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CLASSIFICATION OF SOUTHERN PILBARA LANGUAGES

Peter Austin

1. INTRODUCTION

This paper[1] is an attempt to provide evidence for a genetic classification of the Australian Aboriginal languages originally spoken in the area between the Ashburton and Gascoyne rivers in northern Western Australia. Following von Brandenstein 1967, I will refer to this area as the southern 'Pilbara region', using the geographical term 'Pilbara' in a slightly wider than normal sense. Traditionally, there were ten languages spoken in the southern Pilbara, some of them showing a degree of dialectal differentiation. These languages will be classified into four first-order genetic groups as follows (for language locations, see map):[2]

1. Kartu - Yingkarta
2. Kanyara - Payungu, Purduna, Thalanyji, Pinikura
3. Mantharta - Tharrkari, Warriyangka, Thiin, Jiwarli
4. Ngayarta - Jurruru

The higher-order relationships between these language groups, and other languages outside the southern Pilbara region, have yet to be fully established (but see O'Grady et al 1966, Wurm 1972).

Data sources for this study are as follows:

(1) for Yingkarta: Dench 1979, unpublished fieldnotes and recordings collected by G.N. O'Grady;

(2) for Payungu, Purduna, Thalanyji, Tharkari, Thiin and Jiwarli: material collected by the author during fieldwork in 1978 and 1985 (supported by grants from the Department of Anthropology, University of Western Australia, the Australian Institute of Aboriginal Studies, La Trobe University and the Australian Research Grants Scheme);

(3) for Payungu, Thalanyji, Tharrkari, Warriyangka, Thiin and Jurruru: unpublished notes and recordings made available by G.N. O'Grady;

(4) for Tharrkari: Klokeid 1969 and unpublished fieldnotes;

(5) for Jurruru: notes made available by A. Dench and C.G. von Brandenstein;

(6) for Warriyangka, Thiin and Pinikura: notes from C.G. von Brandenstein.

In some cases, source transcriptions and analysis have been altered in minor ways. None of the scholars who kindly made their material available can be held responsible for errors of fact or interpretation in this paper.

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Map: Location of languages mentioned in the text

2. PREVIOUS CLASSIFICATIONS

The earliest published classification mentioning southern Pilbara languages is O'Grady et al 1966. In this lexicostatistical classification, there are four subgroups of the Nyungic group of the Pama-Nyungan family represented in the southern Pilbara region:

Kanyara - Payungu, Purduna, Thalanyji, Tharrkari, Watiwangka[3]
Mantharta - Warriyangka, Thiin, Jiwarli
Kartu - Yingkarta
Ngayarta - Jurruru, Pinikura[4]

O'Grady (1966:121) presents a cognate density matrix for some of these languages. This was used by O'Grady to support the proposed classification (figures represent percentage cognates on a standard wordlist):

```
Thalanyji
79   Purduna
43   46   Tharrkari
31   36   45   Warriyangka
63   59   35   37   Payungu
36   36   36   33   51   Yingkarta
```

The lexicostatistical classification was later amended by O'Grady with respect to Tharrkari, as Klokeid (1969:1) notes:

> according to comparisons made by G.N. O'Grady and the author in July 1967, Thargari is a member of the Mantharda subgroup, Nyungic group of the Pama-Nyungan family. In his earlier classification in 1966, p.37 and p.111, O'Grady had tentatively placed Thargari in the Kanyara subgroup.

The reasons for this amendment are not spelled out by Klokeid and have not appeared in print (in the published matrix (see above), Tharrkari shares 45% with Warriyangka but 46% with Purduna). For evidence that the reassignment of Tharrkari is correct, see section 5 below.

Wurm (1972:125) adopts this revised classification and presents a listing identical to O'Grady et al 1966, except that Tharrkari is assigned to the Mantharta subgroup.

Austin 1981 accepts the lexically based classification of Kanyara and Mantharta groups, but, using an unpublished vocabulary from O'Grady, places Jurruru with the Mantharta languages. Grammatical criteria supporting such a classification are also invoked (op.cit. 298-299). Data recently made available shows that Jurruru meets none of the distinguishing criteria and hence cannot be classed as a Mantharta language. The data points to an affiliation to the north with the Ngayarta languages (see 3.4 below).[5] Wordick (1982:7), in fact, lists Jurruru and Pinikura as Ngayartic languages, stating that they "apparently resemble Yindjibarndi and Kurrama."

A somewhat different classification has been devised by von Brandenstein and reported in Oates (1975:65). It dismantles the Mantharta grouping and subdivides Ngayarta into coastal and inland sections. The classification is as follows (von Brandenstein's spelling of language names is retained here):

Kanyara subgroup - Bainggu, Dalandji, Burduna, Dargudi

Coastal Ngayarda subgroup - Djiwarli, Binigura, Nuala, Gurama, Jindjibarndi

Inland Ngayarda subgroup - Njamal, Bandjima, Djururu, Warianga, Inawanga

Notice that Tharrkari, Jiwarli and Warriyangka are here classified into three separate subgroups. Oates (1975:72) notes that Tharrkari was:[6]

> classified by O'Grady et al as belonging to the Mantharta subgroup, but von Brandenstein says it is an AVC dialect so has been reclassified here, together with Denma, a subgroup.

Also, she states (ibid. 76) that Warriyangka was:

> originally classified by O'Grady and Wurm as part of the Mantharta subgroup, but von Brandenstein shows it is linked with Bandjima, being basically an AVC language with PVC intrusions.

For reasons detailed below (see 3.3 and Appendix), I believe these revisions are incorrect and that the Mantharta group must stand as a genetic unity. Unfortunately, von Brandenstein's errors have been reproduced by Wurm and Hattori eds 1981, in their Map 20, which appears to be based on the same classification as that described by Oates.

3. TOWARDS A GENETIC CLASSIFICATION

In the following sections, I will present evidence which could be used to support the genetic picture set out in the introduction. According to the compartive method (see Greenberg 1972:46-55), in order to demonstrate genetic connections and prove the proposed subgrouping, it would be necessary to:

(a) reconstruct the putative ancestor of all four subgroups; and
(b) describe the shared innovations which distinguish members of one subgroup from those of another.

I am not in a position to undertake the necessary reconstruction required by (a) at this time. The following sections must be taken as suggestive of shared innovations and retentions which may ultimately be used to prove the genetic hypothesis.

3.1 Yingkarta

The position of Yingkarta in their lexicostatistical classification is outlined by O'Grady et al (1966:114) as follows:

> Although the available evidence from cognate densities points to a closer relationship between Inggarda and its northern neighbour, Bayungu (51 percent), than between Inggarda and any other language, we classify Inggarda as belonging to the Kardu subgroup because of the large areas to its east and southeast which remain linguistically unknown, but which are probably occupied by languages or dialects linking Inggarda with the main group of Kardu languages. Inggarda is structurally more similar to Kardu languages to its east and south than to the Kanyaric languages to its north and northeast.

O'Grady (1966:121) provides the following cognate percentage figures for Yingkarta and the Kartu languages Nhanta and Wajarri:

Yingkarta		
33	Nhanta	
33	42	Wajarri

Since the publication of this data, more relevant information has come available, namely Dench 1979 on Yingkarta and Douglas 1981 on Wajarri. As Dench points out (following O'Grady et al), Yingkarta is spoken in two dialects, northern and southern, which are grammatically identical but lexically somewhat different. Comparisons which I have carried out using a 160 item basic vocabulary list for southern Yingkarta and Wajarri give a cognate sharing of 54% (for 35 verbs alone, the figure is slightly lower at 46%). This is markedly higher than the 33% figure arrived at by O'Grady, and is suggestive of a closer relationship.[7]

There is strong grammatical evidence to support the lexical figures. This comes from three areas:

(1) free pronouns - the pronominal systems of Wajarri and Yingkarta are almost identical, except that Yingkarta lacks an inclusive-exclusive contrast in the first person non-singular. The paradigms for nominative case (root) forms in the two languages are:[8]

	Wajarri	Yingkarta
1sg.	ngatha	ngatha
1du.incl.	ngali	ngali
1du.excl.	ngalija	
1pl.incl.	nganhu	nganhu
1pl.excl.	nganyju	
2sg.	nyinta	nyinta
2du.	nhupali	nhupalu
2pl.	nhurra	nhurra

None of the other languages in the southern Pilbara region has nganhu as a first person plural form (although nganhurru does occur elsewhere - see 3.2, 3.3). The suffixes used to indicate pronominal case are identical in the two languages, namely -nha accusative, -ngu dative and -la locative.

(2) bound pronouns - Yingkarta is unique among southern Pilbara languages in having a (partial) set of optional bound pronominal suffixes, typically suffixed to the first word of a clause. These pronouns are shared with Wajarri where the forms are virtually identical:

	Wajarri	Yingkarta
1sg.nom.	-rna	-rna
1sg.dat.	-ja	-ju
1du.nom.	-li	-li
2sg.nom.	-n	-n(pa)[9]
2sg.acc.	-nta	-nta

(3) monosyllabic verbs - the following partial verb paradigm indicates that the verb inflection suffixes used in Wajarri and Yingkarta are quite different (Y and L are conjugation class mnemonics):

	Wajarri		Yingkarta	
	Y	L	Y	L
past	-manha	-nmanha*	-purru	-lpurru
present	-nha	-na*	-nyi	-lanyi
future	-ya	-la*	-wu	-lku
imperative	-Ø	-n	-ya	-ka
purposive	-ku/-wu	-lku	-wura	-lkura

*n and l alternate with rn and rl respectively

Apart from a correspondence between Wajarri 'purposive' and Yingkarta 'future', there are few similarities. However, both languages have a small set of monosyllabic verbs which have irregular inflectional paradigms. In one irregular

class are ya- *to go* and ma- *to get*, while in another are nha- *to see* and yu- *to give*.[10] Interestingly, the various forms of these verbs are practically identical in the two languages as the following paradigms show:

	Wajarri		Yingkarta	
	ya- *go*	nha- *see*	ya- *go*	nha- *see*
past	yanmanha	nhanganha	yanma	nhanga
present	yana	nhanya	yana	nhanya
future	yanaya/yarra	nhangaya	yanku	nhangku
imperative	yarran/yanma	nhanga/nhangama	yanta	nhangka
purposive	yanaku	nhangaku	yanawura	nhangawura

Wajarri past tense forms show an increment -nha; imperative is different in the two languages, but Wajarri purposive corresponds to Yingkarta future, as mentioned for the regular verb paradigm above (but note the deletion of medial a in the Yingkarta forms). These irregular verb forms, which must be retentions from a common ancestor, are the strongest evidence of a genetic connection between Yingkarta and Wajarri.

For these reasons, Yingkarta may be assigned to the Kartu group.

3.2 The Kanyara group

There is both lexical and grammatical evidence which can be presented to show that Thalanyji, Purduna and Payungu form a closely related group of languages. Data from von Brandenstein (personal communication) suggests that Pinikura should also be added to this group.

Lexically, the three languages show a high degree of cognate vocabulary, as demonstrated by O'Grady 1966 (see table in 2 above) and reconstructions of proto-Kanyara in Austin 1981 (see also Appendix). Grammatically, there are a number of morphological features peculiar to these languages and not shared with neighbouring groups:

(1) nominal derivational morphology - the following stem-forming affixes occur only in these languages:

-wartu	comitative ('having')
-pirritha	privative ('lacking') (-wirriya in Purduna)

Also, the word kupuju *child* has an irregular plural, kupujarri, in all three languages (the regular plural suffix is -nyjarri (-jarri in Purduna)).[11]

(2) nominal cases - the following allomorphs of the allative case suffix are peculiar to Kanyara languages:

Thalanyji	-pura/-kurrunu[12]
Pinikura	-pura
Purduna	-pura/-wura
Payungu	-kurrunu/-rla

(3) pronouns - the set of first and second person plural pronouns unique to Kanyara languages is:[13]

1pl.incl.	nganhurru
1pl.excl.	nganarna
2pl.	nhurra

(4) verbs - there are two verb inflections which mark verbs of relative clauses that are uniquely Kanyara. These inflections also code (non-)identity of subjects between the main and subordinate clause:[14]

relative - same subject:	-rra/-lkarra
relative - different subject:	-yitha/-lkitha

3.3 The Mantharta group

O'Grady 1966 gives only one lexical figure for shared cognates between Mantharta languages, namely 45% for Tharrkari-Warriyangka. This figure is almost certainly too low, as my comparisons based on a wordlist of 200 items show the figure to be 80% cognate. The other Mantharta languages have the following cognate percentages:

% Cognate				Number of items compared			
Tharrkari				Tharrkari			
80	Warriyangka			200	Warriyangka		
80	79	Jiwarli		194	183	Jiwarli	
65	61	75	Thiin	159	170	138	Thiin

For the category of verbs only, the figures are even higher:

% Cognate				Number of items compared			
Tharrkari				Tharrkari			
80	Warriyangka			54	Warriyangka		
82	93	Jiwarli		44	41	Jiwarli	
68	75	87	Thiin	41	40	31	Thiin

Grammatical evidence supporting the genetic grouping is:

(1) nominal derivational morphology - the privative ('lacking') stem-forming affix is unique to Mantharta languages in being of the form -yirra (optionally extended to -yirrangu or -yirranyu). In addition, there is an irregular plural in -rti (Tharrkari -rdi) for the word for *child* (cf. the Kanyara word for *child* in 3.2 above):

Thiin, Warriyangka	jumpa-rti
Jiwarli	juma-rti
Tharrkari	jupa-rdi

(2) nominal cases - the case inflection for allative is unique to Mantharta in being -kurla (following a consonant) and -rla (following a vowel).

(3) pronouns - there are a number of purely Mantharta pronominal features:

(a) second person singular pronoun nhurra
second person plural pronoun nhurrakara

(b) exclusive reference for non-singular pronouns is marked by a suffix -ju (Tharrkari -yi),[15] as in Warriyangka and Jiwarli ngaliju, Tharrkari ngaliyi for first person dual exclusive (cf. Kanyara ngaliya)

(c) the dative case inflection for pronouns is -mpa (Tharrkari -pa) for second person and first person non-singular inclusive, but -ngu for first person non-singular exclusive:

	2sg.	1du.incl.	1du.excl.
Warriyangka Jiwarli	nhurrampa	ngalimpa	ngalijungu
Tharrkari	nhurrapa	ngalipa	ngaliyingu

The first person singular dative pronoun is suppletive and has the form nganaju (Tharrkari nganayi). In Payungu and Purduna, all datives take -ngu and in Thalanyji -ma (except first person singular, which is suppletive jurti).

(3) verb morphology - Mantharta languages all distinguish five verb conjugations and show related inflections for each conjugation. Inflections unique to the group are:

(a) past tense	-rninyja/-nyja
(b) future tense[16]	-lka/-rrka/-ira/-ra
(c) relative-same subject[17]	-rnu/-nhu/-ngu
(d) relative-different subject	-ini(ya)/-ya

There is some weak evidence which suggests that subgrouping internal to the Mantharta group could be proposed linking Jiwarli and Thiin on the one hand, and Tharrkari and Warriyangka on the other:

(1) the comitative ('having') nominal derivational affix is:

Tharrkari, Warriyangka[18]	-parri
Jiwarli, Thiin	-jaka

(2) first person plural pronouns are:

Tharrkari, Warriyangka	nganhurru
Jiwarli, Thiin	nganthurru

(3) there are seven basic lexical items where Tharrkari and Warriyangka share one form and Thiin and Jiwarli have a different form:

	Tharrkari	Warriyangka	Jiwarli	Thiin
mother	ngaka	ngangka	pipi	pipi
father	marti	marnti	papu	papu
foot	thina	thina	jina	jina
snake	thurnu	thurnu	pilpu	pilu[19]
short	tharda	tharta	pulhu	pulhu
bad	puga	puka	walhi	walhi
to eat	marni-	marni-	thika-	thika-

For these various reasons the Mantharta grouping may be proposed as a genetic unity.

3.4 Jurruru

The position of Jurruru has been disputed as shown by the various classifications outlined in section 2 above. Until recently, the only data readily available on this language was a 300 word lexical test list collected by G.N. O'Grady in 1967. Examples were drawn from this list in Austin 1981 to show the purported Mantharta affiliation of this language. In December 1982, Alan Dench was able

was able to record lexical and sentence data in Jurruru from Jack Butler, whose main language is Jiwarli. These data are consistent with those of O'Grady, but show that the language is grammatically *not* of the Mantharta type.

The crucial grammatical differences are as follows:

(1) Jurruru is morphologically a nominative-accusative language like its northern Ngayarta neighbours (Dench 1982) and unlike the Mantharta and Kanyara languages, which show split-ergative nominal morphology.[20]

(2) the nominal case system shows the following differences:

	Jurruru	Mantharta	Kanyara
accusative[21]	-ku	-nha	-nha
allative	-karta	-kurla/-rla	-pura/-kurrunu
ablative[22]	-nguru	-parnti	-parnti

(3) the pronouns of Jurruru resemble those of Panyjima and other Ngayarta languages more closely than they do the Mantharta forms:[23]

	Jurruru	Yinyjiparnti	Panyjima	Mantharta
1sg.	ngathu	ngayi	ngatha	ngatha
2sg.	nyinta	nyinta	nyinta	nhurra
1du.incl.	ngali	ngali	ngali	ngali
1du.excl.	ngaliya	ngaliya	ngaliya	ngaliju
2du.	nyintapala	nyintauyha	nhupalu	nhupalu
1pl.incl.	ngaliku	ngaliuu	ngalikuru	nganthurra
1pl.excl.	ngaliyaku	ngaliyauu	ngaliyakuru	nganthurraju
2pl.	nyintaku	nyintauu	nhupalukuru	nhurrakara

(4) in its verb morphology, Jurruru has only two conjugations (like its northern Ngayarta neighbours), and the various inflections show no similarity to the Mantharta and Kanyara forms.[24]

(5) syntactically, the Kanyara and Mantharta languages show unusual case-marking of transitive object noun phrases, namely with allative case in purpose-same subject clauses and with dative case in relative clauses (see Austin 1981). In Jurruru, objects are consistently marked with accusative -ku regardless of clause type.

For these reasons, Jurruru is clearly not a Mantharta (or Kanyara) language, although it shares a degree of lexical similarity with its neighbours. Indications are that its genetic affiliations are with the Ngayarta languages to its north. The precise details of such a relationship are yet to be explored.

4. CONCLUSION

Various classifications of southern Pilbara languages have been presented in the past. This paper has brought forth lexical and grammatical evidence to suggest that the languages of the region belong to four distinct genetic first-order groupings, namely Kartu (Yingkarta), Kanyara (Payungu, Purduna, Thalanyji, Pinikura), Mantharta (Tharrkari, Warriyangka, Jiwarli, Thiin) and Ngayarta (Jurruru).

NOTES

1. This paper has benefitted from comments and discussions with Alan Dench and Harold Koch. My thanks to the various speakers of southern Pilbara languages with whom I have worked for providing the primary data.

2. Following O'Grady et al 1966, the term for *man, human being* is used to name each genetic group. In some instances, a given language may have replaced the particular term used to name its group, for example, Tharrkari has kanyara *man, human being*, but, as shown below, it belongs to the Mantharta group.

3. The identity of Watiwangka (or Wadiwangga) is unclear. O'Grady et al (1966: 112) state that

> Wadiwangga is not listed among Greenway's 554 tribal names. The sample of its vocabulary provided by Paterson in 1960 indicates conclusively that it is a member of the Kanyara subgroup, though sufficiently divergent from any other Kanyara language to be regarded as a separate language.

   I found one person, Stuart Peck, who recognised the name, but the sample vocabulary he provided is identical to Warriyangka. I do not have access to the Paterson vocabulary and cannot check the accuracy of the statement in O'Grady et al. This language will be removed from further consideration.

4. O'Grady et al (1966:103) state that: "a few words of [Tjuroro] remembered by a Kurama informant indicate that Tjuroro (and hence also probably Binigura) is to be classified with the Ngayarta subgroup."

5. Von Brandenstein (personal communication, February 1982) points out that he similarly changed his mind about the affiliations of Jurruru (cf. his report, von Brandenstein 1965) and quotes from his manuscript on the language:

> it was originally intended to treat Tjururu together with some of its south-western neighbouring dialects. It has been found, however, that this was not advisable. The dialects Warrijarngga, Tjiwarli and Teen(ma) should be treated together exclusively because of their relationship .... But Tjururu stands apart.

6. In von Brandenstein's terminology, AVC (active verbal concept) relates to nominative-accusative case marking and PVC (passive verbal concept) to ergative-absolutive case marking. On all the evidence available to the writer, Tharrkari is *not* a morphologically nominative-accusative language (see also Klokeid 1969).

7. O'Grady's figure is based upon comparison of Wajarri with the northern Yingkarta dialect - the difference in dialect could explain the discrepancy in the cognate percentage figures.

8. Douglas' transcription of Wajarri has been altered to reflect a laminal contrast missed in his recordings (see Austin (forthcoming)).

9. All words in Yingkarta must end in a vowel. The enclitic -pa is added to any words which would otherwise end in a consonant (see O'Grady et al 1966: 116, Dench 1979:41, Hale 1973).

10. The verb yu- *to give* shows a stem alternant yi- in Wajarri (see Douglas 1981:231), but Yingkarta yu- is invariant.

11. Interestingly, the word kupija, meaning *little*, occurs in the Ngayarta language Panyjima and is one of four roots taking an idiosyncratic plural suffix, -rri (Dench 1981:43 - see also Wordick 1982:53 for Yinyjiparnti).

12. -kurrunu is suffixed to demonstratives and pronouns in Thalanyji. Some speakers use it as the noun allomorph for stems of three or more syllables and restrict -pura to disyllabic stems. Others have replaced -pura/-kurrunu on nouns with -karta, an apparent borrowing from a Ngayarta language (see 3.4 below).

13. Payungu has collapsed the distinction between inclusive and exclusive reference for first person non-singular pronouns; its first person plural pronoun is nganhurru. Note that although some of these forms occur in other groups (for example, nganarna in Ngayarta, nganhurru in Tharrkari and Warriyangka (see 3.3) and nhurra in Mantharta (as second person singular *not* plural)), the set as a whole is unique to Kanyara.

14. Thalanyji also has -rrkarra and -rrkitha respectively for verbs in the rr class which only it preserves. Alan Dench (personal communication) points out that the Ngayarta language Martuthunira has a relative same-subject marker -rra/-lyarra/-rryarra, which is apparently cognate with the Kanyara forms. The relative different-subject affix is not cognate, however.

15. Tharrkari has undergone a number of diachronic phonological changes including loss and stopping of nasals and lenition of stops; see Austin 1981 for details. -yi is the regular reflex of ancestral *-ju in Tharrkari; see nganaju first person singular dative cited below, and proto-Mantharta *kartaju *dark* which becomes Tharrkari kardayi.

16. Tharrkari has -la and -rra as allomorphs for the two conjugations where the other languages have -lka and -rrka.

17. These affixes are cognate with the nominative relative suffixes -r nu/-ngu in Yinyjiparnti and Kurrama (Wordick 1982:98).

18. Interestingly, -parri occurs as the comitative in Yingkarta which is contiguous with Tharrkari and Warriyangka.

19. The word pilu appears to be a borrowing from Jurruru, which is adjacent to Thiin. There are five other basic lexical items which Thiin and Jurruru share, as distinct from the other three Mantharta languages:

	Tharrkari	Warriyangka, Jiwarli	Thiin	Jurruru
liver	marurri	marurri	yipa	yipa
throat	wurrkal	wurrkal	wangkarr	wangkarr
bone	mapu	mampu	kanta	kanta
meat	pirru	pirru	mantu	mantu
to hit	pudhi-	puthi-	warnpa-	warnpi-

20. Von Brandenstein 1965 reports that Jurruru is PVC (in our terms, has ergative-absolutive case marking). The evidence from his Jurruru notes is confusing, since the informant shows some inconsistent use of ergative case marking. The data need further checking.

21. The Kanyara languages have a dative case suffix of the form -ku, while in Mantharta, the allomorphs are -ku/-wu/-yu (or -yi). Dench 1982 argues that historically the Ngayarta accusative is an old dative suffix.

22. In Jiwarli there are two ablatives; one of the form -parnti and the other of the form -nguru added to the locative inflected form of some nominals (for the full distributions see Austin 1985). The latter ablative is identical to the Ngayarta inflection (see, for example, Panyjima described by Dench 1981 and Yinyjiparnti described by Wordick 1982).

23. Yinyjiparnti has undergone a number of diachronic phonological changes, including loss of k and r between vowels, as, it seems, in the plural forms. The Jurruru plurals may end in a long vowel, viz. kuu, which would be a reflex of -kuru through loss of r. The sources are unclear on the vowel length.

24. O'Grady (1966:111,113) reconstructs four monosyllabic verb roots for the ancestor language proto-Ngayarta (and more distant ancestors), namely: ma-N *to take*, ya-N *to go*, yu-NG *to give* and nga-L *to eat*. He points out (op.cit. 81) that the daughter languages have reshaped the monosyllables as disyllables by taking the old root plus inflection as a new root. Jurruru roots reflect the old present tense inflection (like all Ngayarta languages except Palyku, Panyjima, Ngarla and Nyamal) as in manku- *to take*, yanku- *to go*, yungku- *to give* and ngalku- *to eat*. The Mantharta cognates for the first two of these are mana- and yana- (the other two verbs do not have cognates).

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APPENDIX

This appendix presents new reconstructions of proto-Kanyara and proto-Mantharta which are additions to Austin 1981, and take into account recently collected data. Format is the same as Austin 1981, as is the numbering of languages, namely:

1. Payungu
2. Thalanyji
3. Purduna
4. Jiwarli
5. Jurruru
6. Warriyangka
7. Thiin
8. Tharrkari - l- dialect
9. Tharrkari - d- dialect

In addition, cognates from Yingkarta are given as 10, from Martuthunira (Dench, personal communication) as M, and from O'Grady's 1966 reconstructions of proto-Nyungic as O'G. Cognates from the different language groups are separated by a slash (/).

The appendix has four sections:

(1) reconstructions assigned to proto-Kanyara only in Austin 1981 (Appendix 2) but which can now also be reconstructed for proto-Mantharta (figures in brackets refer to item numbers in Austin 1981):

1.	(181)	*jampa	*short while*	4,6; 8,9 japa/5/M/O'G
2.	(182)	*janta	*lame*	4,6; 8,9 jata/5/M/O'G
3.	(194)	*jiriparri	*echidna*	4,6; 8,9 jiriwarri/10
4.	(197)	*jurtungkaji	*honey*	4,6
5.	(206)	*kakul	*testicles*	4,6
6.	(241)	*kurlirr	*galah*	4,8/5
7.	(240)	*kurlpurr	*rock pigeon*	4,8/5/M
8.	(264)	*mangu	*cheek*	4,8,9/M
9.	(271)	*mirru	*spear thrower*	4,6,8,9/10/M/O'G
10.	(276)	*mulu	*vagina*	6,8
11.	(277)	*mulyaru	*carpet snake*	4,8/5/M
12.	(318)	*ngangkanu	*ignorant*	4; 8,9 ngakanu
13.	(303)	*ngapari	*father's mother*	4,6; 8,9 ngabari/10/M
14.	(313)	*ngarnawarra	*little corella*	4; 8,9 ngarnaarra/5
15.	(323)	*ngarri	*ashes*	4,6,8,9/10 *white ochre*
16.	(291)	*nyirti	*wife's parents*	4,6; 8,9 nyirdi/M
17.	(117)	*pilhi	*buttocks*	4,6,7,8; 9 pidhi/5
18.	(112)	*pirtinykura	*snipe*	4; 8 pirdickura/5
19.	(113)	*pirtirra	*black cockatoo*	4,6/10/O'G
20.	(131)	*pukarti	*snake wood*	4; 8 pugardi/5/M
21.	(132)	*pukurra	*devil*	4,6; 8,9 pugurra/M
22.	(133)	*pulharn	*calf*	4,8
23.	(146)	*purra	*lap*	6,8
24.	(141)	*punta	*tic*	4; 8,9 puta
25.	(142)	*punyja-	*to lick*	4; 8,9 puca-
26.	(328)	*walkarta	*topknot pigeon*	4; 8 walkarda/5
27.	(344)	*wirlu	*blackheart tree*	4,8/M
28.	(342)	*wirta	*boy*	4,6/5/M
29.	(361)	*yukarta	*white ochre*	4; 8,9 yugarda
30.	(363)	*yungkurrji	*goanna*	4,6; 8,9 yukurrji

(2) additional reconstructions with reflexes in both Kanyara and Mantharta languages:

31.	*jartungu	*rock hole*	1,2,4,6;8,9 jardungu
32.	*jirli	*back of animal*	1,2,3,6,8/O'G
33.	*kala	*like this*	2,3,4,6,8; 9 kada
34.	*karrulyu	*gravel*	1,2,4,8/M
35.	*kartarn	*bean tree*	1,2;4
36.	*karti	*side*	1,2;3 kardi;4
37.	*marnta	*lower arm*	2;3 marta;4,6;8,9 marta/M
38.	*malha-L	*to crush*	1,2,4,6/M
39.	*ngulha	*nothing*	1,2,3,4,6
40.	*nhukura	*knowledgeable*	1,4,6,7;8,9 nhugura/M nhuura
41.	*nyuurr	*nasal mucus*	1,3,4,6
42.	*paapaa	*deaf, silly*	1,2,4;8,9 paabaa
43.	*parlkarra	*clearing, bald*	1,2,4,6/M pal.yarra/O'G
44.	*pirlurn	*afternoon*	1,2,4,6,8;9 pirdurn
45.	*pulara	*soft*	1,2,4,7
46.	*wakarri	*hair belt*	1,2,4,6
47.	*yarrukarri-a	*to want*	1,2,4;3,8,9 yarruwarri-
48.	*yinti-	*to go down*	1,2,4,6;8,9 yiti-/5/10 *to flow*
49.	*yirrara	*top*	1,2 *below*;4,6,7,8,9/10 *east*
50.	*yungarra	*self, own*	1,2,3,4,8,9

(3) additional reconstructions with reflexes in Kanyara languages only:

51.	*jirtirti	*needle bush*	1,2
52.	*karrika-L	*to lift*	1,2;3 karriya-
53.	*kawajarr	*umbilicus, afterbirth*	1,2
54.	*kayaparri-Y	*to hear*	1,2;3 kayawirri-
55.	*kuliparra	*lizard type*	1,2
56.	*kunthuwa	*wild potato*	1,2
57.	*kunyjarra	*tree type*	1,2
58.	*kurlurn	*tree type*	1,2
59.	*kurrawiny	*yam type*	1,2
60.	*kurrika	*one*	1,2
61.	*kuthuwa-L	*to burn*	1,2
62.	*makaran	*wild tomato*	1,2/M
63.	*malka	*dirty*	1,2/5
64.	*mangumangu	*creeper type*	1,2
65.	*mayapurlu	*fisherman*	1,2
66.	*minturnkura	*tree type*	1,2
67.	*minyinpiri	*medicinal plant*	1,2
68.	*minyjilininy	*tree type*	1,2
69.	*ngarnti	*Pleiades*	1,2
70.	*nhuka-L	*to spear*	1,2;3 nhuwa-/M nhuwa
71.	*nyipurta	*paddymelon*	1,2
72.	*nyuwarti	*soon, now*	1,2
73.	*parntalyu	*slippery lizard*	1,2
74.	*parrpalha	*tired, lazy*	1,2
75.	*pijin	*double gee*	1,2
76.	*pikurrka	*bluebell tree*	1,2
77.	*pirunpaji	*kookaburra*	1,2
78.	*purla	*already*	1,2,3
79.	*thamparli	*tree type*	1,2
80.	*wilyiwilyi-L	*to wash*	1,2,3/10/M
81.	*wirlumayi	*stone curlew*	1,2
82.	*wirraji	*storm bird*	1,2
83.	*wurlany	*tree type*	1,2
84.	*wuruwuru	*wave*	1,2,3/M
85.	*yilpurr	*lip*	1,2

(4) additional reconstructions with reflexes in Mantharta languages only:

86.	*jankaa-ru	*to tie, join*	4,6/M janka
87.	*jarnpa	*light, flame*	4,6;8,9 jartpa
88.	*jartukurla	*nape*	4,6,7;8,9 jartuurla/5/10
89.	*jirlirr	*claypan*	4,6,8;9 jirdirr
90.	*jirril	*afraid*	4,6/5
91.	*julyu	*old man, grey hair*	4,6,8;9 juju/5/M/O'G
92.	*kajiri	*sharp-pointed spear*	4,6,8,9
93.	*kampa-yi	*to be cooking, burning*	4,6,7;8,9 kapa-/5/10/M/O'G
94.	*kamu	*hungry*	4,6,7,8,9/10/M kamungu/O'G
95.	*karnu	*body*	4,6,7,8,9
96.	*karrkanu	*masked plover*	4,8,9
97.	*kaya	*lungs*	4,6,7,8,9
98.	*kuurl	*mopoke*	4,6,8
99.	*kurni-ngku	*to look for*	4,6,7,8,9

100.	*kurnta	*shame*	4;8,9 kurta/M
101.	*kurriya	*boomerang*	4,6,8,9
102.	*kurrpirli	*plains kangaroo*	4,6,8;9 kurrpirdi/5
103.	*kuwa	*language*	4,6
104.	*kuyun	*lower grinding stone*	4,8,9
105.	*malhu	*hole in ground*	4,6
106.	*manyja-ru	*to hunt*	4,6;8,9 maca-
107.	*manyjira	*old*	4,6
108.	*marrkarri-a	*to wait*	4,6,8,9
109.	*marrkara	*younger brother*	4,6,8,9/M marryara
110.	*martarr	*red ochre*	4,6;8,9 mardarr/5/M
111.	*mathan	*hill kangaroo*	4,6;8,9 madhan
112.	*mukamarri-a	*to dance*	4,6;8,9 mugamarri-/5
113.	*muniji	*zebra finch*	4;8,9 muniyi/5
114.	*murlurru	*straight*	4,8/5/M
115.	*murtu	*small*	4,6,7;8,9 murdu/5
116.	*ngarnngarn	*jaw*	4,6/10/M
117.	*nguji	*dream*	4,6; 8 nguyi/5/M nguyi
118.	*ngurruwari	*catfish*	4,8,9/5
119.	*nguthurl	*firedrill*	4,6;8 ngudhurl
120.	*nguwan	*sleep*	4,8,9
121.	*nhuku	*near*	4,6;8 nhugu
122.	*nhukunu	*sister's husband*	4;8 nhugunu/M nhuunu
123.	*nyaju-ru	*to turn*	4,6,8
124.	*nyimirri	*sandhill grass*	4,8
125.	*pajaparri	*wild*	4,6;8,9 pajawirri
126.	*pani-ru	*to grind*	4,8,9/M
127.	*panyja-ru	*to leave*	4;8,9 paca-
128.	*parampu	*wattle tree*	4,6;8,9 parapu
129.	*parapara	*lump*	6,8,9
130.	*parna-ru	*to run*	4,8,9
131.	*parnarra	*morning*	4,6
132.	*parru	*again*	4,6
133.	*patha-rru	*to hit with thrown object*	4,6,7;8,9 padha-/M/O'G
134.	*payal	*that's all*	4,6
135.	*piji	*many*	4,6,7,8,9
136.	*pilarra	*barbed spear*	4,6,8;9 pidarra/5
137.	*pilyarnti	*galah*	4,6;8 pilyarti;9 pijarti/M pilharnti
138.	*pirlu	*maggot*	4,6,7/10
139.	*pirlura	*diamond dove*	4,8
140.	*pirtaja	*rescue expedition*	4,6
141.	*puju	*guts*	4,6,7/5
142.	*puka-ru	*to visit*	4; 8,9 puga-
143.	*puntha-ru	*to wash*	4,6,7;8,9 putha-/5/M/O'G
144.	*puntha-yi	*to swim*	4,6,7;8,9 putha-/M
145.	*puntharri	*dew, fog*	4,6
146.	*punthura	*upper grinding stone*	4; 8,9 puthura
147.	*purlunhu	*stranger*	4,6,8
148.	*purrpa-ru	*to bark*	6,8,9
149.	*puyu	*hornet*	4,8
150.	*thara	*pouch*	4,6,8/O'G *mouth*
151.	*tharla-ru	*to insert*	4,8
152.	*tharnti	*hut*	4; 8,9 tharti

153.	*thirri	*spinifex*	4,8,9/5
154.	*thukuthuku	*hot*	4,6
155.	*thurli	*distant*	4,7,8
156.	*thurriyarti	*black snake*	4; 8 thurriyardi/5
157.	*walhangu	*youth*	4,6,8;9 wadhangu/5/10
158.	*walhi	*bad*	4,6,7/10/O'G *walyi
159.	*walhu	*cave*	4,6/5
160.	*wanaparna	*thunder*	4;8 wanabarna
161.	*wantuka	*mountain butcher bird*	4; 8,9 watuwa
162.	*wapa-yi	*to come*	4,6,7/10
163.	*warlarn	*yellow ochre*	4,8
164.	*warnira	*younger sister*	4,6
165.	*warrapa	*grass*	4,6/O'G
166.	*winyjarra-ru	*to sweep*	4; 8,9 wicarra-
167.	*wirripuka	*many*	4,6; 8,9 wirribuga
168.	*wirrkura	*sand goanna*	4,8
169.	*wiyarnu	*rock wallaby*	4,8
170.	*wuna	*long time*	4,6
171.	*wurnta	*shield*	4,6;8,9 wurta/10/M/O'G
172.	*yajina	*sweet food*	4,6
173.	*yakarrangu	*heat*	4,6/M
174.	*yana-ngku	*to go*	4,6,7,8,9/10/O'G
175.	*yanga-ru	*to chase*	4,6,8,9/10/M
176.	*yikaru	*charcoal*	4,6/5/10
177.	*yilya	*head of animal*	6,8; 9 yija
178.	*yinka-ru	*to chisel*	4,6;8,9 yitka-/M
179.	*yitha-rru	*to ignite*	6; 8,9 yidha-
180.	*yurlu	*powder*	4,6

BADIMAYA, A WESTERN AUSTRALIAN LANGUAGE

Leone Dunn

ABSTRACT

This grammar is an attempt to salvage as much information as possible on Badimaya, on the basis of data collected from one speaker of the language,[1] Mr Joe Benjamin.

Although he had not spoken Badimaya since the death of his sister in 1970, Mr Benjamin proved to be an intelligent and imaginative informant, always offering many examples with little prompting.

As a result of the constraints inherent in 'salvage' linguistics, some areas of the grammar have been investigated in greater detail than others. Many potentially interesting areas could not be explained due to lack of data.

Section 1 contains a brief description of the historical and cultural background of Badimaya.

Section 2 contains a brief discussion of Badimaya phonology, intended principally to permit the reader to interpret later examples. Some consideration is given to typological similarities between the phonological systems of Badimaya and other (West) Australian languages.

Sections 3 and 4 describe nominal and verbal morphology respectively, considering not only the formal properties of the morphemes, but also their syntactic and semantic functions.

Section 5 deals with the syntax of Badimaya simple and complex sentences.

The descriptive framework of the grammar is largely notional, a choice motivated by the desire to present the data in a form which provides maximum generalisation with a minimum of abstractions.

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This study would not have been possible without the patience and cooperation of Joe Benjamin. His enthusiastic interest and concern that the Badimaya language and traditional beliefs be recorded led to many hours of painstaking work, despite his severe health problems.

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ABBREVIATIONS AND SYMBOLS

V	any vowel
C	any consonant
S	subject NP of transitive or intransitive sentence
O	direct object NP
NP	nominal phrase
COMP	complement (NP or clause)
*	precedes ungrammatical sentence
1	first person
2	second person
3	third person
ABL	ablative case
ABS	absolutive case
ACC	accusative case
ALL	allative case
CAUSE	causative verbaliser
COORD	coordinator
DAT	dative case
DIM	diminutive
DU	dual number
ERG	ergative case
EXCL	exclusive reference
FUT	future tense
HAVE	having
INCH	inchoative verbaliser
INCL	inclusive reference
IMP	imperative
KIN PROP	kin proprietive
LOC	locative case
NEG	negative
PAST	past tense
PL	plural number
PRES	present tense
PURP	purposive
RECIP	reciprocal
REFL	reflexive
SEMBL	semblative
SG	singular number
WITHOUT	privative

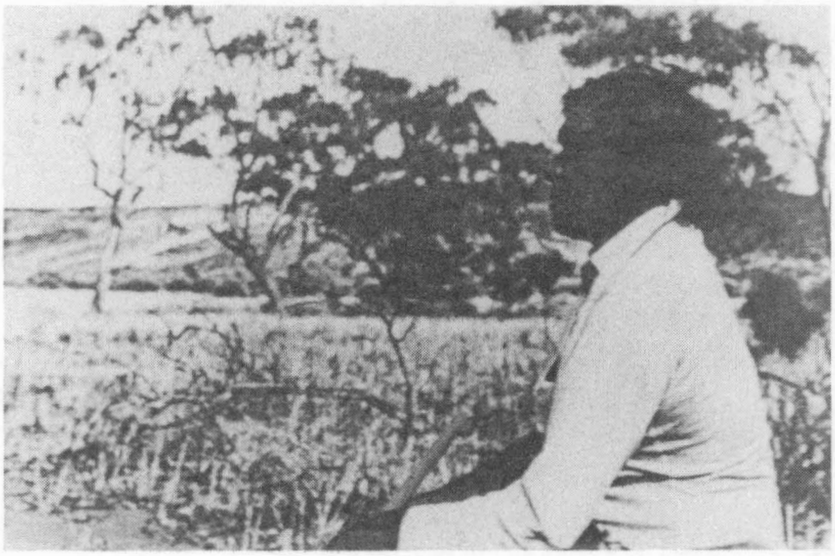
1. INTRODUCTION

1.0 The Badimaya: historical and cultural setting

The Badimaya people traditionally occupied a large area around Lake Moore - Ninghan Station - Paynes Find (see map). Their language, also known as Badimaya, is classified by O'Grady, Voegelin and Voegelin (1966:128) as a member of the Kardu subgroup of the south-west group of Pama-Nyungan languages. As Kingsford (1982) and I recorded it, the traditional area of the Badimaya includes a large area south-west of the area recorded by Tindale (1974:240), although Tindale does indicate 'disputed territory' in this region. However, the territory around Lake Moore/Ninghan is attested, as my informant, Mr Joe Benjamin, can trace site ownership[2] back three generations.

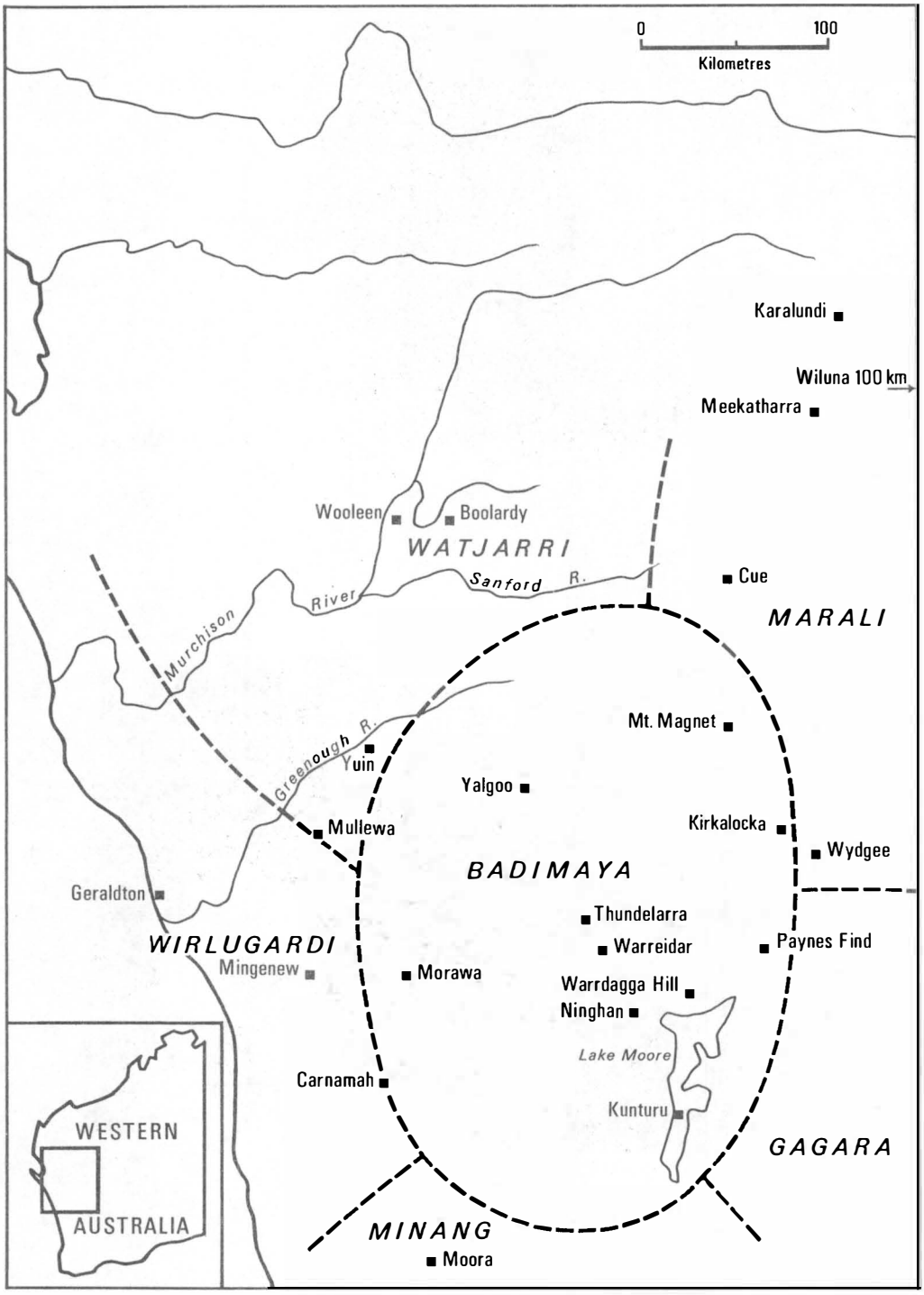
Today the Badimaya are scattered in towns throughout the Murchison Region in Mullewa, Cue, Mingenew, Mt Magnet, Yalgoo, Carnarvon and Meekatharra. There are many people remaining of Badimaya descent, but if they speak a traditional language, it is usually Watjarri, otherwise known as the 'Murchison' or 'Yamadyi' language, which has become the dominant language of the region.

Joe Benjamin



Joe Benjamin at his bimara, Warrdagga Hill (on Ninghan Station)

Map 1: Badimaya territory and neighbours



Virtually nothing has been recorded on the Badimaya as a separate group. Apart from Tindale's (ibid.) brief mention, R. and E. Gould (1968) describe a stone arrangement at Kunturu (on Lake Moore), a Badimaya sacred site. Gould's informants were men known and distantly related to Joe Benjamin. Day (1957) also describes a Badimaya 'corroboree' site on Wanara station.

Today the Badimaya call themselves 'Yamadyis', as do their north-westerly neighbours, the Watjarri and the coastal people, known by both the Badimaya and the Watjarri as Wirlugardi *(seaside)* (possibly the Nhanda). 'Yamadyi' is a cover term originating from the Aborigines of the Murchison, corresponding to the term Nyungar used by and for the Aborigines of the south-west (Badimaya: Minang), and the Wanggayi (Badimaya: Wanmala/Gagara/Marali), the Aborigines of the near Western Desert Bloc.

It is not known when the 'Yamadyi identity' arose. The affiliation of the Watjarri and Badimaya is not a recent development. Old people recall that intermarriage between the two groups was common, as opposed to either group with the Western Desert People (whom the older Yamadyis still regard with a certain amount of distrust).[3] Many old people in the Murchison, who claim Badimaya descent from their father, have had a Watjarri mother.

1.0.1 European contact

First European contact came during the 19th century to the Murchison in three stages; the missionaries during the 1840s, the pastoralists/explorers during the 1850s and the gold prospectors during the 1890s.

The Roman Catholic Benedictine Mission at New Norcia was founded in 1846 by Bishop R. Salvado (Salvado 1977), and later attracted Aborigines from the northern Murchison region. Russo (1980:219) notes that Aborigines and Benedictine brothers worked in close association, on the mission and at the outstations. By 1906 the mission had become virtually a childrens' institution, rather than the integrated community Salvado had envisaged (Biskup 1973:124). Elderly Badimaya and Watjarri recall being sent to the mission as children. Some were sent by their relatives, others under the 1905 Aborigines Act. Some people have a favourable impression of their mission days, others recall that discipline was strict, work onerous and religious instruction incessant. Badimaya oral tradition has preserved a record of an incident also recorded by Salvado (1977:67), in which he held up a painting of Mary to avert a bushfire from his wheat field. Badimaya people add, probably accurately, that some Aborigines 'tried to burn him out'.

The European pastoral settlement began in the Geraldton area in the 1850s and expanded to the hinterland after the 1860s. As the pastoralists spread themselves throughout the Murchison, competition for the economic resources became intense, and clashes soon arose. Keeffe (1976) documents in some detail a phase of clash in the Mullewa area, commencing in earnest in 1864 when a European fired at a Yamadyi, and culminating in the hanging of five Yamadyi men before an enforced assembly of their kin. Frank Wittenoom (n.d.), an early pastoralist (explorer), provides a colourful account of first contact from ca. 1870-1890 from a pastoralist's point of view. Wittenoom controlled at various times large areas of the Murchison including Yuin, Boolardy, Murgoo, Wooleen, Nookawarra and Mileura stations (see map). Apparently Wittenoom took up large tracts of land 250 kms broad "wherever there was a good water hole" (p.8). According to him, "one had the run of the intervening country for nothing" (op.cit.). His

technique was then to shift his stock (usually some tens of thousands of sheep) to follow the rainfall (pp.22,28), replicating the pattern of the Yamadyis. Needless to say, the introduction of large numbers of stock inevitably disturbed the ecological balance, and resulted in the reduction or elimination of many plants and animals on which Yamadyis depended for food (Wittenoom n.d.:32; Fink 1960:81). Overt clashes soon arose. Wittenoom mentions that settlers first organised their own punitive expeditions: "we had 35 on the chain at Beringarra where they had created great havoc amongst the sheep" (p.26). A police station was established, but in 1882 pastoralists asked the governor for greater protection (Biskup 1973:37). In 1899, a pastoralist, using his power as a justice of the peace, sentenced a Yamadyi to hard labour with flogging (op.cit.). Unofficial flogging also took place, and long continued: some men recall being flogged as late as 1940. Yamadyis call this era 'the convict days', and say it was customary for certain managers to flog boys aged 10 to 15 years when they fell off their horses.

However, from the early contact years, Yamadyis began to settle on stations. Yamadyis in Mullewa recall accounts from their grandparents of the way pastoralists gave their forebears beef and flour, and told them to 'sit down' in a camp. The small group of Aborigines attached to one station gradually expanded, as 'outsiders' were attracted by material goods. In the Murchison, the thousand or so surviving full-Aborigines had all settled on stations or around towns by 1910 (Biskup 1973:28). Very early the Yamadyis became invaluable to pastoralists as shepherds, horse breakers and trackers of lost horses and sheep. Joe Benjamin's life (see below) reflects this era of pastoral adaptation. This 'adaptation' lasted until about 1960, then it gradually eroded, as Fink (1965: 428-429) and Kingsford (1982) note, the reasons being manifold:

(1) Mechanisation - from 1960 onwards motorbikes and planes were introduced for mustering, replacing Aboriginal labour.

(2) Aborigines became attracted to towns after the 1950s, when many acquired motor vehicles, which enabled them to 'holiday' in towns. Yamadyis recall these years and often date them from 1945.

(3) Drinking rights became available from 1965.

(4) The pastoral industry equal wages award from 1968 also contributed to drift to towns.

(5) Downturns in the pastoral industry as a whole through drought, etc.

(6) The 'Native Rights and Citizenship Act of W.A.' (1944-1972), which encouraged Aborigines to sign forms denouncing their Aboriginal heritage, thus giving them the right to drink, vote, live in towns, etc. also had a tremendous social effect in the Murchison.

After 1899 the Cue, Mt Magnet, Paynes Find, Yalgoo areas were the scene of gold rushes. Many Aborigines were involved in the subsequent gold industry, Joe Benjamin included (see below). Little of the history of contact between the Yamadyis and the gold prospectors in the Murchison has been recorded (R. Berndt 1979). A mythic belief is widely current in the Murchison today, which stems from this particular historical period. It is a syncretism of concepts which were of basic importance to Yamadyis and Europeans alike at that time, namely, the myth that a huge golden mushroom exists which becomes invisible when someone approaches (Kingsford 1982). There was known to be a mushroom-shaped stone near Lake Moore which was the centre for Badimaya species-increase rituals during the time when gold fever ran high in the Paynes Find-Yalgoo area. The fact that this myth developed reflects interaction between the Yamadyis and prospectors.

This interaction is also reflected in the fact that many Badimaya, including Joe Benjamin, worked in partnership with prospectors on the goldfields.

1.0.2 The language situation

As noted above, Day (1957) and O'Grady et al (1966) estimated the Badimaya as a score. Kingsford (1982) records about 50 people claiming Badimaya descent. It is not known whether Day's (ibid.) estimates refer to speakers of the language, or simply to people claiming Badimaya descent. There are a number of Badimayas in the Murchison. What has almost died is the language. The Badimaya people I spoke to were all concerned about this, and were pleased to hear that their language was being recorded. Joe Benjamin, who is acknowledged to be one of the last speakers, was the principal source for the material gathered. Douglas (1981) also lists a few Badimaya nouns in his Watjarri. These are (pp.246-261):

likarra	*dry bark*	tjirala	*centipede*
marrkarn	*frog*	tjupa	*child*
marun	*quandong*	wingku	*black ants*
nanpa	*hairbelt*	wirnta ∿ winta watjan	*firestick*
ngangkari	*day, sky*	yuwaka	*to blow (as the wind)*
nganirri	*bullroarer*		

Mr Stan Gratte of the Geraldton Historical Society recorded a short list of items, mostly nouns, with Maggie Bell (now deceased), Joe Benjamin's classificatory sister, in 1968. Allowing for discrepancies in phonetic representation, the ca. 120 items recorded by Mr Gratte are identical to those I recorded with Joe Benjamin. Following is the list of items as recorded by S. Gratte. The right-hand column contains phonemic representations of the words elicited from Joe Benjamin. One of the most noticeable phonological features of the data recorded with Joe Benjamin (and Maggie Bell), was the consistent use of the post-alveolar frictionless continuant r, where, in identical lexical items of (neighbouring) Pama-Nyungan languages, the post-alveolar flap rr is used. It is not known whether this feature is idiosyncratic to Badimaya, or whether it is a case of phonological change due to language death.

S. GRATTE/MAGGIE BELL (1968)	JOE BENJAMIN (1980)
mugga *head*	maga
moonya *hair of head*	manggalya
moolya *nose*	mulya
challang *tongue*	dyalang
coolga *ears*	kulga
cooroo *eyes*	guru
eera *mouth*	yira
nungun *chin*	nangan
narngool *beard*	ngangu
brigi *shoulders*	biridyi
cheeli *arms*	dyili
marboo *lower arm*	-
murra *hand*	mara
muggathudda *headache*	maga dhadha also *stupid*
wotoo *back*	warru
cooradoo *heart*	gurradu
wotchcoo ∿ miraldoo *chest*	mirdardu ∿ midadu
wori *stomach*	wari

gunna *backside, faeces*	guna
winda *tree*	winda
mungada *jam tree*	-
cooding *onion*	gurany
karnoora *turnip*, kurrajong *KIA*	-
coorara *tree with edible seeds*	kurara
djuba *child - boy or girl*	dyuba
nyoongara *Aborigine/man*	nyunga ∿ nyungara
kadja mooni *daughter*	gadya murni
mooni *woman*	murni
narrali *very small baby*	-
goodiya *one*	gurriya
goodara ∿ cootharra *two*	gudha ∿ gudhara
targudi ∿ kutcheri *three*	gadyadi
goodara goodara *four*	gudha ∿ gudhara
murra gudi *five*	mara gurriya
biloong *white*	biluny
muraldoo *black*	mawurdu
weebala *white man*	widbala
cannooyagga *big man*	-
branymudda *good*	baranymarda
wadji *no*	wadyi
gubbi *water*	gabi
gubbi yanda *water coming*	gabi yanda
mingari *scoop*	mingari
wonna *digging stick*	wana
bunna *sand*	barna
mudda yagoo *rocks*	marda yagu *big stones/rocks*
beeli *sky*	-
weelaia *moon*	wilaya
murroo *night-time*	maru
jeegoda *daytime*	dyigada ∿ dyigarda
coolgoo *bag for carrying foods*	gulgu *dilly bag*
windthoo *wind*	windu ∿ windhu
wulba *hot*	walba
moodi *cold*	murdi
wollada yanda *thunderstorm coming*	waladyari yanda
beeli *clouds*	-
doolima *thunder*	-
jumbadabulla *to run*	dyambardabala *to run*-FUT
yarra *to walk*	yara
wurradoogala *to jump*	wara dhugala
worrang *fall down*	warang *fell*
coobilyai *to sleep*	gubulya *asleep*
dyuba coobilyai narnga *the baby's gone to sleep*	
yowada *grey kangaroo*	yawada (yawarda in languages to the north)
marloo *red kangaroo*	marlu
nyow *eggs*	ngawu
yallabiddi *emu*	yalibidhi (yalibirri in languages to the north)
poondugooda *teal duck*	bundyuguda
caboogoora *mountain duck*	galbigura ∿ gabigura
cooraldoo *swan*	gurulu

weelo *crow*	-
carla *wedgetailed eagle*	garla *crow*
tooto *dog*	dhudhu
tooto oobanoong *dingo*	dhudhu ngubanu
bigu *bobtail goanna*	bidyaru
djooladi *blue-tongue goanna*	galadi
bungarra *black bungarra*	bangara
queeul *yellow bungarra*	guwiyal
minjin *mountain devil*	mindyan
jeega *snake*	dyiga
boonargali *carpet snake*	-
bubba *water snake*	bimara
goomal *possum*	gumal
myingun-goondooa *porcupine*	gunduwa
kurra *spider*	gara
jeeala *centipede*	-
worrai *fly*	warayi
billbooda *maggots*	bilbuda
minga *ant*	minga
gwinilya *fish*	winalya
wuggoo *camp, humpy*	wagu
wallanoo *boomerang*	walanu
coondi *fighting stick*	gundi
kudyi *spear*	gadyi
meero *woomera*	miru (mirru in languages to the north and west)
woonda *shield*	-
judi *belt*	-
nunan kudyi *my spear*	nganang gadyi
noonoong kudyi *your spear*	nhunung gadyi
nunun yua kudyi *give me your spear*	nganang yuwa gadyi
nyoondoo yan nathala *you come with me*	nhundu yan ngadhula
nyina *sit down*	nyina
kuralya yoobari *stand up*	yuga *to stand*
tooroo *meat*	dhuru
nurathoo tooro bown *we cook the meat*	ngalidya dhuru bawun *we cooked the meat*
gooba *blood*	nguba
carno *fat*	ganu
taba *bones*	dhaba
woonya *skin*	-
tjoodu *smoke*	dyudu (dyuurdu (or dyuguidu) in languages to the north)
coolyi *hungry*	gulya
mooltha *thirsty*	murda
muroon *quondong*	maruny
koolong *onion*	-
womma *food*	wama
wonggai *talk*	wanggaya

I noticed that a few Badimaya in their 40s-50s appeared to understand some of the language, though none speak it, except for a few words.

1.0.3 Joe Benjamin

Joe Benjamin was born at Idawa Well (see map) in 1910 in the Berkshire Valley area. His life until about 1970 reflects the various contact phases. He was born at a New Norcia mission outstation where his father was employed as a shepherd. He spent his childhood with his mother and father, helping mind the sheep, as well as attending school at the mission until he was 14. His first language was Badimaya which he spoke at home, though he also learned English at an early age. When he was 14 his father took him to live near Warrdagga Hill the bimara *(sacred site)* of Joe's patriline (see photo). Joe spent the bulk of his working life on stations in the Warrdagga area: Ninghan, Thundelarra, Wydgee, Kirkalocka, Kurara. He was known by all (even today) as a skilled horseman. He broke in camels and horses and is said to be able to ride a wild horse "through the front door and out the back of the house". Sickness forced him to retire from station life in the late 60s. Joe also worked as an offsider to a white prospector (his brother-in-law) in the Ninghan-Paynes Find area. After his initiation at Warrdagga Hill in 1935, he was subsequently involved in the ritual life of the Murchison (see Kingsford 1982). Most of the texts recalled by Joe are lively anecdotes about his station life.

2. PHONOLOGY

This section describes the phonological system of Badimaya. The phoneme inventory is presented in 2.1, along with orthographic conventions (2.1.1). Section 2.2 discusses the phonemic status of consonants, their allophonic realisations (2.2.1), including various allophonic features (2.2.1.1-2.2.1.2). The phonemic status of vowels is presented in 2.3, allophonic realisations in 2.3.1. The canonical form of words and syllables is described in 2.4, beginning with a description of the syllable and glide insertion (2.4.1-2.4.2) and followed by a description of the phonological word (2.4.3) and the grammatical word (2.4.4), including reduplication (2.4.4.1). Distributional constraints on consonants are discussed in 2.4.5, consonant clusters are described in 2.4.6 (word-initial clusters - 2.4.6.1, word-internal clusters 2.4.6.2 (.1-2.4.6.2.2). Phoneme frequencies are presented in 2.5.

2.1 Phoneme inventory

The phoneme inventory exhibits the areal features for the south-west group of Pama-Nyungan languages described by O'Grady (1966:85). There are 20 consonant phonemes (see table 2.1 below). Stops and nasals contrast at six points of articulation, while laterals contrast at four. The alveolars and retroflexes have apical articulation, and the dentals and palatals, laminal articulation. When reference is made to common properties of bilabials and velars, these will be termed peripheral.

Though voicing is not phonemic for consonants, under certain conditions a particular realisation of this feature is the preferred one (see 2.2.1).

As in most Pama-Nyungan languages, Badimaya has three vowel phonemes /i/, /a/, /u/. Their allophonic realisations are considered in 2.2.2. Vowel length is not phonemic (see 2.4.3).

Table 2.1: Phonemes of Badimaya

CONSONANTS						
Manner of Articulation / Place of Articulation	APICAL		LAMINAL		PERIPHERAL	
	Alveolar	Retroflex	Dental	Palatal	Bilabial	Velar
Stop	/d/	/ḍ/	/d̪/	/dʸ/	/b/	/g/
Nasal	/n/	/ṇ/	/n̪/	/nʸ/	/m/	/ŋ/
Lateral	/l/	/ḷ/	/l̪/	/lʸ/		
Rhotic	/r/	/ṛ/				
Glide				/y/	/w/	

VOWELS			
	Front	Central	Back
High	/i/		/u/
Mid			
Low		/a/	

2.1.1 Orthography

Where it is deemed necessary, Badimaya forms will be cited in phonetic or in phonemic transcription. Otherwise they will be given in a 'practical' orthography whose symbols differ from those of table 2.1 in the following respects:

(i) non-rhotic retroflexes are written rd, rn, and rl, i.e. with an r preceding the appropriate alveolar symbol;

(ii) dentals are written dh, nh, and lh, i.e. with an h following the appropriate alveolar symbol.

(iii) palatals are written dy, ny, and ly, i.e. with a y following the appropriate alveolar symbol.

(iv) the alveolar rhotic is written rr and the retroflex, r.

(v) the velar nasal is written ng.

The orthography represents /ṇḍ/, /ḷḍ/, /nʸdʸ/, and /lʸdʸ/ clusters as rnd, rld, ndy, and ldy respectively. /rd/ clusters are written r.d to distinguish them from orthographic rd /ḍ/. Similarly, /ng/ clusters are written n.g, to distinguish them from orthographic ng /ŋ/.

2.2 Consonants: phoneme status

Though there are distributional restrictions on the occurrence of certain consonants and consonant series, due to accidents of the data, to be considered in

section 2.4.7, all the consonants in table 2.1 above contrast in at least some positions, as evidenced by the following data:

[1] Bilabials /b,m,w/ contrast

(a) initially:

/bad^{y}a/ *wild, savage*
/maḍa/ *stone*
/waḍa/ *far away*

(b) intervocalically:

/ŋuba/ *blood*
/yuma/ *to trick, dodge*
/yuwa/ *to shoot*

[2] Alveolars /d,n,l/ contrast

(a) intervocalically:

/malagaḍi/ *behind*
/waniwa/ *to throw*
/d̂alima/ *to lead*
/ŋ̂ariya/ *to lie*

(b) finally:

/ŋud/ *horse*
/-ŋun/ ablative suffix
/d̂agul/ *hollow*

[3] Retroflexes

(a) Retroflexes /ḍ,ṇ,ḷ,ṛ/ contrast intervocalically:

/wiḍi/ *no*
/miṇu/ *to know*
/wiḷu/ *sea*
/miṛu/ *umbilical cord*

(b) Retroflex stop /ḍ/ also contrasts with retroflex rhotic plus alveolar stop /r.d/ intervocalically:

/wiḍibaya/ *don't want it*
/wir.dula/ *favourite*

(c) Retroflexes /ṇ,ḷ/ contrast finally:

/baṇbaṇ/ *bellbird*
/bil^{y}baḷ/ *no.28 parrot*

[4] Dentals

(a) Dentals /d̂,n̂,l̂/ contrast intervocalically:

/d̂ad̂a/ *bad, stupid*
/d̂an̂a/ 3sg-PL
/ŋal̂a/ *forehead*

(b) Dentals /d̂,n̂/ contrast initially:

/d̂a/ *hole*
/n̂a/ *what*

[5] Palatals

(a) Palatals /dʸ,nʸ,lʸ,y/ contrast intervocalically:

/ŋalidʸa/ 1du-ABS
/wadinʸa/ *now*
/winilʸa/ *fish*
/miriya/ *to call out*

(b) Palatals /dʸ,nʸ,y/ contrast initially:

/dʸula/ *root*
/nʸuŋa/ *Aborigine*
/yuŋguwa/ *to give*

(c) Palatals /nʸ,lʸ/ contrast finally:

/gunin ʸ/ *poor fellow*
/bimbilʸ/ *ribs*

[6] Velars /g,ŋ/ contrast

(a) intervocalically:

/maŋa/ *tired*
/maga/ *head*

(b) initially:

/galadʸa/ *sick*
/ŋalidʸa/ 1du-ABS

(c) finally:

/ŋulʸag/ *white-tailed black cockatoo*
/wulaŋ/ *cried*

[7] Stops

(a) Stops /d,ḍ,d̲,dʸ,b,g/ contrast intervocalically:

/gadada/ *to stop*
/gaḍa/ *on top of*
/gaḍara/ *to flood*
/gad̂ʸa/ *child*
/nabala/ *something*
/n̲ugala/ *to enter*-FUT

(b) Stops /d̲,dʸ,b,g/ contrast initially:

/d̲ud̲u/ *dog*
/d̂ʸudu/ *smoke*
/buwa/ *younger B/to hit*-FUT
/guwa/ *yes*

(c) Stops /d,g/ contrast finally:

/d̲algad/ *native rat*
/ŋ̂ulʸag/ *white-tailed black cockatoo*

[8] Nasals

(a) Nasals /n,ṇ,n̲,nʸ,m,ŋ/ contrast intervocalically:

/nʸina/ *to sit*

/miṉu/ *to know*
/ṉiṉa/ *this*
/wadinʸa/ *now*
/mimi/ *breast, milk*

(b) Nasals /ṉ,nʸ,m,ŋ/ contrast initially:

/ṉaŋga/ *when*
/nʸaŋga/ *nape of neck*
/maŋgan/ *FZ, MZ*
/ŋan.gu/ *beard*

(c) Nasals /n,ṉ,nʸ,ŋ/ contrast finally:

/wadʸan/ *fire*
/ṉaŋaṉ/ *jaw*
/gaganʸ/ *bush turnip*
/garaŋ/ *sun*

[9] Laterals

(a) Laterals /l,l̤,l̰,lʸ/ contrast intervocalically:

/ganila/ *to do, perform*
/mul̤a/ *dead*
/mil̤a/ *claypan*
/milʸa/ *soft*

(b) Laterals /l,l̤/

/guwiyal/ *possum*
/bilʸbal̤/ *no.28 parrot*

[10] Rhotics /r,ř/ contrast intervocalically:

/daru/ *lungs*
/wařu/ *back*

[11] Glides /w,y/ contrast

(a) initially:

/yaba/ *no good*
/wabamadʸi/ *name of dead kin*

(b) intervocalically:

/mayaga/ *to sing*
/ŋawadaŋ/ *brain*

Unlike in many of the neighbouring languages, there appears to be evidence for a dental/palatal contrast in Badimaya. On the basis of data collected, there is no evidence to suggest any patterns of complementary distribution between dental and palatal laminals in relation to front and back vowels, as is the case in Watjarri (Douglas 1981) or Pitjantjatjara and Mantjiltjara (Glass and Hackett 1970; Marsh 1969:131). There is also no evidence in the data to suggest neutralisation of the laminal contrast word-initially due to the presence of a laminal later in the word, as is the case in Diyari (Austin 1981) or Ngiyambaa (Donaldson 1980). While in some high-frequency items like /ṉiṉa/ *this* vs. /nʸiṉa/ *this*, the word-initial dental and palatal laminals appeared to be used in free variation by Mr Benjamin, this could possibly be an idiosyncratic

feature of Mr Benjamin's speech, as minimal and near minimal contrast support a double laminal series (see 2.2 above).

2.2.1 Allophonic realisation of consonants

2.2.1.1 Voicing of stops

Initial and medial stops are typically voiced in Joe Benjamin's speech, while word-final stops (in the few words in which these occur) are voiceless and sometimes aspirated: /d̪algad/ [d̪algat^{h}] *native rat*, /ŋulʸag/ [ŋulʸak] *white-tailed black cockatoo*. Mr Benjamin favoured a voiceless articulation for some initial stops (e.g. /gurara/ [kʊrarʌ] *Kurara tree*, /gogola/ [kogolʌ] *wild pear*). A similar phenomenon was noted in the Watjarri of Mr George Barrington, aged 65, in examples like /gaŋ̣gu/ [kaŋ̣gu] *law* vs. /gaŋgu/ [gaŋgu] *uncle*.

On a tape recording made in 1968 of a Badimaya woman (Mrs Maggie Bell - see wordlist 1.0.2), all stops appear predominantly voiceless. It is possible that a ± voice for stops was a sex-marked phonetic feature. (A similar observation has been made by Berndt and Berndt (1945:52) that, in Southern Western Desert languages spoken at Ooldea (S.A.), men favoured voiceless articulation of stops, and women voiced. On the basis of data from only two speakers, of course, this observation is purely speculative.)

2.2.1.1 Other allophonic features

Except as noted below, all consonants are realised phonetically as described in section 2.1.

(i) As noted in 2.2.1.1, stops are typically voiced and unaspirated except finally, where they are unvoiced and aspirated.

(ii) The dental and palatal stops /d̪/ and /dʸ/ are *frequently* realised as voiced fricatives [ð] and [ž] respectively, intervocalically.

(iii) The degree of retroflexion for /ḍ/, /ṇ/ and /l̩/ varies with the preceding vowel, being more pronounced after the low vowel /a/.

(iv) The alveolar rhotic /r̃/ is realised as a flap, and often difficult to distinguish from /d/ (see also section 2.4.5). The retroflex rhotic /ṛ/ is realised as a frictionless continuant.

2.3 Vowels

Like most Pama-Nyungan languages, Badimaya has three phonemic vowels, as evidenced by the following data:

(a) medial contrasts:

/miḍi/ *dirty*
/maḍa/ *stone*
/muḍi/ *cold*

(b) final contrasts:

/maḍa/ *stone*
/muḍi/ *cold*
/mawuḍu/ *black*

Vowels occur long under certain predictable circumstances, to be considered in section 2.4.3. Primary stress is initial, as in:

/wánara/ *long, thin*
/wíndʸindʸi/ *grasshopper*

In words of four or five syllables, a weaker secondary stress occurs on the third syllable from the front:

/ŋán.gaŋgùwa/ *to choke on something*
/wánaldʸìliŋa/ *scorpion*

This suggests an alternating stress pattern that might be described by the following rules:

(1) $ → primary stress / # __

(2) $ → secondary stress / $[+ stress]$ - $

Unfortunately, no words of more than five syllables, necessary to test this hypothesis, are extant.

