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1. INTRODUCTION

This paper 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):

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(1) for Yingkarta: Dench 1979, unpublished fieldnotes and recordings collected by G.N. O'Grady;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, Tharrkari, 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(3) for Payungu, Thalanyji, Tharrkari, Warriyangka, Thiin and Jurruru: unpublished notes and recordings made available by G.N. O'Grady;
(4) for Tharrkari: Klokeid 1969 and unpublished fieldnotes;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.
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
Mantharta - Warriyangka, Thiin, Jiwarli
Kartu - Yingkarta
Ngayarta - Jurruru, Pinikura

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):
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). 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 - Djijwari, 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:

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 comparative 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:

<table>
<thead>
<tr>
<th>Language</th>
<th>Cognate Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yingkarta</td>
<td>33</td>
</tr>
<tr>
<td>Nhanta</td>
<td>33</td>
</tr>
<tr>
<td>Wajarri</td>
<td>42</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th></th>
<th>Wajarri</th>
<th>Yingkarta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg.</td>
<td>ngatha</td>
<td>ngatha</td>
</tr>
<tr>
<td>1du.incl.</td>
<td>ngali</td>
<td>ngali</td>
</tr>
<tr>
<td>1du.excl.</td>
<td>ngalija</td>
<td>ngalija</td>
</tr>
<tr>
<td>1pl.incl.</td>
<td>nganhu</td>
<td>nganhu</td>
</tr>
<tr>
<td>1pl.excl.</td>
<td>nganyju</td>
<td>nganyju</td>
</tr>
<tr>
<td>2sg.</td>
<td>nyinta</td>
<td>nyinta</td>
</tr>
<tr>
<td>2du.</td>
<td>nhupali</td>
<td>nhupali</td>
</tr>
<tr>
<td>2pl.</td>
<td>nhurra</td>
<td>nhurra</td>
</tr>
</tbody>
</table>

None of the other languages in the southern Pilbara region has nganhu as a first person plural form (although nganhruru 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:

<table>
<thead>
<tr>
<th></th>
<th>Wajarri</th>
<th>Yingkarta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg.nom.</td>
<td>-rna</td>
<td>-rna</td>
</tr>
<tr>
<td>1sg.dat.</td>
<td>-ja</td>
<td>-ju</td>
</tr>
<tr>
<td>1du.nom.</td>
<td>-li</td>
<td>-li</td>
</tr>
<tr>
<td>2sg.nom.</td>
<td>-n</td>
<td>-n(pa)</td>
</tr>
<tr>
<td>2sg.acc.</td>
<td>-nta</td>
<td>-nta</td>
</tr>
</tbody>
</table>

(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):

<table>
<thead>
<tr>
<th></th>
<th>Wajarri</th>
<th>Yingkarta</th>
</tr>
</thead>
<tbody>
<tr>
<td>past</td>
<td>-manha</td>
<td>-manha*</td>
</tr>
<tr>
<td>present</td>
<td>-nha</td>
<td>-na*</td>
</tr>
<tr>
<td>future</td>
<td>-ya</td>
<td>-la*</td>
</tr>
<tr>
<td>imperative</td>
<td>-ø</td>
<td>-n</td>
</tr>
<tr>
<td>purposive</td>
<td>-ku/-wu</td>
<td>-ku</td>
</tr>
</tbody>
</table>

* and | alternate with and 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. Interestingly, the various forms of these verbs are practically identical in the two languages as the following paradigms show:

<table>
<thead>
<tr>
<th>Wajjari</th>
<th>Yingkarta</th>
</tr>
</thead>
<tbody>
<tr>
<td>ya- go</td>
<td>nha- see</td>
</tr>
<tr>
<td>past</td>
<td>yamanha</td>
</tr>
<tr>
<td>present</td>
<td>yana</td>
</tr>
<tr>
<td>future</td>
<td>yanaya/yarra</td>
</tr>
<tr>
<td>imperative</td>
<td>yarran/yanma</td>
</tr>
<tr>
<td>purposive</td>
<td>yanaku</td>
</tr>
</tbody>
</table>

Wajjari past tense forms show an increment -nha; imperative is different in the two languages, but Wajjari 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 Wajjari.

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 kupuji child has an irregular plural, kupujarri, in all three languages (the regular plural suffix is -nyjarri (-jarri in Purduna)).

(2) nominal cases - the following allomorphs of the allative case suffix are peculiar to Kanyara languages:
- Thalanyji -pura/-kurrunu
- Pinikura -pura
- Purduna -pura/-wura
- Payungu -kurrunu/-rla

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

<table>
<thead>
<tr>
<th>% Cognate</th>
<th>Number of items compared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tharrkari</td>
<td>Warriyangka</td>
</tr>
<tr>
<td>80</td>
<td>200</td>
</tr>
<tr>
<td>80</td>
<td>79</td>
</tr>
<tr>
<td>65</td>
<td>61</td>
</tr>
<tr>
<td>Jiwarli</td>
<td>75</td>
</tr>
<tr>
<td>80</td>
<td>194</td>
</tr>
<tr>
<td>65</td>
<td>183</td>
</tr>
<tr>
<td>75</td>
<td>159</td>
</tr>
<tr>
<td>Thiin</td>
<td>170</td>
</tr>
<tr>
<td>61</td>
<td>138</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>% Cognate</th>
<th>Number of items compared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tharrkari</td>
<td>Warriyangka</td>
</tr>
<tr>
<td>80</td>
<td>54</td>
</tr>
<tr>
<td>82</td>
<td>44</td>
</tr>
<tr>
<td>68</td>
<td>41</td>
</tr>
<tr>
<td>Jiwarli</td>
<td>87</td>
</tr>
<tr>
<td>85</td>
<td>40</td>
</tr>
<tr>
<td>75</td>
<td>31</td>
</tr>
<tr>
<td>Thiin</td>
<td>75</td>
</tr>
<tr>
<td>68</td>
<td>40</td>
</tr>
<tr>
<td>75</td>
<td>31</td>
</tr>
</tbody>
</table>

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 ngaliyu, 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:
The first person singular dative pronoun is suppletive and has the form nganjup (Tharrkari nganayi). In Payungu and Purdu na, all datives take -ngu and in Thalan yji -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 -lka/-rrka/-ira/-ra
(c) relative-same subject -ru/-nu/-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 -parri
   Jiwarli, Thiin -jaka

(2) first person plural pronouns are:
   Tharrkari, Warriyangka nganhurruru
   Jiwarli, Thiin nganthurruru

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

<table>
<thead>
<tr>
<th></th>
<th>Tharrkari</th>
<th>Warriyangka</th>
<th>Jiwarli</th>
<th>Thiin</th>
</tr>
</thead>
<tbody>
<tr>
<td>mother</td>
<td>ngaka</td>
<td>ngangka</td>
<td>pipi</td>
<td>pipi</td>
</tr>
<tr>
<td>father</td>
<td>marti</td>
<td>marnti</td>
<td>papu</td>
<td>papu</td>
</tr>
<tr>
<td>foot</td>
<td>thina</td>
<td>thina</td>
<td>jina</td>
<td>jina</td>
</tr>
<tr>
<td>snake</td>
<td>thurnu</td>
<td>thurnu</td>
<td>pilpu</td>
<td>pilu</td>
</tr>
<tr>
<td>short</td>
<td>tharda</td>
<td>tharta</td>
<td>pulhu</td>
<td>pulhu</td>
</tr>
<tr>
<td>bad</td>
<td>puga</td>
<td>puka</td>
<td>walhi</td>
<td>walhi</td>
</tr>
<tr>
<td>to eat</td>
<td>marni-</td>
<td>marni-</td>
<td>thika-</td>
<td>thika-</td>
</tr>
</tbody>
</table>

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.

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

<table>
<thead>
<tr>
<th></th>
<th>Jurruru</th>
<th>Mantharta</th>
<th>Kanyara</th>
</tr>
</thead>
<tbody>
<tr>
<td>accusative</td>
<td>-ku</td>
<td>-nha</td>
<td>-nha</td>
</tr>
<tr>
<td>allative</td>
<td>-karta</td>
<td>-kural/-rla</td>
<td>-pura/-kurruru</td>
</tr>
<tr>
<td>ablative</td>
<td>-nguru</td>
<td>-parnti</td>
<td>-parnti</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Jurruru</th>
<th>Yinyjiparnti</th>
<th>Panyjima</th>
<th>Mantharta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg.</td>
<td>ngathu</td>
<td>ngayi</td>
<td>ngatha</td>
<td>ngatha</td>
</tr>
<tr>
<td>2sg.</td>
<td>nyinta</td>
<td>nyinta</td>
<td>nyinta</td>
<td>nhurra</td>
</tr>
<tr>
<td>1du.incl.</td>
<td>ngali</td>
<td>ngali</td>
<td>ngali</td>
<td>ngali</td>
</tr>
<tr>
<td>1du.excl.</td>
<td>ngaliya</td>
<td>ngaliya</td>
<td>ngaliya</td>
<td>ngaliyu</td>
</tr>
<tr>
<td>2du.</td>
<td>nyintapala</td>
<td>nyintauyha</td>
<td>nhupalu</td>
<td></td>
</tr>
<tr>
<td>1pl.incl.</td>
<td>ngaliku</td>
<td>ngaliuu</td>
<td>ngalikuru</td>
<td>nganthurra</td>
</tr>
<tr>
<td>1pl.excl.</td>
<td>ngaliyaku</td>
<td>ngaliyauu</td>
<td>ngaliyakuru</td>
<td>nganthurraju</td>
</tr>
<tr>
<td>2pl.</td>
<td>nyintaku</td>
<td>nyintauu</td>
<td>nhupaluku</td>
<td>nhurrakara</td>
</tr>
</tbody>
</table>

(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.

(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, Thii) 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 Warrijarnnga, 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 Panyijima and is one of four roots taking an idiosyncratic plural suffix, -rrri (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 nhrura in Mantharta (as second person singular not plural)), the set as a whole is unique to Kanyara.

14. Thalanyji also has -rrkarrar 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/-rryarrara, 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 kardaji.

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 -ru/-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:

<table>
<thead>
<tr>
<th></th>
<th>Tharrkari</th>
<th>Warriyangka</th>
<th>Thiin</th>
<th>Jurruru</th>
</tr>
</thead>
<tbody>
<tr>
<td>liver</td>
<td>marurri</td>
<td>marurri</td>
<td>yipa</td>
<td>yipa</td>
</tr>
<tr>
<td>throat</td>
<td>wurrkal</td>
<td>wurrkal</td>
<td>wangkarr</td>
<td>wangkarr</td>
</tr>
<tr>
<td>bone</td>
<td>mapu</td>
<td>mampu</td>
<td>kanta</td>
<td>kanta</td>
</tr>
<tr>
<td>meat</td>
<td>pirru</td>
<td>pirru</td>
<td>mantu</td>
<td>mantu</td>
</tr>
<tr>
<td>to hit</td>
<td>pudhi-</td>
<td>puthi-</td>
<td>warnpa-</td>
<td>warnpi-</td>
</tr>
</tbody>
</table>

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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DOUGLAS, W.H.

