevant case role without fully specifying the identity of the participant or a time or place. This construction is very common in lists when the speaker is suggesting potential participants or trying to recall a long list of actual participants. It is not uncommon to have sequences of the *dhika* plus interrogative/indefinite pronominal combination followed by a lexical item designating an appropriate referent. The following shows one instance of this:

(157) *bili+n ŋäthi+nya+mi+rr+a, bu+nha+mi+rr+a,*
because+SEQ cry+4th+R/R+1st+SEQ strike+4th+R/R+1st+SEQ
*dakul+yu+n, nayf+thu+n, **dhika nhaliy+nha,** dharpa+y+nha,*
axe+ERG+SEQ knife+ERG+SEQ INDEFP what-ERG+SEQ stick/tree+ERG+SEQ
dhika nhaliy+nha** banikin+dhu+n, **dhika nhaliy+nha,
INDEFP what-ERG+SEQ pannikins+ERG+SEQ INDEFPwhat-ERG+SEQ
gunda+y+nha
rock+ERG+SEQ T204p30
because (they) are all (together) crying/wailing, striking (themselves) with axes or knives, or with something, perhaps sticks, or with something, perhaps pannikins, with something, maybe rocks

2. *dhika* in questions

dhika also occurs in questions with interrogative/indefinite pronominals asking for clarification in ways which seem quite in keeping with its indefinite uses already outlined. They have not been considered in detail however. In this use *dhika* follows rather than precedes the the pro-form, but this is to be expected given the preference for the interrogative/indefinite proforms to occur clause initially.

(158) *nhä dhika*
what INDEFP
what did you say? (i.e. I heard you speak but didn't hear properly, did not understand fully or can't believe what I heard)

(159) *wanha dhika nhuŋu wäŋa*
where INDEFP 2sg-DAT place
where abouts is your house? (I know it's here somewhere, but where exactly)

6.5.1.4 *dhika* as an intensifier

The use of *dhika* as an intensifier is the most particle like of all its uses. It appears to add an intensification of a different quality to that of the general intensifiers *mirithirr* INTENS (nominal) and *mirithi-* INTENS (verbal) with which it can co-occur. Some examples are given below:

(160) *latju+n **dhika** wäŋa ....\ yo latju mirithirr dhika*
lovely+SEQ INDEFP(Intens) place yes lovely INTENS INDEFP(Intens)
It's a truly beautiful place .... Yes its truly really lovely T101p21/23

(161) *bili layyu+n+a **dhika** gaŋa-djuŋithi+rr+a mirithi+rr+a*
because relieve+1st+SEQ INDEFP(Intens) happy+1st+SEQ INTENS+1st+SEQ
walal ŋarra+kal
3pl 1sg+OBL T101p43
because they were truly relieved and happy for me

(162) *layyu+n+a ŋarra dhika rerri+ŋur*
relieve+1st+SEQ 1sg INDEFP(Intens) sickness+LOC/ABL G2739
I am completely recovered from the sickness

(163) *ŋayi+ny dhu ga ŋanya ŋunhi dhatthu+n dhika,*
3sg+PROM FUT IMPV-1st 3sg-ACC TEXD decorate+1st INDEFP(intens)
mulkuru+ya+m
strange+TRANS+1st
she/he completely decorates it (the house), makes it different T009p8

(164) *ŋayi muka wurrwa dhika gä+ŋal waŋa+lil märrma'+lil*
3sg PRT-OK armbands INDEFP(intens) bear+3rd arm+ALL two+ALL
She was wearing lots and lots of armbands, on both arms T022

This use is one speakers readily distinguish from others and they will often gloss it as *mirithirr*. The intensification it expresses appears to be more highly subjective than the use of the other two forms. This may be attributable to the general concern of *dhika* with speaker based judgements. The link between indefiniteness and intensification has its counterpart in the English use of the determiner/pronoun 'some' in expressions such as "That was some party".

6.5.2 INDEFinite *be*

In its formal distribution and functions *be*, like *dhika*, has many parallels with demonstratives. It occurs most frequently with the ABL suffix *-ŋur*. It is a unique feature of demonstrative stems that the suffix *-ŋur* functions only as an ABL marker. On other stems *-ŋur* is ambiguous as to LOC or ABL case. *Be* also occurs as the bare stem and with the LOC_2 *-ŋumi*. Like other demonstrative stems it occurs with the particles *bala* and *bili*, as well as with the ANA suffix.

It functions as both a spatial and temporal indefinite/distant deictic. Its general locus appears to be "non-proximate", the ABL form *beŋur* being interchangeable with the other "non-proximate" demonstrative forms *ŋuliŋur* and *ŋulaŋur*.

Despite many parallels in the distribution of *be* and *dhika* I have not been able to find any dimension in which they enter into an opposition with each other. Rather there are examples in which they both co-occur in the one clause with different functions. At this point of analysis I will assume that the two morphemes have essentially independent but not unrelated functions. The widespread occurrence of *be* with the ABL and its use as a temporal deictic are quite distinct from *dhika*. (*dhika* has only been noted with temporal reference when juxtaposed with temporal interrogative/indefinite pronouns). They overlap in their potential to combine with interrogative/indefinite pronouns to code indefinite reference, their use as intensifiers and their general "indefinite" meaning.

The functions of the unmarked *be* are even less clear than *dhika*, but it does appear that the speaker's knowledge and belief system is again involved. They both seem to indicate the speaker's lack of certainty in regard to something. However, *be* appears to have wider scope than *dhika*, which codes indefiniteness in regard to particular referents in particular roles (i.e. S, O and LOC). The presence of *be* is associated with the speaker's expectation, opinion, judgement or assessment that the proposition is what they hold to be the case. This is quite distinct from the use of *dhika* to indicate that the speaker is not certain of a particular identity or a location. (It is also distinct from the counterfactual notions associated with the particle *yanbi* which indicates that proposition is false (see section 13.4.1)). *Be* would seem to indicate that the speaker, on the basis of available evidence, believes the proposition to be true.

Below I document the known uses of *be*. The uses of *be* with the ABL suffix will be considered first since this is the most frequently occurring form.

6.5.2.1 Ablative *beŋur*

6.5.2.1.1 Spatial and temporal functions of *beŋur*

The following examples demonstrate the spatial and temporal functions of *beŋur*.

1. Spatial use of ABL *beŋur*:

(165) *budapthu+n+a walal ŋuli* ***be+ŋur bala raypiny+ŋur, räli,***
cross+1st+SEQ 3pl HAB INDEF+ABL (MVTWAY) fresh(water)+ABL, MVTTWD
moŋuk+lil
salt(water)+ALL Burrp10
they would cross over from the freshwater area over there, this way, to the saltwater region

(166) *ŋayi ŋuli be+ŋur+nydja rur'yu+na*
3sg HAB INDEF+ABL+PROM get up+4th T102Bp23
it (the emu) gets up from there

2. Temporal use of ABL *beŋur*

(167) ***beŋur bili ga+n dhärra+n ŋurru'yirryu+na+ŋur,***
INDEF+ABL "same" IMPV+3rd stand+3rd begin+4th+ABL/LOC
be bala baman'
INDEF (MVTAWY) long ago T015p8
(it) has existed from the beginning, a long time ago

6.5.2.1.2 The use of ABL demonstratives including the stem *beŋur* for periphrastic expression of Ablative case

The demonstrative ABL forms with *-ŋur* are unambiguously Ablative in function. They thus contrast with other nominals where *-ŋur* codes either Ablative or Locative case. The presence of ABL demonstratives in determiner function with nominals thus clearly disambiguates the case role of the nominal. The basic spatial distinction between "proximate" and "non-proximate" is maintained, with the Ablative "proximate" form *dhipuŋur* coding PROX and MED domains and the "non-proximate" forms *beŋur*, *guliŋur* or *ŋulaŋur* coding the DIS domains. In regard to the temporal dimension these forms also respectively code the "now" domain of the PROX and the non-"now" domain associated with the TEXD. However, the INDEF *beŋur* often occurs in contexts when the referent is not being "distantly" placed. In such instances it appears to be a formal means to disambiguate Ablative and Locative case. *Beŋur* would appear to be the unmarked ABL form used periphrastically in this way. Clearly, the Ablative always invokes some prior reference point, be it a place, time, state or event. In the following two examples *beŋur* occurs with nominals expressing states which serve as the reference points for prior conditions.

(168) ***be+ŋur*** *miriŋu+ŋur* *burrmidi+yi+na+ny* *ŋayi*
INDEF+ABL war/battle+ABL/LOC peaceful/quiet/calm+INCH+3rd+PROM 3sg
from warring he became peaceful Burr p26

(169) *yoŋu+ŋur+nydja* ***be+ŋur+yi+ny*** *rumbal+ŋur* *biiyu+rr*
person+ABL/LOC+PROM INDEF+ABL+ANA+PROM body+ABL/LOC change+3rd
ga+n, ***bala wäyin+dhi+na+n***
IMPV+3rd then animal+INCH+3rd+SEQ T022p18
(they) changed from those human bodies and became animals

The general use of *beŋur* as an Ablative marker may stem from the fact that it has taken on the roles of both DIS and TEXD stems. The combination of spatial, temporal and "anaphoric" functions would give it a wider range of functions than is associated with most demonstrative stems. An alternative explanation is that it is possible these particular uses of *beŋur* may account for all uses of *beŋur* without the need to claim the general syntactic function I have attributed to it, and that only when a demonstrative is required for some other function are the Ablative and Locative cases distinguished. We need to know more, particularly about the functions of the TEXD, before this can be clarified.

6.5.2.1.3 Clause connective use of ABL demonstratives *beŋur, ŋulaŋur* and *ŋuliŋur*

The ABL "non-proximate" forms *beŋur, ŋulaŋur* and *ŋuliŋur*, are also used as clause connectives denoting "after(that)". In this function they may co-occur with a lexeme for "mouth" with the ABL/LOC suffix *-ŋur* e.g *dhurrwara+ŋur* or *dhä+ŋur*. For example:

(170) *bala ŋayi ŋuli ŋunhi walŋa+thi+na+n* ***be+ŋur+yi+ny***
then 3sg HAB TEXD alive+INCH+4th+SEQ INDEF+ABL+ANA+PROM
dhurrwara+ŋur *yolŋu+ny*
mouth+ABL/LOC person+PROM T014
then the person heals, after that (treatment)

6.5.2.2 Locative *beŋumi*

A Locative use of *be* is clearly found in the form *be+ŋumi* [INDEF+LOC_2]but its occurrence in the corpus is rare. An example is:.

(171) ***be+ŋumi*** ***bala*** *märra+nha miyapunu baṯpa+ŋur*
INDEF+LOC_2 (MVTAWY) get+4th turtle reef+LOC/ABL T015p8
(they) get turtle over there at the reef

6.5.2.3 The bare stem *be*

It is not clear what the full range of functions of the bare stem *be* are. In one use it appears to indicate that the proposition is viewed by the speaker as potentially true or valid on the basis of knowledge available to them. A temporal function appears closely connected with this. It also functions as an intensive and can code indefinite reference in conjunction with the interrogative/indefinite pronouns. Examples of each of these functions will be given in turn.

6.5.2.3.1 Indicating that the propositions have been assessed by the speaker as being valid, true or realizable

In this use *be* appears to indicate the speaker's belief or judgement that the proposition is true. A range of types of evidence indicated in discussions with speakers suggest that the bases for the speaker's belief are wide ranging. In the data considered, this ranges from direct sensory evidence, verbal reports by other people, knowledge which the speaker thinks to be true but is not absolutely certain about, and judgements of people's characters. In all situations in which *be* is used, the speaker is currently in a situation at some remove from evidence that might directly attest to the truth of the proposition. This might be temporally or spatially

determined, or result from limited knowledge in a particular domain. Various examples are considered below:

(172) ***be*** *ŋayi warragul*
INDEF 3sg outside
Is s/he still outside?
OR I thought s/he is outside!

With varying intonation contours this may be either a question or an exclamation[3]. Both assume that the speaker expected the person to be outside. Possible grounds for such a belief could be that the speaker had seen the person outside some time before.

(173) *ŋunhi+yi* ***be,*** *ŋayi manymak yolŋu*
TEXTD+ANA INDEF 3sg good person
I think/thought that person was good/OK

This was described as being appropriate in two contexts. In one the person being commented on is close to the speaker and the speaker is responding to a criticism. In the other the speaker is indicating their assessment of a person they do not know very well, following a critical comment by someone else. In both contexts it is the speaker's assessment of what they believe to be the case is being revealed.

The following examples contrast only in the presence of *be* and the senses with which they are associated reveal the difference in the speaker's knowledge in regard to the proposition:

(174) ***be*** *galki walal ga ŋorra*
INDEF near 3pl IMPV-1st lie/sleep-1st
(I have reason to believe) they are sleeping nearby

(175) *galki walal ga ŋorra*
near 3pl IMPV-1st lie/sleep-1st
(I know) they are sleeping nearby

Another example from a text is considered below:

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[3] With a characteristic rise-fall on the first two syllables of *warragul* this is a question. As an exclamation a distinctive fall occurs on *be*.

(176) *ga nhaltja+na walal ŋuli ga+nha be djawarr'yu+na+ny bu+nha*
and "do/be what"+4th 3pl HAB IMPV-4th INDEF dig+4th+PROM strike+4th
And how were they extracting and killing (goanna/snakes from holes in the ground)? T102Bp4

As far as I can ascertain the *be* in this clause places the knowledge being asked about outside of the realm of the speaker's own experience. One consultant attempted to explain this by stating that in this context the *walal* "3pl" referred to others who had done it before, and did include the questioner. She was working on the utterance in isolation but in giving this as a potential context accurately recreated the context of the text from which the clause was taken. However, it should also be noted that the verb inflection and particles in this example are those associated with past habitual events, and they thus provide additional clues.

The use of *be* in this example is close to another common use of the bare stem together with temporals such as *baman'* "long ago"and *ŋäthil* "prior/before" to set stories or events in the distant past. It is usually combined with the particle *bala* which suggests a temporal function. While *bala* can also occur with demonstrative stems in a spatial function, I have no evidence of this with *be* (see section 6.6.2). Two examples of *be* plus *bala* in temporal function follow:

(177) ***be bala baman'*** *yolŋu ga+n nhina+n*
INDEF (MVTAWY) long ago person IMPV+3rd sit+3rd
long ago Aboriginal people were living...

(178) ***be bala baman'*** *walal rom+dja djäma*
INDEF (MVTAWY) long ago 3pl law+PROM work
long ago they practised/made the law

In addition to being temporally distant it is also true of these contexts that the speaker is unable to personally attest to the events or knowing the people. As one consultant expressed it the speaker has "only heard, not seen". This explanation reveals a link between a temporally distant event and other uses of the bare stem *be* in their common association with propositions whose truth cannot be validated by the speaker at the time of the speech situation.

In the next set of examples uses of *be* and *dhika* are compared:

(179) ***be*** *ŋayi bunan*
INDEF 3sg arrive+3rd G
Has s/he arrived yet?

This would be an appropriate question when the speaker is expecting the person they are asking about.

A similar question with *dhika* designates the place the person is to arrive at, namely "hereabouts" - the general area rather than a specific place.

(180) *dhika ŋayi buna+n*
INDEFP 3sg arrive+3rd G
Is s/he already here?

It is also possible to express both the expectation and the indefiniteness concerning the location together in a single clause:

(181) ***be ŋayi dhika***
INDEF 3sg INDEFP G
Is s/he (who is expected) hereabouts?

6.5.2.3.2 *be* with interrogative/indefinite proforms

As mentioned above *be* also occurs with interrogative/indefinite pronominals to indicate indefinite referents in a parallel fashion to *dhika*.

(182) ***be*** *yol+thu miyalk+thu ŋäthil ga+n djäma dhiyal*
INDEF who+ERG woman+ERG prior IMPV-3rd work PROX-LOC T208p9
some person, a woman, worked here before...

The combination of *begur* and the place interrogative/indefinite pronominal *wanha* has been noted with a temporal function in designating the starting point of something that goes on for some time:

(183) *ga* ***be+ŋur*** ***wanha*** *8 o'clock napurr ŋunhi nhina+na+ny, bäyŋu djäma*
and INDEF+ABL where 8 o'clock 1pl TEXD sit+3rd+PROM NEGQ work
and from 8 o'clock we sat, doing nothing OMS p31

This use needs further investigation. The use of the unmarked stem of the place pronominal in combination with the (presumably) Ablative marked *be* and the unmarked 8 o'clock is puzzling.

6.5.2.3.3 The expression *be wanha*

This expression has occurred in a few yes/no questions in which it appears that the speaker believes there is a strong likelihood the hearer knows the answer to the question. The second lexeme is the interrogative/indefinite place demonstrative but it is not interpreted as "somewhere" which we would expect from such

combinations. However, I am not clear as to its precise function although it would seem linked to the uses of *be* suggested in sections 6.5.2.3.1 above. An example, given in response to someone who as just asked about something, is:

(184) ***be*** ***wanha*** *nhe marŋgi*
INDEF where 2sg know
I think/suspect you know about this, don't you

6.5.2.3.4 *be* as an intensifier

Like *dhika, be* also appears to have a particle-like use as an intensifier. The ways in which it is used and the distinctions between it and *dhika* are not fully clear. The fact that speakers tend to gloss *dhika* with *mirithirr* or *mirithi-* and *be* with qualitative or quantitative nominals e.g. *yindi* "big" and *warrpam'* "all" - may be indicative that they have different scope, with *be* being strictly adnominal. This would be counter to their scope in other functions however, so should be treated with caution. It may point to a different semantic role with *be* possibly confined to amplification.

(185) *bala ŋayi ŋawyu+n+a ŋa---aw\ be muka ŋayi*
than it burn fiercely+1st+SEQ BVR"burn fiercely" INDEF PRT-OK 3sg
ga ŋaŋarr+nydja djulkthu+n nhära, waŋarr yan gurtha
IMPV-1st tongue/flame+PROM surpass+1st burn-1st "huge" EMPH fire
then it (the fire) burns fiercely, the big flame burns really brightly, (it's) a really strong fire T012p18

(186) *be muka dhu budaw'yu+n buku waŋgany yan dhu larrwaŋ'thu+n*
INDEF OK FUT burst+1st "at one time" EMPH FUT spill/drop+1st
All (the pus) bursts, spilling out all at once T014p19

Table 39: Summary of known oppositions involving demonstrative stems

It should be noted that the PROX is the form in which coincide the speaker, the here, now and certain of various oppositions. Isomorphism of functions is not nearly so extensive with other demonstrative forms.

	PROX (dhuwal)	MED (dhuwali)	DIS (ŋunha)	TEXD (ŋunhi)
Distance	near speaker	near addressee/ relatively close to speaker	relatively far from speaker	(-)
Speech role	speaker	addressee/ other	(-)	(-)
Time	now	-	-	non-now
Textual	(? + presenting function)	just mentioned	?	prior mention
"Presenting"	yes (default)	yes <only if spatial dimension obtains>	yes	-
Anaphoric	(?yes)	(?yes)	(?yes)	yes
	< in relation to participants present in the > speech event			
Location/ Time				
S-O-LOC	present	present	present	(In determiner
LOC	non-present	non-present	non-present	function only)
Movement to DIS location/ Time (?S-O-LOC only)		"today"		"non-today"

	PROX/MED dhuwal/dhuwali	INDEFP dhika
speaker's knowledge regarding S,O or LOC	certain	not quite certain

"-" indicates the form does not enter into the opposition at all
"(-)" indicates that the forms do not enter directly into the oppostion but interact with it. For example TEXD can co-occur with any given participant be it at any distance with respect to the speaker, and the DIS can co-occur with the addressee if the speaker chooses to designate a distance by relative distance from him/her rather than by reference to the addressee.
"?" indicates the information is not known.

6.6 Demonstrative phrases

In this section certain constructions involving demonstrative stems are considered. They are similar to the emphatic pronominal phrases considered in section 5.7.2.2. The discussion is largely based on the occurrence of these constructions in the corpus.

Demonstratives collocate with a few morphemes which cannot be considered suffixes or clitics. The morphemes concerned are *bala, bili/liŋgu/linygu* and *banydji/bäyma*. They do however always occur in a fixed order, with the demonstrative first, and for this reason I refer to them as phrases.

The alternates indicated appear to be synonymous. Both *bili* and *linygu/liŋgu* are common in the Djambarrpuyŋu texts while *banydji* is more favoured than *bäyma*. A third form that has been given as synonymous with the latter two is *bäypi* but I only have this in elicitation notes. In Zorc (1986) it is designated as a Golpa (Nhaŋu) form.

Bala and *bili/linygu/liŋgu* also occur as independent morphemes with different functions from those associated with demonstrative phrases. *bala* functions as a sequence clausal connective "then" (see section 13.5.1.2), and as a directional particle indicating "movement away" (see section 13.2), while *bili* etc. function as a logical clausal connective "because" (see section 12.2.3.2) and as a completive marker (see section 7.4.4.2). Their autonomous status as words in other functions appears to be retained in the collocations with demonstratives.

In contrast *banydji/bayma* 'in (this/that) same place'[4] do not occur in isolation. Their occurrence is bound to demonstratives. It is my impression from limited discussion with Djambarrpuyŋu speakers that these two morphemes are synonymous. However, the glosses in the dictionaries of Zorc (1986) and Morphy (1983) indicate that this might not be the case.

The inappropriateness of treating any of these morphemes as suffixes or clitics is revealed in the way they interact with the independent particle *yän* "EMPH-only/just" and the discourse suffixes. In these phrases the particle *yän* may occur after the phrase complex or between the demonstrative and *bala, bili* etc. or

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[4]This is a working gloss. Morphy's Djapu vocabulary lists *bäyma* as a locational meaning "around here/there" (1983 p160, p183). However in Djambarrpuyŋu it is different from other locationals in that its occurrence appears to be bound to that of demonstratives.

banydji/bayma. If these morphemes were suffixes or clitics the second option would not be possible.

The occurrence of the discourse suffixes in these constructions is also indicative of greater autonomy than that found between a stem and a suffix. The discourse suffixes appear free to occur either just on the demonstrative or on both the demonstrative and the co-occurring morpheme. e.g. *ŋunhili+n bili+n* (TEXD-LOC+SEQ "same" +SEQ) or *ŋunhili+n bili* (TEXD-LOC-SEQ "same") "in/on that same place"; *ŋunhili+n banydji+n* (TEXD-LOC+SEQ "same place") "back there/at that same place" and *dhiyal+a banydji* (PROX-LOC+SEQ "same place") "back here/still here". If the morphemes were truly suffixed to the demonstrative the discourse suffixes would be expected to occur only after the combined morphemes. Yet this particular option has never been noted. The option that permits marking both morphemes reflects agreement marking found in other constructions involving separate words. The fact that this is only an option however, sets these phrases apart.

The ANA discourse suffix only occurs suffixed to the demonstrative in these phrases. It is also much more common with the *bala* and *bili/linygu/liŋgu* phrases than those with *banydji/bäyma /*. This may be attributable to an anaphoric component in the meaning of the *banydji/bäyma*.

The *bala* and *bili* etc phrases are distinct from nominal expressions in which all coreferring nominals agree in case. Only the demonstrative must be case marked in this construction, and with *bala* and *bili* etc phrases this is the only constituent that is case marked. With *banydji/bäyma* case marking can occur on both constituents.

A further distinction *bala, bili* etc. and *banydji/bäyma* phrases occurs in relation to the range of cases in which the phrases occur.

Bala and *bili/linygu/liŋgu* have been recorded with demonstratives in almost all case forms, i.e. S-O-LOC, ERG, DAT, LOC, ALL, ABL, ASS as well as with PERL verbal stems. They have not yet been noted with the OR, OBL and PROP. While I would expect *bili* to occur with these given appropriate contexts, I am more doubtful about *bala* given the particular temporal and spatial functions of the *bala* phrases.

Banydji/bäyma on the other hand, only co-occur with demonstratives in local cases. It was just observed that case marking can occur in both constituents in phrases

with *banydji/bäyma*. However, in the corpus this is confined to the ALL and ASS. Strikingly, no case suffix appears on the particle when the demonstrative is marked for S-O-LOC or LOC. This distribution suggests they are bound Locational lexemes, given their overall restriction to local cases and the fact that Locational lexemes are distinct in using the bare stem for Locative case.

Demonstrative phrases with *bili/linygu/liŋgu* have two functions. They can designate that something is the same as that previously mentioned or the starting point of something that has temporal or spatial extent. The phrases with *bala* appears to be confined to spatial and temporal functions of the demonstratives. Given the range of functions served by demonstratives it may well be that its function is to make explicit or delimit the kind of deixis involved. In particular there seems to be a close association between temporal functions of demonstratives and the occurrence of *bala*. With spatial reference the phrase denotes something like "over here/over in this direction" or "over there/over in that direction"

Some examples of demonstrative phrases are given below:

6.6.1 Demonstrative phrase with *banydji/bäyma*

These phrases appear to indicate that the location is the same as one identified earlier. However my data is not extensive and the uses of these phrases warrants further consideration. The data with *bäyma* is particularly limited and the synonymy between these forms suggested by Djambarrpuyŋu speakers is at odds with the dictionary entries of Zorc (1986) and Morphy(1983). Both describe these lexemes as Locationals, *bäyma* meaning "close (around here/there), "behind" or "around here/there" and *banydji* meaning "still in the same place, close by". The following examples with *banydji* are offered in support of my working gloss "same place":

(187) *bili ŋayi ŋanapurruŋ ŋunhi yoŋu wäŋa ŋininyŋu, ŋunhaŋu+wuy*
because 3sg 1pl-DAT TEXD person place permanent DIS+ASS
banydji+wuy+nydja *burumun'+puy+nydja / maŋutji-ŋurrka+m*
same+ASS+PROM island/cheek+ASS+PROM [eye-throw]"stare"+1st
Because the people who are permanent inhabitants, who are from that same island, stared at us. T101p5

(188) *walu ŋanapurruŋ gärri, ga munha yapthu+n, ŋunhal yan*
sun 1pl-DAT enter-1st, and dark/night descend+1st DIS-LOC EMPH
banydji Darwin
same place name T101p2
the sun went down on us, and night fell, there still in Darwin

One problem for the gloss "same place" is the potential overlap with locative *bili* demonstrative phrases which can convey a similar meaning.

6.6.2 Demonstrative phrases with *bala*

When demonstratives occur in temporal function it is usually as a phrase with *bala* or *bili* etc. Invariably the highly frequent ERG marked PROX and TEXD forms occurring in Temporal function occur with *bala*. Several examples with *dhiyaŋ(u-) bala* "now, nowadays" and *ŋuriŋi bala* "then/non-now" are found in section 6.4.3.1. Other demonstrative case forms also commonly occur with *bala* when temporal reference is involved. The presence of *bala* would appear to be most common when the demonstrative phrase has an adverbial (relational) function. I suggest that the key function of *bala* in these contexts is to distinguish this function from other potential functions of the demonstrative forms involved. *Bala* phrases also occur as determiners to nominals with temporal reference. An example follows:

(189) *yurr dhaŋuny'+tja ŋarra dhu dhuwal lakara+m ŋunhiŋu+wuy bala,*
but story+PROM 1sg FUT PROX tell+1st TEXD+ASS (MVTAWY)
walmaŋa+wuy
moon/month+ASS T101p1
I will tell a story about the other month (when we, a group of Aboriginal people, went from here)

The second use of demonstrative phrases with *bala* is in regard to spatial deixis. As with the temporal function they can occur as adverbials or as determiners. In the spatial domain the phrases can be glossed "over here, over there or "in this direction, in that direction". It would appear to indicate the general locus in which something is to be found or toward which something is moving. This includes examples like the following:

(190) *\ŋändi+pulu beŋur bala moŋuk+ŋur, ga*
M(Z)+MATCOLL INDEF+ABL (MVTAWY) saltwater+LOC/ABL and
raypiny+ŋur
freshwater+LOC/ABL OMSp34
the mother clans from the saltwater over there, and from the freshwater

(191) *ga ŋayi+ny ŋunha+wal bala ŋäkul martjanba+lil*
and 3sg+PROM DIS+ALL (MVTAWY) hear-3rd place name+ALL
and he heard (something) over there at Martjanba BurrW/Rp14

(192) ***dhipu+ŋur bala*** *ŋuli dhawatthu+n,* ***ga dhipu+ŋur bala***
PROX/MED+ABL (MVTAWY) HAB come out+1st and PROX/MED+ABL (MVTAWY)
ga ***dhipu+ŋur bala*** *ga* ***dhipu+ŋur bala***
and PROX/MED+ABL (MVTAWY) and PROX/MED+ABL (MVTAWY) T009p30
(they) would come out from over t/here, and over t/here and over t/here and over t/here
(This is from a text describing an ambush and the speaker is indicating the appearance of the attackers from all directions.)

(193) *ga dhirrkpunu+nha**dhiyaŋu+n*** ***bala*** *dhärak, dhiyaŋu+n*
and put on +4th PROX+ERG+SEQ (MVTAWY) spear, PROX+ERG+SEQ
maŋal
spear thrower T102Bp18
and (he) put on the things to go hunting, this side the spear and this the spear thrower (the speaker makes gestures to the appropriate parts of her own body as she says this)

(194) ***dhuwali+n bala*** *ŋayi marrtji ga*
MED+SEQ (MVTAWY) 3sg go-1st IMPV-1st Gut
S/he is going in that direction (i.e. towards the addressee, even though the addressee cannot see her/him)

6.6.3 Demonstrative phrases with *bili/linygu/liŋgu*

The first set of examples demonstrates the use of these phrases to indicate that the the referent is the same as some other one:

(195) *ga mam'mara+ma+ny nhe dhu ŋunhiwili bili, yän mäpan+lil*
and stick+1st+PROM 2sg FUT TEXD-ALL "same" only boil+ALL
and you will apply it (i.e. the medicine) (again) to that same boil T014p17

(196) *ŋayi+ny dhu marrtji ŋuliŋur bili djalkthun+mi+rr*
3sg+PROM FUT go-ST TEXD-ABL "same" spill out+R/R+1st T102Bp25
it (i.e. faeces) will spill out from there (i.e.the kangaroo)

(197) *dhiyak bili mala+ny ga rom ŋorra*
PROX-DAT "same" plural+PROM IMPV-1st law lie/exist-1st T204p14
the law is for those ones (particular kin dyads that have been the topic of the preceding text)

(198) *ŋunhi bili wäŋa+ŋur +nydja nhe ga ŋorra*
TEXD "same" place+LOC/ABL+PROM 2sg IMPV-1st lie-1st Rup1
Are you staying at the same place?

(199) *ga nhäŋu nhuna marwat dhuwali liŋgu yan weyin*
and see-2nd 2sg-ACC hair MED "same" EMPH long T023Ap9
and (I) will see your hair still long
OR and (I) will see your hair the same, still long

Bili/linygu/liŋgu collocates with other stems with a similar meaning to this. With the nominal determiner *balanya* "such" it indicates something is the same or similar

to something else. In a parallel fashion with the verbal determiner *bitja*-N$_K$ "do such, thus" it indicates that something is done in the same way (see section 13.14.3). I have also noted *bitja*-N$_K$ in one text with *bala* "movement away", indicating movement back to a previously identified place

The other use of demonstrative phrases with *bili/linygu/lingu* is to mark the starting point of something with spatial or temporal extent.

(200) *guyiŋarr+yi+rr nhe ŋuli ŋunhi-ya, rumbal ŋanak nhuŋu ŋunha,*
cold+INCH+1st 2sg HAB TEXD-"OK" body flesh 2sg-DAT DIS
dhipuŋur bili liya+ŋur ga baṯ ŋurrka+m
PROX/MED-ABL "same" head+LOC/ABL and BVR"reach" reach/throw +1st
luku+lil
foot+ALL T009p18
and then you, the flesh of your body becomes cold, extending from head to foot

(201) *wukuŋdi dhuwal rom .... ŋulaŋur linygu baman'ŋu+ŋur*
law name PROX law TEXD-ABL "same" long ago+ABL T204p20
this law called Wukuŋdi ... is (i.e. has existed) from long ago

(202) *\ŋorra+nha+n ŋayi ŋuli-----l\beŋur bili godarr'ŋur\ ga*
lie+4th+SEQ 3sg HAB INDEF-ABL "same" morning+ABL and
yän bili ga walu djudup
"keep on" and sun BVR"go in/enter" T013p8
and she lies there from the morning and stays there and the sun goes down
/and she lies there from the morning until the sun goes down

In the last example another expression with *bili/linygu/lingu* occurs, namely that with the EMPHatic particle *yän/yan*. The sense contributed by *bili* is very close, if not identical, to that currently under consideration. This expression is used to indicate duration, either of a spatial or temporal extent, or of a situation expressed by a predicate. It indicates that something continues on. This would seem clearly analogous with the use of *bili* to indicate "sameness" in relation to nominal denotata.

The case marking used in the expression of extent is different for space and time. While both mark the start with the Ablative, only the end point of a spatial extent can be marked with the Allative.[5] A temporal endpoint is simply indicated by an expression denoting what it is. This might be a clause, as in the last example, or a Temporal nominal expression. It often follows an expression such as *yan bili* "keep on" or *bitja*-IR *bili* "do the same/keep on doing" which denotes that some situation

[5]From one or two younger speakers with good English I have recorded the ALL on numbers which could be construed as expressing a temporal endpoint. The contexts have always been ones in which the influence of English is likely. They include the description of a range of school classes e.g.from years 1 to 3 or span of time e.g. from 1 to 3 o'clock .

continued (see sections 13.9 and 13.14.3). The notion of "do Z from time X until Y" is thus expressed as "from time X do Z and keep on doing it and time Y"

It is also quite possible to express motion from one place to another in this way. The case on a nominal denoting the endpoint is then always the Locative, not the Allative.

6.6.4 The temporal use of ERG PROX plus *bili* i.e. *dhiyaŋ(u-) bili*

bili/linygu/lingu is also found in a phrase with the PROX-ERG *dhiyaŋ(u-)* with a special temporal reference. It has a much narrower time span than *dhiyaŋ(u-) bala* and can be roughly glossed as "just now" or "a little while ago". When the reference point is the time of the speech event and it would seem to indicate that the event took place or began to take place at some point judged to be close to that of the speech event. This is somewhat relative although apparently bound by the span of the current day. It might refer to sometime earlier that day or just a few minutes before the speech event. These are both time spans that could also be designated by *dhiyaŋ(u-) bala* but *dhiyaŋ(u-) bili* seems to stress the immediacy of the time relative to the speech event. Unlike *dhiyaŋ(u-) bala* it cannot be used of something that will begin after the speech event, nor can it be used with a general sense comparable to the use of dhiyaŋ bala for "nowadays". Two examples are:

(203) *dhiyali napurr bäpi dhiyaŋ bili nhä+ŋal*
MED 1pl snake "just now" see+3rd T007p3
we just saw a snake there

(204) *dhuwandja dhiyaŋ bili ḏo'yu+rr ŋayi, ŋunha+n bala, dhiyaŋ bili marrtji*
PROX-PROM "just now" arrive+3rd 3sg DIS+SEQ "just now" go-1st
ga
IMPV-1st
he just arrived here, he's going over there right now T007p12

There are also occurrences of this phrase when the temporal reference is not relative to that of the speech event. It would seen to establish the clause in which it occurs as the one in relation to which something else pertains. An initial hypothesis that it denoted two situations as simultaneous and might be glossed as "at the same time" has had doubtful responses from speakers. I simply offer some examples with tentative glosses "just then", or "just at that time":

(205) *baḏak napurr galku+n ga ŋayi+ny gapu+ny marrtji dhiyaŋ bili*
still 1pl wait-1st and 3sg+PROM water+PROM go-1st "?just then"
nyimdhu+n
go down-1st RurrD
we kept waiting ?while/at the time the (flood)water went down

(206) *ŋayi ŋuli marrtji biṯthu+n dhalŋurr dharpa, dhiyaŋ bili ŋayi marrtji*
3sg HAB go-1st grow+1st young tree "?just at that time" 3sg go-1st
biṯthu+n ŋunhi ga burumun'+nha ŋayi ŋuli ga gorru+m,
grow+1st TEXD IMPV-1st fruit+SEQ 3sg HAB IMPV-1st be high+1st
ŋunhi+yi+n ŋanapurr ŋuli bäba+ny lakara+m
TEXTD+ANA+SEQ 1pl HAB gali+PROM say+1st TAPE 1
a young tree grows and when a "fruit" is hanging while/at the time it is still growing, that is what we call "bäba"

6.6.5 Demonstrative phrases in other Dhuwal/Dhuwala varieties

While the lexical items are found in Djapu the particular constructions I have presented here are not described. Both *bala* and *bili* etc occur in Djapu. Morphy reports that *bili* was not currently being used in Djapu because of a restriction having been placed on its use according to the practice of not using words which sound similar to the name of someone who has died (1983 p145). The synonyms *liny̮gu/liŋgu* are used instead. Of the *banydji/bäyma* forms, only *bäyma* is described as occurring in Djapu, and it has been my observation that it is the form favoured by Yolŋu from the Yirrkala area.

Lowe (n.d.a) devotes Lesson 89 to listing uses of *bili* in Gupapuyŋu that include combinations with demonstratives parallel to those described here. She identifies an additional use to those I have so far observed in Djambarrpuyŋu, namely to indicate a sense of "only" or "just" as in *dhuwala bili ŋarraku yothu+nydja* [PROX *bili* 1sg-DAT child+PROM] "This is my only child". It suggests a function which delimits a particular referent rather than solely indicating its identity with something else. The uses of *bala* with demonstratives are either described as possible for purposes of emphasis, as when spatial uses are presented (ibid L54) or simply occur in examples, as when temporal uses are presented (ibid L59). I have found no mention of *banydji* or *bäyma* for Gupapuyŋu but the available data suggest the two varieties are very similar.

CHAPTER 7

VERB MORPHOLOGY

7.1 Introduction

Verbs are primarily distinguished as a word class on the basis of their distinct inflections. They are inflected predominantly by suffixing. There are four different inflections all of which have have several distinct allomorphs. The allomorphy is primarily morphologically determined. There are 14 different patterns of marking associated with the four inflections. One of these consists of a small class of uninflecting verbs and there are several irregular verbs. On the basis of similarities between the verb inflection forms it is possible to posit four "super" classes which I will refer to as conjugations.

The inflections, together with various particles and auxiliary verbs realize tense-modality-mood-aspect (TMA) distinctions. Each of the four verb inflections are associated with an range of TMA distinctions. These are described in section 7.4.

The verb stems to which nominal case suffixes and derivational suffixes are added are identical to two of the inflected forms. Because of the multiple functions of both the verb inflections (in the TMA system) and the inflected verb forms (as inflected verbs or derived verb stems) I have chosen to label them simply as FIRST (1st), SECOND (2nd) THIRD (3rd) and FOURTH (4th). These labels are used both to refer to verb inflections and the inflected verb form functioning as derived stems. The FIRST and FOURTH are the forms used as derived stems. There are certain nominal suffixes which require a somewhat different stem to the FOURTH inflected form but usually there is no formal distinction between the form of an inflected verb and the stems which occur with derivational or nominal case suffixes (see section12.1.2)

In addition to inflecting verb stems there are also two categories of uninflecting lexemes which are allied with the verbs on the basis of their functions. The first is the small class of uninflecting verbs. While not inflecting these stems interact with the TMA particles and auxiliary verbs identically to fully inflecting stems, and are associated with particular case arrays. The second is the class of bare verb roots (BVR). These have been observed in two contexts, namely with a stylistic function in texts and in imperatives. Only in restricted contexts can these bare roots occur on their own, and that is when the relevant TMA, transitivity, and participants are clear from the context. They are more appropriately considered as a shorthand

device for coding events rather than a fundamental category of the grammatical system.

There are a number of suffixes which derive new verb stems from non-verbal roots. Verbs may also be reduplicated and there are innumerable compounds consisting of an initial nominal, usually a body part lexeme, and a following verb.

While the majority of verbs can be categorized as transitive or intransitive, there are clearly some verbs that are ditransitive and others, termed semitransitives, that occur with an S-IO case array. The textual data has produced evidence of alternations in case arrays and the need for a more specific consideration of the range of arrays that may occur with individual verb stems. In terms of transitivity, the alternations are between transitive and intransitive, intransitive and semitransitive, ditransitive and transitive (For more discussion of variation of case arrays see section 11.2). There are only a handful of stems that appear to allow a variation in transitive/intransitive alternation, and the other alternations still maintain a fundamential dichotomy between intransitive/semitransitive and transitive/ditransitive. It should be noted that the number of ditransitive and semitransitive stems is far fewer than the number of transitives and intransitives. In terms of this dichotomy it is possible to discern correlations between conjugations and transitivity and these will be mentioned in relation to particular conjugations below. As is widespread in Australian languages, the correlations are only tendencies, and all conjugations and their sub-classes are of mixed transitivity. In an attempt to gain an impression of the distribution of transitivity overall, 530 verb roots were considered, of which 58% were intransitive/ semitransitive and 42% transitive/ditransitive. This shows a much greater preponderance of intransitive roots than the 'one-third' norm for Australian languages described in Dixon (1980 p281).

7.1.1 Verbal expressions

Like nominal expressions the constituents of verbal expressions are essentially the same as those described for Djapu (Morphy 1983 pp87-93) although she refers to the constituent as a verbal complex. The only obligatory element is the main verb stem which may be fully inflected or a Bare Verb Root. A fully inflected verb stem can co-occur with a Bare Verb Root as well as the TMA particles, the auxiliary verb *ga-* or *marrtji* "go" in aspectual function or other verb stems in 'adverbial'

function. All these elements are either fully inflected to agree with the main verb or formally allied with particular verb inflections.

Again like nominal expressions constituency is not realized by ordering or juxtaposition. There is no requirement that the elements just described be adjacent to each other. As in Djapu the verb is commonly last but this is not obligatory.

The requirement that the elements agree in inflection or, as in the case of the TMA particles, have formal connections with particular inflections, provides a basis for positing a verbal expression as a clause constituent. The place of other particles (see chapter 13) and Temporals (see section 4.5) is less clear. Morphy incorporates them within the verb complex. However while I might support the inclusion of some Temporals e.g. *barpuru/yawungu* "yesterday/recently" and *boŋguŋ* "future from tomorrow onwards" and the CounterFACTual *yanbi* within the verbal expression, on the grounds of their interaction with verb inflection, it is not obvious on what grounds to include other Temporals or particles which can co-occur with all verb forms. I would thus favour treating them as independent clause constituents but these are matters that require more detailed consideration.

It is interesting to note that in Djinaŋ, unlike the two Dhuwal varieties, the order of the verb complex is fixed. It includes various particles (Perfective, Reciprocal and Directionals) and reduced pronouns which occur before the main verb and auxiliary verbs which follow (see Waters 1989 pp200-201). This is not unlike ordering tendencies in Djambarrpuyŋu and Djapu, except that directional particles in these two Dhuwal varieties commonly follow the verb.

7.2 Verbal words

7.2.1 Fully-inflecting

The minimal fully inflecting verbal word has a verbal root to which is attached an inflectional suffix. Some exceptions to this arise with those inflections that require the bare root or a vowel change rather than a suffix.

A verbal word may be extended by the addition of either of two derivational suffixes, the CAUS *-mara-* or the R/R *-mi-*(see section 7.5.4). It may also be extended by the addition of any peripheral nominal case suffix. In only one instance however, namely with the CAUS *-mara-*, is a non-inflecting suffix attached directly to the

verb root. Even then it only does so with the *-Thu-* verb class. In all other instances the suffixes are attached to stems essentially identical with occurring fully inflected stems. While the root is always word initial and the inflection plus any discourse suffixes word final, the ordering of the non-verb-inflecting suffixes is variable. They may directly follow the root or one of the two derived stems (those that I refer to as the FIRST and FOURTH forms). These are detailed in sections 7.5.3. The general outline of a verbal word and a few examples are given below:

Verb Root + $\begin{pmatrix}\text{Augment} \\ \text{Derived stem form}\end{pmatrix}$ + (Derivational suffix) +Inflection + (Discourse Suffix)

The derived stem forms are the FIRST, which is required by the CAUS suffix with N_L class verbs and the R/R suffix with N conjugation verbs, and the FOURTH which is required by the R/R suffix with non-N conjugation verbs. An extended form of the FOURTH is required with a restricted number of nominal case suffixes

Both CAUS and R/R derived stems can feed the nominalizing process. This process is productive in relation to the coding of verbs in non-finite subordinate clauses as well as in deriving nominals from verbs. Further derivation of derived stems has only been noted with CAUS stems, which can feed the R/R. Examples of verbal words displaying various of these combinations are:

dhiŋga+ŋal "died" (intr)
die (intr N_{GA} class) + THIRD inflection (3rd-a past tense)
(verb root + inflection)

lup+thu+rr "was washed"
be with water (intr N class)+*Thu*+3rd
(root + augment + inflection)

dhiŋga+nha+mara+ŋal "killed" (tr)
die +4th+CAUS+3rd
(verb root + derived stem + derivational suffix + inflection)

dhiŋga+nha+mara+nha+mi+n
die+4th+CAUS+4th+R/R+3rd "killed each other"
(verb root + derived stem + derivational suffix +derived stem +
derivational suffix + inflection)

A non-verbal stem can be verbalized by one of four derivational suffixes, namely the INCHoative *-Thi-*, the TRANSitiviser 1 *-ku-*, the TRANSitiviser 2 *-Tha/ya-* and the VerBaliZeR *-(') Thu-*. These attach directly to the non-verbal stem and then inflect regularly as verbs. The only further derivational suffix with which these stems have been recorded is the R/R. They may all be nominalized.

Non-verbal root + Derivational suffix + (Derived stem + Derivational suffix) + Inflection + (Discourse suffix)

[INCH / TRANS1 / TRANS2 / VBZR] [FIRST/FOURTH + R/R / FOURTH + nominal case suffix]

maḏakarritj+thi+n "was/became angry"
angry+INCH + 3rd
(nominal root + derivational suffix + inflection)

I have one example of a nominalized verb stem that is in turn verbalized i.e.

guyaŋa+nha+mirri+ya+m "to remind, bring to mind"
think (tr/ $Ø_a$ class) +4th+PROP+TRANS2+1st
(verb root +derived stem+nominal suffix+derivational suffix+inflection)

While the verb *guyaŋa* "think" is still in use, the nominalization *guyaŋanhawuy* ["think"+4th+ASS] "thoughts" is also not uncommon. It is thus possible that this derivation can be attributed to the existence of the nominalized forms (both the ASS and the PROP occur on deverbal nominalizations but the relationship between them has yet to be fully ascertained).

7.2.2 Non-inflecting

As mentioned above there are two categories of verb roots which do not inflect, the non-inflecting verb class (for which see 7.2.4.1) and the bare verb roots used for stylistic purposes. Functionally the two categories are quite distinct. Formally neither category can be derived or inflected, but they can occur with the discourse suffixes.

The Bare Verb Roots and their functions are widely recognized in the Yolŋu literature. They are referred to by Heath (1980a, 1980b p73) as root forms, by Zorc (1986) as discourse verbs or ideophones, by Morphy (1983 p92) as non-inflecting verb roots and by Waters (1989 p22) as non-thematic verbs. See also Lowe (n.d.a L92).

Many of the BVRs are homophonous with roots of the *-Thu-* class verbs or their counterparts with the CAUS *-mara-*. These verb roots are potentially all BVRs, although a closer analysis may reveal semantic constraints as to the types of situations that can be expressed with this category of verb forms. There are in addition, a number of suppletive BVRs which are synonymous with fully inflecting

verbs. Many of these are listed in Zorc (1986) and I will include only a small sample here for illustration. They are shown with the fully inflecting verbs which they frequently accompany and which are offered in response to questions about the meaning of the BVR.

Bare Verb Root	Corresponding inflecting verb	English gloss
dharr	nhäma-$Ø_a$	"see (tr)"
bat̪	märra-Ŋ	"take/get (tr)"
	ŋayatha-Ŋ	"hold (tr)"
ḏal	wutthu-N	"hit (tr)"
	djatthu-N	"chop (tr)"
bur	buna-$Ø_a$	"arrive (semitr)

I have also observed in conversation the use of *laknha* together with the verb *lakara*-Ŋ "tell". This appears to be a BVR *lak* plus the SEQ suffix *-Nha*. It was uttered by a younger person and is one of only two forms where I have noted a correspondence between a BVR and an inflecting verb root which was not a member of the *-Thu-* class.

The other example is the fully inflecting verb *bat̪pitja*-N_k "hold firmly" which looks like a compound of *bat̪* (BVR) "hold" + *bitja*-N_k "to do thus". Some support for the compound as the historical source is the occurrence of *bitja*-N_k in several compound stems in the $N_k$verb class (see section 7.2.4.10). Speaker responses to this analysis, however, suggest it is not synchronically transparent as a compound.

Other scholars have noted correspondences between BVRs and fully inflecting verbs in other varieties e.g. *ḏutj roŋiyi-* "return" in Djapu (and Djambarrpuyŋu) compared with *ḏutj-tju-* "return" in other varieties (this example is attributed to Bernhard Schebeck in Morphy (1983 p92)) and also *ḏal* (see above) in regard to which Zorc (1986) notes the Burarra word *daldalja* "tap, knock, shake (out of)". The extent to which such correlations are available for the BVRs is not known.

An example of a clause in which a BVR occurs without an accompanying inflected verb stem is given below:

(207) *gul+nha nhe dhu ŋuli+ŋur+yi larru+nha+ŋur bulu+ny*
BVR"stop"+SEQ 2sg FUT TEXD+ABL+ANA look for+4th+ABL/LOC more+PROM
And you stop from searching any more T009p15

Other examples in which BVRs are found are 185, 200, 284, 314, 549, 565, 724, 731 and 1094.

7.2.3 Verb roots and stems

Some 140 monomorphemic verb roots are currently entered on my Djambarrpuyŋu lists. These particular verb roots are affixed directly by inflectional and derivational suffixes. They contrast with stems belonging to the largest verb class which are, with one exception, all dimorphemic. They consist of a verb root plus an augment *-Thu-*. The augment is required before all inflections and most derivational suffixes. One derivational suffix attaches directly to the root. My current entries for this class in Djambarrpuyŋu are about 500. This basic distinction between monomorphemic and dimorphemic verb stems is common to all Dhuwal/Dhuwala varieties. My figures for Djambarrpuyŋu compare reasonably with those for Djapu of 'about 75' and 'around 500' respectively (Morphy 1983p63). The most extensive listing for a single variety, namely that for Gupapuyŋu (Lowe n.d.a) would add about 40 stems to the first category and possibly another 200 to the latter. I have no doubts that the the number of stems in the *-Thu-* class of verbs will be extended.

All non-derived inflecting verb stems are vowel final and are predominantly of two or three syllables. This statement also holds true of verb roots, with the exception of those belonging to the *-Thu-* verb classes. These roots are distinct from others, firstly, in being predominantly consonant final and secondly, in being predominantly of one or two syllables. However, the *-Thu-* augment required by these roots produces stems that conform with the shape of roots in other verb classes.

The Table 40 below shows the number of syllables in 564 verb stems/roots in the major verb classes.

Table 40: Number of Syllables in Verb Stems/Roots of Major Verb Classes

Verb Class	Number of Syllables in Verb Stems					Number of Syllables in Roots of the N class			
	1	2	3	4	5	1	2	3	4
NKa	0	7	2	1					
N	3	25	18	3	1				
Øa	1	8	3	2					
Øi	0	4	3						
Ørr	0	1	15	15	1				
N	0	146	233	25	18	145	234	25	18
NL	0	21	12						
IR(N)	2	1	2						
		1							
Totals	6	214	288	36	20				
%	1.1	37.9	51.1	6.4	3.5				

The distribution of the number of syllables is clearly similar for all verb classes. Overall 88.8% have two or three syllables. It will be noted that except for the -*Thu*-verb class and the $Ø_{rr}$ class, disyllabic stems generally outnumber trisyllabic stems. It will be noted below that many of the $Ø_{rr}$ stems appear to be fossilized forms. Many have -*yi*-, -*thi*- or -*tji*- as final syllables. These are presumably cognate with the INCH -*Thi*- which is synchronically productive.

A discrepancy of one occurs in the N class between the number of stems with two and three syllables and the corresponding number of roots with one and two syllables. This is attributable to the single known member of that class which does not have the -*Thu*- augment i.e. *galku*- "wait".

The N class verb roots are quite distinct in the degree to which they favour final closed syllables. There are two factors contributing to this, the existence of consonant final roots and the prevalence of glottal stops with this particular category of morphemes. Glottal stop is particularly frequent between the root and the -*Thu*- augment. However, as the following table reveals the closed final syllable is more characteristic of shorter roots than longer roots.

N verb root	Monosyllables (146)	Disyllables (223)	Trisyllables (22)	4 syllables (13)
C(') final	94%	82%	76%	23%
V' final	2%	16%	23%	15%
V final	4%	2%	18%	62%

Non-inflecting verbs are both consonant and vowel final. The Non-inflecting verb class roots are all polysyllabic, while BVRs are frequently monosyllabic.

The polysyllabic roots include a number of stems with fossilized reduplicated roots. This accounts for about 28% of the disyllables and including partial reduplication, about 31% of trisyllabic roots. By far the majority of roots with 4 syllables, all but two in fact, are roots of this type e.g. *wirryawirrya'+yu-*N "fall".

Besides the *-Thu-* augments there are certain other segments that can be isolated in a number of verb stems. One set of potential morphemes show a high degree of correspondence with allomorphs associated with the productive INCH *-Thi-* suffix. However, there are several stems in which there is no evidence for the potential root as an independent morpheme, and others where the potential independent morpheme and that occurring in the verb form are not quite identical. Furthermore, some of the potential allomorphs are not consistent with those currently associated with the INCH *-Thi-*. This distribution suggests they are fossilized derivations. This distribution and the fuzziness in regard to the status of stems as productive or fossilized derivations is similar to that found in association with the fossilized *-Thu-* augment and the productive VerBaliZeR *-(')Thu-*.

The second set of potential morphemes are *-wunu-* and *-punu-* suggesting a morpheme *-Punu-*. However I have no evidence of this as a productive suffix. Of 23 transitive stems in which this morpheme can be isolated, only 3 have recognizable nominal roots. I thus treat these stems as fossilized derivations. It should be noted that for a couple of stems speakers have offered as synonyms forms with the CAUS-*mara-* suffix e.g. *dhawirrkpunu-/dhawirrkmara-* "to finish off something, do the activities associated with ending something". This suggests speakers recognize *-Punu-* as a suffix, and it presumably had/has a function similar to the CAUS.

7.2.4 Verb inflections

There are four distinct verb forms for most Djambarrpuyŋu verbs. These I designate FIRST (1st), SECOND (2nd), THIRD(3rd) and FOURTH (4th). Each of these has distinct functions in connection with the TMA system. Forms homophonous with the FIRST and FOURTH inflected verbs also occur as stems to which the derivational suffixes attach. There is an extended allomorph of the FOURTH form which only occurs as a derived stem, but it has a restricted occurrence.

The FIRST, SECOND and THIRD inflections are associated with quite distinct allomorphs. The FOURTH form allomorphs *-nha(ra-),-nya(ra-)* and *-na(ra-)* are the most consistent and while the lamino-palatal initial forms are clearly conditioned by a preceding high front vowel, the laminal - apical distinction is morphologically conditioned.

I recognize four major groupings amongst the 15 verb classes, primarily on the basis of similarities in the inflection patterns. These are designated as Ø, N, Ŋ and NI (Non-inflecting) and I will refer to these four as conjugations. There are also five irregular patterns, associated with seven verb roots. Such roots are designated as IR.

I have essentially adopted Morphy's approach to coding conjugations (1983). Most other scholars have adopted a numbering system but I find a letter based system allows for a more transparent indication of the inflections of a particular stem.

The following table displays the classification I propose for Djambarrpuyŋu verb classes. Following it I will consider each verb class in turn.

Table 41: Djambarrpuyŋu Verb Classes

Classification	VERB FORM			
	FIRST	SECOND	THIRD	FOURTH
Ø Conjugation				
Øi	Ø	Ø	-n(a-)	-nya/-nya(ra)-
Øa	Ø	Ø(V->i)[1]	-n(a-)	-nha/-nha(ra)-
Ørr	-rr	Ø	-n(a-)	-nya/-nya(ra)-
Ømirr	-rr	-rr	-n(a-)	-nya/-nya(ra)-
IRØ	Ø	Ø(V->i)	-r	-nha/-nha(ra)-
N Conjugation				
N	-n	-rr	-rr	-na/-na(ra)-
N_L	-n	-l(V->u)	-r	-na/-na(ra)-
Irregular IR(N)	-n	-rr(V->u)	-r	-na/-na(ra)-
N_K	-n	-k(u->)(tj->y)	-rr	-na/-na(ra)-
Ŋ Conjugation				
Ŋ	-m(a/a-)	-ŋ(u/u-)	-ŋal	-nha/-nha(ra)-
ŊKa	-m(a-)	-ŋ(u-)(V->u)	-ŋal	-nha/-nha(ra)-
Irregular IR(Ŋ)	-m	-l(V->u)	-ŋal	-nha/-nha(ra)-
Irregular IR(*bu-*)	-ma	-ŋu	-mar	-nha/-nha(ra)-
Irregular IR(*ŋä-*)	-ma	-ku	-kul	-nha/-nha(ra)-
Non-inflecting NI	-	-	-	-

1. Parentheses are used to indicate allomorphs or stem adjustments associated with particular inflections. A change in a root phoneme is indicated by the symbol " ->". V designates the last root vowel. The possibility of extended allomorphs occurs in a range of environments e.g. before further suffixes or following a monosyllabic root. The various contexts in which these variations occur are described more fully in the text that follows.

The extended FOURTH form with *-ra-* is highly restricted and only occurs in derived stem forms before a restricted number of nominal suffixes. Usually the inflected stems and the derived stems are homophonous.

A more extensive table (Table 45) summarizing information in regard to Djambarrpuyŋu verb classes is to be found at the end of section 7.3.

7.2.4.1 The Non-Inflecting (NI) verb class

This is a small class of some 15 verbs, most of which appear to be loan words. Walker and Zorc (1981) have shown that some are from Austronesian. The following are those I have recorded being used by Djambarrpuyŋu speakers:

verb	English Gloss	Source
bäyarra	pay back, take revenge (tr) (also noun)	Austronesian
bothurru	count (tr)	Austronesian
djambi	change (tr/intr) (also noun)	Austronesian
djäga/djäka	care for, look after (semitr) (?also noun)	Austronesian
djäma	work, make, do (tr) (also noun)	Austronesian
wukirri	write (tr) (also noun -"school")	Austronesian

The next two examples in this class have not been identified as Austronesian loans but are also not derived from English. Their status as loans is thus only tentative.

bäki	use (tr)	?
dharray	care for, look after (semitr)	?

The other uninflecting verbs I have noted are all English-based loans. Most that have been documented appear to have come into the language via Kriol. These include:

bäyim	buy, pay for; cost (tr/intr)	English "buy"
mäkim	?mark something when measuring	English "mark"
yutjim	use (tr)	English "use"
riŋimap	ring up (semitr)	English "ring up"

I suspect there are additional forms but that they have yet to be rigorously documented.

There are a few commonly occurring forms which may be direct loans from English Some examples I recorded from older speakers are:

beriya	pray (intr) (also noun- "Church/Church service")	English "prayer"
'antiŋ	hunt (intr) (also noun)	English "hunting"
dhiŋkiŋ	think (tr) (also noun)	English "thinking"

The status of the English based loans has yet to be ascertained. Certainly some English/Kriol derived words are widely used by many speakers. While those I have given have been heard used by older speakers, my main consultant was only too ready to eliminate them from transcribed texts in preference for Yolŋu Matha forms. This was never attempted with the Austronesian loans, nor with the two verbs *bäki* and *dharray*.

This would appear to be the main path through which borrowed verbs enter the language. I know of only three possible loans that are inflected. Two of these are in the -*Thu*–N verb class and one in the Ŋ class. The first two are potential English

loans *warkthu*-N "to work (tr)" and *bepthu*-N "to sound a (vehicle) horn" from English "work" and "beep" respectively. The nominal *wark* "work" also occurs. These thus appear to be derived with the verbaliser -(')*Thu*-. The Ŋ class example is the inflected use of *djäma* "work" listed above as a non-inflecting Austronesian loan. Its use as an inflected form has been noted with younger speakers in their late 20s/early 30s. It does not occur in any of the text from older Djambarrpuyŋu speakers. Its four inflected forms are *djä+ma*, *djä+ŋu*, *djä+ŋal* and *djä+nha*. These examples suggest that a loan is assigned to a particular verb class by analogy of the loan with the root/stem forms of particular classes. *Djäma* has clear canonical counterparts in the inflecting verb class it is included with. The pattern adopted for it is quite clearly parallel to that found with the monosyllabic Ŋ class roots - *gä*-Ŋ "take/bear", *nhä*-Ŋ, *mo*-Ŋ "forget" whose FIRST forms are *gä+ma*, *nhä+ma*, *mo+ma* respectively. The inflected forms of *djäma* thus reflect the reanalysis of a disyllabic loan as a monosyllabic root with a *-ma* ending. *Wark* and *bep* on the other hand, monosyllabic with a final consonant, clearly fit with the verb roots in the N class.

These examples are clearly the exception rather than the rule, and to date the verb class does not appear to have been particularly available to borrowings. It is striking that the majority of loans listed by Walker and Zorc (1981) are nominals in Yolŋu Matha. All the verbs they list are included in this class.

7.2.4.2 The $Ø_i$ verb class

The $Ø_i$ inflection pattern is : Ø Ø -n(a-)[1] -nya/-nya(ra)[2]-

[1] The vowel final form occurs when this inflection is followed by another suffix. Word finally the vowel does not occur.

[2] The forms with *-ra-* only occur with certain nominal suffix allomorphs.

For example:

marrtji marrtji marrtji+n marrtji+nya "go/come, walk (intr)"

This is a closed class of 7 verbs in which all roots are *-i* final and all but one stem is intransitive. The following is the full extent of my listing for Djambarrpuyŋu:

bäni-	be (of, in water) (intr)	marrtji-	go, come, walk (intr)
galkirri-	fall (intr)	ŋäkirri-	cover (tr)
gärri-	go in, enter (intr)	ŋäthi-	cry (intr)
gukarri-	?to go out hunting (intr) (for the day)		

7.2.4.3 The $\emptyset_{rr}$ verb class

The $\emptyset_{rr}$ inflection pattern is: -rr Ø -n(a-)[1] -nya/-nya(ra)[2]-

[1]The vowel final form occurs when this inflection is followed by another suffix. Word finally the vowel does not occur.

[2] The forms with *-ra-* only occur with certain nominal suffix allomorphs.

For example:

waŋdi+rr	waŋdi	waŋdi+n	waŋdi+nya	"run (intr)"
däl+thi+rr	däl+thi	däl+thi+n	däl+thi+nya	"harden (intr)" [hard+INC]

This class includes some 16-17 verb roots as well as all verbs stems derived with the INCHoative suffix *-Thi-*. It is thus one of the productive patterns of inflection. All stems are *-i* final. A single transitive stem has been recorded in this class, and th INTENSifier *mirithi-* functions as an adverbial and is thus unmarked for transitivity. The rest are intransitive/semitransitive.

Synchronically, the INCH is only productively suffixed to non-verbal roots (see section 7.5.2). However, there are several stems in this class in which allomorphs of this suffix can be isolated but the sense appears to be specialized. There are others where cognates with senses and/or forms suggesting a potential "root" but for which the segmentation is not completely transparent or the 'root' does not ocur as an independent morpheme. These all point to these stems being fossilized derivations.

Those stems which are clearly monomorphemic members of this class are:

buraki-	be hurt, wounded (intr)
giritji-	play (vs work), dance(intr)
gulŋiyi-	go in/through, enter, be inside (intr)
mirithi-	INTENSifier (Adv)
waŋdi-	run (intr)

Likely fossilized derivations include the following:

i) Those for which there are cognates suggesting potential roots but where the INCH suffix is not transparent:

barrari-	be frightened (semitr/intr) *barrari* "fear/frightened"
manaŋi-	steal (tr) *manaŋa/manaŋgan* "theft, thief" (Austronesian)

maranhi- to have enough food, be full (intr)
maranhu "satiated with food", *maranhu-gä-Ŋ* " hunt"
midiki- do/go badly, wrongly (intr)
midiku-Ŋ "do/go badly (tr)" and *midiku* "bad"

These examples suggest a sequence of V+yi has been reduced to /i/.

ii) Those where potential INCH allomorphs are transparent but the roots do not occur in isolation:

ŋamathi- be/become good, better; ready; improve (intr)
ŋamatha-Ŋ "do well (tr)"; *ŋamakuli/ŋamakurr* "good"
roŋiyi- return, go back (intr)
roŋanmara- "return, send back (tr)"

The latter example suggests the reduction of V+yi- to /i/ may have been mediated by an assimilation of the root final vowel to /i/.

iii) Those where the potential INCH allomorph does not occur synchronically:

yätji- go wrong, badly (intr)
yätja-Ŋ "do badly (tr)", *yätjkurr* "bad"; (*yätj* "bad"))

Yätj is heard as an independent morpheme in Dhuwal/Dhuwala varieties, but the correct Djambarrpuyŋu form is *yätjkurr*. However, even if we posit *yätj* as a root, the INCH suffix expected synchronically is *-Thi-* (cf *maḏakarritj+thi-* "angry+INCH"). The likelihood that /-tji-/ was an allomorph in the past is supported by the existence of *-tju-* as an allomorph of the *-Thu-* augment but not of the productive VerBaliZeR *-(')Thu-* (see section 7.5.1).

iv) Those where the INCH allomorphs is transparent but the root is not quite identical to the free form cognate:

gäŋaŋ'thi- be alone
gänaŋ'mara-Ŋ, *gänaŋ'yu-N* "do alone"
gäna/gänaŋu " alone"
gupatjthi- to die, pass away (intr)
gupa; "nape"; *gupatjku-Ŋ* "to leave behind (as when someone dies or goes away for a long time) (tr)"

In these examples there is some variation in the form that appears with the suffix and that which occurs as a free form. The first example would appear to involve the deletion of a vowel, assuming it is originally derived from *gänaŋu*. The second example has final /tj/ whose presence I am unable to explain. There are four body

part terms which have cognates with a final /tj/. These are *gupa* "nape", *ŋapa* "exterior surface" (cf *ŋapatjku-* "to conceal (tr)")and *dhudi/dhurpu* "bottom'" (cf *dhuditj/dhurputj* "behind, after(wards)"). It does not appear to be associated with a synchroncially productive process and I have never found the first two forms with the final /tj/ in isolation.

v) Those with clearly isolatable stems and roots but with specialized meanings:

raŋithi-	to go out (of tide) (intr) *raŋi* "beach"
ŋurruthi-	to go in (of tide) (intr); to come up on (of tide) (tr) *ŋurru* "nose, point"

While there is a close connection between the movement of the tides and the presence of a "beach" and "points" of land, the verbs have a more specialized meaning than might be expected from the productive derivational process. They commonly occur with *gapu* "water" as the S argument. It is clearly nonsensical to attribute the water with the inchoative sense of "be/becoming a beach/point". The variable transitivity of *ŋurruthi-* is also not a feature of synchronically derived inchoative stems.

A further example of this type is the verb *gaŋgathi-* which has the senses "to get ready, prepare (intr/semitr)", "to rise up (intr)" as well as that of "do slowly, carefully, less intensely". The cognate free form *gaŋga*, a degree particle meaning "somewhat", suggests the latter is productively derived but I have no evidence of this being the case for the first two senses.

7.2.4.4 The $Ø_a$ verb class

The $Ø_a$ inflections pattern is: Ø Ø(V#-> i)[1] -n(a-)[2] -nha/-nha(ra)[3]-

[1] The stem final vowel becomes /i/

[2]The vowel final form occurs when this inflection is followed by another suffix. Word finally the vowel does not occur.

[3] The forms with *-ra-* only occur with certain nominal suffix allomorphs.

For example:

luka luki luka+n luka+nha "eat, drink - ingest (tr)"

This is a closed class in which all the roots are *-a* final. Most of the stems are intransitive/semitransitive but there are a few that are transitive. The following

14 stems are all the potential stems in this class I have noted to date in work with Djambarrpuyŋu speakers:

buna-	arrive (semitr)
buthuwa-	excrete, give birth (intr)
dhalaktharra-	leak, drip (intr)
dhärra-	stand, be (intr)
dhunarra-	descend, come down (intr)
ga-	IMPeRfectiVe auxiliary
gora-	be shy, embarrassed, ashamed (semitr) (also noun)
guyaŋa-	think, remember, worry/think about (tr)
luka-	ingest, eat, drink (tr)
nhära-	cook, burn, sting (eg of jellyfish) (intr)
nhina-	sit, sit down, stay, live, be (intr)
ŋorra-	lie down, sleep, be (intr)
walma-	go/come out, rise(of sun,moon) (intr)
waŋa-	talk, speak, say (tr/semitr/intr)

7.2.4.5 The $Ø_{mirr}$ verb class

The $Ø_{mirr}$ inflection pattern is: -rr -rr -n(a-)[1] -nya/-nya(ra)[2]-

[1] The vowel final form occurs when this inflection is followed by another suffix. Word finally the vowel does not occur.

[2] The forms with *-ra-* only occur with certain nominal suffix allomorphs.

For example:

bunhami+rr bunhami+rr bunhami+n bunhami+nya
"fight together, each other"
(The stem is *bu+nha+mi* "hit/strike(tr)+4th+R/R)"

This is the inflection for *-mi-*, the Reflexive-mutualis-Reciprocal derivational suffix. It is a productive suffix and thus an open class. It is the only derivational suffix which is associated with a pattern of inflection found on verb roots. It is possible that some of these stems are in essence fossilized derivations, e.g. *bunhamirr* "fight" and *gurrpanmirr* "share" (see *gurrupa*-N_L "give"). However the only basis for claiming this is their frequency of use. In their morpho-syntax and semantics I have found nothing that distinguishes them from other R/R stems. For a fuller consideration of this suffix and its functions see sections 7.5.4.2 and 11.3.

Heath (1980a) notes that there is an occasional fluctuation between *-rr* and Ø in the second inflection for both the *-Thi-* and *-mi-* suffixes in his material from an older Djambarrpuyŋu speaker. While I have few examples of the R/R stems in the SECOND inflection these consistently occur with *-mirr*. There are many examples with *-Thi-* in this inflection in the texts, but I have not noted any variation in the

form. If it occurs it is certainly is not as pervasive as the alternation between lenited and unlenited allomorphs associated with some of the nominal suffixes.

7.2.4.6 The IRø verb class

The IRø pattern of inflection is: ø ø(V->i)[1] -r -nha/-nha(ra)[2]-

[1] last stem vowel becomes u

[2] The forms with *-ra-* only occur with certain nominal suffix allomorphs.

It has been noted with only one stem, namely *gurrma-* "paddle":

gurrma gurrmi gurrma+r gurrma+nha "paddle (intr)"

It is identical to the inflections found with the $ø_a$ class except for the THIRD inflection. The THIRD inflection /-r/ is regularly found in the N_L class.

7.2.4.7 The N verb class

The N Class inflection pattern is: -n -rr -rr -na(ra)[1]-

[1] The forms with *-ra-* only occur with certain nominal suffix allomorphs.

For example:

lupthu+n	lupthu+rr	lupthu+rr	lupthu+na	"wash, swim (intr)"
galku+n	galku+rr	galku+rr	galku+n	"wait (semitr)"
nyäl'yu+n	nyäl'yu+rr	nyäl'yu+n	nyäl'yu+na	"to lie to (tr)" (cf *nyäl* "lie")

This is a large open class to which by far the majority of verb roots belong. My current list includes some 440 distinct verb roots and I know it is incomplete. This is also the group to which stems derived with the VerBalIZeR *-(')Thu-* belong. The homophony between the augment and the VBZR make it difficult to determine whether stems are productively derived or fossilized derivations. Some 75 stems with recognizable non-verbal roots are currently listed. Various categories are distinguishable and at least a Delocutive function is synchronically productive (see section 7.5.1.2.1 for further details). The presence of the stem *warkthu-* "work, a potential English loan, in this class also points to the synchronic productivity of this class.

This is a distinct group since the verb stem to which the inflection attaches, with one exception, is dimorphemic. It is the class requiring the *-Thu-* augment described above. The augment can be realized as *-Thu-*, *-tju-* or *-yu-* (see section

7.5.1.1). The only exception noted so far is the monomorphemic *galku-* "wait (semitr)". A selection of examples:

wä+thu-	call out to (semitr)
bark+thu-	crack, split (tr)
dhal'+yu-	land (of plane, bird) (intr)
ruiwaŋ+dhu-	put (tr)
dhamany'+tju-	grow, get bigger (intr)
dhaŋgi'+yu-	embrace, hug, carry baby in arms (tr)
dhamuluku+yu-	hold in mouth (tr)
martjmartj +tju-	go, walk (Pl) (intr)

All stems are *-u-* final. The verb roots themselves are distinct from those in other inflecting verb classes in that they can be consonant final, and are predominantly monosyllables and disyllables. They are also distinct in their ability to occur independently as BVRs (Bare Verb Roots - see section 7.2.2) e.g. *yarrup* from *yarrupthu-* "descend, come/go down"; *muk* from *mukthu-* "be quiet", as well as in the fact that they are directly attached with the CAUS *-mara-* derivational suffix e.g. *bakthu-* "break", *bakmara-* "break"; *lupthu-* "bathe, wash, swim (intr)", *lupmara-* "wash (tr)" (see sections 7.2.5 and 7.5.4.1).

All transitivity types are represented in this class, although in a sample of 372 stems approximately two thirds were intransitive/semitransitive stems (69%) and one third transitive/ditransitive (31%).

7.2.4.8 The N_L verb class

The N class inflection pattern is: -n -l(V->u)[1] -r -na/-na(ra)[2]-

[1]final stem vowel becomes u

[2]The forms with *-ra-* only occur with certain nominal suffix allomorphs.

For example:

gurrupa+n	gurrupu+l	gurrupa+r	gurrupa+na	"give (tr/ditr)"

This is a closed class. The majority have roots with final /a/, but there are few with final /i/ and final /u/. Almost all stems are transitive. I list below 30 stems that occur in this class. From my own and the Gupapuyŋu listings there are potentially another score or so stems.

batha-	cook (tr)	lirrtha-	roast in ashes (tr)
bokma-	create (tr)	liyama-	sing, play (an instrument) (tr)
dharaŋa-	understand (tr)		
manapa-	join together (tr)	mirritja-	squeeze, knead (tr)
dhararrma-	cast off (tr)	nhanapa-	make/stoke a fire (tr)
dharrpa-	hide (tr)	nhi/erra-	put (tr)
dhayuŋa-	transfer, send (tr)	nhirrpa-	put (tr)

dhunukthunukma-	explain, point out (tr)	nhuka-	copulate (tr)
gadayma-	take along (tr)	nhuma-	smell, sniff (tr/intr)
garrpi-	tie, bind (tr)	ŋaymu-	wait
gotha-	cook (tr)	ŋämi-	paint/annoint (tr)
garrmu-	try, test, think (tr)	ŋoma-	knead, press (tr)
gurrpa-	call by kin term (tr)	ŋutha-	grow (intr)
gurrupa-	give (tr/ditr)	ŋupa-	follow, chase (tr)
guwatjma-	visit (tr)	yäkarrma-	pretend, imitate
		yirrpa-	scratch,scrape (tr)

7.2.4.9 IR_N verb class

The IR_N class pattern of inflection is: -n -rr(V ->u)[1] -r -na

[1]Stem final vowel becomes/ u/

For example:

litha+n lithu+rr litha+r litha+na "to dry (intr)"

This is only distinct from the N_L inflection pattern in the second inflection where the suffix is *-rr* rather than *-l*. Only three stems have so far been found which occur with this pattern of inflection in Djambarrpuyŋu:

ḏiltha-	kill/heal with potion, sting (tr)
litha-	dry (intr)
galka-	to put into, record (on tape) (tr)

There is an additional stem *gana-* "leave" (tr) which is attested with the forms *ganan* (1st) *ganurr* (2nd) and *ganana* (?3rd/4th) and *ganan-* (stem to which R/R attaches). It is synonymous with the stem *ganarrtha-*$IR_{N/L}$ which is readily elicited in all inflections, and is often in given in lieu of *gana-* stems in elicitation sessions. It has been described as only occurring in the FIRST inflection form in Gupapuyŋu (Christie (1979)). However, in Djapu it is a member of the IR_N class and is included with this class in Zorc (1986). On the basis of the latter fact one would expect a 3rd form *ganar* but I have not been able to elicit it and it is not included in Heath (1980a). It therefore appears to be a root in the IR_N class with a defective paradigm.

7.2.4.10 The N_K verb class

The N_K class inflection pattern is: -n -k(u-) -rr -na/-na(ra)[2]-
(stem tj->y)[1]

[1] A stem final sequence -tja- occurs in all the verbs in this class. In the 2nd inflection the /tj/ regularly lenites to /y/.

[2]The forms with *-ra-* only occur with certain nominal suffix allomorphs.

For example:

bitja+n	biya+k	bitja+rr	bitja+na	"do/be thus"
nhaltja+n	nhalaya+k	nhaltja+rr	nhaltja+na	"do/be what/how"

This is a closed class, all with *-a-* final stems. One stem is transitive while the others are unmarked for transitivity. They are all deictic or interrogative/indefinite stems whose transitivity is determined by the context in which they occur.

Eight stems occur in my Djambarrpuyŋu corpus:

nhaltja-	do/be what/how (interrogative/indefinite stem)
(/nhalaya- 2nd inflection stem)	
bitja-	do/be thus
baṯpitja-	hold firmly (tr)
dhuwalatja-	do/go this way (demonstrative stem)
dhuwalitja-	do/go this/that way (demonstrative stem)
ŋulawitja-	do/go that way (demonstrative stem)
ŋuliwitja-	do/go that way (demonstrative stem)
wanhawitja-	do/go which/some way (interrogative/indefinite stem)

It is possible to posit a derivational history for all these stems, although synchronically they would all appear to be monomorphemic. The interrogative/indefinite non-human stem *nhä* and the INDEFinite stem *be* are potentially cognate with the first two stems listed. The only potential source for the *-tja-* that I can find is a possible connection with the TRANS2 *-Tha-*.

The five last stems on the list all show cognates with demonstrative and interrogative/indefinite stems i.e. the PROX *dhuwal,* or *dhuwala-*, the MED *dhuwali,* the DIS/TEXD stems *ŋuli-/ŋula-* and the place interrogative/indefinite *wanha.* The other stem *baṯpitja-* appears to have a cognate in the BVR *baṯ* (see section 7.2.2).

Several of these stems appear to have been derived through the compounding with the verb *bitja-*. The latter can be isolated in 4 of the stems, albeit with the initial /b/ lenited to /w/ in three of them. The other two stems, *dhuwalatja-* and *dhuwalitja-*, appear analogous to the stem *bitja-*, if the INDEF *be* is in fact the original root. That is they appear to have been directly suffixed by *-tja-*. The fact that *-tja-* is only associated with these stems, and the degree of fusion reflected by the lenition in the proposed compounds, suggest at least some of these stems have a long history. While the demonstrative stems are somewhat varied across even Dhuwal/Dhuwal varieties (see 6.2.2 point 7) a cognate with *bitja-* is isolable across these varieties and also in Dhaŋu forms.

7.2.4.11 The Ŋ verb class

The Ŋ class inflection pattern is: -m(a/a-)[1] -ŋ(u/u-)[1] -ŋal -nha/-nha(ra)[2]-

[1] The forms *-ma* and *-ŋu* are found suffixed to monosyllabic roots. The vowel final forms also occur when this inflection is followed by another suffix. Word finally on stems of more than two syllables the vowel does not occur.

[2] The forms with *-ra-* only occur with certain nominal suffix allomorphs.

Examples:

dharpu+m	dharupu+ŋ	dharpu+ŋal	dharpu+nha	"spear (tr)"
nhä+ma	nhä+ŋu	nhä+ŋal	nhä+nha	"see (tr)"
waŋgapunu+m	waŋgapunu+ŋ	waŋgapunu+ŋal	waŋgapunu+nha	"cook (tr)"
lupmara+m	lupmara+ŋ	luŋmara+ŋal	lupmara+nha	"wash (tr)"
			(lup+mara- [wash+CAUS-]	
dälku+m	dälku+ŋ	dälku+ŋal	dälku+nha	"harden (tr)"
			(däl+ku- [hard/firm+TRANS1])	
galkitha+m	galkitha+ŋ	galkitha+ŋal	galkitha+nha	"make near (tr)"
			(galki+tha- [near+TRANS2])	

This is a productive inflection pattern. Like the $Ø_{rr}$ class it can be considered open because it is fed by a number of highly productive derivational suffixes. i.e. the CAUS *-mara-*, the TRANS1 *-ku-* and the TRANS2 *-Tha/ya-* (see sections 7.5.3 and 7.5.4.1). It appears to have the largest number of non-derived verb roots outside of the N class. I have about 60 clearly non-derived stems listed for Djambarrpuyŋu and there are another possible 25 or so in the Gupapuyŋu dictionaries of Lowe (n.d.b) and Christie (1979) which may be common to Djambarrpuyŋu. In addition there are some 40 stems which appear to be fossilized derivations. This can be attributed to the presence of final segments that are cognate with allomorphs of one of the productive suffixes associated with this class, or to the presence of the fossilized suffix *-Punu-*. However, there is usually no free form lexeme that can be clearly identified with the potential root.

All the verbal roots are vowel final. They are either /u(:)/ or /a(:)/ in a ratio of about 2:1. Root final long vowels are confined to monosyllabic roots. There are three monosyllabic roots used by all speakers - *gä-* "bear, carry (tr)", *nhä-* "see (tr)" and *mo-* "forget (tr)". The younger speakers' inflection of *djäma* "work" provides an additional monosyllabic root in this class, namely *djä-* (Older speakers do not inflect this stem).

The members of this verb class are predominantly transitive. In a sample of 82 non-derived/fossilized stems 79% were transitive/ditransitive and 21% intransitive/semitransitive. As main verbs, all derived stems are transitive.

However, if we extract the potentially fossilized derivations from the sample, the percentages, 73% and 27% respectively, do not change dramatically.

A selection of examples is given below:

Non-derived roots:

bela-	dig (tr)	ŋarru-	look for (semitr)
dhaḏulu-	leak (intr)	ŋakara-	tell (tr/semitr/ditr)
gorru-	be high, hang (intr)	nyalu-	ingest (tr)
gundupu-	run (Pl) (intr)	räku-	fish (tr)

Potential fossilized derivations:

biltjawunu-	shoot (tr)	maŋ'maŋbunu-	to test a spear (tr)
burraku-	threaten (tr)	yorrku-	to lie st down (tr)
bartjunmara-	to whip, beat (tr)	bapmara-	to spread liquid (tr)
ŋamatha-	do well (tr/Adv)	ŋurrutha-	do before, prior

An irregular SECOND form occurs in connection with one member of this class, namely *märra-ŋ* "take/get(tr)". The suppletive form *mängu* occurs in addition to the regular SECOND form *märra+ŋ*.

7.2.4.12 The Ŋka Class Verbs

The Ŋka class pattern of inflection is:

-m(a-)[1] -ŋ(u-)[1](V->u)[2] -ŋal -nha/-nha(ra)[3]-

[1]The vowel final form occurs when this inflection is followed by another suffix. Word finally the vowel does not occur.

[2]last vowel in the stem becomes /u/

[3] The forms with *-ra-* only regularly occur with certain nominal suffix allomorphs.

An example:

ŋurrka+m ŋurrku+ŋ ŋurrka+ŋal ŋurrka+nha "throw (tr)"

This is a closed class, all with *-a* final roots. I have nine possible Djambarrpuyŋu examples. These are:

boŋga-	break (of day) (intr)	gunga-	block (tr)
burrumilka-	not understand fully	gurruka-	carry, bear (tr)
dhaŋga-	hang, suspend (intr)	ŋayarrka-	ask (tr)
dhiŋga-	die (intr)	ŋurrka-	throw (tr)
wäŋga-	go, walk (Pl) (intr)		

This particular inflection pattern is almost identical to the previous one. The only difference is the vowel change in the SECOND inflection (*-ŋ(u-*)). A consideration of these stems will show that the last consonant in the root is always a velar stop. There are also no stems ending in a velar consonant and a low vowel in the Ŋ class. This complementary distribution suggests the variation can be accounted for phonologically. However, the situation is complex and there is a variety of factors that could be argued to be motivating the vowel change. Morphy suggests that it is the result of assimilation to the following vowel (1983 p66). This would explain why the change does not take place with the THIRD inflection (*-ŋal*). The two Dhuwal varieties present something of a problem for this explanation since the vowel is not always present in the 'surface' form. However, since the change occurs in the vowel retaining varieties in Dhuwala as well it could well be argued that this vowel change is a shared retention. Yet even allowing for this, we still do not have an explanation for the fact that the last consonant in all these roots is a velar stop. I suggest that the height and backness of the preceding and following velars in the SECOND inflections are additional factors motivating the vowel change. Some general support/motivation for this vowel change also comes from other conjugations. The change from /a/ to /u/ is of course, also found in connection with the /a/ (and a few /i/) final stems associated with the N_L conjugation. Here however it is regular for all stems. In Dhuwal there is no synchronic phonological motivation, the relevant inflection being /-l/. However, in Dhuwala the inflection involved has a final /u/ (i.e. *-lu*) so the (morpho-)phonological motivation is still evident.

As with the Ŋ verb class the transitivity is mixed, although in this group of stems the distribution of intransitive and transitive stems is fairly even.

7.2.4.13 Irregular verbs

There are five patterns of inflection associated with seven verbs which I designate as "irregular". They could also be considered as minor classes since their patterns of inflection are only marginally different from those found with classes with a wider membership. Only one inflection form occurs in these verb stems that is not found elsewhere in the inflection paradigms. Two of the irregular patterns of inflection, namely the $IR_{\emptyset}$ and the IR_{N}, were considered above (see 7.2.4.6 and 7.2.4.9) following the presentation of classes with which they are most similar. The three irregular patterns to be considered next, are those most closely associated with the Ŋ conjugation described in the previous two sections. The first is identical to the Ŋ class with the exception of the SECOND inflection. The SECOND inflection is

identical to that of the N_L class verbs. The inflections of this $IR_{N/L}$ class are as follows:

-m -l(V->u)[1] -ŋal -nha/nha(ra)[2]-

[1]last stem vowel becomes u

[2]The forms with *-ra-* only regularly occurs with certain nominal suffix allomorphs.

This pattern has only been recorded with the two stems given below:

ŋayatha+m	ŋayathu+l	ŋayatha+ŋal	ŋayatha+nha	"touch,reach (tr)"
ganarrtha+m	ganarrthu+l	ganarrtha+ŋal	ganarrtha+nha	"leave (tr)"

These verbs are commonly occurring and all forms are attested in the texts. However, an alternative THIRD form, namely *ganarrtha+r* occurs occasionally in texts by an older Djambarrpuyŋu speaker. This form is also documented from a Djambarrpuyŋu speaker in Heath (1980a). It is the regular THIRD inflection associated with the N_L verb class.

The two other irregular inflection patterns are associated with the verb stems *bu-* "hit/strike (tr)" and *ŋä-* "hear/listen (tr)". These two irregular (IR) stems inflect as follows:

bu	-ma	-ŋu	-mar	-nha/-nha(ra)[1]-
ŋä-	-ma	-ku	-kul	-nha/-nha(ra)[1]-

[1]The forms with *-ra-* only regularly occur with certain nominal suffix allomorphs.

Except for the THIRD inflection the *bu-* inflections are identical to those of the Ŋ class. The THIRD inflection with final /r/ is closest to that regularly occurring with the N_L class. The Ŋ class monosyllabic verb *mo-* "forget" has an alternative THIRD inflection form *momar*, in addition to the expected *moŋal*. It is not a permitted alternation with other Ŋ class monosyllabic roots however.

While the FIRST and THIRD inflections of the verb *ŋä-* ally it with the Ŋ conjugation, the THIRD form is unique within the paradigm and the SECOND form is only found with the restricted N_K class. It is the most irregular amongst all the inflection patterns, in the sense that it has an inflection that does not occur elsewhere in the paradigm.

I label the irregular verbs using subscripts. With the monosyllabic stems *bu-* and *ŋä-* I give the roots as subscripts i.e. IR_{bu} and $IR_{ŋä}$. With the other categories I use

letters which show the conjugations with which they are allied. The labels for the irregular verbs are thus: $IR_{\emptyset}$, IR_{L}, R_{N} and $IR_{N/L}$.

7.2.5 Conjugations in Djambarrpuyŋu

I will now consider the arguments for positing three larger groupings. These draw on the similarities in the patterns of inflection, the stem final vowels, the transitivity, and the stems that are required by derivational suffixes.

1. Similarities of inflections.

The following table shows the inflections that are common to each of the three larger groupings.

Table 42: Common Inflections across Verb Classes

	Individual verb class inflections				Common inflections		
Verb class	1st	2nd	3rd	4th	1st	3rd	4th
$\emptyset_1$	∅	∅	-n(a-)	-nya(ra-)			
$\emptyset_a$	∅	∅(V->i)	-n(a-)	-nha(ra-)	∅	-n(a-)	-Nha(ra-)[1]
$\emptyset_{mirr}$	-rr	-rr	-n(a-)	-nya(ra-)	-rr		
$\emptyset_{rr}$	-rr	∅	-n(a-)	-nya(ra-)			
$IR_{\emptyset}$	∅	∅(V->i)	-r	-nha(ra-)		-r	
N_K	-n	-k(u). (tj->y)	-rr	-na(ra-)			
N	-n	-rr	-rr	-na(ra-)	-n	-rr	-na(ra)
IR_N	*-n*	*-rr(V->u)*	*-r*	*-na(ra-)*		-r	
N_L	-n	-l(V->u)	-r	-na(ra-)			
$IR_{N/L}$	*-m*	*-l(V->u)*	*-ŋal*	*-nha(ra-)*			
N	-m(a/a-)	-ŋ(u/u-)	-ŋal	-nha(ra-)	-m(a/a-)	-ŋal	-nha(ra-)
N_K a	-m(a-)	-ŋ(u-) (V->u)	-ŋal	-nha(ra-)			
IR_{bu-}	*-ma*	*-ŋu*	*-r*	*-nha(ra-)*	-ma		-nha(ra-)
$IR_{ŋä-}$	*-ma*	*-ku*	*-kul*	*-nha(ra-)*			

[1] *-nya* occurs following /i/ and *-nha* following /a/
The irregular patterns of inflection in italics.

All patterns of inflection have at least two inflections that are shared with another verb class. Indeed there are certain inflections that are quite general across a number of verb classes, and it is these that point to larger groupings. Similarities

across classes centre on the the FIRST, THIRD and FOURTH inflections while differences within the larger groupings centre on the SECOND inflection. It is the shared inflections that I use as the primary parameter to posit the Ø, N and Ɲ conjugations.

2. Stem final vowels:

Stems in the Ø conjugation are predominantly /i/ final, although there is one verb class where the stems end with /a/. Stems in the N conjugation are overwhelmingly /u/ and /a/ final. The only exceptions are two /i/ final stems which occur in the N_L class. Stems in the Ɲ conjugation are all /u/ or /a/ final.

There is clearly a strong correlation between /i/ final stems and the Ø conjugation, and /u/ final stems and the N and Ɲ conjugation. All but two /i/ final stems occur in Ø conjugation and /u/ final stems only occur in the N and Ɲ conjugations. This particular correlation is reflected in the vowel changes associated with the SECOND inflection. In the Ø conjugation this requires a change to /i/ and in the N and Ɲ conjugations a change to /u/. Another feature attributable to the /i/ final stems of the Ø conjugation is the occurrence of the FOURTH inflection allomorphs with an initial lamino-palatal.

3. Transitivity

Considering non-derived stems to begin with, a correlation is clear between intransitive/semitransitive stems and the Ø conjugation and between transitive/ditransitive stems and the Ɲ conjugation. The fact that derivational processes producing intransitive stems or reducing transitivity inflect according to the Ø conjugations, while those producing transitive stems inflect according to the Ɲ conjugation, is also in accord with this particular correlation. Viewed as a whole the N conjugation is a mixture of transitive and intransitive stems. However, its two major verb classes are split according to the predominant transitivity type. The N class favours intransitive stems in a ratio of about 2:1, while the N_L class is predominantly transitive.

4. The stem options for derivational suffixes

The choice of stem with the R/R *-mi-* and CAUS *-mara-* derivational suffixes distinguishes the N conjugation from the Ø and Ɲ conjugations.

(i) Stems for the Reflexive-mutualis-Reciprocal suffix *-mi-*

In the Ø and Ŋ conjugations the stem required by suffix is the FOURTH form of the verb e.g. *luŋ'mara+nha+mi-* "to gather together+4th+R/R" (cf *luŋ'mara-*Ŋ) and *ŋäkirri+nya+mi-* "to cover +4th+R/R-" (cf *ŋäkirri-* $Ø_1$).

However for the N conjugation the FIRST form is required e..g. *ŋarrju+n+mi-* 'to argue/tease each other' (cf *ŋarrju-* N) and *gurrupa+n+mi-* "share" (cf *gurrupa-*N_L).

(ii) Stems required by the CAUSative suffix *-mara-*

In Djambarrpuyŋu CAUS-*mara-* is attached to the FIRST form of the verb in the N_L and IR_N verb classes. i.e. *ŋutha+n+mara-* [grow+1st+CAUS (tr)] "grow something' (cf *ŋutha-*N_L (intr) "grow") and *litha+n+mara-*. [dry+1st+CAUS (tr)] "dry something" (cf *litha-*IR_N "dry (intr)"). In the N class it is suffixed directly to the root e.g. *ŋal'+mara-* [rise+CAUS (tr)] "raise" (cf *ŋal'yu-*N "rise (intr)). While there are two distinct patterns associated with the N conjugations, these are both distinct from the Ø and Ŋ conjugations where the CAUS is added to the FOURTH form of the verb e.g. *nhi+nha+mara-* [sit+4th+CAUS (tr)] "sit something up" (cf *nhina-*$Ø_a$ "sit (intr) and *dhiŋga+nha+mara-* [die+4th+CAUS (tr)] "kill" (cf *dhiŋga-*$Ŋ_{ka}$ "die (intr)").

7.3 Verb classes, inflections and their coding in Dhuwal/Dhuwala varieties

In the discussion that follows I draw on the work of Lowe (n.d.a and b) for Gupapuyŋu, Buchanan (n.d.) for Djambarrpuyŋu, Morphy (1983) for Djapu, Heath (1980a) in regard to Dhuwal (Djambarrpuyŋu and Djapu), Zorc (1986 and n.d.) and Schebeck (1968) for Yolŋu Matha generally. Additional sources for Gumatj are Ross (n.d.) and Amery (1985).

There is a high degree of correspondence in the number of inflection patterns that occur across the four Dhuwal/Dhuwala varieties. However, there is quite a bit of variation in the way they have been organized into higher level groupings. This reflects both differences between varieties, as well as differences in the approach to larger groupings taken by different linguists. The differences between varieties are

in relation to the number of distinct verb classes, their relative size and their actual membership.

There is also some variation in the actual form of inflections and in the number of inflections that occur. However, in a comparison across these varieties it is the similarities that are most striking and which clearly distinguish Dhuwal/Dhuwala from other varieties. Varieties in the Southern sub-group have the least number of distinct inflections of all Yolŋu Matha varieties. Gupapuyŋu, Djambarrpuyŋu and Djapu have four while Gumatj, Ritharrŋu and Dha'yi have five. Varieties in other sub-groups make additional distinctions. Djinaŋ has 6 inflections (Waters 1989) while Dhaŋu and Nhaŋu are reported to have 7 (Wood (n.d.) and Schebeck (1968)).

I will be focussing on the Dhuwal/Dhuwala varieties. Ritharrŋu is the only other member of the Southern sub-group for which it is possible to make a comparison. It is distinct from Dhuwal/Dhuwala in regards to certain inflection patterns that occur, the form of inflections that occur in shared verb classes and the stems that are required by derivational suffixes (see Heath 1980b and Zorc 1986 for details). There is also no evidence of a non-inflecting verb class and often there are one or two stems associated with particular classes which do not appear in any Dhuwal/Dhuwala vocabulary lists (or vice versa).

7.3.1 Verb classes in Dhuwal/Dhuwala

There are various indications that the distinctions in verb classes are areal phenomena, grouping the western varieties (Djambarrpuyŋu and Gupapuyŋu) and the eastern varieties (Djapu and Gumatj) together, rather than aligning Dhuwal and Dhuwala varieties. It is thus a domain in which the two Dhuwal varieties display some differences.

One of the more obvious differences is the relative size of the class which I designate in Djambarrpuyŋu as IR_N. In Djapu, Gumatj and Ritharrŋu this is a larger closed class which includes several lexemes from the Djambarrpuyŋu N_L class. The inflection patterns associated with these two classes differ only in the SECOND inflection. In the IR_N class this is *-rr* (*-rru* in Dhuwala) and in the N_L class *-l*. (*-lu* in Dhuwala). The most stems attributed to the IR_N class are the12 that occur in Djapu (Morphy 1983 p64, my IR_N = N_1 in Morphy's classification). Examples of stems that occur in this class in Djapu but which belong to the N_L (= Morphy's L

classes) in Djambarrpuyŋu include *ŋupa-* "follow (tr)", *batha-*"cook (tr)" and *manapa-* "join, unite (tr)", *ḻirrtha-* "roast in ashes (tr)", *ŋutha-* "grow (tr)".

Other stems occur which belong to different verb classes in different varieties but nothing as extensive as those just described. There are also a few lexemes which are clearly attributable to variation in the lexicons in the two regions. However, the data available for Yolŋu Matha is not yet detailed enough concerning the range of individual lexical items to determine the extent to which this occurs. In this regard it should be noted that the lists presented in various word classes above have not been rigorously considered in light of particular allegiance to Djambarrpuyŋu, although they have all been elicited from or produced in texts by Djambarrpuyŋu speakers. It is generally assumed that there is a pool of vocabulary common to the language group as a whole. However, it is not clear how this interacts with the potential association of particular lexical items with social groupings such as moieties or individual clans, linguistic groupings such as Dhuwal, Dhuwal or Dhaŋu or particular regions. The work on lexical diffusion between Yolŋu and non-Yolŋu languages to the south of the Yolŋu area by Heath (1981) indicates that different domains of vocabulary items are another expected variable. It is to be expected that vocabulary items form certain domains are more likely to be shared than others, although as the varieties become more similar the distinction between diffusion and retention becomes more problematic.

The NI class is common to all Dhuwal/Dhuwala varieties although it is not mentioned in Heath's sketch of Dhuwal (1980a). Morphy only describes the Macassan loans and the lexemes given are subsumed in the list I have given Zorc (n.d.) includes Kriol forms as well.

The $Ø_{i}$ class is common to all varieties. The stems I have given for Djambarrpuyŋu subsumes the three stems given for this class in Djapu. However, one of the Djambarrpuyŋu stems *galkirri-* "fall" is clearly cognate with Djapu *gälki-* which occurs in the $Ø_{rr}$ class.

The $Ø_{rr}$ class is common to all varieties. Somewhat more stems are considered for this class in Djambarrpuyŋu given the potential for fossilized derivations. However, the available comparative evidence suggests there is a substantial overlap in the membership of this class. Only 5 monomorphemic stems are given for Djapu (Morphy 1983 p63) but further examples of fossilized stems occur in the vocabulary lists. However, the Djapu and Gumatj stem *guyaŋi-* "think (tr)" is

clearly cognate with Djambarrpuyŋu and Gupapuyŋu *guyaŋa* which belongs to the $Ø_a$ class. The cognate with the Djapu stem *gälki-* "fall over" also does not occur in this class in Djambarrpuyŋu.

The $Ø_a$ class is common to all varieties. Again there is considerable overlap in the membership. Two stems are specific to the eastern varieties, namely *mulka* "hold (tr)" and *yukurra* "lie (intr)". The IMPV *ga-* on the other hand, is specific to the western varieties.

The $Ø_{mirr}$ class is common to all varieties and restricted to R/R derived stems.

The N class is common to all varieties. More detailed lexicographical work is required to determine the extent to which stems are common to all varieties. Some distinctions in other N conjugation classes were described above.

The N_K class is common to all four varieties. The two stems *bitja-* "do/be thus" and *nhaltja-*"be/do what/how" are common to all and each variety is attributed with stems based on demonstrative stems. These are not identical however and for details refer to section 6.2.1 point 7. Gumatj does not have a suppletive stem for the SECOND inflection of *nhaltja-* (compare Gumatj *nhaltjurru* with Gupapuyŋu *nhalayaku* and Djambarrpuyŋu *nhalayak(u-)*). Morphy only mentions the existence of a suppletive stem for *bitja-* (1983 p66). From her description we would expect the Djapu SECOND form of *nhaltja-* to be *nhaltja+k(u-).*

The $Ŋ$ class is common to all varieties and again there is substantial overlap in membership. One stem is attributed to this class in Djapu i.e. *ŋamatha-* "do properly" which in Djambarrpuyŋu belongs to the $IR_{Ŋ/L}$ class.

The $Ŋ_{Ka}$ class is common to all varieties and there would appear to be almost complete overlap in the membership, except that *weka-* "give(tr)" is an eastern lexeme.

The $IR_{Ŋ/L}$ class may be restricted to western varieties. Of the two stems in this class in Djambarrpuyŋu and Gupapuyŋu (*ŋamatha-* "do properly" and *ganarrtha-* "leave(tr)"), I have only seen *ŋamatha-* specifically reported for an eastern variety. This is for Djapu where it occurs in the $Ŋ$ class. I have not seen the second stem reported as occurring in eastern varieties.

The irregular verbs *bu-* and *ŋä-* are common to all varieties.

7.3.2 Larger groupings/conjugations in Dhuwal/Dhuwala and other Yolŋu varieties

Some of the classifications that have been adopted for Yolŋu varieties are presented in Table 43. Some systems essentially number each individual word class. Others have posited larger groupings/conjugations, focusing on the inflections as the basis for doing so. The minimum number of conjugations posited is three. Waters does this for Djinaŋ and, ignoring the NI class, this is what I propose for Djambarrpuyŋu. Morphy posits 4 major conjugations for Djapu while Zorc proposes 5 major classes for Yolŋu Matha generally. Heath posits 6 classes for both Dhuwal and Ritharrŋu. (Note: I have excluded the NI class in this comparison of the number of major classes).

The Ṉ class (= NG (Morphy); =5 (Zorc); =6 (Heath) = Class 1 (Waters)) is generally recognized. The Ø conjugation is recognized in Djapu (Morphy's Ø conjugation) and Djinaŋ (Waters' Class 3). Zorc and Heath distinguish between /i/ and /a/ final stems. This conjugation is thus associated with classes 3 and 4 of Zorc, and 1 plus the inchoative and 2 of Heath (for the /i/ and /a/ final stems respectively). In the N conjugation the large N class is treated independently by Zorc (=1) and Heath (=5). Morphy has an N conjugation which includes this group of stems (=N_2) and those I designate IR_N (=N_1). She posits a separate conjugation for those I designate as N_L (= her L conjugation). While positing a separate class for the large N class, Zorc has a single grouping for the other classes I include in the N conjugation. (His Class 5 thus includes my IR_N, N_L and N_K classes). His classes 1

Table 43: COMPARISON OF VERB CLASS CLASSIFICATIONS

Classes as designated in thesis Djamb	Zorc Dict(YM)	Lowe-Christie /Buchanan Djamb/Gup	Heath Rith	Heath Dhuwal	Ross Gumatj	Morphy Djapu	Waters Djinaŋ/Djinba
N	1	5	5	5	4	N_2	
Ŋ	2	7	6A	6B(u-final) 6A(a-final) 6D(mono-syllables)	7	NG_2	Class 1
Ŋ+CAUS	(2)	(7)	Causative(like 6A)	(6)		(NG_2)	
$IR_{Ŋ/L}$	2d	IR	Factitive(like 6B)	-	8	-	
Ŋka	2a	8	6B	6C		NG_1	
IR*bu* -	2b	IR	Irreg(like 6B)	6(Irreg)	8	IR	
IR*ŋä* -	2c	IR	Irreg(like 6A)	6(Irreg)	8	IR	
$Ø_{mirr}$	3	-	R/R(like inchoative */galkirri*)	1		$Ø_4$	
$Ø_{rr}$	3a	4	inchoative	1B	5	$Ø_3$	Class 3
$Ø_l$	3b	2	1	1A	2	$Ø_2$	
$Ø_a$	4	3	2	2	3	$Ø_1$	
IRØ	-	-	-	-	-	-	
N_L	5	6	4	4	6	L_1/L_2	Class 2
IR_N	5a	IR	3	3		N_1	
N_k	5b and 5c	IR	-	-	(IR)	D/I	
NI	6	1	-	-	1/1	NI	

Abbreviations: NI non-inflecting; IR/Irreg irregular; D/I deictic and interrogative verbs; Djamb Djambarrpuyŋu, Gup - Gupapuyŋu, Rith - Ritharrŋu, Dict(YM) Yolŋu-Math Dictionary (Zorc 1986).

and 5 together are equivalent to my N conjugation. Heath makes additional distinctions with his class 4 equivalent to my N_L and his class 5 equivalent to my IR_N. Waters equates at least these two classes with his Class 2 for Djinaŋ and Djinba. (I am not sure of the place of the large N class in relation to these language groups).

The variation in classification, while on the surface somewhat confusing, does not rest on essential differences but in where different analysts focus for the purpose of making distinctions. My approach has been to focus on similarities in inflections as far as possible. This follows Zorc (n.d.) and his numeric system essentially reflects this approach. He argues for keeping the large N class independent however, on the grounds that this is the largest class and common to all Yolŋu varieties. The ranking of his numbers reflects the productivity of various classes. The productivity factor is relevant to my system in two areas. The first is in regard to the minor classes which I have designated "irregular" and in the use of Ṉ and N without subscripts to designate both conjugations and the major class within each of these conjugations. A letter based system is preferred to a numeric one, since it makes the inflection forms of particular stems reasonably self evident.

7.3.3 Rationale behind the conjugations proposed for Djambarrpuyŋu

The largest groupings I have posited are essentially based on the similarities in the FIRST and FOURTH inflections between the different verb classes. This holds for all the N and Ṉ classes. It is not absolutely rigorous in regard to the Ø class whose FIRST form may be either the bare root or the inflection /rr/. However, the constancy of the THIRD inflection and /ɪ/ final stems in this class support the conjugation as a whole. This approach is consistently maintained except in regard to the irregular classes. With these I have given priority to the fact that the pattern of inflection occurs with a highly restricted set of stems (three or fewer). The subscripts of some of these classes indicate the conjugation with which their inflections are closest. The exceptions are the stems *bu-* and *ŋä-*. Given that there are several irregular classes associated with the Ṉ conjugation on the basis of their FIRST and FOURTH inflections, some means was required to distinguish between them. Given that these stems are common lexical items and monosyllables, for the purposes of referring to them distinctly in this thesis, it seemed simplest to indicate the stems directly.

The subscripts with the conjugation markers are chosen to indicate a characteristic that is distinctive to that particular class. With the Ø conjugation this is either the FIRST inflection form or the root final vowel. In the N and Ŋ conjugation it may be a distinctive stem shape e.g. the /ka/ final roots of the $Ŋ_{ka}$ class, or the SECOND inflection.

7.3.4 Inflections in Dhuwal/Dhuwala varieties

The following inflection allomorphs occur in Djambarrpuyŋu:

FIRST	-rr, -n, -ma/-m(a-)
SECOND	-rr, -l, -ŋu/-ŋ(u-), -ku, -k(u-)
THIRD	-n(a-), -rr, -r, -ŋal, -mar, -kul
FOURTH	-nya, -nha, -na
(derived stem allomorphs)	-nya(ra)-, -nha(ra)-, -na(ra)-

The FOURTH inflection and the derived stem used with nominal suffixes are only formally distinct when the longer stem with /ra/ is required. This is restricted to two nominal suffixes. Thus in Djambarrpuyŋu the FOURTH inflection and derived stems suggest a single form common to the Ø and Ŋ conjugations, namely *-Nha-/ -Nha(ra)-*. The *-nya-* allomorph only occurs with /i/ final stems in the Ø conjugation. However it does not not occur with /i/ final stems in the N_L class. The *-na-* allomorph is found consistently with stems belonging to the N conjugation classes. All inflections are thus to some extent lexically determined.

Only five of the 15 inflection patterns are productive - i.e. those associated with the derivational suffixes, VerBaliZeR *-(')Thu-* which feeds the N class, INCH *-Thi-* which feeds the $Ø_{rr}$ class, R/R *-mi-* which feeds the $Ø_{mirr}$ class and CAUS *-mara-*, TRANS1 *-ku-* and TRANS2 *-Tha/y a-* which feed the Ŋ class. The majority of loan words appear to be placed in the Nl class but there is a little evidence that they may also enter the N class. There is thus a productive class in each of the four conjugations (Ø, Ŋ N and Nl).

Unlike verb classes most differences in inflections between the four Dhuwal/ Dhuwala varieties pattern with the Dhuwal/Dhuwala distinction rather than with regions. In fact what is most striking about the inflections in these varieties is their similarity. All inflections are clearly cognate, if not identical. Most of the differences can be attributed to the application of vowel deletion as described in section 2.4.6.7. There are however some further differences that should be noted.

Two of these result from the reduction of inflections being somewhat different in Djambarrpuyŋu and Djapu. The relevant inflections are shown in the table below:

Table 44: Reduction of the THIRD inflection in the Dhuwal N and Ṉka Verb Classes

N class

	FIRST	SECOND	THIRD	FOURTH
Gupapuyŋu	-n	-rru	-rruna	-na/-na(ra)-
Gumatj	-n	-rru	-rruna	-na/-na(ra)-
Djambarrpuyŋu	-n	-rr	-rr	-na/-na(ra)-
Djapu	-n	-rr	-nan	-na/-nar(a)-

Ṉka Class

	FIRST	SECOND	THIRD	FOURTH
Gupapuyŋu	-ma	-ŋu(V->u)	-ŋala	-nha/-nha(ra)-
Gumatj	-ma	-ŋu(V->u)	-ŋala	-nha/-nha(ra)-
Djambarrpuyŋu	-ma/-m(a-)	-ŋu/-ŋ(u-)	-ŋal	-nha/-nha(ra)-
Djapu	-ma/-m(a-)	-ŋu/-ŋ(u-)	-ŋ(al-)	-nha/-nhar(a)-

The THIRD inflection in each of these classes has distinct allomorphs in Djambarrpuyŋu and Djapu. In the N class, the two Dhuwal varieties have clearly reduced the disyllabic Dhuwala allomorph *-rruna* to a monosyllable in different ways. In the THIRD inflection of the Ṉka class Djapu permits *-ŋal* to be reduced to *-ŋ*. This does not occur in Djambarrpuyŋu.

In regard to the Ṉka inflection pattern reported for Djambarrpuyŋu in Heath (1980a) the vowel change is indicated for the THIRD and FOURTH inflections in addition to the SECOND. I have never recorded this from speakers at Galiwin'ku.

Another difference in inflections is the potential for retroflex nasal as the FIRST inflection in connection with the Ṉ class. This is reported for Djapu and Gumatj and is the basis for the distinction between two sub-class of the L (=Ṉ) conjugation in Djapu e.g. *garrpi+ŋ* "bind/block up+1st". Heath (1980a) notes an alternation between *gurrupan/gurrupaŋ* " give-FIRST" from one Djambarrpuyŋu speaker but suggests it may be the result of Ritharrŋu influence. I have not noted any retroflexed stems in Djambarrpuyŋu, but admit to not having consistently checked

for them. They have not been reported in the literature for either Gupapuyŋu or Djambarrpuyŋu nor have I found Yolŋu writers writing retroflexes in this context. The presence or not of a regular FIRST inflection /ɳ/ thus has the potential to distinguish Dhuwal/Dhuwala varieties according to eastern/western regional groupings.

The last difference in verb forms occurs in the FOURTH form that is used as the derived stem. The three FOURTH derived stem allomorphs are given below.

Gupapuyŋu	-nha(ra)-	-nya(ra)-	-na(ra)-
Gumatj	-nha(ra)-	-nya(ra)-	-na(ra)-
Djambarrpuyŋu	-nha(ra)-	-nya(ra)-	-na(ra)-
Djapu	-nha(r(a-))	-nya(r(a-))	-nar((a-))

All four Dhuwal/Dhuwala varieties permit the second syllable /ra/ to be deleted. In Djambarrpuyŋu the longer stems are required before monosyllabic nominal suffixes. Very occasionally they occur before other suffixes. Djapu is unique in having allomorphs with a final /r/ i.e. *-nhar, -nyar* and *-nar*. This can be attributed to the fact that this form can be a word final form in Djapu. It is a stem required in certain non-finite clause constructions (see Morphy 1983 pp135-8). In contrast, in Djambarrpuyŋu this suffix can never occur word finally. It must always be followed by a nominal suffix.

The Djapu stems are subject to vowel deletion in a manner consistent with the application of vowel deletion elsewhere. The deletion is not complete however, and a vowel final allomorph occurs before other suffixes. The fact that these stems are never word final in Djambarrpuyŋu means that the vowel deletion process does not have the opportunity to apply.

The /r/ final stems provide Djapu with a nominalized stem quite distinct from the FOURTH inflection. In Djambarrpuyŋu the two functions of the FOURTH form, i.e. as a verb inflection and as a derived stem to which nominal suffixes attach, are only formally distinct when the extended allomorphs with /ra/ occur. However, the two functions are clearly distinguished by the presence or not of a following nominal suffix.

A final difference between the four varieties is the existence of a distinct inflection for the imperative in Gumatj. The other three varieties code the imperative with the SECOND inflection. The Gumatj imperative uses the verb plus SECOND inflection as the stem and then attaches a final /ya/ in the Ø conjugations or changes the stem

final vowel to /a/ in other conjugations eg. waŋdi+ya "run+IMP" (cf *waŋdi-*$Ø_1$) and *lakara+ŋa* "tell+IMP" (cf *lakara-*Ŋ).

7.3.5 Stems that occur with derivational suffixes in Dhuwal/Dhuwala

The derivational suffixes described for Djambarrpuyŋu are common to all Dhuwal/Dhuwala varieties. They attach to corresponding verb classes and have identical patterns of inflection, allowing for the application of vowel deletion in Dhuwal. There is some variation in allomorphy of the derivational suffixes themselves (see section 7.6) and some variation in the stems to which they attach.

The stem to which the R/R *-mi-* attaches is the same throughout all varieties. In the Ŋ and Ø conjugations it attaches to the FOURTH form and to the FIRST form in the N conjugation.

However the CAUS *-mara-* which attaches directly to the root of N class verbs in Djambarrpuyŋu and Gupapuyŋu attaches to the FIRST form in Gumatj and Djapu, evidently a western/eastern distinction. This results in contrasts such as *lupmara-*(western) and *lupthunmara-* (eastern) "wash (tr)".

The following table is a summary of information concerning Djambarrpuyŋu verb classes.