2.3.1 Allophonic realisation of vowels

The high front vowel /i/ is realised as a high front unrounded [i], except word-initially (see section 2.4.1), where it is a somewhat laxer [ɪ]:

wirdi [wiḍi] *no*
guniny [gʊninʸ] *poor fellow*
ira [ɪrʌ] *mouth*

The high back vowel /u/ is typically a high back rounded [u]. In non-final position, particularly after a peripheral consonant, it is often a somewhat laxer [ʊ]. Immediately following primary stress and adjacent to a liquid or nasal, it is often realised as [ə]:

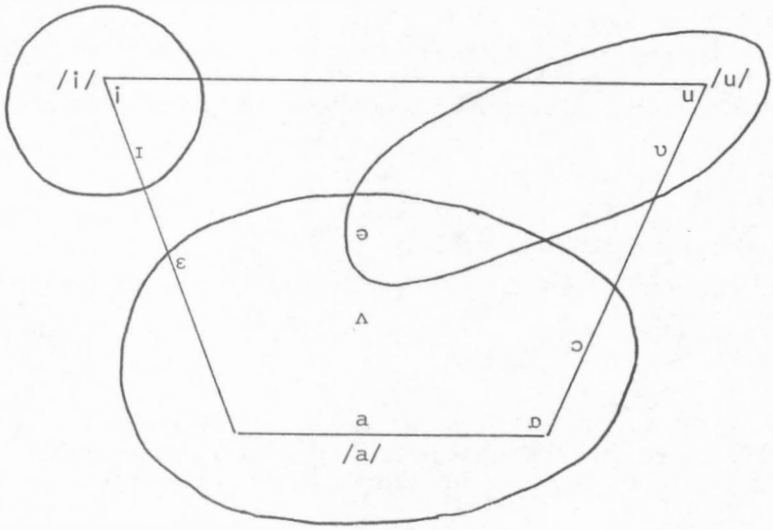
guru [gʊru] *eye*
bunguwa [bʊŋuwʌ] ∿ [bʊŋəwʌ] *to hit*
nyunga [nʸʊŋʌ] *Aborigine*
wirlugardi [wiləgʌḍi] *west*

The low vowel /a/ exhibits the most allophonic variation. Following palatals it is a raised and fronted [ɛ]. After /w/ when followed by a sonorant it is backed and somewhat rounded vowel [ɒ]. The final vowel of place names in -wa is typically and inexplicably [ɔ], rather than the expected [ʌ] - see below. A similar phenomenon occurs in the East Kimberleys language, Gidja (cf. Taylor and Taylor 1971). Following primary stress, and adjacent to a liquid or nasal, /a/, like /u/, is realised as [ə]. Word-finally (except after palatals and in -wa place names), and under secondary stress, it is [ʌ]. Elsewhere /a/ is realised as [a]:

bimara [bimərʌ] *water python*
waladyari [wɒlədʸɛṛi] *lightning*
Malawa [maləwɔ] *Mullewa*

gulya [gʊlʲɛ]	*hungry*
wama [wɒmʌ]	*food*
wagardi [wagəḍi]	*way*

Badimaya vowel allophones are summarised in the following chart:



2.4 The canonical form of words and syllables

2.4.1 The syllable and glide insertion

With two patterned exceptions, one involving a process giving rise to word-initial high vowels (see immediately below) and the second, a constraint on word structure (see 2.4.5), all Badimaya syllables, on the surface, are of the form $\$C_1V(C_2)\$$.[4]

In forms like ira *mouth, tooth* and iladyi *salmon gum*, which are apparent exceptions to this generalisation, the first syllable in fact alternates between i and yi. Given this alternation, and the fact that /i/ is the only vowel to appear word-initially under any circumstances, one might want to conclude that such forms have an underlying initial /y/. (That is, that they are phonemically /yira/ and /yiladyi/, respectively) and that a process:

(3) y → Ø / # -i

applies optionally to yield the vowel-initial forms. In this way, the generalisation that no words are vowel initial (in their underlying form) can be preserved.

While there are certainly no surface vowel-initial internal syllables in Badimaya, it is perhaps arguable that such syllables be permitted in underlying representation. Consider examples like the following:

buwa [buwʌ]	*to hit*
gurriya [gʊr̃iyʌ]	*one*
guwiyal [gʊwiyal]	*goanna*
gabiyu [gabiyu]	*water* (dative)
yamadyiyidya [yamʌdʲiyidʲʌ]	*like a man* (*man* + SEMBL)

An examination of these forms reveals that the intervocalic glides are, in all cases, 'homorganic' with the preceding vowel (i.e. /w/ if that vowel is /u/ and /y/ if it is /i/). One might, then, suggest that these glides arise through the following process of glide insertion:

(4) $\emptyset \rightarrow G \;/\; V\$ - V$
$\qquad\qquad\quad \alpha ba \;\; \alpha ba$

Under this analysis, vowel-initial internal syllables are posited in underlying representation, though not on the surface.[5] When one notes, further, that some of the forms above involve suffixes, this analysis receives additional support. Compare:

yamadyiyidya *like a man*
dhudhuwidya *like a dog*

both of which involve the semblative suffix -idya.

The glide insertion rule (4) above must be modified to account for forms like:

badyabaya *to get angry*
wamayidya *like food*
Joeyu *Joe* (dative)

in which the vowel preceding in *Joe* is /a/ or /o/. From these data it appears that the glide /y/ is inserted if the preceding vowel is non-high in all cases. (Note that /o/ occurs only in borrowed terms such as the proper name *Joe*):

(5) $\emptyset \rightarrow G \;/\; V \;\$ \; - \; V$

$$\left\{ \begin{bmatrix} \alpha ba \\ +hi \end{bmatrix} \right\} \left\{ \begin{bmatrix} ba \\ +hi \end{bmatrix} \right\} \rightarrow \left\{ \begin{bmatrix} -ba \\ +hi \end{bmatrix} \right\} \left\{ \begin{bmatrix} \\ [-hi] \\ \end{bmatrix} \right\}$$

Unfortunately, forms of the shape /a$u/, where /u/ is not word-final, are not extant, so that alternative hypotheses cannot be tested.

The question remains whether *all* intervocalic glides should be regarded as the result of the rule of glide insertion (5). Examples like:

waniwa [waniwʌ] *to throw*
malawa [maləwɔ] *Mulewa*

(place name) suggest either

(i) that the generalisations noted above regarding glide insertion are spurious; or

(ii) that, in some items, the glide does appear in underlying representation.

If the second of the above items is regarded as borrowed, then waniwa *to throw* remains the sole extant exception to these generalisations in native vocabulary.

2.4.2 Word-final glides

The analysis of forms like:

wanggai *Western Desert Aborigine*
gadjau *child* (dative)

ending in a sequence a V # is problematic. Phonetically, the final segments
[+hi]

are not syllabic but are, however, much less constricted than initial or medial glides. One is tempted, then, to treat the final syllable of forms as CVG on the surface. This analysis conforms to the syllable pattern given in 2.4.1 above, since glides are considered consonantal for purposes of syllabification. It appears, however, that these final glides must be derived from underlying vowels, if, for example, the morphemic unity of the dative suffix -u is to be preserved. Compare:

gadjaw *child* (dative)
gabiyu *water* (dative)
Joeyu *Joe* (dative)

One might then propose a further glide formation rule of the form:

(6) V → [-syl] / a — #
[+hi]

(As noted above, a final /u/ becomes /a/ regularly before the dative suffix:

dhudhu *dog* (absolutive)
dhudhawu *dog* (dative) [---au] or [---auu] - only the former conforms to the hypothesis.)

2.4.3 The phonological word

A phonological word in Badimaya is a sequence of one or more syllables of the following shape:

(7) # $ C V (C)($CV(C))^{n} $ #

where n ≧ Ø

In words of one syllable, like:

warn [wa·n̥] *creek*
ngud [ŋu·d̥] *horse*
dha [d̪a·] *hole*

the vowel is obligatorily long, though the corresponding vowel is short in affixed forms; for example, nguddu [ŋuddu] ∿ [ŋudu] *horse* (ergative). These data suggest a rule of the form:

(8) V → [+long] / # C - (C) #

guaranteeing that all phonological words will be minimally bimoric.

Note that long vowels are preserved in compounds like gabidha [gabid̪a·] *water hole* (gabi *water* + dha *hole*), suggesting that each of the components of such compounds is a phonological word.

2.4.4 The grammatical word

A Badimaya word consists of a *base stem*, usually augmented by one or more derivational and/or inflectional suffixes. Base stems are of two sorts:

(i) a monomorphemic *root*;
(ii) a root with a fossilised suffix (see 4.4).

With some exceptions, all monomorphemic root words are nouns in the absolutive case. (The exceptions are some pronouns, demonstratives, interrogatives, and verb forms the apparently unsuffixed forms of many of which are likely to involve fossilised morphology that is difficult to identify.) Root words may be monosyllabic:

dha *hole*
nha *what*
warn *creek*
ngud *horse*

disyllabic:

gulu *house*
mabarn *medicine*
maga *head*

or, rarely, trisyllabic:

bidyaru *bobtail goanna*
dhirandi *red-tailed black cockatoo*
gunduwa *porcupine*

The majority of tri- and polysyllabic words involve suffixation, reduplication, and/or compounding:

dyambardaban *ran*
dyinabugalu *boot* (ergative) (lit. dyina *foot*, buga *cover*)
mabarnbari *medicine (have)*
garan.garan *smoker parrot*

2.4.4.1 Reduplications

Most instances of reduplication in Badimaya involve leftward reduplication of a bisyllabic root:

milya *soft*
milyamilya *very soft*

waniwa *to discard* (wani-wa)
waniwaniwa *to throw far away*

gardangguwa *to break* (garda-ngguwa)
gardagardangguwa *to break into pieces/fall to bits*

In some cases, the unreduplicated root is not attested:

burdaburda *to tell a story*
bilubiluwa *to rattle, shake*

Deviations from this pattern are rare. Some examples are:

dyidyida *to tease*
gudhagudhara *four* (of gudha ∿ gudhara *two*)
windyindyi *grasshopper*

The first of these may be an instance of # CV - reduplication of a monosyllabic root (where -da is a fossilised suffix). The second is apparently regular # CVCV - reduplication of a root with a fossilised suffix. I can offer no principled account for the aberrant reduplication pattern of the third item above. The semantics of reduplication is considered in 3.0.1.1 and 4.6.

2.4.5 Distributional constraints on consonants

All Badimaya consonants occur intervocalically:

-b-	dyuba	*child*
-d-	iradula	*language*
-rd-	dyarda	*knee*
-dh-	dhadha	*stupid, bad*
-dy-	dyidyi	*shell necklace*
-g-	wulbaga	*scar*
-m-	ngamari	*tobacco*
-n-	wudyanu	*stranger*
-rn-	barna	*ground*
-nh-	balunha	3sg-ACC
-ny-	babanyu	*friend*
-ng-	mingari	*water bag (skin)*
-l-	dyulabardi	*moth*
-rl-	mayarlu	*nephew*
-lh-	ngalha	*forehead*
-ly-	malyu	*younger Z*
-rr-	gurra	*older B*
-r-	bamburu	*message*
-w-	buwa	*younger B/to hit*-FUT
-y-	mayamaya	*humpy*

Word-initially, all consonants, with the exception of the laterals (though Douglas (1981) notes one instance of a Badimaya word beginning with a lateral - see 1.0.2), rhotics, and apicals (alveolars and retroflexes) occur:

-b-	barilya	*kite-leaf poison*
-dh-	dhurra	*blackbutts*
-dy-	dyunda	*thigh*
-g-	guru	*eye*
-m-	mangarda	*jam tree*
-nh-	nhinha	*this*
-ny-	nyurin	*wrist*
-ng-	nganawara	*white (sulphur-crested) cockatoo*
-w-	walarda	*sandalwood*
-y-	yala	*bald*

Initial dentals are, however, relatively infrequent in the corpus (see table 2.5.1). Word-final position is restricted to nasals (with the exceptions of /m/ and /n/), laterals (with the exception of /l/), and, in a total of three items, the stops /d/ and /g/:

-n-	wadyan	*fire*
-rn-	nhangarn	*chin*
-ny-	maruny	*quondong*
-ng-	ngawadang	*brain*
-l-	dhagul	*hollow*
-rl-	yanggarl	*hip*
-ly-	bimbily	*ribs*
-d-	ngud	*horse* dhalgad *native rat*
-g-	ngulyag	*white-tailed black cockatoo*

The distribution of word-final consonants in Badimaya is unusual in the following respect. First, the occurrence of final stops is rare per se in Australian languages. As noted above, such forms are rare in Badimaya, but do occur. One

notes, in the case of ngud *horse*, that this form appears in some other West Australian languages (for example, Watjarri (Douglas 1981)), as ngurru *horse*. While final /rr/ would not be an unusual feature for a West Australian language, it remains the case that the final consonant in the Badimaya item is a stop.

2.4.6 Consonant clusters

2.4.6.1 Word-initial clusters

Consonant clusters do appear word-initially as a result of a low level phonetic process of vowel deletion. In particular, words with the initial syllables $C a r - $ show an overwhelming tendency to delete the vowel, as in the following examples:

barany / baranʸ / [brɛnʸ] *good*
dharingga / d̪ariŋga / [d̪riŋgʌ] *to lie*

and in one English loanword /miyul/, spoken as [myul] *mule*.

2.4.6.2 Word-medial clusters

2.4.6.2.1 Intramorphemic clusters

With the exception of some borrowed items, such as widbala *European*, the first component of all intramorphemic consonant clusters is a sonorant non-glide (nasal, lateral, or rhotic). The most frequent such cluster type NC, the homorganic nasal-stop cluster. All six possible instances of this type are extant in the corpus:

-mb-	gumbu	*urine*
-nd-	bandiya	*to sniff, smell*
-rnd-	barndi/bandi/	*sweet*
-ndy-	bundya/bu a/	*to kiss*
-ndh-	bindhi/bindi/	*suddenly*
-ngg-	manggan	*FZ, MZ*

In the remaining intramorphemic cluster types, the second component is a peripheral consonant (b, g, m, or ng). The first component may, it appears, be any nasal, lateral, or rhotic except that:

(i) dental-peripheral clusters are absent;
(ii) rr does not appear in clusters.

The second of these gaps may be accidental, while the first might be related to the status of the dental/palatal contrast (see 2.2). Note also that second component nasal clusters are rare; only nm is attested:

-nm- nganmi *local, countryman*

Further examples are:

(a) heterorganic nasal plus stop clusters:

-rnb-	marnbi	*bronzewing pigeon*
-nyb-	nyanyba	*to shave, whittle*
-rng-	barnga	*racehorse goanna*
-ng-	ngan.ga	*cave*

(b) lateral continuant plus stop clusters:

-lb- walba *hot*
-rlb- warlba *another*
-lg- milgu *point*
-rlg- mirlgu *law dance*
-lyg- bilygi *clean*

(c) retroflex continuant plus stop clusters:

-rb- garbang *widow*
-rg- ngargal *empty*

The following table summarises clusters of this type. Gaps taken to be accidental are given as '-'; attested clusters are marked 'x':

Table 2.4.6.2.1: Summary of intramorphemic consonant clusters

		FIRST COMPONENT									
		m	n	rn	nh	ny	ng	l	rl	ly	r
SECOND COMPONENT	b	x	-	x		x		x	x		x
	d		x								
	rd			x							
	dh				x						
	dy					x					
	g		x				x	x	x	x	x
	m		x								

2.4.6.2.2 Intermorphemic clusters

The morphosyntactic processes of affixation, reduplication, and compounding potentially give rise to intermorphemic consonant clusters. The range of possible cluster types is, therefore, potentially much greater inter- than intramorphemically. In theory, at least, the following are possible:

(i) clusters whose second component is any possible word-initial consonant (non-apical stop/nasal, or glide), and whose first component is any possible word-final consonant (non-labial/-dental nasal l, rl, ly, and, in the items noted in 2.4.6.2.1 above, d and g), in compounds and reduplications;

(ii) clusters whose first component is any possible word-final consonant (as given above) and whose second component is the consonant of a consonant-initial suffix.

Examples of intermorphemic cluster types attested are:

(a) homorganic nasal plus stop clusters:

-nd- wadyandu *fire* (ergative) wadyan *fire*
-ngg- garanggardi *east* garang *sun* + SIDE

(b) heterorganic nasal plus stop clusters:

-nb-	nganbindan	*to choke someone* ngan *neck* + bindan *to close*
-rnb-	barnbarn	*bellbird*
-nyb-	gurranybari gurrany	*wild onions* + HAVE
-ngb-	warangbala	*fall*-PAST-LEST
-n.g-	garan.garan	*smoker parrot*
-rng-	warngudi	*to the creek* warn *creek* + ALL
-nyg-	gaganygu	*for the turnips* gagany *bush turnip* + PURP
-rnd-	warnda	*at the creek* warn *creek* + LOC
-nyd-	marunyda	*on the quondong tree* maruny *quondong* + LOC

(c) lateral continuant plus stop clusters:

-lb-	guwiyalbari guwiyal	*possum* + HAVE
-rlb-	bilybarlbari bilybarl	*no.28 parrot* + HAVE
-lg-	ngal-guwa	*swallow* - PRES
-lʸlb-	bilybarlgu	*for the no.28 parrot* bilybarl *no.28 parrot* + PURP
-rlg-	garlgarl	*bush*
-lyg-	bimbilygardi	*(to lie) on one's side* bimbily *ribs* + SIDE
-ld-	guwiyalda	*on the possum* guwiyal *possum* + LOC
-rld-	garlgarlda	*in the bush* garlgarl *bush* + LOC
-lyd-	bimbilyda	*on the ribs* bimbily *ribs* + LOC

(d) nasal plus nasal clusters:

-nng-	wadyanngun	*away from the fire* wadyan *fire* + ABL
-rnng-	warnngun	*from the creek* warn *creek* + ABL
-nyng-	marinymarinyngun	*away from the black ants* marinymariny *black ants* + ABL
-ngng-	mundungngun	*away from the devil* mundung *devil* + ABL
-nym-	baranymarda	*good one* barany *good*

(e) lateral plus nasal clusters:

-lng-	walbalngawu	*mallee hen*
-rlng-	garlgarlngun	*from the bush* garlgarl *bush* + ABL

(f) stop plus nasal clusters:

-dng-	ngudngun	ngud *horse* + ABL
-gng-	ngulyagngun	ngulyag *white-tailed black cockatoo* + ABL

(g) stop plus stop clusters:

-db-	ngudbari	*by horse* ngud *horse* + HAVE
-gb-	ngulyagbari ngulyag	*white-tailed black cockatoo* + HAVE
-dd-	nguddu	ngud *horse* + ERG
-gd-	ngulyagda	ngulyag *white-tailed black cockatoo* + LOC
-dg-	ngudgu	ngud *horse* + PURP
-gg-	ngulyaggu	ngulyag *white-tailed black cockatoo* + PURP

(h) lateral plus glide clusters:[6]

-rlw- garlgarlwala *through the bush* garlgarl *bush* + LOC

Consider the intermorphemic clusters of type (i) above. Note, first, that the set of possible word-final consonants (with the exception of the stops d and g), is a proper subset of the set of cluster components in table 2.4.6.2.1 above, and, second, that the majority of consonant-initial suffixes have a peripheral consonant. The only exceptions to this second generalisation are -du 'ergative',

-da 'locative', -dula 'diminutive' and -wala 'locative-*path*'. The last of these is attested with a consonant-final root in only one case: garlgarlwala *through the bush*. (Other consonant-initial suffixes, for example, -la 'locative', have post-consonantal allomorphs that are not consonant-initial.) From these observations it thus follows that the number of intermorphemic clusters created through suffixation is not greatly increased over that potential intramorphemically, as illustrated in table 2.4.6.2.2 below. The eight clusters set off in box 'A' of the table, are, of course possible only in suffixed forms of the three stop-final items noted in 2.4.5 above. The geminate stops dd and gg are often heard single; for example, nguddu [ŋuddu] ∿ [ŋudu] *horse* (ergative). Note all clusters in table 2.4.6.2.2 below are attested in the corpus.

Table 2.4.6.2.2: Summary of intermorphemic consonant clusters

		FIRST COMPONENT									
		n	rn	ny	ng	l	rl	ly	d	g	
SECOND COMPONENT	b	x	x	x	x	x	x	x	x	x	
	d	x	x	x		x	x	x	x	x	
	g	x	x	x	x	x	x	x	x	x	
	ng	x	x	x	x	x	x	x	x	x	A
	m			x							
	w						x				

2.5 Phoneme frequencies

In order to obtain some indication of the frequencies of the various phonemes in Badimaya, and of the relative frequencies of the phonemes in different positions, i.e. word-initial, -medial, and -final, and in the case of consonants, first and second of consonantal clusters in word-medial positions, the longest narratives, 14 and 15, were analysed.

(a) Ratio of consonants to vowels. In the two passages totalling 123 words (excluding English words), there were 361 consonants and 301 vowels, almost a 1:1 ratio.

(b) Phoneme in initial position. The most frequently occurring consonantal phoneme in word-initial position is the bilabial glide /w/ with 23 occurrences. This was followed by /y/, 20, then /ng/ with 21 occurrences. (See table 2.5.1 below.)

(c) Phoneme in word-final position (table 2.5.2). All consonants appeared very rarely in word-final position. The most frequently occurring c-phoneme was the past tense inflection /ng/ with 22. Of the vowels, /a/ is the most predominant in any position, 47 words out of 123 ended with the /a/ phoneme.

(d) Consonant phonemes in word-medial position (table 2.5.3). In the two passages analysed, nasals are the most common medial intervocalic phonemes, closely followed by the stops, from the point of view of manner of articulation. From the point of view of place of articulation, alveolars were the most common.

The alveolar nasal-stop cluster /nd/ was, along with the velar nasal-stop cluster /ngg/, about the only medial consonantal cluster, with the exception of one occurrence of the alveolar lateral-velar stop cluster /lg/, one occurrence of the stop-stop cluster /db/, and two occurrences of the nasal-nasal cluster /nm/.

(e) Relative frequency of vowels (table 2.5.4). As already stated, the vowel phoneme /a/ was by far the most commonly occurring in the two narratives analysed. Out of 304 vowel phonemes 137 /a/-phonemes occurred in word medial position and 47 /a/-phonemes occurred in word final position. This was followed by /u/ with a total of 71 (43-initial and 28-final). The /i/ phoneme occurred 31 times medially and 18 times finally.

(f) Relative frequency of consonants in any position (table 2.5.5). From the point of view of manner of articulation, nasals were the most commonly occurring consonants (170 out of a total of 361 consonantal phonemes were nasals). Stops had an overall total of 105, followed by glides with a total of 58 out of 361. Bilabial, alveolar, and velar consonants were equally the most frequently occurring places of articulation.

(g) Relative frequency of all phonemes in any position. The most noticeable feature is that /a/ is overwhelmingly the most common phoneme, exceeding in frequency any other vowel, or any groups of consonants, i.e. by manner or place or articulation.

Table 2.5.1: Relative frequencies of phonemes in word-initial position

/b/	14	/m/	16	/w/	23
/d̪/	4	/n̪/	1	/y/	20
/d̪ʸ/	3	/n̪ʸ/	11	Total Glides	43
/g/	10	/ŋ/	21		
Total Stops	31	Total Nasals	49		
Bilabials (including /w/)			53		
Dentals			5		
Palatals (including /y/)			34		
Velars			31		
Total number of words analysed			123		

Table 2.5.2: Relative frequencies of phonemes in word-final position

CONSONANTS		VOWELS	
/d/	2	/a/	47
/g/	0	/i/	18
/n/	6	/u/	28
/n̪/	0	Total all Vowels	93
/n̪ʸ/	0		
/ŋ/	22		
Total all Consonants	30		

Table 2.5.3: Relative frequencies of consonantal phonemes in word-medial position

	MEDIAL Inter-vocalic	MEDIAL First of Cluster	MEDIAL Second of Cluster	TOTAL Medial Position
/b/	4	-	1	5
/dʸ/	10	-	-	10
/ḍ/	13	-	-	13
/d/	6	1	12	19
/d̠/	10	-	-	10
/g/	4	-	11	15
Total Stops	47	1	24	72
/m/	19	-	2	21
/n/	23	14	-	37
/nʸ/	4	-	-	4
/ŋ/	7	10	-	17
/ṇ/	12	-	-	12
/n̠/	2	-	-	2
Total Nasals	67	24	2	93
/l/	19	1	-	20
Total Laterals	19	1	-	20
/r̃/	3	-	-	3
/r/	5	-	-	5
Total Rhotics	8	-	-	8
/y/	4	-	-	4
/w/	11	-	-	11
Total Glides	15	-	-	15
TOTAL	156	26	26	208
Bilabials (including /w/	34	-	3	37
Dentals	22	-	-	22
Alveolars	51	16	12	79
Retroflexes	20	-	-	20
Palatals (including /y/)	18	-	-	18
Velars	11	10	11	32
TOTAL	156	26	26	208

Table 2.5.4: Relative frequencies of vowel phonemes

	MEDIAL	FINAL	TOTAL
/i/	31	18	49
/a/	137	47	184
/u/	43	28	71
TOTAL	211	93	304

Table 2.5.5: Relative frequencies of consonantal phonemes in any position

/b/	19	/l/	20
/d/	21	/l̪/	-
/ḍ/	13	/l̤/	-
/d̤/	14	/l̂ʸ/	-
/d̂ʸ/	13	Total all Laterals	20
/g/	25		
Total all Stops	105	/r̃/	3
		/r/	5
/m/	37	Total all Rhotics	8
/n/	43		
/n̪/	2	/y/	24
/n̤/	13	/w/	34
/n̂ʸ/	15	Total all Glides	58
/ŋ/	60		
Total all Nasals	170		
Bilabial (including /w/)		90	
Alveolar		87	
Dental		27	
Retroflex		20	
Palatal (including /y/)		52	
Velar		85	
Total all Consonantal Phonemes		361	

3. THE NOMINAL PHRASE AND ITS CONSTITUENTS

This chapter begins by presenting morphological, syntactic and semantic evidence for distinguishing a category *nominal*, and for identifying certain subcategories thereof (3.0). These individual subcategories are then considered from the point of view of their inherent referentiality and their case marking (3.0.1-3.0.4). The syntax of the nominal phrase is described in 3.1, section 3.2 presents the case system typology (3.2.1) and the case functions (3.2.2). Derivational suffixes are described in 3.3.

3.0 Nominals

A category *nominal* can be distinguished in Badimaya on the basis of the syntactic, semantic and morphological properties of its members:

(i) nominals occur as the (sole) constituent(s) of the nominal phrase (3.1);
(ii) nominals refer to entities or classes of entities;
(iii) nominals are inflected for case.

The following subcategories of nominals can be distinguished on the basis of the openness of the subclass, and the case marking and semantics of its members.

3.0.1 Nouns

Nouns are an open subcategory of nominals whose members, in terms of their inherent semantics include:

[1] Names of classes of entities such as:

(a) People, delimited by race, sex, age, kinship and other social relations: ngalunga *age mate*, wabamadyi 'term used for dead kin', nyunga *Aborigine*, yamadyi *Aborigine of the Murchison region*, mudyi *spouse*, babinyu *friend*, gadya ngubadala, lit. *child other blood* - term used for son's wife and daughter's husband;

(b) Fauna, such as yalibidhi *emu*, mindyan *mountain devil*, gunduwa *porcupine*, marnbi *bronzewing pigeon*, bardurda *scrub turkey*, badyalgara *tiger snake*;

(c) Supernatural beings, such as bimara *mythical serpent*, mundung *devil*, murdinggura, muradyi *the little people*, mabarn *medicine, power*;

(d) Vegetation, such as winda *tree*, walarda *sandalwood tree*, yiladyi *salmon gum*, maruny *quondong tree*, dhurra *blackbutts*;

(e) Artefacts, such as gundi *fighting stick*, bandyi *possessions*, walanu *boomerang*, wana *women's digging and fighting stick*;

(f) Language, ceremony and song styles: yiradula *language*, dhurna *stick for hitting ground in dances*, dhulgu *paint dance*, mirlgu *law dance*, mamayugari *corroboree*;

(g) Body parts and functions, such as nguba *blood*, dhaba *bone*, wulbaga *scar*, nyundyulu *marrow*, dyarda *knee*, mambu *leg*.

[2] Names of individual persons and places.

[3] Numerals and other quantifiers.[7]

[4] Names of classes of entities delimited by:

(a) Their physical characteristics, such as yagu *big*, dyuba *small*, wanara *long, tall* (wanarra in Pilbara languages), bulamarda *short*, gunyal *thin*, ganu *fat*, dyuwa *flat*, yala *bald*, dhadha *bad, stupid*, gulya *hungry*, murla *dead*, etc.;

(b) Their non-physical characteristics, such as dhugara *happy*, bindu *quiet, peaceful*, gundanya *shame*, barany *good*, dhadhadya *strong*, gurlbarl *secret*, dyindu *jealous*, badya *wild, savage*, etc. (see Derivations 3.3 -bari *having*, and Nominal sentences 5.1.8 for discussion of attributes as statements);

(c) Their colour. There are three colour terms in Badimaya: mawurdu *black*, biluny *white*, and binma *red*. Joe Benjamin remembers 'green ochre' being used in ceremonies, but cannot remember the term for this.

[5] Nouns also refer to locations, directions and time (see Case functions 3.2.2 and Sentence expansions 5.1.7).

3.0.1.1 Reduplication of nouns

Nouns naming qualities and some nouns naming entities can be reduplicated to show intensity: dyuba *little*, dyubadyuba *very little*; milya *soft*, milyamilya *very soft*, etc. Some instances of stem reduplication have also been noted for nouns referring to agglomerations of entities: barna *ground*, barnabarna *sand*; dhugu *dust*, dhugudhugu *lots of dust*; garang *sun*, garanggarang *sunrise*. A number of inherently reduplicated stems also occur: gidigidi *willy wagtail*, garan.garan *smoker parrot*, mudyimudyi *bullock tripe*, mayamaya *humpy*.

3.0.1.2 Noun case allomorphy

This section considers the allomorphy of noun case suffixes.[8] Table 3.0.1.2 below summarises these forms in complete paradigms. The various functions of each case are discussed in 3.2.2. The principal functions of each case will be discussed in the present section.

[1] The *absolutive* marks intransitive subject and direct object (5.1.1) for nouns with non-human reference. The absolutive form has Ø realisation, so that the absolutive noun is identical to the base stem of the noun (2.3.1).

[2] The *accusative* marks direct object for nouns with human reference. Its forms are: -nha when the stem is vowel-final, and -ganha when the stem is consonant-final, in the case of proper names only (Note: it was not possible to obtain native consonant-final stems):

stem	dyalga	accusative	dyalga-nha
	Peter		Peter-nha
	Joseph		Joseph-ganha

[3] The *ergative* marks transitive subject (5.1.1) for nouns denoting humans and higher animates, and for nouns in the instrumental function. The ergative has the form: -gu after -ng- ; -du after other -C-:

stem	ngud	accusative	ngud-du	*horse*
	wadyan	ergative	wadyan-du	*fire*
	garang		garang-gu	*sun*
	rifle		rifle-du	*rifle*

-lu -nggu follow vowels. With proper names and kin terms -lu appears:

stem	Peter/Joe/Kathy	ergative	Peter-lu/Joe-lu/Kathy-lu
	bibi		bibi-lu *mother*
	yigu		yigu-lu *elder sister*

Otherwise vowel-final nouns select -lu or -nggu idiosyncratically. Hale (1976: 417) postulates -nggu as the "historically underlying" form suffixed to vowel-final disyllabic stems, and -lu as the form suffixed to polysyllabics. Badimaya shows -lu suffixed to polysyllabics, though not many such stems have been recorded:

stem	yamadyi	ergative	yamadyi-lu	*man*
	dyinabuga		dyinabuga-lu	*boot*

There is no evidence for any phonological, or semantic conditioning of the use of -lu and -nggu with vowel-final disyllabic nouns except as noted above:

stem	gadyi	ergative	gadyi-lu	*spear*
	marda		marda-nggu	*stone*
	gabi		gabi-lu	*water*
	murni		murni-nggu	*woman*

[4] The *locative* marks a number of functions including spatial and temporal location (what Lyons (1968:298) terms "local" functions), comitative function, and the obligatory complement of certain activity verbs (see 5.1.1). With local functions, the locative differs from the ergative of the same noun only in the identity of the vowel, which is /a/ for the locative:

stem	ngud	locative	ngud-da	*horse*
	warn		warn-da	*creek*
	garlgarl		garlgarl-da	*bush*
	guwiyal		guwiyal-da	*possum*
	garang		garang-ga	*sun*
	Peter		Peter-la	*Peter*
	yigu		yigu-la	*elder sister*
	yamadyi		yamadyi-la	*man*
	gadyi		gadyi-la	*spear*
	marda, etc.		marda-ngga	*stone*

The comitative locative of consonant-final proper nouns, including place names, has the form -ala:

stem	Sid	comitative-locative	Sid-ala	*with Sid*
		locative	Sid-da	*on Sid*
	Magnet	comitative-locative	Magnet-ala	*in Mt Magnet*

The comptative is marked by -la with vowel-final stems:

stem	yamadyi	locative	yamadyi-la	*with the man* or *on the man*

-da locative forms are used in pronoun-noun *inclusion* constructions like:

(1) ngalidya yigu-da *we two, my elder sister and I*
ngalidya Sid-da *we two, Sid and I*
ngalidya babinyu-da *we two, my friend and I*

and in some constructions with nouns following gardi *side*, as in:

(2) ngadhu wagu-nda-n wirlu-gardi town-da
1sg-ABS *camp*-CAUS-PAST *west*-SIDE *town*-LOC
I'm camping on the west (side) of town.

(3) ngadhu wagu-nda-n wirlu-gardi yalgu-da
1sg-ABS *camp*-CAUS-PAST *west*-SIDE *Yalgoo*-LOC
I'm camping on the west (side) of Yalgoo.

(4) balu banha-gardi yuga counter-da
3sg-ABS *that*-SIDE *stand*-PRES *counter*-LOC
He's standing on the other side of the counter.

Further semantically and pragmatically conditioned partial 'specialisations' of locative allomorphs will be discussed in 3.2.2.4.

[5] The *dative* marks purpose, beneficiary (recipient) and possessor. Its realisations are:

-gu with consonant-final stems:

stem	marran	dative	marran-gu	*for the sheep*
	guwiyal		guwiyal-gu	*for the possum*

-yu with the front vowels /i/ and /o/ (note final /o/ occurs only in loans):

stem	gabi	dative	gabi-yu	*for water*
	Joe		Joe-yu	*Joe's, for Joe*

-wu with the back vowels /a/ and /u/, where /u/ becomes /a/:

stem	dhudhu	dative	dhudha-wu	*dog's, etc.*
	Peter		Peter-wu	*Peter's, etc.*
	banha		banha-wu	*that one's, etc.*

The functions of -gu as a verbal suffix are considered in 4.1.3.

[6] The *allative* marks the goal towards which motion is directed. It has the forms:

-di with vowel-final stems
-adi with consonant-final stems:

stem	Mullewa	allative	Mullewa-di	*to Mullewa*
	warn		warn-adi	*to the creek*

A compound of the dative-purposive -gu and the allative -di (-gudi), is commonly found marking the goal function on all stems (see 3.2.2.6). A similar phenomenon is found in the neighbouring Pitjantjatjara language (Blake 1976:417).

[7] The *ablative* marks source. Its form is invariably -ngun.

stem	winda	ablative	winda-ngun	*from/out of the tree*
	Sid		Sid-ngun	*from Sid*
	warn		warn-ngun	*from the creek*

Table 3.0.1.2: Noun case forms

Gloss	ABS	ACC	ERG	DAT	LOC	ALL	ABL
woman	murni	murninha	murninggu	murniyu	murnila	murnidi	murningun
mother	bibi	bibinha	bibilu	bibiyu	bibila	bibidi	bibingun
Peter	Peter	Peternha	Peterlu	Petawu	Peterla	Peterdi	Peterngun
gun	gun		gundu	gungu	gunda	gunadi gungudi	gunngun
Sid	Sid	Sidganha	Siddu	Sidgu	Siddaṉ Sidala	Sidadi Sidgudi	Sidngun
creek	warn		warndu	warngu	warnda	warnadiṉ warngudi	warnngun

3.0.2 Personal pronouns

3.0.2.1 First and second person pronouns

First and second person pronouns are a closed subcategory of nominals. They have the following structure:

pronoun stem + (number [-dya 'dual', -mi 'plural']) + case

There is no inclusive/exclusive contrast for first person non-singular pronouns.[9] Explicit addressee-exclusion may be marked by a pronoun-noun construction (see 5.1.6).

The first and second person paradigms are shown in the following table:

Table 3.0.2.1: First and second person pronouns*

Gloss	ABS	ACC	LOC	DAT	ALL
1sg	ngadhu	ngadhunha	ngadhula	nganang	nganangudi
1du	ngalidya	ngalidyanha	ngalidyala	ngalidyang	?
1pl	ngalimi	ngaliminha	ngalimila	ngalimi	ngalimidi
2sg	nhundu	nhununha	nhundula	nhunung	nhunungudi
2du	nhuradya nhubadya nhubali	nhuranha	nhurala	nhubadyang nhurang	nhurangudi
2pl	nhurami	nhuraminha	?nhurangula	?	?

*Note: '?' refers to forms that were not known by Joe Benjamin.

It can be observed that distinct stems appear in singular and non-singular forms (ngadhu ∿ ngana '1sg', ngali '1n-sg'; nhundu ∿ nhunu '2sg', nhura ∿ nhuba '2n-sg'). The '1sg' stem ngana appears only before the dative suffix ng(u). The stem nhunu '2sg' occurs before both dative and locative suffixes. The stem nhuba varies with nhura in absolutive and locative 2du forms. All these pronoun stems are among those listed by Dixon and Blake (1979:12) as common Pama-Nyungan morphemes although second person plural base is usually nhurra not nhura (cf. Dixon and Blake 1979:12; Douglas 1981:223).

3.0.2.2 Third person pronouns

Third person singular and plural pronouns have the following structure:

pronoun stem + case

The paradigm for third person singular and plural is presented in the following table. Third person dual reference is realised by a demonstrative + numeral (3.0.3).

Table 3.0.2.2: Third person pronouns

Gloss	ABS	ACC	LOC	DAT	ALL
3sg	balu	balunha	balula	balung	balungudi baludi
3pl	dhanha	dhanhanha	dhanhala	dhanhung	dhanhungudi

The '3sg' stem balu, while not noted by Dixon and Blake (op.cit.) as common to Pama-Nyungan, also o-curs in Watjarri (Douglas 1981:223).[10] The '3pl' stem dhanha is common in many Pama-Nyungan languages (Dixon and Blake ibid.), though usually dhana (ibid.).

3.0.2.3 Case marking of pronouns

In contrast to the tripartite, ergative-absolutive-accusative system of nouns (3.2.1 and 5.1.2), the case system of Badimaya pronouns is absolutive-accusative (absolutive Ø forms for subject NPs of both transitive and intransitive sentences, and accusative -nha forms for direct objects). The ergative case is thus systematically absent (except in the third dual, which, as noted above, is a demonstrative + numeral).

The source is marked by the locative for pronouns, there being no distinct ablative. Pronominal datives have the suffix -ng (probably an earlier -ngu - see Dixon 1972:7). The dative form serves as a stem for pronominal allatives (in -ngudi), in a manner parallel to purposive ablatives (in -gudi) for nouns (3.2.2.6).

3.0.2.4 Non-singular reference

My informant, Mr Benjamin, usually used a numeral or quantifier with non-singular pronouns. For example:

(a) First person dual reference is often by means of:
(5) ngali-dya badiwi
    1du-DUAL *mob/lot/all*
    lit. *We two/the lot/us lot.* or

(6) ngali-dya gudha
    1du-DUAL *two*
    lit. *us two two*

(b) Second person dual is often by means of:
(7) nhura gudha
    You two.

(c) First person plural is often by means of:
(8) ngali badiwi/mudimi
    us mob/lot/all

(d) Second person plural by means of:
(9) nhura badiwi/mudimi
    you mob, etc.

(e) Third person plural is often by means of:

(10) dhanha badiwi
they all.

3.0.3 Demonstratives

The forms of the Badimaya demonstratives are as follows:

proximal	*this/here*	nhinha
distal	*that/there*	banha

The case system of demonstratives is the tripartite system found with nouns. In addition to the 'syntactic' cases, demonstratives have four other morphological cases: the locative (in -la), the dative (in -wu), the allative (in -di), and the ablative case. All cases except the ablative are suffixed directly to the (absolutive) stem. The ablative has the form -gardingun (gardi *side* + ablative -ngun). Table 3.0.3 below summarises the paradigm for demonstratives.

[1] Demonstratives can appear as the sole constituents of a nominal phrase or with other nominals (see 3.1).

(11) nhinha ngana-ng dhudhu
this-ABS 1sg-DAT *dog*-ABS
this is my dog.

(12) nha nhinha
what-ABS *this*-ABS
What's this?

(13) nha banha
what-ABS *that*-ABS
What's that?

(14) banha-lu dyiga bu-nung
that-ERG *snake*-ABS *hit/kill*-PAST-PERF
That (one) killed the snake.

(15) nhinha wagadi
this-ABS *way*-ABS
this way

(16) nhinha dhudhu ngana-ng
this-ABS *dog*-ABS 1sg-DAT
This dog is mine.

(17) nhundu banha-nha dhudhu ma-ra ya-ra
2sg-ABS *that*-ACC *dog*-ABS *take*-FUT *go*-FUT
You go and get that dog.

(18) ngadhu banha-nha wiranda
1sg-ABS *that*-ACC *like*-PRES
I like that one.

Nhinha is used when the speaker is including himself in the reference, as in

(19) nhinha mudimi vs. (20) banha mudimi
this mob/lot/all *that mob/lot/all*

Dual third person pronoun reference is expressed by the demonstrative banha plus the numeral quantifier gudha *two* (see also 3.0.2), i.e. banha gudha *those two.*

[2] The Badimaya demonstrative system, unlike that of neighbouring languages,[11] but like languages further north (e.g. Yingkarta and southern Pilbara languages (cf. Klokeid 1969, Austin 1981b), is two- (rather than three-) dimensional: the forms, in addition to their deictic function, are discourse functional. The proximal demonstrative introduces new topics not given "in the addressee's consciousness" (Chafe 1976:30), as in:

(21) ngadhu Ningan-da ngud garda-ngguwa nhinha babinyu balu
1sg-ABS *Ningan*-LOC *horse*-ABS *break*-PRES *this*-ABS *friend*-ABS 3sg-ABS
I'm breaking in horses out at Ningan station and this friend he

wima ngana-ngudi ...
appear-PRES 1sg-ALL
comes to me ...

[3] The distal demonstrative marks the status of the referent as 'given':

(22) nhabala wama gadala walba ngawu-la nha-ngga
something-ABS *food*-ABS *get up etc.*-NON-PAST *mallee hen*-ABS *egg*-LOC *what*-LOC
There is a flower that blooms when the mallee hen lays her eggs.

ngawu banha-lu wangga nha-rni ngawu ngarriya
egg-ABS *that*-ERG *say/tell/speak*-PRES *what*-? *egg*-ABS *lie*-PRES
That one tells you how many eggs are in the nest.

(23) banha-gardi nha-ngung warn gabi yagu banha-la ngarriya
that-SIDE *see/look*-PAST *creek*-ABS *water*-ABS *big*-ABS *that*-LOC *lie*-PAST

banha warn marran gabi-ngga nhabala shearerman-gu
that-ABS *creek*-ABS *sheep*-ABS *water*-LOC *something*-ABS *shearer*-DAT
That creek's good for the shearer and sheep to get a drink.

In this use the distal demonstrative, as the sole constituent of an NP, can be interpreted as a third person anaphor.

[4] The derivational suffix -gardi *side* is common with demonstratives in 'adverbial' uses like:

(24) nhundu nhinha-gardi yan
2sg-ABS *this*-SIDE *come*-FUT
Come around this side!

(25) Kogola downs banha-gardi Cue-la
Kogola Downs-ABS *that*-SIDE *Cue*-LOC
Kogola Downs station is on the other side of Cue.

Table 3.0.3: Demonstratives

Gloss	ABS	ERG	ACC	DAT	LOC	ALL	ABL
this (here)	nhinha	nhinhalu	nhinhanha	nhinawu	nhinhala	nhinhadi	nhinha gardi(ngun)
that (there)	banha	banhalu	banhanha	banhawu	banhala	banhadi	banha gardi(ngun)

3.0.4 Interrogatives

Badimaya has four interrogative roots:

ngana *who*
nha *what*
ya *how*
wandi *where*

The syntax and semantics of interrogatives are considered in 5.2 Questions.

[1] The interrogative ngana *who* and nha *what* have systematically reduced case paradigms:

ABS	ERG	LOC	DAT
ngana *who*	nganalu		nganawu *whose*
nha *what*	nhalu	nhala *on what*	nhawu *why*
		nhangga *when*	

'Local' cases (locative, allative and ablative) are absent for the referentially human interrogative ngana *who*. Its dative has possessive functions and renders English *whose*. The interrogative nha *what* distinguishes spatial (nhala *on what*) and temporal (nhangga *when*) locatives. Its dative nhawu renders English *why*. The case system of ngana and nha is ergative/absolutive. [Note also the interrogative nharni *how many*, presumably nha- with a suffix -rni of uncertain provenance.]

[2] Badimaya wandi *which/where* has three case forms:

ABS	LOC	ABL
wandi *which, where*	wandila *whereabouts*	wandigardingun *where from*

The Ø absolutive form appears either with nominals, as in wandi wagadi *which way?*, or as a locative, *in what place?*

The locative form of wandi is the 'neutral' locative *where?* in contrast to nhala *on what*. With -gardi *side*, it can be glossed *whereabouts* [i.e. wandigardi].

[3] The interrogative ya or yayidya (see Questions 5.2) *how, in what manner*, has no case forms.

[4] Unlike many Australian languages (see note in Dixon 1977:182) the interrogative pronoun *what* does not function per se as an indefinite pronoun. An indefinite pronoun form meaning *someone, something, anything*, is derived by the addition of a suffix -bala (meaning not known)[12] to the interrogative root nha-:

(26) nhandi ngadhu nhabala branya
there-ABS 1sg-ABS *something*-ABS *fix/make*-PRES
I'm fixing something over there.

nhabala can be verbalised to form the one-argument and two-argument verbs, nhabalabaya and nhabalanda *do what*, respectively (see 4.4.1).

3.1 The nominal phrase

A member of any of the subcategories of the category *nominal* (3.0) may function as the sole constituent of a nominal phrase:

(a) Nouns
(i) Proper nouns:
(27) Peter-lu dyuba-mi yungguwa mimi
Peter-ERG *child*-PL-ABS *give*-PRES *milk*-ABS
Peter gives the children milk.

(ii) Common nouns:
(28) dhudhu badya-ba-ya
dog-ABS *wild*-INCH-PRES
The dog's getting mad.

(iii) Adjectives:
(29) ngana-ng yu-wa branymarda-nha
1sg-DAT *give*-FUT/IMP *good one*-ACC
Give me a good one!

(iv) Numerals/quantifiers:
(30) ngadhu gawunu gurriya ma-nung
1sg-ABS *again*-ABS *one*-ABS *take*-PAST
I again took one.

(31) dyalga brany ya-nung
some-ABS *good/well*-ABS *go*-PAST-PERF
Some went well.

(b) Personal pronouns
(32) ngadhu balu-nha bu-ngung
1sg-ABS 3sg-ACC *hit*-PAST-PERF
I hit him.

(c) Demonstratives
(33) banha-lu wangga nha-rni ngawu ngarriya
that(one)-ERG *say*-PRES *what*-? *egg*-ABS *lie*-PRES
That one tells you how many eggs lie (in the nest).

(d) Interrogatives
(34) nha-lu balu-nha bu-ngung
what-ERG 3sg-ACC *hit*-PAST-PERF
What killed him?

Complex nominal phrases can be formed by juxtaposing nominals. That is, the complex nominal phrase consists of a single 'head' nominal, to which are juxtaposed other nominals. Thus:

(a) Demonstratives may precede nouns, quantifiers, or adjectives:

(35) nhinha bibal-mi
this-ABS *paper*-pl
This book.

(36) nhinha mudimi
this-ABS *lot/mob/all*-ABS
This lot/mob.

(37) banha gudha
that-ABS *two*-ABS
Those two. (3du reference)

(38) banha dyudya
that-ABS *old*-ABS
That old one.

(b) Nouns functioning ascriptively, or adjectives are typically postposed to the head constituent. Some examples are:

(39) dhudhu ngubanu
dog-ABS *dingo*-ABS
dingo

(40) warayi yirabandi
fly-ABS *honey*-ABS
bee

(41) nyunga wudyanu
aborigine-ABS *stranger*-ABS
stranger

(42) ngana-ng gami murni
1sg-DAT *grandfather*-ABS *woman*-ABS
my grandmother

(43) windu dhugudhugu yagu yan-da
wind-ABS *dust*-ABS *big*-ABS *come*-PRES
A big dust storm is coming.

(44) banha dyuba dhadha dhudhu bu-ngguwa
that-ABS *child*-ABS *bad*-ABS *dog*-ABS *hit*-PRES
Those (two) naughty kids hit my dog.

As in (42) and (44) noun phrases with adjectives can be expanded by demonstratives and possessives (see (c)(i) below).

(c)(i) Nominal or pronominal alienable possessors generally precede the possessed noun, although there are one or two instances in the corpus where possessive pronouns follow the head constituent. Pronominal (alienable) possessors are always marked with the dative, while nominal possessors may or may not carry dative marking:

(45) balu-ng mama-lu ngadhu-nha minu-n
3sg-DAT *father*-ERG 1sg-ACC *show*-PAST
His father showed me.

(46) yurda dhanha dhaba balu-ng dhanha nha-ngung
later 3pl-ABS *bone*-ABS 3sg-DAT 3pl-ABS *see*-PAST-PERF
Later on, they saw his bones.

(47) ngana-wu dhudhu nyawuna
who-DAT *dog*-ABS *howl*-PRES
Whose dog's howling?

(48) Peter-wu dhudhu badya yagu
Peter-DAT *dog*-ABS *wild*-ABS *very*-ABS
Peter's dog is very savage. OR

(49) Peter dhudhu badya yagu
Peter-ABS *dog*-ABS *wild*-ABS *very*-ABS
Peter's dog is very savage.

(c)(ii) The noun or pronoun naming the whole in a whole part relationship is not dative marked, however:

(50) dhudhu dyalang ngadiya-ba-ya widila-ngguwa
dog-ABS *tongue*-ABS *swing*-INCH-PRES *swing*-PRES
The dog's tongue's hanging out.

(51) dyiga dyalang minu-wa
snake-ABS *tongue*-ABS *show*-PRES
The snake's flicking its tongue.

(52) ngadhu wiru garda-ng
1sg-ABS *spirit*-ABS *break*-PAST
My spirit broke.

(53) balu wiru dhadha-ba-n
2sg-ABS *spirit*-ABS *bad*-INCH-PAST
His spirit went bad.

(54) ngadhu balu-nha maga yuwa-n banha-gardi barna gani-n
1sg-ABS 3sg-ACC *head*-ABS *shoot*-PAST *that*-SIDE *ground*-ABS *hit*-PAST
I shot at his head (but) hit the dirt on the other side.

(55) ngana-ng marlu ngunya
1sg-DAT *kangaroo*-ABS *skin*-ABS
My kangaroo skin.

(d) Numerals and other quantifiers can be juxtaposed to nouns. The numeral 'one' often functions as an indefinite determiner, rather than as a quantifier. In these instances, the numeral always precedes the head:

(56) gurriya yamadyi-lu wangga-ng
one-ABS *man*-ERG *speak*-PAST-PERF
One man spoke. vs.

(57) ngadhu guru gurriya
1sg-ABS *eye*-ABS *one*
I've (got) one eye.

For numerals other than gurriya, the position is pre- or posthead, with a slight preference for the posthead position:

(58) gudha dyuba ∿ dyuba gudha
two children

However, in NPs involving descriptive adjectives, as well as numerals, the numeral will precede the head, as in:

(59) ngana-ng gudha dyuba dhadha
1sg-DAT *two*-ABS *child*-ABS *naughty*-ABS
My two naughty kids.

Douglas (1981:243) also mentions this tendency in the neighbouring language, Watjarri. Logical quantifiers are generally postposed to the head:

(60) marran badiwi mula-nda-n
sheep-ABS *all/lot/mob*-ABS *die*-CAUS-PAST
All the sheep were killed.

However, in instances where one lexical item represents both adjective and quantifier, as is the case with yagu *big/a lot of*, then the posthead position is occupied by the adjectival yagu, while the quantifier yagu precedes the head:

(61) wama yagu
food-ABS *big/a lot*-ABS
A big meal. vs.

(62) yagu wama ma-ra ya-ra
big/a lot-ABS *food*-ABS *take*-FUT/IMP *go*-FUT/IMP
Take a lot of food.

Numeral and logical quantifiers are also found juxtaposed to personal pronouns with non-singular reference (see 3.0.2.4). In these instances, the quantifier always follows the head:

(63) ngalidya gudha
1du-ABS *two*-ABS
Us two.

(64) dhanha badiwi
3pl-ABS *lot/mob/all*
They lot.

(65) nhubadya gudha murni
2du-ABS *two*-ABS *woman*-ABS
You two women.

(See also modification of nominals by NEG particles in 5.4.)

The structure of a complex nominal phrase may be schematicised as follows:

$$\left\{\begin{matrix}\text{demonstratives} \\ \text{possessives}\end{matrix}\right\} \quad \text{quantifier} \quad \text{noun} \quad \text{quantifier} \quad \text{adjective}$$

Though not completely rigid, the order of juxtaposition appears to reflect a hierarchy of inherent, or context-determined referentiality. That is, demonstratives/possessives, being inherently highly referential, precede nouns. Nouns tend to precede adjectives since, in noun-adjective constructions, the referent (of the noun) has typically been established in the discourse. The relative position of quantifiers with respect to nouns is variable, they precede in what seems to be a 'quasi-deictic' function (two entities, being horses), and follow in a 'qualifying' function (horses, two in number). These ordering tendencies may, of course, be varied pragmatically.

It is typically only the constituent of a complex nominal phrase that is in focus that is overtly marked for case:

(66) nhinha dhudhu banha dyudya-wu murni
this-ABS *dog*-ABS *that*-ABS *old*-DAT *woman*-ABS
This dog belongs to that old woman.

(67) nhinha dhudhu banha dyuba-wu
this-ABS *dog*-ABS *that*-ABS *child*-DAT
This dog belongs to that child.

(68) nhinha dhudhu banha-wu yamadyi
this-ABS *dog*-ABS *that*-DAT *man*-ABS
This dog belongs to that old man.

are all acceptable. Other constituents may be case-marked for what, for want of a better term, can be described as emphasis:

(69) nhinha mindyu ngana-ng dyudya-wu mama-wu
this-ABS *blanket*-ABS 1sg-DAT *old*-DAT *father*-DAT
This blanket (belongs to) my old father.

Significantly, if one member of a complex nominal is a dative of possession (as above), then another member will be marked for the case appropriate to the whole:

(70) yurda gadya-lu wangga ngana-ng bibi-nha
later-ABS *child*-ERG *say*-PRES 1sg-DAT *mother*-ACC
Later, the child asks its mother ...

3.1.1 Coordinated NPs have the form $_{NP}$[NP (-banha) NP (-banha)] where NPs may be simple or complex. Coordinated NPs have two (or more) referents which are concomitantly involved in an event. Coordination may be marked by simple juxtaposition, as in:

(71) gadya bibi-lu madya nyina-ng
child-ABS *mother*-ERG *wait*-PRES *sit*-PAST-PERF
The child and its mother sat waiting.

or by means of the -banha suffix (3.3.2), as in:

(72) Joe Sid-banha Mullewa-di ya-ngguwa
Joe-ABS *Sid*-COORD *Mullewa*-ALL *go*-PRES
Joe and Sid are going to Mullewa.

-banha may be suffixed to all nouns in the coordinated relationship. Thus:

(73) Joe-banha Sid-banha Dyiga-banha Mullewa-di ya-ngguwa
Joe-COORD *Sid*-COORD *snake*-COORD *Mullewa*-ALL *go*-PRES
Joe, Sid, and Dyiga are going to Mullewa.

The use of -banha as a coordinator of two (or more) NPs is restricted to nouns. If one of the NPs is a pronoun, the locative -la is used. This construction is discussed in 3.2.2.4 and in 3.3.2.1.

3.2 The case marking system

3.2.1 Overview of case system typology

Table 3.2.1 contains an overview of the Badimaya case system. A full description of the various subsystems is given in 5.1.2.

Table 3.2.1: Overview of case system typology

Form \ Category	Noun-human	Noun-'higher' animates	Noun-inanimate	Pronouns	Demonstratives	Interrogatives
ABS	+	+	+	+	+	+
ACC	+	-	-	+	+	-
ERG	+	+	(1)	-	+	+
LOC	+	+	+	+	+	+
DAT	+	+	+	+	+	+
ALL	+	+	+	(2)	+	+
ABL	+	+	+	(3)	(4)	(4)

Notes to table 3.2.1

(1) Ergative distribution is only partially dependent on the inherent lexical content of the nominal. A full description of ergative distribution is given in 5.1.2.
(2) Pronominal allatives have a dative stem (see 3.0.2).
(3) For pronouns, the source function is marked by the locative case. There is no distinct ablative (3.0.2).
(4) The ablative form for demonstratives and interrogatives is -gardingun (gardi) *side* + ablative -ngun (see 3.0.3 and 3.0.4).

3.2.2 Case forms and functions[13]

3.2.2.1 Absolutive

All nominals, whether nouns, pronouns, have an absolutive form. Its functions are:

[1] To mark the subjects of nominal sentences (see 5.1.1 for definition of subject and 5.1.8):

(74) balu maga yala
3sg-ABS *head*-ABS *bald*-ABS
He's bald headed/has a bald head.

(75) dyuba mulya mirdi
child-ABS *face*-ABS *dirty*-ABS
The child's face is dirty/has a dirty face.

[2] To mark personal pronoun subjects of verbal clauses (5.1.3) both transitive and intransitive (5.1.2):

(76) ngadhu balu-nha bu-ngung
1sg-ABS 3sg-ACC *hit*-PAST-PERF
I hit him.

(77) balu dyindu-ba-ya
3sg-ABS *jealous*-INCH-PRES
He's getting jealous.

[3] To mark noun, demonstrative, and interrogative subjects of intransitive clauses (5.1.2):

(78) banha mundung yan-da
that-ABS *devil*-ABS *come*-PRES
Is that a devil coming?

(79) ngana ya-nung
who-ABS *go*-PAST-PERF
Who's going?

[4] To mark the noun subjects of transitive clauses which do not fulfil conditions for ergative marking (5.1.2).

(80) bagudyi dyidamin bu-ngung
fox-ABS *bird*-ABS *hit/kill*-PAST-PERF
The fox killed the chicken.

[5] To mark the identifying complements and some attributive complements of nominal sentences:

(81) balu maga yala (≡74)
3sg-ABS *head*-ABS *bald*-ABS
He's bald-headed.

(82) dyuba mulya mirdi (≡75)
child-ABS *face*-ABS *dirty*-ABS
The child's face is dirty/the child has a dirty face.

(83) ngadhu wudyanu
1sg-ABS *stranger*-ABS
I'm a stranger.

[6] To mark noun direct objects with non-human reference, and all interrogative objects:

(84) Peter-lu guwiyal wadha
Peter-ERG *goanna*-ABS *chase/look for*-PRES
Peter is chasing the goanna.

(85) dhudhu dhaba ngal-guwa
dog-ABS *bone*-ABS *swallow*-PRES
The dog is chewing the bone.

(86) nha nhundu nha-guwa
what-ABS 2sg-ABS *see/watch/look*-PRES
What do you see?

3.2.2.2 Accusative

Only personal pronouns, demonstratives, and nouns with human reference have accusative case forms. They are used when nominals of these subcategories function as direct objects:

(87) nhundu nhinha-nha branya-la
2sg-ABS *this*-ACC *fix*-FUT
Will you fix this?

(88) ngadhu nhunhu-nha nha-ngung
1sg-ABS 2sg-ACC *see/look/watch*-PAST
I saw you.

(89) bagali-lu murni-nha bu-ngung
man-ERG *woman*-ACC *hit*-PAST
The man hit his wife.

(90) murni-nggu Joseph-ganha nha-ngung
woman-ERG *Joseph*-ACC *see/look/watch*-PAST
The woman saw Joseph.

3.2.2.3 Ergative

All nominals except pronouns have an ergative case form. The ergative has two major functions, (i) to mark the transitive subject for demonstratives, interrogatives and some nouns (5.1.2) and (ii) to mark the instrumental function for

nouns. Though homophonous, ergative and instrumental are often treated as distinct cases in grammars of Australian languages. In these grammars it is argued that the ergative and instrumental can be distinguished in terms of the effects of such processes as reflexivisation, reciprocalisation, intransitivisation, on ergative NPs. Subject NPs that would otherwise be marked ergative are marked absolutive in these constructions, while instrumental ergatives remain unaffected. Arguments of this sort cannot be extended to Badimaya since the distribution of ergative and absolutive forms, in the constructions in question, is not as described in these arguments (see examples in Topic B and Summary, Dixon 1976: 411).

Ergatively marked subject NPs and instrumental NPs appear in sentences with no direct object NP (i.e. 'intransitive' constructions):

(91) murni-nggu garda-ng yuga-n
woman-ERG *get up*-PAST *stand*-PAST
The woman got up (and stood).

(92) murni gadyi-lu ya-ngguwa
woman-ABS *spear*-ERG *go*-PRES
The woman is walking with a spear.

Ergatively marked subjects and instrumentals also appear in reflexive and reciprocal constructions:

(93) bagali-lu mudyi-lu bu-ngguwa gadyi-lu
man-ERG *spouse*-ERG *hit*-PRES *spear*-ERG
The man and his wife are hitting each other with spears.

(94) yamadyi-lu sheet-du dhama-dya-n yamadyi-mi wanyana-la
man-ERG *sheet*-ERG *cover*-RECIP/REFL-PAST *man*-PL *frighten*-FUT
The man covered himself with a sheet (in order) to frighten the Yamadyis.

In Badimaya, the only distinctions that can be made between ergatively marked subjects and instruments are conceptual:

[1](a) Noun ergative subjects typically refer to humans or higher animates:

(i) humans, as in:

(95) murni-nggu dyuba-nha nha-ngung
woman-ERG *child*-ACC *see/look*-PAST-PERF
The woman saw the child.

(ii) higher animates, as in:

(96) ngana-ng ngud-du ngadhu-nha dhalima gabi-di
1sg-DAT *horse*-ERG 1sg-ALL *lead*-PRES *water*-ALL
My horse leads me to water.

(iii) extensions of humans, as in:

(97) ngana-ng dyinabuga-lu balu-nha warni-ng
1sg-DAT *boots*-ERG 3sg-ALL *trip*-PAST-PERF
My boots tripped him.

(98) ngana-ng dyina-nggu balu-nha gani-n
1sg-DAT *foot*-ERG 3sg-ACC *kick*-PAST
My foot kicked him.

The only inanimate noun ergative subjects are those referring to body parts (or clothing) or to inanimate entities under human control (potential instruments). Other inanimate transitive subjects are marked with the absolutive:

(99) gadyi-lu balu-nha mula-nda-n
spear-ERG 3sg-ALL *die*-CAUSE-PAST
A spear killed him.

(100) gabi-lu ngadhu-nha ngabu-n
water-ERG 1sg-ALL *wet*-PAST
Water wet me.

(101) wadyan-du wama dhaba-la
fire-ERG *food*-ABS *burn*-FUT
The fire'll burn the food.

(102) mandala garang dhama-n
cloud-ABS *sun*-ABS *cover*-PAST
Clouds covered the sun.

(b) Demonstratives and interrogatives in the ergative may only appear as subjects in sentence-initial position, never as 'peripherals':

(103) banha-lu balu-nha bu-ngung
that-ERG 3sg-ACC *hit*-PAST-PERF
That one hit him.

not

(104) *ngadhu balu-nha banha-lu bu-ngung
1sg-ABS 3sg-ALL *that*-ERG *hit*-PAST-PERF
I hit him with that one.

Similarly,

(105) nha-lu balu-nha bu-ngung
what-ERG 3sg-ACC *hit*-PAST-PERF
What hit him?

not

(106) *balu balu-nha nha-lu bu-ngung
3sg-ABS 3sg-ACC *what*-ERG *hit*-PAST-PERF
He hit him with what?

[2] Instrumental uses of the ergative include:

(a) Marking the object, accessory, or tool involved in performing the action carried out by the transitive subject NP, as in:

(107) yamadyi-lu gadya-nha mara-nggu bu-ngung
man-ERG *child*-ALL *hand*-ERG *hit*-PAST-PERF
The man hit the child with his hand.

(108) bagali-lu magulga winalya wala-lgu gadyi-lu
man-ERG *directly*-ABS *fish*-ABS *spear*-PURP *spear*-ERG
The man's going to spear the fish soon.

(109) dhanha guwiyal badama-n dhudhu-nggu
3pl-ABS *goanna*-ABS *chase*-PAST *dog*-ERG
They chased the goanna with dogs.

(110) balu gadyi-lu ya-ngguwa
3sg-ABS *spear*-ERG *go*-PRES
He's walking with (the aid of) a spear.

(111) dyuba gabi-nggu nhabala-ba-ya
child-ABS *water*-ERG *do something*-INCH-PRES
Do something with water to the baby (Wash the baby).

(112) ngadhu magulga yuwa-la rifle-du balu-nha
1sg-ABS *directly*-ABS *shoot*-FUT *rifle*-ERG 3sg-ACC
I'll shoot him with a rifle.

(b) Marking the ma-erial out of which something is made, as in:

(113) balu mindyu baranya marlu-nggu ngunya
3sg-ABS *shirt*-ABS *make*-PRES *kangaroo*-ERG *skin*-ABS
He's making a shirt out of kangaroo skins.

This use of the ergative is rare. The function is usually encoded as a whole-part relationship, by two juxtaposed absolutive nominals:

(114) balu wagu baranya winda birili
3sg-ABS *camp*-ABS *make*-PRES *tree*-ABS *leaf*-ABS
He's making a camp out of branches.

Similarly,

(115) balu gurara/bagurda wama baranya
3sg-ABS *gurara/bagurda*-ABS *food*-ABS *make*-PRES
He's making a damper out of gurara/bagurda seeds.

(c) Ergative nouns referring to body parts in quasi-instrumental function[14] with sense/perception verbs in constructions like:

(116) ngadhu balu-nha gulga-nggu minu-wa
1sg-ABS 3sg-ACC *ear*-ERG *show*-PRES
lit. *I showed him with my ears*, i.e. *I listened to him.*

(117) nhundu ngadhu-nha gulga-nggu guwa-nda
2sg-ABS 1sg-ACC *ear*-ERG *yes*-CAUS-PRES
Are you listening to me? (with your ears)?

With some verbs of bodily function, the instrumental is required to supplement the meaning expressed by the verb, as in:

(118) ngadhu yira-nggu bandi-n nha-ngung
1sg-ABS *mouth*-ERG *taste/smell*-PAST *see/look*-PAST-PERF
I tasted it (with my mouth) to see what it was like. vs.

(119) ngadhu mulya-nggu bandi-n
1sg-ABS *nose/face*-ERG *taste/smell*-PAST
I smelt it.

(d) In sentences like the following, an ergative (instrumental) noun names the predicate of the clause:

(120) balu dyina-nggu murdi-ngga
3sg-ABS *foot*-ERG *cold*-LOC
He's walking around in the cold.

3.2.2.4 Locative

All nominals have a locative form. Its principal functions include the marking of:

[1] Spatial location and range (with motion and stance verbs):

(121) minga ngadhu-la nyina-ga
ant-ABS 1sg-LOC *sit*-PRES
The ant is sitting on me.

(122) nha-la balu ngarri-ya
what-LOC 3sg-ABS *lie*-PRES
What's he lying on?

(123) baranya-la nha-wa marda-ngga wara-lgu
make/fix-FUT *watch/look/see*-FUT/IMP *stone*-LOC *fall*-PURP
Be careful or you'll fall over a stone.

(124) ngawu nhinha-la banha-la biragili-
egg-ABS *this*-LOC *that*-LOC *leaves*-ABS
(Put) one egg here, (one egg) there, (arcund in a circle) in the leaves.

(125) balu garlgarl-da ya-ngguwa
3sg-ABS *bush*-LOC *go*-PRES
He's walking around in the bush.

(126) balu gabidyi-la ya-ngguwa
3sg-ABS *rain*-LOC *go*-PRES
He's walking around in the rain.

(127) dhudhu ngunuru-la marran-da dyambarda-ba-ya
dog-ABS *middle*-LOC *sheep*-LOC *run*-INCH-PRES
The dog is running through the sheep.

A locative complement is obligatory with such verbs as those in [1] above (see classification of obligatory constituents 5.1.1).

[2] Temporal location and setting:

(128) yurda yurda murdi-ngga
later-ABS *later*-ABS *cold*-LOC
Later on, when it gets cold (i.e. *in the cold*).

(129) marru-ngga walba-ngga wanda-ngga
evening-LOC *hot*-LOC *?* -LOC
This afternoon, tonight *in summer* *in winter*

(130) bugul-aba-n winda-ngga dyuba-ngga
already-INCH-PAST *tree*-LOC *child*-LOC
A long time ago in the bush in my childhood.

[3] The locative case can also indicate (some instances of) the comitative relation:

(131) ngadhu ngana-ng mama-la ya-nung
1sg-ABS 1sg-DAT *father*-LOC *go*-PAST-PERF
I went with my father.

(132) ngana-ng babinyu ngadhu-la nyina-ga
1sg-DAT *friend*-ABS 1sg-LOC *sit*-PRES
My friend is staying with me.

(133) ngana-la nhundu ya-nung
who-LOC 2sg-ABS *go*-PAST-PERF
Who did you go with?

(134) nha-la ya-ngguwa - mataka-la ya-ngguwa
what-LOC *go*-PRES *car*-LOC *go*-PRES
What are you going with/by? - By car.

Note that the locative form for consonant-final stems when indicating the comitative function is -ala, as opposed to -da for local functions (see 3.0.1.2[4]):

(135) ngadhu Sid-ala ya-ngguwa
1sg-ABS *Sid*-LOC *go*-PRES
I'm going with Sid. vs.

(136) minga Sid-da nyina-ga
ant-ABS *Sid*-LOC *sit*-PRES
The ant is on Sid.

The locative form for vowel-final stems in both local and comitative functions is identical (3.0.1.2[4]):

(137) ngalidya igu-da nyingan-gardi ya-nung
1du-ABS *elder sister*-LOC *Ningan*-SIDE *go*-PAST-PERF
We two, my elder sister and I, were walking around at Ningan station.

(138) ngalidya babinyu-da gabi ngal-ang
1du-ABS *friend*-LOC *water*-ABS *swallow*-PAST-PERF
We two, my friend and I, were drinking wine in the bush.

These last two cases (137) and (138) are instances of the pronoun/noun inclusion construction noted in 3.0.1.2.

[4] Cause/reason:

(139) ngadhu budu-ngga ya-ra gabi-la
1sg-ABS *inside*-LOC *go*-FUT/IMP *water*-LOC
I'll go inside because of the rain.

(140) ngadhu murdi-dya windu-la
1sg-ABS *cold*-REFL/RECIP-PRES *wind*-LOC
I'm shivering because of the cold.

(141) wama dhama-la warayi-la
food-ABS *cover*-FUT *fly*-LOC
Cover the food because of the flies.

(142) balu yadabu-nda murni-la
3sg-ABS *hide*-CAUS-PRES *woman*-LOC
He's hiding from the woman.

(143) balu murla ngana-ng mama mabarn-da
3sg-ABS *dead*-ABS 1sg-DAT *father*-ABS *medicine/magic*-LOC
He's dead because of my father's medicine.

This function can also be marked by the dative case (see below 3.2.2.5). What semantic contrast, if any, this variation reflects, is unclear.

[5] The object of comparison:

(144) balu yagu marda ga-ngguwa ngadhu-la
3sg-ABS *big*-ABS *stone*-ABS *hold*-PRES 1sg-LOC
He's got more money than me.

(145) ngadhu ngardi dyambarda-ba-n Peter-la
1sg-ABS *hard*-ABS *run*-INCH-PAST *Peter*-LOC
I run faster than Peter.

3.2.2.4.1 'Specialisation' of locative allomorphs

Some instances of semantically conditioned specialisation of locative allomorphs were noted in 3.0.1.2, for example, /-la/ for kin and proper names. The data suggests the following additional instances of specialisation:

(a) Proximal and distal deixis are distinguished by -ngga/-la:

(146) balu nhinha-la winda-ngga nyina-ga
3sg-ABS *this*-LOC *tree*-LOC *sit*-PRES
He's sitting in this tree here. vs.

(147) balu nhandi-la winda-la nyina-ga
3sg-ABS *there*-LOC *tree*-LOC *sit*-PRES
He's sitting in that tree over there.

Similarly,

(148) balu gabi-ngga nyina-ga
3sg-ABS *water*-LOC *sit*-PRES
He's sitting in the water (here). vs.

(149) balu nhandi-la gabi-la nyina-ga
3sg-ABS *there*-LOC *water*-LOC *sit*-PRES
He's sitting over there in the water.

(b) With the interrogative root nha- *what*, this same contrast distinguishes temporal and spatial locative: the interrogative nha + LOC -la (cf. (122) above) means *on what*, nha + LOC -ngga means *when* (see 3.0.1.3).

(c) Finally, some contrast appears to be marked by the choice of locative allomorph in sentences like:

(150) yalibidhi dhugala ngawu-la
emu-ABS *tap/bump*-NON-PAST *egg*-LOC
The emu taps on the egg. vs.

(151) balu yan ngawu-ngga nyina-ga
3sg-ABS *come*-FUT *egg*-LOC *sit*-PRES
He'll come and sit on the egg.

i.e. ngawu *egg* appears with both -la and -ngga suffixes. Though several hypotheses suggest themselves (i.e. 'assimilation' to the form of the inflection of the adjacent verb, alternation based on the inherent semantics of the predicate (action vs. stance)), data is insufficient to draw any conclusions. The above occurrence was restricted to one narrative text. There is otherwise no evidence one way or another for the locative being a collapsing of two formally distinct cases, or conversely, a 'split' of a unified, though multiply marked case.