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:

2. Thalanyji  6. Warriyangka
3. Purduna  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 jampa/5/M/O’G
2. (182) *janta lame 4, 6; 8, 9 jata/5/M/O’G
3. (194) *jiriparri eohidna 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, 6; 8, 9/M
8. (264) *mangu cheek 4, 6; 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, 6; 8, 9/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 pidi/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 tie 4; 8, 9 puta
25. (142) *punyja- to lick 4; 8, 9 puca-
26. (328) *walkarta topknot pigeon 4; 8 walkarda/5
27. (344) *wilu blackheart tree 4, 6; 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 lover 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. *parkarra 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-a
48. *yinti- to go down 1, 2, 4, 6; 8, 9 yiti-5/10 to flow
49. *yirrrara 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. *minyjininy 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. *pirumpaji 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 jartampa
88. *jartukurla nape 4,6,7;8,9 jartuurla/5/10
89. *jirrli r clay pan 4,6,8,9 jirrli
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
<table>
<thead>
<tr>
<th>Number</th>
<th>English Word</th>
<th>Meaning</th>
<th>Pairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>*kurnta</td>
<td>shame</td>
<td>4;8,9 kurta/M</td>
</tr>
<tr>
<td>101</td>
<td>*kurriya</td>
<td>boomerang</td>
<td>4,6,8,9</td>
</tr>
<tr>
<td>102</td>
<td>*kurrpirli</td>
<td>plains kangaroo</td>
<td>4,6,8;9 kurrpirdi/5</td>
</tr>
<tr>
<td>103</td>
<td>*kuwa</td>
<td>language</td>
<td>4,6</td>
</tr>
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<td>104</td>
<td>*kuyun</td>
<td>lower grinding stone</td>
<td>4,8,9</td>
</tr>
<tr>
<td>105</td>
<td>*malhu</td>
<td>hole in ground</td>
<td>4,6</td>
</tr>
<tr>
<td>106</td>
<td>*manyja-ru</td>
<td>to hunt</td>
<td>4,6;8,9 maca-</td>
</tr>
<tr>
<td>107</td>
<td>*manyjira</td>
<td>old</td>
<td>4,6</td>
</tr>
<tr>
<td>108</td>
<td>*marrkarri-a</td>
<td>to wait</td>
<td>4,6,8,9</td>
</tr>
<tr>
<td>109</td>
<td>*marrkara</td>
<td>younger brother</td>
<td>4,6,8,9/M marryara</td>
</tr>
<tr>
<td>110</td>
<td>*martarr</td>
<td>red ochre</td>
<td>4,6;8,9 mardarr/5/M</td>
</tr>
<tr>
<td>111</td>
<td>*mathan</td>
<td>hill kangaroo</td>
<td>4,6;8,9 madhan</td>
</tr>
<tr>
<td>112</td>
<td>*mukamarri-a</td>
<td>to dance</td>
<td>4,6,8,9 mugamarri-/5</td>
</tr>
<tr>
<td>113</td>
<td>*muniji</td>
<td>zebra finch</td>
<td>4,8;9 muniyi/5</td>
</tr>
<tr>
<td>114</td>
<td>*murlurruru</td>
<td>straight</td>
<td>4,8/5/M</td>
</tr>
<tr>
<td>115</td>
<td>*murru</td>
<td>small</td>
<td>4,6,7;8,9 murdu/5</td>
</tr>
<tr>
<td>116</td>
<td>*ngarrrngarn</td>
<td>jaw</td>
<td>4,6/10/M</td>
</tr>
<tr>
<td>117</td>
<td>*nguji</td>
<td>dream</td>
<td>4,6; 8 nguji/5/M nguyi</td>
</tr>
<tr>
<td>118</td>
<td>*ngurrurward</td>
<td>catfish</td>
<td>4,8,9/5</td>
</tr>
<tr>
<td>119</td>
<td>*nguthurl</td>
<td>firedrill</td>
<td>4,6;8 ngudhurl</td>
</tr>
<tr>
<td>120</td>
<td>*nguwan</td>
<td>sleep</td>
<td>4,8,9</td>
</tr>
<tr>
<td>121</td>
<td>*nhuku</td>
<td>near</td>
<td>4,6;8 nhugu</td>
</tr>
<tr>
<td>122</td>
<td>*nhukunu</td>
<td>sister's husband</td>
<td>4,8 nhugunu/M nhuunu</td>
</tr>
<tr>
<td>123</td>
<td>*nyaju-ru</td>
<td>to turn</td>
<td>4,6,8</td>
</tr>
<tr>
<td>124</td>
<td>*nyimirri</td>
<td>sandhill grass</td>
<td>4,8</td>
</tr>
<tr>
<td>125</td>
<td>*pajaporri</td>
<td>wild</td>
<td>4,6;8,9 pajawirri</td>
</tr>
<tr>
<td>126</td>
<td>*pani-ru</td>
<td>to grind</td>
<td>4,8,9/M</td>
</tr>
<tr>
<td>127</td>
<td>*panyja-ru</td>
<td>to leave</td>
<td>4,8,9 paca-</td>
</tr>
<tr>
<td>128</td>
<td>*parampu</td>
<td>wattletree</td>
<td>4,6;8,9 parapu</td>
</tr>
<tr>
<td>129</td>
<td>*parapara</td>
<td>lump</td>
<td>6,8,9</td>
</tr>
<tr>
<td>130</td>
<td>*parruru</td>
<td>to run</td>
<td>4,8,9</td>
</tr>
<tr>
<td>131</td>
<td>*parrarna</td>
<td>morning</td>
<td>4,6</td>
</tr>
<tr>
<td>132</td>
<td>*parru</td>
<td>again</td>
<td>4,6</td>
</tr>
<tr>
<td>133</td>
<td>*pathha-rrru</td>
<td>to hit with thrown object</td>
<td>4,6,7;8,9 padha-/M/O'G</td>
</tr>
<tr>
<td>134</td>
<td>*payal</td>
<td>that's all</td>
<td>4,6</td>
</tr>
<tr>
<td>135</td>
<td>*piji</td>
<td>many</td>
<td>4,6,7,8,9</td>
</tr>
<tr>
<td>136</td>
<td>*pilarra</td>
<td>barbed spear</td>
<td>4,6,8;9 pidarra/5</td>
</tr>
<tr>
<td>137</td>
<td>*pilyarnti</td>
<td>galah</td>
<td>4,6;8 pilyarti;9 pijarti/M pilharnti</td>
</tr>
<tr>
<td>138</td>
<td>*pirlu</td>
<td>maggot</td>
<td>4,6,7/10</td>
</tr>
<tr>
<td>139</td>
<td>*pirlura</td>
<td>diamond dove</td>
<td>4,8</td>
</tr>
<tr>
<td>140</td>
<td>*piritaja</td>
<td>rescue expedition</td>
<td>4,6</td>
</tr>
<tr>
<td>141</td>
<td>*puju</td>
<td>guts</td>
<td>4,6,7/5</td>
</tr>
<tr>
<td>142</td>
<td>*puka-ru</td>
<td>to visit</td>
<td>4; 8,9 puga-</td>
</tr>
<tr>
<td>143</td>
<td>*puntha-ru</td>
<td>to wash</td>
<td>4,6,7;8,9 putha-/5/M/O'G</td>
</tr>
<tr>
<td>144</td>
<td>*puntha-yi</td>
<td>to swim</td>
<td>4,6,7;8,9 putha-/M</td>
</tr>
<tr>
<td>145</td>
<td>*puntharri</td>
<td>dew, fog</td>
<td>4,6</td>
</tr>
<tr>
<td>146</td>
<td>*punthura</td>
<td>upper grinding stone</td>
<td>4; 8,9 puthura</td>
</tr>
<tr>
<td>147</td>
<td>*purllunhu</td>
<td>stranger</td>
<td>4,6,8</td>
</tr>
<tr>
<td>148</td>
<td>*purrrpa-ru</td>
<td>to bark</td>
<td>6,8,9</td>
</tr>
<tr>
<td>149</td>
<td>*puyu</td>
<td>hornet</td>
<td>4,8</td>
</tr>
<tr>
<td>150</td>
<td>*thara</td>
<td>pouch</td>
<td>4,6,8/O'G mouth</td>
</tr>
<tr>
<td>151</td>
<td>*tharln-ru</td>
<td>to insert</td>
<td>4,8</td>
</tr>
<tr>
<td>152</td>
<td>*tharnti</td>
<td>hut</td>
<td>4; 8,9 tharti</td>
</tr>
<tr>
<td>No.</td>
<td>Term</td>
<td>English Equivalent</td>
<td>Classifications</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------</td>
<td>----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>153</td>
<td>*thirri</td>
<td>spinifex</td>
<td>4, 8, 9/5</td>
</tr>
<tr>
<td>154</td>
<td>*thukuthuku</td>
<td>hot</td>
<td>4, 6</td>
</tr>
<tr>
<td>155</td>
<td>*thurli</td>
<td>distant</td>
<td>4, 7, 8</td>
</tr>
<tr>
<td>156</td>
<td>*thurriyarti</td>
<td>black snake</td>
<td>4; 8 thurriyardi/5</td>
</tr>
<tr>
<td>157</td>
<td>*walhangu</td>
<td>youth</td>
<td>4, 6, 7/10 O'G</td>
</tr>
<tr>
<td>158</td>
<td>*walhi</td>
<td>bad</td>
<td>4, 6/5</td>
</tr>
<tr>
<td>159</td>
<td>*walhu</td>
<td>cave</td>
<td>4; 8 wanabarna</td>
</tr>
<tr>
<td>160</td>
<td>*wanaparna</td>
<td>thunder</td>
<td></td>
</tr>
<tr>
<td>161</td>
<td>*wantuka</td>
<td>mountain butcher</td>
<td></td>
</tr>
<tr>
<td>162</td>
<td>*wapa-yi</td>
<td>to come</td>
<td>4, 6, 7/10</td>
</tr>
<tr>
<td>163</td>
<td>*warlarn</td>
<td>yellow ochre</td>
<td>4, 8</td>
</tr>
<tr>
<td>164</td>
<td>*warnira</td>
<td>younger sister</td>
<td>4, 6</td>
</tr>
<tr>
<td>165</td>
<td>*warrapa</td>
<td>grass</td>
<td>4, 6/O'G</td>
</tr>
<tr>
<td>166</td>
<td>*winyjarra-ru</td>
<td>to sweep</td>
<td>4; 8, 9 wicarra-</td>
</tr>
<tr>
<td>167</td>
<td>*wirripuka</td>
<td>many</td>
<td>4, 6; 8, 9 wirribuga</td>
</tr>
<tr>
<td>168</td>
<td>*wirrkura</td>
<td>sand goanna</td>
<td>4, 8</td>
</tr>
<tr>
<td>169</td>
<td>*wiyarnu</td>
<td>rock wallaby</td>
<td>4, 8</td>
</tr>
<tr>
<td>170</td>
<td>*wuna</td>
<td>long time</td>
<td>4, 6</td>
</tr>
<tr>
<td>171</td>
<td>*wurnta</td>
<td>shield</td>
<td>4, 6; 8, 9 wurta/10/M/O'G</td>
</tr>
<tr>
<td>172</td>
<td>*yajina</td>
<td>sweet food</td>
<td>4, 6</td>
</tr>
<tr>
<td>173</td>
<td>*yakarrangu</td>
<td>heat</td>
<td>4, 6/M</td>
</tr>
<tr>
<td>174</td>
<td>*yana-ngku</td>
<td>to go</td>
<td>4, 6, 7, 8, 9/10/O'G</td>
</tr>
<tr>
<td>175</td>
<td>*yanga-ru</td>
<td>to chase</td>
<td>4, 6, 8, 9/10/M</td>
</tr>
<tr>
<td>176</td>
<td>*yikaru</td>
<td>charcoal</td>
<td>4, 6/5/10</td>
</tr>
<tr>
<td>177</td>
<td>*yilya</td>
<td>head of animal</td>
<td>6, 8; 9 yija</td>
</tr>
<tr>
<td>178</td>
<td>*yinka-ru</td>
<td>to chisel</td>
<td>4, 6; 8, 9 yitka/-M</td>
</tr>
<tr>
<td>179</td>
<td>*yitha-rru</td>
<td>to ignite</td>
<td>6; 8, 9 yidha-</td>
</tr>
<tr>
<td>180</td>
<td>*yurlu</td>
<td>powder</td>
<td>4, 6</td>
</tr>
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</table>
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, 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.