Table 45: DJAMBARRPUYŊU VERB CLASS SUMMARY

	1st	2nd	3rd	4th		M	H	B	Z	REF
$Ø_1$	Ø	Ø	-n(a-)	-nya(ra-)	all /i/ final, 7 members, most intr	$Ø_2$	1A	2	3b	7.2.4.2
$Ø_a$	Ø	Ø(V->i)	-n(a-)	-nha(ra-)	all /a/ final, 15 members, most intr	$Ø_1$	2	3	4	7.2.4.4
$Ø_{rr}$	-rr	Ø	-n(a-)	-nya(ra-)	all /i/ final, 17+ members, most intr. Open class due to INCH-*Thi* -	$Ø_3$	1B	4	3a	7.2.4.3
$Ø_{mirr}$	-rr	-rr	-n(a-)	-nya(ra-)	all /i/ final. Open class for R/R-*mi* - derived stems only	$Ø_4$	1	-	3	7.2.4.5
$IR_Ø$	Ø	Ø(V->i)	-r	-nha(ra-)	/a/ final. One member					7.2.4.6
N_K	-n	-k(u-) (tj->y)	-rr	-na(ra-)	all /a/ final, 7 members, most adv	DI	-	IR	5b	7.2.1.10
N	-n	-rr	-rr	-na(ra-)	all /u/ final, open class, 2:1 intr:tr All but 1 with -*Thu* - augment or verbalizer	N_2	5	5	1	7.2.4.7
IR_N	-n	-rr(V->u)	-r	-na(ra-)	/a/ final, three members , tr	N_1	3	-	5a	7.2.4.9
N_L	-n	-l (V->u)	-r	-na(ra-)	all vowel final, most /a/, a few with /i/and /u/, 29+ members, most tr	L_1	4	6	5	7.2.4.8
$IR_{N/L}$	-m	-l(V->u)	-ŋal	-nha(ra-)	/a/ final, only 3 members, tr	-	-	IR	2d	7.2.4.13
Ŋ	-m(a/a-)	-ŋ(u/u-)	-ŋal	-nha(ra-)	all vowel final, /a(:)/ or /u(:)/. 60+ non-derived members, approx 3:1 tr:intr. Open class due to CAUS-*mara* -, TRANS1-*ku* - and TRANS2-*Tha/ya* -	NG_2	6A	7	2	7.2.4.11
ŊKa	-m(a-)	-ŋ(u-) (V->u)	-ŋal	-nha(ra-)	all 'velar stop + /a/' final, 10 members, approx 1:1 tr:intr	NG_1	6C	8	2a	7.2.4.13
IR(*bu*)	-ma	-ŋu	-mar	-nha(ra-)	/u/ final,one member(*bu* -), tr	IR	6IR	IR	2b	7.2.4.13
IR(*ŋä*)	-ma	-ku	-kul	-nha(ra-)	/a:/ final,one member (*ŋä* -), tr	IR	6IR	IR	2c	7.2.4.13
NI	-	-	-	-	vowel and consonant final, loan words17+, tr and intr	NI	-	1	6	7.2.4.1

Z (Zorc's Yolŋu-Matha Dictionary classification); M (Morphy's Djapu Classification); H (Heath's Dhuwal Classification); B (Buchanan's Djambarrpuyŋu Classification); REF (Section in which discussed in this thesis)

7.4 Tense Modality/Mood and Aspect (TMA) and verb inflection.

Tense, modality/mood and aspect, henceforth referred to as TMA, is realized in Djambarrpuyŋu by verb inflection in conjunction with the auxiliary verb *ga-*$Ø_a$, particles, temporals and reduplication of the verb stem. There is also a small subset of verbs which have an aspectual function when co-occurring with other verbs.

There are four inflections, each of which is associated with various TMA functions. Due to the multiplicity of functions of each inflection I use a numeral system to refer to them: FIRST/1st, SECOND/2nd, THIRD/3rd and FOURTH/4th. I will use letters within the text and numbers in examples and often in Tables. In this section I will be generally using these terms to refer to inflections but it should be noted that these same labels are also used to refer to verb forms, the FIRST and FOURTH forms being used as stems for derivational or nominal suffixes (see sections 7.2.5 and 7.3.4). The chart below shows how these labels correlate with those of other linguists who have worked on Yolŋu languages:

	FIRST/1st	SECOND/2nd	THIRD/3rd	FOURTH/4th
Lowe (Gupapuyŋu)	Primary	Secondary	Tertiary	Quaternary
Tchekhoff & Zorc (Djamb-arrpuyŋu)	Base	Future	$Past_1$	$Past_2$
Heath (Dhuwal)	Pres/Fut	Fut/Imp	Past	Past Remote
Morphy (Djapu)	Unmarked	Potential	Perfective	Past Non-indicative

Aspect is not considered fundamental to the inflection system since the IMPerfectIve inflecting particle *ga-* occurs with verbs in all four inflections. The COMPLetive particle *bili* may also co-occur with any inflection having past realis reference. Another particle with aspectual functions is the HABitual/HYPothetical *(ŋu)li* which in one of its functions codes customary situations. However it generally interacts with the inflection system in a way which allies it with inflections concerned with irrealis situations (see section 7.4.2).

As far as I have been able to determine there are two fundamental semantic oppositions underlying the pattern of verb inflections. The first is a three way temporal opposition which I will call contemporary, pre-contemporary and post-contemporary and the second a modal opposition between realis and irrealis. Pivotal to the system are contemporary actualized or occurring events. They are expressed

by the citation form of verbs, namely the FIRST form. The temporal distinction between "now" and "not-now" which occurs in certain uses of demonstratives also reflects this (see section 6.4.3) and seems to have a similar basis.

In the following sections we consider the tense oppositions and the realis-irrealis opposition in turn. A list summarizing the key functions of inflections and a chart attempting to schematize the interaction of inflections and particles are to be found at the end of section 7.4.3.

7.4.1 The three-way opposition associated with tense.

The temporal opposition referred to above as contemporary, pre-contemporary and post-contemporary is one based on the distribution of verb inflections and the FUTure particle *dhu*. The terminology is adopted from Eather (1990).

The three way opposition involves a reference point, time prior to it and time subsequent. However it is found over two different time frames, one of which concerns the current today and another which is relative to the current day but not bounded by it. I refer to these frames as the "today" frame and the "non-today" frame respectively. The "today" frame is associated with the moment of speech, time earlier today and time later today. The "non-today" frame is associated with yesterday or recent past time, remote past time and future time from tomorrow onwards.

The formal coding of the tense system is both metrical and cyclic, although the cyclicity is confined to the non-future. In the use of the term 'metrical' I follow Chung and Timberlake (1985 p207-8) who use it to describe tense distinctions that

> "not only characterize the relationship between the event frame and the tense locus, but are also weakly metrical, in the sense that they provide an approximate and subjective measure of the interval between the frame and the tense locus."

The term 'cyclical' is adopted from Comrie (1985 p89), who uses it in relation to a tense system in which two formally distinct tenses have discontinuous time reference which alternate cyclically. Thus one codes the present moment and situations up to a few days ago and the other codes situations earlier on today and situations in the more distant past. The language he is demonstrating this with is in fact Burarra (spelt Burera in Comrie (1985)), a language spoken not far to the west of Djambarrpuyŋu. Indeed this kind of system appears to be an areal feature

cutting across the Pama-Nyungan and non-Pama-Nyungan boundary, since it is also reported for languages spoken in the area between e.g. Gupapuyŋu, Djinaŋ and Nakkara.

The following table shows the distinctions associated with the two frames and their correlation with particular inflections:

FRAME	PRE-CONTEMPORARY 3rd inflection	CONTEMPORARY 1st inflection	POST-CONTEMPORARY (FUT-*dhu*)
"today"	Today Past	Present	Today Future (1st inflection+*dhu*)
"non-today"	Remote Past	Yesterday/Recent Past	Non-today Future (2nd inflection +*dhu*)

Both frames assume the current day as a reference point. In the "today" frame it is the temporal domain[1] within which the tense distinctions are made, while the "non-today" frame is concerned with times outside of the current day although still relative to it. The "non-today" frame distinctions thus start minimally at yesterday and tomorrow.

It will be noted that events at the moment of speech i.e. the Present and those occurring yesterday or recently are coded with the same inflection, namely the FIRST. These are the tenses referred to as Contemporary. Notice that in both frames FIRST codes realized events closest to the speaker's moment of speech. Some examples are given below:

Present:

(208) *ŋunha nhawi ga dhärra, gunga maia ga*
DIS whatsit IMPV-1st stand-1st pandanus PL(/group) IMPV-1st
dhärra'-dharra
stand-REDUP-1st T401p14
there are whatsit (standing) there, pandanus plants are (standing) there

(209) *nhäkurr nhuma ga ŋirrimbu+m*
"where" 2dl/pl IMPV-1st go+1st
Where are you going?

---

[1] The term '(temporal) domain' is used to refer to the unit of time or event type according to which the tense oppositions are operating. At this point we are considering the unmarked instance which is that of the current day. The extent to which the domain can be varied has yet to be determined but weeks, months, years and events such as a number of visits have been noted as other temporal domains with which the tense oppositions appear to function.

Yesterday/Recent Past:

(210) *yo,* ***barpuru+ny*** *ŋarra ŋanya* ***nhä+ma+ny***
yes yesterday/recently+PROM 1sg 3sg-ACC see+1st+PROM
Yes, I saw him yesterday OD46

Events occurring either earlier today or in the remote past are both coded with the THIRD inflection. They are termed Pre-contemporary since they code events occurring prior to the Contemporary tenses.

Today Past:

(211) *ŋe, gäthur ŋarra ŋanya* ***nhä+ŋal,*** *goḏarr dhiyal*
yes, today 1sg 3sg-ACC see+3rd morning PROX-LOC OD143
yeah, I say him here this morning

Remote Past:

(212) *märrma'* ***ga+n*** *malwan+ḏja* ***dhärra+n,*** *yindi maŋḏa+ny*
two IMPV+3rd Hibiscus tiliaceus+PROM stand+3rd, big DL(2pl)+PROM
two big Hibiscus were (growing)
(the speaker is describing a locality as it was in her youth)

In summary, there is a metrical distinction in the past between today, yesterday/recent and remote past. This is achieved by the cyclic use of two inflections, one to code realized events closest to the speaker's moment of speech i.e. the Contemporary tenses (present and yesterday/recent) and another to code Pre-contemporary events (earlier today and remote past).

Considering now the future we find two distinctions each associated with different inflections: i.e. the FIRST with the Today Future in the "today" frame and the SECOND with the Non-today Future (used for future reference from tomorrow onwards) in the "non-today" frame. Both can occur with the FUTure particle *dhu.* In the "today" frame this particle is what distinguishes the Today Future from the Present, both of which use the FIRST inflection. The SECOND inflection the only inflection within the tense paradigm that is not associated with discontinuous time intervals. However it is also used in the context of the current speech event with a distinct TMA function. However rather than coding a tense it codes a distinct mood, namely the imperative (see section 7.4.3). Examples of the future tense distinctions are given below:

Today Future:

(213) *yalala ŋarra dhu nhokal* ***lakara+m***
later 1sg FUT 2sg-OBL tell+1st
later (today) I will tell you

Non-today Future:

(214) *ŋayi* ***boŋguŋ*** *nhini* ***ŋă-ku*** *ŋarra+ny ŋunhal yirrkala*
3sg "tomorrow" sit-2nd hear=2nd 1sg+ACC DIS-LOC place name
S/he will be there at Yirrkala listening to me W80ClansL68
(The future time involved in this context is several weeks away)

While there is metrical distinction between later today and tomorrow onwards, it will be noted that there is no recent - distant opposition parallel to that in the past. However, it is possible to make such a distinction using temporals rather than inflections. Both *boŋguŋ* and *goḏarr'* can be glossed as "tomorrow" or "in the next few days", but *boŋguŋ* is used for any future event beginning with tomorrow while *goḏarr'* is only used for the first week or so. Furthermore *boŋguŋ* is confined to non-today future use, while *goḏarr* is also used to mean "morning", in which case it can occur in non-future contexts as well. A general sense shared by the uses of *goḏarr'* is the "early part of certain temporal domains" (i.e. days or non-today future).

The table below summarizes the metrical and cyclical distinctions reflected in verb inflections and the use of temporals.

Table 46: Metrical-Cyclical Distinctions Coded by Verb Inflections and Temporals

'Real World' Time:	P A S T			PRES	F U T U R E		
Tense/Inflection	Metrical Time:						
Pre-Contemporary:3rd	Remote Past		Today Past				
Contemporary:1st		Yesterday /Recent Past		Present	Today Future (+*dhu*)		
Post-Contemporary:2nd						Non-today Future	
						Near	Remote
Relevant temporals:	*ŋäthil*	*barpuru/ yawungu*	*gäthur*			*godarr' boŋgu̱ŋ*	*boŋgu̱ŋ*

(*ŋäthil* "prior/before"; *barpuru / yawungu* "yesterday/recently"; *gäthur* "today/nowadays")

Similar distinctions to these are noted for the western Yolŋu varieties Gupapuyŋu and Djinaŋ as well as for non-Pama-Nyungan languages further west e.g. Nakarra and Burarra. Strikingly they are not reported for Djapu nor Ritharrŋu. This suggests a possible areal distinction in the tense systems of the Yolŋu varieties. It would be a major difference between the two Dhuwal varieties.

Analyses of western Yolŋu varieties write of distinctions in which a time is specified /definite versus unspecified /indefinite. Lowe (n.d.a L16 and L17) describes the "Yesterday Past " use of the FIRST inflection in Gupapuyŋu as encoding past time referring to something that took place "yesterday, or at any time in the recent past (apart from today) especially when a definite time is stated or inferred. (e.g. 2 days ago, last month)". This contrasts with the use of the THIRD inflection which encodes "something which has already happened today, or when no particular time is stated or inferred" as well as the distant past. It is also noted that a temporal can occur with the THIRD inflection in reference to "today". A parallel opposition is also implied for the future, with the FIRST inflection plus *dhu* being the one described as encoding the "indefinite" future.

Lowe's description does not categorically ally the use of the Yesterday past with specific times but simply notes that it is common. This contrasts with Waters' analysis for Djinaŋ. He posits a feature of "Definiteness" underlying Djinaŋ verbal inflections which has to do with whether an event is "referentially definite

[or indefinite] with respect to a reference time" (1989 p177). The reference time is normally the moment of speech. All today's events and those occurring yesterday are inherently temporally definite.

In Waters' system for Djinaŋ the feature Definite is used to distinguish between the Remote and Today Past which, as in Djambarrpuyŋu, share the same inflection. The Remote Past is [-definite] and the Today Past is [+definite]. He does not consider Definiteness in regard to the future.

It appears that Waters and Lowe are trying to express a similar idea in their use of the notions specific and definite. Both find a correlation between the association of an event with a definite/specific time and the use of a yesterday/recent past in contrast to the remote past. However, I remain unclear as to what notions the terms 'definite' or 'specific' really refer to. In the approach I have adopted for Djambarrpuyŋu the distinctions between the Remote and Today Past are derived from the existence of two time frames i.e. one concerning "today" and another "non-today", and their interaction with metrical tense distinctions. The following points are made in regard to the notions 'definite' and 'specific' in light of data I have considered for Djambarrpuyŋu.

1. In Djambarrpuyŋu many texts are placed in the domain of the FIRST inflection without a "specific" time being expressed.

On the use of the equivalent inflections in Djinaŋ, Waters writes that they are used "for events which are regarded as having occurred in a time context known to the participants in the speech event" or for a "recent known time before today" (1989p178). This is a somewhat stronger claim than Lowe's description for Gupapuyŋu which is stated in terms of a 'preference' for the Yesterday Past to occur in connection with a "definite" time.

My problem with the definite/specific notions as regards Djambarrpuyŋu is that there are many events coded with the THIRD inflection as Remote Past for which it could equally well be claimed that the time contexts are known to the speech participants, for instance when people are talking about an event that occurred earlier in their lives.

2. In Djambarrpuyŋu it is possible to specify a time with either the FIRST inflection or the THIRD inflection, as the following examples reveal:

(215) *way marŋgi nhe ŋarra+kalaŋa+w bäpa+'mirriŋu+w+nydja, ŋunhi ŋayi*
hey know 2sg 1st+OBLS+DAT father+KINPROP+DAT+PROM TEXD 3sg
dhiŋga+ma+ny ŋuriŋi bala dhuŋgarra+y
die+1st+PROM TEXD-ERG (MVTAWY) year+ERG OD50
Hey, did you know my father who died last year?

(216) *nhä nho=kiyin+gal wäwa+'mirriŋu+y warkthu+rr päthil rarranhdharr+yu*
what 2sg=EMPH+OBL B+KINPROP+ERG do/work+3rd before dry season+ERG
What did your brother do last summer? T410p3/OD20

(217) *bäyŋu ŋayi ga+n nhina+n dhä-gandarrkurr+nydja,*
NEGQ 3sg IMPV+3rd sit+3rd "in between"+PERL+PROM
märr barpuru+ny
somewhat "yesterday"+PROM
S/he did not live here in recent times

(218) *dirramu+wal yothu+wal bäpa+'mirriŋu+y rrupiya barpuru djuy'yu+n,*
man+OBL child+OBL F+KINPROP+ERG money "yesterday send+1st
märr barpuru ga barpuru buna+ny dhiyal+nydja
somewhat "yesterday" and "yesterday" arrive-1st+PROM PROX-LOC+PROM
The father sent money to the boy recently and it arrived here yesterday OD100

In the light of examples such as these I cannot see how a notion of a specific/definite time can be claimed to hold for one set of past events and not the other.

The fact that specifying a time does not categorically ally itself with the use of one inflection or the other suggests, that for Djambarrpuyŋu at least, one should search for other explanations. Two factors suggest themselves as pertinent.

Firstly, it seems likely that the opposition coded by the FIRST inflection and the THIRD inflection in the past is a temporal one involving relative distance from some reference point. While these inflections may be categorically determined at the extremes of the temporal distances involved (thus permitting only the FIRST inflection with reference to yesterday and the THIRD inflection for the several decades past) it would appear that the "switch-over" point is not associated with an absolute time. In being flexible it is thus possible for the same temporal distance to be coded by either inflection. A notion such as relative "relevance" of an event in relation to the present, would be worth considering in relation to the use of the Yesterday/Recent Past.

The fact that temporal specification is less common with the Remote Past could simply be the result of temporal distinctions at that distance not being culturally pertinent, rather than the fact that they are "unknown" to the participants, or "unspecified".

The second feature that seems relevant is that the temporal domain within which the distinctions are operating can be variable. While the unmarked domain is determined with reference to the current day, other temporal domains such as weeks months or years or even particular events such as visits, can provide alternative points of reference. These appear to pattern analogously to the "non-today" frame, in that the FIRST inflection can be used to code the immediately preceding unit, be it last year, last week etc. The notion of "recent time " is thus maintained but is relative to particular domains. The different "domains" may be a factor contributing to the specified/definite interpretations of other analyses.

One problem with the variation in domains is the extent to which they are allied with the formal oppositions of the two frames, "today" and "non-today", proposed above. It is common for instance, for the FIRST inflection to occur with either *gäthur* "today" or *dhiyaŋ bala* "now" to refer to "nowadays" rather than just the current day or the actual moment of speech. If we maintain the "today" frame for larger domains then the correlation between the FIRST inflection, the present and the allied temporals *gäthur* and *dhiyaŋ bala* can be explained, given that it is maintained when the moment of speech is extended to "current times". However we have now moved outside the bounds of the current day which raises problems for interaction with the "non-today" frame. Once the "today"-frame is extended outside the current day the contrast with the FIRST and the THIRD inflection is easily associated with the "non-today" frame since the THIRD inflection has a past reference in both. However it does leave the question of a possible extended function of the FIRST inflection plus FUT *dhu* beyond expressing the Today Future. As we will see below the FIRST plus FUT *dhu* combination is commonly used in descriptions and explanations of <u>current</u> practices, that is for events which have the potential to occur given our knowledge and expectations about the contemporary world. This use is certainly not associated with the Today Future of the "today" frame, but does seem bound to events associated with "nowadays", not unlike the extension of the Present use of the FIRST inflection when used to express "nowadays" rather then the moment of speech.

For those temporal domains such as weeks, years and so on that make use of the Recent past function of the FIRST inflection I am not sure if there are analogous correlations with the SECOND and THIRD inflections as used in the "non-today" frame. Given the fact that the SECOND is used for future time from tomorrow onwards it would subsume any future distinctions based on domains larger than days (which includes all the other temporal domains I have noted). It is possible there may be some correlation with the use of the THIRD, but again I suspect that remote

past in relation to domains other than of the current day used in the "non-today" frame may also naturally fall within the general domain of the Remote Past. If this is so, then these other domains which are referring to time units of larger span than days, would appear to be associated with a third frame which distinguishes "nowadays/recently", both of which are both coded with the FIRST, "remote past" (coded with the THIRD) and "future" (coded with the SECOND). I will leave this discussion here as it is tentative. Indeed it may be difficult to resolve categorically at all.

7.4.2 The realis-irrealis opposition

The realis-irrealis distinction is less directly correlated with simple verb inflections than the tense distinctions. Instead it revolves around the interaction of the verb inflections and a set of particles used to code irrealis categories. These include the future, encoded by the FUTure particle *dhu*, hypothetical and habitual encoded by the HABitual/HYPothetical *ŋuli*, unactualized or possible events encoded by the IRRealis *balaŋ* and negative events coded with the particles *yaka* (NEGative) and *bäyŋu* (NEGative Quantifier). The categories subsumed under irrealis all concern events that are not specific occurrences in either the present or past (i.e. realis modality). These irrealis categories are essentially aligned with particular inflections.

The basis for positing a realis-irrealis opposition is the pattern of occurrence of the irrealis particles and the four verb inflections. This opposition is both distinct from, but overlapping with, that of the tense opposition. Very generally one can describe the SECOND and the FOURTH inflections as essentially irrealis, while the FIRST and the THIRD are essentially realis. The inflection which fits least well in regard to this opposition is the FIRST. As well as coding the realis events of the present and yesterday/recent past, it also occurs with various of the particles associated with irrealis categories, albeit with particular functions which contrast with their use with other inflections. The best fit occurs in regard to the THIRD and the FOURTH inflection where realis past events are coded by the THIRD and irrealis events by the FOURTH. The only exceptions to this correlation between these two inflections and the realis/irrealis opposition occurs with the negative particles (see section 7.4.2.4).

I will approach the irrealis categories in more detail, by considering the particles in turn.

7.4.2.1 FUTure *dhu*

Dhu has strictly future and irrealis functions. It can co-occur with any inflection used to refer to future time i.e. with the FIRST inflection used to code the Today Future and the the SECOND inflection used to code the Non-today Future.

(219) *yalala ŋarra **dhu** nhokal* ***lakara+m***
later 1sg FUT 2sg-OBL tell+1st
later (today) I will tell you

(220) *godarr'nha ŋarra dhu nhuŋu dhäwu+ny* *lakara+ŋ*
tomorrow+SEQ 1sg FUT 2sg-DAT story+PROM/(ACC?) tell+2nd
I will tell you the story tomorrow

(221) *yalala+ŋu+mirri+y ŋula nhätha ŋarra dhu nhokal* *lakara+ŋ*
later+ŋu+PROP+ERG "sometime" 1sg FUT 2sg-OBL tell+2nd
I will tell you sometime later on G19690

The combination of FIRST inflection plus FUT *dhu* is also favoured in texts describing or explaining a whole host of general practices. This might be a particular specialized cultural practice or a matter of everday concern such as the procedures by which something is (to be) done or presenting contexts when describing the meanings of words. They are all concerned with situations which pertain, or are expected to pertain, to current life styles or activities. Despite not being temporally located in the way the Today Future is, they are events which could potentially occur at any time.

I suggested before that this use of the FIRST inflection with *dhu* may reflect an extension of its use as the Today Future to a broader time domain associated with "nowadays".

These events are distinct from those coded with HAB *ŋuli* (see following section). Those with *dhu* are presented as potential contemporary specific situations, while those with the HAB *ŋuli* are habitual, customary situations.

Another context in which the SECOND inflection can be combined with *dhu* is indicated in a textual example in which a speaker describes a proposition with respect to current time that cannot become realized. In an example given more fully below (number 227), the speaker states that she is shifting the reference back to past time. She does this with the expression

(222) *....bala+yi ŋarra dhu roŋiyi*
...MVTAWY+ANA 1sg FUT go back/return (intr)-2nd T014p5
I will go back (to the time of the old people)

She acts on her words in the immediately following clause, changing to past time inflections. This clearly does not correlate with the Non-Today Future use. This use appears to highlight the strength of the association of the SECOND inflection with the irrealis. The speaker can only take herself back in time metaphorically. It suggests an underlying contrast with the FIRST inflection which must be potentially realizable in the contemporary context.

Morphy presents a Djapu example (1983 p72) with the SECOND inflection to describe a past event that almost happened but did not (*ga nhini ŋanapurr* (and sit-2nd 1pl) "and we were about to sit down"). Although the FUT particle is not involved it is another use of the SECOND inflection concerning an irrealis event. Unfortunately I have no comparable data for Djambarrpuyŋu in the corpus. The sense of imminence here may be linked with the imperative use of the SECOND inflection.

Combinations of *dhu* and the FIRST inflection also occur in conditional constructions (see section 7.4.2.2.2 below).

7.4.2.2 HABitual/HYPothetical *ŋuli*

This particle has a wide range of functions. *Ŋuli* occurs with verbs in the FIRST, SECOND and FOURTH inflection but not the THIRD. The latter it will be recalled is strictly pre-contemporary and realis and its non-occurrence with *ŋuli* is an indication that this particle is aligned with the irrealis categories.

Ŋuli is associated with functions that are distinct from the pivotal specific actual events in being either non-specific and/or non-actual. Non-specific events include those that recur, are customary or generic i.e. are those that fall within the domain often termed habitual. Non-actual events include hypothetical specific events such as the protasis of a conditional.

There are some formal correlations with different functions, having to do both with the form of the particle and the position in which it occurs. In a habitual-generic function the particle is often reduced to *li* and cliticized to a preceding word. Marking a conditional clause it normally occurs clause initially and is never reduced. It is also possible to have the particle appear twice within a clause with distinct functions (see example 235).

This situation in which a single form has distinct functions within the TMA system and inter clausal relations, has parallels with several other particles which have homophonous forms functioning clause internally and as clause linkers. Thus the IMPV aspect inflecting auxiliary *ga-* has a homophonous form that functions as a clause connective i.e. *ga* "and". The COMPL aspect particle *bill* is homophonous with a clause connective meaning "because". The directional particle MVTAWY *bala* also has a homophonous form with a clause linking function i.e. *bala* "then". The clause linking functions are strongly associated with clause initial position while the clause internal functions occur later in the clause.

Another form homophonous with *ŋuli* (HAB/HYP) that should be noted is the variant TEXD demonstrative stem *ŋuli-* (see 6.1.1 and 6.1.3). The fact that the other TEXD stem *ŋula-* also has a homophonous counterpart which functions as an indefinite particle suggests the formal links are less than accidental.

Ŋuli can co-occur with various other TMA particles namely FUT *dhu*, IMPV *ga-* and IRR *balaŋ*. The FUT and IRR are found with *ŋuli* in conditionals with non-past and past reference respectively.

Examples of the various functions are presented below. They are in two sets, one having to do with the habitual function and the second the hypothetical.

7.4.2.2.1. The habitual functions of *ŋuli*

(a) *ŋuli* with the FIRST inflection:

(i) To describe a current habitual situation

(223) *...ŋunhi ŋilinyu ŋuli ga warkthu+n maŋda waŋgany+ŋur*
TEXD 1+2dl HAB/HYP IMPV+1st work+1st DL(3dl) one+LOC
us two who are working in the one work

(224) *ŋarra ŋuli ga rur'yun munhawumirri yan bitjan bill*
1sg HAB/HYP IMPV+1st get up/wake up+1st early morning EMPH "always"
I always get up early in the morning OD 71/72

(ii) To describe a current customary/generic practice

The following is an extract from a dictated text about the life of a goanna:

(225) *ga mapu nhakun ŋayi ŋuli ŋunhili bili* **ga**
and egg like 3sg HAB/HYP TEXD-LOC ("same") IMPV-1st
dhawal-guyaŋa, *djinawa ŋaŋga+ŋur* ***ga ŋorra+n*** *nhaŋu* ***ŋuli***
lay/give birth-1st inside hole+LOC and lie-1st+SEQ 3sg-DAT HAB/HYP
ga *ŋunhi mapu+ny ga yan bili, ga* ***buku-laʟawukthu+n ŋuli,***
IMPV-1st TEXD egg+PROM and "keep on" and hatch+1st HAB/HYP
mapu+ŋur rumbal+nha djanda ŋuli ***dhawaʟthu+n***
egg+ABL/LOC body+SEQ goanna HAB/HYP come out+1st
and she lays the the eggs in the same place. Her eggs lie inside the hole for some time and then they hatch out. Goanna (bodies) come out from the eggs.

The distinction between the FIRST plus *dhu* and FIRST plus *ŋuli* was raised in the previous section. This is the only context in which the two particles are found in formal opposition with each other. The choice would seem to be a matter of perspective depending on whether the situation is seen as a potential specific event or a generic-customary event. Both share a concern with current potential situations. A possible distinguishing factor may be whether the situation is attributed to particular participants or not. A contemporary practice may be habitual in terms of its regular occurrence but may not be in regard to a particular individual. This would allow a choice of options in contexts where the identity of the participants is not specified.

(b) Past habitual use of HAB *ŋuli* with the FOURTH inflection

Ŋuli is often found combined with the FOURTH inflection in the corpus to describe habitual or customary situations in the past. It contrasts with specific past situations which are coded using the THIRD inflection, as exemplified in the text below.

The FOURTH inflection can be the predominant verb inflection in texts which are concerned with describing customary practices of the past. The example I have chosen, however, is a passage from a text about the speaker's early working life. It is predominantly in the inflection appropriate for remote past realis events, i.e. the THIRD. In this selected section the routine patterns of work at that time are described and there is a switch from the THIRD inflection to combinations of the FOURTH and the HAB/HYP particle inflection.

I have included an extended passage to show that not every occurrence of a verb in a text requires the HAB/HYP particle. The verb remains in the FOURTH inflection and the context clearly delimits the interpretation. This is a feature of all the TMA particles.

(226) *yurr ŋanapurr* ***ŋuli*** ***ga+nha*** *ŋunhi* ***djäma+ny*** *ŋuriŋi+wurru+y*
and/but 1pl HAB/HYP IMPV+4th TEXD work+PROM TEXD-ERG+PL+ERG
miyalk+kurru+y, ***buku-djulkmara+nha+mi+nya*** *ŋayi ŋäthil* ***ŋuli***
woman+PL+ERG swap over+4th+R/R+4th 3sg before HAB/HYP
m.....+y *buŋbu* ***djäma,*** *ŋuriki* *wäŋa+mirri+w* *dirramu+w*
personal name+ERG house work TEXD-DAT place+PROP+DAT men+DAT
ŋäpaki+w, *ga ŋumurruŋu* ***ŋurrka+nha*** *märrma'* ***bitja+na***
white person+DAT and week extend+4th two do thus+4th
\ ga ŋayi+ny ***ŋuli*** ***yarrupthu+na+n*** *ganybu+lil+a*
and 3sg+PROM HAB/HYP go down (to water)+4th+SEQ net+ALL+SEQ
dharpu+nha+lil, ga linyu+ny ***ŋuli*** ***ŋuwatthu+na+n,***
sew+4th+ALL and 1+2dl+PROM HAB/HYP go up+4th+SEQ,
b.....+nydja *ga linyu+ny* *muka* ***ŋuli*** *buŋbu* ***warkthu+na***
personal name +PROM and 1+2dl+PROM PRT-OK HAB/HYP house work+4th

and furthermore we, those women, were working, swapping over with each other. M would clean the house of the white men for two weeks. And then she would go and sew fishing nets and us two, B (and myself) would go up and work in the house T008p2

It would appear that habitual events do have to be generally located within a particular time frame. In the following example from a text on medicinal uses of plants the speaker switches between using the 1st inflection plus the FUT particle and using the FOURTH inflection with *ŋuli*. The choice is usually consistent for each particular description. However, in one text she switches from the FIRST to the FOURTH inflection part way through, stating explicitly that she is going back to the time of the old people. This would seem to be prompted by the fact that the particular usage, of binding large cuts with the inner bark of the Kurrajong (Brachychiton paradoxis), is no longer practised.

(227) *\mirithi+rr ŋayi nhuna* ***dhu*** *ŋunhi* ***läwu+ma+n*** *[\yurr\ dhuwandja*
INTENS+1st 3sg 2sg-ACC FUT TEXD bite+1st+SEQ [ADD PROX-PROM
ŋarra ***lakara+ma+ny*** *dhu ŋäthiliŋu ŋunhi bala+yi* *ŋarra dhu*
1sg tell+1st+SEQ FUT old TEXD MVTAWY+ANA 1sg FUT
roŋiyi, *ŋunhi ga+n* *ŋalapalmirr nhina+n ŋuriŋi+yi\ ]*
go back-2nd TEXD IMPV+3rd old people sit+3rd TEXD-Temp+ANA]
mäna+y ***walala=ny*** ***ŋuli*** ***läwu+nha***
shark+ERG 3sg=ACC HAB bite+4th T014p5
(When) it (a shark) bites you badly. [But, what I am saying is past. I will go back to the time the old people/ancestors were living.] (When) a shark used to bite them.
(the brackets [ ] indicate the aside in which the speaker describes the shift in the story reference time)

(c) Future habitual function of *ŋuli* with the SECOND inflection

In the following example a future habitual situation is proposed:

(228) nhämirr balaŋ ŋayi gi ŋirrimbu+ŋ ŋarra+kal milmitjpa+ny, ga
what+PROM IRR 3sg IMPV-2nd come+2nd 1sg+OBL afternoon+PROM and
godarr'+tja ŋayi ŋuli gi dhiyal warkthu+rr
morning+PROM 3sg HAB/HYP IMPV-2nd PROX-LOC work+2nd T008p3
How about she comes to me in the afternoon and works here in the morning?

The SECOND inflection plus *ŋuli* is sometimes the option chosen by a speaker to describe customary practices such as the making of a spear or digging stick. I do not have many examples of this in my corpus and the relationship between the expression of customary practices with the FIRST plus *ŋuli* and the SECOND plus *ŋuli* is not clear.

7.4.2.2.2 The hypothetical uses of *ŋuli*

The protasis of a conditional is marked by *ŋuli* occurring early in the clause. It occurs with verbs in the FIRST or the FOURTH inflections which appear to be associated with present/future and past time reference respectively. The two particles FUT *dhu* and IRR *balaŋ* are also a feature of these constructions. The HAB *ŋuli* always occurs first. FUT *dhu* co-occurs with the FIRST inflection and IRR *balaŋ* with the FOURTH. These two particles also feature in the apodosis of the conditional while *ŋuli* only ever occurs in the protasis.

(a) Hypothetical uses of *ŋuli* with the FIRST inflection

The FUT particle usually co-occurs with HAB *ŋuli* and the FIRST inflection, but not always. The co-occurrence of HAB *ŋuli* and FUT *dhu* with a single function is to be noted as distinct from the quite separate functions they have when they occur alone with the FIRST inflection. Square brackets in the examples that follow indicate the protasis clause.

(229) [ŋuli nhe dhu warku'yu+n wuŋgan+nha], ŋayi+ny dhu läwu+m
HAB/HYP 2sg FUT tease/annoy+1st dog+ACC, 3sg+PROM FUT bite+1st
If you tease the dog, it will bite OD 75

(230) [ga ŋuli nhe ga ŋäpaki ŋunhili+yi+ny djingaryu+n]
and HAB/HYP 2sg IMPV-1st white person TEXD-LOC+ANA+PROM stand+1st
\nhe dhu marrtji ŋawatthu+n.....
2sg FUT go-1st/2nd take/get+1st T018p19
and if you are a white person being there (at one with my work) you can/may go and get them (the meanings from my words)

(231) *[ŋuli ŋayi dhu ga marrtji girri'+mirr yoiŋu], ga ŋayi+ny dhu*
HAB/HYP 3sg FUT IMPV-1st go-1st things+PROP person, and 3sg+PROM FUT
wiripuŋu+y+nydja gaɪmara+m ŋanya, dhukarr+nha nhaŋu guŋga+m
other+ERG+PROM trip+1st 3sg-ACC, path+ACC/SEQ 3sg-DAT block+1st
\ bala ŋayi dhu girri+ny' nhaŋu]arr'yu+n+a, burr'purryu+n+a
then 3sg FUT things+ACC/PROM 3sg-DAT fall(pl)+1st+SEQ T010p10
If a person is walking with a lot of things and someone else trips him up, blocking his path, then his things fall (i.e. "]arr'yun" or "burr'purryun" - the speaker is describing the meaning of the last verb form).

(b) Hypothetical uses of *ŋuli* with the SECOND inflection

The distinction between the use of the FIRST and SECOND inflection with hypothetical uses of *ŋuli* is not clear and the data for this particular combination is limited. One example from the corpus is given below:

(232) *[ŋuli ŋayi* ***dhu*** *dhuwal raki* ***djaw'yu+rr+nydja*** *boŋguŋ Melanie+y*
HYP 3sg FUT PROX tape take+3rd+PROM "tomorrow" personal name+ERG
\dhäruk+mirr ŋarra+kalaŋu+mirr+nydja]\ bala ŋayi dhu gi bäki+n
word+PROM 1sg +OBL+PROP+PROM then 3sg FUT IMPV-2nd use+SEQ
nhakun\nhanukiyin+galalaŋu+wurr ŋä+nha+kurr
like 3sg-EMPH+OBL+PERL listen/hear+4th+PERL T018p6-7
If s/he Melanie takes this tape with my voice in the future then she will be using it, for instance by listening (to it)

(c) Hypothetical uses of *ŋuli* with the FOURTH inflection

This is closely associated with the IRR particle *balaŋ* which is the topic of the next section. I will simply present some examples:

(233) *[ŋäthil ŋarra ŋuli* ***balaŋ liya-ŋamaŋamayu+n+mi+nya]*** *bala ŋarra*
earlier 1sg HAB/HYP IRR have an idea+1st+R/R+4th then 1sg
balaŋ\ waŋa+nha+n
IRR speak+4th+SEQ T018p20
Had I thought of it before I would have spoken

(234) *[ŋuli* ***balaŋ*** *ŋayi ŋuriŋi dirramu+y yothu+y* ***barpuru+ny***
HAB/HYP IRR 3sg TEXD-ERG man+ERG boy+ERG yesterday+PROM
märra+nha *rrupiya]_ŋayi balaŋ ga+nha ŋuriŋi+yi rrupiya+y*
get/take+4th money 3sg IRR IMPV+4th TEXD-ERG+ANA money+ERG
wuŋuli'yuna+n munhdhurr+nha miyalk+ku+n
buy+4th+SEQ present+SEQ/ACC woman+DAT+SEQ OD106
If the boy got the money yesterday he would have bought the girl a present

The distinct functions associated with *ŋuli* are clearly indicated in the following example where it occurs twice in a single clause, initially as the introducer of the protasis and secondly as a habitual marker.

(235) *[ga ŋuli balaŋ ŋuli nhä+nha wäyin waŋgany'+thu yolŋu+y\ bala*
and HYP/HAB IRR HAB/HYP see+4th animal one+ERG person+ERG then
marrtji+nya wap-wapthu+na ....
go+4th hop-REDUP+4th T102Bp3
and if a person sees an animal then (he) creeps up ...

7.4.2.3 IRRealis *balaŋ*

IRRealis *balaŋ* occurs with the FIRST, SECOND and FOURTH inflections but not the THIRD in a distribution parallel to that of the HAB *ŋuli*. It is given the label IRRealis since it codes possible situations which have not (yet) occurred. It has been described elsewhere in Yolŋu as an adversative (see Morphy 1983 p145) but it occurs with both desiderative and adversative senses in Djambarrpuyŋu. Lowe (n.d.a L63) translates it variously as "might", "should", "would" or "must" in her lessons for Gupapuyŋu. These are all modal particles associated with degrees of certainty in English. They all also imply unrealized events.

IRR *balaŋ* may co-occur with other TMA particles including HAB *ŋuli*, FUT *dhu* and IMPV *ga-*.

In declarative clauses IRR *balaŋ* occurs in future or past irrealis situations. In the corpus it is most frequently found with the SECOND and FOURTH inflection, with the expected future and past temporal associations. These two inflections are also the two which are essentially irrealis. There is a clear correlation between past realis events coded with the THIRD inflection and past irrealis events which are coded with the FOURTH. However, this is complicated by the fact that the past tense oppositions associated with different inflections described above, appear to be neutralized in connection with IRR *balaŋ*. Thus the FOURTH inflection is used for any situation in the past prior to the moment of speech, whether it be earlier today, the yesterday/recent past or the distant past. Two examples occurred in the preceding section concerning conditionals with *ŋuli* and *balaŋ*. Some non-conditional examples follow:

(236) *barpuru balaŋ ŋarra bala dentist+kal marrtji+nya dhiyak*
"yesterday" IRR 1sg MVTAWY dentist+OBL go+4th PROX-DAT
filling+gu
filling+DAT
yesterday I should have gone to the dentist for a filling T401p14
(the speaker had a toothache)

(237) *märr* ***balaŋ*** *ŋayi* ***yaka*** *dharpa+ny* ***galkirri+nya*** *be+ŋur+nydja*
so that IRR 3sg NEG tree+PROM fall+4th INDEF+ABL+PROM
garramat+ŋur+nydja
top+ABL+PROM T401p17
(she drove slowly) so that the wood would not fall from the back (of the truck)

(238) *ga bulu+ny maŋda ŋunhi* ***balaŋ*** *roŋiyi+nya bala+yi*
and again+PROM 3dl TEXD IRR return+4th MVTAWY+ANA
räku+nha+lil, yän ŋayi+ny walu warray nyumukuŋiny'+thi+rr, bala
fish+4th+ALL EMPH 3sg +PROM sun/time "in fact" little+INCH+1st then
ŋanapurr yän marrtji+n räli, roŋiyi+rr+a wäŋa+lil+a
1pl EMPH go-1st+SEQ MVTTWD return+1st+SEQ place+ALL+SEQ
and the two might have gone back off fishing again but the time was getting short
so we came back home. T280p2

In future contexts the SECOND inflection predominates in combination with IRR *balaŋ*, but there are also examples of *balaŋ* combined with the FIRST inflection and the FUT *dhu*. These are both exemplified below:

(239) *ŋayi* ***balaŋ*** *limurruŋ* ***madakarritj+thi***
3sg IRR 1+2-DAT angry+INCH+2nd
she might be angry with/at us T101p34
(context - current day)

(240) *ga yuwalk+nha* ***balaŋ*** *ŋanapurr* ***meŋgu+ŋu+ny*** *dhäruk+tja\ bili*
and "in actuality"+SEQ IRR 1pl forget+2nd +PROM word+PROM because
dharrwa ga nhina dhiyal galiwin'ku wiripu-wiripu bäpurru
many IMPV-1st sit-1st PROX-LOC place name other-REDUP clan
And it might in fact happen that we lose our languages, because lots of different
clans live here at Galiwin'ku BM

(241) *guyaŋa ŋarra ga [dhuwal napurr* ***balaŋ*** *gi marŋgi+thi*
thing 1sg IMPV-1st PROX 1pl IRR IMPV-2nd learn+INCH+2nd
English+ku]
English+DAT
I think we should be learning English GB

(242) *ŋuli* ***balaŋ*** *ŋarra dhu* ***meŋgu+ma+ny*** *ŋarranhawuy+nha ŋarra rirrakay*
HAB IRR 1sg FUT forget+1st+PROM 1sg-EMPH+ACC (1sg) sound
\ ga ŋarra+ku djamarrkuli
and 1sg+DAT children T018p10
When/in-the-event-that I forget my voice and my children (i.e. when/in the
event that I die)

In the last example the function of *balaŋ* is not absolutely clear. The *ŋuli* plus *dhu* plus FIRST inflection is the expected realization for a hypothetical future situation. Given the subject matter, the function of *balaŋ* here may be to distance the situation somewhat from its inevitable reality.

In the future it codes possible events in contrast to the expected future events coded with FUT *dhu*.

The only context in which *balaŋ* commonly occurs with the FIRST inflection is in suggestions or "soft" questions. These do not appear to implicate the addressee in the proposition as strongly as in direct questions and are thus seen as less "pressing". In this use *balaŋ* is used in conjunction with interrogative pronouns. Approximate translations in English are questions prefaced with "How about....." or "What do you think about....." (see sections 8.7.2 and 11.4.5).

The following two questions could both be addressed to two people sitting down. The second example without *balaŋ* is much more pressing.

(243) *yol balaŋ dhu marrtji ḏo'+lil*
who IRR FUT go-1st store+ALL
Who is interested in going to the store?

(244) *yol dhu marrtji ḏo'lil*
who FUT go-1st store+ALL
Who/which of you will go to the store?

There are also a few examples of the *balaŋ* with the FOURTH inflection in which the speaker is proposing situations that have not yet occurred but which the speaker desires or expects might occur. This use of the FOURTH does not appear to be within the temporal constraints for it so far proposed. Whether these are founded on discourse practices that use a past setting for particular purposes or whether it reflects a modal function of the FOURTH plus *balaŋ* is a matter for future consideration.

An example is the following, which occurred in a text where the speaker was giving instructions about access to their material. The rest of the text clearly concerned with outlining the speakers' wishes for future actions.

(245) ***ŋuli balaŋ*** *ŋayi ḻiya+mirr+nydja balanya nhakun dhuwal ŋäpaki*
HAB IRR 3sg head+PROP+PROM "such as" PROX white person
gäthur\ ŋayi ga ŋäma ŋarra+ny waŋa+nha+wuy\ ŋayi+ny
today 3sg IMPV-1st hear-1st 1sg+ACC speak+4th+ASS 3sg+PROM
balaŋ bitja+na *nhuŋu* ***waŋa+nha***
IRR do thus-4th 2sg-DAT speak+4th T018p18
If s/he thinks (/has a mind) like this white person listening to me today, she might say to you "....."

This was the first occasion on which the topic had been discussed so there is no possible past time reference which could explain its use, unless it has to do with expected behaviour associated with a particular person on the basis of past association.

7.4.2.4 Negation and verb inflection

There are two negative particles in Djambarrpuyŋu, NEGQ *bäyŋu* and NEG *yaka*. Only the NEGQ *bäyŋu* may function as a negative quantifier and only the NEGative *yaka* occurs in negative imperatives. However both occur as propositional negators.

The interaction between verb inflections and negation is complex. While there is evidence of a system consistent with that reported for languages further west, which shows a clear correlation between positive and negative expressions and the realis and irrealis opposition, there is also evidence of alternations which run counter to it. I have not been able to determine a functional basis for this alternation. Nor yet is there enough information available from other varieties to consider factors such as historical development or diffusion.

The realis-irrealis aligned pattern is one which involves a switch to irrealis inflections (i.e. SECOND and FOURTH) in negative expressions whose positive counterparts occur with the realis inflections (i.e. the FIRST and the THIRD). Thus the SECOND inflection occurs in negatives of situations temporally located in the present and yesterday/recent past (coded with the FIRST) and the FOURTH inflection occurs in negatives of situations temporally located with the THIRD inflection. This kind of correlation appears to be categorical for languages to the west e.g. Gupapuyŋu (Lowe n.d.a) and Djinaŋ (Waters 1984 p224). Positive irrealis categories do not change their inflection when negated.

Evidence for the alignment of negation with the realis-irrealis oppositions in Djambarrpuyŋu will now be considered.

Most uses of the FIRST inflection can shift to the SECOND inflection when the clause is negated. This includes the two Contemporary tenses, the Present and Yesterday/Recent Past as well as the Habitual. However the combination of the FIRST inflection plus the FUT *dhu* which codes the Today Future or contemporary potential specific predictable situations shows no evidence of shifting inflection under negative polarity. This could be interpreted as indicating that this particular

coding (i.e. FIRST inflection plus *dhu*) is associated with fundamentally irrealis categories, despite the use of the FIRST inflection.

(a) FIRST inflection changes to the SECOND for the negative Present

(246) ***bäyŋu ŋarraku gi ŋorri*** *ŋula dhiyal* ***wäŋa+ŋur+nydja***
NEGQ 1sg+DAT IMPV-2nd lie-2nd INDEF2 PROX-LOC place+LOC+PROM
I don't have any here T012p1

(247) ***yaka gi*** *biyak* ***rom waŋi***
NEG IMPV-2nd do thus-2nd law say-2nd
that is not how the law is/what the law says T023A p4

(248) *dhiyaŋuny bala* ***bäyŋu*** *ŋayi* ***gi*** *nhini* ***dhuwal***
"now" NEGQ 3sg IMPV-2nd sit-2nd PROX
Nowadays s/he doesn't live here Bk186p82

(b) FIRST inflection changes to the SECOND for the negative Yesterday/Recent Past

(249) ***yaka*** *ŋarra nhuna* ***wäwun'ku+ŋ*** ***barpuru***
NEG 1sg 2sg-ACC promise+2nd "yesterday"
I didn't promise (to get) you (something) yesterday T008p8

(250) ***bäyŋu*** *ŋayi* ***gi*** *nhini* ***barpuru***
NEGQ 3sg IMPV-2nd sit-2nd "yesterday"
S/he wasn't staying here yesterday T008p8

(251) *ga* ***yaka*** *ŋayi ŋunhi* ***dharyu+rr*** ***biyak*** ***djin'tjiŋdhu+rr***
and NEG 3sg TEXD rain+2nd do thus-2nd rain lightly+2nd
and it did not rain lightly T012p15
(text is about a hunting trip in the recent past and the positive inflection used is the FIRST)

(c) FIRST inflection changes to the SECOND with negative HAB *ŋuli*:

(252) ***butjikit+tja*** *muka* ***ŋuli*** ***ga*** *nyoyu+n*
cat+PROM PRT-OK HAB IMPV-1st howl+1st
Do cats howl?
bäyŋu ŋuli gi *dhuwal* ***butjikit+tja*** ***nyoyu+rr***
NEGQ HAB IMPV-2nd PROX cat+PROM howl+2nd
Cats don't howl T012p10

The other inflection sensitive to polarity is the THIRD. All its associated functions are associated with shifts to the FOURTH inflection with negative polarity i.e. the Today and Remote Pasts.

(d) THIRD inflection changes to the FOURTH in the Today Past negative:

(253) *bäyŋu ŋarra gäthur ŋorra+nha manymak+ku+nha munhawu*
NEGQ 1sg today lie+4th good+TRANS1+4th night time
I did not sleep well last night T008p8

(e) THIRD inflection changes to the FOURTH in Remote Past negatives

(254) *ŋäthil+nydja ŋarra ga+n dhuwal, ga miltjiri marrtji+n\ bäyŋu ŋarra*
before+PROM 1sg IMPV+3rd PROX, and blind go+3rd NEG 1sg
ŋuli ga+nha nhä+nha
HAB IMPV+4th see+4th T402p5
I was blind before, I was not able to see

(255) *ŋayi+ny muka bäyŋu yan yolŋu+ny yurrumdhu+na*
3sg+PROM PRT-OK NEGQ EMPH person+PROM gather together+4th
not all people had gathered together T0120p9
(this is from a text of a distant past happening which uses the THIRD for positive events)

However there are also examples in which negative particles occur with the realis inflections rather than the expected irrealis inflections i.e. with the FIRST and the THIRD rather than the SECOND and FOURTH. Such "counter" examples to the pattern outlined above are presented below:

(f) FIRST inflection for the negative Present which does not shift to the SECOND: (compare with examples 246-248)

(256) *bäyŋu ŋayi ga dhuwal nhina dhiyaŋuny bala*
NEGQ 3sg IMPV-1st PROX sit-1st "now"
s/he is not living here now T012p8

(g) FIRST HAB negative with the FIRST inflection rather than the SECOND: (compare with example 252)

(257) *yurr yaka walal ŋuli ga bitja+n+dhi ŋamaŋamayu+n, ga*
but NEG 3pl HAB IMPV-1st do thus-1st+ANA build/do+1st and
bokma+n
create+1st
but they are not practising and building (that law) T016p20

(h) Negative of Today Past with THIRD inflection rather than FOURTH: (compare with example 253)

(258) *gurrupa+r muka ŋarra ga+n, yurr bäyŋu+n ŋayi·ga+n luka+n,*
give+3rd OK 1sg IMPV+3rd but NEG+SEQ 3sg IMPV+3rd eat+3rd
ŋatha+ny
food+PROM
I was giving (him) the food, but he wasn't eating it T402 p9

(i) Negative of Remote Past with THIRD inflection rather than the FOURTH: (compare with examples 254 and 255)

(259) ***bäyŋu+n ŋayi ga+n dhiyal nhina+n ŋäthil***
NEG+SEQ 3sg IMPV+3rd PROX-LOC sit+3rd earlier
She wasn't living here a long time ago Bk186p82

Table 47 summarizes the distribution of the NEG particles and particular inflections that have been noted for Djambarrpuyŋu.

Table 47: Distribution of NEG particles with particular inflections and functions

POSITIVE CLAUSE	NEGATIVE CLAUSE
1st Present 1st with HAB *ŋuli*	NEG + 2nd or NEG + 1st NEG + 2nd or NEG + 1st
1st Yesterday/Recent Past	NEG +2nd (no examples without a shift)
1st with FUT *dhu* (Today Future, contemporary potential situations)	NEG 1st (no examples with a shift)
2nd (Non-today Future, Imperative, Hypothetical Irrealis)	NEG 2nd
3rd (Today Past, Remote Past)	NEG 4th or NEG 3rd
4th (Past Irrealis)	NEG 4th

7.4.2.5 Negation in other Dhuwal/Dhuwala varieties

Djambarrpuyŋu clearly allows the negative particles to occur with a wider range of inflections than that reported for Yolŋu languages to the west.

It is interesting that in her Gupapuyŋu language lessons (n.d. L41 and L60) Lowe makes a note of the fact that the FIRST and THIRD inflection may be used in negative clauses at Elcho Island (and Yirrkala), in contrast to the pattern she describes for Gupapuyŋu as spoken at Milingimbi where only the SECOND inflection and FOURTH inflections are reported with the negative. Waters (1989) dates these lessons at "circa 1960" which gives the usage at least a 30 year time span.

The situation in varieties to the east is not clear. The only constraint described for Djapu is that the negative particle *yaka* does not occur with the THIRD (= Morphy's PERFective) inflection. Negative counterparts occur in the FOURTH (= Morphy's Past Non-Indicative) inflection just as in the western Dhuwal/Dhuwala varieties. Negative examples also occur in the Djapu material with all other inflections.

The use of the negative with the FIRST inflection in Djapu and in Djambarrpuyŋu may reflect a shift in the organization of TMA systems within the Yolŋu area along the east-west dimension that we have seen with other phenomena, including a potential difference in the tense distinctions. It appears that negative polarity is less aligned with the irrealis as one moves further east, and the current use of negatives with the THIRD inflection in Djambarrpuyŋu, given the fact it does not occur in Djapu, may be a more recent shift in this direction. It is certainly sparse in my corpus, although speakers accept alternations of negative constructions with either the THIRD or FOURTH inflection. The relationship of the TMA systems amongst Yolŋu varieties clearly presents itself as an interesting area for future consideration.

7.4.3 Imperative Mood

The SECOND inflection is also used for imperatives, both positive and negative. Some examples are given below:

(260) *g.....y,* *ǰupmara+ŋu+n ŋarra+ny*
personal name, wash(tr)+2nd 1sg+ACC T020p6
G.....y, wash me.

(261) *baṯpiyak ŋayathul*
hold-2nd hold-2nd
Hold (it) firmly! 86Bk2p29

(262) *yaka waŋi*
NEG talk-2nd G
Don't talk!

(263) *yaka walalaŋ buku-bakamaraŋ*
NEG 3pl-DAT [head-break]"answer"-2nd GenCon
Don't answer them!

To conclude this discussion on the inflection system in Djambarrpuyŋu I present a table summarizing the functions of the four inflections that have so far been identified. I also present a chart which attempts to schematize the system.

Summary of key functions of the inflections:

FIRST inflection:

- predominantly realis but also irrealis categories that are more highly probable/predictable such as Today Future and current Habitual
- has two domains for tense i.e. the two contemporary tenses: the Yesterday/Recent Past as well as the Today non-past (i.e. the Present and the Today Future)
- can be perfective or imperfective
- negative polarity possible but there are also negative counterparts with the SECOND inflection

SECOND inflection:

- irrealis such as Habitual(generic) and Hypothetical
- future tense for any time after tomorrow
- can be perfective or imperfective
- occurs with negative polarity for counterparts to positive expressions with the SECOND and FIRST inflection
- used for imperatives

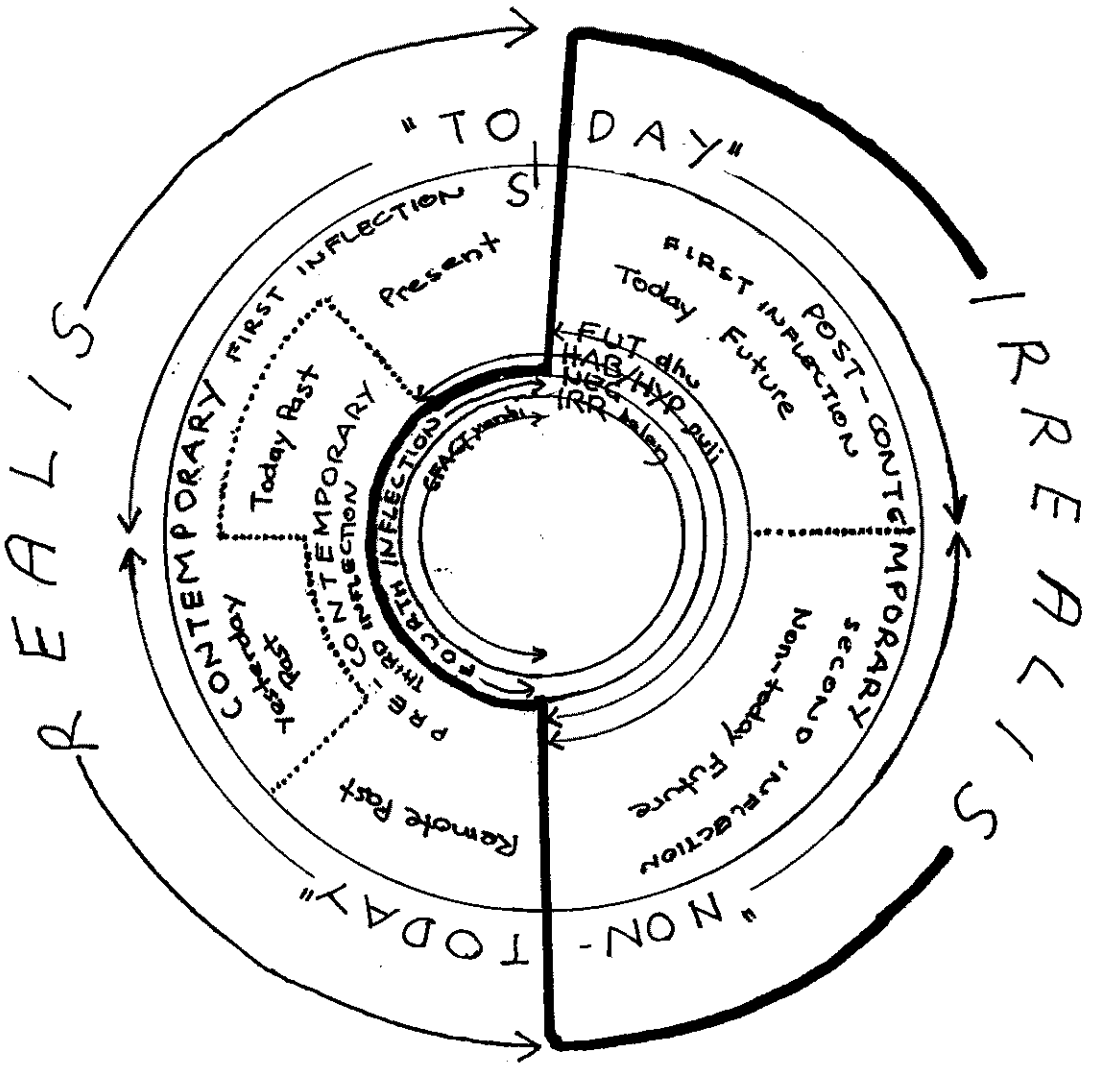
THIRD inflection:

- realis
- has two domains for tense i.e. the two pre-contemporary tenses, the Today Past and the Remote Past
- can be perfective or imperfective
- negative polarity possible but alternates with the use of the FOURTH inflection for negative counterparts to positive expressions

FOURTH inflection:

- irrealis
- predominantly past tense extending from the moment of speech, but current counterfactual conditionals are also found with it.
- can be perfective or imperfective
- occurs with negative polarity for counterparts to positive expressions with the FOURTH and THIRD inflection

The following diagram is an attempt to schematize the TMA system as I currently understand it:



S moment of speech

▬ indicate the irrealis -realis distinction

.... indicate tense distinctions

circular lines indcate the inflections with which different particles occur

7.4.4 Aspect

This section describes various encodings which clearly convey aspectual notions. Most of them are concerned with expressing imperfective aspect. The most commonly occurring of these is the inflecting IMPerfectiVe auxiliary verb *ga-* The IMPV inflects like a regular verb in the $Ø_a$ conjugation i.e. *ga* (1st), *gi* (2nd), *ga+n* (3rd), *ga+nha* (4th). However it can never occur as a main predicate. It is distinctive to the western Dhuwal/Dhuwala varieties Djambarrpuyŋu and Gupapuyŋu, and does not occur in the eastern varieties Gumatj and Djapu. The latter varieties utilize the two other devices, also found in Djambarrpuyŋu, to code imperfective aspectual notions, namely reduplication of the verb and apposition of certain "existential" verbs. Perfective aspect would appear to be closely associated with the occurrence of a verb stem without any of the imperfective marking just described. The COMPLetive particles *bili/linygu/liŋgu* do overtly express notions that are associated with perfective aspect, but they are obligatory in the coding of perfective events.

The interaction of these aspectual markers with the TMA system and the precise nuances they convey are subjects for future research. Some preliminary observations are made below.

7.4.4.1 IMPerfectiVe *ga-*

The IMPV is widely occurring, as the reader will no doubt have noticed in the examples presented so far. It agrees in inflection with the verb with which it occurs and often enters into a single phonological unit with the modal particles which it generally follows, particularly if both morphemes are monosyllabic e.g. *dhuka* (FUT+IMPV) *lika* (HAB+IMPV). It co-occurs with all four verb inflections, coding imperfective situations in all time frames and both realis and irrealis contexts. Some examples are given below:

(264) *yo, ŋarra yawungu ŋanya nhäma, ŋayi ga djäma do'ŋur*
yes 1sg "yesterday" 3sg-ACC see-1st 3sg IMPV-1st work store+LOC/ABL
ŋunha Baŋ'thula
DIS place name 0042
Yes, I saw him/her yesterday. S/he was working at the store at Baŋ'thula

For other examples with the FIRST inflection see examples 208, 209, 223, 224, 225, 230,231, 256 and 257.

(265) *djorra' mala ŋayi **dhu gi** **wukirri, dharrwa***
paper/book PL 3sg FUT IMPV-2nd write many/much OD8
s/he will be writing many letters
(a future time frame with *boŋguŋ* is established in the preceding question)

For other examples with the SECOND inflection see examples 228, 241, 246, 247, 250 and 252.

(266) *ŋatha ŋarra **ga+n** **gă+ŋal***
food 1sg IMPV+3rd bear+3rd OD66x
I was buying/getting food
(in the "today" frame)

For other examples with the THIRD inflection see examples 212, 217, 258 and 259.

(267) *\bala **ga+nha** **dulŋurr'yu+na+n**\ ga **yatju+na** muka ŋayi ŋuli*
then IMPV+4th extract, pull out+4th+SEQ and yell+4th PRT-OK 3sg HAB
*ga+nha **mirithi+nya, ŋunhi** bäwarraŋ'+tja*
IMPV+4th INTENS+4th TEXD animal+PROM T102Bp2-3
Then (it) pulls (at the spear, trying to get it out) and cries out loudly, that animal

For other examples with the FOURTH inflection see examples 226 and 254.

Unlike the imperfective the notion of perfectivity does not appear to require overt coding. Thus I do not believe that the auxiliary *ga-* and the COMPL particles are in a direct imperfective-perfective opposition. Rather it seems that the presence and absence of the IMPV itself establishes an opposition. In Djapu the THIRD and FOURTH inflections are in fact interpreted as being perfective, referring to "events or actions that have been completed,or to the achievement of states" (Morphy 1983p71). In Djambarrpuyŋu the THIRD and FOURTH appear to be fundamentally associated with past time rather than perfectivity. The main evidence for this is the fact that both inflections can occur with the IMPV *ga-*. However many perfective events are coded by these verb stems alone, which does suggest a close association with these inflections and perfectivity. This is not surprising given the inherent correlation between perfectivity and past time.

Another point to be noted is that the IMPV also frequently co-occurs with the HAB *ŋuli*, which we have seen has an aspectual function in coding customary or regular events. The IMPV is used for various situations of continuous duration, be they states, motions or activities. Both IMPV and HAB situations may be continuous or iterative. However situations with the HAB have the distinctive feature of being customary and they may also be perfective (see the extracts in 225 and 226 for examples of *ŋuli* without the IMPV).

The following examples are of a state occurring with the HAB and the IMPV, and an iterative event with only the IMPV. Several examples of the alternative combinations occur in the preceding sections.

(268) *dhuwandja bunbu bitjan bili ŋuli ga miku+mirri+yi+rr*
PROX house "always" HAB IMPV-1st red+PROP+INCH+1st
Has this house always been red? OD70

(269) *ŋalparr'yu+n barpuru ŋayi ga buku-dharrwa+mirr*
cough+1st "yesterday" 3sg IMPV+1st head-many+PROP "many times"
Yesterday he coughed many times OD94

The FIRST inflection plus the IMPV predominates in the expression of ongoing situations at the moment of speech. However certain predicates, namely those expressing emotional and bodily states, more commonly occur with the THIRD inflection. For example

(270) *ŋalimurr dhuwal djaŋŋarr+thi+na+n*
1+2pl PROX hunger+INCH+3rd +SEQ T102Bp1
we are all hungry

(271) *ŋarra dhuwal rirrikthu+rr*
1sg PROX be sick+3rd
I am sick (from Buchanan 1978 p168)

(272) *bili djawar'yu+rr+a*
COMPL be tired+3rd OD58
(S/he's) already tired

The description of such states relative to the moment of speech appears to invoke a general temporariness to the state. It is quite possible with a predicate such as *rirrikthu*-N "be sick, in pain" for someone to be seen as in that state for a long period of time. Then the THIRD inflection is not required. The use of the FIRST inflection in this context, however, would appear to be relative to "nowadays" rather that the actual moment of speech.

(273) *balanya nhakun ŋunha rerrimirr, rirrikthu+n nhina galiwin'ku+n*
such like DIS sick+PROP be sick+1st sit-1st place name+SEQ
like that sick one, living there ailing at Galiwin'ku T102Ap6

(274) *ŋunha yolŋu rirrikthu+n ga*
DIS person be sick+1st IMPV-1st G
that person is ill

The use of the THIRD inflection with certain predicates relative to the moment of speech does appears to express a perfective notion i.e. that the state is "achieved"

and current relative to the moment of speech. Testing for the use of two of these predicates with the IMPV plus the FIRST inflection I was offered explanations in which the participant was not yet fully affected by the state. Thus *djaŋarrthi+rr ŋarra ga* [hunger+INCH+1st 1sg IMPV-1st] was translated as "I am starting to get hungry" and *djawaryu+n ŋarra ga* [to tire+1st 1sg IMPV-1st] "I'm feeling tired". The latter would be appropriate as a response in the context of being asked to go up a hill. Once you climbed the hill you could express being tired with the THIRD inflection. These examples clearly point to some kind of aspectual contrast being coded by the FIRST inflection plus the IMPV and the THIRD inflection at the moment of speech. The former is associated with ongoing events or states still in the process of affecting a participant. The THIRD inflection indicates the participants are fully affected by a particular state.

The full range of predicates for which this opposition may exist has yet to be ascertained. There are a few examples which suggest that a contrast is possible with other kinds of predicates. Two examples with *nhäma-ŋ* "see" are given below:

(275) *bitja walal ga* ***nhäma***
picture 3pl IMPV-1st see-1st
they are watching a movie

(276) *ŋarra dhu dhuwal lakara+m [ŋunhi nhä ŋarra* ***nhä+ŋal*** *dhiyaŋ bala]*
1sg FUT PROX tell+1st TEXD what 1sg see+3rd "now" ODB8
I will tell you what I can see right now

In the first context the situation is clearly an ongoing event relative to the moment of speech, but in the latter context it would appear that the sighting of the event which is reported must be "achieved" prior to the reporting and thus the moment of speech. It would appear that here the "seeing" is viewed holistically or perfectively. The individual events that are described following this statement are expressed using the FIRST inflection with the IMPV.

As a final example I offer a translation of "I promise you to come to you tomorrow" in which the speaker use the THIRD inflection for the act of promising. Again the act of promising can be seen as perfective.

(277) *ŋarra+ny nhuna* ***wäwun'ku+ŋal*** *[ŋarra dhu marrtji boŋguŋ nho=kal]*
1sg+PROM 2sg-ACC promise+3rd 1sg FUT go-2nd "tomorrow" 2sg=OBL
I promise you to come tomorrow OD125

Similar observations on the use of the THIRD or comparable inflections with certain predicates regarding the moment of speech are made for other languages in the area. See Lowe (n.d.a) for Gupapuyŋu and also Heath (1984 p341) for Nunggubuyu. That similar distinctions occur in the latter is interesting given the typological and genetic distinctions between this language and those of the Yolŋu group. It adds to the parallels between the Yolŋu TMA distinctions and those in surrounding non-Pama-Nyungan languages that have already been mentioned.

7.4.4.2 COMPLetive *bili/linygu/liŋgu*

The COMPL particle does not occur nearly as frequently as the IMPV *ga-* and I am doubtful it has parallel functions. This is not surprising given that the past tense (with either the FIRST or THIRD inflection) could be assumed to be perfective if the IMPV does not co-occur. The COMPL appears to focus on the termination of a situation rather than express perfectivity. Some examples of it in various past realis contexts are given below:

(278) ***bili+n*** *ŋayi buna+na+n,* *buŋgawa+ny*
COMPL+SEQ 3sg arrive+3rd+SEQ boss, leader+PROM
The boss has already arrived T401p11
("today" frame - Today Past)

(279) *ŋe* *bay* ***bili*** *ŋarra barpuru* *ŋanya* *nhä+ma*
yes PRT-OK/"you know" COMPL 1sg "yesterday" 3sg-ACC see+1st
yes, I did meet him recently OD37
(i.e. "non-today" frame - Yesterday/Recent Past)

(280) *ga ŋunhi+yi* *bundurr+nydja* *walal, ŋunhi+yi, nhuma*
and TEXD+ANA clan place/totem name+PROM 3sg TEXD+ANA 2sg
ŋäkul *ŋarra+kuŋ* *ŋarra lakara+ŋal* ***bili***
hear-3rd 1sg+OR 1sg tell+3rd COMPL T102Ap2
and those (are the) clan place/totem names of theirs, those you have heard from me, I have told (them) already
("today" frame - Today Past)

(281) *yo* ***bili*** *linyu gumurr-buna+na+mi+na+ny*
yes COMPL 1di [chest-arrive]"meet"+4th+R/R+3rd+PROM
buku-lurrkun'+mirr
head-three/few+PROP OD44
yes, we two did meet a few times
("non-today" frame - Past habitual)

The COMPL particles are also used quite generally to indicate that something has ended. This includes speech, but might be any kind of activity such as concluding demonstration of how to do something. During speech it can be used to signal the end of a phase or a particular idea, as well as the end of the whole text.

The sense of "termination" associated with this particle is highlighted in the next example where it is used in a clause referring to a future event which will mark the end of a visit.

(282) *marrtji dhu nhakun* ***bili+n*** *roŋiyi+rr+a* *wäŋa+lil+a*
go-1st FUT as COMPL+SEQ return+1st+SEQ place+ALL+SEQ T208p1
(S/he) is going, that is finishing up, and returning home.

Homophonous forms of *bili* also occur, one is a clause connective meaning "because" and another occurs in conjunction with demonstratives indicating that something is the "same" or "similar" (see section 6.6.3). Two other expressions in which the COMPL forms feature are *yän(a-) bili/liŋgu* and *bitja-*N$_K$ *bili/liŋgu*. Both expressions have aspectual functions. They can be used for any situation that endures for a continous period of time be it durative or iterative. The first expression is based on the EMPHatic particle *yän* which also occurs with the SEQ suffix as *yäna+n*. It often occurs following a clause to indicate the situation continues (see section 13.9). This in turn is often followed by an expression of the end point. The second expression is based on *bitja-*N$_K$ "do thus". The second expression is also found clause internally to indicate a notion like "always" (see section 13.14.3).

7.4.4.3 Verb reduplication

The details of reduplication patterns are presented in section 10.2. Verb reduplication functions to indicate the recurrence of a particular situation. The recurrence may be iterative, as when a participant repeats an action or simultaneous, as when several participants do the same action at once. It may also be used with an intensifying function.

Examples include 208 and 235 and those in section 10.2.4.2. The following example is an instruction given by a mother to her child when they hear the father call out on his return from a successful hunting expedition:

(283) *ŋal'yu-ŋal'yu+rr* *gi* *nhäŋu'-nhä+ŋu* *bäpa+w*
climb-REDUP+2nd IMPV-2nd look for-REDUP+2nd F+DAT T102Bp19
Quickly climb up and look about for Dad!

7.4.4.4 Aspectual functions of existential verbs

Certain stance verbs and the motion verb "to go" are used to express existence. This is common in many Australian languages where there is no copula verb (see section 11.2.4).

In eastern Dhuwal/Dhuwala these verbs are also used to code durative aspect. In Djapu the verb most commonly found with this function is *yukurra-Ø* "lie", but *nhina-Ø* "sit", *dhärra-Ø* "stand" and *marrtji-Ø* "go" may also be used (Morphy 1983 p89).

In Djambarrpuyŋu the IMPV *ga-* is clearly the main imperfective aspectual marker. However there are numerous examples in the corpus where *marrtji* "go" appears to have an aspectual function. In this function the IMPV *ga-* and *marrtji* cannot co-occur. It co-occurs with verbs of all transitivity types while as a main predicate it is intransitive. It often accompanies other motion predicates as in the following:

(284) *marrtji+nya walal ŋuli, budapthu+na marrtji+nya, dhawal*
go+4th 3pl HAB cross over (intr)+4th go+4th come out
they moved on, crossed over, came out Burrp9

However it also occurs in extended passages with non-motional predicates. It then looks like an alternative to the IMPV *ga-*. What the specific nuances associated with *marrtji* might be awaits future consideration. A rough gloss would be "to go about (doing X)". Some of the examples suggest a possible link between something being viewed as in motion and something being viewed as in a process of change or as a single process with separate phases. The following extract is one of several in which *marrtji* features rather than *ga-*. I only gloss the main clause verb stems:

(285) *walal marrtji+n lakara+ŋal ŋanapurruŋ, ŋunhi ŋanapurruny walal*
3pl go+3rd tell(tr)+3rd 1pl-DAT TEXD 1pl-ACC 3pl
marrtji+n mala-wuma+r, ga bitthu+rr ŋanapurr marrtji+n,
go+3rd have children(tr)+3rd and rear(intr)+3rd 1pl go+3rd
ŋuliwitja+rr+yi+n dhäwu+wurr+a\ dhäwu marrtji+n räli,
TEXD-PERL+3rd+ANA+SEQ story+PERL+SEQ story go+3rd MVTTWD
walalaŋ+guŋ dhawatthu+rr gurrupa+na+wuy, rom-lakara+nha+wuy,
3pl+OR come out(intr)+3rd give+4th+ASS [law-tell]" instruct"+4th+ASS
ga bäku+mirr+ya+nha+wuy.
and plan, think ahead+PROM+TRANS2+4th+ASS
djuwu+mirr+ya+ŋal marrtji+n ŋanapurruny walal
plan, think ahead+PROP+TRANS2+3rd go+3rd 1pl-ACC 3pl

dharaŋa+na+mara+ŋal ya-bitja+r\ ga djuŋuny malany
make understand(tr)+3rd "OK"-do thus+3rd and meaning PL(/group)+PROM
ŋanapurruŋ walal mala+ny marrtji+n lakara+ŋal
1pl-DAT 3pl Pl/group+PROM go+3rd tell(tr)+3rd
dhunukthunukma+r
point out(tr)+3rd T018p3-4

They spoke to us, those that bore us and we grew up through those stories. The stories came down to us from their giving, instructing and tutoring. They made us understand and do it correctly- like that. And the meanings (symbolism) they explained to us.

In those examples in the corpus where the other existential verbs e.g. *nhina* "sit", *ŋorra* "lie", *dhärra* ,"stand" *gorrum* "be high/raised" co-occur with non-existential verbs the relationship does not appear to be an aspectual one. Rather a particular existential state and whatever situation is expressed by the other predicate occur simultaneously.

(286) *nhaltja+rr ŋayi ga+n dhuwal wämut+tja*
do what+3rd 3sg IMPV+3rd PROX subsection name+PROM be
mukthu+rr nhina+n dhiyal+nydja nhumalaŋ+gal
quiet(intr)+3rd sit+3rd PROX-LOC+PROM 2pl+OBL T402p11
Has Wämut been sitting here quietly with you?

(287) *gorru+nha ŋayi ŋä+nha*
be high +4th 3sg hear(tr) +4th T102Bp19
(while) being up (in a tree) he heard

These existential verbs can themselves however co-occur with *marrtji* "go". The motion/process association again features strongly as in example 288 "go loose", but it is also used when the participant whose existence is being expressed is extended in space rather than time as in example 289 "lies a creek":

(288) *märr ŋayi dhu djiŋdjiŋ' yaka dhayala ŋorra marrtji garrpi'yu+nha+wuy*
so that 3sg FUT wire NEG loose lie-1st go-1st tie+4th+ASS
(can put glue) so that the wire that is wound around (the spear) does not go loose
Spear Book

(289) *ŋunha dhudupuŋur ŋunhi mayaŋ marrtji ŋorra nyumukuŋiny*
DIS place name TEXD creek/throat go-1st lie-1st small
there at Dhudupuŋur there lies a small creek OMSL50

7.5 Verb derivation

There are four verbalizing suffixes found with non-verbal stems, the INCHoative-*Thi*- the TRANSitivizers -*ku*- and -*Tha*- and the VerBaliZeR -*(')Thu*-. The VBZR is also homophonous with the -*Thu*- augment. There are also a few non-verbal

roots with the CAUSative *-mara-* suggesting it may have a verbalizing function. However its main use appears to be to change the case array associated with particular verb stems (see section 7.5.4). All the non-verbal roots with the CAUS also occur as roots with the *-Thu-* augment. This means they are potentially analysable as derivations from *-Thu* verb stems rather than direct derivations from the non-verbal roots. The INCH derives intransitive verbs and the TRANS derives transitives. They are both highly productive. The VBZR, which includes a Delocutive amongst its more clearly productive functions, is comparatively less productive that the other suffixes. It occurs with both transitive and intransitive verb stems.

The four verbalizing suffixes will now be considered in turn, beginning with the Verbalizer *-(')Thu-* and the verb augment *-Thu-*. This will be followed by the Inchoative and the two Transitivizers. The CAUS is considered in section 7.5.4.1.

7.5.1 The verb augment *-Thu-* and VerBaliZeR *-(')Thu-*

These homophonous suffixes both inflect according to the N conjugation. The two functions are largely dependent on the word class of the root. With a verb root it is an augment and with a non-verbal root a verbalizing suffix. The productiveness of the verbalizing suffix is uncertain and in some examples with non-verbal roots it may well be fossilized. The distinction between the augment and the verbalizing functions would then be minimal. However the identification of the root with a regularly occurring non-verbal root often remains highly transparent, both formally and semantically.

The two suffixes presumably have the same source. Morphy makes a plausible suggestion in this regard, drawing on the fact these suffixes are cognate with the verb *dhu*-N "put/do" found in Pama-Nyungan languages further south. She puts forward the hypothesis that the augment *-Thu-* derives from an earlier independent verb. Further support for this is found in the fact that this verb has evolved as a suffix in various Australian languages (see Morphy 1983 pp74-5, p113).

7.5.1.1 The augment *-Thu-* with verb roots

This suffix is realized as *-thu-*, *-yu-* or *-tju-*. It is distinctive to verb roots in the N conjugation class which is the largest in the language (see section 7.2.4.7). Examples include:

one argument (intransitive)		two arguments (transitive)	
wilwil+yu-	shake, tremble	*buny'+tju-*	smoke (a cigarette)
bil+yu-	turn	*rurrwu+yu-*	wash, clean
wap+thu-	jump, hop, bounce	*warku'+yu-*	tease, aggravate
		nyaŋ'+thu-	eat/drink,ingest

two arguments (semi-transitive)

mal+thu-	follow
gatjpu'+yu-	look forward to, hope
buthuru - bi=tju-	listen to

The augment is obligatory before inflectional suffixes for all roots in this class except one. The dimorphemic status is indicated by the fact that the root may occur as a bare verb root (see section 7.2.2) and the fact that it is isolable with the CAUS suffix *-mara-* (e.g *bil+mara-*ŋ "turn (tr)").

The allomorphs *-thu-* and *-yu-* are the most common. The form, *-thu-*, is found following non-palatal stops and nasals. It also occasionally occurs following liquids, vowels and semivowels, but *-yu-* is more frequent in these environments. Glottal stops are commonly found between the root and the suffix, and there are several minimal pairs contrasting only in the presence/absence of the glottal stop. For this reason the glottal stop is included with the root morpheme.

Th allomorph *-tju-* is found in less than 20 verb stems. There are a dozen or so examples with a final vowel or palatal stop and a further handful with a final palatal nasal. It appears to be a fossilized allomorph, presumably once productive following palatal nasals and possibly palatal stops. The latter environment is problematic since there is often no synchronic evidence as to whether the root should be considered stop or vowel final. The following list presents some of the kinds of evidence that is available:

1. the form used as bare verb root e.g. *badatj* (cf *badatj+tju-* "to miss")
2. the shape of reduplicated roots e.g. *martjmartj+tju-* "go, walk (pl)". The pattern of reduplication displayed elsewhere supports a final stop in the second syllable of the root.
3. the correspondences between *-Thu-* verb roots and CAUS *-mara-* roots. The only examples so far recorded i.e. *diditju-* "tie up (intr)" and *didi'mara-* "tie up (tr)" indicate a vowel final root (cf *dhamany'+tju-* "to grow, get bigger (intr)" and *dhamany'+mara-* "to grow (tr)").

4. cross-dialect comparisons. Zorc (1986) includes some revealing entries with alternations between an augment *-thu* and *-tju* e.g. *yulutj+tju-* and *yulutj+thu-* "stalk, sneak up to (tr)". The first is the form found in Djambarrpuygu, the latter an alternative noted for Gumatj (see Zorc 1986 p284).
Since the western varieties appear to be the ones that permit lamino-palatal and lamino-dental sequences, I expect this kind of evidence may be more useful for eastern varieties (see also the introductory section of 2.4 where Laminal Assimilation in Djapu is described).

Where there is no clear evidence by which to identify the root as vowel final or as having a palatal stop I have used the boundary marker '=' rather than '+'.

7.5.1.2 The VerBaliZeR *-(')Thu-* with non-verbal roots

There are also some 100 N class verbs with *-Thu-* which have identifiable non-verbal roots. These include nomens, adverbs, particles and the odd pronominal and demonstrative. Some examples are given below:

i) with nominal roots

batjpatj+thu-	be sick, in pain	*batjpatj*	illness
dharaw+'yu-	light a fire	*dharaw'*	bark of stringybark
gumurr+'yu-	meet	*gumurr*	chest, front
warwu+yu-	worry, feel upset, concerned	*warwu*	worry, sorrow
wanha+'yu-	look for	*wanha*	place indefinite/ interrogative proform

ii) with adverbial roots

bondi+'yu-	do quickly, hurry	*bondi*	quickly, fast
bulnha+'yu-	slow down	*bulnha*	slowly, carefully

iii) with particle roots

yaka+'yu-	refuse	*yaka*	NEG
bala-räli+'yu-	go back and forth	*bala*	MVTAWY
		räli	MVTTWD

The suffix allomorphs which occur with non-verbal roots are *-(')thu-* and *-(')yu-* and they pattern consistently with the regular leniting suffix alternations i.e. *-thu-* following stops and nasals and *-'yu-* elsewhere. This is distinct from the allomorphy of the augment *-Thu-* found with verb roots. It will be noted that there are no examples of the *-tju-* allomorph in these examples, in fact a stem with a lamino-palatal final stop *batjpatj* occurs with the *-thu-* allomorph. The evidence

from the allomorphy of *-Thu-* associated with non-verbal roots thus adds support to the claim that the augment allomorph *-tju-* is fossilized.

Table 48: Allomorphs of the *-Thu-* augment and the VBZR *-(')Thu-*

	stops and palatal	nasals non-palatal	liquids	semivowels	vowels
-Thu- augment	-tju-	-thu-	-thu- -yu-	-thu- -yu-	-thu- -yu- (-tju-)
-(')Thu- VBZR	-(')thu	-(')thu-	-(')yu-	-(')yu-	-(')yu-

A glottal stop also features in the majority of these stems even when they are not part of the underlying roots. In the most productive use of the verbalizing *-(')Thu-* yet identified, the Delocutive, the presence of a glottal stop is completely regular. The roots concerned do not have final glottal stops in other contexts. This suggests the glottal stop is part of the derivational process and for this reason the verbalizing suffix is indicated as *-(')Thu-*. It is distinct from the augment where there is evidence to include the glottal stop with the root.

Other than its widespread occurrence with *-Thu*, the glottal stop does appear to have a general association with derivational processes. It will be recalled that it occurs in combinations of demonstratives with the PROP *-mirr* to indicate language types e.g. *dhuwal'mirr* "'dhuwal'- having". A glottal stop is also present in two nominal derivational suffixes i.e. KINDYD *-'manydji* and KINPROP *-'mirriŋu*. These all have a limited application. It also regularly appears in reduplicated stems. However, even though reduplication is reasonably productive it is not associated with an obligatory grammatical category (see section 10.2).

Of course the number of *-Thu-* verbs indicate a highly productive process, presumably involving the glottal stop, may once have existed.

7.5.1.2.1 The Delocutive and other senses associated with the VBZR *-(')Thu-*

It is not clear how many productive functions are associated with this suffix. It certainly does not have the general productive status of the INCHO *-Thi-* or TRANS *-ku-* verbalisers. However, one sense that is productive is that of the Delocutive (I

adopt the term from Morphy (1983 p113) who identified this function in Djapu). The morpheme *-'Thu-* is added to nominals to indicate the "saying or uttering " of the root. It is commonly used with kin terms to indicate how someone refers to or addresses another. In other examples it designates particular ways of speaking rather than the saying of the particular word or noise designated by the root. This includes the speaking of a particular language, lying or praying. Its current productive status is reflected in its use on English loans.
Some examples are:

waku+'yu-	to call someone *waku* (tr)	*waku*	(Z)C
dhuway+'yu-	to call someone *dhuway* (tr)	*dhuway*	FZC
gurruŋ+'thu-	to call someone *gurruŋ* (tr)	*gurruŋ*	FZDC
bambay+'yu-	to call someone *bambay*	*bambay*	term for certain *ŋändi* M(Z);blind
bep+thu-	to sound the horn of a vehicle	*bep*	(cf English "beep")
hello+'yu-	to say 'hello'	(cf English "hello")	
yaka+'yu-	to refuse, say 'no'	*yaka*	NEG
ŋarraku+'yu-	to claim as one's own	*ŋarra+ku*	1sg+DAT
dhuwal+'yu-	to speak Dhuwal	*dhuwal*	PROX
biraya+'yu-	to say prayers, pray	*biraya*	prayers, Church (cf English "prayer")
nyäl+'yu-	to lie to (tr)	*nyäl*	lie, untrue

Other non-verbal roots with *-(')Thu-* do not display a delocutive sense. They are predominantly intransitive and express the state or the activity of producing/doing something inherently associated with the root. I have identified the following categories in my corpus:

1. the expression of bodily states

There are verbs for breathing, coughing, sweating and having a headache where the roots are the nomens for breath, cough/cold, sweat and headache respectively.

ŋalparr+'yu-	cough, have a cold	*ŋalparr*	cough, phlegm, cold
ŋir+'yu-	breathe	*ŋir'*	breath, asthma
worr+'yu-	sweat	*worr'*	sweat
rathala+'yu-	have a headache	*rathala*	headache
wargirr+'yu-	urinate	*wargirr*	urine

2. the expression of actions inherently associated with the particular body part which constitutes the root. For example:

dhä'yu-	to open one's mouth	*dhä*	mouth
ŋäŋarr'yu-	to poke out one's tongue	*ŋäŋarr*	tongue
waŋa'yu-	wave	*waŋa*	arm

3. an instrumental relation between the root and the process expressed by the verb. One example *dharaw'yu-* "to light a fire" (cf *dharaw* "bark of stringybark tree") has already been mentioned. Others include:

ŋuttji'yu-	make a fire, rub sticks together	(cf *ŋuttji* "firesticks; the trees Premna obtusifolia or Premna cuminata")
dhumurr'yu-	to hit, thump with something; to poke, kick	(cf *dhumurr* "a type of stone")

Morphy records a form *mutika+'yu-* "to go by car" for Djapu (1983 p113) which suggests the instrumental sense may still be productive where *mutika* "vehicle" is, of course, an English loan based on "motor car".

4. expressing the process of doing or producing the notion denoted by the nominal. For example:

wakir+'yu-	to stay away/ visit for a few nights (cf *wakir'* "visit/ stay of a few nights duration"
ŋadi+'yu-	to sulk, be discontented (cf *ŋadi* "discontent")
ŋurrwu+'yu-	to hide, shelter, protect (intr) (cf *ŋurrwu* "in shelter of, protected")
warrpam'thu-	This stem is used adverbially to indicate that the action/state fully affects something (cf *warrpam(')* "all, every")

As with other suffixes there is a problem in distinguishing productive uses of the suffix from its fossilization. An example of a lexicalized form with *-(')Thu-* where the root is phonologically distinct from that in cognate nominals is *rirrik=thu-* "to be sick, ill". Likely cognates include *rerri* "sickness" and *rirrkminy* "sick person". In many cases however the verb root and a cognate nominal are phonologically identical.

An alternative explanation for some of these forms may be that the nominal cognates are derived from the verb stem rather than vice versa. This would be analogous to the back formation of nominals from compound verbs e.g. *buku-ŋup* (see section 10.1.1.1) or the nominal function of certain reduplicated verb roots (see section 10.2.4.3).

7.5.2 INCHoative *-Thi-*

The INCHoative suffix *-Thi-* derives intransitive verbs which are members of the $\emptyset_{rr}$ conjugation. It is highly productive on nominal stems but there are also

lexicalized stems. This is parallel to the situation we have seen with other derivational suffixes. Its transitive counterparts are TRANS1 *-ku-* and TRANS2 *-ya-/-tha-*.

It is used to indicate change of states or states which result from a process. The presence of *-Thi-* allows for the expression of the full range of TMA categories, something which is not possible with the bare stems, even though many can function as predicates in equational clauses.

It is another suffix which is subject to lenition and was considered in section 2.4.2.2 There is no environment in which only the lenited version occurs, rather both *-thi-* and *-yi-* are found in potential leniting environments. However the lenited allomorph is more frequently attached to stems of 3 syllables or more, and is always found on stems incorporating the PROP *-mirr(i-)* or PRIV *-miriw*.

Stems include nomens, locationals and temporals. It is very common with nomens which denote qualities, quantities and colours. Some examples include:

baṉdany+dhi-	to dry up	*baṉdany*	shallow
gorrmur+'yi/thi-	to get hot; have a fever	*gorrmur*	hot
dharrwa+thi-	be/become many	*dharrwa*	many
ḏämbumiriw+yi-	be/become four	*ḏämbumiriw*	four [head+PRIV]
buthalak+thi-	be/become yellow	*buthalak*	yellow

It occurs directly attached to entity denoting nomens describing an S participant involving a change in state or having a certain constituency. For example:

ḏirramu+thi-	to turn into/become a man	*ḏirramu*	man, male
djambaka+thi-	be of/made of metal	*djambaka*	metal
milmitjpa+yi-	become afternoon	*milmitjpa*	afternoon

It also occurs on certain emotion/mental state denoting nominals, including the "adjectival" predicates (see section 11.1.6).

djäl+thi-	to want, like	*djäl*	want, like (semitr)
maṉŋgi+thi-	to learn, know	*maṉŋgi*	know (semitr)
djuḻŋi+thi-	to be happy, pleased	*djuḻŋi*	pleasing
biyaṉi+yi-	to be frightened	*biyaṉi*	fear

Other stems with which the INCH frequently occurs are stems consisting of an entity denoting nomen and either the PROP *-mirr(i-)* or PRIV-*miriw* describing an attribute or lack of it in the S participant.

binbarrmirri+yi-	to have wings - used for a particular stage of the life cycle of a grub	*binbarr*	wings
ŋaminimirri+yi-	to develop breasts	*ŋamini*	breasts
djälmiriw+yi-	to become unwanting (as when one has overeaten)	*djäl*	want, like
rrupiyamiriw+yi-	to be/become without money	*rrupiya*	money

Some locational and temporal examples include:

garramat+thi-	to be/become raised, at the top, on the surface(of water)	*garramat*	above
galki+thi-	to be (getting) near	*galki*	near
baman'+thi-	be for a long time	*baman'*	long time (ago)
munhawu+yi-	be/become dark, night	*munhawu*	night time

The final examples are those of the INCH with particles:

bäy+thi-	to be left over/behind	*bäy*	BVR "leave"
bäyŋu+thi-	be/have none; to pass away, die	*bäyŋu*	NEGQ

The last two examples may well be instances in which the INCH is fossilized. Other examples in which this suffix appears lexicalized were presented in the discussion of the $\emptyset_{rr}$ conjugation class in section 7.2.4.3. A selection are repeated here:

raŋithi-	go out (of tide)	(cf *raŋi*	"beach")
ŋurruthi-	go in (of tide)	(cf *ŋurru*	"nose, point of land")
yätji-	be/do wrong, badly	(cf *yätjkurr*	"bad")
miḏiki-	be/do wrongly, badly	(cf *miḏiku*	"bad")

Some examples of verb stems with the INCH from the text corpus are given below:

(290) *bala rerri yindi+thi+na+n*
then illness big+INCH+3rd+SEQ OMSIn 85
then the illness got worse

(291) *mak dhuwal dhiyaŋu+ny bala walu+y, bäyŋu yan*
perhaps PROX PROX-ERG+PROM (MVTAWY) "now" sun/time-ERG NEGQ EMPH
guku+ny dharrwa+thi
honey+PROM many/much+INCH-2nd T012p1
perhaps there was not a lot of honey at this time

(292) *bala ŋayi djoy'nha nhä+ŋal balanya+n-ya\ miku+thi+nya+n, ŋuli*
then 3sg sap/gum+SEQ see+3rd such+SEQ-"OK" red+INCH+4th+SEQ HYP
li ga dharpa+ŋur gorru+m
HAB IMPV-1st tree+LOC/ABL be high+1st T022In178
Then he saw some sap which was red up in a tree

(293) *ga yurrnha dhuwa+thi+na+ny ŋunhal+a*
and "and then" moiety name+INCH+3rd+SEQ DIS-LOC+SEQ
dhuwa+ŋur+a wäga+ŋur+a galiwin'ku
moiety name+LOC/ABL+SEQ place+LOC/ABL+SEQ place name OMS ln283
and then (it) became Dhuwa at the Dhuwa place, Galiwin'ku

(294) *yolŋu+ny rumbal wäyin+dhi+na+n ga+n*
person +PROM body animal+INCH+3rd+SEQ IMPV+3rd T022ln268
the human bodies turned into animals

(295) *bala ŋayi ŋuli gumurr+mirri+yi+n*
then 3sg HAB chest+PROP+INCH+3rd T013ln19
then her breasts grew

7.5.3 Transitivizers

7.5.3 1 TRANSitivizer 1 *-ku-*

The suffix *-ku-* is another highly productive verbalizer. It derives transitive verbs from the same classes of stems found with the INCH *-Thi-* except that there are no examples in the corpus with the PROP and PRIV suffixes. The derived verbs are members of the Ŋ conjugation. As with *-Thi-* there are some stems where a potential *-ku-* suffix is present but there is no known free form cognate with the potential root. Thus again there are forms on a continuum from lexicalized to those which are productively coined. Unlike *-Thi-*, however, there is no evidence of lenition associated with this suffix.

Some examples include:

baŋdany+ku-	to dry	*baŋdany*	shallow
gorrmur+ku-	to heat, give power to	*gorrmur*	hot
märrma'+ku-	to do in two ways, make two	*märrma'*	two
marŋgi+ku-	to teach, make known	*marŋgi*	know
galki+ku-	to make close, put near; to visit, meet with someone	*galki*	near
munhawu+ku-	to make dark	*munhawu*	night time, dark

7.5.3.2 TRANSitivizer 2 *-Tha-/-ya-*

The second transitive verbalizing suffix is *-Tha-*. The derived verbs are also members of the Ŋ conjugation. It is another suffix that lenites. In fact in contrast to the *-ku-* suffix, most of the examples have the lenited allomorph and there are no examples in the corpus with the *-Tha-* suffix following a stop or nasal. The productive form of this suffix thus appears to be *-ya-*. Some examples are:

rrambaŋi+ya-	to put, join together	*rrambaŋi*	together
murrukay+ya-	to increase, make bigger	*murrukay*	big
miriŋu+ya-	to make someone into a fighter	*miriŋu*	warrior

The relationship between the two transitive verbalizers is not clear. There is some evidence to suggest that the two forms are in complementary distribution. I have already noted that the distribution in the corpus indicates that there is a single synchronically productive allomorph of the TRANS2 i.e. *-ya-* and that it does not occur following stops and nasals. No such constraints apply to *-ku-*. Furthermore all non-compound stems which are morphologically complex (i.e. in which a suffix morpheme is present between the root and a TRANS verbalizing suffix) occur with *-ya-*, not *-ku-*.

The morphologically complex stems that occur with the TRANS2 predominantly involve the PROP *-mirr(i)* and PRIV *-miriw* but there are two examples incorporating recognizable ALLative suffixes *-lili-* or *-lil-*. The occurrence of *-lili* as an ALL allomorph indicates a fossilized stem, since the Dhuwal ALLative suffix is *-lil*. The appropriate gloss for these stems appears to be "to 'put' something to/into" whatever is denoted by the root.

gurruŋumirri+ya- to give kin-relationships
(cf *gurruŋumirr* "relatives" [*gurruŋu+mirr* kin-relationship +PROP])
goŋmirri+ya- to tame, break (a horse, camel)
(cf *goŋmirr* "domesticated, tame, cared for" [*goŋ+mirr* "hand+PROP"])
guyaŋanhamirri+ya- to cause to think, remember, remind
(cf *guyaŋa+nha+mirr* "think+4th+PROP")
rom+miriw+ya- to do lawlessly
(cf *rom+miriw* "law+PRIV")
wäŋa+lili+ya- to give a wife to a man
(cf *wäŋa+lil* "place/camp +ALL")
raŋan+lil+ya- to put in paperbark
(cf *raŋan +lil* "paperbark +ALL")

The unlenited allomorph *-tha-* is restricted to a few stems and would appear to be a fossilized instance of the TRANS2:

ŋamatha- do well, properly
ŋurrutha- to do prior to, earlier, before (cf *ŋurru* "nose, point")
galkitha- to make something closer (= *galkiku-*) (cf *galki* "close")

There is also one stem with an allomorph with an initial lamino-dental stop *-tja-*. This suggests this suffix originally had a range of allomorphs parallel to those for the *-Thu-* augment.

yätja- do badly, wrongly

All these stems have correlates with *-Thi-* i.e. *ŋamathi-* "be good" *yätji-* "be bad" *ŋurruthi-* "to go out (of tide)" *galkithi-* "be close", which we would expect given the synchronic functions of the INCH and TRANS sufffixes. However, their fossilization is indicated by the fact that they have allomorphs which are no longer productive, by the fact that some roots no longer occur independently e.g. **ŋama* (but cf *ŋamakuli/ŋamakurr* "good") and finally by the fact that some have very distinct senses e.g. *ŋurrutha-* "to do before, first" vs *ŋurruthi-* "to go out (of tide)".

The distribution of *-ku-* and *-Tha-* as described so far is potentially complementary on morpho-phonological grounds. However there are several stems that permit either suffix, *galkitha-/galkiku-* are not unique in this respect. Additional examples however all involve the *-ya-* allomorph.

ŋurruŋu+ku-	*ŋurru+ŋu+ya-*	to put someone first, elect someone (cf *ŋurruŋu* "leader")
ŋäŋarr+ku-	*ŋäŋarr+ya-*	to peel, shell, scale something (cf *ŋäŋarr* "tongue")
lukanydja'+ku-	*lukanydja'+ya-*	to make rich, ornate (cf *lukanydja* "ornate")
mulkuru+ku-	*mulkuru+ya-*	to make strange (cf *mulkuru* "strange, different")
dhunupa+ku-	*dhunupa+ya-*	to put right, do correctly (cf *dhunupa* "right; straight, correct")

I have not yet been able to detect any semantic difference in the use of these terms but further work may reveal them. It should be noted that speakers do not permit the two transitivizers to alternate with all stems, which suggests a lexical factor is involved in the choice of suffix.

It is possible that *-ku-* is evolving as the synchronically productive transitive verbalizing suffix. The overlap of forms which occur with either suffix could be then explained as *-ku-* making further advances in this direction. Within this view *-ya-* is confined to morphologically complex stems, it being a remnant of an earlier productive suffix *-Tha-*. The remaining occurrences of *-tha-/-ya-* may best be viewed as fossilized or fossilizing stems.

Another feature of stems to which *-ya-* is suffixed is that they are predominantly of three or more syllables. There is some evidence from Djapu that this may have been a much more pertinent factor distinguishing between the presence of *-ku-* or

-Tha- (see section 7.6.3). The presence of *-ya-* on these longer simple stems in Djambarrpuyŋu may be a remnant of a constraint found in Djapu, in which stems of more than two syllables not ending in a stop occur with *-Tha-*, not *-ku-*.

The presence of two transitivizers appears to be unique to Dhuwal/Dhuwala varieties. In section 7.6.3 the distribution of transitivizers in other Yolŋu varieties is considered and provides evidence that these varieties may have borrowed the TRANS1 *-ku-*.

Verbs derived with either of the two transitivizers can occur as transitive main verbs or with other verbs in adverbial function. Examples are given below of verb stems derived with the TRANS suffixes functioning as main verbs. For examples of of these stems used adverbially see section 7.7.

(296) *Waŋgany ŋathil gara ŋaraka* ***dhunupa+ya+ŋ,*** *ga yurrnha*
one first spear bone straight+TRANS2+2nd and "and then"
wiripu+ny mala
other+PROM group Spear Bk
First straighten one of the spearshafts and then the others.

(297) *ŋayi dhu ga* ***gorrmur+ku+m*** *nhuna ŋuriŋi girri+y', nhokal*
3sg FUT IMPV-1st hot+TRANS1+1st 2sg-ACC TEXD-ERG clothes+ERG 2sg-OBL
You are made hot by your clothes T009p12

(298) *ga dharpu+m wiripu raŋan,* *ga* ***raŋan+lil+ya+m***
and spear/pierce+1st other paperbark and paperbark+ALL+TRANS2+1st
wiripu+ŋu+lil+a
other+ŋu+ALL+SEQ T204p23
and (they) get some more paperbark and put (the bones) into some different paperbark

7.5.4 Argument changing suffixes

There are two major suffixes which affect the core case array of verbs. These are the CAUSative *-mara-* and the Reflexive-mutualis-Reciprocal *-mi-*. The first produces transitive verbs with an A-O case array. There are many intransitive *-Thu-* verb stems whose root also occurs with CAUS *-mara-* and in which the S role of the intransitive verb corresponds with the O role of the CAUS verb. The second suffix produces verb stems that never occur with an A argument. With transitive verbs this results in the demotion of A to S. However, other roles are not directly affected and an outcome of this is the possibility of a unique S-O core case array.

7.5.4.1 CAUSative *-mara-*

The CAUS suffix morpheme has the effect of introducing a further participant who plays a role in inducing the activity or state expressed by the stem.

The CAUS *-mara-* derives transitive verbs in the Ŋ verb class. It attaches predominantly to verb roots. There are, however, a few instances in which this suffix is attached to non-verbal stems. We will consider the verb stems first.

1. CAUS with verb stems

The form of the stem to which it is suffixed varies according to conjugation membership.

With most conjugations it attaches to the FOURTH form of the verb:

Ø conjugation:

Ø$_a$

dhärra+nha+mara-	to stand something up	*dhärra*	stand/be (intr)
guyaŋa+nha+mara-	to remind	*guyaŋa*	think (tr)

Ø$_i$

galkirrinyamara-	push over, cause to fall	*galkirri*	fall (intr)
gärri+nya+mara-	to record (on tape)	*gärri*	enter/go in (intr)

Ø$_{rr}$

waŋdi+nya+mara-	to make something go quickly	*waŋdi-*	run, move quickly (intr)

Ŋ conjugation:

dhiŋga+nha+mara-	to cause to die	*dhiŋga-*	die (intr)
wurrpu+nha+mara-	to put up (into) (Pl)	*wurrpu-*	be amassed (Pl) (intr)

With N class verbs it attaches directly to the verb root, without the *-Thu-* augment:

lup+mara-	do in water, wash (tr)	*lup+thu-*	be in water, bathe (intr)
dhawar'+mara-	finish end (tr)	*dhawar'+yu-*	finish, end (intr)
rulwaŋ+mara-	to put/place (tr)	*rulwaŋ+dhu-*	put (tr)
gulthu'+mara-	to turn upside down (tr)	*gulthu'+yu-*	be curled up, crouched (intr)

There are only three stems recorded from the N$_L$ conjugation with the CAUS *-mara-*. Two of them are widely occurring and the stem is identifiable as the FIRST form of the verb:

lithan+mara-	to dry (in sun) (tr)	*litha+n*	to dry +1st (intr)
ŋuthan+mara-	to raise, bring up (tr)	*ŋutha+n*	grow (up)+1st (intr)

In a third example however a stem in this class *dharaŋa*-N$_L$ "understand (tr)" occurs in the FOURTH form with the CAUS i.e. *dharaŋa+na+mara+ŋal* "understand+4th+CAUS+3rd".

The first two examples are noteworthy in that they are widely occurring within my corpus and reported across Dhuwal/Dhuwal varieties. I suspect these are old formations while the third example is a more recent form derived according to the currently synchronic productive pattern. This is based on the following observations.

Firstly, they are the only intransitive roots noted for the N$_L$ conjugation. The rest are transitive. The presence of CAUS is thus quite consistent with the correlation between intransitive *-Thu-* verbs and transitive stems with *-mara-*.

Secondly, there is an irregular correspondence between the stems of an Ø$_{rr}$ class verb *roŋiyi-* "go back, return (intr)" and its transitive counterpart *roŋanmara-*N. While the shape of the root in the latter lexeme is analogous to that of the N$_L$ conjugation stems we are considering, it is synchronically suppletive. The existence of a root with this shape that is clearly lexicalized lends some support to the possibility that the two N$_L$ conjugation stems with the CAUS are also fossilized.

The final piece of evidence comes from variation in the stems to which the CAUS is suffixed across varieties. In both eastern Dhuwal/Dhuwala varieties the CAUS suffix is added to the FIRST form of all N conjugation verbs (i.e. the *-Thu* class verbs and the N$_L$ class). Some examples are given below for comparison:

Western Dhuwal/Dhuwala Djambarrpuyŋu/Gupapuyŋu	Eastern Dhuwal/Dhuwala Djapu/Gumatj	
lup+mara-	*lup+thu+n+mara-*	wash (tr)
liw'+mara-	*liw'+yu+n+mara-*	surround (tr)
ŋutha+n+mara-	*ŋutha+n+mara-*	to raise (tr)

Since western varieties attach the CAUS directly to the root for verbs in the largest verb class i.e. the N or-*Thu*- class, the FIRST form plus *-mara-* pattern found in the few N$_L$ conjugation stems is severely marginalized. This is the only class with stems with the CAUS attached to the FIRST form. However, the occurrence of the form *dharaŋa+na+mara*-N [understand+4th+CAUS] "to make understand" suggests it is in fact no longer productive. This form suggests the use of the FOURTH form has been regularized for all classes other than the N class.

In an overwhelming number of cases there is a direct correlation between an intransitive stem, usually with *-Thu-*, and a transitive stem with *-mara-*. About a quarter (in the vicinity of 120) of the N conjugation class verbs have so far been recorded with a CAUS counterpart. The fact that common roots can occur with either *-Thu-* or *-mara-* in western varieties gives the appearance that the process is non-directional (see Comrie 1985 p322). However there are numerous examples of *-Thu-* stems that are inherently transitive. Therefore the two suffixes do not stand in comparable relations to common stems. This, and the fact that verb stems from other conjugations which do not have the *-Thu-* augment also occur with the CAUS *-mara-*, indicate that the process is in fact a directed one, deriving transitive from intransitive stems. Formally this is much more obvious in the eastern Dhuwal/Dhuwala varieties, where the CAUS is attached to the *-Thu-* augment plus the FIRST inflection.

Inconsistent with this general pattern are a handful of examples with transitive verb stems as the base. One might expect that this is associated with a valency increase to a ditransitive verb but I have no direct evidence that this is so.

With the two transitive mental state verbs which have been recorded with the CAUS the function of the suffix appears to be semantic rather than changing the argument array. We saw one example above in *dharaŋa*-N "understand (tr)" and *dharaŋanamara*-Ŋ "to cause to understand, bring to understanding (tr)". Another example is *guyaŋa+nha+mara*-Ŋ "remind, cause to think of something (tr)" and *guyaŋa*-$Ø_a$ "think (tr)". All these forms appear to be transitive stems. I have been unable to elicit the forms with the CAUS with three core roles with an ERG(A)-ABS/ACC-ABS case array.

There are two further examples in the corpus of CAUS with transitive stems where the relation between the bare stem and the CAUS stem is not yet clear. These are *gulkthu*-N "cut" and *gulkmara*-Ŋ "cut", and *rulwaŋthu*-N "put" and *rulwaŋmara*-Ŋ "place, put".

Also inconsistent with the general pattern in which the CAUS derives transitive stems from intransitive are a few examples with CAUS *-mara-* which have no intransitive correlate. These include:

bapmara-	paint, splatter, dab, mark
bartjunmara-	beat, whip, slap

It should be noted however, that these could be viewed as fossilized. This situation would be quite compatible with the existence of fossilized forms found with many other suffixes.

2. CAUS with non-verb stems

There are only a handful of examples with *-mara-* suffixed to non-verbal stems. They are:

diltjimara- to turn something on its back
(cf *diltjiyu-* "to bend over", *diltji* "back")
ŋurrwumara- to hide
(cf *ŋurrwu'yu-* "to be protected/sheltered", *ŋurrwu* "out of sight"
gänaŋ'mara- to separate
(cf *gänaŋ'thu-* "to be separate, different", *gäna* "alone, separate"
bulnha'mara- to slow something down
(cf *bulnha'yu-* "to slow down", *bulnha* "slow(ly)"

It is noticeable that all these non-verbal roots also occur with *-Thu-*.
This suggests there is a direct correlation between the potential for a non-verbal stem to occur with CAUS *-mara-* and its occurrence with *-Thu-*, i.e. that there is a direction of derivation from intransitive to transitive.

7.5.4.2 Reflexive-mutualis-Reciprocal *-mi-*

The R/R is the only derivational suffix which produces stems that have a distinct inflectional pattern from those of underived verbs.

These inflect in a manner that aligns them with the Ø conjugation. Both the FIRST and SECOND inflections are identical, each having a final *-rr*. This therefore distinguishes the R/R pattern from the $Ø_{rr}$ class where the two inflections are different, the 1st having the final *-rr* and the 2nd a final *-i*. The $Ø_{i}$ class also has identical forms in the FIRST and SECOND inflections, but these have a final *-i* rather than *-rr*.

Sample verb stems from each of these classes are given below:

	1st inflection	2nd inflection	3rd inflection	4th inflection
$Ø_{mirr}$	waŋanhami+rr	waŋanhami+rr	waŋanhami+n	waŋanhami+nya
$Ø_{rr}$	roŋiyi+rr	roŋiyi	roŋiyi+n	roŋiyi+nya
$Ø_{i}$	ŋäthi	ŋäthi	ŋäthi+n	ŋäthi+nya

(Glosses for the stems: *waŋa+nha+mi-* "talk (intr/tr)+4th+R/R-", *roŋiyi-* "go/come back" and *ŋäthi* "cry, wail")

Like the CAUS, the R/R attaches to different forms of the verb according to their conjugation membership. In the Ŋ and Ø conjugations the stem is the FOURTH from of the verb e.g. *luŋ'mara+nha+mi-* (cf *luŋ'mara-*Ŋ "gather (tr)") and *ŋäkirri+nya+mi-* (cf *ŋäkirri-*$Ø_1$ "cover (tr)"). For the N conjugation verbs the stems are in the 1st inflection e.g. *ŋarrju+n+mi-* (*ŋarrju-* N "speak angrily (tr)"), *gurrupa+n+mi-* (cf *gurrupa-* N_L "give (ditr)") and *bitja+n+mi-* (cf *bitja-*N_K "do thus (Adv)"). This is parallel to the CAUS *-mara-* suffix except that the latter attaches directly to the root of the *-Thu-* class verbs of the N conjugation, rather than the FIRST form (e.g. *lapthu-* "open (intr)" and *lapmara-* "open (tr)").

For a discussion of the uses of the R/R see section 11.1.3

7.6 Cross variety notes concerning the suffixes involved in verb derivation

7.6.1. Re the *-Thu-* verb class

The allomorphy in Djapu appears to be almost identical, with the same differences in distribution between the verb roots (i.e. the *-Thu-* augment) and non-verb roots (i.e. the *-(')Thu-* verbalizer) as in Djambarrpuyŋu (see Morphy 1983).

In the equivalent of the *-Thu-* verb class Ritharrŋu (Heath 1980b) has a distinct suffixing pattern after nasals. The nasal is followed by a homorganic stop rather than *-thu-* e.g. *wilaŋ'gun* (cf Djambarrpuyŋu *wilaŋ'thun*).

Zorc (1986) lists some alternations with *-thu* rather that *-tju* as the augment e.g. *dhakatjtju-* and *dhakatjthu-* "pout, be surly, hate". The *-thu* alternates appear to have been recorded for eastern varieties. It is possible that the palatal initial allomorph in these varieties is being reanalyzed as part of the verb stem and the synchronically productive *-thu-* allomorph attached as the augment.

7.6.2 Re INCHoative *-Thi-*

This is widespread throughout the Yolŋu family as an intransitive verbalizer/inchoative. It is reported for Djapu, Gupapuyŋu, Gumatj and Ritharrŋu (all members of the Southern sub-group) as well as having cognates in Dhaŋu, Djinaŋ and Djinba (see Morphy (1983), Lowe (n.d.a), Ross (n.d.) and Amery (1985), Schebeck (1976),Wood (n.d), Waters (1989), and Zorc (1986)). Palatal cognates occur in some Dhaŋu varieties as well as in Djinaŋ and Djinba.