3.2.2.4.2 'Rare' locative forms: -wala and -lga

There are several instances in the corpus of the suffixes -wala and -lga marking the locative path:

(152) ngadhu nganga-wala ya-ngguwa
1sg-ABS *cave*-LOC *go*-PRES
I'm going through cave country. vs.

(153) ngadhu nganga-ngga nyina-ga
1sg-ABS *cave*-LOC *sit*-PRES
I am sitting in the cave.

Similarly,

(154) ngadhu garlgarl-da ya-ngguwa
1sg-ABS *bush*-LOC *go*-PRES
I'm going through the bush/I'm walking around in the bush. vs.

(155) ngadhu garlgarl-wala ya-ngguwa
1sg-ABS *bush*-LOC *go*-PRES
I'm going through bush country.

(156) ngadhu marda-ngga nyina-ga
1sg-ABS *stone*-LOC *sit*-PRES
I'm sitting on the stone/rock. vs.

(157) ngadhu marda-lga ya-ngguwa
1sg-ABS *stone*-LOC *go*-PRES
I'm walking through the hills.

My data suggest that these suffixes, whatever their previous status, are now fossilised. Blake (1977:54) notes the existence of identical suffixes of the same function in Nunggubuyu, N.T. (Heath, in Blake 1977).

3.2.2.5 Dative

All nominals have a dative case form. Its functions include marking:

[1] The animate beneficiary/recipient:

(158) nhundu gurriya ngana-ng yu-wa ngana-ng yu-wa baranymarda-nha
2sg-ABS *one*-ABS 1sg-DAT *give*-FUT/IMP 1sg-DAT *give*-FUT/IMP *good one*-ACC
You give me one! Give me a good one!

(159) Sid-gu dyudu yu-wa
Sid-DAT *smoke*-ABS *give*-FUT/IMP
Give Sid a smoke.

(160) nhinha wama banha-wu murni
this-ABS *food*-ABS *that*-DAT *woman*-ABS
This food is for that old woman.

[2] Possessor in an alienable possession construction:

(161) banha dhudhu Joseph-gu
that-ABS *dog*-ABS *Joseph*-DAT
That dog is Joseph's.

(162) dhudhu-mi town-gu
dog-pl-ABS *town*-DAT
The town's dogs.

(163) ngana-ng mama-wu mindyu-la dhudhu nyina-ga
1sg-DAT *father*-DAT *swag*-LOC *dog*-ABS *sit*-PRES
The dog's sitting on my father's swag.

[3] NPs in dative case also mark the 'reason/purpose or indirect cause' (Blake 1977:57) in examples like:

(164) dhanha wula-ng dhanha-ng gadya-wu
3pl-ABS *cry*-PAST 3pl-DAT *child*-DAT
They cried for their child.

(165) ngadhu murda gabi-yu
1sg-ABS *thirsty*-ABS *water*-DAT
I'm thirsty for water.

(166) dhanha dhugara-ba-n gabi-yu
3pl-ABS *happy*-INCH-PAST *water*-DAT
They rejoiced for rain.

(167) ngadhu dyudya-wu murni dyindu-ba-ya
1sg-ABS *old*-DAT *woman*-ABS *jealous*-INCH-PRES
I'm jealous of the old woman.

(168) ngadhu wama-wu / gabi-yu wadha
1sg-ABS *food*-DAT / *water*-DAT *look for*-PRES
I'm going looking for tucker/water.

(169) ngadhu ya-ngguwa rifle-gu
1sg-ABS *go*-PRES *rifle*-DAT
I'm going to get the rifle.

(170) nha-wu nhundu yan-ang
what-DAT 2sg-ABS *come*-PAST-PERF
What for did you come?

See 3.2.2.4 above for locative case forms marking reason/indirect cause. The contrast between locative and dative in this function is unclear.

[4] Goal or purpose of a motion activity is commonly marked by a compound of dative and allative (-gudi- see below 3.2.2.6.1).

[5] A dative nominal is necessary, it appears, with some transaction verbs:

(171) murni-nggu Joe-yu dhalga-n wangga-ng
woman-ERG *Joe*-DAT *send*-PAST *speak/say*-PAST
The woman sent Joe a message.

3.2.2.6 Allative

All nominals have an allative form. The allative marks the goal towards which an action is directed:

(172) ngadhu Mullewa-di ya-ngguwa
1sg-ABS *Mullewa*-ALL *go*-PRES
I'm going to Mullewa.

(173) dyuba winda-ngga widila-ngguwa barna-di
child-ABS *tree*-LOC *swing*-PRES *ground*-ALL
The child swung down from the tree.

(174) ngadhu balu-nha school-gudi yidya-n
1sg-ABS 3sg-ACC *school*-ALL *take*-PAST
I took him to school.

Some utterance verbs, such as dharingga *to lie* and miriya *to shout* appear to require an allative complement (see 4.4.2[4]):

(175) murni-nggu balu-di dharingga
woman-ERG 3sg-ALL *lie*-PRES
The woman is lying to him.

(176) murni-nggu yigu-di mira-ng
woman-ERG *elder sister*-ALL *shout*-PAST
The woman shouted to my sister.

(see also Ergative distribution 5.1.2).

3.2.2.6.1 Dative-allative

The dative + allative compound -gudi marks the goal of a motion activity, as in:

(177) ngadhu mama-gudi ya-ngguwa
1sg-ABS *father*-ALL *go*-PRES
I'm going to my father's (for a purpose).

(178) balu gun-gudi ya-ngguwa
3sg-ABS *gun*-ALL *go*-PRES
He's going for the gun (to get the gun)[15]

Further examples of the dative-allative compound are:

(179) ngadhu balu-nha school-gudi idya-n
1sg-ABS 3sg-ACC *school*-ALL *take*-PAST
I took him to school.

(180) ngadhu marran shed-gudi ma-ra ya-nung
1sg-ABS *sheep*-ABS *shed*-ALL *take*-FUT *go*-PAST-PERF
I took the sheep to the shed.

(181) ngadhu Peter-gudi ya-ngguwa
1sg-ABS *Peter*-ALL *go*-PRES
I'm going to Peter's.

Although all nominals have allative forms, two restrictions should be noted. The allative of pronouns is always the dative-allative (Austin 1981b:218, notes this same phenomenon in other W.A. languages of the Pilbara, northern neighbours of the Badimaya language). Interrogatives and demonstratives by contrast have only 'simple allative' forms (i.e. the combination dative-allative is not possible).

3.2.2.7 Ablative

The ablative case marks source (point of origin):

(182) balu gabi ira-ngun wadyu-n
3sg-ABS *water*-ABS *mouth*-ABL *emerge*-PAST
He spat water out of his mouth.

(183) gumal winda-ngun wala-ng
possum-ABS *tree*-ABL *fall*-PAST-PERF
The possum fell out of the tree.

(184) wandi-gardi-ngun yan-da
which-SIDE-ABL *come*-PRES
Which side are you from?

(185) dyudya-wu dhudhu-nggu dyambarda-ba-n marlu-ngun
old-DAT *dog*-ERG *run*-INCH-PAST *kangaroo*-ABL
The old (man's) dog ran away from the kangaroo.

(186) gabi yagu dha-ngun
water-ABS *much*-Ø *hole*-ABL
Was there much water in the hole?

Pronouns do not have ablative forms (3.0.2). The ablative of interrogatives (3.0.4) and demonstratives (3.0.3) has the form -gardingun, as in (184) above. (See also -gardi *side*, 3.3.3.)

3.3 Nominal derivations

This section contains a description of suffixes which may be added to nominal bases to form derived stems. In terms of their distribution and function, the suffixes fall into two groups:

(a) Those suffixes which are syntactically significant, i.e. which converts a stem into an adverb, predicate or coordinated stem. Only one suffix from this group may be attached to the nominal base. These suffixes are -bari *having*, -banha *and that*, -gardi *side*, -idya *like*, -gula *without* and -bara *first* (3.3.1-3.3.6 incl.).

(b) The second group involves suffixes which merely provide some type of semantic qualification of the nominal base with which they occur. These suffixes are -muga 'kin proprietive', -gudhadya 'kin dual', -mi 'plural', -gurany 'endearment' and -dula 'diminutive' (3.3.7-3.3.11 incl.). More than one of these suffixes can occur in combination, as well as a combination of suffixes from group (a) and (b), with group (b) suffixes preceding those of (a). Some examples are:

(187) balu ngud-bari ya-ngguwa
3sg-ABS *horse*-HAVE *go*-PRES
He's going by horse. (stem + suffix from group (a))

(188) balu gami-gurany-bari ya-ngguwa
3sg-ABS *grandfather-dear*-HAVE *go*-PRES
He's taking his dear old grandfather. (stem + suffix from (b) and (a)).

(189) ngana-ng dyuba-gurany-dula
1sg-DAT *child-dear-little*
My dear little baby. (stem + suffix from group (b)).

It is rarely the case in the data that a derived stem is marked for case, although case inflections may be added.

3.3.1 -bari 'having'

The 'having' suffix -bari may be added to nouns only. The derived forms have the sense of temporary possession, accompaniment, or association. The N-bari constructions may function syntactically as attributive/ascriptive predicates and as adverbials (see 5.1.7). Only two instances of N-bari constructions with case marking have been noted in the corpus (see for example (213) below). Some uses of the -bari suffix are:

[1] To mark the physical characteristics of persons:

(190) balu ngulya ngunya-bari
3sg-ABS *armpit*-ABS *hair*-HAVE
He has hairy armpits.

(191) balu midadu ngunya-bari
3sg-ABS *chest*-ABS *hair*-HAVE
He has a hairy chest.

(192) dyuba wilgi-bari
child-ABS *dribble*-HAVE
The baby is a dribbler.

(193) bagali dyudi-bari
man-ABS *scar*-HAVE
The man's got scars (he's initiated).

[2] To mark the characteristics of places and things:

(194) gurara bandu-bari
Kurara-ABS *thorn*-HAVE
The kurara tree's got thorns.

(195) yuru winda gabi-bari
feed-ABS *tree*-ABS *water*-HAVE
The Christmas tree's got water (in its roots).

(196) gadyi milgu-bari
spear-ABS *point*-HAVE
The spear's got a sharp point.

[3] To mark permanent physical and mental states:

(197) balu mabarn-bari
3sg-ABS *medicine*-HAVE
He's got the medicine/magic (bush-doctor).

(198) gudadu barany-bari
heart-ABS *good*-HAVE
His heart's good (healthy).

(199) balu mulya- barany-bari
3sg-ABS *face*-ABS- *good*-HAVE
His face has goodness (he's handsome).

(200) balu galadya-bari
3sg-ABS *sick*-HAVE
He's got the sickness.

However, it is far more common to express states, both physical and mental, by means of the inchoative -ba- (4.4.1) added to the noun. This allows a tense/aspect distinction (see also Nominal sentences 5.1.8), as in:

(201) balu galadya-ba-n
3sg-ABS *sick*-INCH-PAST
He's got sick (but it is not known how long he'll stay in that state).

[4] To mark accompaniment, when the subject has *control* over the person or thing being accompanied:

(202) Joe dhudhu-bari/(ya-nung)
kamal-bari/
ngud-bari/
gadyi-bari/
mudyi-bari
Joe dog-HAVE/(*go*-PAST)
camel-HAVE/
horse-HAVE/
spear-HAVE/
spouse-HAVE
Joe went with his dog, etc.

(203) balu dyuba-mi-bari dyambarda-ba-ya
3sg-ABS *child*-pl-HAVE *run*-INCH-PRES
He's running with his kids.

(204) yurda ngana yan-da kamal gadya-bari
later-ABS *who*-ABS *come*-PRES *camel*-ABS *child*-HAVE
By and by who's coming? A camel with her young one.

(205) yurda balu malaga-ngun yan-da gabi-bari
later-ABS 3sg-ABS *back*-ABL *come*-PRES *water*-HAVE
Later he comes back with water.

As noted above, -bari appears to mark accompaniment with humans when a certain *control* can be exercised (e.g. -bari appears to be used specifically with wife and children). Accompaniment may also be expressed by the locative-comitative (3.2.2.4) and the coordinating suffix -banha. The differences in usage are discussed in 3.3.2.1 below.

[5] -bari vs. the ergative-instrumental case. The N-bari construction is used to refer to inanimate objects which merely accompany the subject. If the object or thing is to be used as an instrument, then an N+ERG is required. The distinction is illustrated in the following sentences:

(206) miru-bari gadyi-nggu wala-ng
thrower-HAVE *spear*-ERG *spear*-PAST
I speared him with a spear from a spear thrower.

(207) balu gadyi-bari ya-ngguwa
3sg-ABS *spear*-HAVE *go*-PRES
He's going with spears (on him).

(208) balu gadyi-lu ya-ngguwa
3sg-ABS *spear*-ERG *go*-PRES
He's going with (the aid of) a spear.

(209) balu guwiyal badama-n dhudhu-bari
3sg-ABS *goanna*-ABS *chase*-PAST *dog*-HAVE
He and the dogs chased the goanna.

(210) balu guwiyal badama-n dhudhu-nggu
3sg-ABS *goanna*-ABS *chase*-PAST *dog*-ERG
He chased the goanna with (the help of) the dog.

One exception to the above hypothesis was noted in the use of wadyan *fire*. According to my informant, it is not possible to say:

(211) *balu guwiyal badama-n wadyan-du
3sg-ABS *goanna*-ABS *chase*-PAST *fire*-ERG
He chased the goanna with (the aid of) fire.

That is, it is not possible to use wadyan + du in a sentence-peripheral position. Either of the following is acceptable, however:

(212) balu guwiyal badama-n wadyan-bari
3sg-ABS *goanna*-ABS *chase*-PAST *fire*-HAVE
He chased the goanna with fire.

(213) balu guwiyal badama-n wadyan-bari-lu
3sg-ABS *goanna*-ABS *chase*-PAST *fire*-HAVE-ERG
He chased the goanna with fire.

As noted in 3.2.2.3 it is possible to say:

(214) wadyan-du wama dhaba-la (≡101)
fire-ERG *food*-ABS *burn*-FUT
The fire will burn the food.

There is insufficient data at present to draw any conclusions as to whether a specialisation of the ergative form -du in fact exists. The restriction of -du to sentence-initial position in (214) is the only instance of this kind in the data. (See also 3.2.2.3 for other examples of -du.)

3.3.2 -banha 'coordinator'

The coordinating suffix -banha may be added to nouns to express accompaniment in structures of the form

$$NP\left[\begin{matrix}[NP\ (banha) & NP\ (banha)] \\ (-coord) & (-coord)\end{matrix}\right]NP$$

(see also 3.1.1). It is not known whether -banha as a coordinator is related to the demonstrative banha (3.0.3):

(215) dhanha mudimi ya-ngguwa Dyiga-banha Sid-banha Mullewa-di
3pl-ABS *lot/mob/all*-ABS *go*-PRES *snake*-COORD *Sid*-COORD *Mullewa*-ALL
That lot, Sid and Dyiga are going to Mullewa.

That is, it is possible to attach -banha to all NPs in the sentence for added focus (as above and also 3.1.1). When -banha is attached to only one element of the coordinator NP, it must be attached to the final element (see below). NPs with the -banha suffix do not take any case marking.

3.3.2.1 The use of -bari vs. -banha vs. locative-comitative -la ∿ -ala. When used to express accompaniment, -bari, -banha, and -la ∿ -ala may be distinguished as follows:

[1] -bari and -banha express accompaniment between two (or more) persons (or animals) when the referents are nouns:

(216) ngadhu dhudhu-bari ya-ngguwa
1sg-ABS *dog*-HAVE *go*-PRES
I'm going with my dog.

(217) ngadhu dhudhu-banha ya-ngguwa
1sg-ABS *dog*-COORD *go*-PRES
I'm taking the dogs, the dogs and I are going.

(218) ngadhu ngud/myul-bari ya-ngguwa
1sg-ABS *horse/mule*-HAVE *go*-PRES
I'm going by horse/mule.

(219) ngadhu myul/ngud-banha ya-ngguwa
1sg-ABS *mule/horse*-COORD *go*-PRES
I'm taking the mules/horses, etc.

However, -bari is used when a sense of *control* is implied. Control can be exercised over one's wife, children, animals, but never over one's friends:

(220) *Joe Sid-bari Mullewa-gudi ya-ngguwa
Joe-ABS *Sid*-HAVE *Mullewa*-ALL *go*-PRES

but,

(221) Joe Sid-banha Mullewa-gudi ya-ngguwa
Joe-ABS *Sid*-COORD *Mullewa*-ALL *go*-PRES
Joe and Sid are going to Mullewa.

However,

(222) ngadhu dyuba-mi-bari/banha Mullewa-gudi ya-ngguwa
1sg-ABS *child*-PL-HAVE/COORD *Mullewa*-ALL *go*-PRES
I'm going to Mullewa with my kids (I'm taking my kids to Mullewa). vs.
My kids and I are going to Mullewa.

(223) ngadhu mudyi-bari/banha Mullewa-gudi ya-ngguwa
1sg-ABS *spouse*-HAVE/COORD *Mullewa*-ALL *go*-PRES
I'm going to Mullewa with my wife. vs.
My wife and I are going to Mullewa.
(cf. also (188) above).

As best as I can determine -banha is used to focus a particular coordinate constituent. It is far more common usage to find coordinating expressed by juxtaposition:

(224) ngadhu dhudhu bu-ngung gadyi-lu marda-banha
1sg-ABS *dog*-ABS *hit*-PAST-PERF *spear*-ERG *stone*-COORD
I killed the dog with a spear and a stone.

(225) bagali-lu mudyi-bari dhudhu bu-ngung
man-ERG *spouse*-HAVE *dog*-ABS *hit*-PAST-PERF
The man and his wife killed the dog.

(226) Joe-lu Sid-banha marlu bu-ngung
Joe-ERG *Sid*-COORD *kangaroo*-ABS *hit*-PAST-PERF
Joe and Sid killed the kangaroo.

(227) dyidamin-ami nyina-ga winda-ngga barna-ngga
bird-PL *sit*-PRES *tree*-LOC *ground*-LOC
The birds are sitting in the trees and on the ground.

NB
(228) ngana-ng mudyi-bari dyuba-mi-banha ya-nung
1sg-DAT *spouse*-HAVE *child*-PL-COORD *go*-PAST-PERF
OR
(229) ngana-ng mudyi dyuba-mi-banha ya-nung
1sg-DAT *spouse*-ABS *child*-PL-COORD *go*-PAST-PERF
(I) went with my wife and kids.

not,

(231) *ngana-ng mudyi-bari-banha dhuba-mi-banha ya-nung
1sg-DAT *spouse*-HAVE-COORD *child*-PL-COORD *go*-PAST-PERF

[2] -banha vs. locative-comitative -la ∿ -ala. As noted above, -banha, in the sense of accompanying someone, is used when the referents are both nouns. If one referent is a pronoun, only the locative-comitative case may be used, e.g.:

(231) Joe Sid-banha Mullewa-di ya-ngguwa (≡221)
Joe-ABS *Sid*-COORD *Mullewa*-ALL *go*-PRES
Joe and Sid are going to Mullewa.

(232) balu Sid-ala Mullewa-di ya-ngguwa
3sg-ABS *Sid*-LOC *Mullewa*-ALL *go*-PRES
He and Sid are going to Mullewa.

[3] With non-human referents, the -bari/-banha/-la contrast is blurred:

(233) ngadhu mataka-bari/banha/la ya-ngguwa
1sg-ABS *car*-HAVE/COORD/LOC *go*-PRES
I'm going by car. (all uses equally acceptable).

3.3.3 -gardi 'side'

The -gardi *side* suffix is used with nouns, demonstratives and interrogatives. The derived stem functions adverbially in a sentence as a locational or directional (see also 5.1.7). Stems generally derived with -gardi are not found with case inflection. An exception is the use of -gardi with demonstratives and interrogatives where the ablative form is -gardingun *side* and ablative -ngun (see 3.0.3 and 3.0.4). The following sentences illustrate the use of -gardi:

(234) dhu-ngga banha-gardi
rise-LOC *that*-SIDE
On the other side of the rise.

(235) wandi-gardi-ngun ya-ngguwa
which/where-SIDE-ABL *go*-PRES
Which side are you from? OR

(236) wandi-gardi ya-ngguwa (same sense)
Where are you from?

(237) ngadhu-la nhinha-gardi ya-ra
1sg-LOC *this*-SIDE *go*-FUT/IMP
Go this side of me.

(238) marlu ngunu-gardi garda-ba-ya
kangaroo-ABS *halfway*-SIDE *cut*-INCH-PRES
Cut the kangaroo in half.

(239) balu Perth-gardi ya-ngguwa
3sg-ABS *Perth*-SIDE *go*-PRES
He's going to Perth.

(240) balu Magnet-gardi ya-nang
3sg-ABS *Magnet*-SIDE *go*-PAST-PERF
He comes from Mt Magnet.

Apart from the use of -gardingun on the interrogatives and demonstratives mentioned above, and illustrated in (235), it is far more common to find either the locative, allative, ablative case marked nominal, or a nominal with the

-gardi suffix. The -gardi suffix is used when the sense of the location or direction is less specific (either unseen or vague):

(241) marran banha-gardi ma-ra ya-ra!
sheep-ABS *that*-SIDE *take*-FUT/IMP *go*-FUT/IMP
Take the sheep over there!

(242) ngadhu Perth-gardi ya-nang
1sg-ABS *Perth*-SIDE *go*-PAST-PERF
I come from Perth.

(243) ngadhu Perth-ngun ya-nang
1sg-ABS *Perth*-ABL *come*-PAST-PERF
I come from Perth.

[2] -gardi is used to specify points of the compass by referencing the tribe on that particulat side of the Badimaya:

(244) yabaru-gardi: Yabaru side (north)
minang-gardi: Minang side (south)
gagara-gardi: Gagara side (east)
garang-gardi: Sun side (east)
wirlu-gardi: Wirlu (sea) side (west)
wanmala-gardi: Wanmala side (north-east)

[3] -gardi can also be used in the sense of *lying on one's side*:

(245) balu bimbily/wari/warru-gardi ngarriya
3sg-ABS *rib/stomach/back*-SIDE *lie*-PRES
He's lying on his side/stomach/back.

[4] also to express left- and right-handedness:

(246) dhambu-gardi *left-handed (crooked side)*
wulgu-gardi *right-handed (straight side)*

3.3.4 -yidya 'semblative'

The -yidya 'semblative' suffix can be attached to nouns, interrogatives, and demonstratives. The derived stem may function as an attribute and as an adverbial. There are no instances in the corpus of any other inflections being found with -yidya. The following sentences illustrate the usage of -yidya as:

[1] An attributive nominal predicate (see also 5.1.8):

(247) nhinha banha-yidya / banha nhinha-yidya
this *that*-LIKE *that* *this*-LIKE
This (one) is like that (one) / That (one) is like this (one).

(248) nha-yidya
what-LIKE
What's it like?

(249) ngan winda-yidya
neck-ABS *tree*-LIKE
My neck's as stiff as a stick.

[2] A manner adverbial (see also 5.1.7):

(250) bundara guru-yidya nhabala-ba-ya
star-ABS *eye*-LIKE *do something*-INCH-PRES
The stars are twinkling like eyes.

(251) balu dyambarda-ba-ya dhudhu-yidya
3sg-ABS *runs*-INCH-PRES *dog*-LIKE
He is running like a dog.

(252) balu gabi-ngga ngarriya winalyi-yidya
3sg-ABS *water*-LOC *lie*-PRES *fish*-LIKE
He's lying in the water like a fish.

[3] A juxtaposed ascriptive (5.1.6):

(253) yamadyi-lu mundung-yidya ngadhu-nha bu-ngung
man-ERG *devil*-LIKE 1sg-ACC *hit*-PAST-PERF
The man (with a face) like a devil hit me.

[4] A non-juxtaposed ascriptive:
Note in the following example the ascriptive NP goes with the nearest NP, in this case the locative:

(254) ngadhu marda-ngga nyina-ng mundung-yidya
1sg-ABS *stone*-LOC *sit*-PAST-PERF *devil*-LIKE
I sat on the rock like a devil.

3.3.5 -gula 'without'

-gula meaning *lacking* or *without*, can be added to nouns, and some sense/perception verbs, as in:

(255) ngadhu wangga-gula
1sg-ABS *speak*-WITHOUT
I can't speak.

(256) ngadhu nhagu-gula
1sg-ABS *see*-PRES-WITHOUT
I can't see.

(257) ngadhu mirnu-gula
1sg-ABS *know*-WITHOUT
I don't know.

When -gula is used with nouns, it can be viewed as the negative of -bari *having* (3.3.1):

(258) marda-gula
stone-WITHOUT
no money

(259) balu mudyi-gula nyina-ga
3sg-ABS *spouse*-WITHOUT *sit*-PRES
He's got no wife (he's a bachelor).

(260) balu gadyi-gula
3sg-ABS *spear*-WITHOUT
He's going without spears.

See also section 5.4 Negation for further examples of -gula, as well as NEG particles.

3.3.6 -bara 'first'

The -bara *first* suffix is attached to body part nouns to form adverbial NPs in the sense of 'face-first', etc. (see also 5.1.7).

(261) fence-gudi bindhi mulya-bara wara-ng
fence-ALL *suddenly/straight*-ABS *face*-FIRST *fall*-PAST
(We) fell straight through the fence, face first.

Similarly,

(262) dyina-bara *feet first*
maga-bara *head first*
dyili-bara *arms first*
mara-bara *hands first*

3.3.7 -muga 'kin proprietive'

The -muga suffix may be attached to nouns only. Though I have little evidence in the data, this suffix appears to be the 'kin proprietive' suffix discussed by Breen (1976:290): "The non-singular kin proprietive is added to a kinship term x, to denote that there are two or more people involved, one of whom is in the relationship x to the others, the others are not being specified".

(263) ngana-ng yigu-muga
1sg-DAT *elder sister*-KIN PROP
My sisters.

(264) ngana-ng gurra-muga
1sg-DAT *elder-brother*-KIN PROP
My brothers.

3.3.8 -gudhadya 'kin dual'

The 'dual' suffix -gudhadya may be attached to nouns, as in (265)-(269) below to denote certain dual kin relationships found in many traditional communities (see Radcliffe-Brown for WA languages, 1913:143):

(265) gami-gudhadya
grandfather/grandmother
grandfather/mother-grandson/daughter

(266) mama-gudhadya
father
father and son

(267) ganggu-gudhadya
uncle
uncle and nephew

(268) mudyi-gudhadya
spouse
husband and wife

(269) yigu-gudhadya
elder sister
two sisters

-gudhadya is possibly a compound of the forms gudha *two* and -dya, pronominal 'dual', reflexive/reciprocal (see 3.0.2 and 4.4.1[3]), though evidence for this analysis is lacking.

3.3.9 -mi 'plural'

The plural suffix -mi (-ami following consonants) is used with nouns and pronouns:

(270) dyuba dyambarda-ba-ya dhudhu-mi/bagali-mi/murni-mi
child-ABS *run*-INCH-PRES *dogs/men/women*-PL
The child is running away from the dogs/men/women.

(271) dhanha dyuba-mi dhadha-mi dhudhu bu-ngung
3pl-ABS *child*-PL *naughty*-PL *dog*-ABS *hit*-PAST-PERF
Those naughty kids hit the dog.

(272) wandi ngud-ami ya-nung
where-ABS *horse*-PL *go*-PAST-PERF
Where's that mob of horses gone?

When the -mi suffix is used, there are rarely instances of case marking.

3.3.10 The -gurany suffix is added to nouns referring to kin terms to express endearment:

(273) ngadhu ngana-ng gami-gurany Yalgoo-di ya-ngguwa
1sg-ABS 1sg-DAT *grandfather-dear* *Yalgoo*-ALL *go*-PRES
I'm going to my dear grandfather, to Yalgoo.

3.3.11 The -dula suffix is used, along with the free form descriptive noun guluny *little*, as a diminutive:[16]

(274) marlu-guluny-dula (cf. marlu guluny *baby kangaroo*)

(275) dhudhu-guluny-dula (cf. dhudhu guluny *puppy*)

(276) dyidamin-guluny-dula (cf. dyidamin guluny *baby bird*)

There are also other instances of -dula in the corpus:

(i) yira-dula *language*, yira *mouth*, and the nominalisation

(ii) wirdula *favourite*, wiranda *to like, fancy*.

It is not known whether the suffixes are semantically related to the diminutive usage listed above (see also 4.7).

4. VERBS

The category verb can be defined morphologically as a class of items which obligatorily take one of a set of inflectional suffixes, some of which are zero. In main clauses, these inflections mark tense, aspect, mood and purpose. In subordinate clauses, verbs have an additional 'lest' inflection. A number of inflectional (sub-)classes may be distinguished on the basis of variations in tense morphology. These inflectional classes do not, however, correspond to differences in valency/transitivity, i.e. the number of arguments a verb is likely to have (4.3).

All verb forms consist minimally of a verb stem plus an inflectional suffix, except the imperative form, which is identical to the uninflected stem of the verb (see also 4.1.1).

Verb stems can be classified into *base* stems or *derived* stems (4.4). Base stems (4.4.2) consist of a verb root, or a root plus a suffix which for that particular stem is 'frozen' or inherent, rather than productive. Derived stems are stems formed by the addition of one or more derivational suffixes (-nda 'causative', -ba 'inchoative', -dya 'reflexive/reciprocal'). These suffixes are discussed in 4.4.1. Verb stems may be reduplicated (4.6), or form part of a compound (4.5).

4.1 Inflectional classes

Badimaya verb subclasses are distinguished on the basis of the tense system (what tense contrasts are marked), and the tense suffix form. Most verbs distinguish clearly present, past and future tenses. A very small number of verbs showed no present-future distinction. The motivation for this 'split-tense' system is not known. Walmatjari (Hudson 1970 and 1976:653) has two distinct tense systems functioning in different moods. In Wunambal, another WA language (Vaszolyi 1976:630), the future tense is clearly marked, but seldom used. Vaszolyi notes that instead, the present tense form is used to imply future action. In Badimaya, the paradigm to be presented for each identifiable verb class and irregular verb is complete, in that it is the paradigm remembered by, and exhaustively checked with Mr Benjamin. Verbs exhibiting present-future 'neutralisation' have been assigned to a separate conjugation class here.

In terms of the number of classes and their phonological realisation, Badimaya conforms to the pattern expected of Western Australian languages and Australian languages in general (see for example Hale 1970:765; Dixon 1980:372ff). Seven main inflection classes can be distinguished, with a number of subclasses. Inflection classes may be distinguished in the first instance, according to the form of the past tense inflections; /-n/ or /-ng/.

4.1.1 The n class

This is a large open class which not only includes the base stems but also the derived stems formed by the verbalisers -nda, -ba, and -dya. The n class can be divided into two subclasses:

n1: The n1 class has a tripartite (present-past-future) tense system. This group consists of simple di- and polysyllabic base stems, and derived stems consisting of a base, to which -nda 'causative', or -ba 'inchoative' have been

added. Three subclasses can be recognised on the basis of allomorphic variations in the present forms. These are:

(a) /-ya/ following base stems ending in /i/:

ganiya *to kick*
yamiya *to swear at*

and complex stems derived by -ba-:

badyabaya *to get mad, savage*

(b) /-wa/ following base stems ending in /u/:

mirnuwa *to know*

(c) Ø follows base stems ending in /a/, and complex stems derived by -nda:

nhuga *to enter*
dha-nda *to stab, pierce*

The n1 paradigm is as follows: (Note: - refers to not applicable forms in the paradigm; ? refers to unattested forms.)

	(a) *to kick*	*to get mad*	(b) *to know*	(c) *to enter/ put*	*to stab, pierce*
present	gani-ya	badya-ba-ya	mirnu-wa	nhuga	dha-nda
past	gani-n	badya-ba-n	mirnu-n	nhuga-n	dha-nda-n
future	gani-la	badya-ba-la	mirnu-la	nhuga-la	dha-nda-la
imperative	?	-	-	nhuga	dha-nda

n2. The n2 class contains verbs with a past/non-past tense system, where the non-past form is Ø. These may be the base stems dyudura *to smoke*, ganggala *to laugh*, gundura *to snore*, dhalgala *to send*, idyara *to take*, or stems derived by the reflexive/reciprocal -dya.

The n2 paradigm is:

	to bark	*to paint each other (for a ceremony)*
present	balgura	ngandi ngandi-dya
past	balgura-n	ngandi ngandi-dya-n
future	balgura	ngandi ngandi-dya
imperative	-	ngandi ngandi-dya

4.1.2 The ng class

This is a relatively small closed class containing base stems only. Seven of these stems are monosyllabic,[17] some of which inflect irregularly. The ng class verbs have two past tense forms, marking perfective and imperfective aspect. This property distinguishes the ng class systematically from the n class. The ng class can be divided into four main subclasses according to the form of tense suffixes.

ng1. The ng1 class contains monosyllabic bases only, some of which have irregular inflections. The regular present tense form is -(ng)(g)uwa following vowels, -guwa following the consonant /-l/. The regular past perfective form is either -ngung or -nung idiosyncratically, while the past imperfective is formed by the addition of /-n/ to the present tense form of the verb. With the

exception of yanda *to come*, the imperative form of verbs in the ng class is identical to the future tense form. The paradigm for ng1 is:

	to go	*to give*	*to take, get*	*to hit*
present	ya-ngguwa	yu-nguwa	ma-ngguwa	bu-ng(g)uwa
past perfective	ya-nung	yu-ngung	ma-nung	bu-ngung
past imperfective	ya-ngguwa-n	yu-nguwa-n	ma-ngguwa-n	bu-ngguwa-n
future	ya-ra	yu-wa	ma-ra	bu-wa
imperative	ya-ra	yu-wa	ma-ra	bu-wa

	to see, look, watch
present	nha-guwa
past perfective	nha-ngung
past imperfective	nha-guwa-n
future	nha-wa
imperative	nha-wa

Consonant-final monosyllabic stems are slightly irregular:

	to swallow	*to come*
present	ngal-guwa	yan-da
past perfective	ngal-ang	yan-ang
past imperfective	-	-
future	ngal-a	yan
imperative	ngal-a	yan-a

ng2. The ng2 class contains di- and polysyllabic stems with present tense form -ngguwa. It was not possible to obtain a complete paradigm for these verbs:

	to break (in)	*to sneak*	*to fall*
present	garda-ngguwa	bida-ngguwa	wara-ngguwa
past perfective	garda-ng	bida-ng	wara-ng
past imperfective	garda-ngguwa-n	bida-ngguwa-n	wara-ngguwa-n
future	garda-la	bida-la	wara-la
imperative	-	-	wara-nggala

Other verbs in ng2 are: barangguwa *to vomit*; widilangguwa *to swing*; nganbindangguwa *to choke someone*; ngan.gangguwa *to choke on something*.

ng3. The ng3 class contains two verbs, nyinaga *to sit* and binmaga *to shine*. Its inflectional paradigm is:

	to sit	*to shine*
present	nyina-ga	binma-ga
past perfective	nyina-ng	binma-ng
past imperfective	nyina-ga-n	binma-ga-n
future	nyina-la	binma-la
imperative	nyina	binma

ng4. The ng4 class also contains two verbs, wulaya *to cry* and wanggaya *to ask, say, speak, tell*. The forms are:

	to cry	*to speak, tell, ask, say*
present	wula-ya	wangga-ya
past perfective	wula-ng	wangga-ng
past imperfective	wula-ya-n	wangga-ya-n
future	wula-la	wangga-la
imperative	-	wangga

4.1.3 Inflection functions

[1] Present. The present tense is used for reference to events that are incomplete at the temporal reference point, which for main clauses is the 'moment of speaking (MOS)' (Comrie 1976:2). That is, present tense indicates a situation that is aspectually imperfective:

(1) balu dyindu-ba-ya
3sg-ABS *jealous*-INCH-PRES
He's getting jealous.

(2) balu mudyi-nha bu-ng(g)uwa
3sg-ABS *spouse*-ACC *hit/kill*-PRES
He's hitting his wife.

In subordinate clauses, the temporal function of the present tense form is identical to that of the main clause. The temporal reference point, however, is established by the main clause verb:

(3) yurda dhanha nha-ngung mundung wima
later-ABS 3pl-ABS *see*-PAST *devil*-ABS *appear*-PRES
Later, they saw a devil appear.

Quite often in particular with 'action' verbs, the time adverb wadinya *now* was given, in addition to the present tense form, as in:

(4) ngadhu balu-nha wadinya guwa-nda
1sg-ABS 3sg-ACC *now*-ABS *yes*-CAUSE-PRES
I hear/listen to him now.

The present tense inflection is also used in future reference of past events:

(5) balu wangga-ng wirdi Minanyu-di ya-ngguwa
3sg-ABS *say*-PAST-PERF NEG *Mingenew*-ALL *go*-PRES
He said he's not going to Mingenew.

A narrative use of the present tense can be observed in examples like:

(6) ngadhu ngud ma-ra ya-nung dam-gudi balu gabi ngal-guwa...
1sg-ABS *horse*-ABS *take*-FUT *go*-PAST *dam*-ALL 3sg-ABS *water*-ABS *swallow*-PRES
I took the horse to the dam, she drinks the water ...

Statements of general truth are often made with the present tense:

(7) dyidamin wagu baranya
bird-ABS *camp*-ABS *make*-PRES
Birds build nests. (See also below for habitual/generic statements in future tense form.)

[2] Past. With verbs of the ng class, there are two distinct past tense forms marking a perfective and imperfective aspectual distinction. The perfective aspect refers to an event or action that took place some time in the past:

(8) ngadhu gawunu gurriya ma-nung Yabaru-gardi
1sg-ABS *again*-ABS *one*-ABS *take*-PAST-PERF *Yabaru*-SIDE
I again took one (a wife) from the north.

The past-imperfective form denotes either an ongoing incomplete action at the MOS:

(9) ngadhu mudyi-nha wagu-ngga nyina-ga-n
1sg-ABS *spouse*-ACC *camp*-LOC *sit*-IMPF-PAST
I have a wife at home (i.e. *she was there and still is*).

or a repetitive action.

(10) ngadhu balu-nha bu-nguwa-n
1sg-ABS 3sg-ACC *hit*-IMPF-PAST
I hit him and hit him (till he couldn't stand up any more).

With verbs of the n class there is only one past tense form. This codes the perfective aspect, as in:

(11) Joe-lu dhadha yami-n Peter-nha
Joe-ERG *bad*-ABS *swear*-PAST *Peter*-ACC
Joe said something bad to Peter (Joe swore at Peter).

The past tense form is used in negative imperative sentences (5.3) when the speaker issues a command to the addressee not to repeat something he did in the past, as in:

(12) wayi wangga nhaba-ba-n
NEG *say/talk/tell*-IMP *do something*-INCH-PAST
Don't talk like that!

(See also Imperatives in [4] below.)

[3] Future. The future tense refers to situations unrealised at the moment of speech:

(13) garang binma-la maru-gudi
sun-ABS *shine*-FUT *evening*-ALL
The sun will shine tomorrow.

(14) windu magulga yan wirlu-gardi
wind-ABS *directly*-ABS *come*-FUT *sea*-SIDE
There'll be a sea breeze soon.

(15) murni-nggu Joe-nha madya-la
woman-ERG *Joe*-ACC *wait*-FUT
The woman will wait for Joe.

Like English, the future is also used to express generic statements of expectations:

(16) ... balu yan ngawu-ngga nyina-ga dyuduwara balu wama
3sg-ABS *come*-FUT *egg*-LOC *sit*-PRES *female*-ABS 3sg-ABS *food*-ABS

gurri-la mama-lu dhama-la ngawu ...
collect-FUT *father*-ERG *cover*-FUT *egg*-ABS
... he'll come and sit on the egg, the female, she'll go and collect food, the father will cover the egg ...

(17) balu wagu branya-la barna baya-la balu mindyali gurri-la
3sg-ABS *camp*-ABS *make*-FUT *ground*-ABS *dig*-FUT 3sg-ABS *leaves*-ABS *gather*-FUT

dha-gudi idya-ra ...
hole-ALL *put*-NON-PAST
She will build her nest, dig a hole, gather leaves and put them in the hole ...

Future tense is also used in conditionals:

(18) balu ngana-ng dhudhu ngadhu balu-nha maga bu-wa marda-nggu
3sg-ABS 1sg-DAT *dog*-ABS 1sg-ABS 3sg-ACC *head*-ABS *hit*-FUT *stone*-ERG
If he were my dog, I'd hit him on the head with a stone.

[4] Imperatives. There are two types of imperatives in Badimaya. The first type, which uses the past tense form (see [2] above), is restricted to negative commands issued by the speaker ordering the addressee not to repeat something that was done in the past, e.g. (12) above. Positive and negative commands, which are unrealised at the moment of speech, are marked with the imperative form:

(19) ya-ra nyina
go-FUT/IMP *sit*-FUT/IMP
Go and sit down!

(20) wayi ya-ra
NEG *go*-FUT/IMP
Don't go!

(See also Imperative sentences 5.3.)

[5] Purposive. Intention is marked in both main and subordinate clauses by the suffix -lgu. This suffix appears to be a synthesis of the Badimaya future -la and the purposive -gu (whose nominal functions have been described in 3.2.2.5):

(21) ngadhu magulga gadyi garda-lgu
1sg-ABS *soon*-ABS *spear*-ABS *break*-PURP
I'll break that spear directly.

(22) dhudhu-nggu yan nhunhu-nha badya-lgu
dog-ERG *come*-FUT 2sg-ACC *bite*-PURP
The dog'll come and bite you.

[6] 'Lest'. This form is found on adjoined clause verbs only (5.5). It is used in constructions which serve to warn, discourage or dissuade. The following examples have been noted in the data:

(23) wirdi banha-nha ngal-a nganga(r)-bala
NEG *that*-ACC *swallow*-FUT/IMP *choke*-LEST
Don't eat that, you'll choke.

(24) marran nha-guwa-n dhudhu ngubanu ngalgu-bala
sheep-ABS *look/see/watch*-IMP-PAST *dog*-ABS *dingo*-ABS *swallow*-LEST
Watch the sheep (or) the dingoes will kill and eat them.

4.2 Valency

For the purposes of sentence description (5.1), Badimaya verbs can be classified according to their syntactic valency, where valency is determined by the number of obligatory arguments (see Lyons 1977:481; Comrie 1978). Verbs will be classified as mono-, bi-, or trivalent, although many are 'ambivalent' (Lyons 1977: 492). That is, they have more than one valency set.

For some verbs, sentential, as well as NP arguments are necessary. These will be considered below. Sentence examples corresponding to verb examples given below are found in simple (5.1) and complex (5.5) sentences.

4.2.1 Monovalent verbs

Verbs requiring an intransitive subject NP (5.1.1) only. Stems may be simple base stems, or stems derived by -ba, -nda, and -dya. For example, (i) simple base stems:

(25) dyudura *to smoke*
balgura *to bark*
nganganggguwa *to choke*
gundura *to snore*
nyawuna *to howl*
guwanda *to hear/listen*

(ii) derived stems:

(26) wanyabaya *to get frightened*
marduwabaya *to grow up*
miribaya *to change skin (snake)*
barnabaya *to sunrise*
ngubaranda *to bleed*
nhabalabaya *to do something*
yagubanda *to get bigger/gather*
nyanybadya *to shave oneself*

Verbs of this type are temporary states, involuntary processes, bodily functions, and voluntary activities. In most instances, the subject NP is functioning as an 'experiencer' (Fillmore 1968:22), except in the case of some bodily functions, and voluntary activities, where the subject is an 'agent'. One verb, dyudura *to smoke*, may take either an animate or inanimate subject: wadyan dyudura *the fire is smoking* vs. ngadhu dyudura *I am smoking (a cigarette)*, in which case the involuntary process becomes a voluntary activity. Other voluntary activities belonging to this group, apart from some derived reflexives and reciprocals noted above in (26), are the base stems gadala *to get up*, wima *to appear*.

Other voluntary activities, such as verbs of motion and rest, require an NP complement and are discussed below in 4.2.2[2].

4.2.2 Bivalent verbs

These may be subgrouped as follows:

[1] Verbs taking a transitive subject NP (5.1.1) and a direct object NP (5.1.1). These verbs may be simple base stems, or stems derived by either the inchoative -ba, the causative -nda, or the reflexive/reciprocal -dya.

(i) simple base stems:

(27) dyidyida *to tease*
ganiganiya *to perform*
bunguwa *to hit/kill*
ngalguwa *to swallow*
nganbindanguwa *to choke*
nhaguwa *to see/watch*

(ii) derived stems:

(28) mulanda *to kill*
marduwanda *to raise*
wanyanda *to frighten*

gardabaya *to cut (up)*
dyambardabaya *to drive/push*
dhadhabaya *to make sick*
dyambadya *to cause to run together*

Verbs belonging to this group are generally 'affect' verbs, but also sense/perception verbs. The subject NPs function as 'agents', and the direct object NPs as 'patients'.

[2] Verbs taking an intransitive subject NP and an NP complement (5.1.1). Verb stems in this group may be base stems, or stems derived by the addition of -nda:

(i) simple base stems:

(29) nyinaga *to sit*
ngarriya *to lie*
yangguwa *to go*
bidangguwa *to sneak*

(ii) derived stems:

(30) wagunda *to camp*

[3] Verbs with two transitive subjects. This group consists of complex stems derived by the addition of the reflexive/reciprocal suffix -dya. These stems are derived from verbs listed in 4.2.2[1] above, i.e. affect and sense/perception verbs:

(31) bungu-dya *to hit each other*
wangga-dya *to talk to each other*, etc.

[4] Verbs taking a transitive subject NP and a goal complement NP. Verb stems in this group are base stems. They are some verbs of utterance: miraya *to shout/call out*, budabuda *to tell a story*, dringga *to lie*. The subject NP functions as an agent.

[5] Verbs with a transitive subject NP and a sentential object. These verbs are the utterance verb wanggaya *to say, tell, speak, ask*, and the aspectual verbs badinda *to finish*, and gadada *to stop*. The subject NPs are functioning as agents, the sentential objects as goals.

4.2.3 Trivalent verbs

All verbs in this section require a transitive subject NP, a direct object NP, and a dative, ablative, or locative complement. Verbs in this group involve some type of exchange, with the subject as agent, the direct object as patient, and the NP complement functioning as a beneficiary or goal. The verbs in this group are: nhuga *to enter/put*, yungguwa *to give*, minuwa *to show*, midari *to lend*, dhalgala *to send*. Note that dhalgala takes a verbal object in the sense of *to send a message*:

(32) murni-nggu Joe-yu dhalga-n wangga-ng
woman-ERG *Joe*-DAT *send*-PAST *talk*-PAST
The woman sent Joe a message.

4.3 Verbal transitivity

The data from many Australian languages, which exhibit ergative case marking on nouns, support a notion of transitivity as a property of verbs. That is, each verb form is either ± transitive, either inherently as in Dyirbal (Dixon 1972), Yidiny (Dixon 1977), Ngiyambaa (Donaldson 1981), or as a derived form, as in the Pilbara languages of Western Australia (Austin 1981b:218), or both. In Badimaya, transitivity is not a property of lexical items since verb transitivity is not a constant. For example, many basic verb stems may undergo both quantitative and/or qualitative valency change without change in form (Comrie 1978:9). These verbs may be subclassified as follows:

(a) verbs requiring Ø or intransitive subject NP only: murdibaya *to get cold* and walbabaya *to get hot* are subjectless when reference is to the weather:

(33) murdi-ba-ya
cold-INCH-PRES
It's getting cold vs.

(34) ngadhu murdi-ba-ya
1sg-ABS *cold*-INCH-PRES
I'm getting cold

(b) verbs requiring either an intransitive subject NP or a transitive subject and a direct object NP. These verbs include: dhadhabaya *to get/make sick*, guwanda *listen, hear, feel*, dyambardabaya *to run/drive*, gurubaya *to wake up/awaken*, dhugulya *beat, tap*, nhaguwa *to see, watch*, wanggaya *to speak, tell, ask*, dhaba *to burn, cook*, bandiya *to smell*, binmaga *to shine, light*:

(35) dhuru bandi-ya
meat-ABS *smell*-PRES
The meat smells. vs.

(36) ngadhu dhuru bandi-ya
1sg-ABS *meat*-ABS *smell*-PRES
I smell the meat.

(37) garang binma-ga
sun-ABS *shine*-PRES
The sun is shining. vs.

(38) ngadhu wadyan binma-la
1sg-ABS *fire*-ABS *light*-FUT
I'll light the fire.

(c) verbs requiring either an intransitive subject only, or a transitive subject and a goal complement NP. These verbs include: ganggala *to laugh*, dharingga *to lie*, burdaburda *to tell a story:*

(39) murni ganggala
woman-ABS *laugh*-PRES
The woman is laughing. vs.

(40) murni-nggu ganggala mudyi-yu
woman-ERG *laugh*-PRES *spouse*-DATE
The woman is laughing at her husband.

One verb, miraya *to call out* was recorded as taking, in its bivalant function, either a transitive subject NP and a goal complement NP, or a transitive subject NP and a direct object NP, with slight meaning differences. The three possibilities of the use of miraya *to call out* are:

(41) ngud mira.ya
horse-ABS *call out*-PRES
The horse is neighing.

(42) yigu-lu ngadhu-nha mira-ng
elder sister-ERG 1sg-ACC *call out*-PAST-PERF
My elder sister called me.

(43) ngadhu yigu-di mira-ng
1sg-ABS *elder sister*-ALL *call out*-PAST-PERF
I shouted at my sister.

(d) verbs requiring either an intransitive subject NP and an NP complement, or a transitive subject, a direct object, and a complement NP. The verb nhuga *to enter/put* belongs to this category:

(44) balu minda-di nhuga-n
3sg-ABS *house*-ALL *enter*-PAST
He entered the house.

(45) ngadhu balu-nha gabi-ngga nhuga-n
1sg-ABS 3sg-ACC *water*-LOC *put*-PAST
I put him in the water.

Verbs derived by means of the suffixes -ba 'inchoative' and -nda 'causative' are similarly ambivalent.

As noted in 4.4.1[2], the inchoative suffix -ba- derives one or two argument verbs:

(46) balu dyudya-ba-ya
3sg-ABS *old*-INCH-PRES
He's getting old.

(47) ngadhu dhuru garda-ba-ya
1sg-ABS *meat*-ABS *cut*-INCH-PRES
I'm cutting the meat.

or ambivalent verbs:

(48) Joe guru-ba-n
Joe-ABS *eye*-INCH-PAST
Joe woke up. vs.

(49) murni-nggu Joe-nha guru-ba-n
woman-ERG *Joe*-ACC *eye*-INCH-PAST
The woman woke Joe up.

The 'causative' -nda- also derives one or two argument verbs:

(50) windu yagu-ba-nda
wind-ABS *big*-INCH-CAUSE-PRES
The wind's getting stronger.

(51) marlu ngubara-nda
kangaroo-ABS *bleed*-CAUSE-PRES
The kangaroo is bleeding.

(52) ngadhu balu-nha marduwa-nda-n
1sg-ABS 3sg-ACC *grow up*-CAUSE-PAST
We raised him.

or ambivalent verbs:

(53) balu barany guwa-nda
3sg-ABS *good/well*-ABS *yes*-CAUSE-PRES
He hears well. vs.

(54) ngadhu balu-nha guwa-nda
1sg-ABS 3sg-ACC *yes*-CAUSE-PRES
I'm listening to him.

Though typically intransitive, verbs with the reflexive/reciprocal suffix -dya (see 4.4.1[3]) can be used transitively. Thus:

(55) balu dhanha-nha dyamba-dya-n
3sg-ABS 3pl-ACC *run*-RECIP/REFL-PAST
He ran them all together.

Most Pama-Nyungan languages are ergative only to a degree (cf. Blake 1979:302), and it is generally thought that at this point in time ergativity is declining, giving way to accusativity (ibid.) on the typological cycle.

With respect to verbs, one of the arguments cited for ± ergativity in Pama-Nyungan languages (cf. Dixon 1981:62), is that, in languages which are more ergative, transitivity is overtly marked in the verb. That is, each verbal root and/or derived stem belong to discrete ± transitivity classes. In languages that are more accusative, on the other hand, transitivity is covert, being manifested in the sentence as verbs have "a more fluid transitivity membership" (Dixon, op.cit.) and are "able to occur equally easily with one or two or three core NPs" (ibid.). If these arguments cited as an indication of ergativity accusativity in a language hold, then as far as the verbal morphology of Badimaya is concerned, the language has overwhelming nominative/accusative characteristics.

4.4 Verb stems

Verb stems are classified as either base stems or derived stems. A *base stem* is unsuffixed, while a *derived stem* consists of a base and a derivational suffix. There are three such derivational suffixes, one or more of which may appear in the same derived stem. Such suffix combinations will be discussed below.

4.4.1 Derivational suffixes

[1] (a) The inchoative -ba- (-aba- following consonants) suffix can be added to noun stems and negative particles, to create verbal constructions of the n1 (4.1.1) inflection class. These derived stems have the following interpretations:

(i) to become x, as in:

(56) balu bagali-ba-n
3sg-ABS *man*-INCH-PAST
He became a man.

(57) balu dyindu-ba-ya
3sg-ABS *jealous*-INCH-PRES
He's getting jealous.

(ii) to exist in a temporary state:

(58) balu gundanya-ba-ya
3sg-ABS *shame*-INCH-PRES
He's got shame.

(59) balu galadya-ba-n
3sg-ABS *sick*-INCH-PAST
He's sick.

(60) ngadhu wirdiwirdi-ba-ya
1sg-ABS *no no* -INCH-PRES
I don't want it.

(iii) involuntary processes:

(61) garang barna-ba-ya
sun-ABS *ground*-INCH-PRES
The sun's rising.

(62) balu marduwa-ba-ya
3sg-ABS *big/grown up*-INCH-PRES
He's growing up.

(63) dyiga miri-ba-ya
snake-ABS *skin*-INCH-PRES
The snake's changing its skin.

(iv) temporal reference

(64) bugul-aba-n winda-ngga dyuba-ngga
already-INCH-PAST *tree*-LOC *child*-LOC
A long time ago, in the bush, in my childhood.

(b) -ba- is also present as a 'frozen' suffix in the base stems of two verbs of action:

(65) dyambardabaya *to run*, also dyambarda *to gallop*.

(66) dhagulabaya *to slip*, dhagula *to jump*.

This use of -ba is not productive (see also below 4.4.2).

Verb forms derived by means of -ba- from verbal and non-verbal stems generally require one NP subject argument in the absolutive case, as in examples (53)-(61) above. There are, however, exceptions, as was already noted in 4.3 above. Namely:

(i) the verb gardabaya *to cut up* is a two-argument verb requiring a transitive subject NP and a direct object NP. The example given in (47) 4.3 was:

(67) ngadhu dhuru garda-ba-ya
I'm cutting the meat.

(ii) the verbs dhadhabaya *to make/get sick*, gurubaya *to wake up*, and dyambarda-baya *to run/drive* are both mono- and bivalent. See for example sentences (39)-(40) in 4.3 and also:

(68) dhudhu dyambarda-ba-ya
dog-ABS *run*-INCH-PRES
The dog is running.

(69) mama-lu marran dyambarda-ba-ya
father-ERG *sheep*-ABS *run*-INCH-PRES
Father drives the sheep.

The above examples suggest that the -ba- suffix also overlaps in function with the -nda- as a causativiser. The flexibility of this suffix to derive one and two argument verbs is not surprising given the fact that Badimaya verbs are typically able to change their valency without changing their forms.

(c) -ba- is the most frequently used 'verbaliser' in Badimaya. As noted in 3.3.1 and 5.1.8, de-adjectival -ba- derivatives are more frequent than the adjectives themselves in 'stative' clauses, though constructions of the latter sort are by no means ungrammatical. Thus:

(70) Joe garnu/dyudya-ba-n Peter-la
Joe-ABS *fat/old*-INCH-PAST *Peter*-LOC
Joe is fatter/older than Peter.

(d) It is not clear whether the 'lest' inflection used in subordinate clauses to denote warning, etc. (see 4.1.2[6]), is an instance of the inchoative -ba- + future -la-, or whether -bala is a separate morpheme.

(71) marran nha-guwa-n dhudhu ngubanu ngalgu-bala (=24)
sheep-ABS *see/watch*-IMPF-PAST *dog*-ABS *dingo*-ABS *eat*-LEST
Watch the sheep lest the dingos kill and eat them!

(i.e. ngalguwa *to swallow*, ngala-FUT). There were not enough instances of subordinate clause inflection in the data to make any claims on this account.

(e) The inchoative -ba- can be followed by the causative -nda- (see below in 4.4.1[2]). The combination of inchoative -ba- with the reflexive reciprocal -dya- is not attested, however -ba + -nda + -dya- is attested (see below).

[2] -nda-. The 'causative' suffix -nda- derives verb stems belonging to the n1(c) class. -nda- has the following uses:

(a) It can be added to non-verbal stems, deriving verbs with the meaning *to cause x to be y*:

(72) walba-nda	*to make hot*	walba	*hot*
murdi-nda	*to make cold*	murdi	*cold*
marduwa-nda	*to raise*	marduwa	*big/grown up*
mula-nda	*to kill*	mula	*dead*
wulgu-nda	*to straighten*	wulgu	*straight*
guwa-nda	*to hear, listen, feel*	guwa	*yes*
dha-nda	*to stab, pierce*	dha	*hole*
badi-nda	*to finish*	badi	*no* (Maggie Bell)
wagu-nda	*to camp*	wagu	*camp*

Verbs derived from non-verbals typically require two NP arguments, a transitive subject NP and a direct object NP. Wagunda *to camp* does not take a direct object. Guwanda *to hear/listen/feel*, as noted in the previous section, 4.2.4, is both mono- and bivalent, i.e. ambivalent, depending on its meaning as either *hear* or *listen/feel* respectively. All these one argument verbs have a possible cognate object interpretation.

(b) -nda- can be added to (i) existing verb bases, and (ii) derived inchoatives (see 4.4.1[1]) to form the causal counterparts:

(i) Examples of -nda- added to verb bases are:

(73) ngubara-nda *to bleed.* ngubara is not attested in the data, but see other -ra stems (4.4.2 below). nguba *blood.*

(74) dhabala-nda *to promise.* dhabala is not attested, but see other -la stems (4.4.2).

The verb ngubaranda requires intransitive subject argument only, see 4.2.1, though dhabalanda has a noun direct object, but an allative pronoun complement:

(75) ngadhu balu-ngudi dhabala-nda-n
1sg-ABS 3sg-ALL *promise*-CAUSE-PAST
I promised him.

(76) ngadhu bibi-nha dhabala-nda-n
1sg-ABS *mother*-ACC *promise*-CAUSE-PAST
I promised my mother.

(c) When -nda- is added to the inchoative stem, the verb inflects as a member of the n1(c) inflection class (4.1.1). Causal stems derived from the inchoative have the meaning *to cause x to be/become y*. In most cases the valency is increased from one (subject) to two (subject + direct object). The subject NP of the inchoative becomes the direct object of the causative:

(77) balu marduwa-ba-ya
3sg-ABS *grow up*-INCH-PRES
He is growing up.

(78) ngalidya balu-nha marduwa-ba-nda-n
1du-ABS 3sg-ACC *grow up*-INCH-CAUSE-PAST
We raised him.

Only in instances such as those stated above, does -nda- function as a 'transitiviser'. In the following instances (with reference to meteorological conditions), valency one is retained:

(79) windu yagu-ba-nda
wind-ABS *big*-INCH-CAUSE-PRES
The wind's getting stronger.

(80) mandala yagu-ba-nda
cloud-ABS *big*-INCH-CAUSE-PRES
The clouds are gathering.

(81) dhagu dhagu yagu-ba-nda
dust-ABS *dust*-ABS *big*-INCH-CAUSE-PRES
The dust storm's coming.

(82) wadyan yagu-ba-nda
fire-ABS *big*-INCH-CAUSE-PRES
The fire is spreading.

In all derived causatives with one NP argument, the semantic relationship of the NP argument is that of 'causee', whereas most derived causatives require the expression of both 'causer' and 'causee' relationships.

[3] -dya-. The reciprocal/reflexive -dya- (see also 4.1) is added to base stems, and some derived stems, to derive verbs belonging to the n2 inflection class. The -dya- suffix is homophonous with the -dya suffix found with nouns (3.3.8) in a compound with gudha (-gudhadya), and personal pronouns (3.0.2),

where it has a dual sense. -dya- is also present as a 'frozen' suffix in many base stems of the n1(c) inflection class (4.4.2).

(a) The derived reciprocal meaning indicates identical action by two (or more) actants of the same type. In most instances of reciprocalisation -dya- functions as a valency 'rearranger'. That is, when a transitive sentence such as:

(83) bagali-lu mudyi-nha bu-nguwa
man-ERG *spouse*-ACC *bit*-PRES
The man is hitting his wife.

is reciprocalised to:

(84) bagali-lu mudyi-lu bungu-dya
man-ERG *spouse*-ERG *hit*-REFL/RECIP-PRES
The man and his wife are hitting each other.

The direct object argument in (80) is now marked as a transitive subject in (81).

(b) In some reciprocals, as well as reflexives, -dya- functions as a valency 'decreaser':

(85) ngadhu balu-ng marda yu-ngguwa
1sg-ABS 3sg-DAT *stone*-ABS *give*-PRES
I'm giving him the money.

(86) ngalidya marda yungu-dya
1du-ABS *stone*-ABS *give*-REFL/RECIP-PRES
We're giving each other the money.

In the case of plural subjects (as in (84)), the reciprocal can be distinguished from the reflexive. In (86) and (87) only the plural sense of the subject distinguishes it from the reflexive:

(87) dhanha gudha ma-nung bungu-dya-n nhinha barna
3pl-ABS *two*-ABS *take*-PAST *hit*-REFL/RECIP-PAST *this*-ABS *ground*-ABS
It was two wars ago in this country ...

(c) Derived stems with a reflexive meaning indicate that the subject acts upon himself:

(88) ngadhu winda nyanyba
1sg-ABS *tree*-ABS *shave*-PRES
I'm whittling the wood. vs.

(89) ngadhu nyanyba-dya
1sg-ABS *shave*-REFL/RECIP
I'm shaving myself.

In simple reflexive sentences, the subject NP is marked with the absolutive case. However, when a complement clause is added, the reflexive subject NP is marked with the ergative (see complex sentences 5.5 and distribution of ergative 5.1.2).

(d) Some reflexive actions are also expressed by means of the noun gan *alone*, as well as the verb form. This usage is restricted to very few action verbs, such as bunguwa *hit*, as in:

(90) ngadhu gan bungu-dya
1sg-ABS *alone* *hit*-REFL/RECIP-PRES
I alone hit myself.

(e) -dya- can be used in combination with the causative -nda- as in:

(91) ya nhundu guwa-nda-dya
how 2sg-ABS *yes*-CAUSE-RECIP/REFL-PRES
lit. *How do you feel yourself? (How are you?)*

(f) In one example in the data, the derived reciprocal had a causative meaning:

(92) balu dhanha-nha dyamba-dya-n
3sg-ABS 3pl-ACC *run*-RECIP/REFL-PAST
He runs them all together.

4.4.2 Base stems

Base stems consist of at least one morpheme or root with basic meaning, having the canonical form of the root morpheme described in 2.2. In some instances, the roots function as base stems. However, in the majority of verbs collected (ca.150), verb bases are formed by the addition of a number of stem-final syllables. The following base stems can be identified:

(a) Root forms which in one or two instances are homophonous with nouns or adjectives:

(93)	badya	*to bite*	badya	*wild, savage*
	buda buda	*to tell a story*	buda buda	*story*
	yaragula	*to dream*	yaragula	*dream*
	baranya	*to fix*	barany	*good, well*
	nhuga	*to enter/put*		
	yidawa	*to get off, dismount*		
	bunya	*to blow out of the mouth*		
	yamiya	*to swear at, talk about*		

(b) There are groups of verbs in the n2 class which have certain stem-final suffixes in common, though the meaning of these suffixes is not always known:

(94) -ra-: gundura *to snore*
balgura *to bark*
dyudura *to smoke* dyudu *a smoke*

-la:[18] ganggala *to laugh*
gadagala *to pick up*

-dya: verbs with the stem-final -dya in the base form all belong to the n1(c) class. These verbs are:
bundya *to kiss*
ngadadya *to play*
bidya *to undo/open*
madya *to await*
waladya *to sew*

4.5 Compounds

Two types of compounds were noted in the corpus: (i) inherent compounds, and (ii) productive compounds.

[1] Inherent compounds were predominantly body-part noun + verb compounds:

(95) dyina-yara mara-yanda
foot-go-FUT *hand-come*-PRES
to walk *to crawl*

That is, the noun denoting a body part is preposed to the verb stem. The verb remains the 'nucleus' semantically, syntactically, and morphologically, while the noun merely modifies the sense of the verb. There are also many instances in the corpus of synchronically 'frozen' compounds.[19] From the n1 class:

(96) badama *to chase* ma- *to take, get*
dhama *to cover* dha *hole* + ma-
dhalima *to lead* ? dhali + ma
dyilima *to carry* dyili *arm* + ma-

From the ng2 class:

(97) nganbindangguwa *to choke someone* ngan *neck* + binda-n *closed*
nganganggguwa *to choke on something* ngan *neck* + gangguwa *to hold*

Verb + verb compounds are rare. Two instances in the corpus,

(98) yuwa-n warni-ng ma-ra ya-ra
shoot-PAST *trip*-PAST *take*-FUT *go*-FUT
to disappear *to go and get*

have been treated as separate sequential events (see Complex sentences, 5.5).

[2] Instances of productive compounding were also noted in the corpus, with verbs that form 'natural' semantic pairs, such as bunguwa *to hit/kill* and mulanda *to kill*, as in:

(99) dhanha bungu-mula-dya
3pl-ABS *hit/kill*-RECIP/REFL
They're hitting and killing each other.

4.6 Reduplication

Base stems exhibiting reduplication were fairly common. In some instances the unreduplicated base does not occur, as in:

(100) manymanyabaya *to get the itches* manymany *hairy caterpillar*
mingamingara *to assemble, congregate* minga *ant*
bilubiluwa *to rattle, shake*
burdaburda *to tell a story*
gidigidiya *to tickle*
dyidyida *to tease*
ngandingandiya *to paint up for a ceremony*

Where an unreduplicated base does occur, it is possible to see in reduplication the following semantic functions:

(a) It may indicate a change in the degree to which an undergoer of a particular action is affected, as in waniwa *to discard*, waniwaniwa *to throw far away*, gardangguwa *to break*, gardagardangguwa *to break into little pieces/to fall into little pieces*.

(b) Control, as in bandiya *to smell*, bandibandiya *to sniff*.

(c) Valency change. For example, the verb gardangguwa *to break* listed in (a) has two arguments, a transitive subject NP and a direct object NP:

(101) ngadhu gadyi garda-ng
1sg-ABS *spear*-ABS *break*-PAST
I broke the spear.

The reduplicated form, gardagardangguwa *to fall/break into little pieces* may be used in the sense of (98), or with subject argument only:

(102) wadyan winda gardagarda-ng
fire-ABS *wood*-ABS *break into little pieces*-PAST
The fire wood's broken into little pieces (and gone rotten).

4.7 Nominalisation

Nominalisation (as opposed to verbalisation) was not common in the data collected. One method of nominalisation was simply to use the particular present tense form of the verb as a noun, as in:

(103) bibi-lu dyuba-nha guwa-nda-n wula-ya-nha
mother-ERG *child*-ACC *listen*-PAST *cry*-PRES-ACC
The mother listened to the child (who was) crying.

Other suffixes present in nominal forms were:

(104) -dula, as in wirdula *favourite*, wiranda *to like*.

(105) -bandi, as in wanybandi *coward*, wanyabaya *to get frightened.*

These suffixes are also found in nominals, where it is not known whether they derived historically from verb forms: yiradula *language*; yira *mouth*; yirabandi *sweet*. This could also be a compound of N + V-stem functioning as a noun (adjective), i.e. yira *mouth* + bandiya *taste/smell*.

-bandi in the nominalisation sense could also be a compound of the past tense forms of the inchoative -ba-n, as in (102) above, + di. These forms require further investigating.

5. SENTENCES

This section considers the structure of sentences in Badimaya. Simple 'monoclausal' declarative sentences are considered in 5.1, questions in 5.2, imperatives in 5.3, and negation in 5.4. Section 5.5 discusses complex sentences.

5.1 Simple sentences

With the exception of meteorological expressions (e.g. see 4.3), simple sentences in Badimaya obligatorily consist of a subject NP and a predicate. Predicates may be either nominal or verbal.

(a) Verbal predicates contain at least a verb, plus one or more NP arguments. The number and type of obligatory arguments associated with each predicate depends on the inherent semantics of the verb. Verbal predicates may be classified according to the number and type of obligatory arguments occurring with them: (i) predicates consisting of a verb only, (ii) a verb plus an object NP, (iii) a verb plus a complement NP, and (iv) a verb plus an object and a complement NP.

(b) Nominal predicates contain at least one obligatory NP complement, however, two NPs occur in 'instrument of predication' constructions (see also 3.2.2.3). Nominal predicates may be subclassified as (i) attributive, (ii) equative, (iii) locative, and (iv) instrumental. All obligatory NP constituents are case-marked for their syntactic and/or semantic function in the sentence. Examples of simple sentence types are given below in 5.1.3 (verbal) and 5.1.8 (nominal).

5.1.1 Obligatory constituents

[1] Subjects[20] may be defined as those NP constituents occupying sentence-initial position, which take ergative or absolutive case marking, depending on the inherent lexical content (or other conditions for ergativity (5.1.2)). Transitive subjects may be in the absolutive or ergative case (5.1.2), intransitive subjects are always in the absolutive case. In complex sentences, the subject of the subordinate clause(s) is/are identified with that of the main clause (5.5).

[2] Objects. Two types of objects can be distinguished in Badimaya sentences: direct objects and sentential objects. Sentential objects are obligatory constituents of some complex sentences, and will be described in 5.5. Direct objects are morphologically specifiable as those (non-subject) NPs taking either absolutive or accusative case marking, depending on inherent lexical content (5.1.2). They are typically entities directly affected by the action carried out by the subject.

Although NPs functioning as subjects and objects may be deleted in ordinary conversational utterances, they are nonetheless obligatory (with the exception of weather terms) in the sense that they can only be omitted when they are implicit in the context of utterance.

[3] Complement NPs are all obligatory constituents not functioning as subjects or direct objects. Complements may be NPs in absolutive (Ø), dative, allative, ablative, locative, and in some instances, even the ergative case (5.1.8).

In addition to the obligatory constituents, sentences may be further augmented by case marked NPs, including derived stems, which for a particular sentence type are optional. Examples of optional, case-marked NPs are given with each sentence type. Sentence expansion by means of derived (Ø) NPs is described in 5.1.7.

5.1.2 Case system typology

Four case systems can be distinguished in Badimaya in terms of what case form(s) mark the grammatical relations, *transitive subject, intransitive subject*, and *direct object*:

(a) Tripartite: transitive subject, intransitive subject, and direct object each have a separate form - ergative, absolutive and accusative respectively. Nouns referring to humans and demonstratives show the tripartite system;

(b) Ergative-absolutive: transitive subject is marked by the ergative case, while intransitive subject and direct object are marked by the absolutive case. In Badimaya, interrogative pronouns and nouns naming 'higher animates', such as

dogs and horses show this system. (For a discussion of other conditions on the use of the ergative case, see 5.1.2.1.);

(c) Absolutive-accusative: transitive and intransitive subjects are marked with absolutive (Ø) case while the direct object NP is marked with the accusative case. The personal pronouns are inflected in this way;

(d) Neutralised: inanimate nouns, not under the control of an agent (3.2.2.3) and also nouns with one or more of the derivational suffixes (3.3), show absolutive case marking in the transitive and intransitive subject and direct object functions.

5.1.2.1 Ergative distribution in Badimaya

Ergative case marking in Badimaya is dependent on the interaction of two variables, (a) the inherent lexical content of the nominal, and (b) the transitivity of the clause. In this respect, Badimaya is a 'typical' ergative language both in the Australian sense, and elsewhere (see for example Plank 1979a). What is 'atypical' about Badimaya in the Australian sense, is that ergative marking (and, perhaps, by implication, clause transitivity) is as dependent on the presence of a semantic goal (see below), as on the presence of a direct object.

Badimaya, like many other Australian languages with a potentially tripartite case marking system (see for example Dixon 1979, 1980; Blake 1977, 1979:291), shows a 'split' between ergative and absolutive case depending on the subcategorisation of the nominal in subject function. Personal pronouns, lesser animates, and inanimates not under the control of an agent, are marked with the absolutive case for both transitive and intransitive subject functions, while demonstratives, interrogatives and nouns referring to humans and higher animates, such as dogs and horses are marked with the ergative case, when functioning as transitive subjects, and the absolutive case when functioning as intransitive subjects (transitivity being defined here as the presence of a subject and direct object; intransitivity being defined as the presence of a subject NP only). Examples of these contrasts are illustrated in the following sentence pairs:

(1) yalibidhi mudyi-nha wangga-ya
emu-ABS *spouse*-ACC *say*-PRES
The emu is calling its mate.

(2) bagali-lu mudyi-nha wangga-ya
man-ERG *spouse*-ACC *say*-PRES
The man is calling his wife.

(3) banha yamadyi-lu wama gula-n
that-ABS *man*-ERG *food*-ABS *swallow*-PAST
That man swallowed the food.

(4) bimara marlu gula-n
bimara-ABS *kangaroo*-ABS *swallow*-PAST
The bimara swallowed the kangaroo.

(5) murni-nggu wama dhama-n
woman-ERG *food*-ABS *cover*-PAST
The woman covered the food.