ACKNOWLEDGEMENTS

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.

I would also like to thank Joe's relatives, Peter and Kathy Bell and children of Mingenew; and Margaret and Charlie Green and children of Mullewa for their friendship and hospitality throughout the duration of my fieldwork.

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© Leone Dunn
Special thanks to Dr Shelly Harrison for many hours of fruitful and stimulating discussion on all aspects of linguistics, and for reading and criticising this work many times. Any shortcomings are of course my own. Thanks also to Richard Kingsford, John Stanton and Professor Basil Sansom for advice and help during my work on Badimaya and in particular Professor Ronald M. Berndt, who stimulated my initial work on the language and who helped in trying to locate further speakers. Mr Stann Gratte of the Geraldton Historical Society kindly lent me his notes and tapes on Badimaya, for which I am extremely grateful.

I would also like to record my appreciation of fieldwork grants and equipment supplied by the Anthropology Department at the University of Western Australia.

ABBREVIATIONS AND SYMBOLS

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

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, Voelglin and Voelglin (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 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.
BADIMAYA, A WESTERN AUSTRALIAN LANGUAGE

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: Wamala/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). 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 children's 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.).
 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):

<table>
<thead>
<tr>
<th>Badimaya</th>
<th>English Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>likarra</td>
<td>dry bark</td>
</tr>
<tr>
<td>marrkarn</td>
<td>frog</td>
</tr>
<tr>
<td>marun</td>
<td>quandong</td>
</tr>
<tr>
<td>nanpa</td>
<td>hairbelt</td>
</tr>
<tr>
<td>ngangkari</td>
<td>day, sky</td>
</tr>
<tr>
<td>nganirri</td>
<td>bulloarer</td>
</tr>
<tr>
<td>tjirala</td>
<td>centipede</td>
</tr>
<tr>
<td>tjupa</td>
<td>child</td>
</tr>
<tr>
<td>wingku</td>
<td>black ants</td>
</tr>
<tr>
<td>wirnta winta watjan</td>
<td>firestick</td>
</tr>
<tr>
<td>yuwaka</td>
<td>to blow (as the wind)</td>
</tr>
</tbody>
</table>

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 | maga
moonya | manggalya
moolya | mulya
challang | dyalang
coolga | kulga
cooroo | guru
eera | yira
nungun | nangan
narngool | ngangu
brig | biridyi
cheeli | dyili
marboo | mara
murr | maga dhadha also stupid
murra | warru
muggathudda | gurradu
wotoo | mirdardu ~ midadu
cooradood | wari
wotchooc | chest
wotchooc | －
nongoo | －
woorun | －
wotchooc | －

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gunna backside, faeces
winda tree
mungada jam tree
cooding onion
karnoora turnip, kurrajong KIA
coorara tree with edible seeds
djuba child - boy or girl
nyoongara Aborigine/man
kadja mooni daughter
mooni woman
narrali very small baby
goodiya one
goodara ~ cootharra two
targudi ~ kutcheri three
goodara goodara four
murra gudi five
biloong white
muraldoo black
weebala white man
cannooyagga big man
branymudda good
wadji no
gubbi water
gubbi yanda water coming
mingari scoop
wonna digging stick
bunna sand
mudda yagoo rocks
beeli sky
weelaia moon
murroo night-time
jeegoda daytime
coolgoo bag for carrying foods
windthoo wind
walba hot
moodi cold
wollada yanda thunderstorm coming
beeli clouds
doolima thunder
jumbadabulla to run
yarra to walk
wurraadoogala to jump
worrang fall down
coobyliyi to sleep
dyuba coobyliyi narnga the baby's gone to sleep
yowada grey kangaroo
marloo red kangaroo
nyow eggs
yallabiddi emu
poondugooda teal duck
cabooogoora mountain duck
cooraldoo swan
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: Ningham, 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 offside to a white prospector (his brother-in-law) in the Ningham-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 palatales, 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

<table>
<thead>
<tr>
<th>CONSONANTS</th>
<th>Manner of Articulation</th>
<th>Place of Articulation</th>
<th>APICAL</th>
<th>LAMINAL</th>
<th>PERIPHERAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alveolar</td>
<td>Retroflex</td>
<td>Dental</td>
</tr>
<tr>
<td>Stop</td>
<td>/d/</td>
<td>/d/</td>
<td>/d/</td>
<td>/d/</td>
<td>/b/</td>
</tr>
<tr>
<td>Nasal</td>
<td>/n/</td>
<td>/ŋ/</td>
<td>/ŋ/</td>
<td>/ŋ/</td>
<td>/m/</td>
</tr>
<tr>
<td>Lateral</td>
<td>/l/</td>
<td>/ɬ/</td>
<td>/l/</td>
<td>/l/</td>
<td></td>
</tr>
<tr>
<td>Rhotic</td>
<td>/r/</td>
<td>/ɭ/</td>
<td></td>
<td>/ɣ/</td>
<td>/w/</td>
</tr>
<tr>
<td>Glide</td>
<td></td>
<td></td>
<td></td>
<td>/ɣ/</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VOWELS</th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>/i/</td>
<td>/u/</td>
<td></td>
</tr>
<tr>
<td>Mid</td>
<td></td>
<td>/a/</td>
<td></td>
</tr>
</tbody>
</table>

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 /ŋd/, /ŋd/, /ŋd/, and /lydy/ clusters as rnd, rld, ndy, and ldy respectively. /rd/ clusters are written r.d to distinguish them from orthographic rd /d/. 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:
/bada/ wild, savage
/mada/ stone
/wada/ far away
(b) intervocalically:
/µuba/ blood
/µuma/ to trick, dodge
/µuwa/ to shoot

(a) intervocalically:
/malagaŋi/ behind
/waniwa/ to throw
/dalima/ to lead
/ŋariya/ to lie
(b) finally:
/ŋud/ horse
/-ŋun/ ablative suffix
/ŋagu1/ hollow

[3] Retroflexes
(a) Retroflexes /d,ŋ,l,ʃ/ contrast intervocally:
/widi/ no
/miŋu/ to know
/wiʃu/ sea
/miʃu/ umbilical cord
(b) Retroflex stop /d/ also contrasts with retroflex rhotic plus alveolar stop /r.d/ intervocally:
/widiŋbaya/ don't want it
/wir.dula/ favourite
(c) Retroflexes /ŋ,ʃ/ contrast finally:
/banban/ bellbird
/biʃbaŋ/ no.28 parrot

[4] Dentals
(a) Dentals /d,ŋ,ʃ/ contrast intervocally:
/daŋa/ bad, stupid
/daŋa/ 3sg-PL
/ŋaŋa/ forehead
(b) Dentals /d,ŋ/ contrast initially:
/da/ hole
/ŋa/ what
[5] Palatals
(a) Palatals /d̪,n̪,l̪,y/ contrast intervocalically:
   /galíd̪a/ 1du-ABS
   /wadin̪a/ now
   /winil̪a/ fish
   /miri̪a/ to call out
(b) Palatals /d̪,n̪,y/ contrast initially:
   /d̪ula/ root
   /n̪uŋa/ Aborigine
   /yunguwa/ to give
(c) Palatals /n̪,l̪/ contrast finally:
   /gunın̪a/ poor fellow
   /bimbil̪a/ ribs

[6] Velars /g,ŋ/ contrast
(a) intervocalically:
   /maŋa/ tired
   /maga/ head
(b) initially:
   /galad̪a/ sick
   /galíd̪a/ 1du-ABS
(c) finally:
   /gul̪ag/ white-tailed black cockatoo
   /wulaq/ cried

[7] Stops
(a) Stops /d,ɖ,d̪,d̪,b,g/ contrast intervocalically:
   /gada/ to stop
   /gaɡa/ on top of
   /gadara/ to flood
   /gaɗa/ child
   /nabala/ something
   /ŋula/ to enter-FUT
(b) Stops /d̪,d̪,b,g/ contrast initially:
   /dудu/ dog
   /ɗ̪uɗu/ smoke
   /buwa/ younger B/to hit-FUT
   /guwa/ yes
(c) Stops /d,ɡ/ contrast finally:
   /galgad/ native rat
   /gul̪ag/ white-tailed black cockatoo

[8] Nasals
(a) Nasals /n,ŋ,ŋ,ŋ̪,m,ŋ/ contrast intervocalically:
   /ŋ̪ina/ to sit
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 Mantjiptjara (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 /nɪŋa/ this vs. /n̥ɪŋa/ this, the word-initial dental and palatal laminals appeared to be used in free variation by Mr. Benjamin, this could possibly be an idiosyncratic
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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 some-
times aspirated: /dalgad/ [dalgatʰ] native rat, /gulvag/ [gulvak] white-tailed
black cockatoo. Mr Benjamin favoured a voiceless articulation for some initial
stops (e.g. /gurara/ [kurarə] Kurara tree, /gogola/ [kogola] wild pear). A
similar phenomenon was noted in the Watjarri of Mr George Barrington, aged 65,
in examples like /gangu/ [kaŋgu] law vs. /gangu/ [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 /d/ and /dʲ/ are frequently realised as
voiced fricatives [ð] and [♯] respectively, intervocally.