Morphy makes the suggestion that the inchoative suffix is derived from **dhirri/djirri* which has reflexes in many Australian languages functioning as proprietives or deriving intransitive verbs from transitive ones (1983 p110).

The distribution of allomorphs in Djambarrpuyŋu and Djapu is similar. One point of difference is the fact that the lenited variant is only possible following a vowel in Djapu while it is also found after liquids and semivowels in Djambarrpuyŋu. In both varieties the lenited variant is always found after the PROP *-mirr(i-)*.

The distribution of allomorphs presented for Gupapuyŋu by Lowe (n.d.a L49) appears identical to that for Djambarrpuyŋu.

The most common allomorphs in Djinaŋ and Djinba are lenited but lenition is not reported at all for this suffix in Ritharrŋu. For Ritharrŋu this restriction on lenition is consistent with the general distribution of lenition. However the fact that Djapu appears to lenite in more restricted environments than Djambarrpuyŋu and Gupapuyŋu is counter to the trend we saw for lenition of morpheme internal stops to be more advanced in eastern varieties (see section 2.4.2.4).

The material I have seen for the Dhaŋu variety, Gälpu, as spoken at Galiwin'ku shows the allomorphs *-tji* after stops and nasals and *-yi* elsewhere consistently (Wood 1978 p72). This, together with the prevalence of the *-yi* allomorph in Djinaŋ and certain Djinba varieties, suggests local pressure for the shift towards lenited allomorphs in western Dhuwal/Dhuwala.

Interestingly Schebeck's work on Dhaŋu was, I believe, based on speakers living in the eastern community of Yirrkala. In his description the suffix *-Thi* is attributed with allomorphs *-thi, -yi* and *-tji*, the latter occurring only following a palatal consonant (see Schebeck 1976b p547 fn32). This allomorphy is different to that just described for Gälpu as spoken at Galwin'ku and indicates a difference in the allomorphy of eastern and western Dhaŋu varieties corresponding with that occurring in Dhuwal/Dhuwala varieties.

7.6.3 Re the TRANS suffixes

Morphy reports both TRANS suffixes in Djapu i.e. *-ku-* and *-Dha-*, and found similar problems with their distribution and functions as I have described for Djambarrpuyŋu. She suggests that the distribution is both phonological and lexical.

As in Djambarrpuyŋu only *-ku-* is found with stop final stems. However, she does note a nasal final stem with *-dha-* i.e. *ŋonuŋ-dha-* "do heavily, make heavy". I have no such evidence for Djambarrpuyŋu where the equivalent stem occurs with *-ku-* i.e. *ŋonuŋ+ku-* She found that the choice of suffix was lexically determined for disyllabic stems which did not end in a stop. There is no mention of the overlap for certain stems found in Djambarrpuyŋu.

Morphy also found that stems of more than two syllables which do not end in a stop take *-Dha-* while disyllabics may take either suffix. This is not categorically the case in Djambarrpuyŋu although there is a clear tendency for disyllabic stems to occur with *-ku-* and longer stems with *-ya-*. However, there are several stems of more than two syllables with *-ku-* e.g. *buyuwuyu+ku-* "to make smooth", *murrukay+ku* "to kill (tr)", *wundaŋarr+ku-* "to make firm, strong" (see Morphy 1983 p46-7). I have interpreted the distinction in terms of the morphological complexity of the stem rather than the number of syllables.

There are clear parallels in the distributions of these two suffixes in the two Dhuwal varieties. It is possible that Djambarrpuyŋu makes more generalized use of *-ku-* than Djapu. The evidence for this lies in the fact that cognates of Djapu with *-Dha-* occur with *-ku-* in Djambarrpuyŋu. Further support of a difference in distribution is the occurrence of stems with either suffix in Djambarrpuyŋu.

Both suffixes also occur in Gupapuyŋu (Lowe n.d.a L.50), but only the *-ya-* allomorph of the TRANS2 is attributed to this variety. The stop initial allomorph *-tha-* of the TRANS2 is described as a variant of *-ku-* used in other dialects.

The presence of both TRANS suffixes appears unique to Dhuwal/Dhuwala. Heath only lists Factitive (=TRANS2) *-tha-* for Ritharrŋu (1980b p61) and only *-ku-* is reported for Dhaŋu (Schebeck(1976b p 523 and p547 fn 33; Zorc/Wood in Zorc (1986)). Waters also derives the Djinaŋ and Djinba Factitive suffixes *-dji-* and *-Dja-* respectively from an earlier **-Dha-* (1989 pp118-120). This generally locates *-Tha-* to the south and west of the Yolŋu area, and *-ku-* to the north-east. The distribution within Djambarrpuyŋu which points to *-Tha-* as an older form and the overall geographical distribution of transitive verbalizer cognates suggests that *-ku-* may have been borrowed into Dhuwal/Dhuwala varieties from Dhaŋu.

7.6.4 Re CAUS *-mara-*

This occurs in all Dhuwal/Dhuwala varieties. As was described in section 7.5.4.1 Gupapuyŋu and Djambarrpuyŋu are distinct from Djapu in Gumatj in attaching the CAUS suffix directly to the verb root of members of the N class (cf Djambarrpuyŋu/Gupapuyŋu *lupmara-* "to be with water (tr)" and Djapu/Gumatj *lupthunmara-*).

7.6.5 Re R/R *-mi-*

This suffix is reported for all Dhuwal/Dhuwala varieties, Dha'yi and Ritharrŋu. Dhaŋu and Djaŋu also have a R/R suffix and a PROP that are homophonous i.e. *-mi(-)* which while clearly cognate with forms found in the latter group never has a final */rr(i)/* either as the PROP or as an inflected form of the R/R.

All four varieties attach the suffix to the same set of stems i.e. to the FIRST form of verbs in the N, N_L and N_K classes and to the FOURTH form of verbs in other classes. Schebeck (1979 p522) also reports similar variation according to conjugation, in the stems to which the R/R is attached.

In eastern Dhuwal/Dhuwala varieties this is parallel to the stems to which the CAUS suffix attaches. In western varieties the two suffixes attach to different stems of verbs in the N class. The R/R attaches to the FIRST form and the CAUS to the verb root. Since this is the largest verb class this difference is significant for dialect variation.

7.7 Adverbial functions of verb stems

A main verb in a clause can be accompanied by another verb stem which modifies the main predicate. It must agree in inflection with the main verb but need not agree in transitivity. The main verb controls the coding of core participants. These verbs may be verb stems that occur as main verbs in their own right, verb stems derived with the INCH and TRANS suffixes, which may also occur as verb stems in their own right, or the INTENS *mirithi-*$Ø_{rr}$ which cannot occur as a main verb. The details of potential collocations and the extent to which this function is productive has yet to be determined. A few examples from the text corpus are presented below:

(i) Regular verb stems functioning as modifiers of main verbs:

(299) *roŋiyi* ***nhäŋu*** ***ɖawa'yu+rr***
go/come back(intr)-2nd look(tr)-2nd look back/to side(intr)+2nd T018p7
(you) look back (at where the words came from)

(300) *dhawar'yu+na+n* ***lupthu+na+n,*** *latjuwarr+nha*
end/finish(intr)+3rd be/do in water(intr)+3rd+SEQ BVR-disperse+SEQ
(they) finish with (cermoninal) cleansing and then disperse Burrp13

(301) *ŋayi ŋuli* ***dharaŋa+na*** ***nhuma+na*** *maɖakarritj+thu+ny*
3sg HAB understand(tr)+4th smell(intr/tr)+4th angry/dangerous+ERG+SEQ
It the dangerous one (snake) is recognizes the smell (of a human being) T102Bp4

(302) *dharaŋa+r* *nhä+ŋal* *ŋarra* *ŋanya*
understand(tr)+3rd see(tr)+3rd 1sg 3sg-ACC Dip
I recognized him/her

(ii) Derived verb stems functioning as modifiers of main verbs:

(303) *ga ŋayi+ny* *dhu* ***yarrga'yu+n*** *ŋunhi yiki* ***djinbulk+ku+m,***
and 3sg+PROM FUT grind(tr)+1st TEXD blade/knife sharp+TRANS+1st
gäyit
shovel-nosed spear T102Bp13
and he grinds that shovel-nosed spear blade sharp

(304) *yurr ŋarra dhu ŋunhi+yi* *ŋonuŋ+nha, ga ɖamba+ny, dhäruk+nha+ny*
ADD 1sg FUT TEXD+ANA heavy+SEQ and light+PROM word+ACC+PROM
nhirrpa+n ***waŋgany+gu+m***
put(tr)+1st one+TRANS1+1st T010p1
but I will put those "heavy" and "light" (sound/accent) to the one word

(305) *nhaltja+n nhe dhu* *.miliny* ***dhunupa+ya+m*** *djuŋuny+nha*
do what+1st 2sg FUT meaning correct/right+TRANS2+1st meaning
nhirra+n *nhokiyin+gal* ***nhe*** *dhäruk+lil*
put(tr)+1st 2sg-EMPH+OBL (2sg) word+ALL T018p17
how you will put the meaning correctly into your own language

(306) *ŋäthil+nydja ga+n* *dhuwal yolŋu walal* ***marl+mirlw+ya+ŋal*** ***nhina+n***
prior+PROM IMPV+3rd PROX person 3pl trouble+PRIV+TRANS2+3rd sit+3rd
In past times people lived here peacefully T401p23

(307) *ɖärrpa* *wal ga* ***ŋayatha+m*** ***marŋgi+thi+rr*** *ga wäyin*
king brown snake 3pl IMPV-1st hold/touch(tr)-1st know+INCH+1st and animal
ŋunhi \bodiny *wal ga* *marŋgi+thi+rr*
TEXD quiet/harmless 3pl IMPV-1st know+INCH+1st T102Bp7-8
they learn (how) to handle a king brown snake and they learn how to handle harmless animals (when exploring holes in the ground for game)

See also examples 253 and 1027.

(ii) Verb stems that only occur in adverbial function:

(1) *wangany yan mayali ŋunhi bili ŋarra* ***lakara+ŋal*** ***ŋurrtha+ŋal***
one EMPH meaning TEXD "same" 1sg tell(ditr)+3rd do first, before+3rd
one meaning is that one I told before T009

For examples with the INTENSifier *mirithi-Ø* see section 13.3.1.

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Ph. D. 30 Oct. 1992

DJAMBARRPUYŊU

A Yolŋu Variety
of Northern Australia

Volume II

Melanie P. Wilkinson

A thesis submitted in fulfilment
of the requirements for the degree of
Doctor of Philosophy

Department of Linguistics

University of Sydney

March 1991

CHAPTER 8

INTERROGATIVE/INDEFINITE PROFORMS

There are six key interrogative/indefinite lexemes in Djambarrpuyŋu - *yol* "who/someone", *nhä* "what/something", *wanha* "where/somewhere", *nhätha* "when/sometime", *nhämunha(')/nhämuny(')* "how many or much/however many" and *nhaltja-* "do what or how/do something".

These generally correlate with major word class distinctions. Thus there are both nominal and verbal forms, and within nominals "humans", non-"humans", demonstratives and temporals are distinguished. The nominal stems show inflectional categories parallel to those word classes with which they correlate. There are in fact two verbal stems, *nhaltja-* which is the general verbal interrogative and *wanhawitja-* the Perlative case form of the locational interrogative/indefinite. They are both members of the small conjugation class N_K.

The inflected forms are presented in Table 49. The stop initial suffixes found on the pronominal interrogative/indefinite forms show patterns of lenition in common with other closed class paradigms. Thus stop initial suffixes are generally unlenited in environments which would require a lenited allomorph in open classes.

There are also certain other interrogative/indefinite proforms based on the stem *nhä- nhämirr* "how about" and *nhäthinya* "be how, what/some kind of" which have functions not clearly allied with particular word classes. These are considered below in section 8.7. The temporal stem *nhätha* and the quantity interrogative *nhämunha(')* have been listed independently as there is no synchronic evidence for further analysis, despite the shape of their initial syllables. Some comparative evidence from Ritharrŋu indicates a possible historical source for the temporal stem. The cognate stem in Ritharrŋu, *nhäthaŋ'*, is synchronically dimorphemic The second morpheme *-thaŋ'* is a productive temporal suffix (see Heath 1980b p41, p 56).

These proforms are used both as interrogatives, and to convey indefinite reference. As interrogatives they normally, but not always, appear clause initially. They may question the identity of a participant or circumstance filling a particular role, or the identity of a particular situation. They may also ask for further information

Table 49: DJAMBARRPUYŊU INTERROGATIVE/INDEFINITE PROFORMS

Nominal stems

	yol	**nhä**	**wanha**	**nhämunha(')** **/nhämuny(')**	**nhätha**
	"human" "who"	"non-human" "what"	place "where"	quantity "how many"	time "when"
Instr	-	*nhaliy*[1]	-	?	-
Temp	-	*nhaliy*	-	?	*nhätha*
A	*yolthu*	*nhaliy*	-	*nhämunharay*	-
S	*yol*	*nhä*	-	*nhämunha(')*	-
O	*yolnha*	*nhä*		*nhämunha(')*	-
DAT	*yolku*	*nhaku*[2]	*wanhaŋuw*		*nhäthaŋuw*
OBL	*yolkal*	-	-	?	-
OBLS	*yolkalaŋa/u-*		-	?	-
OR	*yolkuŋ*	-	-	?	-
LOC	-	*nhäŋur*	*wanha* *wanhal* *wanha(ŋu)mi*	?	-
ALL	-	*nhäkurr* *nhälil*	*wanhawal*	*nhämunha'lil*	-
ABL	-	*nhäŋur*	*wanhaŋur*	*nhämunha'ŋur*	?
PERL	*yolkalaŋawurr*		*wanhawitja*-N$_K$ (verb stem)		-
ASS	*yolkalaŋawuy* *nhäthaŋuwuy*	*nhäpuy*	*wanhaŋuwuy*		
PROP		*nhämirr* (+How about?)	-	*nhämunha(')mirr* */nhämuny(')mirr* (how many times)	-
PRIV		*nhämiriw*			
KINPROP		*nhä'mirriŋu*			

Verbal stems

	nhaltja-N$_K$ general verbal stems "do what"	**wanhawitja-N$_K$** Perlative case place stem "do/go which way"
FIRST	*nhaltja+n*	*wanhawitjan+n*
SECOND	*nhalayak*	*wanhawiyak*
THIRD	*nhaltja+rr*	*wanhawitja+rr*
FOURTH	*nhaltja+na*	*wanhawitja+na*

Other:

	"what/some kind of, be how"
S/O	***nhäthinya***
PROP (Temp)+ASS	*nhäthinyamirriwuy*

Key
- \- non-occurring forms
- ? non-attested but potentially possible
- (...) special feature of those forms

[1]Heath (1981a p33) records the ERG form *nhäthu* and the DAT form *nhäku* as Djambarrpuyŋu but I have not heard these used by speakers at Galiwin'ku.

regarding a particular nominal or situation. They are used in both information questions and polar questions (see section 11.4.2 and 11.4.3).

As in many other Australian languages interrogative forms are also used to express indefinite reference (cf Dixon 1980 p372). In Djambarrpuyŋu this function is coded periphrastically and the interrogative/indefinite forms occur together with certain particle/demonstrative-like stems. The most commonly occurring particle is *ŋula* (INDEF2) but the indefinite demonstrative-like stems *be* (INDEF) or *dhika* (INDEFP) are also found in combination with interrogative/indefinite proforms (for examples of the latter see sections 6.5.2.3.2 and 6.5.1.3). Less commonly an interrogative/indefinite proform appears in the texts in indefinite function collocated with a nominal and none of these particles. Then it appears to indicate an indefinite referent of the type designated by the nominal (see examples 312 and 340 below)

Other constructions in which interrogative/indefinite proforms feature are finite subordinate clauses and exclamative clauses (see section 12.2.1.2 and 11.4.4).

8.1 The Human Interrogative/Indefinite pronominal *yol*

The interrogative/indefinite *yol* occurs with distinct forms for S, A and O just as do other human referring nomens. The A form has an unlenited ERG allomorph following a liquid i.e. *yol+thu.* This is quite consistent with the non-lenition of stop initial suffixes found throughout this and other closed class paradigms. Lenited forms are only found after the OBLS.

Besides the DAT *-ku* the other suffixes with which this stem occurs are those closely associated with "human" reference, namely the OBL *-kal*, used for local cases and possessors, the OR *-kuŋ(u-)* and the OBLS *-kalaŋu/a-*, used before PERL, ASS and ABL suffixes.

(i) Interrogative examples:

(309) *dhuwal ga yolŋu marrtji, yol*
PROX IMPV-1st person go-1st, who T208p14
Who is this person going by?

(310) *wo **yolthu** dhu guŋga'yu+n maŋawiny+nha,*
or who+ERG FUT help+1st avoidance address/reference term+ACC T208p14
or who will help Maŋawiny?

(311) *yol+kuŋ bili dhuwal dhäwu+ny*
who+OR COMPL PROX story+PROM
From whom is this story? GuthMEGp2

(312) *yaka bukmak+ku waŋa-djaw'yu+n+mi+nyara+w\ yol nhe dhu rirrakay+yu*
NEG all+DAT arm-take+1st+R/R+4th+DAT who 2sg FUT sound+ERG
ŋarra+kal lulumurr'yi+rr
1sg+OBL want+3rd T018p6
(the tapes are) not for everyone to hand around, whoever may become wanting by (hearing) my story

(ii) Indefinite reference:

(313) *wo ŋula yol+kal nhe dhu wäŋa+lil wiripu+ŋu+wal gärri, yaka*
or INDEF2 who+OBL 2sg FUT place+ALL other+ŋu+OBL enter-1st/2nd, NEG
or you don't just go into some other person's place T021p1-2

8.1.1 Special augmentative use of the stem *yol*

Yol occurs in a special expression to indicate that something is of great size or intensity. In this function it co-occurs with either the EMPH particle *yan*, the lexeme *waŋarr* "ancestral being", or both. It is also possible for the combination of *yan* and *waŋarr* (i.e. without *yol*) to function in this way. *Yol* and *waŋarr* take suffixes in agreement with the nominal they are modifying. However, in this function *yol* takes the regular nomen case allomorphs, not those particular to the interrogative/indefinite paradigm. Thus we find the ERG form *yolyu* rather than *yolthu*. The agreement also appears sensitive to animacy. It will be noted that in the first example below the nominal is in O function but there is no ACC suffix on *yol* in agreement with that on the nominals with which it co-occurs. This is counter to what we would expect given the "human" use of *yol* as an interrogative/indefinite proform. Unfortunately I have no examples of the augmentative use of *yol* with local cases.

(314) *bala dharr+nha nhäma ŋanya, dhurrpa+n, yol yan galarrwuy+nha*
then BVR see+SEQ see-1st 3sg-ACC imprint+SEQ "huge" proper name+SEQ
bäru
crocodile
then we saw an imprint of a huge Galarrwuy crocodile T8 p2

(315) *walala=ny guyinarr+yu warray ŋayatha+m yol+yu yan*
3pl=ACC cold+ERG "indeed" hold+1st who+ERG EMPH
waŋarr+yu
ancestral being+ERG Baŋ'p1
"they were held by a great coldness"
they were freezing cold

(316) *waltjan nhuŋu dhu buna yol waŋarr ŋula wanha+mi*
rain 2sg-DAT FUT arrive-1st "who" "ancestral being" INDEF2 where+LOC$_2$
wäŋa+ŋur
place+LOC/ABL T009p16
heavy rain/ a great rainstorm/downpour meets you at some place

I have not investigated the full extent of the use of this periphrastic expression. It is possible that in invoking ancestral beings to convey great size or intensity, its use is confined to features of the environment, flora and fauna or other phenomena with which ancestral beings are generally associated.

8.2 The non-human interrogative/indefinite pronominal *nhä*

Like non-"human" referring nomens case marking follows an ergative-absolutive pattern. Local case marking is also distinctively non-"human". Adnominal suffixes with which *nhä* occurs include the ASS *-Puy,* PROP *-mirr(i-)* and PRIV *-miriw.* It has also been recorded with the derivational suffix KINPROP *-'mirriŋu.* Stop initial suffixes are all unlenited i.e. DAT *-ku,* ASS *-puy* and ALL(Interrog) *-kurr.*

The A/Instr/Temp form *nhally* has a unique syllable /li/ compared to other *nhä-* stems. This may have its origins in an earlier ERG allomorph. Heath (1980b) for instance, reports *-li* as a Ritharrŋu ERG suffix, albeit confined to vowel final kin term roots. It is also a Djinaŋ ERG allomorph (Waters 1989 p27). However, the final /y / in the Djambarrpuyŋu form looks to be the regular ERG post-vocalic allomorph. Its presence is affirmed by the PROM and SEQ allomorphs which attach to it, namely *-nydja* and *-nha,* both of which occur after semivowels but not vowels.

The use of the form *nhäkurr* (analyzable as *nhä* plus the regular PERL suffix *-kurr*) to code the Allative case is an everyday one, which is widely recognized as a distinctive Djambarrpuyŋu feature. Examples of this particular use of this stem in both interrogative and indefinite function are given below:

(317) *djanda'yu+n nhuma ga, nhäkurr\ wäŋa+lil*
go+1st 2pl IMPV-1st what+ALL(Interrog) place+ALL
Where are you going? Home. T208p8-9
(In the section of the text from which this is extracted, the speaker is demonstrating appropriate ways to speak to someone in the kin category *maralkur* MMB. The verb *djanda'yu-N* is appropriately used instead of *marrtji* only to people in certain kin categories, including this one. The use of a plural pronoun is also required when addressing people in certain categories, again including this one.)

(318) *wo ŋula nhä+kurr wiripu+ŋu+lil wäŋa+lil*
or INDEF2 what+ALL(Interrog) other+ŋu+ALL place+ALL T012p28
or to whatever other places

The stem *nhä* occurs in the corpus with various local case suffixes other than the ALL(Interrog) *-kurr*, namely the LOC/ABL *-ŋur* and the ALL *-lil*. The full extent of the overlap or distinction between locative cases with *nhä* and the place interrogative/indefinite *wanha* "where" are not yet clear. Speakers recognize *nhälil*, *nhäkurr* and *wanhawal* as equivalent, although they will say that *nhäkurr*, rather than *nhälil*, is "proper" Djambarrpuyŋu. The latter claim is largely matched by the distribution of these forms in the corpus, particularly in the speech of older people. However, there are some occurrences of *nhälil*. It is not clear if there is any difference between *nhäkurr* and *wanhawal*. In the text in which example 317 occurred the speaker also gave the following alternative:

(319) ***wanhawal*** *nhuma ga djanda'yu+n+dja*
where-ALL 2pl IMPV-1st go+1st+PROM
Where are you going?

Below I give some further instances of the use of *nhä* both as an interrogative and for indefinite reference.

(i) Interrogative examples:

(320) ***nhä*** *ŋayi ga+n djäma+ny\ dharripa*
what 3sg IMPV+3rd work(tr)+PROM trepang T208p16
What (work) was he doing? Trepang

(321) *nhä dhuwal gäthur+nydja, Monday*
what PROX today+PROM, Monday T012p3
Is today Monday?
OR What's today, Monday?

(322) *bili* ***nhaliy*** *ga bitja+n+dhi lakara+m\ bäpi+y*
because what-ERG IMPV-1st do thus+1st+ANA tell+1st snake+ERG T204p2
Because what said this be so? Snake.

(323) ***nhaliy*** *mak ŋayi dhu roŋiyi*
what-ERG maybe 3sg FUT return-2nd T208p16
When will s/he return?

(324) *nhä way,* ***nhaku*** *nhe marrtji+na+ny*
What hey what-DAT 2sg go/come+3rd+PROM
What's up, what have you come for/why have you come?

(ii) Indefinite reference:

(325) *luka+n ŋayi ga+n ŋula nhä+n, w.....i+y+ny'tja*
eat+3rd 3sg IMPV+3rd INDEF2 what+SEQ proper name+ERG+PROM T204p40
and she, W.....i, was eating every/anything

(326) *dharrwa+ŋur ŋayi dhu ga ŋula nhä+ŋur mala djäma*
many+LOC/ABL 3sg FUT IMPV-1st INDEF2 what+LOC PL/group work(tr)
s/he works on many things T012p28

(327) *ŋarra balaŋ ŋunhi ŋula nhä+mirr\ djimindi+mirr+nydja ga*
1sg IRR TEXD INDEF2 what+PROM fish spear+PROP+PROM and
djimuku+mirr+nydja\ dharpu+nha+n ŋunhi+yi maranydjalk+nha
metal bar+PROP+PROM spear+4th+SEQ TEXD+ANA stingray+?ACC/SEQ T8p2
Had I had something, a fish spear or metal bar, I might have speared that stingray

See also example 413 for *ŋula nhämirr* with the sense "some number of times". For a special use of *nhämirr* in questions see section 8.8.2.

(328) *ŋunhi+yi nhe bala-ŋuthanayŋu, yuŧa+n yolŋu\ diku ŋunhi+yi nhe*
TEXD+ANA 2sg young adult, new+SEQ person raw/unripe TEXD+ANA 2sg
yolŋu\ yuŧa yän\ bäki+miriw, ŋula nhä+miriw
person new EMPH use+PRIV INDEF2 what+PRIV T010p21
you are a young adult, a new person, "raw", only new, unused, without whatever

See also example 423.

(329) *dhuwana nhina ga\ ga nhanukal yapa+'mirriŋu+wal, ŋula yol+kal*
PROX+SEQ sit-1st IMPV-1st and 3sg-OBL Z+KINPROP+OBL INDEF2 who+OBL
mak, yaka ŋarra marŋgi, bulu\ waku+'mirriŋu+wal, nhä'mirriŋu+wal
maybe NEG 1sg know more (Z)C+KINPROP+OBL what+KINPROP+OBL
(he) sits with his Z, with anyone maybe, I don't know, also with a (Z)C, with some other kin T204p16

8.3 The locational interrogative/indefinite proform *wanha*

The inflections found with the locational interrogative/indefinite stem *wanha* correlate with those found in the demonstrative paradigm. It only occurs with local cases i.e. LOC *-l*, ALL *-wal* and ABL *-ŋur*, the forms and the separate coding of the All and Abl being identical to demonstratives. The LOC_2 suffix variant *-(ŋu)mi* and the expression of Perlative case with a verbal stem i.e. *wanhawitja-* are also features distinctive of demonstratives. The ASS and DAT also occurs with this stem but require the augment *-ŋu-* between the stem and the suffix. This augment is only required with the ASS in the demonstrative paradigm. Distinct from the demonstrative paradigm is the fact that there are no stem changes, the stem *wanha* being constant throughout the paradigm.

The range of suffixes with which this stem occurs is similar to that found with Locationals.

There is a plethora of interrogative/indefinite forms marking local cases. Possible Locative case forms are *wanha, wanhal, wanhami, wanhagumi* and *nhägur*. On the available evidence the *wanha* based stems appear reasonably interchangeable, although *wanhal* may be confined to clauses with verbal predicates, and *wanha* is certainly most frequent in equational clauses. Possible Allative case forms are *nhäkurr, nhälil* and *wanhawal*. Except for *nhäkurr*, the *wanha* based stems are more frequent than the *nhä* based stems in these cases. Of the possible Ablative case forms, *nhägur* and *wanhagur* the latter seems to be more common. As mentioned before the nature of the relationship between the two sets of stems is not yet understood.

(i) Interrogative examples:

(330) ***wanha*** *nhe ŋanya ganarrtha+ŋal+nydja* ***wanhami*** *wäna+ŋur+nydja*
where-LOC 2sg 3sg-ACC leave+3rd+PROM where-LOC$_2$ place+LOC+PROM
Where did you leave her, at what place? T022p16

(331) ***wanha=l*** *nhuma ga+n ŋorra+n*
where=LOC 2sg IMPV-3rd sleep+3rd
where were you sleeping?

(ii) Indefinite example:

(1) *ŋunhi* ***walal*** *ŋuli* ***wanha+ŋur mala*** *wäŋa+ŋur* ***buku-manapan+mi+nya***
TEXD 3pl HAB where+ABL pl place+LOC/ABL unite+R/R+4th
bäpurru+mirri+y balanyara+y wäŋa+y
clan+PROP+ERG such+ERG place+ERG T016p9
they join together, from all different places, at the time of a funeral

8.4 The temporal interrogative/indefinite proform *nhätha*

This has very restricted case options, occurring only as the bare stem, in Temporal case, and with the ASS *-wuy* and the DAT *-w*. The augment *-ŋu-* is required before a further suffix.

The ERG stem of *nhä, nhaliy*, also occurs in Temporal function. It commonly occurs together with another nominal having temporal reference e.g. *walu+y*, which *nhätha* does not. It is thus possible that there is a distinction in scope with the bare stem *nhätha* always having clausal scope, while *nhaliy* can be adnominal.

(333) *nhätha nhe ḻuka+ny*
when 2sg eat+PROM 851p22
When did you eat?

(334) *nhätha nhe dhuwal nhina+na+ny, märr weyin'+nha*
when 2sg PROX sit+3rd/4th+PROM somewhat long+SEQ
dhiyal galiwin'ku+ny
PROX-LOC place name+PROM T008p4
How long have you been living at Galiwin'ku?

(335) *nhätha+ŋu+wuy dhuwandja\ barpuru+ŋu+wuy*
when+ŋu+ASS PROX-PROM yesterday/recently+ŋu+ASS
When's this from? From yesterday

(ii) Indefinite example:

(336) *ŋorra+nha ga+nha ga ŋula nhätha+yi dhawar'yu+na+ny,*
lie+4th IMPV+4th and INDEF2 when+ANA finish+4th+PROM T102Bp29
(the pieces of emu) lie there and are finished some time (later)

8.5 The quantity interrogative/indefinite proform *nhämunha(')/nhämuny(')*

This has been recorded in S and O function with either stem. An ERG form *nhämunharay* has been recorded. A *-ra-* augment appears elsewhere on deverbal nominals, notably in temporal expressions (see section 11.2.2.1).

It is possible that in appropriate contexts i.e. when referring to quantities of nominals with other case forms than those so far recorded, that these stems will take appropriate case forms in agreement.

These stems are commonly found with the PROP *-mirr(i-)* in its derivational use to indicate "number of times" i.e. *nhämunha(')mirr/nhämuny(')mirr* "how many times, how long" (see section 9.1.4.1).

(i) Interrogative examples:

(337) *nhämunha wapiṯi+ny\ märrma dhuwal bay*
how many stingray+PROM two PROX PRT-OK/"you know" T012p20
how many stingray (are there)? There are two here.

(338) *ḻurrkun'+thu walal, nhämunhara+y mak yuwalk+tja, ḏämbumiriw+yu*
three/few+ERG 3pl how many+ERG maybe truly+PROM four+ERG
(those two were working....) three/a few, how many in truth, four OMSp1

(ii) Indefinite examples:

(339) *ga djäma nhe dhu ga--a, yindi nhe dhu ga djäma*
and work 2sg FUT IMPV-1st, big 2sg FUT IMPV-1st work
ŋula nhämunha dhuŋgarra ŋurraka+m
INDEF2 how many year throw+1st T021p13
and you are working, you are working (on something) big, lasting for an indefinite number of years

(340) *bukmak ŋuli gunga'yu+n+mi+rr dhuwal wäŋa+ny djäma, ŋunhi*
all HAB help+1st+R/R+1st PROX place +PROM work TEXD
nhämunha' ga yoŋu ŋunhili+yi nhina
how many IMPV-1st person TEXD-LOC+ANA sit-1st T401p26
all people helps in doing the work in this place, however many people live there

8.6 The verbal interrogative/indefinite proform *nhaltja*-N_K

This stem has no fixed transitivity. It can occur as an interrogative predicate on its own, inquiring as to what people are doing or what is happening, or together with another verb asking for further information regarding a particular situation. When it occurs with another verb the transitivity is determined by that verb and the stem *nhaltja*- must agree in inflection. Each of these are exemplified below

(341) *nhaltja+n nhuma ga dhuwal*
do what+1st 2pl IMPV-1st PROX 852p24
What are you lot here doing? OR What's happening with you mob?
(Uttered by someone arriving at a house)

(342) *nhaltja+na walal ŋuli ga+nha djäma dharrip+ny*
do what+4th 3pl HAB IMPV+4th work trepang+PROM
What did they do to trepang?

It can also be used indefinitely as in the following example:

(343) *bäyŋu walal dhu manaŋi+rr, girri djalkthu+n, ŋatha manaŋi+rr,*
NEGQ 3pl FUT steal+1st things toss about+1st food steal+1st
ŋula nhaltja+n djarrwaŋ+gu+m
INDEF2 do what+1st mess+TRANS1+1st T021p12
they don't steal, throw the things about, steal the food, do such things, make a mess

8.7 Other *nhä-* based interrogative/indefinite stems

8.7.1 *nhäthinya* "be how, what/some kind of"

There is one commonly occurring form based on *nhä* that has not been mentioned so far -*nhäthinya*. This looks to be *nhä* plus the FOURTH form of the INCHoative -*Thi-*. I assume it is a nominal stem given that it has not occurred with other verbal inflections, and in the corpus is restricted to referring to nominals. As a working gloss I will use "be how". "What kind of?" is also often appropriate. In the corpus it occurs as a predicate in equational clauses or apposed to O nominals in transitive clauses. This is demonstrated in the two following examples:

(344) *ga djukurr'tja ŋayi, miny'tji+ny* ***nhäthinya***
and fat/liver+PROM 3sg colour/design+PROM be how T102Bp26
and the fat, what colour is it?

(345) *go mak ŋarra birrak'yu+n* ***nhäthinya*** *dhuwali dhäkay*
come here maybe 1sg try+1st be how MED taste
Let me/Can I have some (of the food) to see how that tastes.
\manymak muka ŋayi dhuwal dhäkay+nydja
good PRT-OK 3sg PROX taste+PROM T402p12
It/This tastes good

There is a single form with further suffixes i.e. ***nhäthinyamirriwuy*** with the PROP and ASS suffix. It occurs in the following example:

(346) ***nhäthinya+mirri+wuy*** *dhuwandja ..... balanya+mirri+wuy muka ŋunhi*
be how+PROP+ASS PROX -PROM such+PROM+ASS PRT-OK TEXD
dhiyal ga ŋäŋdi ga bäpa+ny nhina+n
PROX-LOC IMPV-1st M(Z) and F(B)+PROM stay+3rd T003p11
with what time is this associated with .... such a time when mum and dad were staying here

It appears to be a derived temporal (see section 9.1.4.2 on this use of the PROP) with the ASS suffix (see section 9.3.1.1 on the adnominal temporal function of the ASS).

It is not clear what the constraints are on the use of this particular form. It appears to focus on properties and conditions rather than the identity of nominals or events and thus is clearly distinct from *nhä* "what" and *nhaltja-* "do what". Its distribution in the corpus suggests that *nhäthinya* is the most general term used to ask about properties of nominals. Above we saw examples in which appropriate responses were qualities or colours. The following examples indicate that

appropriate responses are not confined to notions, such as qualities and colours, which are coded by adnominal apposition.

In the next example a PROP marked expression is shown to be appropriately questioned within the scope of a question with *nhäthinya*:

(347) ***nhäthinya*** *balaŋ ŋarra nhokal yuwalk+tja gurrupa+na+ny, zip+mirr*
be how IRR 1sg 2sg-OBL true+PROM give+1st+PROM zip+PROM
gumurr
chest/front T007
What kind of (dress) should I get you, (one) with a zip in the front?

The following example was given as a model of the type of a question certain white people ask Aborigines:

(348) ***nhäthinya*** *nhumalaŋ culture, bäpa+'mirriŋu+w nhumalaŋ+galaŋa+w,*
be how 2pl-DAT F(B)+KINPROM+DAT 2pl+OBLS+DAT
ŋäŋdi+'mirriŋu+w
M(Z)+KINPROP+DAT T209p7
how/what is your culture and that of your father and mother?

From other 'model' questions provided for this in the context (concerning land ownership etc) it was clear the speaker was not asking for an evaluation of the culture but a description of it.

However there is some evidence that *nhäthinya* cannot appropriately be asked of any nominals. It was for instance rejected in combination with a pronoun. An expression such as **nhäthinya nhe* "be how you (2sg)" was dismissed as senseless. On the other hand, this becomes acceptable once a lexeme which designates the reference as "bodily form" is included:

(349) ***nhäthinya*** *ŋayi rumbal*
be how 3sg body
"whats it/she/he (look) like?".

Note that this is asking for a description of the body rather than the identity of a part. The latter requires the non-human interrogative *nhä* and is of note as a feature which distinguishes the whole-part relation from other relations coded by adnominal apposition (see section 9.4.5.1).

This form is clearly one that does not neatly identify with a particular word class or word classes. Its full range of uses and interaction with other adnominal interrogative/indefinite forms has yet to be clarified.

Nhäthinya can also be used indefintely as in the expression "*gula nhäthinya rumbal*" "some kind of thing/person" or more literally perhaps "a body of some kind" to explain something you saw but could not identify who/what it was.

8.7.2 A note on *nhämirr* in questions

The combination of *nhä* "what" and the PROP suffix is not particularly common in the corpus in adnominal questions. However, unlike *nhäthinya* it is acceptable to appose *nhämirr* with a bare pronoun in a question. The appropriate way to ask "How are you?" is in fact *nhämirr nhe*. It is quite appropriate to respond to this with a quality-nomen such as *manymak* "good, OK". It also elicits joking responses such as *djalwarra+mirr* [trousers+PROP] "With trousers". It is possible this is an expression especially coined to take the place of the English greeting.

The most common use of the *nhämirr* in questions is to turn a proposition into a suggestion "how about we do X?". In this use it often occurs in conjunction with the IRR particle *balaŋ* (see section 7.4.2.3).

(350) *nhämirr limurr balaŋ marrtji dhudupu+lil+nydja*
how about 1+2pl IRR go-1st place name+ALL+PROM Bk2p26
How about we go to Dhudupuŋur?

See section 8.2 for some examples of *nhämirr* used for indefinite reference with INDEF2 *ŋula*.

8.8 Cross variety notes concerning interrogative/indefinite proforms

Similar distinctions in interrogative/indefinite proforms occur across all Yolŋu varieties but there is some variation in the form of the roots. The form *nhä* "what" is common to all varieties except Djinaŋ/Djinba, although the initial syllable *nyi-/nya-* of the equivalent stems are clearly cognate. *nhätha* "when" is also common to most varieties. *wanha* "where" is confined to the Dhuwal/Dhuwala varieties. *yol* "who" occurs in Dhuwal/Dhuwala and Dhaŋu. Notable within the Southern sub-group are the Ritharrŋu forms *nhika-/yika-* "which/be where?" and *wara* "who" and the Dha'yi forms *nhaka* "where" and *nhala* "who".

The six basic forms described for Djambarrpuyŋu are common to all Dhuwal/Dhuwala varieties. There is some variations in suffixes, some of which can be attributed to the effects of final vowel deletion in Dhuwal. This is summarized below although I do not detail the effects of final vowel deletion as these are quite consistent with the particular word classes with which these proforms are correlated.

1. Re the human interrogative/indefinite *yol*

The forms of this stem are identical for both Dhuwal varieties. The only differences with Dhuwala forms can be attributed to vowel deletion. The OBLS alternation with final /a/ appears to be confined to Djambarrpuyŋu.

2. Re the non-human interrogative/indefinite proform *nhä*

The ERG form *nhaliy* and the ALL function *nhäkurr(u)* appear to be confined to western Dhuwal/Dhuwala i.e. Djambarrpuyŋu and Gupapuyŋu. *Nhäthu* is the ERG form occurring in Djapu (eastern Dhuwal) and also in Ritharrŋu. The DAT form in eastern Dhuwal/Dhuwala is also distinct in having a long initial vowel i.e. *nhäku.*

The forms *nhäthu* (ERG) and *nhäku* (DAT) are also reported by Heath (1980a p33) for Djambarrpuyŋu but I have not heard them used by speakers at Galiwin'ku.

3. Re the place interrogative/indefinite pronominal *wanha*

The stem *wanha* is unique to Dhuwal/Dhuwala. The forms are essentially the same although there are various alternates for particular case forms which appear to be restricted. Thus the ALL *wanhamal* is only described for eastern varieties and conversely, the form *wanhawal* is found only in western varieties. Djapu also has ALL *wanhalil* and *wanhaŋulil* not noted elsewhere. A LOC alternate *wanhaka,* common in Gumatj and Djapu, is not found in western varieties. Finally there is an alternative form of the PERL i.e. *wanhalatja-* which has only been described for Gupapuyŋu.

4. Re the interrogative/indefinite proform *nhäthinya* "be how"

This form is described for Gupapuyŋu, along with a variant *nhäthinyara.* However, I have not found it in materials describing Djapu and Gumatj.

8.9 The "whatsit" stem *nhawi*

Nhawi "whatsit" is used by speakers when they cannot bring to mind a word or name to properly identify a referent or if they deliberately wish to be vague. In most instances it is followed by the required word or an identifying statement. A couple of examples are:

(351) *bala ŋarra* ***nhawi+ny*** *napurr+nydja ŋunhi yan ŋal-'ŋalyu+n+dja*
then 1sg whatsit+PROM 1pl+PROM TEXD EMPH go up-REDUP+1st+PROM
then I, "whosit", we went up T101p13

(352) *ŋunhala* ***nhawi+ŋur+a*** *wäŋa+ŋur yäku+ŋur kota*
MED-LOC whatsit+LOC+SEQ place+LOC name+LOC place name T101p20
there at whatsit, the place called Kuta

It occurs with the case form appropriate to the role concerned, taking either human or non-human suffixes as context requires. It is however like members of closed classes in that it takes unlenited allomorphs of stop initial suffixes e.g. OR *nhawikuŋ*, OBL *nhawikal*, DAT *nhawiku* and ASS *nhawipuy*. It also takes an irregular ERG allomorph *-yu* which is not found on other stems after vowels.

An obvious source for this stem is the non-human interrogative/indefinite *nhä* plus the ASS suffix *-wuy* and just such a cognate stem is described for Ritharrŋu and Dhaŋu (cf Zorc 1986). However the stem is phonologically reduced in contemporary Djambarrpuyŋu. This is best indicated by the regular use of post-vocalic PROM and SEQ allomorphs with the stem ie. *nhawi+ny* and *nhawi+n* respectively (rather than those required after semivowels i.e. *-nydja* and *-nha*). However this historical source would explain the ERG allomorph. Its maintenance may be attributable to the fact that it keeps the ERG stem clearly distinct from the S/O stems.

Nhawi is reported for all other Dhuwal/Dhuwala varieties. A locational stem *nhay(i)ka* "what's that place" is also reported for Djapu but I have only noted *nhawi* with local case suffixes in this function for Djambarrpuyŋu.

CHAPTER 9

THE CODING OF ADNOMINAL RELATIONS

This chapter is concerned with those suffixes whose key function is to code adnominal relations, as well as those relations between nomens which do not require a suffix. I refer to the latter as adnominal apposition. There is a general correlation between suffixing and those relations between nomens which denote autonomous entities and apposition and those relations between nomens that concern a single referential entity. Key semantic relations that can be coded by apposition include those of generic-specific, quality-entity and quantity-entity. It can also code the whole-part relation. However, the whole-part relation has a distinct grammar from other apposed adnominal relations. This would appear to reflect the unique properties of this relation, in that it is possible to view it as concerning either a single entity or two discrete entities. Relations between autonomous entities are coded with the following suffixes - the PROPrietive *-mirr(i-)*, commonly referred to as the "having" suffix in Australianist literature, PRIVative *-miriw*, ASSociative-*Puy* and the ORiginative *-Kuŋ(u-)*. Possession is also coded by suffixing but the possessive construction is more complex than that found coding other adnominal relations. There are three options available for marking a possessor, the selection of which is determined by the case of the possessee.

The suffixes found coding adnominal relations also occur with other functions. The suffixes which code possession are distinct from most suffixes coding adnominal relations in that they also have regular relational case functions and can occur in complementizer function. The ASS and OR also occur with a complementizer function. The PROP and PRIV have derivational functions. Lexicalised words have been noted which incorporate the ASS, PROP and PRIV suffixes.

In the following sections below, I describe in turn, the functions of individual adnominal suffixes, the relations coded by apposition and the possessive construction.

There is extensive overlap between the coding of adnominal relations in nominal expressions in a clause with a verbal predicate and the relations which hold between nominal expressions in equational clauses. I incorporate examples from both categories in those sections concerned with adnominal suffixes (but see also section 11.1 for more on equational clauses.)

This chapter does not consider the functions of proforms and demonstratives (see chapters 5 and 6 respectively). The functions of these word classes when co-ocurring with other nominals are similar to apposed adnominal relations. They too are concerned with a single referential entity and must be case marked to agree with a head nominal. However they are distinct from the categories of nomens which are coded by adnominal apposition both in regard to the forms involved and their primary deictic functions.

9.1 The PROPrietive *-mirr(i-)*

Form

The suffix is found both with and without a final vowel. The form *-mirr* occurs word finally and also usually before the PROM or SEQ discourse suffixes. There are a few instances in texts where the extended form is found with these as well. Before all other suffixes the form *-mirri-* is found, triggering the distinctive post-vocalic allomorphs of suffixes such as the DAT and ERG (see section 2.4.6.6).

This allomorphy is marginally distinct from that of Djapu where *-mirr*, i.e. without a final vowel, is also found before case suffixes. The final vowel form *-mirri* only occurs before another derivational suffix (cf Morphy 1983 p44).

Morpho-syntactic function

This suffix has both adnominal and derivational functions.

It is added to various word classes - nomens (nouns/adjectives), temporals, the interrogative/indefinite proform *nhä* "what", deverbal nominals, *-Thu-* verb roots and in restricted functions on proforms and demonstratives.

A PROP marked lexeme is generally followed by appropriate relational case marking to indicate its role in the clause. Functioning as a modifier this will agree with the marking on any head nominal that is present. It is also possible for *-mirr(i-)* forms to stand as the sole representative of a role in a clause, either as a modifier with an understood head or as a derived nominal.

PROP *-mirr(i-)* is also associated with a somewhat unique construction type in Djambarrpuyngu. It occurs with scope over two adjacent words which must be adjacent and in a particular order. I refer to them as phrases, but they could also be

considered as productive compounding. They are one means by which a nominal in modifier function can itself be modified.

Derivational uses of the PROP *-mirri(i-)* include the derivation of adverbs meaning "X number of times" when suffixed to numerals and quantifiers and Temporals/time denoting nomens when suffixed to other nomens. Their status as Temporals or time denoting nomens is hard to determine since while these forms somewhat not obligatorily require Temp case marking (with the ERG), they are commonly found with it.

Lexicalised words with *-mirr(i-)* include nouns, adjectives and adverbs.

PROP *-mirr(i-)* suffixed forms are also potential stems for verb derivation with the INCH *-Thi-* and TRANS2 *-Tha-* (see section 7.5.2 and 7.5.3).

Semantico-syntax

This suffix has counterparts in many other Australian languages where it can code a wide range of meanings and also occurs predominantly on words in equational sentences or noun phrases. Of those semantic functions summarized in Dixon (1976 p306) as associated with "having" affixes all but the expression of human/human accompaniment occur in Djambarrpuyŋu. The meanings coded with the suffix thus include characteristics of people - either their physical, mental or corporeal states, their being in possession of something (alienable or inalienable); attributes of a place; accompaniment - in rest or motion, with inanimates or instruments; and temporal. Examples of these are included below, although I have used a somewhat different typology.

It is important to recognize the syntactic constraints on this suffix as an adnominal case marker. This is pertinent when considering some of the general meanings associated with the PROP since they can overlap with meanings that can be expressed by relational case marking. Take for example one of the possible meanings associated with the PROP in Australian languages, that of instrument. In Djambarrpuyŋu, as in other languages, an instrument can be coded by relational case markers. In Djambarrpuyŋu the ERG carries this function (see section 11.2.2.1). But in addition to this it is possible to include an instrument referring nominal within a nominal expression. This instrument referring nominal is

suffixed with the adnominal PROP *-mirr(i-)*. These two distinct means of expression are exemplified in the following:

(353) ***dharpa+mirr*** *napurr dhu lakara+m yolŋu+ny, ŋayi dhu ga marrtji*
stick+PROP 1pl FUT tell+1st person+ACC 3sg FUT IMPV-1st go-1st
bijta+n gä+nha+mi+rr
do thus+1st bear+4th+R/R+1st T022Ap6
we call a person "stick-having" who is going about bearing him/herself (i.e. with a stick)

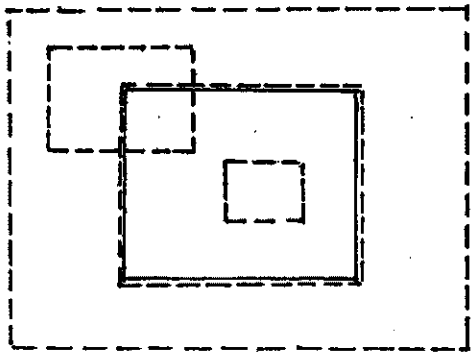
In this example the PROP marked nominal *dharpamirr* is being described in relation to the O nominal. In the following the ERG marked nominal marks an instrumental role in relation to the verbal predicate *marrtji*.

(354) ***dharpa+y*** *ŋayi dhu marrtji*
stick+ERG 3sg FUT go/walk-1st T022Ap6
he/she walks with a stick

Of the notions used as the basis for the classification in Dixon (1976 p307-7) that of "accompaniment" seems most useful in trying to ascertain some general underlying semantic parameter for the PROP. However I suggest that the notion "local coincidence" captures a basic feature shared by expressions with the PROP. Many uses of this suffix seem to assert coincidence of a characteristic, condition or another entity with the referent at the time indicated. This might be an emotional or mental or physical state attributed to a person or a place, or a more direct physical contact between inanimate or inanimate/animate things. Social/kin categories can also occur with the PROP and if we view the entities to which they are attributed as bearers of such categories it is possible to hold to "coincidence" as a general notion.

There are also some distinct meanings associated with the PROP in its derivational functions. These are specific to a few word classes e.g. the notion of "plural" when suffixed to an quality denoting nominal and "number of times" when suffixed to a numeral.

The time span of the coincidence can range from a lengthy or habitual condition to one that simply occurs for a particular event. The degree of coincidence is also variable. It may be enveloping, completely coincident or partial as the following diagram attempts to represent:



— head nominal

-- possible relation of PROP marked nominal

Antonyms to lexemes with the PROP are formed with the PRIVative *-miriw* (see section 9.2).

The PROP would appear to have an independent semantic domain from other adnominal cases i.e. those coding ownership or possession, the Ass which codes a much looser and broader ranging "association" between entities than that I am to claim for the PROP (see section 9.3) and simple apposition which marks relations such as entity-quality, generic-specific,and whole-part.

Presumably a similar notion to that of "local coincidence" could be argued to exist in the case of possession as well, but the PROP would have a more strictly local association than the specialized notions of "ownership, " social rights to" or such that are involved with possession.

In fact two distinct types of equational clauses could be argued to treat the possession relation from different perspectives. In one the focus is on the Possessor which is suffixed with the DAT, thus indicating "Y is X's" (Y X(DAT)). In the other the focus is on the possessee as an attribute, the latter being suffixed with the PROP thus indicating "X has Y" (X Y(PROP)). Thus perhaps we could view these as reflecting an inverse focus on same relationship (i.e.that of 'local coincidence').

At a more abstract level it is no doubt also possible to argue that any adjectival notion is a characteristic borne by the entity it qualifies. Yet in Djambarrpuyŋu there is a distinct subset of such "abstract" notions, lexemes within Dixon's universal semantic-morphological-syntactic categories for adjectives such as SIZE, AGE, PHYSICAL PROPERTY etc which are attributed of an entity by apposition rather than suffixing. Essentially PROP suffixed forms and adnominal relations involving qualities (adjectives) seem to be concerned with a mutually exclusive set of roots. One might posit an underlying continuum between entity referring and qualifying

lexemes, with the PROP coding relations between lexemes placed toward the entity end of such a continuum, and apposition coding relations between entities and 'pure' qualities. Abstract nominals such as kin categories would occupy a place somewhere in the middle of the continuum since they can occur, in both constructions (see section 9.1.1.5 and 9.4.4).

The fact that the distinction between entity and quality reference is reflected syntactically is supported by the existence of forms which have both entity referring and qualifying senses (i.e. those which function as both nouns and adjectives (see section 3.1.5.2)). The PROP is required when the form refers to an entity. In its qualifying sense the form will be directly apposed to the entity it qualifies (see section 9.4.1).

e.g. *borum* "edible fruit" as in		*dharpa borummirr*	tree has edible fruit /tree with edible fruit
borum "cooked" as in		*guya borum*	fish is cooked (i.e. ready for eating)

I will now present examples of PROP *-mirr(i-)*. The first two sections consider the PROP suffixed to nominals and verbs. Section three looks at PROP phrases and section four considers derived and lexicalized forms.

9.1.1 PROP *-mirr(i-)* added to nominals

Such forms are widely occurring and are common with entity type nominals, both concrete and abstract. They may ascribe characteristics or conditions to people, places or other entites, either as predicate attributes in equational clauses or as modifiers in a nominal expression.

9.1.1.1 Characteristics/conditions of people

a) As attributes

(355) *dhuwana yol munatha'+mirr*
PROX-SEQ who sand+PROP Bk1 86p29
Who's this covered with sand ? (re someone in a photo)

(356) *rerri+mirr ŋayi yolŋu*
illness+PROP 3sg person
the person is sick

(357) *ŋurru ŋunhi ŋayi miyalk ŋunhi muraŋay+mirr*
nose TEXD 3sg woman TEXD stick+PROP T022 ln31
the nose of the girl had a stick (through it)

(358) *wiripu+ny balanda mala* ***marŋgi+mirr***
certain+PROM whites/Europeans PL/group knowledge+PROP
latjin+gu luka+nhara+w, ga wiripu+ny mala bäyŋu
mangrove worm+DAT eat+4th+DAT and certain+PROM PL/group NEGQ
some Europeans like mangrove worms and others don't T401p24

b) As modifier

(359) *ŋuli ŋayi dhu ga marrtji* ***girri'+mirr*** *yolŋu*
IRR 3sg FUT IMPV-1st go-1st things+PROP person T010p10
When a person is walking with/carrying some things....

(360) ***marimirr*** *walal dhu marrtji ŋilimurruŋ,* ***bu+nhara+w***
trouble+PROP 3pl FUT go-1st 1+2pl-DAT strike+4th+DAT
they will come for us in anger/to make trouble, to attack T009p26

(361) *ŋal'yu-ŋal'yu+rr gi nhäŋu'-nha+ŋu bäpa+w*
rise-REDUP+2nd IMPV-2nd look-REDUP+2nd father+DAT
\dhika ***bäwarraŋ'+mirri+w***
INDEFP animal+PROP+DAT T102Bp19
climb up and look for Father, somewhere there with game
(mother to child, awaiting father's arrival from hunting)

9.1.1.2 Characteristics/conditions of places

a) As attribute

(362) ***ŋathu+mirr*** *dhuwal ŋirriman bay*
cycad+PROP PROX place PRT-OK/"you know" Burrp1
this place has cycads

(363) ***warwu+mirr*** *balanya wäŋa*
worry+PROP such place T208p10
place with sadness (because someone has left)

(364) *walal,* ***bäpurru+mirr*** *dhuwal wäŋa, bay*
3pl clan+PROP PROX place PRT-OK/"you know" OMS ln216
you lot, this place is with a death (this is a standard expression used to refer to the fact that someone has died)

(365) *waŋgany muka ga+n yan wäŋa dhärra+n* ***ŋäpaki+mirr+nydja***
one PRT-OK IMPV+3rd EMPH place stand+3rd whites+PROP+PROM
only one place had whites OMSp12

b) As modifier

(366) *yaka ga malŋ'mara+m waŋgany ga dhärra* ***girri'+mirr*** *wäŋa,*
NEG IMPV-1st find(tr)+1st one IMPV-1st stand-1st things+PROP place
yaka\ yan ga ***gumurr+mirr*** *dhärra wäŋa \ ga*
NEG EMPH IMPV-1st chest/shore+PROP stand-1st place and

ŋunhal+a *bala* ***gumurr+mirr***
DIS-LOC+SEQ (MVTAWY) chest/shore+PROP T101p27
(you/one) don't find just one place selling clothes, no. But a whole line of places, and a row (too) on the other side (re shopping in Bali)

(367) *yaka nhe* *dhu dhuwal marrtji* ***ŋärra+mirri+lil*** *<u>wäna</u>+lil*
NEG 2sg FUT PROX go-1st sacred shade+PROP+ALL place+ALL T401p19
you mustn't go to sacred ceremonial ground

9.1.1.3 Characteristics/conditions of non-human entities

a) As attribute

These examples were elicited as ways of describing particular objects:

object	description using the PROP	
bathi "bag"	*raki'+mirr*	"string having" (i.e. what made of)
bala' "house"	*gotha'+mirr*	"metal having" (i.e. what made of)
	dharpa'+mirr	"wood having" (i.e. what made of)
	dhurrwara+mirr	"mouth/opening having" i.e. "door having" (i.e. type of part it has)
gap "cup"	*likan+mirr*	"elbow having" i.e. "handle having" (type of part it has). This term is also used to refer to the cup itself
	dhurrwara+mirr	"mouth/opening having" used to indicate that the cup has been drunk out of (prior contact of a person's mouth with the cup)

b) as modifier

(368) *yaka napurr <u>dhäwu</u>+w' djäl* *yätjkurru+w+nydja* ***warwu+mirri+w+nydja***
NEG 1pl news+DAT want bad+DAT+PROM worry+PROP+DAT+PROM
we(excl) don't want bad or worrying news T101p43

(369) *ŋayi marrtji* *<u>yununali+ny</u>* *ŋanapurruŋ* *ŋinydjakŋu+ny ŋunhi*
3sg go-1st oysters+PROM 1pl-DAT first+PROM TEXD
daŋga+puy+nydja *bu+nha+puy,* *dhärra'-dharra* ***banikin+mirr*** *mala*
clear+ASS+PROM strike+4th+ASS stand-REDUP-1st tin+PROP PL/group
our oysters, collected earlier when it was clear, were standing in the cans T012

(370) *bala djalkthu+na+n* .... *<u>djewul+nydja</u>* \ *djurruk* ***gapu+mirr***
then put down+4th+SEQ water weed+PROM wet water+PROP
then put on ... the weed, wet with water (in which it has been dipped)
T013ln162-3

(371) *<u>gapu</u>* *ŋayi dhu* *luka* ***dhanlya'+mirr***
water 3sg FUT drink-1st paperbark+PROP T013ln108
she/he will drink water in a paperbark container

The relationship between what can function as head and what as modifier is not fixed, as the following examples involving two "non-human" entities illustrate:

(372) *Beŋur+yi+ny* *limurr ŋuli rulwaŋdhu+rr* ***rupa bilpiljaniŋ+mirr***
INDEF+ANA+PROM 1+2pl HAB put+1st tin Jacksonia dilatata+PROP
bala+n *gurtha+lil+a*
MVTAWY+SEQ fire+ALL+SEQ
After that we put the tin with the Jacksonia dilatata on the fire
(..and leave it to boil, then take it off and put it aside to cool off)

(373) *Ga bäy ŋuli* ***bilpiljaniŋ rupa'+mirr*** *ŋulwitj+thi+rr* ....
And until HAB Jacksonia dilatata tin+PROP cold+INCH+1st
And when the Jacksonia dilatata in/with the tin cools .... Bil Dhäwu p22,26

This is from a school text entitled *Bilpiljaniŋ* illustrating the preparation of a medicine made from *bilpiljaniŋ* "Jacksonia dilatata", used for diarrhoea in small children. The use of the PROP here is associated with a reciprocal relationship between entities - either can be expressed as an attribute of the other. The function of a particular entity as modifier or head is determined by which entity plays a direct role in the specific event/state expressed by the clause. This would seem to be compatible with the general notion of local coincidence which I have suggested as underlying many uses of the PROP.

One can observe from the examples given so far that the relation of physical containment, often expressed in English as "X in Y", is frequently involved in *-mirr(i-)* constructions. Unlike English locative PPs which can occur both as a modifier within an NP and as a clause constituent, the Djambarrpuyŋu LOC case marker does not function adnominally. The closest expression of such a relationship in Djambarrpuyŋu is that seen here with *-mirr(i-)*. However, it would appear that *-mirr(i-)* does not necessarily entail a one-way relationship between a container and the contained. Thus, as we saw in the last two examples, medicine in a tin can be viewed as "tin medicine-having" or as "medicine tin-having". The same adnominal marker is used whichever is the head of the NP.

Another relation that is expressed using the PROP *-mirr(i-)* is the constituency of items, either in terms of their material composition (X is made of Y(PROP)) or their individual component parts (X has a part Y(PROP)). I do not have enough evidence to comment on whether these relationships are also reciprocal. In regards to constituency it would seem to require a somewhat marked situation to talk of a part 'having' a whole or a material 'having' the entity it constitutes.

What appears crucial to expressions with the PROP is the fact that entities have been physically connected or coincided with each other at some point in time. It can be appropriately used to describe a condition that results from "local coincidence" of two entities, as in the case of a cup being described as *dhurrwaramirr* "mouth having" once someone has drunk out of it.

When suffixed to other nominals than those denoting concrete entities, the notion of "local coincidence" becomes somewhat less evident. In some instances it is associated with quite distinct meanings and morpho-syntactic functions. It is also problematic in relation to abstract concepts. However the notion of "local coincidence" does capture some of the key uses of this suffix in a way that is useful for contrasting them with relations coded by other adnominal suffixes.

9.1.1.4 PROP *-mirr(i-),* body parts and the whole-part relation

The whole-part relation is generally coded within a nominal expression by apposition. It may also be coded as a Possessive relation with the whole taking Possessor marking (see section 9.5.3). However a part attributed of a whole in an equational clause is marked with the PROP. Some examples are given below

(374) *..waŋgany+dja yolŋu* ***doŧurrk+mirr*** ***biɖila' +mirr*** ***guŧun+mirr...***
one+PROM person heart+PROP liver+PROP stomach+PROP
(for example) a person has a heart, a liver, a stomach T022Bp7

(375) *yuŧuŋgurr+mirr ŋayi ŋunhi dharpa dhuthunuŋu waŋgany,*
thigh+PROP 3sg TEXD tree body one
yuŧuŋgurr+mirr ..... ***waŋa+mirr, marra+mirr ga borum+mirr***
thigh +PROP arm+PROP hair+PROP and fruit+PROP
has a trunk (thigh), trees have one trunk, has a trunk ..... branches (arms), leaves (hair) and fruit T022Bp7

The shellfish *ɖaruma* "Brown Baler Shell - Melo umbiculatus" was once described as follows:

(376) ***ŋaraka+mirr*** *yurr buyuwuyu, dhudi dhirrtkthirrk, dhurrwara ɖumurr,*
bone/shell+PROP ADD smooth end rough/prickly mouth big
maypal+mirr, *gapu+w* ***luka+nhara+w*** *ga dhurrwara djinbuik*
edible shellfish+PROP water+DAT drink+4th+DAT and mouth sharp
(It) has a shell which is smooth, the end is pointed, the opening wide, (it) has an edible animal (inside), (it is used) for drinking water and its lip is sharp.

Note that in this example only the parts are coded with the PROP. Qualities, parallel to their behaviour within nominal expressions, require no suffix (see section 9.4.2). The shell's use is coded with a Purposive clause (see section 12.9.1).

Body part terms for humans are extended as designations of parts, to many other phenomena - flora, fauna, buildings, vehicles, boats, tools, bags etc. It is a very general strategy readily applied to any kind of item. There are few distinct part terms specific to particular kinds of things comparable to English leaf, branch, tail, door etc. In the examples just given we find the use of *dhurrwara* "mouth" to refer to both the opening and the lip of a shell and the terms for "thigh", "arm" and "hair" used for the trunk, branches and leaves of a tree respectively.

Body part terms also occur with the PROP with extended senses. Some examples are given below:

gulun+mirr	stomach+PROP	"pregnant"
gog+mirr	hand+PROP	"cared for (by ones relatives) sickness not attributed to sorcery; favourite/favoured; used/usable; opp *wakingu*
liya+mirr	head+PROP	"have thoughts, ideas" "smart, intelligent"
mel+mirr	eye+PROP	"sighted"; opp *bambay* "blind" "to understand" (cf *nhäma* "to see" also used with the sense "to understand")
mangutji+mirr	eye+PROP	"sighted";"to understand"; "boy/girlfriend having" -this sense is not possible with *mel*.

With these extended senses the body part term suffixed with the PROP can occur either as a modifier in an nominal expression or as an attribute in an equational clause. This is distinct from the (body) part senses which do not take PROP marking within a nominal expression.

Note that the whole-part relation and the possessive relation, often referred to as inalienable and alienable possession, can be coded distinctly in a nominal expression. But in equational clauses, where the focus is on the "possessee" or the part as an attribute (Y), they are treated identically, i.e as "X has Y(PROP)".

9.1.1.5 PROP *-mirr(i-)* with kin terms or terms denoting other social categories

Kin relationships between people i.e." X is Y's kin" are indicated by the KINship PROPrietive *-'mirrigu* (see section 4.8.1). However in ascribing kinship

categories to items such as places, songs, dances and so on it is possible to use a kinship or other term denoting a social category plus the PROP *-mirr(i-)* e.g.

(377) ***märi+mirr, wayirri+mirr*** *waŋa, dhika nhä ŋanya*
MM(B)+PROP MM(B)/ZDDC+PROP arm [INDEFP what 3sg-ACC]"and what else"
warrak, be nhä ŋanya waŋa yirritja,
special string [INDEF what 3sg-ACC]"and what else" arm moiety name
ŋamini+mirr
breast+PROP OMS In 237
"arm" (i.e. special string items) of (the desceased's) *märi* (MM(B)), and other things, the special Dhuwa string, and other Yirritja things, "arms"(i.e.strings) of the mother (symbolized by the breast) clan
(The speaker is describing sacred paraphenalia involved in a funeral)

This can also evidently occur with terms denoting social categories other than kin terms. For example:

(378) *yolŋu+ny rumbal wäyin+dhi+na+n ga+n\ yurr*
person+PROM body animanl+INCH+3rd+SEQ IMPV+3rd ADD
bäpurru'+mirr+a bäpurru'+mirr+a bäpurru'+mirr+a *barrkuwatj+nha*
clan+PROP+SEQ clan+PROP+SEQ clan+PROP+SEQ different+SEQ
dhuwa yirritja
moiety name moiety name T022In268
the human bodies turned into an animals, and furthermore (they) all had different clans Dhuwa and Yirritja
(cf example 364 above for a different sense of *bäpurrumirr* when modifying *wäŋa* "place" indicating that there has been a death)

(379) *ŋunhi ŋayi miyalk+mirr yolŋu ...*
TEXD(sub) 3sg woman+PROP person ... T013In179
when a person has a wife

The social identification of an entity is often formally coded by apposition (see section 9.4.4). The distinction between the use of apposition and the PROP suffix in these contexts has yet to be established

Gurrutumirr is a commonly occurring lexeme concerned with social categories, which appears to be a derived noun/adjective from the abstract noun *gurrutu* meaning "relationship, kinship relation". Its unmarked use would appear to be to indicate people bearing kin relations to other people i.e. "relatives", as in the following example:

(380) *yaka ŋoy-märra+m nhuŋu* ***gurrutu+mirri+ny*** *yapa+ny ga ŋändi+ny ga*
NEG annoy +1st 2sgDAT relationship+PROP+ACC Z+ACC and M(Z)+ACC and
bäpa+ny
F(B)+ACC T013In 175
don't annoy your relatives - sister(s), mother(s), father(s)

However it can also be used to describe the relationship of individual clans or languages to people, as well as relationships between different languages or clans. Then a sense closer to that associated with regular PROP suffixation "having a kin relation" is suggested. It then becomes less clear that the sense "relative" is truly fossilized.

9.1.1.6 PROP *-mirr(i-)* with temporals

The PROP has been noted with the following temporals *-gäthur* "today/ now" *yalala* "later" and *ŋäthil* "prior, earlier". The conditions on the use of the PROP with temporals is not properly understood, although it should be noted that the PROP is commonly used to derive temporals from other nominals (see section 9.1.4.2).

Heath (1980a p27) cites two examples *munhaku-mirr* "around dawn" (='having night') and *gudarr'-mirr* "morning before dawn" (='having morning') in which he claims "*-mirr* indicates a transitional or marginal period adjacent to that specified by the root". *munhawumirr* is also commonly used by Djambarrpuyŋu speakers at Galiwin'ku to refer to the early part of the day. It is used for time extending well into the period after the sun has risen.

Other instances of temporals occurring with the PROP from the corpus are:

(381) *mak dhuwal linygu+n djulkthu+rr+a daykun'+tja* ***\gäthur+mirr*** *muka*
maybe PROX COMPL pass+3rd+SEQ time+PROM **today/ now+PROP** PRT-OK
The time has already passed/finished for today, hasnt' it? T018p23

(382) *ŋalapal+mirri+y, [ŋunhi walal marrtji+n ŋäthil+mirr ga dhä-gandarr+kurr]*$_{Rel}$
big/old+PROP+ERG TEXD 3pl go+3rd prior+PROP and mouth-middle+PERL
the old people, who lived early on and "half-way"i.e. between then and now,
(held/kept the law) T016p20

The following two sentences are minimally contrasted by the presence or not of PROP-*mirr(i-)* on a temporal:

(383) *gapu nhe dhu galka+n limurruŋ* ***yalala+ŋu+w***
water 2sg FUT put into+1st 1+2pl-DAT later+ŋu+DAT

(384) *gapu nhe dhu galka+n limurruŋ* ***yalala+ŋu+mirri+w***
water 2sg FUT put into+1st 1+2pl-DAT later+ŋu+PROP+DAT T024Bp1

They both translate as "put some water in (the freezer) for us" but the first implies "for later today" while the second could be anytime later on.

The sense suggested by Heath could plausibly hold in the first example with *gäthur* "morning", in that the speaker is indicating that the end of the (working) day has passed. If *yalala* in its unmarked sense means "later today" and not simply "later" then it could be said to hold in these examples as well. The second example gives problems to this interpretation, unless the speaker is trying to specify a time not so long ago (i.e. at the boundaries of long ago). This particular use of the PROP came to my attention after my field trips. The sense indicated by Heath suggests it is a derivational use of the PROP with temporals. Clearly the extent of its occurrence with temporals and the specific senses associated with them are matters that should be investigated more thoroughly.

9.1.1.7 PROP *-mirr(i-)* and quality denoting adjectives

PROP *-mirr(i-)* does occur suffixed to quality denoting adjectives but the unmarked expression of entity-quality relations is by apposition (see section 9.4.1). Quality denoting adjectives suffixed with the PROP would appear to be interpreted either as having an understood head or as indicating that the head has plural reference. However, there is another factor which should be considered and which is not fully clear. This is whether a systematic semantic or syntactic distinction is always reflected in the presence of the PROP or whether speakers are extending the domain of PROP suffixation into domains traditionally coded by apposition.

Below I present the evidence for the interpretations of the PROP coding plurality and functioning as a "headless" adnominal modifier. Much of this is based on discussion of textual examples with a single older consultant and, the findings presented here must be considered preliminary.

9.1.1.7.1 Plurality

The use of the PROP to indicate plurality when attached to quality denoting adjectives is reasonably attested and accepted by my main consultant. Like many other plural marking phenomena it is not obligatory and the unsuffixed form is unmarked for number. However, an adjective with a singular referent cannot take the PROP. This use of the PROP appears to be confined to the quality denoting adjectives. When suffixed to other nominals considerations of number are not relevant and the suffixed form, like most other nominals, is also unmarked for number.

The full potential of the PROP to occur with all adjectival categories is still not clear, but it does occur with adjectives denoting dimensions, physical properties and human propensity. The PROP does attach to quantity denoting adjectives but it has quite a distinct function, indicating "X number of times" (see section 9.1.4.1).

The examples are predominantly attributes in equational clauses e.g.

(385) *"ŋi ŋunha+n dhuwal yolŋu* ***walal dhapinya+mirr+nydja"***
yes DIS+SEQ PROX person 3pl generous+PROP+PROM T022Bp1
yes, the people there are generous

(386) *"way djamarrkuli', nhä nhuma* ***dhuwal*** *yolŋu+ny,* ***maŋutji+miriw mala,***
hey, children what 2pl PROX person+PROM eye+PRIV PL(/group)
bambay+mirr, *yaka nhuma gi dhuwandja yolŋu+ny*
blind+PROP NEG 2dl/pl IMPV-2nd PROX-PROM person+ACC
nhä+ŋu yakurr ga ŋorra"
see+2nd sleep IMPV-1st lie-1st T022Bp6
Hey you kids, what are you people - without eyes, blind! Can't you see this person's sleeping!

However there are a few cases of a PROP marked adjectival nomen occurring in a nominal expression of a clause with a verbal predicate. The following is one:

(387) ***yindi+mirr mala*** *gämurru napurr waŋa+nha+mirr* ***b----+wal***
big+PROP PL(/group) point/nose 1pl talk+4th+R/R personal name+OBL
bilingual+puy
bilingual+ASS ALF 87
The main points we talked about with B, about Bilingual (education)

There are also two instances recorded of a reduplicated adjective with the PROP. Both involve lexemes meaning "big". They are from a female speaker in her mid-twenties and a man in his sixties:

(388) *ŋunha Gove+tja ŋarra nhäma wäŋa,* ***wiripu yindi'-yindi+mirr***
there place name+PROM 1sg see-1st place, other big-Redup+PROP
At Gove I saw some big houses. T401

(389) *ga balanya* ***yindi'-yindi+mirr, batha'-bathala+mirr*** *balanya rom malanynha*
and such big-REDUP+PROP big-REDUP+PROP such law PL/group
such important laws as T208

In response to these my main consultant commented that they were recent forms and notably no such examples occur in material recorded of her speech.
The main consultant further commented that speakers she grew up around used the word *dilkurr*, a specific plural lexeme meaning "big". While forms such as *yindimirr* and *yindi'-yindimirr* were held to be recent coinages, it was not

suggested that this use of PROP to indicated plurality was totally innovative however. Without prompting, *ŋalapalmirr* "old people" was offered as a "proper/ old speaker's" word which reflected this use of the PROP with plural reference (cf *ŋalapal* "old/important; adult").

9.1.1.7.2 Other occurrences of the PROP with quality denoting adjectives

There is a little evidence in my corpus that the PROP can occur on quality denoting adjectives without a plural sense. The following discussion focuses on the use of the PROP with *maḏakarritj* "angry/dangerous/poisonous/wild" and *guyiŋarr* "cold". Both the following clauses are acceptable ways of describing a place with something dangerous in it.

(390) *nhä dhuwal maḏakarritj wäŋa*
what PROX dangerous place
nhä dhuwal maḏakarritj+mirr wäŋa
what PROX dangerous+PROP place T022Ap8

Number was never suggested as a relevant factor in these examples. One consultant offered the following in an attempt to explain the difference:

(391) *yaka+n wäŋa+ny maḏakarritj ... ŋunhili wäŋa+ŋur*
NEG+SEQ place+PROM angry/dangerous TEXD-LOC place+LOC/ABL
ŋula nhä ga ŋorra maḏakarritj
"something" IMPV-1st lie dangerous/angry T022Ap9
Not that the place is dangerous but ... in the place lies something dangerous (e.g. something that could induce nasty effects on people who wandered into the area)

The PROP was thus interpreted as indicating that another entity bearing the characteristic of being *maḏakarritj* is involved. This suggests that the PROP is being used in a regular adnominal function to indicated the coincidence of an entity with another. The problem lies in determining whether *maḏakarritj* can have "entity" type reference to an abstract notion such as "anger" or whether another entity is implicit.

The explanation for *guyiŋarr* was similarly put. Some examples are given below:

(392) *dhuwandja wäŋa guyiŋarr, guyiŋarr+mirr+a*
PROX-PROM place cold cold+PROP+SEQ T022B
This place is cold, has coldness

(393) *yo guyiŋarr+mirr, ga wäŋa+ny ŋamakurr\wäŋa+ny*
yes cold+PROP and place+PROM good place+PROM
ŋayi+pi+ny ŋunhi gäna \guyiŋarr ŋunhili ga ŋorra
3sg+EMPH+PROM TEXD separate cold TEXD-LOC IMPV-1st lie-1st
Yes cold-having and the place is OK. The place is separate. The coldness lies in it.
T022Ap9

(394) *dhuwandja ŋatha guyiŋarr, dhuwandja guyiŋarr+mirr, bili+n*
PROX-PROM food cold PROX-PROM cold+PROP COMPL+SEQ
ŋayatha+ŋal+a guyiŋarr+yu
hold+3rd+SEQ cold+ERG T022B
this food is cold, this is cold(-having), (its) already held by coldness

Like *maḏakarritj* "angry", *guyiŋarr* "cold" can be ascribed of a place/food or person with or without the PROP suffixed.

Again I interpret the explanations offered in these examples as indicating that the presence of the PROP implies an independent entity, apart from the head it is modifying. It is also of note that in both these explanations the speaker speaks of the nominal to which the PROP is suffixed in terms of it being "located" somewhere. This may be taken as some support for the notion of "local coincidence" that has suggested as fundamental to many uses of this suffix.

These examples present evidence that *guyiŋarr* can function both as a noun and an adjective. In the last example *guyiŋarr* is the A argument of the verb. In the equational clause above *guyiŋarr* is the S argument of *ŋorra* "lie/be". Furthermore elsewhere *guyiŋarr* is 'intensified' with the qualtity denoting adjective *yindi* "big". If it were only a quality denoting adjective one would expect the degree particle intensifier *mirithirr* "very" to be used.

Its potential to occur as a noun could be argued as the basis for its occurrence with the PROP. I have not noted equivalent evidence for the form *maḏakarritj*. Note that in the existential clause in example 391 *maḏakarritj* is not posited as the head but is attributed to *ŋula nhä* "something". However in each instance of the PROP with *guyiŋarr* or *maḏakarritj*, it would appear a separate entity having a distinctive quality is attributed to another entity. These examples thus appear to fall within regular uses of the PROP suffix.

Another category of adjectival nominals where the PROP frequently occurs is with colours. Since most colour terms can denote both entity and quality i.e. the clay/ochre/paint and the colour, the occurrence both with and without the PROP would be parallel to that for *guyiŋarr*. However, more work is required to

determine whether the correlations, firstly, between the use of the PROP and the assumption that two entities are involved and, secondly, between the use of apposition and concern with a single entity, can always account for its presence when a plural interpretation is not possible.

One indication that there are restrictions on the use of the PROP with these nominals is the rejection of the *-mirr(i-)* form on *guyiŋarr* with the sense "cold/coldness" when a relational case form is suffixed. Thus while the following is acceptable:

ŋunha guyiŋarr+ŋur wäŋa+ŋur
DIS cold+LOC/ABL place+LOC/ABL
in that cold place

the next example is not:

**ŋunha guyiŋarr+mirri+ŋur wäŋa+ŋur* T022Ap8
DIS cold+PROP+LOC/ABL place+LOC/ABL
*in that cold place

These two examples were produced in elicitation work but I have no examples of the latter type in my text data either. (However it should be noted that the latter construction is potentially acceptable with yet another meaning of *guyiŋarr*, namely that of "fridge", which is clearly entity-denoting. The gloss would then be "in the place/house with a fridge").

9.1.18 PROP *-'mirr(i-)* with demonstratives

A form of the PROP with an initial glottal stop occurs with a specific function attached to a restricted set of stems. It indicates different language varieties according to the word for "this/here". Thus a head with a general sense such as *dhäruk* "word" or *matha* "tongue" is usually assumed, and does occasionally appear. The stems to which the PROP is suffixed are the unmarked forms of the proximal demonstrative. It requires the presence of a glottal stop between the stem and the affix, something specific to this particular combination, since neither the stems nor the affix have a glottal stop in other contexts.

dhuwal'mirr 'dhuwal form of "this" having'
dhuwala'mirr 'dhuwala form of "this" having'
dhaŋu'mirr 'dhaŋu form"this" having' '
nhaŋu'mirr 'nhaŋu form of "this" having'

While constrained in its function when suffixed to demonstratives the use of the "having"-suffix in this way is not unusual in the Australian context. It is found in

wide range of Australian Aboriginal languages e.g. Walmatjari spoken in WA (Hudson 1976) and Wangaybuwan spoken in western NSW (Donaldson 1976). It therefore seems appropriate to consider this a morphologically conditioned allomorph of the PROP rather than an independent suffix.

9.1.2 PROP *-mirr(i-)* on verbal stems

9.1.2.1 PROP *-mirr(i-)* suffixed to the FOURTH form of verb stems

PROP *-mirr(i-)* is added to the "nominal" stem of the verb, namely that with the FOURTH inflection *-Nha*. It can occur on verbs of all transitivity types and the head of the phrase may or may not be linked to an argument role of the verb. On available evidence it would appear that the possible roles the head may have in relation to the arguments of the verb include S, A, O or Loc. There are also cases where the head does not bear any role relation to the verb. Examples of these are given below:

i) head nominal with an S role in relation to the verb stem

To illustrate intransitive verbs with the PROP *-mirr(i-)* I have chosen two domains where PROP suffixed forms are the main means by which subclassification is expressed. These domains are types of animals and different stages of development of a young child. Both are classified according to their associated mode/stage of motion. The following lists indicate this classification for a general class of fauna that includes land mammals, reptiles and birds i.e. *warrakan'*, and for a young child/baby i.e. *yothu*.

warrakan' ***marrtji+nya+mirr***
walk intr +4th+PROP
land animals that walk in an upright position (includes the emu)

warrakan' ***butthu+na+mirr***
fly intr+4th+PROP
flying animals - birds (except the emu) and furred animals that fly i.e. sugar-glider, bats and flying foxes

warrakan' ***gal'yu+na+mirr***
crawl intr+4th+ PROP
"crawling animals - lizards, goannas, crocodiles, tortoises and echidna"

warrakan' ***djuryu+na+mirr***
slither intr+4th+PROP
slithering animals - snakes, legless lizards

yothu ***bilyu'-bilyu+na+mirr*** *yothu* ***gal'yu+na+mirr***
child turn(intr)-Redup+4th+PROP child crawl(intr)+4th+PROP
child that can turn from side to side child that can crawl

yothu ***nhina+nha+mirr*** *yothu* ***marrtji+nya+mirr***
child sit(intr)+4th+PROP child walk(intr)+4th+PROP
child that can sit up child that can walk

(from T009p 20)

ii) head nominal with an O role in relation to the verb stem

Another way of distinguishing between different kinds of flora and fauna is according to whether they are eaten or not. This is expressed by with the transitive verb *luka-* $Ø_a$ "to ingest" plus the PROP or PRIV i.e. *lukanhamirr* "edible/is eaten" and *lukanhamiriw* "inedible/not eaten". The flora and fauna under consideration clearly plays an O role in relation to the underlying verb. This particular relation is also demonstrated by the verbs in the following example:

(395) *wiripu ŋanapurr ŋuli ŋäma* ***yoŋu+ny*** *ŋunhi ŋayi ŋuli ga*
other 1pl HAB hear-1st person+ACC/SEQ TEXD 3sg HAB IMPV+1st
waŋa *nhakun bulnha,* ***gulmara+nha+mirri+y*** *rom+dhu ga dhäruk+thu*
speak-1st like slow stop tr+4th+PROP+ERG law+ERG and word+ERG
\ga ŋunhi+yi+n ***dharaŋa+na+mirr+nydja*** *dhäruk*
and that+ANS+SEQ understand tr+4th+PROP+PROM word T010p8
we also hear people who speak slowly, by (speaking their)words drawn out/ and those are understandable words(or/that is understandable speech)

iii) head nominal with an A role in relation to the verb stem

(396) *latju ŋunhi yoŋu ŋi* ***guŋga'yu+na+mirr*** *balanya mak, yuwalk*
nice TEXD person yes help tr+4th+PROP such maybe true T208p10
a nice person eh? helpful such-a-one maybe, (yes) true

(397) *ŋuriŋi+yi+n* *ŋäpaki+y* *ŋinydjakŋu+y+nha* ***balanyara+y+nha***
TEXD-ERG+ANA+SEQ white+ERG leader+ERG+SEQ such+ERG+SEQ
nhanukal ***djuy'yu+na+mirri+y+nha***
3sg-OBL(Poss) send tr+4th+PROP+ERG+SEQ T018p22
(taken) by that white(person), the leader/boss, such-a-one, his/her sender
(All the expressions in this example are describing the person who is filling an A role to an earlier verb. The verb stem with the PROP indicates that this person is the one who did the sending.)

iv) head nominal with a Locative role in relation to the verb stem

(398) *ŋunha ganydjula gapu+n \ ŋunhi+yi+n ŋathu*
DIS eye water+SEQ TEXD+ANA+SEQ cycad
bäni+nya+mirr+nydja
be of/in water(intr)+4th+PROP+PROM Burr p13
There is the waterhole that has the cycad soaking (in it)
OR There is the waterhole with those cycad soaking (in it)

v) Cases when the head of the phrase does not have an role in relation to the verb

In all my examples this involves the specification of a generic by referring to the kind of activity involved.

Many texts designate kinds of *rom* "law/practice" in this way.

rom is used in a wide range of contexts. This covers broad notions such as culture tor traditional law, especially that concerned with the sacred/ceremonial sphere, as well as a to a plan for a particular event, or someone's decision/point of view in regard to some matter. These all seem generally linked by a notion of something that has been given, or deemed as so -either by ancestral beings, tradition (being the ways of ones ancestors or simply by having become general practice), contemporary leaders or those with a recognized place to give their views (.e.g. if some kind of judgment/decision is required concerning an individual this might involve people in a particular kin relations to that person).

A selection includes:

(399) *balanya rom djaw'yu+na+mirr+nydja, yätjkurr*
such law take+4th+PROP+PROM bad T024p2
the practice of stealing is bad

(391) *balanya rom malanynha\ burr'yu+na+mirr, ŋäthi+nya+mirr ga*
such law PL/group dance(intr)+4th+PROP cry(intr)+4th+PROP and
bu+nha+mirr ga dharr'yu+n+mi+nya+mirr ga
strike/hit tr+4th+PROP and ?stop tr+R/R+4th+PROP and
ŋurrka+nha+mirr ...
throw (tr) +4th+PROP
such laws/practices as dancing, crying, striking oneself in grief ... (the implications of the last two verbs have yet to be clarified) T204p15

(392) *barpuru+n märr gandarr+kurr+a ŋunhi+yi+ny rom*
"yesterday"+SEQ somewhat middle+PERL+SEQ TEXD+ANA+PROM law
guŋga'yu+na+mirr+nydja dhawaṯthu+n
help (tr) +4th+PROP+PROM go/come out (intr)+1st 88Report
Sometime recently in between (i.e. a time of a different practice in the past and now) that law/practice of helping went out (re practices in the school since bilingual education was introduce in the early seventies)

The function of the verb stems with PROP *-mirr(-)* are parallel to those of the nominals with this suffix. They can occur as modifiers in a nominal expression bearing a role to a verbal predicate as well as attributes in equational clauses.

The widespread occurrence of verb stems with the PROP amongst my data is at odds with Morphy's (1983 p109) observations in regard to Dhuwal-Dhuwala that its use is rare. There is only one example in her corpus of texts and only two occur in

Heath's Dhuwal texts (Heath 1980a). It is indicative of the ad hoc collection of texts for use in initial language descriptions that the first major text I worked on produced six of these forms.

It is possible that the difference in distribution reported for these forms reflects a differences between varieties. Both Morphy's Djapu texts and Heath's Djambarrpuyŋu and Djapu texts were collected in areas to the east and south of Galiwin'ku. But the discrepancy between my Djambarrpuyŋu corpus and those included in Heath (1980b) suggests it is an accident of the data.

However, while not particularly numerous, they occur regularly enough in my text corpus to suggest that it is a productive process by which entities can be ascribed qualities having to do with particular actions with which they are associated. Furthermore such forms were found in texts from the three oldest speakers which suggest it is in fact not so innovative. Their use does seem to require a context in which the speaker is concerned to describe or characterize something somewhat fully.

On the basis of the Gupapuyŋu examples cited in Lowe (n.d.a), which are predominantly coinages for Bible Translation, Morphy suggests that these forms might take on a greater role with the development of literacy (Morphy 1983 p109). The use of these forms in my data does not confirm the weighting of the Lowe examples towards coinages for new notions and I would prefer to interpret the Lowe data as reflecting that this construction is one available for deriving new terminology. I do not believe we have enough evidence to support any claims about a correlation between their occurrence and the development of literacy.

PROP suffixed verb stems code actions or events which are inherently associated with, or even defining of, the head nominal. Its use here is problematic for the notion of "local coincidence" since the senses involved are processes rather than entities.

However, there is another consideration that should be taken into account. and that is the fact that these forms, and those verb stems suffixed with the ASS (see section 9.3.4.3), are amongst the closest to nominalizations of verbs that occur in Djambarrpuyŋu. No unsuffixed nominalized verb stems occur, although the FOURTH stem of the verb has cognates in other varieties that function as nominalized verbs (e.g. Djapu and Ŋaymil). There are some instances where the PROP and ASS would

appear to overlap but the full extent of this, and the possible distinctions between them, are matters that must await further investigation. It should be noted that the overall syntactic potential of the ASS and PROP suffixed to verb stems is quite different. The ASS occurs regularly in a complementizer function, in a relative clause like relation to the head nominal and can be used of a specific event which occurred or will occur in relation to the head. The PROP simply presents the event or activity as a general condition or characteristic of the entity. It does not occur in complementizer function. It is thus possible to distinguish between a fruit that is "edible" i.e. *lukanhamirr* and one "that has been, or will be, eaten" i.e. *lukanhawuy*.

9.1.2.2 PROP suffixed to *-Thu-* verb roots

Amongst various word lists and fieldnotes are a few instances of the PROP added directly to *-Thu-* verb roots. These roots may or may not be reduplicated (see section 10.2.4.3 for the derivation of modifiers by the reduplication of *-Thu-* verb roots).

In the available examples, which I simple list below, you will also find reduplicated *-Thu-* verb roots suffixed with the PROP. These all seem to involve a plural sense and thus potentially distinct from the reduplicated forms occurring as qualifiers without the PROP.

bap-bapmirr	marked eg spots/stripes of leopard or tiger (cf *bapthu*-N "paint, splotch, dab")
djawarmirr	boring (cf *djawaryu*-N "be tired, bored)
bawa'mirr	one who acts silly, stupidly or does something in error (cf *bawa'yu*-N "be/act silly or stupid; make an error")
djaŋ'tjaŋmirr	toddler (alt: *djaŋ'tjaŋdhunamirr*) (cf *djaŋ'tjandhu*-N "toddle (of baby)")
gal-galmirr	crawler (alt: *gal'-galyunamirr*) (cf *gal'yu*-N "crawl(of people, reptiles with legs), slither (of snake))
dhä-nyaŋ'nyaŋmirriy	dinner time (cf *dhä* "mouth"; *nyaŋ'thu*-N "eat/drink/chew")

It would appear that it is not a highly productive process although a detailed testing of all potential forms would be necessary to confirm this. Certain lexical items occur frequently e.g. *dhal-dhal* " closed" *lap-lap* "open" and *djawarmirr* "tired". However, speakers have rejected outright many other combinations of *-Thu* verb roots with the PROP which I have proposed.

Another factor of possible relevance to these forms is the fact that the use of uninflected *-Thu-* verb roots is a feature of young children's speech. It is thus possible that these forms reflect a register difference (see Devlin 1986 for an account of register differences associated with young children's speech).

9.1.3 PROP *-mirr(i-)* phrase

These constructions occur with both nonverbal and verbal stems each of which will be considered in turn below. In these constructions two words are juxtaposed in a particular order and the PROP is suffixed to the second. This whole expression then functions as a modifier of another entity.

9.1.3.1 PROP phrase involving non-verbal stems

The structure of the PROP *-mirr(i-)* phrase involving non-verbal stems is captured by the following:

noun	noun/adjective+PROP
(head)	(modifier)

The first nominal does not have any marking. Any relational case marking for the phrase is found only following the PROP on the modifier. The order shown is the only one permitted. The second constituent is usually a nomen but there is one recorded example with a locational. Some examples are listed below. Unless otherwise stated assume the entity to which the construction refers is a person.

entity-quality

djäma	*manymak+mirr*	"good worker"
work	good+PROP	
rrupiya	*yindi+mirr*	"with lots of money"
money	big+PROP	

entity-number

waŋarr	*waŋgany+mirr*	with the one Ancestral Being
ancestral being	one+PROP	
munha	*dharrwa+mirr*	with many nights (of animal)
night	many+PROP	

entity-locational

wäŋa	*barrku+ŋu+mirr*	from different places
place	far+ŋu+PROP	

This example contains the only instance in the corpus of a locational with the PROP and it is notable that this occurs with the *-ŋu-* augment. This makes it comparable with Temporals which also favour this augment before the PROP.

body part-entity

goŋ	*banikin+mirr*	with cans in their hands
hand	container+PROP	
goŋ	*wuŋgan+mirri+y*	with dog in hand (hit another)
hand	dog+PROP+ERG	

These examples are somewhat different to the previous examples in that the head of the construction is the whole to which the part refers. It is possible that the constructions could be viewed as an apposed whole-part relation with the PROP suffixed nominal modifying the whole-part combined. However, the second example given here, in which the relational case marker only occurs on the second word, indicates a PROP phrase. If *goŋ* "hand" were apposed to the whole it would occur with the ERG suffix.

9.1.3.2 An alternative construction with PROP marking on both nominals

The construction presented in the previous section is not uncommon. Less common in the corpus, but quite acceptable, are instances when both nominals are independently suffixed with the PROP, in accordance with the general principle of case concord. Examples include the following:

entity-quality

(402) *yo, buluk+nha warrpam+nha ... yaka+n* ***buruŋurr'+mirr bathala+mirr***
yes bullock-SEQ all+SEQ NEG+SEQ testicles+PROP big+PROP
Yes, all were bullocks ... (they did) not have large testicles T202p1

generic-specific

(403) *ŋunha+yi+ny ga nhina* ***djinba'+mirr+a dhäruk+mirr mala***
DIS+ANA+PROM IMPV-1st sit-1st djinba+PROP+SEQ word+PROP PL/group
Over there live the group with the Djinba language/speech/words REPp21

possessive

(404) *ŋuli ŋayi dhu dhuwal raki djaw'yu+rr+nydja boŋguŋ*
IRR 3sg FUT PROX tape/string take+2nd+PROM "tomorrow"
m .....i+y\ dhäruk+mirr ŋarra+kalaŋu+mirr+nydja
personal name+ERG word+PROP 1sg+OBLS +PROP+PROM T018p6
If M.....i takes this tape with my words (on it) ...

It is not known if the generic-specific and possessive constructions can occur in the phrase construction. However the possibility that the either construction is permissible for the entity-quality relation is clearly demonstrated by the following examples:

(405) *nyumukuɲiny'+mirra rrupiya+mirr ŋatha store+ŋur*
little+PROP+SEQ money+PROP food store+LOC/ABL
food at the store is cheap

(406) *rrupiya nyumukuɲiny'+mirr+a ŋatha store+ŋur*
money little+PROP+SEQ food store+LOC/ABL FN18989
food at the store is cheap

9.1.3.3 PROP phrases with verbal stems

In these constructions an argument of a verb occurs before a deverbal nominal with the PROP suffix. It has the structure

nomen + verb+4th+PROP

This construction, and parallel constructions which occur with the PRIV, are distinct from all other constructions in which case suffixes occur on deverbal nominals in that 1. the co-occurring nominal receives no marking and 2. the relational case only occurs on the second word. They are in fact formally parallel to the PROP phrases just described i.e.

[nomen[1] + verb+4th+PROP]+relational case marking
[noun + nomen+PROP]+relational case marking

A further distinctive feature shared by these constructions is that they appear to be confined to two constituents. Indeed both phrase types bear a close resemblance to nominal and verbal compounds (see section 10.1).

Predominant amongst my examples are those in which an O argument precedes a transitive verb, but there are also a few combinations of an S with an intransitive verb. This suggests a constraint limiting the first constituent in this construction to an unmarked form - thus an S or O argument. The head is not required to have an argument role in relation to the verb although it may. This is reflected in the

[1] There is one example in the corpus in which a quality-denoting nomen potentially occurs in a PROP phrase. This requires further investigation but it is for this reason I have described the first constituents as a nomen rather than a noun.

examples below where the head can be in a generic or locational relation to the modifying phrase:

i) Head is a generic in relation to the PROP phrase

(407) *bäpurru rom yäku* ***matjka ŋal'mara+nha+mirr***
tribe law name string raise (tr)+4th+PROP T018p2
a generic law name - "putting-up-the-string" (used as body decoration)

(408) *buraki+nya maŋda rom,* ***mokuy yupthu+na+mirr+a***
break+4th 3dl law corpse go/come down(intr)+4th+PROP+SEQ
the two broke the law, corpse-descending having (i.e. being killed) T010p19

ii) Head bears a possible locative relation to the verb in the PROP phrase:

(409) *dhuwana* ***rrupiya bilmara+nha+mirr+nydja*** *wäŋa*
here-SEQ money turn(tr)+4th+PROP+PROM place T101p19
here is the money-changing place

iii) Head plays an A role in relation to the verb in the PROP phrase:

(410) *bala dhaguny'nha buna be+ŋur+yi bili yan\ yolŋu+wuŋ*
then story/news+SEQ arrive-1st INDEF+ABL+ANA "same" EMPH person+OR
balanya+wuŋ, nhawi+kuŋ-ya ***yäku ŋayatha+nha+mirri+wuŋ***
such+OR whatsit+OR-ya name hold/keep (tr)+4th+PROP+OR
ga ***djorra' ŋayatha+nha+mirri+wuŋ***
and paper hold/keep (tr)+4th+PROP+OR T101p31
then a story arrived from that same place/from the person such, whatsit the name-holder(or one holding the names) and paper-holder(one holding the papers)

(411) *dhuwana* ***maŋda*** *ŋunhi* ***mala bunha+mirr+nydja*** *maŋda*
PROX-SEQ 3dl TEXD PL/group strike+4th+PROP+PROM 3dl Burr Fo p3
these are those two who procreated the group

The parallel structure of verb compounds and PROP phrases is well illustrated in the following example, in which a a compound verb with the PROP and a PROP phrase co-occur:

(412) *ga latju dhuwal yolŋu\ miyalk ..... galŋa-layyu+na+mirr*
and nice PROX person woman skin-relax/relieve (intr)+4th+PROP
ga ***dhäwu lakara+nha+mirr***
and story tell (tr)+4th+PROP T208p8
this is a nice person, woman ..... who is relaxed and who tells stories

9.1.4 Derivational uses of the PROP *-mirr(i-)*

This section is concerned with the use of the PROP to derive adverbials meaning "X number of times" and temporals. Its use with verb stems in adnominal function have been described above.

9.1.4.1 Adverbials meaning "X number of times"

Suffixation of the PROP to numerals and quantity denoting nominals derives lexemes meaning "X number of times", where X is the amount referred to by the nominal. Thus

waŋgany+mirr	one+PROP	"once"
märrma'+mirr	two+PROP	"twice"
lurrkun'+mirr	three/few+PROP	"three times, a few times"
dämbumiriw+mirr	four+PROP	"four times"
dharrwa+mirr	many/much+PROP	"many times, often"
nhämunha'mirr	how/some many +PROP	"how(ever) many times, how(ever) much time"

Several of these forms are exemplified in the following extract from a text:

(413) *ga ŋurruŋu malanynha balanda malanynha, ga dhiyal nhina+n nhawi ŋuli*
and first mob European PL/group and PROX-LOC sit+3rd whatsit HAB
waŋgany+mirr *lakara+nha, wo* ***märrma'mirr,*** *wo ŋula nhä+mirr, bala*
one+PROP tell+4th or two+PROP or "something"+PROP then
marrtji+nya+n\ bitja+rr bili ŋäthil+nydja ga+n buna+n
go+4th+SEQ do thus+3rd "same" before+PROM IMPV+3rd arrive+3rd
balanda ***märrma'+mirr, wo lurrkun'+mirr, wo bulal'+mirr,*** *ga*
European two+PROP or three/few+PROP or two+PROP and
bala+yi roŋiyi+nya
MVTAWY+ANA return+4th T208p18
And the first group of Europeans stayed here once, or twice or however many times then left. Always before the European would come, twice or a few times, or twice and then would go back.

An alternative pattern is to use the compounding initial *buku* "head" and make a PROP phrase e.g.

buku-waŋganymirr "once"
buku-dharrwamirr "many times"

It is also possible to express "number of times" with a compound like construction in which *buku* occurs as the first component followed by the numeral e.g.

buku-märrma'' "twice"
buku-goŋ waŋgany ga märrma' baythi+nya+wuy "seven times"
head hand one and two left over+4th+ASS

9.1.4.2 PROP *-mirr(i-)* deriving temporals

The PROP is often found suffixed to nominals before the ERG marking Temporal case indicating the time of an event. While these often occur on their own in the clause they do also occur with a head, which is either a word designating a time e.g. *walu* "sun/day", *dhuŋgarra* "year" or *wäŋa* "place". It would thus seem that all derived temporals can be viewed as modifiers, even if a time or a place nominal is not actually present, meaning roughly 'the time/place distinguished by X-having"

The "adverbial" function of these can generally be attributed to the relational case marker that occurs i.e. ERG *-Thu.* However there are a few exceptions where the ERG suffix does not occur e.g. *waŋganymirr* (*waluy*) "(on) one/ a certain day" (rather than *waŋganymirriy).* This variation has only been noted for nominals with the PROP in Temporal function. The fact that they can occur in temporal function without the ERG suffix links them with the temporal word class (see section 3.1.1.5).

Other Australian languages allow the "having"-suffix to indicate time without any further marking e.g.Walmatjari (Hudson 1976) and Yidiŋ (Dixon 1976).

The PROP has been found suffixed to nomens, verbal stems and PROPphrases in temporal function. Some examples are given below for particular temporal domains. There are also other lexemes or expressions which do not involve the PROP associated with each of these domains.

Seasons

bärra'+mirr(i+y) west/NW wind+PROP(+ERG)	(in the) Wet season - when the North West monsoon blows
luku nhära+nha+mirr(i+y) foot burn+4th+PROP(+ERG)	(in) the dry season when the ground is hot and burns people's feet
gapu ranhdhak+mirr(i+y) water dry +PROP(+ERG)	(in) the dry season when the water has dried up

Days of the week

marrya'+mirri+y the hunger+PROP+ERG	Saturday (the store was closed on Saturdays in past)
gulkthu+na+mirri+y cut+4th+PROP+ERG	Monday

Times of the day

dhä nyaŋ'nyaŋ+mirri+y — dinner time
mouth eat-REDUP+PROP+ERG — (cf *nyaŋ'thu*-N "eat/drink/chew")
ŋarkula+mirri+y — "cup of tea" time
water/drink/petrol +PROP+ERG

Some textual examples are given below:

(414) ***weyin+ŋu+mirr+a*** *yana+n, maŋda ga djingaryu+n*
long+ŋu+PROP+SEQ EMPH+SEQ 3dl IMPV+1st stand+1st
dhiyaŋ ***bala*** *gumatj+nha ga djambarrpuyŋu+n*
PROX-ERG (MVTAWY) "now" clan name+SEQ and clan name+SEQ T008p13
the two, Gumatj and Djambarrpuyŋu have now stood/existed for a long time

(415) *ŋunhi walal ŋuli wanha+ŋur mala wäŋa+ŋur*
TEXD 3pl HAB (some)where+ABL PL/mob place+ABL/LOC
buku-manapa+n+mi+nya ***bäpurru+mirri+y*** ***walu+y***
join together+1st+R/R+4th clan+PROP+ERG sun/time+ERG T016p12
they all came together from different places at the time of the funeral

9.1.4.3 *bawalamirr/birrka'mirr*

These lexemes are not uncommon used adnominally to indicate indefinite reference in relation to the domain established by the referent of the (present or understood) head. Appropriate English glosses are "any X" or "every X". There are a few examples where an expected case suffix is absent and the forms appear to be adverbials. Some examples from the texts are given below:

(416) ***bawala+mirri+ŋur*** *rumbal+ŋur ŋuli djetji dhärra+nha*
"random"+PROP+LOC/ABL body+LOC/ABL HAB sore stand+4th T014p1
the sores appear anywhere/everywhere on the body

(41)7 *mak ŋarra dhu* ***bawala+mirri+y*** *bäyŋu+thi*
perhaps 1sg FUT random+PROP+ERG NEGQ+INCH-2nd T204
I might die at anytime

(418) ***birrka'mirr*** *ŋayi ga+n marrtji+na+ny dhuwal*
random+PROP 3sg IMPV+3rd go+3rd+PROM PROX T208p5
S/he was going everywhere

I have not examined the use of the root forms and they certainly do not occur in the text corpus with the frequency of the PROP suffixed forms. They are however cited in Zorc (1986) and I present the glosses from there - ***bawala*** "[Adv] accidently, at random, unintentionally" and *birrka°* "[Adv] accidently, by mistake, at random".

9.1.5 Lexicalised nominals with PROP *-mirr(i-)*

In addition to those PROP suffixed forms that result from the productive or semi-productive processes that have been described so far there are also various stems in which the PROP suffix is fossilized. The examples of body parts with "extended" senses presented in section 9.1.1.4 are just some. It should be noted that each of the body part terms suffixed with the PROP can also be used in a regular productive sense to attribute a particular part to a whole. However the sense associated with the fossilized stem is quite distinct.

The PROP-*mirr(i-)* marked word may serve as the sole expression of the referent of a particular role and there are several forms which seem rarely or never to appear with a head. They are thus potentially lexicalized nouns. However for many of these examples it remains at least potentially possible to designate a head – often *yolŋu* "person" or *girri'* "things, clothes etc (moveable possessions)" and this potential needs further examination.

Suffixing the PROP to a word denoting a characteristic or defining feature of some new entity is a productive strategy for coining new words, as certain of the following examples will make evident. It is often only facts concerning general usage which will indicate whether a PROP suffixed word has become the standard term by which something is denoted. Both single words and phrases with the PROP can be lexicalized.

likan+mirr	elbow/handle+PROP	"cup"
ŋurru+mirr	nose/point+PROP	"kind of cycad nut parcel"
djäma+mirr	work +PROP	"worker, employed person"
ŋalapal+mirr	big+PROP	"old people"
gurrutu+mirr	kin relationship +PROP	"relative"
bathi yalŋgi+mirr	bag weak+PROP	"old person"
liya ḏukitj+mirr	head fresh shoot/grey hair+PROP	"old person"
ŋapa raŋan+mirr	back paperbark+PROP (paperbark carriers were traditionally used for young babies)	"new born baby"
goŋ gurtha+mirr	hand fire+PROP	"type of bee"
marŋgi+ku+nha+mirr	know+TRANS+4th+PROP	"teacher"
nhina+nha+mirr[1]	sit+4th+PROP	"chair"

[1]compare this use of this particular stem with its use above to indicate a child which is able to sit up (in section 9.1.2.1 (i)).

Another domain in which lexicalized expressions with the PROP occur are proper names and names for particular species of flora and fauna. There are few cases where the root does not or is not known to be related to a freely occurring morpheme. They include the following:

Clans

Lamamirr
Guyamirrilil
Buyuyukuluŋmirr
Liyagawumirr
Liyag(/w)alawumirr

Places

Dhäŋawumirr
Gandjalamirr

Flora and Fauna

galaŋgamirr	dugong
gawaŋalkmirr	type of stingray
djewurrumirr	yams, potato, various bush yams
wurrtjwurrtjmirr	emu

Most of the terms listed have no known free morpheme that is cognate with the potential root. However, some of the clan names do contain elements that are potentially cognate with free morphemes but it is unclear to me how these are connected to the clan names. Recognizable as independently occurring morphemes in the above list are *guya* "fish", *liya* "head", *gäwu* "muddy water",*buyu* " the weave, strips of fibre ready for weaving" *lama* "shovel-nosed spear". The isolation of the first two morphemes *guya* and *liya* at least is confirmed by the fact that alternative names exist with synonyms e.g. *Dämbu-gawumirr* with *dämbu* "head" rather than *liya* and *Ŋarirri'mirrilil* with *ŋarirri'* "fish" rather than *guya*. Further understanding of the relation between the clan names and the morphemes which constitute their names may clarify this

Of over 1300 Yolŋu Matha names listed by Yunupiŋu and Zorc (n.d.) there are only four peoples names that have *-mirr(i)*, and there is no evidence that the stems in these occur independently.

In the following set of examples the forms occur both as proper names as well as common nouns.

Place Names
Ganarrimirr
Nyamnyam'mirr
Wurrŋ'kamirr
Barŋgitjmirr

People's nicknames
Bolutjumirr
Ŋurru-ŋurrtjimirr

The following are roots isolable in these names that are identical to freely occurring lexemes in the language.

ganarri	"tree - Colophyllum ionophyllum"	*bolutju*	"beard"
		ŋurru	"nose"
nyamnayam'	"root food - water lily"	*ŋurrtji*	"mucus"
wurrŋ'ka	"shellfish - Cardita orbiculata"		
barŋgitj	"type of bee/honey -Trigona sp"		

The relationship between the proper name and the common name can be quite transparent. Thus the place referred to by *Ganarrimirr* has that particular tree there and *Bolutjumirr* refers to someone with a distinctive long beard. However *Ŋurru-ŋurrtjimirr* is a name used of a particular sister by her brothers. Brothers cannot use their sister's names and the "nicknames", while often seemingly unflattering in translation are quite in accord with the speech etiquette of men in regard to kin of the category *yapa* "Z -'sister'".

Names for particular flora and fauna that are composed of independent nomens with the PROP include:

goŋ gurthamirr	"type of bee/honey"	(cf *goŋ* "hand" *gurtha* "fire(wood)")
bathi gurriri'mirr	"death adder"	(cf *bathi* "bag" *gurriri'* "short")

There are also instances of PROP suffixed forms which retains a general sense which is not transparently related to its parts as well as being used as specific name for something e.g. *Jirra-warmirr*. Both its general and specific uses are demonstrated in the following example:

(419) *ŋuli nhe dhu ŋula nhä luka, balanya nhakun Jirra-warmirr, borum,*
HYP 2sg FUT "something" eat-1st such as tamarind fruit
djambaŋ dhuwal wo ŋula nhä Jirra-warmirr borum, wirpu-wiripu
tamarind PROX or "something" tart fruit other-REDUP
mala+ny
PL(/group)+PROM T101p27
should you eat something, such as the Tart-one(i.e. Tamarind), a fruit, Tamarind that is or any of the other tart fruit

As we see in this text *Jirra-warmirr* is used both as a name for tamarind as well as for anything tart or sour. This compound consists of an initial morpheme clearly identifiable as that for "teeth, blade". The second component of this compound is not clear. The only potential candiate for the second morpheme *war* I can find is the verb *waryu-N* "urinate". Tamarinds are very popular so it is not surprising that this has gained currency as a particular designation for this fruit. Schebeck (1978p176) lists a cognate compound in Dhaŋu *rirra-war* as the name for a "a

type of honey". He also lists the compound for "sour" as *rirra-waryuntami*. The equivalent to this in Djambarrpuyŋu would be the unattested form **lirra-waryunamirr*. It does suggest the second element is derived from a verb but it is not clear which.

9.1.6 Near homophony with the Reciprocal-mutualis-Reflexive suffix.

A near homophonous suffix is also found on verb stems to mark reflexive-mutual-reciprocal actions. The affix form is *-mi-*$\emptyset_{mirr}$ but two of its inflected forms produce a sequence homophonous with that of the PROP suffix, i.e. *-mi+rr* (the FIRST and SECOND inflection) e.g. *waŋa+nha+mi+rr* talk+4th+R/R+1st/2nd "talk with each other, talk together, talk to self ". This formal correspondence between nominal and verbal affixes is parallel to that between the nominal and verbal intensifiers ie. *mirithirr* and *mirithi-* $\emptyset_{rr}$ (with FIRST inflection *-mi+rr*). The verb stems to which R/R *-mi-* is added and those to which PROP *-mirr(i-)* is added are not identical, although there is some overlap for certain verb classes (see section 7.5.4.2).

The following example shows the contrast between the R/R *-mi-* and the PROP *-mirr* on the same verb in a class where there is a different stem is used for each of these suffixes.

(420) *bala ŋayi+ny dhu ŋunhi* ***djatthu+n+mi+rr+a*** *ŋayi+n*
then 3sg+PROM FUT TEXD chop+1st+R/R+1st+SEQ 3sg+SEQ
ŋunhi+yi+n yolŋu ***djatthu+na+mirr+a***
TEXD+ANA+SEQ person chop+4th+PROP+SEQ T007p1
then she/he chops her/himself, that person who's chopping

The use of the R/R to code reciprocal events and activites and events in which a group of people are engaged together (thus "mutualis") is inherently allied with non-singular participants. It is possible that this might be the source of the plural use of the PROP suffix with adjectives.

9.2 The PRIVative *-miriw*

Like the PROP, PRIVative *-miriw* has counterparts in many Australian languages. It has a roughly parallel distribution to the PROP but occurs less frequently.

An antonymous relation often holds between lexemes in which the same stem is suffixed by the PRIV and the PROP-*mirr(i-)*. The lexeme with the PRIV indicates

the lack or absence of some characteristic or condition rather than its presence which is coded by the PROP. While derived antonym pairs with each of these suffixes on the same root do occur, it is not always the case that all their senses are opposites e.g. *gaŋmirr* "hand+PROP"and *gaŋmiriw* "hand+PRIV" have quite distinct extended senses, "favoured, used, cared for" and "unable to cook" respectively.

The PRIV is found suffixed to certain nomens - nouns, numerals and colours, deverbal nominals, the interrogative/indefinite proform *nhä* "what" and a few -*Thu*- verb roots and proforms. Unlike the PROP it has not yet been noted with demonstratives. Nor does it occur with qualities, temporals or productively on locationals. I am not aware of any specific derivational processes associated with this suffix akin to those for deriving temporals and "number of times" with the PROP. However, a derivational function is indicated by examples in which PRIV suffixed forms are used adverbially. One particularly distinctive use of the the PRIV is its use in negative imperatives. There are also nominal plus PRIV combinations that are lexicalized.

Heath and Morphy both observe that the PRIV favours null marking in regard to relational case marking. Heath (1980a p26) notes that the PRIV can occur with such suffixes but rarely does, while Morphy (1983 p44) claims that the PRIV only occurs in ABS case. My data is in accord with the preference both found for null case marking on the PRIV. All but a handful of examples occur in S arguments of existential or equational clauses. However, there are a few examples with identifiable LOC, OBL, ERG and DAT suffixes, although examples of the latter case are confined to lexicalized stems. The potential for ERG marking is unclear, since there are several instances where an expected ERG marking does not occur. These examples are just those where the PRIV suffixed word functions as an adverbial, indicating the situation occurred "without (doing) X".

As with the PROP, a PRIV suffixed form is also a potential stem for the INCH -*Thi*- and TRANS -*Tha*- verbalizing suffixes (see sections 7.5.2 and 7.5.3).