(6) mandala garang dhama-n
cloud-ABS *sun*-ABS *cover*-PAST
Clouds covered the sun.

It would appear that, in Badimaya, a clause is *transitive* not only when it contains a direct object (in accusative or absolutive case), but also when it contains an obligatory goal (a nominal in dative or allative case). Thus, subjects of such clauses (when their inherent semantics permit) are in the ergative, rather than the absolutive case:

(7) murni burdaburdala
woman-ABS *tell a story*-PRES
The woman is telling a story. vs.

(8) murni-nggu burdaburdala dyuba-wu
woman-ERG *tell a story*-PRES *child*-DAT
The woman is telling a story to her child.

(9) murni ganggala
woman-ABS *laugh*-PRES
The woman is laughing. vs.

(10) murni-nggu ganggala mudyi-yu
woman-ERG *laugh*-PRES *spouse*-DAT
The woman is laughing at her husband.

Clauses, as well as NPs can be objects or goals, thus the following complex sentences also have main clause subjects in the ergative.

(i) Where the main clause is morphosyntactically intransitive, but the juxtaposed clause is functioning as a sentential object (of utterance and aspectual verbs):

(11) murni-nggu badi-nda-n wama bawa
woman-ERG *finish*-CAUSE-PAST *food*-ABS *cook*-PRES
The woman has finished making the meal.

(12) Joe-lu wangga-ng wirdi ya-ngguwa Mingenu-di
Joe-ERG *say*-PAST NEG *go*-PRES *Mingenew*-ALL
Joe said he's not going to Mingenew.

(ii) Where the main clause is morphosyntactically intransitive, but the juxtaposed subordinate clause is functioning as a semantic goal:

(13) dhudhu-nggu yan nhunhu-nha badya-lgu
dog-ERG *come*-FUT 2sg-ACC *bite*-PURP
The dog is coming to bite you.

(14) yamadyi-lu ya-nung wama wadha
man-ERG *go*-PAST-PERF *food*-ABS *chase/look for*-PRES
The man has gone to look for food.

(15) mama-lu sheet-du dhama-dya-n yamadyi-mi wanyana-la
father-ERG *sheet*-ERG *cover*-REFL/RECIP-PAST *man*-PL *frighten*-FUT
Father covered himself with a sheet in order to frighten the men.

5.1.3 Verbal sentences

Verbal sentences are of the following type:

(a) SV
(b) SOV
(c) SCompV
(d) SOCompV

[1] SV sentences are those with

S - representing an intransitive subject NP, with functions described in 3.2.2 and 4.2.1, and

V - a finite verb of the semantic and syntactic type described in 4.2.1.

Examples of sentences corresponding to verbs listed in 4.2.1 are:

(16) wadyan dyudura
fire-ABS *smoke*-PRES
The fire is smoking.

(17) ngadhu dyudura
1sg-ABS *smoke*-PRES
I am smoking (a cigarette).

(18) dhudhu balgura
dog-ABS *bark*-PRES
The dog is barking.

(19) ngadhu nganga-ngguwa
1sg-ABS *choke*-PRES
I am choking.

(20) balu gundura-n
3sg-ABS *snore*-PAST
He was snoring.

(21) dhudhu ngubanu nyawuna
dog-ABS *dingo*-ABS *howl*-PRES
The dingo's howling.

(22) ngadhu guwa-nda
1sg-ABS *yes*-CAUSE-PRES
I am listening/I can hear.

(23) bagali wanya-ba-ya
man-ABS *frighten*-INCH-PRES
The man's getting frightened.

(24) dyuba maduwa-ba-ya
child-ABS *grow up*-INCH-PRES
The child is growing up.

(25) dyiga miri-ba-ya
snake-ABS *skin*-INCH-PRES
The snake's changing its skin.

(26) garang barna-ba-ya
sun-ABS *ground*-INCH_PRES
The sun's rising (lit. *ground's getting covered*).

(27) marlu ngubara-nda
kangaroo-PRES *bleed*-CAUSE-PRES
The kangaroo is bleeding.

(28) windu yagu-ba-nda
wind-ABS *big*-INCH-CAUSE-PRES
The wind's getting stronger.

(29) dyiga dyalang nhabala-ba-ya
snake-ABS *tongue*-ABS *something*-INCH-PRES
The snake's flicking its tongue.

As described in 4.2.1 and 4.3, the verb of an SV sentence can be ambivalent, that is, can also occur in sentence constructions described in [2] and [3] below. Examples of sentences with ambivalent verbs were given in 4.3 and 4.4.1. A further set of examples is:

(30) ngadhu maga dhadha-ba-n
1sg-ABS *head*-ABS *bad*-INCH-PAST
I got a headache/my head got crook.

(31) dyalbi-lu ngadhu-nha wari dhadha-ba-n
beer-ERG 1sg-ACC *stomach*-ABS *bad*-INCH-PAST
The beer made my stomach crook/The beer made me sick in the stomach.

Reflexive sentences are also of the SV type (reflexivisation is described in 4.4.1[3]):

(32) ngadhu nyanyba-dya
1sg-ABS *shave*-REFL/RECIP-PRES
I'm shaving myself.

(b) The SV sentences can be expanded by the addition of one or more optional constituents like:

(i) dative NPs expressing cause, reason, purpose (3.2.2.5). These may precede or follow the verb:

(33) ngadhu gabi-yu wadha
1sg-ABS *water*-DAT *chase*-PRES
I'm going for water.

(ii) locative NPs denoting object compared:

(34) Joe dyudya-ba-n Peter-la
Joe-ABS *old*-INCH-PAST *Peter*-LOC
Joe is older than Peter.

(iii) ergative-instrumental NPs (3.2.2.3[2]), which generally precede the verb:

(35) balu sheet-du dhama-dya-n
3sg-ABS *sheet*-ERG *cover*-REFL/RECIP-PAST
He covered himself with a sheet.

(36) ngadhu yurda yurda gulga-nggu guwa-nda
1sg-ABS *later*-ABS *later*-ABS *ear*-ERG *yes*-CAUSE-PRES
I'll listen later on.

(37) balu mara-nggu wangga
3sg-ABS *hand*-ERG *say/talk*-PRES
He talks with his hands.

[2] SOV sentences are those with

S - representing a transitive subject NP (5.1.1), with functions described in 3.2.2.3[1] and 4.2.2.

O - a direct object NP (5.1.1), with functions described in 3.2.2.2, and

V - a finite verb with syntactic and semantic properties from the examples corresponding to verbs listed in 4.2.2 are:

(38) bagali-lu mudyi-nha mula-nda-n
man-ERG *spouse*-ACC *die*-CAUSE-PAST
The man killed his wife.

(39) ngalidya dyuba-nha maduwa-nda-n
1du-ABS *child*-ACC *grow up*-CAUSE-PAST
We raised the child.

(40) bagali-lu dyuba-nha wanya-nda-n
man-ERG *child*-ACC *frighten*-CAUSE-PAST
The man frightened the child.

(41) ngadhu dhuru garda-ba-ya
1sg-ABS *meat*-ABS *cut*-INCH-PRES
I cut the meat.

(42) bagali-lu dyuba-mi dyidyida
man-ERG *child*-PL *tease*-PRES
The man teases the children.

(43) murni-nggu mama ganigani-ya
woman-ERG *song*-ABS *perform*-PRES
The woman is singing a song (and dancing).

(44) murni-nggu mudyi-nha bu-ng(g)uwa
woman-ERG *spouse*-ACC *hit*-PRES
The woman is hitting her husband.

(45) dyuba-nggu mimi ngal-guwa
child-ERG *milk*-ABS *swallow*-PRES
The child is drinking the milk.

(46) ngadhu marlu mindyu wil-guwa
1sg-ABS *kangaroo*-ABS *skin*-ABS *peg out*-PRES
I am pegging out my kangaroo skin.

The following examples illustrate the use of ambivalent verbs (also found in SV sentences) in SOV sentences:

(47) ngadhu balu-nha guwa-nda
1sg-ABS 3sg-ACC *listen/hear/feel*-CAUSE-PRES
I'm listening to him.

(48) bagudyi dyidamin bandi-n
fox-ABS *chicken*-ABS *smell*-PAST
The fox smelled the chicken.

(49) dyalbi-lu ngadhu-nha wari dhadha-ba-n
beer-ERG 1sg-ACC *belly*-ABS *bad*-INCH-PAST
The beer made me sick in the stomach (the beer made my stomach sick).

Word order is typically SOV in 'unexpanded' sentences.

(b) The SOV sentences can be expanded by the addition of optional constituents like:

(i) ergative-instrumental NPs (3.2.2.3), preceding or following the verb:

(50) murni-nggu dyiga bu-ngung gadyi-lu
woman-ERG *snake*-ABS *kill*-PAST *spear*-ERG
The woman killed the snake with a spear.

(51) dhanha balu-nha gadyi-lu wala-ng gurra-wu
3pl-ABS 1sg-ACC *spear*-ERG *spear*-PAST *brother*-DAT
They speared him because of (their) brother.

(ii) dative NPs of cause, reason (3.2.2.5), preceding or following verb, as in (51) and (55) below.

(iii) locative, allative, and ablative NPs - preceding or following verb (3.2.2.4-5-6):

(52) ngadhu gabi yira-ngun wadyu-n
1sg-ABS *water*-ABS *mouth*-ABL *emerge*-PAST
I spat water out of my mouth.

(53) ngadhu wama ma-ngguwa winda-ngun
1sg-ABS *food*-ABS *take*-PRES *tree*-ABL
I picked fruit off the tree.

(54) ngadhu ngud barna-di yidawa-n
1sg-ABS *horse*-ABS *ground*-ALL *get off*-PAST
I got off the horse onto the ground.

(55) ngana-ng bibi-lu burna-ngga bawu-n dhuru ngalimi
1sg-DAT *mother*-ERG *ash*-LOC *cook*-PAST *meat*-ABS 1pl-DAT
My mother cooked food for us in the ashes.

(See 3.0.2 - omission of dative marking on plural pronouns.)

[3] S Comp V sentences are of two types:

(1) Those with

S - representing an intransitive subject NP (5.1.1)
Comp - representing an NP in the allative, ablative, or locative case, and
V - a finite verb from class 4.2.2[2].

Examples of sentences corresponding to verbs listed in class 4.2.2[2] are:

(56) murni nhandi-la wagu-nda
woman-ABS *there*-LOC *camp*-CAUSE-PRES
The women camp over there.

(57) balu galgal-da ya-ngguwa
3sg-ABS *bush*-LOC *go*-PRES
He's walking around in the bush.

(58) ngadhu bida-ngguwa fowl-gudi
1sg-ABS *sneak*-PRES *fowl*-ALL
I'm sneaking up on a fowl.

(59) gumal winda-ngga wala-ng
possum-ABS *tree*-LOC *fall*-PAST
The possum fell out of the tree.

One verb belonging to this group is ambivalent (see [4] (70) below):

(60) ngadhu minda-di nhuga-n
1sg-ABS *house*-ALL *enter/put*-PAST
I entered the house.

Ordering is generally S Comp V.

Optional expansions may be:

(i) further locative, allative, and ablative NPs. Verbs of motion and rest require conceptually a source, or goal (Lyons 1977:494). In Badimaya, one of these parameters is syntactically obligatory for motion verbs:

(61) balu station-ngun ya-nung town-gudi
3sg-ABS *station*-ABL *go*-PAST-PERF *town*-ALL
He went from the station into town.

(62) ngadhu wagu-nda mayamaya-la galgal-da
1sg-ABS *camp*-CAUSE-PRES *humpy*-LOC *bush*-LOC
I'm camping in a humpy in the bush.

(63) ngadhu ngana-ng mama-la ya-nung Mullewa-di
1sg-ABS 1sg-DAT *father*-LOC *go*-PAST-PERF *Mullewa*-ALL
I went with my father to Mullewa.

(64) dyuba winda-ngga widila-ngguwa barna-di
child-ABS *tree*-LOC *swing*-PRES *ground*-ALL
The child swung down from the tree.

Additional locatives, allatives, or ablatives generally follow the verb.

(2) The second type of S Comp V sentence differs from type (1) above in that,

(a) S - represents a transitive subject NP, rather than intransitive
Comp - is a dative or allative complement marking goal function
V - finite verb from class 4.2.2[4].

Examples of sentences corresponding to verbs listed in class 4.2.2[4] are:

(65) murni-nggu balu-di dharingga
woman-ERG 3sg-ALL *lie*-PRES
The woman is lying to him.

(66) murni-nggu burdaburdala dyuba-wu
woman-ERG *tell a story*-PRES *child*-DAT
The woman is telling a story to the child.

(67) yigu-lu ngana-ngudi mira-ng
sister-ERG 1sg-ALL *call out*-PAST
My sister shouted at me.

No expansions of this subtype have been recorded.

[4] SO Comp V sentences are those with

S - representing a transitive subject NP
O - representing a direct object NP
Comp - representing a dative-, locative- or allative-marked NP functioning as goal
V - a finite verb from class 4.2.3.

Examples of sentences corresponding to verbs listed in 4.2.3 are:

(68) bagali-lu mudyi-yu marda yu-ngung
man-ERG *spouse*-DAT *stone*-ABS *give*-PAST
The man gave the woman money.

(69) bagali-lu murni-yu minu-n banha-nha
man-ERG *woman*-DAT *show*-PAST *that*-ACC
The man showed the woman that.

(70) Joe-lu balu-nha gabi-ngga nhuga-n
Joe-ERG 3sg-ACC *water*-LOC *put/enter*-PAST
Joe put him in the water.

See also [3] (60) above for alternative interpretation of nhuga.

(71) ngadhu balu-nha school-gudi idya-n
1sg-ABS 3sg-ACC *school*-ALL *take*-PAST
I took him to school.

Ordering is generally S-NP-V-NP. That is, human NPs tend to cluster at the front of the sentence, regardless of their syntactic function, and two NPs usually precede the verb. Note, however, the following example:

(72) ngadhu mila-ngga nhuga-la balu-nha
1sg-ABS *claypan*-LOC *put/enter*-LOC 3sg-ACC
I'll put him in the shallow hole.

No expansions have been recorded.

5.1.4 Reciprocalisation

Reciprocal sentences, with verb forms in -dya (see 4.4.1[3]), may contain a single nominal argument (with plural reference), two juxtaposed nominal arguments in the same role (interpreted as a conjoined nominal), or rarely, two nominal arguments in different roles. Single and juxtaposed nominals in reciprocal sentences are in the ergative case if noun or adjective, in spite of the fact that these sentences are not syntactically transitive:

(73) banha gudha yamadyi-lu bungu-dya
that-ABS *two*-ABS *man*-ERG *hit/kill*-REFL/RECIP-PRES
Those two men are hitting each other.

(74) dhanha gudha ma-nung bungu-dya-n nhinha barna
3pl-ABS *two*-ABS *take*-PAST-PERF *hit/kill*-REFL/RECIP-PAST *this*-ABS *ground*-ABS
It was two wars ago (in) this country ...

(75) ngali-dya wangga-dya
1du-ABS *speak/say/talk*-REFL/RECIP-PRES
We're talking to each other.

(76) bagali-lu mudyi-nha bu-nguwa
man-ERG *spouse*-ACC *hit*-PRES
The man is hitting his wife.

is reciprocalised as:

(77) bagali-lu mudyi-lu bu-ngu-dya
man-ERG *spouse*-ERG *hit*-REFL/RECIP-PRES
The man and his wife are hitting each other.

Note absence of case marking with -banha (3.3.2) in the following:

(78) Joe Peter-banha bu-ngu-dya
Joe-ABS *Peter*-COORD *hit*-REFL/RECIP-PRES
Joe and Peter are hitting each other.

Transitive reciprocal sentences, in which the two nominals have different roles can be exemplified by cases like:

(79) balu dhanha-nha dyamba-dya-n
3sg-ABS 3pl-ACC *run*-REFL/RECIP-PAST
He runs them all together (i.e. *he causes them to run together*).

(b) Reciprocal constructions can be expanded by the addition of optional constituents like:

(i) Dative NPs:

(80) dhanha bu-ngu-dya murni-yu
3pl-ABS *hit*-REFL/RECIP-PRES *woman*-DAT
They're fighting over that woman.

(ii) Ergative-instrumental NPs:

(81) dyuba-mi marda-nggu yuwa-dya-n
child-PL *stone*-ERG *shoot*-REFL/RECIP-PAST
The children threw stones at each other.

5.1.5 Summary of word order

[1] The subject (or some other topical nominal - see (83) and (84) below) is the first constituent of most sentences. Though most Badimaya sentences are verb-final, it is rare that more than two nominal constituents precede the verb. For example, a complex nominal object may follow the verb, as in:

(82) murni-nggu wangga banha-nha yamadyi
woman-ERG *talk/say/speak, etc.*-PRES *that*-ACC *man*-ABS
The woman is talking to that man.

[2] Obligatory NPs generally precede optional expansions, which themselves may precede or follow verb. There appears to be no ordering preference for optional NPs except instrumentals, which generally precede the verb.

[3] Inherently topical NPs, such as NPs with human reference, are positioned at the beginning of the sentence. That is, in sentences with one human NP, regardless of case function, these NPs often have preference over subject for sentence-initial position:

(83) ngadhu-la marlu bida-ngguwa
1sg-LOC *kangaroo*-ABS *sneak*-PRES
The kangaroo is sneaking away from me.

(84) dyuba-nha dhudhu-nggu badya-n
child-ACC *dog*-ERG *bite*-PAST
The dog bit the child.

[4] Some nominals, which are inherently topical may only occupy sentence-initial position. These are demonstratives and interrogatives with the ergative case marking (see 3.0.3 and 3.0.4).

5.1.6 Paratactic NPs

Paratactic NPs are simple or complex NPs following another typically subject NP. Paratactic NPs are of the following type:

(i) pronoun-noun inclusion sets as in:

(85) gadya ngalidya ginggila
child-ABS 1du-ABS *laugh*-NON-PAST
Us two children are laughing and shouting.

(86) ngalidya gudha babinyu-da gabi ngala-ng garlgarl-da
1du-ABS *two*-ABS *friend*-LOC *water*-ABS *swallow*-PAST-PERF *bush*-LOC
We two, my friend and I, were drinking wine in the bush.

(ii) apposite ascriptive NPs:

(87) Noela wanbarna gadya-nggu marlu yuwa-n
Noela-ABS *one-ground*-ABS *child*-ERG *kangaroo*-ABS *shoot*-PAST
Noela, Peter's daughter, shot a kangaroo.

(iii) topicalised NPs which are also noun-shadow pronoun sets:

(88) nhinha babinyu balu wima-n ngana-ngudi
this-ABS *friend*-ABS 3sg-ABS *come*-PAST 1sg-ALL
This friend, he came to me ...

If the topicalised NP is part of the predicate, then the shadow pronoun is not juxtaposed to the topicalised NP, as in (88), but occupies the position in the sentence, originally occupied by the topic:

(89) ngana-ng mama mataka balu-nha bu-ngung
1sg-DAT *father*-ABS *car*-ABS 3sg-ACC *hit/kill*-PAST-PERF
My father, a motor car killed him.

5.1.7 Further optional sentence expansions

Verbal sentences may be further augmented by NPs in absolutive (Ø) case, or NPs with the derivational suffixes -bari *having* (3.3.1), and -gardi *side* suffixes (3.3.3), -idya 'semblative' (3.3.4) and -bara *first* (3.3.6). Such expansions mark:

[1] Location and direction:

(90) marran nhinha-gardi wirlu-gardi ma-ra ya-ra
sheep-ABS *this*-SIDE *sea*-SIDE *take*-FUT/IMP *go*-FUT/IMP
Take the sheep this side, to the west.

(91) ngadhu-la nhinha-gardi ya-ra
1sg-LOC *this*-SIDE *go*-FUT/IMP
Go beside me.

(92) ngadhu-la mala-gardi ya-ra
1sg-LOC *back*-SIDE *go*-FUT/IMP
Go behind me.

(93) guranda ngadhu-la ya-ra
in front of-ABS 1sg-LOC *go*-FUT/IMP
Go in front of me.

(94) marlu ngunu-gardi garda-ba-ya
kangaroo-ABS *halfway*-SIDE *cut*-INCH-PRES
Cut the kangaroo crosswise.

These NPs (i.e. (94)) could be described as (functioning as) manner adverbs. Case-marked NPs denoting locations and directions may be further modified by adverbial NPs, as in:

(95) marda-ngga gada nyina-ga
stone-LOC *up/on top of*-ABS *sit*-PRES
Sitting on top of the rock.

(96) warda ya-ra garang-gardi
far-ABS *go*-FUT/IMP *sun*-SIDE
Go a long way away to the east.

(97) gabi warda ngarri-ya barna-ngga dha-ngga
water-ABS *far*-ABS *lie*-PRES *ground*-LOC *hole*-LOC
The water's lying a long way down in the bottom of the hole.

Adverbial NPs expressing direction and location follow the subject NP and precede the verb.

[2] Time. Sentences may be modified by NPs referring to the time an action or event took place, its duration, or its frequency. Some temporal adverbials are yurda *later, by and by*, wadinya *now*, bugul *already*, bugulidya (bugul + SEMBLATIVE) *a long time ago*, magulga *directly, soon.* Complex NPs are also used: gudhara wilaya *two months (two moons).* Some sentence examples are:

(98) ngadhu wadinya guwa-nda
1sg-ABS *now*-ABS *yes*-CAUSE-PRES
I'm listening now.

(99) ngadhu yaragula bugul nga-nung banha-nha
1sg-ABS *dream*-ABS *already*-ABS *see/look*-PAST-PERF *that*-ACC
I dreamt I saw that already.

Temporal NPs generally occur in any position in the sentence, including sentence-initially. yurda (yurda) *later, by and by*, is a frequent 'linking' element in texts:

(100) yurda yurda ngubanu dyuduwara ya-nang ...
later-ABS *later*-ABS *dingo*-ABS *female*-ABS *come*-PAST
By and by, the female dingo came (back) ...

(See also locative case functions for other temporal expressions (3.2.2.4) and also 4.4.1, for derived verb stem as temporal.)

[3] Manner. The manner in which an event or action occurs is expressed by means of Ø (marked absolutive) NPs:

(101) balu wulgu wangga-ya/yuga
3sg-ABS *straight*-ABS *talk*-PRES/*stand*-PRES
He's talking straight (not lying)/He's standing straight.

(102) ngadhu balu-nha ngardi bu-nguwa-n
1sg-ABS 3sg-ACC *hard*-ABS *hit*-PAST-IMPF
I was hitting him hard.

(103) balu brany branya
3sg-ABS *good*-ABS *make/fix*-PRES
He's doing the right thing.

(104) walanu irbidhi garda-ngguwa
boomerang-ABS *spin*-ABS *rise*-PRES
The boomerang rises spinning.

(105) wama bindhi ngarri-ya table-da
food-ABS *ready*-ABS *lie*-PRES *table*-LOC
The food is lying ready on the table.

(106) ngadhu magu gubulya
1sg-ABS *nearly*-ABS *go to sleep*-PRES
I'm nearly falling asleep.

(107) balu widawu wangga-ya
3sg-ABS *steady*-ABS *talk*-PRES
He's whispering.

NPs marked with the -bari *having*, -idya 'semblative', or -bari *first* suffixes also function as manner adverbials:

(108) balu mudyi-bari nyina-ga
3sg-ABS *spouse*-HAVE *sit*-PRES
He has a wife at home (lit. *he's sitting down 'be-wifed'*).

(109) balu dyambarda-ba-ya dhudhu-idya
3sg-ABS *run*-INCH-PRES *dog*-SEMBL
He runs like a dog.

(110) ngadhu gawunu gurriya ma-nung yabaru-gardi
1sg-ABS *again*-ABS *one*-ABS *take*-PAST-PERF *Yabaru*-SIDE
I again took one (a wife) from the north.

There appears to be no fixed order for manner NPs, other than that they follow the subject NP.

[4] Degree. Sentences also contain NPs functioning as adverbs of degree or intensity, as in:

(111) wari yagu dyalba ngardi ngal-ang
stomach-ABS *big*-ABS *beer*-ABS *hard*-ABS *drink*-PAST-PERF
(I've got) a big stomach, (I've) been drinking beer too hard/much.

5.1.8 Nominal sentences

Nominal sentences contain at least two juxtaposed NPs. The first NP is the subject (5.1.1) in absolutive case. The second (and subsequent) NP(s) constitute the predicate, naming a 'state' attributed to the subject. Nominal predicates may be subclassified as follows:

[1] Attributive sentences contain NP predicates describing certain inherent properties of the subject. Predicates may be in absolutive Ø case, or marked with -bari *having*, or -idya 'semblative' suffixes:

(112) ngana-ng dyina galadya
1sg-DAT *foot*-ABS *sick/sore*-ABS
My feet are sore/I have sore feet.

(113) banha yamadyi dyina yagu
that-ABS *man*-ABS *foot*-ABS *big*-ABS
That man has big feet/That man is big-footed.

(114) balu mabarn-bari
3sg-ABS *medicine*-HAVE
He's got the medicine (bush doctor).

(115) balu mudyi-bari
3sg-ABS *spouse*-HAVE
He's married.

(116) balu mulya mundung-idya
3sg-ABS *face*-ABS *devil*-SEMBL
His face is like a devil's.

As noted in 3.3.1, attributes that are less permanent are always expressed by means of inchoatives derived from the attribute noun. The verbs ngarriya *to lie* or nyinaga *to sit*, which also function as existentials in the absence of a copula (see 4.7), can also be used. That is, instead of sentence (117) below, (118) or (119) would be preferred:

(117) ngadhu galadya
1sg-ABS *sick*-ABS
I am/was sick.

(118) ngadhu galadya nyina-ga
1sg-ABS *sick*-ABS *sit*-PRES
I'm sitting down sick.

(119) ngadhu galadya-ba-n
1sg-ABS *sick*-ABS-INCH-PAST
I got sick (and could still be).

[2] Equational sentences contain NP(s) in absolutive case that identify the class of objects or entities to which the subject NP belongs:

(120) balu gami murni
3sg-ABS *grandfather*-ABS *woman*-ABS
She's my grandmother.

(121) balu-ng ini windi
3sg-DAT *name*-ABS *Windy*-ABS
His name is Windy.

(122) ngadhu wudyanu
1sg-ABS *stranger*-ABS
I am a stranger.

(123) nhinha dhudhu ngana-ng
this-ABS *dog*-ABS 1sg-DAT
This dog is mine.

(124) nhinha ngana-ng dhudhu
this-ABS 1sg-DAT *dog*-ABS
This is my dog.

[3] Like equational and attribute sentences, possessive sentences contain two NPs. The possessor is encoded as either subject (in the absolutive case), as in (113) above, or as a nominal predicate in the dative, as in (123) above, and:

(125) nhinha dhudhu banha dyudya-wu murni
this-ABS *dog*-ABS *that*-ABS *old*-DAT *woman*-ABS
This dog is that old woman's.

As the dative marks beneficiary, as well as possessor, sentence (125) could also be translated as *This dog is for that old woman.* Possession, like attribution, is often expressed by means of the 'dummy copula' nyinaga *to sit*, as in:

(126) balu mudyi-bari nyina-ga-n
3sg-ABS *spouse*-HAVE *sit*-PAST-IMPF
He's got a wife.

Negative possession is always expressed as a verbal sentence, i.e. the following sentence is not possible:

(127) balu marda wirdi
3sg-ABS *stone*-ABS NEG
He has no money.

(128) balu wirdi marda ga-ngguwa
3sg-ABS NEG *stone*-ABS *hold*-PRES
He's got no money.

(128) is the preferred form. (See also Negation 5.4.)

[4] Location sentences contain NP predicates referring to the location of the subject. They consist of one (or more) NP(s) marked with the locative, or with the -gardi *side* suffix (3.3.3):

(129) kogola downs banha-gardi cue-la
Kogola Downs-ABS *that*-SIDE *Cue*-LOC
Kogola Downs station is on the other side of Cue.

(130) balu warada-Ø winmilman gugaman
3sg-ABS *Warreidar*-LOC *windmillman*-ABS *cook*-ABS
He's cook and windmillman on Warreida station.

and (131) below.

[5] Instrumental sentences contain NP predicates referring to the action or event itself, as shown in (131). (See also 3.2.2.3 for 'instruments of predication'):

(131) balu dyina-nggu murdi-ngga
3sg-ABS *foot*-ERG *cold*-LOC
He's walking around in the cold.

5.2 Questions

5.2.1 Yes/No questions

Yes/No questions are marked only by the use of rising intonation at the end of a sentence:

(132) Q: banha mundung yan-da
that-ABS *devil*-ABS *come*-PRES
Is that a devil coming?

(133) A: guwa, banha marla-gardi dyuba yan-da
yes-ABS *that*-ABS *back*-SIDE *child*-ABS *come*-PRES
Yes, there behind you, the child is coming ...

5.2.2 New information questions

In new information questions the appropriate interrogative is placed in sentence-initial position (see 3.0.4 for interrogatives). The rising intonation of yes/no questions is not a feature of new information questions. [A phonetic feature of new information questions is the lengthening of the stem-final vowel of the interrogative word.]

As shown in 3.0.3, interrogatives function as subjects, objects, complements, and adverbials. The sentence-initial position of the interrogative conforms to the general tendency in Badimaya for the most topical word to occupy sentence-initial position (5.1.5).

5.2.2.1 ngana 'who'

[1] ngana *who* appears in sentences like:

(134) ngana ya-nang
who-ABS *come*-PAST-PERF
Who came?

(135) ngana nhundu nha-ngung
who-ABS 2sg-ABS *see/look*-PAST-PERF
Who(m) did you see?

(136) ngana-lu balu-nha bu-ngung
who-ERG 3sg-ACC *hit*-PAST-PERF
Who hit/killed him?

[2] ngana-wu (ngana + DAT) *whose*, is used to query the identity of the possessor:

(137) ngana-wu wulanu
who-DAT *boomerang*-ABS
Whose boomerang?

5.2.2.2 nha 'what'

[1] nha *what* is used, as in English, to request information regarding either a non-human participant or predicate:

(138) nha nhinha / nha banha
what-ABS *this*-ABS / *what*-ABS *that*-ABS
What's this/What's that?

(139) nha nhandi ngarri-ya
what-ABS *over there*-ABS *lie*-PRES
What's that lying over there?

(140) nha ngadhu guwa-nda-n
what-ABS 1sg-ABS *yes*-CAUSE-PAST
What did I hear?

(141) nha-lu balu-nha bu-ngung
what-ERG 3sg-ACC *hit*-PAST-PERF
What hit/killed him?

(142) nha nhunu-ng ini
what-ABS 2sg-DAT *name*-ABS
What's your name?

(143) nha nhundu yara-ngguwa
what-ABS 2sg-ABS *do*-PRES
What are you doing?

[2] nha-la (nha + LOC) *on what*, is used to question the specific location of a person or object:

(144) nha-la balu ngarri-ya
what-LOC 3sg-ABS *lie*-PRES
What's he lying on?

[3] nha-ngga (nha + LOC) *when*, is used as a temporal interrogative (compare nha-la with the -la locative in example (144):

(145) nha-ngga nhundu ya-ngguwa
what-LOC 2sg-ABS *go*-PRES
When are you going?

[4] nha-wu (nha + DAT) *why*, is used to query reason or purpose:

(146) nha-wu nhundu yan-ang
what-DAT 2sg-ABS *come*-PAST
Why did you come?

(147) nha-wu nhundu banha-nha branya-la
what-DAT 2sg-ABS *that*-ACC *make/fix*-FUT
Why are you going to fix that?

[5] nha-rni (nha + ?) *how many*:

(148) nha-rni nhundu dhudhu ga-ngguwa
what-? 2sg-ABS *dog*-ABS *hold*-PRES
How many dogs do you have?

The suffix -rni is not attested elsewhere in the data.

5.2.2.3 wandi 'where'

The locative interrogative is rendered by wandi *where*.

[1] wandi-la (wandi + LOC) *whereabouts*, is used to query a non-specific location:

(149) wandi-la nhundu ya-ngguwa
where-LOC 2sg-ABS *go*-PRES
Whereabouts are you going?

[2] wandi (wandi + Ø) *where*, is used to query directions, as in:

(150) wandi nguud-ami ya-nung
where-ABS *horse*-PL *go*-PAST-PERF
Where's that mob of horses gone?

(151) wandi nhundu ya-ngguwa
where-ABS 2sg-ABS *go*-PRES
Where are you going?

[3] wandi-gardi (wandi + SIDE) *which side*, is used to query an unseen location, as opposed to wandi-la above. wandi-gardi appears in sentences which have a more static sense, as in:

(152) wandi-gardi nhundu wadinya
where/which-SIDE 2sg-ABS *now*-ABS
Which side are you at now?

[4] wandi-gardi-ngun (wandi + SIDE + ABL) *where from*, is used to query the ablative sense of where (see Interrogatives 3.0.4 for restrictions on ablative use):

(153) wandi-gardi-ngun balu wima-n
which/where-SIDE-ABL 3sg-ABS *appear*-PAST
Which side did he come from?

[5] wandi can be juxtaposed to a noun in the sense of *which*:

(154) wandi wagadi
which-ABS *way*-ABS
Which way?

(155) wandi walanu
which-ABS *boomerang*-ABS
Which boomerang?

5.2.2.4 ya 'how'

[1] ya (ya + Ø) *how*, is used to query the means or manner:

(156) Q: ya nhundu ya-ngguwa
how-ABS 2sg-ABS *go*-PRES
How are you going?

(157) A: ngadhu ngud-bari ya-ngguwa
1sg-ABS *horse*-HAVE *go*-PRES
I'm going by horse.

(158) ya nhundu guwa-nda-dya
how-ABS 2sg-ABS *yes*-CAUSE-REFL/RECIP
How do you feel?/How are you?

[2] ya-idya (ya + SEMBL) *how is, what's it like*, is used in sentences like:

(159) ya-idya yuru marran-gu brany
how-SEMBL *feed*-ABS *sheep*-DAT *good*-ABS
What's the feed like for the sheep (up there), good?

5.2.3 Embedded questions

Both yes/no and new information questions may appear as complements, rather than main clauses:

(160) balu wangga ngana-ng banha dhudhu brany
3sg-ABS *say/ask/tell*-PRES 1sg-DAT *that*-ABS *dog*-ABS *good*-ABS
He asks me "is that a good dog"?

(161) ngadhu wangga-ng balu-ngudi guwa wandi-gardi-ngun
1sg-ABS *say/tell, etc.*-PAST-PERF 3sg-ALL *yes where*-SIDE-ABL
I said to him, "yes, where are you from"?

5.2.4 Negative questions (see 5.4)

5.3 Imperatives

Imperative sentences are used by the speaker to issue a command or make a request to the addressee. Distinguishing a command, request, or declarative depends often on the context of utterance. As was noted in 4.1.1, the imperative form in many instances is identical to the future tense form (of verbs of the ng class). As subject NPs are often omitted once reference has been established (5.1.1), a command can only be interpreted by the context of utterance:

(162) nha banha-nha nhawa
what-ABS *that*-ACC *see*-FUT/IMP
Have a look at that.

(163) dha-nda-la
stab-FUT/IMP
Put a hole in it.

(164) warda ngarriya
far away-ABS *lie*-FUT/IMP/PRES
Go and lie down.

Evidence from narratives suggests the possibility of distinguishing commands from requests. In situations where the imperative form was uttered in a command the second person pronoun was omitted. However, as soon as the force of the utterance was weakened to more of a suggestion, the second person pronoun form was included, e.g.:

(165) ya-ra nyina
go-FUT/IMP *sit*-IMP
Go and sit down!

(166) warda wani-la
far away-ABS *throw*-FUT/IMP
Throw it far away!

Sentence (167) was spoken as a declarative statement:

(167) nhundu dyambardaba-la warn-gudi (gabi binhdhi marran-gu)
2sg-ABS *run*-FUT/IMP *creek*-ALL *(water*-ABS *suddenly*-ABS *sheep*-DAT*)*
You run up to the creek (and see if there's any water there for the sheep).

Sentence (168) was spoken as a threat:

(168) nhundu nhinha-gardi yan
2sg-ABS *this*-SIDE *come*-FUT
You come around this side.

The irregular verb yanda *come*, however, is unique in having a distinct imperative form yana, as in:

(169) nhinha-gardi yan-a
this-SIDE *come*-IMP
Come around this side! vs. (168) above.

5.4 Negation

Badimaya has two uninflecting particles wirdi and wayi, and one privative suffix -gula *without* (3.3.5), functioning as predicate negators, negative quantifiers and negative responses (see also 5.2).

5.4.1 Negatives: forms and functions

5.4.1.1 wirdi

Wirdi has the widest range of functions of the negatives. Its uses are:

[1] As a negative quantifier:[21]

(170) marda wirdi
stone-NEG
No money. vs.

(171) marda-gula
stone-PRIV
No money.

There is a slight difference in meaning between the uses of wirdi and -gula in the above context. marda wirdi means you haven't got any money on you, whereas marda-gula means you have no money at all.

[2] As a negative response to questions (5.2):

(172) Q: nhundu dhanha-nha mirnu
2sg-ABS 3pl-ACC *know*-PRES
Do you know them?

(173) A: wirdi wirdi dyalga-nha ngadhu mirnu
NEG NEG *some*-ACC 1sg-ABS *know*-PRES
No, no, I know some of them.

[3] As a predicate negator for all sentence types. In these instances the negative particle precedes the predicate, i.e. the subject NP remains outside the scope of negation, in contrast to many Australian languages (e.g. Bandjalang, Crowley 1978; Ngiyambaa, Donaldson 1981; Diyari, Austin 1981a), where the negative particle is placed sentence-initially in this function:

(174) balu wirdi galadya balu brany
3sg-ABS NEG *sick*-ABS 3sg-ABS *good*-ABS
He's not sick, he's well.

(175) banha wirdi mawurdu banha biluny
that-ABS NEG *black*-ABS *that*-ABS *white*-ABS
That's not black, that's white.

(176) balu wangga-ng wirdi ya-ngguwa Mingenew-di
3sg-ABS *say/tell*-PAST-PERF NEG *go*-PRES *Mingenew*-ALL
He said he's not going to Mingenew.

(177) balu wirdi wulgu wangga-ya
3sg-ABS NEG *straight*-ABS *talk/say, etc.*-PRES
He's not talking straight (he's lying).

(178) nhundu wirdi banha-nha murni nha-ngung
2sg-ABS NEG *that*-ACC *woman*-ABS *see*-PAST-PERF
Didn't you see that woman?

Unfortunately, I was not able to record paradigms, such as *It wasn't I who saw him*, i.e. with subject scope of the negative.

[4] As a negative command word:[22]

(179) wirdi balu-nha bu-nguwa-n
NEG 3sg-ACC *hit*-IMPF-PAST
No, don't hit him.

(180) wayi balu-nha bu-nguwa-n
NEG 3sg-ACC *hit*-IMPF-PAST
Don't hit him.

(see 4.1.1 for use of past tense form in negative imperatives).

5.4.1.2 wayi

[1] The use of wayi is generally restricted to negative commands or suggestions, though one instance of wayi being used in negative questions was also noted (see [2] below). It is more frequent as a negative command word than is wirdi:

(181) wayi wangga mama gurlban ngalimi
NEG *say/tell*-PRES *song*-ABS *secret*-ABS 1du-ABS
Don't say that it's our secret song.

(182) wayi ngana-ng yu-wa bila-ngga waradu wulgu
NEG 1sg-DAT *give*-FUT/IMP *air*-LOC *on top of*-ABS *straight*
Don't give me (a horse) (that tosses me) straight up in the air.

Wayi occupies predicate-initial position. The addressee nhundu is omitted in commands.

[2] As stated above, one instance of wayi was in negative questions. Sentence (178) above was also represented as:

(183) nhundu wayi banha-nha murni nha-ngung
2sg-ABS NEG *that*-ACC *woman*-ABS *see*-PAST-PERF
Didn't you see that woman?

5.4.1.3 -gula

[1] The privative suffix -gula *without* is used with nouns as an existential negative:

(184) marda-gula
stone-PRIV
No money.

(185) gabi-gula
water-PRIV
No water.

(186) wama-gula
food-PRIV
No food.

[2] -gula is also used as a negator for verbs of cognition, utterance, and perception:

(187) nhagu-gula
see/look-PRIV
I can't see.

(188) mirnu-gula
know-PRIV
I don't know.

(189) guwanda-gula
hear/listen/feel-PRIV
I can't hear, etc.

Although it seems to be the case in the existing data that all instances of verb + -gula are in the present tense, this has not been explicitly tested.

5.4.2 Discourse context and function of negation

Quite often certain ambiguities in the scope of negation can be resolved by the fact that whenever the speaker negates a statement he counters by offering a positive alternative. This is also common in Dyirbal and Walbiri negative commands (see Dixon 1972). As mentioned in 5.4.1 the NEG particle is placed predicate-initially. In instances where verbal predicates contain more than a verb (such as an object or adverbial NP), the scope of the negative is not immediately clear, e.g.:

(190) balu wirdi winda garda-ba-n
predicate scope
comp scope
verb scope
he-ABS NEG *tree*-ABS *cut*-PAST

The ambiguity of the negative is resolved when the speaker offers the positive alternative:

(191) winda nhandi-la yuga
tree-ABS *over there*-LOC *stand*-PRES
The tree's standing over there.

Similarly, in the following utterance:

(192) gabi wirdi bunya-n
water-ABS NEG *dry up*-PAST

could be ambiguous between *there's no water* - PAUSE - *it's dried up* or *the water has not dried up*. In these instances my informant tended to offer a positive alternative, e.g.

(193) gabi wirdi bunya-n gabi barna-ngga ngarriya
water-ABS NEG *dry up*-PAST *water*-ABS *ground*-LOC *lie*-PRES
The water hasn't dried up - it's still lying on the ground.

5.5 Complex sentences

A complex sentence consists of two (or more) juxtaposed clauses, standing in what might be termed a coordinate or subordinate semantic relationship. One of the clauses, generally the first, functions as the main clause, and has the structure of a simple sentence (described in 5.1.3 and 5.1.8). The subsequent adjoined clauses differ structurally from the main clause in that overt NPs whose referents are common to all adjoined clauses are omitted in all but the first, regardless of their case.

One notes in Badimaya a marked absence of overt coordinate/subordinate morphology, as compared with what might be expected in a suffixing Pama-Nyungan language (cf. Dixon 1980:460). One might speculate that this observation is a function of the fact that Badimaya is a moribund language.[23] At this point in time this hypothesis cannot, of course, be tested. Only two morphologically marked non-finite clause types were observed, the purposive and the 'lest' constructions (see below in 5.5.2.1 and 5.5.2.2). Most logical subordination and coordination was expressed by means of finite juxtaposed clauses with omitted coreferential NPs, as noted above.

5.5.1 Coordination

A coordinated sentence in Badimaya consists of a series of two or more finite clauses indicating sequences of events, where the order of the conjuncts reflects the temporal order of the events. Main and adjoined clauses have identical tense forms, usually (though not always) the past.

An examination of coordinate constructions in texts reveals that Badimaya, like English, shows an overwhelming tendency to conjoin clauses with the same subject NP (though not necessarily the same case marking). However, whereas in English the syntactic constraint is so strong that it overrides pragmatic considerations such as the following:

(194) **The man dropped the glass and (it) broke (it)*

in Badimaya, if the context of utterance is understood, it is possible to omit other NPs along with the subject NP leaving

(a) clauses juxtaposed to the main clause consisting of verbs only; where the subjects (and objects) are identical and thus omitted:

(195) murni-nggu garda-ng yuga-n
woman-ERG *get up*-PAST *stand*-PAST
The woman got up and stood.

(196) nhundu marran ma-ra ya-ra
2sg-ABS *sheep*-ABS *take*-FUT *go*-FUT
You take the sheep and go.

(197) yamadyi-lu balu-nha nha-ngung bu-ngung ngal-ang
man-ERG 3sg-ACC *see/look*-PAST-PERF *hit/kill*-PAST-PERF *swallow*-PAST-PERF
The man saw him, killed (him), ate (him).

(b) clauses juxtaposed to the main clause consisting of verbs plus direct objects or complements; where the subjects are identical, and thus omitted from juxtaposed clauses:

(198) balu wadyan dhaba-n wama bawu-n
3sg-ABS *fire*-ABS *burn*-PAST *food*-ABS *cook*-PAST
He made a fire and cooked a meal.

(199) yurda balu nha-ngung warlba-nha ngadhu-la yadanga-n
later-ABS 3sg-ABS *see/look*-PAST-PERF *another*-ACC 1sg-LOC *run away*-PAST
Later she saw another bloke (and) ran away from me.

Note that in the above constructions, where inherent semantics permit, the main clause subject (whether transitive or intransitive) carries an ergative case marker (see also below in 5.5.3).

5.5.2 Subordination

Subordinate constructions may be subclassified according to the various semantic relationships they express, and according to whether they contain a finite or non-finite verb:

(a) non-finite juxtaposed clauses include

(i) purpose-intent clauses (5.5.2.1)
(ii) lest clauses (5.5.2.2)

(b) finite juxtaposed clauses include

(i) purpose-intent clauses (5.5.2.3)
(ii) causal clauses (5.5.2.4)
(iii) simultaneous action clauses (5.5.2.5)
(iv) clausal (sentential) objects (5.5.2.6)
(v) conditionals (5.5.2.7)

5.5.2.1 Non-finite purpose-intent clauses

Purpose-intent clauses denote actions or events which will follow (or are intended to follow) the action described by the main clause. They are marked by the -lgu inflection on the verb (4.1.3), or by the future tense inflection (see below in 5.5.2.3). The conditions of occurrence of -lgu, as opposed to simply use of the future tense were not possible to determine, due to insufficient data. The non-finite purpose-intent clause, also noted in 4.1.3[5], is one which has a main clause intransitive subject NP identified with the (omitted) transitive subordinate clause subject NP. The main clause subject carries the ergative case marking:

(200) dhudhu-nggu yan nhunhu-nha badya-lgu
dog-ERG *come-*? 2sg-ACC *bite*-PURP
The dog is coming to bite you.

(see also 4.1.3[5] for simple sentence example of the purposive).

5.5.2.2 Non-finite 'lest' clauses

'Lest' clauses are marked by the verbal inflection -bala (4.1.3[6]). Lest clauses denote warnings or admonitions about an unrealised situation. The lest clauses recorded were of the type which involved:

(a) identical (and thus omitted) subjects:

(201) wirdi wirdi garda well-da yuga-n gabi-ngga warang-bala
NEG NEG *on top of*-ABS *well*-LOC *stand*-PAST *water*-LOC *fall*-LEST
No, no, don't stand too close to the well or you'll fall in the water.

(b) juxtaposed clauses consisting of subject NP and verb, i.e. where the object NP of the main clause was identical to the (omitted) object NP of the subordinate clause:

(202) marran nha-guwa-n dhudhu ngubanu nhalgu-bala
sheep-ABS *look,etc.*-PAST-IMPF *dog*-ABS *dingo*-ABS *eat/swallow*-LEST
Watch the sheep or the dingoes will get them.

5.5.2.3 Finite purpose-intent clauses

Juxtaposed clauses having a purpose-intent relationship to the main clause may be morphologically marked by a special verbal inflection (as was the case with those mentioned above), or be marked by the future tense, denoting situations unrealised at the time of the utterance. Implicated clauses marked with the future denote purpose-intent or conditionals (see below 5.5.2.5).

The purpose-intent clauses recorded for Badimaya involved coreferential subject NPs, which were subsequently omitted in the juxtaposed clauses. As is the case with all other complex sentences discussed so far involving the identification of subject NPs, the main clause subject (whether transitive or intransitive) carries an ergative case marker:

(203) mama-lu sheet-du dhama-dya-n yamadyi-mi wanyana-la
father-ERG *sheet*-ERG *cover*-REFL/RECIP-PAST *man*-PL *frighten*-FUT
Father covered himself with a sheet to frighten the Yamadyis.

(204) mama-lu ya-nung wama wadha-la
father-ERG *go*-PAST-PERF *food*-ABS *look for*-FUT
Father has gone to look for food.

5.5.2.4 Finite causal clauses

Finite causal clauses are marked by the past tense denoting situations which occur prior to the events described by the main clause. The examples of this clause type in the corpus involve the identification of main clause direct object NPs or NPs in local cases, with (omitted) direct object NPs in the juxtaposed clauses:

(205) gumal winda-ngga mula-ba-n Peter-lu wanggu-lu garda-ba-n
possum-ABS *tree*-LOC *dead*-INCH-PAST *Peter*-ERG *axe*-ERG *cut*-INCH-PAST
The possum died in the tree Peter cut down with an axe.

(206) Peter minda-di nhuga-n Joe-lu baranya-n
Peter-ABS *house*-ALL *enter*-PAST *Joe*-ERG *make,etc.*-PAST
Peter went into the house Joe built.

(207) gulu balu-nha mula-nda-n nha-lu bu-ngung
poor fellow-ABS 3sg-ACC *dead*-CAUSE-PAST *what*-ERG *hit/kill*-PAST-PERF
Poor fellow got killed - what hit him?

5.5.2.5 Finite simultaneous event clauses

Simultaneous event clauses describe events that take place at the same time as the events described by the main clause and verbs in these clauses bear the neutral or 'unmarked' present tense form. Most simultaneous event clauses recorded were, like all other clause types discussed so far, juxtaposed to the main clause. However, in one example in the corpus the verb carrying the neutral tense, i.e. expressing the 'simultaneous event', precedes the verb carrying the overt tense marking. There is not enough data available, however, to generalise. The one example of this clause type involves two intransitive clauses with like subject NPs; the main clause subject is marked with the ergative case:

(208) gadya bibi-lu madya nyina-ng
child-ABS *mother*-ERG *wait*-PRES *sit*-PAST-PERF
The child and its mother sat waiting.

Many of the examples in the corpos involve the direct object NP of the main clause being coreferential with subject or direct object NPs of the juxtaposed clause:

(209) ngadhu nhunhu-nha bugul-aba-n nha-ngung station-da
is-ABS 2sg-ACC *already*-INCH-PAST *see/look*-PAST-PERF *station*-LOC

wama bawu-la
food-ABS *cook*-PRES
I saw you a long time ago cooking food on the station.

(210) balu mirnu ngadhu-nha wangga-ya balu-ngudi
3sg-ABS *know*-PRES 1sg-ACC *speak/say,etc.*-PRES 3sg-ALL
He understands everything I say to him.

(211) mama-lu dyambarda-ba-ya gadya-muga balu-nha badama-la
father-ERG *run*-INCH-PRES *child*-KIN PROP-ABS 3sg-ACC *chase*-PRES
Father (emu) runs off (and) the little ones (the newly-hatched babies) follow him.

Sentence (211) above was translated by Joe Benjamin as *Father trains the little ones to follow him.* As has already been noted in 4.4.1, the verb dyambardabaya *to run* may take one or two NP arguments, and therefore as far as the syntax of Badimaya is concerned, either interpretation would be acceptable, i.e. whether the main clause is transitive, the juxtaposed clause intransitive, or vice versa, the main clause subject NP still carries the ergative case marking.

In instances where the main clause 'controller' NP is not in subject or direct object function, there appears to be a 'syntactic requirement' that that NP appear in 'subject form', i.e. in the absolutive or ergative case, depending on conditions for ergativity (5.1.2.1). For example, in the sentences (214) and (215) below, the main clause controller NPs function as beneficiary and instrumental respectively, and as such would in simple sentences be marked with the dative and ergative case (3.2.2.5 and 3.2.2.3). However, the NPs appear in the absolutive case, i.e. in the form of the underlying subject NPs:

(214) murni-nggu wama bawu-n balu-ng mudyi marran gurrigurrila
woman-ERG *food*-ABS *cook*-PAST 3sg-DAT *spouse*-ABS *sheep*-ABS *collect*-PRES
The woman was cooking food for her husband (who was) mustering sheep.

and not

(215) *murni-nggu wama bawu-n balu-ng mudyi-yu marran gurri gurrila
woman-ERG *food*-ABS *cook*-PAST 3sg-DAT *spouse*-DAT *sheep*-ABS *collect*-PRES

Similarly,

(216) murni-nggu dyiga bu-ngung marda bindhi ngarri-ya
woman-ERG *snake*-ABS *hit/kill*-PAST-PERF *stone*-ABS *suddenly*-ABS *lie*-PRES
barna-ngga
ground-LOC
The woman killed a snake with a stone lying on the ground.

and not

(217) *murni-nggu dyiga bu-ngung marda-nggu bindhi ngarri-ya
woman-ERG *snake*-ABS *hit/kill*-PAST-PERF *stone*-ERG *suddenly*-ABS *lie*-PRES
barna-ngga
ground-LOC

5.5.2.6 Finite sentential objects

Juxtaposed clauses may function as the obligatory sentential objects (5.1.1) of utterance and aspectual verbs. They may or may not have the same tense form as the main clause verbs. Juxtaposed clauses functioning as sentential objects are universally nominative/accusative, according to Dixon (1979). Note, in the following Badimaya examples, the ergative case marking on the main clause subject (where semantically applicable):

(218) Peter-lu badi-nda-n ngud gada-ngguwa
Peter-ERG *finish*-CAUSE-PAST *horse*-ABS *break in*-PRES
Peter's finished breaking in the horses.

(219) dhanha wangga-ng wirdi ya-ngguwa Mingenew-di
3pl-ABS *say/speak*-PAST-PERF NEG *go*-PRES *Mingenew*-ALL
They said they're not going to Mingenew.

(220) balu wangga-ng wirdi galadya
3sg-ABS *say,etc.*-PAST-PERF NEG *sick*-ABS
He said he's not sick.

(221) bibi-lu wangga-ng gadya gadya dyindyil warda-di
mother-ERG *say,etc.*-PAST-PERF *child*-ABS *child*-ABS *laughter*-ABS *far*-ALL
waniwani-wa
throw-FUT/IMP
Mother said: "child, child, throw that laughter far away".

As noted in 4.2.4, all main clause verbs of aspect and utterance may take either a direct object NP, a sentential object, as above, or both:

(222) ngadhu balu-nha gadada-n wangga
1sg-ABS 3sg-ACC *stop*-PAST *say/speak*-PRES
I stopped him talking.

(223) yurda gadya-lu wangga ngana-ng mama ya-nung
later-ABS *child*-ERG *say,etc.*-PRES 1sg-DAT *father*-ABS *go*-PAST-PERF
Later on the child asks its mother: "where's my father gone?"

5.5.2.7 Finite conditional clauses

Conditional clauses, like purpose-intent clauses (5.5.2.3), are marked by the future tense, denoting situations unrealised at the time of the utterance:

(224) balu ngana-ng dhudhu ngadhu balu-nha marda-nggu bu-wa
3sg-ABS 1sg-DAT *dog*-ABS 1sg-ABS 3sg-ACC *stone*-ERG *hit*-FUT
If he were my dog, I'd hit him on the head with a stone.

(225) balu marran nha-wa balu ngunu-la dyambarda-ba-la
3sg-ABS *sheep*-ABS *see,etc.*-FUT 3sg-ABS *middle*-LOC *run*-INCH-FUT
If he'd see some sheep, he'd take off through the middle.

In the examples in the corpus, the deletion of NPs with identical reference does not apply to conditional clauses.

5.5.3 Clause-linking and ergative case marking

In terms of constraints on coreferential NP deletion clause-linking operations, Badimaya apparently *behaves* like the majority of Pama-Nyungan languages (cf. Blake 1979:301), in that either a particular syntactic process applies exclusively to (coreferential) subject NPs (regardless of case), or a common NP can have any function in each of the clauses involved. While the coordinate constructions in the corpus showed an overwhelming tendency to conjoin clauses with coreferential subject NPs, subordinate constructions, like English, involved the coreferentiality of any actant of the main clause with any or no actant of the subordinate clause. (Some of the subordinate constructions, such as purposives and 'jussive complements' (sentential objects) 'universally' require coreferential subject NPs (cf. Dixon 1979).) Table 5.5.3 below summarises features of the various logical relations holding between the main clause and the adjoined clauses. It appears that, where clause-linking operations involved coreferential subject NPs, there was a morphological requirement for the main clause subject to be marked with the ergative case (see table 5.5.3).

The fact that an ergative main clause subject in Badimaya 'controls' coreferential NP deletion across coordinating (and subordinating) clauses, is an unusual phenomenon in Pama-Nyungan languages (regardless of whether these languages are classified as 'more or less' ergative). Generally, where there is a need to maintain anaphoric reference between subject NPs of conjoined clauses, with the main clause subject for discourse purposes, it is the *absolutive* rather than the ergative which controls the 'topic chain' (Dixon 1972), with the help of certain 'normalising' (in the sense of Silverstein 1976) subordinate clause morphology.

As stated above (5.5), Badimaya has practically no subordinate clause morphology. Therefore, 'de-ergativising' mechanisms usually found in Pama-Nyungan languages, such as antipassives, as in Dyirbal, Yidiny (Dixon 1972, 1977), and Kalkatungu (Blake 1979); switch-referencing, as in Diyari and the Pilbara languages (Austin 1981a,b); or constructions allowing the use of lexically transitive verbs in intransitive sentences, as in War(r)gamay (Dixon 1981a,b), are absent in Badimaya. One might speculate that, due to the absence of processes such as

the above-mentioned to 'justify' the alignment of coreferential subjects for discourse, that this 'discourse function' has shifted to the ergative case form in Badimaya. (Similar shifts in ergative functions have been noted elsewhere, e.g. in the Papuan languages (Li and Lang 1979) and Sherpa languages (Givon 1980).) However, conclusions at this stage can only remain speculative, due to the absence of speakers and previously published work on the language.

Table 5.5.3: Summary of morphological and syntactic features of clause-linking and coreference

Logical Relations of Clauses with Coreferential NPs	MAIN CLAUSE		ADJOINED CLAUSES	
	Function of Controller NP	Inflectional Features of NP	Function of Target NP	Infl. Features of Clause-linking
1. Coordination	*Intrans. Subject*	= *Ergative*	(Intr. Subject)	None
	Trans. Subject	= *Ergative*	(Intr. Subject)	" "
	Trans. Subject/ *Direct object*	= *Ergative*	(Trans. Subject/) (Direct object)	
2. Subordination				
2.1 Purpose-intent				
(non-finite)	*Intrans. Subject*	= *Ergative*	(Trans. Subject)	"
(finite)	*Intrans. Subject*	= *Ergative*	(Trans. Subject)	" "
2.2 Causal (finite)	Location	= Locative	(Direct Object)	" "
	Goal	= Allative	(Direct Object)	" " "
	Direct Object	= *Accusative*	(Direct Object)	"
2.3 Simultaneous Action				
(finite)	*Intrans. Subject*	= *Ergative*	(Intr. Subject)	"
	Direct Object	= Accusative	(Trans. Subject)	" "
	Direct Object	= Accusative	(Intr. Subject)	" " "
	Intrans. Subject	= *Ergative*	(Direct Object)	" " "
	Beneficiary	= Absolutive	(Trans. Subject)	" " " "
	Instrumental	= Absolutive	(Intr. Subject)	" " " "
2.4 Sentential Objects	*Trans. Subject*	= *Ergative*	(Trans/Intr. Subj.)	"
	Intrans. Subject	= *Ergative*	(Trans/Intr. Subj.)	"

TEXTS

HOW JOE STOPPED THE MAD COOK AT WARREIDAR STATION

balu warada gugaman winmilman
3sg-ABS *Warreidar*-ABS *cook*-ABS *windmillman*-ABS
He was cook and windmillman on Warreidar station.

balu badya-ba-n wama-wu badya-ba-n
3sg-ABS *wild*-INCH-PAST *food*-DAT *wild*-INCH-PAST
He got mad, got mad because of (the complaints about) the food.

balu ya-nung gun ma-nung
3sg-ABS *go*-PAST-PERF *gun*-ABS *take*-PAST-PERF
He went and got a gun

malaga ya-nung kitchen-gudi
back-ABS *go*-PAST-PERF *kitchen*-ALL
and went back to the kitchen.

balu yuwa-lu yamadyi-mi
3sg-ABS *shoot*-FUT *man*-PL
He was going to shoot the men.

ngadhu balu-nha dyili ma-nung
1sg-ABS 3sg-ACC *arm*-ABS *take*-PAST-PERF
I got him by the arms.

ngadhu gun ma-nung
1sg-ABS *gun*-ABS *take*-PAST-PERF
I got the gun.

ngadhu gulgadyula bu-ngung
1sg-ABS *ear hole*-ABS *hit*-PAST-PERF
I hit him in the ear hole.

balu dyambarda-ba-n wudib wudib axe ma-nung
3sg-ABS *run*-INCH-PAST *woodheap*-ABS *axe*-ABS *take*-PAST-PERF
He ran to the woodheap and got an axe.

gurriya yamadyi-lu badama-n balu-nha bu-ngung
one-ABS *man*-ERG *chase*-PAST 3sg-ACC *hit*-PAST-PERF
One man chased him and hit him.

THE DAY JOE GOT CHASED BY A CAMEL

ngalidya ya-nung dyidamin ngawu wadha
1du-ABS *go*-PAST-PERF *bird*-ABS *egg*-ABS *look for*-PRES
We two went looking for birds eggs.

yurda ngana yan-da
later-ABS *who*-ABS *come*-PRES
By and by, who's that coming?

kamal gadya-bari balu badya-ba-n gadya-wu ngalidya-nha badama-n
camel-ABS *child*-HAVE 3sg-ABS *wild*-INCH-PAST *child*-DAT 1du-ACC *chase*-PAST
A camel with her children. She got wild because of the little ones and chased us.

ngali dyambarda-ba-n fence-gudi
1du-ABS *run*-INCH-PAST *fence*-ALL
We ran to the fence (and instead of going over the fence),

fence-gudi bindhi mulya-bara wara-ng
fence-ALL *straight*-ABS *face*-FIRST *fall*-PAST-PERF
fell straight through the fence face-first.

JOE CAUGHT THE PORCUPINE

ngalidya yigu-da nyingan-gardi ya-nung
1du-ABS *elder sister*-LOC *Ningan*-SIDE *go*-PAST-PERF
We two, my elder sister and I, were walking around at Ningan station.

ngarriya garang-gudi ya-ngguwa
lie-PRES *sun*-ALL *go*-PRES
Just lying around till sunrise.

balu garanggarang yan-da yuga
3sg-ABS *sunrise*-ABS *come*-PRES *stand*-PRES
She got up at sunrise and walked around.

yurda nha-nung gunduwa ngarri-ya dha-ngga
later-ABS *see*-PAST-PERF *porcupine*-ABS *lie*-PRES *hole*-LOC
Later she saw a porcupine lying in a hole.

yurda ngana-ngudi mira-ng
later-ABS 1sg-ALL *call*-PAST
By and by she called out to me:

dha-ngga yidawa-la gunduwa ma-nung
hole-LOC *get down*-FUT *porcupine*-ABS *take*-PAST
"Get down the hole, take the porcupine,

maga bu-wa garda-di waniwa
head-ABS *hit*-FUT *top*-ALL *throw*-PRES
hit him on the head, and throw him up top."

rope ya-nung ma-nung
rope-ABS *go*-PAST-PERF *take*-PAST-PERF
(She) went and got a rope

ngadhu-nha wadyu-n yidya-n
1sg-ACC *emerge*-PAST *take*-PAST
pulled me out and put me down

HOW THEY GO ABOUT SENDING WORD FOR A CEREMONY

ira dhalgala mama-la yuga-n
mouth-ABS *send*-NON-PAST *sing*-FUT *stand*-PAST
Someone sends word to the next lot that there will be a corroboree

gurriya yamadyi yan
one-ABS *man*-ABS *come*-FUT
One man will come and

nha-wa nhinha mudimi
look-FUT *this*-ABS *lot/mob*-ABS
have a look at our mob. (He will either say:)

wirdi ngadhu yuga-n banha-wu mama
NEG 1sg-ABS *stand*-PAST *that*-DAT *song/dance*-ABS
No, I've danced that dance -

dhana-nha badiwi dhana wirdi wirdi-ba-n
3pl-ACC *lot/mob*-ABS 3pl-ABS NEG NEG-INCH-PAST
they all (said then) they didn't want it (the corroboree),

guwa ngalidya badiwi yan
yes 1du-ABS *lot/mob*-ABS *come*-FUT
or (they say:) "Yes, we'll all come."

HOW THE MAN FOUND WATER IN THE CHRISTMAS TREE

yuru winda gabi-bari
feed-ABS *tree*-ABS *water*-HAVE
The Christmas tree has water.

marran shed-gudi ma-nung ya-nung
sheep-ABS *shed*-ALL *take*-PAST-PERF *go*-PAST-PERF
(We) were taking the sheep to the sheds (for shearing).

yurda gabi bunya-n
later-ABS *water*-ABS *blow*-PAST
Later, the water dried up.

wandi gabi ngarri-ya
where-ABS *water*-ABS *lie*-PRES
Where's the water now?

wirdi gabi wirdi
NEG *water*-ABS NEG
No, there's no water.

gurriya yamadyi-lu wangga-ng
one-ABS *man*-ERG *speak*-PAST-PERF
One man spoke:

quartpot yu-wa balu ya-nung
quartpot-ABS *give*-FUT/IMP 3sg-ABS *go*-PAST-PERF
"Give me the quartpot!" He went.

yurda malaga-ngun yan-da gabi-bari
later-ABS *back*-ABL *come*-PRES *water*-HAVE
Later, he comes back with water.

wandi gabi ma-nung
where-ABS *water*-ABS *take*-PAST-PERF
Where did you get the water from?

nhandi winda-ngga dyula-ngun
there-ABS *tree*-LOC *root*-ABL
Over there, out of the roots of the tree.

JOE MAKES FRIENDS WITH THE STOREKEEPER

ngadhu station-ngung ya-nang town-gudi
1sg-ABS *station*-ABL *come*-PAST-PERF *town*-ALL
I came into town from the station.

ngadhu gabi ma-nung
1sg-ABS *water*-ABS *take*-PAST
I bought some wine.

ngalidya gudha babinyu-da gabi ngal-ang garlgarl-da
1du-ABS *two*-ABS *friend*-LOC *water*-ABS *swallow*-PAST-PERF *bush*-LOC
We two, my friend and I, were drinking the wine in the bush.

yurda ngadhu wangga-ng
later-ABS 1sg-ABS *say/speak*-PAST
Later on I said:

ngamari yu-wa
tobacco-ABS *give*-FUT/IMP
"Give me some tobacco!"

balu wangga-ng
3sg-ABS *say/speak*-PAST
He said:

wirdi wirdi ngadhu ngamari-gula
NEG NEG 1sg-ABS *tobacco*-WITHOUT
"No, no, I haven't got any tobacco."

ngadhu wangga-ng
1sg-ABS *say/speak*-PAST-PERF
I said:

guwa ngadhu ma-ra ya-ra
yes 1sg-ABS *take*-FUT/IMP *go*-FUT/IMP
"Yes, I'm going to get some."

ngadhu store-gudi ya-nung
1sg-ABS *store*-ALL *go*-PAST-PERF
I went to the store.

ngadhu wangga nha-ngung storeman
1sg-ABS *say/speak*-PRES *see/look*-PAST-PERF *storekeeper*-ABS
I went to the storekeeper to ask him.

balu nha-ngung ngadhu-nha
3sg-ABS *see/look*-PAST-PERF 1sg-ACC
He saw me and

yurda balu biyan ngadhu-nha dhadha yami-n
later-ABS 3sg-ABS *suddenly*-ABS 1sg-ACC *bad*-ABS *swear at*-PAST
straight away started abusing me.

balu wangga-ng
3sg-ABS *say/speak*-PAST-PERF
He said:

nha-ngga nhundu marda ngana-ng yu-wa
what-LOC 2sg-ABS *stone*-ABS 1sg-DAT *give*-FUT/IMP
"When are you going to give me the money (you owe me)?"

ngadhu badya-ba-n balu-ngudi
1sg-ABS *wild/mad*-INCH-PAST 3sg-ALL
I got mad at him.

ngadhu guru-ba-n counter-di
1sg-ABS *eye*-INCH-PAST *counter*-ALL
I went up to the counter -

balu banha-gardi yuga counter-da
3sg-ABS *that*-SIDE *stand*-PRES *counter*-LOC
He's standing on the other side of the counter -

ngadhu balu-ng ngan ma-nung
1sg-ABS 3sg-DAT *throat*-ABS *take*-PAST-PERF
I grabbed his throat.

ngadhu wangga
1sg-ABS *say/speak*-PRES
I say:

nhundu nhinha-gardi yan
2sg-ABS *this*-SIDE *come*-FUT
"You come around this side".

wirdi wirdi balu wangga-ng
NEG NEG 3sg-ABS *say/speak*-PAST-PERF
"No, no", he said,

balu wanya-ba-n
3sg-ABS *frightened*-INCH-PAST
He got frightened and

balu mara yu-wa
3sg-ABS *hand*-ABS *give*-FUT/IMP
gives me his hand.

(The storekeeper never got his money, but he's been good friends with Joe ever since.)

JOE'S WIVES

ngadhu minang-gudi ya-nung murni-nha wadha
1sg-ABS *Minang*-SIDE *go*-PAST-PERF *woman*-ACC *look for*-PRES
I went south looking for a woman.

yurda mudyi ma-nung
later-ABS *spouse*-ABS *take*-PAST-PERF
By and by I got a wife.

guwa baranymarda murni
yes good-ABS *woman*-ABS
Yes, she was a good woman.

ngalidya nyina-ga bugul-idya
1du-ABS *sit*-PRES *already*-SEMBL
We stay together for a long time.

yurda balu nha-ngung warlba-nha
later-ABS 3sg-ABS *see*-PAST-PERF *another*-ACC
By and by she saw another bloke (and)

ngadhu-la yadanga-n
1sg-LOC *run away*-PAST
ran away from me.

ngadhu gawunu gurriya ma-nung yabaru-gardi
1sg-ABS *again*-ABS *one*-ABS *take*-PAST *Yabaru*-SIDE
I again took one - from the north.

balu yadanga-n ngadhu-la
3sg-ABS *run away*-PAST 1sg-LOC
(Then) she ran away from me.

ngadhu gan nyina-ga wadinya
1sg-ABS *alone*-ABS *sit*-PRES *now*-ABS
Now I'm alone.

warlba-nha dyuba ngadhu ma-nung
another-ABS *child*-ABS 1sg-ABS *take*-PAST-PERF
I took another person's kid. (Joe adopted a son)

ngalidya marduwa-nda-n
1du-ABS *grow up*-CAUSE-PAST
We raised him.

ngadhu school-gudi yidya-n
1sg-ABS *school*-ALL *take*-PAST
I took him to school.

JOE GOES TO NINGAN (FOR THE FIRST TIME)

ya-yidya yuru marran-gu brany
how-SEMBL *feed*-ABS *sheep*-DAT *good*-ABS
"How's the feed for the sheep up there, good?"

balu ngadhu-nha wangga-ng
3sg-ABS 1sg-ACC *say/speak*-PAST-PERF
He (Joe's father) said to me:

nhundu dyambarda-ba-ya warn-gudi
2sg-ABS *run*-INCH-PRES *creek*-ALL
"You run up to the creek and

gabi bindhi ngarri-ya marran-gu
water-ABS *straight*-ABS *lie*-PRES *sheep*-DAT
see if its full of water for the sheep."

guwa gabi yagu ngarri-ya
yes water-ABS *much/big*-ABS *lie*-PRES
"Yes, the creek is full".

banha-gardi nha-ngung
that-SIDE *see/look*-PAST-PERF
"Did you see the other side?"

warn gabi yagu banya-la ngarri-ya
creek-ABS *water*-ABS *big/much*-ABS *that*-LOC *lie*-PRES
"There's plenty of water in the other side of the creek".

banha warn marran gabi-nggu nhabala shearerman-gu
that-ABS *creek*-ABS *sheep*-ABS *water*-ERG *something*-ABS *shearer*-DAT
"That creek's (good) for the shearer to wash in and the sheep (to get a drink).

ngalidya badiwi ya-ra warda nyingan-gudi
1du-ABS *lot/mob*-ABS *go*-FUT *far away*-ABS *Ningan*-ALL
We're all going far away up to Ningan station.

yurda yurda malaga-ngun
later-ABS *later*-ABS *back*-ABL
By and by we'll come back".

ngadhu wula-ng
1sg-ABS *cry*-PAST
I cried.

JOE'S FATHER'S SHEEPDOG

balu-ng yini windi
3sg-DAT *name*-ABS *Windy*-ABS
His name was Windy.

balu marran nha-wa
3sg-ABS *sheep*-ABS *see,etc.*-FUT/IMP
If he'd see some sheep,

balu ngunu-la dyambarda-ba-la
3sg-ABS *middle*-LOC *run*-INCH-FUT
he'd take off through the middle.

balu gura yan
3sg-ABS *back*-ABS *come*-FUT
He'd come back

balu ngunu-la dyambarda-ba-n
3sg-ABS *middle*-LOC *run*-INCH-PAST
through the middle and split 'em up again.

balu dhanha-nha dyamba-dya-n
3sg-ABS 3pl-ACC *run*-REFL/RECIP-PAST
Then he'd put them all together again.

balu brany yirba-la
3sg-ABS *good*-ABS *take/drive*-FUT
He'd take 'em along good.

ngadhu wangga-ng mama-nha
1sg-ABS *say*-PAST-PERF *father*-ACC
I said to my father:

balu ngana-ng dhudhu
3sg-ABS 1sg-DAT *dog*-ABS
"If he were my dog,

ngadhu balu-nha maga bu-wa marda-nggu
1sg-ABS 3sg-ACC *head*-ABS *hit*-FUT/IMP *stone*-ERG
I'd hit him on the head with a stone."