(iii) The degree of retroflexion for /d/, /n/ and /l/ varies with the preceding
vowel, being more pronounced after the low vowel /a/.

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

2.3 Vowels

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

(a) medial contrasts:
   /miːdɪ/ dirty
   /maːdə/ stone
   /muːdɪ/ cold
Vowels occur long under certain predictable circumstances, to be considered in section 2.4.3. Primary stress is initial, as in:

/wánara/ long, thin
/windvindvi/ grasshopper

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

/ɡû.n.gãɡùwà/ to choke on something
/wánalvilliga/ scorpion

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

(1) $ \rightarrow $ primary stress / # __
(2) $ \rightarrow $ secondary stress / $[+\text{stress}]$ $-$ $

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 [i]:

/write [wìði] no
/guniny [guninY] poor fellow
/ira [rrA] 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 [u]. Immediately following primary stress and adjacent to a liquid or nasal, it is often realised as [ɘ]:

/guru [guru] eye
/bunguwa [buguwa] ~ [bugwəwa] to hit
/nyunga [nYuŋA] Aborigine
/wîrlugardi [wilagàdi] 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 [ø]. 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 [ɘ]. Word-finally (except after palatals and in -wa place names), and under secondary stress, it is [ʌ]. Elsewhere /a/ is realised as [a]:

/bimara [bimorA] water python
/waladyari [woladvɛɾi] lightning
/Malawa [malAwA] Mullewa
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 $C_1V(C_2)$.2

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:

\[(3) \ y \rightarrow \emptyset / # -i\]

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 [buwa] to hit
- gurriya [gurriya] one
- guwiyal [guwiyal] goanna
- gabiyu [gabiyu] water (dative)
- yamadyiyidya [yamadyiyidya] 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) $\emptyset + G / V S - V$

\text{aba $\emptyset$ba}

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

- yamadyiyida $\text{like a man}$
- dhudhuwidiya $\text{like a dog}$

both of which involve the semblative suffix -idya.

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

- badyabaya $\text{to get angry}$
- wamayidyida $\text{like food}$
- Joeyu $\text{Joe (dative)}$

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) $\emptyset + G / V S - V$

\begin{align*}
\text{aba} &+\text{hi} \\
-ba &-\text{hi}
\end{align*}

Unfortunately, forms of the shape /a$\emptyset$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 $\text{[waniwa]}$ $\text{to throw}$
- malawa $\text{[malawɔ]}$ $\text{Mulewa}$

(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 $\text{to throw}$ remains the sole extant exception to these generalisations in native vocabulary.

### 2.4.2 Word-final glides

The analysis of forms like:

- wanggai $\text{Western Desert Aborigine}$
- gadjau $\text{child (dative)}$

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 consonant 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)
- gablyu water (dative)
- Joeyu Joe (dative)

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

(6) $V \rightarrow [-\text{-syll}] / a \rightarrow # 
[+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 $n \geq 0$

In words of one syllable, like:

- warn [waŋ] creek
- ngud [ŋu̯d] horse
- dha [ɡaː] hole

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

(8) $V \rightarrow [+\text{long}] / \# C \rightarrow (C) \#$

guaranteeing that all phonological words will be minimally bimoric.

Note that long vowels are preserved in compounds like gabidha [gabidaː] 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 mono-
syllabic:

- 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
- bilbiluwa to rattle, shake

Deviations from this pattern are rare. Some examples are:

- dyidyida to tease
- gudhagudhara four (of gudha ~ gudhara two)
- windindyi 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 intervocally:

- **-b-** dyuba *child*
- **-d-** iradula *language*
- **-rd-** dyarda *knee*
- **-dh-** dhadha *stupid, bad*
- **-dy-** dyidi *shell necklace*
- **-g-** wulbag *scar*
- **-m-** ngamari *tobacco*
- **-n-** wudyanu *stronger*
- **-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-** nhin *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-** dhuagul *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 / barren / [brənə] good
dharinnga / daringga / [drəŋgə] 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- gumba urine
- nd- bandiya to sniff, smell
- rnd- barndi/bandi/ sweet
- ndy- bundya/bu a/ to kiss
- ndh- bindhi/bindih/ suddenly
- ngg- manggan

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- wirlba another
- lg- milgu point
- rlg- mirlgu law dance
- lyg- bilyggi 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**

<table>
<thead>
<tr>
<th>FIRST COMPONENT</th>
<th>m</th>
<th>n</th>
<th>r</th>
<th>n</th>
<th>nh</th>
<th>ny</th>
<th>ng</th>
<th>l</th>
<th>rl</th>
<th>ly</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECOND COMPONENT</td>
<td></td>
<td>b</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
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<tr>
<td></td>
<td>d</td>
<td>x</td>
<td></td>
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<tr>
<td></td>
<td>dh</td>
<td>x</td>
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<td>dy</td>
<td>x</td>
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<td></td>
<td>g</td>
<td>x</td>
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<tr>
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<td>m</td>
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</tbody>
</table>

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, r l, 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
-\(rb\)- barnbarn bellbird
-\(nyb\)- gurranybari gurrany wild onions + HAVE
-\(ngb\)- warangbala fall-PAST-LEST
-\(ng\)- 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
-\(lyb\)- bilybarlgui 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
-\(rnn\)- warnnun 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
-\(gng\)- ngulyangngun 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:

-\(rlw\)- garlgarlwlala 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] ~ [ŋdu] 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

<table>
<thead>
<tr>
<th>FIRST COMPONENT</th>
<th>n</th>
<th>rn</th>
<th>ny</th>
<th>ng</th>
<th>l</th>
<th>rl</th>
<th>ly</th>
<th>d</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECOND COMPONENT</td>
<td>b</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>d</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>ng</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>A</td>
</tr>
<tr>
<td>m</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 /lq/, 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

<table>
<thead>
<tr>
<th>/b/</th>
<th>14</th>
<th>/m/</th>
<th>16</th>
<th>/w/</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>/d/</td>
<td>4</td>
<td>/n/</td>
<td>1</td>
<td>/y/</td>
<td>20</td>
</tr>
<tr>
<td>/dr/</td>
<td>3</td>
<td>/ny/</td>
<td>11</td>
<td>Total Glides</td>
<td>43</td>
</tr>
<tr>
<td>/g/</td>
<td>10</td>
<td>/q/</td>
<td>21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>CONSONANTS</th>
<th>VOWELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>/d/</td>
<td>/a/</td>
</tr>
<tr>
<td>/g/</td>
<td>/i/</td>
</tr>
<tr>
<td>/n/</td>
<td>/u/</td>
</tr>
<tr>
<td>/p/</td>
<td>/ Total all</td>
</tr>
<tr>
<td>/ny/</td>
<td>Vowels</td>
</tr>
<tr>
<td>/q/</td>
<td>22</td>
</tr>
</tbody>
</table>

Total all 30  Consonants
Table 2.5.3: Relative frequencies of consonantal phonemes in word-medial position

<table>
<thead>
<tr>
<th>MEDIAL</th>
<th>MEDIAL</th>
<th>MEDIAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INTER-</td>
<td>FIRST OF</td>
<td>SECOND OF</td>
</tr>
<tr>
<td></td>
<td>VOWELIC</td>
<td>CLUSTER</td>
<td>CLUSTER</td>
</tr>
<tr>
<td>/b/</td>
<td>4</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>/d'/</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/d/</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/d/</td>
<td>6</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>/g/</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/g/</td>
<td>4</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>TOTAL StOPS</td>
<td>47</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>/m/</td>
<td>19</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>/n/</td>
<td>23</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>/n'/</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ŋ/</td>
<td>7</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>/ŋ/</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ŋ/</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL Nasals</td>
<td>67</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>/l/</td>
<td>19</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>TOTAL LATERALS</td>
<td>19</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>/r/</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/r/</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL Rhotics</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/y/</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/w/</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL Glides</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>156</td>
<td>26</td>
<td>26</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>MEDIAL</th>
<th>FINAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/</td>
<td>31</td>
<td>18</td>
<td>49</td>
</tr>
<tr>
<td>/a/</td>
<td>137</td>
<td>47</td>
<td>184</td>
</tr>
<tr>
<td>/u/</td>
<td>43</td>
<td>28</td>
<td>71</td>
</tr>
<tr>
<td>TOTAL</td>
<td>211</td>
<td>93</td>
<td>304</td>
</tr>
</tbody>
</table>

Table 2.5.5: Relative frequencies of consonantal phonemes in any position

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>/b/</td>
<td>19</td>
<td>/l/</td>
<td>20</td>
</tr>
<tr>
<td>/d/</td>
<td>21</td>
<td>/l/</td>
<td>-</td>
</tr>
<tr>
<td>/g/</td>
<td>13</td>
<td>/l/</td>
<td>-</td>
</tr>
<tr>
<td>/d/</td>
<td>14</td>
<td>/i/</td>
<td>-</td>
</tr>
<tr>
<td>/d/</td>
<td>13</td>
<td>Total all Laterals</td>
<td>20</td>
</tr>
<tr>
<td>/g/</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total all Stops</td>
<td>105</td>
<td>/r/</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>/r/</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>/m/</td>
<td>37</td>
<td>Total all Rhotics</td>
<td>8</td>
</tr>
<tr>
<td>/n/</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/p/</td>
<td>2</td>
<td>/y/</td>
<td>24</td>
</tr>
<tr>
<td>/n/</td>
<td>13</td>
<td>/w/</td>
<td>34</td>
</tr>
<tr>
<td>/n/</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/l/</td>
<td>60</td>
<td>Total all Glides</td>
<td>58</td>
</tr>
<tr>
<td>Total all Nasals</td>
<td>170</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilabial (including /w/)</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alveolar</td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retroflex</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palatal (including /y/)</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Velar</td>
<td>85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total all Consonantal Phonemes</td>
<td>361</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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, mudyiyi 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, muringgura, muradyi the little people, mabarn medicine, power;
(d) Vegetation, such as winda tree, wa larada sandalwood tree, yiladyi salmon gum, maruny quondong tree, dhurra blackbutts;
(e) Artefacts, such as gundi fighting stick, bandyi possessions, wa lanu boom-erang, wana women's digging and fighting stick;
(f) Language, ceremony and song styles: yiradula language, dhurra stick for hitting ground in dances, dhulgu paint dance, mirlgu law dance, mamayu garra corroboree;
(g) Body parts and functions, such as nguba blood, dhaba bone, wulbaga scar, nyundyulu marrow, dyarda knee, mambu leg.