The constructions in which these occur overwhelmingly place the PRIV in an attributive function - either predicatively in an equational clause or adnominally in an existential clause (i.e. those based on the existential verbs such as *nhina* "sit" *dhärra* "stand" etc.). Some occur in "afterthought" constructions, i.e. in sequences found at the ends of clauses where the speaker is concerned to further identify or qualify some participant. It is not uncommon for the case marking relevant to the

clausal role to be lost in such sequences and then these sequences are like a string of equational clause predicates.

PRIV marked words also occur in the phrasal constructions noted with the PROP. Their use adverbially and as negative imperatives is quite distinct from the functions described for the PROP.

We will now consider some examples. These are presented as far as possible in parallel sequence to those of the PROP *-mirr(i-)*.

9.2.1 PRIV *-miriw* with nominals

9.2.1.1 Characteristics/conditions of people

(421) *...ŋarali'+miriw ŋarra li ga nhina*
cigarette+PRIV 1sg HAB IMPV-1st sit-1st T401p22
(I get sleepy when) I haven't any cigarettes

(422) *yolŋu+ny ga+n nhina+n warraŋul* ***bala'+miriw,*** *bäyŋu bala'*
person+PROM IMPV+3rd sit+3rd outside house+PRIV, NEGQ house
people lived outside without houses,(there were) no houses OMS ln66

9.2.1.2 Characteristics/conditions of places

(423) *wäŋa+n yan dhu ga dhärra weraŋ+nha,* ***ŋula nhä+miriw+nha***
place+SEQ only FUT IMPV-1st stand-1st empty+SEQ, some/anything+PRIV+SEQ
yolŋu+miriw+nha
person+PRIV+SEQ T009p25
the place is empty, without anything, without people

(424) *bili* ***yätjkurr*** *ŋunha wäŋa,* ***wurralŋur+nydja,*** ***gapu+miriw***
because bad DIS place place name+PROM, water+PRIV OMSln57
because that place Wurralŋur is bad, (it's) without water

9.2.1.3 Characteristics/conditions of non-human entities

(425) *wiripu+n ŋunhi balanya+yi warrakan' barriri dumurr ga*
certain+SEQ TEXD such+ANA animals fear big and
wiripu+ny nhakun ***barrari+miriw+nha*** *latju+n mel-butji+n*
certain+PROM like fear+PRIV+SEQ nice+SEQ [eye-?]"tame"+SEQ
some animals are really frightened and others are without fear, nice, tame
T202p10

(426) ***yätjkurr*** *dhuwal \dhäwu dhuwal ga rom*
bad PROX story PROX and law/practice
mayali märr gaŋga ga ***mayali'+miriw***
meaning "somewhat" and meaning+PRIV T204p6
this story and practice (which story is about) is bad, (it has) little meaning (i.e. is not sanctioned by traditional practice/belief) and is without meaning

9.2.1.4 PRIV with body part terms

Like the PROP, the PRIV occurs with body parts with both literal and extended interpretations. Below are some examples of extended meanings:

	literal sense	extended sense
goŋ+miriw	having no hands	"unable to cook"
liya+miriw	having no head	"stupid, not thinking about work or whatever one should be"
buthuru+miriw	having no ear(s)	"inattentive, stubborn, one who doesn't listen; deaf"
mel+miriw	having no eye(s)	"not careful, doesn't watch out"
matha+miriw	having no tongue	"silent; dumb; doesn't speak a particular language"

Several body part terms plus the Privative suffix are used by brothers as reference terms for their classificatory sisters. They may also be use as address terms to the same class of kin. The "brother-sister" relationship is one with many constraints on it. One affecting language use is that sisters are not to be addressed or referred to directly by name. There are many expressions that can be used, and while most might at first appear derogatory, they function as polite and respectful ways of referring to someone in this relationship. One set of such terms involves body parts plus the Privative. Some examples are:

dulkun+miriw	ankle+PRIV
likan+miriw	elbow+PRIV
lirra+miriw	teeth+PRIV
yaŋara'+miriw	lower leg+PRIV

These may also be used as nicknames by other kin e.g. sisters of sisters.

9.2.1.5 PRIV with kin terms or terms denoting other human relationship categories

Kin terms with the PRIV are quite readily applied to people who are missing specific kin in a particular category - thus a child without a mother or father can be described as *ŋändi+miriw* "mother(M(Z))+without", *bäpa+miriw* "father(F(B))+without", a single or widowed person as *dhuway+miriw* "husband (FZC)+without" or *galay+miriw* "wife(MBC)+without".

It can also be used with non-kin human categories as in the following example:

(427) *weyin muka ŋarra dhuwal nhina+na+ny* ***yothu+miriw***
long PRT-OK 1sg PROX sit+3rd+PROM child+PRIV T008p5
for a long time I lived here without children

9.2.1.6 Some non-productive uses of the PRIV *-miriw* on other nominals

The PRIV has not been recorded on qualities, demonstratives or temporals. Most attempts to elicit the PRIV on locationals and pronominals were also rejected. However two examples, one of a locational and one of a pronominal were found to be quite acceptable.

The locational *djinawa'* "inside" was accepted with the PRIV as an appropriate response to a question asking if something is inside i.e.

(428) *yaka,* ***djinawa'+miriw***
NEG inside +PRIV GB89
No (its) not inside

Note that this denies the location of an entity, not the existence of an inside part. The resulting form is thus still a locational and the PRIV functioning as a negator rather than the lack of something in a particular entity. A counterpart with the PROP would thus be nonsensical since the locational lexemes themselves are already used to assert that something is in a particular location.

The PRIV was also accepted with the pronominal *ŋarra* "1sg" to indicate the absence of the speaker from a particular time/situation.

(429) *nhaltja+n dhu walal nhumalaŋ balanya+mirri+y*
do what+1st FUT 3pl 2pl-DAT such+PROP+ERG(Temp)
\guyaŋa dhä-dhuditj ***ŋarra+miriw+ŋur***
think-1st later on 1sg+PRIV+LOC T018p10
how they will think about you at such a time later on, without me (i.e. after my death)

9.2.2 PRIV *-miriw* on verbal stems

9.2.2.1 Deverbal PRIVatives used adnominally

PRIV *-miriw* is added to the FOURTH form of verb stems in an identical fashion to the PROP. Examples occurring in the corpus again almost exclusively refer to an S in the main clause. Relations these bear to the underlying verb include A, S,and O for which examples of each are given below. For an example of a potential local relation between the main clause S and the underlying verb see example 438.

a) A

(430) ***gurrupa+na+miriw*** *balanya yolŋu-ya*
give (ditr) +4th+PROP such person-ya T009p33
the kind of person who does not share

b) S

(431) *rom+dja* ***mala+ny*** *dhuwali dilkurr\ ga* ***dhawar'yu+na+miriw***
law+PROM PL/group+PROM MED big and end(intr)+4th+PRIV T018p9
these laws are important, and without end

c) O

(432) ***luka+nha+miriw*** *ŋayi ŋunhi dharpa+ny*
eat (tr)+4th+PRIV 3sg TEXD tree+PROM T014p10
that tree is not edible

The only examples in which the deverbal nominals are further case marked is with local case markers. One example occurs with LOC/ABL marking and another in a PRIV phrase with OBL marking in Allative case (see following section 9.2.3.3). In the following example with the LOC/ABL marker, it will be noted that any coreference between a main clause role and that of the underlying verb stem is between the DAT marked nominal in the main clause and the A of the verb stem to which the PRIV is suffixed.

(433) *ga yothu* ***manda+ŋ*** *dhu malŋ'thu+n, gäna+ŋu+ŋur* *yan,*
and child 2dl+DAT FUT happen+1st apart+ŋu+LOC/LOC EMPH
märra+nha+miriw+ŋur
get+4th+PRIV+LOC/ABL T019p9
and they have a child, apart (i.e. outside of social consent), without being "married" (i.e. having an officially sanctioned liaison)

9.2.2.2 Deverbal PRIVatives used as negative imperatives

This use is quite distinct from any found with the PROP. The deverbal nominal plus the privative expresses a complete negative predication. "Don't do X" or "Stop doing X". They are stronger, less polite than regular imperatives (see section 7.4.3)

(434) ***luka+nha+miriw+nha,*** *dhuwali+yi+ny* *dhulŋuŋu+n* *ŋatha*
eat+4th+PRIV+SEQ there+ANA+PROM assigned+SEQ food
Don't eat (it), that food is for someone else

(435) *way, mukthu+rr\ dlyṯlyyu+na+miriw\ gäthi+nya+miriw\ mukthu+rr*
hey, be quiet+2nd smart/crackle+4th+PRIV cry+4th+PRIV be quiet+2nd
Hey be quiet! Don't make a "crackling" noise! Don't cry, be quiet. T209p1
(Aside to kids while taping is in progress)

The first example (434)can be contrasted with the use of the same privative form in example 432. In the example here it functions as a prohibitive, telling the addressee not to eat X, where X is something specific. In the earlier example it is used adnominally to indicate that something has the general characteristic of being inedible.

9.2.2.3 PRIV with *-Thu* verb roots

The only example of the PRIV with a *-Thu* verb root that I have recorded is *gaṯkaṯmiriw* used to describe someone who does not prevent someone from doing something. It is the antonym of *gaṯkaṯmirr* used to describe someone who holds someone back or prevents someone from doing something. The verb root from which these forms are derived occurs with both *-Thu-* and the CAUS *-mara-* ie. *gaṯthu-*N (intr) and *gaṯmara-*Ṉ (tr) "to trip (someone) up, to choke (something)". The derived reduplicated nomen is *gaṯkaṯ* "to be restrained - as by a tight clothes or in the sense of being prevented from doing something".

9.2.3 PRIV *-miriw* phrases

The PRIV can enter into similar adnominal constructions to those found with the PROP. The structures are quite parallel (see section 9.1.3.3).

i.e. [noun + nomen+PRIV] + relational case marking
[noun + verb+4th+PRIV] + relational case marking

There are not as many examples in the corpus as for the PROP phrase. A selection is included below:

(a) Noun plus nomen PRIV phrases

(436) *gulaŋ djaga+miriw rerri*
blood care+without sickness AIDS Pamph
AIDS

(437) *dhurrwara bäpa+miriw yoŋu*
mouth/opening father+PRIV person
someone who has lost a father

(b) Nomen plus deverbal nominal PRIV phrases

There are examples with both transitive and intransitive verbs:

(438) ***maŋutji ŋorra+nha+miriw ŋunha+yi wäŋa***
eye lie+4th+PRIV DIS+ANA place T101p21
it is not possible to sleep in that place (re being busy all day while visiting Bali)

(439) *yolŋu nhe ga ŋäpaki nhe\ galki+puy ga barrku+puy\ gurruṯu+mirr ga*
Aborigine 2sg and white 2sg near+ASS and far+ASS kinship+PROP and
gurruṯu+miriw\ dhäruk märra+nha+mirr ga ***dhäruk märra+nha+miriw***
kinship+PRIV word get/take+4th+PROP and word get/take+4th+PRIV
\ djuŋuny dharaŋa+na+mirr ga djuŋuny dharaŋa+nha+miriw
meaning understand+4th+PROP and meaning understand+4th+PRIV T018p16
you an Aborigine (of NE Arnhem land) and you, a white - from near and far, kin and non-kin, having the words or not having the words, understanding the meanings or not understanding the meanings

(440) *ga barrkuwatj+thi+rr ŋayi ga dhuwali gurruṯu+lil+a,*
and apart+INCH+1st 3sg IMPV-1st MED-S kin category+ALL+SEQ
dhäruk+tja bambay+nydja ga yolŋu+wal+nha, ŋurlkal+nha
word+PROM blind+PROM and person+OBL+SEQ TEXTD-OBL+SEQ
wäŋa nhä+nha+miriw+wal+nha, miltjiri+wal+a
place see+4th+PRIV+OBL+SEQ blind+OBL+SEQ T022Bp5
and it is separated, this word *bambay*, to kin categories and to the person who cannot see the place, the blind (i.e. the word "bambay" can be used to designate a kin category (*ŋäŋdi*' "mother (M(Z))") and to mean "blind")

No examples of the alternative to the phrase in which both words are suffixed have been recorded for the PRIV.

9.2.4 Consideration of case marked adnominal functions and adverbial functions of the PRIV

In the introductory comments above mention was made of the limited occurrence of relational case markers following the suffix *-miriw*. Here I will review the few examples that do occur. It is clear that further research is required to determine the limits of relational case marking with PRIV marked stems.

Only three case markers have been recorded following the productive use of the PRIV, i.e. the LOC/ABL, OBL and ERG suffixes. The LOC/ABL occur in examples 429 and 433 above, and in the following:

(441) *bitja+rr ga+n ŋunhi ŋäthil+nydja baman'+tja nhina+n*
do thus+3rd IMPV+3rd TEXD prior+PROM long ago+PROM sit+3rd
mitjin+miriw+ŋur+nydja
mission+PRIV+LOC/ABL+PROM '80MedDaw
that's how it was long ago without the mission

In all occurrences with the LOC/ABL the expression establishes a condition, defined by the lack or absence of something, which describes the situation under which the clause occurred. Examples 441 and 429 appear to specify a temporal domain, while example 433 states the circumstance under which the event occurred. The latter might possibly be in Ablative case. It is not clear why the LOC/ABL suffix is used in these particular instances rather than the ERG, in either Temporal or Causal/Instrumental function. It may be that the Locative is the neutral choice for coding an abstract circumstance involving the lack of something.

The OBL example occurs on a PRIV deverbal nominal phrase in example 440. In this example the adnominal function of the phrase and presence of the OBL following the principle of case concord is quite transparent.

I have only noted one example in the corpus where the ERG suffix occurs following the PRIV. It is in Instrumental case:

(442) *bäygu nhe dhu gunhi gula nhä märra+m gäna+ny*
NEGQ 2sg FUT TEXD INDEF "what" take/get+1st alone+PROM
nho=kiyin+gal nhe djäl+miriw+yu+ny\ djäl+kurr+a yana+n nhe
2sg=EMPH+OBL (2sg) want+PRIV+ERG+PROM want+PERL+SEQ EMPH+SEQ 2sg
dhu märra+ma+ny
FUT get+1st+PROM T012p11
you do not take/get anything with your lack of desire, only through wanting (it) will you get (it)

Within the corpus several examples that could potentially be ERG case marked, and are so in equivalent uses of the PROP, occur without any such suffix. For example:

(443) *yaka* ***gamunuŋgu'+miriw*** *luki*
NEG white paint+PRIV ingest(tr)-2nd T013In209
don't (you) eat without (having been) paint(ed)

(444) *djamarrkuli+y' marrtji lakara+m* ***badatju+na+miriw***
children+ERG go-1st say+1st make a mistake+4th+PRIV Rep88Bir
the children were speaking without making mistakes

(445) *ga buma rerri* ***mirritjin'+miriw***
and strike-1st sickness medicine+PRIV AIDS pamph
and (they -the white blood cells) kill sickness without medicine

In at least the first and last example here it does not make sense to construe the PRIV marked nominal as modifying the O nominal, even though this might be expected from the patterns of case agreement evident with PROP marked words (and also those with the ASS (see section 9.3.3)). The situation is less clear in the

second example since it could be claimed that what the children are saying is "without mistakes".

Indeed semantically it would make more sense to construe the PRIV marked nominal with and ERG marked A or instrumental role.

Given that they are not so case marked it is possible these forms appear best interpreted as derived adverbials, presenting a negative condition for the whole clause.

9.2.5 Lexicalized nominals the PRIV *-miriw*

The only lexicalized forms that have been noted with *-miriw* are nominals. Several examples of *-miriw* with special senses when suffixed to body part terms were presented in section 9.2.1.4. The isolated occurrences of the PRIV on *djinawa'* "inside" and *ŋarra* "1sg" given in section 9.2.1.6 can also be considered as lexicalizations. Two further examples are *bäpurru+miriw* "corpse [tribe+PRIV]" and *dämbu+miriw* "four (head+PRIV)".

The occurrence of the DAT suffix following the PRIV is confined to the to the lexeme *dämbumiriw* "four". As a quantity-denoting nominal the occurrence of suffixes with this stem is unexceptional.

9.2.6 Summary of the uses of the PROP and PRIV

Shared characteristics	Distinct characteristics
1. To code characteristics of people, places, "non-human" entities. 2. Use with nomens, including body parts and kin terms 3. Use with proforms is restricted 4. Use with verbs in the4th stem and *-Thu-* verb roots 5. Use in phrases modifying another nominal 6. Fossilized in some lexemes	1. Only the PROP occurs with temporals,qualities, and demonstratives 2. PROP is used to derive temporal stems. 3. PRIV is used to derive adverbs of lack or negative conditions 4. PRIV words used as negative imperatives 5. In productive adnominal functions the PROP codes the presence of something while the PRIV codes the absence of something

9.3 The ASSociative *-Puy*

Form

This suffix occurs with an initial stop after nasals and stops or a glottal stop preceded by a nasal or stop, and variably as a stop or a semivowel elsewhere. This latter alternation does not appear to be completely random. The lenited form tends to occur with longer stems. Conversely, mono- or disyllabic stems are most likely to occur with an initial stop. There are a few contexts which appear to be categorically associated with a particular variant. Only the lenited form has been noted following the OBLS *-Kalaŋa-* or the augment *-ŋu-* on demonstrative stems and personal pronouns. On the indefinite/interrogative for non-humans only the stop initial form occurs i.e. *nhä+puy* "what/something+ASS". Some examples are:

mayaŋbuy	creek+ASS
gu|un'puy	stomach/billabong+ASS
rawalkpuy	sorcery+ASS
Galiwin'kupuy/Galwin'kuwuy	Galiwin'ku+ASS
mutika'puy/mutika'wuy	vehicle+ASS

On human referring nomens and demonstratives and pronominals the ASS requires the OBLS *-Kalaŋa-* e.g. *ŋarrakalaŋawuy* [1sg-ASS]. On non-human referring demonstratives the *-ŋu-* augment regularly occurs before the ASS e.g. *dhuwalaŋuwuy* [PROX-ASS] and it is also very common with Temporals e.g. *baman'ŋuwuy* "long time ago -ASS" but is is not categorical e.g. *baman'puy*.

As far as I have been able to establish, a cognate form for the ASS is found in all the major Yolŋu sub-groups except Djinba and Djinaŋ.

In Dhuwal/Dhuwala varieties spoken in the east- Djapu, Gumatj, Dhuwaya and Madarrpa - a suffix *-puyŋu* is found suffixed to place names to indicate "person from" that place (see Morphy 1983 p45, Amery 1985 p73). In varieties spoken elsewhere i.e. Djambarrpuyŋu and Gupapuyŋu to the west and Ritharrŋu to the south, this sense is coded by the ASS. It is noteworthy however, that this particular suffix appears to be fossilized in the clan names of the two western Dhuwal/Dhuwala varieties just mentioned.

This suffix occurs regularly with a wide range of word classes - nouns, locationals, temporals, pronominals, demonstratives and verb stems. It is proscribed in older people's speech with adjectival nominals, unless these are part of a construction in which the adjectival nominal receives ASS case marking by agreement. This may be through its occurrence modifying a non-derived head nominal with *-Puy,* or in an ASS subordinate clause. I have heard it used with adjectives in younger people's speech but am not aware how extensive their use of it is, nor if it is constrained in any way. Unlike PROP and PRIV the ASS has not been noted with *-Thu-* verb roots.

The predominant syntactic function of this suffix is to code an adnominal relation. Like other adnominal suffixes it is found modifying another nominal either in a nominal expression in a clause with a verbal predicate or in in an equational clause. In addition to the adnominal function, and distinct from the other markers of adnominal relations, the ASS-*Puy* in used in complementizer function to code non-finite subordinate clauses. However, even in these uses the constructions are adnominal. They are appropriately described by Morphy as reduced relative clauses (Morphy 1983 pp135-139). Unlike the PROP *-mirr(i-)* and PRIV phrases which allow an argument to be included with a deverbal nominal, and which formally resemble compounds, the *-Puy* constructions are more clause like and resemble other non-finite clauses which are marked with (relational) case suffixes in complementizer function (see section 12.1). These are distinct from the PROP *-mirr(i-)* phrases in that they require any arguments in the clause to be case marked in agreement with the complementizer suffix on the verb stem. Furthermore, the potential range of elements that can occur is also wider than for the PROP phrase constructions and the ordering of elements is not fixed although all constituents of the clause are usually juxtaposed. The constituents of the clause may include A, S or O arguments, Instrumental or Temporals and particles such as the COMPLetive *bili.*

Like the adnominal PROP *-mirr(i-)* and PRIV *-miriw* forms, ASS *-Puy* forms require appropriate relational case marking after the adnominal suffix. It is also quite possible for them to be the sole representative of a role in a clause.

Both nominals and clauses occur with relational case marking. While the presence of relational case marking is not common, the ASS overwhelmingly occurring in S

or O function in the corpus, the fact that they do occur attests to the adnominal function of this suffix.

ASS *-Puy* is also found fossilized on nominals. This is quite frequent amongst personal and place names but also occurs with common nouns.

Semantico-syntax

Various meanings have been attributed to the ASS suffix in the literature. These are listed below:

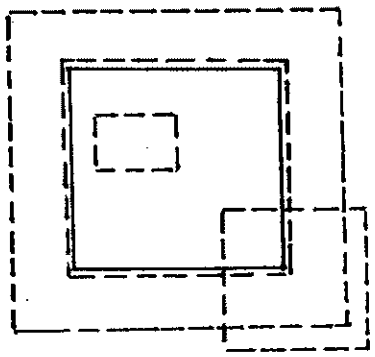
"(inherently or permanently) associated with"
(cf Schebeck for Yuulngu (1976 footnote 27); Heath for Ritharngu (1980b) and Dhuwal (1980a); Morphy for Djapu (1983 p39, p138))
"characteristically associated with X" and "basically purposive"
(Morphy for Djapu (p107) in regard to equational sentences)
"concerned with X"
(Morphy for Djapu p138 in regard to derived adjectival nominals)
"belonging to/for/about/"
(Lowe (n.d.a L39) in relation to nominal stems)
"as a result of/ caused by"
(Lowe (n.d.a L68) in relation to verb stems)

Adopting "associative" as the name of the suffix suggests a general kind of relation that is often recognized as existing between nominals coded with this suffix.

The relations coded by the ASS are distinct from those coded by other adnominal relations. The head establishes the domain and the ASS marked expression denotes the subcategorization of it according to a range of parameters. These include habitual/designated/chosen location, function or purpose, cause, or being the general concern of something e.g what a story is about. The ASS thus "types" or classifies a nominal along various dimensions.

I suggest that the sense of the ASS is very general, although exactly what the possible culturally appropriate notions of "concerned with/associated with" can be awaits a more detailed analysis. It may prove to be fairly unlimited, the ASS acting as a default or "elsewhere" coding for adnominal relations. The other categories, such as those coded by the PROP, PRIV, possession or adnominal apposition (see section 9.4) seem more circumscribed. The idea of an indefinitely extendable category which permits nominals to be classified according to a number of different parameters, would also seem to offer a plausible explanation for the use of this particular suffix as a complementizer in non-finite relative clauses.

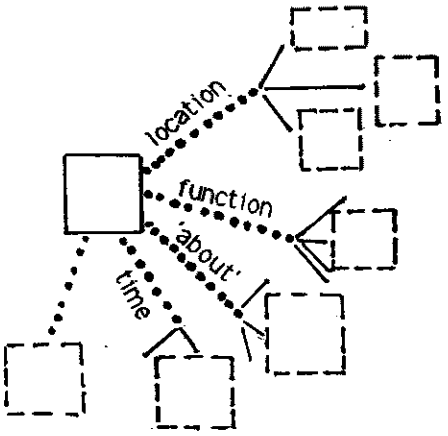
The diagrams below are an attempt to represent what I see as a key distinction in the use of the ASS and the PROP adnominally - at least as they occur on nouns. On the boxes the solid lines represent the head nominal and the dotted lines potential ASS - *Puy* or PROP *-mirr(i-)* marked modifiers.



— head nominal

-- possible relation of PROP marked nominal

PROP -
"coincidence"



ASS -
"Types" (according to different parameters)

The ASS is also distinct from the PROP (and PRIV) in the uniformity of the senses associated with this suffix when attached to different word classes. I have not been able to ascertain any derivational uses of the ASS on a par with those noted for the these two suffixes.

Both the ASS and the PROP appear to code several relations between nominals that are similar to many of the semantic cases coded by relational case markers between a nominal expression and a verb (such as the locative (LOC), instrumental (ERG), purpose (DAT), temporal (ERG) and source (ABL)). Unlike English, which can use prepositional phrases both adnominally and relationally or Warlpiri which uses its relational suffixes adnominally as well as relationally (see Dench and Evans 1988 p13 and p9) Djambarrpuyŋu codes these two relations with two discrete sets of suffixes. The suffixes found coding the possessor are exceptions in that they also have relational functions (see section 9.5).

We will now consider the different uses of the ASS that have been noted in turn.

9.3.1 ASS *-Puy* with nominals

9.3.1.1 ASS *-Puy* with nomens

a) Association through location

The examples of Lowe's "belonging to" category (n.d.a L39) and those of others described coding " inherently/permanently associated with" are those entities related by a close association with a particular location, for instance a person with a place, be it their clan territories, place of residence or place of work, or the association of a plant with the particular habitat. This is thus a 'typing' using the parameter of location. It is distinct from the role of location in the relation coded with the PROP *-mirr(i-)* which asserts the coincidence of two entites in relation to each other. The ASS-*Puy* is used to assert an association rather than coincidence. In this section I will focus on nouns which can be used to designate locations rather than on locationals which are the focus of section 9.3.1.2 below. Members of both word classes can be used with the meaning just described.

Unlike other writers on Yolŋu Matha however, I do not think that the component of "inherent or permanent" association is crucial, although it is often concomitant. As with the PROP *-mirr(i-)* the relation may be temporally long or short, habitual or confined to a single instance. The following examples show the ASS in both a habitual and instantial context:

(446) *nhä dhuwal gulwirri+ny, **diltji+puy,** dharpa*
what PROX Fan Palm+PROM back/bush+ASS tree/shrub
Do/Are Fan Palms (Livistona benthamii) grow in /associated with the open forest?

(447) *bäyŋu \ dhuwal gulwirri+ny dharpa, **ŋunha+ŋu+wuy***
NEGQ PROX Fan Palm+PROM tree/shrub DIS+ŋu+ASS
gulun'+puy
billabong/stomach+ASS T012
No, Fan Palm trees are associated with /grow around the billabongs

These examples clearly imply a habitual association, relating to the known habitats of particular tree types and indeed, habitats of all flora and fauna are regularly expressed in this way.

The following example was an exclamation uttered as someone noticed a cat sleeping on a bed:

(448) *way butjikat dhuwal bed+puy*
hey cat this/here bed+ASS FN 17989
Look there's a cat (asleep) on the bed
Look at this cat (asleep) on the bed!

It is not asserting that the cat is always found on the bed (although it is possible the speaker may be inferring this), rather it is describing a quality of the cat in this particular instance. It is in fact probably noteworthy just because it is a place in which a cat would not normally be expected. This expression contrasts also with one which would locate the cat on the bed, *butjikattja dhuwal bedɲur* [cat+PROM PROX bed+LOC/ABL] "The cat is on the bed" or one which would assert the coincidence of the cat with the bed i.e. *dhuwal bed butjikatmirr* [PROX bed cat +PROM]"The bed has a cat on it".

Note also that the location relation coded with the ASS is non-specific. Although the ASS will always be attached to the locale it is ambiguous as to whether the relationship is one of containment "X in Y" or juxtaposition of some kind "X on Y", "X under Y", "X near Y " and so on. In contrast to the PROP *-mirr(i-)* there is no requirement of coincidence.

Other uses of the ASS to indicate local associations which are not permanent or inherent include references to people by their positions or locations in a game or a ceremony.

Like flora and fauna, people are also associated with locations. This may be either through the localities to which they are allied through clan membership or ethnicity or by less absolute categories such as place of residence. Thus a person could be described by their association with a named place (see section 9.3.1.2 on locationals below for examples) or by a more general association with a type of landform. A commonly used distinction is one between people of the coast and people of the inland, described respectively as

(449) *ragi+puy gali'+puy* *or* *moŋuk+puy*
beach+ASS side+ASS salt(water)+ASS
from the seaside saltwater (people)

munatha'+wuy gali'+puy *or* *dilʧi+puy*
earth/sand+ASS side+ASS bush/back+ASS
from the inland inland (people)

b) Association through being what something is about

This is another function of the ASS that has been generally recognized in Yolŋu varieties. The following examples demonstrate one of its most common uses to denote what a *dhäwu* "story, information, news, message" is about:

(450) *dhuwal ŋarra dhu dhäwu lakara+m* ***wämut+kalaŋa+wuy,***
PROX 1sg FUT story tell+1st subsection name +OBLS+ASS
I will tell a story about Wämut T024Ap4

(451) *nhe rraku dhäwu lakara+m,* ***nhawi+puy*** *ŋunhi-ya,* ***worrk+puy***
2sg 1sg-DAT story tell+1st whatsit+ASS TEXD-ya fire type+ASS
"You tell me a story about, whatsit yes-that-one, the "worrk (type of fire)"
T101Bp1

(452) *ga balanya nhumalaŋ dhäwu* ***gara+puy+nydja***
and such 2pl-DAT story spear+ASS+PROM Spear Bk
An such is the story for you about the spear.

The notion of "about" is not confined to stories, as seen in the following example where it refers to *rom* "law/practice":

(453) *Gapman'+thu+ny ga dhuwal rom djäma* ***yuŋa+n***
Government+ERG+PROM IMPV-1st PROX law do/work new+SEQ
watjpil+puy+nydja *ga* ***dukta+walaŋu+wuy+nydja***
hospital+ASS+PROM and doctor+OBLS+ASS+PROM Yurr Hlthp1
The government has made a new law concerning the hospital and the doctors.

c) Association by function/purpose

This is another function of the ASS that is generally recognized for Yolŋu varieties. The Lowe "for" label covers this use of the ASS to indicate a relationship which is concerned with the function or purpose of a particular item e.g. a potion for sickness (i.e. a medicine) or a container for water (i.e. a bucket) as in the following examples:

(454) *wanha yawungu nhe nhirrpa+n ŋarkula'+wuy banikin,*
where "yesterday" 2sg put+1st water+ASS container T008p2
Where did you put the bucket (container for water) yesterday?

(455) *buthurr mirritjin* ***miŋiny'+puy+nydja***
bark of Wild Peach medicine diarrhoea+ASS+PROM Drrk(3)
the bark of the Wild Peach (Terminalia carpentaria) is a diarrhoea medicine
/the bark of the Wild Peach medicine is for diarrhoea.

d) Association by cause

The following examples suggest a cause relation or one in which a nominal is held to have been affected by the ASS marked nominal.

(456) *yolŋu dhiŋga+ŋal miyalk* ***galka'+puy***
person die+3rd woman sorcerer+ASS T023Bp7
a woman died from/through sorcery (OR a woman died because she was affected by sorcery)

(457) *ga ŋir'yu+na* ***ŋuli*** *ga+nha* *ŋunhiliŋumi,* ***gurtha+puy ganydjarr+puy***
and rest+4th HAB IMPV+4th TEXD-LOC$_2$ fire+ASS power+ASS
and (the animal) rests there (in the hole) because of the heat of the fire.
(OR because it was affected by the heat of the fire) T102Bp9

(458) *ŋunha djetji* ***nhä+puy***
DIS sore "what"+ASS
What's was that sore caused by?
yiki+puy OR ***wuŋgan+buy***
knife+ASS dog+ASS G191290
By a knife. OR By a dog.

This function is only exemplified with the ASS attached to verb stems in other descriptions or presented as a relation case function of this suffix. While I think the relation between the notion of cause and source to be presented in the following section warrants further consideration I maintain that even in these contexts the ASS is in adominal case function (see section 4.1.1).

e) Association by being the source

The following examples suggest a relation such as 'source' or 'result of':

(459) *djetji nhuŋu ŋunhi+yi* ***mäpan+buy***
sore 2sg-DAT TEXD+ANA boil+ASS T014p20
that sore of yours from/associated with the boil (becomes smaller)

(460) *yaka nhe dhu luka* *dharrayarrk,* ***dharraŋguik+puy***
NEG 2sg FUT eat-1st "dharrayarrk" Red-flowering Kurrajong+ASS T401p12
You mustn't eat "dharrayarrk" (the outer casing of the seeds) from/associated with the Red-Flowering Kurrajong (Brachychiton paradoxis)

(461) *ŋali dhu godarr* *dilthu+rr* ***\ŋeny+buy***
1+2dl FUT "tomorrow" to heal/kill by using a potion+2nd freshwater pool+ASS
We will poison (fish) from/which live in/which are associated with a freshwater pool tomorrow T022In36

The last example may also potentially be interpreted as using the ASS in regard to "locational" parameter.

It is possible the "cause" examples given previously should be subsumed with this category, with "caused by" being just one kind of general source relation.

f) Association by time

The following relationship, which is the final one I will present, is a temporal one, the ASS marked nominal indicating the time with which another nominal is connected:

(462) *bay ŋayipi dhu nhära **bilikan+lil+nydja**, .yaka bilikan+lil+nydja,*
until 3sg-EMPH FUT cook-1st billycan+ALL+PROM NEG billycan+ALL+PROM
*dhuwandja **yuṯa+puy**, dhaniya+lil+nydja*
PROX-PROM new+ASS paperbark container+ALL+PROM 80 Medp1
until it cooks in the billycan - not in a billycan, that's recent/ new - in a paperbark container

(463) *ga ŋunhi ŋanapurr ŋurruŋu+ny **wiripu+ŋu+wuy+nydja** munha+puy*
and TEXD 1pl first+PROM other+ŋu+ASS+PROM night+ASS
ga mitthu+n+a
IMPV-1st cut+1st+SEQ 80Baŋ'p3
and we cut up first those (turtles) from the previous day

(464) *yolŋu ga rirrikthu+n **guyiŋarr+puy***
person IMPV-1st be ill+1st cold+ASS
the person got sick when it was cold/in the cold weather G191290

Besides time referring nouns/adjectives exemplified here Temporals can also take the ASS suffix (see section 9.3.1.3 below).

9.3.1.2 ASS -*Puy* with Locationals

This is a distinctive use of the ASS, since other adnominal markers, namely the PROP, PRIV and DAT (Poss) do not have productive uses with this word class. The ASS occurs with both locationals and place names. These regularly occur indicating particular location with which another entity is associated. This uses would seem to follow naturally from the inherent locational meaning of words in this class. Some examples of this use with Locationals are given below:

(465) *ŋunhi **laypa+puy**, Darwin Harbour, wakatj people*
that other side+ASS, clan name Bk285p22
Wakatj people come from the other side (of) Darwin Harbour

(466) *nhe yolŋu \galki+puy ga barrku+puy\ga nhe balanda*
2sg Aborigine near+ASS and far+ASS and 2sg European
galki+puy ga barrku+puy
near+ASS and far+ASS T018p10
You Aborigines, close and distant, and you Europeans, close and distant...

This use is not distinct from those found with nouns. There is however a usage of the ASS with locationals that is somewhat distinct in that it denotes a locale in relation to the head nominal itself e.g. the inside part of something the central part of something. Body part lexemes and the location denoting nomens can also be used in this way (see section 4.4). An example is given below.

(467) *barrwaŋ+dja djalkthu+n ŋunhi **ŋapa+puy+nydja** gurrŋan+dja*
skin+PROM discard+1st TEXD **outer surface+ASS+PROM** black+PROM
*balanya+ny\ **djinawa'wuy+nha** dhu ŋayatha+m*
such+PROM **inside+ASS+SEQ** FUT hold+1st T014p16
discard the skin/bark, the black outer surface, then get the inside (part)

In this example the ASS marked Locational occurs alone as the representative of the O argument but it is clear from the context that the head entity is a plant.

The ASS marks an adnominal relation distinct from the use of locationals to modify a LOC marked nominal e.g. *djinawa' X-ŋur* "inside X". While the latter locates something in relation to the head nominal, i.e. it further specifies the location, the combination of an ASS marked Locational (or a nomen with locational meaning) and another nominal indicates the particular region of the head i.e. it further specifies a participant.

In this particular use the ASS appears to mark a location as an entity and it could be considered as a nominalizing function. However given the overall functions of the ASS it is probably more plausible to view it as a special instance in which one nominal is "typed" according to a locale in relation to itself.

Uses of the ASS with place names appears to be analogous to its use with Locationals. It can be used to indicate the place from which someone comes, and as in the following example:

(468) *ŋunha **yirrkala+wuy** yolŋu*
DIS place name+ASS person
That person is from Yirrkala

(469) *yaka yan ŋunhi ŋanapurru+wuy* ***galiwin'ku+wuy*** *yolŋu walal nhä+nha+mi+rr*
NEG EMPH TEXD 1pl+EMPH place name +ASS person 3pl see+4th+R/R+1st
It wasn't just us people from Galiwin'ku watching OMSIn142

The following example also suggests an analogous use of the ASS to the that where it denotes a locale in relation to the head itself. In this instance a place name delineates a place.

(470) *ga ŋayatham ŋunha* ***baŋ'thula+wuy*** *ŋayambalk*
and reach/hold-1st DIS place name+ASS place 80Banp1
and (then we) reached the place (that is associated with) Baŋ'thula

This interpretation is based on the assumption that this place name is of the kind that can occur as the bare stem (see section 4.6). It is possible that some speakers also treat it as stem that requires a final case suffix and that I am making an inappropriate interpretation of the ASS here.

The ASS also occur on place names when they are what a story is about:

(471) *balanya ŋunhi dhäwu lakara+m, ŋäthiliŋu baman'+puy wäŋa+puy\ yurr*
such TEXD story tell+1st old long span+ASS place+ASS ADD
märrma'+yi+rr ga bitja+n ŋurru+puy ga ***guŋda+puy***
two+INCH+1st IMPV-1st do thus+1st place name and place name
\ balanya, märrma' mala nhakun
such two group like T208p27
(I will) tell an old story about a place long ago, that is really about two places
Ŋurruŋur and Guŋdaŋur, that is, there are two groups
(cf *ŋurru* "nose/point" and *guŋda* "rock")

9.3.1.3 ASS *-Puy* with Temporals

Parallel to the coding of adnominal locational relationships by the ASS and its occurrence on Locationals, is its use to code a temporal adnominal relationship and its occurrence on Temporals.

While the PROP *-mirr(i-)* can occur with Temporals, it has a specialized sense and is restricted as to the stems with which it can occur (see section 9.1.1.6).

The ASS takes on no such distinctive nuance in regard to its occurrence with Temporals. It consistently "types" a nominal according is association with a particular time. However, Temporals are formally distinct from nouns occurring with the ASS, in that they generally occur with an augment *-ŋu-* between the

temporal root and the case marker. A few forms have been recorded without the augment but it is usually present.

gäthura+ŋu+wuy to do with today/nowadays
today/nowadays+ŋu+ASS
baman'+ŋu+wuy to do with the past(long ago)
long ago+ŋu+ASS
bäpuru+ŋu+wuy to do with yesterday/near past
yesterday/near past+ŋu+ASS

(472) *balanya ŋunhi rom\ ŋäthiliŋu* ***baman'+ŋu+wuy***
such TEXD law old long ago+ŋu+ASS T204p13
Such is that old law from long ago

(473) ***yawungu+wuy*** *dhuwali+ny gandarr+puy,*
yesterday/near past+ASS MED+PROM middle+ASS
yindi'-yindi+mirr+nydja
big-Redup+PROP+PROM T022Ap3
that (form) *yindi'yindimirr* is from more recent times

9.3.1.4 ASS *-Puy* with demonstratives and pronominals

ASS marking on these word classes can be the result of case agreement with another ASS marked nominal with which they co-refer in a determiner function, or it can be the sole constituent of a nominal expression coding one of the ASS marked adnominal relations. The following examples show first demonstratives and then pronominals in each of these functions

i) Demonstrative with ASS in agreement with another ASS marked nominal

(474) *balanya ŋunhi nhaŋu dhäwu, dhuwal ŋarra ga lakara+m,*
such TEXD 3sg-DAT story PROX 1sg IMPV-1st tell+1st
dhiyakalaŋa+wuy maŋawiny'+kalaŋu+wuy
PROX-OBLS+ASS avoidance address/reference form+OBLS+ASS
that is the story for her, I am telling about this "maŋawiny" (here it refers to a *gurruŋ* FZDC) T208p3

ii) Demonstrative with ASS coding the location with which something is associated

(475) *dhuwal ŋarra marrtji+na+ny dhipal+nydja* ***bala ŋarra märra+ŋal+nha***
PROX 1st go+3rd+PROM PROX-ALL+PROM then 1sg take/get+3rd+SEQ
dhuwala+ŋu+wuy+nha dirramu+nha+n
PROX+ŋu+ASS+SEQ man+ACC+SEQ Bk386p7/T008p11
I came here and married a man from here

iii) A pronominal with ASS coding what something is about

(476) *wiripu ŋarra dhu lakara+m nhuŋu, ŋarra+kiyin+galaŋa+wuy ŋarra,*
certain 1sg FUT tell+1st 2sg-DAT 1sg+EMPH+OBLS+ASS (1sg)
Another thing I will tell you is about myself, T023Bp6

iv) Pronominal with ASS in agreement with the noun of which it is the possessor

(477) *ga balanya, dhäwu+ny' ŋunhi+yi, wark+puy+nydja, ŋarra+kalaŋu+wuy*
and such, story +PROM TEXD+ANA work+ASS+PROM 1sg+OBLS+ASS
And such (it is), that story about my work T008Txtp13

9.3.2 Modification of ASS marked nominals

Modification of the ASS marked nominal requires case agreement on any co-referring nominal, not just pronominals and demonstratives in determiner function as we have seen in the previous section.

Relations such as whole-part, generic-specific, quantification and qualification expressed by apposition can also co-occur with a ASS marked nominal (see section 9.4). They all receive ASS marking by agreement, as we see in the following examples:

(478) *ŋunhi walal ŋuli nhakun wäŋa+puy mala+ŋu+wuy barrkuwatj+puy*
TEXD 3pl HAB like place+ASS plural+ŋu+ASS separate+ASS
luŋ'mara+nha+mi+nya
assemble+4th+R/R+4th T009p27
those people from many different places gathered together

(479) *ga bathi mala dhu dhaŋaŋ+dhi+rr, dhaniya,*
and bag PL/group FUT full+INCH+1st paperbark container
dhika nhä ŋanya ŋunhi+ŋu+wuy bili
[INDEFP what 3sg-ACC] "whatever" TEXD+ŋu+ASS "same"
dharpa+puy waŋgany+buy borum+dhu
tree+ASS one+ASS fruit+ERG(Instr) T017p15
and bags get filled up, paperbark container, whatever with fruit from that one same tree

Another example occurs in 457.

9.3.3 The ASS followed by other case suffixes

In the corpus ASS case marked nominals generally occur with a head nominal in S or O case. However, there are clear examples of the ASS suffix followed by relational case markers although I have only noted ERG, DAT and LOC suffixes. These are shown in the following examples:

(480) *balanya nhakun märr galki+puy+yu waku+'mirriŋu+y dhu*
such like "somewhat" near+ASS+ERG (Z)C+KINPROP+ERG FUT
ŋändi+'yu+n gurrpa+n
M(Z)+DELOC+1st call by relationship term+1st T022Bp5
for instance those "waku" ((Z)C) who are quite close will call their classificatory mother "ŋändi"

(481) *ga dhawar'mara+nha ŋayi ŋuli\ ŋunhi+yi djetji\ ŋuriŋi+yi yäku+y*
and end(tr)+4th 3sg HAB TEXD+ANA sore TEXD-ERG+ANA name+ERG
yanhuŋaniŋ+dhu mirritjin+dhu, marrandil+wuy+yu
sea anemone+ERG medicine+ERG rocky shoreline exposed at low tide+ASS+ERG
and that sore is completely healed by that medicine called "yanhuŋaniŋ" which is found in the rocky shoreline exposed at low tide Ŋrrk(11)

(482) *bäyŋu yan ŋarra Sydney+puy+wu+ny dhuwal marŋgi*
NEGQ EMPH 1sg place name+ASS+DAT PROX know T008p11
I don't know Sydney yet

(483) *nhina+n ŋarra ga+n\ ŋunhili nhanukal djäma+puy+ŋur bunbu+ŋur*
sit-3rd 1sg IMPV-3rd TEXD-LOC 3sg-OBL work+ASS+LOC shelter+LOC at
I was there in her office T003p7

There is also one example of an ASS marked expression modifiying an OR marked nominal:

(484) *ŋayi, malŋ'mara+nha+wuy, wäna ŋunhiŋu+wuy+wuŋ ŋalaŋal+wuŋ*
3sg appear, happen(tr)+4th+ASS place TEXD+ASS+OR elders/adults+OR
S/he "was brought into being" by old people from that place T023Ap2

I have not noted a nominal in which the ASS followed by the PROP or PRIV except with nominals where these suffixes are lexicalized. However the ASS does occur following productive uses of the PROP. The interaction of the various adnominal suffixes has yet to be probed in detail and it is not possible to be absolutely definite about restrictions on their co-occurrence and relative ordering. However, I am certain that the PROP, PRIV and ASS will always occur before the OR and relational suffixes.

9.3.4 ASS *-Puy* with verb stems

9.3.4.1 The complementizer function of the ASS in non-finite relative clauses

The ASS is suffixed to the FOURTH form of verb stems. Like nominals with the ASS suffix they function adnominally and relational suffixes may occur following the ASS suffix. A variety of nominals having relational roles to the underlying verb stem may co-occur. These must be marked to agree with the complementizer suffix,

either with the ASS or the OR case suffix. This agreement between the case marking of the deverbal nominal and co-occuring roles is quite general in Djambarrpuyŋu (see section 12.1.2).

Roles co-occurring with an ASS marked deverbal nominal in the corpus are A, S, O Instrumental, Locative and Temporal. However, the number of roles which actually co-occur appears to be restricted and a maximum of two occur in any one clause in the data. When I tried to elicit more, speakers produced finite clause constructions, i.e. constructions in which regular role marking was possible. The occurrence of finite clauses following these constructions making the role relations explicit are also not uncommon in the corpus. This restriction on the number of roles explicitly mentioned is in fact a feature of all non-finite clause constructions (see section 12.1).

For confirmation that elicitation of non-finite clause constructions in Yolŋu varieties is problematic, I refer the reader to Schebeck (1976a and b) who reports a wide range of speaker judgements for many of his elicited examples. The seemingly pragmatic constraint on the number of roles that can occur suggest context will play a vital role in what is considered "acceptable". A text based corpus has been invaluable in providing a wealth of naturally occurring examples. This provides both "acceptable" data and fortunately has extended the information already available. It also leads to further questions regarding these constructions and to the identification of new "gaps". In describing the non-finite clause constructions I present what information the corpus has provided and conclude with a summary in order to facilitate comparison between the different non-finite clauses and in the identification of 'gaps' in the data. Since the majority of non-finite clauses are coded with relational case suffixes most of them are described in a later chapter (see sections beginning with 12.1...).

Coreference constraints require that when an argument of the lower clause is coreferential with an argument in the higher clause it can appear in the higher clause with appropriate case marking for that clause (i.e. without the ASS). It is also possible for an emphatic pronominal or pronominal phrase to occur in the subordinate clause coding the coreferential argument but usually it is not mentioned (see example 494 and section 5.7.2.2 for the use of these pronouns to code clause internal coreference).

The higher clause role with which a lower clause role can be coreferential is determined by the relational case role. As with nominals, in the majority of examples, ASS non-finite clauses are adnominal to main clause S and O roles and thus neither the main clause argument nor the subordinate clause occur with a relational case suffix. However, there are examples in the corpus where the ASS clause is adnominal to DAT or ERG marked nominal in the main clause and then the non-finite clause constituents are suffixed with relational case markers in agreement.

It is not clear what the full potential is for main clause roles to occur with non-finite subordinate clauses. In my Djambarrpuyŋu data their occurrence with S and O roles is clearly favoured, but ASS marked verbal stems with additional ERG, DAT and LOC marking also occur. A notable exception to the requirement of relational case concord is the ACC (see example 499 where it does not appear). What this suggests is that ASS non-finite clauses are not required to agree with the head in regard to "humanness". The ASS marked verb is still an appropriate form for O case.

The following set of examples demonstrate the range of coreference attested between arguments in ASS marked subordinate clauses and main clauses.

a) Subordinate S to main clause S

(485) " ....." *bitja+n* *ŋanapurr dhu ŋäma,* *ŋunhi* *walal* *dhu*
"....." do thus+1st 1pl FUT hear(tr)-1st, TEXD 3pl FUT
dhawaṯthu+n ***bidi'yun+mi+nya+wuy***
come out(intr)+1st paint +R/R+4th+ASS T022Bp6
we hear thus "...." when they all appear painted up

b) Subordinate O to main clause O

(486) *ga* *märra+nha* *ŋunhi* *makuyuk+tja* ***lupmara+nha+wuy+nydja***
and get(tr)+4th TEXD pandanus+PROM do in water(tr)+4th+ASS+PROM
and get that pandanus that has been soaking in water 80 Drrk(11)

c) Subordinate S to main clause O

(487) *ŋali* *ŋanya* *ga* *nhäma* *B .....rr+nha,*
1+2dl 3sg-ACC IMPV-1st see(tr)-1st personal name+ACC
ŋorra+nha+wuy, *bili* *mirritjin ŋayi* *luka+n*
lie(intr)+4th+ASS because medicine 3sg ingest(tr)+3rd T023Bp2
we are seeing B.....rr sleeping because she drank/ate the medicine

d) Subordinate O to main clause S

(488) *ŋayi marrtji yunuŋali+ny ŋanapurruŋ ŋinydjakŋu+ny ŋunhi*
3sg go-1st oysters+PROM 1pl-DAT first/earlier+PROM TEXD
daŋga+puy+nydja bu+nha+puy dhärra'-dharra
dry spells+ASS+PROM collect/hit(tr)+4th+ASS stand/be(intr)-Redup-1st
banikin+mirr mala
can+PROP PL(/group) T012p18
the oysters which were collected earlier when it was dry stood there in tins

(489) ***w.....u+wuŋ*** *ŋunha+yi* ***bu+nha+wuy+nydja***
type of snake+OR DIS+ANAPH hit(tr)+4th+ASS+PROM BurrW/Rp1
That place was made by W.....u

e) Subordinate A to main clause O

(490) *ŋarra ŋanya nhä+ŋal* ***djaɪthu+na+wuy*** ***gäyi+puy***
1sg 3sg-ACC see(tr)+3rd chop(tr)+4th+ASS tree+ASS T023Bp1
I saw her chopping a tree

f) Subordinate O to main clause A

(491) *ŋunhi+yi ŋanapurr ga bäki gäthur+nydja*
TEXD+ANAPH 1pl IMPV-1st use(tr) today+PROM
walkur+puy+yu+n
people descended from forebears of one clan +ASS+ERG+SEQ
walalaŋ+gal **malŋ'mara+nha+wuy+yu+n** mala*
3pl+OBL happen/appear(tr)+4th+ASS+ERG+SEQ group T018p5
We use that today, (us) their descendents, (those) who were "brought into being" (by them)

The coreference in this instance is problematic given the possibility that *walkurpuy* might be construed as a modifier standing as an O in place of the higher clause A. However the OBL on the 3rd person pronoun suggests this is a possessive string, the OBL being the regular possessor marking where the posssessed is ERG case marked. An agent to the ASS marked verb would have either OR or ASS case marking. I therefore assume that there are two apposed ASS marked modifying expressions here, and that the coreferent main clause argument for the O of the nominalized verb is *ŋanapurr* "1pl". The slashes represent very clear pause breaks which provide additional support that these are two distinct units.

g) Subordinate O to main clause DAT

(492) *djäka waŋa-nhirra+na+wuy ŋayi \ ŋuriki+yi ŋarra+kalaŋa+w*
care for appoint(tr)+4th+ASS 3sg TEXD-DAT+ANAPH 1sg+OBLS+DAT
dhäruk+ku \ linygu nhaŋgu ŋunhi djäma ŋuriki+yi
words+DAT because 3sg-DAT TEXD work TEXD-DAT+ANAPH

\ *waŋa-nhirra+na+wuy+wu yoŋu+w*
[arm-put]"appoint"(tr)+4th+ASS+DAT person+DAT T019p9
she, the appointed one will care for those words of mine, because that work is for her, the appointed person

9.3.4.2 Constituents in ASS marked subordinate clauses

The most commonly found roles co-occurring with the ASS deverbal nominal in a subordinate claue are A, S, O and Instr, but peripheral roles such as Temp and Loc also occur. The A and S roles show some variation in marking. The A role is predominantly coded with the OR suffix rather than the ASS. It is not clear what contrains the choice but I suspect it is affected by the type of relation that holds between the A or S and the higher clause nominal. If the lower clause role can be construed as the source or originator of the higher clause entity then the OR option is possible (see section 9.6.2). All other roles are coded with the ASS. As various of the following examples demonstrate it is also possible for the roles to be modified.

a) A

(493) *dhäwu+ny ga+n ŋunhi+yi ŋorra+n ŋanapurruŋ+galaŋa+wuŋ*
story/news+PROM IMPV+3rd TEXD+ANA lie+3rd 1pl +OBLS+OR
ŋalapalmirri+wuŋu+ny lakara+nha+wuy+nydja
elders+OR+PROM tell+4th+ASS+PROM T018p13
that information (about various ceremonies) was there, which our elders spoke about

The OR is the regular case used to code the A role in a ASS marked non-finite clause. The Oblique Stem plus OR combination is the regular coding of the Possessor of an OR marked nominal.

(494) *bala ŋuli lakara+nha+n ŋunhi miyapunu dharpu+nha+wuy*
then HAB tell+4th+SEQ TEXD turtle spear/pierce+4th+ASS
walalaŋ+glyin+guŋ walal
3pl+EMPH+OR (3pl)
then (they) tell about the turtles they themselves had speared T023B

(See also example 489)

(495) *dhuwal ŋarra dhäwu lakara+m, wämut+kalaŋa+wuy mutika'+wuy*
PROX 1sg story tell+1st subsection name+OBLS+ASS car +ASS
wutthu+na+wuy
hit+4th+ASS
I will tell you a story about Wämut hitting the car T024Ap4

b) S

(496) *dhuwandja wiripu dhäruk, **yolŋu+walaŋu+wuy** nhina+nha+wuy*
PROX-PROM other word person+OBLS+ASS sit+4th+ASS T023Ap1
These are different words, about people sitting

(497) *napurr rirrakay ŋäma, **worru'-worruŋu+wuŋ**, ŋäthi+nya+wuy*
1pl sound hear+1st old people-REDUP+OR cry+4th+ASS G191290
We heard the sound of the old people crying

c) O

(498) *ŋayi+ny nhaŋu+wuy ŋayi [ŋunhi+yi **[djetji+puy***
3sg+PROM 3sg-DAT+EMPH 3sg TEXD+ANA sore+ASS
waŋa+ku+nha+wuy] $_{Rel}$]$_{O}$ märra+nha
healthy+TRANS+4th+ASS get/take+4th 80MedDrrk(11)
he gets it the sore-healer (i.e. sore-healing medicine) for himself

(499) *ŋali ŋanya ga nhäma b.....rr+nha ŋorra+nha+lil*
1dl 3sg-ACC IMPV-1st see-1st personal name+ACC lie+4th+ALL
***mirritjin+buy** nyaŋ'thu+na+wuy*
potion +ASS eat/dring+4th+ASS FN21/9/89
We two are watching B.....rr sleeping, having drunk the medicine

(See also example 490)

d) Instr

(500) *ŋunha ga ŋorra warrakan' garrtjambal, buraki+nya+wuy*
DIS IMPV-1st lie-1st animal kangaroo wound+4th+ASS
***gara+puy**\ dharpu+ŋal gara+y yolŋu+y*
spear+ASS pierce+3rd spear+ERG(Instr) person+ERG T023Bp4
There lies a kangaroo that is wounded by a spear, pierced by a person with a spear.

e) Body Part

(501) *ŋunha yaka yan **yolŋu+wuŋ goŋ+buy** djäma+puy*
DIS NEG EMPH person+OR hand+ASS work+ASS Gutp2
That is not produced by a person's hands

(502) *ga waŋga'+waŋgany **gulun+buy** **walalaŋ+guŋ** gurruka+nha+wuy*
and one+REDUP stomach+ASS 3pl+OR bear+4th+ASS
ŋurukurruŋ+guŋ+dhi** **märrma'+wuŋ** **bäpurru+wuŋ
TEXD-PL+OR+ANA two+OR clans+OR OMSL282
and each one who was borne from their stomachs, from those two clans
(i.e. all those whose mothers came from the two clans)

The body part obviously gets independent treatment from its "whole" in these constructions. This has parallels with the marking of this relationship in main clauses where body parts can only occur with "non-human" case markers while

their wholes can take case marking appropriate to the "humanness" of the referent. (see section 9.4.5).

f) Temp

See example 488 above where *dangapuy* in *dangapuy bunhapuy* refers to the time when the oysters were collected i.e. "during the dry spells". The expression *danga+y wäna+y* "dry spells+Temp place+Temp" would be an equivalent expression with relational case marking.

g) Loc

(503) *bäyŋu ŋayi ŋunhi diltji+puy dharpa, ŋunhi+yi+ny dhuwal ŋayi*
NEGQ 3sg TEXD bush+ASS tree TEXD+ANA+PROM PROX 3sg
ŋunha+ŋu+wuy dhärra+nha+wuy gulun+buy, balanya,
DIS+ŋu+ASS stand+4th+ASS billabong+ASS such
badarr+mirri+wuy
paperbark+PROP+ASS T012p3
That tree isn't found in the open forest, that is one which stands in/near the billabong, OK, near the paperbarks.

Adnominal relations within the ASS subordinate clause are permitted - possession (as in example 493), quantification (see example 502) and qualification. Demonstratives (as in examples 502 and 503), *wiripu* "difference/certain" and *mala* "Plural/group" can also occur in these clauses.

These adnominal relations within a subordinate clause all require case marking agreement with the relevant ASS clause marker of their heads i.e. ASS or OR. This is optional with the form *mala*, exactly as it is when indicating plurality in relationally case-marked nominals.

Modification of a subordinate clause role is not widespread however, reflecting the heavily reduced nature of these clauses. Given the fact that most roles receive a single identical suffix it is not surprising that most of the non-deictic modification recorded occurs in regard to OR marked role, the only role that does get a distinctive marking.

The only other constituents that have been noted are the COMPL lexemes *bili/ liŋgu/linygu* and the co-occurrence of other deverbal nominals.

The COMPL always occurs with the *-ŋu-* augment before the ASS i.e. *biliŋuwuy* and *liŋguŋuwuy*.

(504) *bili ŋayi ŋunhi bakpakmara+nha+wuy+nha* ***linygu+ŋu+wuy+nha,***
because 3sg TEXD wound(tr)+4th+ASS +SEQ COMPL+ŋu+ASS+SEQ
wiripu+ŋu+wuŋu+ny yoiŋu+wuŋ ŋurikuŋu+n gurruɫumirriŋu+n
certain+ŋu+OR+PROM person+OR TEXD-OR+SEQ relative+SEQ
nhanu+kalaŋa+wuŋ, dhuway+'mirriŋu+wuŋ
3sg+OBLS+OR FZC+KINPROP+OR T019p4-5
because she/he is bashed up already, by another person, her/his relative, a father's sister's child

(505) *" ....." ŋunhi+ny* ***bili+ŋu+wuy+nha,*** *dhiŋga+nha+wuy+nha warrakan'*
TEXD+PROM COMPL+ŋu+ASS+SEQ die+4th+ASS+SEQ bird/animal
thats (about something that is) finished, an animal that is dead T023Bp1

This was given in explanation of an expression which implied that the animal was already dead, as against one in which the animal is yet to be speared.

Sequences of deverbal nominals may have a head-modifier relation or represent autonomous actions. Examples of these are:

a) modification of the action

(506) *wiripu bäyŋu+thi+n marrtji+n walalaŋ+guŋ* ***guŋga'yu+na+wuy***
other/certain NEGQ+INCH+3rd go+3rd 3pl+OR help+4th+ASS
djäma+puy
work+ASS OMS1n92
some had passed away, (those/the ones) they had worked to help OR some had passed away who had received their help

b) independent actions

(507) *wiripu-wiripu bäpurru* ***dada'yu+na+wuy+nha,***
different-REDUP clan free+4th+ASS+SEQ
waŋgany-manapa+na+wuy+nha
unite+4th+ASS+SEQ OMS
all the different clans - freed and united (by the work of a particular old man)

9.3.4.3. The complementizer function of the ASS not involving coreference between subordinate and higher clause constituents.

In some examples of the ASS with verb stems there is no coreference between its core arguments and that of the main clause nominal with which it agrees in relational case. Then the ASS appears to function, at least in part, as a nominalizer, permitting the head nominal to be "typed" or specified according to the particular situations denoted by the verb stem. The distinction between the complementizer function and and regular adnominal function of the ASS is fuzzy in this context and

warrants further consideration. Most examples only consist of a single verb stem, but there is some evidence these can be expanded (see 510 below).

Many examples occur in those texts in which the speaker is describing the meanings of words. The ASS marked verb stem occurs in S function with heads such as *dhäruk* "word", *mayali* "meaning" and *rirrakay* "sound". The ASS form is one which permits verbs or the events they denote to be talked about metalinguistically. Some examples are:

a) the ASS attached to a verb stem that is being talked about as a word

(508) *waŋgany+dja ŋayi dhuwali* ***dhawal-guyaŋa+nha+wuy*** *dhäruk mayali'*
one+PROM 3sg MED give birth/think of homeland +4th+ASS word meaning
one meaning of/associated with the word "dhawal-guyaŋa" is T024Ap6

b) the ASS with verb stems which describe the meaning of another word

(509) *wudatj,* ***wokthu+na+wuy*** *dhäruk*
INT praise+4th+ASS word Bk286p10
"wudatj" is a word of/associated with praise

(510) *ŋayi wiripu mayali',* ***girri'+puy*** ***larr'yu+na+wuy***
3sg certain meaning things+ASS drop/fall from(pl)(intr)+4th+ASS
That one's meaning is (associated with/about) things dropping T010p10
(re the verb *burr'purryu*-N)

Note the inclusion of an S argument in the second example here.

c) the ASS with verbs stems describing a locution or activity with which a particular sound is associated

(511) *"gu-uy"* ***gawaw'yu+na+wuy***
"guy" to call out "guy"+4th+ASS T102Bp26
"gu-uy" is the sound called out
OR "gu-uy" is the sound associated with the doing of "gawaw'yu-N"

(512) *ga ŋäma muka dhu ga nhe ŋunhi, rirrakay+nydja*
and hear-1st PRT-OK FUT IMPV-1st 2sg TEXD sound+PROM
gapu+nha+ny, djalwurr, djalwurr, djalwurr, djalwurr, djalwurr
water+ACC+PROM "splosh" "splosh" "splosh" "splosh" "splosh"
balanya+wuy+nydja marrtji+nya+wuy+nydja
such+ASS+PROM go+4th+ASS+PROM T011p4
and you hear it, the sound of the water "splosh, splosh etc" which is associated with walking (through water)

(513) *marrawinydju+na+wuy+nydja* *rirrakay* *dhu ga* *walal*
to call out in a special way+4th+ASS+PROM sound FUT IMPV-1st 3pl
dhawaŧmara+m
put/send out+1st T011p7
They put out the sound of/associated with "marrawinydjun"-ing

In the next examples the ASS is again attached to a type of saying, but apposed to a generic noun that is not inherently concerned with the production of sound.

(514) *guriŋi+yi* *ga* *rom+dhu* *lakara+m* *gurruŧu,*
TEXD-ERG+ANA IMPV-1st law+ERG tell+1st relationships
gurrpan+mi+nya+wuy ***wäwa+'yu+n+mi+nya+wuy***
to call by kin term+R/R+4th+ASS B+VBZR+1st+R/R+4th+ASS T015p10
the law tells about the relationships, the calling of one another by kin terms, the calling of each other/people as brother.

In all these examples we see the X in expressions equivalent to "the noise of X", "the word X", "the meaning of X" contains a verb coded with the ASS. One possible perspective on these examples is that they code a generic-specific relation, where the specific item is denoted by a verb. Were the X not a verb but a a nominal root then the ASS case marker would not be required. It would simply be apposed to the head nominal (see section 9.4.3). This suggests that in this context the ASS is grammatically required. It should be noted that the FOURTH form of verb stems cannot occur without a case inflection when it is used deverbally. The ASS appears to be the default case in this context.

However, it is still possible to attribute an adnominal function not unlike that of the "being what something is about" which occurs with nouns. The distinction between a verb stem which is nominalized and apposed to another nominal with regular relations to those between two nominal and that of an adnominal clause is problematic in this context. The possibility that they are formally nominalized verbs rather than clauses is one to be considered, given the similarities of these forms to action nominalizations in which the ASS suffix is fossilized (see the following section).

Further investigation into the potential for these verbs to occur with additional roles would be revealing as to their status. If they can occur with ASS or OR marked arguments/roles they are formally clauses. If they are nominalizations they would be expected to occur with regular modification associated with nominal expressions.

The fact that there is a semantic relation between the clause and the head nominal similar to that coded with the ASS between nominal roots is not particularly

problematic. Indeed it is quite possible that the relationship of ASS marked non-finite clauses to their heads may well overlap with the general array of functions occurring with the adnominal use of the ASS. A similarly close correlation is also evident between meanings of relational case suffixes and their use as complementizers.

Two further examples of the ASS with verb stems where there is (potentially) no coreference between a subordinate clause role and the higher clause nominal to which it refers, used in somewhat different contexts to those described so far, are considered below:

(515) *rom+dja ŋarra dhu dhuwal lakara+m nhawi+puy\ **dhiŋga+nha+walaŋu+wuy,***
law+PROM 1sg FUT PROX tell-1st whatsit+ASS die+4th+OBLS+ASS
yolŋu+walaŋa+wuy
person+OBLS+ASS T015p1
I will tell the law/custom concerning corpses.

This is the only example in the corpus with an OBLS on a deverbal nominal. This suggests that it refers to 'the dead ones ("human")' and is modifying the nominal *yolŋu*. The case marking can the be attributed to case concord reflecting the "humanness" of the referent. There is no coreference between the head nominal *rom* "law" and an argument of the verb stem with which the ASS occurs. This appears to be an instance in which the ASS is associated with both a nominalization of the event and the notion "be what something is about". It is unlike the previous examples in that the ASS marked event does not further specify or identify the head, despite the fact that is it is a generic nominal. The term *dhiŋganhawuy* referring to "death" i.e. nominalizing the event itself, has also been recorded. This example is thus further support for the potential for ASS marked verb stems to be interpreted as nominalizations.

In the next example the LOC suffix occurs on the ASS marked constituent:

(516) *wiripu+n dhuwal nhakun ŋali ga nhina maŋda\ dhiyal*
other/certain PROX like 1+2dl IMPV-1st sit-1st DL(3dl) PROX-LOC
***nhina+nha+wuy+ŋur** dharpa+ŋur*
sit+4th+ASS+LOC/ABL tree/wood+LOC/ABL T009p3
and another instance is this/here, we two are sitting, on this "wood for sitting on" (i.e. sofa)

Two interpretations are possible here and it is not clear which is appropriate. In one the verb stem is a nominalization specifying the head according to a particular activity with which it is associated. The ASS marked form can again be attributed

dual functions, that of marking an action nominalization (sitting) and the coding of the adnominal relation in which things are related by function (the latter is one of the regular uses of the ASS with nouns (see section 9.3.1.1). The gloss given above is according to this interpretation.

The second interpretation attributes the verb stem with the ASS the status of a non-finite clause, on the grounds that coreference is permitted between the Locative role in each clause. This would require a gloss something like "we two are sitting on this wood which is being sat on". This interpretation would not be inappropriate given that the speaker is setting the scene to provide another context in which the verb *dhurrpara-*Ŋ (tr) "cover, be over" would be appropriate. Indeed in the clause that follows the speaker applies this verb to this particular context (i.e. in relation to people sitting on something).

Clearly more needs to be known about the distribution of these constructions and the full range of roles which permit a relative clause interpretation needs to be ascertained.

Summary of characteristics of ASS marked non-finite relative clauses in the corpus:

1. The ASS appears on verb stems whose associated arguments may or may not be coreferential with those in the main clause. However, it is possible those instances in which there is no coreference should be interpreted as nominalizations. The suffix is very widely used to code non-finite relative clauses and the following points refer to these.
2. The coreference that occurs involves higher clause A, S, O and DAT roles
3. The coreferential role in the lower clause is usually deleted. However, it can be mentioned using an emphatic pronominal or pronominal phrase.
4. Co-occurring clause constituents are roles marked with the ASS or the OR. The ASS can code any role but the OR only occurs coding A or S. The ASS also codes any additional constituent that is not a nominal.
5. Constituents that occur in these clauses include A, S, O and the peripheral roles Instrumental, Temporal and Locative. The COMPL particles *bili/]ingu/]inygu* also occur. They also take the complementizer suffix but appear to require the *ŋu* augment before the ASS. These clause also permit additional verb stems in the subordinate clause. Various complex nominal expressions occur included possessives, plural marking with *mala,* adjectives and demonstratives.
6. Co-occurring demonstratives agree with the "humanness" of the subordinate clause roles they modify.
7. They function as reduced relative clauses
8. The occur predominantly with head nominals in S or O function. They have also been noted with ERG, LOC and DAT relational case marking.
9. The clause constituents are usually juxtaposed.

9.3.5 ASS -*Puy* in fossilized stems

Like the PROP and PRIV adnominal suffixes there are a number of lexicalized nominals incorporating the ASS suffix. The stems may be nominals or verbs. The distinction between productively formed lexemes and those which are lexicalized is not readily determined, but there are some semantic and syntactic criteria which can be invoked. Thus lexicalized forms regularly appear without a head (although this is not automatic proof of lexicalization since there is no syntactic restriction against a modifier occurring without a head). Any further modification of these forms is identical to that for other nominals. This is particularly useful for distinguishing lexicalized verb stems from ASS marked verb stems in non-finite clauses. Special senses may also be associated with the lexicalized form but the denotata are often obviously within the range of what might be expected from productive uses of the ASS. In some contexts, the lexicalized form may also be homophonous with productively formed lexemes.

For some discussion of the ASS in personal and place names refer to section 4.6. It is much more prolific in these domains than the PROP suffix.

Lexicalized nomens include the following:

ḷiyapuy	pillow	(cf *ḷiya* "head")
walupuy	daytime	(cf *walu* " sun/day")
gumurr'puy	shirt	(cf *gumurr'* "chest")
guyiŋarrpuy	jumper/cardigan	(cf *guyiŋarr* "cold")
djinawa'wuy	petticoat	(cf *djinawa'* "inside")
buku gurthapuy	widow/widower	(cf *buku* "head" *gurtha* "fire")

As with the PROP suffix a generic nominal such as *yolŋu* "person" or *girri'* "things. moveable possessions" can often co-occur with lexicalized nomens incorporating the ASS suffix.

Some of the examples of lexicalized verb stems with the ASS noted to date reveal relations between the process of the verb and the entity to which it refers which are familiar from productive uses of the ASS. As the following examples demonstrate, the association may be in regards to a place in which the process occurs, the product of the process or a tool by which the process can be carried out. These suggest a correlation between the locational, source and causal relations covered by the ASS.

ḷup-ḷupthunawuy	shower	(cf *ḷupthu*-N "be in water (intr)")

"location"

yäkthunawuy "result of/source"	airstrip	(cf *yäkthu-* N "clear (tr)")
mulka'kunhawuy	towel	(cf *mulka'ku-* N "dry (tr)")
dhurrthurryunawuy "cause"	blanket	(cf *dhurrthurryu-N* "cover (tr)")

It is also possible for the ASS to occur on verb stems that are action nominalizations. The following are some examples:

marŋgithinyawuy	learning/ knowledge	(cf *marŋgithi-*$Ø_{rr}$ "learn, know (intr)")
guŋga'yunawuy	help	(cf *guŋga'yu-*N "help (tr)")
guyanhawuy	thought	(cf *guyaŋa-*$Ø_a$ "think (tr)")

The following example demonstrates the use of *marŋgithinyawuy* as the head of an S expression. It also raises the possibility that roles pertaining to the deverbal nominal can occur in these action nominalizations. However, the full extent of this requires more study.

(517) *yindi+thi+n+a ŋayi mirithi+na+n, **marŋgi+thi+nya+wuy***
big+INCH+4th+SEQ 3sg INTENS+4th+SEQ know+INCH+4th+ASS
*ŋarra+ku, ga **dhuŋgal+puy djäma+puy** ga **maŋutji+wuy***
1sg+DAT and hand+ASS work/do+ASS and eye+ASS
marŋgi+thi+nya+wuy
know+INCH+4th+ASS T008Txtp10
It became really extensive, my learning, both writing (working /doing with the hand or "associated with" the hand) and reading (learning by the eye or "associated with" the eye).

Without further data it is not possible to be sure whether the additional ASS marked nominals function as modifiers of the lexicalized form or are co-occurring roles.

The final example I will present is one in which the stem *guyaŋanhawuy*, which is known to occur as an nominal, may be functioning as a modifier rather than a head.

(518) *yaka liya dhuwal warraŋul, ŋali ŋuli ga nhä+nha+mi+rr,*
NEG head PROX outside 1+2dl HAB IMPV-1st see+4th+R/R+1st
*ŋunha bala liya **guyaŋa+nha+wuy***
DIS (MVTAWY) head think+4th+ASS T022Bp3
Not this external "head", which we all see, that other "head" which we think with
OR 'that other "head" for thinking'
(re sense of *liyamirr* [head+PROP] "smart")

It is also possible that it is a regular occurrence of a reduced relative clause with coreference between *liya* in S function in the higher clause and an assumed role in the lower clause as a body part in A or instrumental case. The potential ambiguity

here cannot be resolved without clarifying the limits of the relative clause contruction.

9.3.6 Comparison with other varieties

The Associative suffix *-Puy*, with variable patterns of allomorphy resulting from lenition of the initial stop, is common to all Yolŋu varieties except Djinaŋ and Djinba.

Subordinate clause constructions with these suffixes have been described for Gupapuyŋu, (Lowe n.d.a L68), Djapu (Morphy 1983 p135), Ritharrŋu (Heath 1980b p110) and Dhaŋu (Schebeck 1976a and b). The most detailed descriptions are of Djapu and Dhaŋu. Both these varieties have distinct constructions in which the bare nominalized verb stems contrast with the nominalized verb stemssuffixed with the ASS contrast. There is nothing comparable in Djambarrpuyŋu to the constructions with the bare nominalized stems and thus we have evidence of a syntactic difference between the eastern and western Dhuwal varieties. On the basis of the data presented in Lowe it is likely that Gupapuyŋu and Djambarrpuyŋu may be more similar, if not identical, to each other.

The range of coreference possibilities described for Djambarrpuyŋu ASS subordinate clauses above further distinguish this construction from that in reported for Djapu in Morphy (1983) where a lower S or A must be coreferential with the higher S or O. The range tolerated in Djambarrpuyŋu fails to offer support for the notion of a S/O or S/A pivot.

Morphy also reports that for Dhaŋu any or almost any NP can be expanded with a reduced relative clause. Schebeck's description of Dhaŋu (1976a and b) certainly provides many examples, but that particular data set is problematic because of the numerous examples with variable speaker judgements as to their acceptability. At this point it is not possible to be precise about the correlations between the two Dhuwal varieties and Dhaŋu.

9.3.7 A note re interpretations of the ASS *-Puy* as a relational case suffix

None of the writers whose characterization of the ASS were cited in the introductory section on this suffix describe it as strictly adnominal. All treat it as relational/adverbial in some contexts and derivational/adjectival in others. Relational functions/meanings with which it is attributed are

"cause" (Lowe n.d.a L67),"non-human agent not in Subject position" (Morphy 1983 p39) or "instrument whose user is not Subj NP" (Morphy 1983 p138); "about" (Heath (1980a p19) with verbs like *lakaram* "tell".

Heath's (1980a) treatment of the the "about" sense as a relational case function of the ASS found with verbs such as "tell" is isolated. Given its frequent occurrence with *dhäwu* "story, news, information" in these contexts I would argue that it is adnominal here too, with "*dhäwu*" assumed as the head in those instances when it does not occur.

I can see no clear arguments that justify attributing the ASS with a relational case function. Indeed there are considerations which indicate this is not an appropriate interpretation. The first of these is the fact that the ASS can be followed by relational case suffixes. Secondly all the examples in which a relational "cause/instrumental" is suggested occur with intransitive verb stems in which it is possible for the ASS marked nominal to come within the scope of the S (with which it can be viewed as agreeing in case). Thirdly the use of this suffix to code non-finite relative clauses can readily be explained if it is an adnominal case marker.

9.4 Adnominal apposition

Certain kinds of adnominal relations between nomens (or demonstratives or pronominals functioning as pronouns) are coded by what I will refer to as "adnominal apposition". The lexeme with the modifiying function in such relations does not require an adnominal case suffix, but does require relational case marking in agreement with the head nominal.

The range of relations that are coded in this way includes generic-specific (entity-entity), whole-part (entity-entity), quality-entity and quantity-entity. They are quite distinct from the relations that are coded by means of adnominal suffixes and to which I would argue those coded by "apposition" are meaningfully opposed. The feature which I suggest all these categories bear in common is that these relations are seen as holding in regard to a single referential category. The relations expressed by suffixes on the other hand are concerned with relationships between distinct, autonomous referential categories.

The same set of relations can be expressed within a nominal expression and within an equational clause. As with adnominal relations expressed by suffixing there is an

extensive overlap in the form and semantic relations between nominals co-occurring in nominal expressions and in equational clauses. Thus attributing qualities, specifics and quantites to another nomen in an equational clause requires no special marking of the nominals involved. This is quite parallel to their coding in nominal expressions. However, as will be recalled from the discussion of the PROP (see section 9.1.1.4) a part is attributed to a whole in an equational clause using this suffix. The latter is one of only a few instance in which I have noted the coding of relations between nominal in equational clauses and nominal expressions to be different. It is one of several areas in which the whole-part relation is distinct from other apposed adnominal relations.

The categories presented below are not expected to be comprehensive. Further work will no doubt reveal more about the relations coded by apposition and possibly additional categories. Morpho-grammatical grounds have been noted for distinguishing the whole-part relationship from the others. Otherwise the distinctions are assumed to be semantic.

All relations to be considered here have counterparts in other Australian languages although the degree to which the relations are grammaticalized is variable. Some languages have no grammatical basis for distinguishing noun from adjective and others have strong constraints on the co-occurrence of generic and specifics, giving the generic a status like that of noun classifiers. In Djambarrpuyŋu there is some evidence for distinguishing adjectives from nouns as a distinct grammatical class, but I have found none to give generics such status.

9.4.1 Quality-entity adnominal apposition

The quality-entity relation involves the apposition of one category of adjectives with an entity denoting nomen. This adjective class was considered in some detail in section 4.3.2.2. Important features of this class included the fact that they are predominantly used to express adnominal relations coded by apposition as well as the fact that they take relational suffixes that agree in animacy with the head nominal or the entity to which they refer (see examples 8 and 9). The relation may also be expressed in an equational clause (see examples 623-628) or an existential clause (see examples 791 and 792). Semantically, qualities involve notions that cannot stand independently and must be realized as a property of a particular entity. The quality-entity relation is thus inherently concerned with a single referent.

9.4.2 Quantity-entity adnominal apposition

The quantity-entity relation involves the apposition of an adjectival quantifier or numerals with an entity denoting nomen. These were also considered in section 4.3.2 2 and 4.3.2.4. These also occur primarily in apposed adnominal relations and agree with the head nominal/referent as to animacy. Some examples are:

(519) *napurr+nydja ŋunhi yan ŋal'-ŋalyu+n+dja* ***wangany+lil+nydja***
1pl+PROM TEXD EMPH go up/rise-REDUP+1st+PROM one+ALL+PROM
bed+lil+nydja
bed+ALL+PROM T101p13
We all climbed into one bed

(520) *wark ŋayi gurrupa+r* ***wangany+gal worrunu+wal***
work 3sg give+3rd one+OBL old person+OBL
He gave work to one old person OMSIn135

The relation may also be expressed in equational clauses (see examples 629 and 630). Semantically, more than a single referent may be involved, but what is relevant to this relation is that the quantification pertains to a single referential category.

9.4.3 Generic-specific/hyponymic adnominal apposition

This is a relation in which two entity type nomens are apposed, one of which has more general reference than the other. It can exist between nominals in the same argument role in a clause, or between a predicate and argument in an equational clause.

The expression of this kind of relation is very common in Aboriginal languages (Dixon 1980 p102, Blake 1987 p94). In Djambarrpuyŋu however, there is no formal requirement that an appropriate generic appear with a specific, and there is no ordering constraint as to which term should appear first. Furthermore either a generic or specific term can occur on its own. The correlation with noun classifiers that has been noted in regard to this relation elsewhere (e.g. Dixon 1980 p102) is therefore only weakly reflected in Djambarrpuyŋu grammar. It is simply one of several relations found between apposed nomens.

The generic-specific relation is one fundamentally based in taxonomy, more particuarly in hyponymic relations amongst lexical items. It is thus a kind of "typing" relation. However, it is distinct from the "typing " expressed by the ASS

suffix in that this relationship is much more reflexive. In essence only a single entity is being "typed", according to different hierarchical relations amongst lexemes. In an ASS marked relation separate entities are typed according to relations having to do with habitat, cause etc. (for more on specifics as "types" of generics see Lyons 1979). There are certain uses of the ASS with verb stems that suggest a generic-specific relation when apposed to certain nomens (see section 9.3.4.3).

There are many general terms, some of which have clearly linked set of lexemes designating particular types and thus provide clear instances of a generic-specific relation. With other general terms it is not clear if there is such a clearly delineated (closed) set of specific terms. It is also possible to appose terms with general reference in what is not clearly a generic-specific relation.

One of the richest areas of taxonomy involving hyponymy are the flora and fauna domains and this is the esource of many occurrences of generic-specific relations. The general categories for flora and fauna include:

wäyin/warrakan'/bäwarraŋ'	edible land based animals birds, mammals and reptiles; meat
bäpi /mol'ŋu/djalki	snakes
reny/maranydjalk/wapiti	stingrays and sharks
bul'manydji/mäŋa	sharks
miyapunu/yimanhdhi	turtles and sea-based mammals
maypal/minaŋara	shellfish, crustaceans, land snails, mangrove worms, edible larvae
ŋarirri'/guya /burirritj	fish (excluding sharks and stingrays)
dharpa/gäyu/gäŋdurru	trees and shrubs
gathul/larrtha'	trees/shrubs of the mangroves
mulmu/waymi	grasses and reeds
borum	edible fruits
ŋatha	edible roots and other non-fruit parts of plants foods, cereal type foods; food
guku/wuŋay'	bees and their honey

In the following examples from the text corpus the generic is underlined:

(521) *ŋunha* ***makuyuk*** *<u>dharpa</u>* *djingaryu+n* *ga*
DIS pandanus tree/shrub stand+1st IMPV-1st T014p1
that is a pandanus tree standing there

(522) *nhä* *mak* *nhuna* *dhu* *<u>maranydalk+thu+n</u>* *lawu+m*
[what perhaps] "or" 2sg-ACC FUT stingray/shark+ERG+SEQ bite+1st
bul'manydji'+y+nha
shark+ERG+SEQ T014p3
or a stingray/shark shark bites you

For further details and discussion of the Yolŋu flora and fauna taxonomy I refer the reader to Rudder (1977) and Davis (1981). It should be noted however that there are named flora and fauna which are not associated with a generic e.g. different kinds of insects, or which do not fit neatly within particular generic categories e.g. creepers.

Other generics with an associated inventory of specific terms include, *guŋda* "rock, mineral, precious stones(unprocessed)/coins"; *gurtha* "fire, firewood, match"; *waŋarr* "ancestral being"; *gara* "spears"; *maŋal* "spear thrower"; *bathi* "baskets, box, pocket"; *yiki* "blade, knife"; *ŋakul* "axes"; *dharpa* "types of stick-tools" (in addition to being a generic for "trees/shrubs", is also means "wood, stick"). The English word "medicine" has provided a generic *mirritjin* used for any "chemical-type" substance, be it a poison or a medicine.. The specific name with which it is apposed is the entity from which it is derived.

(523) *ŋunhi ŋuli yolŋu+y dulwir'yu+n+a, gurtha worrk*
TEXD HAB person+ERG light fire+1st+SEQ fire fire used for hunting
nhirrpa+n+a, wäyin+gu
put +1st+SEQ meat bearing animals+DAT T101Bp1
(tell us about)when a person lights up, makes the fire "worrk", for animals/reptiles etc that have edible flesh (*worrk* refers to a special use of fire to hunt game)

(524) *wutthu+rr ŋarra nhawi+yu dharpa+y bälupalu+y*
hit+3rd 1sg whatsit+ERG tree/stick ERG tool name+ERG Txt3 1980
I hit (it) with the stick *bälupalu* (special kind of stick used for turtle hunting and fighting)

(525) *bala ŋayi+ny marrtji+n ŋunhi nyimdhu+rr+a nhaŋu rerri+ny*
then 3sg+PROM go+3rd TEXD do down+3rd+SEQ 3sg-DAT sickness+PROM
ŋuriŋi+yi muthir'+yu+ny mirritjin+dhu
TEXD-ERG+ANA Ficus sp+ERG+PROM medicine+ERG T014p3
and his/her sickness(a swelling) goes down with that *muthir'* medicine

There are also generic terms for more abstract notions which have associated specific lexical sets. They include the following:

i) terms for various general social categories e.g. clans (*bäpurru*), subsections (*mälk*) and kin relationships (*gurrutu*). The specific terms consist of the actual named categories that occur.

(526) *yaka dhuwali ŋayi yuwalk+tja* ***mälk*** ***gamanydjan'+tja,***
NEG MED 3sg really+PROM subsection subsection name+PROM
yuwalk+tja ŋayi dhuwali ***malk+tja,*** ***bilinydjan***
really+PROM 3sg PROX subsection+PROM subsection name T012p2
Her subsection is not Gamanydjan, its really Bilinydjan

(527) *yurr* ***gurruŋ+'manydji*** *maŋda* ***gurrutu+ny***
ADD FZDC(-MMBC)+KINDYD 3dl/pl relationship+PROM T022p2
those two's relationship is *gurruŋ-maralkur/mukul*
/those two have the relationship *gurruŋ-maralkur/mukul*

ii) a term for word/language and a particular word

(528) ***dharrku'yun+dja*** *ŋunhi ŋayi* ***dhäruk+tja,*** *ga wiripu+ny* *ŋayi dhäruk,*
"dharrku'yun"+PROM TEXD 3sg word+PROM, and other+PROM 3sg word
mamul'yun
"mamul'yun"
that is the word "dharrku'yun", and another word is "mamul'yun" T009p10

iii) the general term for name (of person, plant, animal, sickness etc) and a specific name

(529) *\guyŋula'* ***wararrpa*** *\ dhuwali+yi* ***yäku guyŋula'*** ***ga***
proper name proper name MED-LOC+ANA name proper name and
wararrpa
proper name T022p1
Guyŋula', Wararrpa, those are (the/his/her) names - Guyŋula and Wararrpa

(530) ***gatjipali+ny*** *dhuwal* ***rerri+ny*** ***yäku***
sickness (includes ringworm)+PROM PROX sickness+PROM name T014p13
"gatjipali" is the name of this sickness

There seem to be some terms with general reference that are not used in the generic-specific sense. One example is *girri'* "things" - a collective term covering items made by and used by people e.g. clothing, pots and pans, bedding, tools, weapons and so on. In sections 9.1.5 and 9.3.5 we saw that it is often the implicit head of lexicalized expressions using the adnominal suffixes, PROP and ASS respectively. It is not unlike the use of "thing" in English in the sense of indicating an entity by its function as in "a thing/something for/which". However, it has not been noted as widely co-occurring with lexemes for specific items which it subsumes. It may be thus desirable to draw a distinction between generics and general terms, the distinction being that generics are associated with a specific set of entities while general terms are not. Within the domain of the general term *girri'* there are several generic terms e.g. *gara* "spears" which do frequently occur with lexemes having specific reference.

9.4.4 Social classification and "narrowing".

We now come to two groups of apposed relations where neither the generic-specific nor the whole-part relation are obviously applicable. Rather two terms jointly specify or "narrow" the reference or they provide alternative ways of identifying by social classification. These relations are still concerned with the properties of a single referent and not relations between discrete referents.

9.4.4.1 Social classification

In expressions concerned with social classification proper names, kin categories, subsection and moiety terms and clan names are apposed to nominals denoting people, places or other items which can be thus socially categorized. Most of these are also categories of discrete lexical sets which, as shown in the previous section, can be apposed to generic terms for the different categories of social classification (e.g. *yäku* "name" and *mälk* "subsection"). However, here we are concerned with their use apposed to nominals denoting specific individuals, places etc. rather than the hyponymic relation between generics and their associated lexical sets. For this reason social classification is posited as a distinct type of semantic relation coded by apposition. Some examples are:

a) social classification of people

(531) *ga* ***nhaŋgu*** *muka* *djorra' winya'yu+n,* ***guthadjaka+w'*** *ga* ***galay+ku***
and 3sg-DAT PRT-OK paper lost+1st personal name and MBC +DAT
marrkap+mirri+w+nydja
dear+PROP+DAT+PROM T101p48
and her paper (boarding pass) was lost, Guthadjaka's, galay's, the dear one's

In this example a person's name and their kin category (both ways of referring to and socially classifying individuals) are apposed, each independently indentifying the referent to the pronoun. Examples 526 and 527 demonstrate the expression of this kind of relation in an equational clause, i.e. a particular social classification is attributed to someone.

b) social classification of places

(532) *dhuwana ŋayi* ***ranı+ny*** ***baŋ'thula***
PROX-SEQ 3sg beach+PROM place name Bk186p11
Is this the beach Baŋ'thula?

(533) *bala ŋayi buma+r+a* ***garrata+n*** ***wäŋa***
then 3sg hit/make+3rd+SEQ place name +SEQ place Burrln108
then he made the place Garrata

(534) *yurr djambarrpuyŋu+ŋur* ***ŋaraka+ŋur*** *dämbuwalawumirri+w ŋunhi wäŋa*
but clan name+LOC bone/shell+LOC clan name+DAT TEXD place Burrw/Rp14
but that place for the Dämbuwalawumirri is on Djambarrpuyŋu land.

This examples involves a common expression used to designate a place as a person's territory (either by hereditary right/origin or place of residence). The expression usually involves the apposition of *wäŋa* "place" and *ŋaraka* "bone/shell". In the above example *wäŋa* does not appear in apposition, but it is clear from the context that this is the sense of *ŋaraka* intended.

c) Social classification of things other than people and places

In the next examples clay, designs and songs are apposed to a kin category or a lexeme having to do with human classification. *Buŋgul* "dance/ceremony", *rom* "law" or any other item of religious/ceremonial significance may be classified in this way.

(535) *ga ŋändi* ***gamunuŋgu*** *- watharr\ bili ŋändi nhaŋu* ***ŋunhi+yi+ny,***
and M(Z) (white) clay white because M(Z) 3sg-DAT TEXTD+ANA+PROM
ŋunhi+yi+ny miny'tji
TEXD+ANA+PROM colour/design Burrln178
and the mother('s) clay - (is) white, because that is his/her mother, that colour/design

(536) *ga* ***manikay*** *ga+n marrtji+n* ***ŋändi,*** *märi ga ŋunhi bili*
and song IMPV+3rd go+3rd M(Z) MM(B) and TEXD "same"
bäpurru+miriw
clan+PRIV Burrln182
and the songs went on, (of his) mother (clan), (of his) mother's mother's (clan) and (of the clan of) that "clan-without" (i.e. the deceased) whom we have been talking about

These social classifications when applied to people as in (a) have been presented in the literature as inalienable possession - as extensions of a whole-part relation to less tangible "parts" but still intrinsically connected, such as a person's name or their kin category. When considered in terms of songs and their kin categories however this interpretation seems less well motivated. If possible at all, it might be preferrable to consider songs as one part of the "mother". This is an indication that the apposed relations are not made up of discrete semantic categories. Rather

particular combinations may reflect more than a single semantic relation, as we see here with the interface of social classification and whole-part relations in human referents.

In section 9.1.1.5 combinations of kin terms with the PROP *-mirr(i-)* were presented. The relationship between these and the apposition of kin terms has yet to be clarified.

9.4.4.2 "Narrowing"

The "narrowing" category concerns apposed entity type nomens where features associated with both contribute to the specification of a single entity, but one does not subsume the other as a "type" of the other. Very often they both have general reference but are not prototypical instances of generics. The fact that they do have general reference raises the possibility that there are potentially two generic-specific relations involved, depending on the role given to each lexeme.

A domain where this is particularly common is human classification. Terms involved include those multifunctional nomens which have both a entity-denoting sense and a quality-denoting sense e.g. *miyalk* used for woman, girl; female or wife and *yolŋu* used as a generic for person or more specifically for an Aborigine or dark-skinned person as well as to describe something as "Aboriginal".

The apposition of these two terms could have various interpretations. Two seem possible if the generic-specific relation is invoked, depending on which word is taken as the generic. If the generic is *yolŋu* "person" then an appropriate gloss would be "woman", if the generic is *miyalk* "woman" then an appropriate gloss would be "human female". A further two interpretations are possible if we assume a quality-entity relation. With the "Aboriginal" sense of *yolŋu* we get "Aboriginal woman" and with the "female" sense of *miyalk* we get "female person". It is hard to tell to what degree all these distinctions are functional. Certainly the relations are not inherent to particular combinations of lexemes, but rather are determined by the contexts in which they are used.

Certainly for those multifunctional (entity/quality-denoting) lexemes which do not figure in human classification the situation is more restricted (see list in section 4.3.2.3). Thus it is unlikely that *borum* "edible fruit; ripe/cooked" in apposition with *warrakan'* "meat" could code anything other than a quality-entity relation

expressing "cooked meat". Apposition of lexemes used for human classification with inanimates is also more likely to have a quality-entity relation e.g. *yolŋu rom/matha* "Aboriginal law/language".

Once one removes the term *yolŋu* from consideration of human classification, it being a prototypical candidate as a generic and thus readily open to a generic-specific interpretations, the question of the generic-specific relation in apposed nomens expressing human classification is more problematic. Often, as in the following example, the reference appears to be narrowed jointly by the lexemes apposed.

(537) *ŋamini ŋayi ŋuli nhakun ŋutha+na+n ..... ŋunhi*
breast 3sg HAB like grow+1st+SEQ .....TEXD
wirrkul ***yothu***
girl/ young woman without a child(sg) child/baby (or people/animals)
and her breasts grow ..... (of) that young girl without a child T013ln213

The term *wirrkul* is used of both young girls and older women without children. It is also a singular lexeme. Combined with *yothu* the referent is "one young girl without a child". It is not clear that one lexeme is modifying another. *yothu* has inherently wider reference, being used for both sexes, but this particular text is about the *wirrkul* and thus potentially the head in this context.

Combinations such as *ŋirramu yothu* "male/man child/baby ("boy") " and *yothu miyalk* " child/baby female/woman ("girl") " are similar. Here both terms have general reference and either could be interpreted as the functional head. The case-agreement tests cannot assist, since all these lexemes have inherent "human" reference.

It is not clear at this point whether apposition concerned with human classification should be distributed amongst quality-entity and generic-specific relations or be considered an instance of a separate "narrowing" category. The former two categories imply a head-modifier relation, while in the latter category it is the intersection of relevant features that specifies the referent, without concern as to what is the "head". It may also be that this domain of apposition is functionally varied and/or ambiguous.

One final point to note is that while the discussion of "narrowing" has focussed on humans it is not confined to them. Certain of the terms used for human classification e.g. *miyalk* "woman", *ŋirramu* "man", and *yothu* "child" are readily

applied to other animates. There are also special lexemes denoting different sexes or stages of life for certain flora and fauna.

Another category where "narrowing" seems to be involved, rather than the generic-specific kind of "typing" occurs in apposition of temporals.

The word *walu* "sun/watch/time/day" is occasionally used with a generic reference in connection with more specific designations of time spans e.g. hours, days of the week or seasons. General time words such as *gäthur* "today/nowadays" and *yawungu* "yesterday, recently" may also be specified by days of the week or times of the clock.

Here the specific terms narrows the reference of the general term, rather than providing a particular "type", as occurs in the generic-specific relations discussed above. General time words and expressions for particular domains of time such as days, months and seasons do not appear to occurs as hyponymic lexical relations in the way days of the week, names of months, seasons of the year and times of the day do in English.

(538) *yaka dhuwal gäthur Monday, dhuwal gäthur+nydja ga Thursday+nha*
NEG PROX today Monday, PROX today+PROM and Thursday+SEQ
walu
time/day
Today is not Monday, today is Thursday T012p4
(Note that *walu* is also a generic in relation to Thursday, the two specifiying the generic *gäthur*)

(539) *dhuwandja wiripu walu, bäygu midawarr+nydja*
PROX-PROM other time NEGQ Midawarr (season)+PROM
dhiyagu+n bala dhuwal walu dharratharra yan...
[PROX-ERG+SEQ (MVTAWY)] "now" PROX time Dharratharra (season) EMPH
This is another time, not the Midawarr season, now, this time is Dharratharra..
(Midawarr is the early part of the dry season, Dharratharra the middle part of the dry, following on from Midawarr. They are marked by characteristic winds, rain and temperature conditions as well as availability of particular food types.)
T012p4

(540) *godarr' Tuesday djamarrkuli' walal dhu ronlyi*
"tomorrow" Tuesday children 3pl FUT return-2nd
The children will come back on Tuesday

9.4.5 Whole-part/meronymic adnominal apposition

This relationship is morpho-syntactically as well as semantically distinct from other apposed relations. The distinctiveness of whole-part relations is a feature of many Australian languages (see Blake 1987 p93-98). One widespread characteristic concerns the expression of possession by two distinct strategies. The whole-part relation, generally referred to as inalienable possession, is expressed by the apposition of the whole and the part. This is in contrast to alienable possession where a genitive suffix is required. Such a formal contrast does exist in Djambarrpuyŋu, but there is no absolute isomorphism between alienable possession and apposition and alienable possession and the use of the DAT suffix as a genitive marker. In fact a formal distinction is only possible for S/O possessees/wholes (see section 9.5.3).

There are however additional morpho-syntactic features which distinguish the whole-part relation from other apposed relations, besides its potential to occur in the possessive construction. Firstly, the range of case suffixes that occur on the part are restricted to those used for non-human reference, even if the whole is a human. In other apposed relations either the "human" or "non-human" suffix may occur depending on the animacy of the referent. Secondly, also reflecting the "non-human" feature of parts is the fact that parts are generally questioned or given indefinite reference with the interrogative/indefinite pronoun *nhä* "what/something", rather than *yol* "who/someone". Thirdly, this relation cannot be expressed in an equational clause with bare stems of lexeme, as is possible with other apposed relations. In an equational clause where a part is attributed of a whole, the part must be suffixed with the PROP-*mirr(i-)* (see section 9.1.1.4). Fourthly, the whole and the part can be marked as separate participants in a clause. (see section 9.4.5.1 below for further information).

The relation is semantically distinct from hyponymy in that it is not concerned with types. The semantic key to its appearance in apposed constructions seems attributable to intrinsic relations between certain phenomena in the world, a prototypical instance of which is that between a body and its parts. This intrinsic relation is one in which the inevitable association of two phenomena is such that it is possible to view them as unitary.

However, unlike all other apposed relations these same phenomena can be viewed from another perspective. i.e. one in which there are two separate entities. It is

this possibility of dual perspectives, inherent to the whole-part relation which distinguishes it both from other apposed relations as well as those adnominal relations which are associated with autonomous entities and coded by suffixing. The formal correlation of this is that the whole-part relation can be coded by both apposition and suffixing.

The relation is termed whole-part or meronymic because the prototypical instances are wholes and their parts. However, this is less obvious with more abstract notions e.g. names and feelings or where items have a clear identity apart from their "wholes" e.g. smoke and reflections. The key is the intrinsic association between certain entities. This may be physically determined but social and cultural factors are also involved.

Unlike the hyponymic relation where distinct lexical sets are associated with different generics, in Djambarrpuyŋu and other Yolŋu varieties, parts of whole are predominantly expressed by lexemes from a single lexical set, namely that of body part terms. The wholes to which the one body part term can be used are highly varied. For instance, *dhä/dhurrwara* is used of the mouth of a person, the mouth of a river, the door of a house, the opening of a bag or basket and the synonym set *yaŋara/balwak/wambal* is used for the leg of birds, the tail of kangaroos and dogs, the back section of a fish, the stem of a tree and the lower leg of people.

In the following text examples the whole is underlined.

(i) Parts of humans:

(541) *nhä <u>nhuna</u> ŋayi dharpu+ŋal\ mak ŋayi <u>nhuna</u> luku dharpu+ŋal*
what 2sg-ACC 3sg spear+3rd maybe 3sg 2sg-ACC foot spear+3rd
nhä mak ŋayi <u>nhuna</u> yaŋara' dharpu+ŋal
[what maybe] "or" 3sg 2sg-ACC calf/lower leg spear+3rd T014p2
s/he speared you somewhere, maybe s/he speared your foot or maybe s/he speared your calf

(ii) Parts of animates:

(542) *wo <u>dharpa</u> dhu waŋa bakthu+n*
"or" tree FUT arm break+1st T009p5
or a tree branch breaks

(iii) Parts of inanimate objects:

(543) *dhal'yu+n+dja* *dhurrwara+ny* *ŋunhi* *bumbum+nha+ny*
close+2st+PROM mouth/door+PROM TEXD car+ACC+PROM T012p21
(we climbed in and) closed the door of the car

There are also parts which while still intrinsically connected with their whole, can have an existence separate from their whole. This includes faeces (*gula*), urine (*warwirr*), blood (*gulaŋ*), footprints or tracks (*luku* ="foot"), shadows/images/representations/pictures (*mali*), shade (*warraw'*) and steam/smoke (*ŋawulul*). Both general part terms and more specialized/restricted part terms are involved here. It would appear that more specialized terms occur with for those "parts" which while intrinsically connected to a whole, always have a (visibly) separate existence. The words for shadows/images, shade and smoke/steam would fall into this category. The one example of a lexeme from the general body part inventory is *luku* "foot, tyre (of car), footprint/tracks". A footprint/track is more clearly identified with a specific part, being a direct imprint of it, than other parts with a separate existence.

There are also less tangible but still intrinsically connected notions expressed by apposition which again do not involve physical body part terms. These include feelings (*djäl* "want/desire", *ŋayaŋu* "feelings" etc.) voices/sounds (*rirrakay*), speech (*dhäruk*), and smell (*buŋgan*).

A few examples are given below:

a) image/representation

(544) *ga ŋunha+yi dhärra+n* ***mali+n*** *ŋayi* *\nhä* *dhuwal dharpa,*
and DIS+ANA stand-1st+SEQ image+SEQ 3sg "what " PROX tree,
deṭi+n, *djaŋ'kawu+n* *ŋunhi+yi+n*
Canarium australianum name of certain ancestral beings+SEQ TEXD+ANA+SEQ
mali
image Burrin67
and an image of it stands over there. What's the tree - (its) Deṭi, that is an image/representation of the Djaŋ'kawu'

b) feelings

(545) *ga maŋda rraku* *ŋunhi* ***djäl+wu*** *nhakun* *malthu+n*
and 3dl 1sg-DAT TEXD want+DAT like follow+1st DBDhp1
and they(2) followed my wishes

c) smell

(546) *yaka ŋarra dhu nhuma+n ŋunha* ***narali' buŋgan***
NEG 1sg FUT smell+1st DIS cigarette smell GMegp1
I won't smell that cigarette smell

The final category of "whole-part" relations I will mention concerns metalinguistic categories. The lexemes *yäku* "name", and *mayali* "meaning" both appear apposed to other nomens to convey the sense "the name of X" and the "the meaning of X" respectively.

(547) *ga dhuwali* ***galka*** *mayali'*
and MED someone with special sorcery powers meaning
and that is the meaning of *galka*

A meaning is clearly intrinsically part of any word. However it should be noted that the word *mayali'* has a diverse range of meanings. It is used when significant patterns or relations hold in, from an English standpoint, quite diverse contexts. This includes the relation between a word/utterance and its use/denotation, thus the translation as "meaning" above. But it is also used for the relation of sounds to speech, and then best translated as "accent". Another use is in regard to the resemblance or likeness between a father and a child. With the PROP or PRIV suffix it is used to convey that something is within the patterns of behavioural norms. Such lexemes may indicate that someone is "well-mannered/behaved" or "bad-mannered/badly behaved", or that something is of significance in the religious/ceremonial realm e.g. a spear that has been painted could be described as *mayalimirr*.

The next example demonstrates the appostion of *yäku* name

(548) *burakt+n ŋayi ŋunhal dhäŋu'+ŋur* ***wäŋa+ŋur yäku+ŋur***
be wounded/hurt+3rd 3sg DIS-LOC place name +LOC place+LOC name+LOC
he was wounded at the place named Dhäguŋur Burrin101

This apposition of the lexeme *yäku* "name" with *wäŋa* is distinct from the hyponymic relation in this clause which holds between the whole-part expression and the specific place name.

Names or *yäku* are attributed to a wide range of phenomena, including people, places (as in this example) plants, animals and sicknesses (see example 530). However, not all words are attributed with *yäku* "names". Verbs and quality-denoting words fall into this category.

9.4.5.1 Distinct grammatical features of the whole-part relation

As was mentioned in the introduction to this section, whole-part relations are distinct from other adnominal relations in various ways. These are considered individually below.

1. "Parts" categorically take non-human suffixes

Unlike other apposed relations where the suffixes agree with the "humanness" of the head (i.e. the generic or entity being qualified, quantified, socially classified or narrowed), the part always takes suffixes found with "non-humans". This means that they never appear with the OBL suffix as a local case marker, not with the ACC suffix, both of which are confined to "human" referents. This is shown in the following examples:

i) Non-agreement in "humanness" for local cases

In the first example the referent whole is human, while in the second it is inanimate, yet both take the "non-human" local suffixes (i.e for Ablative, Allative or Locative case).

(549) *guyŋarr+yi+rr nhe ŋuli ŋunhi-ya, rumbal, ŋanak nhuŋu ŋunha...*
cold+INCH+1st 2sg HAB TEXTD-OK body, flesh 2sg-DAT DIS
dhipu+ŋur bili liya+ŋur ga bat ŋurrka+m luku+lil
PROX/MED+ABL "same" head+ABL and BVR-throw throw+1st foot+ALL
you are cold, your body, your flesh, right from your head down to your feet

(550) *gulyu+n ŋunhili+yi+n dhurrwara+ŋur wăŋa+ŋur*
stop+1st TEXD-LOC+ANA+SEQ mouth/door+LOC/ABL place+LOC/ABL
stopped at/near the door/gate/entry of the house T101p9

(551) *waŋa+ŋur dharpa+ŋur nhina ga*
arm/branch+LOC/ABL tree/shrub+LOC/ABL sit-1st IMPV-1st Mthsp27
(someone) is sitting near(on/under) the branch of a tree

This contrasts with the following two examples which show other apposed relations in which there is agreement with "humanness" of the head.

In the first example a generic-specific (as well as a PROP suffixed nominal) modify a human referring nominal marked for a local case with the OBL. All the modifying nominals take the OBL suffix as well.

(552) *dhut+nha nhina+nha\ **balanya+wal+a yolŋu+wal worru'-***
BVR-sit+SEQ sit+4th such+OBL+SEQ person+OBL old-
wurruŋu+wal+a - ya, liya-dukitj+mirri+wal+a walalaŋ+gal
REDUP+OBL+SEQ-(OK) head-grey hair+PROP+OBL+SEQ 3pl+OBL
and (she)sat down with those kind of people, old ones, with grey hair T013p5

In contrast, in the next example quality-denoting lexemes modifying nominals with non-human reference appear with the LOC/ABL and ALL suffixes:

(553) *bili ŋayi ŋunhi dhukun marrtji be+ŋur **yindi+ŋur***
because 3sg TEXD rubbish go-1st INDEF+ABL big+LOC/ABL
munatha+ŋur,** ga ŋunhiwili **nyumukuŋiny'+lil
ground/sand+LOC/ABL and TEXD-ALL small+ALL
munatha+lil maŋutji+lil
ground/sand+ALL eye/hole+ALL T016p18
because that rubbish goes from the big sand to that small hole in the sand.

ii) Non-agreement in "humanness" for Accusative case

The part in whole-part relations with either a "human" or "non-human" whole, does not require ACC marking. Example 541 is repeated here:

(554) *nhä <u>nhuna</u> ŋayi dharpu+ŋal\ mak ŋayi <u>nhuna</u> luku dharpu+ŋal*
what 2sg-ACC 3sg spear/pierce+3rd maybe 3sg 2sg-ACC foot spear+3rd
nhä mak ŋayi <u>nhuna</u> yaŋara' dharpu+ŋal
[what maybe]"or" 3sg 2sg-ACC calf/lower leg spear/pierce+3rd
S/he might have speared some part of you, maybe s/he speared your foot, or
perhaps s/he speared your lower leg T014p2

Example 554 above contains an animate referent which, as expected, also does not take ACC marking.

The following example shows the agreement required in other apposed adnominal relations. In this instance a generic-specific or "narrowing" relation refers to a human and thus any nomens denoting the O must be marked with the ACC

(555) *...ŋurrka+nha\ ŋanya ŋunhi **wirrkul+nha** **yothu+ny***
put out(tr)+4th 3sg-ACC TEXD young girl without a child+ACC child+ACC
(the parents) put (with her promised) that young girl T013p3

2. The use of the "non-human" indefinite/interrogative *nhä* with parts rather than the "human" form *yol*.

The indefinite/interrogative pronominal use of *nhä* "what/something" is exemplified in example 544. The first instance of of whole-part apposition in that example is between *nhä* and the 2sg ACC pronoun *nhuna*.

A single exception has been observed to the general use of *nhä* to refer to parts and that is the use of the "human" form *yol* "who" in conjunction with *yäku* "name" when referring to a person's name.

3. The option of occurring in the possessive construction

This is dealt with in detail in section 9.5.3.

4. Formally distinct means of expressing the whole-part relation within a nominal group and in an equational clause.

The whole-part relation cannot be expressed using the base forms of lexemes in an equational clause. As is described in section 9.1.1.4 the PROP *-mirr(i-)* must be suffixed to the part when attributing a part to a whole.

5. Other grammatical distinctions of the whole-part relation

In the Reflexive-mutualis-Reciprocal construction a body part linked with the A role in a parallel transitive clause is never apposed with the S to which the A is demoted. It retains its ERG marking and is thus presumably coded as an Instrument in these clauses (see section 11.3).

In adnominal subordinate non-finite clauses with ASS *-Puy* A or S arguments can be marked with the OR *-Kuŋ(u-)* suffix. Body parts associated with these roles receive the ASS *-Puy* suffix however.

Both these constructions provide evidence that the part has a different role from its whole. In transitive main clauses where both A and Instr are marked by the ERG suffix this is formally ambiguous.

As independent participant roles parts can occur with their own demonstratives, modifying nomens and possessors.

It seems to me that the distinct morphological and grammatical patterning of the whole-part relation can be attributed to the dual perspective which is intrinsic to such relations. Thus the frequent coding of the whole-part relation by apposition reflects the unitary perspective, while the occurrence of the PROP suffix on the part in equational clauses and the independent coding of the whole and the part in both Reflexive-mutualis-Reciprocal clauses and ASS non-finite clauses reflect the perspective in which the whole and the part are seen as separate entities.

Interestingly, "humanness" appears to be a feature solely associated with the whole, since all individual parts are coded as "non-human". The separate treatment of the whole and the part according to this feature is not surprising given other patterning however.

9.4.6 A note on multiple apposed relations

As we have seen in example 548 and in 526 and 527 it is possible for more than one apposed relation to occur in a single clause. In example 548 both a generic-specific and whole-part relation occurred in the nominal expression coding the Locative role we have two apposed relations in the one nominal expression. *yäku* is functioning both as a generic (with *wäŋa*) and as "part". Examples 526 and 527 both contain two such appositions i.e. a whole-part relation between a person and their subsection or relationship and a generic-specific relation between the general term for subsection/relationships and a specific terms. In both these constructions the specific term is the predicate of an equational clause.

In the final example to be considered a generic-specific relation appears with two whole-part relations:

(556) *yo, **galaŋarr** ŋunhi **yäku+n** **djana+ny,** ŋayi*
yes "galaŋarr" TEXD name+SEQ "fat/liver"+PROM 3sg
ŋunhi+dhi+ny ***wurrpaŋ+dja***
TEXD+ANA+PROM emu+PROM T102Bp31
Yes, "galaŋarr" is the name of the fat/liver of the emu

The various apposed relations contained in this sequence are:

1. a generic-specifc relation between the "name of the fat" and its name i.e.
galaŋarr ŋunhi yäku djanany
2. a whole-part relation between the word for "fat/liver" and its name i.e.
yäku djanany
3. a whole-part relation between the emu and its "fat/liver" i.e
djanany ..... wurrpan

The full potential for multiple apposed relations has yet to be fully explored.

9.4.7 Apposition and lists

Another context in which nomens can co-occur without adnominal suffixes is in lists, whether these be lists of synonyms or lists of potential or actual participants. The latter at least are distinct from relations expressed by "adnominal apposition" since they are not concerned with a single referent. The co-occurrence of synonyms does refer to a single referent and is not unlike the identification accorded an entity through social classification. However it is distinct in that it is providing an alternative wording for the reference rather than an a social identification. A further difference is that synonyms are not confined to nominals.

I use the term 'synonyms' loosely and the words included in such lists may prove on further examination not to be strictly synonymous. While in some instances they do appear to be completely interchangeable, in others the senses may only be overlapping in particular contexts. Those that are interchangeable may also prove to be differentiated according to the variety or varieties to which they are held to belong.

9.4.8 Lexicalized adnominal apposition

In section 10.1 I describe various fixed sequences of lexemes as compounds. Two word classes that feature in adnominal apposition are also common in nominal compounds, namely body part lexemes and adjectives. This raises the possibility that nominal compounds may be the formal counterpart for adnominal apposition, to fossilized lexemes incorporating adnominal suffixes. However, the most commonly occurring compound initials, i.e. body parts, are followed by a wider range of lexemes than those that might be expected if there were a strong association with relations coded by adnominal apposition. Verbs and particles are such "unexpected" second members. It is also the case that the most common combinations are of a body

part and an adjective (which is not a common combination in my corpus for apposed adnominal relations) or a body part and a verb (which has no counterpart in apposed adnominal relations). Furthermore compounding with an initial body part can be quite productive. The connection between apposed adnominal relations and nominal compounds is thus much less obvious than that between fossilized stems with adnominal suffixes and those in which the suffix is used productively.

9.5 The Possessive construction

The adnominal relation of possession is coded quite distinctly from other adnominal relations we have so far considered, in that the coding of the possessor is sensitive to the function of the possessee. The suffixes found on the possessor thus vary according to the role/case marking of the possessee. The possessee may be functioning in a particular role in a clause or it may be involved in an adnominal relation. The possessor - possessee relation is thus not confined to one functional level. In this it is like the apposed adnominal relations which can also appear at different "depths" i.e. to a nominal which is head of a clausal role or a nominal modifying another nominal.