WHEN JOE WAS A BOY ...

ngadhu dyuba ngana-ng yigu-lu wangga-ng
1sg-ABS *child*-ABS 1sg-DAT *elder sister*-ERG *say/speak*-PAST-PERF
When I was a child my elder sister said to me:

ngud gabi-di ma-ra ya-ra
horse-ABS *water*-ALL *take*-FUT/IMP *go*-FUT/IMP
"Take the horse to the water hole".

ngadhu warru-ngga waradu wala-ng
1sg-ABS *back*-LOC *up*-ABS *jump*-PAST-PERF
I jumped up onto the horse's back.

ngadhu ngud ma-ra ya-nung dam-gudi
1sg-ABS *horse*-ABS *take*-FUT/IMP *go*-PAST *dam*-ALL
I took the horse to the dam.

balu gabi ngal-guwa
3sg-ABS *water*-ABS *swallow*-PRES
She drinks the water, and

ya-nung gabi-ngga ngunu-la
go-PAST *water*-LOC *middle*-LOC
went out into the middle of the dam.

mara-nggu balu gabi bu-ngung
hand-ERG 3sg-ABS *water*-ABS *hit*-PAST
She started hitting the water with her front legs and is

gabi-ngga wara-wa ngarri-ya
water-LOC *fall*-PRES *lie*-PRES
going to lie down in the water.

ngadhu warru-ngga ngud-da nyina-ga
1sg-ABS *back*-LOC *horse*-LOC *sit*-PRES
I'm sitting on the horse's back

ngadhu wanya-ba-n
1sg-ABS *frightened*-INCH-PAST
I got frightened.

ngadhu yigu-di mira-ng
1sg-ABS *elder sister*-ALL *shout/call*-PAST-PERF
I called to my sister.

yigu-lu ngadhu-nha yami-n
elder sister-ERG 1sg-ACC *rouse/swear*-PAST
My sister roused on me:

nha-wu ngud ngunu-la dam-da
what-DAT *horse*-ABS *middle*-LOC *dam*-LOC
"Why did you take the horse into the middle of the dam?"

wirdi balu gan ya-nung
NEG 3sg-ABS *alone*-ABS *go*-PAST-PERF
"No, she went by herself".

yigu-lu ngadhu-nha yami-n
elder sister-ERG 1sg-ACC *rouse/swear*-PAST
My sister cursed me:

nhudu yaba
2sg-ABS *bad/no good*-ABS
"You're no good.

ngadhu nhunu-nha bu-wa magulga
1sg-ABS 2sg-ACC *hit*-FUT/IMP *directly*-ABS
I'll hit you directly".

JOE'S FIRST JOB

ngalidya yigu ngana-ng
1du-ABS *elder sister*-ABS 1sg-DAT
We two, my elder sister and I, went from

gurara-ngun ya-nung Kogola downs-gudi
Kurara station-ABL *go*-PAST-PERF *Kogola Downs*-ALL
Kurara station to Kogola Downs station.

Kogola downs banha-gardi Cue-la
Kogola Downs-ABS *that*-SIDE *Cue*-LOC
Kogola Downs station is on the other side of Cue.

madya ngadhu-nha wangga nha-ngung
boss-ABS 1sg-ACC *say/tell*-PRES *see/look*-PAST-PERF
The boss saw me and asks:

nhundu barany ngud-da nyina-ga warru-ngga
2sg-ABS *good*-ABS *horse*-LOC *sit*-PRES *back*-LOC
"Are you a good rider?" (lit. *Do you sit well on a horse's back?)*

ngadhu wangga-ng
1sg-ABS *say*-PAST-PERF
I said:

guwa dyudya ngud baranymarda
yes old-ABS *horse*-ABS *good*-ABS
"Yes, a good old horse -

ngadhu barany nyina-ga
1sg-ABS *good*-ABS *sit*-PRES
I'll sit on it well."

madya-lu wangga-ng
boss-ERG *say*-PAST-PERF
The boss said:

wirdi nhundu nha-rni dyambarda balu-nha
NEG 2sg-ABS *what*-? *gallop*-PRES 3sg-ACC
"You won't gallop him too hard.

balu dyudyaba-nda balu wara-ng-bala mambu bala-ba-n
3sg-ABS *old*-INCH-CAUSE-PRES 3sg-ABS *fall*-PAST-LEST *leg*-ABS *stiff*-INCH-PAST
He's getting old, he'll fall, his legs are stiff."

ngadhu wangga-ng
1sg-ABS *say/speak*-PAST-PERF
I said:

wirdi ngadhu widawu ma-ra ya-ra
NEG 1sg-ABS *steady*-ABS *take*-FUT/IMP *go*-FUT/IMP
"No, I'll take him around steady."

nhundu banha-nha dhudhu ma-ra ya-ra
2sg-ABS *that*-ACC *dog*-ABS *take*-FUT/IMP *go*-FUT/IMP
"You take that dog there

balu baranymarda marran-gu
3sg-ABS *good*-ABS *sheep*-DAT
He's a good one for sheep."

ngadhu wangga-ng
1sg-ABS *say/speak*-PAST-PERF
I said:

guwa ngadhu gulawu yan-ang station-gudi maru-ngga
yes 1sg-ABS *back*-ABS *come*-PAST *station*-ALL *evening*-LOC
"Yes". I come back to the station that night.

madya yuga gate-da
boss-ABS *stand*-PRES *gate*-LOC
The boss is standing on the gate.

balu wangga-ng
3sg-ABS *say/speak*-PAST-PERF
He said:

banha dhudhu brany
that-ABS *dog*-ABS *good*-ABS
"That dog good?"

ngadhu wangga-ng
1sg-ABS *say/speak*-PAST-PERF
I said:

wirdi balu marlu badama-n
NEG 3sg-ABS *kangaroo*-ABS *chase*-PAST
"No, he chased kangaroos."

madya-lu yigu-nha wangga
boss-ERG *elder sister*-ACC *say/speak*-PRES
The boss asks my sister:

ngana-ng dhudhu marlu badama-n
1sg-DAT *dog*-ABS *kangaroo*-ABS *chase*-PAST
"Did my dog chase kangaroos?"

ngana-ng yigu-lu wangga-ng
1sg-DAT *elder sister*-ERG *say/speak*-PAST-PERF
My sister said:

guwa gurriya ma-nung
yes one-ABS *take*-PAST-PERF
"Yes, only one."

ngadhu wangga-ng
1sg-ABS *say/speak*-PAST-PERF
I said:

guwa guwa brany
yes yes good-ABS
"Yes, yes, (he's) good."

HOW THE DINGOES GOT OLD CLINCH

nyunga ya-nung nganga-di
Aborigine-ABS *go*-PAST *cave*-ALL
An Aborigine went to the caves

balu wadyan dhaba-n
3sg-ABS *fire*-ABS *burn*-PAST
He made a fire,

wama bawu-n
food-ABS *cook*-PAST
cooked food, and

balu wama ngal-ang
3sg-ABS *food*-ABS *swallow*-PAST-PERF
he ate it. Then he

gulgarda ngarriya
forget-PRES *lie*-PRES
lies down not thinking about anything

balu wirdi guluny dhudhu nha-ngung
3sg-ABS NEG *little*-ABS *dog*-ABS *see*-PAST-PERF
He didn't see the puppies.

yurda ngubanu dyuduwara yan-ang
later-ABS *dingo*-ABS *female*-ABS *come*-PAST
Later on, the female dingo came (back).

balu biyan dhagula-n warru badya-n mula-nda-n
3sg-ABS *straight away*-ABS *back*-ABS *jump*-PAST *bite*-PAST *die*-CAUSE-PAST
She straight away jumped on (his) back, bit (him), and killed (him).

yurda dhanha dhaba balu-ng dhanha nha-ngung
later-ABS 3pl-ABS *bone*-ABS 3sg-DAT 3pl-ABS *see/look*-PAST-PERF
Later on, they saw his bones.

THE PORCUPINE STORY

mama-lu ya-nung wama wadha
father-ERG *go*-PAST-PERF *food*-ABS *look for/chase*-PRES
Father (porcupine) went looking for food.

yamadyi-lu balu-nha nha-ngung
man-ERG 3sg-ACC *see/look*-PAST-PERF
The man saw him,

bu-ngung ngal-ang
hit/kill-PAST-PERF *swallow*-PAST-PERF
killed (him), and ate (him).

gadya bibi-lu madya nyina-ng
child-ABS *mother*-ERG *wait*-PRES *sit*-PAST-PERF
The child and his mother sat waiting.

balu yuwa-n warni-ng
3sg-ABS *sheet*-PAST *trip*-PAST-PERF
He (the father) disappeared.

gadya ngalidya ginggila
child-ABS 1du-ABS *laugh/shout*-PRES
The children were laughing and shouting.

bibi-lu wangga-ng
mother-ERG *say/tell/speak*-PAST-PERF
Mother (porcupine) said:

gadya gadya dyindyil warda-di waniwani-wa
child-ABS *child*-ABS *laughter*-ABS *far*-ALL *throw*-PRES
"Child, child, chuck that laughter far away.

mama gurany gulu gunduru warda-di wadinya
father-ABS *dear*-ABS *poor*-ABS *Kunturu*-ABS *far away*-ABS *now*-ABS
Your poor dear father is a long way away at Kunturu."

HOW THE LITTLE BOY FRIGHTENED HIS FATHER

mama-lu sheet-du dhama-dya-n wanyana-la yamadyi-mi
father-ERG *sheet*-ERG *cover*-REFL/RECIP-PAST *frighten*-FUT *man*-PL
The father covered himself with a sheet to go and frighten the men.

yurda gadya-lu wangga ngana-ng bibi-nha
later-ABS *child*-ERG *say,etc.*-PRES 1sg-DAT *mother*-ACC
Later on, the child asks its mother:

wandi ngana-ng mama ya-nung
where-ABS 1sg-DAT *father*-ABS *go*-PAST-PERF
"Where's my father gone?"

bibi-lu wangga-ng
mother-ERG *say*-PAST-PERF
Mother answered:

yamadyi-mi wanyana-la
man-PL *frighten*-FUT
"to frighten the men."

guwa nha balu ma-nung
yes what-ABS 3sg-ABS *take*-PAST-PERF
"What's he taken with him?"

bedsheet ma-nung
sheet-ABS *take*-PAST-PERF
"His bedsheet" (The child says:)

ngadhu ngana-ng sheet ma-ra
1sg-ABS 1sg-DAT *sheet*-ABS *take*-FUT/IMP
"I'll get my bedsheet too."

balu ya-nung sheet ma-nung dhama-dya-n
3sg-ABS *go*-PAST-PERF *sheet*-ABS *take*-PAST-PERF *cover*-REFL/RECIP-PAST
He went and got his sheet and covered himself and

ya-nung mama-nha wadha
go-PAST-PERF *father*-ACC *chase*-PRES
went chasing his father.

yamadyi-mi mama-maya-ga
man-PL *sing/dance*-PRES
The men were all having a corroboree.

yurda dhanha nha-ngung mundung wima
later-ABS 3pl-ABS *see/look*-PAST-PERF *devil*-ABS *come*-PRES
Later they saw a devil coming.

gurriya yamadyi-lu wangga-ng
one-ABS *man*-ERG *say/speak*-PAST-PERF
One man spoke:

banha mundung yan-da
that-ABS *devil*-ABS *come*-PRES
"Is that a devil coming?"

guwa banha malaga-di dyuba yan-da
yes that-ABS *back*-ALL *child*-ABS *come*-PRES
"Yes, there behind you the child is coming."

mama-lu gulawa nha-ngung
father-ERG *back*-ABS *see*-PAST-PERF
The father looked back.

nhinha dyuba yuga
this-ABS *child*-ABS *stand*-PRES
"Is this a baby?"

balu sheet wani-ng nguna-la yamadyi-mi
3sg-ABS *sheet*-ABS *throw*-PAST-PERF *middle*-LOC *man*-PL
He threw the sheet away and (ran) through the men.

BREAKING IN HORSES AT NINGAN

ngadhu ngud garda-ngguwa nyingan-da
1sg-ABS *horse*-ABS *break in*-PRES *Ningan*-LOC
I'm breaking in horses at Ningan station and

nhinha babinyu balu wima-n ngana-ngudi
this-ABS *friend*-ABS 3sg-ABS *come*-PAST 1sg-ALL
This friend, he came to me ...

ngalidya wangga-dya-n
1du-ABS *say/speak*-REFL/RECIP-PAST
We talked to each other.

ngadhu wangga-ng balu-ngudi
1sg-ABS *say/speak*-PAST-PERF 3sg-ALL
I said to him:

guwa wandi-gardi-ngun
yes which/where-SIDE-ABL
"Yes, which side are you from?"

bahna-gardi minang-gardi ngadhu yan-da
that-SIDE *Minang*-SIDE 1sg-ABS *come*-PRES
"That side, the south side - I come from.

nhundu dhanha-nha mirnu
2sg-ABS 3p1-ACC *know*-PRES
Do you know them?"

wirdi wirdi dyalga-nha ngadhu mirnu
NEG NEG *some*-ACC 1sg-ABS *know*-PRES
"No, no, I know some of them ...

wandi nhundu ya-ngguwa wadinya
where-ABS 2sg-ABS *go*-PRES *now*-ABS
Where are you going now?"

ngadhu nhinha-di yan-ang ngana-ngudi
1sg-ABS *this*-ALL *come*-PAST 1sg-ALL
"I came here to you.

ngadhu marran wadha-la ngud-bari-lu
1sg-ABS *sheep*-ABS *chase*-FUT *horse*-HAVE-ERG
I want to go mustering sheep on horseback.

nhundu ngud garda-ngguwa guwa
2sg-ABS *horse*-ABS *break in*-PRES *yes*
Are you breaking in horses?" - "Yes" -

nhundu gurriya ngana-ng yu-wa baranymarda-nha
2sg-ABS *one*-ABS 1sg-DAT *give*-FUT/IMP *good one*-ACC
"You give me one!

ngana-ng yu-wa baranymarda-nha
1sg-DAT *give*-FUT/IMP *good one*-ACC
Give me a good one!"

wayi ngana-ng yu-wa bila-ngga waradu wulgu
NEG 1sg-DAT *give*-FUT *air*-LOC ? *straight*-ABS
"Don't give me one that tosses me straight up into the air!"

wirdi wirdi ngadhu nhunu-ng baranymarda-nha yu-wa
NEG NEG 1sg-ABS 2sg-DAT *good one*-ACC *give*-FUT
"No, no, I'll give you a good one!"

STORY ABOUT THE MALLEE HEN

walbalngawu balu wagu baranya-la barna baya-la
mallee-hen-ABS 3sg-ABS *camp*-ABS *make/fix*-FUT *ground*-ABS *dig*-FUT
The mallee hen, she'll make her nest, dig a hole.

balu mindyali gundila-la dha-gudi yidya-ra
3sg-ABS *leaves*-ABS *gather*-FUT *hole*-ALL *put*-NON-PAST
She'll gather leaves and put them in the hole.

balu nyina ngawu baranya-la
3sg-ABS *sit*-PRES *egg*-ABS *make*-FUT
She sits and lays eggs ...

gurriya ngawu dha-ngga ngarri-ya
one-ABS *egg*-ABS *hole*-LOC *lie*-PRES
She lays one egg in the centre of the nest and

ngawu nhinha-la ngawu banha-la biragili barnabarna
egg-ABS *this*-LOC *egg*-ABS *that*-LOC *leaves*-ABS *sand*-ABS
places one egg here, one there, around in a circle in the leaves and (covers them with sand).

walba-ba-ya garang walba-la
hot-INCH-PRES *sun*-ABS *hot*-FUT
It gets hot - the sun gets hot.

nhabala ngawu guluny balu baya-la garda-di
something-ABS *egg*-ABS *little*-ABS 3sg-ABS *dig*-FUT *up top*-ALL
The little ones hatch out, dig their way out

galgal-wala dyambarda-ba-n
bush-LOC *run*-INCH-PAST
and run off into the bush.

HOW THE EMU GETS BORN

yalibidhi dhugula ngawu-la
emu-ABS *tap/bump*-NON-PAST *egg*-LOC
The emu bumps on the egg and

mudyi-nha wangga-ya
spouse-ACC *say/tell*-PRES
calls to her mate.

balu yan ngawu-ngga nyina
3sg-ABS *come*-FUT *egg*-LOC *sit*-PRES
He'll come and sit on the eggs.

dyuduwara balu wama wadha-la
female-ABS 3sg-ABS *food*-ABS *chase/look for*-FUT
The female - she'll look for food.

mama-lu dhama-la ngawu
father-ERG *cover*-FUT *egg*-ABS
Father covers the eggs.

guluny badiwi garda-ng
little-ABS *all/the lot*-ABS *break*-PAST-PERF
All the little ones break out.

mama-lu ma-ra yan
father-ERG *take*-FUT *come*-FUT
The father takes them.

mama-lu dyambarda-ba-ya
father-ERG *run*-INCH-PRES
Father trains

gadya-muga balu-nha badama-la
child-KIN-PROP 3sg-ACC *chase*-FUT
the little ones to chase him.

NOTES

1. Data for this study were collected on two field trips to the Murchison District from April-June 1980 and November-December 1980, and in Perth from January-May 1981.
2. Mr Benjamin is the current owner of Warrdagga Hill which was declared a 'protected area' in 1979 under the Aboriginal Heritage Act (Registrar of Aboriginal Sites 1979) (see photo).
3. Old Yamadyis believe that the Western Desert dwellers are dyinagabi *feather foot*, who come to kill by sorcery.
4. See initial phonetic consonant clusters 2.4.7.1.
5. Note that no forms analysable as u$u are extant in the data. The only possible candidates are u# nouns with the dative suffix -(w)u, but in such cases the final /u/ becomes /a/ morphophonemically (see 2.4.2).
6. Note - only surface clusters are exemplified here. Clusters formed from -yidya- 'semblative' are not listed.
7. Badimaya has (an approach to) a base-five counting system:

gurriya	*one*
gudha ∿ gudhara	*two*
gadyadi	*three*
gudhagudhara	*four* (2x2)
mara ∿ mara gurriya	*five* (mara *hand*)
mara gudhara	*ten*
mara gadyadi	*fifteen*
mara gudha gudhara	*twenty*

8. This grammar uses a three-way case marking system: ergative, absolutive (referring to all unmarked NPs, whether subject or object. That is, absolutive in this grammar covers the terms 'nominative' and 'absolutive), and accusative.

9. Two of the neighbouring languages, Watjarri (Douglas 1981) and Pitjantjatjara (Glass and Hackett 1970), again O'Grady's et.al. (1966) assumptions do have an exclusive/inclusive. The Watjarri form, ngalidya '1 excl.', is identical to Badimaya '1du.'.

10. palunya is '3sg.' form in Pitjantjatjara (Glass and Hackett 1970:50).

11. Watjarri (Douglas 1981), Nyungar (Douglas 1976) and Pitjantjatjara (Glass and Hackett 1970), distinguish three basic deictic categories, as well as anaphoric reference. These languages also have (at least) four demonstrative forms.

12. Donaldson (1980) discusses a similar suffix to -bala in Ngiyambaa and gives the meaning as 'indefinite'.

13. Note - examples cited in this section are *underived* nominals. As stated in 3.3, it is rarely the case in the corpus that derived nominal stems are marked for case.

14. Donaldson (1976:350; 1981:92) also mentions this phenomenon in Ngiyambaa (Wang(g)aybuwan).

15. Recall also purposive function of dative (3.2.2.5), so that (178) may simply be represented as:

(178a) balu gun-gu ya-ngguwa
3sg-ABS *gun*-DAT *go*-PRES
He's going to get the gun.

16. Note also the form dyuba-dula (dyuba *baby* (human)). In the interpretation in question, guluny appears only with nouns naming the adult of a species to derive a noun naming the young of that species (where no underived form in that interpretation is extant):

marlu-guluny *baby kangaroo*
dyidamin-guluny *baby birds*
dhudhu-guluny *little dog*

17. The monosyllabic roots listed are identical to those of the neighbouring language, Watjarri (Douglas 1981:231), with the exception of ngal- *swallow*.

18. There are also inflection forms la for the present and/or future tense of n2 verbs. It is not known whether these were historically tense markers. The future tense form of -la verbs above is -lala, as in gadagalala.

19. South-western Australian languages have generally been classified as not possessing compound verbs (see Capell 1976:614, map). However, Platt (1976:667ff) demonstrated that about 77% of Pitjantjatjara verbs could be analysed as historically 'frozen' compounds. Similar processes appear to have been present in Badimaya. Douglas (1981:226) also lists many simple stems in Watjarri WA as containing "meaning extending suffixes" (ibid.).

20. This is a language-specific, operational definition of subject for the purposes of sentence description.

21. And -gula in equivalent function.

22. Note also equivalent function of wayi below.

23. Writers often refer to the tendency towards the use of loose parataxis, coordination rather than subordination, in times of 'communicative stress', such as language death situations (Hill 1973, 1977), including pidginisation processes (Samarin 1979) and fast speech (Keenan 1979).

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PRAGMATIC STRUCTURE AND WORD ORDER IN WARLPIRI

Stephen M. Swartz

0. INTRODUCTION

This paper falls into five sections. Section 1 is a brief look at Warlpiri grammatical structure. Section 2 looks at pragmatic principles devised by Barry Blake in his description of Kalkatungu, noting particularly his view that such principles are the key determining factor in generating the various word orders. Attention is also given to Kathleen Callow's work on prominence and how her ideas can be combined with Blake's to arrive at a descriptive tool relevant to Warlpiri word order. Section 3 is a statistical look at Warlpiri word order. Section 4 is a detailed look at one written text observing how these pragmatic principles can be applied in practice. Section 5 looks at some implications for translation into Warlpiri.

1. BASIC GRAMMATICAL FEATURES

Warlpiri is an Australian language of the south-central Northern Territory and is spoken by about 3,000 people. Similar to Kalkatungu, Warlpiri exhibits very free word order on the clause level, and thus a sentence consisting of subject-object-verb-instrument-time constituents could result theoretically in 120 different combinations. All of these would be grammatically correct; however, some would be far less likely to occur than others, and all would be determined by pragmatic, or stylistic, considerations.

Warlpiri nouns inflect for case on an ergative-nominative basis with transitive subject (A) opposed to the absence of a suffix on intransitive subject (S) and transitive object (O). There is a cross-referencing agreement system composed of two series of bound pronouns, one of which cross-references subjects of both intransitive and transitive verbs and the other which cross-references objects (or indirect objects if present). With a few minor exceptions these bound pronouns are affixed in series directly to the verbal catalyst (auxiliary) which functions along with verb inflection to help indicate tense, aspect, and mood. In that tense, aspect and mood are signalled jointly by auxiliary and verb inflection, the auxiliary may properly be thought of as part of the verb phrase. These two elements, auxiliary and verb plus inflection, are normally discontinuous in the clause but may occur together, with either element at the fore. The auxiliary itself may be considered semantically complex, consisting of an initial morpheme which helps to indicate tense and mood and a second morpheme which indicates either perfective or imperfective aspect. Either of these morphemes may be phonologically null. Laughren (1981:5) states that while "the

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auxiliary base may be phonologically null [indicated in all examples by O] in Warlpiri, it is semantically non-null since the absence of the aspectual affixes -ka and -lpa indicates the perfective aspect."

The only exception to the above-stated free word order characteristic in Warlpiri is provided by the positioning of the bound pronouns. If the auxiliary is phonologically null, then the bound pronoun is suffixed directly onto the first clause level constituent. If the auxiliary is monosyllabic, that is, if it consists only of either of the imperfect aspect morphemes -ka or -lpa, then bound pronouns are suffixed onto these aspect markers which in turn are affixed directly onto the first clause level constituent. If the auxiliary is di- or trisyllabic, then the auxiliary (plus bound pronouns) may occur either clause initially or as the second clause level constituent.

(1) Ngaliya-0-ka-0 Warlpiri-0 nyina wiri-0.
Ngaliya-NOM-AUX-3sg *Warlpiri*-NOM *sit* *big*-NOM
There are a lot of the Warlpiri people living, Ngaliya speakers to be precise.

(2) Watiya-0-0-rna paka-rnu mayingka-kurlu-rlu.
tree-NOM-AUX-1sg *cut*-PAST *axe*-COM-ERG
I cut the tree with an axe.

A further notable feature of the syntax is the widespread use of discontinuous noun phrases in which various members of either syntactic arguments (those cross-referenced) or non-syntactic arguments (those not cross-referenced) occur distributed throughout the sentence. When so distributed, each nominal carries with it the appropriate case marking clearly identifying its clause level grammatical function. This is illustrated in (3):

(3) Wiinywiinypa-rlu-ju junarrpa-0-ji-lpa-0-0 warru turnuma-nu
hawk-ERG-??? *things*-NOM-???-AUX-3sg-3sg *around gather*-PAST

yapa-kari-0 yapa-kari-kirlangu-0.[1]
people-other-ACC *people-other*-POSS-ACC
As for the hawk, he was gathing things around, things belonging to other people.

When the parts of the noun phrase occur together each one may carry the appropriate case marking, or else only the final nominal will.

2. PRAGMATIC PRINCIPLES GOVERNING WORD ORDER

In chart form Blake (1983:153) summarises statistically the basic word order tendencies for non-elliptical sentences in Kalkatungu. In transitive sentences he records the following frequencies (here changed to percentage figures):

AOV	51%
AVO	29%
VAO	3%
OAV	13%
OVA	3%
VOA	1%

In intransitive sentences he records the following frequencies:

SV	80%
VS	20%

In his chart Blake further records the instances where one or both of the syntactic arguments is represented by a pronoun. The figures in the above charts are all based upon non-elliptical sentences. He does not indicate what percentage of sentences demonstrate partial or complete ellipsis of syntactic nominals. From the above data it is obvious that AOV and AVO orders greatly predominate over the other orders. However, from this fact, Blake does not conclude that these constitute basic unmarked word orders for Kalkatungu. He states (1983: 153) rather,

> I believe the word order preferences of basic sentences, of more elaborate sentences, and of elliptical sentences can be largely accounted for in terms of a few pragmatic principles. AOV and AVO emerge as the most frequent orders as a by-product of these principles. The general principle seems to be that the topic precedes the comment and the focus is placed first even though the focus is usually part of the comment and indeed is coextensive with it if the comment consists of only one word.

He sums up this pragmatic principle with the formula in (4):

(4) (focus) - topic - (remainder of) comment

Essentially, this principle states that topic (represented by an overt nominal) will precede comment, and that a particularly vital portion of that comment may be singled out for attention in which case it will precede the topic as focus.

As used by Blake, 'topic' refers simply to what is being talked about, and 'comment' to what is being said about the topic. 'Focus' is, again quoting Blake, "The most important part of the comment, the essential part, the part that resists ellipsis (since there would be no point to a sentence if the focus were removed)." (1983:153)

Blake introduces another pragmatic function 'salience' which he would apply to such things as time words, locatives, and adverbial clauses all of which themselves may compete for the all-important sentence-initial position. Such salient words are "... neither topic nor focus ... which is appropriate since these functions are mutually exclusive in initial position." (1983:170-171)

The formula in (4) he then modifies as in (5):

(5) (salient) - (focus) - topic - (remainder of) comment

This formula states that highly significant time or locative elements are placed before the focused item (if any).

Blake (1983:154) gives his explanation of how such a pragmatic principle determines word order:

> As I stated earlier, I do not think that AVO and AOV should be considered unmarked orders. They are probably the most frequent orders because of the topic-before-comment principle and the fact that, all things being equal, an agent or experiencer (the roles covered by A) is a more likely choice of topic than a patient, and also because a focused A, a non-nuclear focus (e.g. a locative) or no focus at all will not interfere with AOV and AVO. Certainly the rarer orders result from O being chosen as focus or topic or V being chosen as focus.

Several comments are in order here. Whereas in Kalkatungu and Warlpiri grammatical functions are clearly indicated by means of grammatical cases, pragmatic functions are indicated, or controlled if you will, by such devices as elision and word order. Thus Blake's formula may not be inclusive enough to handle the vast majority of instances in Warlpiri (or even perhaps in Kalkatungu) where syntactic arguments are elided. Many of these elided arguments do represent themes, that is, they are what is being talked about in the sentence by virtue of having been talked about in the prior context of paragraph and/or discourse. Though elided, their presence in the mind of speaker and listener is apparent. Furthermore, while agreeing that the topic-comment dichotomy is useful, in practice it is often difficult to decide whether a given constituent is part of the topic or the focused part of the comment. Blake gives the following example as an illustration of the focus-first principle in Kalkatungu:

(6) Ati-nciwa nai-ka inka-na.
meat-DAT *I*-O *go*-PAST
I went for meat.

In this example, one could as easily say that the topic of the sentence, that which the speaker is talking about, is *the meat* rather than *I* as Blake indicates. Is the speaker in (6) really talking about himself? The question is at least worth the asking, even more so since (6) is given as the response to the question *What did you go for?* One can note that (6) would be pointless in answer to the question if ati *meat* were elided. But why does this fact make it the focused part of the comment and not a topic in itself?

By defining topic and focus as he has, Blake has excluded the possibility that this tendency to 'push to the front' is a unitary phenomenon. Would it not be preferable to be able to state that whatever motivates such fronting does so without necessitating the somewhat arbitrary labelling of topic and focus? What we in fact have here is a prime example of the difficulty one finds when trying clearly to delineate pragmatic functions. One is normally left with subjective hunch and intuition when instead one would wish for more testable and objective criteria. Is it possible to stake out one constituent position within the clause as being the topic position following which occur subsidiary elements of comment?

For Warlpiri I believe that such a thing is possible, and it is here that I posit the first constituent position in the sentence nucleus as being this key point. Therefore, by definition, sentence topics are overt syntactic arguments which, assuming they are preceded by sentential conjunctions or discourse-level particles, occupy the pragmatically-prominent first constituent position in the sentence nucleus. Sentence topics are restricted to arguments filling the grammatical functions of subject, object or indirect object if they occur. The unitary principle which motivates the placing of syntactic constituents into this position is what has been called *prominence*. On this basis then, for Warlpiri I would wish to modify Blake's formula with the following:

(7) (sentence topic) - [verb phrase - (remainder of comment)]

In Warlpiri one-word sentences consisting of only a verb-auxiliary-bound pronoun(s) combination are not at all uncommon. In such sentences, context supplies the understood topic, and the verb provides the comment. Also common is the combination of a verb plus any number of non-syntactic (un-cross-referenced) nominals indicating such things as time, location, and instrument. Such constructs can be viewed as being all comment. Sentences may also be verbless, consisting only of comment as is (8).

(8) Wiri-0-lki.
big-NOM-*now*
He's big now. (comment often made concerning growing children)

Several comments are in order here regarding the function of nominals in any narrative. Their first function is of course identification of the people, objects, places, and ideas. A quote from Callow (1974:49) is appropriate:

> A story in which every character was equally important and every event equally significant can hardly be imagined. Even the simplest story has at least a central character and a plot, and this means one character is more important than the others, and certain events likewise. Human beings cannot observe events simply as happenings: they observe them as related and significant happenings, and they report them as such.

Prominence therefore is the indication of relative importance of characters and objects within a narrative. Callow divides prominence into three subcategories: thematic, focus, and emphatic. She states:

> Prominence that occurs with *thematic* significance is, in effect, saying to the hearer, 'This is what I'm talking about'. .... Prominence that occurs with *focus* significance is saying to the hearer, 'This is important, listen'. It picks out items of thematic material as being of particular interest or significance. (1974:52)

In any story, each character and object, once identified, is assigned a status within the overall framework of the story. At any particular stage a character may be the one that the narrator is talking about, or the character may be merely subsidiary to the action of the main or thematic character. This status can change from paragraph to paragraph, sentence to sentence and clause to clause.

Further on in her book, Callow says the following about focus prominence: "In some languages, focus is an obligatory category and one cannot avoid using it: at any point, some clause or participant or event must be in focus." (1974:60) Callow leaves it up to the researcher to discover devices which signal prominence in any particular language. Several questions can be asked here. Why, for instance, are items having significance as 'focus' or 'prominence' to be selected from only items of thematic material? Are not items of thematic significance also saying 'Listen, this is important!'? Unless the grammar clearly indicates separate devices for thematic and focus prominence, then it is arbitrary to force these categories.

Without for one moment claiming anything close to native-speaker intuition into Warlpiri, I would contend that word order and ellipsis work primarily in this assignation of what Callow calls prominence and Blake topic and focus. However it does not seem necessary to speak of topic as opposed to focus, as does Blake, nor to speak of thematic prominence as opposed to focus prominence, as does Callow. Still, one must allow for those instances where several clause constituents do crowd in before the verb. When this occurs, what is the pragmatic status of each? It is at this stage where the notion of hierarchy comes in. Excepting for the moment one-sentence discourses such as obtained from elicitation, it is often the case that within any sentence there are several topics under discussion, all of which are competing for attention. Sentence, paragraph and discourse topics all must be handled clearly by the speaker in order

for there to be coherent communication. Lending the wrong prominence to a particular item can and often does result in garbled communication.

It is not at all incorrect, I believe, to speak of pragmatic deviance, or better yet inappropriateness, as one does of grammatical deviance. It is likely that any given ordering of words in a grammatically correct utterance would be appropriate sometime and with certain styles, but pragmatic inappropriateness grates every bit as much on the ears of mother-tongue Warlpiri speakers as does grammatical incorrectness, perhaps even more so. When faced with such pragmatic inappropriateness, as when talking with a non-native speaker, as likely as not the response will be 'it sounds better this way' and not 'we don't talk like that'. As anyone learning Warlpiri as a second language could attest, pragmatic rules are exceedingly more difficult to internalise than grammatical rules.

Casting a wary eye about to avoid falling into a similar web, I would like to suggest the following definitions of theme and topic. These terms have been bandied about for so long that one must clearly define how one is using them. Theme, as I am here using it, refers to what the speaker is talking about, the subject matter at hand if you will. A sentence topic refers to any theme which is given prominence by being placed in the first sentence constituent position and whose range of influence does not extend beyond the particular sentence in which it occurs. Watiya in (2) is such a sentence topic. In this particular sentence the speaker is talking about the particular tree which was chopped down to produce a boomerang. Prior to this sentence there was no mention of the tree, nor was any other statement made regarding any peculiarity or item of interest regarding that tree. Its thematicity extends only throughout the one sentence, and like a static electric charge it quickly dissipates. It is the placing of sentence topics in the prominent initial position which gives them the necessary "charge" to hold centre stage in the sentence.

Themes on the other hand normally carry no prominence at all but rather reflect thematicity downwards from paragraph and discourse. Every discourse has at least one unifying theme which glues the discourse together. Every paragraph likewise has a unifying theme. Discourse themes maintain their influence throughout the entire discourse. Though not overtly mentioned in a particular paragraph, their influence is still there in the background. Wiinywiinypa *hawk* in (3) is such a discourse theme. This sentence is taken from a Dreaming story telling how the Spirit Man was changed into the present-day hawk. Although the story is quite long, the hawk is not mentioned by name again until the very end.

Likewise for paragraph themes; their influence extends throughout the paragraph, and though not overtly mentioned in any particular sentence their influence is felt throughout. Jurnarrpa *things* in (3) is such a paragraph theme. Sentence (3) is interesting in that it is of the rare AOV order. The speaker is in this one sentence establishing both the discourse theme and paragraph theme, both of which are fronted in succession before the verb. In (3) the discourse theme is also the sentence topic.

The five sentences which immediately follow (3) (here repeated) clearly demonstrate discourse and paragraph themes and sentence topics.

[(3) Wiinywiinypa-rlu-ju junarrpa-0-ji-lpa-0-0 warru turnuma-nu
hawk-ERG-??? *things*-NOM-???-AUX-3sg-3sg *around gather*-PAST

yapa-kari-0 yapa-kari-kirlangu-0
people-other-ACC *people-other*-POSS-ACC
As for the hawk, he was gathering things around, things belonging to other people.]

(9) Manu-lpa-0-0 kurdiji-0 wiri-0 ma-nu.
and-AUX-3sg-3sg *shield*-ACC *big*-ACC *get*-PAST
And a shield he got.

(10) Karli-0-lpa-0-0 ma-nu.
boomerang-ACC-AUX-3sg-3sg *get*-PAST
A boomerang he got.

(11) Mangulpa-0-lpa-0-0 ma-nu.
shovel spear-ACC-AUX-3sg-3sg *get*-PAST
A shovel spear he got.

(12) Kurlarda-0-lpa-0-0 ma-nu, kurdiji-0.
spear-ACC-AUX-3sg-3sg *get*-PAST *shield*-ACC
An ordinary spear he got, and a shield.

(13) Kuturu-0-lpa-0-0 ma-nu.
club-ACC-AUX-3sg-3sg *get*-PAST
A club he got.

The agent throughout this paragraph is of course 'the hawk', the main theme of the entire discourse. This particular paragraph which opens the narrative is about 'all the things' that the hawk kept gathering up, something he does several times throughout the story. So the paragraph thematicity of 'things' extends over these several sentences. The speaker then proceeds to list just what particular things the hawk was gathering up. These items are placed in the prominent first sentence constituent position, thus telling the listener that these objects are what he is now talking about. To the extent that the narrator is now talking about them in this fashion, these objects have temporarily superseded 'the hawk' in importance. Such fronting, I would argue, is necessary to snatch, if but momentarily, the spotlight off 'the hawk' and onto the items listed. However, no single one of them carries any influence beyond the sentence in which it occurs; they are merely sentence topics.

One is justified at this point in asking what other options were open to the narrator. What other themes or sentence topics could have been selected? First of all, the narrator could have decided to tell a story about another Dreamtime being in which case 'the hawk' obviously would have been supplanted as discourse theme. But having selected 'the hawk' as discourse theme, the narrator then did not need to mention him further by name. Having decided to start the story off by talking about the things he was collecting, several different elements in (3) could have provided alternative paragraph themes. By placing yapa-kari-kirlangu *people-other*-POSS in the first position, he would have been emphasising the fact that these were not his own possessions. By placing the verb first, prominence would have been lent to the nature of the action as opposed to 'stealing' or 'grabbing' the items.

Then in (9)-(13), the narrator could have chosen something else besides a succession of same-verb AV orders. Verb prominence could have been achieved by altering the verb as in this fashion: 'Grabbed (he) a spear, scooped up (he) a shield, fetched (he) a club'. Or source prominence (Blake's salience) could have been achieved in this way: 'From one man (he) got a spear, from another (he) got a shield, from still another (he) got a club'. But again, the contention being made here is that in each of these sentences (9)-(13), the sentence topics about which the narrator is talking are the various items of weaponry. In each of (9)-(13) the narrator is not talking about 'the hawk' although he is the obvious agent. Nor is he lending special prominence to the manner of the collection or the source of the items.

To reiterate: the placement of syntactic arguments in the prominent first sentence constituent position is the device for establishing the topic of the sentence, otherwise it is assumed that the theme of the sentence remains the same as the prevailing paragraph and/or discourse theme. Stated somewhat differently: all sentence topics are also sentence themes, but not all sentence themes are manifested as sentence topics.

3. WARLPIRI WORD ORDERS

How then does the principle in (7) work to determine word order choices in Warlpiri? The following chart summarises data taken from ten written and five oral texts, all but one of which were of narrative genre, the exception being a short exposition. I have included in the counts elliptical sentences since 51% of all intransitive sentences and 83% of all transitive sentences exhibit ellipsis. Thus to ignore these is to skew the picture badly. Excepting bound pronouns, pronouns are included in the counts as nominals.

INTRANSITIVE CLAUSES	ORAL	WRITTEN	COMPOSITE
total clauses	208	156	364
SV	73	41	114
VS	39	16	55
V	91	93	184
SVS	5	6	11

TRANSITIVE CLAUSES	ORAL	WRITTEN	COMPOSITE
total clauses	136	158	294
AOV	3	1	4
AVO	19	6	25
VAO	2	2	4
OAV	0	1	1
OVA	7	6	13
VOA	3	1	4
V	32	52	84
OV	16	36	52
VO	38	32	70
OVO	5	6	11
AV	3	9	12
VA	5	5	10
AVA	3	1	4

The following are but some of the possible observations to be made. First regarding intransitive sentences, the order SV predominates over VS by a ratio of about 2:1. Written style seems to produce a higher percentage of elliptical sentences than does oral style. Regarding transitive sentences ellipsis of some sort is the rule and not the exception. Only 17% of all transitive clauses are fully complemented. In 74% of the sentences the agent (A) argument is elided, and in 37% the object(O) argument is elided. In 28% both A and O are elided. In fully-arrayed sentences where there is no elision, the order AVO is most common occurring 50% of the time. The order OVA occurs in 25% of such sentences, the other orders occurring far less frequently than these two. As a percentage of occurrences in all transitive sentences, V precedes A 11% of the time; A precedes V 14% of the time; V precedes O 35% of the time; and O precedes V 24% of the time. Occurrences of both A and O preceding V are quite rare (less than 2%).

Like Blake I would be reluctant on the basis of this data to posit any order as basic for Warlpiri. In continuous narrative or in dialogue, the speaker constantly makes thematic choices. No utterance occurs in isolation from another, and therefore the choice of a particular word order is determined not only by what the speaker is now talking about, but by what has been talked about, and by what if anything he wishes to emphasise. The speaker also must take into consideration the hearer's ability to follow the ebb and flow of the story or argument. Thus the best way to see how the pragmatic formula in (7) functions in Warlpiri narratives is to examine an actual text.

4. TEXTUAL EXAMPLES

The following written short story about a school excursion to Catfish waterhole illustrates many of the points to be covered. The story is divided into paragraphs at sentences (14), (15), (18), (22), (28), (30), (33), and (36). All sentence topics are capitalised.

DISCOURSE THEME: OUR TRIP TO CATFISH

PARAGRAPH I THEME: CHILDREN

(14) Nyurruwiyi-kari KURDUKURDU-0-0-rnalu ka-ngu Catfish-kirra.
ago-other *CHILDREN*-NOM-AUX-1plinc *take*-PAST *Catfish*-ALL
A while back we took THE CHILDREN to Catfish Waterhole.

PARAGRAPH II THEME: CHILDREN AND WE

(15) Kuja-rnalu yuka-ja-rra Catfish-rla manu jiti-ja, ...
AUX-1plexc *arrive*-PAST-*hither* *Catfish*-LOC *and* *dismount*-PAST
When we got to Catfish and climbed off (the truck), ...

(16) ngayi-lpa-lu KURDUKURDU-0 jurlpu-ngu ngapa-kurra.
merely-AUX-3pl *CHILDREN*-NOM *jump*-PAST *water-into*
well THE CHILDREN literally jumped into the water.

(17) NGANIMPA-RLANGU-0-lpa-rnalu julyurlwanti-ja.
WE-ALSO-NOM-AUX-1plexc *swim*-PAST
WE TOO were swimming.

PARAGRAPH III THEME: M. NAPANANGKA

(18) Ngula-jangka M. NAPANANGKA-RLU-0-0-0 parlupu-ngu marnta-0
that-after *M. NAPANANGKA*-ERG-AUX-3sg-3sg *spot*-PAST *resin*-ACC
wiri-jarlu-0 watiya-rla.
big-very-ACC *tree*-LOC
After that M. NAPANANGKA spotted a large chunk of resin in a tree.

(19) Kuja-0-0 warrka-rninja-rla ma-nu, ...
AUX-3sg-3sg *climb*-INF-SEQ *get*-PAST
When she climbed and got it, ...

(20) milkiyirra-rnu-0-0-jana kardiya-ku
show-PAST-AUX-3sg-3pl *whites*-DAT
she showed it to the white staff.

(21) Nya-ngu-lku-lpa-lu-0 manu paja-rnu wita-kari-0 wita-kari-0.
see-PAST-*then*-AUX-3pl-3sg *and* *taste*-PAST *little-other*-ACC *little-other*-ACC
Then they saw it and tasted little bits of it.

PARAGRAPH IV: THEME: H. NAPANGARDI, WE, THE CROCODILE

(22) Ngula-jangka H. NAPANGARDI-rli-0-0-0 nya-ngu kirakatayili-0
that-after *H. NAPANGARDI*-ERG-AUX-3sg-3sg *see*-PAST *crocodile*-ACC

wita-0 ngapa-ngka.
little-O *water*-LOC
After that H. NAPANGARDI saw a little crocodile in the water.

(23) Kuja-0-nganpa milki yirra-rnu, ...
AUX-3sg-1plexc *show*-PAST
When she showed it to us, ...

(24) NGANIMPA-0-ju-0-rnalu parnka-ja-rra nya-nja-ku.
WE-NOM-???-AUX-1plexc *run*-PAST-*thither* *see*-INF-DAT
WE ran there to see it.

(25) PANIYA-JARRA-MIPA-0-0-rnalu-0 nya-ngu.
EYES-TWO-ONLY-ACC-AUX-1plexc-3sg *see*-PAST
ONLY ITS TWO EYES we saw.

(26) Kuja-0-nganpa NYANUNGU-rlu nya-ngu, ...
AUX-3sg-1plexc *IT*-ERG *see*-PAST
When IT saw us, ...

(27) pina yuka-ja-0-0 ngapa-ngka.
back enter-PAST-AUX-3sg *water*-LOC
it re-entered the water.

PARAGRAPH V THEME: WE

(28) Ngula-jangka parda-rnu-lpa-rnalu-rla watiya-kurlu.
that-after *wait*-PAST-AUX-1plexc-3sg *stick*-COM
After that we waited with sticks for it.

(29) Warru-lpa-rnalu wapa-ja palka-kurlu-juku watiya-kurlu-ju nyanungu-ku
around-AUX-1plexc *walk*-PAST *some*-COM-*still* *stick*-COM-??? *it*-DAT

jangkardu-ju.
opposing-???
We were walking around with some sticks trying to get at him.

PARAGRAPH VI THEME: WE

(30) Ngula-jangka KARLARLA-0-lku-0-rnalu-0 nga-rnu mangarri-0 manu
that-after *LUNCH*-ACC-*then*-AUX-1plexc-3sg *eat*-PAST *bread*-ACC *and*

kuyu-0.
meat-ACC
After that then we ate LUNCH of bread and meat.

(31) Pina-0-rnalu yuka-ja ngapa-ngka-yijala.
back-AUX-1plexc *enter*-PAST *water*-LOC-*again*
We went back into the water again.

(32) NGULA-NGKA-ku-juku-lpa-lu-nganpa kujukuju-rnu yapurlu-0 kardiya-rlu-ju.
THAT-LOC-DAT-*still*-AUX-3pl-1plexc *throw*-PAST *apple*-ACC *whites*-ERG-???
TO US STILL THERE IN THE WATER, the white staff threw apples.

PARAGRAPH VII THEME: THE OLD WOMEN

(33) Karlarla-jangka-ju MURTURNAMURTURNA-0 ya-nu-0-lu yawu-kurra wurnturu.
lunch-after-??? *OLD WOMEN*-NOM *go*-PAST-AUX-3pl *fish*-ALL *far*
After lunch THE OLD WOMEN went fishing a long way away.

(34) Kuja-lu kulpari ya-nu-rnu, ...
AUX-3pl *back* *come*-PAST-*hither*
When they returned, ...

(35) PALKA-0-0-LU YAWU-0-JU ka-ngu-rnu
SOME-ACC-AUX-3pl *FISH*-ACC-??? *carry*-PAST-*hither*
they brought SOME FISH back with them.

PARAGRAPH VIII THEME: WE

(36) Ngula-jangka pina-0-rnalu ya-nu-rnu Lajamanu-kurra.
that-after *back*-AUX-3pl *come*-PAST-*hither* *Lajamanu*-ALL
After that we came back to Lajamanu.

(37) Ngulajuku.
finished
Finished.

Since the presence or absence of syntactic nominals in any clause and their subsequent ordering in relation to the verb is determined by elements within the higher levels of paragraph and discourse, that is by pragmatic rather than grammatical rules, the logical place to begin in examining this text is at the highest level. It can be readily seen that the author of this short piece has done a careful and tightly controlled piece of writing. Such control is what one expects of written discourse as opposed to oral discourse where the speaker is literally planning as he goes and is not always able to plan carefully ahead of time what he will say next.

The overall discourse theme is 'we', or expressed more fully, 'what we did the other day'. Excepting paragraphs III and VII mention is made of 'we' as a group although often by means only of the bound pronouns. And even in these two paragraphs, it is obvious that the events therein are described within the overall context of the entire group of people. This feature hints at what I believe to be a general pragmatic principle in Warlpiri, namely that the higher the level of thematicity for a referent, the greater the likelihood of elision for that referent. This concurs with a statement made by Lothar Jagst (Swartz 1982: 3), namely that there is

> ... a marked tendency to communicate by making only the bare minimum of information explicit .... Warnayakas [one of several Warlpiri subdialects] also firmly believe that when someone doesn't understand something that has been said, then let him use his mouth and ask, and implicit information is then usually made explicit to him.

Often this assignation of a character as the major participant is done extrinsically to the text itself. Once the group of participants identified as 'we' has been set out as the major thematic participants of the discourse occupying centre stage, it is possible then for this group to float back onto stage with a minimun of effort. Other participants or groups must, as it were, continually fight to prevent being upstaged.

Moving down a level to that of paragraph, it can then be seen that the writer has selected a particular group or individual to be the theme in subsequent paragraphs, what that paragraph is all about. Carrying the analogy of the stage one step further, the writer has shifted the spotlight first upon this person, then that group, then onto this thing, and finally back to the whole group. Within a paragraph several different individuals, groups, or things can be

themes with first one and then the other being focused upon, or in other words, receiving prominence. Paragraph IV is a good example of this where during the incident involving the crocodile, first the person spotting it, then 'our' reaction, then the crocodile's reaction become paragraph themes.

Moving finally down to the sentence level, we can now discuss the question of what is the theme of each sentence and how it is that some of these are given prominence by making them sentence topics. Out of all the various individuals and things, what has the writer selected out of all the rest to talk about in this particular sentence? What is this theme's relation to higher level themes which are also exerting pragmatic pressure on the grammatical structure? Why has not the writer selected some other person or item as the sentence theme, and if he were to have done so, how would he have indicated it?[2]

The theme of sentence (14) is kurdukurdu *children*. In that this theme conflicts with the discourse theme 'we', kurdukurdu is placed in the prominent first position; it is made a sentence topic. Nyurruwiyi-kari *ago-other* is an adverb here placed in the sentence margin and thus not to be counted as occupying a constituent position in the sentence nucleus. The pragmatic effect of this positioning of kurdukurdu can best be reflected by translating the sentence, *A while back the children we took to Catfish Waterhole*. To have had an overt subject nganimpa placed in this first position would have lent too much prominence on the agent which, given the overall discourse theme, has natural or unmarked thematicity.

The theme of paragraph II reverts effortlessly to the discourse theme 'we'. The theme of sentence (15) likewise is 'we'. In sentence (16) however, the writer has shifted the spotlight onto 'the children' in a fashion which lets the reader know immediately that someone else is being talked about. Shifting kurdukurdu further back in the sentence would have resulted in some confusion. Ngayi *merely* is a sentence particle indicating narrator comment, and as such belongs in the sentence margin. In the absence of such narrator comment, I strongly suspect that kurdukurdu would have been placed before the auxiliary. The general tendency in Warlpiri discourse is for higher level particles to take precedence in positioning within a clause, even if it means, as in (16), that a sentence topic is shifted behind the auxiliary. In (17) then, the writer shifts back to talking about 'we', doing so in dramatic fashion by making nganimpa-rlangu-0 *we-also*-NOM a sentence topic.

The theme of paragraph III is 'M. Napanangka'. In that this person constitutes an individual subgrouping within the group 'we', the writer of the story has brought her carefully to the centre of the stage by making M. Napanangka the topic of sentence (18). The writer could have made 'the resin' the topic of the sentence by placing it before the verb. So to translate the sentence in the following manner would be pragmatically incorrect: *After that a large chunk of resin M. Napanangka spotted in the tree*. Contrast the pragmatic choice of theme in (18) with that made in (14). Sentences (19) and (20) continue with 'M. Napanangka' as the elided paragraph theme. 'The resin' which has also now been elided becomes a secondary paragraph theme, and now in (20) new characters, 'the white teaching staff', have been introduced. Sentence (21) is interesting in that the writer chose not to give either one of the two secondary paragraph themes 'the resin' or 'the white teaching staff' any prominence at all. The latter, as subject of the verb, can probably be considered to be the sentence theme, the prominence falling upon the two actions of 'seeing and tasting'.

The themes of paragraph IV are in order 'H. Napangardi', 'we' and 'the crocodile'. Sentence (22) contains H. Napangardi as topic, this being indicated by

the prominent first position. 'The crocodile' is introduced to the story, but thus far only in the background. Thus (22) would be incorrectly translated, *A crocodile was seen in the water by H. Napangardi.* 'H. Napangardi' as theme continues down into (23) where the major discourse theme 'we' slides back into the picture with the assistance of only the bound pronoun -nganpa *us.* But in sentence (24) 'we' grabs centre stage from 'H. Napangardi' by virtue of its prominent positioning. Thus far, 'the crocodile' remains secondary to the other participants. Finally in (25) 'the crocodile' surfaces as the sentence topic even if it is 'only the two eyes' that 'we' saw. Perhaps because 'eyes' is in a part-whole relationship to 'the crocodile', the writer may have felt it necessary to hold the spotlight on it through the prominent fronting of nyanungu *it* in (26). This accomplished reference to 'the crocodile' is deleted in (27) as the action itself is given prominence.

The theme of paragraph V again is 'we'. Since the major discourse theme is retained, no particular prominence is required following the paragraph conjunction ngula-jangka *that-after.* Thus sentences (28) and (29) differ pragmatically from sentence (17) where 'we' contrasted with the prior sentence topic 'children' and from sentence (24) where it contrasted with 'H. Napangardi'. This is of course an arguable point, but I would say that pragmatically speaking, in (28) and (29), the writer is talking not about 'the crocodile' but about 'we', or more specifically, 'what we did then'. If the writer had wished to continue talking about 'the crocodile', then she might have dropped Ngula-jangka *that-after* to commence (28) and might have fronted nyanungu-ku *it*-DAT in (29). Failure to do so coupled with the fact that now the agency has returned to 'we' causes 'the crocodile' to fade from the stage gradually as opposed to making some dramatic exit.

The theme of paragraph VI again remains 'we', more specifically 'what we did then'. In sentence (30) interest shifts to 'lunch' which is given topic prominence before the verb. Omitting karlarla-0 *lunch*-ACC would have still left it clear what 'we' ate, namely mangarri-0 manu kuyu-0 *bread*-ACC *and meat*-ACC, but would have detracted from the more vivid status of the event as being during lunchtime. In (31) the theme of the sentence reverts easily back to 'we' again with the prominence being given to the action itself. Sentence (32) is perhaps the most interesting in the entire story. There are two sets of participants involved, 'we' and the 'white teaching staff'. There are objects involved, 'the apples', and an activity 'throwing'. Any one of these presumably could have achieved prominence by occurring first in the sentence. But the writer has drawn special attention to the location of the recipients of the apples, 'we', by making use of double-case marking Ngula-ngka-ku-juku-lpa-lu-nganpa *this*-LOC-DAT-*still*-AUX-3pl-1plexc. By doing so, the writer has not only relegated 'the white teaching staff' to the rear of the stage, but has also lent vivid prominence to the group 'we'. Normally as can be seen in other parts of the story, (19) and (23) for example, when an individual or group performs a series of actions, the subsequent actions are contained in sentences where the verb subject is elided. This also is true of (32), but the writer through the use of the dative -ku has made the group 'we' coterminous with the location 'there in the water'. It is a handy piece of writing!

The theme of paragraph VII is 'the old women', a previously unmentioned subdivision within the overall cast of characters. Murturnamurturna *old women* occurs in (33) as a sentence topic and in (34) as sentence theme. In (39), the object of the venture, 'the fish' grab centre stage if but briefly through the device of making palka-0 *some* a sentence topic. (39) would be more accurately translated by, *Some fish they brought back.*

Paragraph VIII's theme returns to 'we'. No prominence is given to the group, and the story ends with the return to Lajamanu. As opposed to (32) where the location was of significance, there is nothing surprising or particularly interesting about the fact that it was to Lajamanu that the group returned. Thus Lajamanu-kurra *Lajamanu*-ALL is not given any prominence by fronting.

5. IMPLICATIONS FOR TRANSLATION

That anyone involved in translating various types of materials into Warlpiri needs to understand and control the grammatical mechanisms of the language is apparent. What is immensely more difficult is to be able to control the pragmatic mechanisms involved in making the translated message 'sound just right'. The proper use of sentence topics, and the avoidance of overuse of such topics, is certainly one very important pragmatic mechanism in Warlpiri. Improper control of sentence topics primarily through their overuse as they relate to paragraph and discourse themes results in an out-of-balance narrative, and once a narrative is so out of balance, it is often very difficult for native speakers to pinpoint exactly where the trouble lies.

I offer here one example taken from my own experience in translating portions of the Bible into Warlpiri to show how the proper control of themes through the use of sentence topics can improve the quality of a translation. The passage is from Genesis 3:16 where Satan in the form of a snake is talking to Eve. The original verse was translated like this (significant portions capitalised):

(38a) "Kaji-npa-0 kurdu-0 nyuntu marda-rni, ngula-ngka-ju kapu-npa-nyanu
AUX-2du-3sg *child*-ACC *you* *have*-PRES *this*-LOC-??? AUX-2du-REF

murrumurru-nyayirni purdanya-nyi.[3]
ill-very *feel*-PRES

(38b) Manu kapu-ngku NYUNTU-PARNTA-0 NGUMPARNA-NYANU-0 wiri-jiki nyina
and AUX-2du *YOU-BELONGING*-NOM *SPOUSE*-REF-NOM *big-still sit*

tarnnga-juku, NGULA-KU-JU nyuntu-ju kapu-npa-rla warrarda yulka-mi."
forever-still THIS-DAT-??? *you*-??? AUX-2du-3sg *always* *love*-PRES

"When you have a child, then you will feel much pain. And over you YOUR HUSBAND will be boss forever, him you will always love."

The verse was later revised to read:

(39a) "Kaji-npa kurdu-0 nyuntu marda-rni, ngula-ngka-ju kapu-npa-nyanu
AUX-2du *child*-ACC *you* *have*-PRES *this*-LOC-??? AUX-2du-REF

murrumurru-nyayirni purdanya-nyi.
ill-very *feel*-PRES

(39b) Manu NYUNTU-PARNTA-0 NGUMPARNA-NYANU-0 kapu-ngku wiri-jiki nyina
and *YOU-BELONGING*-NOM *SPOUSE*-REF-NOM AUX-2du *big-still sit*

tarnnga-juku, NGULA-KU-JU kapu-npa-rla warrarda yulka-mi."
forever-still THIS-DAT-??? AUX-2du-3sg *always* *love*-PRES

"When you have a child, then you will feel much pain. And YOUR HUSBAND will be boss over you forever, him you will always love."

Note that in the original version (38b), the constituent nyuntu-parnta ngumparna-nyanu *you-belonging*-NOM *spouse*-REF-NOM is the second sentence nucleus constituent following the auxiliary. Thus it has been given no prominence from which

can be concluded that the sentence is about 'the wife' and not 'the husband'. Then note that in the revised version (39b) nyuntu-parnta ngumparna-nyanu has been moved to the prominent first position; it has been made the theme of the sentence, what is being talked about in that sentence. Why this was done can only be understood in relation to ngula-ku-ju *this*-DAT-??? in the final clause. Ngula by itself is an anaphoric referent, it is a cohesive device which always looks backwards in reference to some person or item which is being talked about. Its function therefore can be seen basically in terms of maintaining the thematic coherence within a narrative.

In the initial version therefore, the theme of (38a) was 'you the woman'. The sudden switch to 'him your husband' as theme of (38b) signalled by ngula-ku-ju was deemed too awkward even though it was entirely possible to keep the participants straight. This pragmatic difficulty was solved (although not without much discussion) by switching nyuntu-parnta-0 ngumparna-nyanu-0 to the front of the first clause in (39b) thus making 'he your husband' a sentence topic, the theme of that sentence. Having done that the transition into the second clause of (39b) becomes smoother as ngula-ku-ju maintained 'him your husband' as the theme of that clause too. It is to be noted here that often such pragmatic choice is grounds for great diversity of opinion between native speakers. However in this instance where we engage in much discussion over the matter of who was being talked about, unanimity was reached that this was the best solution.

NOTES

1. The nominal clitics -ji and -ju are glossed ??? since their function in Warlpiri is not clearly understood. Some occurrences appear to be controlled by rhythmic considerations. However, other occurrences seem clearly to be controlled by considerations of new vs. old information and/or topic vs. comment.
2. Introductory words such as ngula-jangka *that-after*, nyurruwiyi-kari *ago-other*, and karlarla-jangka *lunch* are considered part of the sentence margin. Although definitely vital for the cohesive flow of the discourse, as they normally occur as the first word in the sentence, they are not considered here among those clause-level constituents that vie for the prominent first position.
3. The free pronoun nyuntu *you*, though subject of a transitive verb, is not marked for ergative case. Unless occurring clause finally, such subject pronouns are optionally marked for ergative case. Occurring finally, they are obligatorily marked.

ABBREVIATIONS

AUX	auxiliary	LOC	locative case	pl	plural
PAST	past tense	COM	comitative case	inc	inclusive
PRES	present tense	INF	infinitive	exc	exclusive
ERG	ergative case	SEQ	sequencer	???	nominal clitic (see note 1)
NOM	nominative case	1	1st person		
ACC	accusative case	2	2nd person		
DAT	dative case	3	3rd person		
ALL	allative case	sg	singular		

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EXISTENTIAL CLAUSES IN GOONIYANDI: A SYSTEMIC-FUNCTIONAL DESCRIPTION

William B. McGregor

ABSTRACT

This paper presents a systemic/functional description of existential clauses in Gooniyandi. Gooniyandi existential clauses are either verbal or verbless. However, the two modes of expression contrast semantically. Verbal existential clauses have one of the stance verbs 'stand', 'sit', or 'lie', and refer to situations of being or existence. By contrast, verbless existential clauses consist of a single NP, whose referent is indicated or pointed to; these clauses refer to things, and not to situations of being involving things. The consequences of this distinction in terms of the contextual skewings in the distribution of the two different types of clauses are investigated in some detail.

1. INTRODUCTION[1]

This paper investigates the syntax and semantics of existential clauses - that is, clauses which assert the existence of an entity - in the Gooniyandi language of the southern Kimberley, north-west Australia.[2] It proposes a description in terms of systemic/functional grammar, particularly as elaborated in Halliday's most recent textbook (Halliday 1985).

Gooniyandi grammaticalises a distinction between *relational* clauses and *situation* clauses. The former assert logical relations such as attribution, identity, and existence, and are encoded as minor, verbless clauses.[3] Situation clauses refer to real-world and imaginary situations or occurrences of some type, and are encoded as major clauses, characterised by an obligatory verbal complex.[4] Existential clauses may be of either type, situation (i.e. verbal) or relational (i.e. verbless). The main purpose of this paper is to show how the contrast between relational and situation clauses contextualises into a set of semantic contrasts between verbal and verbless existential clauses.

In addition, it is hoped that this analysis of a relatively small part of the grammar of a single language will demonstrate the usefulness of systemic grammar - a theory which has been ignored by the majority of students of exotic languages - as a descriptive and explanatory model.

I begin, in section 2, by outlining some of the major tennets of systemic functional grammar as I understand it. I then describe, in section 3, verbless and verbal existential clauses in turn. This is followed by a brief discussion of negation, in section 4. Section 5 argues for the main thesis of the paper. It

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demonstrates that verbal and verbless existential clauses are not in free variation, but contrast semantically. The contrasts are shown to relate in a natural way to the differences in the modes of formal expression. The paper ends with a short conclusion summarising the results of the investigation, and comparing the verbal/verbless contrast in existential clauses with the verbal/verbless contrast in attributive clauses.

2. THEORETICAL PRELIMINARIES

This section outlines, in very general terms, what I see as the central ideas of systemic functional grammar, in so far as they are relevant to the argument of this paper. For more complete and detailed presentations of the theory (as applied to the description of English grammar), see especially Fawcett 1980, Halliday 1970 and 1985, and Butler 1985.

The fundamental assumption of the functional approach to grammar is that constituents are linguistic signs: each constituent form is associated with a function, the meaning it contributes, by its presence, to the unit of which it is an immediate constituent (Haas 1954:80, Halliday 1985:24). Furthermore, these two aspects of the sign are inseparable, in the sense that they are mutually defining, and neither one can be established independently of the other. It follows that constituency breaks must be justified - usually by the well known principles of semantic contrast and complementary distribution - and cannot be assumed a priori to be binary. This approach implies a 'string constituent' type analysis, with the constituents labelled by function or role (Longacre 1960). Following Halliday (1985:27), labels for functions will be written beginning with a capital letter.

But there is another way - and this is the only way accepted by theories that assume binary Immediate Constituent analysis - in which constituents may be labelled; that is, by their class. This implies a description of a given clause as a syntagm of units of particular classes (for example, it may be a syntagm of a Nominal Phrase (NP) and a Verbal Phrase (VP)). A complete account of any particular clause, of course, requires both formal description - i.e. description in terms of class - and description in terms of function. The formal and the functional descriptions are related by realisation: units of particular classes realise the functions. Now whilst description in terms of classes and their linear sequence may prove reasonably satisfactory for individual clause tokens, it is difficult, if not impossible, to generalise from them, and beyond the particular instances (cf. McGregor 1984:218ff). And, as a rule, clause *types* may be defined more satisfactorily and generally in terms of functions than units. In particular, the major clause types may be defined in terms of the number and types of inherent[5] roles that make them up (McGregor 1984:254ff).

Halliday (e.g. 1970:143, 1985:xiii) has suggested that all languages are organised around three principal functional 'components'. First there is the *ideational* component which has two major subcomponents: the *experiential*, which is concerned with the role of language as a means of representing reality; and the *logical*, which concerns the logical relations 'and', 'or', and so on. Then there is the *textual* component, which concerns the way linguistic units contribute to the organisation of the text as a message bearing unit. This component also has two major subcomponents: the *thematic*, which concerns the theme/rheme opposition, and the *information* component, which concerns the way in which the message is organised as an information bearing unit. And third is the *interpersonal* component, which concerns the role of language in shaping the

interaction between the speech participants. Each clausal role (or function) falls into one of these three major components, although of course the formal linguistic units typically realise roles of more than one type. And conversely, each functional component imposes a distinct labelled constituent structure on a clause. In Gooniyandi, as we will see, verbal existential clauses contrast with verbless existential clauses in respect of each of these three functional components.

3. GRAMMAR OF EXISTENTIAL CLAUSES

3.1 Verbless existential clauses

Verbless existential clauses constitute a relatively infrequent clause type which draws attention to the existence of an entity, usually in a particular spatial location. An example is sentence number (1).[6]

(1) biliga gambaya˅/ yoonggoo nyamani giddaabingaddi`/
middle water-LOC *scrub* *big* *long*
In the middle of the water there is some big scrub.

Before proceeding with the description of existential clauses, I wish to raise an important methodological question concerning identification of the meaning intended by (1). Since there is no morphological marker indicating existence, how can I claim that the speaker intended to convey this type of meaning? I would argue as follows, anticipating somewhat the discussion of the latter part of this section. Example (1) was uttered freely by a speaker of Gooniyandi on being shown a photograph which he interpreted as representing an island in the midst of a large body of water. That the purpose of his utterance was to draw attention to the existence, or presence, of the island, and not to attribute a location of an island whose existence was assumed is supported by the following observations. Had he intended to attribute a location of the island, the speaker would most likely have referred to it with a definite NP having the determiner ngirndaji *this*: except where their existence is being asserted, items which stand out as *figures* against the *ground* constituted by the context of situation are invariably referred to by definite NPs involving determiners. Secondly, it is highly unlikely that the speaker would modify the referent of the nominal yoonggoo with a quality, as well as attribute a location of it. (Gooniyandi, like many Australian languages, shows a strong tendency to limit modification of nominals to one modifier per phrase; indeed, most usually, there is no more than one per clause.) Finally, it would have been more natural for the speaker, if he intended to attribute a location of the island, to have given the main stress to a syllable of biliga gambaya, rather than, as he did, give it to the last stressed syllable of giddaabingaddi. The fact that the second tone unit of (1) is not a secondary one argues that the Theme is biliga gambaya (for details see McGregor 1984:303), and not yoonggoo nyamani giddaabingaddi as would be expected if the clause was intended to attribute a location of the island (see also below). In fact, biliga gambaya is a starting point Theme for the clause - consistent with the fact that the water constitutes the ground in the photograph. Having argued the case for (1), I will not enter into detailed discussion of any further examples. It may, however, be assumed in each instance that there is similar evidence that the speaker intended to convey existential meaning.

As example (1) shows, existential clauses typically consist of two roles: a spatial location, realised by a Locative PP or a locational Adverbial, or a

complex of Locative PP and locational Adverbial (as in (1)); and an Existent, realised by an NP. Only the Existent role is inherent. The Location, though frequently present, is not inherent, as (2), which began a text concerning the exploits of the man whose existence is asserted, shows:

(2) yoowarni boolga ˇ/ marlami boolga ˇ / yanoonggoonyali yoowooloo `/
one old man not old man young man
There was an old man; not really an old man, he was still young.

An existential clause sometimes contains, in addition to a spatial Location, a temporal Location. However, it seems that there can never be just a temporal Location and an Existent. In the few examples available which consist of just these two elements, there is evidence that a verbal complex has also been ellipsed. The evidence consists in the fact that the apparent counterexamples all occur in contexts in which the previous clause was a verbal existential clause and the verbless clause presents a new quality of the entity, or a new number of entities, referred to in the verbal clause, associated with the new time. We must conclude that these examples are in fact elliptical *verbal* existential clauses.

In summary, a verbless existential clause must contain an NP referring to an Existent; it may have in addition, a PP or an Adverbial referring to a spatial location. And, provided it has an expression of the latter type, it may also have an expression referring to a temporal location. These observations argue against the hypothesis that the "underlying subject" of an existential clause is a locative or temporal expression (cf. Lyons 1977:723).

The Location and Existent phrases may come in any order, and the two possible orders are approximately equally frequent in the examples available. The relative order of the two phrases is governed by discourse considerations. In particular, Gooniyandi is a "theme-first" language; that is, the initial element in a clause may be identified as the Theme (McGregor 1984:299). This generalisation is subject to two qualifications. First, a Theme which conveys given (i.e. predictable) information may be ellipsed. Second, because it is the speaker who evaluates information as given or not given, he may change his mind, and add the Theme as an afterthought (McGregor 1984:303); but such "Themes" always come in their own separate tone unit, and I would maintain that the Theme had been initially ellipsed.

The system of thematisation interacts with another but distinct textual system, namely the system of information, which is realised prosodically. Gooniyandi texts are spoken as sequences of *tone units*, which carry the significant intonation contours. I have argued elsewhere (McGregor 1984:292) that the tone units delimit *information units*, each of which carries one "quantum" of information (cf. Halliday 1985:274ff). In each tone unit there is one syllable which is more prominent or salient than the others. This syllable marks the *focus* of the information unit. In the unmarked case, the focus falls within the final constituent of a tone unit (McGregor 1984:294ff). In the example sentences, tone units are marked off by a slash, underlinging indicates the most salient syllable of the unit, and grave and acute accents indicate pitch movement iconically.[7]

When the locational constituent occurs first, the two phrases always (at least in the examples available) occur in different tone units. There is always a hiatus at their boundary, and a slight rise in pitch on the final syllable of that phrase. The phrase referring to the Existent then has falling pitch, with the final stressed syllable the most salient. But when the Existent precedes the Location, the clause frequently consists of only one tone unit. As far as

I can ascertain, this unit always has a falling tone, with the greatest phonological salience falling on the final stressed syllable of the unit. The two phrases may, however, constitute distinct tone units; if so, each will have falling tone. I believe also that the second tone unit will normally have lower pitch than the first. Typical examples of each possibility are, respectively, sentences (3), (4) and (5).

(3) laandi giriliya˘ / garndiwangooddoo jirigi` /
up *tree* *many* *bird*
In the tree there are many birds.

(4) nalija ngirndajawu´ /
tea *here*
There's tea here!

(5) garndiwangooddoo biyindi` / doowoo-ya babaabiddi` /
many *bat* *cave*-LOC *inside*
There are lots of bats in the cave.

It follows from the preceding discussion that whenever the Location is thematic, it must constitute a separate information unit; a thematic Existent need not. This suggests that the Location is the marked choice of Theme; the Existent, the unmarked choice. Indeed, it would appear that the Location is thematic only in circumstances in which it is clearly the ground against which the existent stands as figure. The two possible choices of Theme, Existent and Location, correspond in a natural way to two distinct types of Theme: one is Theme as what the clause is *about* - most naturally the item claimed to exist, which will be a figure; the other is Theme as *starting point* of the clause - most naturally something which is given, the ground.

There is another clause type which is realised as a syntagm of an NP and a Locative PP. This is a class of clauses which attribute a location of an entity; I refer to these clauses as locational characterising clauses (McGregor 1984:243). An example is (6):

(6) garndiwiddi girli warlibiddi baabiddi
two *same* *river* *below*
The two rivers are below (the surface of the billabong).