[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, baranyx good, dhadhaya 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: mawardu black, biluny white, and binma red. Joe Benjamin remembers 'green ochre' being used in ceremonies, but cannot remember the term for this.
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. 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):

<table>
<thead>
<tr>
<th>stem</th>
<th>accusative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dyla</td>
<td>dyla-nha</td>
<td></td>
</tr>
<tr>
<td>Peter</td>
<td>Peter-nha</td>
<td></td>
</tr>
<tr>
<td>Joseph</td>
<td>Joseph-ganha</td>
<td></td>
</tr>
</tbody>
</table>

[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-:

<table>
<thead>
<tr>
<th>stem</th>
<th>accusative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ngud</td>
<td>ngud-du</td>
<td></td>
</tr>
<tr>
<td>wadyan</td>
<td>wadyan-du</td>
<td></td>
</tr>
<tr>
<td>garang</td>
<td>garang-gu</td>
<td></td>
</tr>
<tr>
<td>rifle</td>
<td>rifle-du</td>
<td></td>
</tr>
<tr>
<td>-lu</td>
<td>-nggu</td>
<td></td>
</tr>
<tr>
<td>-lu</td>
<td>-nggu</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>stem</th>
<th>ergative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Peter/ Joe/ Kathy</td>
<td>Peter-lu/ Joe-lu/Kathy-lu</td>
<td></td>
</tr>
<tr>
<td>bibi</td>
<td>bibi-lu</td>
<td></td>
</tr>
<tr>
<td>yigu</td>
<td>yigu-lu</td>
<td></td>
</tr>
</tbody>
</table>

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.
BADIMAYA, A WESTERN AUSTRALIAN LANGUAGE

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:

<table>
<thead>
<tr>
<th>stem</th>
<th>ergative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>yamadyi</td>
<td>yamadyi-lu</td>
<td>man</td>
</tr>
<tr>
<td>dyinabuga</td>
<td>dyinabuga-lu</td>
<td>boot</td>
</tr>
</tbody>
</table>

[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:

<table>
<thead>
<tr>
<th>stem</th>
<th>locative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ngud</td>
<td>ngud-da</td>
<td>horse</td>
</tr>
<tr>
<td>warn</td>
<td>warn-da</td>
<td>creek</td>
</tr>
<tr>
<td>garlgarl</td>
<td>garlgarl-da</td>
<td>bush</td>
</tr>
<tr>
<td>guwiyal</td>
<td>guwiyal-da</td>
<td>possum</td>
</tr>
<tr>
<td>garang</td>
<td>garang-ga</td>
<td>sun</td>
</tr>
<tr>
<td>Peter</td>
<td>Peter-la</td>
<td>Peter</td>
</tr>
<tr>
<td>yigu</td>
<td>yigu-la</td>
<td>elder sister</td>
</tr>
<tr>
<td>yamadyi</td>
<td>yamadyi-la</td>
<td>man</td>
</tr>
<tr>
<td>gadyi</td>
<td>gadyi-la</td>
<td>spear</td>
</tr>
<tr>
<td>marda, etc.</td>
<td>marda-ngga</td>
<td>stone</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>stem</th>
<th>comitative-locative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sid</td>
<td>Sid-ala</td>
<td>with Sid</td>
</tr>
<tr>
<td>Magnet</td>
<td>Magnet-ala</td>
<td>in Mt Magnet</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>stem</th>
<th>locative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>yamadyi</td>
<td>yamadyi-la</td>
<td>with the man or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>on the man</td>
</tr>
</tbody>
</table>

-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 yalu-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:

-\textit{gu} with consonant-final stems:

\begin{center}
\begin{tabular}{ll}
\textbf{stem} & \textbf{dative} \\
marran & marran-gu for the sheep \\
guwiyal & guwiyal-gu for the possum \\
\end{tabular}
\end{center}

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

\begin{center}
\begin{tabular}{ll}
\textbf{stem} & \textbf{dative} \\
gabi & gabi-yu for water \\
Joe & Joe-yu Joe's, for Joe \\
\end{tabular}
\end{center}

-\textit{wu} with the back vowels /a/ and /u/, where /u/ becomes /a/:

\begin{center}
\begin{tabular}{ll}
\textbf{stem} & \textbf{dative} \\
dhudhu & dhudha-wu dog's, etc. \\
Peter & Peter-wu Peter's, etc. \\
banha & banha-wu that one's, etc. \\
\end{tabular}
\end{center}

The functions of -\textit{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:

-\textit{di} with vowel-final stems

-\textit{adi} with consonant-final stems:

\begin{center}
\begin{tabular}{ll}
\textbf{stem} & \textbf{allative} \\
Mullewa & Mullewa-di to Mullewa \\
warn & warn-adi to the creek \\
\end{tabular}
\end{center}

A compound of the dative-purposive -\textit{gu} and the allative -\textit{di} (-\textit{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 -\textit{ngun}.

\begin{center}
\begin{tabular}{ll}
\textbf{stem} & \textbf{ablative} \\
winda & winda-ngun from/out of the tree \\
Sid & Sid-ngun from Sid \\
warn & warn-ngun from the creek \\
\end{tabular}
\end{center}

Table 3.0.1.2: Noun case forms
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 [-dy 'dual', -mi 'plural']) + case

There is no inclusive/exclusive contrast for first person non-singular pronouns. 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>
<thead>
<tr>
<th>Gloss</th>
<th>ABS</th>
<th>ACC</th>
<th>LOC</th>
<th>DAT</th>
<th>ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg</td>
<td>ngadhu</td>
<td>ngadhunha</td>
<td>ngadhu</td>
<td>nganang</td>
<td>nganangudi</td>
</tr>
<tr>
<td>1du</td>
<td>ngalidyana</td>
<td>ngalidyanha</td>
<td>ngalidyala</td>
<td>ngalidyang</td>
<td>?</td>
</tr>
<tr>
<td>1pl</td>
<td>ngalimi</td>
<td>ngaliminha</td>
<td>ngalimila</td>
<td>ngalimi</td>
<td>ngalimidi</td>
</tr>
<tr>
<td>2sg</td>
<td>nhundi</td>
<td>nhununha</td>
<td>nhundula</td>
<td>nhunung</td>
<td>nhunungudi</td>
</tr>
<tr>
<td>2du</td>
<td>nhurad ya</td>
<td>nhuranha</td>
<td>nhurala</td>
<td>nhubadyang</td>
<td>nhurangudi</td>
</tr>
<tr>
<td></td>
<td>nhubali</td>
<td></td>
<td></td>
<td>nhurang</td>
<td></td>
</tr>
<tr>
<td>2pl</td>
<td>nhurami</td>
<td>nhuraminha</td>
<td>?nhurangula</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

*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', ngal '1n-sg'; nhundi ~ nhunu '2sg', nhura ~ nhuba '2n-sg'). The '1sg' stem ngana appears only before the dative suffix ng(u).

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

<table>
<thead>
<tr>
<th>Gloss</th>
<th>ABS</th>
<th>ACC</th>
<th>LOC</th>
<th>DAT</th>
<th>ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>3sg</td>
<td>balu</td>
<td>balunha</td>
<td>balula</td>
<td>balung</td>
<td>balungudi/baludi</td>
</tr>
<tr>
<td>3pl</td>
<td>dhanha</td>
<td>dhanhanha</td>
<td>dhanhala</td>
<td>dhanhung</td>
<td>dhanhungudi</td>
</tr>
</tbody>
</table>

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). 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 (gard: 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, 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 shearer-man-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 -gardί side is common with demonstratives in 'adverbial' uses like:

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

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

Table 3.0.3: Demonstratives

<table>
<thead>
<tr>
<th>Gloss</th>
<th>ABS</th>
<th>ERG</th>
<th>ACC</th>
<th>DAT</th>
<th>LOC</th>
<th>ALL</th>
<th>ABL</th>
</tr>
</thead>
<tbody>
<tr>
<td>this</td>
<td>nhinha</td>
<td>nhinhalu</td>
<td>nhinhanha</td>
<td>nhinawu</td>
<td>nhinhala</td>
<td>nhinhadi</td>
<td>nhinha gardί(ngun)</td>
</tr>
<tr>
<td>(here)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that</td>
<td>banha</td>
<td>banhalu</td>
<td>banhanha</td>
<td>banhawu</td>
<td>banhala</td>
<td>banhadi</td>
<td>banha gardί(ngun)</td>
</tr>
<tr>
<td>(there)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>ABS</th>
<th>ERG</th>
<th>LOC</th>
<th>DAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ngana who</td>
<td>ngana</td>
<td>on what</td>
<td>nhanagga when</td>
</tr>
<tr>
<td>nha what</td>
<td>nhalu</td>
<td></td>
<td>nhawu why</td>
</tr>
</tbody>
</table>

'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 (nhanagga 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:

<table>
<thead>
<tr>
<th>ABS</th>
<th>LOC</th>
<th>ABL</th>
</tr>
</thead>
<tbody>
<tr>
<td>wandi which, where</td>
<td>wandila whereabouts</td>
<td>wandigardingun where from</td>
</tr>
</tbody>
</table>

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)\textsuperscript{12} to the interrogative root nha-:

(26) nhandi ngadhu nhabala branya
    there-ABS lsg-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 bran yaya-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 demonstra-
tives and possessives (see (c)(i) below).

(c)(i) Nominal or pronominal alienable possessors generally precede the posses-
sed 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.

(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 adjecival yagu, while the quantifier yagu precedes the head:
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
   ldu-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:

{demonstratives quantifier noun quantifier adjective
possessives

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 dyuda-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 dyuda-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 \[ NP (-banha) NP (-banha) \] 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>
<thead>
<tr>
<th>Category</th>
<th>Noun-human</th>
<th>Noun-'higher' animates</th>
<th>Noun-inanimate</th>
<th>Pronouns</th>
<th>Demonstratives</th>
<th>Interrogatives</th>
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<tr>
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<td>(3)</td>
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</tbody>
</table>
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 -gun (see 3.0.3 and 3.0.4).

3.2.2 Case forms and functions
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  
3sg-ABS head-ABS bald-ABS
He's bald-headed.

(82) dyuba mulya mirdi  
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 instrumental NPs 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  
lsg-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 magulqa 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.
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(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 maqulga 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 win da 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 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, (around 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-1a 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-INC-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 yadayu-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.
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(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:
Some utterance verbs, such as dharingga to lie and miriya to shout appear to require an allative complement (see 4.4.2[4]):
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(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)\(^\text{15}\)

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 Badimimaya 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, -idyä 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 proprietary', -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 ngula ngunya-bari
3sg-ABS armpit-ABS hair-HAVE
He has hairy armpits.

(191) balu midu 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 gabu-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) gudu 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 accommodated:
(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 dyambarada-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
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 specialization 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

\[
\text{NP} \left[ \begin{array}{c}
\text{(banha)} \\
\text{(-coord)}
\end{array} \right] \text{NP}
\]

(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 -bари vs. -banha vs. locative-comitative -la ~ -ala. When used to express accompaniment, -bари, -banha, and -la ~ -ala may be distinguished as follows:

[1] -bари 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-CORD go-PRES
   I'm taking the mules/horses, etc.