The formal apparatus used to express Possession also occurs in many non-finite subordinate clauses to code roles filled by "human" referring nominals (see section 12.1.2).

There are no categorical ordering constraints on the possessor and the possessee, but they are normally juxtaposed. The possessor may be a pronoun, demonstrative or nomen and they all follow the same suffixing patterns. Both the possessor or possessee may be further modified. Demonstratives and pronominals are the most common lexical classes co-occurring with either the possessor or possessee in the corpus. Possessors also occur with other nomens such as kin terms, qualities and quantities. Any co-occurring nominal agrees in case with the head, be it a possessor or possessee.

There are three different suffixing patterns associated with the possessive construction. These correlate with three different suffixes found on the Possessor, namely the DAT *-Ku*, the OBL *-Kal* and the OBLS *-Kalaŋu/a-*. The OBLS always occurs before another suffix, which in the possessive construction may be either a peripheral (relational) case suffix or an adnominal case suffix.

In equational clauses the expression of a possessive relation between a (nominal) predicate and an argument only involves the DAT marked Possessor. The possesee will be in S case.
Each of the possessive marking patterns will now be considered in turn:

i) The DAT *-Ku* occurs on the possessor of a nominal in S or O case. This may involve the bare stem form of the nominal designating the possessee or an ACC marked stem. It is also the suffix used to code possession in an equational clause.

(a) S possessee in an intransitive clause

(557) *\djalŋgirr, ŋunha nhuŋu guthanhur nhina ga*
personal name DIS 2sg-DAT MM(B)(AP) sit-1st IMPV-1st T023Ap6
Djalŋgirr, your MM(B) is sitting there

(b) O possessee with ACC marking

(558) *bala nhe dhu ga ŋunhi bartjunmara+ma+n, girri+nha+n*
then 2sg FUT IMPV-1st TEXD beat (tr)+1st+SEQ things+ACC+SEQ
nhuŋu+wuy nhe mulka+ku+ma+ny...
2sg-DAT+EMPH 2sg dry+TRANS2+1st+PROM T017p9
then you beat your clothes dry (against a rock)

(c) O possessee with bare stem

(559) *ga dhiyaŋu+ny bala walal ga ŋunhi badak bäki ŋunhi+yi rom*
and "nowadays" 3pl IMPV-1st TEXD still use TEXD+ANA law(O)
ŋiimurruŋ
1+2pl-DAT
And are they still using that today, that law of ours? T102Bp9

(d) DAT marked possessor in an equational clause

(560) *..yaka **nhumalaŋ** balanda+w ŋayambalk\ Thursday Island+tja*
NEG 2pl-DAT white person+DAT place place name +PROM
*dhuwal **napurruŋ** wäŋa, **yoŋu-'yuŋu+w***
PROX 1pl-DAT place Aboriginal person-REDUP+DAT T208p11
its not you white people's land, Thursday Island is our land, Aboriginal people's

ii) The OBL *-Kal* occurs on the possessor of a nominal in A, Instr, Loc, All, Abl or Perl case

(a) ERG marked possessee in A case

(561) *ga gäna ŋayi dhu luka ŋunhal \ dhiyaŋ wäwa+'mirriŋu+y+nydja*
and separately 3sg FUT ingest-1st DIS-LOC PROX-ERG B+KINPROP+ERG+PROM
nhanukal
3sg-OBL T204p11
and he eats separately, this brother of hers

(b) ERG marked possessee in Instr case

(562) *mak ŋayi dhu ga dhatthu+n, girri+y' yoŋu+wal,*
maybe 3sg FUT IMPV-1st decorate+1st things+ERG(Instr) Aboriginal+OBL
nhä mak ŋäpaki+wal
"or" white person+OBL T009p9
She might decorate (the house) with Aboriginal people's things or white people's things.

(c) LOC/ABL marked possessee in Loc case

(563) *dhuway+'mirriŋu+wal+a wäna+ŋur+a ŋayi ga nhina*
FZC+KINPROP+OBL+SEQ place+LOC+SEQ 3sg IMPV-1st sit-1st
she lives at her spouse's camp T019p13

(d) ALL marked possessee in All case

(564) *bala walal ganarrtha+ŋal ŋanapurruŋ+gal+a djäka+lil*
then 3pl leave+3rd 1pl+OBL+SEQ care+ALL T018p5
then they left (it) to our care

(e) ABL/LOC marked possessee in Abl case

(565) *bat+nha ŋurrka+nha ŋuli dharraŋgulk+tja, raki'*
BVR-"throw off"+SEQ throw+4th HAB Kurrajong+PROM string
rumbal+ŋur yoŋu+wal, nhanu+kiyin+gal ŋayi
body+ABL/LOC person+OBL, 3sg+EMPH+OBL (3sg) T014p7
and (s/he) discards the Kurrajong string from his/her body

(566) *bili ŋarra rrupiya märra+ŋal nhanukal bathi+ŋur*
COMPL 1sg money take/get+3rd 3sg-OBL bag+ABL/LOC G
I have already got the money from his/her bag

(f) PERL possessee

(567) *walal ŋuli "vote" walalaŋ+giyin+gal rom+gurr*
3pl HAB 3pl+EMPH+OBL law+PERL T401p25
they vote according to their own custom/law

iii) The OBLS *-Kalaŋu/a-* together with the appropriate relational or adnominal case marker occurs on the possessor of a possessee with a DAT, OR, OBL, ABL, PERL, ASS or PROP suffix.

(a) DAT marked possessee

(568) *ga rakI+ny dhuwal, dhiyak wärrpala+w, manawiny'+ku,*
and tape+PROM PROX, PROX-DAT address term+DAT address term+DAT
rra+kalaŋa+w gurruŋ+'mirriŋu+w
1sg+OBLS+DAT FZDC+KINPROP+DAT T208p30
and this tape is for Wärrpala, Manawiny', my gurruŋ (FZDC)

(b) OR marked possessee

(569) *yaka dhuŋayi mari märra+m miyalk+thu, wo ŋayi dirramu+y,*
NEG FUT 3sg trouble get/take+1st woman+ERG, or 3sg man+ERG
nhanu=kalaŋa+wuŋ gurrutumirri+wuŋ
3sg=OBLS+OR relative+OR T017p14
The woman, or the man, do not get trouble from her/his relatives

(c) OBL marked possessee (Accompaniment)

(570) *nhuma dhu marrtji ga nhina djamarrkuli'+wal*
2dl/pl FUT go-1st and sit-1st children+OBL
nhumalaŋ+giyin+galaŋa+wal
2dl/pl+EMPH+OBLS+OBL
you go and sit with your own children G'sLet

(d) ABL marked possessee

(571) *märra+ŋu+n marrtji mayali nhirrul marrtji be+ŋur*
take/get+2nd+SEQ go-2nd meaning put-2nd go-2nd INDEF-ABL
ŋarra+kalaŋa+ŋur dhäruk+ŋur dhipali nhokiyin+gal nhe dhäruk+lil
1sg+OBLS+ABL word+ABL/LOC MED-ALL 2sg-EMPH+OBL (2sg) word+ALL
(you) will be taking the meaning and putting it from my language into your language T018p14

(e) PERL marked possessee

(572) *wuŋgan bura+kurr ga marrtji yolŋu+walaŋu+wurr*
dog amongst/between+PERL IMPV-1st go-1st person+OBLS+PERL
wäŋa+kurr
place+PERL T023Ap1
the dog is running around/between people's places

(f) ASS marked possessee

(573) *dhäwu+ny ŋunhi, wark+puy+nydja narra+kalaŋa+wuy*
story+PROM TEXD work+ASS+PROM 1sg+OBLS+ASS T008
that's the story about my work

(g) PROP marked possessee

(574) *ŋuli ŋayi dhu dhuwal raki djaw'yu+rr+nydja boŋguŋ malani+y*
HAB 3sg FUT PROX tape take+2nd+PROM "tomorrow" person's name+ERG
dhäruk+mirr narra+kalaŋu+mirr+nydja
word+PROP 1sg+OBLS+PROP+PROM T018p6
If/when she, Melanie, takes this tape with my words..

The following table is a summary of the suffixing patterns used in the possessive constuction:

Table 50: Summary of Djambarrpuyŋu Possessive Construction Suffixing Patterns

CASE		CASE/SUFFIX ON POSSESSEE SUFFIX	CASE SUFFIX ON POSSESSOR
S,O		(Bare stem) /ACC (*-Nha*)	DAT (*-Ku*)
A/Instr		ERG (*-Thu*)	OBL (*-Kal*)
Loc	(-Hu)	ABL/LOC (*-ŋur*)	
All	(-Hu)	ALL (*-lil*)	
Abl	(-Hu)	ABL/LOC (*-ŋur*)	
Perl	(-Hu)	PERL (*-Kurr*)	
Abl	(-Hu)	ABL/LOC (*-ŋur*)/	OBLS+case suffix (/OBL) (*-Kalaŋa/u+ŋur /-Kal*)
	(+Hu)	OBLS+ABL (*-Kalaŋu+ŋur*)	
Perl	(-Hu)	PERL (*-Kurr*)	(*-Kalaŋu/a+wurr /-Kal*)
	(+Hu)	OBLS+PERL (*-Kalaŋu+wurr*)	
Accomp, All, Abl,Loc (+Hu)		OBL (*-Kal*)	(*-Kalaŋu/a+wal/-Kal*)
Benef, IO		DAT (*-Ku*)	(*-Kalaŋu/a+w*)
Or		OR (*-Kuŋ(u-*)	(*-Kalaŋu/a+wuŋ(u-*))
Poss		DAT (*-Ku*)	(*-Kalaŋu/a+w*)
Poss		OBL (*-Kal*)	(*-Kalaŋu/a+wal*)
Ass		ASS (*-Puy*)	(*-Kalaŋu/a+wuy*)
Prop		PROP (*-mirr(i-*))	(*-Kalaŋu/a+mirr(i-*))

Most cases are associated with a single possessive marking. Thus S and O require a DAT suffix on their possesor; A, Instrumental and Locative require the OBL and DAT, OBL, OR, PROP and ASS require the OBLS plus the case suffix found on the possessee. There is some overlap in the local cases, with the ABL and PERL marked possessees

allowing the possessor to be marked with either the OBL or the OBLS+case suffix. There are also some distinctions in the marking of the Allative case, dependent on the "humanness" of the possessee. A "human" nominal in allative case requires the OBL suffix and its possessor can occur, with the OBLS or the OBL. A "non-human" nominal on the other hand, takes the ALL suffix and the possessor must be coded with the OBL suffix.

Note that while the DAT is used with any O role, whether it is realized by the bare stem or a stem plus the ACC suffix, marking of a possessor in allative case is sensitive to the way in which the possessee is marked i.e. whether it is ALL (-Hu) or OBL (+Hu). This is despite the fact that both O and All have distinct marking dependent on the "humanness" of the nominal in that role (recall that ACC and OBL are used for "human" referring nominals while the bare stem and the ALL are used for "non-human" referring nominals).

9.5.1 A brief consideration of the possessive construction in other Yolŋu varieties

The pattern of marking possession just outlined is reported for all described Dhuwal and Dhuwala varieties, and involves near-identical morphemes (see section 4.7). However, Ritharrŋu only has two patterns. One is associated with local cases (ie. Loc, All, Abl or Perlative (=Pergressive (Heath 1980b)). Possessors of nominals in these cases requires the Locative increment *-kala-*. The latter marking is also associated with the local case marking of nouns with human/higher-animate reference. This pattern is familiar to the one involving the OBL and OBLS with local cases in Djambarrpuyŋu. Possessors of non-local case marked nominals in Ritharrŋu however, are coded with the DAT and this is distinct from the situation in Dhuwal/Dhuwala where the DAT only occurs with possessees in S and O case. There is one exception in Ritharrŋu and that is a pronominal form (i.e. stem+*kulu+y*) which may optionally occur as possessor of an ERG marked possessee, rather than the DAT (see Heath 1980b p38, p46).

The descriptions of Dhaŋu reveal a similar pattern to Dhuwal/Dhuwala. However, Dhaŋu has a much richer inventory of distinct Possessor suffixes. These also correlate with the larger number of local case suffixes found on nominals with "human" reference. Most Dhaŋu "possessive" suffixes have an initial syllable *-Ku-* suggestive of a link with the DAT *-Ku*, something not transparent in the Dhuwal/Dhuwala DAT form *-Ku* and the oblique forms *-Kal(a) /-Kalaŋu/a-*. However the form of the "linking" suffix found before certain suffixes (i.e. the equivalent to the Djambarrpuyŋu OBLS), is identical to the ABL possessive suffix

and that found with an ERG-marked possessee. Thus as in Djambarrpuyŋu there is a formal link between a suffix found before certain case marked possessees, including the ERG, and that which occurs as an augment before certain other cases. However these forms are different in the two sub-groups, with Dhuwal/Dhuwala using the OBLS and Dhaŋu the ABL. Dhaŋu also shows the same correspondence between the coding of possessors and the marking of human roles in non-finite clauses (see Schebeck 1976 a and b and Wood n.d.).

I will conclude this section by simply noting certain shared features between the different sub-groups reviewed briefly here. These features are ones which would seem to warrant highlighting in regard to any consideration of possible diachronic and/or functional explanations for the range of marking that occurs.

1. Distinct marking of certain Possessors sensitive to the marking on their head, in which local cases are minimally distinguished from other cases.
2. The appearance of an augment on certain stems and the basis for its identity with case suffixes found on "human" nominals.
3. The correspondence between forms marking possessors, "human" roles in non-finite clauses and local cases on "human" referring nominals.

The Ritharrŋu facts suggest that the OBL *-Kala* may have been a more widely distributed Locative increment in the past. Ritharrŋu requires the individual locative suffixes to appear on both the Possessor and human/higher animate nominals after the Locative increment. If Dhuwal/Dhuwala originally had the same pattern we need to posit two later developments: one in which this form plus the augment *-ŋu-* was extended to other case forms, and another in which the case marking following *-Kala* was no longer required. What resulted in Djambarrpuyŋu now having the ERG and only two local cases (the LOC and ALL) categorically associated with the non-final oblique form i.e. OBL *-Kal* is unclear. The cross-variety evidence is not helpful, given that Ritharrŋu marks the possesssor of the ERG possessee with the DAT or a pronominal stem plus *kuluy*, while Dhaŋu uses the ABL (*-Kuru*).

The Dhaŋu pattern in which DAT /Ku/ is isolatable as an initial syllable in most Possessor suffixes suggests the possibility that the OBL and Locative increment form *-Kala* found in Dhuwal/Dhuwala and Ritharrŋu may have a similar derivation, namely DAT *-ku* plus /la/ i.e.**Ku+la*. The demonstrative paradigms offer some evidence for *la* as a LOC/ALL marker e.g. *dhipala* and *dhiyala* [the PROX ALL and LOC respectively].

9.5.2 A possible semantic core for the possessive relation

As I have done with other adnominal relations I will suggest a semantic core to this particular formally distinct adnominal relation. For possession I suggest the relationship is one that concerns social/cultural/physical rights and obligations that exist between certain entities. Prototypically these rights will be attributed to

humans. It is unlike the whole-part relationship in that it cannot be viewed as unitary. However, as I have already mentioned it is possible for entities in a whole-part relation to be coded by either apposition or the possessive construction. I suggest this is possible because of the fact that the whole-part relation can also be viewed as concerning two autonomous entities. The possessive construction allows this to be made explicit. The possessor is invariably the whole, and thus the entity with the "rights" concerning the part. This will receive further consideration below. Both the possessive and whole-part relation are distinct from the "local coincidence" coded with the PROP, which has also been treated as another kind of expression of possession in the literature (Austin 1981 p137). I will confine the use of the term possessive to this one particular relation however. (It is not my intention to counter the more general use of this term, given that many languages subsume these relations within a single construction, but rather to reflect the Djambarrpuyngu distinctions reasonably transparently).

The semantic distinction between the whole-part relation and possession has been widely referred to as a distinction between "inalienable" and "alienable" possession. It is also discussed by Morphy in regard to Djapu (1983 p122). She notes, rightly, that the notion of inalienable versus alienable is inappropriate. It does not account for the fact that a part can be detached from its whole, or that certain so-called inalienable relations are not coded inalienably e.g. kin categories. She argues that the difference is between an "intrinsic" relation and one which is "constituted in some way" (following Haviland (1979 p149) who uses the term "socially constituted" rather than alienable). Dixon (1980 p293, p510) describes inalienability as an "intrinsic" or "inherent" relation in which the part cannot be given away. Morphy's approach stresses the unitary view of the inalienable or whole-part relationship (1983 p126). I on the other hand favour a view which attributes a dual perspective, which permits the whole part relation to be viewed as both unitary and as involving two autonomous enities, as this appears to offer an explanation for the distinctive grammar with which it is associated.

Morphy does not give much consideration to examples where an "inalienable" relation is expressed by the possessive construction. She notes that they do occur "occasionally" and the example provided is of a DAT marked possessor to an S possessee with an intransitive verb (*ŋarra-ku-ny mulkurr yatj-tji-n* [1sg-DAT-PROM head bad+INCH+3rd] "My head hurts"). She suggests that this construction may be best interpreted as a "semi-transitive" construction in which the part is thought of as acting upon its whole" (Morphy 1983 p127).

9.5.3 The inter-relationship between whole-part and possessive relations

I observed in section 9.4.5 that whole-part relations can be coded by either apposition or possession. In fact the potential for this distinction to be formally represented is severely constrained. Only certain (relational) roles are associated with formally distinct suffixing patterns which correlate with whole-part (inalienable) or possessive (alienable) relations. Furthermore, certain formal distinctions that do occur are not concerned with distinguishing these particular relations.

I will consider first those roles where there is no formal apparatus by which the relations can be distinguished, then those where there are different suffixes associated with these constructions, but which do not correlate with the whole-part (inalienable) and possessive (alienable) distinction and finally those where these are formally distinguished.

1. Roles for which no formal distinction between whole-part (inalienable) or possessive (alienable) relations is possible

This concerns the locative and allative cases coded with the LOC and ALL suffixes. If the possessor or "whole" is a "human", then the relation will be expressed with OBL marking on the possessor/whole and LOC or ALL marking on the possessee/part. That is, the construction is identical for either relation.

"whole" "part"	"possessor" "possessee"
yolŋu+wal goŋ+lil	*yolŋu+wal wäŋa+lil*
person+OBL hand+ALL	person+OBL place+ALL
"into/to a person's hand"	"into/to a person's house/camp"

The reason for the formal overlap can be found in features particular to the whole-part apposition and the possessive construction respectively. Recall that the Possessive construction requires a human possessor of an ALL marked nominal to be coded by the OBL, while the whole-part apposed construction requires that "humanness" be reflected in the suffixes appearing on the "whole", but not on the "part". The fact that parts are consistently coded as non-humans means there can be no formal distinction. If parts could be coded as human we would expect apposed constructions with the OBL on both stems, such as **yolŋuwal goŋgal*.

Within my corpus there are no instances of an "alienable" relation involving an "non-human" possessor in ALL or LOC case. There are of course examples of "inalienable" relations between "non-humans" and in these both nominals appear with "non-human" suffixes. It is not clear if possession can be attributed to "non-humans" or not.

2. Roles for which a distinction is potentially possible, given that a range of suffixes does occur in conjunction with the coding of these relations, but which are not used for this purpose.

A case which patterns similarly to the LOC and ALL marked possessees is the instrumental case, coded by the ERG suffix. Again there is no formal distinction possible with "human" referring wholes or possessors consistently coded with the OBL and "non-human" possessors or wholes with the ERG. The possessee or part will of course occur with the ERG. The following "inalienable" examples should be compared with 562 above where an "alienable" possessive relation is coded. The first example has a "human" whole and the second a "non-human" whole

(575) *miyalk+kal rirrakay+yu ŋarra rathala'yu+rr*
woman+OBL sound+ERG 1sg have a headache+3rd Gut3490
I have a headache from the noise of the women
(**miyalkthu [woman+ERG]*)

(576) *rowu+y djamarriny+dhu ŋayi ga+n badarraŋdhi+n*
plant species+ERG leaf+ERG 3sg IMPV+3rd heal+3rd Gut3490
S/he was healed by the rowu leaf
(**rowuwal* [plant species+OBL])

The fact that "humanness" of the whole is the key, is reflected in speaker judgements which would not accept the starred forms shown in parentheses beneath each of the examples above. If the ERG were formally allied with the apposed whole-part or "inalienable" possession one would expect **miyalkthu rirrakayyu* to be acceptable. The coding of possession involving the ERG case is therefore somewhat different to the LOC and ALL, in that while the case forms are available to make the distinction between the "alienable" and "inalienable" possessive relations, they are not used in in this way. For human referring wholes and possessors of ALL or LOC possessees, the distinction is not possible. For instrumental case it is possible for "alienable" possession be associated with the OBL marking of the possessor and "inalienable" possession with ERG marking of the possessor/whole. However, the distinction in the use of the OBL and the ERG appears to correlate with the

"humanness" of the possessor/whole rather than the "alienable/inalienable" distinction.

As for the LOC and ALL, I have no examples of "alienable" possession with "non-human" possessors.

The variation found between the OBL and OBLS suffixes marking possessors of PERL or ABL marked possessees is another context in which it is potentially possible that the use of the two suffixes might correlate with a formal distinction between "alienable" and "inalienable" possession. However, since both whole-part relations and possessive relations occur with either suffix on their wholes or their possessors, this is clearly not the case. This variation is reflected in examples 565-567, 572, 573 and the following:

(577) *yan ŋayi nhawi luku+kurr* ***napurruŋ+galaŋa+wurr*** */napurruŋ+gal*
EMPH 3sg whatsit foot+PERL 1pl+OBLS+PERL 1pl+OBL
djulkthu+rr
pass by +3rd G+T007p5
it just passed by our feet

In regard to the ABL it is possible to argue that the alternation between the OBL and OBLS+ABL is part of a general shift in which the Ablative case is being syncretised with other local case marking of "human" referring nominals. The alternation of OBL and OBLS+ABL occurs with relational case marking of "human" nominals in Ablative case as well as with possessors in the possessive construction. A possible motivation for this within Dhuwal varieties is the occurrence of the the syncretised "non-human" LOC/ABL suffix *-ŋur*. However Lowe (n.d.a L29 and L36) records similar alternations in regard to the ABL for the Dhuwala variety Gupapuyŋu. Gupapuyŋu does have distinct "non-human" LOC and ABL case suffixes which suggests the syncretised "non-human" suffix is not the appropriate motivation.

The situation is somewhat different with the Perlative case since it is obligatorily required with "human" nominals coding a relational case role. Only in the possessive construction is it possible for the possessor to have either the OBL suffix or the OBLS+PERL. In elicitation the whole in a whole-part or "inalienable" relation has also been accepted with either suffix.

The PERL is thus like the ABL in permitting possessor marking with the OBL. However, in the corpus, the OBLS+case form is favoured for marking a possessor.

This would seem to be supported by the fact that no alternation for the PERL, parallel to that noted for the ABL, is indicated for Gupapuyŋu.

An alternative explanation for the variation in possessor marking for the ABL and PERL may lie in the observation they are the only predominantly relational case suffixes that permit possessive marking with the OBLS. The OBL, when it is used to code accompaniment or location on "human" referring nominals, or the DAT when it is used to code an indirect object, benefactive etc. are also admittedly relational in function. Their possessors also require the OBLS, but this could be argued to have a functional basis, in that it distinguishes the possessor and possessee roles in the possessive construction, where the possessee has a suffix that can itself code a possessor. Note that the same pattern occurs with these suffixes when they are functioning as possessors which are themselves "possesseed" e.g. *ŋarra+kalaŋa+wal galay+wal wäŋa+lil* [1sg+OBLS+OBL MBC+OBL place+ALL] "to my MBC's house".

All other instances in which the possessor requires the OBLS are those where the possessee is itself in an adnominal relation. Thus the OBLS has a very strong association with the marking of a deeper tier of adnominal relations i.e. where the possessor is of a nominal which is itself part of another adnominal relation. In contrast the OBL is associated with higher/shallower tier adnominal relations i.e. where the possessee is a participant with a clausal role. The shift of the ABL and PERL to possessor coding with the OBL can thus be seen in terms of a move towards a unified treatment of possessive relations for nominals at different levels. This particular explanation would hold for the Gupapuyŋu data as well.

However, synchronically the situation is one which variation is clearly evident and all case markers found on possessors also have relational case marking functions as well. Only time will tell whether the correlations noted here will be reflected in future developments.

3. Roles in a which a formal distinction between whole-part/"inalienable" and possessive/"alienable" actually occurs

The roles concerned are the core roles of A, S, and O for cases coded with the DAT. Nominals in these roles may occur apposed (i.e. with identical case forms) or in the possessive construction (i.e. with possessor having a distinct suffix from the possessee). Apposition is confined to the whole-part (inalienable) relation but the possessive construction can occur with both whole-part (inalienable) and the

"alienable" relations. Examples of the whole-part relation were presented in section 9.4.5 and some examples of the possessive (alienable) relation are to be found in section 9.5 above.

Below are some examples, both elicited and from texts, in which the possessive construction was accepted or used for a whole-part relation

(a) Possessee in S case

(578) *goŋ+dja nhaŋgu(/ŋayi) mirithirr madakarritj*
hand/paw+PROM 3sg-DAT 3sg INTENS "angry" T102Bp3
its (i.e. the Antilopine Wallaroo's) paws are really fierce

(b) Possessee in O case

(579) *bili nhe ŋarra+ny /ŋarra+ku luku nhä+ŋal munatha'+ŋur*
COMPL 2sg 1sg+ACC/1sg+DAT foot see+3rd sand/ground+LOC
Did you see my footprints in the sand? G

(580) *bala ŋayatha+ma+n dhiyala bindha+n nhaŋgu+wuy ŋayi/*
then hold/keep+1st+SEQ PROX-LOC ribs+SEQ 3sg-DAT+EMPH (3sg)
ŋanya+pi+nya ŋayi
3sg-ACC+EMPH+ACC (3sg) T102B
then (it -a speared animal) held here its own ribs

(c) Possessee in DAT case

(581) *ga malthu+n ŋarraku ŋirrakay+wu*
and follow+1st 1sg-DAT voice/sound+DAT T018p23
and follow my voice (words)

(582) *ŋunhi+yi+n mak boŋgun ŋayi+n ŋadupthu+rr+nydja*
TEXD+ANA+SEQ perhaps "tomorrow" 3sg+SEQ ask (in secret)+2nd+PROM
dhiyak ŋirrakay+wu+ny ŋarra+kalaŋa+w
PROX-DAT voice+DAT+PROM 1sg+OBLS+DAT T018p23
S/he might ask (without seeking permission) for that sound (those words) of mine

(583) *mirithirr ŋayi ŋunhi yätjkurr litjalaŋ/litjalaŋ+galaŋa+w rumbal+wu+ny*
INTENS 3sg TEXD bad 1dl-DAT/1dl+OBLS+DAT body+DAT+PROM
it (the fruit of a certain tree) is really bad for our bodies T009p10

(d) Possessee in A case

(584) *r.....ny+dhu/r.....ny+gal luku+y bathi ŋurrka+m*
personal name+ERG/personal name+OBL foot+ERG bag throw+1st
R.....ny tossed the bag with her feet G

(585) *ŋawulul+yu (*ŋawululwal gurtha+y wuŋgan+nha dhiŋganhamara+ŋal*
smoke+ERG (*smoke+OBL) fire+ERG dog+ACC kill+3rd
The smoke of the fire killed the dog G

The only instance of an inanimate whole-part relation in a possessive construction for A role is the following example from a text:

(586) *wo ŋanapurru+ny yoŋu+ny walala+ny ŋayi dhu warrpam*
or 1pl+ACC person+ACC 3pl+ACC 3sg FUT all
galŋa-batha+n\ ŋänarr+yu nhanu+kiyin+gal ŋayi. gurtha+wal
[skin-cook]" make hot"+1st tongue+ERG 3sg+EMPH+OBL (3sg) fire+OBL
or the flame of the fire makes us human beings hot T017p16

The Possessor here is complex involving both an emphatic pronominal phrase and a nomen. The EMPH form denotes coreference between the possessor and the A. An EMPH form is also equally possible with the apposed construction, shown by the use of NOM case form rather than the OBL in the following example:

(587) *ga ŋunha bathi malany märra'-marra+m, limurru+wuy dhu*
and DIS bag plural+PROM take/get-Redup+1st 1+2pl+EMPH FUT
goŋ+dhu
hand+ERG
and (we) will take those bags with our own hands T101p7

The potential for the OBL to occur on the whole of an A nominal appears to be restricted. The importance of the textual example given in 586 above, in which it occurred on an inanimate whole, was not realized until my return from the field. However the text was transcribed in the field and the construction was not "corrected" by the speaker with whom I worked on the transcription. I have elicited examples with the OBL on "human" nominals, including with some animates, but it is not an automatic alternation.

A and Instrumental case, both marked with the ERG, appear to behave differently in respect to their potential to code the whole-part and possessive relations distinctively. Only for the A is there evidence that the two can be distinctively marked, the whole-part with an ERG combination and the possessive with an ERG-OBL combination. In contrast, in Instrumental case the formal distinction between the two relations appears to be neutralized, at least in regard to "human" possessors and wholes. However, the data on which these observations is based is limited and further work in this area may reveal that the Instrumental and A cases may be more similar in their potential to occur with the possessive construction than my data base indicates.

One general area that needs clarifying is the potential for the possessor to be "non-human". At present the only evidence is that given in example 586. The data overwhelmingly provides evidence for "human" possessors and "non-human" wholes. The possibility that the correlation with "humanness" may not be an accidental artefact of the data, is suggested by the use of the OBL and OBLS suffixes in other areas of the grammar, namely in the relational and complementizer case marking of "human" nominals.

A formal distinction between the possessive and whole-part relations also exists in regard to the ORiginative case. In an inalienable relation the whole is marked with the OR and the part with the ASS.

(588) *rirrakay+nydja marrtji dhu dhawaṯthu+n ḏhu, nho+kun luku+ouy+nydja*
sound+PROM go/come-1st FUT come/go out FUT 2sg-OR foot+ASS+PROM
The sound comes out from your feet T011p5
OR The sound is made by your feet

This is parallel to the marking of the A and instrumental roles in ASS non-finite clauses (see section 9.3.4.2). The alienable relation requires the OBLS plus the OR suffix on the possessor. I have not found any examples in which this marking is acceptable with the whole in a part- whole relation.

I do not have enough data to comment on the ASS and PROP adnominal cases in regard to the "alienable-inalienable" distinction.

The following table compares the two constructions that have been discussed in this section:

Table 51: Comparison of the Coding of the Possessive Construction and Whole-Part Adnominal Apposition

	Possessive ("alienable")			Apposition ("inalienable")		
	POSSESSOR	POSSESSEE		WHOLE		PART
		+hu	-hu	+hu	-hu	
CLAUSE ROLE						
IO, Benef etc.	OBLS+DAT	DAT	DAT	DAT (\OBLS+ DAT)	DAT	DAT
S	DAT	bare stem	bare stem	bare stem (\DAT)	bare stem	bare stem
O	DAT	ACC	bare stem	ACC (\DAT)	bare stem	bare stem
A	OBL	ERG	ERG	OBL	ERG (?/OBL)	ERG
Instr.	OBL	ERG	ERG	OBL	ERG	ERG
Locative	OBL	OBL	LOC/ABL	OBL	LOC/ABL	LOC/ABL
Allative	OBL OBLS+OBL/ OBL	OBL	ALL	OBL	ALL	ALL
Ablative	OBL/ OBLS+ABL	OBLS+ABL	LOC/ABL	OBL/ OBLS+OBL	LOC/ABL	LOC/ABL
Perlative	OBLS+PERL /OBL	OBLS+ PERL	PERL	OBLS+ PERL/OBL	PERL	PERL

This table depicts the formal relations between the coding of relational cases in whole-part apposition and in the possessive construction.

The first section shows those cases where a formal opposition is possible. The alternative case marking indicated in parentheses for "human" wholes form is that of the possessive construction in which these can occur.

The middle section shows the situation for A case. There is one example in which a "non-human" whole gets marked with a "human" suffix, suggesting the potential for this role is distinct from that of the Instrumental.

The final section shows the situation for the other cases. For all of these the "human" whole plus part relation is coded identically to the Possessive construction with a "non-human" possessee.

9.5.4 On the overlap between whole-part relations and possessive relations

In summary then, the evidence indicates that the overlap between whole-part and possessive relations is limited to A, S, O and DAT marked relational cases. In the corpus the prototypical whole-part relations such as between people and their body parts are predominantly coded in apposed constructions, which suggests it is the unmarked use. They are particularly favoured in animate whole-part relations and in fact only one example has been recorded in which an inanimate whole is coded as a possessor, i.e. example 586. Attempts to elicit simple clauses with the possessor marking however have not proved successful. The following are two instances in which possessive marking was rejected:

(589) *walal wutthu'-wutthu+n* ***bala' dhurrwara***
3pl hit-REDUP+1st house door Gu3490
they knocked on the door of the house
*balaw'

(590) *ŋayi malthu+n ŋarra+ku /weɫi+w /mutika+w luku+w*
3sg follow+1st 1sg+DAT wallaby+DAT car+DAT foot+DAT Gu3490
s/he followed my/the wallaby's/ the car's prints/tracks
*ŋarrakalaŋaw/weɫiwalaŋaw/mutikawalaŋaw

These contrasted with examples presented under section 9.5.3 point 3 above which demonstrate that variation is possible. All these examples except number 586 involve "human" wholes/possessors. As I have already mentioned it is possible that the link between "humanness" and possession may not be simply a reflection on the limits of the data. However, the precise domain of possessive marking and the relationship between the possessive construction and apposition in regard to whole-part relations are matters for future research.

The connection between possession and whole-part relations of "inalienability" is one that has been noted in various languages (see Lyons 1977 and McGregor 1985). In some Australian languages the constructions in which they appear are quite distinct. but others permit both apposition and suffixing.

For Kuniyanti, a bound pronominal cross-referencing language of north-western Australia, McGregor (1985) argues that two oppositions, separable/inseparable and individuated/non-individuated, motivate the expression of whole-part relations, as well as various other clausal phenomena. These two oppositions reflect the fact firstly, that body parts are typically inseparable from their wholes and secondly, the fact that a part may be treated as a participant (i.e. a role cross referenced in the VP).

It would be interesting to pursue such notions further in regard to Djambarrpuyŋu as they are clearly similar to the distinction I have expressed in terms of single entities versus autonomous entities in regard to the coding of adnominal relations. The two oppositions seem to correlate with the dual perspective I have proposed is possible for the whole-part relation.

In Djambarrpuyŋu, the potential independence of the part is realized in certain constructions in which the whole and the part must be coded as different roles. The whole is aligned with the subject role and the part with a non-subject role. In R/R clauses and adnominal ASS *-Puy* clauses an underlying A participant and its part must be distinctly coded. In R/R clauses, where the A is demoted to S, the parts retain the ERG suffix and are thus formally instruments. In transitive clauses the status of the part to an A-whole is ambivalent since both are coded by the ERG. As we saw in example 586 above it is possible for the part to be independently possessed with an emphatic OBL case form pronominal indicating coreferentiality with the subject (i.e. the whole) which would suggest the part has an automous role. However it is also possible for an apposed construction to have an emphatic NOM pronominal (see example 587). This suggests the part can be interpreted either as intrinsic to the A or as an independent instrumental participant even in transitive clauses.

The evidence that the dual perspective of whole-part relation is relevant to Djambarrpuyŋu grammar is strong. I have suggested above that the distinction between apposed and possessive marking of the relation may also be motivated by this perspective, but it has yet to be conclusively shown that this is the case.

Example 578 above for instance, which is shown as permitting either coding, occurred in the original text with the possessive constuction. It is possible that the speaker used the possessive because she was commenting on a particular attribute of the part. However, various speakers were happy to accept an apposed whole as an alternative. Furthermore they all indicated that the meaning was the same.

9.6 The ORiginative *-Kuŋ(u-)*

Form

This has the allomorph *-kuŋ(u-)* following stops and nasals and optionally after semivowels, and *-wuŋ(u-)* following liquids and vowels and also optionally after semivowels. On a stem with a final glottal stop the relevant segment in determining this allomorphy is the segment preceding the glottal stop. The final vowel does not appear when the suffix is word final but must occur before any additional morphemes.

On pronominals and demonstratives and the indefinite/interrogative proform *yol* "who" the unlenited allomorph occurs except when it follows the OBLS, in which case it is lenited.

A cognate suffix has been noted for all other Yolŋu varieties except Djinaŋ and Djinba.

Morpho-syntactic functions

This is a suffix whose general functions appear to be predominantly adnominal. In main clauses it has scope over the S or O role and it can also occur on nominals in equational clauses. While it does not occur on verb stems in a complementizing function, it can code A and S roles in non-finite subordinate clauses. In the corpus this is overwhelmingly in ASS-*Puy* marked subordinate clauses, but there are a couple of examples where it occurs with other complementizing suffixes. Given that the ASS is the only adnominal suffix with a complementizing function, its use of the OR to code subjects provides some indirect support for the claim the the OR is fundamentally adnominal.

It should also be noted that A and S arguments of ASS *-Puy* marked deverbal nominals also sometimes occur marked with the ASS. This is in fact identical to the pattern of marking found with other non-finite subordinate clauses in which all roles take a suffix agreeing with the complementizer case. The variation evident in the coding of non-finite clause A and S roles in the corpus means that the two "regular" patterns affecting the marking of A and S roles in non-finite subordinate clauses (i.e. OR in ASS clauses and the complementizing case in other types of

clauses (see section 12.1) both leak. The basis for the variation in marking is not yet clear.

Th OR occurs predominantly with "human" referring nominals, be they nomens, pronominals or demonstratives. This is reflected in the fact that the only indefinite/interrogative stem with which it occurs is the "human" form *yol* "who/someone". There are no instances of it occurring directly attached to a deverbal nominal although it may attach to stems with the PROP and ASS suffix, including deverbal nominals, when these are modifying an OR marked nominal.

However, unlike other adnominal suffixes it never occurs with a following relational suffix and is confined in scope to S or O nominals in main clauses. It thus has a distinct distribution from both other adnominal suffixes and peripheral relational suffixes.

Semantico-syntax

This suffix seems confined to occurring with nomens in main clauses that can be interpreted as creators, providers or original sources - all in some sense non-local sources. Basically this restricts it to "human" referring nominals. The creative sense is seen in its marking of the mother of a child, or the ancestors from whom a clan is descended and the ancestral beings as creators of features of the landscape, ceremony, social practices etc. The providing sense is seen in its presence on the person who provides food, either by hunting, gathering or shopping. The original source sense appears in its use with the teller of a story or the people('s language) from which a particular word comes.

The occurrence of the OR with non-finite subordinate clauses may be broader. Morphy (1983 p39) suggests that the OR in Djapu marks and agent not expressed as subject in a clause. While its use in this context warrants further investigation it is possible the "source" notion can be retained here as well.

Some examples of the OR in main clauses are given below

(a) OR with O in its scope

(591) girri' walal ga+n ŋayatha+ŋal ŋăpaki+wuŋ, dilkurru+wurruŋ+guŋ
thing 3pl IMPV+3rd hold+3rd white people+OR old person+PL+OR
"They"(the deceased) had a thing (an OBE medal) from the white leaders OMSp18

(592) *yapa'mirriŋu+wuŋ maypal ŋayi dhu bäyŋu luka*
Z+KINPROP+OR shellfish 3sg FUT NEG ingest-1st T204p11
he does not eat shellfish from his sister

(593) *warrpam ŋuli gurtha+y djaw'yu+na\ ŋula nhä mala+ny nhanu+kuŋ,*
all HAB fire+ERG take+4th "somethin'g PL/group+PROM him+OR
ŋurukuŋ+dhi yoloŋu+wuŋ rakuny+guŋ
DIS-OR+ANA person+OR dead+OR T016p22
the fire takes all, everything of (belonging to, used by) his, that person who died.

(594) *ga waŋgany+mirri+y+nydja walu+y, godarr'+nha bala dhaŋuny'+nha*
and one+PROP+ERG+PROM time+ERG morning+SEQ then story+SEQ
buna ..... yoloŋu+wuŋ balanya+wuŋ, nhawi+kuŋ-ya
arrive-1st person+OR such+OR whatsit+OR
yäku-ŋayatha+nha+mirri+wuŋ ga djorra'-ŋayatha+nha+mirri+wuŋ
name hold+4th+PROP+OR and paper hold+4th+PROP+OR
and one morning news arrived ..... from a person, the kind that whatsit, the one who has the names, the one who has the papers T101 p31

(b) OR with S in its scope

(595) *bala yiki+ny' marrtji+na+n ŋäpaki+wuŋu+ny*
then knife+PROM go+3rd+SEQ white people+OR+PROM OMS p33
then the swords of the white people came out
(as part of the burial ceremony)

(596) *dhika ga ŋorra rom, bäpi+wuŋ*
INDEFP IMPV-1st lie-1st law snake+OR T204p13
the law from the snake is around here

(c) OR in an equational clauses

(597) *ga dhuwal balanda+wuŋ yäku buyla*
and PROX white people+OR name boiler
and this is the white people's name "boiler"
the word "boiler" is from the white people

(598) *yol+kuŋ dhuwal dhawal-guyaŋa+nha+wuy*
who+OR PROX give birth+4th+ASS
From whom was this one born?

(599) *ga nhokuŋu+ny nhä+n, ŋinyala+ny nhe dhu nhaltja+n gurrupa+n*
and 2sg-OR+PROM what+SEQ 1dl+ACC 2sg FUT do what-1st give+1st
dhäwu
news/story Bp4
And what is from you? What news/information do you have to give us?

9.6.1 The occurrence of the OR with "non-human" referents

There is some evidence that the OR can occur on "non-human" nomens. They are all examples first noted in texts rather than produced in elicitation work.

One inanimate nomen with which the OR is generally accepted is *garrkatji* "saw" as in *dharpa garrkatji+wuŋ* [wood/tree saw+OR] describing sawn up pieces of wood. Attempts to get it with other tools or machines have not been successful. The explanation given in relation to this was that the items I designated were not the work of human hands. Possibly the existence of a saw-mill in which Yolŋu worked during mission days is behind the acceptance of this example, perhaps because people were aware of the close association of people with the operation of the saw. Certainly the interpretation that the cut up pieces of wood have their source in the saw seems plausible.

There are also a few instances in the corpus where speakers uses the OR with animates e.g. on a plant name in the context of its use of a medicine and on a term for "stingray" in connection with the wound it had caused. Generally the OR would not seem to be acceptable on such nominals. However, in both contexts the nominals can be construed as "creative" sources - the medicine as the source of healing (e.g. bringing a boil to a head) and the stingray as the source of a wound.

(600) *.....wanhawitja+rr nhuŋu gadanuk marrtji+n maranydjalk+kuŋ*
where(PERL)+3rd 2sg-DAT barb go+3rd stingray+OR T014p9
(anoint the medicine) along where the barb of the stingray goes

These examples suggest that while the OR normally attaches to "human" referring nominals it can be extended to other nominals in contexts which are in keeping with its prototypical use to code a "source".

9.6.2 The OR in non-finite subordinate clauses

As mentioned above the OR is the predominant case used to code an A in a ASS non-finite subordinate clause. It may also code an S. Examples are given in section 9.3.4.2. This coding is distinct from the general pattern evident in non-finite clauses in which a form agreeing with the complementizer case occurs on all nominal constitutents. However it is also possible for both A and S roles in ASS marked non-finite clauses to occur with the ASS (see section 9.3.4.2 again for examples).

It is not possible yet to draw any conclusions about these forms due to the limited data available for the less common combinations.

There is some evidence that the OR marked nominals can occur with other kinds of non-finite clauses. The following data set is based on speaker judgements concerning various elicited clauses with the ERG in complementizer function (see section 12.1.4). The category "common" indicates the combinations that occur in the text corpus.

(601)

(i)	*ŋarra rathala'yu+rr yolŋu+wuŋ ririrakay+wuy (ŋäthi+nya+wuy)*	(common)
	1sg have headache+3rd person+OR sound+ASS cry+4th+ASS	
(ii)	*ŋarra rathala'yu+rr yolŋu+wuŋ ririrakay+yu (ŋäthi+nyara+y)*	(said to be
	1sg have headache+3rd person+OR sound+ERG cry+4th+ERG	possible)
(iii)	*ŋarra rathala'yu+rr yolŋu+wal ririrakay+yu (ŋäthi+nyara+y)*	(common)
	1sg have headache+3rd person+OBL sound+ERG cry+4th+ERG	
(iv)	**ŋarra rathala'yu+rr yolŋu+wal ŋäthi+nya+wuy*	(rejected)
	1sg have headache+3rd person+OBL cry+4th+ASS	
	I have a headache from the noise of a person crying	

In the first example the OR is combined with an ASS marked nominal and a deverbal nominal. In the third the subordinate S coded with the OBL appropriate for "human" role in an ERG marked non-finite clause. These are the "regular" patterns. However the second example shows an acceptable combination of OR and ERG marking. This suggests that the OR may in fact be more autonomous. One possibility is that the OR is apposed to the nominal it modifies, independently of the ASS marked nominals. In the current set of examples however this produces a problem, since an interpretation in which the OR has scope over the S would not convey the sense intended. If it did, we would expect a translation something like "I (who am born) from a person have a headache by the noise". Clearly the OR marked nominal is the source of the cause, not the source of the S.

The examples without both and OR and ERG nominal and without the deverbal nominals are problematic. Either the OR must be brought within the scope of certain roles other than S or O, or an "underlying" full subordinate clause must be posited.

The potential for the OR to occur with other non-finite clauses than those with ASS marking clearly distinguishes it from the A and S roles in those clauses marked with the ASS.

9.6.3 Other interpretations of the OR

Schebeck (1976b p359) posits a transformational relation in Dhaŋu between a transitive clause and a nominalized clause with A marked by the OR and O marked as S. He equates the construction loosely with a "passive".

While the correlation on which Schebeck bases the transformational analysis exists it seems to me to misrepresent the facts, at least as far as I understand them for Djambarrpuyŋu.

Schebeck's correlation is between a main clause, with full TMA coding, and a construction I would describe as an equational clause, in which the OR marked nominal and the deverbal nominal are predicated of another nominal expression. In Djambarrpuyŋu the deverbal nominal must occur with the ASS. This is not required in Dhaŋu.

The "transformational" approach would be inappropriate in Djambarrpuyŋu since not all transitive clauses appear to have equivalent constructions using the OR and a deverbal nominal. Furthermore the OR is also found on nominals which would be in S case in the equivalent tensed clause. The latter is demonstrated by the following examples involving intransitive and R/R predicates:

(602) *ŋayi li ga+nha wäŋany dhärra+nha nhakun djalkiri+puy*
3sg HAB IMPV+4th place+PROM stand+4th such as foot+ASS
yolŋu+wuŋ marrtji+nya+puy
person+OR go(intr)+4th+ASS
the place stood with the footprints from people walking

(603) *ga bulu ŋayi guli miriŋu+lil marrtji+nya ŋunhi+yi yolŋu gatpurr*
and again 3sg HAB battle+ALL go+4th TEXD+ANA person wounded
djetji+mirr gara+puy buraki+nya+wuy yolŋu+wuŋ 80MED(11)
sore+PROP spear+ASS be wounded(intr)+4th+ASS person+OR
and that person goes to battle again, wounded, with the scar, being wounded from a person's spear.

(604) *nhäthinya ŋarra+kuŋ\rirrakay\ galkan+mi+nya+wuy*
be how 1sg+OR sound enter-1st+R/R+4th+ASS T018p17
(listen) to what the (/my) sound which I recorded is like

An instance when an equivalent construction is not possible occurred in my attempts to elicit a non-finite subordinate ASS clause in translations of sentences such as "I saw them get/who were picked up by X". Non-finite subordinate constructions are certainly possible with the predicate *nhäma* "see/look for" but the clause

**märra+nha+wuy X+kuŋ* [get/take+4th+ASS X(person's name)+OR] "the ones collected by X" was not an acceptable one.

Morphy also argues that the OR can occur marking the non-subject agent in intransitive clauses. She gives a "result" interpretation to the following examples arguing that the OR marked nominal is the "conscious, purposive cause of the state or event described by the sentences" (1983p97). The interlinear glosses for her examples below conform with the terminology I use for Djambarrpuyŋu:

(605) *mak]inygu-n gara-thi-n bäpa-ŋali-ny [galka'-ŋu-n]Result*
maybe COMPL+SEQ spear-INCH-3rd F-KINPROPAP-PROM sorcerer-OR-SEQ
Maybe your father has already been speared by a sorcerer [because of the action of a sorcerer] (Morphy 1983 (No141) p97)

(606) *ŋarra ŋä-kul ŋunhi dhäwu [Dambuythun-guŋu-ny]Result*
[1sg hear-3rd TEXD story personal name-OR-PROM]
I heard that story from Dambuythun (ibid No142)

With intransitive constructions I am willing to admit the possibility that the OR pertains to the whole proposition rather than strictly the S and may be construed as cause as in the first example. This would seem to reflect the marginal adnominal/relational status of this suffix. What is more difficult to accept is an interpretation of the second example in which the OR is what "caused" the main clause event. I would suggest that the OR in this sentence attributes the story to a particular author, i.e. indicates the "source-origin". I do not see that the situation expressed by the rest of the clause is causally bound to an event associated with the OR marked nominal.

The OR nominals with intransitive predicate in the Djambarrpuyŋu examples that follow seem to me to also raise problems for a "cause" interpretation, while the notion of a "source/origin" is maintainable.

(607) *dhäwu marrjti+n räli \walalaŋ+guŋ dhawatthu+rr gurrupa+na+wuy*
story go/come+3rd MVTTWD 3pl+OR go/come out+3rd give+4th+ASS
rom-lakara+nha+wuy\ ga bäkumirriya+nha+wuy
law-tell+4th+ASS and "correct"+4th+ASS T018 p3
the story came to (us) \ came out from their giving, instructing and correcting

(608) *nhepi dhu gäna liya-ŋamaŋama+yu+n+mi+rr, **nhokiyin+guŋ** dhu*
2sg-EMPH FUT alone think+1st+R/R+1st 2sg-EMPH+OR FUT
ga guyaŋa+nha+wuy dhawatthu+n, yaka wiripu+ŋu+wuŋ nhe dhu
IMPV-1st think+4th+ASS go/come out+1st NEG different+ŋu+OR 2sg FUT
ga guyaŋa+nha+wuy märra+m
IMPV-1st think+4th+ASS take/get+1st T021p14
You think for yourself alone, the thoughts come out from you, you do not get thoughts from someone else

(609) *gapu+n ŋunhi+yi+n raypiny+nha ŋuwapthu+rr\ nhanukuŋu+n*
water+SEQ TEXD+ANA+SEQ fresh+SEQ rise+3rd 3sg-OR+SEQ
djaŋ'kawu+wuŋu+n
proper name+OR+SEQ
the fresh water rose, from the Djaŋ'kawu BW/Rp5

(610) *märr nhe dhu yaka dhiŋga+m, **miriŋu+wuŋ***
so that 2sg FUT NEG die+1st warrior+OR T010p25
so you do not die, from the warriors (at the warriors hands)
(This particular example is similar the first Djapu example above)

Morphy also proposes an analysis which derives certain equational-type clauses from underlying verbal clauses. This follows from a general assumption that all equational clauses where there is a [relational] case marked NP (except the DAT marked possessor) are derived from underlying verbal structures. ' "True" equational clauses' do not have an underlying verbal structure, and therefore the NPs of which they are composed bear no marking for case-role. In contrast I have assumed that all clauses in which the predicate is a nominal expression are directly generated.

Morphy's approach assumes the OR is a relational case marker and thus it is proposed that the occurrence of an OR marked nominal in an equational clause is derived from a non-finite clauses in which the deverbal nominal is deleted (see Morphy 1983 p108). This is similar to Schebeck's approach for Dhaŋu.

While the correlation between the OR and the ASS marked deverbal in equational clauses is strong, it is not clear that it is always necessary to invoke it. On many occasions more than a single predicate is potentially possible. While I am not in a position to judge whether speakers do in fact have a specific predicate in their minds it seems to me the semantics of the OR are rich enough for it to stand as a nominal predicate of its own. The "source/origin" relationship expressed between the two entities could often be achieved through a variety of situations.

More work is needed to determine just what are the constraints on the use of the OR, but I would expect that they are likely to be partly semantic. A general notion such

as "agency" seems too broad, although the fact that the source/origin is generally attributed to humans means there is a clear overlap with prototypical agents. The restriction of their scope to S or O nominals also fuels an "agency" interpretation.

With certain intransitive predicates its scope does appear to be clausal rather than that of S and O, suggesting a possible peripheral relational function.

A possible syntactic motivation in relation to the OR is suggested by its use with a range of non-finite clauses. It is possible that the language is undergoing a shift to permit at least the A roles of non-finite clauses to be distinctly coded from other roles.

It should be noted that Djapu, like Dhaŋu, has rather different patterns of coding non-finite relative subordinate clauses to that in Djambarrpuyŋu. When only an OR nominal appears then the deverbal nominal occurs in the FOURTH inflection with no further suffix. If no OR appears or if nominals in a peripheral role to the subordinate predicate occur, then the deverbal nominal occurs with the ASS suffix. In Djambarrpuyŋu (and Gupapuyŋu) the ASS must occur on all the deverbal nominals. In Djapu the OR and the ASS are largely in complementary distribution rather then overlapping as in Djambarrpuyŋu.

These constructions also illustrate another area of dialect variation between the two Dhuwal varieties. It is also of note that the Djapu appears closer to Dhaŋu in regard to this construction than it is to Djambarrpuyŋu.

CHAPTER 10

COMPOUNDING AND REDUPLICATION

10.1 Compounds

Compounding, for the most part, involves the juxtaposition of two free morphemes, only the second of which can bear inflectional suffixes. There are both nominal and verbal compounds, the latter being particularly numerous. There are also a few adverbial compounds. A striking feature all classes of compounds is the dominance of body parts as the initial lexeme.

Regular morphophonological processes associated with suffixing and reduplication, such as lenition and loss of vowel length, occur only sporadically with compounds. The second member of the compound usually takes initial stress and retains a long vowel should it have one. Furthermore, in reduplication of verbal compounds it is the verb stem which is reduplicated, never the compound initial lexeme. The compound word is thus distinct from the suffixed or reduplicated word in that the morphemes are more autonomous. However compounds do function as a single unit in regard to inflections and are semantically distinct from the lexemes of which they are composed. This distinguishes nominal compounds from adnominal expressions where the lexemes need not be juxtaposed, do not occur in any particular order, are independently inflected and the meaning is predictable. Verbal compounds can be distinguished from verb plus argument combinations on similar grounds.

The adnominal phrases with the PROP or PRIV suffixes also require juxtaposition of root morphemes and in such expressions there may be no formal distinction between compounds and the productive combination of root morphemes in the phrases (see sections 9.13 and 9.2.3).

Verbal compounds are also often similar to clauses which involve a part-whole relationship as one of the arguments. Since clauses do not have fixed ordering requirements the ambiguity only occurs when the arrangement of clause elements happens to parallel that of compounds.

10.1.1 Nominal and nominal derived adverbial compounds

10.1.1.1 Nominal compounds with initial body part lexemes

By far the majority of nominal compounds combine a body part lexeme with some other nominal lexeme. There are also a few combinations with particles and verb roots from the *-Thu-* verb class. While the resulting compound is usually a nominal, a few combinations producing adverbs have been recorded. The table below presents some examples:

Table 52: Nominal and Adverbial Compounds with Body Parts as their Initial Lexemes

2nd member	(Main) Functional Category of Compound				
	nominal				adverb
	entity	quality	quantity	temporal	
entity	*buthuru-wuŋgan* ear-dog 'Hammer Oyster' *burumun'-dhumbul'* cheek-short 'football'	*dhulmu-ŋaraka* lower stomach -back bone 'empty'			
quality	*makarr-yindi* thigh-big 'mainland' *ŋurru-bilkpilk* nose-flat 'barge' *dhapi-weyin* foreskin-long 'type of bee /hive entrance'	*liya-ŋäl* head-firm 'smart; persitent' *liya-baŋdany* head-dried up 'bald'		*gupa-ŋäl* nape-firm 'forever'	
number	*yaŋara'-märrma'* lower leg-two 'twins'	*matha-dharrwa* tongue-many 'irresolute, wishy-washy"	*goŋ-waŋgany* hand-one 'five'		*buku-märrma'* head-two 'twice'
colour	*dhuḏi-mol* bottom-black 'Modialis pro- clivis (shellfish)' *ḏämbu-gamunuŋgu* head-white(clay) 'trouble maker'				
particle	*dhulmu-bithiwul* lower stomach- NEG 'person whose child has died'	*goŋ-gäna* hand-alone 'person without companions' 'place without people'			
locational		*liya-barrku* head-far 'smart'			*dhä-garramat* mouth-high 'open(place); (do)openly'

This table describes occurring terms. Some of the gaps are for word classes with limited membership, eg. quantity-denoting nomens and temporals, and may be real. Others may be accidental because of the limits of the corpus.

In the following examples the second element in the compound is a verb root; the first lexeme is *buku* "head":

buku-lup	"cleansing/purification ceremony"
buku-lumbak	"a particular type of loaf made from cycad; folded, made into a parcel"

These appear to be back formations from compound verbs. Compare the two examples with the following verbs:

buku-lup+thu-	"be cleansed (ceremonially)/be baptized"
(see also *lup+thu*	"to be in/with water")
buku-lumbak+mara-	"to fold, make up a parcel"
(see also *lumbak+thu*	"fold, bend; turn a corner suddenly")

10.1.1.2 Nominal compounds with non-body part initials

Although not as common, there are nominal compounds which do not involve a body part term.

The combination of a nomen with *ḏumurr* "big" is quite productive, deriving agentive nominals. For example:

räl-ḏumurr	"excellent hunter, good provider"
skilled-big	
manikay-ḏumurr	"one who always sings/one who likes singing"
song-big	
barrari-ḏumurr	"one who is fearful"
fear-big	
dhäruk-ḏumurr	"talkative; someone who is always talking"
words-big	
manaŋa-ḏumurr	"thief"
thief-big	
nyäl-ḏumurr	"liar"
lie-big	

Other non-body part compounds include examples such as *marí-moŋuk* [trouble-salty]" type of caterpillar with stinging hairs"; *ŋäŋ'ka-bakarra* [type of shellfish -type of tortoise] "Billy-goat Plum, Green Plum" and the more recently coined *dhuwurr-yätjkurr* [path-bad] "sinner". A more fossilized example is *barrpa'-wukitj* [rotten- ?] "someone who knows a lot about/is interested in "rottenness" i.e. the handling of a corpse", in which the first morpheme is a commonly occurring

nominal but the second morpheme, as far as I have been able to ascertain, does not occur independently.

10.1.2 Verbal compounds

Compounding is very common with verb stems. As is the case with nominal compounds the majority begin with a body part term. I have some 300 examples listed without attempting to make a comprehensive listing of all examples occurring in the texts and other sources. The number of compounds with non-body part initials number around 40.

The compounds are always verb stems, with senses that range from being nearly identical to that of the simple verb stem it contains to being quite distinct, although a greater knowledge of extended/secondary uses of both body parts and verbs may reduce the incidence of compounds in which some kind of analysis is not possible. Thus consider *galŋa-djulŋithi-*$Ø_{rr}$ [skin-be happy, excited (intr)] "to be happy, in a good mood (intr)" where the difference between the simple and compound verb has yet to be explicated, compared to the compound *galŋa-dhiŋga* -N$_{ka}$ [skin-to die; with a colloquial meaning " to feel tired (intr)"] which is derived from a secondary sense of the verb for "to die", i.e. "to be tired", and *dhä-bakthu*-N [mouth-break(intr)] "to go/come last(intr)", where there is no overt connection between the meaning of the compound and the simple verb stem.

There are a few examples in my corpus of compounds where the case array commonly associated with the simple verb stem is distinct from that which occurs with the verbal compound e.g. *nyalyu*-N "to bend (intr)" vs *mel-nyalyu*-N [eye-to bend] "to stare at (tr)", *guyaŋa-*$Ø_a$ "think (tr)" vs *dhuwal-guyaŋa-*$Ø_a$ ["place"-to think] "be born (intr)". There are also several examples where a S-DAT case array is typical of the compound while a single S array occurs with the simple verb stem. However, generally the transitivity of the compound and simple verb stems does not appear to change and the distinction between the S-DAT and S array requires further investigation as to whether the S-DAT does indicate an IO or some other role.

While a detailed study of the semantics of the various body part terms remains to be undertaken, there are clearly some meanings/functions of particular body part terms which remain constant across several compounds. This constancy in the semantic contribution by at least one compound element means that it is liable to be

productive. However, while some evidence of productive compound formation will be presented below, the extent of the productivity in relation to compounding is not currently clear. Another matter for future consideration is the extent to which the senses of body parts in compounds directly relate to their senses as independent morphemes.

10.1.2.1 Verb compounds with initial body part lexemes

Amongst the most common body part terms found as verbal compound initials are *buku* "forehead, head"; *dhä* "mouth"; *ŋoy* "lower part of the torso, 'seat of emotions'"; *liya* "head, mind"; *mel/maŋutji* "eye"; *ŋurru* "nose"; *märr* "spiritual power"; *dhudi* "bottom"; *galŋa* "skin" and *goŋ* "hand". A selection of compounds with these and a few other body part terms are listed below:

buku-yätji-$Ø_{rr}$	"to frown" (*yätji*-$Ø_{rr}$ "be bad, go wrong")
buku-roŋanmara -Ŋ	"answer" (*roŋanmara* -Ŋ "return, give back")
buku-dhunarra-$Ø_a$	"to be born" (*dhunarra*-$Ø_a$ "to come down, descend)
buku-ŋal'yu-N	"to respect, worship, go right to the top" (*ŋal'yu*-N "to rise, go up")
dhä-ŋäma-IR	"to ask someone about something" (*ŋäma*-IR "to hear, listen")
dhä-bakthu-N	"to go/come last" (*bakthu*-N "break")
ŋoy-gärri-$Ø_i$	"to be anxious, troubled, worried" (*gärri*-$Ø_i$ "to enter")
ŋoy-märra-Ŋ	"to annoy, irritate, tease" (*märra* -Ŋ "to get/take")
liya-marrtji-$Ø_i$	"to think of someone far away, be homesick, daydream" (*marrtji*-$Ø_i$ "go/come, walk")
mel-manapa-N_L	"to mix (up)" (*manapa*-N_L "to join, unite, be with")
maŋutji-gurrupa-N_L	"to show" (*gurrupa*-N_L "to give")
mel/maŋutji-gä-Ŋ	"to blame, use someone as pretext or excuse" (*gä*-Ŋ "to bear")
ŋurru-waŋa-$Ø_a$	"to hum, moan" (*waŋa*-$Ø_a$ "to talk, speak")
ŋurru-ŋamu-N_L	"to not recognise "(*ŋamu*-N_L "to not recognise")
märr-ŋal'yu-N	"to praise, admire, feel gratitude" (*ŋal'yu*-N "to rise, go up")
märr-dharaŋa-N_L	"to believe, obey, trust" (*dharaŋa*-N_L "to understand")
dhudi-nhirrpa-N_L	"to plant" (*nhirrpa*-N_L "to put, place")
dhudi-yarrkyarrkthu-N	"to go backwards, go back where one came from" (*yarrkthu*-N "to go away, go come off the road, shift (in seat))
galŋa-djulŋithi-$Ø_{rr}$	"be happy, in a good mood" (*djulŋithi*-$Ø_{rr}$ "be happy, excited")
galŋa-laymara-Ŋ	"to make happy, comfort, cheer up" (*laymara* -Ŋ "to relieve, put at ease")
goŋ-nhäma (Ŋ)	"to rely, depend on someone else" (*nhäma* (Ŋ) "see")
goŋ-dhawar'yu-N	"to finish making something" (*dhawar'yu*-N "to finish, end")
matha-yätji-$Ø_{rr}$	"to long for the taste of, hunger for (semitr)" (*matha* "tongue" *yatji*-$Ø_{rr}$ "be bad, wrong")

bun'kumu-djipthu-N	"to kneel (down)" (*bun'kumu* "knee" *djipthu*-N "to stand straight in one place")
gupa-waŋa-$Ø_a$	"to gossip" (*gupa* "nape" *waŋa*-$Ø_a$ "to talk, speak")
gumurr-buna-$Ø_a$	"to meet" (*gumurr* "chest" *buna*-$Ø_a$ "arrive")
waŋa-nhirrpa-N_L	"to appoint" (*waŋa* "arm" *nhirrpa*-N_L "put, place")
lirra-garrpi-N_L	"to cut off someone's retreat" (*lirra* "teeth" *garrpi*-N_L "to tie, bind")

The body part terms that occur in compounds would appear to be co-extensive with those that occur as parts in whole- part apposed adnominal expressions (see section 9.4.5). They thus include the less tangible notions such as *dhäruk* "word" and *djäl* "want, desire":

djäl-guwatjma-N_L	"to interfere, interrupt, bother someone" (*guwatjma*-N_L "visit")
dhäruk-bakthu-N	"to have a meeting" (*bakthu*-N "break")

It is possible to identify common senses in compounds with the same body part initial. This may be a general association of particular situations with particular body parts e.g. speaking with *dhä* "mouth" as in *dhä-wanaŋgu*-Ŋ "to imitate someone's speech," (*wanaŋgu* -Ŋ " to imitate, copy, mimic"); thinking with *liya* "head, mind" as in *liya-ŋamaŋamayunmi*-$Ø_{mirr}$ " to make up one's own mind, decide for oneself" (*ŋamaŋamayu*-N "make, build"); engaging in an activity using the hands or having responsibility for something/someone with *goŋ* "hand" as in *goŋ-märra* -Ŋ "to take possession of someone's things, to take over someone's work" (*märra* -Ŋ "take, get"); leading with *ŋurru* "nose" as in *ŋurru-warryu*-N "to lead" (*warryu*-N "pull, push"). References to events that affect the whole body occur with *galŋa* "skin" rather than *rumbal* "trunk of the body, body" e.g. *galŋa-batha*-N_L "to be hot, have a fever" (*batha*-N_L "to cook").

Many compounds having to do with emotions and psychological states occur with the two terms *ŋoy* " lower part of torso, seat of emotions" and *märr* "spiritual power" as the compound initial. *Ŋoy* is associated with the lower part of the trunk and this is the locus of various emotions or sensations such as being puffed, or thirsty. Its concrete reference to an area of the body appears in compounds such as *ŋoy-bäl|walyu*-N "to stoop, be bent over" (*bäl|walyu*-N "to stoop, be bent over") *ŋoy-layyu*-N "to go to the toilet, get relief from stomach pain, trouble; to be calm, serene" (*layyu*-N "to be relieved, at ease, relaxed"). This general locus is also reflected in the use of *ŋoy* with local suffixes with the locational meaning "under, below".

Märr is the only common compounding initial which I include with body part terms, that does not have a physical manifestation in relation to the body. Its designation is complex and I refer the reader to Thomson (1975) for a discussion of its reference in relation to religious and ritual contexts. He likens it to Polynesian *mana*. However it would also appear to have a general reference to certain human emotional and psychological domains, for which I cannot offer a direct link with the notion of spiritual power. e.g. *märr-ŋamathi-*$Ø_{rr}$ "to love, welcome, be happy" (*ŋamathi-*$Ø_{rr}$ "be good, proper") and *märr-yuwalkthi-*$Ø_{rr}$ " to believe, take notice, obey" (*yuwalkthi-*$Ø_{rr}$ "be true, real", *märr-dj/yulkthu-*N "to disbelieve, break(the law), take no notice"(*djulkthu-*N "to pass by, go on"). and *märr-garrpi-*N_L" to worry about" (*garrpi-*N_L "to tie, bind, tangle up in"). Further work into the perceptions of emotions and pyschological states may reveal relationships to other notions associated with *märr*. It should also be noted that other body part terms also occur in compounds denoting emotional and mental states e.g *mel-di'yu-*N "to be jealous, envious" (*di'yu-*N "to itch, smart"); *galŋa-miŋiki-*$Ø_{rr}$ "to feel ill, upset, sad" (*miŋiki-*$Ø_{rr}$ "be bad").

There are some exceptions to the claim that the body part in compounds is never case marked. A few examples have been recorded where the body part occurs with the ERG suffix e.g. *ŋapa+y-ŋurrka-*Ŋ "?to ignore, turn one's back, dislike" (*ŋurrka-*Ŋ "throw, cast out/away") *buku+y-moma* ($Ø_a$) "leave behind at death" (*moma* ($Ø_a$) "forget"). There is also one example with a DAT suffix i.e. *melku - larru* -Ŋ "to look for (someone)". The regular DAT allomorph following a lateral is /-wu/. The fact that it is not lenited in the compound suggests it is a fossilized form. It is not clear at this point why the ERG occurs. It has so far been confined to transitive verb stems and the DAT example occurs with a semitransitive verb stem which suggests the part may be identified by a particular role.

The marking of the body part terms in compounds is apparently confined to core roles. Verbal compounds bear many similarities to part-whole constructions involving these roles. It seems quite general that the entity to which the body part refers is the role for which it would be appropriately case marked if it did occur as an argument to the verb in a part-whole relationship, rather than signalling some modification in the meaning of the verb. Since the body part term is also associated with both literal and non-literal meanings there is much scope for ambiguity. In many contexts it seems that only knowledge of the specialized meaning of the particular collocation permits the constructions to be disambiguated. The ordering of the body part and the verb and any morphophonological changes to the verb stem

would of course provide formal clues, but not infallible tests. It is quite possible for the body part in a whole part relationship to occur before the verb and the morphophonological changes that occur in compounds are far from regular. The question of the relationship between compounds and part-whole relationships concerning A, S, O and IO roles is one that warrants further consideration. It does appear as if the whole-part and the entity-quality relationships, realized by apposition in adnominal expressions, have been major contributors to compounds.

Native speaker's consciousness of the range of functions and meanings of body part terms is made very clear in a 'dictionary' of 106 expressions with body part terms written by a Yolŋu teacher (see Malibirr 1987). Her choice of entries and 'definitions' reflect the ambiguity of sense (whether it refers to a body part, geographical phenomenon or some figurative sense), ambiguity of structure (whether there is a predicate argument relationship between the body part and the second lexeme or it is a compound word) or restriction in function (e.g use for avoidance relationships or abuse) that can occur in relation to body parts. She assumes the body as the basic domain to which all others are related. The body part referent thus provides the "literal" senses. Her favoured strategy is to state what the expression does not mean, and then convey how it is appropriately used. The latter does not always involve defining the meaning of the expression.

Particularly verbal compounds, but also with some nominal compounds, the rejected interpretation is one in which the body part bears a direct role to the predicate. Consider the following description of *ŋoy-murryu*-N "to be angry":

(611) *Yolŋu ŋunhi ŋuli ga bitja+n bili*
person TEXD HAB IMPV-1st "always"+1st
ŋoy-murryu+n *wiripu+ŋu+w* *yolŋu+w.*
[lower torso-make rumbling noise]"be angry" +1st other+ŋu+DAT person+DAT
Yaka ŋuli murryu+n+dja *ŋoy* *yolŋu+w* *bitja+n bili*
NEG HAB rumble, growl+1st+PROM lower torso person+DAT "always"+1st
A person that is always angry at some other person. It is not that the lower torso of the person is always rumbling. BM8793

Ŋurrulil, as in the expression *limurr dhu marrtji ŋurrulil* [1+2pl FUT go-1st nose/point+ALL] is included because it is not used in relation to motion to one's nose but to a point of land i.e. she is drawing on the difference between body part reference and geographical phenomena. Examples such as *mani-weyin* [neck, long] "long neck" and *likan-djarrpi* [elbow-crooked] "crooked elbow" are included because they are appropriate expressions for a brother to use of a sister, but are

not to be interpreted literally. Similar is the inclusion of *waḏaŋga-weyin* [forehead/head-long] which is used in abuse when one is angry.

10.1.2.2 Verb compounds with non-body part initials

Verb compounds also occur with non-body part nominals as the first lexeme, although in fewer numbers. Transitive verbs seem to predominate with the nominal associated with the O role. The initial *mala* "group/PLural" can be isolated in a few and the verbs *märra* -Ŋ "take/get", *nhirrpa*-N_L "put", *gurrupa*-N_L "give", *bu* -Ŋ "hit, strike " are found as the second element in several others. Some examples are given below:

rom-lakara-Ŋ	"to instruct, teach" (*rom* "law" *lakara* -Ŋ "tell")
maranhu-gä-Ŋ	"to hunt" (*maranhu* "satiated, full(of food)) *gä* -Ŋ "to bear")
mala-dj/yarr'yu-N	"to split up, sort out" (*djarr'yu*-N "choose, select")
mala-b/wu-IR_{bu}	"to beget, procreate"
biyarrmak-märra-Ŋ	"to make laugh" (*biyarrmak* " funny, amusing")
barrari-gurrupa-N	"to frighten" (*barrari* "fear")
dhawal-guyaŋa-$Ø_a$	"to be born" (*dhawal* "named place" *guyaŋa*-$Ø_a$ "think")
waŋgany-manapa-N_L	"to put in one, heap, bring together (*waŋgany* "one" *manapa*-N_L "join, unite")
mokuy-yupmara-Ŋ	"to kill (someone)" (*mokuy* "corpse,ghost, bad spirit" *yupmara* -Ŋ "lower, take down")

10.1.3 Productivity of compounds

On the basis of the Djambarrpuyŋu data I have considered, it is clear that there are some senses of body part terms that are synchronically productive in compounds. This gives at least certain body part terms a function akin to a derivational prefixes. However, the full extent to which the compounding process can be claimed to be productive has not been established. Below I will present evidence for both productive and fossilized compounds.

1. *buku-* to indicated preoccupation with/ keenness on something e.g. *buku-mari* "always in trouble" (*mari* "trouble"), *buku-mutika* "into cars/always going about in a car" (*mutika* "vehicle"); *buku-miyalk* "into women/ always thinking of women" (*miyalk* "woman"), *buku-rrupiya* "someone who is only interested in getting money" (*rrupiya* "money").

2. *buku-* in expressions used to flatter, praise or indicate affection.
Kin terms and clan or other terms denoting social groupings occur as the second morpheme e.g *buku-ŋathi* "head-MF"; *buku-Dhamarraŋdji* "head-clan surname".

In *buku*-kin term combinations it would appear that the appropriate the kin term is one which is a category which includes the father of the addressee, although the kin term is one that pertains to the speaker. An explanation for this may lie in the fact that people are deemed to bear physical resemblance only to their fathers.

3. *buku* plus a quantifier to indicate number of times.
There are two constructions that appear to be used to indicate "number of times". One is to compound a quantifier with *buku* as in *buku-märrma'* twice (*märrma'* "two") and the other to suffix the PROP to a qualifer e.g. *dharrwamirr* "many times" (*dharrwa* "many/much"). It is also possible to combine both e.g. *buku-dharrwamirr* "many times" and *buku-ḻurrkun'mirr* "several times/now and then" (*ḻurrkun'* "three, a few, a little"). The longest expression with *buku* is an elicited one i.e. *buku-goŋ waŋgany ga märrma' bäythinyawuy* "seven times" [*goŋ waŋgany* (hand-one) "five" *ga* "and" *märrma'* "two" *bäythi+nya+wuy* "to remain/be left over+4th+ASS i.e."five and two more = seven"].

The productivity of the *buku*-qualifier compound is brought into question with the expression *buku-waŋgany*. It appears to be an adverbial with the meaning "do all at once", rather than simply "once". An example is its use to describe talk between people in certain avoidance relationships. They are required to talk *buku-waŋgany*, that is to state their business and not linger about and chat. However *buku* can occur with the sense 'once' if the term for "one" is also suffixed with the PROP e.g. *buku-waŋganymirr*. It would therefore appear to be productive with the meaning "number of times", even if it is not the sole means by which this notion is formally indicated.

4. *gali'* "side" to indicate a particular region or area and *gumurr* "chest" to indicate the edge/boundary of an area. e.g.

gali'-ḻuŋgurrma	"north" (*ḻuŋgurrma* "north(-east) wind")
gali'-moŋuk	"saltwater area" (*moŋuk* "salty, bitter, sour")
gumurr-retja	"edge of the jungle" (*retja* "jungle, tropical rainforest")

Buku can also be used to designate a region e.g. *buku-djalathaŋgur* "on the south side, in the south" (*djalathaŋ+ŋur* "south (wind/rain)+LOC/ABL"), although it is not clear how/if this is distinct from the *gali'* "side" compounds.

5. Use of body parts to denote kin relationships of large social groupings such as clans.
Two commonly used examples are listed below:
ŋamini "breast" plus a clan name is used to indicate that it is someone's *ŋändi* M(Z) "mother's" clan e.g. *ŋamini-Warramiri.*
wayirri "back" plus a clan name is used to indicate that it is someone's *märi* MM(B) i.e. "mother's mother's" clan e.g. *wayirri-Marraŋu.*

Examples where the second lexeme appears to function as a derivational suffix are less common. One example, using *dumurr* "big", was described in the section on non-body part initial nominal compounds above. Another example involves the morpheme *djulŋi.* It is combined with body parts to express affection or make compliments. Included in this category is the form generally given as an equivalent for English "please", *buku-djulŋi.* Another example is *bun'kumu-djulŋi* used to praise someone's running (*bun'kumu* "knee"). I have heard both the *buku-* compounds described under 2 above, and the *-djulŋi* compounds used in making requests, attempts to get one's own way as well as in direct expressions of affection or compliments. The morpheme *djulŋi* has only been recorded as a bound morpheme, either in the compounds described or in the verb *djulŋithi-*$Ø_{rr}$ "be pleased, happy" where the INCH suffix can be readily isolated.

The clearest evidence of fossilized compounds are those where phonological changes at the morpheme boundary occur, or where one morpheme does not occur as an independent morpheme. *Mel-butji* [eye-?] "tame, quiet", as well as having a lenited alternant *mel-wutji,* is an example in which a constituent, namely *butji,* does not occur as an independent morpheme. Other examples are *ŋurrudawalaŋu* - "eldest in family; leader, chief;" in which *ŋurru-* "nose; first" is readily isolatable but *dawala(ŋu)* is not known as an independent morpheme. In *galŋaparrambarr* "upper back" and *milparrambarr* "eyebrow", the initial body part terms i.e. *galŋa* "skin" and *mel* "eye" are recognizable, but the common final element is not an occurring free morpheme. This is also the case for the verb *buthuru-b/witju-*N_L "to listen" with *buthuru* "ear" clearly recognizable. The latter is also quite acceptable with the synonyms *mäkiri* or *dhuli'na* but *bitju-*N_L does not occur as an independent morpheme.

The possibility for synonymous body part terms to occur even when the second member does not indicates the transparency of the morpheme boundary in these compounds. The fact that body part synonyms are interchangeable may not be of

particular significance in trying to ascertain the status of compounds, given the extent to which body part terms occur as compound initials and the ease with which a boundary can be posited. Body parts have many synonyms and there is ample evidence that some expressions allow the body part term to alternate without any shift in meaning. Besides the example of *buthuru/mäkiri/dhuli'na-bitju*-N "to listen (semitr)" just given, there is the case of the clan names *Liyagawumirr* alternatively called *Dämbugawumirr*, as well as other compounds e.g. *buku/dämbu-märrma'* "twice", *dhä /dhurrwara-djaw'yu*-N "steal, use someone else's ideas, words,, follow someone's lead", *mel/maŋutji-ŋal'yu*-N "to look at, catch sight of something". While I expect that compounds will generally be quite flexible in their tolerance of body part synonyms, a more detailed study is needed to determine just how free the occurrence of synonyms in compounds actually is. The only example of which I am currently aware where synonyms are not interchangeable is in the word *maŋutji'mirriŋu* "eye+KINPROP" meaning "one's girlfriend/boyfriend". My attempts to replace *maŋutji* with its synonym *mel* with this meaning have always been rejected.

The full range of meanings of particular body parts is far from fully documented. Their extension to geographical phenomena and use as locationals has been mentioned in sections 4.3.2.6 and 4.4.2. Their use to denote particular kin categories in sign language is documented in various sources (see Galpagalpa et al 1984). Their use in whole-part relations was discussed in section 9.4.5. A subset of body part terms also occur in temporal compounds, and are not overtly mentioned. The appearance of body part terms in these compounds can also be attributed to the whole-part relation. The whole in this instance is usually *walu/ŋaykun'* "sun" (see section 12.1.4), with parts such as *waŋa* "arm", and *dhuŋi* "bottom".

Another factor that has arisen in relation to some compound expressions is the degree to which the relative ordering of the elements is fixed. Thus an alternative to *goŋ-waŋgany* "five" *waŋgany goŋ* has been recorded. This suggests there are fixed expressions that are somewhat less tightly bound than the notion of compound I have hitherto proposed. However the elements here are still juxtaposed, albeit in an inverse order. Somewhat damaging to the notion that these are simply inverted compounds is the fact that *waŋgany goŋ* has also been recorded with suffixes on each constituent i.e. *waŋgany+gu goŋ+gu* (T008p8). The alternate pattern now looks like a regular numeral plus head pattern rather than a compound. It is possible these are restricted stylistic variations, but the full potential for this kind of alternation remains to be investigated. This may be particularly relevant to the

verb compounds that do not involve body parts since the initial lexeme could clearly be interpreted as 'direct argument' of the verb. It may also be that common collocations can become expressed in the compound pattern but still be free to occur as independent constituents. One example of this is the coinage of *yolŋu matha* [person-tongue] to designate the Yolŋu languages. I have not observed this used in any other order than that given, but it is variously case marked, either on both constituents or only on the rightmost. It is thus likely that there is a cline between true compounds and common collocations or idioms.

Waters claims that compounding is productive for all Yolŋu languages and that the figurative senses are maintained across varieties, even when the body-part lexemes are not cognate (1989 p126).

10.2 Reduplication

There is a single reduplicative pattern common to all word classes for which there is any evidence that the process is synchronically productive. This involves prefixing a copy of the first syllable plus the onset and nucleus of the second to the simple stem. It is most commonly found with verbs but also occurs with certain nomens and a few particles. Pronouns and demonstratives do not reduplicate. Alternative patterns occur, in which the whole morpheme is reduplicated. There is also a separate pattern of reduplication in which a copy of the last syllable is suffixed to the simple stem. This appears to be confined to the Baby Talk register. In addition to the productively reduplicated stems, there are also many fossilized reduplicated roots.

It functions to indicate intensification, plurality and duration or repetition.

The most regular reduplication process entails certain additional changes to the stem besides prefixing a copy of the first syllable and the onset and nucleus of the second. These are the insertion of a glottal stop between the two reduplicated morphemes except when the prefix ends in a stop, and the loss of vowel length in the root morpheme.

Some examples demonstrating the predominant pattern are:

a) Verb stems

Simple stem		Reduplicated stem	
Kalki+rri	"fall+1st($\emptyset_1$)"	Kalki'+Kalkirri	"fall(pl)"
Kalku+n	"wait+1st(N)"	Kalku'+Kalkun	"wait(prolonged)"
nha:+nha	"see+4th(N)"	nha:nha'+nhanha	"watch (pl/prolonged)
mu:+ŋal	"forget+3rd(N)"	mu:ŋa'+muŋal	"kept forgetting"
lingap+thu+n	"limp+Thu+1st(N)"	linga'+lingapthun	"keep on limping"
ɖa:l+ku+ŋal	"firm+TRANS1+3rd(N)"	ɖa:lku'+ɖalkuŋal	"made more secure"
wut+thu+rr	"hit+Thu+3rd(N)"	wutthu'+wutthurr	"keep on hitting/hit(Pl)"
ŋurruk-nhirrpa+n [pile-put]+1st(N_L)	"place in group"	ŋurruk-nhirrpa'+nhirrpan	"put in groups/piles"

b) Nomens

luni	"single person"	luni'+luni	"single people"
Parala	"sandhill, sandbank	Para'+Parala	"sand dunes"
waŋgany	"one"	waŋga'+waŋgany	"each one, in turn"
yu:lŋu	"person"	yu:lŋu'+yulŋu	"people"

c) Adverbs

ga:na	"alone"	ga:na'+kana	"alone, separate(Pl)"

Variation on this pattern result from alternations in the reduplicated morpheme and the occurrence/placement of the glottal stop.

10.2.1 Alternations in the shape of the reduplicated morpheme

There are two alternative patterns. The first we will consider are those stems in which the reduplicated element is the first full morpheme. With monosyllabic verb roots this contrasts with the predominant pattern in that the onset and nucleus of the second syllable are not copied. With disyllabic roots the difference is that the full second syllable is copied. I am unaware of any attested examples in the corpus of roots of more than two syllables being fully reduplicated. However, these are attested for Djapu (Morphy 1983 and Heath 1980a).

This reduplication pattern is exemplified below:

Simple stem	Reduplicated stem
wap+Thu+n "jump+Thu+1st(N)"	wap+wapThun "jump about, many jump"
Tjulk+mara+nha+mi+rr "pass+CAUS+4th+R/R+1st"	Tjulk+Tjulkmaranhamirr "keep passing each other"

Simple stem	Reduplicated stem
ŋal'+yu+n "climb, rise+Thu+1st(N)"	ŋal'+ŋalyun "climb quickly, many climb, keep climbing"
Ku:rrmur'+yi+rr "hot+INCH+3rd(Ø)$_{rr}$"	Ku:rrmur'+Kurrmuryirr "be really hot, keep on being hot"
Tjulul'+mara+m put out of sight+CAUS+1st(N)	Tjulul'+Tjululmaram "put out of sight (PL/quickly)"
Pudutj+Tju+n "run+Thu+1st(N)"	Pudutj+PudutjTjun "keep on running"

The extent to which these variations are permitted is not clear. Alternations are clearly tolerated for some forms e.g. *wapthu'-wapthun/wap-wapthun* "jump about", *Pil'-Pilmaram/Pilma'-Pilmaram* "keep turning around", *Thawa'-Thawarmaram/Thawar'-Thawarmaram* "to finish everything" and *ḏimi'-ḏimirr/ḏimirr'-ḏimirr* "prickles, multi-spined". The short time investigating reduplication in elicitation however, revealed speakers were not always willing to accept alternations for certain stems. For others they claimed different senses were associated with the alternative patterns. This indicates a lexical component to reduplication which requires further investigation. The specialization of meanings beyond those generally found with the reduplication does occur. Thus swimming is always referred to as *lup-lupthu-*, not by the simple form *lupthu-* "to be in/with water" and paddling (a canoe) with *liw'liwyu-* not the simple form *liw'yu-* "turn, go round". Such semantic shifts in connection with reduplication have been noted for both Djapu and Djinaŋ (see Morphy 1983 p78 and Waters 1989 pp125-6).

The reduplication of the full morpheme also occurs with non verbal roots, although this may be confined to lexicalized stems. Nomens, including people categories, numbers and qualities appear to favour the basic reduplication patterns and I have no clear evidence that in Djambarrpuyŋu these stems also permit full morpheme reduplication. The one alternation given below needs confirming with further speakers.

In addition to the examples of non-verbal reduplication above, the following examples occur with the regular reduplication patterns:

wu:rruŋu	"old person	wu:rru'-wurruŋu	"old people"
wuluman	"old woman"	wulu'-wuluman	"old women"
Palanya	"such"	Pala'-Palanya	"such(Plural)"
yinTi	"big"	yinTi'-yinTi	"really big"
yuŧa	"new"	yuŧa'-yuŧaŋumirr [new+ŋu+PROP]	"the first time"
wirrkul	"young girl"	wirrku'-wirrkul /wirrkul'-wirrkul	"young girls/women"

In the following examples there is some variation in the reduplication pattern, either in the meaning of the reduplicated stem or its phonological shape that is different from that of the regular pattern. Those with semantic specialization are clearly candidates for lexicalized stems.

Thudiŋu	last	Thudi-Thudiŋu	"new generation"
Ka:thu	(B)C/FFF	Ka:thu-Kathu	"FFF only"
ralpa	"industrious"	ralpa-ralpa	"really industrious"
wiripu	"different, other"	wiripu-wiripu	"different (kinds), others"
Pulnha	"slowly, carefully"	Pulnha-Pulnha	"Wait a moment!"
Kalki	"near"	Kalki-Kalki	"Nearly ready!"
Pulu	"more"	Pulu-Pulu	"more (in relation to plural actors)"

One final context in which reduplication of the full morpheme might be said to occur is in expressions denoting the orientation of things to one another e.g. *gumurr gumurr* [frontx2] "face to face" or *galki galki* [nearx2] "close of two or more". Such expressions do not require the glottal stop and can also involve an explicit conjunction e.g. *gali ga gali* "[side and side] "side by side". The potential for these expressions to be broken up with a conjunction suggests the "reduplication" in this context is more properly viewed as apposition of two lexemes. There is a sense in which this construction can be seen as an iconic reflection of the real world situations. Apposition is symbolizing the fact that each entity is oriented to another in a particular way.

The cline from reduplicated roots, productive reduplication, apposition of identical lexemes in special expressions is completed by noting that the occurrence of full word repetitions in texts is not an uncommon stylistic device.

The second alternation to the reduplication pattern is one I am only aware of occurring in Baby Talk register or motherese. This reduplicates the final syllable of certain stems, and in all stems with which I am familiar the initial consonant of the word is also deleted. Some commonly occurring examples are:

root in adult language		Baby Talk form
yothu	"child"	u:thuthu
yapa	Z	apapa
ŋama	M(Z)	amama
ŋatha	food	athatha

Further examples are noted in Amery (1985 p58). It is clearly a feature common to this register in many Yolŋu varieties.

10.2.2 Alternations in reduplicated stems attributable to other features of the reduplication process

Given the shape of particular reduplicated stems glottal stop deletion and lenition may also apply.

If a glottal stop occurs in a root which is reduplicated, only a single glottal stop will be realized, unless the 'special' reduplication pattern in which the glottal stop associated with *-Thu-* or *-mara-* verb root occurs in both reduplicated morphemes (see section 2.4.3.1).

Some examples of various alternations are given below:

malŋ'Thun	appear-1st	malŋ'-malŋThun malŋ'Thu-malŋ'Thun
nya:'yun	cry-1st	nya:'-nyayun nya:'yu-nya'yun

As noted above it is also possible in normal speech for glottal stops to disappear from reduplicated stems altogether. This, like lenition, is a more sporadic contributor to alternations within reduplicated stems. For examples of lenition affecting reduplicated stems see section 2.4.2.3.

10.2.3 Comparison with reduplication in other Yolŋu varieties

The morphology and functions of reduplication as described for Yolŋu varieties are essentially similar. Within the southern subgroup Ritharrŋu, Djapu and Djambarrpuyŋu show similar patterns of reduplication (see Heath 1980b pp21-22, and Morphy 1983 pp26-29). Amery (1985 p46, p57) reports an innovative pattern of initial CV reduplication occurring in Dhuwaya. In Djinaŋ this is the favoured reduplication pattern. Waters (1989 p125) mentions that Djinaŋ only rarely reduplicates full stems in contrast with Dhuwal/Dhuwala. The "favoured" pattern of reduplication may be another phenomenon which varies within the Yolŋu group.

Between the two Dhuwal varieties, Djapu and Djambarrpuyŋu, the realization of reduplicated morphemes appears to be largely overlapping. The differences are summarized below:

1. In Djapu the glottal stop is less common in citation forms than in normal speech. (Morphy 1983 p26). This is contrary to the situation in Djambarrpuyŋu where the glottal stop is normally present in citation forms and often in normal speech. The only citation forms I have noted without a glottal stop are with stems that have also lenited the initial stop of the base.

There is also no indication that the alternative reduplication pattern observed for Djambarrpuyŋu where the glottal stop is retained in both reduplicated morphemes ever occurs in Djapu.

2. Djapu sporadically deletes the consonant following the glottal stop in rapid speech. Variants with the consonant and the glottal stop also occur. I am not aware of consonant deletion as an acceptable alternative in Djambarrpuyŋu. There are some examples in the texts where the speed of the utterance has reduced the form, but it does not appear confined to the consonant alone. In fact, in such reduced examples I have not been able to determine which elements are present by listening to the tape, and speakers assisting with transcription in the field provided unreduced forms.

3. The alternative pattern associated with the *-Thu* verb class in Djapu is one that permits reduplication of the whole root e.g. *djarrkaḻa'yu-* "move in an uncontrolled way" -> *djarrkaḻa+djarrkaḻa'+yu-* "keep moving in an uncontrolled way-" (These examples are taken from Morphy 1983 p80).

In Djambarrpuyŋu there is only evidence for reduplication of full roots as an alternative for disyllabic roots and this is not confined to the *-Thu* verb class. All attested examples with trisyllabic or longer roots occur with the regular reduplication patterns.

10.2.4 Functions of reduplication

Common to all the "regular" reduplicated stems is the notion that it marks a greater quantity than that minimally associated with the simple stem.

10.2.4.1 Nominal reduplication

Reduplication of nominals is far less common than with verbs. It functions to intensify qualities or indicate plurality on entities. However this is neither the

only, nor the predominant means by which these meanings are marked. Intensification is far more commonly indicated periphrastically with *mirithirr* and marking of plural is associated with various processes, again the most common of which, is periphrastic rather than morphological. One of the richer domains for nominal reduplication, as with various morphological processes associated with plural marking, is to indicate plural number on nominals designating humans. For human-referring nominals the particular plural process that occurs appears to be lexically determined. Thus the plural of *yolŋu* is regularly *yolŋu'-yulŋu* while *miyalk* "woman" and *dirramu* "man" occur with the PLural suffix *-(Kurru)wurr(u-)*. The only lexeme recorded with both options is *waŋgany "one"* and it has different functions associated with each form. With the plural suffix it will be an indefinite determiner with plural referent "one lot (of people)" while as reduplicated form it indicates "each (X) /one-by-one".

(612) *warkthu+rr ŋarra ŋäthil+nydja ga+n girri' ga+nha rurrwuyu+na*
work+3rd 1sg prior+PROM IMPV+3rd things IMPV+4th wash+4th
ŋäpaki+w walalaŋ, wäŋa+kurr mala+ŋu+wurr buŋbu+kurr,
European+DAT 3pl-DAT place+PERL PL+ŋu+PERL house+PERL
bay\ waŋga'-waŋgany+ŋur buŋbu+ŋur\ ga yän bili,
PRT-OK/"you know" one-REDUP+LOC/ABL house+LOC/ABL and "keep on"
bala ŋarra bilmara+ŋal+a, ŋunhi+yi warkt+ja
then 1sg turn+3rd+SEQ TEXD+ANA work+PROM T008Txtp8
I was working before washing clothes in the European houses OK, in each house. I did it for some time and then I changed (from) that work.

(613) *nhä+ŋal yan ŋarra ga+n ya-bitja+n, dhäruk nyumurrku*
see+3rd EMPH 1sg IMPV+3rd ya-do thus+1st word small
waŋga'-waŋgany, waŋgany yuŧuŋgurr dhäruk
one-REDUP one thigh word T008Txt
I was reading in this way, each small word, each part of the word (i.e. syllable)

10.2.4.2 Verbal Reduplication

With verbs the 'quantitative' difference is centred on the situation expressed by the verb being repeated or prolonged. As both Morphy (1983 p78) and Waters (1989 p125) point out, this distinction is determined by whether the verb is inherently punctual or durative. The quantity is often directly attributable to a number of participants engaging in the same situation simultaneously. In other instances it is attributable to a single participant engaging in a situation repetitively or over a period of time. There are also a few contexts where the reduplicated stems conveys some kind of intensification, such as "do quickly" or "do with some consideration and care". Some examples are:

(614) *dharrwa ŋunhi dhärra'-dharra marrtji*
many TEXD stand-REDUP-1st go-1st T022Ap2
There are many of them (houses) standing

(615) *ŋayi ŋunhi **bulyu'-** bulyu+rr+a*
3sg TEXD play-REDUP+3rd+SEQ T023Bp4
S/he was playing

(616) *ŋayi ga+n dhurrwara **wutthu'-wutthu+rr***
3sg IMPV+3rd door hit-REDUP+3rd T008Txtp6
She was knocking on the door

(617) *bulnha ŋarra **guya'-guyaŋa***
wait 1sg think-REDUP-1st T008Txtp6
Let me think about (it)

(618) *ŋayi li marrtji+nya gorrmur'-gurrmur+yi+nya*
3sg HAB go+4th hot-REDUP+INCH+4th T102Bp1
it (the animal) would move being really hot

See also example 283.

10.2.4.3 A derivational use of reduplication

There is one final context in which I have observed reduplication and that is to derive nomen stems from *-Thu-* verb roots. All examples of which I am aware are derived from monosyllabic verb roots and conform to the basic reduplication pattern. The process would appear to be of somewhat limited productivity. Some examples are:

lap-lap	"open, loose"	lapThu-	"to open"
Thal'-Thal	"closed"	Thal'yu-	"to close"
pak-pak	"broken"	pakThu-	"be broken"

See section 9.1.2.2in regard to these stems with the PROP *-mirr(i-)*.

10.3 An overview of suffixed, reduplicated and compound words

Words consisting of a root plus a suffix have initial main stress and there are regular morpho-phonological processes that operate at the morpheme boundary. Reduplications, in citation form for the most commonly found pattern, require the insertion of a glottal stop between the reduplicated segments. Lenition of stops, a regular process for many suffixes, is sporadic, and secondary stress occurs on the first syllable of the reduplicated root. The boundary is thus less fused than that between a root and a suffix or between suffixes.

Compounds are morpho-phonologically distinct from both combinations of nominal roots and their suffixes and reduplications. Morphologically they are composed of unbound morphemes. However, they are suffixed only on the rightmost constituent quite parallel to suffixed or reduplicated words. Semantically they may have a distinct sense from that of the words which compose them, but often the sense is fairly transparent.

The processes forming these words, namely suffixing, reduplication and compounding are all synchronically productive. There is also evidence of fossilized stems in association with each process.

The fact that compounds require unbound morphemes to be juxtaposed allies them with the PROP and PRIV phrases. They all share in common the fact that two free morphemes are juxtaposed in a fixed order and suffixed on the second. They all also permit combinations involving both nominals and verbals. It is a fact about Djambarrpuyŋu that word order is not a device used for coding intra-clausal relations. However it does feature in several sub-clausal constituents including various nominal phrases (PROP, PRIV, emphatic pronominal and demonstrative phrases) and compounds. The pronominal and demonstrative phrases are distinct from the others in that the morpheme bearing the relevant case marking is the leftmost. Of course, the constitutents for which ordering relations are most rigid is in regard to bound morphemes that combine with other morphemes in words.

In section 9.1.3.3 it was noted that verbal compounds with the PROP suffix can be formally indistinguishable from verbal PROP phrases. A minor point of contrast might occur with the few compound in which the initial word bears a case suffix but these have not yet been tested for occurrence with the PROP. Of course PROP phrases with verb stems do not show the same tendency to occur with body part initials as compounds do. The range of juxtaposed nominals in nominal phrases also appears to be more extensive than that found in nominal compounds.

The fact that the majority of compounds have an initial morpheme that is predominantly restricted to one particular domain lends the body part terms a morphological status not unlike that of a set of prefixes. This phenomenon can be seen as mitigating against the closer coalescence of the constituents over the morpheme boundary. Since body parts provide the the initial morpheme and morpho-phonological processes affect the second, it is not unexpected that the

morpheme boundary remains transparent. This is also encouraged by the fact that synonymous body part terms are often interchangeable in compounds.

CHAPTER 11

MAIN CLAUSE TYPES

The first part of this chapter describes simple clauses in Djambarrpuyŋu. Later sections describe the reflexive-mutualis-reciprocal clauses, questions and exclamations. Imperatives are described in sections 7.4.3 and 9.2.

There are two major categories of simple clauses in Djambarrpuyŋu according to the type of predicate. A clause with a verbal predicate may be fully specified for TMA and selects one to three core cases. A clause with a non-verbal predicate is not fully specified for TMA. These combine an S-coded nominal expression with other nominal expressions. There is also a small class of two place "adjectival" non-verbal predicates which are associated with an S (ABS/NOM)-DAT case array.

11.1 Equational clauses i.e. clauses with non-verbal predicates

There are two main types of non-verbal predicates. Both are restricted in the range of TMA categories that can be expressed. The first category concerns the use of a nominal expression as a predicate. Identifying, attributive, locative, possessive or benefactive/purposive relations may be expressed between nominal expressions in this type of clause. The range of nominal suffixes associated with these constructions is confined to the adnominal suffixes (i.e. the ASS, OR, PROP, PRIV and DAT (Poss)) and the relational suffixes LOC/ABL (Loc, Source), OBL (+Hu Accomp, Loc) and DAT (Benefactive/Purposive). Generally the clauses consist of a predicate and one other nominal expression. However additional roles such as a Temporal or a DAT (Benefactive) can also occur.

There is a close correlation between the case marking found on expressions in equational clauses and the cases found as adnominal case markers within nominal expressions in clauses with verbal predicates. However, while the LOC/ABL (Loc) and DAT (Benefactive /Purposive) occur in nominal expressions with non-verbal predicates, they have not been noted with adnominal functions within nominal expressions.

The second category of non-verbal predicates, are those I will refer to as "Adjectival"-predicates. This involves a small number of stems which are associated with an S-IO (ABS-DAT) case array.

Non-verbal clauses have the following structural characteristics:

1. Free word order as to the sequence of the constituents.
2. Discontinuity is possible for co-referring constituents.
3. The simplest nominal expressions consist of a single nominal of any word class, but combinations of demonstratives, pronominals and nomens are also possible. The nominal expressions can be expanded by adnominal phrase types, or finite or non-finite clauses. They thus show the same potential as nominal expressions encoding verbal predicate roles.
4. These clauses are generally imperfective, contemporary and realis. This is their unmarked status. For full expression of TMA categories a verbal predicate is required.
5. They can be negated or modalized with CFACT *yanbi* "mistakenly thought", IRR *balaŋ* and HAB *ŋuli*. Notably absent is the IMPV particle *ga*, but, given the inherently stative nature of the predicates in these clauses, this is not surprising.
6. They permit temporal setting to be expressed in various ways. This can be done lexically with Temporals such as *barpuru* "yesterday/recently". A distinction between "now" and "not now" can also be indicated by the form of the demonstrative i.e. with the S/O/LOC and LOC case forms respectively (see section 6.4.3.2). Finally, the TMA particle FUT *dhu* may be used, although it occurs in only a few examples. These include an identifying clause naming "tomorrow" and locative clauses indicating a future location.
7. The PROM suffix is frequently found with the argument, the SEQ less commonly with predicate constituents. Neither suffix is required however.

We will now consider each of the different types of equational clause in turn.

11.1.1 Identifying equational clauses

In these clauses two nominal expressions enter into a relation in which one identifies the other. The following are a selection of examples from the text corpus:

(619) *ga ŋarra+ny* ***wäŋa+waṯaŋu***
and 1sg+PROM land+OWNR T023Ap2
I am a land owner

(620) ***balwurr+nydja*** *dhuwandja*
Brachychiton paradoxis +PROM PROX-PROM T014
This/Here is "Balwurr" (Brachychiton paradoxis)

(621) *dhuwal* ***dhamarraŋdji*** *miyalk\ ..... ŋunhi+ny* ***gaŋdaŋu*** *ŋayi+ny*
PROX clan "surname" woman TEXD+PROM clan "surname" 3sg+PROM
\ga dhuwandja ***dhamarraŋdji***
and PROX-PROM clan "surname" T208p12
This woman is a Dhamarraŋdji ..... that (other one) is Gaŋdaŋu and this one is Dhamarraŋdji

(622) ***yiŋdiṯi+ny*** *dhuwal dharpa*
Diospyros maritama+PROM PROX tree/bush T014p10
This tree is "Yiŋdiṯi" (Diospyros maritama)

ga yuṯuŋgurr+nydja ŋayi ŋunha mutamuta [ŋunhi ŋayi ŋuli
and thigh/root+PROM 3sg DIS Grewia retusifolia TEXD 3sg HAB
ga garminydjarrk+thu+n yuṯuŋgurr ŋanya dhurrthurryu+n
IMPV-1st ground+ERG+SEQ root/thigh 3sg-ACC cover+1st
djinawa+n ŋunhal+al]Rel ŋunhi+yi+ny ***mirritjin***
"inside"+SEQ DIS-LOC+SEQ TEXD+ANA+PROM medicine T014p14
and the root of the plant Grewia retusifolia [that which the earth covers, there under (the ground),] that is a medicine

The generic-specific, social classification and "narrowing" relations described in sections 9.4.3 and 9.4.4 bear a very close connection with this type of equational clause. Further examples occur in those two sections.

11.1.2 Attributive equational clauses

Attributes may be bare nominals denoting qualities, quantities and colours, or nominals with the PROP, PRIV, ASS or OR suffix.

(a) Qualities

The selection of examples here is quite extensive so as to reveal the ordering options available. Note the comment-topic of (i), topic-comment of (ii), (ii) and (v) and the mixture in (iv) and (vi):

(623) *\jätju muka ŋunha wäŋa+ny*
lovely PRT-OK DIS place+PROM T101p28
That country is lovely

(624) *\way, wäŋa dhuwal yätjkurr*
hey, place PROX bad
Hey, this place is bad T101p6

(625) *\walal ŋamakuli, ga ŋarra+ny yätjkurr+a*
3pl good and 1sg+PROM bad+SEQ T208p8
she is well and I am poorly

(626) *\ŋayi+ny ŋunhi* ***rakuny*** *miyalk+tja*
3sg+PROM TEXD dead woman+PROM T022p15
that woman was dead

(627) *\jätju* ***mirithirr*** *wäŋa*
lovely INTENS place T101p22
The country is really lovely

(628) *märr gaŋga dhuwal dhäwu+ny* ***ŋamakurr***
"somewhat" PROX story+PROM good T022p11
this story is only partly good

(b) Quantity

(629) *djaka+ny wäŋa* ***märr*** ***weyin***
extent/size+PROM place somewhat long T101p9
the distance was rather long

(630) *ga dhuwali+yi+ny ŋayi dhäruk+tja* ***dharrwa***, *yurr ŋuya+ny* ***waŋgany***
and MID+ANA+PROM 3sg work+PROM many, but meaning+PROM one
yan
EMPH T009
and those words are many/there are several words, but only one meaning

(c) Colour

(631) *ga dhurpu ŋayi ŋunhi* ***watharr***
and base 3sg TEXD white T014
and the base is white

(d) Attributes with the PROP *-mirr(i-)*

Only an example with a PROP phrase is included here, but many examples are found in section 1 of chapter 9.

(632) *dhuwal miyalk* ***djäma manymak+mirr***, ***dharray ŋamakuli+mirr***
PROX woman work good+PROP care good+PROP T208p3
this woman works well and is caring

See:
9.1.1.1 for examples of PROP as an attribute regarding characteristics of people
9.1.1.2 for examples of PROP as an attribute regarding characteristics of places
9.1.1.3 for examples of PROP as an attribute regarding characteristics of non-human entities
9.1.1.4 for examples of the PROP attributing parts to wholes
9.1.1.5 for examples of the PROP attributing kin/social categories

(e) Attributes with ASS *-Puy*

Again only a single example is included here, namely one with the ASS indicating what something is about.

(633) *dhuwal dhäwu* ***yapa+'manydji+puy*** ***yapa+'manydji+puy,*** *ŋunhi dhäwu*
PROX story Z+KINDYD+ASS Z+KINDYD+ASS TEXD story
this story is about brothers and sisters, about brothers and sisters that story was T204p1

Other examples are found in:
9.3.1.1(a) and 9.3.1.2 with the ASS coding association by location
9.3.1.1(c) with the ASS coding association by purpose/function
9.3.1.1(d) with the ASS coding association by cause
9.3.1.1(e) with the ASS coding association by source
9.3.1.1(f) and 9.3.1.3 with the ASS coding association by time

(f) Attributes with the PRIV *-miriw*

The following example illustrates the PRIV coding the characteristics of people in an equational clause:

(634) *yaka ŋayi* ***djäma+miriw***
NEG 3sg work+PRIV 86Bk2 p24
S/he is not without work

Other examples are found in:
9.2.1.2 with the PRIV coding characteristics of places
9.2.1.3 with the PRIV coding characteristics of non-human entities

The PRIV may also code the absence of kin/social categories and the absence of body parts.

11.1.3 Source equational clauses

There are three suffixes which code a 'source' notion, the OR *-Kuŋ(u-)*, the ASS *-Puy* and the ABL *-ŋur*. These all occur adnominally within a nominal expression with a verbal predicate and, with the exception of the ASS, have all also been noted in equational clauses. For examples of source coded with the OR *-Kuŋ(-)* see examples in section 9.6. For examples of source coded with the ASS *-Puy* see examples in section 9.3.1.1.

There are many fewer instances in the corpus of the ABL coding an adnominal 'source' than the OR or ASS. It is of course widely used in to code a source relation between a nominal expression and a verbal predicate (see section 11.2.2.3.2). Adnominally and in equational clauses there is evidence that the ABL may code an

originating locality. One such instance is the following example where a tree is coded as the source from which honey is obtained:

(635) ***dhipuŋur+nydja*** *bäyŋu+n* *guku*
PROX/MED-ABL+PROM NEGQ+SEQ honey
From this (tree) there is no honey

In example 934 in section 12.2.1.3 an ABL interrogative/indefinite pronoun introduces an equational clause i.e. *wanhaŋur ŋayi ŋunhiyi yoliŋu* "from where that person is". The reference is to the land/ceremonial-religious affiliations of a person. These could be expressed perhaps as one's "cultural origins/source", which are, in this cultural context, intimately connected with place.

The ABL appears to be confined to places of absolute origin rather than the more general association coded with the ASS.

On the basis of the available evidence I suggest that a 'source' is marked by the OR if it is an entity construed as a productive, creative, originating entity, the ASS if it is a locale or non-human entity from which something comes but which lacks a creative element, and the ABL if it is an originating locale. The different 'source' notions thus appear to be distinguished according to parameters of "productivity/creativity", "origin" and "location". The first parameter pertains to the ability of something to give rise to or bring about change in another entity, the second is self-explanatory, and the third pertains to whether the source is a place. Characteristically, the OR thus codes a source which is both creative and originative, the ASS a source which is neither and the ABL a source which is originative but not creative. It is possible that the combination "productive/creative" but not originative may also be coded by the OR. This might explain the examples of the OR with medicines etc. and its use to code both S and A roles associated with non-finite ASS *-Puy* clauses (see sections 9.6.1, 9.6.2 and 9.3.4.2).

	Cases coding a "source" notion		
	ASS	OR	ABL
parameters:			
productive/ creative	-	+	-
originative	-	+(?/-)	+
location	+/-	-	+

11.1 4 Locative equational clauses

Location can be expressed by the unmarked S/O/LOC stem of demonstratives and Locative nominals, as well as by nominals suffixed for Locative case. These are all instantiated in the following examples:

(636) *dhuwal ŋurŋgitj+tja*
PROX fire place+PROM T102Bp19
here is the fire place

(637) *ŋayi dhu **barrku+n***
3sg FUT far+SEQ T208p15
s/he will be far away (i.e. is leaving)

(638) *ga ŋarrapi+ny dhuwal **ŋapuŋga,** **ŋapuŋga** ŋarra+ny,*
and 1sg-EMPH+PROM PROX in between/in the centre 1sg+PROM
ŋarra+kal ŋamini+mirri+ŋur wäŋa+ŋur, ga ŋarrakal
1sg+OBL breast+PROP+LOC place+LOC and 1sg-OBL
wayirri+mirri+ŋur wäŋa+ŋur ga ŋarrakal
"back"+PROP+LOC place+LOC and 1sg-OBL
walkur+ŋur** **wäŋa+ŋur
own patrilineal descent group+LOC place+LOC T023Ap3
and I am in the middle of (/at the centre of/in between) my mother's land, my mother's mother's land and my own clan's land.
(Parts of the body denote particular kin relationhips, both in sign language and figuratively in speech. Thus "breast" denotes M(Z) and "back" MM(B))

11.1.5 Equational clauses with DAT marked expressions

A DAT expression may be the predicate or a third additional role in an equational clause. It has a wide range of functions including Possessive, Benefactive, Malefactive and Purposive. It also appears to be used widely for any participant "in regard to which" the other nominal expression obtains. These are variably translated into English as "for" or "of". In the first three examples below the DAT codes a predicate expression, while in the following three it codes an additional adjunct expression.

(639) ***ŋarra+ku+ny** dhuwandja*
1sg+DAT+PROM PROX-PROM T022Bp9
This is mine/for me

(640) *g.....**a+w** dhuwali ŋatha*
person's name+DAT MED food T401p22
that food is G's/for G

(641) *ŋula nhaku malaŋu+w dharrwa+w dhuwali+ny dhäruk*
INDEF2 "what"-DAT PL/group-ŋu+DAT many+DAT MED+PROM word
that word is (used of/with) for lots of things/
that word is applied to many things T009p22

(642) *maŋda ŋunhi+n buŋgawa maŋda, gamunuŋgu+w*
3dl TEXD+SEQ boss DL(3dl) "(white) paint" +DAT Burr
the two were bosses for/of the "paint" (reference to involvement in fighting)

(643) *dhuwali+yi+n nhuŋu mirritjin+dja*
MED+ANA+SEQ 2sg-DAT "medicine"+PROM
murma'-murmara+nha+mi+nyara+w+nydja
heat-REDUP+4th+R/R+4th+DAT+PROM T014p8
that is the medicine for you to heat (yourself with)

(644) *ga mirithirr ŋayi yatjkurr\ litjalaŋ rumbal+wu+ny*
and INTENS 3sg bad 1+2dl-DAT body+DAT+PROM T014p10
and it (a particular fruit) is very bad for our bodies .

The distinction between the Possessive and other functions of the DAT such as Benefactive is never overt in equational clauses where it is these particular notions that are being being asserted (as opposed to the possession of a particular argument in an equational clause). It will be recalled that the DAT marked possessor is associated with S and O possessees (see section 9.5). Since nominal expressions functioning as possessee predicates or arguments in equational clauses are in S case, the coding of possession with the DAT is consistent with the coding elsewhere. Of course where a possessive relation exists within a nominal expression in an equational clause, other marking of the possessor is possible e.g. OBL for a Locative Possessor.

The following series of examples are taken from a single text and are included because of the connection they reveal between the S-DAT array found with verbal predicates and the array found with non-verbal predicates with two associated roles, one of which is DAT marked. In the first two examples there is a non-verbal predicate with two roles, coded as S and DAT respectively (the predicate is in bold face and the DAT underlined):

(645) *dhika mak <u>rra+ku</u> yoŋu+mirr+a wäŋa+ny dhuwal*
INDEFP maybe 1sg+DAT person+PROP+SEQ place+PROM PROX T102B
somewhere about maybe this place has a person (hunter) for me
/there might be a hunter after me in this place

(646) *ga yuwalk <u>ŋinyaŋ</u> dhuwal wäŋa+ny yoŋu+mirr+a*
and really 1pl-DAT PROX place+PROM person+PROP+SEQ T102B
and this place actually does have a hunter in it (looking) for us

The correspondence of the S-DAT patterns in these constructions with S-DAT array of certain verbal stems is brought out nicely by the following from the same text:

(647) *way nhä* *palinyalan* *dhuwal* ***yolŋu+mirri+yi+n*** *wäŋa+ny*
Hey "what" 1pl-DAT PROX person+PROP+INCH+3rd place+PROM
Hey, does this place have a hunter (looking) for us?/! T102Bp23

The non-verbal predicate of the preceding example is verbalized with the INCHoative. The function of the verbalization in this context may be to stress the perfectivity of the situation (see section 7.4.4.1 on the use of the 3rd inflection to code achieved and still current states).