Despite the fact that both verbless existential clauses and locational characterising clauses typically consist of phrasal constituents of the same class, there is reason to distinguish them as grammatically different types. The differences are as follows: firstly, the Existent always carries new information, and the denoting NP may never be omitted; on the other hand, the phrase referring to an entity of which a location is attributed may be ellipsed, in case it conveys given information. Furthermore, the NP realising Existent may not have a deictic element[8] since the presence of a deictic indicates that the NP is definite, and is compatible only with presumed existence of the entity. Secondly, the Location is inherent to locational characterising clauses, but (as we have seen) not to existential clauses. Thirdly, the order of the Location and Existent is more variable than is the order of Location and Entity (in characterising clauses). In characterising clauses, because the entity is normally given, and hence likely to be Theme both in the sense of what the clause is about, and in the starting point sense, the Location occurs clause initially very infrequently. The greater variability in existential clauses may be attributed to the conflict between the Existent as what the clause is about, and the Location as the natural choice of starting point Theme. Fourthly, although both clause types have situation clause agnates, the contrast between

the relational and the situation clauses contextualises in different ways in each (as will be briefly mentioned in the concluding section). And finally, as a consequence of the way in which the contrast contextualises, locational characterising clauses are far rarer than their situation clause agnates; this statistical tendency does not hold for existential clauses.

As we can see from the examples above, Gooniyandi verbless existential clauses frequently translate into 'there is' clauses of English. But there are occasions where this translation is inappropriate, as example (7) illustrates.

(7) nya ` / girlala ngaanggi ` /
here tobacco yours
Here! (This is) tobacco for you.

The difference is that existential clauses in Gooniyandi, unlike their English counterparts, as a rule function to draw attention to an entity, or *present* it into the hearer's consciousness. They are not used merely or exclusively to assert existence in the abstract, outside of the context of a particular speech situation or referent situation. I will return to this point in section 5 below.

3.2 Verbal existential clauses

Like verbless existential clauses, verbal existential clauses have as an inherent role an Existent, whose denoting NP cannot be ellipsed. As a rule, there is also a temporal and/or spatial locational element present; however, the presence of the former is not dependent on the presence of the latter, as it is in verbless existential clauses. In addition, there is an inherent role which I will label Situation,[9] which refers to a state of rest or being and is realised by a verbal complex, the lexical 'head' of which is one of the three verbs of stance, bagi- *lie*, warang- *sit*, and wara- *stand*. Examples (8) and (9) illustrate these properties:

(8) ngamoo yoowooloo-moowa warangbiddi
before man-only they sat
Before there were only Aborigines.

(9) goobardiya marlami mayaroo warayi ˇ / yardmoowa bagiyi ` /
[placename] *no house it stood yard-only it lay*
At Goobardiya there was no house; there was only a yard.

Verbal existential clauses assert the existence of an entity in some situational circumstance, and more particularly, in some mode of being or existence. Evidence for this is that the three stance verbs are not in free variation, but contrast semantically. The choice between them depends principally on characteristic posture of the Existent and its degree of activity. Basically,

bagi- occurs if the thing adopts a reclining or horizontal posture, or has significantly greater extent horizontally than vertically; for example, yards (in (9)), bodies of water, and so on;

wara- occurs when the position is vertical, where there is greater vertical than horizontal extent, or where significant parts are vertical, and thus ultimately unstable and liable to fall down; for example, houses (in (9)), trees, etc.; and

warang- occurs where the posture is a sitting one, perhaps more precisely, where the body as a whole adopts neither a vertical nor a horizontal orientation, and/or has roughly comparable horizontal and vertical extents;

for example, rocks and birds (except those with long legs) - see clause (10). (Interestingly, a cassette player usually sits, a cassette tape usually lies.)

(10) giriliya jirigi waranggiri
tree-LOC *bird* *it sits*
There's a bird in the tree.

Sometimes, however, posture is irrelevant or secondary - for example, when the existent is abstract and intangible, or when it is tangible but has no particular or invariant posture. In such cases, one of the two verbs warang- *sit* and bagi- *lie* occurs. warang- is normally used of things that are typically relatively active, especially people. Example number (8) illustrates this; it should be noted that there is no suggestion here that people used to do nothing but sit around. On the other hand, bagi- is used where the thing is quite inactive. Examples numbered (11) and (12) illustrate this (see also (15) below):

(11) ngaddagi thiddi nyamani bagiri-ngadda
my *fight* *big* *it lies-on me*
There's a big fight waiting for me.

(12) babirnali ngalwiri-ya ˇ / thangarndi bagiri ` /
from underneath (head of crayfish?)-LOC *mouth* *it lies*
On the underneath of the crayfish is a mouth.

Two strong generalisations may be made regarding the order of constituents. The strongest is that the verbal complex almost always comes finally, as an examination of all of the examples of this section will reveal; the second clause of sentence number (17) below is the only counterexample available to this generalisation. Only slightly weaker is the tendency, demonstrated by nearly all examples in this section, for the phrase referring to the Location to precede the phrase referring to the Existent. Example number (13) is one of the relatively few instances of the order Existent^Location.

(13) gamba joomoo laandi bagiri ` /
water soak *up* *it lies*
There's soak water up there.

There are certain similarities in the discourse structure of verbal and verbless existential clauses (but there are also some significant differences, as we will see in section 5 below). For instance, when the Location is initial, it is always set off on its own tone unit and represents a starting-point Theme. But when the Existent comes first, the whole clause normally falls into a single tone unit. This indicates that the unmarked choice of Theme is the Existent, which, as we have already seen, is also the case in verbless existential clauses. Here 'unmarked' relates to the information content of the clause: it does not refer to frequency of occurrence (see preceding paragraph). In other words, the most natural choice of Theme is a locational expression; but as a Theme, a locational expression is normally treated as carrying a full unit of information - it typically marks the beginning of a new episode or some sort of turning point in narrative texts (cf. McGregor 1985:9-10). An additional characteristic of verbal existential clauses is that the verbal complex *never* constitutes a tone unit by itself, and is never given sentential prominence (although as the last word of a tone unit, it may carry the most perceptible pitch movement). In information terms this means that the verbal complex never carries particularly newsworthy information (see section 5 below).

Existential clauses need to be distinguished from two other types of verbal clauses which share overlapping classes of realisations. They are locational

attributive clauses, and clauses of inhabitation. The former attribute a location of an entity, while the latter indicate a niche which it inhabits. The three types typically consist of an NP referring to an entity, a locational element referring to a place, and a verbal complex with one of the three verbs of stance. Not only do these types differ in terms of their extra-linguistic logical or referential meaning, but there are grammatical differences between them. (a) The existential type involves only two inherent roles, the Existent and the Situation, whereas the other two types each have three inherent roles: Entity, Location and Situation for locational attributive clauses; and Inhabitant, Niche, and Situation for inhabitation clauses. (b) NPs realising Existent may never be ellipsed, but NPs realising Entity or Inhabitant may. (c) In existential clauses, the locational element may give either spatial or temporal Location; in the other two types, the Location must be spatial. (d) Unlike the other two types, clauses of inhabitation have no relational (i.e. verbless) clause agnates.

It is not strictly the case that verbal existential clauses always assert that an entity not previously known about exists. They also occur in circumstances where the existence of some entity or other is taken for granted, but some facet of its existence is new, the result of a situation, or of a process of change. The two examples I have available involve the only two logical possibilities: change in an essential quality, and change in number. These are given as examples (14) and (15) respectively.

(14) giljiddijgi-nhingi goornagjawani woogoo bagiyawi
tadpole-ABL *it would turn*[10] *frog* *it would die*
From a tadpole it would turn into a frog.

(15) yaniyaningi giribaala ngarloodoo bagiringadda
right now *I'm finishing it three* *it lies-on me*
I'm nearly finished (my cassettes), there are three left.

If we were to give natural translations of these examples which preserve the flavour of the original, they would involve 'there results' and 'there remains', rather than 'there is' or 'there exists'.

4. NEGATION IN EXISTENTIAL CLAUSES

The most common mode of expressing negation in Gooniyandi existential clauses is by phrase-level negation, as is the case also in English. This expresses the fact that there is no entity of the type referred to by the head nominal of the NP.

In verbless existential clauses negation is always of this type. That is, it is invariably expressed at phrase level, by the negative word marlami *nothing, no*, which always follows the head of the NP, as illustrated in example number (16):

(16) niyajiya gamba marlami
this-LOC *water nothing*
There is no water here.

In contrast to the positive versions of (3) and (4) which draw attention to the existence or presence of an entity, clauses like (16) appear to be used to draw attention to the *absence* of any entity of the designated type at a particular location. Furthermore, as a rule, it would appear that existence is denied, or attention is drawn to the absence of something, only in those contexts in which

there is a presupposition or expectation that some quantity of the entity denoted by the Existent nominal is, or might be present.

In verbal existential clauses, negation is also as a rule expressed by the NP-level particle marlami, which denies the existence of any entity of the type designated by the head noun of the NP. However, in contrast to their verbless counterparts, in verbal clauses this particle normally *precedes* the head noun of the NP; example (9) above illustrates this.

This difference in the order of marlami relative to the head nominal of the NP in negative verbless existential clauses, and negative verbal existential clauses may be explained as follows. When marlami follows its head nominal it functions as a qualifier in the NP, modifying the referent of the phrase (Bolinger 1967, McGregor 1984:218ff). In this position the adverbial enters into paradigmatic contrast with other qualifying expressions such as nyamani *big*: that is, 'none' contrasts with 'a large quantity', 'a small quantity' and so on. This is in keeping with the presupposition (mentioned above) that some quantity of the referent entity is present. In addition, as a qualifier marlami has a "narrowing down" function, which correlates with the function of the clause in drawing attention to the absence of any quantity of the entity. On the other hand, when marlami precedes the head nominal it functions as a quantifier, indicating that the number of entities is zero; here marlami is in paradigmatic contrast with yoowarni *one*, etc. In this instance the adverbial modifies the reference of the nominal (Bolinger 1967, McGregor 1984:218ff). What is presupposed in negative verbal existential clauses is that something exists; it is not presupposed that there is some amount of the referent present. And as example (9) shows, the following clause is likely to indicate what it is that exists instead.

There is another way of expressing negation in verbal existential clauses: by clause-level negation using the particle mangaddi *no, not*. This construction expresses the denial of the existence of a particular entity, rather than the denial of the existence of any entity of a particular type. The NP realising the Existent role is always a referential expression, denoting some entity presumed (usually by the hearer) to exist. However, although the NP is referential, it may not be definite; this would contradict the assertion of the clause. (17) provides an illustration:

(17) mangaddi goobardiya mayaroo warayi ˇ / marlami ` / yard bagiyi ngamoo ` /
not [place] *house it stood nothing yard it lay before*
Goobardiya homestead wasn't there (then). There was a yard before.

The two types of negative existential clauses would seem to be in complementary distribution, marlami phrasal negation occurring when there is no particular referent in mind, mangaddi clausal negation occurring when there is. In this connection, it is interesting to note that although (9) and (17) refer to the same real-world situation, (9) occurred in one of the first texts I collected, when it would not have been reasonable for the speaker to suppose I knew of a house at Goobardiya, whereas (17) occurred in a recently collected text; the speaker could by now presume that I remembered that there was a house there.

Whereas in all other situation clauses, the negative particle can occur between an NP and a following verbal complex, in existential situation clauses it invariably precedes both the NP denoting the entity, and the verbal complex, as illustrated in the above example. This is because the constituent immediately following mangaddi is always the focus of the negation (McGregor 1984:296). Were mangaddi to immediately precede the verbal complex, there would be a focus of contrast on that constituent, and a following correlative positive clause would indicate the situation in which the NP was involved. Clearly this would presuppose the existence of the referent of the NP.

5. CONTRAST OF VERBAL AND VERBLESS EXISTENTIAL CLAUSES

It seems to be an underlying assumption of Australianist linguistics that existential clauses are of little theoretical interest. To the best of my knowledge, no description of an Australian language gives more than a brief mention of this clause type. As a consequence, it is not known how widespread is the contrast between verbal and verbless modes of expression in existential clauses. Two languages in which the contrast would appear to exist are Yidiny (cf. Dixon 1977:272,501) and Diyari (cf. Austin 1981:102-104), although neither Dixon nor Austin provides any discussion and neither makes any attempt to identify a concomitant semantic difference. On the other hand, Donaldson (1980:233) and Goddard (1985:38) indicate that all existential clauses are verbal in Ngiyambaa and Yankuntjatjarra respectively.

However, as is well known, a number of Australian languages do exhibit formal contrasts between verbal and verbless clauses in the expression of the relations of attribution (qualification). In general the (frequently implicit) assumption seems to be that this formal opposition does not correlate with a meaning contrast of any great significance (see e.g. Heath 1984:516, Dixon 1977:271-272,500, and Tsunoda 1981:123). The stance verbs are thus viewed as optional in attributive clauses.

I would argue that there is strong evidence against this assumption in relation to Gooniyandi. This should be clear from the discussion of sections 3.1 and 3.2. In addition, there are arguments against the hypothesis that the stance verbs are mere optional adjuncts to existential clauses, and also against the hypothesis that the presence of a stance verb is governed by formal grammatical (rather than semantic) factors. For one thing, we have the fact that there is a meaning contrast between the three stance verbs bagi-, warang-, and wara-; this demonstrates that at least the last two carry distinctive meaning. However, it might still be suggested that the verb bagi-, the least lexically specific of the three stance verbs, is a meaningless place-filler, at least in some of its uses (see examples (14) and (15)). It could be, for instance, that this verb is merely added to function as a locus for tense, aspect, or mood information (all of which are expressed by verbal morphemes). But while it is undeniable that the presence of a verb does allow for the expression of this type of information, it demonstrably does more than this, as we will shortly see. Furthermore, it would seem to be impossible to write formal rules, based solely on morphological/syntactic factors, which correctly predict when to insert the verbal complex into a clause: we can see from examples such as (2) that it is not necessary to add a verb in case temporal information is not given elsewhere in the clause; coversely, the temporal information provided by the verb in (8) is redundant.

A few linguists have proposed meaning contrasts between the verbal and verbless modes of expression in attribution. One suggestion is that the contrast may lie in the opposition of temporary vs. permanent possession of the attribute (cf. Goddard 1985:37-38); another suggestion is that the two types contrast non-present vs. present possession of the attribute respectively (cf. Austin 1981: 104). It is clear that neither of these contrasts can be modified in any obvious way so as to provide an explanation of the facts of Gooniyandi existential clauses. There are numerous counterexamples to permanent existence of the Existent in verbless existential clauses (examples (3) and (4)), and it is not infrequent for present existence to be referred to by a verbal clause (example (15)) and past existence by a verbless clause (example (2)).

The remainder of this section will be devoted to an attempt to determine how verbal and verbless existential clauses contrast semantically. It will be shown

that they differ in terms of the ideational, the textual, and the interpersonal meanings that they convey. These differences are not a random collection, but all relate ultimately to the contrast situation vs. relation. Not only this, but there is a close correlation between these meanings and the linguistic modes of expression that convey them. This means that a case can be made for a type of diagramatic iconicity within the structure of Gooniyandi clauses (cf. Haiman 1980): that is, the differences in form "resemble" in natural and expected ways the meaning differences associated with the forms. We will now deal with the three types of meaning difference in order.

In ideational terms, the difference is between the two subtypes: experiential meaning and logical meaning. Verbal existential clauses refer to situations or circumstances of being or existence, and convey meaning of the experiential type. Verbless existential clauses, on the other hand, express a logical relationship of the indexical type (Pierce 1931-35:volume 2): they indicate or point to the existent. It is of course true that verbless existential clauses also convey experiential meaning. However, I would argue that this experiential meaning is all carried phrasally, by the NP realising the role of Existent, and not clausally, by the construction itself. In experiential terms, then, verbal existential clauses refer to situations involving entities; verbless existential clauses refer to entities only, and do so in the usual way, i.e. through their constituent NP.

This distinction between experiential and logical meanings is manifested in a number of skewings in the distribution of verbal and verbless existential clauses in respect of the types of ideational meaning conveyed. Firstly, verbless clauses refer to tangible (including potentially tangible) physical objects only, whereas verbal clauses can refer to intangibles, or objectified actions or events, such as fights (example (11)). Clearly this correlates with the fact that abstract intangible entities cannot be pointed at under any circumstances; nor can objectified actions or events be pointed at except at the time of their occurrence (in (11), for example, the fight has not yet happened).

Secondly, only verbal clauses occur when reference is made to existence as a result of a situation. In examples (14) and (15) above, the existence of a certain number of entities, or of a particular type of entity, is the result of some occurrence. And in these circumstances it is clear that the entity is involved in some existential situation. What results from the earlier event is not normally simply the presence of an entity, its emergence into existence. More usually, it is its existence in a certain qualitative mode (through metamorphosis), the actual presence of some thing not being at issue. Here both the referential nominal and the verb carry information relevant to the way in which the thing exists. Thirdly, temporal expressions may occur instead of locational expressions in verbal existential clauses; but in their verbless counterparts, the presence of a temporal expression is contingent on the presence of a locational expression. And finally, verbless existential clauses are not used for the expression of general truths - see example (8): this would be incompatible with their indexing function.

There is also a marked skewing in the textual distribution of verbal and verbless existential clauses, indicating that the two clause types have distinct textual functions. Within situated dialogue, as we have already seen, verbless existential clauses function to draw attention to the presence of some entity in the context of speech. This is their indexical function. There is no evidence that verbal clauses are ever used in this way.

In narrative texts, the verbless type is typically found introducing the major participants. This was the case for (3) above, which was the first clause of a text, and introduced its major participant, the young man. By contrast, verbal existential clauses do not usually introduce major participants into narrative texts. Existents introduced by these clauses are invariably secondary or background entities in the text. Typically, such entities are ones which, once having been introduced, are not mentioned again in the sequel. Thus, for instance, in (9), neither the house nor the yard is mentioned again; and the clause itself merely provides background descriptive or qualifying information, inessential to the development of the text. To summarise, verbal existential clauses are used descriptively, and refer to the existence/presence of an entity in a particular mode of being; they carry background information. By contrast, verbless existential clauses are used introductorily, and foreground the existent. Introduction is clearly a type of indexical relation, in which the thing pointed at is brought into the hearer's conscious imagination, even though it is not present in the context of speech.

Now I do not mean to suggest by the discussion of the preceding paragraph that major protagonists are necessarily introduced by verbless existential clauses. Rather, what I am saying is that in all available instances (which number over twenty), the entities introduced by verbless existential clauses fulfil important and significant roles in the narrative. But a major protagonist may be introduced into a text in one of a number of other ways, for example, by a verbal clause other than of the existential type (the alternatives need not concern us here). In this connection it is interesting to contrast the ways in which the two main protagonists are introduced in a short mythological text (included as Text 2 in McGregor 1984:479-480). The first, an indefinite group of people, is introduced in the initial clause of the text by a verbal clause asserting that they were sitting around together (in itself a highly marked way of initiating a text). Then, in the sixth sentence, a verbless existential clause introduces a certain little man, who turns out to be the principal and most outstanding actor in the myth: he steals their fire, takes it away and hides from them. It seems not unreasonable to regard this little man as the major protagonist (only he is named), the others being secondary in relation to him, though still main protagonists. In other words, it may be that the relative importance of a character or entity in a text may be reflected in the linguistic mode in which he/she/it is introduced, ranging from verbless existential clauses, through verbal non-existential clauses, to verbal existential clauses.

Not only do verbal and verbless existential clauses differ textually in terms of their status as backgrounded and foregrounded respectively, but they also differ in terms of their structure as information bearing units (Halliday 1985: 274ff). As remarked above, the salient syllable of the tone unit containing a verb of stance in an existential clause never falls on the verb, even though the verb is normally the final element in the unit. This is unusual because the unmarked place for the salient syllable of a tone unit, which identifies the information focus, is for it to fall somewhere in its final constituent (see 2.1 above). However it seems to me that there is no need to hypothesise a fundamental difference in information structure between verbal existential (and attributive) clauses and all other clause types. Rather, it would appear that the unmarked situation for verbal existential clauses is in fact marked in information terms. Indeed, examination of most of the examples given in section 3.2 (including certainly (8), (9), (12), (14) and (15)) clearly reveals that there is some point whereby the thing claimed to exist contrasts with another potential existent. Any existential contrast of this type will naturally involve a presupposition. The presence of the stance verb allows a marked focus to fall

on either the existent or the location; at the same time this permits the stance verb to indicate what is given, the presupposition that something exists. In structural terms, a verbless clause does not allow either the location or the existent to be treated as a marked focus while at the same time preserving an existential presupposition. Furthermore, it is intuitively obvious that the function of verbless existential clauses in presenting existents is incompatible with any existential presupposition or point of contrast.

Finally we turn to the differences in interpersonal meanings. The discussion of negation in the last section shows that verbless existential clauses have no propositional nexus; for, if they did have one, the particle mangaddi *no, not* could be used to negate the propositional content of the clause. Intuitively it is clear why this should be so: the ideational content of verbless existential clauses is not something that can be argued about. Clauses of this type are performative - i.e. their utterance performs the indexical act - and it would be pointless to dispute that the speaker is pointing to something he presumes the hearer is not aware of. The only thing that can be argued about is whether there is anything of the sort referred to present. The speaker can only point to the negation of - i.e. the absence of - the thing in question: he cannot negate that he is indicating something. On the other hand, verbal existential clauses do have propositional content, and the expressed proposition may be negated or modified by clause level particles such as mangaddi *no, not*, thaaddi *mistakenly believed*, yiganyi *uncertain*, etc. For these reasons, verbless existential clauses may be regarded as minor, interjection-like clauses; verbal existential clauses as major clauses.

It is quite obvious that verbal clauses are the "right" type to refer to existential situations of 'being', and that verbless clauses are the "right" ones to be used in making reference to entities instead of situations. This is because the former has a verbal lexeme realising the role Process within the VP, while the latter has just an NP referring to an entity. It is also true that other contrasting properties of the two types can be correlated with the fact that one type has a VP and the other does not.

Tense marking would be redundant for clauses which function indexically. It is thus natural that it is the verbless clauses that function in this way. The verbally located distinctions of mood (subjunctive and factive) and mode (potential, desiderative and definite) modify respectively the proposition expressed and the likelihood (etc.) of occurrence of the situation. Once again it is clear that these distinctions are irrelevant to clauses with indexical function; as we have just seen, the verbless clauses do not have propositional content, nor do they refer to situations. Similar remarks apply with respect to aspect markers.

The VP in Gooniyandi has bound pronominal prefixes and enclitics which can make reference to up to three "participants", entities which play a central role in the referent situation. One of these participants, which I call the Actor (cf. McGregor 1984:263), occurs across the range of clause types, and is the thing which is involved in the 'action'. Another, the Affected, is optional, and is something which is modified in some way by the situation. It is clear that in the case of indexical clauses there is nothing being or doing anything, nor is there any referent action to affect anyone.

The upshot of this discussion is that the verbal distinctions of tense, mood, aspect, and participant roles, are neutralised in indexical contexts. This refines the observations of some linguists, referred to in the beginning of this section, that time is irrelevant to verbless clauses, because they always refer

to the present or to enduring situations. My suggestion is that tense, mood, aspect, etc. are irrelevant when something is being pointed out or drawn to the hearer's attention; they are not irrelevant merely because they are given or predictable.

To conclude this section it may be useful to summarise the contrasting properties of verbal and verbless existential clauses, and indicate the correlation with formal properties of the two types. This is done in Table 1.

Table 1: Contrasting properties of verbal and verbless existential clauses

VERBAL	VERBLESS
Refers to a situation - any sort of entity - which may be the result of some other situation - which is located in time - which may be desired, potential, desirable, definite, etc. - may or may not have temporal length or duration, etc. - can affect something - which has something that is 'being' in a particular mode - introduce minor participants, as background information	Indicates or points to something: - entity must be an object - entity there not as a consequence of some situation - so time distinctions are not relevant - mood and modal distinctions are not relevant - aspectual distinctions are not relevant - cannot affect anything (in the referent "reality") - which is not necessarily in any state of being - so introduce major participants
Have marked distribution of information - there is typically a presupposition that something or other exists	Information distribution is normally unmarked - and there is not usually any presupposition that anything exists
Expresses a proposition - possible because it has a nexus (has at least two inherent roles)	Does not express a proposition - has no nexus (has a single inherent role)

6. CONCLUSION

In this paper I have examined the contrast between verbal and verbless existential clauses, and hypothesised that the former treat existence as a process of being, whereas the latter treat it as a logical relation: the Existent is indicated. Roughly, the difference may be characterised as follows: 'an x is (or sits, lies, stands)', for verbal clauses, and 'here is an x', or 'take x', for verbless clauses.

It has been demonstrated that this difference in ideational meaning correlates with, and gives rise to, differences in the ways in which the two clause types contextualise, in terms of their specific experiential, textual and interpersonal meanings. Verbal existential clauses are used descriptively, and fall into the narrative mode; they provide background information, or information that is not central to the development of the text. On the other hand, verbless existential

clauses present an entity into the discourse in such a way as to give it psychological salience; they draw attention to it. Such clauses do not belong to the narrative mode. A second difference in the textual meanings of the two clause types is that in the verbal variety the information focus is marked, and always falls on the existent, whereas in verbless existential clauses the focus is always unmarked. The difference in interpersonal meaning is that verbal existential clauses have a propositional nexus, while verbless existential clauses do not.

Precisely the same distinction exists between verbal and verbless attributive clauses: that is, clauses which attribute a property of an entity. Verbless clauses treat attribution as a logical relation, whilst verbal clauses treat it as a process: the entity is asserted as displaying the quality in a particular mode of being. There are corresponding skewings in the qualities typically found in verbal vs. verbless attributive clauses (McGregor 1984:249-250). And verbless clauses again fall outside of the narrative/referential-descriptive mode, and represent the intrusion of the speaker's characterisation. However, the interpersonal contrast identified above in respect of verbal and verbless existential clauses does not occur in attributive clauses. This is due to the fact that verbless attributive clauses, as well as verbal attributive clauses, possess a predicate, the attribute. This illustrates that parallel contrasts in core meaning may contextualise in different ways.

More generally, my discussion of the Gooniyandi data raises the possibility that closer examination of other languages may reveal that there are two modes of expressing existence, verbal and verbless, and that these competing constructions contrast semantically, and are never in free variation. This is of course consistent with the assumptions of functional grammar, and with the predominant attitude of linguists to instances of alleged homophony in the lexicon (in this connection, see especially Haiman 1980).

NOTES

1. This is a somewhat modified version of a paper read to the Australian Linguistics Society Conference held in Brisbane in August 1985. It develops and extends on ideas presented in sections 5.2.1.1.2 and 5.2.1.2.2 of my Ph.D. thesis (McGregor 1984). I wish to thank Michael Walsh for reading the paper to the Conference in my absence, and Alan Rumsey for helpful comments on an earlier version. I would also like to express my gratitude to the Australian Institute of Aboriginal Studies for partly funding my fieldwork, and to my Gooniyandi teachers, especially Jack Bohemia, for sharing their language with me.

2. Gooniyandi is a non-Pama-Nyungan language spoken by around 100 Aboriginal people in communities in Fitzroy Crossing and nearby cattle stations in the southern-central Kimberley region of Western Australia. It belongs to the Bunuban family, a small family consisting of just two languages, whose relationship with the other language families of Australia has not yet been established. For reasons of precision and economy, I use a practical phonemic orthography (described in McGregor 1986), which is a slightly modified version of the English based orthography developed for the Yiyili Community School (see Street and Chestnut 1984). Australianists should note that oo represents the high back vowel usually written u, and dd represents the apical tap usually written rr; otherwise the letters have the expected values.

3. It should be noted that my use of 'relational' is distinct from, but closely related to, Halliday's use of this term. Halliday's relational clauses assert relations between things (Halliday 1970:154, 1985:112-128); mine express logical relations, which can of course include relations between things. On the other hand, in Gooniyandi, relations between things, in Halliday's sense, may be expressed by situation clauses as well as by relational clauses.

4. The Gooniyandi verbal complex constitutes a single distributional word, but grammatically has the rank of phrase (McGregor 1984:110ff). Its morphemic structure is complicated, and obscured by morphophonemic alternations. As the morpheme divisions are irrelevant to the present paper the entire complex is given the English gloss which is most appropriate for the circumstances of its occurrence. For a description of the verbal complex see McGregor 1984:155-188.

5. By 'inherent' it is meant that these roles necessarily occur in constructions of the particular type. This does, however, allow that there may not be an element of structure realising it (see Halliday 1970:150ff and Fawcett 1980:135fn). The form may, for example, be ellipsed if it happens to carry given information. This fact, together with the fact that units of quite different types quite frequently realise a single function, is why description in terms of units and their sequence is of limited generality.

6. The following abbreviations are used: ABL - Ablative; LOC - Locative; NP - Nominal Phrase; PP - Postpositional Phrase; and ^ - concatenation. In example sentences only word boundaries are indicated (by a space). Morpheme constituency is not indicated, except in the interlinear glosses for nominal words.

7. However, these features are indicated only in examples extracted from texts, and not in elicited decontextualised sentences.

8. Example (7) does not contradict this claim. Coming after the head of the NP, the possessive pronominal ngaangki *your* functions as a *qualifier* rather than a deictic (cf. McGregor 1984:211ff).

9. It might alternatively be suggested that the Situation is not inherent in verbal existential clauses. In this view, the Process (the VP) would be non-inherent in existential (and attributive) clauses, and the verbal and verbless types would be seen as close agnates. The reason why I have not taken this point of view is that it would suggest either that the verbal existential clauses are more like other verbless relational clauses than other verbal clauses, or that they form a primary category of their own. Against these possibilities is the fact that verbal existential clauses display much in common with other verbal clauses.

10. Note that Gooniyandi is like English in its idiomatic use of the word goornag- *turn over, turn around* in reference to metamorphosis.

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BARRANBINYA: FRAGMENTS OF A N.S.W. ABORIGINAL LANGUAGE

Lynette F. Oates

INTRODUCTION

The Barranbinya (bʌrrʌnbiñʌ) language probably ceased to be spoken before the turn of the century. Its speakers belonged to a patch of territory, small by inland N.S.W. standards, along and north of the Darling River, stretching from present day Brewarrina to about 20 kilometres west of Bourke. Tindale (1974) so positions it, as do O'Grady, Wurm and Hale (1966). They all base their findings on Mathews (1903) and Howitt (1904). Mathews' description is less precise than Tindale's map as far as the western boundary is concerned, but a little more precise concerning its northern boundary. He states that the territory is situated on the Darling River, extending from "above" Brewarrina downstream to "about" Bourke, comprising the lower portions of the Bokhara, Bogan and Culgoa Rivers for "some distance" above their respective junctions with the Darling. Howitt simply places the language on the Darling River "from Bourke up to the Barwon River". Richardson (1910) less accurately states the territory extended "along the lower Warrego from Bourke outwards and probably till it meets a Queensland dialect."

There is very little published material on Barranbinya. Mathews' brief sketch, The Burranbinya language (1903), containing about 30 entries, mostly nouns and pronouns, and four sentences, is the only definitive reference extant. There are a few oblique references in the literature, and one legend, 'The Emu and the Crow', also collected by Mathews. There is one page of manuscript material by R.H. Mathews (Notebook 7:117). A vocabulary from Brewarrina by A.M.T. (1896) comprises 30 items of vocabulary and one phrase. It is of doubtful linguistic affiliation as will be discussed later. The remaining available references to Barranbinya, both published and unpublished give no linguistic information. There is a letter dated 25 August 1907 from Mrs Eliza Benson at Brenda Station near Goodooga to Howitt, in which she gives an account of the kinship system in the area and she mentions the 'Burrumbiniya'. Apart from this there are only references to the Barranbinya as neighbours to other people; for example, by Teulon (in Curr 1886), by Wilson and Henderson (ibid.), and by Pechey (1872). The Barranbinya are also mentioned in lists of tribes as in Ridley 1875 and Howitt 1904. Various spellings are used by these authors: Burrunbinya, Burranbinya, Barrumbinya, Barren-binya and Parran-binye.

No first-hand information on Barranbinya has appeared since Mathews' work of 1903 and it seemed that there was no hope of learning more or of being able to classify the language in any way.

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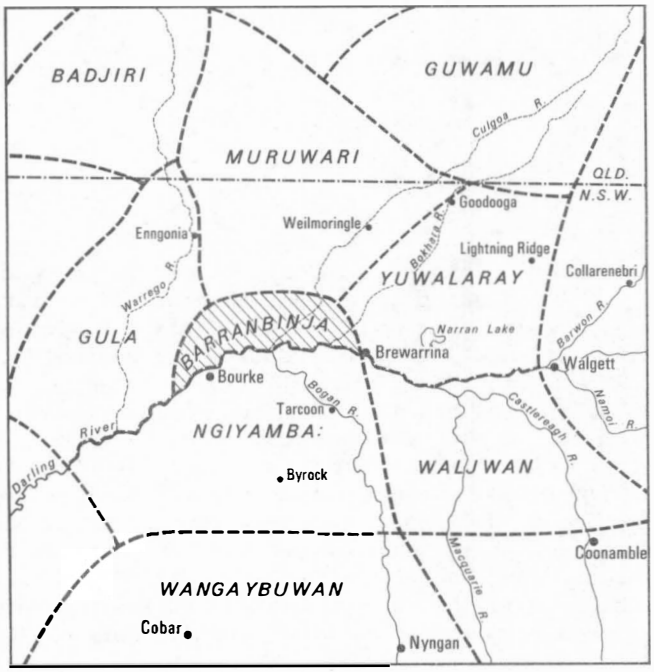

A redrawn version of part of Tindale's map (1974) of north-western N.S.W. showing his positioning of Barranbinya territory. (Spellings of language names have been changed to conform with modern conventions.)

Mrs Emily Horneville of Goodooga to whom we are indebted for most of the information in this paper.

In 1975 during a field trip to Goodooga in north-western New South Wales to gather Muruwari data from Mrs Emily Horneville, one of the last speakers of that language, she happened to remark one day that as a child, she and her family paid frequent visits to the Barranbinya people, and that they would converse in the Barranbinya language. Mrs Horneville was probably born round 1880, and it appears that the last group of the Barranbinya had disappeared by the time she was about ten years of age. Consequently, when in 1975, and on several other field trips in the next two years, I tried to elicit what Barranbinya Mrs Horneville remembered, her memory had to search back over a lapse of at least 80 years. She kept saying, "So many years ago .... I was a girl when I learnt that .... I forget ...". But what she remembered spontaneously, she remembered with certainty, and with clear understanding of the differences between Barranbinya and Muruwari. She also maintained that she could remember "every word" of Barranbinya if she heard it. But the effort of recall she found exhausting, and she tired easily, becoming very discouraged if she had to admit to not being able to remember question after question that was asked. At such times, rather than claim ignorance, she drifted back into giving the Muruwari forms. Sometimes, in the hope that Barranbinya had a cognate in another language, I would suggest the Ngiyamba:, Guwamu or Yuwalaray form, but seldom, if ever, did this elicit a Barranbinya equivalent. It is regretted that some more obvious forms were not obtained, but one had to be content, and grateful, that the old lady was willing to expend so much mental energy to recall what is here presented.

2. PHONOLOGY

The consonantal system of Barranbinya was similar to that of Muruwari.

2.1 Phonemic chart

	PERIPHERAL		APICAL		LAMINAL	
	Velar	Labial	Retroflex	Alveolar	Palatal	Dental
Stop	g	b	rd	d	dy	dh
Nasal	ng	m	rn	n	ny	nh
Lateral			(rl)	l	(ly)	(lh)
Rhotic			r	(R) rr		
Semivowels		w		y		

Symbols given in brackets are not attested with certainty in the recordings made by Mrs Horneville.

Only phonemes listed in boxes occur initially.

Nearly all words end in vowels: there are some rare occurrences of final -ny and -n. This approximates the situation in Ba:gandji and further west where vocalic finals are the rule. The situation is different in Muruwari and Ngiyamba: where final nasals and final l, r and y are very common.

The vowels are a, i and u. Length is phonemic.

2.2 Distinctive phonetic features of Barranbinya

2.2.1 Gemination of medial consonants

This feature is unknown in Muruwari but it is a very conspicuous characteristic of Barranbinya as well as Ba:gandji and languages further west. The following rules apply:

Only consonants at the end of the initial and therefore accented syllable are geminated.

Gemination is never found with medial r sounds, and semivowels.

Gemination never occurs after a long vowel.

These restrictions are the same as those operating in Ba:gandji.

Gemination is very noticeable because there tends to be a syllabic break in the middle of the geminated consonant, thus giving a distinctive quality of length.

excrement	[gun.nʌ]	/guna/	cp. Muruwari:	/guna/
bread	[mʌn.nu]	/manu/		/manu/
water	[ngʌph.phʌ]	/ngaba/		/ngaba/
ashes	[bu̲t.t̲ʌ]	/budha/		/budha/
sand goanna	[ba̤.n̤ʌ]	/barna/		/barna/
stinking	[bukh.khʌ]	/buga/		/buga/
breast	[ngʌm.mʌ]	/ngama/		/ngama/

But nga:madYi *mother* displays a long a:. Also walbala shows gemination in what looks like a second syllable: [walbal.la], but evidently this was felt to be a compound *white-fellow* with the word *fellow* still retaining some independent status.

2.2.2 Aspiration and voicelessness

As noticeable as the gemination is the strong aspiration and voicelessness of word medial stops, in both gemination (as illustrated above) and in clusters:

head	[bʌmphu]	/bambu/	cp. Muruwari:	/bambu/
wind	[yʌrkhʌ]	/yarga/		/yarga/
knee	[dhinki:]	/dhinki:/[3]		/dhinkal/[3]
house	[ngathʌ]	/ngan̲da/		/nga̲ndi/

2.2.3 Long vowels

A further prominent feature is the number of cognates with Muruwari and other surrounding languages which manifest a long vowel in Barranbinya rather than a short one as in other languages:

fish	/gu:ya/	[gu:ya:; gu:wiya]	cp. Muruwari, Ngiyamba:	/guya/
teeth	/di:ya/	[di:yʌ]	cp. Muruwari	/dira/
or	/di:yi/	[di:yi]		
camp	/ngu:rru/	[ngu:ru; ngu:wuru]	cp. Muruwari	/ngurra/
nallanalla	/mu:ra/		cp. Muruwari	/mura/
meat	/wi:dhi/		cp. Muruwari	/widji/
fire	/bu:rdi/		cp. Ngiyamba:	/burdi/
dog	/mi:rri/		cp. Ngiyamba:	/mirri/
hand	/ma:ra/		cp. Muruwari, Ngiyamba:	/mara/

With the exception of wi:dhi [wi:thi] *meat* (Muruwari widji), these words contain medial consonants that by their nature, quite apart from the long vowel, would not be subject to gemination under the rules listed above.

2.2.4 Retraction and labialisation of /a/

Another feature is that a preceding r and rr is slightly retracted and slightly labialised in Muruwari. This is not the case in Barranbinya.

All these changes make Barranbinya sound distinctly different from Muruwari even when spoken by the same person.

3. GRAMMATICAL OUTLINE

3.1 Nouns

Because of the limited corpus of sentences, case forms are very rare, but there is no doubt that the nominal system was ergative. Unlike Kalkatungu and other languages, the ergative did not also extend to personal pronouns, demonstratives, etc. The following case forms were noted:

3.1.1 Ergative: -lu

As with many Proto-Ngunyan languages, the subject of a transitive verb carries the ergative marker -lu:. (The term 'Absolutive' is used for the unmarked nominative-accusative form of an ergative language.) Mathews' two sentences, (2) and (3), are given in brackets.

(1) ba-r-a-dana guragany marinydyi-lu
hit-CL-PAST-3pl. *possum*-ABS *man*-ERG
The men killed a possum.

(2) (bullu-lu kuranyi burralaru (Mathews)
man-ERG *possum*-ABS *kill*-CL-PAST-3sg.obj.+3sg.sub.
A man killed an opposum.)

(3) (thuntal-lu maralanu (Mathews MS version)
kangaroo-ERG *scratch*-CL-PAST-1sg.obj.+3sg.sub.
A kangaroo scratched me.)

3.1.2 Locative: -ra

Only one occurrence of the locative -ra is found in the corpus:

(4) ngaba-ra gubiminigana ngaba-ra
water-LOC *wash*-PROG-CL-PRES-FM-3pl. *water*-LOC
The women are going to bogey in the water.

3.1.3 Ablative: -ngu

Only one example also of the ablative case was obtained.

(5) dagayny wa:rira ngurra-ngu
towards speaker walk-CL-PRES-3sg. *camp*-ABL
He's coming from that camp over there.

3.1.4 Derivational affix 'having': -bida/-yida

This affix is the same as the Muruwari forms, namely, -bida and -yida. The two forms seem to be interchangeable; both examples in the corpus follow vowels (though different ones, which may account for the two forms: -yida following a, -bida elsewhere).

(6) murli-bida manigara ngudu dhamuga
stomach-HAVING ? (DEM?) *woman*-ABS
The (that?) woman is big with child.

(7) barla-yida di:ya mirri
fork?-HAVING *teeth*-ABS *dog*-ABS
The dog has forky (sharp) teeth.

3.1.5 Possessive marker: -wu (or -rru?)

The two phrases given by Mathews, entitled 'Genitive' are the only examples in the corpus using the suffix -wu. Mrs Horneville gave one example with the suffix -rru which also appears to be genitive in the sentence:

(8) dhamuga-rra garayi
woman-GEN *yamstick*-ABS
That woman has the yamstick.

(9) (bullu-wu murli (Mathews)
man-GEN *boomerang*
a man's boomerang)

(10) (thummaga-wu kaia (dhamuga-wu gaya/garayi)
woman-GEN *yamstick*-ABS
a woman's yamstick)

3.2 Verbs

3.2.1 Verb classes

In common with other languages in the area it appears that Barranbinya has verb classes but lack of data makes it impossible to identify these for sure. Because a number of the verbs recorded have r following what may be considered a CV root, the first syllable of the word has been analysed as the verb root, and the -r as a class marker.

do dha-r-
hit ba-r-
take wu-r-

Other class markers appear to be -l, -n and -y.

(11) gubi mi-r-i-ga-na
water-ABS *wash*-CL-PRES-FM-3pl.
The women are bogeying in the river.

(12) gura-l-i-ya (or -yu?)
play-CL-PRES-1sg.
I am playing games.

(13) mina-na duwa-y-i-na
what-2sg. *talk*-CL-PRES-2sg.
What are you talking about?

(14) ya:-n-i-wa-ra-na
talk-CL-PRES-MM-?-1du.
We two are having a chat.

3.2.2 Tense

Tense is marked as follows:

Present:	-i
Past:	-a
Future, Purposive:	-gu (alternating with -u?)

This analysis reflects a similar pattern in Muruwari. Compare these sentences:

(15) dagayny wa:-r-i-yira bibi balagu
towards speaker come-CL-PRES-3pl. *baby*-ABS *child*-ABS
The kids are coming here.

(16) ba-r-a-la:-nu
hit-CL-PAST-OM-1sg.O+3sg.S
He hit me.

(17) dha:-gu-mi-na
take-FUT/PUR-PROG-2sg.
You can take (be taking) a piece too.
(Note the absence of a class marker in this utterance.)

3.2.3 Aspect

The four following suffixes appear to express what may be differing aspects of the verb.

Object Marker (OM)	-la:
Continuous (CONT)	-dira
Progressive (PROG)	-mi
Causative (CAUS)	-ma

The Progressive Aspect seems similar to the Muruwari -mi which expresses the idea of an action proceeding towards some goal, as in sentence (17) above. For an example of -la: see sentence (16) above. The -la: suffix occurs usually, but not always, in transitive verb constructions, and thus appears to be an optional suffix. Its position is immediately before the pronominal suffixes. Sentence (18) illustrates that -dira carries the '-ing' continuitive meaning. From the

one example in the corpus, it appears the Causative -ma has a similar function to that in numerous other languages, expressing the idea of to make or cause to happen.

(18) ganyiga balagu wa:-dira-na bibi
small child-ABS *come*-CONT-3sg. *baby*-ABS
The little kid is coming along.

(19) widiyan ma:nu nguna-ma-y-i ngurra
QM *bread*-ABS *lie*-CAUS-CL-PRES *for us*
You got any bread put away? (for our use?)

3.2.4 Gender distinction

It appears that Barranbinya may distinguish between male and female in both subject and object, -ga being the feminine marker (FM) and -wa the masculine marker (MM). The following two forms were given and a clear distinction made between *her* and *him* in the meaning given by Mrs Horneville - a distinction which appeared particularly significant because of the fact the gloss is usually given as a blurred impersonal *'im* in Aboriginal English.

(20) ngu:-ga-rani
give-FM-3sg.O+2sg.S
Give it to her!

(21) ngu:-wa-rani
give-MM-3sg.O+2sg.S
Give it to him!

The following sentence may corroborate this analysis.

(22) wu:-r-a-ga-ra dhamuga-lu gara:yi
take-CL-PAST-FM-3sg.O+3sg.S *woman*-ERG *yamstick*-ABS
The woman took her (the other woman's) yamstick away.

The morphemes -wa and -ga occur frequently in the verb form and can be analysed as suggested, though it was impossible to fully test the validity of this analysis.

(23) ngadhu dha-r-a-wa-na-ran
1sg. *do*-CL-PAST-MM-3sg.O+1sg.S
I (masculine) *did it.*

Another sentence given for *I did it* used the feminine marker with the intransitive verb suffix -yu, 1st person singular, as follows:

(24) dha-r-a-ga-yu
do-CL-PAST-FM-1sg.
I (feminine) *did it.*

(25) yindu dha-r-a-ga-rani
2sg. *do*-CL-PAST-FM-3sg.+2sg.S
You (feminine) *did it.*

3.2.5 Verb roots

The following verb roots have been recorded. (The Muruwari form is given in brackets.)

come	wa:-	Muruwari: (bulga-)
walk	ya-	(yana-)
see	nha:-	(nha-)
sit	ni:-	(niya-)
give	*ngu:-	(nguwa-)
hit	*ba:-/bara-	(ba-)
eat	gura-	(dha-)
talk	duwa-	(ya:-)
go up	wundi-	(gula-)
bite	*gu-/gura-	(yida-)
bathe (bogey)	gubi-	(gu:mbi-)
play	gura-	(ngagi-)
take away	wu-/wuri-	
scratch	*ma-	(yida-)
cry	wu-	(wangi-)

* recorded as transitive verbs within the corpus.

3.3 Pronominal system

In his printed extract Mathews gives the first, second and third singular pronominal forms for 'Nominative', 'Possessive' and 'Objective', all as free forms. The Mathews manuscript however, gives a full list of Nominative and Possessive forms, but only the three 'Objective' forms, which my data shows to be suffixes, not free forms. Mathews also lists two 'we' forms for dual and plural (presumably inclusive and exclusive), as he also does for the Muruwari, but no such distinction has been recognised by recent informants in either language.

3.3.1 Nominative pronouns

Only first and second person singular, ngadhu and (y)inda were obtained from Mrs Horneville. For interest, Mathews' forms are listed below. (* in MS only). The comparative Muruwari are also listed (in brackets) following.

I	Ngutta	Muruwari: (ngadhu)
you	Hinta	(yindu)
him	Nuanara	(nhumbu)
we	*Ngurriga	-
we	*Ngullinna	(ngali)
you	*Nhulawura	(nhula)
they	*Buraiaura	(bula)
we	*Wunna nhumma	-
we	-***	(ngana)
you	*Nhura	(nhura)
they	*Dhunna	(dhana)

*** form obviously missed out here.

The lengthy forms Mathews gives of most of these pronouns suggests they represent pronominal root plus suffix, but it is obviously impossible to give fine distinctions of meaning.

3.3.2 Possessive pronouns

The possessive forms given are only attested by Mathews, mostly from his manuscript. (Again Muruwari forms are given for comparison.)

1sg.	Ngunnu	Muruwari:	(dhiga/ngandi)
2sg.	Ingga		(yingga/baga)
3sg.	Ngurrani		(buga/nhumbuga)
1du.	*Ngurriga		-
	*Ngullinni		(ngaliga)
2du.	*Nhulinni		(nhuraga or nhulaga)
3du.	*Bulani		(buraga)
1pl.	*Wannunni		-
	*Nganunni		(ngaraga)
2pl.	*Nhurunni		(nhuraga)
3pl.	*Dhunnanni		(dharaga)

* forms in MS only.

First person singular form ngAnu (Ngunnu) is unrelated to Muruwari dhiga, but has obvious links with an older and less used Muruwari form ngandi. Third person singular, ngArra (Ngurrani) does not reflect Muruwari buga, but second person singular in both languages share the same form (y)ingga, and the basic form ngali- in the dual. The significant possessive case suffix in Barranbinya is -ni, except that it does not occur in 1st and 2nd person singular. (Compare the Muruwari possessive case suffix -ga.)

3.3.3 Transitive verb suffixes

Mathews lists three 'Objective' forms:

Lanu	*me*
Luggunni	*you*
Larunni	*him*

However, as discussed previously, these are obviously suffixes of a transitive verb. From the data gathered it seems that the transitive verb carried a type of fused object-subject pronoun (in that order). An attempt to analyse these fused pronouns follows:

-nu-0 1st person *object* with 3rd person *subject* (he ... me):
Examples (16), (27)

-ra-na 3rd person *object* with 1st person *subject* (I ... him):
Example (23)

-ra-ni 3rd person *object* with 2nd person *subject* (you ... him):
Examples (20), (21), (25), (26), (36)

-ra-0 3rd person *object* with 3rd person *subject* (he ... him/it):
Examples (22), (28)

(26) yinda ba-r-a-la:-rani
you-SUBJ *hit*-CL-PAST-OM-3sg.O+2sg.S
You hit him back.

(27) gu-r-a-la:-nu
bite-CL-PAST-OM-1sg.O+3sg.S
He bit me.

(28) ba-r-a-la:-ra bambu
hit-CL-PAST-OM-3sg.O+3sg.S *head*-ABS
He hit his head.

(29) ba-r-a-la:-ra du:ru
hit-CL-PAST-OM-3sg.O+3sg.S *snake*-ABS
He killed the snake.

3.3.4 Intransitive verb suffixes

No clear understanding of these has been obtained. They appear to reflect the Muruwari forms to some degree. The following are all the corpus yielded; no suggestion is made for the differing forms in several instances.

-yu (once heard as -ya)	1sg.
-na; -ndu; -yina	2sg.
-ra (possibly -na?)	3sg.
-na	1du.?
-bula	3du.
-yira/-na ?	3pl.

3.4 Particles

A list of adjectives is given in the comparative word lists at the end of this paper. The particles listed below are considered part of the grammatical structure and so deemed necessary to include in the grammatical sketch.

3.4.1 Interrogatives

The following interrogative particles, occurring utterance initial, were recorded:

widiyan/wiya	question marker (QM)
minara/mina	*what?*
dalama	*where?*
ga:nu	*who?*

The Muruwari for *who?* is nga:nu, one of those interesting cognates where one language manifests a stop, and the other a nasal of the same point of articulation - in this case, velar.

3.4.2 Numerals

wanggara; garawa	*one*
muggu (Mathews)	*one*
bulaya/buraya	*two*
bulagar (Mathews)	*two*
galga (Mathews)	*several*
wulliwal (Mathews)	*several*
gulli (Mathews)	*a couple*
babu ?	*a couple*

3.4.3 General particles

dhagany	movement towards the speaker
nhuwa	*that one*
ya:wu	*no!*
bu:rda	*tomorrow*
darany	*today*

4. SENTENCE CONSTRUCTION

Three basic sentence types have been recorded: Imperative (Commands), Interrogative (Questions) and Indicative (Statements).

4.1 Imperative sentences

These sentences are distinguished by the imperative form of the verb. Insufficient data was recorded to make any sure observations on a distinctive imperative marker (IMP), but a suggested analysis has been made in the sentences that follow, postulating the imperative suffixes as -na, -ra, -wa or -ya. Transitive verbs may carry transitive pronominal suffixes, but intransitive verbs do not carry any overt pronominal marker.

(30) bi:bi mugara ni-na nhura
child-ABS *quiet* *sit*-IMP 2pl.-NOM
Don't make a noise, you kids.

(31) dhagany wa-ri (or -ra?) dhagany
towards speaker come-IMP *towards speaker*
Come here!

(32) wa:ra
go-IMP
Go away!

(33) ga-ra-la:-y wi:dhi
eat-IMP-OM?-CL? *bread*-ABS
Eat this bread!

(34) ngamangu ngu:-ya bi:bi
breast-ABL *give*-IMP *baby*-ABS
Give the baby a drink! (lit. *give from the breast*)

(35) nhuwa da-ra-ga yinda
that? do-IMP-FM? 2sg.-NOM
You do that thing!

(36) ngu:-wa-rani
give-IMP-3sg.O+2sg.S
Give it to him!

4.2 Interrogative sentences

In these sentences, an interrogative particle always occurs sentence initial. This and the "towards speaker" particle, dhagany, which also always occurs sentence initial, is the only fixed word order noted. However, sentences seem to have a preference for the verb to come before the subject or object. The interrogative particles are listed in 3.4.1 above.

(37) mina-na da-r-u-wa-yina
what-2sg. *do*-CL-PURP-MM-2sg.(??)
What are you doing? (intending to do?)
(The above analysis is the best that could be suggested.)

(38) widiyan ma:nu
QM *bread*-ABS
Have you any bread?

(39) wiya ma:nu ngu:na
QM *bread*-ABS *give*-2sg.
Will you give (me?) bread?

(40) dalama-ndu wa:-r-i-na
where-2sg.? *go*-CL-PRES-2sg.
Where are you going?

(41) dalama-ndu mi:rri ... mi:rri-gu
where-2sg. *dog*-ABS *dog*-LOC
Where are you (taking) the dogs to? was the gloss given, but the meaning implied is:
Where are you (taking) the dogs to?

4.3 Indicative sentences

The sentences (1)-(29) are mostly statement type sentences. Others recorded are:

(42) gala:yi wa:-dira-na
emu-ABS *walk*-CONT-3sg.
There's an emu walking along over there.

(43) ngamadyi dhagany wa:-r-a-la:-na
mother-ABS *towards come*-CL-PAST-OM-3sg.
The mother came over to the baby.

(44) ni:-n-i-nya
sit-CL?-PRES-1sg.?
I am sitting down.
(Mrs Horneville compared the above utterance with Muruwari niyaguyu *sit*-FUT-1sg. *I will sit down*, commenting, "Another way, see".)

(45) wa:ra ... wa:-r-a-yira dhaganyi
come *come*-CL-PRES-3pl. *towards*-?
All are coming this way.

(46) gu-r-a-la:-daranyu bi:bi
bite-CL-PAST-OM-3sg.O+*that*? *baby*-ABS
That fellow over there, he bit the baby.

(47) ganyugu ... ganiga balagu wa:-r-i-ga-na bi:bi ... dhagany wa:riganа
? *now*? *small*? *come*-CL-PRES-FM-3pl. *child*-ABS *towards come*...
The little kid is coming along this way.

(48) ganyugu barragu bi:bi gurra-n-i-ga-na ... midyirra galgaRa
? *child*-ABS *baby*-ABS *play*-CL-PRES-FM-3pl. ? *all* (Muruwari)
All the kids are playing.

5. COMPARATIVE WORD LISTS IN BARRANBINYA AND NEIGHBOURING LANGUAGES

The comparative word list that follows gathers together the recent material on Barranbinya, with Mathews' list, and words from *Science of Man* (1910) entitled 'Obtained by A.M.T. from the Brewarrina Tribe'. This latter however contains only four words found in the other data.

The other word lists are of Muruwari obtained from my own field notes and published and unpublished manuscripts, Wangaybuwan-Ngiyamba:, obtained from Tamsin Donaldson's recent research, and some from Curr 1886, Wiradjuri and Waljwan, obtained mostly from old word lists in Curr 1886, but some from modern research. A comparison was also made with Wiradjuri (data mostly obtained from old sources), Margany-Gunya (Breen 1981) and Ba:gundji (Luise Hercus, personal correspondence, 1984).

The word list was compiled in an attempt to examine what basis existed for the O'Grady-Voegelin classification (1966) of Barranbinya with Wangaybuwan and Ngiyamba: as part of the Wiradjuri language. It proved impossible to gather all the necessary data in all these languages, especially when researching old sources, so what material was researched is given, with reconstructed vowels written in capitals, and old symbols changed to their modern equivalents. No attempt has been made to reclassify Barranbinya; only the general comment as listed below, which suggests it is most closely linked with Muruwari.

The following chart shows results directly related to the amount of data collected. However, it may be possible to draw some conclusions from it concerning neighbour intelligibility between the languages concerned.

LANGUAGE	No. of items compared with Barranbinya			Cognates with Barranbinya			
	General words	Pro-nouns	Total	C.A* words	General words	Pro-nouns	Total
Muruwari	98	18	116	9	37	13	59
Marguny-Gunya	108	18	126	8	13	8	29
Ba:gandji	104	15	119	5	10	3	18
Wangaybuwan-Ngiyamba:	59	-	59	8	9	-	17
Wiradjuri	42	2	44	6	5	1	12
Waljwan	35	-	35	7	1	-	8

(Note: The Common Australian (CA*) words recognised in the corpus are as follows:

bina	*ear*
ngama/u	*breast*
mara	*hand*
guna	*excrement*
dhina	*foot*
mil	*eye*
buga	*stinking*
bula-	*two*
nha-	*see*)

Of the 140+ items listed, it was possible to compare most (116 of them) with Muruwari - 98 general words, and 18 pronominal forms. A more detailed analysis of the figures in the chart above for Muruwari is as follows:

	General words	Pronouns
Barranbinya direct cognates with Muruwari (including C.A* words):	34	6
Cognates with some phonological change:	12	7
Non-cognates:	52	5

These figures give a cognate count of 44%, which suggests a fairly high degree of neighbour intelligibility between Barranbinya and Muruwari, so Barranbinya was probably a dialect of the Muruwari group. It is probable Mathews so regarded it as he states:

> Although there are numerous differences in the vocabulary, the grammatical rules governing the other parts of speech of this language are the same as in the Murrawarri, and are therefore, omitted on the present occasion, for want of space.

The latter part of this statement is most tantalising since nothing else in manuscript form has been found except the one brief page which forms the bones of the published paper. Grammatical analysis has been carried out on the assumption that Mathews was correct in assigning similarity of grammatical function between the two languages. It is rather perplexing that Mrs Horneville failed to recognise so much of Mathews' vocabulary, though she agreed in the main with his grammatical points.

BARRANBINYA COMPARATIVE WORD LIST

(* denotes a borrowing from English)

	BARRANBINYA			MURUWARI	WANGAYBUWAN-NGIYAMBA:	WALJWAN
	Oates	Mathews	A.M.T.			
A. PEOPLE						
1. *man*	marinyi (bAlu)	Bullu (wiringa)	Werrengah	mayiny	dhu:r	mayi
2. *men collectively*		Murrin (mArriN)			wirin-ga	
3. *woman*	dhamuga	Thummuga	Warrena	muginy	winar	
4. *father*	yabu			badhany	baba	baba
5. *mother*	ngamadyi			gaya	guni	guni
6. *older sister*	gu:dha			baba	dhadhi	gadi
7. *younger sister*	bi:riga			guwira	gidyuray	gidyuray
8. *older? brother*	gu:wuru/gururru			buwin	murambay	gAga
9. *cousin: uncle's daughter*	nga:bumba:/ nga:bu					
10. *young woman*	malagan	Thummagu-balu[1]		malayan		
11. *young male*	gumuru	Bullubullu[1]		yangura	yimamuru	yamba
12. *child of either sex*	balagu	Kirridya (girridya)	Warroora; Warrelda	gudhara	buray	gira
13. *baby*	bi:bi[2]			gudhara		
14. *doctor (clever man)*	gurayi			gubi		
15. *white man*	baraga; guwan-gura; walbala*			guwiny	guyN	wanda
16. *policeman*	gayinya			gurayida		
B. BODY PARTS						
17. *ear*	bina			bina	bina	bina
18. *teeth*	di:yi/a; di:rr			dirra	wira	wira
19. *foot*	dhina			dhina	dhinwa	dhina
20. *eye*	mi:ngna			mi:l	mil	mil
21. *head*	bambu[bʌmphu]			bambu	bala	gubu
22. *breast*	ngama[ngʌm.mʌ]			ngama	ngamu	ngamu
23. *blood*	guma			guwany	guway	guwa
24. *hand*	ma:ra			mara	mara	mara
25. *knee*	dhinki:[3]			dhinkal[3]	dhinbir	
26. *excrement*	guna[gun.nʌ]			guna	guna	guna
27. *urine*	gidurany			giwa	gil	gil?
28. *back*	barrga			birla		
29. *stomach*	mu:rli; muli:ny			dugu	burbidird?	buru
30. *vagina?*	gadyi			gini		
C. ANIMALS, BIRDS, ETC.						
31. *possum*	gura:gany	Kuranyi		gugay	gu:raga:y	guragi
32. *couple of possums*		Kuranyigulli				
33. *several possums*		Kuranyigalga[4]				
34. *kangaroo*	danda	Thunta	Murraway	gula	girba	marawi?
35. *pademelon*	daguny			waya; wambila		
36. *snake*	dhu:ru		Durroo	ga:n	dhuru	waru
37. *porcupine*	dandyina			gagara		
38. *sand goanna*	barna			barna	gugar	
39. *"pineapple" goanna*	birimbila					
40. *iguana*			Gullee			
41. *emu*	gala:yi; ngururri		Waree	nguruny	nguru:y	nguri
42. *red kangaroo*	bawara			bawura		
43. *fish*	gu:ya/gu:wiya		Goewah /gU:wa/?	guya	gila	

	BARRANBINYA			MURUWARI	WANGAYBUWAN-NGIYAMBA:	WALJWAN
	Oates	Mathews	A.M.T.			
44. *turtle*	gagara?			wayamba		
45. *egg*	abuny			gabuny	gabu	gabu
46. *bird*	wi:dhi			widyiwidyi		
47. *dog*	mi:rri	mirri		gundarl	mirri	mirri
48. *sheep*			Toomba*	dhumba*		
49. *horse*	yara:man			yara:man		
50. *male of sp.*		dhulatadya				
51. *female of sp.*		ngummagara				
D. ELEMENTS						
52. *fire*	bu:rdi			wi:	wi:N	wi
53. *rain*	murnka[3]			burdu	yuru	
54. *cloud*	dharingara			yagun	yurung	
55. *water*	ngaba			ngaba	gali	gali
56. *flowing water*	gubi			ngarndu		
57. *ashes*	bu:dha			budha		
58. *star*	girala:		Kerrilah	miriny	girala	
59. *moon*	gidya		Gooyah	giyan	giwar	gi:wa
60. *grass*			Grooand	yawi		
			Eng. *ground?*			
61. *tree*	madhan; bala		Mudda	madhan	gAgA; garal	
62. *fork of tree*	barla			wanba		
63. *Barwon River*	bama		Waawon	bama		
64. *wind*	yarrga			yarrga		
65. *night*			Bulloy	yuriny		
66. *camp*	ngurru	Ngura		ngurra	ngura	
67. *humpy*	gurli	gurli		gurli		
68. *house, town*	nganda/anda			gundhi		
69. *stone*	marda			bagurl	garal	
70. *shade, shadow*	marlu			gurli-gurli		
E. ARTIFACTS, ETC.						
71. *spear*	guliya			guliya	mura	
72. *boomerang*	marli			marli	balba	
73. *nalla-nalla*	mu:ru	Murli		muru		
74. *waddy*	bundi			bundi		
75. *yamstick*	gara:yi	Kaia		garay	ganay	
76. *dilly bag*	murnda			wadyaga		
77. *shield*	yilaman			burrgu	murga	murga
78. *meat*	yuri; wi:dhi			widyi		
79. *bread, food*	manu			manu		
F. PARTICLES						
Numerals						
80. *one*	wanggara; garawa	Muggu		yaman	magu	
81. *two*	bulaya	Bulagar		gabu	bulaga	bulaga
82. *several*		galga; wulliwal		galga		
83. *couple*	babu?	gulli /gAli/				
Interrogatives						
84. question marker	widiyan			wiya		
85. *what?*	minara			minyan	minya	
86. *where?*	dalama			dhirangga		
87. *who?*	ga:nu			nga:nu		
General						
88. towards speaker	dhagany			dhayin	dha:yN	
89. *that one*	nhuwa			nhurana		
90. *tomorrow*	bu:rda			bardala		
91. *today*	darany			dhalu		
92. *no*	ya:wu			wala	wanga:y	

	BARRANBINYA			MURUWARI	WANGAYBUWAN-NGIYAMBA:	WALJWAN
	Oates	Mathews	A.M.T.			
G. ADJECTIVES						
93. *small*	ganyiga			gidyu	bubay	
94. *big*	ngura:ri			dha:da		
95. *stinking*	buga			buga	buga	
96. *fleshy, stout*	murlibida					
97. *good*			yeddenbah	bidara		
98. *bad*			Warroo	yu:ral		
99. *sick*			Waagen	ma:riya		
100. *very tired*			Errijoo-gurrah	gilya bayli-		
101. *dark?*			Bullenmeddie			
102. *young?*		balu				
H. VERBS						
103. *come*	wa:-/wa:ri-			balga-		
104. *walk*			Yuenggarry; Yuengeddi	yana-	yana-y	
105. *see*	na:-			naga-	nga:-y	
106. *sit*	ni:-			niya-	wi:-y	
107. *give*	ngu:-			nguwa-	ngu:-y	
108. *hit*	ba-/bara-	burra-		ba-		
109. *eat*	gura-			dha-	dha-l	
110. *drink*	ngu-?					
111. *do*	dharu-			dhana-	ma-l	
112. *talk*	duwa-; ya:-			ya:-	ya-l	
113. *go up*	windi-					
114. *bite*	gu-/gura-			yida-	gadhi-y	
115. *bathe (bogey)*	gubi-			gu:mbi-		
116. *play (children)*	gura-			ngagi-		
117. *take away*	wuri-					
118. *sleep*			Yurragerry	yambura-		
119. *scratch*		ma-				
120. *cry*	wu:-/wu-			wangi-		
I. PRONOUNS						
Nominative						
121. *I*	ngadhu	Ngutthu		ngadhu		
122. *you*(sg.)	(y)inda	Hinta		yindu; ngindu		
123. *he,she,it*		Nuanara		nhumbu		
124. *we two*		Ngurriga[5]				
		Ngullina		ngali		
125. *you two*		Nhulawura		nhula		
126. *they two*		Buraiaura		bula		
127. *we all*		Wunnanhumma		ngana		
128. *you all*		Nhura		nhura		
129. *they*		Dhunna		dhana		
Possessive						
130. *my*		Ngunnu		ngandi; dhiga		
131. *your*(sg.)		Ingga		(y)ingga		
132. *his,her*		Ngurrani		buga		
133. *our two*		Ngurriga[5]				
		Ngullinni		ngaliga		
134. *your two*		Nhulunni		nhuraga		
135. *their two*		Bulani		buraga		
136. *ours*		Wannunni[5]				
		Nganunni		ngaraga		
137. *your*(pl.)		Nhurunni		nhuraga		
138. *their*		Dhunnanni		dharaga		

NOTES

1. Mathews' bAlu *young*, bAlubAlu *very, very young* may be compared with Ba:gandji barlu *very, very young*.
2. Mrs Horneville regarded this as an Aboriginal word, not a borrowing from English. Hercus reports that in neighbouring Gurnu, Mrs Moisey, a last speaker, used an identical word for 'child', regarding it as Gurnu.
3. nk has been used in the orthography to denote an alveolar n + a velar stop, since ng denotes a velar nasal.
4. galga means *all* or *many* in Muruwari.
5. Mathews' two forms for first person dual and plural could not be verified. The first forms are those for which parallel forms in surrounding languages could not be found.

APPRECIATION

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THE STRUCTURE AND SYSTEM OF BURARRA SENTENCES

Kathleen Glasgow

0. INTRODUCTION

The purpose of this paper is a description of Burarra sentences primarily as an aid to translation work, but it is also hoped that the description will be helpful to others interested in the Burarra language, and that it may serve as a basis for discussing Burarra sentence with Burarra speakers. Ideally, this description will one day be rewritten especially for the Burarra people, who in their multilingual situation are linguistically aware, and enjoy seeing the pattern of their language displayed.

The Burarra language is spoken by approximately 600 Australian Aboriginals whose homelands are in the Blyth and Cadell River regions, and who also live at Maningrida. Burarra includes the three close dialects: Gun-nartpa, Gun-narta and Gun-narda.

My husband, Dave Glasgow, and I are indebted to the Burarra people and also to the people of other language groups at Maningrida for their friendship and help during our 20 years of association with them.

The analysis for this paper was based particularly on 32 pages of text including narrative, hortatory and expository discourse types, with reference to a further 160 pages of text.

I am indebted to Robert Longacre of the Summer Institute of Linguistics for his paper 'Sentence structure as a statement calculus'. A list of references is given at the end of this paper, all of which helped me to tune in to the subject of sentence and begin analysis. As I progressed, however, I found myself constantly referring to Longacre's paper to know what to do with my findings. I was particularly challenged by his suggestion that "sentence types form a system - never simply an inventory list." Longacre states that his "classification of English sentence types ... are suggestive of universal parameters of relation and contrast among sentences." This has proven true for Burarra. Once the groundwork was done, findings fell into place within an adaptation of the parameters used by Longacre for English. Hence the tables in this paper are patterned closely after Longacre's.

Webster's Collegiate Dictionary describes sentence as "a group of words so related as to convey a completed thought with the force of asserting something or of asking, commanding, exclaiming, or wishing, and marked at the close, in writing, by a period, question mark, or exclamation point." - a definition which includes the grammatical, semantic and phonological aspects of sentence. Likewise the process of establishing sentence boundaries for this description has been an iterative one, taking into account not only grammatical and semantic criteria,

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but also phonological features of juncture, as identified by Dave Glasgow in groundwork done for this paper. These phonological features may be summarised as sentence final decrescendo, drop in pitch, or pause, or where these are imperceptible, a fresh momentum indicates the beginning of a new sentence. Generally, the phonological features of Burarra sentences include an optional build-up, a peak and a falling off. The special intonation associated with wurriya *but why*, which manifests the clause level Mood Tagmeme (Garner and Glasgow 1980) is described at the end of section 17 of 'Burarra word classes' (Glasgow 1984), and the special intonation associated with the Setting Margin and with the Comparison-Contrast Sentence is described in the present paper, sections 3.3 and 4.3.2.4 respectively.

There is a problem, however, in relying too heavily on phonological features in determining sentence boundaries. Longacre (1968) quotes Lawrence Reid who, working on the Bontoc language in the Philippines notes that "in first attempts at analysis of Grammatical Sentences, considerable confusion was caused through undue reliance on phonological criteria for establishing Grammatical Sentence boundaries." He explains that

> in many instances logical relations which are lexically marked, such as Alternation, Antithesis and Coordination, and which are considered to be indicative of Grammatical Sentence types occur across Phonological Sentence boundaries. There is evidently no one-to-one correspondence between Phonological and Grammatical Sentences.

Reid has developed a set of rules for determining grammatical sentence boundaries. These have been helpful in making basic decisions for the present analysis. Also Amee Glass (1979) in her analysis of sentences in the Ngaanyatjarra language of Australia has developed language-specific rules, which, being for Australian language, have helped me to focus on several of the Outer Peripheral Tagmemes of Burarra.

However, sentence is still sentence - a combination of the grammatical, the semantic, and the phonological. Therefore, having usefully separated grammatical criteria from phonological criteria, and having weighed them against each other in establishing sentence boundaries, we must now consider grammatical sentence and phonological sentence reunited in order to have real world sentences to describe. It is interesting to note that the logical relations occurring across sentence boundaries in Burarra appear to adhere to the same linear order as described for sentence, although they belong to the paragraph/discourse level. This is compatible with the somewhat arbitrary nature of sentence breaks, which are affected by such things as sentence length and personal choice. The Outer Peripheral Tagmeme, Finis, and all of the sentence Margins except Topic Margin, Inception Margin and Setting Margin may occur sentence initial or as a sentence fragment relating to the preceding context on the paragraph/discourse level. It is not within the scope of the present paper to describe this phenomenon in detail, but some description of it is given in section 2.1, paragraph 3, and in section 3.14, paragraph 2.

0.1 Abbreviations and symbols

The examples in this paper have literal and free translations and grammatical annotations. The sentence type and embedded sentence types are given in parentheses at the end of each free translation.