However, -bāri 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-bāri Mullewa-gudi ya-ngguwa
      Joe-ABS Sid-HAVE Mullewa-ALL go-PRES

but,

(221) Joe Sid-banha Mullewa-gudi ya-ngguwa
      Joe-ABS Sid-CORD 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-CORD
   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-CORD 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-CORD go-PAST-PERF

OR

(229) ngana-ng mudyi dyuba-mi-banha ya-nung
   1sg-DAT spouse-ABS child-PL-CORD go-PAST-PERF
   (I) went with my wife and kids.

not,
(231) *ngana-ng muddyi-bahi-banha dhuba-mi-banha ya-ngung
   lsg-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-nggwa (≡221)
   Joe-ABS Sid-COORD Mullewa-ALL go-PRES
   Joe and Sid are going to Mullewa.

(232) balu Sid-ala Mullewa-di ya-nggwa
   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-bahi/banha/la ya-nggwa
   lsg-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 direc­
tional (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-nggwa
   which/where-SIDE-ABL go-PRES
   Which side are you from? OR
   (same sense)
   Where are you from?

(237) ngadhu-la nhinha-gardi ya-ra
   lsg-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-nggwa
   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 men­
tioned 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 particular 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)  
    wannala-gardi:  Wannala side (north-east)

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

(245) balu bimbily/warl/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.


\(253\) 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-barra wara-ng
      fence-ALL suddenly/straight-ABS face-FIRST fall-PAST
      (We) fell straight through the fence, face first.

Similarly,

(262) dyina-barra feet first
     maga-barra head first
     dyilli-barra arms first
     mara-barra hands first

3.3.7 -muga 'kin proprietary'

The -muga suffix may be attached to nouns only. Though I have little evidence in the data, this suffix appears to be the 'kin proprietary' suffix discussed by Breen (1976:290): "The non-singular kin proprietary 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 dhadhua-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) wirinda 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.)

<table>
<thead>
<tr>
<th></th>
<th>to kick</th>
<th>to get mad</th>
<th>to know</th>
<th>to stab, put</th>
<th>pierce</th>
</tr>
</thead>
<tbody>
<tr>
<td>present</td>
<td>gani-ya</td>
<td>badya-ba-ya</td>
<td>mirnu-wa</td>
<td>nhuga</td>
<td>dha-nda</td>
</tr>
<tr>
<td>past</td>
<td>gani-n</td>
<td>badya-ba-n</td>
<td>mirnu-n</td>
<td>nhuga-n</td>
<td>dha-nda-n</td>
</tr>
<tr>
<td>future</td>
<td>gani-la</td>
<td>badya-ba-la</td>
<td>mirnu-la</td>
<td>nhuga-la</td>
<td>dha-nda-la</td>
</tr>
<tr>
<td>imperative</td>
<td>?</td>
<td>-</td>
<td>-</td>
<td>nhuga</td>
<td>dha-nda</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th></th>
<th>to bark</th>
<th>to paint each other (for a ceremony)</th>
</tr>
</thead>
<tbody>
<tr>
<td>present</td>
<td>balgura</td>
<td>ngandi ngandi-dya</td>
</tr>
<tr>
<td>past</td>
<td>balgura-n</td>
<td>ngandi ngandi-dya-n</td>
</tr>
<tr>
<td>future</td>
<td>balgura</td>
<td>ngandi ngandi-dya</td>
</tr>
<tr>
<td>imperative</td>
<td>-</td>
<td>ngandi ngandi-dya</td>
</tr>
</tbody>
</table>

4.1.2 The ng class

This is a relatively small closed class containing base stems only. Seven of these stems are monosyllabic, 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:

<table>
<thead>
<tr>
<th></th>
<th>to go</th>
<th>to give</th>
<th>to take, get</th>
<th>to hit</th>
</tr>
</thead>
<tbody>
<tr>
<td>present</td>
<td>ya-ngguwa</td>
<td>vu-ngguwa</td>
<td>ma-ngguwa</td>
<td>bu-ng(g)uwa</td>
</tr>
<tr>
<td>past perfective</td>
<td>ya-nung</td>
<td>vu-nung</td>
<td>ma-nung</td>
<td>bu-ngung</td>
</tr>
<tr>
<td>past imperfective</td>
<td>ya-ngguwa-n</td>
<td>vu-ngguwa-n</td>
<td>ma-ngguwa-n</td>
<td>bu-ngguwa-n</td>
</tr>
<tr>
<td>future</td>
<td>ya-ra</td>
<td>vu-wa</td>
<td>ma-ra</td>
<td>bu-wa</td>
</tr>
<tr>
<td>imperative</td>
<td>ya-ra</td>
<td>vu-wa</td>
<td>ma-ra</td>
<td>bu-wa</td>
</tr>
</tbody>
</table>

to see, look, watch

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>present</td>
<td>nha-guwa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>past perfective</td>
<td>nha-ngung</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>past imperfective</td>
<td>nha-guwa-n</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>future</td>
<td>nha-wa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>imperative</td>
<td>nha-wa</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Consonant-final monosyllabic stems are slightly irregular:

<table>
<thead>
<tr>
<th></th>
<th>to swallow</th>
<th>to come</th>
</tr>
</thead>
<tbody>
<tr>
<td>present</td>
<td>ngal-guwa</td>
<td>yan-da</td>
</tr>
<tr>
<td>past perfective</td>
<td>ngal-ang</td>
<td>yan-ang</td>
</tr>
<tr>
<td>past imperfective</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>future</td>
<td>ngal-a</td>
<td>yan</td>
</tr>
<tr>
<td>imperative</td>
<td>ngal-a</td>
<td>yan-a</td>
</tr>
</tbody>
</table>

to break (in) to sneak to fall

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>present</td>
<td>garda-ngguwa</td>
<td>bida-ngguwa</td>
<td>wara-ngguwa</td>
</tr>
<tr>
<td>past perfective</td>
<td>garda-ng</td>
<td>bida-ng</td>
<td>wara-ng</td>
</tr>
<tr>
<td>past imperfective</td>
<td>garda-ngguwa-n</td>
<td>bida-ngguwa-n</td>
<td>wara-ngguwa-n</td>
</tr>
<tr>
<td>future</td>
<td>garda-la</td>
<td>bida-la</td>
<td>wara-la</td>
</tr>
<tr>
<td>imperative</td>
<td>-</td>
<td>-</td>
<td>wara-nggala</td>
</tr>
</tbody>
</table>

Other verbs in ng2 are:barangguwa to vomit; widilanguwa 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:

<table>
<thead>
<tr>
<th></th>
<th>to sit</th>
<th>to shine</th>
</tr>
</thead>
<tbody>
<tr>
<td>present</td>
<td>nyina-ga</td>
<td>binma-ga</td>
</tr>
<tr>
<td>past perfective</td>
<td>nyina-ng</td>
<td>binma-ng</td>
</tr>
<tr>
<td>past imperfective</td>
<td>nyina-ga-n</td>
<td>binma-ga-n</td>
</tr>
<tr>
<td>future</td>
<td>nyina-la</td>
<td>binma-la</td>
</tr>
<tr>
<td>imperative</td>
<td>nyina</td>
<td>binma</td>
</tr>
</tbody>
</table>

ng4. The ng4 class also contains two verbs, wulaya to cry and wanggayya to ask, say, speak, tell. The forms are:

<table>
<thead>
<tr>
<th></th>
<th>to cry</th>
<th>to speak, tell, ask, say</th>
</tr>
</thead>
<tbody>
<tr>
<td>present</td>
<td>wula-ya</td>
<td>wangga-ya</td>
</tr>
<tr>
<td>past perfective</td>
<td>wula-ng</td>
<td>wangga-ng</td>
</tr>
<tr>
<td>past imperfective</td>
<td>wula-ya-n</td>
<td>wangga-ya-n</td>
</tr>
<tr>
<td>future</td>
<td>wula-la</td>
<td>wangga-la</td>
</tr>
<tr>
<td>imperative</td>
<td>-</td>
<td>wangga</td>
</tr>
</tbody>
</table>
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 Mingeneu-ALL go-PRES
    He said he's not going to Mingeneu.

A narrative use of the present tense can be observed in examples like:

(6) ngadhu ngud ma-ra ya-nung dam-gudi balu gabii ngal-guwa...
    1sg-ABS horse-ABS take-FUT go-PAST dam-ALL 3sg-ABS water-ABS swallow-PRES
    I took the horse to the dam3 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.)

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 ngauw-ngga nyina-ga dyuduwaru balu wama
3sg-ABS come-FUT egg-LOC sit-PRES female-ABS 3sg-ABS food-ABS

gurri-la mama-ru dhama-la ngauw ...
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 brany-a-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 -lg u. 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-lg u
    1sg-ABS soon-ABS spear-ABS break-PURP
    I'll break that spear directly.

(22) dhudhu-nggu yan nhunhu-nha badya-lg u
    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 ngabanu 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
    nganganguwa 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
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 -da. These stems are derived from verbs listed in 4.2.2[1] above, i.e. affect and sense/perception verbs:

(31) bungu-da to hit each other
    wangga-da 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 dhalg-a-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 transitve, 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, waggaya to speak, tell, ask, dhaba to burn, cook, bandiya to smell, binnaga 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 bivalent 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:
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 n! (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-aban 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, dha gu la 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 dyambardabaya 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.
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/dyuda-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 ngbanu ngalu-bala (=24)
sheep-ABS see/watch-IMPF-PAST dog-ABS dingo-ABS eat-LEST
Watch the sheep test the dingos kill and eat them!

(i.e. ngaluwa 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
murdinda-nda to make cold
marduwa-nda to raise
mula-nda to kill
wulgu-nda to straighten
guwa-nda to hear, listen, feel
dha-nda to stab, pierce
badi-nda to finish
wagu-nda to 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 dhabalandi 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] -dyu-. The reciprocal/reflexive -dyu- (see also 4.1) is added to base stems, and some derived stems, to derive verbs belonging to the n2 inflection class. The -dyu- suffix is homophonous with the -dyu 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 hit-PRES
    The man is hitting his wife.

is reciprocalised to:

(84) bagali-lu mudyi-lu bingu-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-ERG 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 bingu-dya-n nhinha barna
    3pl-ABS stone-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 binguwa hit, as in:

(90) ngadhu gan bingu-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:
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(91) ya nhundu guwa-nda-dya
how 2sg-ABS yes-CAUSE-RECIPI/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-RECIPI/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
yarahula to dream yarahula dream
baranya to fix baranya 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: ganggala to laugh
gadagala to pick up
-dya: verbs with the stem-final -dyad in the base form all belong to
the n1(c) class. These verbs are:
bundy a 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. From the nl class:

(96) badama to chase ma- to take, get
dhama to cover dha hole + ma-
dhalima to lead dhal + ma-
dylima to carry dyll arm + ma-

From the ng2 class:

(97) nganbindangguwa to choke someone ngan neck + binda-n closed
ngangangguwa 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-RECP/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
bilbiluwa to rattle, shake
burdaburda to tell a story
gidigidiy a 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:
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(101) ngadhu gadyi garda-ng
      lsg-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 'monoclusal' 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 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 mudiy-nha wangga-ya
  emot-ABS spouse-ACC say-PRES
  The emu is calling its mate.