An S-DAT array is in fact common to all predicate types, both verbal and non-verbal. In the next section we shall be concerned with a small class of non-verbal predicates that categorically select an S-DAT array.

11.1.6 "Adjectival"-predicates

These non-verbal predicates are associated with a particular argument array, namely S-IO (DAT). They constitute a distinct minor class. As far as I can determine, the following three stems (and their synonyms) are the only members of this class. Despite the restricted membership they are part of everyday vocabulary and are in frequent use.

djäl/dukŧuk	"want, like, desire, love"
marŋgi/marrpuy	"know, be familiar with, know how to use, know about"
dhuŋa	"be ignorant of, be unfamiliar with, not know how to use, not know about"

The case array with which they are associated is consistent with that found with many verbs expressing emotional/mental states (see section 11.2.1.2). Furthermore the array is maintained if these stems are verbalized with the INCH.

The DAT marked complement may be a nominal expression or non-finite clause. These stems also occur with finite clause complements which are juxtaposed to the main clause without any special marking (see section 12.2.1.3).

The following selection is taken from a text in which all three predicates occurred in a conversation between a white person and the speaker, about the speaker learning to read and write:

(648) *nhä muka nhe+ny djäl, marŋgi+thi+nyara+w+nydja dhäruk+ku+ny*
what PRT-OK 2sg+PROM want know+INCH+4th+DAT+PROM word+DAT+PROM
Do you want to learn about words (i.e. reading and writing)?
\ yaw, yaka ŋarra dhuwal marŋgi+ny, bay,
INT NEG 1sg PROX know+PROM PRT-"you know"
marŋgi+thi+nyara+w+nydja
know+INCH+4th+DAT+PROM T008Txtp5
Eeeh, I don't know about learning

(649) *\ dhuŋa ŋarra yan dhuwal ŋuriki+yi+ny djäma+w*
ignorant 1sg EMPH PROX TEXD-DAT+ANA+PROM work+DAT
I am ignorant about doing that kind of thing T008Txtp5

The non-verbal status of these stems is indicated by the following characteristics:

1. They can be verbalized. When this occurs it is with the denominal/verbalizing suffixes regularly used with non-verbal stems i.e. INCH *-Thi-*$Ø_{rr}$ and TRANS2 *-Ku-* (see sections 7.5.2 and 7.5.3).

2. They do not inflect, nor do they co-occur with TMA particles in the systematic fashion of verbal predicates. The latter in particular distinguishes them from uninflecting verb stems. As with other non-verbal predicates, these "adjectival" predicates cannot occur with the IMPV *ga-*.

3. All these stems are also found in contexts in which they function as nomens suffixed with nominal case markers bearing relations to a verbal predicates. Both *marŋgi* and *dhuŋa* can convey qualities of being knowledgeable or ignorant. In the following example for instance, *marŋgi* occurs as part of a nominal expression filling the A role in a clause:

(650) *bala darrtjalk+ku+ma+n ŋanya ŋuli, wiripu+ŋu+y+nha*
then clean+TRANS+1st+SEQ 3sg-ACC HAB certain+ŋu+ERG+SEQ
yolŋu+y, marŋgi+y balanyara+y+nha
person+ERG knowledgeable+ERG such+ERG+SEQ T017p5
then he is "cleaned" (i.e. cut during circumcision) by a certain person, a knowledgeable one

On the other hand *djäl* regularly occurs with nominal suffixes functioning as an entity-denoting nomen rather than quality-denoting.

(651) *bäyŋu nhe dhu ŋunhi ŋula nhä märra+m gäna+ny*
NEGQ 2sg FUT TEXD [INDEF "what"]"something take/get+1st alone+PROM
nhokiyin+gal nhe djäl+miriw+yu+ny\ djäl+kurr+a yana+n nhe
2sg-EMPH+OBL (2sg) want+PRIV+ERG+PROM want+PERL+SEQ EMPH+SEQ 2sg
dhu märra+ma+ny
FUT get+1st+PROM T012p11
you do not take/get anything with your lack of desire, only through wanting (it)
will you get (it)

These three stems are identical to those reported for Djapu (Morphy 1983 pp103-4) who refers to them as Adjective-Predicates. *Djäl* and *maŋgi* are also described for Gupapuyŋu (Lowe circa n.d. L15 and 44). All descriptions suggest these stems function in the same way in all three varieties. Zorc's Yolŋu Matha dictionary entries indicate that *djäl* and *maŋgi* are indeed common to all varieties and all require DAT marking on what is wanted or known about (Zorc 1986 p91, p177).

I have modified Morphy's designation for this category as there is no clear relation between this class of stems and the "quality" denoting nomens which display prototypical adjectival semantics and have a distinct distribution from these predicates. *Djäl* in particular suggests closer parallels with entity-denoting nomens rather than those denoting qualities.

The tripartite equational clauses without "Adjectival" predicates and those with "Adjectival" predicates have combinations of case-marked nominals which, while they appear formally parallel, are functionally distinct. With a non-adjectival predicate the DAT may code the possessor of the S or a Benefactive or other non-core DAT marked role. With adjectival predicates the DAT codes a core function - IO. It is obligatorily selected for the "non-S" participant.

Predicate type	Case of nominal expressions (NOM/ABS marked)	(DAT marked)
"adjectival" nominal	S	IO
	S	Benefactive...etc
	[S	Possessor]$_{S\ role}$

11.1.7 Equational clauses with *wiripu* "certain", *balanya* "such", *bäyŋu* NEGQ and *yaka* NEG

Both *balanya* "such" and *wiripu* "other, certain; different" can occur as predicates in equational clauses e.g.

(652) ***balanya ŋunhi nhaŋu dhäwu***
such TEXD 3sg-DAT story T208p3
that story for her/him is thus/ like that
/such is that story for her/him

(653) *maŋawiny' **wiripu+ŋu+ny** gurruŋ'+tja*
address/reference term for certain kin 'other'+ŋu+PROM kin term(FZDC)+PROM
wiripu
'other' T208p4
'maŋawiny' is one (name) 'gurruŋ' another
(terms that can be used of a gurruŋ in a gurruŋ-maraikur relationship)

bäyŋu (and synonyms such as *dhäwul* and ***bithiwul***) is used for negation of existence or as a negative quantifier. In equational clauses it may function as a predicate as in:

(654) *yuwalk muka dhuwal bäyŋu+n*
in truth PRT-OK PROX NEGQ+SEQ T102Bp23
Truly this (emu) is dead

However more commonly the negative particles negate the proposition or a constituent of it. For example:

(655) ***yaka** dhuwali ŋatha, dhuwali ŋula nhä+n, **dhuwali botjin***
NEG MED food, MED [INDEF2 what] "something+SEQ MED poison
That's not food, that's something else, that's poisonous Rup2

(656) *bili **bäyŋu** limurruŋ dhuwal bäwarraŋ*
because NEGQ 1+2pl-DAT PROX animal (meat) T102Bp13
because there is no meat for us

(657) *dhuwal galiwin'ku wäŋa, **yaka bukmak+ku yolŋu+w** ŋe*
PROX place name place NEG all+DAT person+DAT PRT-yes
bäyŋu** yan **bukmak+ku yolŋu+w
NEGQ EMPH all+DAT person+DAT T010p20
This place Galiwin'ku does not belong to everyone OK. It is <u>not</u> everyone's

A nominal expression in a clause with a verbal predicate can look identical to an equational clause. The distinctions are yet another area to be fully considered but the following are some observations on the relationship between them:

1. In an equational clause the relation between nominal expressions is asserted while this is subsumed in a nominal expression identifying the referent of a single argument/role to a verbal predicate.
2. While the relationships between generic-specific, quality-entity and quantity-entity denoting nominals does not involve case marking in either use, the part-whole relationship which may be coded by apposition adnominally appears to

require the part to be suffixed with the PROP *-mirr(i-)* when it is expressed in an equational clause.
3. Another difference is the fact that equational clauses permit constituents not found within nominal expressions, namely Locative and DAT marked nominal expressions with a non-possessive role.

11.2 Clauses with verbal predicates

Clauses with verbal predicates have similar structural characterisitics to those listed for equational clauses (see section 11.1). However they permit a full range of TMA categories (see section 7.4) and verbal predicates are associated with a distinct set of case roles and case markers (see sections 11.2.1 and 11.2.2 following). Word order is not fixed although a survey of four texts indicates an unmarked ordering of AOV and OV (see section 11.2.3). For some discussion of the use of discourse suffixes see Tchekhoff and Zorc (1983).

11.2.1 Core roles

The various arrays found in connection with the coding of key participants involved in a situation expressed by a Djambarrpuyŋu clause indicate that four core functions should be recognized. By 'key' participants I intend those that are inherently understood as being involved in a situation even if they do not overtly appear in a particular clause. The four core functions are A, S, O and IO.

The three functions A, S and O correlate with the three cases Ergative, Nominative, and Accusative. These three cases are required to explain the case concord between different word classes coding the same case, even though individual word classes may not formally distinguish all three functions. It will be recalled that different case marking strategies apply to nomens, demonstratives, pronominals and derived plurals, that nomen and demonstrative markings vary according to the "humanness" of the referent and that parts are coded differently from their wholes in certain contexts. Aside from these known constraints, all nominals coding the same role will be individually marked to agree with one another. The exceptions to this are constituents in various nominal phrases and the number marking function of *mala* PL /"group".

A is marked by ERG or NOM forms and codes the "subject" of a transitive verb. S is unmarked (ABS or NOM) and codes the "subject" of intransitive verbs. O is

unmarked (ABS) or marked by ACC and codes the "object" of transitive verbs. IO is marked by DAT and codes the "object"-like predicates of two place verbs which take S "subjects" i.e. semitransitive verbs and the "recipient or loser" of three place (i.e. ditransitive) verbs. One of the more striking features of Djambarrpuyŋu case arrays, and also a feature of many other Australian languages, is that there are two distinct case arrays found with verbs that have two participants i.e. S-IO and A-O. Typicaly A or S is associated with an "agent or experiencer" participant and O or IO with a "patient or goal" participant.

The roles associated with each core case incorporate the prototypical instances of the core grammatical functions put forward in Andrews (1985). Thus the Agent in primary transitive verbs such as 'kill', 'break', and 'eat' is coded as A, and the patient as O.

In Djambarrpuyŋu each prototypical core function is grammaticalized. There is no evidence of an S/A or S/O alignment in the coding of core roles (in contrast to case marking distinctions found in certain word classes). Furthermore, semantic roles associated with the cases are not confined to prototypical instances. However, at this point of analysis the alignment of semantic roles with particular cases can only be hinted at rather than fully explicated. My chief concern is to identify the primary arrays and potential alternations.

Verbs may have one to three core arguments. A one-place predicate will always have that argument coded as S. Two argument predicates are usually associated with either an A-O or an S-IO array. However there are some predicates which occur with an S-O array. This array is grammatically required with reflexive-mutual-reciprocal predicates. With other predicates it appears to be a secondary array, associated with specialized meanings. An A-IO array is also permitted as an alternative array with certain transitive verbs. The predominant array with three-place verbs is A-O-IO, but A-O-O also occurs.

Assigning case arrays to particular verb stems is reasonably straightforward, despite the fact that a clause is not required to have a manifestation of any core role. To interpret those instances when there is no such manifestation it would make functional sense to have the case array associated with particular predicates reasonably stable. However there are a number of stems which tolerate more than one of the core case arrays. There are stems that alternate between intransitive and semitransitive, ditransitive and transitive, and intransitive and transitive. Most of

these alternations focus on possibilities regarding the presence or coding of a non-actor participant (O or IO), and the DAT marker is often involved in case array alternations. There are stems that permit an alternation between A and S coding of the actor participant without also requiring morphological adjustments in the verb, but the number appears to be highly limited.

In addition to core participant roles there are circumstantial or "semantic" roles which are coded by 'peripheral cases' (Dixon 1980 p294). These include the local cases Allative, Ablative, Locative and Perlative.

The ERG case marker which codes A, and that associated with IO ie. the DAT, both code non-core roles. The ERG codes Temporal and Instrumental roles and the DAT roles such as Benefactive, Malefactive, and Purposive. Determining the status of a DAT nominal expression is generally more problematic than that of the ERG. Firstly the DAT codes adnominal as well as relational and complementizing functions. Secondly the instrumental and temporal functions of the ERG suffix are much more easily distinguished from the A. Notably the occurrence of an ERG marked nominal expression with an intransitive or semitransitive verb can only be interpreted as a peripheral role. The different roles associated with the 'core' and 'peripheral' uses of the DAT on the other hand, overlap to a much greater extent and the potential for ambiguity is retained with verbs of all transitivity types. The DAT is the case marker for which the distinction between core and periphery is most fuzzy.

The text based approach has provided a wealth of evidence in regard to variation of case arrays. However while it reveals that there are alternations, the pervasiveness of null anaphora in regard to core roles restricts the amount of evidence available. There is clearly a need for a more focused investigation of the alternations and the functions associated with them.

The range of case arrays in Warlpiri, a central Australian Pama-Nyungan language has been given more detailed attention than has yet been undertaken for Djambarrpuyŋu. The suggestions concerning semantic correlations with various arrays made by Hale (1982) provide some promising suggestions as to future directions for investigations in Djambarrpuyŋu, since the evidence available for Djambarrpuyŋu shows many parallels to that described for Warlpiri. One fundamental grammatical difference between the two languages is that Warlpiri has a pronominal cross-referencing system which provides vital clues as to the status of different case marked nominal expressions.

11.2.1.1 Verbs with one core role

Clauses with intransitive verbs with a single S argument are numerous. Such verbs occur in all conjugation classes and are also frequently derived from non-verbal roots with the INCH *-Thi-* (see section 7.5.2).

A selection are given below:

barkthu-N	"crack"
rirrikthu-N	"be sick, in pain"
gorru-Ŋ	"to be high/above/raised"
litha-N$_L$	"to dry, get warm"
walma-Ø$_a$	"go/come out"
galkirri-Ø$_i$	"fall"
buraki-Ø$_{rr}$	"be hurt, wounded"
waɳɖi-Ø$_{rr}$	"run"
ɖälthi-Ø$_{rr}$	"be/become firm, rigid" (cf *ɖäl* "firm,hard, strong")
djälmiriwyi-Ø$_{rr}$	"be/become/get 'without want' for, to lose desire for" (cf *djäl* "want/desire")

The S may code roles such as patient, theme, experiencer and agent, that is both actor and undergoer roles in terms of Foley and Van Valin (1984).

11.2.1.2 Verbs with two core roles

There are two arrays which predominate with verbs associated with two core roles, the A-O (ERG/NOM-ABS/ACC) array and the S-IO (ABS/NOM-DAT) array.

1. A-O (ERG/NOM-ABS/ACC) case array

This is the array with which the prototypical transitive roles of agent and patient are associated. Besides simple verb roots it includes verb stems with the CAUS *-mara-* (see section 7.5.4.1) and those derived from non-verbal roots with the TRANS *-ku-* and *-Tha-* (see section 7.5.3). A selection include:

buma-IR	"hit, strike, gather, make"
batha-N$_L$	"cook"
luka-Ø$_a$	"eat, drink"
ŋarrtju-N	"scold, rebuke, tease, speak negatively"
gäma-Ŋ	"bear, bring/take"
djäma-NI	"work, do, make"
ŋal'mara-Ŋ	"raise, put up, hang up"
ɖälku-Ŋ	"make something firm, strong"
goŋmirriya-Ŋ	"to tame (a horse/camel) (cf *goŋmirr* "tame, cared for, usable)".

The ERG(A) marked role does not require an animate or volitional actor (agent), as the following examples reveal:

(658) *retja+y ŋanya ŋuli roŋanmara+m*
jungle 3sg-ACC HAB sent back/return(tr)+1st T019p1
the jungle makes the rain go back

(659) *warrpam nhuna dhu guyiŋarr+yu ŋayatha+m, warraŋul ga djinawa*
all 2sg-ACC FUT cold+ERG hold(tr)+1st outside and inside
the cold "holds" you completely, inside and out
/you are cold all over T009p18

(660) *ŋuriŋi\ yinditi+y burumun'+thu ŋayi dhu ŋanya*
TEXD-ERG plant name+ERG fruit/cheek+ERG 3sg FUT 3sg-ACC
buma
strike(tr)-1st T014p3
that fruit of the Diospyros maritima strikes (i.e. heals) it (the sickness)

2. S-IO (ABS/NOM-DAT) case array

This array is found in verbs from different conjugation classes and it also occurs with INCH-*Thi*- derived verbs. Included amongst them are the following:

malthu-N	"to follow, accompany"
gumurr'yu-N	"to meet"
buna-$Ø_a$	"to arrive/ come (to someone)"
ŋayilpi'yu-N	"look for (someone) in vain since they are not there"
nhäma-Ṉ	"look for"
larru-Ṉ	"look for"
galku-N	"to wait for"
dharray-Nl	"look after"
djäga-Nl	"look after"
buthuru-bitju-N	"listen to"
matha-yätji-$Ø_{rr}$	"to hunger for (a particular food)"
yaka'yu-N	"to refuse"
bal'yu-N	"to obtain(get/take) from, cadge"
barraŋga'yu-N	"to speak continuously (to someone)" (has various connotations such as distract,annoy, teach)"
wäthu-N	"to call out/shout to"
warrwuyu-N	"to worry (about someone)"
gora-$Ø_a$	"be shy, ashamed "
barrari-$Ø_{rr}$	"be frightened of"
märr-miŋiki-$Ø_{rr}$	"to feel/be upset about/for"
djäl+thi-$Ø_{rr}$	"to want, like, desire"
marŋgi+thi-$Ø_{rr}$	"to know"
marramba+thi-$Ø_{rr}$	"to want/desire someone outside of a legitimate union"
märr-ŋamathi-$Ø_{rr}$	"to love, be happy with, welcome"
märr-yuwalk+thi-$Ø_{rr}$	"to believe, obey "
mel-däl+thi-$Ø_{rr}$	"to stare/look at; to ignore someone"
gatjpu'yu-N	"to wish, hope for"
gitkitthu-N	"to laugh at"
dhumbal'yu-N	"to be ignorant (of), to be confused (about)"

Many "anticipatory"(cf Dench and Evans (1988 p25) type predicates, emotional/mental and locutionary predicates regularly occur with this case array. The S participant in all these cases can be conceived of as an experiencer or a patient rather than an agent. Similarly the DAT marked participant can be viewed as one that is not directly affected or effected compared to the O of an A-O array. The semantic areas covered by this array are very similar to those listed for Warlpiri (Hale 1982 pp243-247), and to the general categories described for this function of the Dative for Australian languages in Blake (1977 p35).

While typically coding an animate, the DAT can also occur with inanimates as in the example below:

(661) *gora* *ŋayi* *nho+kalaŋa+w* *ŋula nhaku*
shy/embarrass-1st 3sg 2sg+OBLS+DAT [INDEF2 "what"] "something"-DAT
mala+ŋu+w
PL+ŋu+DAT
she is shy of your things
(Note: this was given in explanation of a child too embarrassed to help herself to an orange)

Another feature Djambarrpuyŋu has in common with Warlpiri (Hale 1982p246) is that there are many verbs that occur with both S and S-IO arrays e.g. *gitkithu*-N (S) "laugh" and (S-IO) " laugh at". It is not yet clear that there is any grammatical means in Djambarrpuyŋu by which to distinguish DAT marked nominal expressions which code an IO function from those coding a peripheral role. This is particularly difficult with these intransitive/semitransitive predicates. Distributionally, one can say that certain predicates, including those just listed, occur regularly with two participants. Many of these do seem to be notions that inherently involve two participants. It is hard to imagine a context in which one would choose to express the notion "X is following" without another participant being involved. With other notions however e.g. to laugh or to be angry it seems semantically plausible that they be associated with two different arrays, one which simply codes the experiencer of the emotional/physical state and another which codes the directing of this situation towards or from another participant. With other predicates the contexts in which two participants are involved is much less frequent, suggesting that they are primarily "intransitive" and that the DAT marked expression is associated with a peripheral role. However this will not be resolvable until the potential for so called "intransitive" verbs to occur with a DAT marked nominal is determined and their potential functions established.

In connection with this it should be noted that there are certain verbs that permit an S-DAT array with specialized meanings more distinct from the S array than that found with predicates such as *gitkitthu-N* "laugh" and *magakarritjthi-* "be/become angry". Two such categories, the use of the DAT to code a path with directional motion predicates and its use to express time in clauses with common intransitive verbs, are described in section 11.2.2.2 below. The specialized sense associated with these clauses indicate that the DAT marked nominal expressions are selected roles. Their status as core or peripheral has yet to be clarified.

The semantic-syntactic role of the DAT marked nominal expressions warrants a much more detailed investigation before the distinction between an IO function and oblique functions of the DAT can be properly determined. Areas in which appropriate evidence may be found include consideration of the range of DAT marked roles associated with the IO function compared to those associated with oblique functions, in the potential for coreference and ellipsis across clauses, in the nature of case array alternation and in the scope of the ALL. It is also potentially a fuzzy distinction.

3. S-O (ABS/NOM-ABS/ACC) and A-IO (ERG /NOM-DAT) case arrays

There are two further two place arrays in addition to those just considered. One is an S-O array found frequently with Reflexive-mutualis-Reciprocal predicates bearing the R/R suffix *-mi-*$\emptyset_{mirr}$ (see section 11.1.3) but for which there is is some evidence of it being selected by a restricted set of other predicates. The second is an A-IO (ERG/NOM-DAT) array but so far this has only been observed as an alternative to an A-O (ERG/NOM-ABS/ACC) array. I will present the evidence for the S-O array with non-derived predicates here. The A-IO array will be considered with other "alternative" case arrays below (see section 11.2.1.4).

The S-O (ABS/NOM-ABS) array has been noted with predicates other than those with the R/R suffix, in the following restricted contexts:

(i) Expressing temporal extent with intransitive/semitransitive verbs.

It is possible to express a span of time by using a nomen with temporal reference and a quantifier without any case marking. This is distinct from the coding of the temporal frame for the situation itself which requires the ERG suffix, unless the

lexemes are members of the temporal class. Temporals occur as the bare root in temporal function.

In both the following examples the verbs are intransitive, and the expressions designating the temporal duration of the situation use the bare nomen stems. They are thus potential Os by case marking although quite distinct in function from the prototypical "patient":

(662) *wakir'yu+n* *mărrma' gămuk*
visit somewhere (for a day or so)(intr)+1st two night
(we) stay away two nights T021p11

(663) *\ga dhuŋgarra mărrma' ŋarra nhina+n ŋunhal*
and year two 1sg sit/live (intr)+3rd DIS-LOC
and I lived there two years T008Txt

Temporal extent can also be coded using transitive stems such as *ŋupa*-N "chase, follow along" and *ŋurrka*-Ŋ "throw, cast away from", in which the extent does in fact function as the O role (see section 4.5.3 for examples).

(ii) With "cognate objects"

So far the only clear instance of a cognate object is found with the predicate *waŋa* "speak/talk" expressing the notion "to speak a language".

(664) *ga bukmak+tja yoŋu yuṯa ga ŋaḻapaḻmirr warrpam'nha ga*
and all+PROM person new and old+PROP all+SEQ IMPV-1st
waŋa dhăruk djambarrpuyŋu+n
speak-1st word clan name+SEQ Rep 87 p2
and all the Aborigines young and old, everyone speaks the Djambarrpuyŋu language

The predicate *waŋa* "speak/talk" also appears with a range of other case arrays (see section 11.2.1.5). In the distinctive sense associated with the S-O (ABS/NOM-ABS) array there is clearly a close connection with the meaning of the verb. This is also a predicate commonly associated with cognate object constructions in other Australian languages surveyed in Austin (1982). However, other verbs Austin noted as occurring with cognate object constructions in the six Australian languages surveyed have not been noted with an ABS/NOM-ABS/ACC array in Djambarrpuyŋu. Some are in fact transitive stems that permit the "cognate object" to be expressed just like any other O, e.g. *buny'tju*-N "to smoke (a cigarette)", *liyama*-N$_L$ "to sing (a song)", *djăma*-NI "to work (work)" and *nhuma*-N$_L$ "to smell (a smell)".

The nominal lexeme used to express sleep *yakurr*, is a nomen which is apposed to the nominal denoting the one who is asleep, and takes the appropriate case marking in agreement. When these two nominals occur in S case with a predicate such as *ŋorra* "lie", they do bear a superficial resemblance to a "cognate object" construction. However, examples such as the following, in which *yakurr* occurs as part of the O expression, are evidence for a more general treatment of the relationship between *yakurr* and another nominal as adnominal apposition, rather than two separate participants.

(665) *ga bulu* ***ŋanya*** *ŋayi* ***ŋunhi*** ***yakurr*** *dhirr'yu+rr*
and again 3sg-ACC 1sg TEXD sleep disturb(tr)+3rd T022p10
and again he tried to disturb her (as she was) sleeping

Two other predicates Austin noted as occurring with the cognate object construction were verbs for 'play' and 'dance'. In Djambarrpuyŋu the verbs *bul'yu*-N "play (intr)" and *giritji*-$Ø_{rr}$ "dance" occur with Locative marked participants designating what is played, e.g. *bul'yun gät+ŋur* "to play (at) cards", or danced e.g. *yolŋu walal giritji+rr buŋgul+ŋur malaŋu+ŋur* [person 3pl dance+3rd dance +LOC/ABL PL+LOC/ABL] "people dance (in) the ceremonial dances (T022p19). While they are evidence for a special array, ABS-LOC, they are not of the "cognate object" type.

11.2.1.3 Verbs with three core roles

There are two arrays associated with predicates with three core roles, A-O-IO (ERG/NOM-ABS/ACC-DAT/OBL) and A-O-O (ERG/NOM-ABS/ACC-ABS). The predicates with these arrays are all transfer verbs. They include:

gurrupa-N_L	"give"
milku-Ŋ	"show"
lakara-Ŋ	"tell"
gombu-Ŋ	"take away from "
djuy'yu-N	"send"
gä-Ŋ	"take/bring (to/from)"

The theme, which may be either a physical entity or transferable notions such as information, the delegation of work or the responsibility for a ceremony is always coded as O. The Recipient or Loser may be coded with the DAT, ABS/ACC or with the OBL. The different case marking options in coding also appears to be receptive to the degree of affect attributed to the role, the greatest affect being associated with the

ABS/ACC and the least with the OBL. The effect of individual predicates on the variation on coding has yet to be fully investigated.

Overall, the array with the "double" objects is the least common in the corpus, although it is the only array noted for *gombu-Ŋ* "take away from". Waters (1989) and Heath (1980b) claim that it is the most common array found with the verb "give" in Djinaŋ and Ritharrŋu respectively. However, this is not reflected in the Djambarrpuyŋu corpus. The three place array A-O-All is also found with transfer verbs which usually take a locative goal, the prototypical instance being *rulwaŋdhu-* "put". Those ditransitive verbs that permit the recipient to be coded with the OBL have parallel arrays to these, reflecting the close relation between a locative goal and a beneficiary/recipient.

I will illustrate the various arrays with the verbs *gurrupa-N* "give" and *lakara-Ŋ* "tell". These two predicates achieve somewhat different meanings with the three arrays.

1. Examples with *gurrupa-N* "give"

(a) *gurrupa-N* with the IO coded with the OBL:

(666) *\yurr walal ga+n rom+dja gurrupa+n+mi+n\ ŋayi ga+n gurrupa+r*
but 3pl IMPV+3rd law+PROM give+1st+R/R+3rd 3sg IMPV+3rd give+3rd
bala ***guŋbala'+wal*** ***Ŋ.....lj+wal*** ***yäku+wal***
MVTAWY clan "surname"+OBL person's name+OBL name+OBL
\ga ŋayi+n ga+n Ŋ.....lj+y+nydja gurrupa+r
and 3sg+SEQ IMPV+3rd person's name+ERG+PROM give+3rd
\ ga ***nhanukal+a*** ***N.....l+wal+a***
and 3sg-OBL+SEQ person's name+OBL+SEQ Burrp2
but they were sharing the law with each other. He (N....) was giving (it) to Guŋbala sub-clan person, named Ŋ....i and Ŋ.....i was giving (it) to N.....i

(b) *gurrupa-N* with the IO coded with the DAT:

(667) *\ ŋayi+ny ŋunhi ŋäpaki+y+nydja gurrupa+r', ga-- ŋuruk*
3sg+PROM TEXD white person+ERG+PROM give+3rd a--and TEXD-DAT
george+ku *\ dhäwu+ny*
person's name+DAT news/story+PROM OMSp25
Then the white person gave the news (of the death) to George (a Yolŋu) (who then was responsible for telling others)

(668) \ *ŋarra+ny ŋayi gurrupa+r, bili ŋarra+ny dhuwa miyalk, ga*
1sg+ACC 3sg give+3rd because 1sg+PROM moiety name woman and
gurrupa+r+nydja ŋayi \ ŋarra+nha+ny ŋändi+y+nydja,
give+3rd+PROM 3sg 1sg+ACC+PROM mother+ERG+PROM
yirritja+w+nha dirramu+w
moiety name +DAT+SEQ man+DAT T023p4
Mother gave me, because I am a Dhuwa woman, to a Yirritja man

(c) *gurrupa*-N with the IO coded with the ABS or ACC (i.e. as O):

(669) *gurrupa+r* ***ŋanya*** *walal murnyaŋ*
give+3rd 3sg-ACC 3pl plant food T022p3
they gave him plant food

(670) *ga nhokuŋu+n nhä+n,* ***linyalany*** *nhe dhu nhaltja+n gurrupa+n dhäwu*
and 2sg-OR+SEQ what+SEQ 2dl-ACC 2sg FUT do what+1st give+1st news
And what's from you, what news will you give us? Burrp4

(671) \ *ga ŋayi+ny ga djambarrpuyŋu+y+nydja gurrupa+n miyalk, ga*
and 3sg+PROM IMPV-1st clan name+ERG+PROM give+1st woman, and
warramiri+nha+n *ga ŋayi ga warramiri+y bitja+n+dhi*
clan name+ACC+SEQ and 3sg IMPV-1st clan name+ERG do thus+1st+ANA
bili ***gurrupa+n manda+ny djambarrpuyŋu+ny \ ga***
"same" give+1st 3dl+ACC clan name+ACC and
liyagawumirri+ny
clan name +ACC T023Ap4
and (the) Djambarrpuyŋu (clan) give women to Warramiri, and Warramiri in the same way give (them) to Djambarrpuyŋu and Liyagawumirri.

With predicates such as *gurrupa*-N "give" and *djuy'yu*-N "send", the distinction between arrays with the DAT and the OBL appears to rest on the exchange of responsibility for the entity transferred. Thus if something is being transferred to someone but is not theirs to do as they like with, then the OBL is appropriate, as in example 666 above. Other examples with the OBL include giving a car to someone when changing over drivers (in contrast to actually giving someone a car) or giving someone something to take to someone else. In such instances the recipient is coded identically to a locative goal (i.e. with the OBL if it is "human" and the ALL if not). However, if the responsibility or ownership is transferred as well, then the DAT is appropriate. This has been described as a distinction between a "temporary" versus "permanent" transfer in other Yolŋu descriptions (cf Lowe n.d.a).

The distinction between the DAT and ACC/ABS coding of the recipient is less clear. It occurs in examples where the transfer seems more absolute, such as the giving of food or spouses. A possible explanation may be that in these contexts the transfer of responsibility is not pertinent, since it can be "naturally" assumed. The recipient may then be deemed on a par with the theme as to the degree it is "affected".

Some additional information may illuminate this in regard to example 670 above. The question is a request for a third party's response to an intention which the questioners have just expressed about going to another place. I can only assume that in this context the response is assumed to "affect" the two questioners in the sense that it is highly relevant to them. This is not implausible given the fact that the interlocutors had been living with each other for some time. It should also be noted that what is talked about is generally coded as O. In responding to the question the responder is in fact being asked to talk about, as well as to, the questioners. This particular observation also seems pertinent to the A-O case array found with *waŋa-Ø$_a$* "speak" (see section 11.2.1.5).

It is not clear to me what distinction there is between the use of the DAT in example 667 and the ACC in example 670.

2. Examples with *lakara-Ŋ* "tell":

(a) *lakara-Ŋ* with the recipient coded with the OBL:

(672) *"....." bitja+n ŋarra nho+kal dhu lakara+m*
do thus+1st 1sg 2sg+OBL FUT tell+1st T023p6
so I will say to you

(673) *".." bitja+n walal+nydja dhu ga lakara+m nhuna, ŋarra+kal*
do thus 3pl+PROM FUT IMPV-1st tell+1st 2sg-ACC 1sg+OBL
so they will say to me about you T023Bp6

(674) *\ ŋurlki+wurruŋ+gal+yi+n nhe dhu ŋalapalmirri+wal+a*
TEXD+PL+OBL+ANA+SEQ 2sg FUT old people+OBL+SEQ
miyalk+kurruwurruŋ+gal\ lakara+nha+mirr+nydja nhuna+pi+nya nhe
woman+PL+OBL tell+4th+R/R+PROM 2sg+EMPH+ACC (1sg)
you go and tell the old women about yourself T013p2

(b) *lakara-Ŋ* with the recipient coded with the DAT:

(675) *nhe rraku dhäwu lakara+m*
2sg 1sg-DAT story tell+1st
you tell a story for me T102Bp1

(676) *"..." ga bitja+n ŋarra+ny dhu nhuŋu lakara+m*
"..quote.." and do thus-1st 1sg+PROM FUT 2sg-DAT tell+1st T023p6
so I will tell you

With the verb *lakara-Ny* "tell", the DAT seems closer to a benefactive, being used when the telling is "for" someone, while the OBL seems to simply code to whom the speaking is directed.

Unlike *gurrupa-N*, this predicate has not been noted with the recipient coded as an O. Rather, the A-O-O array is used to express "to call X Y", as in:

(677) *maŋda+nha+n napurr lakara+ŋal* ***marrŋal+nha+n*** *maŋda+ny*
3dl +ACC+SEQ 1pl tell+3rd ceremonial leader+ACC+SEQ 3dl+ACC
we called the two "marrŋal" Burrp2

Another three place verb with DAT and OBL options for the coding of the recipient is *milku-Ny* "show". The difference here was described as one in which the DAT was possible if the participant were present. This suggests another parameter to that of the degree of "affect" which needs pursuing further.

Somewhat different perspectives in regard to the various case arrays are put forward in Morphy (1983), Lowe (n.d.a) and Waters (1989), for Djapu, Gupapuyŋu and Djinaŋ respectively. The notion of affect, the patient as the orientation versus terminus of the activity, and the relative locations of the participants have all been identified as relevant parameters. However, until the potential for various arrays with different predicates and their distinctive meanings are better understood, any general claims regarding the relative status of these features in Djambarrpuyŋu or how they compare across Yolŋu varieties must be considered speculative. It should be noted that the different patterns of core case arrays and the possibility of case alternations associated with the single verb stems has in fact been noted for all varieties where variable case arrays are discussed (i.e. those listed at the beginning of the paragraph).

In the next section I will review and present additional observations about the variable case arrays.

11.2.1.4 Variable case arrays involving the DAT case marker

The majority of case array alternations involve the DAT case marker. The various alternations are listed below.

1. With no formal changes in the verb:

S(ABS/NOM)	vs S(ABS/NOM) IO(DAT) (see section 11.2.1.2.)
A(ERG/NOM) O(ABS/ACC)	vs A(ERG/NOM) IO(DAT) (see point 1. below))
A(ERG/NOM) O(ABS/ACC) O(ABS/ACC)	vs A(ERG/NOM) O(ABS/ACC) IO(DAT) (see section 11.2.1.3)
A(ERG/NOM) O(ABS/ACC) All(OBL/ALL)	vs A(ERG/NOM) O(ABS/ACC) IO(DAT) (see section 11.2.1.3)
S(ABS/NOM) IO(DAT)	vs S(ABS/NOM) OBL (see section 11.2.2.5 (v))

2. With formal changes in the verb:

A(ERG/NOM) O(ABS/ACC)	vs S(ABS/NOM) IO/DAT (see point 2 below)

The DAT may alternate with the absence of another core role, or be an alternative coding of a participant as O or Allative (and possibly other local cases coded with the OBL (see section 11.2.2.5 (v))).

From the patterning with verbs with three place arrays it was suggested that the alternation of the DAT with O and All may correlate with variable degrees to which the recipient is affected. It was also suggested that the O and IO participants in the two place arrays correlate with a difference in the degree to which the situation impinges on these particular participants. There are a few further pieces of evidence that support the idea that the notion of affect is highly pertinent to the coding of predicate-argument relations.

1. Alternation between an A-O and an A-IO array

There are two two place verbs which are known to permit both an A-O and A-IO array.

*nhäma-*Ŋ	A-O	"to see"	A-IO	"to look for"
*ŋäma-*Ŋ	A-O	"to hear"	A-IO	"to listen to/for"

The distinction here is between a "directed" situation (coded as A-IO) and one in which the situation is actually carried out (coded as (A-O)). Perception predicates in Djambarrpuyŋu have a basic A-O case array. A rationale for this would be that a perception cannot be said to occur without the perception of something taking place.

Some examples with are given below:

(678) *nhäma'-nha+ma walal yolŋu'-yulŋu+y miyalk+kurruwurr+yu butjikat+ku*
see-REDUP+1st 3sg person-REDUP+ERG woman+PL+ERG cat+DAT
the women are looking for the cat G90

(679) *ŋäma'-ŋama walal ga djamarrkulI+y' plane+gu*
hear-REDUP-1st 3sg IMPV-1st children+ERG plane+DAT
the children are listening for the plane G90

(680) *bili+n walal ŋäkul plane+nha+ny*
COMPL+SEQ 3sg hear-3rd plane+ACC+PROM
they have already heard the plane G90

Parallel arrays to these, with similar sense associations, are also found in Warlpiri (Hale 1982 p248). Besides verbs with a choice of arrays as shown here for Djambarrpuyŋu there are some Warlpiri stems for which ERG-DAT is the sole array. A key sense associated with the array is one of "seeking" and the verb *warri-rni* 'ERG seek DAT' is the paradigm instance. The full potential for this array in Djambarrpuyŋu is yet to determined but as yet no verb has been noted with ERG-DAT as the sole array. It is of note too that the common verbs for seeking all in fact take an S-IO (DAT) array. However, Hale's description of this use of the DAT as occurring in situations where the "effect normally resulting from the action denoted by the verb is ... aborted or else subordinated in importance to the action itself" (Hale 1982 p249) would seem potentially applicable to the two Djambarrpuyŋu examples with an A-DAT array given above.

As additional support for this notion Hale cites the use of the DAT with verbs as "hit" to indicate that the action did not reach the target and thus conveying a sense such as "hit at". It is of note however that I have no examples in the corpus of this use of a DAT with verbs such as *wutthu*-N "hit-tr" and *buma*-IR "strike, hit, gather-tr", nor have I yet been able to elicit such examples with the appropriate senses. This is despite the reporting of such possibilites in Djapu (Morphy 1983 p115) and Djinaŋ (Waters 1989).

Speakers have interpreted DAT nominals in this context as Benefactives or proferred other verbs which mean "hit at". This raises the question as to degree to which the notions underlying the use of the IO and O may in fact be lexicalized. There are various distinct transitive and semitransitive verb stems that seem to be semantically closely related. For example the semitransitive verbs *buna*-$\emptyset_a$ "to come/go to/visit (someone)" and *gumurr'yu*-N "to go and meet" only occur with an S-IO array and the transitive "counterpart" *guwatjma*- N "to meet (someone)" occurs only with an A-O array.

2. An A-O, S-IO/DAT alternation in connection with verb roots of the *-Thu-* class

There are some verb roots which occur with the augment *-Thu-* and *-mara-* CAUS, both of which may occur with two participants. Thus the same root may be associated with both an S-IO/DAT and A-O array. The *-Thu-* augment occurs on a verb with the S-IO/DAT array and the CAUS *-mara-* on a verb with the A-O array. In this instance the alternative array is associated with different marking on the verb. It is not yet clear whether the DAT marked nominal in the S-IO/DAT array is a core or peripheral roles. Some examples are:

budapthu-N	S "cross over"	S-IO/DAT	"to cross over something"
budapmara-Ny		A-O	"to take something across"
djulul'yu-N	S "hide, be hidden"	S-IO/DAT	"to hide from someone/thing"
djulul'mara-Ny		A-O	"to hide something"
daw'yu-N	S "be broken"	S-IO/DAT	"to break "under" someone" (e.g. a rock)
daw'mara-Ny		A-O	"to break something"
wapthu-N	S "jump, hop"	S-IO/DAT	"to jump over something, about someone"
wapmara-Ny		A-O	"to pick up something and put it into/onto something"

The relations expressed with the S-IO/DAT array and the A-O array in these examples are consistently distinct in a way quite compatible with the interpretation of these two arrays so far. In the A-O array the situation expressed by the verb is induced in the O role, while in the S-IO/DAT array the S role is the one who experiences or is affected by the situation, while the IO/DAT role is less directly involved, either as the participant which the situation is directed towards or as a non-goal locative. The only general correspondence between roles in the two verb types, is that between the S role associated with the intransitive/semitransitive stem and the O role of the transitive stem. Such a correspondence is unexceptional amongst causative/transitivizing constructions (see section 7.5.4.1).

It is not known how the roles expressed with the DAT in the semitransitive clauses would be expressed with the transitive stems but I suspect it would be with local case markers rather than with the DAT. If they are coded with local case markers this suggests the DAT marked array with an S is a core role on the grounds that if it were a peripheral role one would expect the coding/function to remain constant across transitivity types.

3. The potential for marking a patient with the DAT in negative constructions.

(681) *ŋarra ŋuli ga yaka bäki ŋaralí+w'*
1sg HAB IMPV-1st NEG use(tr) cigarettes+DAT
I don't smoke

The status of this particular piece of evidence is tentative since there is only one example. However, it was elicited from an older speaker and has proved quite acceptable to other speakers. There are numerous occurrences of this verb that attest to it being transitive, i.e. associated with an A-O array. Presumably the feature motivating the use of the DAT is that the clause expresses a negative condition. In that context the potential patients are in fact never affected. The use of the DAT marking on patients is certainly not a general feature of negative constructions, but this example indicates the need for a more detailed examination of the interaction of negation and the coding of potential patients.

Finally, it will be recalled that the distinction between intransitive and semitransitive verbs is formally associated with the presence of a DAT marked nominal coding a second participant. The basis for a distinction between an intransitive verb with a peripheral DAT marked Benefactive or whatever, and a stem that has an alternative semitransitive array i.e. one associated with a DAT marked IO core participant is one that requires further consideration. However, the DAT marked IO appears in situations that can be viewed as ones in which one participant directs the situation towards another, rather than one in which the situation engages both participants in its instantiation. Again the DAT appears to code a goal rather than a patient or theme, i.e. a less affected undergoer.

The two place arrays, A-O and S-IO, suggest that a fundamental distinction is made about events according to whether the situation is one which involves two participants impinging on one another in some way, or one in which the two participants are not directly impinging on one another but rather one participant is involved in an activity directed to/at another.

Coupled with the case array alternations, this is a strong indication that the A-O array is associated with highly transitive situations i.e. those in which the situation expressed by the verb impinges on both participants. I use "impinge" rather than "affect", since O participants may not be directly affected by the situation. Perception verbs such as *nhä-*Ŋ "see" would be of this category. However one cannot experience seeing without concomitantly sighting something. The two

participants are mutually engaged in the instantiation of the situation expressed by the predicate. This is in contrast to those situations expressed with the S-IO array where the S codes a participant and the predicate codes a situation which is directed towards another rather than one which inherently engages both participants in it. Included in the S-IO array are many verbs having to do with activities, processes or states which can be viewed as "directed", e.g. emotional/mental states.such as *gatjpu'yu*-N "hope/wish for"; speech verbs such as. *murryu*-N "growl at"; "seeking" predicates such as *larru*-Ŋ "look for" and *galku*-N "wait for" and certain motion predicates, e.g. *malthu*-N "follow, accompany" and *buna*-$Ø_a$ "arrive, come/go to". The IO participant has a much more passive role in the situation than those coded as O, in that the situation does not impinge on the IO directly.

In summary it can be said that the DAT marked role appears to:

1. - code a role which is less directly participating in the situation than the S, A or O roles. This is true of both an IO function and a peripheral function associated with the DAT suffix.

2. - compared to an O role it indicates a participant towards which the situation is oriented or directed rather than one in which two participants impinge on one another through whatever situation is expressed by the predicate. That is, it codes less affected participants relative to those coded by O.

3. - compared to an Allative it may indicate the presence of a participant at the speech event (e.g. *milku*-Ŋ "show") or the transfer of responsibility for something (e.g. with *gurrupa*-N "give", *djuy'yu*-N "send"). That is it codes participants more affected than those coded as Allatives.

11.2.1.5 Variable case arrays involving alternations between A and S

There are very few instances of an alternation between S and A which is not associated with special marking on the verb. Two predicates where it has regularly been noted are *waŋa*-$Ø_a$ "speak" and *dharyu*-N "rain".

The verb *waŋa* "speak" appears to be unique in the number of arrays in which it is found. Besides the S-O array described in section 11.2.1.2 (3(ii)), it also occurs with S, S-DAT, S-OBL and A-O arrays. In the following examples the actor is underlined and the recipient/goal is in bold type:

(682) *"..." bitja+n ŋayi dhu yolŋu ga waŋa worrunu*
do thus+1st 3sg FUT person IMPV-1st speak-1st old person
ŋurlkal+yi yolŋu+wal waŋgany+gal, goŋ-marwat+mirri+wal.
TEXD-OBL+ANA person+OBL one+OBL hand-hair+PROP+OBL T021p3
"..."thus will the old person speak to that person with the paintbrush in his hand

(683) *\ bitja+rr ŋayi galikali+ny rra+ku waŋa+n*
do thus+3rd 3sg subsection name+PROM 1sg+DAT speak+3rd OMSp32
thus Galikali said to me

(684) *waŋi* ***ŋanya*** *nhe+ny, [ŋayi dhu räli marrtji]*
speak-2nd 3sg-ACC 2sg+PROM 3sg FUT MVTTWD walk-1st T023Bp8
you tell her/him, she/he is to come here

(685) *ŋayi guthadjaka+y dhu waŋi* ***maŋda+ny***
3sg personal name+ERG FUT speak-2nd 3dl+ACC G90
Guthadjaka will speak to the two of them

The A-O array appears to be confined to instances where "speaking" involves a directive and the appropriate translation closer to "tell X to...". It is yet another context in which the notion of affect may be relevant to the choice of case marking.

The following examples involve verbs for "to rain". The actor associated with this verb is the nominal for "rain". Thus in Djambarrpuyŋu "the rain rains". The S array is found in the first example below, expressing the event of raining. The A-O array exemplified in the second is used in contexts in which the rain is "raining on" or "wetting" someone.

(686) *waltjaŋ ŋuli ga dharyu+n dhuŋgarra ŋupa+n*
rain HAB IMPV-1st rain+1st year follow+1st G90
It rains every year

(687) *ŋayi ga+n waŋbana+y* ***miyalk+nha*** *dharyu+rr*
3sg IMPV+3rd rain+ERG woman+ACC rain+3rd
It was raining on the woman G90

11.2.1.6 The case-marking of core participants

This varies according to the word class of the stem, to the "humanness" of the referent and to the topicality of the referent. The chart below sets out the different case marking patterns for core roles:

	PRONOUN	NOMEN		DEMONSTRATIVE (non-plural)	
Core Role		"human"	"non-human"	"human"	"non-human"
A	NOM	ERG	ERG	ERG	ERG
S	NOM	-	-	-	-
O	ACC	ACC	- (/ACC)	-	-
IO	DAT	DAT	DAT	DAT	DAT

I have not included in this chart the various options associated with IO i.e. ACC or OBL or ALL as these have yet to be fully investigated.

It will be recalled that pronouns show a categorical NOM-ACC pattern of case marking and demonstratives a categorical ERG-ABS pattern. Case marking on nomens however is categorically distinct for all three roles when they have "human" reference. When they do not have "human" reference there appear to be two factors which can trigger the occurrence of the ACC.. One is the potential for "higher animates" which can be attributed human-like characteristics to occur coded as "humans" i.e. with either ACC marking for O or OBL for local cases. This has been noted for various varieties within the Yolŋu bloc e.g. Djapu (Morphy 1983 p33), Ritharrŋu (Heath 1980b p34, p38) and Djinaŋ (Waters 1989 p55). An example of ACC marking on *wuŋgan* "dog" is given below:

(688) ***wuŋgan+nha yothu+ny*** *dhu dhurrpara+m ŋändi+'mirriŋu+y,*
dog+ACC child+ACC FUT cover+1st mother+KINPROP+ERG
yindi+y wuŋgan+dhu
big+ERG dog+ERG T009p1
the mother dog covers the puppy

However there are also several examples in the texts of the ACC case marker on inanimate nominals. I suggest this is prompted by the participant being highly 'focused' within the discourse context. The contexts in which they occur all appear to foreground the O participant. This might be in a context in which the O denotes something which is the general subject matter of the text. The following example is taken from a text which is about medicinal uses of plants.

(689) *bala märra+ma+n beŋur+nydja gapu+ŋur+nydja*
then take+1st+SEQ INDEF-ABL+PROM water+ABL/LOC+PROM
mutamuta+nha+ny *ga mam'mara+ma+ny nhe dhu ŋunhiwill*
Grewia retusifolia+ACC+PROM and stick+1st+PROM 2sg FUT TEXD-ALL
bili yän mäpan+lil
"same" EMPH boil+ALL T014p17
then take it from the water, the Grewia retusifolia, and put it over that boil

The plant and what happens to it during the preparations of the associated medicine is clearly the focus of this particular part of the text. In the next example the speaker is explaining the meaning of the verb *dhatthu*-N.

(690) *ga girri+y' nhe dhu ŋunhi dhattthu+n nhuŋu+wuy nhe*
and things+ERG 2sg FUT TEXD decorate+1st 2sg-DAT+EMPH (2sg)
wäŋa+nha+ny,
place+ACC+PROM T009p6
and you decorate your own place with things
(the text is about the meaning of *dhatthu*-N "decorate, dress, adorn")

It appears that the speaker is highlighting the effects on the house. Indeed, in the following text she goes on to describes how laden with 'decorations' the place is.

In other contexts it seems that the speaker is focusing on the identity or nature of a particular O since this is important to or inherently connected with what the speaker is talking about. Examples of this kind are not uncommon in the texts on word meanings. The following are two such examples

(691) *ŋäma muka dhu ga nhe ŋunhi, rirrakay+nydja* ***gapu+nha+ny***
hear-1st PRT-OK FUT IMPV-1st 2sg TEXD sound+PROM water+ACC+PROM
"djalwurr djalwurr djalwurr djalwurr djalwurr djalwurr"
"splosh" (sound of feet moving through water)
balanya+wuy+nydja marrtji+nya+wuy+nydja
such+ASS+PROM go+4th+ASS+PROM T011p4
you hear the sound of the water "splosh, splosh, splosh, splosh, splosh" from the (person's feet) moving (through the water)
(the speaker is describing one use of the verbs *lumurr'yu*-N and *djalwurr'yu*-N "splash, move in water, walk through shallows")

(692) *gurrum' yan ŋayi ŋunhi mitthu+rr+nydja, ŋaraka+ny*
carefully EMPH 3sg TEXD cut+3rd+PROM bone+PROM/ACC
miyapunu+nha+ny
turtle+ACC+PROM T401p17
carefully he cut the turtle shell (so the knife would not slip and he would not cut himself)

In each case it appears that the 'impinging' of the situation expressed by the predicate on the O is judged highly topical at that point in the discourse. In the first example the speaker is explaining the meaning of *djalwurr'yu*-N "splash etc". Water is clearly highly relevant to understanding its meaning. In the second example, which was elicited with a prompt that did not specify a patient, the speaker has provided a plausible context in which someone could be "cutting carefully so as not to cut themselves". A turtle shell is difficult to cut.

The clearest instances of ACC marking on non-human nominals are those in which it occurs in conjunction with the discourse suffixes. It will be recalled that the ACC marker is *-Nha* with an allomorph *-ny* following vowels. These allomorphs are homophonous with allomorphs of the discourse suffixes. The PROM *-Nydja* post-vocalic allomorph is *-ny* and the SEQ *-Nha* post-consonantal allomorph is *-nha*. However what is crucial to the identification of the ACC allomorph is that it occurs together with both discourse suffixes i.e. either as *-nha+ny* [ACC+PROM] or as *-nha+n* [ACC+SEQ]. Given no other evidence of combinations of SEQ+PROM or SEQ+SEQ and the O function of the particular nominals concerned, the interpretation of these as dimorphemic sequences of the ACC and a discourse suffixes seems justified. Furthermore these combinations also occur on "human" denoting nominals and have formal parallels in the extended stems of the regular pronouns which occur before the discourse suffixes e.g. *maŋga+nha+ny* 3dl+ACC+PROM.

It remains a matter for future investigation as to how instances of a "non-human" vowel final stem plus the affix *-ny* can be distinctly analysed as the PROM or the ACC. That the PROM can occur on O participants is confirmed by allomorphs of the PROM which are not homophonous with the ACC (i.e *-nydja* and *-Tja*). An example is:

(693) *ŋayi* *burumun'+tja* *märra+m*
3sg fruit/cheek+PROM take/get+1st T101p23
s/he takes/gets the fruit

That the SEQ can occur is supported by examples such as the following where the *-nha* form is interpreted as SEQ rather than ACC, given the presence of the SEQ on the co-occurring verb and the 'whole':

(694) *yän* *napurr* *ŋunhi* *nhä+ma+n* *gumurr+nha* *waŋbana+n*
EMPH 1pl TEXD see+1st+SEQ chest+SEQ rain cloud+SEQ T012p14
then we saw the front of the rain cloud

The occurrence of the PROM on the O participant is not that infrequent. The question that remains to be answered is whether the *-ny* allomorph can ever be interpreted as an ACC marker on lower animate and inanimate nominals, or whether ACC marking only occurs on such nominals in conjunction with the discourse suffixes.

The occurrence of the form *-nha* on the relevant O participants is not so common in the corpus, but it is problematic in regard to its interpretation as SEQ or ACC in the same way that the form *-ny* is problematic as to whether it is coding the PROM or ACC.

11.2.2 Peripheral cases

In this section the case forms associated with relational case functions which do not code core participants are presented and exemplified. The "human" -"non-human" distinction is pertinent to most of these cases (see sections 4.2.4.2 and 11.2.2.3.5).

11.2.2.1 Peripheral cases associated with the ERG

There are four distinct semantic case functions associated with the ERG. They are the Instrumental/Causal, Temporal, Place-name Allative and Manner. These are all distinct from the A function of the ERG in that they can occur with intransitive, semitransitive and reflexive-mutualis-reciprocal verbs. The Instrumental and Temporal functions are also possible with (di-)transitive verbs. All functions are restricted to "non-human" referents.

(i) Instrumental/Causal

This codes the means by which the situation is effected, enabled or made necessary.

(695) *ga banikin+dja mala linyu ga watjim gopi+y*
and pots/pans+PROM PL 1+2dl IMPV-1st wash coffee/tea+ERG(Instr)
gorrmur+yu
hot+ERG(Instr) Rlet
and we washed the pots and pans with hot tea

(696) *dirramu+y manda dhu ga dharrwa guya gurruka+m, dharpa+y*
man+ERG(A) 3dl FUT IMPV-1st many fish bear(tr)+1st stick+ERG(Instr)
two men carry lots of fish by a stick (slung between their shoulders)
(Note the presence in this example of two ERG marked nominals, one in A function and one in Instrumental function)

(697) *gunda+y nhe luku burak1+rr*
rock+ERG(Instr) 2sg foot be hurt/injured(intr)+1st
your foot is hurt by a rock T012

(698) *ŋarali+y' ŋarra rerrikthu+rr, nhuma+r ŋarra buŋgan*
cigarette+ERG(Instr) 1sg be sick (intr)+3rd smell(tr)+3rd 1sg smell
I am ill because of/from the cigarette, smelling its smell GutMeg

(699) *dharpu+nha+mi+nya walal ŋuli gayi̱+thu*
spear(tr)+4th+R/R+4th 3pl HAB shovel-nosed spear+ERG(Instr)
they speared each other with shovel-nosed spears

Body parts in R/R constructions also occur with the ERG and are thus formally distinct from their wholes which are demoted to S (see section.9.4.5.1).

(700) *ŋunha ŋayi ga bapmara+nha+mi+rr **guḻa+y** yothu*
DIS 3sg IMPV-1st spread liquid (tr)+4th+R/R+1st faeces+ERG(?Instr) child
that child has splotched faeces over him/herself T017p10

(701) ***bulman+dhu+n** bala **wony+dhu+n***
spear-thrower+ERG(Instr)+SEQ MVTAWY armpit+ERG (?Instr)+SEQ
gä+nha+mi+n
bear+4th+R/R+3rd T022
(he) bore (himself) along with the spear-thrower to (his) underarm

This is the only example recorded in which both a body part and an "external" instrument occur coded with the ERG in one clause. This may be attributable to the predicate *gä-Ŋ* "bear, carry (tr)" which is also used to express the notion "to wear (an item of clothing)". In the latter sense the body part on which a garment is worn takes the ERG case marker.

(702) *ŋunha+yi **balwurr** ŋanapurr ŋuli märra+nha\ **yindi+y+nha***
DIS+ANA kurrajong 1pl HAB get/take(tr)+4th big+ERG(Caus)+SEQ
gämurru+y'
reason/nose+ERG(Caus) T014p5
we would get that kurrajong for an important reason

(703) *nhuma+ny dhu dhuwala+wurr+yi+ny yolŋu walal yaka+n*
2pl+PROM FUT PROX+PL+ANA+PROM person PL(3pl) NEG+SEQ
*warwuyu+n **dhiyaŋi** **rom+dhu** **yuḻa+y***
worry (intr/semitr)+1st MED-ERG(Caus) law+ERG(Caus) new+ERG(Caus)
gapman'+kal
government+OBL(Poss) Yurr Htrp1
you people (that I have specified) must not be worried by this new law of the government

Morphy distinguishes a Causal function from the Instrumental on the grounds that the "human" nouns can occur with the OBL in Causal function but not the Instrumental (or Temporal) (1983 p38). There are no occurrences of a single human marked nominal with the OBL in any of these functions in my corpus. The OBL marked nominals that do occur in this context are either possessors or "human" arguments in an Instrumental/Causal non-finite subordinate clause. As we shall see below there are formal parallels between the marking of non-finite clause "human" roles and possessors (see section 12.1). The evidence in Djambarrpuyŋu suggests a distinction between relational functions of the OBL coding various local cases (see section 11.2.2.3.5) and adnominal and complementizer functions in which it codes a certain possessors and "human" arguments in non-finite subordinate clauses. The range of cases with which the OBL occurs in adnominal and complementizer function includes those associated with the ERG case marker (see sections 9.5 and 12.1).

In fact there are no clear examples of a main clause role coded by a single "human" referring nominal with OBL marking in Causal function in the relevant sections of Morphy's description. The only example that I have found in these sections is in a non-finite subordinate clause. If we explain the OBL marking in this context as part of the formal properties of the construction in which it occurs (see section 12.1), then there is no basis on which to syntactically distinguish a Causal relational case function of the OBL.

Further data for either Djapu or Djambarrpuyŋu may in fact attest to the use of the OBL to code a Causal relational case function. It would need to be shown that the nominal so coded was not a possessor of an ERG marked possessee and that alternative explanations involving local case functions such as the Ablative or Allative were not appropriate.

(ii) Temporal

Non-temporal nominals suffixed with *-Thu* indicate the time at which the situation takes place. Generic nominals often used in connection with this temporal function are *walu* "sun, time" and *wäŋa* "place".

(704) *ga ŋunhal+nydja ŋuli walalaŋ+giyin+gal+nydja walal wäŋa+ŋur, buna+nha*
and DIS+PROM HAB 3pl+EMPH+OBL+PROM 3pl place+LOC arrive+4th
wiripu+ŋu+y+nha ŋalindi+y
other+ŋu+ERG(Temp)+SEQ moon/month+ERG(Temp) T009p31
and there at their own place they would arrive during a different month

(705) *nhaliy walu+y ŋuli do lapthu+n*
what-ERG(Temp) time/sun+ERG(Temp) HAB store open(intr)+1st Rnotes
What time does the store open?

(iii) Place-name Allative

An allative function of the ERG suffix has been recorded only on place names. It is an alternative to the ALL suffix which also often occurs with place names:

(706) *ŋanapurr+nydja dhu marrtji bala maranhu-gä+nha+lil*
1pl+PROM FUT go-1st MVTAWY [food-carry]"go hunting"+4th+ALL
bala ŋurru+lil ŋaŋinyburra+y
MVTAWY point/nose+ALL place name+ERG(All) T021p11
we will go hunting at the point Ŋaŋinyburra

(iv) Manner

A few instances of nominals with the ERG with a possible manner function have been noted but it is not a regular function. Such notions are usually conveyed by co-occurring verbal predicates or an adverbial particle. The most frequently occurring nominal with a manner function is *ganydjarr* "power, strength, energy, force". It almost appears to have lexicalized status.

(707) *ŋayi+ny ga+nha gal'yu+na+n, **ganydjarr+yu***
3sg+PROM IMPV-4th crawl/slither+4th+SEQ energy+ERG(Manner)
bu+nha+mi+nya+n
strike+4th+R/R+4th+SEQ T102Bp12
the (snake, which has been hit) slithered and threw itself about frantically

In the following example, the ERG occurs on the quality-denoting nominals *ŋonuŋ* "heavy" and *ŋamba* "light" and also suggests a manner interpretation:

(708) *mak ŋarra dhu waŋa **ŋonuŋ+dhu***
maybe 1sg FUT speak(intr)+1st heavy+ERG(Man)
gulmara+nha+mirri+y rirrakay+yu nhä mak ŋarra dhu waŋa
stop(tr)+4th+PROP+ERG(Man) sound+ERG(Man) "or" 1sg FUT speak-1st
ŋamba+y rirrakay+yu
light+ERG(Man) sound+ERG(Man) Bk1/86p36
I might speak with a heavy, drawn out sound or I might speak with a light sound

11.2.2.2 Peripheral cases associated with the DAT case marker

The distinction between the core case function of the DAT and the peripheral is much less clear than for the ERG. Peripheral functions include those of benefactive, malefactive, goal and purpose. These roles may occur as an IO argument or as an oblique. The adnominal, i.e. possessive, function of the DAT is described in section 9.5.

In all the following examples I have chosen verbs which are not usually associated with a S-IO array and which are thus more likely candidates for a peripheral interpretation.

(i) Benefactive

(709) *bala ŋayi dhu gäma wäŋa+lil+a, **ŋändi+'mirriŋu+w, ga***
then 3sg FUT bear(tr) place+ALL+SEQ M(Z)+KINPROP+DAT and
bäpa+'mirriŋu+w ga djamarrkuli+w' yukuyuku+'mirriŋu+w
F(B)+KINPROP+DAT and children+DAT younger sibling+KINPROP+DAT

nhanu=kalaŋu+w, ga waku+'mirriŋu+w nhanu=kalaŋu+w
3sg=OBLS+DAT(Poss) and (Z)C+KINPROP+DAT 3sg=OBLS+DAT(Poss) T102B
the s/her takes (it) home for mother,father and children, his/her younger siblings and his sister's/her children

(ii) Malefactive

(710) daw'yu+n+a ŋayi dhu guŋda+ny nhaŋu
break(intr)+1st+SEQ 3sg FUT rock+PROM 3sg-DAT
the rocks break on him/her (as he/she is climbing) T017p6

(711) yepthu+n walal dhu ŋunhi+yi miriŋu limurruŋ
gather together+1st 3sg FUT TEXD+ANA warrior/soldier 1+2pl-DAT
they those warriors amass for us (i.e. with intent to come and fight) T009

(iii) Purposive

*(712) gäna yan mutika waŋdi+rr märrma' bitja+n, **bathi+w+nydja***
alone EMPH vehicle run+1st two do thus+1st bag+DAT+PROM
mala+ŋu+w, ga ŋanapurruŋ+gu+wuy** gäna yan **yoŋu+w
PL+ŋu+DAT and 1pl+DAT+EMPH alone EMPH person+DAT
walala+ŋ waŋdi+rr, ŋal'yu+nara+w
PL(3sg)-DAT run+1st rise+4th+DAT T101p6
two separate vehicles were going, (one) for the bags and (another for) us people to go in

*(713) ... ŋanapurr+nydja **minaŋara+w'+nha** yarrupthu+n*
1pl+PROM shellfish+DAT+SEQ go down(intr) +1st
... we went down (to the beach/rocks) for shellfish T012p19

There are a few potential tests which might distinguish between core and peripheral functions of the DAT. All have yet to be applied rigorously.

One is based on the limited scope of the Allative case. In the vast majority of its occurrences it has scope over S or O. However there are a couple of examples of ALL non-finite clauses where the ALL has scope over the IO of semitransitive verbs. An examples is:

(714) napurr galku+n walala+ŋ gurrma+nha+lil
1pl wait (semitr)+1st 3pl+DAT paddle+4th+ALL T019p26
we waited for them paddling

If the ALL were not permitted to have scope over peripheral DAT marked nominals its occurrence would offer syntactic evidence for an IO.

Another potential test concerns the coreference constraints between main clauses and non-finite clauses. There is some evidence that coreference might be possible with a DAT marked IO of main clause predicates such as *djäl* "want" but not with a peripheral DAT marked role (see relevant sections within 12.1).

Yet another test that may reflect on this distinction is the formation of reciprocals with the R/R suffix *-mi-* (see section 11.3). There is clear evidence that identification between the S and IO of semitransitive predicates is permitted, yet there is no evidence of peripheral roles being involved in coreference or dual role identification in any of the R/R constructions. However, it remains to be seen whether this is due to the limitations of the data or whether it indicates a grammatical distinction between core and peripheral roles of the DAT.

(iv) "location of action" with motion verbs

With motion verbs the DAT can be used to mark the path traversed, point passed or general locale which is not the source or goal of the motion.

(715) *mayaŋ ŋupa+n+a, ŋuriki budapthu+n+a mayaŋ+gu*
creek follow along(tr)+1st+SEQ TEXD+DAT cross over(intr) creek+DAT
(they) followed the creek, crossed over that creek BaŋB0 p2

(716) *yaka walal dhu ga wap-wapthu+n ŋuruk fence+gu*
NEG 3pl FUT IMPV-1st jump(intr)-REDUP+1st TEXD+DAT fence+DAT
They must not climb over the fence T401p12

(717) *wapthu'-wapthu+n+a nhaŋgu ŋuriki yoŋu+w ŋunhi dhu*
jump-Redup+1st+SEQ 3sg-DAT TEXD-DAT person+DAT TEXD(Sub) FUT
yakurr ŋorra
sleep lie-1st T022Bp6
(the children) are jumping around about the person who is sleeping

In the last example the DAT appears in a context in which it is reasonably clear that the sleeping person is not the intentional goal of the activity. The speaker uses this as a frame for a context in which she can use an exclamation drawing their attention to the fact of the sleeping person (and thus to cease jumping about, or move away). It is also a situation in which there is no locative goal, the children are just playing with each other. However it is one in which some effect on the DAT marked participant can be implied, so that it is not absolutely clear what role the DAT has in this particular utterance.

(v) DAT in temporal expressions

a) There is a particular S-IO/DAT array associated with clauses expressing time. The S is always designated by, or understood as a time associated nominal such as *walu/ŋaykun'* "sun, day, time" or *munha* "night", and the IO/DAT codes the humans present at the time. The expressions can be glossed as "the sun/night 'verb' on X"

(718) *ga walu+ny ŋanapurruŋ gulŋiyi+rr baŋ'thula+n*
and sun+PROM 1pl-DAT enter(intr)+1st place name-LOC+SEQ
and the sun went down on us at Baŋ'thula T012p22

Verbs such as *yupthu-* N "descend" *milmitjpa'yi-*$Ø_{rr}$ "be/become afternoon" *djaŋaw'yu-*N "be/become morning" are found with this particular array i.e. S-IO/DAT. A Locative role is also often present. This contrasts with the S (- ALL-ABL) array associated with verbs such as *gulŋiyi-*$Ø_{rr}$ "enter" and *yupthu-*N "descend" when expressing motions of other entities..

b) The DAT can also occur on temporals with a purposive sense:

(719) *wiripu+ny marrtji+nya ŋal'mara+nha+n* ***godarr'+wu***
other+PROM go+4th raise +4th+SEQ "morning/tomorrow"+DAT
and some (of the meat) (they) put up for the next day or so T102B

11.2.2.2.1 Ambiguity as to adnominal or relational functions of DAT marked nominals

With intransitive verb stems the distinction between a benefactive and possessive function of a DAT marked nominal is not always clear. The case marking associated with the S-DAT array is identical to that associated with an adnominal possessive relation of an unmarked (i.e. S/O) nominal.

(720) *nhaliy* ***rra+ku*** *dhu dhuwal buŋaw'yu+n*
what-ERG(Instr) 1+DAT FUT PROX burst(intr)+1st
How will my boil burst?
Or: By what shall this boil get to burst for me?

11.2.2.3 Peripheral functions of case markers associated with local case marking

There are four local cases Locative, Allative, Ablative and Perlative. Case marking is syncretised for Locative and Ablative on "non-human" nomens and for Locative, Ablative and Allative on "human" nomens (and pronominals). It will be recalled

that there is also a small class of Locative nominals and certain Place names which occur without any marking for Locative case.

All the case markers associated with local cases also have non-local functions. We will first consider the local case marking on "non-human" nomens.

11.2.2.3.1 Locative

The locative indicates the general location of a situation. It is clause wide in scope. It is predominantly used with a local sense but there are examples with a temporal sense. However, the latter function, i.e. indicating the temporal location of a situation, is predominantly coded by the ERG *-Thu* (see section 11.2.2.1) (For uses of the PROP *-mirr(i-)* and ASS *-Puy* to indicate adnominal location (see sections 9.1 and 9.3).

(721) *ŋayi li ga+nha ŋorra+nha* ***ŋunhal djinaga, ŋarŋga+ŋur***
3sg HAB IMPV-4th lie(intr)+4th DIS-LOC inside hole+LOC
it lies there inside the hole T102Bp11

(722) *ŋayi+ny dhu ga* ***ŋoy+ŋur*** *dhärra,* ***dharpa+ŋur***
3sg+PROM FUT IMPV-1st "under" stand(intr)-1st tree+LOC
yolŋu+ny
person+PROM T009p2
a person stands beneath a tree

(723) *waltjaŋ nhuŋu dhu buna* ***yol waŋarr, ŋula wanha+mi***
rain 2sg-DAT FUT arrive at(semitr)-1st "huge" INDEF2 where+LOC$_2$
wäŋa+ŋur maranhu-gä+nha+mirri+ŋur balanya+ŋur
place+LOC/ABL [foot-bear]"go hunting"+4th +PROP+LOC such+LOC
the huge rainstorm, comes on you, at some place where (you are) hunting for instance. T009p16

(724) *gap* ***nhirra+n*** *mutika+ny,* ***ŋunhal nhawi+ŋur***
BVR-"put" put(tr)+1st vehicle+PROM DIS-LOC whatsit+LOC/ABL
wäŋ'ka burumun'+ŋur
place name island/cheek+LOC/ABL T012p19
(we) parked the vehicle, there at whatsit the island Wäŋ'ka

It can also be used to to indicate general conditions within which the situation occurs. This often involves more abstract concepts or expressions denoting events.

(725) ***ŋunhili+yi*** *dhuwal ŋanapurr ga* ***wiripu+wurr+nydja***
TEXD-LOC+ANA PROX 1pl IMPV-1st certain+PL+PROM
*däpthu+n * ***ŋunhili bili yän rom+ŋur, ŋäthiliŋu+mi***
sit(intr-pl)+1st TEXD-LOC "same" EMPH law+LOC old+LOC
and some of use are (still) living in (/by) that same old law T015p12

(i) Locative with a temporal nuance:

(726) *dhuwali+yi+ny ŋarra dhäruk nhirra+n+mi+n yalalaŋumirri+w*
MED+ANA+PROM 1sg word put(tr)+1st+R/R+3rd later on+DAT
\ŋarra+kal gupa+ŋur
1sg+OBL nape+LOC T018p14
I have put those words of mine for later on, when I have died
("at X's nape" is a metaphorical expression for death)

(727) *dhawurrŋa ŋayi buna+na+ny* ***warraga+ŋur*** *[ŋayi*
" interrupt" 3sg arrive at(semitr)+3rd+PROM cycad+LOC 3sg
marrtji+n nhära+na+n]Rel
go+3rd cook+3rd+SEQ T022p15
he arrived in the midst of the cycad being cooked

The similarity between this use of the locative and the instrumental/temporal use of the ERG suffix is reflected in the following example:

(728) *wiripu ga nhina* ***ŋunhili+mi bili ŋäthiliŋu+ŋur***
certain IMPV-1st sit(intr)-1st TEXD-LOC$_2$ "same" old+LOC
rom+ŋur ninnyŋu+ŋur *ga wiripu+ny ga nhina* ***yuŧa+y+nha***
law+LOC original+LOC and certain+PROM IMPV-1st sit-1st new+ERG+SEQ
some live in the old law, and others live by the new T019p17

Certain combinations of nominals and the LOC/ABL appear to be lexicalized. These include:

1. *ŋoyŋur* "lower part of stomach+LOC" used adverbially to mean "under" (see example 722 above).

2. *waŋganyŋur* "one+LOC" used adverbially to mean "together"

(729) *ŋilinyu ŋuli ga workthu+n maŋda* ***waŋgany+ŋur***
1+2dl HAB IMPV-1st work(tr)+1st DL(3dl) one+LOC T018p15
us two are working on the same (work)/together

3. *gandarrŋur* "middle +LOC" used adverbially for both location and time part way through an event, which need not be that described by the predicate.

(730) *yirritja ŋanapurruŋ* ***gandarr+ŋur+yi*** *munha yupthu+n*
moiety name 1pl-DAT middle+LOC+ANA night descend(intr)+1st
the Yirritja (part of the) night descended on us half way (back) T012p23

Locative nominals also commonly occur after a clause with a motion predicate to express the end point of the motion. The expression *yän bili* "to keep on" or the connective *ga* "and", frequently occur between the clause and the Locative

expression. Note that following movement the doers of the movement are located at the place indicated, thus the end point is only indirectly being indicated.

(731) *\bala waŋdi+rr+a \ waŋdi+rr+a ga----a \ ŋuliwitja+n+dhi bili yan*
then run+1st+SEQ run+1st+SEQ IMPV-1st DIS(Perl)+1st+ANA "same" EMPH
ŋurru-liw'yu+n+dhi ga waŋdi+rr\ yarrup\ ŋunhal
nose/point-go round+1st+ANA IMPV-1st run+1st BVR (go down) DIS-LOC
ŋaŋinyburra\ raŋi+kurr+a bala----a+ny\ duwaŋ+nha\ djuranydjuraŋur
place name beach+PERL+SEQ MVTAWY+PROM BVR"go up" place name
Then we went. (we) travelled along, going back the same way around the point. Then (we) went down to Naginyburra, away along the beach and came up to Djuranydjuraŋur. T012p21

11.2.2.3.2 Ablative

The Ablative is associated with coding the local source. As a location this can be the starting point of a movement or of a spatial extent,i.e. "movement from" or "extending from". The source may also be a condition rather than a location. The source notion is distinct from that of the the OR in not being creative or productive. It can thus mark the originating state of a change of state. It can also code a reason or cause.

With a temporal function the ABL markers code the starting point of something which endured or marks the point or condition after which the event occurred. The latter is in effect the starting point of the situation expressed in the clause. This sense is also found with certain nominals with ABL marking which act as clause linkers, as well as with ABL marked non-finite subordinate clauses.

The ABL appears to have an adnominal case function. It can code the locational source of a participant. Its relationship to other adnominal cases coding 'source' notion is discussed in section 11.1.3.

(i) Movement from a location

(732) *ga larryu+n ŋanapurr ŋunhi\ bumbum+ŋur*
and get/fall off(pl) (intr)+1st 1pl TEXD car+ABL/LOC
dambumiriw+ŋur\ ŋunhal+a nhawi+ŋur+a wäŋa+ŋur
four+ABL/LOC DIS-LOC+SEQ whatsit+LOC/ABL+SEQ place+LOC/ABL
yäku+ŋur kota
name+LOC/ABL place name
and we got off from the four vehicles there at a place called Kuta T101

(733) *ŋayi dhu barrwaŋ+dhu+rr+a* ***nhokal*** ***goŋ+ŋur+a***
3sg FUT slip/fall/trip up(intr)+1st+SEQ 2sg-OBL hand+LOC+SEQ
it will slip from your hand T401p16

(ii) Locational Extent

(734) *waŋa+nha+mi+rr barrku+ŋur+a bitja+n nhakun dhipuŋur ga*
speak+4th+R/R+1st far+ABL/LOC+SEQ do thus+1st like PROX-ABL and
ŋunha+n
DIS+SEQ T204p2
they talk to one another from a distance, as from here and (to) over there

(735) *guyiŋarr+yi+rr nhe ŋuli ŋunhi-ya, rumbal, ŋanak nhuŋu ŋunha,*
cold+INCH+1st 2sg HAB TEXD-PRT body flesh 2sg-DAT DIS
dhipu+ŋur bili ***liya+ŋur*** ***ga bat*** ***ŋurrka+m luku+lil***
PROX+ABL "same" head+ABL/LOC and BVR(reach) throw+1st foot+ALL
you might be cold, your body, your flesh, reaching from head to foot T009p18

(iii) Movement from a condition

(736) *bala ŋunhi walal märra+ŋal+a ŋarra+ny* ***be+ŋur+yi+ny***
then TEXD 3sg get/take+3rd+SEQ 1sg+ACC INDEF+ABL+ANA+PROM
ganybu+ŋur+nydja ***wark+ŋur*** ***ŋäpaki+y*** ***walal***
fish net+ABL/LOC+PROM work+ABL/LOC white person+ERG PL(3sg)
then they took me from that work making fishing nets, those white people
T008p3

(737) ***maranydjalk+ŋur be+ŋur+yi+ny,*** *bala marrtji+na+n*
stingray+ABL/LOC INDEF+ABL+ANA+PROM then go+3rd+SEQ
roŋiyi+na+n wäŋa+lil+a
return+3rd+SEQ place+ALL+SEQ Gulip1
from/after (hunting) stingray (he) then went back home

(iv) Cessation from a condition

(738) *warrpam' ŋayi yawungu djaw'yu+n* ***ŋilimurruŋ+galaŋa+ŋur*** ***bäki+ŋur***
all/every 3sg "yesterday" take(tr)+1st 1+2pl+OBLS+ABL use+ABL
everything he took from our use T015p4
(this is in reference to the fact that use of a person's things or hunting in localities with which they are associated is stopped on their death)

(v) Change of state 'from' something:

Not unrelated to the cessative notion, and possibly subsumable within it, is the use of the ABL to mark the participant or condition from which something changes. For example:

(739) *yaka muka ŋarra dhu bilyu+n+dja dhuwal* ***dhäwu+ŋur+nydja***
NEG PRT-OK 1sg FUT turn+1st+PROM PROX story+ABL/LOC
dhipuŋur+nydja
PROX/MED-ABL+PROM T208p20
I will not be changing from this topic (while I am speaking)

(740) ***yoloŋu+ŋur+nydja be+ŋur+yi+ny rumbal+ŋur***
person+ABL/LOC+PROM INDEF+ABL+ANA+PROM body+ABL/LOC
bilyu+rr+a ga+n, bala wäyin+dhi+na+n
turn(intr)+3rd+SEQ IMPV+3rd, then animal+INCH+3rd+SEQ T022p18
(they) were changing from human form and became animals

(vi) Source (Relational)

(741) *nhe dhu marrtji ŋawatthu+n* ***be+ŋur+yi ŋarra+kalaŋa+ŋur***
2sg FUT go-1st get/take+1st INDEF+ABL+ANA 1sg+OBLS+ABL
rirrakay+ŋur ga dhäruk+ŋur *ŋuya* ***mala+ny***
sound+ABL/LOC and word+ABL/LOC meanings PL/(group)+PROM T018p19
you will go and get the meanings from my sound and words

(742) *ga manikay ga+n marrtji+n, ŋändi ga märi, ga ŋunhi bili*
and song IMPV-3rd go+3rd M(Z) and MM(B) and TEXD "same"
bäpurru+miriw \ ga wiripu-wiripu ***be+ŋur bala***
clan+PRIV "deceased" and different-REDUP INDEF+ABL (MVTAWY)
rirratjiŋu, ***be+ŋur bala*** *marraŋu*
clan name INDEF+ABL (MVTAWY) clan name OMSp22
and the songs were going, (of the) mother (clan(s)) and (of) the mother's mother's (clans) and (of) that deceased's (clan). And lots of different (clan songs) from Rirratjiŋu, from Marraŋu.

(vii) Start of temporal duration

(743) *beŋur* ***bili*** *godarr'+ŋur [ŋunhi nhe marrtji+n*
INDEF+ABL "same" morning/tomorrow+ABL TEXD(Sub) 2sg go+3rd
bala maranhu-gä+nha+lil]Adv
MVTAWY [food-bear]"hunt"+4th+ALL T208p16
(it keeps on raining) from the morning when you went out hunting

Expressions incorporating the ABL suffix which convey the sense "after" are described in section 6.5.2.1.3.

11.2.2.3.3 Allative

Allative marks motions towards or into a place or situation. It also codes the transfer (induced motion) of an object towards or into a place or situation.

It would appear that the ALL has scope only over S, O and possibly IO functions. Where the clause entails a change in position of the referents filling these roles, or

an inherently motional predicate, e.g. *rulwaŋthu*-N "put" and *ŋal'yu*-N "rise up, climb", then the ALL is appropriate to code the goal of the motion. It is also used to code the location of an O without implying any motion, but where the A and O are in distinct locales. This is also the case for the examples involving the ALL with scope over an IO (see example 714 above). It contrasts with the LOC which marks the general location of the situation and implies that the core participants including the A role are within the general vicinity.

Like the Ablative it can also code orientation, here towards rather than away from something. Again this has scope over S and O.

Unlike the Ablative it is not generally used for extent, either spatial or temporal. The favourite strategy for marking the end point is to use a Locative marked nominal, or a time denoting nominal.

Example 735 above is unusual in that the ALL occurs indicating the extent but my suspicion is that the verb *ŋurrka*-Ø is a vital factor here. It should be noted that even in this example the extent is set apart from the rest of the clause by the co-ordinating particle *ga* "and". This is quite characteristic and occurs also in example 734, where a Locative demonstrative indicates the terminus of the extent. The verb stem *ŋurrka*-Ø is also found coding temporal extent in conjunction with a time denoting nominal (see example 37).

I have a few examples from texts pertaining to school classes where the ALL occurs on numbers in expressions for "from year X to year Y". This may be the result of English influence.

Examples of the various uses of the Allative are given below:

(i) Motion to/into

(744) *napurr+nydja ŋunhi yan ŋal'-ŋalyu+n+dja*
1pl+PROM TEXD EMPH rise, climb(intr)-REDUP+1st+PROM
waŋgany+lil+a bed+lil+a
one+ALL+SEQ bed+ALL+SEQ T101p1
we climbed up onto the one bed

(745) *ga ŋayi+ny dhu bala marrtji ŋula **antiŋ+lil+a,** **ŋayirri'+lil** wo*
and 3sg+PROM FUT MVTAWY go-1st INDEF2 hunting+ALL+SEQ fish+ALL or
warrakan'+lil
animal+ALL
and he will go to hunt something, fish or animals T204p9

(746) *bäwarraŋ' **ŋarŋga+lil** gärri+nya*
animal hole+ALL enter+4th T102B
the animal would go into a hole

(ii) Induced motion or transfer to /into

(747) ***garrwar+lil** ŋal'mara+ŋ*
top+ALL raise(tr)+2nd Mthp35
Put it higher!

(748) *bala walal ganarrtha+ŋal **ŋanapurruŋ+gal+a djäka+lil***
then 3pl leave(tr)+3rd 1pl+OBL+SEQ care+ALL
then they left (it) in our care T018p5

(749) *..yäku mala+ny ŋarra galka+r **dhipal** **raki+lil***
name PL(/group)+PROM 1sg put in/enter(tr)+3rd PROX-ALL tape+ALL
..the names I put into this tape T019p31

(750) *dhärra+n ga, ga **yuta+lil** wapthu+n*
stand-1st+SEQ IMPV-1st and new+ALL hop+1st
(the law) still stands and passes to the young (generation) T208p18

(iii) Orientation towards

(751) *dhärra **walal** ga **gumurr-luŋgurrma'+lil***
stand-1st 3pl IMPV-1st chest-north wind/rain+ALL
they are standing facing north G90

(iv) Location of O

In the next examples the ALL describes the location of O but without involving any necessary motion or orientation.

(752) *ga ŋayi+n **ŋunhawal bala** ŋäkul **martjanba+lil***
and 3sg+SEQ DIS-ALL (MVTAWY) hear(tr)-3rd place name+ALL
and he heard (something) over there at Martjanba BurrW/Rp14

(753) *ga nhä+nha ŋarra nhuna **dhipal+yi djäma+lil***
and see(tr)+4th 1sg 2-ACC PROX-ALL+ANA work+ALL
and if I see you in this work T018p18

(v) To express the state into which something changes

(754) *djetji nhuŋu ŋunhi+yi mäpan+buy nyumukuŋiny'+thi+rr+a ŋayi dhu,*
sore 2sg-DAT TEXD+ANA boil+ASS small+INCH+3rd+SEQ 3sg FUT
yutjuwala+lil+a *wapthu+n*
small+ALL+SEQ hop/change+1st T014
your sore from that boil will become small, shift (change) to (being) little

The next example reveals another metaphorical use in which meaningful sound distinctions ("accents") are described as being dispersed or spread out in words.

(755) *\yurr mayali+n' mala ga ŋunhili+yi gänaŋ'thu+n+dja,*
ADD meaning+SEQ PL(/group) IMPV-1st TEXD-LOC+ANA separate+1st+PROM
barrkuwatj+thi+rr+nydja bitja+n-ya, latjuwarr'yu+n+dja
apart+INCH+1st+PROM do thus+1st-PRT disperse(intr)+1st+PROM
dhäruk+lil+a mala+ŋu+lil
word+ALL+SEQ PL(/group)+ŋu+ALL T010p12
but the "meanings" are separate in these (i.e. two ways of speaking - "heavy" versus "light"), they are distinct and dispersed in the words.

The insights of Hale regarding Warlpiri local cases (Hale 1982) would seem applicable to the Djambarrpuyŋu local cases. Both languages distinguish four local case markers. The same labels are used for these cases except that what is referred to in Yolŋu languages as the 'ablative" is referred to in Warlpiri literature as the "elative". Hale presents a view of these cases according to the notions of figure and ground. In Warlpiri the locative and perlative cases both require local coincidence of the figure i.e. the entity being located or oriented and the ground i.e. the locality associated with the figure. The allative and the elative (=ablative) on the other hand are concerned with the end point and the starting point of the path over which the motion or situation extends.

The contrast between the Allative and Locative in Djambarrpuyŋu can be explicated if, as they appear to be, Hale's observations for Warlpiri are fundamental to the Djambarrpuyŋu local case distinctions as well. However while the Allative is concerned with the end point, it also appears to implicate the final coincidence of the S or O referent with the locality. This contrasts with the Locative which asserts such a coincidence and which appears to have the clause as its scope.

It does not however so implicate the A referent and it is here that there is scope for subtle distinctions to be made regarding the locations of participants simply by choice of local case.

There are certain situations in which it is possible for the A to coincide or not coincide with the location of the O.

For instance, if someone is looking at at bird in a tree the perceiver may be standing far from the tree or within its vicinity (whether in it or standing underneath it). The Allative is appropriate for the first context and the Locative for the second.

(756) *yolŋu+y* *warrakan'+nha* *nhä+ŋal* *dharpa+lil*
person+ERG animal+ACC see+3rd tree+ALL
the person saw a bird in a tree (person is some distance away, O and location coincide)

(757) *yolŋu+y* *warrakan'+nha* *nhä+ŋal* *dharpa+ŋur*
person+ERG animal+ACC see+3rd tree+LOC/ABL
the person saw a bird in the tree (person can be beneath the tree or in it)

In other situations it seems to be the relationship between the O and the locality that is contrasted. For instance if some people are going to cook a wallaby in an earth oven one it is appropriate to say

(758) *batha+n* *walal* *dhu* *weṯi* *gundirr+lil*
cook(tr)+1st 3pl FUT wallaby ant bed+ALL
They will cook wallaby in the earth oven

Since the cooking has not yet begun the wallaby is not in the earth oven. But the future transfer of the wallaby is implied. However, if the wallaby were already in the oven cooking the Locative case is appropriate:

(759) *batha+n* *walal* *ga* *weṯi* *gundirr+ŋur*
cook(tr)+1st 3pl IMPV-1st wallaby earth oven+LOC/ABL
They are cooking wallaby in the earth oven

Here no future motion of the O is implied, they are coincident. Presumably cooking something in an earth oven also entails that the "cooks" be in the vicinity of the earth oven as well.

With predicates or situations involving motion the use of the LOC or the ALL appears to be essentially the one noted by Hale. The Locative is concerned with coincidence and the Allative with the terminal locus.

Another illustration of this is the use of the expression *diltji+ŋur marrtji* back+LOC/ABL, go(intr) "to go (along)behind/ at the back " in contrast to *diltji+lil*

marrtji "to go to the end". The Locative places the S participant in a particular (albeit non-static) location while the Allative indicates movement to that location.

However, with predicates such as *nhäma* "see" and *ŋäma* "hear" the ALL does appear to code the locale with which the O is coincident, although it remains the case that it is also the locus towards which the perception by the perceiver is directed.

To conclude this section I will review possible areas in which functions of the ALL overlap with those of other other case markers

1. ERG and ALL:

It was mentioned above that one of the functions of the ERG-*Thu* was to code Allative case with place names. The corpus has also provided some evidence of other alternations between the ERG-*Thu* and the ALL-*lil*.

a) In example 758 a "cooking" predicate occurred together with an ALL marked nominal denoting the place in which something is cooked. These predicates also permit the ERG-*Thu* (Instr) marking on the same nominal.

(760) *wiripu+ny* ***gundirr+yu*** *gotha+n*
certain+PROM antbed +ERG(Instr) cook(tr)+ 1st
others are cooked by earth ovens

This overlap of possible functions in a nominal marked by the ALL or the ERG (Instr) is also found with "send" predicates

(761) *bili* *ŋarra ŋatha* *djuy'yu+n* ***mutika+lil*** *barpuru,* *dj.....+wal*
COMPL 1sg food send(tr)+ 1st vehicle+ALL "yesterday" personal name+OBL
I already sent the food in the car yesterday, with Dj.....

(762) *bili* *ŋarra ŋatha djuy'yu+n* ***mutika+y*** *barpuru, dj..... +wal*
COMPL 1sg food send(tr)+ 1st vehicle+ERG(Instr) yesterday personal name+OBL
I already sent the food by car yesterday, with Dj.....

b) Orientation

To express the notion of items arranged nose to tail either *ŋurru+y marrtji* nose+ERG go "go by the nose" or *ŋurru+lil marrtji* nose+ALL "go oriented to the "nose"" are possible.

2. ALL and DAT:

a) With three place predicates it would appear that the recipient or IO can be coded by either the ALL or the DAT. The ALL marks the terminal locus of the act of transfer whilst a DAT marks the recipient with additional nuances. These need further investigation but they seem clearly linked with the notion of Benefactive. So with verbs of telling it may convey that they are the intended recipient, of a message, or that the topic is of particular relevance to that particular participant. With verbs of giving the choice of DAT, rather than ALL, to code the recipient can indicate the transfer of responsibility for the theme participant in addition to the physical transfer. With the predicate for "show" it was suggested the DAT were possible if the participant were present (see section 11.2.1.3).

b) With motional predicates the DAT can mark localities that are not the intended terminus. The DAT and ALL marked roles appear to be quite discrete and peripheral. See examples 715 and 716.

One notable feature of the Allative is that it is not used with a temporal function. This appears widespread in the Yolŋu varieties, having been noted for Djapu in the east and Djinaŋ in the west. A strategy commonly found to demarcate a temporal endpoint is to simply state a time after having indicated the fact that an event continues. This is parallel to the strategy described above (section 11.2.2.3.1) in which a nominal in Locative case is used to indicate a spatial end point.

11.2.2.3.4 Perlative

The perlative is concerned with motion along, through or within a locality. The locality must have spatial extent with which the situation expressed by rest of the clause can be coincident. This might be a continuous area or a mass of discrete entities that can be constituted as such. The entity and the location may be in actual contact or their respective spatial domains be parallel with each other. In more abstract uses the perlative marks the means through which the situation occurs. This is like the spatial use in that the situation expressed in the rest of the clause is co-extensive with the nominal marked with the perlative. It provides the context through or within which the situation occurs without invoking the instrumental notion associated with the ERG. Another way to express the distinction is to view the PERL as coding a facilitator through which the situation is channelled while the ERG codes an enabler.

Different uses of the Perlative case are demonstrated in the examples below.

(i) Motion, through, within, along:

(763) *bala* ***dhurrwara+kurr+a*** *gärri'-garri*
then door/mouth+PERL+SEQ enter-REDUP-1st
then (we) went in (/to the plane) through the door T101p5

(764) *wuŋgan* ***bura+kurr*** *ga* *marrtji* ***bimbi+walaŋa+wurr***
dog middle+PERL IMPV-1st go-1st sheep+OBLS+PERL
(/ ***ŋatha+mirri+wurr*** *.....)*
food+PROP+PERL T023Ap1
the dog ran through the middle of /amongst the sheep (/ the (place with) food).

(765) *ga ŋayi ŋuli ga+nha* *gurtha+ny ŋunhi* *marrtji+nya* ***djinawa'+wurr,***
and 3sg HAB IMPV+4th fire+PROM TEXD go+4th inside+PERL
ŋäŋarr+nydja *walal+nydja ŋuli* *marrtjinya* ***warraŋul+kurr+a***
flame/tongue+PROM 3pl+PROM HAB go+4th outside+PERL+SEQ T102Bp3
and the flame of the fire goes about inside and they (the hunters who lit the fires) go about outside

(766) *mitthu+na+ny ŋanya* ***gulun'kurr***
cut+4th+PROM 3sg-ACC stomach+PERL T102Bp15
(they) cut it (animal) along the stomach

(767) *warkthu+rr ŋarra ŋäthil+nydja ga+n* *girri'* *ga+nha* *rurrwuyu+na*
work+3rd 1sg prior+PROM IMPV-3rd clothes IMPV+4th wash+4th
ŋäpaki+w *walalaŋ,* ***wäŋa+kurr*** ***mala+ŋu+wurr*** ***buŋbu+kurr,***
white person+DAT 3sg-DAT place+PERL PL+ŋu+PERL house+PERL
bay *waŋga'-waŋgany+ŋur buŋbu+ŋur*
PRT-OK/"you know" one-REDUP+LOC/ABL house+LOC/ABL T008p1
the first job I did was washing clothes for the white people, in all the houses, in each house

(ii) Stative extent

(768) *dhukarr* ***marrtji*** *ŋorra* ***mayaŋ+gurr***
road go-1st lie-1st creek+PERL Mthp58
the road runs along the creek

(iii) Means

(769) *yurr ŋarra dhu yaka* ***balanda+kurr*** *waŋa* *mirithi+rr,* *lurrkun'*
but 1sg FUT NEG white person+PERL talk-1st INTENS+1st few
ŋarra dhu waŋa
1sg FUT talk-1st T208p14
but I do not talk English very well, I speak a little

(770) *ŋä+ma ŋanapurr ŋunhi* ***rirrakay+kurr+a*** *balanya+wuy+nha gam' "....."*
hear+1st 1pl TEXD sound+PERL+SEQ such+ASS+SEQ PRES
we heard through the public address system such (speech/sound) thus "....."
T101p4

(771) *walal ŋuli marŋgi+thi+rr+a ŋuliwitja+n dhu* ***ŋarra+kalaŋa+wurr+a***
3pl HAB know+INCH+3rd+SEQ TEXD-PERL+1st FUT 1sg+OBLS+PERL+SEQ
rirrakay+wurr, *ŋunhal+nydja wukirri+ŋur+nydja*
voice+PERL DIS-LOC+PROM school+LOC/ABL+PROM T022Ap5
They are learning through my speech there at the school

(772) ***bämara+kurr*** *ŋayi ga+n* ***ŋunhi*** *marrtji+na+ny*
companion 3sg IMPV+3rd TEXD go+3rd+PROM T401p16
s/he went with a companion (so as not to get lost)

(773) *ga yaka+n* ***gurruŀu+kurr+nydja*** *maŋda dhu* ***märra+nha+mi+rr***
and NEG+SEQ relationship+PERL+PROM 3dl FUT get/take+4th+R/R+1st
and two (people) do not marry according to relationships (but according to other means) T023Ap5

(iv) Temporal span

The perlative can be used with a temporal function when indicating a span of time

(774) *bäyŋu ŋayi ga+n nhina+n* ***dhä-gandarr+kurr+nydja,*** *märr*
NEGQ 3sg IMPV+3rd sit+3rd mouth-middle+PERL+PROM "somewhat"
barpuru
"yesterday" T012p10
s/he wasn't living here in between (now and the distant past) sometime recently

11.2.2.3.5 Peripheral coding of "human" denoting nominals

The "local case" marking of "human" denoting nomens involves syncretism of the locative, allative and, optionally, ablative cases which are marked with a single case marker, the OBL *-Kal*. The Perlative, and also optionally the Ablative are coded with the OBLS and the same suffix found on "non-human" denoting nominals (i.e PERL *-Kurr* and ABL *-ŋur*). Like the ACC the marking is obligatory for human referring nominals and 'fuzzy' for higher animates. Pronouns are case marked similarly to "human" nomens. Demonstratives have distinct marking for "human" and "non-human" referents which is similar, but not identical to, that found with nomens and pronominals. The local case marking of the major nominal word classes is summarized below:

	PRONOUNS	NOMENS		DEMONSTRATIVES	
		"human"	"non-human"	"human"	"non-human"
Locative	OBL	OBL	LOC/ABL	OBL stem	LOC stem
Allative	OBL	OBL	ALL	OBL stem	ALL stem
Ablative	OBL /OBLS+ABL	OBL /OBLS+ABL	LOC/ABL	OBL stem /OBLS+ŋur	ABL stem
Perlative	OBLS+PERL	OBLS+PERL	PERL	OBLS+PERL	(Verb stems)

The various functions of the OBL and OBLS with regard to relational case functions are exemplified below.

(i) OBL (Locative/Accompaniment)

(775) *yaka ŋayi dhu ga ŋutha+n* ***ŋäŋdi+wal*** ***bäpawal***
NEG 3sg FUT IMPV-1st grow+1st M(Z)+OBL F(B)+OBL T019p12
she does not grow up with her mother and father

(776) *ŋarra+ny dhuwal ŋäthil djäma ga+n* ***balanda+wal***
1sg+PROM PROX prior work IMPV+3rd white people+OBL T202p5
I was working before with white people

(ii) OBL (Allative)

(777) *barpuru* ***balaŋ ŋarra bala*** ***dentist+kal*** *marrtji+nya dhiyak*
"yesterday" IRR 1sg MVTAWY dentist+OBL go+4th PROX-DAT
filling+gu
filling+DAT T401p14
yesterday I should have gone to the dentist for a filling for this (tooth)

There are examples of higher animates occurring with the OBL. In the next example a distinction is made in the coding of people and "animals" which are suffixed with the OBL and shellfish, turtle and fish which are suffixed with the ALL.

(778) *\bawalamirri+lil dhäruk+nha ŋali dhu ŋunhi+yi bäki* ***yolŋu+wal,***
any/everything+ALL word+SEQ 1+2dl FUT TEXD+ANA use person+OBL
wäyin+gal, *minaŋara+lil,* ***miyapunu+lil,*** *ŋarirri+lil, wiripu+ŋu+lil*
"animal"+OBL "shellfish" +ALL "turtle"+ALL "fish"+ALL certain+ŋu+ALL
wiripu+ŋu+lil
certain+ŋu+ALL T010p7
we apply those 'accents' to (names of /words for) anything - people, "animals", "shellfish", "turtles", fish, all different kinds of things
(Many of these words are generics. For instance, *wäyin* is a generic subsuming a broad group including birds, land mammals and reptiles.)

(iii) OBL and OBLS *+ŋur* (Ablative)

(779) *nhe waka* ***bäpa+'mirriŋu+walaŋa+ŋur,*** *yaka ŋäɳɖi+wal*
2sg part(from one body)) F+KINPROP+OBLS+ABL NEG M+OBL
you are a part from (your) father, not from your) mother Bk186p87

The two nomens in Ablative case could also have been coded as *bäpa+wal* [F(B)+OBL] and *ŋäɳɖi+walaŋa+ŋur* [M(Z)+OBLS+ABL] respectively.

(iv) OBLS+*Kurr* (Perlative)

(780) *ŋarra ŋäkul* *dhäwu* ***mori+walaŋa+wurr***
1sg hear-3rd story F(B)+OBLS+PERL
I heard the story through my father Gut

See also 764 above where the OBLS occurs with *bimbi* "sheep".

(v) Examples of the OBL where the function is not yet clear

There are several examples in the corpus where an OBL marked pronominal occurs when a DAT might be expected. These include the following:

(781) *ŋarra* ***nhanukal*** *djäl+thi+rr* *marŋgi+thi+nyara+w,* *ŋayi dhu*
1sg 3sg-OBL want(semitr)+INCH+1st know+INCH+4th+DAT 3sg FUT
gi *marŋgi+thi* *dhäruk+ku* *yolŋu+w*
IMPV-2nd learn+INCH-2nd word+DAT Aboriginal person+DAT T009Txtp4
I want her to learn, (that) she learn (to read and write) Yolŋu language
(? I want on her behalf that she learn, rather than I want "her")

(782) *buku-djulŋu malŋ'mara+ŋ* ***nhanukal*** *nhä* ***nhanukal*** *ga*
"please" find out(tr)+2nd 3sg-OBL what 3sg-OBL IMPV-1st be
yätjtji+rr
wrong(intr)+3rd G'sLet
?please find out from him/her what is wrong for/with them
(i.e why they do not come to school)

(783) *bili* *layyu+n+a* *dhika* *galŋa-djulŋithi+rr+a*
because be relieved+1st+SEQ INDEFP [skin-be happy]"be pleased"+1st+SEQ
mirithi+rr+a *walal* ***ŋarrakal*** *miyalk+kurruwurr+nydja*
INTENS+1st+SEQ 3pl 1sg-OBL woman+PL+PROM T101p43
?the women were relieved and truly happy on my account (when a problem was resolved)

(784) *napurruwuy+nha dhu* *bu+nha+mi+rr* ***nhanukal\ bili*** *ŋayi ŋunhi*
1pl-EMPH+SEQ FUT fight+4th+R/R+1st 3sg¡-OBL because 3sg TEXD
ŋanya *buma+r*
3sg¡-ACC hit+3rd T004p4
?we will fight on his/her¡ account because s/he hit him/her¡

Potentially the locative/accompaniment or ablative function of the OBL would appear the most likely to be involved here but more work is required to find out the function of this particular case form is in these kinds of arrays. Consideration of any equivalents for these in Dhaŋu varieties may be revealing since Dhaŋu has independent suffixes for each of the local cases with "human" referents.

In section 11.2.2.1 there is some discussion of the possibility that the OBL codes a Causal relational case function. This particular function is described as syntactically distinct in Djapu but I have no clear evidence that this is so in Djambarrpuyŋu.

11.2.3 Unmarked word order in Djambarrpuyŋu

Djambarrpuyŋu is not unusual amongst Australian lanaguages in having remarkably free word order (Dixon 1980 p441-443). According to Tchekhoff and Zorc (1983) the unmarked or discourse neutral order in statements is S V O (p851). If the object NP (assuming broad interpretation of object including ACC, ABL, ALL etc) is a pronoun then the normal order is S O V (p852).

As a preliminary consideration of these claims in relation to my corpus I selected four texts and some elicited utterances and coded the ordering relation between the core roles A, S, O and IO and V. All the material is from older speakers. The four texts include two monologues. In one the speaker recorded the meanings of various words and in the other she delivered a narrative on her working history. In both of these I was the only audience but the speaker was quite used to recording texts for future reference without my being required to follow them at the time. A third text is a conversation between two older women in which other people than myself were present. For the most part however the exchange is a dialogue between the two older women. The fourth text is from an older man recorded on one of my early visits to Galiwin'ku. However, while I myself, would have been 56a highly uncomprehending audience, the recording had been requested and attended, by a fully comprehending Djambarrpuyŋu adult.

All predicates for which the transcription or interpretation was clear were coded, although I did not code peripheral case roles. For discontinuous nominal expressions the position of the first constituent was coded. Because there is no grammatical requirement that core arguments be mentioned in a clause, various possible combinations were considered to see if they produced alternative tendencies. These are presented in Table 53 following.

Table 53: The Ordering of Core Arguments in Four Djambarrpuyngu Texts

	Text 1 (T102B)	Text 2 (T010)	Text3 (T008Txt)	Text4 (Br)	Elicited utterances (T008)
No of predicates coded	328	204	102	195	62
% with no core arguments present	approx. 33%	17%	8%	15%	4%
Transitive predicates:					
A/O V					
(i.e. V final)	77.50%	60.00%	58.82%	58.82%	63.16%
AOV	62.50%	46.67%	47.06%	26.47%	57.89%
OAV	15.00%	13.33%	11.76%	32.35%	5.26%
AVO	15.00%	36.67%	35.29%	26.47%	31.58%
VAO	7.50%	3.33%	5.88%	2.94%	5.26%
VOA				2.94%	
OVA				8.82%	
	(40)*	(30)	(17)	(55)	(19)
(i) The following figures indicated the relative ordering of A and O independently in relation to the verb, whether the verb has one or two arguments:					
AV	83.87%	84.85%	72.73%	84.09%	95.83%
VA	10.00%	15.15%	27.27%	15.91%	4.17%
	(62)	(33)	(33)	(44)	(24)
OV	77.92%	81.82%	56.00%	51.61%	61.90%
VO	22.08%	18.18%	44.00%	48.39%	38.10%
	(77)	(41)	(25)	(31)	(21)
(ii) The next set of figures compare the relative ordering of A and O without respect to the position of the predicate:					
AO	77.50%	86.67%	82.35%	55.88%	90.00%
OA	22.50%	13.13%	17.65%	44.12%	10.00%
	(40)	(4)	(17)	(34)	(20)
Intransitive predicates:					
SV	80.00%	73.12%	90.63%	74.32%	95.33%
VS	20.00%	26.88%	9.38%	25.68%	4.17%
	(75)	(93)	(32)	(74)	(24)
Semitransitive predicates:					
SV	69.23%	80.00%	92.31%	100.00%	100.00%
VS	30.77%	20.00%	7.69%		
	(13)	(5)	(13)	(4)	(2)
IOV	73.33%	40.00%	85.71%	50.00%	100.00%
VIO	26.66%	60.00%	14.29%	50.00%	
	(15)	(5)	(7)	(4)	
S IO	81.82%	80.00%	100.00%	100.00%	100.00%
IO S	18.18%	20.00%			
	(11)	(5)	(6)	(4)	(2)

*The figures in parentheses indicate the actual number of examples that occurred. with the relevant arguments. The percentages are based on these figures. The numbers are very low for many categories involving semitransitive predicates.

I do not present material for ditransitive stems given the range of combinations that occur and the limited data regarding the potential range occurring in the selected corpus. Of the 7 examples noted across the corpus with all three arguments present, 6 have all three before the verb (four ordered A IO O, one O A IO and one IO A O) and the other is O A V IO. There are some 54 other examples across the corpus which have less then three core roles explicitly mentioned.

On the basis of these scores the predominant ordering is for the predicate to be final, i.e. for A/O V and SV. This is consistent across all text types. The ordering AOV is also favoured except in Text 4 where the OAV order outranks AOV. The next most favoured ordering is AVO followed by VAO. These tendencies would seem to be supported by a consistent overall tendency for A to precede the predicate, whether O is mentioned or not, for O to precede V, whether O is mentioned or not, and for A to precede O.

The fact that AOV is the most favoured in the texts is surprising in light of Tchekhoff and Zorc's finding that SVO (i.e AVO) is the unmarked or discourse neutral ordering, unless the O is a pronominal object of some kind. In light of this I went back and recoded the material to see whether the preferences that appeared could be explained by the distribution of pronominals.

Unlike Tchekhoff and Zorc I was only considering direct objects, and did not take peripheral roles into account. I coded the occurrence before a V and following a V of a single pronominal, a single demonstrative and a nomen (either alone or in combination with other nominals) functioning as Os.

The following table presents the results. There are some discrepancies with the original data due to the fact that I must have missed some examples in the original coding. However, these do not affect the overall picture.

	Text 1	Text 2	Text3	Text4	Elicited
O before V					
Pro	2.53%	6.38%	7.69%	3.23%	43.48%
Dem	5.06%	8.51%		6.45%	4.35%
Nomen(+)	60.76%	53.19%	46.15%	41.94%	17.39%
V before O					
Pro	3.8%		15.38%	12.90%	4.35%
Dem	1.27%		3.85%		
Nomen(+)	26.58%	31.91%	26.92%	35.48%	30.43%
	(79)	(47)	(26)	(31)	(23)
	+2	+6	+1		+2

Pro - only a pronominal codes the O
Dem - only a demonstrative codes the O
Nomen (+) - either a single nomen or a nominal expression including a nomen codes an O
Parentheses around a number indicate the number of predicates considered. The number underneath indicates the discrepancy with the original coding.

This material did not reveal the findings expected from Tchekhoff and Zorc in that the occurrence of the AOV ordering does not show a predominant correlation with the coding of the O with a pronominal. Indeed it appears that the favoured ordering indicated in the initial coding is to be attributed to the occurrence of nomens before the verb, at least for the four texts. In striking contrast the relative frequency of OV and VO is inverted for the elicited utterances. Only this material shows the preferential ordering of AVO, reflecting the unmarked ordering corresponding to that described in Tchekhoff and Zorc. One possible explanation for the elicited examples is that the regular English ordering SVO is having an impact on the ordering in Djambarrpuyŋu responses. At least some of Tchekhoff and Zorc's examples are attributed to translations from English, but it is not clear to what extent this constitutes the data base (see ibid p862).

However the occurrence of nomens in O function following the verb is not uncommon in Djambarrpuyŋu as the data considered here confirms. The relative position of the O may well be attributable to a specific discourse function. A more detailed consideration of the texts coded here may reveal that fronting features prominently, so much so, in fact that it occurs more frequently than the "unmarked" ordering.

The data did not contain proportionally as many instances of pronominals coding O roles as nomens. However in three of the texts they occurred both before and after

the verb. Furthermore the favoured position appeared to be after the verb. Again this is contrary to the findings of Tchekhoff and Zorc. But yet again the elicited examples show the inverse pattern to that indicated for the texts (and thus these do correspond to the findings of Tchekhoff and Zorc).

This discrepancy is puzzling and I hesitate to make further comment on the relation between the text and elicited data. The data involving Os coded by single pronominals in the texts is fairly limited and it would be necessary to consider further data before suggesting a possible unmarked order. Furthermore all the elicited utterances concerned 1st and 2nd person pronouns, whilst the texts were predominantly about 3rd persons (the examples with pronominals quoted in Tchekhoff and Zorc all contain 1st person pronouns (see p852)).

On the basis of this data the unmarked ordering of the first mention of core roles in Djambarrpuyŋu is AOV. The fact that pronominals in elicited contexts favour preverbal contexts may simply be a reflection of this unmarked AOV ordering (rather than a partial fronting as Tchekhoff and Zorc suggest). The AVO alternative, while not uncommon, consistently ranks second to the occurrence of A and O before the verb. The major exception in my corpus is with elicited examples and this is just the context in which all the material considered here was recorded, the influence of English is likely to be greatest.

It is also of note that the unmarked order described for Djapu by Morphy is that indicated in the Djambarrpuyŋu texts i.e. AOV and SV (see Morphy 1983 pp81-2).

Given the variation in the ordering that is tolerated, the positing of an unmarked ordering and 'fronting' is not unproblematic. I would not want to dispute the fact however that occurrence in the front of a clause is a significant to Djambarrpuyŋu discourse. The data presented here however, does suggest the need for further consideration. In some of Tchekhoff and Zorc's examples the ordering OVS is depicted as fronting of the O (see for instance number 12 (1983 p855)). Given the unmarked ordering AOV, we might want to view this as dislocation of the A to the right. The result is still that O occurs in clause initial position.

In addition to fronting to clause initial position Tchekhoff and Zorc also discuss "displacing" an element "to the left of its expected position", not necessarily to the beginning of the clause. I do not believe we have yet seen conclusive evidence as to what the unmarked ordering of all clause constituents actually is. With the text

corpus now available it is hoped it will be possible to add to our understanding or ordering tendencies in the future.

11.2.4 Existential clauses

There are a number of stance and motion predicates which are used to express existence as well as particular stances/motions. This is a widespread feature of Australian languages which usually have no copula verb. There is some overlap with the relations expressed in equational clauses, presumably to allow the latter a wider range of TMA categories. The other strategy that permits relations expressed in equational clauses to be fully coded for TMA is the *-Thi-* INCH suffix. The relationship between equational clauses, those with existential verbal predicates and the INCH has yet to be fully explored.

The existential verbal predicates noted so far are:

nhina-$Ø_a$/ḏapthu-N (Pl)	sit, sit down; live/stay; be
ŋorra-$Ø_a$	lie, lie down; be
dhärra-$Ø_a$/djingaryu-N	stand, stand up; be
gorru-N	to be hanging; be high, raised; be
marrtji-$Ø_i$	go/come, walk; continue to be

There are also two synonymous verbs *bäni-*$Ø_i$*/bulyu-*N used to code existence of/in/on water.