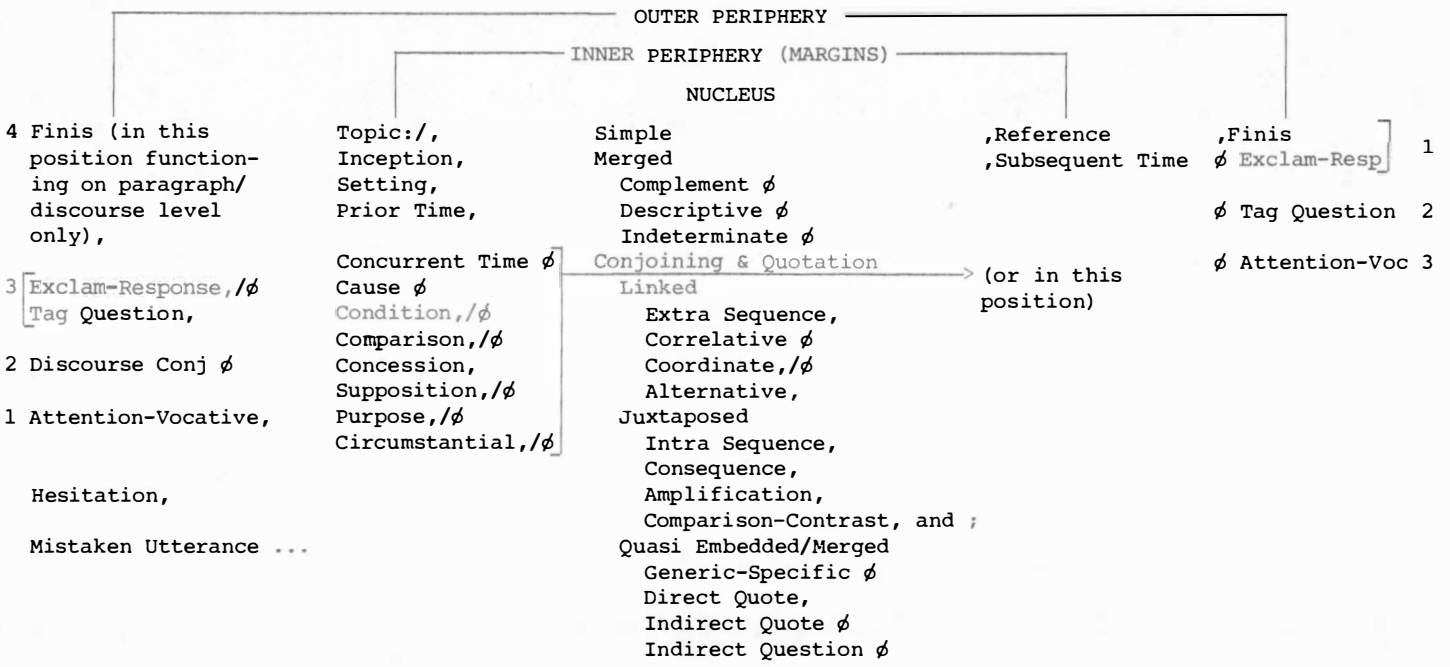
├──────┤	A line with end points indicates a sentence Base; embedded sentence Bases are shown successively below one another.
...	indicates an interrupted sentence tagmeme.
- - - -┤	following the annotation of a grammatical Margin indicates its extent.
( )	Parentheses in the interlinear grammatical annotations indicate embedded constructions.
[ ]	Brackets enclose words which are added to aid understanding in the literal translation, free translation, or grammatical annotation.
acc	accompaniment (prefix)
Amplif	Amplification (Sentence)
Att-Voc	Attention-Vocative Tagmeme
Circumst	Circumstantial (Margin)
Compar	Comparison (Margin)
Conces	Concession (Margin)
Concur	Concurrent (Time Margin)
ctf	contrafact (suffix)
Descr	Descriptive (Merged Sentence)
diff	different
Disc Conj	Discourse Conjunction Tagmeme
excl	exclusive (person)
Exclam-Resp	Exclamation-Response Tagmeme
fem	feminine
fut	future
Incept	Inception (Margin)
incl	inclusive
interrog	interrogative (mood word)
M	Margin
Narr Intro	Narrative Introducer Tagmeme
neg	negative
Ref	Reference (Margin or Sentence)
rep	repetition (suffix)
Sent	Sentence
Subsq	Subsequent (Time Margin)
Supp	Supposition (Margin)
T	Time (Margin: Prior, Concurrent or Subsequent)
Tag Q	Tag Question

1. SENTENCE STRUCTURE

The clauses of Burarra have been described by Garner and Glasgow (1980). These clauses combine to form sentences in two ways, as Longacre points out: "(1) as PERIPHERAL (or subordinate) elements plus NUCLEUS; and (2) as intranuclear combinations." In Burarra some Peripheral Tagmemes combine, as well, in Non-nuclear Sentences as shown in section 6. An overall view of Burarra sentence structure is shown in Table 1.

The peripheral tagmemes are divided into OUTER PERIPHERY and INNER PERIPHERY. Outer peripheral tagmemes usually consist of a single word which either modifies the sentence as a whole or relates it to other sentences on the paragraph or

Table 1: Overall view of Burarra sentence structure



(1) Linear order reflects the ordering of Burarra sentence tagmemes.
(2) Bracketed tagmemes in the Outer Periphery are mutually exclusive of each other in that position. Note that this varies for sentence initial and sentence final positions.
(3) Numbers assigned to Outer Peripheral Tagmemes indicate their order of proximity to the Nucleus. They are listed from top to bottom, however, in the order in which they occur in the sentence as a whole. Note that Outer Peripheral Tagmemes which may occur sentence final occur in the same relative order as when occurring sentence initial. No number is assigned to Outer Peripheral Tagmemes which usually occur within the Nucleus and its Margins.
(4) Punctuation following or preceding Peripheral Tagmemes indicates punctuation used for setting them off, if at all, from the Nucleus; intranuclear punctuation is also indicated following the various sentence Nuclei. ø indicates no punctuation. Punctuation alternatives are separated by a slash, their choice depending on complexity of embedding, etc.
(5) The eight Inner Peripheral Tagmemes (Margins) bracketed together may occur either prenuclear or post-nuclear, as indicated by the arrow.

discourse level. These generally occur in a prescribed order sentence initial or sentence final, although Discourse Conjunction and Attention-Vocative may permute to a sentence medial position, highlighting the clause level tagmeme they follow. The outer peripheral tagmemes, Hesitation and Mistaken Utterance, are related to the speaker's self-editorial processes, and usually occur sentence medial where this process most often takes place. Tag Question and Exclamation-Response may also occur sentence medial in a self-editorial process (see section 2.3(d)).

Inner peripheral tagmemes are sentence MARGINS which contribute to the semantic content of the sentence and, with the exception of the Topic Margin, always consist of a relator-axis sentence. The Topic Margin consists of a substantive phrase, or embedded simple sentence, and may have a Comparison or Reference Margin embedded within it (see section 3.1). Other Margins may also have embedding. The Inception Margin and the Setting Margin are manifested by very minimal relator-axis sentences, as will be seen in sections 3.2 and 3.3 respectively.

Sentence Nuclei consist of either a single BASE in a grammatically SIMPLE SENTENCE or two or more Bases in MERGED or CONJOINING and QUOTATION SENTENCES. Multiple sentence Bases are embedded sentences.

Conjunctions occur as obligatory LINK between the Bases of some conjoining sentence types, and a Link may also optionally occur between Outer Periphery and Nucleus, as in section 2.2(b); and between a prenuclear Margin and the Nucleus, as in section 3.10(e); and between the relator and axis of a postnuclear Margin, but linking the Margin and Nucleus, as in sections 3.7(d) and 3.8(b); and between repeated Margins, as in section 2.7; and linking Peripheral Tagmemes in a non-nuclear sentence, as in section 6(b).

2. OUTER PERIPHERAL TAGMEMES

2.1 FINIS consists of the interjection (see Glasgow 1984) ganapiya *it is finished* occurring sentence final in first order proximity to the Nucleus and its Margins, and indicating the end of the activity of the Nucleus. In this sentence final position Finis may co-occur with the Outer Peripheral Tagmemes Tag Question and Attention-Vocative only; see (b) below.

Finis may also permute to within the Nucleus and its Margins, expressing the completion of a thought, as in section 3.13(1), or the completion of an activity of duration which leads up to the final action, as in (c) below.

Finis may also occur sentence initial, where it functions on the paragraph/discourse level referring to the completion or finality of the foregoing. In this sentence initial position Finis optionally co-occurs with all other Outer Peripheral Tagmemes; see section 2.2(c) and section 3.2(c) for examples.

Finis also occurs in a non-nuclear sentence; see section 6(b).

For a further example of Finis occurring sentence final see section 4.3.1.1(c).

(a) Mu-yerrnjinga jinyu-ni, mu-yerrnjinga jinyu-ni, ganapiya.
she threw them she did *she threw them she did* *finished*
Finis
She threw them out [yams from hole she was digging], she threw them out, finished. (Amplification Sentence)

(b) Gipa ny-yepana nyi-ni, ganapiya, ya, a-jay Bambay?
already you washed it you did finished eh hey old woman
Finis Tag Q Att-Voc
You already were washing it and finished, did you old woman? (Simple Sentence)

(c) Ngu-bamuna, ganapiya, ngu-menga.
I went on finished I got it
Setting M Finis
I went on [throwing out the fishing line], finished, [then], I got it [fish]. (Simple Sentence)

2.2 EXCLAMATION-RESPONSE expresses response to real or spoken context, and is manifested by all interjections (see Glasgow 1984) except those which manifest Finis and Tag Question (see sections 2.1 and 2.3 respectively). Exclamation-Response occurs sentence initial in third order proximity to the Nucleus, or it may permute to within the Nucleus and its Margins (see section 2.3(d)), or it may occur in a non-nuclear sentence (section 6(b)), or as a sentence fragment. Exclamation-Response may also occur sentence final, where it is always manifested by awa *yes indeed* and is mutually exclusive of all other Outer Peripheral Tagmemes.

A non-final pause separates sentence initial Exclamation-Response from the sentence Nucleus and its Margins. It is this pause which distinguishes Exclamation-Response manifested by ngika *no*, as in (b) below, from the clause level Mood Tagmeme (Garner and Glasgow 1980), which may also be manifested by ngika.

(a) Angga, lika gun-nerra ng-gutawurra
horrors then bad I picked up
Exclam-Resp Disc Conj
Horrors, then I picked up bad one! (Simple Sentence)

(b) Ngika a-lay, wurra jurra jal ngu-ni.
no hey but book desire I am
Exclam-Resp Att-Voc Link
No [I don't want to trouble you] hey but I want a book. (Simple Sentence)

(c) Ganapiya awa, bi-buna.
finish yes indeed he hit you
Finis Exclam-Resp
It's done now indeed, he's hit you! (Simple Sentence)

2.3 TAG QUESTION turns a statement into a question, and may be manifested by the two interjections ya *is it* and yuwa *is it like that*, or by the mood word minja *isn't it* (see Glasgow 1984). Tag Question may occur sentence initial in third order proximity to the Nucleus, or sentence final in second order proximity to the Nucleus, or it may permute to within the Nucleus, inquiring about a particular tagmeme as in example (d) below. Tag Question does not co-occur with the Outer Peripheral Tagmeme Exclamation-Response. It occurs with Discourse Conjunction, as in section 2.4, example (i); with Attention-Vocative, as in (a) and (b) below; and with Finis, as in section 5(b).

(a) Ya, an-jarral, ngi-wu barra?
is it old man I give to you fut
Tag Q Att-Voc
Eh, old man, shall I give it to you? (Simple Sentence)

(b) Nginyipa ny-jarlapuna, ya, an-jarral?
you you made it is it old man
Tag Q Att-Voc
You made it, did you, old man? (Simple Sentence)

(c) Ngu-boy barra, yuwa?
I go fut *is it like that*
Tag Q
Shall I go? (Simple Sentence)

(d) Gala minja English, gun-anngiya, minjiya, an-gungarlcha
neg *isn't it English whatchamacallit it is so white man*
... Tag Q ... Hesitation Exclam-Resp ...

gun-nika a-nganabitimarna, gu-manggarna gun-burral.
his he could have mimicked him he could have got it true one

He couldn't, isn't it English, whatchamacallit, that's it, the white man's language he couldn't mimic him and get the true [story]. (Intra Sequence Sentence).

Note in example (d) that the proper response to Tag Question manifested by minja is the Outer Peripheral Tagmeme, Exclamation-Response, manifested by minjiya *it is so* (see section 2.2).

2.4 DISCOURSE CONJUNCTION relates a participant, activity or exposition to the foregoing discourse. A full study has not yet been made of Burarra discourse, but the following have been noted as Discourse Conjunction, occurring sentence initial in second order proximity to the Nucleus.

HEAD-TAIL LINK consists of a repetition of the last clause of the preceding sentence, always a minimal clause. Head-tail Link is characteristic of narrative style. This particular manifestation of Discourse Conjunction does not co-occur with other sentence initial Outer Peripheral Tagmemes.

Four of the conjunctions which link conjoining sentences internally also occur as Discourse Conjunction, that is rrapa *and*, wurra *but, or*, lika *then* and rraka *and so potentially*. As Discourse Conjunction these co-occur with all other sentence initial Outer Peripheral Tagmemes. Discourse Conjunction manifested by rrapa or lika may also permute to within the sentence Nucleus immediately following the clause level tagmeme being related on the discourse level.

For a further example of Discourse Conjunction see section 2.2(a) and compare with 2.2(b) where a Link joins Periphery and Nucleus. Also see 4.3.1.2(b) and 4.3.2.1(a).

(a) A-ganaja a-yurra, a-garlmiya, gorrngunya m-banga.
he watched he lay there he got up grass he ate it
Disc Conj [Head-tail Link] Incept M
He [wallaby] was lying there watching, [then] he got up [and] ate grass.
(Simple Sentence)

(h) Rrapa ngarripa arr-yinagatiya.
and you and I we're like that
Disc Conj ├──────────────────────┤
And our generation is like that [like our ancestors]. (Simple Sentence)

(i) Ya, rraka ng-gurrmiyarna, ngu-ngekngarna
is it and so I could have lain down I could have rested
Tag Q Disc Conj ├──────────────────┤├──────────────────┤

ngu-yurrarna?
I could have lain there
├──────────┤

Isn't it so, and I could have lain down and rested [if it weren't for all these kids making noise]? (Intra Sequence Sentence)

(j) Wurra a-wenapa wurra birripa gubu-ngurrjungapa awurr-bona.
but he spoke rep *but they they told it they went*
Disc Conj ├──────────┤ Link ├──────────────────────────────┤
But the more he spoke [to them asking them not to tell], the more they went telling it. (Coordinate Sentence)

2.5 Attention Words have been described by Garner and Glasgow as one of the manifestations of the clause level Vocative Tagmeme, hence also the ATTENTION-VOCATIVE Outer Peripheral sentence tagmeme, which may be manifested by one or more of the following: attention words, proper nouns, nouns and descriptives used as terms of respect, and kinship terms (see Glasgow 1984, the conjugation of the attention word in section 20 being of special interest).

Attention-Vocative may occur sentence initial in first order proximity to the Nucleus, or sentence final in third order proximity to the Nucleus, or it may permute to within the Nucleus or its Margins, highlighting the clause level tagmeme it follows.

For further examples of Attention-Vocative see sections 2.3(a) and (b), 2.2(b) and 3.12(a).

Gurdijarra bubi-rra arrburrwa a-la.
fish you all spear it for us all hey
├──────────────────────────────┤ Att-Voc
Hey, you all spear fish for us! (Simple Sentence)

2.6 HESITATION may occur at any juncture, and is manifested by indeterminates (see Glasgow 1984, section 18) which indicate the nature of what the speaker is trying to recall. Example (d) of section 2.3 includes Hesitation manifested by gun-anngiya *whatchamacallit.* A further example follows.

Nyiwurr-bena yanngiya, Wurdeja.
we excl *arrived such and such a place place name*
├──────────... Hesitation ...──────────┤
We arrived at such and such a place, Wurdeja. (Simple Sentence).

2.7 MISTAKEN UTTERANCE occurring at any juncture is obviated by postposed ee *oops!*, after which the sentence is continued, substituting the right words for the Mistaken Utterance.

Gun-burral gun-nerra gu-yalpuna, minypa 10 Commandment yerrcha
true *bad* *he burned it like* *10 Commandment* plural
Compar Margin ----------...

gubi-yalpuna ee, gubi-rrimarra aburr-ni janguny, aa minypa
they burned it *oops they held it* *they did story* *and uh like*
Mistaken Utterance ... Compar Margin ---------- Link Compar Margin

Ngun-anya waykan a-nirra bol gu-jerrmarra, aa minypa gun-gata jambay.
my father high he is fire he sent it *and uh like* *that one same thing*
---------- Link Compar Margin ----------
(Ref Margin)

It's true, he [God] burned badness, like the 10 Commandment mob burned it, oops, they kept the story, and uh, like my Father in heaven sent fire, and uh, like that's the same thing. (Descriptive Merged Sentence; Simple Sentence embedded in the subject of the second Comparison Margin).

3. INNER PERIPHERAL TAGMEMES

3.1 The TOPIC MARGIN occurs in prenuclear position stating the sentence topic and, as has been noted in section 1, consists of a substantive phrase or a simple sentence (see sections 3.2(b) and 4.3.1.3(b) for examples of the latter). The descriptive gun-guna *this* frequently occurs in the Topic Margin, in contrast to the Reference Margin (section 3.13), in which a form of gun-narda *that near you* or gun-gata *that in sight or known to us both* often serves as relator. (For the derivation of these demonstrative-derived descriptives see Glasgow 1984, section 11, Tables 4 and 5.)

Topic Margin may have a Comparison or Reference Margin embedded within it, as in examples (b) and (c) below. For further examples of Topic Margin see section 3.9(a), where there is both an initial Topic Margin and one embedded in a Concession Margin; and see section 3.13(q), where the Topic Margin is interrupted by the Outer Peripheral Tagmeme, Hesitation, and also has an embedded Reference Margin; and section 6(a), where Topic Margin occurs in a non-nuclear sentence.

(a) Gun-guna janguny, Wangarr gu-barnjinga janguny.
this *story* *God* *he put it* *story*
Topic Margin ---

This story, God put [this] story. (Simple Sentence)

(b) Gun-guna minypa yarlanga ay-ganja arr-workiya: gun-nerra
this *like* *exposed* *you and I take it* *you and I all the time* *badness*
Topic Margin ----------
(Compar Margin ----------)

an-gugaliya an-nerrawenga mu-dayan walang gala a-yinmiya gu-rrima a-ninya.
Aboriginal man another *law* *leader* neg *he do how he hold* *he sit*

This is like the one we take openly all the time: a man, the leader of the law, can't sit down holding badness. (Simple Sentence)

(c) An-gungarlcha gun-nika janguny, gun-gata ngu-ngurrjunga, English:
white man his story that one I'm telling about it English
Topic Margin ----------

(Reference Margin)

janguny gun-jaranga gu-nenga, gun-jaranga a-lamajinga minypa.
story many he makes it many he plants like
Compar M ----------

That's it, the white man's story, that's what I'm talking about, English: he makes many stories, like he plants many. (Simple Sentence: Reference Margin embedded in the Topic Margin)

3.2 The INCEPTION MARGIN is characteristic of narrative style, occurring in prenuclear position expressing the beginning point in relation to the action of the Nucleus. Inception Margin is manifested by a very minimal relator-axis sentence of sorts, in which the verb stem garlma *get up* is the relator, and usually the person-number and aspect affixes alone constitute the axis. The clause level Subject Tagmeme may also occur in the Inception Margin, see section 3.4(c).

Where garlma does not express the beginning point for the Nucleus, it occurs in other than the Inception Margin, as in section 4.1(a), section 4.2.1(d), and section 4.3.1.1(a) and (b).

In example (b) below the Inception Margin is embedded in the second Base of a Consequence Sentence, in which morphophonemic changes render garlma as -jarlmu- (K. Glasgow 1984).

(a) A-garlmuna, a-bona
he got up he went
Incept M

He got up [and] went. (Simple Sentence)

(b) Awirriny-buna: A-bungguna, jiny-jarlmuna, a-buna,
they two fem *hit him he fell down she got up she hit him*
Topic Margin

(Incept Margin)

a-jolarchinga gu-bech.
she put him in in bag

They hit him: he [goanna] fell down [when she chopped the tree down], she got up, hit him, put him in the bag. (Consequence Sentence: Intra Sequence Sentence embedded in second Base)

(c) Ganapiya, lika awurr-garlmuna, aburr-jekarra rrawa.
finish then they got up they returned camp
Finis Disc Conj Incept Margin

Finish, then they got up [and] returned to their camp. (Simple Sentence)

3.3 The SETTING MARGIN is characteristic of narrative style, establishing the setting for what follows. Setting Margin occurs in prenuclear position, and like the Inception Margin, consists of a very minimal relator-axis sentence. The relator for the Setting Margin is the verb stem bamba *move along*, and the

person-number and aspect suffixes alone may constitute the axis, as in (a) below. In a more expanded Setting Margin another verb may occur as the Head of the predicate Phrase, with bamba as the Auxiliary (Garner and Glasgow 1980), and/or a further clause level tagmeme may co-occur, such as Subject in (c) below.

The Setting Margin has a sustained intonation of non-falling pitch, which distinguishes it from other occurrences of bamba. For an example of bamba which is not in a Setting Margin see section 4.3.1.2(b).

(a) Awurr-bamburda, gapa awurr-beya arrburrwa.
they went along there far they arrived to us
Setting Margin ├──────────────────────────┤
They were going along [when] they came to us way over there. (Simple Sentence)

(b) Gu-yartkujamurra jiny-jamuna, gu-bungguna.
she chopped it she went along it fell down
Setting Margin ----------┤ ├──────┤
She was chopping [the tree and] it fell down. (Simple Sentence)

(c) Gulukula awurriny-jarl awurriny-jamuna, a-numurra.
dog they two fem *hastening they two* fem *went along he smelled him*
Setting Margin ----------------------------------┤ ├──────┤
She and the dog were hastening along [when the dog] smelled him [goanna].
Simple Sentence)

3.4 The PRIOR TIME MARGIN is pivotal in function, occurring in prenuclear position and relating the sentence Nucleus to a prior event in time. Prior Time Margin consists of a relator-axis sentence in which the preposed relator is gata *there in sight or known to you and me*, or a derivative of the same. The relators in addition to gata are therefore: gatiya *it's there*, gawata *there further*, gawatiya *it's there further*, gun-gata *that one*, and gun-gatiya *it's that one*. In addition, the accompaniment prefix gu- may co-occur in the form gu-gata *in/on there* when the axis of the Prior Time Margin is manifested by the From Phrase (Garner and Glasgow 1980, section 4.2), which merges with the relator, as in (a) below.

The axis of the Prior Time Margin reflects one of the four completive aspects which occur on verbs in the past tense (see Glasgow 1984, section 13.6.1). Axes reflecting perfect aspect are manifested by either the From Phrase mentioned above and shown in (a) below, or by a clause in which there is no non-derived intransitive stative verb of being, as in (b). When Prior Time Margin reflects perfect aspect the relator may also occur with a zero axis, which is understood from the preceding context, as in (c) below. The conjunction lika *then* or wurra *but* as sentence Link obligatorily follows Prior Time Margin in which perfect aspect is reflected when the axis is manifested by zero or by a clause; when the axis is manifested by the From Phrase, sentence Link follows optionally, manifested only by lika. Axes of the Prior Time Margin which reflect punctiliar aspect are manifested by an embedded Concurrent Time Margin (section 3.5), as in (d) below. Axes of the Prior Time Margin which reflect continuous aspect are characterised by one of the three intransitive stative verbs, ni *be (sitting)*, ji *be (standing)*, yu *be (horizontal)*, as head or auxiliary in the predicate phrase, as in (e) and (f) below. Axes reflecting imperfect aspect are characterised by the descriptive {gun-}maywapa *same one* with either the accompaniment prefix or an intransitive stative verb of being co-occurring, as in (g) and (h) below.

Prior Time Margin may be repeated to ensure its cohesive function on the paragraph/discourse level, as it is in example (i), where the axis of the first Prior Time Margin is fairly long.

(a) Gu-gata wenga ngaypa ngu-nana ngana gu-jirra gu-lapkujamiyana gu-ji.
acc *there from I I saw it mouth it is it opened itself it did*
Prior Time M
After that I saw the door was open. (Complement Merged Sentence)

(b) Gun-gata nipa a-molamiyana, lika a-bona a-workiyana, jama a-ji.
that one he he recovered then he went he habitually work he did
Prior Time Margin ---------| Link
When he had recovered, then he went all the time [and] worked. (Intra Sequence Sentence)

(c) Gatiya lika mampa nuya rrapa nyanyapa nuya, birrinjipa
it's there then mother to him and father to him they two fem
Prior T M Link Topic Margin ----------| Incept Margin --

abirriny-jarlmuna, abirriny-yena nula.
they two fem *got up they two* fem *talked to him*

That was it, then his mother and father, they got up and talked to him.
(Simple Sentence)

(d) Gata waypa a-bena, burr-nana burr-guya aburr-rruwja aburr-ni.
there same time he arrived he saw them strongly they cried they did
Prior Time Margin --------
(Concurrent Time M)
There when he arrived he saw that they were crying very hard. (Complement Merged Sentence)

(e) Lika gun-gatiya gun-nerranga gu-ni, mola wurra gama gorlk
then it's that one another one it was again man woman swag
Disc Conj Prior Time Margin ----------

aburr-mulpiyana.
they got together

Then when it was another day, again the people got together. (Simple Sentence)

(f) Gun-gatiya birripa aburr-wena aburr-ni, nipa a-bena burrwa.
it's that one they they spoke they did he he arrived to them
Prior Time Margin ----------
It was when they were talking, he came to them. (Simple Sentence)

(g) Lika gawatiya ji-maywapa marnnga jel gu-ngorrkiyana
then it's there further acc *same sun earth it wobbled*
Disc Conj Prior Time Margin ----------

burr-guya.
strongly

Then at that same time the earth shook very hard. (Simple Sentence)

(h) Gata gun-maywapa ana-munya gu-ni, nipa a-yinagata burrwa, "Nguburr-boy".
there same one night it was he he said like to them we all go
Prior Time Margin ----------┤├──────────┤├──────┤
There the same night he said to them, "Let's go". (Direct Quote Sentence)

(i) Gun-gata awirri-jirrapa gun-ngardapa rrapa goma gu-jirra ngorrngurra
that one they two are rep *one and body it is sleep*
Prior Time Margin ----------

gu-bona, lika gu-gata wenga barlmarrk wana gu-bena.
it went then acc *there from wind big it arrived*
-------┤ Link Prior Time M ├──────────┤
After three and a half days had gone by, then after that a big wind came.
(Simple Sentence)

3.5 CONCURRENT TIME MARGIN usually occurs in prenuclear position. It refers to an action which overlaps in time the action of the Nucleus, and consists of a relator-axis sentence having as relator waypa *same time* (lit. *certainly also*). The Concurrent Time relator is usually preposed, but may be postposed when the axis is a descriptive clause manifested by a temporal word alone, as in (b) below.

The Concurrent Time Margin may have a Purpose Margin embedded within it, adding a sense of prerequisite, as in (a) below.

Concurrent Time Margin may also have a Subsequent Time Margin embedded in it, as in (c) below, and also in (d) where the Margin occurs postnuclear expressing 'until'. Concurrent Time Margin may similarly embed in Subsequent Time Margin (see section 3.14, including example (c)).

(a) Waypa barra ji-gabi yi-rrana arr-boy.
certainty also fut *she is over there evening you and I go*
Concurrent Time Margin ----------┤├──────────┤
(Purpose Margin----------)
First [the sun] must be over there, in the evening you and I will go.
(Simple Sentence)

(b) Ngulam waypa arr-boy.
morning certainty also you and I go
Concurrent Time Margin ├──────┤
When it's morning [tomorrow] you and I could go. (Simple Sentence)

(c) Waypa nuwurra ngulam arr-boy.
certainty also afterwards morning you and I could go
Concurrent Time Margin ---------┤├──────────┤
(Subsequent Time M)
When later it's morning [tomorrow] you and I could go. (Simple Sentence)

(d) Jaga jiny-janana nula, waypa nuwurra an-gata ngamangama
care she watched him certainty also afterwards that one breast milk
├──────────┤ Concurrent Time Margin ----------
(Subsequent Time Margin -------

gu-bawa barra.
he leave it fut
----------┤
----------)
She took care of him until he would be weaned. (Simple Sentence)

(e) Waypa a-bena rrawa awurr-gapulga burr-nana.
same time he arrived camp their absence he saw them
Concurrent Time Margin ├──────────┤
When he arrived at the came he saw that they were gone. (Simple Sentence)

3.6 The CAUSE MARGIN defines the cause of the action of the Nucleus, and occurs in prenuclear or postnuclear position. The Cause Margin consists of a relator-axis sentence with the mood word nyanma *cause* as relator, and the axis being an embedded Simple or Amplification Sentence with the Bases manifested by Descriptive Clauses. A zero axis may occur in an embedded Cause Margin, as in (g) below, where it is embedded in a Purpose Margin and the axis is understood from the context.

When the cause is animate, the relator is postposed and the axis is manifested by a Simple Sentence, as in (a) and (b) below; or interposed in an Amplification Sentence manifesting the axis, as in (c) below. An embedded Topic Margin frequently co-occurs in the axis of the Cause Margin expressing an animate cause when the axis is manifested by a Simple Sentence, as in (d) and (e) below.

When the Cause Margin expresses an inanimate cause, the relator is preposed and the axis is manifested by a Simple Sentence, as in (f) below, and a similar relationship to the Nucleus may be expressed by the Circumstantial Margin, which is nevertheless distinct (see section 3.12, including example (c)). For an example of Cause Margin co-occurring with Circumstantial Margin see section 3.12(b). Cause Margin may also be embedded in Circumstantial Margin, as in section 3.12(b) and (d).

(a) Nipa nyanma a-buyana.
he cause he hit himself
Cause M ├──────────┤
He as the cause he hit himself. (Simple Sentence)

(b) Nipa nyanma jichicha ana-jerrmarra nggula.
he cause seafood he sent it to you
Cause M ├──────────┤
He as the cause he sent seafood to you. (Simple Sentence)

(c) Rrawa ji-moch gu-gurrmurra jiny-bona nipa nyanma Wangarr.
country acc *dreaming she put it she went he cause God*
├──────────┤ Cause Margin ------┤
The dreaming went along putting the country, he God as the cause. (Simple Sentence)

(d) Wangarr nipa wupa nyanma gu-jarlapuna rrawa.
God he inside cause he made it country
Cause Margin ----------┤ ├──────────┤
(Topic M)
God, just he as the cause, he made the country. (Simple Sentence)

(e) Jichicha ana-jerrmarra nggula gululapa nggu nipa nyanma.
seafood he toward sent to you maternal uncle to you he cause
Cause Margin ----------|
(Topic Margin ------)
He [uncle] sent seafood to you, your uncle, he as the cause. (Simple Sentence)

(f) Mun-guna ma, nyanma rrupiya mun-delipa.
this one get it cause money little one
Cause Margin ----------|
Get this one, because it costs [only] a little. (Simple Sentence)

(g) Gu-ngimarra minypa bichuman barra nyanma gala gu-yinmiya bugula
he painted it like bitumen fut *cause* neg *it do how water*
Comparison M Purpose Margin ----------
(Cause Margin ----------

gu-barrnguma.
it go inside
----------|
----------)

He painted it like with bitumen, so from that the water couldn't go in.
(Simple Sentence)

3.7 CONDITION MARGIN may occur in prenuclear or postnuclear position. It refers to an action which is prerequisite or predisposing to the action of the Nucleus, and consists of a relator-axis sentence having minja *isn't it* as preposed relator. Minja also occurs as relator in the second Base of the Indirect Question Sentence (see section 4.3.3.4). For an example of minja in a nonnuclear sentence see section 6(c).

(a) Minja motor car a-jarlapa, nguwurr-boy.
isn't it motor car he could fix it we could go
Condition Margin ----------
If he fixes the motor car, we could go. (Simple Sentence)

(b) Minja motor car a-jarlapa, lika nguwurr-boy barra.
isn't it motor car he could fix it then we could go fut
Condition Margin ----------| Link
If he fixes the motor car, then we will go. (Simple Sentence)

(c) Burraya nguwurr-boy, minja nginyipa jal nyi-ni.
soon we could go isn't it you desire you do
Condition Margin ----------|
We could go soon, [that is] if you want to. (Simple Sentence)

(d) Ngu-boy barra tea ngu-yalpa, minja rraka
I could go fut *tea I could cook isn't it and potentially*
Purpose Margin -------| Condition M ... Link

ana-boga.
he is probably coming
... Condition M
I will go so I can cook tea in case he is coming. (Simple Sentence)

3.8 COMPARISON MARGIN defines the Nucleus and may occur in prenuclear or post-nuclear position, or it may permute to within the Nucleus as in example (b) below; it is also characteristic of the non-nuclear Definition Sentence (see section 6). Comparison Margin consists of a relator-axis sentence having as relator minypa *like*, or more rarely galngu or moranga, both also meaning *like*. For an example of galngu see section 4.3.2.3(b). The Comparison Margin relator is usually preposed, although it may permute to within the margin or occur post-posed. In example (a) below there are two Comparison Margins; in the first one minypa occurs both preposed and postposed; in the second one minypa occurs mid-margin emphasising the phrase preceding it.

For a further example of minypa postposed see section 3.1(c). For an example of a sentence having three Comparison Margins see section 2.7, where one of the Comparison Margins also has a Reference Margin embedded in it.

(a) Gu-yanggiyarra, minypa gu-wengga a-gaypurda minypa, gala a-yinmiya
what went wrong like by language he deprived him like neg *he do how*
Hesitation ----| Comparison M ----------| |----------

a-wengga nula, rrawa burr-guta minypa gona a-ninyarra, ngardawa
he speak to him camp included like shame he sits specific to that
----------| Comparison Margin ----------| Circumst M -----

nipiya rrawa a-wuna murna gona a-ninyarra.
he's the one camp he gave to him hand shame he sits
----------|
|----------| |----------|
What went wrong, like by language he deprived him, he can't speak to him, the camp and everything it's like we're ashamed, because the one that had the camp handed down to him, he's the one that's ashamed. (Simple Sentence; Descriptive Merged Sentence embedded as Subject of Circumstantial Margin)

(b) Wangarr gu-barnjinga wurra Wangarr gu-barnjinga, minypa
God he put it but God he put it like
|----------| Link |----------... Comparison M ...
|----------...
|----------|

rrapa ngarripa arr-gurdiya arr-yawarriny gu-beybeybarda a-nirra, gala
and you and I we here we young men he passes it by he does neg
Link ... Comparison Margin ----------| ...
...

a-yinmiyarna gu-nacharna gipa an-guyinda rrapa gojilapa
he didn't do how he didn't see it already one like that and half way
---
----------| |----------
|----------

a-wuna murna.
he gave to him hand

God put [the story], but the one that God put, like you and I we young people are passing it by, [like that] our ancestor and the one he handed it down to they couldn't see it. (Coordinate Sentence: Indeterminate Merged Sentence embedded in second Base; Simple Sentences embedded in the Indeterminate Merged Sentence as Indirect Object and as part of the noun phrase manifesting Subject)

3.9 The CONCESSION MARGIN admits of something as a balancing factor or an argument against, but not preventing the action of, the Nucleus. It consists of a relator-axis sentence having as relator jarra *rather, although, instead*; marrban or wuriya, both meaning *even though, inspite of, well anyway, doesn't matter*; wurpa *except, however*, alone or in the close-knit phrase wurpa nuya *even though, except also* (see Glasgow 1984, section 10.2). The conjunction lika *then* freqently co-occurs with wurpa, as in (f) below.

The relator of the Concession Margin is usually preposed. However, when manifested by jarra, the relator may be preposed, postposed or interposed, as in examples (a), (g) and (h) below.

The relators marrban and wuriya frequently occur as sentence fragments (see section 5 and example (c) below).

When Concession Margin is embedded in a Supposition Margin (see section 3.10(c)), a supposed, rather than an actual argument is expressed.

(a) Gun-burral janguny: gun-burral janguny arr-burriyapiya,
true story true story you and I will find out
Topic Margin

minypa murna a-wuna a-bona jawarrga a-ngarlcha a-bona rrapa
like hand he gave to him he went head he become white he went and
Comparison Margin (Link)

ngarripa second arr-nirra nula arr-boya, gu-guyinarda
you and I second you and I are to him you and I go it does like that
Reference Margin

ngacha arr-burriyapiya, jarra nipa ngarripa marn.gi janguny,
indeed you and I will find out although it you and I know story
Concession Margin (Topic M)

gun-jaranga janguny.
many story

The true story: you and I will find out the true story, like they that handed it down became white haired and you and I are second to them, that's the kind now we will find out indeed, although you and I know stories,

there are many stories. (Simple Sentence: the axis of the Comparison Margin is an embedded Coordinate Sentence with an Intra Sequence Sentence embedded in the first Base; the axis of the Concession Margin is an Amplification Sentence having its own Topic Margin)

(b) Marrban mari gu-menga, wurra jama a-jirra a-workiya.
even though trouble he got it but work he does he habitually
Concession Margin ----------┤ Link ├----------┤
Even though he has trouble, but he [still] works all the time. (Simple Sentence)

(c) Wuriya. Buburr-ninya, wurra ngaypa ngu-walagiya barra.
anyway you all stay sitting but I I dance fut
Conces M ├----------┤ Link ├----------┤
It doesn't matter [you all don]t want to dance]. You all stay sitting, but I will dance. (Concession Margin as Sentence Fragment preceding a Coordinate Sentence)

(d) An-gata a-barrngumurra, wurpa an-garla an-nerra a-ni.
that one he went inside except his flesh he bad he was
├----------┤ Concession Margin ----------┤
That [man you're looking for] went inside, except he was tired [so don't bother him]. (Simple Sentence)

(e) Wurpa nuya nipa gun-nerra gu-rrimanga, wurra aburr-werranga
even though he bad one he has but others
Concession Margin ----------┤ Link ├----------

aburr-yinagatiya.
they are like that
├----------┤

Even though he's got badness, but others are like that too. (Simple Sentence)

(f) Gornabola abirri-dana, wurpa lika gala a-juwiyarna.
wallaby they two speared him except then neg *he didn't die*
├----------┤ Conces M ... Link ... Conces M
They two speared a wallaby, except then it didn't die. (Simple Sentence)

(g) Jimarna jichicha ngu-rakawurra, wurra gaparlma wupa jarra.
supposed seafood I hooked it but seaweed inside instead
Supposition Margin ----------┤ Link Concession Margin -----┤
[I] supposed I had hooked a fish, but it was just seaweed instead.
(Supposition-Reality Sentence; see section 6)

(h) Nipa jarra a-yorrpuna guya gun-derta, wurra barrwa a-molamiyana.
he although he was sick nose hard one but again he recovered
Concession Margin ----------┤ Link ├----------┤
Although he was very sick, but he got well again. (Simple Sentence)

3.10 The SUPPOSITION MARGIN expresses an incorrect supposition, and normally occurs in either prenuclear, postnuclear, or midnuclear position. Supposition Margin consists of a relator-axis sentence having jimarna *supposed* as preposed relator. The declarative mood occurring in the Supposition Margin indicates a

supposed fact, as seen in (a), (b) and (e) below; the subjunctive mood occurring in the Supposition Margin admits to supposing an unrealised possibility, as in (c) and (d) below. (For a description of mood in Burarra see Glasgow 1984, sections 13.4 and 13.5, including Tables 10 and 11.)

The sentence Nucleus occurring with the Supposition Margin may fragment as in (b) below, compared with the full sentence Nucleus in example (a). This results in a non-nuclear Supposition Sentence (see section 6).

The Concession Margin frequently embeds in the Supposition Margin, increasing the force of the supposition from 'supposed' to 'supposed instead'. Such an embedded Concession Margin expresses a supposed argument for the action of the Nucleus, which is a reversal of the meaning of unembedded Concession Margin, compare (c) below with section 3.9, including example (g) where Concession Margin co-occurs with Supposition Margin.

(a) Birripa guwu-borrwurra, jimarna nipa rrapa a-ni.
they all they thought about it supposed he also he was there
├──────────────────────────┤ Supposition Margin ----------┤
They thought that he was also there. (Simple Sentence)

(b) Birripa jimarna nipa rrapa a-ni.
they all supposed he also he was there
Topic M Supposition Margin ----------┤
They supposed he was also there. (Supposition Sentence; see section 6)

(c) Jimarn jarra a-nirrarna, Ng-ganja nula.
supposed rather he would have been there I took it to him
Supposition Margin ----------┤├──────────┤
(Concession Margin ----------)
Supposing rather [that] he would have been there, I took it to him. (Simple Sentence)

(d) Ngu-bona, jimarna ngu-wucharna, wurra an-gapulga ngu-nana.
I went supposed I could have given to him but his absence I saw him
├──────┤ Supposition Margin ----------┤ Link ├──────────┤
I went, supposing I would give it to him, but I saw that he wasn't there.
(Coordinate Sentence)

(e) Jimarna gipa ngi-wuna, wurra ngu-rrimanga burdak.
supposed already I gave to you but I am holding it yet
Supposition Margin ----------┤ Link ├──────────┤
I thought I had already given it to you, but I still have it. (Simple Sentence)

3.11 The PURPOSE MARGIN refers to the purpose for the action of the Nucleus. It consists of a relator-axis sentence in the subjunctive mood, having barra 'future' as relator. Barra as relator of the Purpose Margin occurs distinctively before the predicate of the margin, either margin initial or after the first or second clause-level tagmeme of the margin, adding emphasis to it. By contrast, when barra co-occurs with the declarative mood it is part of the predicate phrase (see Glasgow 1984, sections 13.4 and 13.5 regarding mood).

Purpose Margin may occur in prenuclear position as in example (b) below, though it more commonly occurs postnuclear. Where the nucleus consists of a minimal

clause, there is often no pause at the juncture between nucleus and the post-nuclear Purpose Margin.

In examples (c) and (e) the Purpose Margins are embedded, and the Purpose Margin in example (e) is negative. (See section 5 regarding the frequent occurrence of negative Purpose Margin as a sentence fragment.) In example (d) the first occurrence of barra is not in a Purpose Margin, as indicated by the non-final pause which separates it from the following clause.

(a) Yina gaya barra nguburr-yu?
interrog *place is* fut *we* incl *sleep*
Purpose Margin
Where is the place so we can sleep? (Simple Sentence)

(b) Balaja barra nguwu-bay, walkur, ny-yalpa barra mun-jaranga.
food fut *we can eat daughter you will cook it* fut *many*
Purpose Margin ---------| Att-Voc
So that we can eat food, daughter, you will cook plenty. (Simple Sentence)

(c) Gun-burral marr arr-balcha nula Wangarr a-gunggaja arrkula,
true soul you and I be lifted up to him God he help you and me

gurda wupa joborr nggula rrapa janguny nggula ny-borrwa
like that inside law for you and story for you you consider it
Reference Margin ----------
Link

barra ny-mungba.
fut *you finish it*
----------|
(Purpose Margin)
It's true that you and I could believe God that he will help us, contained in that is the law for you and the story for you [to] think about so you will finish it. (Descriptive Merged Sentence: Complement Merged Sentence embedded in second Base; Reference Margin: Descriptive Merged Sentence: Coordinate Sentence embedded in first Base)

(d) Wurra arr-bama arr-barnjiya barra, ay-wenggana
but our heads you and I put ourselves fut *you and I ask him*
Disc Conj

Ngun-anya waykan a-nirra barra a-gunggaja arrkula.
my father high he is fut *he help you and me*
Purpose Margin ----------|
But let's bow our heads, let's ask my Father in heaven so he will help us.
(Intra Sequence Sentence)

(e) Gun-nerra jarlakarr, wurra a-wucha a-workiya,
bad road but he gives to him he all the time
Link

gun-guna gun-nerra nula gala barra ay-jenacha a-ni.
this bad for him neg fut *he away-make a mess he do*
(Purpose Margin ----------)

The road is bad, but he [God] gives to him [leader] all the time, so that with this thing that is bad for him he won't go on making a mess of things.
(Coordinate Sentence: Purpose Margin embedded in second Base: Simple Sentence embedded in the axis of the embedded Purpose Margin as Indirect Object)

3.12 The CIRCUMSTANTIAL MARGIN, which is described by Longacre (1970) as a 'watered down Reason Margin', expresses attendant circumstances in relation to the Nucleus. It consists of a relator-axis sentence in which ngardawa *specific to that, because*, occurs preposed as relator. Circumstantial Margin may occur in prenuclear or postnuclear position.

As the Circumstantial Margin expresses a relationship similar to the Cause Margin (compare (c) below with section 3.6(f)), it is important to note that Cause Margin may be embedded in Circumstantial Margin, as in (b) and (d) below.

For a further example of Circumstantial Margin see section 3.8(a).

(a) Ngardawa ngu-wena nggula walkur, janguny n-dima barra ny-bamba.
because I spoke to you daughter story you will hold it fut *you go along*
Circumstantial Margin Att-Voc
Because I spoke to you, daughter, you will go along keeping the story.
(Simple Sentence)

(b) Nipa jama a-jirra a-workiya ngardawa ganjarr gu-rrimanga
he work he does he habitually specific to that calling he has it
Circumstantial Margin ----------

nipa nyanma Ngun-anya.
he cause my father [God]
(Cause Margin ----------)
He works all the time, because he has the calling, he our Father [God] as cause. (Simple Sentence)

(c) Mun-guna ma, ngardawa rrupiya mun-delipa.
this one get it related to that money little one
Circumstantial Margin ----------
Get this one, because it costs only a little money. (Simple Sentence)

(d) Nipa gun-molamola jama a-jirra a-workiya, ngardawa
he good one work he does he habitually specific to that
Circumstantial

Wangarr nipa nyanma.
God he cause
Margin ----------
(Cause Margin-------)
(Topic M)
He does good work all the time, as God, he is the cause. (Simple Sentence)

3.13 The REFERENCE MARGIN consists of a relator-axis sentence immediately following the Nucleus, and referring to all or part of the Nucleus as explicit. Reference Margin may also occur midnuclear in an Amplification Sentence, as in (o) below, and it may be embedded, as it is in a Comparison Margin in section 2.7 and in embedded Indirect Quote Sentence in 4.3.2.1(b). Reference Margin may also occur in a non-nuclear sentence, as in section 6(b).

The following words and close-knit phrases have been noted as Reference Margin relator, which is always preposed:

(a) {gun}-narda/{gu}rda *that one known to you*
(b) {gun}-nardiya *it's that one known to you*
(c) aburr-gurdiya *it's those known to you*
(d) {gun}-gata *that one in sight or known to you and me*

} ± wupa *inside*

(e) gun-gaya gata *it's that one there*
(f) gu-gurda *in that one known to you*
(g) gu-gata *in that one within sight*
(h) gu-gaya gata *it's in that one there*
(i) gu-guyinda *in one that does like*
(j) gu-guyinarda *in one that does like that*

} + ngacha *indeed*

The axis of the relator-axis sentence manifesting Reference Margin is implicit in the rest of the sentence and may be omitted, as it is in the Reference Margin of examples (k), (o), (p) and (q) below.

For examples of (a) above see section 3.11(c) and section 4.3.2.1(b). See section 4.3.2.1(b) also for an example of (i) above. For an example of (j) above see section 3.9(a). Other examples follow.

(k) Jiny-babapabajinga a-babapabajinga a-nirra, a-workaja
she is crazy *he is crazy* *he is* *it throws him about*

gu-nirra janguny, gun-nardiya.
it does story *that's it*
Reference M

She's crazy, he's crazy, the story is throwing them about, that's what it is. (Consequence Sentence: Amplification Sentence embedded in first Base)

(l) Minja ngayburrpa nyiburr-guna jama nyiburr-jirra nyiburr-workiya
isn't it so we all *we* excl *here work we* excl *do* *we* excl *habitually*

nyiburr-jirrapa rrapa nyiburr-jirrapa, minypa four gu-galiya yerrcha,
we excl *are* rep *and* *we* excl *are* rep *like four Aborigine* plural
Link Comparison Margin ----------

ganapiya, nyiburr-gurdiya wupa.
finished we excl *are those inside*
Finis Reference Margin -------

Isn't it so, we here who work all the time are two and two, like four people, finish, just us. (Coordinate Sentence: Simple Sentence embedded as subject of the first Base)

(m) Arr-werranga joborr marn.gi, Ngun-anya marr arr-balcha nula,
you and I others rule know my father soul you and I lifted up to him

gun-gata marn.gi janguny.
that one [we] know story
Reference Margin ---------|
We others know the rule, we believe in my father [God], that one we know the story. (Amplification Sentence)

(n) Gun-burral gun-borrmunga ay-ma barra arr-boy, gun-burral,
true one compatible one you and I get it fut *you and I go true one*

murna gun-gugopiya, rrawa gun-nika gun-borrmunga, gun-gaya gata
hand thing to keep camp belonging to it compatible one it is there
Reference M --

gun-burral gun-borrmunga.
true one compatible one that one
----------|
The truly compatible one you and I will get, the true one, the one for keeping, the country's compatible one, it's that one now the true compatible one. (Amplification Sentence)

(o) Gun-nerra bama gu-yalpurda a-workiya, gu-gurda ngacha,
bad head he burns it he all the time in one like that indeed
Reference Margin ------|

gun-nerra bama gu-yalpurda a-workiya.
bad head he burns it he all the time
Badness he rejects it all the time, that kind now, badness he rejects it all the time. (Amplification Sentence)

(p) Gun-gata janguny gun-burral Wangarr nyanma, rrawa nulawa, wurra nulawa,
that one story true one God cause camp for it man for him
(Cause Margin)

jarlakarr nulawa, gun-burral gun-borrmunga, gun-molamola, gun-burral, magaya,
road for it true one compatible one good one true one perfect

gala gun-nga gindirrkindirr gu-yu, gunnerra, gindirrkindirr - minypa
neg *what messy it is bad one messy like*
(Topic Margin) (Compar

gun-nerra, gun-gugarlachkorndiya, minypa gun-nerra janguny, gun-nerra
bad one chopped up like bad one story bad one

Margin ----------) (Comparison Margin ----------

gun-guworka, - gala gu-yu, gu-gata ngacha.
one that throws about neg it is in that one indeed
Reference Margin

----------)

That one is the true story from God, it's for the camp, for man, for the road, the truly compatible one, good one, true one, perfect, there is nothing messy, bad, messy - like bad one, chopped up, like bad story, bad one, one that throws people around - there isn't [anything messy], that one now. (Amplification Sentence: Descriptive Merged Sentence embedded in fifth Base; recursive embedding of Amplification Sentences in the ninth Base; the embedded Topic Margin and two Comparison Margins comprise a non-nuclear definition Sentence (section 6) manifesting Subject at that particular level of embedding)

(q) Gun-nerrawenga, gun-anngiya, gu-day gu-goma gun-gata,
one from another place whatchamacallit joking on side of body that one
Topic Margin ... Hesitation ... Topic M ----------
(Ref M)

wakal, gun-anngiya, jarrma, wakal gera gu-mayana gu-bona,
untruth whatchamacallit lie untruth side it got itself it went
--- ... Hesitation ... Top M

gu-gaya gata ngacha.
it's in that one there indeed
Reference Margin ----------

Another one, whatchamacallit, on the joking side, that one, untruth, whatchamacallit, lie: untruth has got itself off to the side, it's like that indeed. (Simple Sentence; the Topic Margin being interrupted by two Hesitation Tagmemes and having an embedded Reference Margin)

3.14 The SUBSEQUENT TIME MARGIN consists of a relator-axis sentence having the preposed relator nuwurra *afterwards*. Subsequent Time Margin occurs in post-nuclear position referring to an activity that succeeds the activity of the Nucleus.

Subsequent Time Margin may also occur in prenuclear position where it relates on the paragraph/discourse level to the preceding context and always has a Concurrent Time Margin embedded within it, which relates forward to the Nucleus of the sentence, as in example (c) below. In a similar way Subsequent Time Margin may be embedded in Concurrent Time Margin (see section 3.5, including example (c)).

In example (b) below the relator of the Subsequent Time Margin occurs alone, the axis being understood from preceding dialogue. For an example of the Subsequent Time Margin occurring as a sentence fragment in the typical farewell, see section 5(d); for an example of Subsequent Time Margin in a non-nuclear sentence, see section 6(c).

(a) Mun-jangarrk mu-rronga, nuwurra jurdach awurr-bena.
bushfire it burned afterwards last they arrived
Subsequent Time Margin
The bushfires burned, and afterwards lastly they arrived. (Simple Sentence)

(b) Burdak gun-guna ay-mungba barra, nuwurra.
yet this you and I finish it fut *afterwards*
Subsq Time M
Wait until we finish this, then [we will go]. (Simple Sentence)

(c) [A-bona.] Nuwurra waypa ana-jeka, balaja m-bay.
he went afterwards same time he return food he eat it
Subsequent Time Margin
(Concur Time Margin)
[He went.] Afterwards when he comes back he'll eat food. (Simple Sentence)

4. SENTENCE NUCLEI

The Nucleus of a sentence consists of one or more clauses which together with any embedded constructions are referred to as Bases. Simple Sentences contain one Base. Merged Sentences have limited lexical range; they contain two Bases which are bound together phonologically and have a shared component, that is, either the subject is the same for both Bases or the subject of one Base is the object, indirect object or benefactor of the other Base. Sentences characterised by conjoining have two or more Bases which are linked by a conjunction or merely by juxtaposition. Sentences characterised by quotation have two Bases which are in a quasi-embedded or quasi-merged relationship to each other.

4.1 Simple sentences

There are no constraints upon the occurrence of Peripheral Tagmemes in the Simple Sentence. As sections 2 and 3 contain numerous examples of Simple Sentences with Peripheral Tagmemes, only two examples are given below. Example (a) has been chosen to show the verb garlma *get up* occurring in other than the Inception Margin (section 3.2), and example (b) has been chosen to show the demonstrative-derived descriptive -gaya as Descriptive Predicate manifesting an independent sentence Base, in contrast to its occurrence in the Indeterminate Merged Sentence (section 4.2.3(k)) and Reference Margin (section 3.13(h) and (n)).

(a) Gipa mu-garlmuna.
already it got up
The [aeroplane] already took off. (Simple Sentence)

(b) Gu-ngarda yerrcha, yina awurr-gaya?
children plural interrog *they place is*
Topic Margin
The children, where are they? (Simple Sentence)

The Simple Sentence is basic; a description of two subsystems of sentences follow, that is (1) Merged Sentences and (2) Conjoining and Quotation Sentences.

4.2 Merged sentences

The distinguishing features of merged sentences have been mentioned in section 4 above. There are three merged sentence types. In the Complement Merged Sentence the first and second Bases are in a complement relationship. In the Descriptive Merged Sentence the first Base contains a Descriptive Predicate Phrase (Garner and Glasgow 1980) relative to the second Base. In the Indeterminate Merged Sentence the first Base asks a question, or, co-occurring with gala 'negative', states a non-ability, all relative to the second Base.

These three merged sentence types range from loose to tight as to the degree of lexical limitation in the first Base, the Complement Merged Sentence having the widest lexical range, and the Indeterminate Merged Sentence being the most lexically limited.

Table 2 displays for the three merged sentence types the inventory of words noted to date which may characterise the predicate of the first Base. These words are displayed in three series according to whether the subject in the second Base must be the same, or may be same or different, or must be different. No manifestation of the first Base of Descriptive Merged Sentence requires that the subject of the second Base be the same as the subject of the first. Yet, where the subject may be either the same or different, if the verb in the second Base is intransitive, the subject is always the same, and if the verb in the second Base is transitive, the subject is always different.

4.2.1 In COMPLEMENT MERGED SENTENCES the second Base complements the meaning of the first Base. The verb phrase in the first Base semantically refers to mental perception or attitude, and may be transitive or intransitive, transitive stative or intransitive stative.

The verbs noted to date in the first Base of the Complement Merged Sentence are listed in Table 2 (section 4.2), and shown in the examples below, except for marr balcha *believe* which is shown in example (c) of section 3.11, where the Complement Merged Sentence is embedded in the first Base of a Coordinate Sentence.

Note that the verb phrase for *know*, literally *knowing be* (see Table 2), is commonly abbreviated by the omission of the stative verb, as in example (h) below. Note also that it is only reflexive verbs (Glasgow 1984, section 13.1.1.4) in the first Base which require the same subject in the second Base as in (a), (b) and (c) below; their transitive counterparts require a different subject in the second Base, as in (l) and (m).

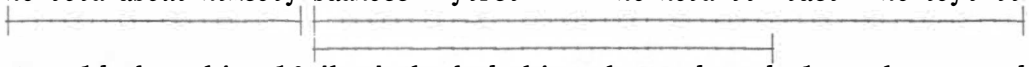
(a) Gu-ngardapa aburr-negiyana awu-bu barra.
acc-*alone* *they-made themselves* *they hit him* fut
They agreed they will hit/kill him. (Complement Merged Sentence)

(b) A-nayana an-jeja.
he saw himself *he was wounded*
He saw that he himself was wounded. (Complement Merged Sentence)

Table 2: Burarra merged sentences - words characterising the predicate of the first base

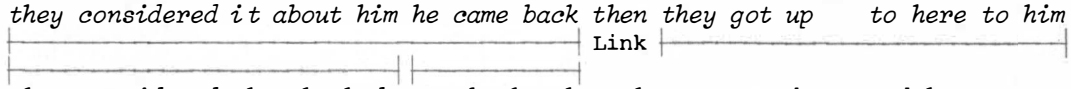
	Loose ——————>		——————> Tight
	Complement	Descriptive	Indeterminate
Same Subject	gu-ngardapa-negiya *make selves one, agree* naya *see self* ngurrjiya *tell about self*		-yinmiya/-yin *do how*
Same/Diff Subject	borrwa *consider* galiya *hear, feel* jal ni *want, need* marn.gi nega *teach* marn.gi + ni *know* marr balcha *trust* marrkapcha *be happy with someone* marrnguwa ni *be thankful, expect* yarlanga nega *explain*	nominative pronoun with realis suffix -ya, e.g. nipiya *it is he* or pronoun-derived descriptive, e.g. munnigipa *it's his* (same/diff subject predictable by intr/tr verb in 2nd Base)	ana-nga *who* -an.gaya *the one where, which one* yinda/a-yinda *where to* (lit. *do like/he do like*) -yinmiyapa *how many* yina gaya *where* yina {gun}-gaya *where {is it}* yina gaya wenga or gu-gaya wenga *where from*
Different Subject	na *see* ngurrja *tell about* barripa *find (doing)* ngiwja *beg (to)* wenggana *ask (to)*	e.g. gun-nyagara *being without something* mala nulawa *for the clan* wugupa *someone being together with* gun-mola *all right* gun-burral *true*	an-nga *whom, what* gun-nga nula *what for* -guyinmiya *by what means*

(c) A-ngurrjiyana gun-nerra mu-nguyurra gu-rrimarra barrwa gu-bawuna.
he told about himself badness first he held it last he left it



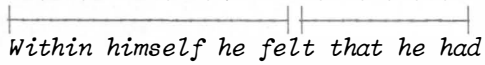
He told about himself [how] the bad things he used to do later he stopped.
(Complement Merged Sentence: Simple Sentence embedded in second Base as Object)

(d) Guwu-borrwurra nula ana-jekarra, lika awurr-garlmuna gurda nula.
they considered it about him he came back then they got up to here to him



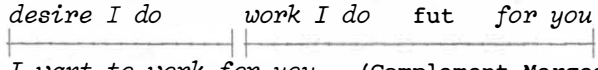
They considered that he had come back, then they got up [to come] here to him. (Extra Sequence Sentence: Complement Merged Sentence embedded in first Base)

(e) Wuparnana a-galiyana a-molamiyana
inside he heard he recovered



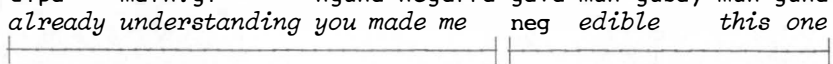
Within himself he felt that he had recovered. (Complement Merged Sentence)

(f) Jal ngu-nirra jama ngu-ji barra nggula.
desire I do work I do fut *for you*



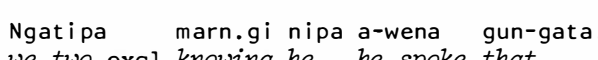
I want to work for you. (Complement Merged Sentence)

(g) Gipa marn.gi nguna-negarra gala mun-gubay mun-guna.
already understanding you made me neg *edible this one*



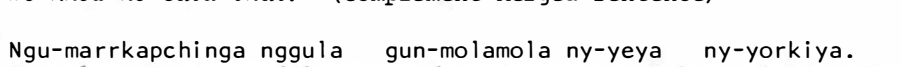
You already taught me that this one is not edible. (Complement Merged Sentence)

(h) Ngatipa marn.gi nipa a-wena gun-gata.
we two excl *knowing he he spoke that*



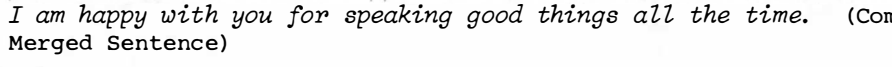
We know he said that. (Complement Merged Sentence)

(i) Ngu-marrkapchinga nggula gun-molamola ny-yeya ny-yorkiya.
I am happy with you good one you speak you habitually



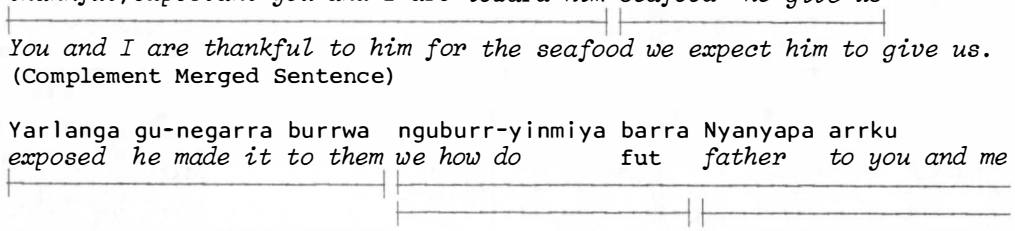
I am happy with you for speaking good things all the time. (Complement Merged Sentence)

(j) Marrnguwa arr-nirra nula jichicha arr-wu.
thankful/expectant you and I are toward him seafood he give us



You and I are thankful to him for the seafood we expect him to give us.
(Complement Merged Sentence)

(k) Yarlanga gu-negarra burrwa nguburr-yinmiya barra Nyanyapa arrku
exposed he made it to them we how do fut *father to you and me*



ana-murna nguburr-ni.
in his hand we be

He explained to them how we should live in God's care. (Complement Merged Sentence: Indeterminate Merged Sentence embedded in second Base)

(l) Ngu-nana gipa a-bena.
I saw him already he arrived

I saw that he already arrived. (Complement Merged Sentence)

(m) Abu-ngurrjunga nipa a-yinmiyana jama a-ji.
they told about him he he did how work he did

They told about how he worked. (Complement Merged Sentence: Indeterminate Merged Sentence embedded in second Base)

(n) Ngu-barripana gu-rrumurra a-ni
I found him he broke it he did

I found him breaking it. (Complement Merged Sentence)

(o) A-ngiwja apula balaja ngu-wu.
he begged me food I give him

He begged me to give him food. (Complement Merged Sentence)

(p) Ay-wenggana a-gunggaja arrkula.
you and I ask him he help for you and me

Let's ask him to help us. (Complement Merged Sentence)

4.2.2 DESCRIPTIVE MERGED SENTENCES having either same or different subject in the two Bases are characterised by a Descriptive Predicate (Garner and Glasgow 1980) in the first Base manifested either by a nominative pronoun with the realis suffix -ya, or by a pronoun-derived descriptive defining possession (see Glasgow 1984, section 10.1). For an example of a nominative pronoun with realis suffix manifesting the first Base, see 3.8(a) where the Descriptive Merged Sentence is embedded in the axis of the Circumstantial Margin as Subject.

Although the subject may be the same or different with these manifestations of the first Base, yet if the verb in the second Base is intransitive, the subject is always the same in both Bases; if the verb in the second Base is transitive, the subject of the first Base is always the object of the second Base.

In example (a) the Descriptive Merged Sentence is embedded in the second Base of an Amplification Sentence.

(a) Rrupiya m-barnjinga, mun-nigipa nipa jama a-ji.
money he put it down his he work he did

He put down money, his that he worked for. (Amplification Sentence: Descriptive Merged Sentence embedded in second Base)

(b) An-ngaypa nipa nguna-bokamurra.
mine he he begat me

He's my (real father) that begat me. (Descriptive Merged Sentence)

In Descriptive Merged Sentences where the manifestation of the first Base requires a different subject in the second Base, the first Base is in an adverbial relationship to the second Base, and is characterised by a Descriptive Predicate (Garner and Glasgow 1980) of various manifestations other than pronouns or pronoun-derived descriptives. Benefactor (ibid.), which is more correctly called 'oblique' (see Glasgow 1984, section 10.2, paragraph 3), co-occurs in the Descriptive Predicate Phrase, either explicitly as a dative pronoun, or implicitly and optionally supplied. For further examples see section 2.7, and also 3.11(c), which is a Descriptive Merged Sentence with a further Descriptive Merged Sentence embedded in it.

(c) Jambaku gun-nyagara nyirri-ninya.
tobacco nothing he and I sat

We lived without tobacco. (Descriptive Merged Sentence)

(d) Gun-burral janguny, gun-borrmunga, gun-guburrmanyba janguny,
true story compatible one calling by kin term story
Topic Margin -----

gun-guburrmanyba rrawa nulawa, gun-guburrmanyba jarlakarr,
calling by kin term camp for it calling by kin term road

gun-guburrmanyba mala nulawa arr-ninya, mala bokmok, delipa
calling by kin term clan for it you and I sit clan mixed child

wana, jin-bambaypambay.
big (adult) all the old women

The true story, the compatible one, the story about calling by kin terms, calling by kin terms is for the camp, calling by kin terms is the way, calling by kin terms is you and I living for the clan, the whole mixed clan, children and adults and all the old women. (Amplification Sentence: Amplification Sentence embedded in third Base: Descriptive Merged Sentence embedded in the Descriptive Predicate of the third Base)

(e) Nyanyapa arrku wugupa arrkula jama arr-ji
father to you and me together with you and me work you and I did

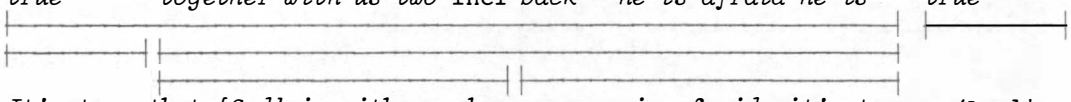
arr-workiyana.
you and I all the time

Our Father [God] was with us all the time as we worked. (Descriptive Merged Sentence)

(f) Gun-mola nggula ny-boy.
all right for you you go

It's all right for you to go. (Descriptive Merged Sentence)

(g) Gun-burral wugupa arrkula jonama a-gurkujurra a-nirra, gun-burral.
true together with us two incl *back he is afraid he is true*



It's true that [God] is with us when someone is afraid, it's true. (Amplification Sentence: Descriptive Merged Sentence as first Base; having a further Descriptive Merged Sentence embedded within it)

4.2.3 INDETERMINATE MERGED SENTENCES ask a question, or co-occurring with gala- 'negative', state a non-ability. They are characterised in the first Base by an indeterminate word or close-knit phrase (see Glasgow 1984, section 18). This first Base of the Indeterminate Merged Sentence, then, is what has earlier been described on the clause level as the Indeterminate Tagmeme (Garner and Glasgow 1980).

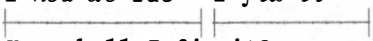
As seen in Table 2, -yinmiya *how do* requires the same subject in both Bases of the Indeterminate Merged Sentence. That is, the subjects are either identical, or the one subject is part of the other as in (c) below. Note that -yinmiya has a shortened form, -yin, which optionally co-occurs with barra 'future' as in example (a).

The alternate forms, yinda/a-yinda *where to*, literally *do like* and *he do like* respectively, appear to fluctuate freely when manifesting the first Base of an Indeterminate Merged Sentence. It will be noted in section 4.3 that yinda may also manifest the first Base of the Generic-Specific and Direct Quote Sentences. The distinguishing features between these and the occurrence of yinda in the Indeterminate Merged Sentence are given in the last two paragraphs of section 4.3.

In example (i) the Indeterminate Merged Sentence is embedded in a Simple Sentence manifesting the Indirect Object Tagmeme (Garner and Glasgow 1980), not to be confused with 'oblique', which in this example is nula *him* (see Glasgow 1984, section 10.2, paragraph 3).

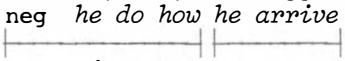
For an example of yina gun-gaya *where is it* manifesting first Base of the Indeterminate Merged Sentence, see section 4.3.2.1(b) where it is embedded in a complex Intra Sequence Sentence.

(a) Ngu-yin barra ngu-jarlapa?
I how do fut *I fix it*



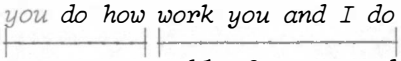
How shall I fix it? (Indeterminate Merged Sentence)

(b) Gala a-yinmiya a-bengga.
neg *he do how he arrive*



He can't get out. (Indeterminate Merged Sentence)

(c) Ny-yinmiya jama arr-ji?
you do how work you and I do



How are you able for you and I to work? (Indeterminate Merged Sentence)

(d) Gala ana-nga bijirrin-dimarrmangarna.
neg *who* *he held those two* fem *back* ctf
There was no one to hold them back [from fighting]. (Indeterminate Merged Sentence)

(e) Mun-an.gaya jal nyi-ni?
the one where desire you do
Which one do you want? (Indeterminate Merged Sentence)

(f) Yinda ny-boya?
do/say like you are going
Where are you going? (Indeterminate Merged Sentence)

(g) Gu-yinmiyapa barra nguburr-ni?
how many fut *we all stay*
How many [days] will we stay? (Indeterminate Merged Sentence)

(h) An-nga jal nyi-nirra?
what *desire you do*
What do you want? (Indeterminate Merged Sentence)

(i) Gun-nga nula gun-jaranga ana-jawarrga, Wangarr a-gunggaja nula.
what *for it many* *in his head* *God* *he will help him*
For whatever reason he has many things on his mind, God will help him.
(Simple Sentence: Indeterminate Merged Sentence embedded as Indirect Object)

(j) Gu-guyinmiya barra nguburr-boy?
by what means fut *we all go*
By what means will we go? (Indeterminate Merged Sentence)

(k) Yina gaya nyiburr-yurra nyiburr-workiya?
interrog *place is you all sleep you all habitually*
Where do you all sleep all the time? (Indeterminate Merged Sentence)

(l) Yina gaya wenga ny-bena?
interrog *place is from you arrived*
Where did you come from? (Indeterminate Merged Sentence)

(m) Gu-gaya wenga nyina-bona?
acc *place is from* *you came*
Where did you come from? (Indeterminate Merged Sentence)

4.3 CONJOINING AND QUOTATION SENTENCES fit together in a matrix as shown in Table 3. There are four series of conjoining and quotation sentences, which have been glossed as 'progression', 'correspondence', 'addition' and 'balance', pertaining to the relationship between the Bases of the various sentence types, in contrast to those of merged relationship, which have been described in section 4.2. At the conclusion of this paper the merged sentences and these four series of conjoining and quotation sentences will be shown as they are interrelated in a larger system of Burarra sentences (section 7 and Table 4).

There are three orders of conjoining and quotation sentences, depending on whether the Bases are joined by a Link, or are merely Juxtaposed, or whether, as in quotation sentences, the second Base is of a Quasi-Embedded or Quasi-Merged nature in relation to the first Base.

The three orders of conjoining and quotation sentences, like the three orders of merged sentences (see Table 2, section 4.2), range from loose to tight as to the degree of internal restrictions or cross referencing.

In Table 3 the various conjoining and quotation sentence types are named; there is one sentence type at each intersection of series and order; the distinguishing links are shown for linked sentences, and the words which characterise the first Base of quasi-embedded/merged sentences are shown also.

Table 3: Burarra conjoining and quotation sentences - links or words characterising the predicate of the first base

	Loose ——→		——→ Tight
	Linked	Juxtaposed	Quasi-Embedded/Merged
Progression	Extra Sequence lika *and then*	Intra Sequence	Generic-Specific yinda *do/say like* -yinagata *do/say like that*
Correspondence	Correlative rraka *and potentially*	Consequence	Direct Quote yinda *do/say like* -yinagata *do/say like that*
Addition	Coordinate rrapa *and also* wurra *but, or* aa *and uh* o *or uh*	Amplification	Indirect Quote wengga *speak* na *see*
Balance	Alternative waygaji *maybe*	Comparison-Contrast	Indirect Question wenggana *ask*

It will be noticed from Table 3 that the same words characterise the first Base of the Generic-Specific Sentence and the first Base of the Direct Quote Sentence, but these sentences are distinguished by their different function and distribution in the discourse and by the different expansion potential of the second Bases (see section 4.3.3.1 and 4.3.3.2). These sentences also differ in the juncture between the first and second Bases, the Direct Quote Sentence having a pause between the first and second Bases, the Generic-Specific Sentence having no pause.

Comparing Table 3 with Table 2, section 4.2, it may also be seen that yinda, which may manifest the first Base of both the Generic-Specific and the Direct Quote Sentences, may also manifest the first Base of the Indeterminate Merged Sentence, but the latter is distinguished by its idiomatic function and the absence of pronominal prefixation with yinda, except for the optional 3rd person singular masculine prefix a- freely fluctuating with its absence.

4.3.1 Linked sentences

4.3.1.1 In the linked EXTRA SEQUENCE SENTENCE there are two or three Bases linked by the conjunction lika *and then*. In contrast to the juxtaposed Intra Sequence Sentence (section 4.3.2.1), each Base of the Extra Sequence Sentence is a separate activity unit having its own goal. Note that the occurrence of the stem garlma *get up* in examples (a) and (b) does not express the beginning point for the action of the Nucleus, as it does in the Inception Margin (section 3.2).

(a) M-barra jinyu-ni lika awurriny-garlmuna gurda.
she ate it she did then they two fem *got up to here*
Link
She was there eating, and then they [dog and woman] got up to come back.
(Extra Sequence Sentence)

(b) Awurriny-garlmuna gurda, lika rrawa awurriny-bena, lika
they two fem *got up to here then camp they two* fem *arrived then*
Link Link

awurrinyu-ninya.
they two fem *sat*

They two got up to come here, then they arrived at the camp, then they stayed. (Extra Sequence Sentence)

(c) Guburri-yartkujamurra awurri-ni, gu-bungguna, lika
they two it through (tree) they two did it fell down then
Link

guburri-gorndanga awurri-ni, ganapiya.
they two chopped it up they two did finished
Finis
They two kept chopping [the tree until] it fell down, then they chopped it up [until they] finished. (Extra Sequence Sentence: Consequence Sentence embedded in first Base)

4.3.1.2 The CORRELATIVE SENTENCE consists of two Bases having a reciprocal relationship and being linked by the conjunction rraka *and so potentially*. The second Base of the Correlative Sentence obligatorily occurs in the subjunctive mood.