(2) bagali-lu mudiy-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.
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 juxta-posed 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-dí
    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 juxta-posed 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/RECIPI-PAST men-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:
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
Isg-ABS smoke-PRES
I am smoking (a cigarette).

(18) dhudhu balgura
dog-ABS bark-PRES
The dog is barking.

(19) ngadhu nganga-ngguwa
Isg-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
Isg-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.
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
    lsg-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
    lsg-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 bala-nha guwa-nda
    lsg-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 comp-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-nga mama-la ya-nung Mullewa-di
   1sg-ABS 1sg-D AT father-LOC go-PAST-PERF Mullewa-ALL
   I went with my father to Mullewa.

(64) dyuba winda-ngga widila-nguwa 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 -dyà (see 4.4.1[3]), may contain a
single nominal argument (with plural reference), two juxtaposed nominal argu-
ments in the same role (interpreted as a conjoined nominal), or rarely, two
nominal arguments in different roles. Single and juxtaposed nominals in recipro-
cal 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:
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(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) gada y ngal id ya g inggila
    child-ABS 1du-ABS laugh-NON-PAST
Us two children are laughing and shouting.

(86) ngal id ya g udha babi nyu-da gabi ngala-ng garlg arl-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) appositive ascriptive NPs:

(87) Noela wan barna gada y 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) nhin ha babi nyu 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 mata ka 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 nhin ha-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 nhin ha-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 Yabarubi-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) war i 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-SEM
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 murri
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 dog-ABS 1sg-DAT
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 murri
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 mudi-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 -gard side suffix (3.3.3):

(129) kogola downs banha-garti cue-1a
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 mardi-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-garti 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?
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(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:
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:

(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"?

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.:

(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.

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:
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 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.

(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-nguwa Mingenew-di
3sg-ABS say/tell-PAST-PERF NEG go-PRES Mingenew-ALL
He said he's not going to Mingenew.
balu wirdi wulgu wangga-ya
3sg-ABS NEG straight-ABS talk/say, etc.-PRES
He's not talking straight (he's lying).

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:

wirdi balu-nha bu-nguwa-n
NEG 3sg-ACC hit-IMPF-PAST
No, don't hit him.

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:

wayi wangga mama gurlban ngalimi
NEG say/tell-PRES song-ABS secret-ABS 1du-ABS
Don't say that it's our secret song.

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:

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:

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  
(comp scope) predicate 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.
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. 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
    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) gu mal win da-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.
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 corpus 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:
The woman was cooking food for her husband (who was) mustering sheep.

Similarly,

The woman killed a snake with a stone lying on the ground.

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):

Peter's finished breaking in the horses.

They said they're not going to Mingenew.

He said he's not sick.

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:

I stopped him talking.
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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 coreferrality 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-ergativing' 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
Table 5.5.3: Summary of morphological and syntactic features of clause-linking and coreference

<table>
<thead>
<tr>
<th>Logical Relations of Clauses with Coreferential NPs</th>
<th>MAIN CLAUSE</th>
<th>ADJOINED CLAUSES</th>
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<tr>
<td>Function of Controller NP</td>
<td>Function of Target NP</td>
<td>Infl. Features of Clause-linking</td>
</tr>
<tr>
<td>Inflectional Features of NP</td>
<td>(Intr. Subject)</td>
<td>None</td>
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<tr>
<td></td>
<td>(Trans. Subject)</td>
<td>&quot;</td>
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<td></td>
<td>(Direct object)</td>
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<tr>
<td>1. Coordination</td>
<td>= Ergative</td>
<td></td>
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<tr>
<td>Intrans. Subject</td>
<td>= Ergative</td>
<td></td>
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<tr>
<td>Trans. Subject</td>
<td>= Ergative</td>
<td></td>
</tr>
<tr>
<td>Trans. Subject/ Direct object</td>
<td>= Ergative</td>
<td></td>
</tr>
<tr>
<td>2. Subordination</td>
<td>= Ergative</td>
<td></td>
</tr>
<tr>
<td>2.1 Purpose-intent (non-finite) Location</td>
<td>= Ergative</td>
<td></td>
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<tr>
<td>(finite) Goal</td>
<td>= Locative</td>
<td></td>
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<tr>
<td>Direct Object</td>
<td>= Allative</td>
<td></td>
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<tr>
<td>Direct Object</td>
<td>= Accusative</td>
<td></td>
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<tr>
<td>2.2 Causal (finite) Intrans. Subject</td>
<td>= Ergative</td>
<td></td>
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<tr>
<td>Direct Object</td>
<td>= Accusative</td>
<td></td>
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<td>2.3 Simultaneous Action (finite) Intrans. Subject</td>
<td>= Ergative</td>
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<td>Direct Object</td>
<td>= Accusative</td>
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<tr>
<td>Direct Object</td>
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<td>Direct Object</td>
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<td>Beneficiary</td>
<td>= Absolutive</td>
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<td>Instrumental</td>
<td>= Absolutive</td>
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<tr>
<td>2.4 Sentential Objects Intrans. Subject</td>
<td>= Ergative</td>
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<tr>
<td>Trans. Subject</td>
<td>= Ergative</td>
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<tr>
<td>Intrans. Subject</td>
<td>= Ergative</td>
<td></td>
</tr>
</tbody>
</table>
How Joe Stopped the Mad Cook at Warreidar Station

He was cook and windmill man on Warreidar station.

He got mad because of (the complaints about) the food.

He went and got a gun

and went back to the kitchen.

He was going to shoot the men.

I got him by the arms.

I got the gun.

I hit him in the ear hole.

He ran to the woodheap and got an axe.

One man chased him and hit him.

The Day Joe Got Chased by a Camel

We two went looking for birds eggs.

By and by, who's that coming?

A camel with her children. She got wild because of the little ones and chased us.

We ran to the fence (and instead of going over the fence),
fence-gud i bindhi  mul ya-bara wara-ng
fence-ALL straight-ABS face-FIRST fall-PAST-PERF
fell straight through the fence face-first.

Joe Caught the Porcupine

ngali dy a 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.

nga rri ya garang-gudi ya-nggu wa
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.

yur da nha-nung gundu wa ngarri-ya dha-ngga
later-ABS see-PAST-PERF porcupine-ABS lie-PRES hole-LOC
Later she saw a porcupine lying in a hole.

yur da ngana-ngudi mira-ng
later-ABS 1sg-ALL call-PAST
By and by she called out to me:

dha-ngga yidawa-la gundu wa ma-nung
hole-LOC get down-FUT porcupine-ABS take-PAST
"Get down the hole, take the porcupine,

maga bu-wa garda-di wani wa
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 yidia-n
1sg-ACC emerge-PAST take-PAST
pulled me out and put me down

How They Go About Sending Word for a Ceremony

ira dhal gala 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

gurri ya 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 sheed-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.
We two, my friend and I, were drinking the wine in the bush.

Later on I said:

"Give me some tobacco!"

He said:

"No, no, I haven't got any tobacco."

I said:

"Yes, I'm going to get some."

I went to the store.

I went to the storekeeper to ask him.

He saw me and straight away started abusing me.

He got mad at him.

I got mad at him.

I went up to the counter.

He's standing on the other side of the counter -
I grabbed his throat.

"You come around this side".

"No, no", he said,

He got frightened and

gives me his hand.

(The storekeeper never got his money, but he's been good friends with Joe ever since.)

I went south looking for a woman.

By and by I got a wife.

Yes, she was a good woman.

We stay together for a long time.

By and by she saw another bloke (and)

Then) she ran away from me.

I again took one - from the north.

(Then) she ran away from me.
Now I'm alone.

I took another person's kid. (Joe adopted a son)

We raised him.

I took him to school.

"How's the feed for the sheep up there, good?"

He (Joe's father) said to me:

"You run up to the creek and see if its full of water for the sheep."

"Yes, the creek is full".

"Did you see the other side?"

"There's plenty of water in the other side of the creek".

"That creek's (good) for the shearer to wash in and the sheep (to get a drink)."

We're all going far away up to Ningan station.

By and by we'll come back".

I cried.
JOE'S FATHER'S SHEEPDOG

3sg-DAT name-ABS Windy-ABS
His name was Windy.

If he'd see some sheep,

he'd take off through the middle.

If he'd see them all together again.

He'd take 'em along good.

I said to my father:

"If he were my dog,
I'd hit him on the head with a stone."

WHEN JOE WAS A BOY ...

When I was a child my elder sister said to me:

"Take the horse to the water hole".

I jumped up onto the horse's back.

I took the horse to the dam.
She drinks the water, and she went out into the middle of the dam. She started hitting the water with her front legs and is going to lie down in the water. I'm sitting on the horse's back. I got frightened. I called to my sister. My sister roused me: "Why did you take the horse into the middle of the dam?" We two, my elder sister and I, went from Kurara station to Kogola Downs station.
Kogola Downs banha-gardi Cue-la
Kogola Downs 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.
HE SAID:

"That dog good?"

I SAID:

"No, he chased kangaroos."

THE BOSS ASKS MY SISTER:

"Did my dog chase kangaroos?"

MY SISTER SAID:

"Yes, only one."

HOW THE DINGOES GOT OLD CLINCH

An Aborigine went to the caves
He made a fire,
cooked food, and

he ate it. Then he
lies down not thinking about anything
BADIMAYA, A WESTERN AUSTRALIAN LANGUAGE

He didn't see the puppies.

Later on, the female dingo came (back).

She straight away jumped on (his) back, bit (him), and killed (him).

Later on, they saw his bones.

Father (porcupine) went looking for food.

The man saw him,

killed (him), and ate (him).

The child and his mother sat waiting.

He (the father) disappeared.

The children were laughing and shouting.

Mother (porcupine) said:

"Child, child, chuck that laughter far away.

Your poor dear father is a long way away at Kunturu."

The father covered himself with a sheet to go and frighten the men.
Later on, the child asks its mother:

Later they saw a devil coming.

One man spoke:

The father looked back.

"Is this a baby?"
BADIMAYA, A WESTERN AUSTRALIAN LANGUAGE

BUT 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 GARD-Angguwa 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 3PL-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 GARD-Angguwa GUWA
2SG-ABS HORSE-ABS BREAK IN-PRES YES
ARE YOU BREAKING IN HORSES?" - "YES" -

NHUNDU GURIYIA NGANA-NG YU-WA BARANYMARDI-NHA
2SG-ABS ONE-ABS 1SG-DAT GIVE-FUT/IMP GOOD ONE-ACC
"YOU GIVE ME ONE!