Another area that requires further investigation is the parameters involved in the choice of existential predicates in different contexts. Some examples of these predicates in existential functions:

(785) *ŋunha nhaŋgu djorrany' warrpam' dhunupa, ŋorra ga*
DIS 3sg-DAT paper+PROM all right/correct lie-1st IMPV-1st
her/his papers were there all in order T101p36

(786) *rom ga ŋunhi+yi+ny dhärra yan, weyin+ŋu+mirr*
law IMPV-1st TEXTD+ANA+PROM stand-1st EMPH long+ŋu+PROP
bitja+n linygu+n dhu ga djingaryu+n
do/be thus+1st "same"+SEQ FUT IMPV-1st stand+1st T015p10
that law still exists, it will continue to be for a long time

(787) *ŋayi ga+n balanya+mirri+y, minista+ny ŋanapurruŋ nhina+n, ga*
3sg IMPV+3rd such+PROP+ERG minister+PROM 1pl-DAT sit+3rd and
yoloŋu muka yan djiŋiyiŋi, yaka muka ŋäpaki
Aborigine PRT-OK EMPH person's name, NEG PRT-OK white person T008Txt
at that time we had a minister living (there), and he was an Aborigine, Djiŋiyiŋi, not a white person

(788) ***gorru+m ga*** *datitji+ŋur*
be high+1st IMPV-1st Pouteria sericea (Wild Prune)+LOC/ABL
dulwarra+mirr+a
paperbark+PROP+SEQ T022ln219
(she) was up in the Wild Prune tree, wrapped in paperbark

(789) *maŋdaŋgu+ny dhu ga ŋunhi djäl+nydja* ***marrtji+n*** *yana+n*
3dl-DAT+PROM FUT IMPV-1st TEXD want+PROM go-1st EMPH+SEQ
bitja+ana bili, weyin+ŋu+mirr+a
do/be thus+4th "same" long+ŋu+PROP+SEQ T019pA
their love continues on and on for along time

Examples in which these predicates occur in clauses similar to equational clauses are:

(790) *waŋgany muka ga+n yan wäŋa+n* ***dhärra+n***
one/certain PRT-OK IMP+3rd EMPH place+SEQ stand+3rd
ŋäpaki+mirr+nydja dhuwal miliŋinbi ga ŋunha yirrkala
white person+PROP+PROM PROX place name and DIS place name OMSln12
Only certain places had white people, Miliŋimbi and Yirrkala

(791) *ŋayi dhu ga* ***dhärra*** *ŋunhi wäŋa lukunydja galumanyaŋ*
3sg FUT IMPV-1st stand-1st TEXD place ornate ornate
ŋunhi+ŋu+mirr girri'+mirr
TEXD+ŋu+PROP things+PROP T009p6
that place (a new house) will stand there ornate with all those things

(792) *ŋarra dhuwal djurruk+nha, dhiwkthiwk+nha,* ***nhina+ny*** *ga*
1sg PROX wet+SEQ wet+SEQ sit-1st+PROM IMPV-1st
I am sitting here wet T013p131

(793) *ga bäyŋu walalaŋgu+wuy wäŋa waŋdi+nyara+w dhalakarr, dhärra+nha ŋuli*
and NEGQ 3pl-DAT+EMPH place run+4th+DAT space stand+4th HAB
ga+nha
IMPV+4th T009p30
and there was no space (standing) for them to go

This last example can be contrasted with an equational clause from another text:

(794) *bäyŋu+n dhalakarr,* ***marrtji+nyara+w***
NEGQ+SEQ space go+4th+DAT T101p21
there is no space to move

See also 254 for an example with *marrtji-Ø* "go/come", and 391 for an example with *ŋorra-Ø$_a$* "lie".

11.3 Reflexive-mutualis-Reciprocal clauses

11.3.1 Overview

The morphology of the Reflexive-mutualis-Reciprocal suffix *-mi-* is described in section 7.5.4.2. It is used to code reciprocal, mutualis and reflexive events or activities. The term mutualis is adopted following Dench and Evans (1988) and Waters (1989) to describe situations in which participants are jointly engaged. The following selection from the text corpus demonstrate this range of functions. (Note that unless otherwise indicated the verb roots are transitive).

1. The Reciprocal

(795) ***nhă+nha+mi+rr*** *maŋda dhu miyalk ŋirramu*
see+4th+R/R+1st 3dl FUT woman man T019p7
the two see each other, the woman and the man

(796) *ga* ***ŋarrju+n+mi+rr*** *maŋda dhu balanda ga yolŋu*
and speak angrily+1st+R/R+1st+SEQ 3dl FUT white person and Aborigine
and they argue, the non-Aborigines and the Aborigines T209p20

(797) *yaka liya dhuwal warraŋul, ŋali ŋuli* ***nhă+nha+mi+rr***
NEG head PROX outside 1+2dl HAB/HYP see+4th+R/R+1st T024Ap7
not the exterior/outside part of the head we see of each other
(vs the inner part of the head we think with)

2. The Mutualis

(798) *bala nhă+ma+n miyalk+kurru+y+nydja, dharrwa+y+nha\ bala*
then see+1st+SEQ woman+PL+ERG+PROM many+ERG+SEQ then
bu+nha+mi+rr+a ***ŋarrju+n+mi+rr+a*** *walal ga*
hit+4th+R/R+1st+SEQ speak angrily+1st+R/R+1st+SEQ 3pl IMPV-1st
ŋăthi+nya+mi+rr *gulku+n' yolŋu'-yulŋu, gurrutumirr+a mala*
cry(intr)+R/R+1st group+SEQ person-REDUP, relatives+SEQ PL(group)
then the women see (the coffin), then strike themselves and cry out .....they cry together, many people, the relatives (during a funeral ceremony) T204p29

3. The Reflexive

(799) *way, dhuwal nhe bitja,* ***nhă+nha+mi+rr*** *nhunapi+nya nhe*
hey, PROX 2sg picture see+4th+R/R+1st 2sg-EMPH+ACC (2sg)
Hey, this is your picture, look at yourself. T024Bp1

(800) *ga ŋarra ga ŋunhi nhakun ŋarranhawuy+nha ŋarra nhä+nha+mi+rr*
and 1sg IMPV-1st TEXD like 1sg-EMPH+ACC (1sg) see+4th+R/R+1st
and I then saw/ realized it was me T101p33

(801) *bitja+rr mak ŋayi marrtji+n ŋarrtju+n+mi+na+n*
do thus+3rd maybe 3sg go+3rd speak angrily+1st+R/R+3rd+SEQ
ŋanyapi+nya ŋayi, ŋunhi dirramu+ny
3sg-EMPH+ ACC (3sg) TEXD man+PROM T022p12
thus he was reproaching himself, that man

The R/R can attach to stems of all transitivity types but there are correlations between transitivity types and the possible functions of this suffix. Intransitive verbs for instance only occur in mutualis function, and concomitantly not in reflexive and reciprocal functions. The correlations are shown in the table below.

Transitivity of basic verb stem	R/R function		
	Reflexive	Reciprocal	Mutualis
Intransitive	-	-	yes
Semitransitive	(-?)	yes	yes
Transitive	yes	yes	yes
Ditransitive	yes	yes	yes

(-?) The potential for semitransitive stems to occur with a reflexive sense has yet to be determined. None occur in the corpus.

The R/R construction does not provide a general syntactic strategy affecting participant role relations such as an intransitivizer or an antipassive. The only categorical role shift associated with the construction is the demotion of A to S with transitive and ditransitive verb stems. With intransitive and semitransitive verbs the S participant is constant to R/R and non-R/R constructions. The case marking of other core roles is also not affected. Thus it is possible for an O to be present in a clause with an underlying transitive verb resulting in an S-O case array. This is not characteristic of any of the major case arrays found with basic verb stems. An example of a distinct O occurs in the following:

(802) *mak märrma' dhu ga yolŋu maŋda, märrma' bäpurru,*
maybe two FUT IMPV-1st person DL(3dl) two clan
ŋä+nha+mi+rr manikay
listen to/hear+4th+R/R+1st song T024Ap7
maybe two people, two clans listen to each others' songs

However, while not a general syntactic strategy, the R/R constructions do appear to be concerned with the core participant roles A, S, O and IO. This is reflected in

three parameters relevant to this construction, namely number, the subsuming of participants within one role and coreference between participants.

1. Number

Reciprocal and mutualis functions require a non-singular S. Singular S is confined to reflexive function.

2. Subsuming of participants within one role

This occurs with the reciprocal function where the S participant can subsume participants associated with two separate core roles in agnate non-R/R constructions. The roles for which this has been observed are A and O, S and IO or A and IO, all core roles. The reflexive does not subsume participants under S in this way.

The role "combinations" in reciprocal clauses are shown in the following examples:

(a) S and IO (Reciprocal)

(803) *ga buna yan ŋayi nhuŋu dhu ŋunhi*
and arrive/meet up(semitr)-1st EMPH 3sg 2sg-DAT FUT TEXD
mokuy+nydja, ***buna+nha+mi+rr*** *nhuma dhu maŋda*
corpse/ghost+PROM arrive/meet up(semitr)+4th+R/R+1st 2pl FUT DL(3dl)
and the ghost meets up with you, you two meet up together/with one another
T010p27

This example, occurring spontaneously in a text, demonstrates nicely in two consecutive clauses, the shift from an S-IO array to an S arrray with an R/R predicate.

(b) A and O (Reciprocal)

(804) *bala ŋanapurr yurrnha* ***dhä-malika+nha+mi+na+ny***
then 1pl "and then" "ask for something"+4th+R/R+3rd+PROM
\walal ŋanapurru+ny dhä-malika+ŋal ga ŋanapurr walala+ny
3pl 1pl+ACC "ask for something" +3rd and 1pl 3pl+ACC T020p18
afterwards we can ask one another for things, they ask us and we them

(805) *yaka maŋda dhu* ***märra+nha+mi+rr*** *ŋayi dhuwa miyalk,*
NEG 3dl FUT take/get(tr)+4th+R/R+1st 3sg moiety name woman
ga ŋayi dhuwa dirramu
and 3sg moiety name man T023Ap5
the two cannot get married, a Dhuwa woman and a Dhuwa man

The following example demonstrates the A-O array associated with the same verb root as that in the previous example:

(806) *bala ŋarra ŋunhi roŋlyi+na+ny, ga märra+ŋal dirramu+nha+ny*
then 1sg TEXD go/come back+3rd+PROM and get/take+3rd man+ACC+PROM
then I returned and married a man T008p11

(c) A and IO (Reciprocal)

(807) *ga yaka nhuma dhu yäku* ***lakara+nha+mi+rr bala-räli'yu+n+mi+rr***
and NEG 2/3dl FUT name tell+4th+R/R+1st back and forth+1st+R/R+1st
and you (two) don't say (your) names to each other T023Bp3

3. Coreference between participants

Just as in other types of main clauses coreference between an S and other participants in the clause is coded by emphatic pronouns or pronominal phrases. In R/R clauses these forms occur with coreferential O and IO roles in reflexive and reciprocal functions. In both these contexts the same participants are involved in more than one role. In reflexives the same entity is involved in two different roles, while in reciprocals two distinct participants are involved in the same roles simultaneously.

The emphatic pronominal phrases are case marked for the role appropriate to the case array of the basic verb stem, even though the S of the R/R construction may subsume participants associated with the core case array of that stem. Some examples of A and O identity in reflexive constructions were given above (see 799-801). Some examples involving reciprocals are given below:

(a) S and IO (Reciprocal)

(808) *bala maŋda dhu djäl+thi+nya+mi+rr maŋdaŋ+gu+wuy maŋda*
then 3dl FUT want+INCH(semitr)+4th+R/R+1st 3dl+DAT+EMPH (3dl)
then the two want each other T023

(b) A and O (Reciprocal)

(809) *\wiripu+ny dhu ga yothu maŋda bul'yun\ bala maŋda dhu ga*
other+PROM FUT IMPV-1st child 3dl play+1st then 3dl FUT IMPV-1st
*bitja+n+dhi+n, **maŋdanhawuy+nha** maŋda,*
do thus-1st+EMPH+SEQ 3dl-EMPH+ACC (3dl)
barr'-barrmara+nha+mi+rr
tear/cut/split-REDUP+4th+R/R+1st
(in) another (context) two children are playing. Then the two do thus cause cuts in each other T017p7

The use of pronominal emphatic pronouns/phrases to code coreference is by no means confined to the R/R construction. Other uses are described in section 5.7.2.

In the text based sample of some hundred naturally occurring R/R clauses there is no evidence that coreference involving peripheral roles or possessors alone can trigger the R/R construction. While this requires more rigorous examination it would appear that the R/R construction is only concerned with relations between participants involved in core roles. As the following example reveals, it is however possible to have both core and non-core coreference in the same clause:

(810) *ŋunhi+ny **bapmara+nha+mi+rr** ŋayi dhu ya-bitja+n*
TEXD+PROM blotch, daub+4th+R/R+1st 3sg FUT PRT-do thus+1st
ŋanyaŋi+nya ŋayi gula+y nhanukiyin+gal nayi]
3sg-EMPH+ACC (3sg) faeces+ERG(instr) 3sg-EMPH+OBL (3sg) T017p12
that one splotches himself with his own faeces

11.3.2 The expression of reflexive and reciprocal function without the R/R suffix

There are a handful of examples of clauses in which reflexive and reciprocal relations between core participants are expressed without the R/R *-mi-* suffix on the verb. These all contain emphatic pronominal phrases. We can dismiss from this group those predicates which are non-inflecting. With such predicates the emphatic proforms alone signal reciprocal and reflexive functions since the suffix cannot occur. The following examples shows the non-inflecting predicate *maŋgi* "know" in a reciprocal clause and the English loan *dhiŋkiŋ* "think" in a reflexive clause.

(811) *maŋgi napurruŋgu+wuy napurr\ walal ŋarraku maŋawiny maŋda maŋgi*
know 1pl-DAT-EMPH (1pl) 3pl 1sg-DAT address term 3dl know
\ ga ŋarra maŋdaŋ maŋgi
and 1sg 2dl-DAT know T208p7orig
We know each other, they, the two maŋawiny, know me and I know them (two)

(812) *nhunapinya nhe dhu ga wagana dhiŋkiŋ*
2sg-EMPH-ACC 2sg FUT IMPV-1st desire think T009p33
Think about your own desires

The remaining examples of predicates without an R/R suffix all involve the reflexive function. In two there is an emphatic pronominal phrase in Accusative case and an apposable nominal, i.e. *dhäruk* "word" and *rirrakay* "voice". The predicates are *meŋgu-Ŋ* "forget" ("When I forget my voice and children" - a euphemism for speaking about death) and *nherrpa-N* "put" ("You put your words to paper"). A potential explanation for the non-occurrence of the R/R in these instances may have to do with the relative separation of the whole and the part in these particular contexts. The final example involves the predicate *biḏi'yu-* "paint" with a list of Os including the self amongst items such as canoes and bark. It contrasts with many other examples in which this predicate occurs with the R/R suffix. This particular instance might be explained by the fact that the list contains a mixture of coreferential and non-coreferential entities. The example with *meŋgu-Ŋ* just mentioned also contains such a combination.

On the available evidence it seems that once we exclude non-inflecting predicates only the reflexive appears coded in variety of ways. There are three alternative codings. It can be coded with a basic verb stem and a coreferential O participant coded with an emphatic pronominal or pronominal phrase. It can be coded with a verb bearing the R/R suffix and regular coding on both coreferential roles. Finally it can be coded with a verb bearing the R/R suffix and a coreferential O coded with an emphatic pronoun or pronominal phrase. The latter is the most commonly occurring.

11.3.3 Relationship of the R/R construction to prototypical notions of the reflexive and reciprocal

The typologically prototypical reflexive and reciprocal involve coreferential constraints between the core participants "subject" and "object" (Comrie 1985 p326). Djambarrpuyŋu R/R *-mi-* constructions while associated with these functions is not bounded by them. A minor point of difference is that coreference is possible with either O and IO (at least for reciprocal function, the potential for the reflexive to identify A and IO is not known). The most striking difference is the use of this construction to express mutual involvement in an activity, with no coreferentiality required between participant roles associated with the base verb.

This is revealed in its occurrence with intransitive verbs and S arguments with non-singular reference. Such examples include:

(813) *marrtji bukmak ŋunhi+yi, **ŋal'yu+n+mi+rr** ga nhuma mala+ny*
go-1st all TEXD+ANA rise(intr)+1st+R/R+1st IMPV-1st 2pl group+PROM
yolŋu'-yulŋu
person-REDUP
they all went and gathered together, people of your group T022p2

(814) *ŋayi+ny ga+nha ŋatha **ŋal'yu+n+mi+nya** ŋunhili+n*
3sg+PROM IMPV+4th food rise(intr)+1st+R/R+4th TEXD-LOC+SEQ
munatha+ŋur+a, märrma'+ŋur yan garminydjarrk+ŋur
sand+LOC+SEQ two+LOC/ABL EMPH sand+LOC/ABL T016p14
The food was piled up in those two (sacred) sand sculptures
(Note that in this example a singular 3rd person pronominal is used with non-singular reference - this occurs in other contexts as well.)

(815) *walal ga **ŋäthi+nya+mi+rr+a** gulku+n' yolŋu'-yulŋu,*
3pl IMPV-1st cry(intr)+4th+R/R+1st+SEQ group+SEQ person-REDUP
gurruṯumirr+a mala
"relatives"+SEQ PL(/group) T204p29
they were crying together, the group of people, the relations

It is not clear to what extent coreference or the subsuming of roles is relevant to the mutualis function. My suspicion is that coreference relations are unspecified in this use of the R/R construction. This can be attributed to its use to code the collective involvement of two or more participants in any kind of activity. It allows for sequences of verbs of varying transitivity sharing the same set of S participants, including activities that may be reflexive or reciprocal. In the following example for instance, verbs of different transitivity types occur with the R/R suffix describing a range of group activities

(816) *luŋ'mara+nha+mirr walal dhu, ga **waŋa+nha+mi+rr***
assemble(tr)+4th+R/R+1st 3pl FUT and talk(intr/semitr/tr)+4th+R/R+1st
*ga **yora+nha+mi+rr***
and agree (semitr)+4th+R/R+1st T024p8
they assemble together, talk and come to an agreement

In example 798 the activity described by *bu+nha+mi+rr* [strike(tr)+4th+R/R+1st] is reflexive. It refers to the action of the woman hitting themselves. In the example just given it is possible to view the last two verbs as describing reciprocal activities. In all these cases however the reflexive and reciprocal activities are acted out collectively and it is this that seems to be vital to the use of the R/R in these examples.

In the next example a transitive predicate occurs with the R/R together with a plural A argument and an independent O argument:

(817) *ga ŋunhili signpost+ŋur linyu bitja dapmara+nha+mi+rr*
and TEXD-LOC signpost+LOC/ABL 1dl picture clench(tr)+4th+R/R+1st
and there at the signpost we took a picture (i.e. one person took a picture of another)

There is no evidence here for either a reflexive or reciprocal relations between the core roles. Its "mutualis" function would appear to be linked to the collective activity inherent to the taking of pictures.

Given the potential for both a collective and coreferential perspective in certain contexts, and the fact that the collective interpretation is the only one available in others, notably with intransitive verb stems, it seems that in mutualis function coreference relations are left vague or unspecified. Some support for this is provided by the fact that there is no evidence in my corpus of coreferential participants being overtly indicated with emphatic pronominal pronouns in connection with the mutualis function. This is in marked contrast to their occurrence in connection with the reflexive function.

11.3.4 The "mutual" relation as a potential semantic characterization fundamental to the R/R construction

All functions of the R/R share an orientation to an event in which participants are seen as mutually or collectively engaged/involved. The S marked participant may be part of a collective involved in a particular activity or coreferential with an O or IO in which the participants are either mirroring the state/event with respect to one another or acting on themselves. The least obviously "mutual" activity is the reflexive, in the sense that the O cannot be seen as actively collaborating in an event. However, an action where the A and O are coreferential clearly concerns a much closer relationship between the participants than one where they are not. The fact that the source of the two roles is a single entity suggests a "mutual" relation between the participants not unlike that found between participants in collective or reciprocal activities.

This notion of a "mutual" relation between participants also offers an explanation for the use of the R/R in those contexts where a non-coreferential O is present such as the taking of a photograph, participating in a conversational exchange or listening to songs.

The reciprocal and mutualis functions appear to be the more central uses of this suffix. The situation in regard to the reflexive is less clear since formally it is at the intersection of the use of the R/R suffix and the general use of the emphatic pronouns to code coreference within a clause.

The existence of examples with coreference between core participants but without the R/R suffix on the verb (see section 11.1.3.2 above) is not surprising, given the very general strategy available for coding intraclausal coreference using the emphatic pronouns. However, it is also the case that the general concern of the R/R construction is with participants associated with core roles. I suggest that the involvement of the R/R construction with core roles is not directly motivated by considerations of coreference per se but stems from the use of this construction to code situations where the alignment of participants with the "subject" (i.e. A or S) and "object" (i.e. O or IO) of two-place or three-place case arrays is not seen as involving discrete autonomous participants in the respective roles. In all three functions of R/R clauses there is a sense in which the relative autonomy of the participants is diminished. In the mutualis function this is reflected in the focus on situations as collective enterprises. In reciprocal function participants are allied with two roles simultaneously and in reflexive function a single entity participates in two different roles.

Corresponding with the distance these functions have from the prototypical transitive situation where unique participants play distinct roles and have some effect on one another, is the absense of the A case from this construction.

Each of the functions of the R/R construction appears to have some marked relation to simple clauses. This is reflected in the three parameters described in 11.1.3.1 above and summarized in the following table:

	Number of S	Subsumes roles in agnate simple clauses	Coreference between core roles required
Reflexive	singular	no	yes
Reciprocal	non-singular	yes	yes
Mutualis	non-singular	yes and no	no

The marked relation between R/R clauses and simple clause is discussed from a different perspective by Waters in regard to Djinang (1989 pp147-152).

In his analysis Waters has proposed a notion of "skewed subject" to explain the four functions of the Djinaŋ RECIProcal particle *inydji*. It should be noted that in addition to the three functions that occur in Djambarrpuyŋu, Djinaŋ also uses this particle as an intransitiviser.

Waters' analysis focuses on the marked subject reference in R/R clauses relative to that associated with the transtivity type of the underlying verb. This can be "skewed" according to whether the activity is "distributed across actors", i.e. "when the referents within the scope of the subject each perform the action" (ibid p148) or whether the subject is the undergoer of the action and finally whether the undergoer(s) and actor(s) are coreferential.

The main difference in the feature Waters proposes to those I have suggested as relevant for Djambarrpuyŋu is in the notion "distributed aross actors". This is a feature which is shared by reciprocal and mutualis functions and which conveys a sense like that in the English expression "They each told the story". My understanding of the mutualis function in Djambarrpuyŋu is that it is concerned with collective activities which do not necessarily require that each person actually carry out the action. For instance the verb *waŋanhamirr* [talk+4th+R/R+1st] is used of meetings in which lots of people are present but may not actually speak. My equivalent parameter is that of number which is motivated by the mutual engagement of participants in a situation. It is possible the apparent plural use of the PROP *-mirr(i-)* suffix with certain adjectives (see section 9.1.1.7) may be connected with this feature of the R/R suffix.

I also perceive the R/R construction in Djambarrpuyŋu as concerned with interactions between core roles, rather than specifically focused on the subject. However, without further research it is not possible to resolve the nature of the relationship between the two construction in the two varieties.

11.3.5 Possible origins of the R/R

Morphy (1983) posits an explanation for the central uses of this suffix in seeking a source of *-mi-* in the PROP *-mirr(i-)*. The formal correlations between the PROP *-mirr(i-)* and R/R *-mi-* with inflections *-mi+rr* (1st and 2nd), *-mi+n* (3rd) and *-mi+nya* (4th) are striking (see section 9.1.6). Morphy suggests that in the past the PROP functioned as a comitative as well as a proprietive i.e. coding an "accompanying" sense not found with the PROP suffix synchronically (see section

9.1). We have seen that the PROP can attach to verb stems. Assuming this occurred in the past as well, Morphy goes on to propose that at some point the nominalized verb with the comitative sense became analyzed as a verb plus an S argument rather than a nominal plus modifier. The semantic link between a comitative "with X" and the mutual engagement in a reciprocal or collective activity is obvious. (See Morphy 1983 p119-20 for the details of this argument).

One formal difference concerning the two suffixes that this does not explained is why they attach to different stems with verbs belonging to the N conjugation. It is possible that once the R/R developed the verbal function it attached to stems in the same ways as the other argument changing suffix, namely the CAUS *-mara-* (see section 7.5.4).

On the evidence of the Djinaŋ data Waters suggests that the reciprocal function is the original, given that the Djinaŋ RECIProcal suffix is etymologically related to the kinship dyadic suffix (1989 p149)).

It is of note that despite the formal differences in the coding of the R/R functions in Djinaŋ and Djambarrpuyŋu, a similar array of functions occurs in the two distantly related varieties.

11.4 Questions

11.4.1 Polar questions using intonation

One type of polar question is distinguished from declarative clauses by intonation. A characteristic rising-falling contour occurs over the last word(s) of the utterance.

Some examples from the texts are:

(818) *ga dhiyaŋuny bala walal ga ŋunhi badak bäki ŋunhi+yi rom ŋilimurruŋ*
and "now"+PROM 3pl IMPV-1st TEXD still use TEXT+ANA law 1+2pl-DAT
And are they still using that law of ours nowadays? T102Bp9

(819) *ga yaka+n ŋuli lawu+nha+ny walala+ny*
and NEG+SEQ HAB bite+4th+PROM 3pl=ACC T102Bp3
And (it) doesn't bite them?

(820) *way, m----i, marŋgi nhe dhäwu+w+ny't ja*
hey person's name know 2sg story+DAT+PROM
Hey M----i do you know the news? T003p4

(821) *yaka nhuŋu d----n+dhu lakara+nha*
NEG 2sg-DAT person's name+ERG tell+4th T003p5
Didn't D----n tell you?

(822) *mumalkur+wal*
MMBW+OBL T003p7
(Is she) with MMBW?

11.4.2 Information Questions

Information questions in Djambarrpuyŋu use the indefinite/interrogative proforms described in chapter 8. The indefinite/interrogative proform is usually clause initial, as many examples in chapter 8 attest, but this is not always so (see examples 309 and 317 in chapter 8 and numbers 823, 824 and 829 below).

The interrogative/indefinite proform may seek information as to the general identity of a relational role or a predicate. There are many examples in chapter 8 but I include one here for ease of reference:

(823) *dhuway+nha ŋarraku **nhaliy** dharpu+ŋal*
FZC+ACC 1sg-DAT "what"-ERG spear(tr)+3rd T102Bp23
What speared my "husband"?

Information can also be requested in regard to adnominal relations. In the following examples we see this in regard to possession, part-whole and generic-specific relations:

(824) *ŋunha+ny **yolku** wäŋa*
DIS+PROM "who"-DAT place
Whose place is that?

(825) *nhä wal ŋuli ŋayatha+m ŋanya*
what 3pl HAB hold+1st 3sg-ACC T102Bp9
What part of it do they hold/touch?

Note the presence of both the "non-human" interrogative/indefinite pronoun and a pronoun with case marking appropriate for an 'inalienable' part-whole relation to question the identity of the part. The answer to this question was *ŋurru* "nose".

(826) *\yol+nydja balanda*
who+PROM white person T202p8
Which white person, who was the white person?
(This was a rhetorical question with the following answer *\ nhawi+ny Captain Cook* [whatsit+PROM personal name] What-his -name, Captain Cook.)

(827) *nhä ŋunhi wurrki manymak*
what TEXD flower good T003
Whats that pretty flower?

The verbal interrogative is in fact most commonly found adverbially, in questions seeking more specific information in regard to a particular predicate. For example

(828) ***nhaltja+n*** *walal ŋuli därrpa+w+ny'tja* *marŋgi+thi+rr*
do what+1st 3pl HAB king brown snake+DAT+PROM know+INCH+3rd
What do they learn about King Browns? T102Bp10

(829) *ga nhawi+ny, mitthu+na+ny ŋuli ŋunhi,* ***nhaltja+na+n***
and whatsit+PROM cut+4th+PROM HAB TEXD do/be what+4th+SEQ
And whatsit, (as for) cutting it up, how do they do it ? T102B

11.4.3 Polar questions with interrogative/indefinite proforms

It is also possible for questions with interrogative/indefinite prounouns to function as polar questions rather than information questions. The initial pro-form has a falling contour on the first syllable, and the last part of these utterances also has a distinct intonation pattern, either the characterisic rising-falling contour found with polar questions, or a final rise.

Information questions on the other hand have not been noted with the distinctive rising-falling contour. The initial syllable of the interrogative/indefinite pronoun is usally associated with a falling contour. The final part of the utterance does not usually appear any different from that of declarative utterances. Sometimes there is a final rise on the last syllable of the clause but it is not clear if this is particular to the question function and/or has something to do with clause linkage in a text. The range and function of different intonation contours has yet to be comprehensively studied.

In some examples the questions consist of two parts. An information question component, equivalent to something like "Whats that?" is followed by a word or clause with the distinctive intonation which is offered as a potential answer. The sequence could thus be glossed as "Whats that? An X?" but seems functionally equivalent to English questions of the type "Is that an X?". There is often a significant pause between the two parts. These constructions are particularly common when an identity or attribute is being queried.

Some examples are given below:

(830) *ŋunhany* ***nhä,*** *waltjaŋ*
DIS+PROM what rain
What's that, rain? T003p4
Is that rain?

(831) *nhä nhuma ga luka+ny bodiny*
what 2pl IMPV-1st eat-1st+PROM tame/non-poisonous T102Bp7
what are you eating - (something) non-poisonous?
Is what you are eating non-poisonous?

(832) *nhä nhe ga dhuwal luka+ny, borum*
what 2sg IMPV-1st PROX eat-1st+PROM fruit T401p12
What are you eating - a fruit?
Are you eating a fruit?

(833) *wanha dhuwa=ndja wäŋa, yirrkala*
where PROX=PROM place place name T012p5
Where is this place, Yirrkala? OR Is this place Yirrkala?

(834) *nhaltja+n limurru+ny dhu, dharyu+n*
do what+1st 1+2pl+ACC FUT rain+1st
What will be done to us, (will we be) rained on?
OR Are we going to be rained on?

In other examples this bipartite structure of information questions plus possible answer is not evident. Then the interrogative/indefinite proform appears to have scope over the whole clause and thus functions more like an interrogative marker than a proform.

(835) *ga nhä ŋunhi maraŋu lukanhamirr bäpi+ny warrakan'*
and what TEXD usable "edible" snake+PROM "animal" T102Bp6
And is it usable, edible, the snake?

(836) *nhä dhuwal gulwirri+ny diltji+puy, dharpa*
what PROX Fan Palm+PROM bush/back+ASS tree T012p3
Is Gulwirri a tree of the open forest?
(Note that *nhä* does not agree in case with that of the actual focus of the question, the focus being the possible habitat for Fan Palms)

(837) *nhaltja+n ŋayi li ga+nha ŋunhi gurtha nhära+nha+ny, ŋunhal*
do what+1st 3sg HAB IMPV+4th TEXD fire burn+4th+PROM DIS-LOC
djinawa', ŋayi ŋuli yoŋu'-yuŋu warraŋul+nha dhärra+nha+ny
inside 3sg HAB person-REDUP outside+SEQ stand+4th+PROM T102Bp3
How does it happen - the fire burns there inside, the people standing outside?
OR Is it that the fire burns there inside (and) the people stand outside?

(838) *nhaltja+n ŋayi ga+n wämut+tja mukthu+rr nhina+n*
do what+1st 3sg IMP+3rd subsection name+PROM be quiet+3rd sit+3rd
dhiyal+nydja nhumaŋa+gal
PROX-LOC+PROM 2pl+OBL T401p12
Has Wämut been sitting quietly here with you?

Question-answer sequences are also not uncommon as a rhetorical device. Examples 320 and 322 are two such instances.

11.4.4 Exclamative clauses with interrogative/indefinite proforms

The same construction type with interrogative/indefinite proforms that function like polar questions also occurs with an exclamative function. They are formally similar to these polar questions, but occur in contexts in which the speaker is expressing some kind of evaluative judgement about a situation. Unlike polar questions they are not seeking a yes-no response. They have been noted particularly in contexts when a speaker is chastising someone about something. This involves attributing to the chastised a particular quality or characteristic that might explain their current behaviour. This is done using the interrogative/indefinite proforms and the distinctive intonation contours.

(839) *way, nhä nhe ga dhuwal marrtji+ny bambay\ yaka nhe gi*
hey what 2sg IMPV-1st PROX go-1st+PROM blind NEG 2sg IMPV-2nd
dhuwal nhäŋu yothu+ny, dhuwal ŋayi ga ŋorra
PROX see-2nd child+ACC PROX 3sg IMPV-1st lie-1st T022Bp4
Hey, what are you blind!/? Can't you see the child that is lying here?

(840) *way, djamarrkuli', nhä nhuma dhuwal yoŋu+ny, maŋutji+miriw walal,*
hey children what 2pl PROX person+PROM eye+PRIV PL(3pl)
bambay+mirr, yaka nhuma gi dhuwandja yoŋu+ny nhä=ŋu
blind+PROP NEG 2pl IMPV-2nd PROX-PROM person+ACC see=2nd
yakurr ga ŋorra
sleep IMPV-1st lie-1st T022Bp6
Hey kids, what are you mob - without eyes, blind!/? Can't you see this person that is asleep

These kinds of exclamations may be accompanied by imperatives or by explanations or descriptions of what would be the appropriate behaviour.

However the construction is not always associated with a negative conotation. Rather it can be used to simply express a speaker's evaluation of a situation. The following examples indicate a more strictly exclamative function:

(841) *nhämunhamirr dhuwal nhe dhu dhäwu lakara+m*
"how many times" PROX 2sg FUT story tell+1st
How many times will you tell this story!
(This is in reaction to someone telling again something they have often told before)

(842) *nhä dhuwal goŋ-däl ŋayatha+nhara+w*
what PROX hand-firm hold+4th+DAT Bk186p50
This is someone who holds onto things!
(This was in response to seeing some photographs that had been kept for several years)

(843) ***nhaltja+n*** *ga* *dhuwal weyin+dhi+rr* *djäma way*
do what+1st IMPV-1st PROX long+INCH+1st work hey BK286p25
This is a long job, hey! OR What a long job this is! OR How long this work is!

11.4.5 Other clause distinctive uses of interrogative/indefinite proforms

The forms *nhämirr* and *wanha*, often with the IRR particle *balaŋ*, also occur with apparent clausal scope conveying distinct speech acts from those of questioning. These need further consideration but ***nhämirr*** is associated with suggestions (see example 350) and *wanha* with questions where the speaker has some expectation that the situation is/was to occur. An example of each follow:

(844) *way* ***nhä+mirr*** *balaŋ nhuma+ny* *dhu rraku+n* *malthu+n..*
hey what+PROP IRR 2pl+PROM FUT 1sg-DAT+SEQ follow+1st OMSp4
Hey, how about you come with me?

(845) ***wanha balaŋ nhuŋu*** *ŋayi yora+nha+ny* *marrtji+nyara+w+nydja*
"where" IRR 2sg-DAT 3sg agree+4th+PROM go+4th+DAT+PROM T402p11
Has she agreed to your going (yet)?

(846) ***wanha balaŋ plumber buna+n*** *ŋunhal* *wäŋa+ŋur*
"where" IRR plumber arrive+3rd DIS-LOC place+LOC Ru87ALF
(I wonder) if the plumber has been to the house
(This is in a context when the plumber had been expected

The full range of uses clearly warrants further consideration.

CHAPTER 12

SUBORDINATE CLAUSES

This chapter is divided into two sections. The first describes non-finite subordinate clauses and the second describes finite subordinate clauses. Clauses which occur with conjunctive and disjunctive coordinating particles are described in chapter 13, as are counterfactual clauses with the counterfactual particle *yanbi*.

12.1 Non-finite subordinate clauses

12.1.1 Complementizer function of case suffixes

The complementizer function proposed by Dench and Evans (1988) concerns those case suffixes that can have a clause as one of their arguments. They distinguish two types, the T-complementizer and the C-complementizer according to whether, the concern is with temporal, logical or spatial relationships between clauses or whether the concern is with coreference relationships. The complementizer suffixes in Djambarrpuyŋu are essentially of the T-complementizer type.

There is complete syncretism in Djambarrpuyŋu between suffixes marking peripheral relational case functions which are not unique to "human" reference and complementizer suffixes found on non-finite subordinate clause predicates i.e. ERG, DAT, ALL, LOC/ABL and PERL. The complementizer function of the adnominal suffix ASS-*wuy* is described in section 9.3.4.3. The DAT also occurs in a complementizer function on clauses filling an IO core role.

There are no suffixes associated with non-finite subordinate clauses which do not also function as case suffixes. This kind of correlation has been commented on for many Australian languages. The existence of identical suffixes coding some kind of "dative" relational case and purposive clause is particularly widespread (see Blake 1977). However, the pervasiveness of the morphological parallels in Djambarrpuyŋu (and other closely related Yolŋu languages) is noteworthy. As for the dative case and purposive clauses, there are clear semantic/syntactic parallels between the relational adnominal case functions and those of the complementizer functions. A few examples are given here, but a more detailed summary of each type will be presented below.

(847) *ŋayi rirrikthu+rr* ***nyaŋ'thu+nara+y*** ***maypal+yu*** ***dharrwa+y***
3sg sick+3rd eat+4th+ERG shellfish+ERG many+ERG
S/he is sick from eating too many shellfish Ŋ/Msyd
(S-(A) coreference)

(848) *ŋarra nhuna barpuru* ***gulmara+ma+ny,*** *gumurr-nhirrpa+n+dja*
1sg 2sg-ACC "yesterday" stop(tr)+1st+PROM prevent+1st+PROM
yothu+wal ***wutthu+na+ŋur***
child+OBL hit+1st+ABL T023Bp7
Yesterday I prevented you from hitting the child
(O-(A) coreference)

(849) *ŋarra+ny* ***nhuna*** *dhu bun'kumu* *nhä+ma* ***waŋdi+nya+lil***
1sg+PROM 2sg-ACC FUT knee see(tr)+1st run+4th+ALL
I will watch your knees while you run
(O-(S) coreference) T022p4

(850) *bala ŋayi dhu gi* *bäki+n* *nhakun* ***\nhanukiyin+galaŋu+wurr***
then 3sg FUT IMPV-2nd use+SEQ like 3sg-EMPH+OBLS+PERL
ŋä+nha+kurr
hear/listen+4th+PERL
then s/he will be using (it) through her/his listening to (it) T018p7
(A-A(EmphPro) and (O)-(O) coreference)

(851) *yan ga* ***ŋaplap wäŋa dhärra*** *ya-bitja+n* ***bukmak+ku nhakun***
EMPH IMPV+1st open place stand-1st ya-do thus+1st all+DAT like
yolŋu+w ***marrtji+nyara+w***
person+DAT go+4th+DAT T022Bp1
the place is open for everyone to go to
(?S-(ALL) coreference)

It is a general characteristic of these clauses that they are heavily reduced compared to other clause types. They are predominantly composed either of the verb stem alone or the verb stem and one other argument (usually A, S or O). Two roles is the maximum that ever occur. Unlike the ASS non-finite clauses which commonly occur with peripheral roles (see section 9.3.4.2), these other non-finite clauses overwhelmingly occur with core roles. The DAT is the only suffix for which clear examples of peripheral roles in these clauses exist, and the occurrence of an allative role is marked by the ALL. The fact that the ALL marker is used, and not the DAT, is in striking contrast to the general pattern of case concord required in these clause types.

The fact that this may be more generally the case for peripheral roles in Yolŋu varieties, at least with DAT marked non-finite clauses, is supported by a footnote to Lesson 44 in Lowe (n.d.a) in regard to Gupapuyŋu where it is noted that the ALL *-lili* is retained in DAT marked clauses. That this might apply to a wider range of

peripheral roles is suggested by an example in Heath (1980b p106) where an ABL marked noun occurs with an infinitive.

12.1.2 The domain of complementizer case

Given the examples of the Allative with the DAT marked clauses we can currently only claim that the domain of the complementizer case is the predicate and the core roles (A, S, O and IO). It may in fact prove to be the case that for some of these clauses this is also the domain of the whole clause. This pattern of only marking core roles is one category described by Dench and Evans for Australian languages and exemplified by Kalaw Lagaw Ya (1988 p21). For all the cases except the Dative the spreading of the complementizer case is sensitive to the "humanness" of the referent, resulting in the use of the OBL or OBLS combinations where the referent is "human". The suffixes occurring on core roles in in non-finite clauses are summarized in the following table.

Predicate suffix	Case form on "human" referent	Case form on "non-human" referent
ERG	OBL	ERG
LOC	OBL	LOC
ABL	OBL/OBLS+ABL	ABL
ALL	?	ALL
PERL	OBLS+PERL	PERL
DAT	DAT	DAT

I do not have data pertaining to a "human" referent filling a core role in an ALL non-finite clause. This appears to be a gap in the data and I expect an OBL marked role would be quite acceptable.

A point to note in regard to the case marking in non-finite clauses is the existence of many examples of non-finite ERG, LOC/ABL and PERL subordinate clauses in which there is a "human" A or S and a predicate. The case suffixes found in these constructions are identical to those found in corresponding Possessive constructions.

Case marking on non-finite "human" A/S or Possessor	Case marking on non-finite predicate or Possessee
OBL	ERG
OBL	LOC
OBL/OBLS+ABL	ABL
OBLS+PERL	PERL

On the basis of this set of correspondences it could be plausibly argued that the Possessive is used to code subjects in nominalized clauses. However, the fact that the suffixes coding "human" referents occur with non-subject roles means such an interpretation must be dismissed.

The use of the adnominal OR suffix in conjunction with the complementizer function of the ASS is described in section 9.3.4.2 and 9.6.2. This is the clearest evidence of a distinct case marker being used in connection with a complementizer suffix. This only occurs coding the lower clause A, or less frequently, the S role. There are however a few examples recorded for Djambarrpuyŋu where the OR occurs on the A role with an ERG, PERL or ABL marked verb stem (see section 9.6.2 for an examples with the ERG). The status of these is not clear. They may represent a shift to permit the marking of the A role distinctly from the other arguments or the extension of the OR case to contexts semantically compatible with its prototypical use to code an originating source.

The subordinate clause roles may be represented by a single nomen, pronominal or demonstrative. The use of a single lexeme to represent a role is the most common. However, combinations of these different nominal classes occur, as do adnominal relations of both the case-marked type, such as the possessive, and the apposed type, such as entity-quality and part-whole relations. These all require the appropriate complementizer case marking. This is also extended to adverbs such as *gäna* "alone", *bulu* "again/more" and *bondi* "quickly", as well as *mala* "group/PL" indicating plural number and *wiripu* "different, certain" in determiner function. These also all occur with *-ŋu-* before the complementizer suffix. The determiner *balanya* "such" also occurs in these clauses. Only the negative particles, *yän* "EMPH" and *nhakun* "like", never occur with suffixes in these constructions. A further constituent permissible in these clauses is an additional verb stem with a modifying function. It must of course have the complementizer case. In Djapu it appears that complex NPs are confined to the DAT marked clauses (Morphy 1983 p135). However, while less common with other complementizers these do occur in Djambarrpuyŋu. In both varieties, it appears that the potential for clausal constituents in subordinate clauses is confined to the DAT.

These clauses are all non-finite. The form of the verb stem never changes and TMA particles never occur. The FOURTH form of the verb is required by all nominal suffixes. When the suffix allomorph consists of a single allomorph, a longer form, *-Nhara-* is favoured. This affects the ERG and DAT suffixes which are,

respectively, *-y* and *-w* post vocalically. This longer form is found on a bare inflected verb, and provides the only indication that the form of verb stems found with the complementizer suffixes involves a distinct suffix from the FOURTH inflection. In other varieties such as Djapu there are additional grounds for isolating a nominalizer suffix which has the forms *-n(r(a)*, *-nha(r(a)*, *-nya(r(a)*. The longer forms with *-ra*, although as in Djambarrpuyŋu they are required before case allomorphs of a single phoneme, also optionally occur before other suffixes. Furthermore, the "nominalized" verb stem can also occur without additional case marking as verb plus *-n/nh/nyar*. This particular variant does not occur in Djambarrpuyŋu, and neither does the "nominalized" stem ever occur on its own. The longer form with *-ra* is the only indication that the FOURTH inflection and the stem for the complementizer suffixes are not completely homophonous. It is only on this basis, together with the support of comparative evidence that one can identify a "nominalizing" suffix rather than posit the FOURTH inflected form as the stem for complementizer suffixes. Synchronically one could well argue the latter to be the case in Djambarrpuyŋu, with the longer form interpreted as an augmented stem required before mono-phonemic case allomorphs. The latter is somewhat of an "oddity" synchronically since the FOURTH form functioning as a verb inflection does occur with mono-phonemic allomorphs of the discourse suffixes. However the comparative evidence offers an explanation for the longer form as the relic of an earlier suffix. A few examples which suggest the nominalizing function is still productive will be considered in section 12.1.10.

12.1.3 Coreference and non-finite subordinate clauses

All these clauses occur both with and without coreference between core roles in the subordinate clauses and roles in the main clause, with the exception of those coded with the ALL. All examples of the ALL non-finite clauses involve coreference.

Coreference is associated with the absence of any representation of a role in the subordinate clause or the use of an emphatic pronominal or pronominal phrase. The appearance of the latter is quite in keeping with its function elsewhere to code intraclausal coreference and points to these clauses being consitituents of the main clause. They contrast with finite subordinate clauses which are peripheral to the main clause and which do not use these pronominals to code relationships between the two clauses.

Viewing these subordinate clauses as a whole, there is evidence that all core roles (i.e. A, S, O and IO) in the main clause and A, S and O in the subordinate clause can

be involved in coreference. Deletion occurs for whatever roles are coreferential and this can be more than one. In other descriptions of Yolŋu varieties considerations of coreference and deletion concern the subordinate clause S or A and any main clause core role (in DAT clauses) or a main clause S or A (with 'peripheral' case suffixes) (see Morphy1983; Lowe n.d.a). The text data for Djambarrpuyŋu indicate the scope for coreference can be wider than the subordinate clause S or A. It also indicates that the range of roles triggering deletion in the subordinate clause coded with complementizer suffixes other than the DAT is also wider than the main clause A and S. However the full potential for each suffix needs more detailed consideration.

That these constructions can be difficult to elicit is well-demonstrated in Schebeck (1976b) who notes many problems with speaker judgements of parallel constructions in Dhaŋu. It has been one of the benefits of a text based approach that it provided a substantial number of naturally occurring examples that display a range of options not yet reported.

In the description of individual non-finite clause types below I conclude each section with a summary of the findings in regard to my Djambarrpuyŋu corpus. It takes the form of a list of points. As far as possible I have attempted to cover the same features of these clauses in the same order (and with the same number) for each non-finite clause type.

Given the identical case marking of all roles in subordinate clauses the interpretation of the predicate-role relations can be ambiguous. While the potential for context to be a key parameter has yet to be ascertained, there are certain syntactic considerations which constrain the extent of any ambiguity.

1. The absence of core roles in the subordinate clause raises the possibility of coreference between the two clauses. However, it may reflect an unspecified non-coreferential referent.

2. An emphatic pronominal or pronominal phrase in the subordinate clause indicates coreference between the referent of that role and one in the higher clause.

3. A consequence of the first two points is that the presence of another role in a subordinate clause, not in Emphatic pronominal form, will be understood as a role that is not coreferential. The presence of such roles can then limit the potential

roles available for coreference. It is possible that there may be formal constraints in connection with this, for instance, coreference of a lower clause O may be confined to contexts in which a non-coreferential A is present. However, it has yet to be determined whether the coreference is formally or pragmatically constrained. The reduced nature of these clauses would favour their use in contexts where the relations are transparent.

12.1.4 ERG marked non-finite subordinate clauses

ERG marked subordinate finite clauses can be both causal/instrumental or temporal. They thus show clear semantic correlations with the peripheral relational functions of this suffix. Some examples demonstrating the range of functions are given below:

a) ERG in causal, enabling and instrumental function

(852) *ŋanapurr+nydja yän ŋuli marŋgi+thi+rr dhunupa+n ŋuriŋi*
1pl+PROM EMPH HAB know(semitr)+INCH+3rd right(away)+SEQ TEXD-ERG
walalaŋ+gal\ dhä-yuythu+nara+y+nydja
3pl+OBL call out "yuy"+4th+ERG+PROM T019p17
we know immediately by/through their calling out "yuy" (that they have caught a turtle)
(no coreference)

Note that in this example the demonstrative is a "non-human" form (cf *ŋurikal* TEXD-OBL). This clearly is not in agreement with the "human" S role in the clause. The demonstrative thus appears to be functioning as a determiner to the clause as if it were a nominal expression.

(853) *ŋurruk nhirrpa'- nhirrpa+n nhe dhu, lumba'-lumbakmara+nhara+y+nydja*
heap/pile put-REDUP+1st 2sg FUT make into a parcel-REDUP(tr)+4th+ERG+PROM
you put them into heaps by making parcels T014p16-17
(A-(A) and O-(O) coreference)

(854) *meŋgu+ŋal+a ŋarra dhuwal dhäwu+ny bay,*
forget+3rd+SEQ 1sg PROX story+PROM PRT-OK/"you know"
nhokal badawadayu+nara+y+nydja
2sg-OBL erase, cause to disappear(tr)+4th+ERG+PROM T007p18
I forget the story, caused by you making (it) disappear
(O-(O) coreference)

(855) *ŋayi mirithi+na+n ŋaramurr+yi+n nhanu=kal gä+nhara+y*
3sg INTENS+3rd+SEQ angry+INCH+3rd 3sg=OBL bear("drive")(tr)+4th+ERG
mutika+y
car+ERG
S/he got very angry by his/her driving the car (elicited)
(no coreference)

b) ERG marked Temporal non-finite clauses

The use of the ERG in complementizer function with a temporal meaning appears to be constrained in its range of application as well as being syntactically distinct from other non-finite clauses. There are no examples of coreference between the two clauses and no evidence of case marked arguments preceding the non-finite predicate.

The ERG appears to be confined to a rich array of temporal expressions which build upon characteristic actions of the sun or night. Nominals such as *walu/ŋaykun'* "sun/day/time" or *munha* "night"are always understood as the S of the underlying verb even if they are not always present. Commonly present are terms for "parts" of the sun such as *dhuḍi* "bottom/end " used in reference to the part that dips below or rises above the horizon, *goŋ* "hand" and *yaŋara* "lower leg" used to to refer to the rays at sunrise and sunset. It is also possible for both terms of the whole-part relation to co-occur. The accompanying nominals in these expressions are rarely case marked when they precede the non-finite predicate but are case-marked if they follow the predicate. This results in a construction more like a compound or the phrases found with the PROP and PRIV than a clause.

(856) ***djaḍaw'yu+nara+y*** ***walu+y***
to break (of day)(intr)+4th+ERG sun+ERG
at sunrise

(857) ***ŋarr'yu+nara+y***
open up(intr)+4th+ERG
at midday

(858) ***munha yupthu+nara+y***
night descend(intr)+4th+ERG
at dusk, when it becomes dark

(859) ***walu gärri+nyara+y***
sun enter(intr)+4th+ERG
at sunset

(860) ***walu dhuḍi nhirrpa+n+mi+nyara+y***
sun end put(tr)+1st+R/R+4th+ERG
at sunset when the sun goes over the horizon

(861) *dhuwandja wäŋa ŋayatha+m,* *dhuḍi-milmitjpa+n*
PROX-PROM place reach, hold+1st end ("late")-afternoon+SEQ
wärrarra-bulwaŋ'thu+nara+y+nha,
colours of sunset/rise-fragment; go off in all directions(intr)+4th+ERG+SEQ
balanya+mirri+y+nha ***ŋaykun'+thu+ny***
such+PROP+ERG+SEQ sun+ERG+PROM T1In24-25
(and) reach this place in the late afternoon when the sunset colours were breaking out, at such a time

The following list summarizes various aspects of the ERG marked non-finite clauses as they have been noted in the corpus.

1. There need not be any coreferential arguments
2. The coreference displayed is between core arguments i.e. A-(A), S-(S), A-(S), S-(A), S-(O), A-(O), O-(O) (The first letter represents the main clause role and the second the subordinate).
3. Where there is coreference concerning the A, S or O arguments of the non-finite predicate a nominal designating the coreferential entity never appears in the lower clause.
4. The most widespread non-finite clausal role case marking pattern is for "human" denoting nominals to occur with the OBL suffix and "non-human" denoting nominals to occur with the ERG. This is for all roles that may co-occur with the verb. To date all A and S roles in non-finite clauses are also "human". The use of the OBL to code the S and A roles in these clauses is of course distinct from main clause marking where the A is marked with the ERG/NOM, whether "human" or "non-human" and S with an unmarked form.
The OR suffix is also permissible coding with S or A case roles in the subordinate clause, although it does not appear in the main text corpus. This is a more likely candidate for a "subject" marker, but its use requires further investigation. All contexts I have checked permit the OBL as well as the OR and it is not clear if there is any distinction between them.
5. Co-occurring roles so far noted are A, S, O and DAT. No more than two occur at once. Various complex NPs occur.
6. Co-occurring demonstratives occur with the "non-human" case marking in clauses where the arguments are "human". This suggests they are apposed to the deverbal nominal or the clause as a whole. If apposed to the "human" roles, one would expect the demonstrative to have "human" case marking.
7. They fill peripheral functions in regard to the main clause parallel to those of the relational case functions of the ERG suffix. The temporal function may be confined to a particular domain of temporal expressions and may be syntactically distinct.
8. The verb stem with the ERG suffix is always the extended form i.e. *-nyara-*, *-nhara-* or *-nara-*.
9. The clause elements are juxtaposed except for one example where the demonstrative is separated from the predicate. While the arguments commonly precede the predicate, their order is variable.

12.1.5. LOC marked subordinate clauses

Because of the homophony between the LOC and ABL suffix and the limited number of examples that are unambiguously Loc, I am unable to say very much about these clauses. There is no evidence to suggest that they are radically different from other non-finite clauses. Both coreferential and non-coreferential examples occur. Coreference in the non-finite clause is marked by deletion or an emphatic pronominal.

The western Dhuwala variety, Gupapuyŋu, has separate LOC and ABL case markers, and these are both used with a complementizer function (see Lowe n.d.a).

A Djambarrpuyŋu example with a locative sense is the following:

(862) *bäyŋu+n dhuwal yolŋu'-yulŋu warrpam'+nha ŋunha+n bala*
NEGQ +SEQ PROX person-REDUP all+SEQ DIS+SEQ (MVTAWY)
maranhu-gä+nha+ŋur+a
hunting+4th+LOC+SEQ OMS p25
There are no people here, they are all away there hunting
(S(Equational)-(A) coreference)

More abstract is the following where the speaker is describing the "locality" of certain linguistic distinctions.

(863) *yurr djuŋuny+nha maŋda+ŋ dhu barrkuwatj+thi+rr+nydja,*
ADD meaning+SEQ 3dl+DAT FUT separate+INCH+1st+PROM
waŋa+nha+ŋur+a
speak+4th+LOC/ABL+SEQ T101p2
the "representation" of the two ("light" v. "heavy" accents) are distinguished in talking
(no coreference)

(8641) *ŋunhi ŋali ŋuli barrkuwatj+ku+m rirrakay mala+ny,*
TEXD 1di HAB separate+TRANS1+1st sound PL(/group)+PROM
dhäruk+ŋur waŋa+nha+ŋur, litjalaŋ+giyin+gal,
word+LOC speak(intr/tr)+4th+LOC/ABL 1dl+EMPH+OBL
bäki+ŋur
use+LOC/ABL T010p4
we make the sounds distinct in speaking/uttering the words, in our use (of them)
(A-(A), A-A(EmphPro) coreference)

12.1.6. ABL marked subordinate clauses

Most examples in the corpus with LOC/ABL-*ŋur* on a verb stem are of the Ablative case function. Again the functions correlate with those found with the relational use of this suffix as the following examples attest.

a) Motion from

(865) *mak ŋayi dhu girri larr'mara+m nhaŋuwuy ŋayi,* ***beŋur***
perhaps 3sg FUT things take down+1st 3sg-DAT+EMPH (3sg) INDEF-ABL
litha+na+ŋur, *räli+n mulka+n*
dry(intr)+4th+ABL/LOC MVTTWD+SEQ dry+SEQ T010p10
or s/he takes down his/her clothes from drying, brings them back dry
(O-(S) coreference)

b) Cessation from

(866) *mukthu+rr* ***yatju+na+ŋur***
be quiet+2nd yell(intr)+4th+ABL/LOC
Stop yelling!
((S)-(S) coreference)

(867) *dadawyurra gulyurra **beguryi**,*
stop, cease+2nd+SEQ stop+2nd+SEQ INDEF-ABL+ANA
*gula nhä+gur **mala+gu+gur** **larru+nha+gur***
[INDEF2 what] "something"+ABL/LOC PL+gu+ABL/LOC search+4th+ABL
(and you) stop from looking for whatever (it is you lost) T009p15
((S)-(S coreference)

(868) *gula nhaliy+nha nhuna dhu dämbu*
[INDEF2 "what"]"something"-ERG+SEQ 2sg-ACC FUT head
*dhumuk+ku+m **garra+kal+nydja** **dhäruk+gur***
thick/blunt+TRANS+1st 1st+OBL+PROM word+ABL/LOC
guyaga+nha+gur
think(tr)+4th+LOC/ABL T023Ap9
(so that) nothing bluntens your mind from thinking of my words (This clause is in the scope of an earlier negative)
(O-(A) coreference

c) Change from a condition

(869) *laymara+m nhuna dhu **gorrmur'+thi+nya+gur**,*
relieve+1st 2sg-ACC FUT hot+INCH+4th+ABL/LOC,
galga-dharrmur'yu+na+gur
(skin-?be hot) "be hot"+4th+ABL/LOC
(It) relieves you from being hot T009p3
(O-(S) coreference)

d) Cause

(870) *garra nhuna barpuru **bartjunmara+ma+ny** **yothu+wal***
1sg 2sg-ACC "yesterday" smack+1st+PROM child+OBL
goy-märra+nha+gur
[lower stomach-get/take]"annoy, tease"+4th+ABL/LOC T023Bp7
I smacked you yesterday after (you) annoyed the child
(O-(A) coreference)

e) Start of temporal span

(871) *rom gunhi+yi\ **begur** **bili** ga+n dhärra+n,*
law TEXD+ANA INDEF-ABL (same) IMPV+3rd stand+3rd
*gurruyirr'yu+na+gur, be **bala'** **baman'***
begin+4th+ABL/LOC INDEF (MVTAWY) long span T009p2
that law has stood continuously from the beginning, long ago

f) Temporally prior event

(872) *ga gunhi napurr **dhurrwara+gur** **djinydjalma+gur***
and TEXD 1pl [mouth+ABL/LOC] "after" mud crab+ABL/LOC
nyag'thu+na+gur, ga gatha+gur+nydja ga yäna+yi
eat+4th+ABL/LOC and (root)food +ABL/LOC+PROM and [EMPH+ANA]"again"

yarru'-yarrupthu+n *ŋanapurr+nydja* *minaŋara+w'+nha*
go down-REDUP+1st 1pl+PROM shellfish+DAT+SEQ T012p15
and after eating mud crab and damper we went down again for shellfish
(S-(A) coreference)

The following list summarized certain features of the ABL marked non-finite clauses as they occur in the corpus:

1. There may or may not be coreferential participants between the main and subordinate clauses.
2. Coreference that does occur is between subordinate A, S or O and the main clause A, S or O. Specifically: A-(A), A-A(Emph Pro), S-(A), S-(S), O-(A), O-(S) and O-(O).
3. Coreferring roles do not appear in the subordinate clause unless represented by emphatic pronouns
4. The case marking on the subordinate clause roles is similar to that found with the ERG. "Human" referring nominals take the OBL and "non-human" referring nominals take the ABL/LOC.
5. Co-ccurring roles that have been noted are A, O and IO. There are also examples of complex NPs.
6. Ablative demonstratives occur with these clauses. They are all "non-human" forms even when "human" arguments are present.
7. They function like the relational suffix in regard to the main clause roles expressing motion from, cessation, change of state from, sequence and the start of temporal duration.
8. The clause elements are juxtaposed in all but one example, and that involves a demonstrative which is separated from the predicate. The order of constituents is variable, with the exception of the demonstratives and *dhurrwaraŋur/dhāgur* "after" lexemes which occur clause initially.
9. A feature unique to the coding of sequence relations between events with this suffix are the lexemes *dhurrwaraŋur/dhāgur* [mouth+ABL/LOC]. These occur when the situation in the ABL clause is sequentially prior to that of the main clause. They can be glossed "after X".

12.1.7. ALL marked subordinate clauses

On the basis of my data it appears that the ALL non-finite clauses are restricted in scope to the S, O and IO arguments of the main clause. This restriction in scope corresponds with that found with the relational function of this suffix. As with other non-finite clauses the functions of the ALL marked non-finite clauses are parallel to those found with the relational case function.
Examples include:

a) Coding Motion towards a situation

(873) *ga ŋayi+ny* *ŋuli yarrupthu+n* ***ganybu+lil+a*** ***dharpu+nha+lil***
and 3sg+PROM HAB go down(to sea)+1st net+ALL+SEQ sew/spear+4th+ALL
and she would go down to sew nets T008Txtp1-2
(S-(A) coreference)

b) Coding the situation in which O or IO engaged

(874) *bala ŋayi nhä+ŋal+a, ŋayi+ny ŋuriŋi+ny ŋäpaki+y+ny'tja,*
then 3sg see+3rd+SEQ 3sg+PROM TEXD-ERG+PROM white person+ERG+PROM
ga ŋäkul+a ŋarra+ny ga+n ŋunhiwili
and hear-3rd+SEQ 1sg+ACC IMPV+3rd TEXD-ALL
maŋutji-law'mara+nha+lil
[eye-lift/pick up] "read"+4th+ALL T008Txtp9
Then s/he watched, that white person, and heard me reading
(O-(A) coreference)

(875) *galku+n* ***walalaŋ gurrma+nha+lil***
wait(S-IO) 3pl-DAT paddle+4th+ALL T019p26
(we) wait for them while they are paddling (looking for turtle)
(IO-(S) coreference)

The following is a summary of the patterns associated with ALL non-finite clauses in the corpus

1. All examples involve coreference (but note that Morphy (1983p 131) has an example without coreference for Djapu which suggests this may be an oversight in the data. A similar example to hers in Djambarrpuyŋu, where the situation in regard to coreferentiality is not clear, is considered below in section 12.1.10 (example 910). This section considers some examples which look similar but not identical to non-finite clauses).
2. The coreference is between subordinate clause A or S and a higher clause S, O or IO. Specifically: S-(A), S-(S), O-(A), O-(S) and IO-(S). Given the apparent constraint on the scope of the ALL relational case marker over S or O in main clauses, it is likely the non-occurrence of examples displaying coreference to an A role is not accidental.
3. The coreferential role in the lower clause is never overt.
4. All co-occurring roles are "non-human" and coded with the ALL.
5. The only arguments that occur are Os.
6. Demonstratives that co-occur have "non-human" marking but there are not enough examples to indicate unambiguously whether this is functioning as a determiner to the clause rather than representing a particular role.
7. There is no evidence that these clauses function any differently to the relational case function uses of this suffix. They are predominantly found with main clause predicates which involve motion or perception. They can fill the Allative role with an intransitive motion verb. Here the activity is the goal to which the main clause S is moving. With transitive verbs it indicates the activity to which the O is moved or in which it is engaged. The activity of the main clause transitive predicate and the subordinate clause are always simultaneous.
8. The clause elements are always juxtaposed but the order of the predicate and its arguments is variable.

12.1.8 PERL marked subordinate clauses

These clauses also function in ways that clearly correspond with the relational Perlative case. The situation denoted by the non-finite clause is always co-extensive with the situation expressed by the predicate of the main clause. This overlap may be for a continuous span of some duration or for a recurrent series of

overlaps. While correlations with the "motion through, along" and "conduit/means" functions identified for the use of this suffix on nominals occur, there are certain examples in which a PERL marked non-finite predicate modifies the main clause predicate. This latter function has not been observed when the PERL is attached to nominal stems. Some examples of these constructions are:

a) Coding a situation concurrent with a main clause motion predicate

(876) *ŋuli nhe dhu ga weyin marrtji-ya* ***maranhu-gă+nha+wurr***
HAB 2sg FUT IMPV-1st long go-1st-ya [food-bear]"hunt/gather"+4th+PERL
ŋayi+ny dhu galŋa+ny ŋunhi gorrmur'+thi+rr+a dharrmu'yu+n+a
3sg+PROM FUT skin+PROM TEXD hot+INCH+1st+SEQ ?be hot+1st +SEQ
If you go out hunting for a long time, and your body(skin) gets hot T009p13
(S-(A) coreference)

(877) *ŋunhi ŋayi ŋuli wapthu'-wapthu+n, ŋupa'-ŋupa+n · bala*
TEXD 3sg HAB hop-REDUP+1st go after/along-REDUP+1st MVTAWY
ŋändi+'mirriŋu+ny ***ŋayaŋay'+wurr nyaŋ'thu+na+wurr, mulmu+kurr***
mother+KINPROP+ACC root food type+PERL eat/drink+4th+PERL grass+PERL
when it (the joey) hops along after its mother (as/while she's) eating food, grass
(O-(A) coreference) T024Ap4

b) Coding a situation which is the channel or means through which the main clause situation occurs.

(878) *maŋgi+thi+n\ ŋuliwiyak ŋarra+kalaŋa+wurr dhäruk+kurr\ ga*
know+INCH+2nd+SEQ TEXD(PERL)-2nd 1sg+OBLS+PERL word+PERL and
rom-lakara+nha+wurr
law-tell+4th+PERL T018p13-14
(the two) will learn through my words and telling of the law
(no coreference)

See also example 850 above.

c) Specifying the nature of the action coded by the main clause predicate

(879) *yurr dhiyaŋ bala ŋarra ŋuli ga dhuwal bäki+n* ***buny'tju+na+wurr+a***
but "now" 1sg HAB IMPV-1st PROX use(tr)+SEQ smoke+4th+PERL+SEQ
dhuwal ŋarali+ny'
PROX cigarette+PROM T012p12
but now I smoke ('use cigarettes through smoking')
(A-(A) and O-(O) coreference)

(880) ***gulmara+nha+wurr*** *nhe dhu waŋa*
stop(tr)+4th+PERL 2sg FUT talk-1st T010p4
you speak in a drawn out manner
(S (?A)-A and possibly also (O)-(O) coreference depending on the potential for *dhäruk* 'word' to occur)

This function of PERL marked verb stems is not at odds with the other functions, as the two events are still clearly concurrent and the PERL marked event is metaphorically construable as the conduit for the main clause activity. It appears to be the general meaning of the main clause predicate and the coreference of all core roles which provide an environment where this particular function is possible. Case suffixes are not widely used with stems which have an adverb-like function, but this is possibly one context in which they are. The other suffixes which can occur with an adverb-like function are the ERG and the PRIV (see section 11.2.2.1 and 9.2.4). They both occur on nominal and verb stems. The last example with the PERL above is one in which the ERG marking i.e.*gulmara+nhara+y* "stop+4th+ERG is also equally possible. In fact in the text from which this was taken the speaker switches between the PERL form and an ERG marked form) (see also example 708).

The following observations are made in regard to data in the corpus for PERL non-finite clauses:

1. Clauses with both coreferential and non-coreferential core participants occur.
2. Coreference occurs between a subordinate S or A and a main clause S, A or O. Specifically: A-(A) A-A(EmphPro) S-(A) O-(A)
3. Coreference roles in the subordinate clause are either deleted or represented by an emphatic pronominal.
4. Co-occurring arguments occur with the PERL if "non-human" and the OBLS+PERL if "human".
5. Roles occurring in the subordinate clause are A, S and O. Complex nominal exxpressions that occur are a co-ordinated S and a demonstrative pronominal sequence.
6. Both the verbal stems and "human" forms of demonstratives occur.
7. Their functions parallel those of relational cases on nominals
8. In all examples the clause elements are juxtaposed. Example > T024Ap4> above is the only one that indicates the possibility of variable placement of the arguments relative to the predicate.

12.1.9 DAT marked subordinate clauses

DAT marked subordinate clauses occur in a range of contexts. Unlike other subordinate clauses they are not confined to peripheral roles in the main clause. They can also act as complements to various predicates. They are also found with both verbal and nominal predicates. Provisionally I have distinguished two peripheral functions, namely a Purposive and a Temporal.

The range of roles in the main clause involved in coreference with roles in a DAT non-finite clause is wider than for the non-finite clauses just described. All core roles - A, S, O and IO - may be involved as well as DAT marked peripheral roles.

There is also evidence that DAT non-finite clauses can occur with a wider range of roles than the other clauses. ALL core roles occur i.e. A, S, O, IO roles and there are also examples with associated Temporal and Allative peripheral roles. As mentioned in the introductory sections of this chapter, the situation in regard to other peripheral cases has yet to be clarified. For the A, S, O, IO and temporal roles the DAT suffix is used. Unlike other non-finite clauses there is no evidence for the "human"-"non-human" pattern of case marking nor for the use of special suffixes such as the OR *-kuŋ(u-)*. However an Allative is coded with the ALL suffix. An example is given below:

(881) *dhuwandja marrtji+n maralkur+nydja, ŋarirri+w' rulaŋdhu+nara+w,*
PROX-PROM go+1st+SEQ MMBS+PROM fish+DAT put+4th+DAT
dhipal ŋulwitj+lil
PROX-LOC "fridge/freezer"/cold+ALL T024A p4
Here comes MMBS to put fish in the freezer
(S-(A) coreference)

The different functions of DAT marked clauses are considered in turn below.

12.1.9.1 DAT marked subordinate clauses with peripheral functions

a) Purposive

The purposive functions of DAT marked clauses are found with both verbal and nominal predicates. While in many instances they code a future goal, they can also code the reason for an action or the purpose/function in regard to which the main clause holds.

a) (i) Purposive DAT marked clauses with verbal predicates

(882) *wiripu+y mala balanda+y djäma gurtha ŋatha+w batha+nara+w*
certain PL white people+ERG work(tr) fire food+DAT cook+4th+DAT
Others of the white people made fires to cook food R-D p3
(A-(A) coreference)

(883) *bala walal+nydja wark+nha nhä+ŋal bala walal gurrupa+r+nha ŋunhi+yi*
then 3pl+PROM work+SEQ/?ACC see+3rd then 3pl give+3rd+SEQ TEXT+ANA
girri', guŋga'yu+nara+w yoŋu+w
thing help+4th+DAT person+DAT OMSp18
Then they saw (his) work, then they gave (him) that medal for helping Aboriginal people
(O-(A) coreference)

Note that in this example the DAT clause codes the reason for which the medal was given rather than a future goal.

(884) *gäna yan mutika waŋdi+rr märrma' bitja+n, bathi+w+nydja*
alone EMPH vehicle run+1st two do thus+1st, bag+DAT+PROM
mala+ŋu+w\ ga ŋanapurruŋgu+wuy gäna yan yoloŋu+w
PL(/group)+ŋu+DAT and 1pl-DAT+EMPH alone EMPH person+DAT
walalaŋ waŋdi+rr, ŋal'yu+nara+w
PL(3pl-DAT) run+1st go up+4th+DAT T101p6
two vehicles were going separately, (one) for the bags and a separate (one) for us people to get into
(S-(All) coreference)

(885) *mar'yu+ndja mayali', mar'yu+n nhe dhu waŋa+nhara+\ mar'yu+n*
be ready+PROM meaning be ready+1st 2sg FUT speak+4th+DAT be ready+1st
nhe dhu wutthu+nara+w
2sg FUT hit+4th+DAT T010p17
The meaning of "*mar'yun*" - you can "*mar'yun*" about/in-regard-to speaking, you can "*mar'yun*" about/in- regard-to hitting something... (This is from a text explaining the meaning of *mar'yu*-N. It means "to be prepared and ready to do something, to be poised to do something")
(S-(S/A) coreference)

(886) *gäma ŋayi ga ŋunhal+a wuŋuli'yu+n,.....*
bear(tr)-1st 3sg IMPV-1st DIS-LOC+SEQ sell(tr)+1st
\rruptya+w nhaŋu+wuy ŋayi, dhawaṯmara+nhara+w
money+DAT 3sg-DAT+EMPH (3sg), make/get to come out(tr)+4th+DAT
and s/he carries (it - [her/his produce]) and sells (it) there in order for him/her to get money T101p23
(A-A(Emph Pro) coreference)

(887) *bala thinking+nha balaŋ ŋayi gan+ha dhärra+nha yan gapu ŋunhili+yi,*
then think+SEQ IRR 3sg IMPV+4th stand+4th EMPH water TEXD-LOC+ANA
maŋutji ŋunhi+yi lup-lupthu+nara+w, raypiny
eye TEXD+ANA [be in/with water-REDUP] "swim"+4th+DAT fresh/itchy
then (I) imagine ('think as if') the water was still there, the freshwater pool (that was used) for swimming
(?S-LOC coreference) T401p15

a) (ii) Purposive DAT marked clause with nominal predicates

(888) *dhuwali+yi+n nhuŋu mirritjin+dja*
MED +ANA+SEQ 2sg-DAT medicine+PROM
murma'-murmara+nha+mi+nyara+w+nydja
heat-REDUP+4th+R/R+4th+DAT+PROM T014p7
This is the medicine for you, to heat yourself
(?DAT(Benef)-(S) and S (Equational)-Instr coreference. This assumes that *nhuŋu* is not part of the non-finite clause. See discussion under (c) below)

(889) *bäyŋu+n dhalakarr, marrtji+nyara+w*
NEGQ+SEQ space go+4th+DAT T101p21
there is no space to move
(no coreference)

(890) *ŋuli ŋayi liya+mirr* ***wâthu+nara+w***
HYP 3sg head/idea+PROP call out+4th+DAT T022Bp1
if s/he has a mind (i.e. is thinking about) to call out

See also the first clause of example 899 below.

(891) *nhä nhe+ny* ***dhiyaki+yi+ny,*** *ŋamakuli* ***guyaŋa+nhara+w***
what 2sg+PROM MED-DAT+ANA+PROM good think+4th+DAT T008p4
Do you think that's a good idea? OR Is that all right to your thinking? OR As for your thoughts about that, is it all right?
(S(Equational)-(A) coreference)

b) DAT non-finite clauses coding an event whose temporal occurrence is being specified in the main clause.

When the main clause expresses the time of an event, a DAT clause can be used to express what that event is. An equivalent expression in English would be "the time for X ....". It would also be possible to view this as a sub-type of purposive.

(892) *ga nhä ŋuli walu+ny* ***dhawar'yu+nara+w+nydja*** *dhiyak*
and what HAB/HYP time+PROM end+DAT+PROM PROX-DAT
ŋirrima+w+nydja
place+DAT+PROM Burrp9
And what time will this place (i.e. ceremony) end?
(no coreference)

(893) *dhuŋgarra nhaŋu ŋuli* ***dhuwurr*** *galki+thi+nya* **buna+nhara+w***
year 3sg-DAT HAB/HYP "way, law" near+INCH+4th arrive+4th+DAT
ŋuriki ***rom+gu***
TEXD-DAT law+DAT T013p3
his/her time comes near for the arrival of that law
(?DAT (Temporal experiencer)-(DAT IO) coreference)

(894) *bilin nhakun\ ŋalindi+ny oba+n marrtji nhaŋu* ***roŋiyi+nyara+w***
COMPL+SEQ like moon/ month over+SEQ go-1st 3sg-DAT return+4th+DAT
The month for her to go back has come already T208p2
(?coreference)

c) Ambiguity of function concerning certain DAT marked nominals as main clause roles or disjunctive DAT non-finite roles.

The potential for ambiguity of certain DAT marked nominals is well demonstrated in the previous two examples. The DAT pronominal in each of these examples is appropriately coded for a role in the main clause (see section 11.2.2.2 (v) on the use of DAT in relational function in temporal clauses) or as the S argument in the non-finite clause. The juxtaposition of the pronominal with the non-finite verb in example 894 is analogous with the juxtaposition of constituents in other non-finite clauses, and thus suggests the pronominal is an argument of the non-finite verb.

Example 893 however, demonstrates a frequent arrangement found with DAT marked clauses in which a DAT marked pronominal, potentially representing the non-finite S, A or O role, occurs earlier in the clause than the non-finite predicate. This is also a position in which a DAT marked nominal coding a main clause IO or Benefactive role is commonly found.

The potential for ambiguity only arises when a non-finite clause role and a DAT marked role in the main clause can be coreferential. There are two morpho-syntactic factors which contribute to this. Firstly, the marking of coreferential non-finite roles and main clause roles is identical. This does not occur with the other complementizer suffixes where either the coding between the two roles is distinct (for instance a main clause A is marked with the ERG/NOM, but a non-finite clause A with OBL), or the suffixes with which there might be conflict in regard to main clause roles are not involved in coreference (such as the ALL, ABL/LOC and PERL). The second factor has to do with the arrangement of the non-finite clause elements. While other non-finite clause elements show an overwhelming propensity to be juxtaposed, the DAT marked clauses are not so constrained. The exceptions to juxtaposition of the other non-finite clause elements all involve the disjunction of a demonstrative. This appears to be on an analogous basis to other nominal expressions where a demonstrative is often separate from other constituents. However, with the DAT clauses the disjunction most commonly found is between the potentially ambiguous DAT nominal and (the rest of) the DAT non-finite clause.

I am not yet able to resolve the question as to the appropriate interpretation of this ambiguity. The examples range from those where the presence of disjunctive DAT marked elements would appear to have separate functions to those where the disjunctive elements clearly constitute a single clause.

In the following example an interpretation of the first DAT pronominal as the main clause IO, to which the non-finite clause S is coreferential and thus deleted, is perfectly compatible with the patterns demonstrated for other non-finite clauses.

(895) *bala ŋayi* *<u>rraku</u>* *nhakun* *märr* *yindi+ny* *dhäruk* *gurrupa+r*
then 3sg 1sg-DAT like "somewhat" big+PROM word give+3rd
marŋgithi+nyara+w
know+INCH+4th+DAT
The she gave me bigger words to learn T008Txtp8
(IO-(S) and O-(IO) coreference)

A similar case for a DAT marked Benefactive role is demonstrated by the next example:

(896) *ŋuli dhaniya* *nhaŋu* *gäna* *ŋurru-garrpi+na* ***gapu+w***
HAB paperbark container 3sg-DAT separate nose-tie+4th water+DAT
luka+nhara+w
ingest +4th+DAT
They tied the ends of a paperbark container for her to drink with T013p7
(?Benef and Purposive or Benef-(A) corefence)

If the disjunction of roles from the DAT non-finite clauses were only to occur in these contexts it would be a clue as to the syntactic allegiance of the particular nominal. However, as we see in example 884 above, even non-coreferential non-finite roles can be separated from the rest of the clause, in an arrangement parallel to those just given. Thus disjunction does not formally disambiguate betwween the functions of the DAT marked elements as main or non-finite clause roles.

The most problematic examples are those where the disjunctive arrangement occurs with main clause predicates that are not known to regularly occur with a single DAT marked nominal. These might be further examples of a disjunctive arrangement of non-finite clause elements (to date this has involved the core roles A, S and O) or examples in which the "disjunctive" nominal codes a main clause peripheral DAT role coreferential to a role in the non-finite role clause. Two such examples ar:

(897) *ga ŋanapurr* *nhuŋu* *dhu ga* ***bilmara+nhara+w*** *marrtji*
and 1pl 2sg-DAT FUT IMPV-1st turn(tr)+4th+DAT go-1st T013p10
and we will come and turn (you)
(S-(A) coreference and possibly DAT(Benef)-(O)).

(898) *ga bäyŋu+ny* *walalaŋgu+ny* ***wäŋa*** ***waŋdi+nyara+w*** *dhalakarr,*
and NEGQ+PROM 3pl-DAT+PROM place run+4th+DAT space
dhärra+nha *ŋuli* *ga+nha*
stand+4th HAB IMPV-4th T009p30
and there is no space for them to go
(The possibilities for coreference here are between a DAT(Benef)-(S)) and more remotely ?S-(?Loc/Perl)

The equational example 888 shows a similar arrangement and likewise a dual interpretation is possible. Either there are separate Benefactive and Purposive roles with coreference between the non-finite verb and the Beneficiary, or the DAT marked elements constitute a single but disjunctive non-finite clause.

12.1.9.2 DAT clausal complements

While DAT clausal complements are well attested, the full range of predicates with which they occur has yet to be described. They certainly occur with "Adjectival" predicates, semitransitive and transitive verbs. We will see in section 12.2.1.3 that finite complements are also possible with all these categories. I have evidence for a few predicates where either clause complement type (i.e. finite or non-finite) is possible e.g. the "adjectival" predicates *marŋgi* "know", *djäl* "want" and the semitransitive/transitive verb *waŋa* "talk". However, the details of complementation in regard to particular predicates remains a topic for future consideration. Examples of DAT marked complements with each of the three predicate types are given below:

a) DAT clause complements with "adjectival" predicates

(899) *wiripu+ny balanda mala marŋgi+mirr ǰatǰin+gu*
certain+PROM white person PL know+PROP mangrove worm+DAT
ǰuka+nhara+w, ga wiripu+ny mala bäyŋu\ ǰurrkun' marŋgi+ny
eat+4th+DAT and certain+PROM PL NEGQ few/three know+PROM
ǰuka+nhara+w, ga djäl+nydja ǰuka+nhara+w\ ga dharrwa+ny bäyŋu
eat+4th+DAT and want+PROM eat+4th+DAT and many+PROM NEGQ

There are some white people who know about eating mangrove worms and others that do not. A few have eaten (them) and like eating (them) but many don't.
T401p24

See also example 648.

b) DAT clause complements with semitransitive verbs

The following examples contain main clause verbs that are clearly not transitive. Some are known to regularly occur with an S-IO array e.g. *yaka'yu*-N "refuse, say 'no'", and *dhumbal'yu*-N "be ignorant about", but the range of potential arrays has yet to be determined for the others. The possibility that the predicates taking these complements do not totally overlap with the predicates that take an S-IO relational case array cannot yet be ruled out.

(900) *ga **waŋdi+nyara+w+nydja** ŋayi ŋuli ŋunhi, yana+n*
and run+4th+DAT+PROM 3sg HAB TEXD EMPH+SEQ
dhumbal'yu+na+n
be ignorant(semitr)+4th+SEQ T102Bp3
and as for running, it is not able to (an emu after it is speared)
(S-(S) coreference)

(901) *yaka'yu+n ŋarra ga, marwat+ku+n nhokalaŋa+w,*
refuse(intr/semitr) 1sg IMPV-1st hair+DAT 2sg-OBLS+DAT(Poss)
mitthu+nara+w+nydja
cut(tr)+4th+DAT+PROM T023A p5
I forbid/say'no' to the cutting of your hair
(no coreference - I interpret this clause as consisting of an S and an IO clausal complement. If there were coreference in this example it could only hold between a higher clause's IO and the lower clause's O. This predicate also occurs with an S-IO case array in which the IO is the person refused. The lack of an Emphatic pronominal suggests "your hair" is not a coreferential lower clause constituent. However it might potentially be a higher clause IO with the DAT marked verb the only constituent of the non-finite clause. This potential ambiguity was described above in section 12.1.9.1).

(902) *ŋarra+ny, ŋäthil dhu rukitjthi+rr ŋarraku+wuy ŋarra ,*
1sg+PROM prior FUT observe quietly(semitr?)+1st 1sg-DAT+EMPH (1sg)
waŋa+nhara+w
speak+4th+DAT
I will first listen to myself talking Bk1 86p36
(S-S(?A)(EMPH Pro) coreference.)

(903) *yaka ŋarraku'yu+n+mi+rr+nydja\ ŋuruku+ny miliny+gu+ny*
NEG claim for self+1st+R/R+1st+PROM TEXD-DAT+PROM meaning+DAT+PROM
\ djuŋuny'+ku+ny märra+nhara+w
meaning+DAT+PROM take/get+4th+DAT T018p15
Don't claim for yourself the taking of those meanings
(S-(A) coreference)

c) DAT clausal complements with transitive verbs

The transitive verbs with which the DAT clausal complement predominate in the corpus are locutionary and cognitive predicates. The role of the DAT complement appears to correlate with whether the verb is concerned with the transfer of speech or thoughts or whether it simply expresses what these are. In the former case the DAT complement is an additional constituent to the A-O array, while in the latter the DAT complement is in O function. The following verbs have been recorded with these clauses - *wäwun'ku-*Ŋ "promise", *waŋa-* $Ø_a$ "speak", *dhä-birrka'yu-*N "ask", *meŋgu-*Ŋ "forget" and *ŋäthilmirriya-*Ŋ "prepare, get ready". The ditransitive predicate *lakara-*Ŋ "tell" also occurs with DAT complements. The Gupapuyŋu examples in Lowe (n.d.a L45) include also *guŋga'yun* "help (tr)" and *guyaŋa* "think (tr)". The examples with *ŋäthilmirriya-*Ŋ and *guŋga'yu-*N are an indication that the potential for DAT complements is wider than that of locution and cognition. As with all the subordinate clause types there is much more to be considered.

(904) *ŋunhi yawungu ŋarra nhuna wäwun'ku+m, **märra+nhara+w***
TEXD "yesterday" 1sg 2sg-ACC promise(tr)+1st get/take+4th+DAT
ŋula nhaku
[INDEF2 what] "something"-DAT
that which I promised you yesterday, to get something T008p8
(A-(A) and O-(IO/Benef) coreference)

(905) *ga ŋunhi napurr ŋanya waŋa+ny birrka'yu+n+dja,*
and TEXD 2pl 3sg-ACC speak-1st+PROM think/test+1st+PROM
*dhä-dhirr'yu+n+dja **balanyara+w+nydja lurrku'-lurrkun+gu+ny***
[mouth-stir]"ask"+1st+PROM such+DAT+PROM few-REDUP+DAT+PROM
ŋorra+nhara+w
lie+4th+DAT T101p17
and when we requested him that a few (of us) sleep together
(A-(S) coreference)

(906) *yaka nhe dhu gi marrtji\ räli lakara+nha+mi+rr ŋanapurruŋ+gal*
NEG 2sg FUT IMPV-2nd go-2nd MVTTWD tell+4th+R/R+1st 1pl+OBL
bulu+ŋu+w+nydja yakurr+ku+nhara+w
again+ŋu+DAT+PROM sleep+TRANS+4th+DAT T013p21
Don't you come here asking us to get you to rest again
(S-(O) and OBL[=IO]-(A) coreference)

Summary of DAT non-finite clause characteristics in the corpus:

1. There may or may not be coreference between participants in the two clauses.
2. Coreference that does occur is wide ranging. Attested are: A-(A), A-A(Emph Pro) A-(S), S-(A), S-(S), S-S(Emph Pro), S-(O), S-(IO), S-(All(motion verb)), O-(A), O-(O), IOthree place verb-(S), DAT(Benef)-(A)/(S)/?(O).
3. Coreferential elements are deleted from the subordinate clause unless expressed using an Emphatic pronominal. The roles ocurring in connection with the emphatic pronominals are A or S in the subordinate clause, coreferential to a main clause A or S.
4. DAT marking is found on all non-finite core roles and nominals in temporal function. ALL occurs on non-finite Allative roles.
5. Co-occurring roles include A, S, O, IO, Temporal and Allative. Occurring complex expressions include possessive, co-ordinated nominals and nominal plus nominal (demonstrative plus nomen, proform plus nomen, quality/quantity plus nomen and part-whole) constructions.
6. They function as clausal complements as well as having peripheral functions coding purposives or events whose time is being specified in the main clause).
7. Very often elements of a DAT marked clause occur juxtaposed. However it is not uncommon for a non-finite clause role to occur separately from the verb stem. A, S and O roles have been coded in this arrangement. Where the non-finite role is coreferential with the main clause IO or Beneficiary in a disjunctive arrangement its function is potentially ambiguous. Juxtaposed elements show varying orders although the verb stem is usually clause final.

The non-finite clause constructions are clearly a very reduced "clause" type. They do not have any of the regular TMA marking associated with main clauses and while there are predicate-role relations these are heavily constrained. Only the ASS and DAT appear to permit peripheral roles and the maximum number of roles ever

overtly expressed is two. The formal marking for distinguishing non-finite roles is minimal. Only the ASS has a suffix distinct from that expected on the basis of agreement with the complementizer suffix and the "human"ness of the referent. The variation demonstrated for some of these constructions, e.g. the occurrence of an OR marked nominal with an ERG marked verb stem, suggests a distinct coding for the A role may be evolving.

12.1.10 Remarks on the relationship between non-finite clauses and nominalizations

Non-finite clauses might be more appropriately viewed as 'expanded' nominalizations, rather than 'reduced' clauses. This is most evident in the close association between the complementizer and the relational suffix functions. They are marked by identical forms and convey similar, if not identical, meanings. This morpho-functional correlation strongly allies the non-finite subordinate clauses with nominals. The use of the emphatic pronominals to code coreferentiality is another feature they have in common. The use of deletion in relation to coreference on the other hand, is a special distinctive feature of the non-finite clauses. Another nominal-like feature suggested for some of these clauses is the presence of demonstratives which are not in agreement with the "humanness" of the non-finite clause roles. This suggests these demonstratives function as determiners to the non-finite verb stem or the clause.

The fact that the form of the stem to which the suffixes are added appears to at least derive from a nominalizing suffix, albeit one now almost completely homophonous with a regular verb inflection, is a further indication that these are nominalizations.

In this regard, I would like to note a handful of examples in the corpus which superficially resemble subordinate non-finite clauses. However in these clauses the co-occurring nominal functions as a generic to the specification expressed by the case marked verb stem rather than having a relational role to it. These verb forms thus appear to be nominalizations. Consider the following:

(907) *yaka dhu ŋayi mari märra+m miyalk+thu wo ŋayi dirramu+y*
NEG FUT 3sg trouble take/get+1st woman+ERG or 3sg man+ERG
nhanukalaŋa+wuŋ gurrutumirri+wuŋ ***manaŋi+nya+ŋur rom+ŋur***
3sg-OBLS+OR relatives+OR steal+4th+ABL/LOC law+ABL/LOC
Neither the woman nor the man gets in trouble from her/his relatives from that "stealing" custom (i.e. running off with someone in a relationship that had not been previously sanctioned by their families (by whom marriage was traditionally arranged)). T019p14

(908) ***dhiyaŋi rom+dhu djaw'yu+nara+y+nydja,*** *nhe dhu bäyŋu bulu+ny*
MED-ERG law+ERG take(tr)+4th+ERG+PROM 2sg FUT NEGQ again+PROM
märra+m
take/get+1st
by this practice of stealing you will not get/take any more T024Ap2

(909) *bitjana* ***wal*** *ŋull ga+nha ŋunhi, nhina+nha+ny\ ga* ***dhiyaŋi***
do thus+4th 3pl HAB IMPV-4th TEXD sit+4th+PROM and MED-ERG
rom+dhu+ny balanyara+y+yi, gatjpu'yu+nara+y
law+ERG+PROM such+ERG+ANA hope+4th+ERG
dämbu+ŋur-waŋa+nhara+y
[head+LO -talk]"say special names"+4th+ERG T019p32
thus they were living, by such a practice as that, speaking special names in hope (of being provided with a catch while hunting)

(910) *ŋunha nhuma dhu town+lil+a* ***marrtji, rrupiya bilmara+nha+lil+a***
DIS 2pl FUT town+ALL+SEQ go-1st money turn(tr)+4th+ALL+SEQ
wäŋa+lil
place+ALL
you will go to town, to a money changing place T101p18

On the basis that these verb stems are apposed to other nominal stems in ways which are exactly parallel to that of other nominal expressions not involving verb stems, these examples provide some of the best evidence in Djambarrpuyŋu that the fourth verbal form does function as a nominalized stem. The last example ,910, in which there is no case marker on the co-occurring role i.e. *rrupiya* suggests that these constructions may in fact be syntactically distinct from the non-finite clauses. The pattern demonstrated in this example is parallel to that found with PROP and PRIV phrases. The phrasal construction associated with these two suffixes (see section 9.1.3 and 9.2.3, and demonstrated in this example and with some of the ERG examples in Temporal function in section 11.2.2.1) is distinct from the non-finite clauses in being restricted to a single co-occurring role which is not case marked and which must precede the verb.

A somewhat different context producing nominalizations occurs when verbs are being talked about as entities, rather than as designating situations. Meanings of a word are commonly expressed as X-LOC "being in X" where X is the word being

talked about. When this is in regard to a verb the fourth form of the verb can be used. For example:

(911) *ga balanya ŋayi dhuwali ŋuya* ***dhuwali+yi+ny,***
and such 3sg MED meaning MED-LOC+ANA+PROM
barrwaŋ'thu+na+ŋur+nydja ***dhäruk+ŋur***
fall, slip+4th+LOC+PROM word+LOC T017p5
and such is that meaning, in that word "barrwaŋ'thun"

There are also examples of this type of expression in which the LOC is suffixed to the FIRST inflection form of the verb. The latter is the usual citation form of verbs and it commonly features in the discussion of verb meanings. Its existence as a variant stem for suffixation in these contexts is therefore not surprising, although "irregular" in relation to the general morpho-syntactic patterns concerning the verb stems to which case marking suffixes are attached (eg. *dhiyali dhäruk+ŋur bakpakthun+ŋur* [MED-LOC word+LOC "bapkpakthun"+LOC] "in that word "bakpakthun" (T019p5)).

12.1.11 Non-finite subordinate clauses in other Yolŋu varieties

This construction type appears widely distributed in the Yolŋu bloc. It is described for Dhuwal/Dhuwala, Dhaŋu, Djinaŋ and Ritharrŋu, although nowhere can the descriptions be said to be complete. The Djinaŋ and Ritharrŋu descriptions suggest that the construction may be more restricted in these varieties than in Dhuwal/Dhuwala and Dhaŋu. The various findings in regard to the different varieties are summarized below.

1. Djapu

The same case markers with similar functions in subordinate clauses as those in Djambarrpuyŋu are noted for Djapu, with the single exception of the PERL which is not mentioned as occurring in these constructions (see Morphy 1983 pp131-135). For the DAT marked clauses there is a constraint requiring the deletion of the lower clause subject (i.e. S/A) if it is coreferential with any core NP in the main clauses (ibid p134). The Djambarrpuyŋu corpus includes examples which suggest that the lower clause O and IO may also be involved.

For the other kinds of non-finite subordinate clauses a coreferential lower clause subject must be deleted if it is identical with the subject of the main clause. Again there is evidence in the Djambarrpuyŋu corpus that the correlation between the absence of an argument in the lower clause and coreference with a higher clause

argument is more broadly based. No mention is made in regard to Djapu regarding the potential for emphatic pronominals to occur in these clauses.

2. Gupapuyŋu

The ERG, ABL, LOC, ALL and PERL suffixes are all described as occurring on verb stems (see Lowe n.d.a L44-46, 53, 66). Co-occurring roles that are included in the examples are O with DAT, ABL, LOC, ALL and ERG and one instance of an IO with DAT. All the examples with verbal or "adjectival" predicates translate as involving coreference between an elided non-finite predicate A or S and the higher clause S, A or IO (with *djäl* "want"). This data set suggests that there are coreferential constraints affecting the lower clause S and A roles. As we have seen the Djambarrpuyŋu data indicates coreference is more broadly based.

The potential for ambiguous interpretations is mentioned in connection with *djäl* "want" where the actor of a transitive non-finite predicate can be construed as coreferential with either the main predicate S or IO (see L44). The use of finite constructions to disambiguate is also mentioned. While there is more to be investigated for both varieties, the current descriptions suggest that both Gupapuyŋu and Djambarrpuyŋu may well be identical in respect to these constructions.

3. Ritharrŋu

Heath (1980b p77) describes comparable constructions in Ritharrŋu. The Associative, Locative, Ablative and Allative suffixes are found on the Nominalized verb stems with obvious correlations with Djambarrpuyŋu. There is also an infinitive with a suffix *-rawu* which correlates with the Djambarrpuyŋu DAT marked purposive clauses. Only the latter construction is attested with nominals designating arguments of the subordinate predicate. The Ritharrŋu constructions involving case markers thus appear even more 'reduced' than those in the Dhuwal/Dhuwala varieties.

4. Djinaŋ

In Djinaŋ the only suffixes that appear to attach to nominalized verbs are the DAT and the ALL, both having a Purposive function (see Waters 1989 pp66-7).

5. Dhaŋu

The Dhaŋu data I have considered is from examples in Schebeck (1976a and b). There are several with constructions comparable to the non-finite clauses described

for Djamabarrpuyŋu, but there are no more than two examples for each type. The range of suffixes demonstrated there include equivalents to the ERG (Instr), LOC, ALL, ABL and DAT case suffixes. As for Djapu there is no indication that the PERL can occur in this construction. Only core roles are ever present and there are never any more than two. There are examples with both coreference and no coreference. Coreference is associated with deletion in the non-finite clause (with examples of this between S-(O), O-(A) and S-(A)). Co-occurring roles agree with that on the verb stem and except for the DAT are also sensitive to the "humanness" of the referent. Dhaŋu however has more "human" case distinctions than Dhuwal/Dhuwala and this is also reflected in the Possessive constructions. As in Djambarrpuyŋu there is a close correlation between the case forms found in non-finite clauses and the possessive construction.

12.2 Finite subordinate clauses

Finite subordinate clauses are formally very close to main clauses. They may function as complements, adverbials and relative clauses. While most of them are identified by subordinating lexemes found clause initially there are many examples of the complement clause category with no such marking.

The subordinating lexemes are either particles, the bare stem form of the TEXD demonstrative - *ŋunhi*, or interrogative/indefinite proforms. The subordinating particles are *bili/]inygu/]iŋgu* " because", *märr/marr (ga)* "so that", *yurr* "but, furthermore", *yurrnha* "and then/before" and *bäy* "until". The particle *ŋuli* is found clause initially in the protasis of conditional clauses.

Those clauses introduced with *ŋunhi* and interrogative/indefinite clauses are multifunctional. They show characteristics similar to those of the adjoined relative clause described in Hale (1976), a construction not uncommon in Australian languages.

Those subordinate clauses introduced by subordinating conjunctions are not multifunctional in this way. They introduce adverbial clauses, coding particular kinds of logico-semantic relations.

We will consider the multifunctional finite subordinate clauses first and then those associated with subordinating conjunctions.

12.2.1 Multifunctional finite subordinate clauses

We are concerned here with clauses that are introduced with *ŋunhi*, the unmarked TEXD demonstrative form, and/or an interrogative/indefinite pronominal. There are also many examples of finite subordinate clauses which are simply juxtaposed to the main clause with no subordinate marking. This includes those have been referred to above as having a complement function. Their status has yet to be clarified, but, as there is some evidence that they may be a sub-class of *ŋunhi* clauses, they will be considered here as well.

The description is heavily dependent on the evidence from the text corpus and the full potential for the presence or absence of participant co-reference or temporal constraints has yet to be fully examined. The evidence does indicate that these clauses are much less syntactically bound to the main clause than are the non-finite clauses. They are found predominantly at the margins of the main clause, either preceding or, more commonly, following it. The "full" clausal appearance of these constructions is in striking contrast to the heavily reduced non-finite clauses. They allow full expression of TMA and code the roles identically to those in main clauses. From the current corpus the evidence suggests that potentially any roles may be expresssed. Characteristically the core roles are expressed in these clauses by a deictic or lexical nominal rather than being deleted. While deletion of coreferential participants occurs, there is no evidence that it is required. However, the possibility that it might be a feature of certain categories cannot yet be discounted. The Djapu description suggests that the potential for deletion is confined to core functions - A, S, O and DAT - in *ŋunhi* "relative" clauses (Morphy 1983 p129).

A major syntactic reflection of the difference in status in regard to the main clause between finite and non-finite clauses is that the former has no requirement that a pronoun coreferential to the main clause A or S be coded with an Emphatic pronominal, in contrast to non-finite clauses and other intra-clausal participants.

12.2.1.1 *ŋunhi* clauses

Ŋunhi appears to be a general subordinator and many *ŋunhi* clauses appear close to the adjoined relative construction described in Hale (1976). He proposes that in many Australian languages there are subordinate constructions which are apposed or "adjoined" to the main clause rather than embedded. Their characterizing features include occurrence at the margins of the main clause, either preceding or

following it, and the fact that these clauses serve a wide range of functions. These functions include the 'NP-relative' where the clause contains information pertaining to a main clause role, the 'T-relative' where temporal or logical relations such as the conditional are expressed. Other functions such as purposive or causal are also possible. The *ŋunhi* clause in Djambarrpuyŋu (and Djapu) is similarly found at the margins of the main clause and occurs with NP-relative and T-relative functions. Coreference may occur between main clauses and subordinate clauses with either of these functions.

a) *ŋunhi* clauses with an "NP-relative" function:

Any role in a main clause has the potential to be referred to in a *ŋunhi* clause. The examples below show the clause referring to O (ACC), IO (DAT), Malefactive (DAT) and Allative (OBL) roles. The coreferential participant may be coded as a pronominal in the subordinate clause (see 912 and 915), as a nominal or receive no mention (see examples 913 and 914). The latter has been noted for A, S, O and one possible Locative role.

(912) *bala ŋayi wapmara+ma+n djamarrkuli'+nha+ny ŋunhi+wurru+nha+ny*
then 3sg pick up+1st+SEQ children+ACC+PROM TEXD+PL+ACC+PROM
maralkur+'manydji+kurruwurru+ny [ŋunhi walal ga dapthu+n,
MMBS+KINPROP+PL+ACC TEXD(Sub) 3pl IMPV-1st sit(pl)+1st
ŋunhili+yi barala+ŋur]
TEXD-LOC+ANA sandhill+LOC T012p15-16
then s/he picks up the children, those in maralkur-gurruŋ relationship, who are sitting on that sandhill

(913) *ŋuriki ŋarra djäl ŋuya+w [ŋunhi darrkthu+rr d.....+nha]*
TEXD-DAT 1sg want fish+DAT TEXD(Sub) bite+3rd person's name+ACC
I want the fish that bit D T024p1

(914) *wap-wapthu+n+a nhaŋgu ŋuriki yolŋu+w [ŋunhi dhu*
jump-Redup+1st+SEQ 3sg-DAT TEXD-DAT person+DAT TEXD(Sub) FUT
yakurr ŋorra]
sleep lie-1st T022p6
(the children) are jumping about the person who is sleeping
(Note that in this example the status of the DAT marked nominal as core with this predicate is questionable yet the S of the lower clause is deleted)

(915) *"..." bitja+n ŋayi dhu yolŋu ga waŋa worruŋu*
do thus+1st 2sg FUT person IMPV-1st speak-1st old person
ŋuri=kal+yi yolŋu+wal waŋgany+gal, goŋ-marwat+mirri+wal,
TEXD=OBL+ANA person+OBL one+OBL hand-hair+PROP+OBL
[ŋunhi ŋayi dhu ga bidiyu+n]R \ goŋ-gamunuŋgu+mirri+wal
TEXD 3sg FUT IMPV-1st paint+1st hand-paint+PROP+OBL
"..."thus will the old person speak to that person, the one with the paintbrush in his hand, who will be painting. The one with the paint in his hand. T021p3
(Note that here the *ŋunhi* clause occurs amidst a listing of expressions identifying a particular participant. While it does not occur at the end of the listing there is a major intonation break between it and the next nominal denoting the head. These kinds of listings are not an unusual feature of clause final position and are much more loosely bound to the clause.

b) *ŋunhi* clauses with a ' T-relative ' interpretation:

The 'T-relative' like function of a *ŋunhi* clause is found in its use to provide a temporal setting for a main clause. This may be simultaneous or prior to that of the main clause. The sequential relationship may be further indicated by distinct TMA coding in each clause and/or by the presence of particles such as *bala* "then", *yurrnha* "and then", or the SEQ suffix in the main clause. These *ŋunhi* clauses very commonly occur preceding the main clause. As with the T-relative clauses described by Hale, the *ŋunhi* clause can also code the conditional clause Some examples follow:

(916) *[ŋunhi ŋayi ga nhakun mar'yu+n+a]\ ŋayi dhu*
TEXD(Sub) 3sg IMPV-1st like be ready+1st+SEQ 3sg FUT
lakara+ma+n, wo dharpu+ma+n
tell+1st+SEQ or spear+1st+SEQ T010p17
when/once s/he is prepared, s/he will speak or spear
(this is from a text explaining the meaning of *mar'yu*-N)

(917) *[ga ŋunhi ŋarra wiripu+ŋu+y+nydja walu+y marrtji+n ŋuwaŋthu+rr*
and TEXD(Sub) 1sg other+ŋu+ERG+PROM time+ERG go+3rd go up+3rd
djäma+lil], bala ŋayi+ny waŋa+na+n bitja+rr+nha ŋunhi
work+ALL then 3sg+PROM speak+3rd+SEQ do thus+3rd+SEQ TEXD
buŋgawa+'mirriŋu+ny ŋarra+ku
boss+KINPROP+PROM 1sg+DAT T008p5
and then one day I went to work and my boss said to me ...
OR and when I went to work one day, my boss said to me ...

(918) *[ŋunhi dhu walal bawalamirri+ŋur+nydja dhärra wuthaŋiny+ŋur],*
TEXD(Sub) FUT 3pl any/every+LOC+PROM stand-1st wind+LOC
ŋayi+ny dhu warrpuru+n walalany nhuma+n bäwarraŋ'+thu+ny
3sg+PROM FUT smell+SEQ 3pl-ACC smell+1st animal+ERG+PROM
when/if they stand anywhere in the wind, the animal will smell their scent
T102Bp2

ŋunhi is a permissible alternative to *ŋuli* at the beginning of the protasis of a conditional (see section 12.2.2). It would appear to be based on the close link that often exists between a logically hypothetical condition and a condition which is logically/temporally prior to something else.

As is also the case with this construction type in other Australian languages, it is often possible for there to be both an 'NP-relative' and a 'T-relative' interpretation possible for the one clause:

(919) *yothu yindi+mirr+nydja dhuwal ga yoŋu miyalk [ŋunhi*
child big+PROP+PROM PROX and person woman TEXD
nhaŋu yothu ŋalapal+nha]
2sg-DAT child big+SEQ T024Ap1
"*yothu yindimirr*" is (used to describe) a woman whose child is big (orthat has a big child)
"*yothu yindimirr*" is (used to describe) a woman when/once her child is big (or when she has a older child).

12.2.1.2 Finite subordinate clauses with an initial interrogative/indefinite proform

The interrogative/indefinite proforms always occur at the beginning of the clause with case marking appropriate for its role within the subordinate clause. This is in contrast to *ŋunhi* which, functioning as a subordinator, never shows any case marking. The interrogative/indefinite proforms which have been noted in this function are: *nhä* "what/something", *nhaliy* "what-ERG(A)", *wanha* "where/somewhere", *wanhal/wanhami* "where-LOC", *wanhawal/nhäkurr* "where-ALL", *wanhaŋur* "where-ABL", *wanhawitja*-N$_K$ "do which way('PERL')", *nhätha/nhaliy* "when", *nhaltja*-N$_K$ "do what/how", *nhäthinya* "be how/what like (adnominal)", *nhaku* "what-DAT" and *nhämunha* "how many".

The interrogative/indefinite pronoun initial clauses commonly occur in complement function, but they have also been noted as place adverbials and with coreference between subordinate and higher clause roles, thus permitting a relative interpretation. These latter two functions thus give them a scope parallel to the NP-relative and the T-relative interpretations of *ŋunhi* subordinate clauses. Some examples follow:

a) Interrogative/indefinite subordinate clauses with an NP-relative interpretation:

(920) *bäyŋu+n ga+n ŋunhili+n girri' gorru'- gurru+ŋal*
NEG+SEQ IMPV+3rd TEXD-LOC+SEQ "things" be high/hang-REDUP+3rd
shop+ŋur duratj+tja mala. [nha+ku linyu gan
shop+LOC dress+PROM PL 'what'+DAT 1+2dl IMPV+3rd
djäl+thi+n girri+w']
want+INCH+3rd "things"+DAT T007
there were no dresses hanging in the shop (which were) of any kind we wanted

(921) *ŋarra+ny nhuŋu dhäwu lakara+m, [nhä napurr gäthur nhä+ŋal]*
1sg+PROM 2sg-DAT story tell+1st 'what' 1pl today see+3rd
I will tell you a story (which is about) what we saw today T007p5

(922) *yaka ŋarra marŋgi wäŋa+w [wanha ga nhina y.....]*
NEG 1sg know place+DAT 'where" IMPV-1st sit-1st person's name
I don't know the place where Y..... is. T023Bp8

With the adjectival predicates there are also examples where the IO is not DAT case marked. The following is one such instance:

(923) *yaka ŋarra marŋgi wäŋa [wanha] ŋayi ga nhina yuwalk*
NEG 1sg know place where-LOC 3sg IMPV-1st sit-1st true
wäŋa+ŋur]
place+LOC 22989p2
I don't know the place where s/he really lives/is

b) Interrogative/indefinite subordinate clauses with a place adverbial function:

(924) *ga djurryun+mi+rr+nydja nhe dhu, yaka birrka'mirr*
and anoint+R/R+1st+PROM 2sg FUT NEG everywhere
[wanha=mi/wanha=l ŋayi nhuna dhu gatjipali+y buma]
where=LOC2/where=LOC 3sg 2sg-ACC FUT ringworm+ERG strike-1st
and you anoint (yourself), not everywhere, (but) where the ringworm strikes you T014p12

While the vast majority of clauses occur with only the interrogative/indefinite proform initially, there are a few examples of the interrogative/indefinite pronoun being preceded by *ŋunhi*. In the following example it occurs in a clause nearly identical to that of 921 above:

(925) *ŋarra nhuŋu dhu dhuwal lakara+m [ŋunhi nhä ŋarra nhä+ŋal*
1sg 2sg-DAT FUT PROX tell+1st TEXD(Sub) 'what' 1sg see+3rd
dhiyaŋ bala]
"now" OD B8
I will tell you about this which is something I saw right now.
OR I will tell you what I saw right now

The full potential for *ŋunhi* to co-occur with the interrogative/indefinite proform is not known. If *ŋunhi* were a generally permissible alternative, this would not be out of place with its function as a general subordinator.

12.2.1.3 Finite complement clauses

We will now consider a possible complement function for finite subordinate clauses. Consider the following examples:

(926) *ŋarra dhu dhä-birrka'yu+n ŋanya [nhätha ŋunhi dhu rom*
1sg FUT ask(tr)+1st 3sg-ACC 'when' TEXD(Sub) FUT law
dhawar'yu+n]
finish+1st Bk18650
I will ask him when the ceremony will finish

(927) *waŋi ŋanya nhe+ny, [ŋayi dhu räli marrtji]*
speak(tr)-2nd 3sg-ACC 2sg+PROM 3sg FUT MVTTWD go-1st/2nd T023Bp8
You tell her/him, (that) she/he is to come here

These examples with transitive locutionary predicates provide the strongest evidence for predicates taking a clausal complement, since they occur with A, O and the clause. They are clear evidence of reported/indirect speech, a phenomenon that some have suggested is not found in Australian languages (Rumsey 1990). For these verbs two arrays are proposed: A-O and A-O-COMP.

A juxtaposed clause is also common with the "adjectival" predicates such as *djäl* "want" and *marŋgi* "know". Some examples are:

(928) *yaka marŋgi dhuway\ [nhaltja+n walal dhu ga*
NEG know FZC do/be what+1st 3pl FUT IMPV-1st
djäma ŋanya]
work(-1st) 3sg-ACC T013p19
the dhuway$_i$ doesn't know what they will do to her/him$_j$

(929) *bili ŋarra marŋgi nhuŋu [ŋunhi nhe ga balanya+mirri+y,*
because 1sg know 2sg-DAT TEXD(Sub) 2sg IMPV-1st such+PROM+ERG
luku ŋunhi rirrikthu+n, guŋda+y nhe luku buraki+rr]
foot TEXD sick+1st rock+ERG(instr) 2sg foot wound(intr)+3rd
Because I know about you that at that time your foot was hurt, your foot was "wounded" by a rock. T401p13

(930) *yaka ŋarra nhuŋu duk$_L$uk [nhe dhu dhuwal meŋgu+m]*
NEG 1st 2sg-DAT want 2sg FUT PROX forget(tr)+1st T401p19
I don't want you to forget this

These predicates regularly have an S (ABS)-IO (DAT) case array, but these examples are evidence of an additional array S-IO-COMP (to which should possibly be added S-S-COMP, if the S-S array should be confined to utterances with a following subordinate clause as in example 923 above). In many examples with these predicates there is no nominal expression present coding the IO. This raises the possibility of an alternative S-COMP array for these predicates. However, the presence of a second participant in a few examples suggests that this may be a matter of "non-mention" of a possible option in an S-IO-COMP array, rather than a S-COMP array. Further investigation is required on this matter. As a final point it should be noted that both these predicates also occur with a DAT marked non-finite clause (see section 12.1.9.2).

It is not known to what extent other semitransitive predicates permit a finite clause complement but the following two examples show they are possible:

(931) *ŋarrapi+ny ga+n ŋunhi märr-yuwalkthi+n [nyäl'yu+rr+a ŋayi*
1sg-EMPH+PROM IMP+3rd TEXD believe(semitr)+3rd lie+3rd+SEQ 3sg
ga+n ŋunhi dhäwu+ny lakara+ŋal]
IMPV+3rd TEXD story+PROM tell+3rd T401p18
I believed that that story he told was untrue

(932) *märr-ŋiŋ'thu+rr ŋarra nhanukal [ŋunhi mak ŋayi dhu rraku*
believe(semitr)+3rd 1sg 3sg-OBL TEXD(Sub) perhaps 3sg FUT 1sg-DAT
ŋunhi bäyŋu+n bäy-lakara+ma+ny]
TEXD NEGQ+SEQ forgive+1st+PROM T401p18
I believed of her that she would not forgive me

The possibility of an O clause complement is also suggested by examples such as:

(933) *yaka ga maŋ'mara+m [waŋgany ga dhärra girri'+mirr*
NEG IMPV-1st find(tr)+1st one IMPV-1st stand-1st things+PROP
wäŋa], yaka
place] NEG T101p22
(you) don't find just one shop standing, no

(934) *ŋuriŋi bili ŋayi nhaŋu dhu dhunupamirriya+m, maŋayin'+thu ga*
TEXD-ERG "same" 3sg 2sg-DAT FUT 'point out'(tr)+1st sacred+ERG and
wäŋa+y, [wanha+ŋur ŋayi ŋunhiyi yoŋu]
place+ERG 'where+ABL 3sg TEXD+ANA person T023Ap6
those same things, the sacred business/ceremony and the place point out for her/him$_i$ where that person$_i$ is from

(935) *ŋarra+kal wäwa+'mirriŋu+y ga guyaŋa [bäyŋu+n*
1sg+OBL(Poss) brother+KINPROP+ERG IMPV-1st think(tr)-1st NEGQ+SEQ
gapu+ny guyŋarr]
water+PROM cold OD122
My brother thought the water was not cold

(936) *warkthu+rr ŋarra ŋäthil+nydja ga+n [girri' ga+nha rurrwuyu+na*
work(tr)+3rd 1sg first+PROM IMPV+3rd "things" IMPV+4th wash+4th
ŋäpaki+w walalaŋ wäŋa+kurr mala+ŋu+wurr buŋbu+kurr]
white person+DAT 3sg-DAT+3rd place+PERL PL+ŋu+PERL house+PERL]
I was first working washing the white people's things in the houses T008Txt p1

(937) *nhäma+n ŋanapurr [ŋayi marrtji dhal'yu+n ŋunhi be+ŋur+nydja*
see+1st+SEQ 1pl 3sg go-1st land+1st TEXD INDEF+ABL+PROM
burumun'+ŋur+nydja dikarr...]
island/cheek+ABL/LOC+PROM plane/flying fish T101p3
we saw/watched the plane from the island landing ...

Note that in none of these examples is there any evidence of an O nominal. This might be considered as indicating an A-COMP array for these predicates. However, the next set of examples show an O nominal together with the subordinate clause.