For an example of a Correlative Sentence embedded in an embedded Direct Quote Sentence see section 4.3.3.1(d).

(a) Japalana gala nyina-ganjarna rraka
container neg *you didn't bring it and so potentially*
Link

ngu-jerrjerrjingarna
I could have begun to pour it (water) in

You didn't bring a container, so I could have begun to pour [the water] in.
(Correlative Sentence)

(b) Lika Alfie an-garla an-nerra a-ni a-bamuna, ngardawa
then Alfie his flesh he poorly he was he went along because
Disc Conj Circumst M

garragarra an-nyagara rraka a-walagiyarna.
crest feathers he nothing and so potentially he could have danced
Link

Then Alfie was going along sad, because he had no crest feathers so he could have danced. (Simple Sentence: Correlative Sentence embedded in Circumstantial Margin)

4.3.1.3 The linked COORDINATE SENTENCE consists of two or more Bases linked by rrapa *and also*, wurra *but, or*, aa *and uh* or o *or uh*. For additional examples of the Coordinate Sentence see sections 3.8(b) and 3.11(e), also 3.11(c), where a Coordinate Sentence is embedded in the Reference Margin.

(a) Gunggaja atila gun-nardiya rrawa rrapa wurra gama gorlk
help us two excl *that's it camp and man woman belongings*
Link

njirri-wu.
you give to us two excl

Help us in this world and give us people. (Coordinate Sentence)

(b) Wangarr gu-barnjinga gun-molamola murna arr-wuna, wurra
God he put it good one hand he gave to you and me but
Topic Margin ------ Link

ngarripa jurdach arr-guyinda gu-workaja a-nirra
you and I last you and I like that he throws it around he does

gu-workaja jinyu-nirra.
she throws it around she does

The one that God put down is a good one [that] he handed down to us, but we in this last generation are throwing it around. (Coordinate Sentence: Amplification Sentence embedded in second Base)

4.3.1.4 The ALTERNATIVE SENTENCE consists of two Bases expressing two alternative possibilities. The second Base obligatorily contains the mood word (Glasgow 1984, section 17) waygaji *maybe* which functions as a Link between the two alternatives. The first Base optionally, but usually, also contains waygaji. The

second Base of the Alternative Sentence may be manifested by a clause fragment, as in example (b) below. The Bases of the embedded Alternative Sentence in (d) below are potentially expandable to *maybe you want tea, maybe you want coffee*, and could be considered to be clause fragments also. However, as they stand they are adequately described as embedded Simple Sentences with Descriptive Predicate Phrases manifesting their Nuclei, *maybe it's tea, maybe it's coffee.*

(a) Motor car waygaji nyirri-boy barra, waygaji aeroplane nyirri-boy
Motor car maybe we two excl *go* fut *maybe aeroplane we two* excl *go*

barra.
fut

Maybe we will go by car, maybe we will go by aeroplane. (Alternative Sentence)

(b) Waygaji nyiwurr-garlma barra motor car waygaji aeroplane.
maybe we all excl *get up* fut *motor car maybe aeroplane*

Maybe we will start out by car, maybe by aeroplane. (Alternative Sentence)

(c) Ngu-boy barra, waygaji ngu-ni barra.
I go fut *maybe I stay* fut

Maybe I'll go, maybe I'll stay. (Alternative Sentence)

(d) Gun-nga jal nyi-ni, waygaji di, waygaji gopi?
what desire you do maybe tea maybe coffee

What do you want, tea or coffee? (Amplification Sentence: Indeterminate Merged Sentence embedded in first Base; Alternative Merged Sentence embedded in second Base)

4.3.2 Juxtaposed sentences

4.3.2.1 The juxtaposed INTRA SEQUENCE SENTENCE consists of a series of juxtaposed Bases expressing a unit of activity having one goal. This is in contrast to the Extra Sequence Sentence (see section 4.3.1.1).

The subject is the same or partially the same for all the Bases of the Intra Sequence Sentence. In example (a) below a woman and her dog are the subject of the Inception Margin (section 3.2), while the dog is the subject of the first Base, and the woman is the subject of the second Base, which is also an embedded Amplification Sentence (section 4.3.2.3).

Example (b) is a very complex Intra Sequence Sentence, and is included here for interest sake. Being one of the most difficult sentences to analyse, it was also a gauge against which to measure the progress of analysis. In the first Base an idiomatic reversal of the verb phrase *hand down* which means *the thing handed down* constitutes a Simple Sentence embedded in the clause level Object Tagmeme (Garner and Glasgow 1980). The second Base of this Intra Sequence Sentence is manifested by an embedded Consequence Sentence, which requires a different Subject in its two Bases (see section 4.3.2.2), in spite of the fact

that the Intra Sequence Sentence in which it is embedded requires the same subject in its Bases, but the second Base of the embedded Consequence Sentence meets this requirement and continues the sequence. This second Base of the Consequence Sentence is an embedded Amplification Sentence; the second Base of the Amplification Sentence is an embedded Indirect Quote Sentence; the second Base of the Indirect Quote Sentence is an embedded Amplification Sentence with its own Reference Margin. Embedded in the first Base of the embedded Amplification Sentence is an Indeterminate Merged Sentence; the second Base of the embedded Amplification Sentence has its own Cause Margin; the axis of the embedded Reference Margin is an embedded Amplification Sentence with its own Purpose Margin; the axis of the Purpose Margin is an embedded Amplification Sentence. A second Reference Margin belongs to the original Intra Sequence Sentence.

Further examples of the Intra Sequence Sentence are in sections 2.3(d), 2.4(c) and 3.2(b) where it is embedded in the second Base of a Consequence Sentence.

(a) Rrapa awirriny-jarlmuna, a-numurra, a-jolarchinga,
and they two fem *got up he smelled him [goanna] she bagged him*
Disc Conj Incept Margin

a-buna a-jolarchinga.
she hit him she bagged him

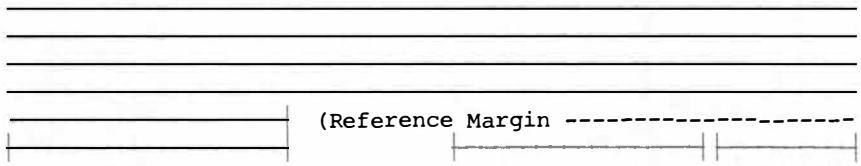
And they [woman and dog] got up, [the dog] smelled [a goanna], [and] she bagged it, she hit it and bagged it. (Intra Sequence Sentence: Amplification Sentence embedded in second Base: Intra Sequence Sentence embedded in second Base of Amplification Sentence)

(b) An-gapa gomkaka gu-barnjinga a-wuna murna, gojilapa
that one far middle-aged he put it he gave to him hand middle

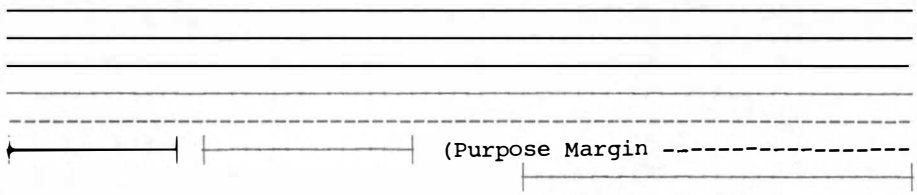
gun-nerra gu-ninya, galginy a-derchinga, gu-nana joborr,
bad it was eye he stopped he saw it law

yina gun-ŋaya gun-molamola Wangarr gu-barnjinga, Wangarr nyanma
interrog *place is good one God he put it God from*

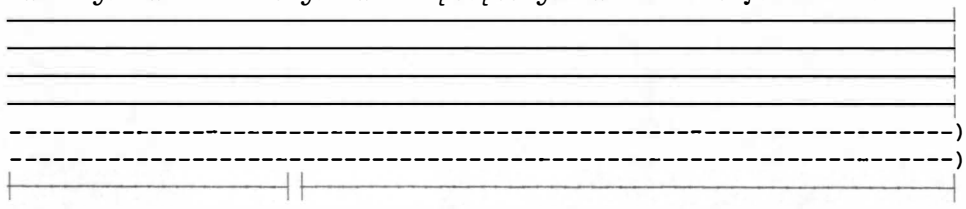
janguny gun-molamola, gurda arrkulawa, nulawa,
story good one that one [is] for you and me for him/it



rrawa nulawa, nulawa Wangarr, barra arr-molamola arr-ninya,
camp for it for him God fut *you and I good you and I sit*



wurra arr-burral, arr-gugaliya arr-burral nulawa Wangarr,
man you and I true you and I people you and I true for him God



gu-guyinda ngacha gu-barnjinga a-bona gipa an-guyinda.
in one that does like indeed he put it he went already one that does like
Reference Margin ----------
That middle-aged man put down the moral code that was handed down to him, [but when] half way along it was bad, he studied it, he saw the law, where was the good one that God put down, the one from God, the good story, that's the one for you and me, that's the one for it, for the camp, for God, so you and I will be good, true men, true people for God; that's the kind now that the ancestor put down. (Intra Sequence Sentence: see second paragraph of this section for description of complex embedding)

4.3.2.2 The juxtaposed CONSEQUENCE SENTENCE consists of two Bases in which the action of the one is consequent upon the action of the other, and in which the Subject of one Base is the Object, Benefactor or Indirect Object (Garner and Glasgow 1980) of the other. For further examples of the Consequence Sentence see the one embedded at the beginning of the second Base of the complex Intra Sequence Sentence in section 4.3.2.1(b), and one embedded in the first Base of 4.3.1.1(c), and also see section 3.2(b).

(a) A-buna, a-juwuna.
he hit him he died
He hit him, [and] he died. (Consequence Sentence)

4.3.2.3 The juxtaposed AMPLIFICATION SENTENCE consists of two or more juxtaposed Bases, in which the first Base is amplified in one of the following ways by each succeeding Base: reiteration of the whole or part of the first Base for emphasis, or to show duration as in section 2.1(a); paraphrase; repeating with an additional clause level tagmeme; repeating, expanding one of the clause level tagmemes as in example (a) below; repeating, omitting one of the clause level tagmemes and adding another; repeating with a change of pronominal prefix to show extent of activity as in the Amplification Sentences embedded in 3.13(k), 4.3.1.3(b) and 4.3.2.4(d).

For other examples of Amplification Sentence see sections 3.13(m),(n) and (p); 4.2.2(g); 4.3.1.4(d); 4.3.3.1(c).

(a) Bulawa gun-gunega gun-nerra, bulawa gun-gunega - guburda
many thing for making be bad *many thing for making be road*

(Topic Margin)

gun-jaranga gu-ninya, bambulabulawa arr-nega a-ni - gun-nerra
many it sits mixed up thought he makes us he do bad

arrkula.
for you and me

Confusing things are bad, confusing things - there are many roads, someone confuses us - that's bad for us. (Amplification Sentence: Amplification Sentence with its own Topic Margin embedded as Subject of the second Base)

(b) An-gata gu-rrimanga, an-molamola wurra an-burral, galngu
the one there he has it good man true like

(Comparison

an-borrmunga, an-burral an-borrmunga, an-gata gu-rrimanga,
compatible one true compatible one that one there he has it

Margin ----------)

janguny Wangarr gun-nika gu-rrimanga.
story God belonging to him he has it

That man has it, he's a good real man, like a countryman, a real countryman, that man has it, he has God's story. (Amplification Sentence: Amplification Sentences embedded in both Bases; a Descriptive Merged Sentence with its own Comparison Margin is embedded in the Amplification Sentence embedded in the first Base of the original sentence)

4.3.2.4 The COMPARISON-CONTRAST SENTENCE consists of one Base or two parallel Bases contrasting with the final Base in the sense of *this and this, but that.* The conjunctions rrapa *and* and wurra *but* are acceptable in a discussion of the

relationship of the Bases, but they do not naturally occur in the Comparison-Contrast Sentence. The parallel Bases are similar in structure and have identical intonation and semi-final pause, the rhythm of this repetition being broken in the last Base.

(a) Mari gun-nika janguny wana, jama gun-nika janguny wana; gun-borrmunga
trouble its story big work its story big compatible one

jipula gu-ni.
little bit it is

The story belonging to trouble is big, the story belonging to work is big; the compatible one is little. (Comparison-Contrast Sentence)

(b) An-nerrawenga: an-nerrawenga gun-nyagara; an-nerrawenga gun-burral
another another nothing another true
Topic Margin

(Topic Margin)

ngaypa marmanja yerrcha nyibi-nacha, nyiburr-worjinga
I grandfather-grandson plural *we* excl *see him we* excl *worry*

nulawa rrawa an-nika.
for him country he belonging to it

The foreigner: one foreigner no; but another foreigner, it's true when we grandfathers and grandsons see him, we worry for the leader of the tribal country. (Comparison-Contrast Sentence: Descriptive Merged Sentence with its own Topic Margin embedded in the final Base: Consequence Sentence embedded in the second Base of the embedded Descriptive Merged Sentence)

(c) Gun-guna, gala barra gun-nerra n-dima ny-boy, gun-nerra janguny
this neg fut *bad you hold it you go bad story*
Topic M

gala barra ny-yengga ny-boy; gun-nerra arrkula.
neg fut *you speak you go bad for you and me*

This one, don't go along holding badness, don't go along speaking a bad story; that is bad for us. (Comparison-Contrast Sentence)

(d) Wuley gun-gunega gun-nerra arrkulawa, o
taken away from a thing for making be bad for you and me or uh

Link

borijipa a-ni a-bu gun-nerra arrkulawa, borijipa mu-ma
aimlessly he be he hit him bad for you and me aimlessly he get it

gun-nerra arrkula; a-wenggana jiny-yenggana, nuwurra
bad for you and me he could ask him he could ask her afterwards

(Subsequent

jiny-junggaja nula, Wangarr a-gunggaja nula.
she could help him God he could help him

Time Margin ----------)

[The practice of] taking things away [from people] is bad for us, or hitting someone who is not doing anything [wrong] is bad for us, helping yourself [to other people's things] is bad for us; a person should ask [and] after that she could help him [and] God could help him. (Comparison-Contrast Sentence: Coordinate Sentence embedded in first Base; Amplification Sentence with its own Subsequent Time Margin embedded in the third Base; Amplification Sentence embedded in the embedded Subsequent Time Margin)

4.3.3 Quasi-embedded/merged sentences

4.3.3.1 The GENERIC-SPECIFIC SENTENCE consists of two Bases. The first Base is generic, having one of the indeterminates, yinda *do/say like* or -yinagata *do/say like that*, as Head of the Intransitive Predicate Phrase, while the second Base makes specific the action of the first Base. Example (a) frequently serves as a quotation closure on the paragraph/discourse level. (Quotations may also be closed by a Simple Sentence in which -yinagata manifests the Head of the Intransitive Predicate Phrase.)

For the distinguishing features between the Generic-Specific, the Direct Quote, and the Indeterminate Merged Sentences, which may all have yinda in the first Base, see the last two paragraphs of section 4.3.

In example (c) below the Generic-Specific Sentence is embedded in the second Base of an Amplification Sentence. In example (d) the Generic-Specific Sentence is embedded in an embedded Correlative Sentence.

(a) A-yinagata a-wena.
he do/say like that he spoke

He spoke like that. (Generic-Specific Sentence)

(b) A-yinagata a-workiya a-wucha.
he do/say like that he habitually he gives to him

He gives to him like that all the time. (Generic-Specific Sentence)

(c) A-yinagata a-workiya, nipa mu-dayan walang a-yinagata
he do/say like that he habitually he law leader he do/say like that

a-workiya an-baparru a-borrwuchiya Wangarr gu-barnjinga
he habitually his clan he considers himself God he put it

arrkula.
for you and me

He does like that all the time, he the leader of the law considers his clan like that all the time [with the law] God put down for you and me. (Amplification Sentence: Generic-Specific Sentence embedded in second Base)

(d) Nipa gala ana-boyarna, rrapa birrinjipa abirriny-yinanga,
he neg *he could have come and they two* fem *they two* fem *said*
Link

"Ya, yama marrka ay-jarlapa rraka a-yinda a-bengga?"
is it can try you and I make it and so potentially he do like he arrive
Tag Q (Link)

He hadn't come, and they two women said, "Eh? Could we try to make [things ready] so he could do it he could come?" (Coordinate Sentence: Direct Quote Sentence embedded in second Base; Correlative Sentence embedded in second Base of Direct Quote Sentence; Generic-Specific Sentence embedded in second Base of Correlative Sentence)

4.3.3.2 The DIRECT QUOTE SENTENCE consists of two Bases, the first Base having yinda *do/say like* or -yinagata *do/say like that* as the Head of the Intransitive Predicate Phrase (Garner and Glasgow) introducing the quote, and the second Base being the first sentence of the quotation.

In example (a) below a-yinaga *he said* is the third person singular punctiliar form of yinda (see Glasgow 1984, section 13.6). In the Generic-Specific Sentence yinda is obligatorily prefixed to show person and number, which distinguishes the Generic-Specific Sentence from the Indeterminate Merged Sentence (see the last paragraph of section 4.3).

-yinagata intrinsically refers back to something known, and hence, in the Direct Quote Sentence it seems to indicate that the same speaker has been previously quoted in the discourse. For more on the use of -yinagata see the first paragraph of the preceding section, 4.3.3.1.

(a) A-yinaga, "Burdak wu, ay-wu, arr-gunggaja nula."
he said yet give to him you and I give to him you and I help him

He said, "Wait, give to him, let's give to him, let's help him." (Direct Quote Sentence: Amplification Sentence embedded in second Base)

(b) A-yinagata, "Ngaw, burraya rrengarrenga arr-boy."
he do/say like that yes soon daylight you and I go

He further said, "Yes, soon, at midday, you and I will go." (Direct Quote Sentence)

4.3.3.3 The INDIRECT QUOTE SENTENCE consists of two Bases. The Head of the predicate phrase in the first Base is manifested by wengga *speak* or na *see*, and introduces the indirect quote, which comprises the second Base. For an example of na *see* introducing an indirect quote, see section 4.3.2.1(b), in which an Indirect Quote Sentence is successively embedded in an Amplification Sentence, which is embedded in a Consequence Sentence, which is embedded in an Intra Sequence Sentence.

(a) Nipa a-wena gala barra nguburr-boy.
he he spoke neg fut *we all go*
He said we must not go. (Indirect Quote Sentence)

4.3.3.4 The INDIRECT QUESTION reports a question indirectly. It consists of two Bases, the first Base having the verb wenggana as the Head of the Transitive Predicate Phrase (Garner and Glasgow 1980), and the second Base being manifested by a relator-axis sentence such as manifests the Condition Margin (section 3.7), in which minja *isn't it* is the relator. The second Base of the Indirect Quote Sentence is distinguished from the Condition Margin, however, in that it does not express a prerequisite or predisposing relationship and it may not occur sentence initial.

(a) Nguna-wengganana minja jama ngu-jirra ngu-workiya.
he asked me isn't it so work I do I habitually
He asked me if I work all the time. (Indirect Question Sentence)

5. SENTENCE FRAGMENTS

Some reference has been made in previous sections to the occurrence of sentence fragments. Outer Peripheral Tagmemes which frequently occur as sentence fragments are Exclamation-Response (section 2.2) and Finis (section 2.1). The ordering and co-occurrence restrictions for Outer Peripheral Tagmemes occurring in sentence fragments and non-nuclear sentences are the same as for Outer Peripheral Tagmemes occurring sentence initial in nuclear sentences (see section 1, Table 1).

Inner Peripheral Tagmemes may also occur as sentence fragments. The Subsequent Time Margin frequently occurs as a sentence fragment in the typical farewell, example (d) below. The relator of the Purpose Margin relator-axis sentence (section 3.11), barra 'future', may occur alone as a sentence fragment in the sense of *For what purpose?*, and the full Purpose Margin co-occurring with gala 'negative' frequently occurs as a sentence fragment in the sense of *must not*, as in example (c). Note that the negative Purpose Margin contrasts with the negative imperative, which says *stop doing* or *do it not* (Garner and Glasgow 1980). Two of the relators for the Concession Margin relator-axis sentence, marrban and wuriya, both meaning *it doesn't matter*, may occur as sentence fragments (see section 3.9(c) for an example). Comparison, Supposition and Circumstantial Margins are other Inner Peripheral Tagmemes which have been noted as sentence fragments.

(a) Ganapiya awa!
finish yes indeed
Finis Exclam-Response
It's finished, yes indeed! (Sentence Fragment)

(b) Ganapiya ya, An-jarral?
finished is it old man
Finis Tag Q Att-Voc
It's finished, is it, Old Man? (Sentence Fragment)

(c) Gala barra ny-bay
neg fut *you eat it*
Purpose Margin
You mustn't eat it. (Sentence Fragment)

(d) Nuwurra ngulam.
afterwards morning
Subsequent Time Margin
Afterwards [it will be] morning. See you tomorrow. (Sentence Fragment)

6. NON-NUCLEAR SENTENCES

Certain Peripheral Tagmemes may combine with certain other Peripheral Tagmemes in non-nuclear sentences of conjoined structure. Topic Margin preposed to one or two Comparison Margins, as in example (a), constitutes a Definition Sentence; see section 3.13(p) for an embedded Definition Sentence having two Comparison Margins. Reference Margin conjoined in fixed order with Finis, followed by Exclamation-Response, as in example (b), constitutes a Prayer Closure Formula. Condition Margin preposed to Subsequent Time Margin, as in example (c), constitutes a Condition Sentence which contrasts with nuclear sentences having a Condition Margin (compare (c) below with the Simple Sentences, section 3.7(a) and (b)). Topic Margin preposed to a Supposition Margin constitutes a Supposition Sentence, as seen in section 3.10(b). Supposition Margin preposed to a Concession Margin constitutes a Supposition-Reality Sentence, as seen in section 3.9(g).

(a) Bapapa: minypa ngun-anya jiny-juyma.
auntie like my father he has her as sibling.
Topic M Comparison Margin ----------|
Auntie: that's like my father has her as sibling. (Definition Sentence)

(b) Gun-nardiya rrapa ganapiya, amen.
that's it and it's finished amen (loanword)
Ref Margin Link Finis Exclam-Response
That's it and it's finished, amen. (Prayer Closure Formula)

(c) Minja motor car a-jarlapa, nuwurra nguwurr-boy.
isn't it so motor car he fix it afterwards we go
Condition Margin ----------| Subsequent Time Margin
If he fixes the car, afterwards we could go. (Condition Sentence)

7. CONCLUSION

In the description of Burarra sentences, aside from Simple Sentences and a few non-nuclear sentences, which are extrasystemic, we have seen two systems of sentences - merged sentences and those characterised by conjoining or quotation. As Longacre (1970) suggests, these two systems may possibly be part of a larger system. This is true in Burarra, as the three merged sentence types parallel the three orders of conjoining and quotation sentences in their inter-Base relationship. Tables 2 and 3 have been condensed to show the larger system of Burarra sentences in Table 4.

Table 4: Interrelations of Burarra sentence types - merged plus conjoining and quotation

		Loose ⟶		⟶ Tight
Merged:		Complement	Descriptive	Indeterminate
Conjoining and Quotation	Progression:	Extra Sequence	Intra Sequence	Generic-Specific
	Correspondence:	Correlative	Consequence	Direct Quote
	Addition:	Coordinate	Amplification	Indirect Quote
	Balance:	Alternative	Comparison-Contrast	Indirect Question

As well as the interrelations of Burarra sentence types, there are practical applications which emerge from this study, one of the most valuable being the discovery of a battery of signals which may be employed in translation to facilitate the absorption of material heavy in new content. These useful signals include the Outer Peripheral Tagmemes of Finis, Exclamation-Response, Discourse Conjunction, Attention-Vocative, and Hesitation, and the Inner Peripheral Tagmemes of the Topic, Inception, Setting, Prior Time, and Reference Margins, as well as the use of -yinagata *do/say like that* in a Simple or Generic-Specific Sentence to close a quote or to summarise.

This study also affords a means of determining sentence juncture and understanding its logical relations.

A reasonably comprehensive punctuation policy for Burarra is also possible now that the sentence structure and the relationship between sentence Bases in the various sentence Nuclei have been described. This punctuation is indicated in Table 1 and has been used in the language examples throughout the paper. In addition, parenthetical material has been observed on the paragraph/discourse level as having a sudden drop in pitch; parentheses may be used to separate such material from the main stream of the discourse. And where the speaker digresses mid-sentence, for example, to give a definition, with no drop in pitch, dash has been used to set off the material, as in sections 3.13(p) and 4.3.2.3(a).

Finally, it is hoped that this presentation of the structure and system of Burarra sentences will effect in the reader, as it has done for the author, an appreciation of the Burarra language for its intricacies, its adequacy, and its symmetry.

Ganapiya - *Finis*

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CASE RELATIONSHIPS IN NYANGUMARTA

Helen Geytenbeek

ABBREVIATIONS

A	agent (transitive subject)	INST	instrumental case
ABL	ablative case	IRR	irrealis
ABS	absolutive case	LOC	locative case
ACC	accusative case	NOM	nominative case
ALL	allative case	NOMLSR	nominaliser
AVERS	aversive case	NF	non-future tense
COM	comitative	NP	noun phrase
CONJ	conjunction	O	transitive object
DAT	dative case	PAST	past tense
DU ∿ du	dual	PL ∿ pl	plural
EMPH	emphatic	POT	potential
ERG	ergative case	PRES	present tense
excl	exclusive	REMP	remote past
FUT	future tense	REP	repetitive aspect
GEN	genitive case	S	intransitive subject
HORT	hortatory mood	sg	singular
IMP	imperative mood	STAT	stative
incl	inclusive	UNM	unmarked
INCHO	inchoative	VB	verbaliser

0. INTRODUCTION

The Nyangumarta language is spoken by 700 or more people along the north-west coast of Australia, between Port Hedland and Broome and inland around Marble Bar. The majority of the Nyangumarta claim to speak the southern (or inland) dialect, while the rest speak the coastal dialect. (These dialects were called Ngurlibardu and Wanyarli respectively by O'Grady, but I have not found Wanyarli acknowledged as a language name.) Many of the coastal Nyangumarta now live at La Grange, but most of the inland Nyangumarta live at Strelley Station and its outcamps, at Yandeyarra Station, or in Port Hedland.

In Nyangumarta[1] (as in many other Pama-Nyungan languages) syntactic relationships are signalled by case-marking on noun phrases with cross-referencing by bound pronominal suffixes on the verbs.

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There is not a one-to-one correlation between the forms of the case-marking suffixes and their functions. There are more functions than there are suffixes to signal those functions. In this paper I propose to examine the morphology and also the semantics of the case-marking system.

I shall also be looking at the relationship between the case-marking on noun phrases and the bound pronoun system, and how the two systems interrelate to display syntactic relationships.

Most of the illustrations in this paper have been taken from natural text, either written or oral. There are, however, some elicited examples.

1. SYNTACTIC RELATIONSHIPS

Certain relationships in a proposition must be made explicit if that proposition is to be understood. The relationship between an actor and his action is one such. In a transitive construction the object must always be made explicit. Other relationships which are not necessary for the utterance to be understood may be made explicit to give additional information.

Dixon (1980:294-298) suggests that it is useful to divide case functions into core and peripheral functions. Core functions are those which must be included if a sentence is to make complete sense. The ones he lists are intransitive subject (S), transitive subject (A), and object (O).

There are others who would also include as core functions some which are DAT-marked. Later I shall discuss Nyangumarta verbs which need DAT-marked complements and a few which have LOC-marked complements. In the light of these I conclude that in Nyangumarta there are also some core functions which are marked by DAT and some by LOC.

1.1 Core functions

When we examine the literature on core functions of case in Australian languages we find considerable diversity in terminology and description. This is particularly so in the description of the functions of S, A, and O.

In languages whose case systems are similar to that of Nyangumarta there is one type of case-marking on NPs and another displayed by the bound pronoun system. NPs show ERG marking for A, while S and O share a different marking. (This binary distinction is made for common nouns, kinship nouns, personal names, demonstratives, and personal pronouns. Nyangumarta is unusual in not having a distinct ACC form on free pronouns.[2]) In contrast to nominals, the bound pronoun system shows identical marking for the A and S functions and ACC marking for O.

While analysts have clearly recognised that the functions of S and O are quite distinct, when they have been identically marked the tendency has been to describe this form as one case. This has been variously labelled NOM by Blake (1977) and ABS by Dixon (1980).

Goddard (1982:167), writing later than Blake and Dixon, disagrees with this way of handling the data and argues "that most Australian languages have three core categories - ergative, accusative and nominative - and that the common belief that a typical Australian language has two case systems co-existing within it is mistaken."

Goddard first examines data from languages which have tripartite marking on at least one subclass of nominals and concludes that these languages really have three separate cases (with a fair degree of homonymity) operating throughout the nominals. He then examines some of the languages which do not have tripartite marking and shows how he would analyse many of them as having three core cases.

I find Goddard's reasoning convincing. He has not developed his analysis to show how it would apply to the small group of languages (including Warlpiri, Walmajarri and Nyangumarta) which have only two forms on nominals to distinguish S, A, and O functions but a distinct ACC form in the bound pronoun system. But I believe that his analysis can be developed to fit this group of languages.[3]

In applying Goddard's analysis to Nyangumarta I am saying that although the S and O functions are identically marked on nominals, yet NPs which are functioning as S really have NOM marking, and those which are functioning as O really have ACC marking. Corroboration for this claim comes from the fact that a NP which is functioning as O is cross-referenced by an ACC bound pronoun. See examples (2) and (3).

Similarly, although the bound pronoun system uses identical forms for the A and S functions they are ERG when functioning as A, and NOM when functioning as S. The fact that one form of the bound pronoun can be cross-referenced to an ERG or NOM NP is further corroboration for this claim. See (1) and (2).

Before giving examples of how the system works it will be helpful to list the bound pronouns.

1.2 Bound pronominal forms

There are three sets of bound pronominal suffixes - ERG/NOM, ACC and DAT/LOC - and these are a part of the verb morphology. They are displayed in Table 1.

The forms given in Table 1 represent the most common forms. The bound pronouns, like the tense markers, are often influenced by a tendency towards vowel harmony. The northern dialect of Nyangumarta once had a complex system of vowel harmony (O'Grady 1964:39-41). It appears that in the southern dialect vowel assimilation was less general than in the northern, and even in the northern dialect it is not used as consistently today as it once was (Fr McKelson in a personal communication).

These suffixes are really person-markers and are usually only cross-referenced to animate nouns, i.e. persons and animals. I have given them case labels to show how they tie in with the case-marking system. Some writers have used labels which show the grammatical functions of the suffixes, e.g. subject or object. But the Nyangumarta system is a complex one, especially when it comes to the function of DAT. It seems that giving case-labels to the person-markers is the simplest solution.

The normal order of occurrence for these suffixes is ERG followed by ACC, with DAT/LOC in third place. However, first person singular ranks higher than second or third person. The result of this ranking is that first person singular accusative -nyi or the dative/locative form -ji precedes any second or third person ergative/nominative form. Also, second person singular ranks higher than third person dual, so that a second person singular accusative -nta or dative/locative -nga precedes third person dual ergative/nominative -pulu.

When the dual and plural accusative and dative forms are compared it is obvious that they consist of a person marker plus -nyi 'accusative' or -ka 'dative/locative'. Without the accusative or dative suffixes these person markers are either identical to or very close in form to the corresponding free pronouns. However, for greater ease with glosses I have chosen not to break off the accusative and dative markers. That is because in some persons the nominative/ergative form is not closely related to that of the accusative or dative. If, for example, we were to dissect -ngananyi the gloss would be very awkward - 'first person plural exclusive non-ergative' plus 'accusative'. It is simpler to leave it as 'first person plural exclusive accusative'. This is not an analytical decision but one made for convenience of writing.

Table 1: Pronominal suffixes

Case:	Ergative and Nominative	Accusative	Dative and Locative
Person-Number:			
1sg	-rna	-nyi	-ji
1du.incl	-li	-ngalinyi	-ngalika
1du.excl	-layi ∿ -liya	-ngalayinyi	-ngalayika
1pl.incl	-nyi	-nganyjurrinyi	-nganyjurruka
1pl.excl	-yirni	-nganinyi	-nganaka
2sg	-n ∿ -npa	-nta	-nga ∿ -ngu
2du	-nyumpulu	-nyumpulinyi	-nyumpuluka
2pl	-nyurru	-nyurrinyi	-nyurruka
3sg	-Ø*	-Ø	-lu**
3du	-pulu	-pulinyi	-puluka
3pl	-yi	-janinyi	-janaka ∿ -janaku

* In word-final position Northern Nyangumarta usually uses -rri for third person singular ergative/nominative.

** The most common shape is -lu, but it may be influenced by vowel harmony to be manifested as -li or -la.

1.3 Functions of A, S and O

A noun phrase functioning as A is marked by an ERG suffix (-lu ∿ -ju). It is cross-referenced by an ERG bound pronoun of the appropriate person and number. A NP functioning as S is marked by a NOM suffix (-Ø) which is cross-referenced by a NOM bound pronoun of the appropriate person and number. A NP functioning as O is marked by an ACC suffix (-Ø) which is cross-referenced by an ACC bound pronoun.[4] See (1), (2) and (3).

(1) paliny-mila-lu nyupaji-lu-jirri japam ji-ni-kinyi-pulu-Ø
he-GEN-ERG *spouse*-ERG-DU *stop* VB-NF-REP-3duERG-3sgACC
His two wives kept trying to stop him.

(2) partany-Ø-jirri wani-kinyi-pulu
child-NOM-DU *stay*-REP-3duNOM
The two children were staying.

(3) pulany-Ø yirri-rni-rni-pulinyi ngaju-lu
those.two-ACC *see*-NF-1sgERG-3duACC *I*-ERG
I saw those two.

In (1) the transitive subject NP with ERG marking -lu is cross-referenced by the ERG bound pronoun -pulu, while in (2) the intransitive subject NP with NOM marking -Ø is cross-referenced by the NOM bound pronoun (which is the same form as ERG). In (3) there is the addition of an object NP with ACC marking -Ø (same form as NOM) which is cross-referenced by the ACC bound pronoun -pulinyi.

Analysing homophonous forms as separate cases may be seen by some to cause problems. But I believe that it solves more problems than it causes. It recognises clearly separate semantic functions. It also more realistically accounts for the cross-referencing system of the language.

One further comment needs to be made regarding the interrelation between NPs and bound pronouns. Because so much information is carried by the bound pronouns it is possible to omit some or all of the NPs from a clause, providing the referents of the bound pronouns are obvious from the context. A clause may then consist of a verb only, with the appropriate pronominal suffixes.

(4) kulu-rna-yi-ngalayinyi
meet-NF-3plERG-1du.exclACC
They met us two.

As the third person singular ERG, NOM and ACC forms are all zero, a clause may actually consist of only a verb without any overt bound pronouns. The absence of overt markers signals third person singular subject (and object in transitive constructions).

(5) wirla-rna-Ø-Ø
hit-NF-3sgERG-3sgACC
He hit him.

1.4 Core functions of DAT and LOC

Several verbs are either semitransitive or middle. Each of them requires a DAT or LOC complement. In a semitransitive construction a NP functioning as S is marked by a NOM suffix, which is cross-referenced by a NOM bound pronoun of the appropriate person and number. In a middle construction a NP marked by ERG is cross-referenced by an ERG bound pronoun. Each of these constructions also has a DAT- or LOC-marked complement which is cross-referenced by the appropriate bound pronoun.

(6) partany-Ø mima-ninya-Ø-lu pipi-ku
child-NOM *wait*-PRES-3sgNOM-3sgDAT *mother*-DAT
The child is waiting for his mother.

(7) ngaju-Ø kuli jarri-nya-rna-lu partany-ku
I-NOM *angry* INCHO-NF-1sgNOM-3sgDAT *child*-DAT
I am angry with the child.

(8) kamal-ju parrja-rni-kinya-Ø-lu partany-ku
camel-ERG *look.at*-NF-REP-3sgERG-3sgDAT *child*-DAT
The camel was staring at the child.

(9) yijalmarta ji-ni-Ø-li Yayipiramu-lu Ngarrka-nga
true VB-NF-3sgERG-3sgLOC *Abram*-ERG *God*-LOC
Abram believed God.

2. PERIPHERAL USES OF CASE

There are seven cases which have peripheral uses. They are:

DATive AVERSive
LOCative INSTrumental
ALLative GENitive
ABLative

2.1 Peripheral uses of dative case

DAT is the most versatile and the least specific of the cases, having seven different functions. The shape of the DAT marker is -ku.

(a) indicating kinship relationship

The more usual way of showing kinship relationship is by use of the GEN, but DAT can be used in a stative construction.

(10) ngani nyuntu-ku palama
what *you*-DAT *that*
What relationship is that person to you?

(b) indicating possession

Alienable possession is normally marked by GEN, but in a construction where both kinship relationship and possession are marked, possession is shown by DAT.

(11) ngulyu ma-rna-Ø-lu marrngu-lu yawarta-Ø ngaju-mila-ku
steal VB-NF-3sgERG-3sgDAT *man*-ERG *horse*-3sgACC *I*-GEN-DAT
mamaji-ku ngaju-ja
older brother-DAT *me*-ABL
A man stole my older brother's horse from me.

(c) signifying benefactive

(12) ngaju-ku yurrpa-rna-kinyi-ji-Ø mayi-Ø warnku-lu
me-DAT *rub*-NF-REP-1sgDAT-3sgERG *food*-ACC *stone*-INST
She used to grind food for me with a stone.

(d) signifying indirect object

(13) nganarna-Ø muwarr pi-lipi-yirna-lu wirtu-ku
we-NOM *talk* VB-FUT-1pl.exclNOM-3sgDAT *big*-DAT
We will talk to the boss.

(e) signifying indirect referent

(14) pala-ku jakurn-ngarra miranu ji-ni-kinyi-nya ngaju-mila-lu
that-DAT *just*-EMPH *knowing* VB-NF-REP-1sgACC *I*-GEN-ERG

kanyjayi-lu
grandmother-ERG
My grandmother taught me all about that.

(15) pala-ku warrarn-ku Mangkikata-Ø miranu
that-DAT *country*-DAT *Mangkikata*-NOM *knowing*
Mangkikata knows about that country.

(f) signifying purpose

Purpose constructions are NPs marked by DAT. The head word of such a NP indicating purpose is a nominalised verb further inflected by DAT. (The nominalising suffix has the same form as the non-future tense marker, but nominalised verbs are distinguished from finite verbs by the permitted suffixation.)

(16) kurnta-rna-ku jakuli-rna-Ø-Ø
sing-NOMLSR-DAT *persuade*-NF-3sgERG-3sgACC
He persuaded him to sing.

(17) muwarr pi-rna-lpa-layi Roebourne-ji jungka-ku yi-nganya-ku
talk VB-NF-REMP-1du.exclNOM *Roebourne*-LOC *land*-DAT *give*-NOMLSR-DAT
At Roebourne we asked (him) to give us land.

(g) signifying unfulfilled purpose

A NP marked by DAT is used in constructions containing walyi *almost* to describe actions which were not completed. In English, *the dog* of example (18) is treated as a direct object, but in Nyangumarta a different perception is shown, no doubt because the action does not carry through.

(18) ngaju-lu walyi wirla-rna-rna-lu yukurru-ku
I-NOM *almost hit*-NF-1sgERG-3sgDAT *dog*-DAT
I almost hit the dog.

2.2 Peripheral uses of locative case

LOC marking has phonologically conditioned allomorphs -ngV following vowels and -ji following consonants. The vowel in -ngV is often affected by vowel harmony, but some speakers use -nga where another vowel would be expected. Among younger speakers -ja is often used instead of -ji. In their speech LOC then becomes homophonous with ABL.

(a) signifying static location

LOC can designate the location where a person or thing is situated, or the location at which one arrives/is put.

(19) wungku-ngu karta karri-nyi-yirni
windbreak-LOC *rest* STAT-NF-1pl.exclNOM
We rested in windbreaks.

(20) wurru-ngu mirran-ji wirri-rni-kinyi-nyi-Ø
bush-LOC *shade*-LOC *put*-NF-REP-1sgACC-3sgERG
She put me down in the shade of a bush.

(21) purlika-nga karnti-nyi-Ø-li mirta-mirta
bullock-LOC *climb*-NF-3sgNOM-3sgLOC *grey-grey*UNM.LOC
He climbed onto a white bull.

(22) ngaju-lu rankurrji-ngi pala jilaman-Ø kalku-rni-kinyi-rni-li
I-ERG *bustard*-LOC *that gun*-ACC *hold*-NF-REP-1sgERG-3sgLOC
I was keeping that gun trained on the bustard.

(b) signifying means of locomotion

(23) marrngu-Ø nganarna-Ø ya-rra-yirni-li jina-ngu-pa wankanyu
Aborigine-NOM *we*-NOM *go*-IMP-1pl.exclNOM-POT *foot*-LOC-CONJ *alive*

wanta-yi-yirni-li
stay-IMP-1pl.exclNOM-POT
We Aborigines might go on foot and stay alive.

(24) marrngu-Ø-pa kunymarnakata-lu jinmurntu ka-nganyi-kinyi-yi-janinyi
Aborigine-ACC-CONJ *policeman*-ERG *chained* *take*-NF-REP-3plERG-3plACC

pala-nga turiyin-ja Ngaru-karti
that-LOC *train*-LOC *Port.Hedland*-ALL
The police used to take Aboriginal people in chains on that train to Port Hedland.

(c) on animate nouns designating those from whom one keeps apart

(25) kulpa-nyi-yirni-janaku palama-rrangu-ngu
return-NF-1plNOM-3plLOC *that*-PL-LOC
We came away from them.

(26) maya-nga kaja-rna-rna-janaku
house-LOC *sit*-NF-1sgNOM-3plLOC
In the house I sat apart from them.

(d) signifying indirect object of *show* and *tell*

(27) jurti ji-na-layi-janaku partanykarrangu-ngu
show VB-NF-1du.exclERG-3plLOC *children*-LOC
We showed it to the children.

(28) japartu-ngu wurra-rna-Ø-la kujarra-lu nga-nanya-pulu
father-LOC *say*-NF-3sgERG-3sgLOC *two*-ERG *eat*-PRES-3duERG
He told his father, "Two (emus) are eating".

2.3 Uses of allative case

ALL denotes the place, person or thing to which movement is made. The marking is -kurti on directional nouns such as *up*, *down*, and points of the compass. For other nominals it is -karti.

(29) palajalu kakarra ya-na-yirni warrura-karti
afterwards eastwards go-PAST-1pl.exclNOM *Black.Range*-ALL
Afterwards we went east towards Black Range.

(30) ya-nanya-rna-lu mirtawa-karti partany-jartiny
go-PRES-1sgNOM-3sgDAT *woman*-ALL *child*-COM
I am going to the woman who has the child.

(31) ya-na-yirni-janaku purlika-karti
go-PAST-1pl.exclNOM-3plDAT *bullock*-ALL
We went to the bullock.

2.4 Uses of ablative case

ABL has four distinct functions. They are motion away from, temporal sequence, temporal overlap (or simultaneous action), and reason. The first two functions of ABL are commonly found in Aboriginal languages. The last two functions are not so common. The shape of the ABL marker is -ja.

(a) indicating motion away from a place

(32) nyungu-ja ya-na-yirni marlurlu-jartiny
this-ABL *go*-PAST-1pl.exclNOM *initiate*-COM
We went from here with young men for initiation.

(b) indicating temporal sequence

(33) pala-ja pirirri-Ø jarri-nyi-rni
that-ABL *man*-NOM INCHO-NF-1sgNOM
After that I grew to manhood.

(c) indicating temporal overlap

(34) wararr-ja yaka-rni-yirni-pulinyi Tarrki-Ø-pupa
standing-ABL *leave*-NF-1pl.exclERG-3duACC *Tarrki*-ACC-CONJ
We left those two, Tarrki and the other one, standing there.

(35) wika-lu kamp-nya-Ø-Ø kupalya-ja
fire-ERG *burn*-NF-3sgERG-3sgACC *sleep*-ABL
The fire burned him while he was asleep.

(d) indicating reason

(36) ngani-ja nyuntu-Ø kuli jarri-nyi-ji-n
what-ABL *you*-NOM *angry* INCHO-NF-1sgDAT-2sgNOM
Why are you angry with me?

2.5 Use of aversive case

AVERS denotes something which should be avoided, or a consequence which, it is feared, may happen. The shape of AVERS is that of LOC+-marra. Although some other Aboriginal languages form AVERS in the same way (I know of Walmajarri, Pintupi and Ngaanyatjarra), it is hard to see any connection between AVERS and LOC; in addition, I have not been able to assign any separate meaning to -marra.

I therefore conclude that the similarity in the forms is coincidental. Both nouns and nominalised verbs may be inflected by AVERS.

(37) yija wirnti karri-kinyi-yirni wirla-rna-ngamarra
truly afraid STAT-REP-1pl.exclNOM *kill*-NOMLSR-AVERS
Truly we were afraid of being killed.

(38) kunyayi-ngimarra yama-rnaku pala ngapa-Ø yija-lu
mosquito-AVERS *cover*-HORT *that water*-ACC *truly*-INST
Truly, to avoid mosquitoes you should cover that water.

2.6 Uses of instrumental case

As is common in Australian languages, INST has the same form as ERG (-lu following vowels, and -ju following consonants). INST has two functions which are separate from the agentive function of ERG. It marks the instrument used in an action and it is used in the formation of adverbs. Because ERG and INST are formally identical and because the instrumental use of INST is closely related to the agentive use of ERG, these two cases are sometimes difficult to separate. Compare (39) and (40).

(39) partanykarrangu-lu malya-rni-yi-ngalayika-lu[5] mungka-Ø
children-ERG *chop*-NF-3plERG-1du.exclDAT-3sgDAT *tree*-ACC
kaju-jartiny-ju
axe-COM-INST
The children chopped wood for us with an axe.

(40) wirrka-rna-jartiny-ju wurra-rna-ji
cut-NOMLSR-COM-ERG *tell*-NF-1sgDAT
The one with the cut told me.

In (40) jartiny-ju is suffixed to a nominalised verb, not to a noun as in (39). It is obvious that -ju is marking ERG in (40), but (39) is not so straightforward.

Perhaps -ju is marking ERG in (39) also. If that is so, then kaju-jartiny-ju would be in apposition to partanykarrangu-lu and the sentence would mean, *The children, the ones having the axe, chopped wood for us.* This would be possible given the prevalence of such appositional phrases in Aboriginal languages. However, this alternative translation of (39) has a different focus from the first translation. It focuses on the children who have an axe, perhaps in contrast to some who don't. In the particular text from which this example is extracted there is nothing to indicate such a distinction.

Hudson, in her analysis of Walmajarri (1978:19-20), has not separated ERG and INST. She states that where the instrument used is an inalienable possession ERG is suffixed directly to the noun. Where the instrument is an alienable possession the comitative suffix is necessary before the ERG marker. Nyangumarta does not present such a clear-cut picture. The comitative suffix is not always used with alienable possession and it can be used with inalienable possession.

With examples involving an instrument which is an inalienable possession I think we have no choice but to say it is ERG marked. The way the language functions clearly shows that the possession is viewed as being part of the possessor and not a separate entity. See (41).

(41) pani-Ø ngaju-Ø mirrimirri jarri-nya-rna
eye-NOM *I*-NOM *itching* INCHO-NF-1sgNOM
My eyes are itching.

Therefore in (42) and (43) what might appear as instruments must be viewed as being agentive and actually being ERG marked.

(42) kurr pi-ni-rni-Ø parirr-jartiny-ju jungurr-Ø
crush VB-NF-1sgERG-ACC *hand*-COM-ERG *sugar*-ACC
I crushed the sugar with my hand.

(43) jina-lu jurrka-rna-Ø-lu warnku
foot-ERG *tread*-NF-1sgERG-3sgLOC *stone*UNM.LOC
His foot trod on a stone.

On the other hand these same suffixes without COM are used in the formation of adverbs where it is clearly inappropriate to say we have ERG marking. It is much more appropriate to talk of INST being used in formation of adverbs.

Then there are situations where an instrument is used which is not an inalienable possession. This is the use where there is most potential for controversy. I have chosen to say in these situations that we have INST marking.

(a) INST marking instrument

The instrument used in an action is marked by INST, providing the instrument is an alienable possession. INST may be preceded by the comitative suffix but it often is not. INST is not usually cross-referenced by a bound form. (There are a few unclear examples where it may be cross-referenced by DAT, but where some other explanation may be better.)

(44) mungka-lu yapan-Ø wirri-rni-rni-li ngarlu-ngu
tree-INST *stone*-ACC *put*-NF-1sgERG-3sgLOC *stomach*-LOC
With a stick I put a stone in the stomach (of the dead kangaroo).

(45) kurlu-jartiny-ju malya-ninyi-Ø kaju-lu
bad-COM-INST *chop*-PRES-3sgERG *axe*-INST
She is chopping with a blunt axe.

(46) wartuwartu ji-ni-kinyi-yi-li parruparru-lu kankarni wirtu-lu
cover VB-NF-REP-3plERG-3sgDAT *net*-INST *above* *big*-INST
mangarrjarra-nga
plane-LOC
They used to cover the planes with big nets.

(b) INST in the formation of adverbs

It is this use of INST which I feel most effectively demonstrates it as a separate case. It can be added to descriptives, interrogative pronouns and time words.

(47) wararr-ju nga-rna-yirni-Ø mayi-Ø
standing-INST *eat*-NF-1p1.exclERG-3sgACC *food*-ACC
We ate food standing up.

(48) nyampa-lu ka-ngku-luma-n ngaju-karti
quick-INST *take*-FUT-FUT-2sgERG *me*-ALL
Bring it to me quickly.

(49) yinku-lu yaja-lama-n-Ø muwarr-Ø
correct-INST *follow*-FUT-2sgERG-3sgACC *talk*-ACC
You will follow the talk correctly.

(50) kanyji-la-lu yirrku-lu paliny-ku
seek-IMP-3sgDAT *continuing*-INST *him*-DAT
Keep on looking for him.

(51) japirr ma-rna-nganyjurrinya wunyjurru-lu kalku-rna-nyi-janinyi
ask VB-NF-1pl.inclACC *how*-INST *keep*-NF-1pl.inclERG-3plACC
kurl-ja partanykarrangu-Ø
school-LOC *children*-ACC
She asked us how we are looking after the children in school.

2.7 Uses of genitive case

There is some controversy among linguists as to whether GEN is really a case or merely a derivational affix. Dixon (1980:300) mentioned the controversy but declined, at least then, to be drawn into it. Certainly GEN functions derivationally, which makes it different from other cases. A nominal may be inflected by GEN to form an adjective, which is always further inflected by another case marker. The basic shape of GEN is -mili but before -lu or -ku it is -mila. The functions of GEN are to show kinship relationship (see (52)) and possession (see (54)).

(52) miranu ji-ni-kinyi-nyi-Ø ngaju-mila-lu kanyjarri-lu
knowing VB-NF-REP-1sgACC-3sgERG *I*-GEN-ERG *grandmother*-ERG
My grandmother used to teach me.

(53) nganarna-Ø nyungu-nga warli-rni-Ø-nganinyi law-lu walypili-mila-lu
us-ACC *this*-LOC *hold*-NF-3sgERG-1pl.exclACC *law*-ERG *white.man*-GEN-ERG
The white man's law has us in its grip here.

In some situations where the meaning is clear the head word of the NP may be omitted and the derived adjective may stand alone.

(54) ya-na-yirni marrngu-mili-karti
go-PAST-1pl.exclNOM *Aborigine*-GEN-ALL
We went to the Aborigines' (camp).

One interesting feature of NPs with GEN marking is that some are cross-referenced by a DAT bound pronoun. This happens when the NP is in S or O relationship.

This form of cross-referencing is different from the rest of the cross-referencing system. In other instances it is really the head word of the phrase which is cross-referenced, but in constructions like (55) and (56) the referent is the modifying word, i.e. the possessor which is cross-referenced.

Bruce Waters, in a personal communication, suggested that there may be a hierarchy of animateness involved. That appeals to me. As I have already stated, the bound pronouns are basically person markers.

(55) ngaju-mili-Ø murtaka-Ø kurlu jarri-nya-ja-Ø
I-GEN-NOM *car*-NOM *bad* INCHO-NF-1sgDAT-3sgNOM
My car went wrong for me.

(56) yawarta-Ø ma-na-Ø-janaka ngulyu-lu jana-mili-Ø
horse-ACC *take*-NF-3sgERG-3plDAT *thief*-ERG *they*-GEN-ACC
A thief took their horses.

Because of this system of cross-referencing it is possible to omit the GEN-marked modifier without any loss of understanding.

(57) ka-nya-ja-Ø ngulyu-lu murtaka-Ø
take-PAST-1sgDAT-3sgERG *thief*-ERG *car*-ACC
The thief took my car.

3. MULTIPLE CASE-MARKING

In Nyangumarta up to three case-marking suffixes can occur on one nominal stem, with the result that a great deal of information can be conveyed by one NP.

It has already been mentioned that other cases co-occur with GEN. Only one additional suffix occurs at any one time following GEN.

In addition nominals inflected by LOC, ALL or ABL may also attract one or two extra case markers. The final marker is the one which shows the case of the NP as a whole. The others which precede it give additional information about the nominal to which they are attached.

Because some constructions with multiple case marking are very complex it is sometimes difficult for those who are not native speakers of Nyangumarta to see how the English translations are derived from the Nyangumarta constructions. The constructions are most easily analysed by first considering the marker furthest from the stem and working backwards towards the stem.

I will give examples of all the different combinations I have found in the data.

LOC + ERG

(58) ngani ji-ninyi-Ø pala-nga-lu
what VB-PRES-ERG *that*-LOC-ERG
What is that person over there doing?

ABL + ERG

(59) wika-Ø-pa yama-rni-kinyi-yirni-Ø ngurntirri pinakarri-nya-ja-lu
fire-ACC-CONJ *cover*-NF-REP-1pl.exclERG-3sgACC *rumbling* *hear*-NOMLSR-ABL-ERG
And when we heard the rumbling noise we used to cover the fire. (lit. *And we after hearing the noise ....*)

ABL + DAT

(60) mirtawanyjarri-lu kampa-rni-yi-Ø mayi-Ø pala-nga muwarr-ja-ku
women-ERG *cook*-NF-3plERG-3sgACC *food*-ACC *that*-LOC *talk*-ABL-DAT

marrngu-ku
person-DAT
The women cooked food there for the people, for after the (people had finished) talking.

ABL + LOC

(61) purlika-lu purri-rni-Ø-puluku mirrilyi-Ø parirr-ja-nga-jirri
bullock-ERG *pull*-NF-3sgERG-3duLOC *rope*-ACC *hand*-ABL-LOC-DU

marrngu-jirri-ja-nga
person-DU-ABL-LOC
The bullock pulled the rope from the hands of the two men.

ALL + ABL

(62) murtaka-Ø kulpa-nya-Ø wika-karti-ja
car-NOM *return*-NF-3sgNOM *firewood*-ALL-ABL
The car came back after going for (towards) firewood.

ALL + ABL + ERG

(63) katu ji-ni-Ø-nganinyi marntamarangka-lu pala-nga kakarni
down VB-NF-3sgERG-1pl.exclACC *policeman*-ERG *that*-LOC *east.from*

jarri-nya-kanu riyijiji-karti-ja-lu
INCHO-NOMLSR-*after* *races*-ALL-ABL-ERG
The policeman made us get down there after he came back from the east where he had been to the races.

ALL + ABL + LOC

(64) ngurnipali jana-lu jija-lapi-yi-janaku nyirrini-karti-ja-nga
perhaps *they*-ERG *show*-FUT-3plERG-3plLOC *behind*-ALL-ABL-LOC

partanykarrangu-ngu
children-LOC
Perhaps they will show it to their children who come after them. (lit. *... the children who are towards the back of them.*)

In some of the examples above, the nominal with multiple case-marking is in agreement with another nominal. In (61) there are two elements forming a straightforward NP showing inalienable possession.

Examples (63) and (64) are more complex. The nominals with multiple marking are used adjectivally. By adding extra cases additional information can be added in a compressed space. In (63) it is a particular policeman, the one who had been to the races and come back, who is the A of the sentence. In (64) it is particular children, ones who are yet to be born, who are mentioned.

Example (60) is different again. The nominal with multiple marking is not acting adjectivally, but merely giving additional information.

In (58) the case-markers have derivational function to transform a deictic into a personal noun. Likewise in (59) a nominalised verb becomes a personal noun by the addition of case-markers.

All the examples above of multiple case-marking concern NPs whose final inflection is ERG, DAT or LOC. The question arises as to whether there are in the data also NPs which additionally have NOM or ACC marking. The NOM or ACC marking would not be obvious at first sight since both are zeroes. However, if there are examples which are analogous to those above where NOM or ACC marking could be expected we can confidently assume that the marking is there.

Examples (65) and (66) are straightforward examples of multiple case-marking involving NOM and ACC.

(65) partany-ja-Ø wani-nya-rna wani-kinyi-yi kuwiyi-Ø rapiti-Ø
child-ABL-NOM *stay*-NF-1sgNOM *stay*-REP-3plNOM *animal*-NOM *rabbit*-NOM
marlu-Ø
many-NOM
When I was a child there were many rabbits.

(66) wika-lu kampa-nya-Ø-Ø kupalya-ja-Ø
fire-ERG *burn*-NF-3sgERG-3sgACC *sleep*-ABL-ACC
The fire burned him while he was asleep.

Example (67) is similar to (64) where two items which are in agreement have a common referent.

(67) ngaju-Ø partany-ja-Ø miranu jarri-nyi-rni station-ji
I-NOM *child*-ABL-NOM *learn* INCHO-NF-1sgNOM *station*-LOC
When I was a child I learned on the station.

I am suggesting that there is also agreement where there is a common locality. In (68) *me* and *back* are in the same location and should progably be viewed as being in agreement.

(68) pipi-lu ngaju-Ø ka-nganyi-kinyi-nyi-Ø jarna-nga-Ø
mother-ERG *me*-ACC *take*-NF-REP-1sgACC-3sgERG *back*-LOC-ACC
My mother used to carry me across her back.

In (69) there is no free pronoun, but if there were it would be ACC marked. As *me* and *in the shade of a bush* are in the same location we may view them as both being ACC.

(69) wurru-ngu-Ø mirrarn-ji-Ø wirri-rni-kinyi-nyi-Ø
bush-LOC-ACC *shade*-LOC-ACC *put*-NF-REP-1sgACC-3sgERG
She used to put me down in the shade of a bush.

4. CATEGORIES OF VERBS

Verbs may be subcategorised according to the set of case markings which occur on core NPs in the clause. In Nyangumarta there are five categories: intransitive, semitransitive, middle, transitive and ditransitive.

4.1 Intransitive verbs

An intransitive clause has one core NP with NOM marking. The NP which functions as S is cross-referenced by a NOM bound pronoun. Because of the presence of the bound pronoun the NP may be omitted. Other peripheral NPs compatible with the semantics of the verb may be present.

(70) partanykarrangu-Ø nyungu-ngu mirti jarri-nyi-yi
children-NOM *this*-LOC *run* INCHO-NF-3plNOM
The children are running around here.

(71) nganarna-Ø muwarr pi-lipi-yirna-lu wirtu-ku
we-NOM *talk* VB-FUT-1pl.exclNOM-3sgDAT *big*-DAT
We will talk to the boss.

4.2 Semitransitive verbs

This is a small group. Clauses where the verb has semitransitive functions have two core NPs. A NP with NOM marking which functions as S is cross-referenced by a NOM bound pronoun. A NP with DAT or LOC marking is cross-referenced by the appropriate bound pronoun. (If the referent of the DAT or LOC NP is inanimate there is no cross-referencing.) The NPs may be omitted if the information is recoverable from the context, and if the cross-referencing pronoun is present.

(72) pala-nga mima-rni-yirni-janaku marrngu-karra-ku
that-LOC *wait*-NF-1pl.exclNOM-3plDAT *person*-PL-DAT
There we waited for the people.

(73) ngaju-Ø kuli jarri-nya-rna-lu ngaju-mila-ku partany-ku
I-NOM *angry* INCHO-NF-1sgNOM-3sgDAT *I*-GEN-DAT *child*-DAT
I am angry with my child.

(74) wariny-Ø purlika-nga karnti-nyi-li mirtamirta
another-NOM *bull*-LOC *climb*-NF-3sgNOM-3sgLOC *white*UNM.LOC
Another person climbed on a white bull.

(75) partany-Ø karnti-nyi-Ø mungka-nga
child-NOM *climb*-3sgNOM *tree*-LOC
The child climbed the tree.

4.3 Middle verbs

This is a small group. Clauses where the verb has middle function have two core NPs. A NP with ERG marking is cross-referenced by an ERG bound pronoun. A NP with DAT or LOC marking is also cross-referenced (if the referent of the NP is animate).

(76) pipi-lu kanyji-rna-Ø-lu partany-ku
mother-ERG *seek*-NF-3sgERG-3sgDAT *child*-DAT
The mother is looking for her child.

(77) yijalmarta ji-ni-Ø-li Yayipiramu-lu Ngarrka-nga
true VB-NF-3sgERG-3sgLOC *Abram*-ERG *God*-LOC
Abram believed God.

4.4 Transitive verbs

A clause where the verb has transitive function has two core NPs. An ERG NP functioning as A is cross-referenced by an ERG bound pronoun. An ACC NP functioning as O is always cross-referenced providing the referent is animate and other than third person singular. If the referent is third person singular and

inanimate a DAT or LOC NP present in the clause may be cross-referenced instead, as in (80) and (81).

(78) ka-nganyi-kinyi-yirni-janinyi kukurnjayi-Ø ngapi-karti De Grey-karti
take-NF-REP-1pl.exclERG-3plACC *sheep*-ACC *what's.it*-ALL *De Grey*-ALL
We used to take sheep to what's-it's-name - to De Grey.

(79) pipi-lu ngaju-Ø ka-nganyi-kinyi-nyi-Ø jarna-nga-Ø
mother-ERG *me*-ACC *take*-NF-REP-1sgACC-3sgERG *back*-LOC-ACC
My mother used to carry me across her back.

(80) ngaju-lu rankurrji-ngi pala-Ø jilaman-Ø kalku-rni-kinyi-rni-li
I-ERG *bustard*-LOC *that*-ACC *gun*-ACC *keep*-NF-REP-1sgERG-3sgLOC
I kept the gun pointing at the bustard.

(81) ngulyu-lu ma-na-Ø-lu ngurnungu-mili-Ø
thief-ERG *take*-NF-3sgERG-3sgDAT *that*-GEN-ACC
A thief took that person's (money).

There are examples in the data of three bound pronouns on one verb, but there is a restriction on the final inflection. The third person singular DAT form is the only inflection which appears in final position. The possible combinations are ERG + ACC + DAT as in (82), or ERG + DAT + DAT as in (83). See also (39).

(82) ka-ngku-luma-rna-nta-lu japartu-ku
take-FUT-FUT-1sgERG-2sgACC-3sgDAT *father*-DAT
I will carry you for Daddy.

(83) kalku-lupu-layi-nga-lu[6]
keep-FUT-1du.exclERG-2sgDAT-3sgDAT
We two will look after him for you.

Use of three bound forms on one verb is comparatively rare. An animate referent with ACC marking ranks higher in the cross-referencing system than one with DAT marking. If there is a NP with ACC marking where the referent is animate and not a third person singular it will always be cross-referenced. But compare (56) where a DAT bound pronoun cross-references the NP with GEN marking rather than the NP with ACC marking.

A NP with DAT marking in the same sentence *MAY* be cross-referenced if the referent is third person singular. Otherwise there is no cross-referencing of the DAT NP.

(84) kalku-lupu-layi-janinyi nyuntu-ku
keep-FUT-1du.exclERG-3plACC *you*-DAT
We two will look after them for you.

4.5 Ditransitive verbs

The verbs yu- *give*[7] and mira- *take from* are ditransitive. They take two object NPs - one denoting the item given or taken and the other the recipient or the person from whom it is taken. The NP which denotes the recipient of *give* or the loser of *take from* is the one which is cross-referenced by an ACC bound pronoun.

The other object NP is not cross-referenced. *Give* is irregular when the recipient is third person singular. In most of such instances the NP is LOC-marked and is cross-referenced by a LOC bound pronoun. (In a few instances ACC marking is used with third person singular. This may be just a performance variable.)

(85) paliny-ju ma-na-Ø-Ø narnngula-Ø yi-nya-Ø-janinyi
she-ERG *get*-NF-3sgERG-3sgACC *honey*-ACC *give*-PAST-3sgERG-3plACC

partanykarrangu-Ø
children-ACC
She got honey and gave it to the children.

(86) yarti yu-ngku-lumi-nyi-npa wirtu-jartiny-ju
later give-FUT-FUT-1sgACC-2sgERG *big*-COM-ERG
Later when you have a lot (of meat) you can give me some.

(87) yi-nya-rna-li kuwiyi-Ø yukurru-ngu
give-PAST-1sgERG-3sgLOC *meat*-ACC *dog*-LOC
I gave meat to the dog.

(88) yarti yu-ngku-lupi-yi-li mirtawa-Ø pala-nga pirirri-ngi
later give-FUT-FUT-3plERG-3sgLOC *woman*-ACC *that*-LOC *man*-LOC
Later they will give the woman to that man.

(89) kunymarnakata-lu mira-rna-Ø-nganinyi yukurru-rrangu-Ø
policeman-ERG *remove*-NF-3sgERG-1pl.exclACC *dog*-PL-ACC
The policeman took our dogs.

(90) parirr-ja-Ø mira-rna-nya-Ø kuwiyi-Ø yukurru-lu
hand-ABL-ACC *remove*-NF-1sgACC-3sgERG *meat*-ACC *dog*-ERG
The dog took the meat from my hand.

My reason for regarding *from my hand* in (90) as being additionally marked for ACC is that I see *hand* as being in agreement with the first person singular ACC bound pronoun. (My hand is part of me.) A parallel can be seen in other expressions which involve body parts, e.g. as in (91), where the bound pronoun is first person, not third.

(91) pani-Ø ngaju-Ø mirrimirri jarri-nya-rna
eye-NOM *I*-NOM *itching* INCHO-NF-1sgNOM
My eyes are itching.

4.6 Verbs with more than one function

While most verbs seem to fit unambiguously into one or another category there are a few which have more than one function.

There are a few verb stems which can take tense inflections of both first and second conjugations (O'Grady 1970:852-853). When they take Conjugation I inflections they function as intransitive verbs. With Conjugation II inflections they function as transitive verbs. Compare (92) with (93), and (94) with (95).

(92) wangal-Ø jupa-nya-Ø nawu
wind-NOM *abate*-NF-3sgNOM *now*
The wind has died down now.

(93) mirtawa-lu jupa-rna-Ø-Ø wika-Ø jungka-lu
woman-ERG *put.out*-NF-3sgERG-3sgACC *fire*-ACC *dirt*-INST
The woman put out the fire with dirt.

(94) wika-Ø kampa-nyi-Ø nawu
fire-NOM *burn*-NF-3sgNOM *now*
The fire is burning now.

(95) pirirri-lu kampa-rna-Ø-Ø warringkura-Ø
man-ERG *cook*-NF-3sgERG-3sgACC *kangaroo*-ACC
The man cooked the kangaroo.

There are also a few verbs which have intransitive or middle function. Compare (96) with (97), and (98) with (99).

(96) partanykarrangu-Ø panyju karri-nyi-ya kurl-karti ya-ninya-ku
children-NOM *dislike* STAT-NF-3plNOM *school*-ALL *go*-NOMLSR-DAT
The children don't like to go to school.

(97) pirirri-ku palama panyju karri-nya-rna-lu ngaju-lu
man-DAT *that*UNM.DAT *dislike* STAT-NF-1sgERG-3sgDAT *I*-ERG
I don't like that man.

(98) partanykarrangu-Ø nyarru pi-na-yi
children-NOM *laugh* VB-NF-3plNOM
The children are laughing.

(99) ngani-ja-lu nyuntu-lu nyarru pi-na-ji-n
what-ABL-ERG *you*-ERG *laugh* VB-NF-1sgDAT-2sgERG
Why did you laugh at me?

I think it is also probable, though difficult to prove, that *cry for someone* functions as semitransitive, though *cry* is intransitive. (It is interesting to note that in Walmajarri *cry* functions as intransitive and *cry for someone* functions as middle (Hudson 1978:52).) Compare (100) and (101).

(100) partany-Ø wupartu-Ø ngangkurl ji-ninyi-Ø
child-NOM *small*-NOM *cry* VB-PRES-3sgNOM
The little child is crying.

(101) pipi-Ø ngangkurl ji-ninya-Ø-lu partany-ku
mother-NOM *cry* VB-PRES-3sgNOM-3sgDAT *child*-DAT
The mother is crying for her child.

The verb *give* can function as a transitive as well as a ditransitive verb. When it has transitive function it seems to convey the idea that what is given is not an outright gift. It may be just a loan, or it may be given in order to be passed on to someone else. There may also be other factors at work which I do not yet control.

When *give* is used as a transitive verb the NP denoting recipient is LOC-marked and is cross-referenced by a LOC bound pronoun.

(102) nyungu-Ø mirlimirli-Ø yu-ngku-luma-rna-ngu nyuntu-ngu nyuntu-mila-ku
this-ACC *paper*-ACC *give*-FUT-FUT-1sgERG-2sgLOC *you*-LOC *you*-GEN-DAT

partany-ku
child-DAT
I will give you this paper for your child.

(103) Nyaparu-ngu yi-nya-Ø-lu jipi-rna-ku
Nyaparu-LOC *give*-PAST-3sgERG-3sgLOC *drive*-NOMLSR-DAT
He gave the (vehicle) to Nyaparu to drive.

(104) blanketi-Ø-pa pillow-Ø-pa yi-nya-rna-ngu ...
blanket-ACC-CONJ *pillow*-ACC-CONJ *give*-PAST-1sgERG-2sgLOC

ka-nya-ji-npa wurru-karra-Ø
take-PAST-1sgDAT-2sgERG *belongings*-PL-ACC
I lent you a blanket and pillow ... you took (i.e. stole) my belongings.

5. CONCLUSION

In this paper I have tried to give an overall picture of case relationships in Nyangumarta. The most important conclusion I have drawn is that there is only one system for marking core cases. I believe that it better fits the data to view the bound pronouns as being in agreement with the case-marking on noun phrases, the two parts forming one unified system showing core relationships.

NOTES

1. Most of the data for this paper has been gathered at Port Hedland and Marble Bar. Many of these people have kindly and patiently shared their language with me. I am very grateful for their help. I would also like to express my thanks to Bruce Waters and Jean Kirton for many helpful insights into the workings of the Nyangumarta case system.

2. In Blake 1977:70 Nyangumarta is listed as having a separate ACC form on free pronouns, but this may be based on misinformation or may be a misprint. There is no separate ACC form.

3. Since I wrote the first version of this paper Blake (1985) has expressed doubts about some points of Goddard's analysis. Two related points concern us here. The first is whether the cross-referencing system of bound pronouns should be analysed as part of the case system. Blake feels that it is preferable to analyse the bound system in terms of grammatical relations, i.e. subject versus object pronouns. After due consideration I have decided that at least for Nyangumarta, the data better fits the original theory that the bound pronouns are really in agreement with the case system, especially since Nyangumarta has three, not two sets of bound pronouns.

   The second point is that, where the bound pronouns are a set of clitics (as in Djaru), rather than verbal inflections (as in Nyangumarta), and S and O are identically marked, Blake questions the validity of establishing a separate accusative case on the basis of the form of the object clitic. Perhaps this second point does not specifically relate to the analysis of Nyangumarta, as it does not have a set of clitics. But it seems to me that even if it can be established beyond reasonable doubt that subject-object clitics are not

cross-referenced to the case system, S and O must be recognised as having different case marking because of their distinct syntactic functions.

4. Uses of ERG and ACC with hortatory mood are exceptions. There is no cross-referencing at all on verbs in hortatory mood, and free forms must be used if S and O are to be made explicit.

   wurru-Ø-pa nganirnnganirn-Ø kalku-rnaku ngalypa-Ø nganyjurru-lu
   clothes-ACC-CONJ *other.things*-ACC *keep*-HORT *good*-ACC *we*(pl.incl)-ERG
   Our clothes and things like that we should look after well.

   Verbs in the imperative mood take cross-referencing, but the NOM/ERG forms differ from those in indicative mood. They are -Ø 'singular', -pulu 'dual', -yi 'plural'.

5. I do not know the function of -lu in this sentence. It is tempting to think that it is cross-referenced to the INST NP, as that is the only item in the surface structure which is unaccounted for in the bound pronoun system. Yet it would be very unusual for INST to be cross-referenced in this fashion. I have found a few other examples where INST is *possibly* cross-referenced, but perhaps other explanations would fit better. I also have other examples of this same third person singular DAT/LOC bound pronoun where I am completely at a loss to account for its use. Perhaps it is better to suspend judgment in this example also.

6. kalku- is irregular in that it takes 3rd singular DAT where ACC would be expected. With other persons it is regular.

7. The stem of *give* has two grammatically conditioned allomorphs in the indicative mood: yu- ∿ yi-.

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