(938) *dhika ŋarra gapu meŋgu+ŋal [wanha ŋarra nhirrpa+r]*
INDEF 1sg water forget(tr)+3rd 'where' 1sg put+3rd
I forgot the water, where I put (it) T023Bp7
(I forgot where I put the water)

(939) *dhika ŋarra yothu+ny meŋgu+ŋal [wanhawal+a ŋarra*
INDEF 1sg child+ACC forget(tr)+3rd where-ALL+SEQ 1sg
yorrku+ŋal+nydja ŋanya]
lie down(tr)+3rd+PROM 3sg-ACC T023Bp8
I've forgotten the child, where I lay her/him down
(I've forgotten where I lay the child down)

(940) *ŋarra+ny ga+n ŋunhi birrka'yu+rr [yanbi balaŋ ŋayi yaka+n*
1sg+PROM IMPV+3rd TEXD think(tr)+3rd CFACT IRR 3sg NEG+SEQ
do'yu+na]
arrive+4th T401p17
I was thinking it (that) s/he would not come (but she did) OR
I was thinking it mistakenly that s/he would not come
(compare this with example 1007 where there is no *ŋunhi*)

On the basis of these examples the alternative array is A-O-COMP. A lot more work is required in this area to determine the range of predicates with which complements can occur and the various permissible arrays.

The following examples involve a transitive perception predicate *nhäma* "see". These examples pose a problem for the range of the complement function and a possible T-relative adjunct function. These could be construed with an A-O-COMP

array as "I saw them, they were being picked up by W" or as A-O and an adjunct "I saw them when they were being picked up by W".

(941) *nhä+ŋal ŋarra walala+ny [ŋayi walala+ny w.....+y+nha*
see+3rd 1sg 3sg+ACC 3sg 3pl+ACC person's name+ERG+SEQ
märra+ŋal+nydja]
get/take+3rd+PROM T023Bp1
I saw them, (when) W..... was collecting them
OR I saw them being collected by W.....

(942) *bili+n ŋarra nhuŋu djamarrkuli+ny nhä+ŋal [ŋayi*
COMPL+SEQ 1sg 2sg-DAT(Poss) children+ACC see+3rd 3sg
märra+ŋal+nha w.....y+nydja]
get+3rd+SEQ person's name +ERG+PROM T023Bp1
I've seen your children already, being collected by W
I saw your children when W.....y was collecting (them)
I saw your children, W.....y was collecting (them)
(compare these with example 937 above where no O nominal was mentioned)

I conclude the exemplification of these "complement" clauses with two examples which point to further areas for consideration. One is an example in which an equational clause predicate occurs with a clause complement:

(943) *yaka muka litjalaŋ manymak\ [ŋali dhu waŋa gurruŋ+'mirriŋu+wal]*
NEG PRT-OK 1pl-DAT good 1dl FUT speak-1st FZDC+PROP+OBL
"it is not good of us" (that) we talk to the people we call *gurruŋ* T401p20
(This was elicited from the English cue "we should not talk to kin we call gurruŋ")

The second is an example with an initial non-specific reference combination i.e. *ŋula* and an interrogative/indefinite proform:

(944) *yaka ŋarra marŋgi [ŋula nhaliy nhuna dhu marŋgi+ku+m]*
NEG 1sg know "something"+ERG 2sg-ACC FUT know+TRANS+1st
I do not know what makes you aware/conscious (of something)
I do not know, something makes you aware/conscious (of something)
T010 p26

Morphy reports for Djapu the use of *ŋula* rather than *ŋunhi* to introduce subordinate clauses which are in non-indicative mood (equivalent to what I refer to as irrealis). There is no evidence for this in my corpus for Djambarrpuyŋu. While it is clear that *ŋunhi* can occur in both realis and irrealis contexts, this does not preclude the possibility of an alternative use of *ŋula* in irrealis contexts.

At this point it is quite possible that the the complement function in Djambarrpuyŋu is formally no different from the other *ŋunhi* subordinate clauses. The distinct "complement" function may be directly attributable to particular kinds of predicates. Most of the predicates with which it has been observed are those for which it is semantically felicitous to encode a whole proposition as a 'participant'.

The predicates can be loosely grouped within the Noonan (1985) complement predicate classification. Thus there are utterance predicates, which appear to subsume the category of "permissive" manipulative predicates e.g. *lakara-Ŋ* "tell", *waŋa-Ø$_a$* "speak, tell", *dhä-birrka'yu-N* "ask", predicates of knowledge and acquisition of knowledge e.g. *maŋgi* "know", *maŋ'mara-Ŋ* "find out", *meŋgu-Ŋ* "forget", desiderative predicates e.g. *djäl* "want, like" and immediate perception predicates e.g. *nhä-Ŋ* "see/watch". The equational clause with *manymak* "good" as a predicate is a possible candidate for Noonan's commentative category in which information regarding mental attitude is conveyed.

Somewhat outside of the Noonan classification is the treatment of complements to verbs of thinking which appear to be treated parallel to "utterance" predicates. The example with the verb *warkthu-N* above (936) also falls outside his general categories.

One complicating feature of the "complement" clauses in the data sample is that *ŋunhi* rarely appears with clauses in this particular function. However there are also examples of the finite clauses in "relative" function and, given the examples with *nhä-Ŋ* "see" (941,942), possibly also the temporal function, where *ŋunhi* also does occur. An example without *ŋunhi* with a possible 'relative' interpretation is the following:

(945) *malthu+rr ' ŋarra ga+n djamarrkuli+w', [walal ga+n guya*
follow(semitr)+3rd 1sg IMPV+3rd children+DAT 3pl IMPV+3rd fish
luka+n]
eat+3rd T024Bp1
I was following the children (who) were eating fish
OR I was following the children (while) they were eating fish

The occurrence of *ŋunhi* with subordinate clauses functioning as complements is not prohibited, as will have been noted in examples 929 and 932. The following is yet another example:

(946) *nhe maŋgi [ŋunhi nhaltja+n barpuru maŋ'thu+n*
2sg know TEXD(Sub) do what+1st yesterday/recently happen+1st
ŋarra+kalaŋa+w wäwa+w]
1sg+OBL+DAT(poss) brother+DAT(IO) ODB4
Do you know what happened to my brother yesterday?
(compare this with example 928 above where there is no *ŋunhi*)

We have seen evidence that *ŋunhi* can occur initially with all kinds of subordinate clauses in the relative, temporal and complement functions. However, its acceptability in all such clauses has yet to be tested.

I will conclude with a review of some findings for subordinate clauses in other Yolŋu varieties.

The examples presented by Lowe in her Gupapuyŋu language lessons offer some valuable insights. The Gupapuyŋu examples consistently have *ŋunhi* at the beginning of all subordinate clauses in all functions, although there is a note in the section covering complement and relative functions that it is not always present. Furthermore many of the the Gupapuyŋu examples include two deictics, even two TEXD forms, one functioning as the O or IO place marker and the other introducing the subordinate clause. If this were the case for Djambarrpuyŋu as well, it means that the clause complements are in addition to the core case array S-IO or A-O rather than substitutions for the particular roles. On available evidence the position of the clause is the same as that of the other "adjoined" clauses, namely at the periphery of the main clause. The "place"-taking deictic is not required to be juxtaposed to the subordinate clause, although in some examples it is.

The lack of any formal marking of a clause as subordinate is however, not a feature unique to Djambarrpuŋyu within the Yolŋu bloc. It is in fact the unmarked case for finite subordinate clauses in Djinaŋ. Waters (1989 pp207-9) presents examples of such clauses functioning as complements, relatives and temporals. In Djinaŋ deictics and interrogative/indefinite proforms may occur with these subordinate clauses, but they are uncommon.

In Djapu on the other hand, the only context in which specific mention is made in regard to the possible absence of *ŋunhi* is in complement clause function, where it is said to be "often" omitted (Morphy 1983 p128). While *ŋunhi* clauses are reported for Djapu with parallel functions to Djambarrpuyŋu, there is no mention of finite subordinate clauses with the interrogative/indefinite proforms.

In Ritharrŋu finite clauses, subordination is marked by juxtaposition and the use of particular verb inflections in the subordinate clauses. Like Djinaŋ there may be no subordination marker. Different functions of such clauses include purposives, complements to *djälthi-* "to want" and *marŋgi* "knowledgeable" and conditionals (Heath 1980b pp107-10). Another common subordination pattern involves the

affix *-ŋu* attached to the inflected verb and is unique to Ritharrŋu. These constructions are more general than English relatives but do not have purposive or temporal function (ibid pp111-2).

From the available data it appears that subordinate finite clauses with a similar range of functions occur in all varieties, yet with different morpho-syntactic realizations. These varying realizations appear to be another domain where differences may correlate with geographical location. Thus, while there is evidence that subordination does not categorically require a subordinate marker in any variety, its absence seems to be more prevalent in Djinaŋ in the north-west than in Djambarrpuyŋu, Djapu and Gupapuyŋu further east.

Another possible regional difference is in the use of interrogative/indefinite proforms in subordinate clauses. This has only been reported western varieties, i.e. for Djinaŋ, Djambarrpuyŋu and Gupapuyŋu (with *wanha* "where" only - see Lowe n.d.a L95).

12.2.2 Conditional clauses

We have seen that conditional clauses can appear with *ŋunhi*, the general subordinator. As described in 7.4.2.2 the HABitual/hypothetical particle *ŋuli* can introduce the protasis of a conditional. As yet no attempt to alternate *ŋuli* with *ŋunhi* the general subordinator has been rejected, and at this point it is not clear whether there is a semantic distinction correlating with the two forms. Several examples were presented in section 7.4.2.2. and see also 918 above. One more is included here with an equational clause as the protasis:

(947) ***ŋuli/ŋunhi*** *ŋarra balaŋ djäma+miriw+nydja, ŋarra balaŋ*
HYP TEXD(Sub) 1sg IRR work+PRIV+PROM 1sg IRR
balanyara+y+nydja walu+y rumbal+nydja
such+ERG(Temp)+PROM time+ERG(Temp) body+PROM
yalŋgi+thi+nya+n\ yurr badak yan ŋarra dhuwal djäma+mirr,
weak+INCH+4th+SEQ ADD still EMPH 1sg PROX work+PROP
ŋarra+ku rumbal däl yan
1sg+DAT body strong EMPH
If I were without work OR when I am without work, (then) it would be at a time my body was weak. But I am still with work, (and) my body yet strong

This coding of conditionals with either *ŋunhi* or *ŋuli* is reported for both Gupapuyŋu and Djapu (Lowe n.d.a L96 and Morphy 1983 p71, p129). In Ritharrŋu

conditional constructions feature particular verb forms rather than particles (Heath 1980b p110).

12.2.3 Finite subordinate clauses with subordinating conjunctions

12.2.3.1 *märr (ga)/marr (ga)* "so that" REASON FOR

This indicates the purpose for which the situation in the main clause was done or is to be done. *Märr/marr* occurs at the beginning of a clause and frequently without the co-ordinate particle *ga*. It is homophonous with the nominal *märr* "spirit" and the degree modifier *märr* "somewhat/kind of". An example is:

(948) \ *gatjuy nhuma+ny g.....a ga g.....rr yarrupthu+rr+a*
INT"be off" 2pl+PROM person's name and person's name go up+2nd+SEQ
märr payi nhumalany dhu yolŋu+y+nydja nhäma punhiwilli+n
so that 3sg 2pl-ACC FUT person+ERG+PROM see-1st TEXT-ALL+SEQ
nhumalaŋ+giyin+gal+a bed+lil+a\ *bitja-n ŋarra*
2pl+OBLS+OBL+SEQ bed+ALL+SEQ do thus-1st 1sg T101p14
"Be off you two G...a and G..rr get up so that the person will see you in your own beds", I said.

Other examples of clauses introduced with *märr* are 135, 237, 288, 610 and 983.

Djinaŋ has two particles that suggest that the homophony here can be attributed to at least two distinct sources. One is the particle *marri* which functions as a probability modal and a diminutive qualifier and the second the link particle *marrga* glossed as "therefore, thus, hence, so that" (Waters 1989 p156, 158). The Djapu cognate for the clause connective is *märr/marr* (Morphy 1983 p13). According to Lowe this is the only variant used at Yirrkala (Lowe n.d.a L99). The presence of *ga* with *märr/marr* would thus appear to be a feature of western varieties.

12.2.3.2 *bili/liŋgu/linygu* "because" EXPLANation

This particle introduces a clause of reason that offers an explanation for the situation in the main clause. It is homophonous with the COMPL *bili /liŋgu/linygu* which may also occur clause initially (see section 7.4.4.2). As noted by Morphy (1983 p131), there are grounds for connecting these functions given that an event that is the cause of another may often precede it. This is certainly the case for many of the examples I have considered, although it should be noted that the *bili* clause also often codes a current or general state or habitual practice which can be simultaneous with the main clause. It is also possible for there to be no prior

temporal relationship, the EXPLAN clause rather offering an explanation for the situation in the main clause. The use of *bili* to code cause or reason appears quite distinct and in fact complementary to the use of *märr (ga)* to code a purposive subsequent situation. *Bili* clauses code the reason why something is done and *märr (ga)* clauses the reason for which something is done. Some examples follow:

(949) \ *ga ŋayi+ny dirramu+y+nydja djamba-djambatj+thi+n'* \ *badak ŋayi*
and 3sg+PROM man+ERG+PROM be skilled-REDUP+INCH+3rd still 3sg
nhäga'-nhä+ŋal dharpa\ *bili ŋayi ŋunhi marrpuy*
see-REDUP+3rd tree because 3sg TEXD knowledgeable T102Bp17
and the male (emu) was really skilled, still he watched the tree (where the hunter hid), because he was knowledgeable

(950) Speaker A
\gandarr+kurr+a gulkthu+na\ *bitja+na+n*
middle+PERL+SEQ cut+4th do thus+4th+SEQ
Speaker B
\ bili bitja+n+dhi walal ŋuli ga ŋunhi malwiya'+nha+ny mitthu+n
because do thus+1st+ANA 3pl HAB IMPV-1st TEXD emu +ACC+PROM cut+1st
Speaker A:..cut through the middle, like that. Speaker B: Because that is how they cut up emus. T102Bp25

(951) \ *bala+n limurr dhu marrtji, märi+wal* \ *bili ŋalinyu*
MVTAWY+SEQ 1+2pl FUT go-1st/2nd MM(B)+OBL because 1+2dl
ga djäl+thi-rr märi+w walalaŋ nhä+nhara+w
IMPV-1st want+INCH+1st MM(B)+DAT 3pl-DAT see+4th+DAT Burrp4
we will go to MM(B) because we want to see MM(B)
(the kin terms here are referring to the clans to which people in the particular relationship *märi* belong)

In the next example the *bili* clause cannot be viewed as temporally prior, but simply offers a explanation/reason for the main clause. The text is set in the past and describes the lives of certain brothers, two of which had many wives:

(952) \ *ŋunhi+yi+n ŋayi+ny g.....a+y+ny'tja märra+ŋal lurrkun'*
TEXD+ANA+SEQ 3sg+PROM person's name+ERG+PROM take+3rd few
yan, yaka dharrwa\ *bili nhakun galki+thi+n nhaŋgu walu*\
EMPH NEG many because like close+INCH+3rd 3sg-DAT time
rerri+w
sickness+DAT Burrp24
G.....a married only a few (women) not many, because his time was close, for sickness

12.2.3.3 *bäy/(/bän)* "until, once"

These particles occur at the beginning of clauses designating a situation which provides the terminus or starting point for another situation. It designates an event

on which the occurrence of another situation is dependent. It occurs with predicates in all inflections.

Used in conjunction with the irrealis particles, IRR *balaŋ* and HAB *ŋuli* it denotes contingent hypothetical events often translatable as "in case, lest or otherwise". In this context the irrealis particles frequently precede *bäy/bay*.

Bäy/bay is commonly found with the ANA *-Thi* and the SEQ *-Nha* suffixes.
The form *bän* is not strictly Djambarrpuyŋu according to various consultants, but it does occur occasionally in texts from older Djambarrpuyŋu speakers.

(953) *yalala muka, bäy dhu walu ŋalki+thi+rr*
later PRT-OK "until" FUT time near+INCH+1st Bk186p80
Later, when/once the time (to finish) is closer (I'll go and get cigarettes)

(954) *yalala+ŋu+mirr ŋilimurruŋ dhu bäki+w+nydja\ limurr ŋäthil*
later+ŋu+PROP 1+2pl-DAT FUT use+DAT+PROM 1+2pl prior
gupa-weyin+ku+m ŋula nhämunha ŋalindi\ nhä mak
"let time lapse"+1st [INDEF2 how many] "some number" month/moon "or"
dhuŋgarra lurrkun' wo märrma' bäy dhu ŋalimurr gurtha nhirrpu+l\ märr
year three/few or two "until" FUT 1+2pl fire put+2nd "so that"
ŋayi dhu ŋunha ŋawulul+yu, wutthu+rr wäŋa
3sg FUT DIS smoke+ERG hit+2nd place T015p5
(the place) is for us to use later on. First we let some time lapse, some months or two or three years. Until we make a fire so that the smoke can hit (and thus cleanse) that place.
(This text is describing various practices associated with a person's death. Ceasing to use particular tracts of land is the one of concern here.)

(955) *ga ŋarra+ny nhaŋgu djulul'yu+rr, ŋunhal garramat\nhäŋa'-nhä+ŋal*
and 1sg+PROM 3sg-DAT hide+3rd DIS-LOC high-LOC see-REDUP+3rd
ŋayi\ga bäy+nha ŋayi wäwu+thi+na+n ŋulkthu+rr+nha
3sg and "until"+SEQ 3sg unaware+INCH+3rd+SEQ swallow+3rd+SEQ
\bala ŋarra djawar'yu+rr+nha
then 1sg spear+3rd+SEQ T102Bp33
and I hid from it(the emu) there up high (in a tree). It kept looking about. But once it drank, thinking it was safe, I speared (it)

(956) *bira'yu+n+a limurr dhu ga dhukarr nhä+ma+n\ ŋayi ŋuli*
be awake+1st+SEQ 1+2pl FUT IMPV-1st path see+1st+SEQ 3sg HAB
bäy+nha buni. ŋula nhä miriŋu+n ŋilimurru-ŋ
"until"+SEQ arrive-2nd [INDEF2 what] "something" warrior+SEQ 1+2pl-DAT
we stay up watching the path in case some warriors come for us T010p25

(957) *Nhäŋu bulu ŋamatha+ŋ ŋunhi+yi mala+ny djimiŋdi+ny'*
see-2nd again do well+2nd TEXD+ANA PL/group+PROM fish spear+PROM
lirra nhuŋu balaŋ bäy+nha gara yätj+thi wo
teeth/blade 2sg+DAT IRR "until"+SEQ spear bad+INCH-2nd or
yalŋi+thi lirra mala.
weak+INCH-2nd blade/teeth PL(/group) SpearBk
Look at your fish-spear prongs again carefully lest the spear be no good or the prongs work loose

The only other Dhuwal/Dhuwala variety for which the particle is reported as a clause connective is Gupapuyŋu. It has identical form (cf Lowe n.d.a L95).

There are various homophonous particles, namely the Bare Verb Root *bäy/bay (/bän)* "leave/left" associated with the verbs *ganarrtha-ŋ* "leave" and *ganurra* (irreg) "leave", an interjection *bäythi* (see section 13.12) and a "conversational" particle *bay(')* (see section 13.11.4)

12.2.3.5 Other expressions incorporating the particle *bäy/bay*

There are two other expressions that include the particle *bäy/bay*. I do not have many examples of either and simply note they exist. I am unable to state whether the SEQ suffix is in fact obligatory or a factor of the particular examples I have.

1. *bäynha(/bän) bala* " at the same time, while"

This expression consists of the particles *bäy* plus the SEQ suffix and the particle *bala* MVTAWY /"then". It indicates that the situation expressed by the clause it is in occurred concurrently with another situation.

(958) *bäy+nha bala ŋayi dhu marrtji ŋarra dhu dhiyal+a nhokal+a*
"at the same time" 3sg FUT go-1st 1sg FUT PROX+SEQ 2sg-OBL+SEQ
ga waŋa
IMPV-1st speak-1st Guth690
While s/he is going about, I will talk with you here

2. *ŋulan bäynha(/bän)* "do unnoticed"

This expression consists of the particles *ŋula* and *bäy*, each suffixed with the SEQ suffix. It indicates that the event in the clause occurred without anyone noticing.

(959) *walal dhu ŋulan bäynha winya'yu+n*
3pl FUT "unnoticed" be lost+1st Gu690
they get lost without being noticed
(i.e. of children playing nearby the speaker)

12.2.3.5 *yurr* "but, furthermore" ADDitional

This particle appears to be used very generally to indicate that the speaker is "adding something further" concerning what has been said. It always occurs clause initially. The presence of the particle explicitly links the following clause with the preceding discourse and indicates that what is expressed by the clause is in relation to what has been said previously. It is not necessary for the the content of the *yurr* clause itself to have had any previous mention. The relationship between the *yurr* clause and the preceding discourse is simultaneous rather than sequential. Often *yurr* can be translated as "but", that is, as a conjunction in which one proposition involves something contrary to that expressed or implied by another. However in other contexts, a translation such as "furthermore" or simply "and", or an expression such as "in connection with this I want to also say that... ",seems to be more appropriate. Some examples are:

(960) *luka+n ŋarra ga+n guya, yurr ŋarra ga+n malthu+n djamarrkuli+w*
eat+3rd 1sg IMPV+3rd fish ADD 1sg IMPV+3rd follow+1st children+DAT
I was eating fish and also /while/but following the children T024Bp2

(961) *malthu+n ŋarra ga+n djamarrkuli+w yurr guku+w ŋarra*
follow+1st 1sg IMPV+3rd children+DAT ADD honey/bee+DAT 1sg
ga+n larru+ŋal
IMPV+3rd look for+3rd T024p2
I was following the children and also/while/but looking for honey

(962) *gurrupa+r muka ŋarra ga+n, yurr bäyŋu+n ŋayi ga+n*
give+3rd PRT-OK 1sg IMPV+3rd ADD NEGQ+SEQ 3sg IMPV+3rd
luka+n, ŋatha+ny
ingest+3rd food+PROM T402p9
I was giving him (food) but he did not eat, the food.

(963) *ŋanapurr nhina+n dhalakarr+ŋur+a, yurrkuruwuy läy,*
1pl sit+3rd space, opening+LOC+SEQ place name temple/side of
yurr dhuwana räli
ADD PROX-SEQ MVTTWD T012p16
we stayed in the opening at the side of Yurrkuruwuy, that is this side
(that side nearest where speaker is)

It is also possible to have more than a single clause with *yurr* pertaining to the one proposition, as in the next example:

(964) *dhuŋgur'yu+na marrtji+nya]iw' \ dhuŋur'yu+na]iw' \ dhuŋgur'yu+na*
light fire+4th go+4th BVR"turn" light fire+4th BVR"turn" light fir+4th
]iw'\ yurr barrkuwatj+nha walal ŋuli dhärra+nha+ny
BVR"turn" ADD separate+SEQ 3pl HAB stand+4th+PROM
\yurr buku+ŋur+nydja walal ŋuli dhärra+nha+ny
ADD head+LOC+PROM 3pl HAB stand+4th+PROM T102Bp2
(they) go about lighting fires in a circle, light a fire and turn, light (another) and turn. (Furthermore,in connection with this) They stand apart and down wind.

While the particle frequently connects two clauses it is also found between larger portions of text. The following is an example:

(965) *..walalaŋgu+ny buku-wurrpa+r djäma\ yu-urr\ dhäwu+ny' ŋanapurr*
3pl-DAT+PROM thank, praise+3rd work ADD story+PROM 1pl
ŋunhi märra+ŋal dhipuŋur+nydja .....
TEXD get/take+3rd PROX/MED-ABL+PROM OMSp24
(we - all the people from different places) gave thanks for their work. And further on this matter (of the funeral). We received the news from here .....

This is taken from a text describing events associated with the death of an important elder. The section of text preceding *yurr* concerns the funeral and who was present. The following section relates how they first got the news. Unlike other examples it is not possible to directly relate the two clauses immediately preceding and following the particle. Rather, two episodes of the text concerned with the one topic, namely the funeral, are being linked. The particle is further distinguished in this particular occurrence by being set off by pauses and by the vowel being extended.

This particle has cognates in the three other Dhuwal/Dhuwala varieties, Gupapuyŋu, Gumatj and Djapu. In all of them it is *yurru,* including Djapu which has not deleted the final vowel as in its Dhuwal counterpart Djambarrpuyŋu.

12.2.3.6 *yurrnha* "and then"

This looks to be morphologically composed of the previous particle *yurr* and the SEQ suffix. Its uses are also semantically compatible with this analysis. Unlike *yurr* without the SEQ suffix, this does express a sequential relation between propositions. The clause with *yurrnha* is always subsequent to some other event(s), and may either precede or follow the main clause. This seems compatible with the "additional" notion associated with *yurr* to which a sequential element has been added. That is, the speaker has something further to say about something else in the discourse, and what s/he has to say is also an event which occurs after that "something else". "And then " is the most useful gloss, although "before" is often possible and occasionally "after".

Yurrnha is most commonly found clause initially. However it is also recorded in texts clause finally and following other lexemes that favour clause initial position such as *ga* "and", *bala* "then", and pronouns.

(966) *liya+y* *litjalaŋ+gal* *ga* *djuwumirrya+m* *lakara+m*
head/mind 1+2dl+POSS IMPV-1st make so as to be correct tell+st
yurrnha *ŋali* *dhu* *dhäruk+tja* *mala+ny* *nhirrpa+n* *djorra'+lil+nydja*
"and then" 1+2dl FUT word+PROM PL+PROM put+1st paper+ALL+PROM
our minds think (them) out correctly and then/before we put the words to paper
Green

(967) *ga* *dhurrwara+ŋur* *be+ŋur+yi+n* *ŋunhi* *ŋayi* *wakuluŋgul*
and mouth+ABL/LOC INDEF+ABL+ANA+SEQ TEXD 3sg mist/spider web
latjuwarryu+n *ga* *yurrnha* *ŋarra* *ŋunhi* *wäŋa+ny* *nhä+ma*
disperse+1st and "and then" 1sg TEXD place+PROM(/?ACC) see+1st
and after that mist dispersed, and then I saw the place. T402p6

(968) *ga* *bulu+ny* *ŋarra* *ŋunhi* *maŋ'mara+m* *ga*
and again+PROM 1sg TEXD find/discover+1st and
television+ŋur+a *ŋarra* *ŋä+ma* *ŋunhi+yi* *bili* *dhäwu,* *ga*
television+ABL/LOC +SEQ 1sg hear+1st TEXD+ANA "same" story and
yurrnha *ŋarra* *ŋunhi* *dhäwu* *märr-yuwalkthi+rr+nydja*
"and then" 1sg TEXD story believe +1st+PROM T402p4
and again I found out about (it), I heard that same story on the television and then/after that I believed the story

Like *yurr, yurrnha* also occurs between episodes of a text as well as two clauses. One such example occurs in a text about an important elder's death. The speaker has one section describing how the deceased's mother clans ceremonially bore the coffin to Galiwin'ku. These clans are members of the Yirritja moiety. The last clause in the section details the social categories of people involved. This is followed by:

(969) *ga* ***yurrnha*** *dhuwa+thi+na+ny* *ŋunhal+a*
and "and then" moiety name+INCH+4th+PROM DIS-LOC+SEQ
dhuwa+ŋur+a *wäŋa+ŋur,* *galiwin'ku+n*
moiety name+LOC+SEQ place+LOC place name+SEQ OMSp36
and then (the ceremony) became Dhuwa there at the Dhuwa place, Galiwin'ku

This clause thus connects with a topic of the previous section rather than with the immediately preceding clause.

The only other Dhuwal/Dhuwala variety for which I have noted a cognate is Gupapuyŋu *yurruna.* (Lowe n.d.a L101). This provides further evidence for the morphological analysis of this particle as *yurr* +SEQ since the Gupapuyŋu cognate for the base form is *yurru* and the SEQ allomorph after vowels is *-na.*

12.2.4.7 The possibility of more than a single subordinate clause

While the full potential for this is far from clear there are examples which show it is clearly possible. The following combinations have been noted:

1. There are examples of two subordinate finite clauses of the same type occurring with a single main clause e.g. with *ŋunhi* interrogative/indefinite proforms, *märr (ga)* or *yurr*. However each of these clauses bears a relationship individually to the main clause and not to each other.

2. It is also possible to have combinations of different kinds of subordinate clauses such as *bili* and *märr (ga)*, *bäy* and *märr*, a *ŋunhi* clause, or a clause introduced by an interrogative/indefinite proform.

3. There are some examples of DAT-marked non-finite clauses with finite subordinate clauses. These include:

(970) *dhawu' nhirrpa+n ŋayi dhu [dhiŋga+nhara+w+nha, ŋuriki+n*
promise put+1st 3sg FUT die+4th+DAT+SEQ TEXD-DAT+SEQ
dirramu+w+nha [ŋunhi ŋayi yothu+ny nhaŋgu\ djaw'yu+rr]]
man+DAT+SEQ TEXD 3sg child+ACC 3sg-DAT take+3rd T024Ap7
He promises death for the man who took his child

(971) *ŋunha+yi+n [däl+ku+nha+mi+nyara+w+nydja*
DIS+ANA+SEQ firm+TRANS+R/R+4th+DAT+PROM
garrpin+mi+nyara+w+nydja djetji+w+nydja dhurrwara gunga+nhara+w
tie-R/R+4th+DAT+PROM sore+DAT+PROM mouth shut+4th+DAT
\ [wanhawitja+na ŋayi ŋuli mäna dhurrwara marrtji+nya]]
along where+4th 3sg HAB shark mouth go+4th T014p6
that (Red Flowering Kurrajong string) was for tightly binding the opening of the sore, along where the shark bite went

Morphy (1983 p135) presents an example of a DAT marked non-finite clause with an embedded ASS clause.

12.3 Reported speech

Both mental and speech predicates can occur with direct speech and indirect speech. For examples of the latter see section 12.2.1.3.

Direct speech/thought usually has some kind of frame. This may be a fully expanded clause including a predicate specifying the nature of the activity e.g. *waŋa-* $Ø_a$

"speak", *lakara-ŋ* "tell", *dhä-birrka'yu-N* "ask, *guyaŋa-Ø$_a$* "think" or *ŋä-IR* "hear" and identifying the speaker and addressee participants. Commonly occurring with these clauses is the general predicate *bitja-IR* "do/be thus" (see section 13.14) and the presentative particle *gam'* (see section 13.11.9). The frame may in fact be reduced to a combination of the latter or even just the general verb itself.

The direct speech/thought may be preceded or followed by the frame or even be both preceded and followed by them. This is demonstrated in the following set of examples. The framing clauses or expressions are underlined and the quoted speech indicated by brackets.

(972) *\ŋäma ŋanapurr ŋunhi rirrakay+kurra balanya+wuy+nha gam'*
hear-1st 1pl TEXD sound+PERL+SEQ such+ASS+SEQ PRES
\[marrtji+n dhu dhuwal dhiyaŋu+n bala .....] \ balanya+wuy+nha
go+SEQ FUT PROX "now-SEQ" such+ASS+SEQ T101p4
We then heard through the loud speaker such (a sound) thus, " Go now....", such a (sound).

(973) *lakara+m ŋayi ga ŋanapurruŋ+gal ŋama+y dhäwu bitja+n gam'*
tell+1st 2sg IMPV-1st 1pl+OBL M(Z)+ERG news do thus-1st PRES
[märra'-marra+ŋ ŋarra dhu bonguŋ.....]
get/take-REDUP+2nd 1st FUT "tomorrow" T401p21
Mum told us her news thus "I will be getting ....."

(974) *[.....] bitja+n*
do thus+1st T012p21
" ... " says (X)

(975) *ŋayi+ny nhuŋu dhu yolŋu waŋa [.....]*
3sg+PROM 2sg-DAT FUT person speak-1st "....." T012p32
a person will say to you "....."

(976) *ŋuli ŋayi dhu ŋarra+ny dhä-wirrka'yu+n marrŋgitj+thu bitja+n+dja [.....]*
HYP 3sg FUT 1sg+ACC ask+1st doctor+ERG do thus+1st+PROM
\ŋa ŋarra+ny dhu lakaraŋha+mi+rr bitjaŋ+mi+rr [.....]
and 1sg+PROM FUT say-INF+R/R+1st do thus-1st+R/R+1st T008 p2
If the doctor asks me thus "....."
and I tell about myself thus "....."

The quotations are also associated with changes in pitch, voice quality and intonation patterns which suit the speaker and the context in which they are uttered.

Shifts in deixis to that appropriate to the setting of the "quote" are also distinctive features of the quoted clauses. In example 973 we see a report of a past utterance from the current event time. However in the quote what is being reported

are future intentions with respect to the quoted speech time. Note also that the 1sg pronoun refers to the 3rd person "mother" of the frame. This is distinct from the use of *gunhi* subordinate clauses to code indirect speech constructions described in section 12.2.1.3 but quite unexceptional in regard to direct/indirect speech distinctions generally.

CHAPTER 13

'PARTICLES'

This chapter is concerned with those non-inflecting words that have not yet been considered. As mentioned in chapter three non-inflecting words in Djambarrpuyŋu cover a wide range of functions. A group which interact with verb inflections i.e. *ŋuli* HAB/HYP, *balaŋ* IRR, *dhu* FUT, *bili/linygu/liŋgu* COMPL, *yaka* NEG *bäyŋu/bithiwul* NEGQ were considered in sections 7.4.2.4, 7.4.3 and 11.1.7. Others introducing finite subordinate clauses i.e. *märr (ga)/ marr(ga)* "so that", *bili* etc "because", *bäy/bay* "until" *yurr*, "but, furthermore", *yurrnha* "and then" as well as the use of *ŋuli* and *ŋunhi* in conditionals are described in variuos sections of chapter 12.

Some of the "particles" to be considered here have been grouped into categories- adverbs, degree qualifiers, directionals, co-ordinating connectives, propositional, conversational, textual particles and interjections. Several forms are presented independently, there being no clear basis on which to group them with other particles. The account given here is inevitably preliminary. While important to any language description these lexemes also provide a particularly intractable area for analysis. The categories I have posited are not rigorously defined and could easily be grouped in different ways. My intention here is to demonstrate the range of functions of these non-inflecting words, to show that they by no means constitute a homogenous class, and to describe what is known of their meanings, illustrating as much as possible with examples from the texts.

13.1 Adverbs

This is a small class of lexemes which do not inflect and which provide modification of the way the situation was carried out. They can occur with the discourse suffixes and some of the stems can occur with various of the verb deriving suffixes. The following list presents some of the more commonly occurring adverbs.

gurrum' "carefully, gently, softly" (see example 692) (cf *gurrum'thu*-N "to go/move softly, gently")

bulnha "slowly, steadily, carefully, cautiously" (cf *bulnha'yu*-N "slow down")

(977) ***bulnha*** *ŋarra guya'-guyaŋa*
carefully 1sg think-REDUP-1st T008Txtp6
I am thinking it over

(978) ***bulnha ŋayi ga*** *ŋunhi wukirri*
slowly 3sg IMPV-1st TEXD write T401p6
S/he was writing it slowly

bondi "quickly, in a hurry, in haste" (cf *bondi'yu*-N "hurry")

(979) *bili* ***nhe bondi*** *marrtji+n bala djäma+lil*
because 2sg quickly go+3rd MVTAWY work+ALL W84let
because you went off quickly/in a hurry to work

gayul "secretly, unknown to others, not publicly"

(980) *ŋayi ŋuli ga* ***gayul*** *ŋunhi buma ŋanya*
3sg HAB IMPV-1st secretly TEXD strike-1st 3sg-ACC T004p3
He is always sneaking up to fight him

milma/maŋutji-warraŋul [eye-outside]/*dhä-garramat* [mouth-high] 'publicly'

(981) *ga* ***maŋutji-warraŋul*** *gara+y dhu ŋayi dharpu+m*
and publicly spear+ERG FUT 3sg spear+1st Txt1p1
and he spears out in the open (in contrast to the secrecy surrounding sorcery)

wawu "unaware, unexpectedly, ignorant of something going on"
(cf *wawuthi-* "do unaware of something")

(982) *bäyŋu nhe dhu ga* ***wawu*** *nhina*
NEGQ 2sg FUT IMPV-1st unaware sit-1st T010p26
you will not be sitting unprepared (in regard to the arrival of warriors)
OR you will not be caught off guard

ɖaɖatj "do in vain, unsuccessfully"

(983) *märr nhe ga law'mara+m* ***ɖaɖatj*** *ŋula nhä*
so that 2sg IMPV-1st pull out+1st in vain [INDEF2 what]"something"
for the reason that you are trying to pull something out without success
Bany21

rrambaŋi "together" (cf *rrambaŋiya*-Ŋ "to put/join together")

(984) *ga* ***rrambaŋi*** *walal ga+n djäma*
and together 3pl IMPV+3rd work OMSIn10
and they were working together

gäna "alone, separately" (see examples 561,608,651 and 712)

dhawurrŋa "to interrupt, come across a situation that is already in progress"
(see example 727)

baɖak "still, continue to do/be"

(985) *ga dhiyaŋu+ny bala walal ga ŋunhi baɖak bäki*
and [PROX-ERG+PROM (MVTAWY)] "now" 3pl IMPV-1st TEXD still use
ŋunhi+yi rom ŋilimurruŋ
TEXD+ANA law 1+2pl-DAT T102Bp9
And are they still using that law/practice of ours these days?

(986) *baɖak ŋayi nhäŋa'-nha+ŋal dharpa, bili ŋayi ŋunhi marrpuy*
still 3sg see-REDUP+3rd tree because 3sg TEXD knowledgeable
it (the emu) kept on/continued watching that tree (where the hunter is concealed)
because it is wise T102Bp33

The nomens *dhunupa/dhuŋday* "right, right hand side; correct" also commonly function as adverbials with the sense "immediately, straight away or directly"

(987) *yaka ŋayi dhu dhunupa waŋa nhanukal ŋurukal+yi*
NEG 3sg FUT directly talk 2sg-OBL TEXD-OBL+ANA
yapa+'mirriŋu+wal, wäwa+'mirriŋu
Z +KINPROP+OBL B+KINPROP T204p2
A brother does not talk directly to a sister

(988) *ŋanapurr+nydja birrka'yu+rr+nydja dhuŋday+nha yäna+n räli+n*
1pl+PROM think+3rd+PROM immediately+SEQ EMPH+SEQ MVTTWD
dhipal+nha watjpil+lil+nha
PROX-ALL+SEQ hospital+ALL+SEQ OMSIn245
We thought straight away/immediately (of the person) here in the hospital

Some of the adverbs also function as imperatives. Some examples are:

bulnha	"Wait a moment!"
bondi	"Hurry up!"
baɖak	"Wait a moment!"

13.2 Directional Particles

There are two particles used to indicate the direction or orientation of a motion or activity, *bala* MoVemenT AWaY and *räli* MoVemenT ToWarDs. The reference points can be variable. They may involve the locus of the speaker or contextually determined loci which have nothing to do with location relative to the speech participants.

Both lexemes can occur with the discourse suffixes. They also occur in various derived stems e.g. *bala-räli* "back and forth", *räli'ŋu* "on the return", *bala-räli'yu-*N "to do back and forth, go to and fro", *rälimirriya-*Ŋ "to approach".

The particles often follow the verb, but not always.

The senses are easily demonstrated with verbs that are inherently undirectional in Djambarrpuyŋu, but which have lexicalized directional verbs as counterparts in English e.g. *marrtji-Ø*$_{1}$ "move, walk, go/come" and *gä-Ŋ* " bear, carry, bring/take". When these occur together with the directional *bala*, the senses "go" and "take" are conveyed respectively. With *räli* the senses expressed are "come" and "bring".

Examples in which the particles pertain to the locus of the speaker are:

(989) *ga* ***räli+n*** *nhuma dhu bondi roŋiyi+rr,*
and MVTTWD+SEQ 2dl/pl FUT quickly return+1st T204p37
and you two come back soon

(990) *ga* ***bala+yi*** *napurr dhu roŋiyi+rr*
and MVTAWY+ANA 1pl FUT return+1st Brp8
and we will go back there
(the ANA indicates that the place to which they will go is one already mentioned)

The next examples show the use of the locations of particular participants being talked about as reference points. They are all taken from contexts in which it is clear that the location of the events described is not that of the speaker:

(991) *ŋayi ga+n* *gurrupa+r* ***bala*** *guŋbala+wal*
3sg IMPV+3rd give+3rd MVTAWY surname+OBL
s/he gave it to (the person who was) Guŋbala Brp2

(992) *gorru+ŋal* *marrtji+n* ***räli,*** *bala dhuryu+rr+a maŋga+ny*
be high+3rd move+3rd MVTTWD then rain+3rd+SEQ 3dl+ACC T022In117
(the rain cloud) moves towards (them) and then rains on the two of them

(993) *ŋunhi ŋayi ŋuli wapthu'-wapthu+n, ŋupa'-ŋupa+n* ***bala***
TEXD 3sg HAB hop-REDUP+1st go along, follow-REDUP+1st MVTAWY
ŋäŋgi+'mirriŋu+ny ŋayaŋay'+wurr nyaŋ'thu+na+wurr, mulum+kurr
M+KINPROP+ACC root food+PERL eat+4th+PERL grass+PERL T024Ap4
when it (the joey) hops along after its mother as she is eating root food, grass

The following examples demonstrate the use of these particles with verbs that do not code or imply motion:

(994) *bala ŋarra ŋäthi+na+n* ***räli*** *djamarrkuli+w"+nha*
then 1sg cry+3rd+SEQ MVTTWD children+DAT+SEQ OMSIn229
and then I cried/wailed for the children here
(In this example the speaker is describing her crying at another place from that of the current speech event. The children however were located at the place where the story is being told). The particles can also code shifts or movements in regard to time and states.

(995) *think* ***bala+yi*** *ŋunhi walu ŋäthiliŋu*
think MVTAWY+ANA TEXD time/sun old
think back to that time that is past

Note that in the last examples the direction is in regard to a temporal dimension rather than a spatial one. This would also appear to be the case in the following example with *räli*.

(996) *dhäwu marrtji+n räli\ walalaŋ+guŋ dhawaṯthu+rr gurrupa+na+wuy*
story move+3rd MVTTWD 3pl+OR emerge+3rd give+4th+ASS T018p3
the story came down to (us here now) from them (the old people) giving (it)

In example 963*räli* is used to describe a location "on the speaker's side of a particular place". This clearly does not involve direction but rather the relative orientation and position of things, here a distant place and the speaker's location.

There are potentially two homophones with the directional *bala*. A conjunctive *bala* "then" links clauses. The conjunction favours clause initial position and does not co-occur with any other discourse suffixes (see section 13.5.1.2). Another *bala* occurs in combination with demonstratives (see section 6.6.2).

The directional *räli* appears to be particular to western Dhuwal/Dhuwala varieties (Djambarrpuyŋu and Gupapuyŋu). Eastern Dhuwal/Dhuwala (Gumatj and Djapu) use the form *lili*.

13.3 Degree qualifiers

Two sets of forms which function as intensifiers or degree qualifiers have been recorded for Djambarrpuyŋu. They have very general functions which, following Quirk et al. (1985 p485). I will refer to as amplification and downtoning. Amplification is associated with scaling up from a norm and diminution the opposite. The amplifying intensifiers are *mirithirr* with nominals and *mirithi-*$Ø_{rr}$ with verbs. The downtoning (see Quirk et al. 1985 p445) intensifiers are *märr*, *gaŋga* or *märr gaŋga*. In glossing these forms I have coded the amplifying forms as INTENS and the downtowning forms as "somewhat".

One reflection of the very general meanings associated with these two sets of forms is the fact that they occur with a wide range of word classes.

There would appear to be some semantic constraints on the co-occurrence of these degreee qualifiers and other lexemes, depending on the extent to which a lexeme has

absolute rather than gradable reference, and on whether the norm with which it is associated can be both "down-scaled" or "up-scaled". This is a subject for much more detailed investigation than I have undertaken. However, it is clear that many entity denoting nominals are clearly non-gradable and cannot occur with any of the degree qualifiers. A more complicated situation is revealed in relation to certain temporal stems. For instance *barpuru* "yesterday/recently" cannot occur with the amplifier *mirithirr* but can occur with the downtowner *märr* with the meaning "somewhat recently". The lexeme *baman'* "long time (ago)" however, can occur with both. This would appear to correlate with the presence of a fixed reference point in regard to *barpuru* "yesterday/recently", namely between today and yesterday. It would appear to be this absolute sense of *barpuru* which prevents its occurrence with *mirithirr*.

13.3.1 Amplifying degree qualifiers - *mirithirr/mirithi-Ø$_{rr}$*

All categories of adjectives except numerals, PROP and ASS suffixed nominals, locationals and certain temporals occur with the adnominal amplifying intensifier *mirithirr*. The verbal intensifier is *mirithi-Ø$_{rr}$* and it inflects to agree with the main verb. Some examples are:

(997) *yurr goŋ+dja nhaŋu* ***mirithirr*** *maḏakarritj*
ADD hand+PROM 3sg-DAT INTENS angry/dangerous T102Bp4
yet it's (the kangaroo's) paws are very dangerous

(998) *miriŋu dhu marrtji dharrwa* ***mirithirr***
warrior FUT go-1st many INTENS T009p25
A great many warriors go
(Note that while numerals cannot be modified with the INTENS, quantity-denoting nomens can)

(999) *bili ŋayi* ***mirithi+n*** *mutika ga+n gä+ŋal*
because 3sg INTENS+3rd vehicle IMPV+3rd bear+3rd M&N
because s/he was driving the car too fast

(1000) ***mirithi*** *waŋi*
INTENS-2nd talk-2nd
Talk loudly/louder! Conv.

(1001) *yaka nhe dhu* ***mirithi+rr*** *dhiŋkiŋ*
NEG 2sg FUT INTENS+1st think
Don't think about (it) too much. Conv.

(1002) *biyaŋi+yi+rr+a nhe dhu* ***mirithi+rr+a***
fear+INCH+1st+SEQ 2sg FUT INTENS+1st+SEQ T010p27
you get really/very frightened

There is an obvious formal correspondence between the forms of the nominal and verbal amplifying degree qualifiers. The relationship between them is not clear. Other Yolŋu varieties. are reported as having intensifying adverbs that do not inflect e.g *wirrka* (according to Zorc (1986) this is used mainly by Yirritja speakers at Yirrkala) and *marimi* (again according to Zorc (1986) a Dhaŋu/Djaŋu form). This suggests the non-inflecting form may have been prior in Djambarrpuyŋu and that it was inflected by analogy with other $Ø_{rr}$ class verb stems. A further possibility is that there was an original stem such as *miri* or *mari* to which the INCH was suffixed.

The situation is complicated by the fact that the presence of an independent adverb does not preclude other varieties from having the *mirithi-/mirithirr* forms. Both *mirithi-/mirithirr* and *wirrka* are listed in the Djapu vocabulary (Morphy 1983) for instance. However, I have never recorded an independent adverbial form for Djambarrpuyŋu and, given the frequency with which a form such as *wirrka* is used at Yirrkala, I doubt one exists.

13.3.2 Downtoning degree qualifiers - *märr/märr gaŋga/gaŋga*

These forms all convey the meaning that something is done less than some norm.

The variation in the downtoning degree forms is not yet fully understood. From the somewhat limited data considered to date (i.e. direct elicitation regarding a few selected examples from various word classes and general distribution in the corpus) each form appears to have a distinct but overlapping distribution.

The form *märr* alone has been noted with a temporals, locationals and all categories of adjectives except numerals and colours. It has also been recorded with PROP and ASS suffixed nominals. The combination of *märr gaŋga* has been recorded with all categories of adjectives, PROP suffixed nominals, locationals and verbs. The form *gaŋga* has only been noted with colours and verbs. With colours it appears to indicate a lighter colour. Between *märr* and *gaŋga* there is thus a suggestion of complementary distribution since *märr* has been rejected in my attempts to collocate it with colours and verbs. Furthermore *gaŋga* has been rejected in combination with qualifiers and quantifiers. No temporals have been recorded with either *gaŋga* or *märr gaŋga*.

Further work is required to determine the exact relationship between the various expressions. The distribution of the independent forms *gaŋga* and *märr* suggests the former may be properly an adverb, albeit with a downtoning meaning and the latter a degree qualifier. The combination however appears to be closer to a degree qualifier. Evaluations of the following examples by one speaker suggest there may be some kind of gradation between *märr* and *märr gaŋga*, with the latter indicating the lesser degree.

(1003) ***märr*** *.....* *weyin' nhini*
"somewhat" long sit/stay-2nd
stay for a while (as long as you want)

(1004) ***märr gaŋga*** *weyin' nhini*
"somewhat" long sit/stay-2nd
stay for a while (implies speaker does not really want the addressee to stay long)

Unlike the amplifier *mirithi-*, the downtoner found with verbs, *gaŋga*, is not a verb stem. With verbs *gaŋga* can be glossed with a range of English adverbials such as slowly, carefully, gently which indicate some kind of lessening in degree of intensity with which the situation expressed by the verb is carried out. Again it is possible that *märr gaŋga* indicates a lesser degree than *gaŋga* but this needs further clarification.

(1005) ***gaŋga*** *nhe dhu gäma+ny*
"somewhat" 2sg FUT bear+1st
Drive carefully/ slowly.

13.3.3 The particle *birr*

This particle appears to have a specialized function as an intensifier indicating length of time or space, eg *baman' birr* "long ago", *barrku birr* "far away". A homophonous form also occurs as a Bare Verb Root associated with *dhärra-*$Ø_a$ "stand".

13.4 Propositional Particles

There are a number of particles which may have clause wide scope and provide some kind of modal qualification in regard to the proposition being expressed. They are concerned with judgements about its truth or possibility.

They generally occur at the periphery of the clause with initial or near initial position the most favoured. The first three particles to be considered, *yanbi*,

warray and *mak*, never occur with any other suffixes. Those particles which code the proposition as reflecting truth or real world states of affairs, may be more appropriately grouped with the adverb class on formal grounds. They are included here on semantic grounds. At least *yuwalk* "true" can occur with the discourse suffixes and the INCH verbalizer.

13.4.1 CounterFACTual *yanbi*

This particle indicates the proposition is believed by the speaker to be false, even though the person(s) to whom the proposition is attributed may not be the speaker. Appropriate English glosses include "think/thought mistakenly that ...." and " it appeared that ....". It occurs only with the 2nd and 4th inflections which clearly ally it with the irrealis TMA categories. It can also occur in equational clauses. It generally occurs clause initially but there are some examples where it follows other common clause initial elements such as pronouns and negative particles.

A clause with *yanbi* can occur as a main clause as in the following example. It provides an explanation for an action.

(1006) bala djurryun+mi+n+an luku+n ŋanyapi+nya ŋayi\ yanbi ŋayi
then annoint+R/R+3rd+SEQ foot+SEQ 3sg-EMPH+ACC (3sg) CFACT 3sg
luku+n buraki+n gidiwak+thu+n, ŋunhili+n
foot+SEQ hurt+2nd+SEQ stingray(Taeniura lymna)+ERG+SEQ TEXD-LOC+SEQ
gulun'+ŋur+a
stomach/pool+LOC+SEQ T022p13
then he annoints his own foot (with a plant that leaves a red stain). His foot (can then) appear to have been wounded by a stingray there at that pool.
(The protagonist is wishing to deceive certain people about what he has been up to.)

However in the corpus it usually occurs in clausal complements to verbs of thinking, saying or wishing. For example:

(1007) ga ŋanapurr+nydja ŋuli birrka'yu+n [yanbi ŋuli märr galki, wäga
and 1pl+PROM HAB think+1st CFACT HAB "somewhat" near place
\yan barrku warray]
EMPH far "in fact" T101p9
we thought wrongly the place was quite close but it was far off

It can also indicate that a negative proposition is false, as in the following example:

(1008) ga bäyŋu napurr yanbi ŋunhi gi nhä+nha+mi+rr biyak, ga
and NEGQ 1pl CFACT TEXD IMPV-2nd see+4th+R/R+2nd do thus-2nd, and
ŋämu+nha+mi+rr,
not recognize/not be familiar with+4th+R/R+2nd OMSp23
and it was not the case that we did not see each other and not recognize each other

13.4.2 *warray* "indeed, in fact" Counterexpectation

This particle seems to express the notion that something is indeed or in fact the case. There always appears to be an implicit contrast involved. Something being the case does so in connection with something else that is not the case. The situations in which such a contrast can arise are quite diverse. They may result from the absence (vs presence) of something, a wrong belief or thought (vs the accurate one), a change where it is not expected, a desire to do something that is not possible (see example 1009). These all invoke what I will refer to loosely as an 'expectation' which does not hold in regard to the clause containing *warray*. However, the subtleties concerning just what may constitute speaker expectations are difficult to establish and the comments here are tentative.

This particle is glossed as "sort of" in Djapu (see Morphy 1983 p144), but this gloss is not appropriate for several of the examples given below.

This particle favours non-initial position in the clause, and commonly occurs clause finally.

(1009) nhäma yanbi ŋuli ǀurrkun' weɬi+ny, ŋany dharrwa warray
see-1st CONF HYP few wallaby+ACC or many 'indeed' Txt280p2
(I) looked (mistakenly) thinking there would be a few wallaby, but in fact there were many.
(expectation: that I would see a few wallaby)

See 1007 for another similar example.

(1010) ga ǀirra-marrayaryun+dja dhuwaliny, ga gäna
and [teeth-sense]" to chatter (of teeth)"+PROM MED+PROM, and separate
warray
"indeed" T010p28
and *ǀirra-marrayaryun* this is in fact different (in meaning from *marrayaryun* which has just been explained.
(expectation: that two words with the same form would have the same meaning)

To the question "Have you any sugar?" the following was given in response:

(1011) dilip+tja ŋarraku+ny ga ŋunha ŋorra **warray,** *yurr djoka+n*
tea+PROM 1sg-DAT+PROM IMPV-1st DIS lie-1st 'indeed', ADD sugar+SEQ
bäyŋu+ny ŋarraku
NEGQ+PROM 1sg-DAT T008p1
I have some tea indeed, but I have no sugar
(expectation: that if I had tea I would have sugar. Few Yolŋu drink tea without sugar, and thus one would automatically expect people to have both)

There are a few examples where *warray* occurs in conjunction with *yän* or *yän linygu*. I suggest that these are used to focus on something continuing. The concomitant counterexpectation is that the situation did not cease when one might expect it to have done.

(1012) ŋayi+ny marrtji+n yän **warray,** *ŋapawalakurryi+n yindi+thi+na+n*
1sg+PROM go+3rd EMPH "indeed" big+3rd big+INCH+3rd+SEQ
wäŋa+ny
place+PROM
The place (Galiwin'ku) kept growing and spreading out OMSp9

13.4.3. *mak* "perhaps, maybe"

This particle is associated with the epistemic notion of possibility. It codes lack of certainty on the part of the speaker as to whether the proposition is, will or did occur. It can have scope over a single nominal or a clause and is not confined to any particular TMA combinations.

It commonly occurs clause initially but may also follow other elements. However, positions early in the clause, such as after negative particles, pronominals or demonstratives, are still favoured. Less commonly it occurs clause finally.

When it occurs with a single clause it can indicate the proposition is only a possibility:

(1013) ga ŋuli ŋarra dhu boŋguŋ yaka nhuna nhä+ŋu dhiyal, ***mak*** *ŋarra*
and HAB 1sg FUT "tomorrow" NEG 2sg-ACC see-2nd PROX-LOC "maybe" 1sg
boŋguŋ marrtji dhipali+yi, nhuna guwatjmul
"tomorrow" go-2nd MED+ALL+ANA 2sg-ACC visit-2nd T023Ap9
and if I don't see you here in the future, maybe I will go and visit you in the future

The particle *mak* may also occur in clauses functioning as requests. They appear to lie between direct commands and suggestions with interrogative/indefinite pronouns and the IRR particle *balaŋ* (see section 7.4.2.3). The following are some examples:

(1014) *go* **mak** *ŋarra nhäma nhäthinya dhuwal nyälka, nhe ga*
come here "maybe" 1sg see-1st what like PROX bag 2sg IMPV-1st
gäma
bear-1st
Here, let me see what the bag you are carrying is like. T402p12

(1015) *way gurruŋ, nhe* **mak** *waŋdi'-waŋdi go ganydjarr*
Hey FZDC 2sg "maybe" run-REDUP+2nd come here fast T401p17
Hey gurruŋ, come on, run along quickly

(1016) *way ŋali* **mak** *bilmara+m ŋini*
hey 1dl "maybe" turn(tr)+1st eh T008Txtp9
Hey, let's change (what we are doing) shall we?

The particle ***mak*** is also used to code disjunction (see section 13.5.2. below). In the following example it occurs with a sequence of clauses presenting a variety of possible events.

(1017) ***mak*** *ŋayi dhu dhäwu gurrupa+n* **mak** *dhu wutthu+n* **mak** *ŋayi dhu dharpu+m*
"maybe" 3sg FUT story give+1st "maybe" FUT hit+1st "maybe" 3sg FUT
spear+1s
yolŋu+y
person+ERG T101p18
Maybe s/he gives some news, or maybe hits (something) or maybe the person spears (something)

13.4.4 Particles expressing that the proposition is "true"

1. *yuwalk* "true, truly, in fact"

This particle expresses the truth of a proposition in relation to its being a reflection of real world situations. The lexeme *rumbal* "body" can also be used with this sense. They can both occur as single word utterances expressing the notion "and that's what happened in fact, that's how it is/was". Both are recorded with the SEQ and PROM suffixes and *yuwalk* also with the ANA suffix.

(1018) *yaka nhaŋgu* ***yuwalk+tja*** *gurrkurr yalŋgi mirithirr*
NEG 3sg-DAT true+PROM vein weak INTENS Bany21
It's not the case/true that her/his veins are really weak

(1019) *ga* ***yuwalk+thi*** *ŋayi+ny ŋuli dhäruk-märra+nha walala+ny*
and true+ANA 3sg+PROM HAB [word-take]"obey"+4th 3pl+ACC T022In133
and indeed s/he obeyed their words ("took their words")

2. *gal'ŋu* "truly, properly, correctly, sincerely"

This appears to overlap to some extent with *yuwalk* or *rumbal* but it also seems to have an additional sense of something being properly or rightly so. In Djapu the cognate *wal'ŋu* is glossed "extremely, indeed" (Morphy 1983).

(1020) yaka ***gal'ŋu*** *ŋurru+miriw+nydja*
NEG properly nose+PRIV+PROM Bany 85
not actually (?correctly) without a nose
(comment made in regard to the non-literal meaning of *ŋurrumiriw*)

(1021) ga wiripu+wurr+nydja yolŋu walal, ŋurru+puy+nydja yolŋu walal ***gal'ŋu***
and certain+PL+PROM person 3pl point+ASS+PROM person 3pl properly
and certain other people really belong to the point T102Ap5

(1022) ŋuli nhe yuwalk gal'ŋu galki dhiyal djäma+ŋur
HYP 2sg truly properly close PROX-LOC work+LOC T018
If you are actually and sincerely close to this work

(1023) nhawi ***gal'ŋu*** *balanya balanda+kurr matha ŋayi dhu waŋa yolŋu nhakun*
whatsit properly such English+PERL tongue 3sg FUT talk-1st person like
whatsit, such a Yolŋu that speaks English properly T208p14

13.5 Co-ordinating connective particles

I have divided connective particles into two groups, subordinators and co-ordinators. The subordinators were considered in section 12.2.3. This section will focus on co-ordinators. There are both conjunctive and disjunctive co-ordinators in Djambarrpuyŋu.

13.5.1 Conjunction

13.5.1.1 *ga* "and"

This links both clauses and clause constituents. As a clause connective it occurs clause initially. There have been numerous examples of this (see for instance 712, 729, 818 and 819). There are also numerous examples of it linking other constituents. See 742 where it links kin categories of particular songs and 466 where is links both nominal expressions describing participants in a particular role and modifiers of the participants within each nominal expression. It also occurs in lists (see 709).

Co-ordination with *ga* is not always required and it is possible to simply appose conjuncts. An example of an extended list occurs in example 778. The example below shows two clauses from different texts involving the same conjuncts. In one they are juxtaposed, in the other they are co-ordinated with *ga*.

(1024) yaka ŋayi dhu ga ŋutha+n ŋändi+wal bäpa+wal
NEG 3sg FUT IMPV-1st grow+1st M(Z)+OBL F(B)+OBL T019p12
S/he does not grow up with (her) mother and father

(1025) ga ŋändi+wal ga bäpa+wal nhina+n ŋarra
and M(Z)+OBL and F(B)+OBL sit+3rd 1sg T202p5
and I lived with (my) mother and father

ga is the most widely occurring clause connective. Its function as a general textual connective is reflected in its use following pauses within a clause to link a role to the previous parts of the clause (see 538, 553, 667 and 668). It can also occur across conversational exchanges, linking questions or further comments to the speech of another person.

One context in which *ga* never occurs is when expanding on the participants subsumed in the non-singular pronominals that include the speaker (i.e. "inclusive" forms). The speaker is assumed in this context and a nominal designating the other referent in the case of dual pronominals, and some other participant in the case of plural pronominals, simply co-occurs with the pronominal. The following is an example:

(1026) ga ŋalinyu w------y+nydja duwatthu+n guwatjma+n walala+ny
and 1+2dl person's name+PROM go up (from beach)+1st meet+1st 3pl+ACC
And we two, (me and) W----y went up to meet them Txt280p4
(The initial *ga* isfunctioning as a clause connective)

With plural pronominals it is possible to get a list of participants which does include the conjunction *ga*, however the pronominal and the first named participant will never be co-ordinated with this particle.

This is a feature common to Yolŋu varieties and many other Australian languages (see Morphy 1983, Blake 1987).

The conjunction *ga* is homphonous with the FIRST inflection form of the IMPV *ga-* (see example 750 for an instance where the two are juxtaposed, albeit mediated by a pause at a clause boundary). The semantics of imperfectivity and co-ordination suggest this homophony is not accidental.

13.5.1.2 *bala* "then"

This suffix also occurs widely as a clause connective. It is always clause initial and codes a sequential or consequential relation between situations (see examples 689, 737, 740 and 798)

It is homophonous with the directional particle *bala* indicating movement away from speaker, and as with the homophony between the conjunction *ga* and the IMPV *ga-* the meanings are such that the homophony is not likely to be accidental.

(1027) ga baynha ŋayi wäwu+thi+na+n ŋulkthu+rr+nha
and "until" 3sg unaware+INCH+4rd+SEQ swallow+3rd+SEQ
\ bala ŋarra djawar'yu+rr+nha
then 1sg spear+3rd+SEQ T102Bp33
and once it was drinking off-guard, then I speared (it)

(1028) ŋunhi dhu walal bawala+mirri+ŋur+nydja dhärra wuthaŋiny+ŋur
TEXD FUT 3pl "random"+PROP+LOC/ABL+PROM stand-1st wind+LOC/ABL
ŋayi+ny dhu warrpuru+n walalaŋ nhuma+n bäwarraŋ'thu+ny
3sg+PROM FUT smell+SEQ 3pl-DAT smell+1st animal+ERG+PROM
bala *bäyŋu+n walalaŋ maŋ'thu+n+dja*
then NEGQ+SEQ 3pl-DAT appear+1st+PROM T102Bp2
When they stand in anywhere in wind, the animal will smell their scent. Then no (animal) will appear to them

13.5.2 Disjunction

13.5.2.1. *mak* "perhaps, (or)"

As in other Australian languages (see Dyirbal (Dixon 1972 p363) and Diyari (Austin 1981 p234)) Djambarrpuyŋu has a single form which is allied an epistemic modal sense and the expression of disjunction. The modal uses of the particle *mak* and an example of disjunction between clauses were outlined in section 13.4.3. The same particle can also code disjunction between nominal expressions.

The English word "or" has been borrowed into Djambarrpuyŋu and may occur together with *mak*.

(1029) *ga ŋayi+ny dhu ga wäwa+'mirriŋu, ga nhina, ŋunha=l*
and 3sg+PROM FUT IMPV-1st brother+KINPROP IMPV-1st sit-1st DIS=LOC
warraw'+ŋur mak, wo djäma ŋayi dhu gara ŋula nhä mak, ŋayi dhu
shade+LOC/ABLmaybe or work 3sg FUT spear "something" maybe 3sg FUT
ga wutthu'-wutthu+n djimindi, wo mak, ŋayi dhu ga djäma
IMPV-1st hit- REDUP+1st fish spear or "maybe" 3sg FUT IMPV-1st work
and the brother sits there in the shade or maybe makes a spear or something, perhaps he beats out a fish spear or maybe he is working T204p10

The particle *mak* is required with each nominal or clause, unlike *wo* "or" which can simply occur between the disjuncts. Thus the two particles have somewhat distinct distribution and function. A disjunctive notion is derived from the sequence of elements with *mak* rather than from the form itself, whereas it can be directly attributed to *wo.*

13.5.2.2 The particle *mak* plus an interrogative/indefinite proform

Disjunction in Djambarrpuyŋu can also be indicated periphrastically with an indefinite/interrogative proform unmarked form plus the particle *mak.* These combinations do not appear to code possibility regarding a single proposition. The most commonly occurring combination is *nhä mak* ["what/something" "perhaps"]. I also have an example with *yol* (Lowe (n.d.a L93) indicates that in Gupapuyŋu combinations occur with *nhä*, "what" *yol* "who" and *wanha* "where".

This may also occur with clauses or nominal expressions as the following examples demonstrate:

(1030) *gara+y nhuna dhu yolŋu+y dharpu+m, gaṯpurrku+ma+n\ **nhä mak***
spear+ERG 2sg-ACC FUT person+ERG spear+1st wound+1st+SEQ "or"
*nhuna **dhu** maranydjalk+thu+n läwu+m bul'manydji+y+nha gaṯpurrku+m*
2sg-ACC FUT stingray/shark+ERG+SEQ bite+1st shark+ERG+SEQ wound+1st
a person pierces and wounds you by a spear/or a stingray may "bite" and wound you T014p5

(1031) *wiriny'tju+n+a nhe dhu ŋaraka+y ŋula nhaliy minaŋara+y\mak*
scrape+1st+SEQ 2sg FUT shell/ bone+ERG "something"-ERG shellfish+ERG maybe
ŋäŋ'ka+y, mak buthuru-wuŋgan+dhu, mak
shellfish sp+ERG maybe [ear-dog] "shellfish sp"+ERG maybe
garrwili+y, nhä mak yiki+y
shellfish species+ERG "or" knife/blade+ERG T014p16
you scrape it with the shell of somethings such as "minaŋara", maybe "ŋäŋ'ka", maybe "buthuru-wuŋgan", maybe "garrwili" or maybe a knife

13.5.2.3 *wo* "or"

The English word "or" has been borrowed into Djambarrpuyŋu, and indeed it is often uttered without the initial semivowel as /u:/ rather than /wu:/ It is used to co-ordinate both clauses and nominal expressions.

(1032) .....*gäma* *maŋda dhu ŋatha* ***wo*** *ŋula nhä*
bear-1st 3dl FUT food or [INDEF2 what]"something" T004p9
the two carry some food or something

(1033) \ŋarra ***dhu*** *nhäma*\ *nhaltja+n* *ŋarra nhuŋu* ***dhu*** *birrka'yu+n*
1sg FUT see-1st do what-1st 1sg 2sg-DAT FUT think+1st
yora+m ŋarra dhu\ ***wo*** *yaka'yu+n ŋarra dhu*
agree+1st 1sg FUT or refuse+1st 1sg FUT T018
I will see what I think about you, whether I will agree or refuse

Alternatives with *mak* were provided for each of the above examples. In the first example *mak* could occur in place of *wo*. In the second *mak* was placed with each clause. It seems to be quite general that the particle *mak* can occur with each nominal or clause in contrast to *wo* "or" which can simply occur between the disjuncts. This is also reported for the modal/disjunctive particles in Dyirbal (Dixon 1972 p235) and Diyari (Austin 1981 p234). There are other examples of disjunctively co-ordinated nominals where speakers have given *nhä mak* as alternatives for *wo*. Then there are examples such as the one following where *wo* and *mak* occur together. The relationship between all these forms is a matter for future consideration.

(1034) *ga ŋayi+ny* *dhu ga* *wäwa+'mirriŋu,* *ga* *nhina, ŋunha=l*
and 3sg+PROM FUT IMPV-1st brother+KINPROP IMPV-1st sit-1st DIS=LOC
warraw'+ŋur ***mak,*** ***wo*** *djäma ŋayi dhu gara,* *ŋula nhä* ***mak,*** *ŋayi dhu*
shade+LOC/ABLmaybe or work 3sg FUT spear "something" maybe 3sg FUT
ga *wutthu'-wutthu+n djimindi,* ***wo*** ***mak,*** *ŋayi dhu ga* *djäma*
IMPV-1st hit-REDUP+1st fish spear or "maybe" 3sg FUT IMPV-1st work
and the brother sits there in the shade or maybe makes a spear or something, perhaps he beats out a fish spear or maybe he is working T204p10

13.5.3 *ŋany/ŋanydja* "but in fact, in actuality"

These particles occur in contexts in which the speaker is concerned to present or enquire about the true or actual state of affairs amongst a possible set of alternatives. These particles thus contrast with clauses presented as alternatives with *mak* or *wo*. With the latter two particles there is no implication as to which alternative actually occurred or will occur. It simply involves the statement of

possible options. The particles *ŋany/ŋanydja* also contrast with *yurr* (see section 12.2.3.5) which presents additional information without necessarily implying any factual contrast between the propositions.

I am assuming that the *ŋanydja* form is analyzable as *ŋany* +PROM but I do not know what distinctions exist regarding the uses of the two forms.

These particles also appear to join clauses rather than nominal expressions. It is common following negative clauses or clauses with the counterfactual *yanbi*. In this context *ŋany* or *ŋanydja* introduce the clause which states the actual state of affairs. Some examples are given below:

*(1035) yaka ŋunhi walala+wuy, **ŋanydja** ŋunhi+yi+ny walal+nydja*
NEG TEXD 3pl+EMPH but/or TEXT+ANA+PROM 3pl+PROM
gänaŋ'mara+nha+wuy nhanukiyin+guŋ
separate(tr)+4th+ASS 3sg-EMPH+OR OMSin133
Not just him (the deceased) but those he (Father Shepherdson) had chosen
(The first plural 3rd person pronoun is used out of deference to the deceased)

(1036) Galŋa-dhiŋga+m: Yaka mayali' nhakun yolŋu+w dhu dhiŋga+m
[skin-die+1st]"galŋa-dhiŋgam" NEG meaning such person+DAT FUT die+1st
*galŋa warrpam'. **Ŋanydja djawaryu+n** ŋuli yolŋu ŋula nhaliy.*
skin all "but" be tired+1st HAB person something-ERG Bany20
"Galŋa-dhiŋgam": This does not mean all the skin of a person dies, but that a person is tired by something.
(In this example the writer is describing the meaning of a compound. First the literal interpretation is rejected and then the actual meaning described)

(1037) way, ŋarra+ny ga+n dhuwal wäŋa dhuwal guyaŋa yanbi dhuwal
hey 1sg+PROM IMPV+3rd PROX place PROX think-1st CFACT PROX
dhudupuŋur\ ŋany ŋayi+ny dhuwal wäŋa+ny ŋayawiliŋur warray
place name "but" 3sg+PROM PROX place+PROM place name "indeed"
Hey I thought this place was Dhudupuŋur, but in fact it is Ŋayawiliŋur T012p5

Another context in which it is common is in asking questions in which the speaker seeks to know the actual state of affairs. In the corpus the questions concerned posit alternative possibilities and link them with these particles. The English translation in this context is "or". In this context *ŋany* or *ŋanydja* do not introduce the proposition that describes the actual state of affairs, rather they link propositions, either of which has the potential to describe the actual state of affairs.

(1038) nhä nhe dhu Toŋa+lil+nydja marrtji, märr weyin
what 2sg FUT Tonga+ALL+PROM go-1st/2nd somewhat long
*\ **ŋany** nhä yan gurriri*
"or" what EMPH short T008p6
Is your visit to Tonga a long time away or just a short time off?

I have also recorded alternative questions with *wo* but not with *mak*. There are no examples in the corpus of these particles occurring with more than a single alternative, and the particles only occur at the beginning of the second clause.

13.6 *bulu/biyapul* "again, more, also"

These particles can be used to express another occurrence of the same situation or an increase in quantity associated with a particular role, or the occurrence of an additional situation in regard to some particular entity. It would appear to have varying scope, including nominal expressions, predicates and clauses.
The form *bulu* is much more frequent in the texts than *biyapul*. It also occurs with the PROM and ANA discourse suffixes.

(1039) Nhä+ŋu ***bulu*** *ŋamatha+ŋ ŋunhi+yi mala+ny djimiŋdi+ny'*
look+2nd again do properly+2nd TEXD+ANA PL/group+PROM metal
lirra nhuŋu
teeth/blade 2sg-DAT Spear Bk
look again carefully at those spear points of yours

(1040) ***Bulu*** *dälku'-dal+ku+ŋ ŋel+yu+n*
also firm/hard-REDUP+TRANS1+2nd nail+ERG+SEQ Spear Bk
Also fix it firmly with a nail

(1041) ŋarra dhiyak djäl mirithirr bay \ *ga* ***bulu***
1st PROX-DAT like INTENS PRT-OK/"you know" and "again"
manawiny, ga bulu dharrwa yoŋu djäl dhiyak
avoidance address/reference term and "again many person like PROX-DAT
I like this one a lot, and so does Manawiny and lots of people like this one too
T208p12

(1042) gatjuy ***bulu-bulu*** *märra+ŋ, gatjuy*
be off more-REDUP take/get+2nd be off
Off you go and get some more, off you go ! (to children to get more food)

(1043) bili ŋarra ga+n ŋunhi thinking, ga ***bulu*** *ŋarra meŋgu+ŋal*
COMPL 1sg IMPV+3rd TEXD thinking and "again" 1sg forget+3rd T401p18
I was thinking of it but I also forgot (it)
(The cue for this was "I thought I wouldn't forget it but I did")

13.7 EMPHatic *yän(a-)/yan(a-)*

This particle is widely occurring. It appears to have wide ranging scope and can be used to focus many different types of constituents. English glosses such as "only" or "just" are frequently appropriate. It would appear to be a focusing strategy that is used to highlight a particular role, or attribute of a particular role, an adverb, the

predicate or even the whole proposition. Amongst the reasons for which something might be highlighted is to contrast it with some other participant, quality or situation, to emphasize the fact that a particular role or predicate remains the same or that there is something unique about it.

There is a tendency for *yan* to be juxtaposed to the relevant constituent. It commonly follows the constituent, unless it is the whole clause, in which case it occurs at the beginning of the clause. However, the ordering constraints have yet to be examined in detail and there are some examples in the corpus where the scope and function of *yan* still remain obscure. The latter may include instances of discontinuity between this particle and the constituent over which it has scope. There are also some clear examples of *yan* preceding predicates and nominals over which they have scope, indicating the ordering rules for these constituents at least is not absolute. One of the contexts in which *yan* may prove to be categorically ordered after a constituent is following a determiner indicating that the role or predicate is the same as one already indicated.

The particle *yän(a-)/yan(a-)* can occur with the SEQ suffix *-Nha* in which case it occurs on the extended stem i.e. *yäna+n* [EMPH+SEQ]. There are also stems with the ANA suffix *-Thi*. The stem most commonly recorded is *yänayi*, again with the extended stem, but the form *yändhi* has been noted in one text. The latter form has particular functions of its own (see section 13.8).

(a) Focus on particular attributes of a role

(1044) *ga ŋuli ŋarra dhu boŋguŋ yaka nhuna nhäŋu* ***dhiyal,*** *mak ŋarra* ***boŋguŋ***
and HAB 1sg FUT "future" NEG 2sg-ACC see-2nd PROX-LOC maybe 1sg **"future"**
marrtji ***dhipali+yi,*** *nhuna* ***guwatjmul*** *\ ga* ***nhäŋu*** *nhuna* ***marwat***
go-2nd MED-ALL+ANA 2sg-ACC meet-2nd and see-2nd 2sg-ACC hair
dhuwali liŋgu yan, weyin
MED "same" EMPH long T024
and should I not see you here in the future, I might come and visit you and see your hair is still long

(1045) *ga ŋunhi nhe nyumukuŋiny* ***yan*** .....
and TEXD 2sg small EMPH T008p
and when you were still/just small

(1046) *ŋändi+y* ***yan*** *ga+n* ***romd+dhu marrtji+n***
M(B)+ERG EMPH IMPV-1st law+ERG go/move(intr)+3rd OMSIn278
Only the mother law was moving (the corpse)
(This refers to a part of a funeral ceremony when only clans having a "mother" relation to that of the deceased are involved)

(1047) *ŋayi ga+n balanya+mirri+y, minista+ny ŋanapurruŋ nhina+n, ga*
3sg IMPV-3rd such+PROP+ERG minister+PROM 1pl-DAT sit+3rd and
*yolŋu muka **yan**, djiŋiyiŋi, yaka muka ŋäpaki*
person/Aborigine PRT-OK EMPH person's name NEG PRT-OK Eurpean
At that time our Minister was living there. He was an Aborigine, Djiŋiyiŋi, not a European T008Wrkp11

(1048) *yothu muka waŋgany **yan***
child PRT-OK one EMPH OMS ln24
there was just one child

(b) Focus on a particular entity

(1049) *ŋurruŋu+ny ḏalwaḻalwa **yän** botja+ŋal*
first+PROM tent EMPH build+3rd OMSln66
First they just built tents (not houses).

(1050) *ŋayi ŋunhi miyalk+nha+ny ga+n dharyu+rr+a **yan***
3sg TEXD woman+ACC+PROM IMPV-3rd rain+3rd EMPH T022ln124
It (the rain) rained only on the woman (not the man)

(1051) *ga dhuwana mak ŋarra dhu ḏoḏarr'+nha luki,*
and PROX-SEQ maybe 1sg FUT "tomorrow"+SEQ ingest-2nd
*ŋarirri+ny', dhuwana bala season balanyara+y linygu **yan***
fish+PROM/?ACC PROX-SEQ (MVTAWY) such+ERG "same" EMPH
midawarr+yu
season name+ERG T402p3
and I suspect I will be eating fish soon, this coming season of Midawarr (i.e. the same season during which s/he ate fish before)

(c) Focus on negation

The focus on negation may prove to be a subcase of the use of *yan* to highlight a contrast. In the first example this occurs in regard to the identity of participants, in the second in regard to the whole clause:

(1052) *dhuwal ... galiwin'ku wäŋa, yaka bukmak+ku yolŋu+w ŋe\ **bäyŋu yan***
PROX place name place NEG all+DAT person+DAT yes/OK NEGQ EMPH
bukmak+ku yolŋu+w
all+DAT person+DAT T010p20
this place Galiwin'ku isn't everyone's,OK. It is <u>not</u> for all (Aboriginal) people (this is followed by a description of those people to whom Galiwin'ku does belong)

(1053) *bäyŋu **yan** ŋarra dhuwal djitni nhä+ŋu*
NEGQ EMPH 1sg PROX Sydney see+2nd T008p12
I haven't seen Sydney yet

(d) Focus on predicate

(1054) ga nhina nhe dhu ga ŋunhi+yi yolŋu, bira'yu+n+a
and sit-1st 2sg FUT IMPV-1st TEXD+ANA person wake up, be on guard-1st+SEQ
yăna+n
EMPH+SEQ T010p25
and you, that person, sits there, keeping awake and on guard

See also example 1012.

(e) Focus on clause

(1055) dhiyaŋ ***bala*** *napurr băpi nhă+ŋal gäthur\ ŋunhal ya-ŋunhal dhukarr+ŋur,*
now 1pl snake see+3rd today DIS-LOC ya-DIS-LOC path+LOC/ABL
ŋuymulu, yurr yindi, bodiny ***yan*** *ŋayi nhawi luku+kurr*
black whip snake ADD big quiet EMPH 3sg whatsit feet+PERL
napurruŋ+galaŋa+kurr djulkthu+rr
1pl+OBLS+PERL pass +3rd T007p5
We saw a snake today. There, over there on the path. A black whip snake but big and quiet. It just passed by our feet.

(1056) ***yan*** *walal ŋuli gamunuŋgu+y+nha maŋgi+thi+nya*
EMPH 3pl HAB white paint+ERG+SEQ know+INCH+4th T013In261
They only know by the paint

(1057) ŋanydja ***yăn*** *ŋuli limurr ŋaramurryirr yolŋuw bala limurr ŋuli*
or EMPH HAB/HYP 1+2pl angry+INCH+1st person+DAT then 1+2pl HAB
waŋa+n bitja+n+a
speak-1st +SEQ do thus-1st+SEQ Bany 97
but only if we are angry at someone then we speak like that

(1058) yăn ŋayi+ny walu ***warray*** *nyumukuŋiny'+thi+rr, bala ŋanapurr* ***yăn***
EMPH 3sg+PROM sun/time "indeed" small+INCH+1st then 1pl EMPH
marrtji+n räli Txt280p2
go/come-1st+SEQ MVTTWD
(we might have gone back to fish again) but in fact the time was running short so we just came home

For examples of *yăn/yan* focusing on an adverb see examples 692 and 712.

I have also heard *yan* used to maintain a conversation. This was during a radio call in which one speaker was indicating they were ready to finish off. The other responded with *yăn* to indicate they still had more to say.

The particle *yăn* can also be given in response to a question with a sense of "for no particular reason". A similar sense occurs in the expression *ŋorra ga yan* [lie-1st IMPV-1st EMPH] "It just is" with the sense that you can't do anything about it.

13.8 EMPH with the ANA suffix *yänayi*

There are not many examples in the corpus with this form. It some examples it appears to have the sense "again":

(1059) ga ŋunhi napurr dhurrwara+ŋur djinydjalma+ŋur
and TEXD 1pl [mouth+ABL/LOC] "after" mud crab+ABL/LOC and
nyaŋ'thu+na+ŋur, ga ŋatha+ŋur+nydja ga yäna+yi
eat+4th+ABL/LOC and (root) food +ABL/LOC+PROM and [EMPH+ANA] "again"
yarru'-yarrupthu+n ŋanapurr+nydja minaŋara+w'+nha
go down-REDUP+1st 1pl+PROM shellfish+DAT+SEQ T012p15
and after eating mud crab and damper we went down again for shellfish

In other examples it appears to serve as a strong emphatic in regard to a proposition. In the following example the EMPH+ANA stem occurs after each clause listing prohibited practices.

(1060) yaka nhe dhu maypal ḻuka \ yäna+yi
NEG 2sg FUT shellfish ingest-1st ANA+EMPH
*yaka nhe dhu miyapunu ḻuka \ yäna+yi *
NEG 2sg FUT turtle ingest-1st ANA+EMPH T013in197
You will not eat shellfish. You will not eat turtle.

The EMPH+ANA stem appear to combine the "focusing" function of *yän* with both the anaphoric function of the ANA (resulting in the "again" sense) and emphatic functions of the ANA suffix (producing a strong emphatic).

In the last two examples the eating must cease in regard to a certain period only. It is possible that some sense of a restricted time span is essential to the meaning of this form. One further example is the following:

(1061) yaka nhe dhu yäna+yi ŋorra, djäma ḻitjaḻaŋ dharrwa
NEG 2sg FUT EMPH+ANA lie/sleep+1st work 1+2dl-DAT much
You mustn't/can't sleep yet, we have lots of work Bk286p17

13.9 The expression *yän(a-)/yan(a-) bili/ḻiŋgu/ḻinygu* "and so on, (until)"

The sequence of the EMPH and a COMPL lexeme is commonly used to indicate the continuation of the situation expressed in a clause. It commonly occurs clause finally, often phonologically separated from the preceding clause. It may even be preceded by the conjunction *ga*. It can also indicate the continuation of a situation expressed over several clauses in which case it could be translated as "And so it went on".

The combination can be interpreted in terms of other functions of these lexemes. The whole situation is focused with *yän(a-)*, and *bili* indicates that it remains the same.

Translation equivalents of English clauses linked with "until" can be expressed by the sequence Clause$_1$ - *yän(a-) bili*- Clause$_2$

(1062) bala rerri+ny yindi+thi+na+n\ yana+n bili----i
the sickness+PROM big+INCH+3s+SEQ [EMPH+SEQ COMPL] "keep on"
\ bala mirithi+na+n rirrikthu+rr
then INTENS+3rd+SEQ be sick+3rd OMS p13-14
Then the sickness got worse, and kept on doing so. Then (he) became very sick

(1063) ŋarrtjun+mi+na+n ŋanyapi+nya ŋayi, ŋunhi dirramu+ny
scold+R/R+3rd+SEQ 3sg-EMPH+ACC (3sg) TEXD man+PROM
\yana+n bili, djadaw'yu+rr+nydja.
[EMPH+SEQ COMP] "keep on" break (of day)+3rd+PROM T022ln165
the man scolded himself, and continued to do so until the break of day

13.10 Extension of the final syllable of a word to indicate the continuation of a particular situation.

The form *bili---i* in example 1062 above also demonstrates another commonly used strategy to code the continuation of a particular situation. That is by drawing out the final syllable of a word, usually a verb or a word associated with coding imperfective or continuous situations (see Waters (1989) for a more detailed consideration of this in Djinaŋ). Other examples in which this occurs include 202, 339, 667 and 731.

13.11 Conversational particles

There are several particles which seem to have key functions in relation to the conversational exchange and which I will refer to as conversational particles. They have meanings which attend to the dynamics of interaction between interlocutors, rather than, or possibly in addition to, the propositional content of what is being said. The structure of talk and the management of matters such as turn taking is by no means understood, but the particles grouped here appear to function predominantly in these domains.

13.11.1 *way* "hey".

This is used by a speaker to signal that they want someone's attention. It can be yelled loudly at someone at some distance, or it might simply preface or conclude an utterance being made to addressees at close quarters.

(1064) ga yol way\ yol nhe
and who "hey" who 2sg Phone Conv.
And hey who (is it)?. Who are you

13.11.2 *ma'*

The particle *ma'* is commonly used to indicate that the speaker is ready to participate again following a delay or an interruption, and/or to query whether the addressee is ready. It could be glossed "I'm ready to get on with things, are you/what about you?". It thus seeks some response from the addressee. The response need not be a spoken one.

This particle is also used by addressees to acknowledge that they are following what is being said. This simply indicates they are monitoring what the speaker is saying and does not require any response.

13.11.3 *muka, ŋini* and *ŋi*

All these particles can occur clause finally in questions with a rising intonation, and in this context appear similar to English tags. The following are such examples:

(1065) ga marŋgi+thi+rr+yi ga djamarrkuli+ny ŋuriki muka
and know+INCH+1st+ANA IMPV-1st children+PROM MED-DAT OK T102Bp9
and the children are learning that aren't they?

(1066) way ŋali mak bilmara+m ŋini
hey 1+2dl maybe change+1st eh T008Txtp9
Hey we might change (our work) eh?

(1067) \nhaltja+n ŋi'
do/be what+1st eh
how was it done? T102Bp36

muka seems to seek collaboration where this might be expected from the addressee, while *ŋini* is used in contexts where the addressee's reaction is more open to doubt. The particular function of *ŋi* is not clear.

However, *muka* is equally frequent in responses to questions or in comments agreeing with what someone else has said. The response to the question in 1065 above for instance was:

(1068) marŋgi+thi+rr muka djamarrkuli+ny
know+INCH+1st OK children+ACC T102Bp9
Yes the children are learning indeed

This particle also occurs in responses that do not have *muka* in the question.

(1069) nhä ŋuli ŋurruŋu+ny mitthu+n+a
what HAB first+PROM cut+1st+SEQ
What is cut first?
dhuwal muka
PROX OK T102Bp35
This (part) OK. Here OK

In the next example the speaker repeats almost word for word the statement of the previous speaker. The only changes are the deletion of *bili* "because" from the beginning of the clauses and the addition of *muka*:

(1070) bitja+n+dhi walal ŋuli ga ŋunhi muka malwiya+nh+any mitthu+n
do thus+1st +ANA 3pl HAB IMPV-1st TEXD OK emu+ACC+PROM cut+1st
that is how they are cutting up an emu for sure T102Bp35

Its function in this example appears to be to acknowledge and affirm what the previous speaker has said. This is akin to the Djapu example (given in Morphy 1983 p143). Morphy glosses *muka* "agreement" and describes its use by a speaker as 'corroborating a previous statement of his own or of another speaker'.

The particle *muka* appears to be used quite generally by interlocutors to indicate their support (agreement or co-operation) for each other and/or in regard to the matter being discussed, or to seek acknowledgement of such support. Its general affirmative use appears to be derived from the original Macassan. According to Zorc (1986) *muka* is a Macassan loan with cognates in both Makassarese *mukka* " all right, sound, valid" and Buginese *mukka* "good".

The form *ŋini* is not used so widely. It also is not confined to questions, as the following example:

(1071) yaka dhuwal nyäl-ŋupul+nydja ŋarra+ny, ŋini
NEG PROX lie-chase-2nd+PROM 1sg+ACC eh Burr31
Do not accuse me of lying/distorting things, eh/you hear

The form *ŋi* is often realized as a nasalized vowel and may also occur as *ŋi'* or *ŋe*. Like *muka* it can also occur with statements:

(1072) dhuwal ... galiwin'ku wäŋa, yaka bukmak+ku yolŋu+w ŋe
PROX place name place NEG all+DAT person+DAT "eh/yes" T008p20
This place Galiwin'ku is not everyone's, OK (It is X's)

A highly tentative gloss is "I assume you're following/agree with me about this, OK"

Unlike the other two forms this can also function as an affirmative in response to a question. Then it is an alternative to *yo* "yes".

(1073) bala ŋarra yora+ŋal+a \ ŋe yalŋuwa+n ŋarra yarrupthu+n bala+yi
then 1sg agree+3rd+SEQ yes later+SEQ 1sg go down+1st MVTAWY+ANA
nhokal+nydja, ripurru+n
2sg-OBL+PROM afternoon+SEQ T008Txtp7
Then I agreed "Yes, I will go down there to you later in the afternoon"

Both *yo* and *ŋe* can also be used by the addressee to acknowledge they are following what the speaker is saying.

13.11.4 *bay(')*

The particle *bay (')* sometimes seems to function like an English tag "isn't it" but seems to be a more general device by which the speaker can track that the addressee is following and/or acknowledge their participation without requiring a verbal response. Morphy (1983) glosses the Djapu form usefully as "are you with me?". Other English glosses that can be appropriate are "you know" and "OK". Some examples are:

(1074) walal, bäpurru+mirr dhuwal wäŋa, bay
3pl clan+PROP PROX place, OK OMS ln216
Hey everyone, this place has had a death

(1075) ŋarra dhiyak djäl mirithirr bay,
1sg PROX-DAT want INTENS OK T208p12
I like this one a lot you know.

13.11.5 *wanhan*

The indefinite/interrogative place ABS stem with the SEQ suffix can be used by a speaker to initiate an exchange. It has a sense something like "Well what are we to do now?"

13.11.6 The clitic *ya*

This syllable occurs as an enclitic or proclitic with words belonging to any of the major classes. One of its more accessible uses is with demonstratives when directing someone to where something is located. Thus *ŋunha-ya, ya-ŋunha* [ya with the DIS] "It's over there see. Look, over there". In other contexts it seems to indicate that the speaker is drawing attention to an entity, event, quality or whatever they are or have been talking about. It is not strongly emphatic but seems to have a sense of "That's how or what it was/is, OK". It draws attention to a particular state of affairs as being the case, or to a particular entity or quality as being the one the speaker is talking about. It may even be used in contexts when the speaker is unable to remember something. This clitic can occur with the word denoting whatever it is once it is recalled.

(1076) mak ŋarra marŋgi gaŋga märr-ya
"perhaps" 1sg know "somewhat-ya T204 p17
Perhaps I do know a little

(1077) nhe rraku dhäwu lakara+m\ nhawi+puy ŋunhi-ya worrk+puy,
2sg 2sg-DAT story tell+1st whatsit+ASS TEXD-ya special kind of fire+ASS
ya-balanya
ya-"such" T102Bp1
You tell me a story, about whatsit, that special kind of fire called *worrk*. About such (a thing) as that.

(1078) djaw'yu+n bitja+n waŋa-ya\ ya-bitja+n
take+1st do thus+1st talk-1st-ya ya-do thus+1st T010p2
talk in a clipped way, like that OK

A commonly heard rejoinder following an explanation is *ya-dhuwal* [*ya*-PROX] "So that's it, so that's how it is". Other examples in which the clitic appears include 123, 200, 410, 451, 549, 552, 613, 876, 1094 and 1095.

13.11.7 Other particles involved with conversational interaction

The following particles are also inherently concerned with interaction between interlocutors:

yo	"Yes." Also used by listeners to acknowledge they are following.
ŋe	"Yes." It is also used by listeners to acknowledge they are following.
yawyaw	Used by the listener to affirm that they are comprehending.
yaka	"No." (=NEG)
bäyŋu/dhawul	"No." (=NEGQ)

yän	Given in response to a question it indicates something like "for no particular reason" (cf EMPH *yän*).
yaw/yäw (+rise)	"I don't know about (responding to) that" "I'm not sure about that".

13.11.8 Lexemes commonly used to indicate a break in a text.

Four lexemes occur frequently in the texts to indicate a break in the text, or its completion. This might be a change in topic, a particular chain of thought, or a phase in a story. The four forms are the COMPL *bili/liŋgu/linygu*, the nominal and predicate determiners *balanya* "such" and *bitja*-N_K "do thus" and the adjective *manymak /ŋamakuli* "good". They occur in this function as single word utterances unless preceded by the conjunction *ga* "and". The first three lexemes also commonly occur with the SEQ suffix in this function.

The same forms can also be used to code the completion or or break in activities other than speech.

(1079) liŋgu+n *limurr marrtji+n*
COMPL+SEQ 1+2pl go-1st/2nd+SEQ T012p21
(We're/That's) finished. Lets go.

13.11.9 The PRESentative particle *gam'*

This is used in a wide range of contexts to direct the addressee's attention to something that is to follow. This may be a spoken utterance or a particular action. In the corpus it is common in connection with reported speech (see section 12.3), and in the texts on word meanings where the speaker introduces the meaning:

(1080) marthulma+ny *dhuwandja, balanya gam', djuŋuny ...*
young (adult)+PROM PROX-PROM such PRES meaning T010p23
"marathulma" has the following meaning: ...
(The text then continues with an description of the meaning)

It is also commonly used when speakers are demonstrating how something is done.

13.12 Interjections

This class, like other lexemes included under the umbrella of 'particles', do not inflect. They are generally distinct from other members of this group in that they stand alone as complete utterances. This group is itself associated with a range of functions.

The first set are essentially commands which accompany particular kinds of activities. These may co-occur with other particles and address terms.

ŋay'	"Take this, I'm giving/passing you"
(also *ŋay'yi* and *ŋay'nha* with the ANA and SEQ suffixes respectively)	
ga'	"Give/pass it to me"
ga' X	"(Please) give me X" (where X is the item requested)
go, gu gu	"Come here. Come (with me)"
gatju/gatjuy	"Off you go! Get away! Get on with it! Go ahead (with something)! "

(1081) "yo, yo \ gatju mak nhuma"
yes yes go ahead perhaps 2dl/pl — T208 p7
OK. You go ahead then

(1082) gatju mak bay, ŋarra malthu+n nhuŋu
off you go perhaps PRT-OK/"you know" 1sg follow+1st 2sg DAT
Go ahead then OK, I will accompany you (in a new task)

djibay	expression used to dogs to signal they are to keep/go away
ya'	"Attend, there is something new, different going on" (cf *ya* clitic, section 13.10.6)

(1083) ya' waŋa marrtji
Attend! talk+1st go-1st — Pnk87
Listen! There is (someone) talking

djutj-djutj(nha)	"Goodbye" (cf *djutj-djutj* "continue")

The following set of lexemes provide comment on events. They function more like exclamations than commands.

yuwalk	"That's the truth" (cf *yuwalk* "true")
ga yuwalkthi	"And that's what actually occurred" (see section 13.4.4)
bäydhi	"Never mind. Forget it" (cf BVR *bäy* "leave (it)")
galkigalki	"I'm nearly ready" (cf Locational *galki* "near")
walal	"That's something deserving of attention!/ Hey, what's that look! Hey, whats that I hear!" (cf *walal* 3pl) (see also section 5.7.1.3)

The following list can be considered as interjections proper in that they only occur as single word utterances and all denote some kind of speaker reaction.

yakay	surprise at something unexpected
yiw/yew'	frustration, annoyance (as when everyone is asking for something at once)
yaw'	disapproval
ya--a	anticipated pleasure, excitement
way	surprise
wu---u	? delight
wuy	? appreciation, or possibly the idea that something out of the ordinary could be happening (either good or bad)

murr'	approval
murr' muka	indicates that the speaker believes what happened was appropriate (as when somebody who does something wrong gets their just deserts)
wudatj	delight

There are also onomatopoieic words coding different noises such as *murr/mu--urr* which depicts the noise both of an emu and thunder or *guy/gu---uy* called out by people when they are hunting so that they can keep track of one another. These words also occur as independent utterances depicting the occurrence of the sound. However, they occur within texts, where context provides the clues as to the source of the sound. They are thus closer to BVRs as a stylistic device used by a story teller to make the narrative more dramatic. Indeed some BVRs can be used to denote sounds eg. *ŋaw* "the sound of something snapping, breaking" (cf *ŋaw'yu*-N "break").

13.13 Problematic particles

The particles considered in this section are problematic in the sense that their meaning is too little understood.for them to be given even an approximate gloss.

13.13.1 *yulŋuny*

The particle *yulŋuny* is not so uncommon in the texts, but I have not been able to glean from the examples or discussions with speakers just how it is used. I suspect it is a propositional particle. The glosses in Zorc (1986), taken from Lowe (n.d.b) and Morphy (1983), are "for some time" and "somewhere around here". However I have not found these generally appropriate. I include here a selection of examples from the texts for future reference:

(1084) dhäruk+tja maŋda+ny ŋamakurr yulŋuny
word+PROM 3dl+PROM good PRT T010p8
both accents are good

(1085) \ŋunha makuyuk, dharpa \ djingaryu+n ga \ ga dhurpu+n ŋayi ŋunhi
DIS pandanus tree stand+1st IMPV-1st and base+SEQ 3sg TEXD
watharr+nha-ya\ ŋunhi+yi+ny ŋuli dulŋurryu+na dhurpu, ŋunha
white+SEQ-ya TEXD+ANA+PROM HAB pull out+4th base DIS
märra+nha\ yurr mirritjin ŋayi ŋunha balanya yulŋuny
get/take+4th ADD medicine 3sg DIS such PRT T014p1
That tree there is a pandanus. The base is white. (You) pull out that base and take it. That bit is a medicine

(1086) \ *yurr nhaŋuwuy dhuwal* ***yulŋuny*** *rirrakay+nydja*\ *yaka*
ADD 3sg-DAT-EMPH PROX PRT sound/recording+PROM NEG
nhumalaŋ wa|aman'+ku
2pl-DAT all+DAT T018p
But the recordings are for her, not for all of you

(1087) \ *wanha+n* \ *yol+ku* ***yulŋuny***\ *m.....l+w, gutharra+w*
where+SEQ who+DAT PRT personal name+DAT (Z)DC=DAT
What's to happen?. Whose is it ? M.....l's, our "grandchild's" ((Z)DC T012
(This is a question in regard to who will have responsibility for a funeral ceremony)

In the last example we see it used in a question. Some speakers have described *nhä yulŋuny* "What's that (you said)" and as equivalent to *nhä dhika*. ["what" INDEFP]. However, the functional equivalence of these expressions is not adequate basis on which to equate the forms that constitute them.

13.13.2 *ŋula* (INDEF2)

This form is associated with various functions some of which have already been described. For its use as a non-proximate demonstrative stem see section 6.1. It is also used in conjunction with interrogative/indefinite proforms to code indefinite reference (see chapter 8). Its occurrence in other contexts is not fully clear. It can occur with clause wide scope in yes/no questions such as the following:

(1088) ŋula nhe bathi ŋarraku märra+ŋal
INDEF2 2sg bag 1sg-DAT get/take+3rd
Did you get my bag? G191

(1089) ŋula nhe ŋarraku nhä+ŋu, wäwa+'mirriŋu+nha+ny
INDEF2 2sg 1sg-DAT see+2nd B+KINPROP+ACC+PROM
Have you ever met my brother? OD42

(1090) wanha (balaŋ) nhe ŋula mutika nhä+nha, ŋunhi yawungu ŋarra nhirrpa+n
"where" (IRR) 2sg INDEF2 car see+4th TEXD yesterday 1sg put+1st
munhawu
night time T008p3
Did you (happen) to see the car I parked last night?

While common in clause initial position it can also occur later in the clause. In questions I have recorded *ŋula* with all four inflections. This use appears to be closely associated with yes/no questions for speakers with whom I have discussed it.

It also occurs in various non-question clauses with a function I have found particularly elusive. In some contexts an epistemic modal is suggested. However, it can co-occur with other particles with meanings in this area, such as the IRR

particle *balaŋ*, the negative particles, the FUT *dhu* and with *mak* "perhaps". This co-occurrence suggests it has a distinct and non-complementary role to the TMA particles and the particle *mak*.

(1091) nhina+n ŋali ga bitja+n+a bili, yaka ŋali dhu marrtji
sit-1st+SEQ 1+2dl IMPV-1st do thus+1st+SEQ "same" NEG 1+2dl FUT go-1st
ŋula wakir'yu+n, ŋalindi ŋurrka+nhara+w, dhuŋgarra ŋurrka+nhara+w
INDEF2 go away+1st moon/month throw+4th+DAT year throw+4th+DAT
\bäyŋu+n
NEGQ+SEQ T012p33
we (two) stay put always, we don't go and stay anywhere for a month or a year
No

(1092) yaka warku'yu+rr wuŋgan+nha, Don't tease the dog
NEG tease+2nd dog+SEQ

ŋayi ŋula darrkthu+rr nhuna	"it might bite you"
3sg INDEF2 bite+2nd 2sg-ACC	(warning)
ŋayi balaŋ darrkthu+rr nhuna	"it might bite"
3sg IRR bite+2nd 2sg-ACC	(speaker "just talking')
ŋayi balaŋ ŋula darrkthu+rr nhuna	"it might bite you/ in
3sg IRR INDEF2 bite+2nd 2sg-ACC	case it might bite you"
	(speaker believes it will occur)
ŋayi ŋula bäynha darrkthurr nhuna+ny	"in case it bites you "
3sg INDEF2 "until" bite+2nd 2sg-ACC+PROM	(?without me seeing (see section>>>)
ŋayi dhu darrkthu+na+ny nhuna+ny	"it will bite you"
3sg FUT bite+1st+PROM 2sg-ACC+PROM	(speaker sure it will happen)

I have not been able to get judgements that clearly distinguish between the first three alternatives in the last example.

In some examples it is possible *ŋula* has scope over a particular constituent within the clause. An example in which this seems most plausible is the following:

(1093) mak nhuŋu dhu ŋayaŋu wiripu+ŋu+lil+nydja yaka+n gurku'yu+n,
maybe 2sg-DAT FUT feelings other+ŋu+ALL+PROM NEG+SEQ ready+1st
wiripu+ŋu+lil+nydja ŋula djäma+lil
other+ŋu+ALL+PROM INDEF2 work+ALL T012p34
Perhaps your feelings are not ready for some other kind of work

I do not have any evidence that *ŋula* is used to introduce finite subordinate clauses in non-indicative (equivalent to my notion of irrealis) mood, as is reported for Djapu (see Morphy 1983 p130). There would appear to be a close connection with irrealis categories but I am not sure precisely what.

13.14 The nominal and verbal determiners, *balanya(ra-)* "such" and *bitja-*N_K "do, be thus", and the particle *nhakun* " like"

The forms to be considered in this section are put together because of the parallel functions of *balanya(ra-)* and *bitja-*N_K and the fact that the only function of *nhakun* clearly recognized is when it co-occurs with them. Strictly speaking only *nhakun* is a particle. It has an invariant form despite its formal correspondence with the non-human interrogative/indefinite DAT pronoun plus the SEQ suffix i.e. *nha-ku+n* from which it was most likely derived. *Balanya(ra-)* and *bitja-*N_K are each general nominal and verbal forms respectively. *Balanya (ra-)* occurs with case suffixes, while *bitja-*N_K takes verbal inflections appropriate to its verb class. They each agree in inflection with co-occurring lexemes.

Both these lexemes are used to express related notions. *Balanya(ra-)* is used with a sense of "such an X" or "that kind of X" when describing a particular role, while the verb *bitja-*N_K expresses "do/be such, thus". They are both concerned with the actual identity of the referent or with the particular nature of the event expressed by the predicate.

13.14.1 The nominal determiner *balanya(ra-)*

The longer form of *balanya(ra-)* is regularly required with the DAT and ERG suffixes. It has very occasionally been noted with the longer form in other contexts. The long and short stems of *balanya(ra-)* mirror those found on verb stems before nominal suffixes, suggesting it is in fact a fossilized nominalized verb stem. Comparative evidence in support of this comes from Djapu where a nominalized form of *bitja-* i.e. *bitjanar(a)* is found alongside *balanyar(a)* (Morphy 1983 p62). There is no evidence in Djambarrpuyŋu for the nominalization based on *bitja-*.

Balanya(ra-) functions like a determiner. It "places " a role as a particular type however, rather than in relation to a particular time or place. Its interpetation necessarily requires information from the surrounding context. This might be something in the immediate environment with the relevant characteristic which can be directly pointed to, a co-occurring nominal or a more lengthy explanation or description given in a text.

It is common in nominal expressions in which the identity or some other characteristic of a referent is being established or drawn attention to.

Some examples are:

(1094) dharr+nha ŋayi nhä+ŋal datitji, wuŋapu ***balanya*** *dharpa-ya*
BVR(look)+SEQ 3sg see+3rd Pouteria sericea such tree-ya
And he looked and saw the kind of tree (called) *datitji* or *wuŋapu* (Pouteria sericea - Wild Prune) T022in171

(1095) ŋonuŋ ***balanya*** *girri' nhe dhu gäma*
heavy such things/clothes 2sg FUT bear-1st T009p12
you wear clothing that is heavy (/which is of a heavy type)

It is also quite common with non-finite subordinate clauses when the event is similarly being established or drawn attention to, as in the following:

(1096) gurtha+ny nhuŋu+wuy nhe bäyŋu+n malŋ'mara+m,
fire/firewood+PROM 2sg-ACC+EMPH (2sg) NEGQ+SEQ find+1st
litha+nara+w+nydja ***balanyara+w+nydja****-ya*
warm/dry+4th+DAT+PROM such+DAT+PROM-ya T009p17
you do not find any fire(wood) for yourself, such as could dry (you)

Balanya can also occur with reference to something described earlier in the text. This may be in the form of a clause as in the following:.

(1097) ***balanya*** *ŋunha+yi rom*
such DIS+ANA law/practice T101p23
Such is that law/practice

On its own it also functions to signal the end of a text or an episode in a text. *ga balanya* [and such] "And so it is/was/will be" is a common concluding expression.

It can also foreground something to come in a text:

(1098) dharrku'yu+n+dja dhuwal mayali' dhäruk, ***balanya*** *gam'*
to put straight into the mouth+1st+PROM PROX meaning word such PRES
The meaning of the word "dharrku'yun" is like this: T009p10

13.14.2 The verbal determiner *bitja*-N$_K$

Bitja-N$_K$ functions as a verbal determiner similarly to *balanya*. The specific nature of the event is identified by reference to something in the surrounding context. It is thus common in contexts when the way to do or make something is being demonstrated or explained. This is a common use in every day speech. The following examples are taken from a text describing how to make a spear:

(1099) ***biyak*** *limurr ŋuli gara djäma dharpa+y*
do thus-2nd 1+2pl HAB spear work tree/wood+ERG
wadawada+y
Macaranga tanarius (Spear Bush) Spear BK
This is how we make spears with the wood of the Spear Bush

(1100) *ga* ***bitja+n+a*** *ŋayi ŋuli limra+ny mala bäyil+wuy+nydja*
and be thus+1st+SEQ 3sg HAB teeth/blade PL/group file+ASS+PROM
djinbulk+ku+nha+wuy
sharp+TRANS+4th+ASS SpearBK
and that is how the (spear) blades are when they are sharpened with a file (referring to an accomplanying photograph)

(1101) *dhuwal ga* ***bitja+n*** ***wäŋa*** *dhärra gäthur*
PROX IMPV-1st be thus+1st place stand-1st "today" T209p15
and that is how this place is today (referring to what has been previously said)

This predicate is also very commonly found framing direct speech. It may occur with a locutionary or cognitive predicate or on its own in this context (see section 12.3).

It also occurs with other predicates where the function appears to mirror the use of *balanya(ra-)* in establishing or drawing attention to the particular activity, state or event involved.

(1102) *djawaryu+n+a* *nhe dhu ya-**bitja+n+a***
tire/be tired+1st+SEQ 2sg FUT ya-do thus+1st+SEQ T009p14
and you tire/get tired (of searching for something that has been lost)

13.14.3 *bitja*-N_K, *bili* and *balanya bili*

Both *bitja-* and *balanya(ra-)* can occur with *bili* or *linygu/liŋgu* to indicate that the role or predicate is the same as or similar to another one. This is parallel to the use of this particle with demonstratives (see section 6.6.3) and reflects their shared determiner function.

(1103) *Ga* ***biyak*** ***bili*** *gara dhudi+ny garrpi'yu+rr*
and do thus-2nd "same" spear bottom/end+PROM tie+2nd
djiŋdjiŋ'+thu+n.
wire+ERG+SEQ Spear Bk
and in the same way tie wire around the end of the spear (having just demonstrated how it is tied around the blade bearing end)

(1104) *\ga* ***bitja+na+yi*** ***bili*** *marrtji+nya ŋaku+y ga luku+y*
and do thus+4th+ANA "same" go+4th canoe+ERG and foot+ERG
and as before (they) go by canoe and by foot/and they travel in the same way, by canoe and foot T009p31

For examples with *balanya bili* see 1110 below.

Bitja-N$_K$ plus the particle *bili* or *linygu/liŋgu* has an additional, although clearly related function, namely to express the continuation of the situation expressed by the predicate. It may be a habitual or iterative situation or one of extended duration.

(1105) \ *ŋayi dhu ga dharyu+n+a nhuna, dharyu+n+a dhu ga,*
3sg FUT IMPV+1st rain+1st+SEQ 2sg-O, rain+1st+SEQ FUT IMPV-1st
bitja+n+a bili dhu ga nyärryu+n
do thus+1st+SEQ "same" FUT IMPV-1st rain+1st T009p17
it rains on you, it rains, (it) rains continuously

13.14.4 *nhakun* "like" "as if"

Nhakun can occur on its own as well as in conjunction with *balanya* and *bitja*-N$_K$. Its functions are not fully understood. Working glosses are "like", "as if", "for instance", "it was/is such that".

One of its clearest uses is in the expression of comparisons. This is demonstrated in the following examples.

(1106) *ŋayi+ny dhu nhaŋgu ga yolŋu+ny gorru+m*
3sg+PROM FUT 3sg-DAT IMPV-1st person+PROM be high/raised+1st
dharrada warrpam \ ***nhakun*** *dhu ga dharpa dhärra*
still/motionless all like FUT IMPV-1st tree stand+1st T102Bp21
He (the hunter) is completely motionless up there (in the tree) (waiting) for it (the emu), its as if a tree was standing

(1107) *yurr yolŋu ga ŋunha nhina* \ *dhuwali* ***nhakun*** *gälkal*
ADD person IMPV-1st DIS sit-1st MED like ants T101p27
but people are living there, as if/like ants (i.e. because there are so many of them)

(1108) *ŋuli balaŋ ŋayi liyamirrnydja* ***balanya nhakun*** *dhuwal ŋäpaki ...*
HYP IRR 3sg head/mind+PROP+PROM such like PROX white person
If s/he has a mind (i.e. thinks) like this white person here ... T018p18

(1109) *ga yäku+ny ŋanapurr ga nhäma yolŋu+nha+ny walalany* \ ***balanya***
and name+PROM 1pl IMPV-1st hear-1st person+ACC+PROM 3pl-ACC such
nhakun *dhuwal limurruŋ yolŋu wal dhiyal ga nhina*
like PROX 1+2p-DAT person 3pl PROX-LOC IMPV-1st sit-1st
and we heard people's names like those for our people living here T101p25

(1110) *Matha-miɖiki+rr: dhuwandja* ***balanya bili nhakun*** *matha-yätji+rr*
tongue-bad+1st PROX+PROM such "same" like tongue-bad+1st
"matha-miɖikirr: this is (means) exactly the same as "matha-yätjirr" Bany80
(These compounds have the sense "to long for the taste of something" (e.g. shellfish))

(1111) *\ŋayi+ny dhu marrtji ŋunhi* ***dikmandja+yi+rr+a***
3sg+PROM FUT go-1st TEXT sticky, thick (consistency)+INCH+1st+SEQ
bitja+n+a ***nhakun*** *yuluk*
be thus+1st+SEQ like type of root food T014p16
It will become sticky like the root food *yuluk*

When used in conjunction with *balanya* or *balanya bili* these expressions usually precede *nhakun*. However there are examples in which they are not juxtaposed, nor in this particular order.

(1112) *yepthun+tja* ***nhakun*** *dhuwal mayali, balanya*
to assembleto go and fight +PROM like PROX meaning such T009p25
The meaning of "yepthun" is like this

(1113) ***balanya bili*** *miyalk,* ***nhakun*** *maŋawiny dhuwal, latju*
such "same" woman like special address/reference term PROX nice
the same kind of woman like Maŋawiny, nice T208p10

Nhakun also appears alone in many contexts where a comparative is not overtly expressed nor obvious from the surrounding context. I have not seen a plausible explication for it in connection with any other variety and its function in Djambarrpuyŋu remains elusive. Some examples are given below:

(1112) *ga dhuwandja dhamarraŋdji, napurr bäpurru* ***nhakun,*** *napurr mala,*
and PROX-PROM clan surname 1pl clan/group "like", 1pl group
Djambarrpuyŋu ***nhakun*** *ŋayi dhuwal*
clan name "like" 3sg PROX T208p11
And this (one) is a Dhamarraŋdji, our tribe that is, our mob, a Djambarrppuyŋu
s/he is

(1113) *ga ŋunhi* ***walal*** *ŋuli* ***nhakun*** *dhäruk+tja bakmaranha* ***bala*** *yan marrtji+nya+n*
and TEXD 3pl HAB "like" word+PROM break +4th then EMPH go+4th+SEQ
and when (?it was such that) they came to an agreement, then they would go
T009p28

(1114) *\ bili* ***nhakun*** *galki+thi+n nhaŋu walu*
because like near+INCH+3rd 3sg-DAT time
because (?it was such that) his/her time was near Br
(this is referring to someones death)

(1115) *ga dharrwa+n* ***nhakun*** *munha+ny ŋarra ŋarru+m, ga ŋalindi+ny*
and many+SEQ "like" night+PROM 1sg search+1st, and moon/month+PROM
ŋupa+n
chase+1st
and many are the nights I have searched, and the months pass T009p14

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GLOSSARY OF GRAMMATICAL TERMS

Comparative sections

GLOSSARY OF GRAMMATICAL MORPHEMES AND PARTICLES