NGANA-NG YU-WA BARANYMARDI-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 werdhi 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-NONE-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 ...

gurrinya ngawu dha-ngga ngarri-ya
one-ABS egg-ABS hole-LOC lie-PRess
She lays one egg in the centre of the nest and

ngawu nhinla-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 gulu nyi 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-NONE-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:

<table>
<thead>
<tr>
<th>Numeral</th>
<th>Badimaya</th>
<th>Approx. English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gurriya</td>
<td>one</td>
<td>one</td>
</tr>
<tr>
<td>Gudha</td>
<td>two</td>
<td>two</td>
</tr>
<tr>
<td>Gadyadi</td>
<td>three</td>
<td>three</td>
</tr>
<tr>
<td>Gudhagudha</td>
<td>four (2x2)</td>
<td>four (2x2)</td>
</tr>
<tr>
<td>Mara</td>
<td>five (mara hand)</td>
<td>five (mara hand)</td>
</tr>
<tr>
<td>Mara gadyadi</td>
<td>ten</td>
<td>ten</td>
</tr>
<tr>
<td>Mara gudhara</td>
<td>fifteen</td>
<td>fifteen</td>
</tr>
<tr>
<td>Mara gudha gudhara</td>
<td>twenty</td>
<td>twenty</td>
</tr>
</tbody>
</table>
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.


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 dyubu-dula (dyuba baby (human)). In the interpretation in question, gulunya 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-gulunya baby kangaroo
dydamin-gulunya baby birds
dhudhu-gulunya 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
auxiliary base may be phonologically null [indicated in all examples by 0] 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) Wiinyiwiinypa-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-kirnlangu-0.1
   people-other-ACC people-other-POSS-ACC
   As for the hawk, he was gathering 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):

<table>
<thead>
<tr>
<th>Order</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOV</td>
<td>51%</td>
</tr>
<tr>
<td>AVO</td>
<td>29%</td>
</tr>
<tr>
<td>VAO</td>
<td>3%</td>
</tr>
<tr>
<td>OAV</td>
<td>13%</td>
</tr>
<tr>
<td>OVA</td>
<td>3%</td>
</tr>
<tr>
<td>VOA</td>
<td>1%</td>
</tr>
</tbody>
</table>

In intransitive sentences he records the following frequencies:

<table>
<thead>
<tr>
<th>Order</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>SV</td>
<td>80%</td>
</tr>
<tr>
<td>VS</td>
<td>20%</td>
</tr>
</tbody>
</table>
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):

\[(4) \text{(focus)} - \text{topic} - \text{(remainder of) comment}\]

Essentially, this principle states that topic \((\text{represented by an overt nominal})\) 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):

\[(5) \text{(salient)} - \text{(focus)} - \text{topic} - \text{(remainder of) comment}\]

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:

    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).
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 clarify 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. Watyia 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-ENG-??? 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-1pa-0-o kurdi-ji-0 wir-i-0 ma-nu.  
and-AUX-3sg-3sg shield-ACC big-ACC get-PAST  
*And a shield he got.*

(10) Karli-0-1pa-0-o ma-nu.  
boomerang-ACC-AUX-3sg-3sg get-PAST  
*A boomerang he got.*

(11) Mangulpa-0-1pa-0-o ma-nu.  
shovel spear-ACC-AUX-3sg-3sg get-PAST  
*A shovel spear he got.*

(12) Kurlarda-0-1pa-0-o ma-nu, kurdi-ji-0.  
spear-ACC-AUX-3sg-3sg get-PAST shield-ACC  
*An ordinary spear he got, and a shield.*

(13) Kuturu-0-1pa-0-o 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 yap-a-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.

<table>
<thead>
<tr>
<th>INTRANSITIVE CLAUSES</th>
<th>ORAL</th>
<th>WRITTEN</th>
<th>COMPOSITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>total clauses</td>
<td>208</td>
<td>156</td>
<td>364</td>
</tr>
<tr>
<td>SV</td>
<td>73</td>
<td>41</td>
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<tr>
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<td>39</td>
<td>16</td>
<td>55</td>
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<tr>
<td>V</td>
<td>91</td>
<td>93</td>
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<td>SVS</td>
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<td>6</td>
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<table>
<thead>
<tr>
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<th>ORAL</th>
<th>WRITTEN</th>
<th>COMPOSITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>total clauses</td>
<td>136</td>
<td>158</td>
<td>294</td>
</tr>
<tr>
<td>AOV</td>
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<td>4</td>
</tr>
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</tr>
<tr>
<td>VA</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>AVA</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

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

    ago-other CHILDREN-NOM-AUX-lplinc 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-rra 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-O jurlpu-ngu ngapa-kurra.
    merely-AUX-3pl CHILDREN-NOM jump-PAST water-into
    well THE CHILDREN literally jumped into the water.

(17) NGANILMPA-RLANGU-O-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-O-0-0-0 parlupu-ngu marrnu-0
    that-after M. NAPANANGKA-ERG-AUX-3sg-3sg spot-PAST resin-ACC
    wiri-jarlru-0 watiya-rra.
    big-very-ACC tree-LOC
    After that M. NAPANANGKA spotted a large chunk of resin in a tree.

(19) Kuja-0-0 warrka-rninja-rra 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-rlu-0-0-0 nya-ngu kirakatayili-o
that-after H. NAPANGARDI-ERG-AUX-3sg-3sg see-PAST crocodile-ACC
wita-o 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) NGANIMPALu-ju-0-rnalu parnka-ja-ra 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 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

that-after wait-PAST-AUX-1plexc-3sg stick-COM
After that we waited with sticks for it.

(29) Warru-lpa-rnalu wapa-ja palu-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-NKGA-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 stuff threw apples.

PARAGRAPH VII THEME: THE OLD WOMEN

(33) Karlarla-jangka-ju MURTURAMURTURNA-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.
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 minimum 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 kurdukuru children. In that this theme conflicts with the discourse theme 'we', kurdukuru is placed in the prominent first position; it is made a sentence topic. Nyurruiyi-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 kurdukuru 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 kurdukuru further back in the sentence would have resulted in some confusion. Ngai 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 kurdukuru 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-o 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. Murturnamurtur na 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
murrumurr-nyayirni purdanya-nyi. 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
"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
murrumurr-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
"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, nyurrwiyi-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

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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

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. 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. 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. 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 tenets 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
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 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).\(^6\)

\[(1) \text{biliga gambaya'}/\text{yoonggoo nyamani giddaabingaddi'}/\]

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 / marlami boolga / 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, underlining indicates the most salient syllable of the unit, and grave and acute accents indicate pitch movement iconically.

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`/ garndiwangooddo jirigi`/
    up tree many bird
    In the tree there are many birds.

(4) naija ngirndajawu`/
    tea here
    There's tea here!

(5) garndiwangooddo biyindi`/ doowoo-ya babaabidi`/
    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 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 waray‘/ 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`/ 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 loca-
tion 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 Exis-
tent and the Situation, whereas the other two types each have three inherent roles:
Entity, Location and Situation for locational attributive clauses; and Inhabi-
tant, 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) gjiliddijgi-nhingi goornagjawani woogoo bagiyawi
tadpole-ABL it would turn 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 realizing 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 / 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 Nginyambaa 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; conversely, 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 clause-ally, 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 indexing 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 introductarily, 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 mangadi 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 mangadi no, not, thaddi 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

<table>
<thead>
<tr>
<th>VERBAL</th>
<th>VERBLESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refers to a situation</td>
<td>Indicates or points to something:</td>
</tr>
<tr>
<td>- any sort of entity</td>
<td>- entity must be an object</td>
</tr>
<tr>
<td>- which may be the result of some other situation</td>
<td>- entity there not as a consequence of some situation</td>
</tr>
<tr>
<td>- which is located in time</td>
<td>- so time distinctions are not relevant</td>
</tr>
<tr>
<td>- which may be desired, potential, desirable, definite, etc.</td>
<td>- mood and modal distinctions are not relevant</td>
</tr>
<tr>
<td>- may or may not have temporal length or duration, etc.</td>
<td>- aspectual distinctions are not relevant</td>
</tr>
<tr>
<td>- can affect something</td>
<td>- cannot affect anything (in the referent &quot;reality&quot;)</td>
</tr>
<tr>
<td>- which has something that is 'being' in a particular mode</td>
<td>- which is not necessarily in any state of being</td>
</tr>
<tr>
<td>- introduce minor participants, as background information</td>
<td>- so introduce major participants</td>
</tr>
<tr>
<td>Have marked distribution of information</td>
<td>Information distribution is normally unmarked</td>
</tr>
<tr>
<td>- there is typically a presupposition that something or other exists</td>
<td>- and there is not usually any presupposition that anything exists</td>
</tr>
<tr>
<td>Expresses a proposition</td>
<td>Does not express a proposition</td>
</tr>
<tr>
<td>- possible because it has a nexus (has at least two inherent roles)</td>
<td>- has no nexus (has a single inherent role)</td>
</tr>
</tbody>
</table>

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
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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 pronoun 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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INTRODUCTION

The Barranbinya (bārranbinya) 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, Burrunbinya, Burrumbinya, 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.

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 Ngayamba:, 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

<table>
<thead>
<tr>
<th></th>
<th>PERIPHERAL</th>
<th>APICAL</th>
<th>LAMINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Velar</td>
<td>Retroflex</td>
<td>Palatal</td>
</tr>
<tr>
<td>Stop</td>
<td>gj</td>
<td>rd</td>
<td>dy</td>
</tr>
<tr>
<td>Nasal</td>
<td>ng</td>
<td>rn</td>
<td>ny</td>
</tr>
<tr>
<td>Lateral</td>
<td></td>
<td>(rl)</td>
<td>(ly)</td>
</tr>
<tr>
<td>Rhotic</td>
<td></td>
<td>r</td>
<td>(R)</td>
</tr>
<tr>
<td>Semivowels</td>
<td></td>
<td></td>
<td>(f)</td>
</tr>
<tr>
<td></td>
<td>Labial</td>
<td>Alveolar</td>
<td>Dental</td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>d</td>
<td>f</td>
</tr>
<tr>
<td></td>
<td>m</td>
<td>n</td>
<td>nh</td>
</tr>
</tbody>
</table>

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:gangdi and further west where vocalic finals are the rule. The situation is different in Muruwari and Ngayamba: 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 Bagandji 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 Bagandji.

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.

<table>
<thead>
<tr>
<th>English</th>
<th>Muruwari</th>
<th>Bagandji</th>
</tr>
</thead>
<tbody>
<tr>
<td>excrement</td>
<td>/guna/</td>
<td>/guna/</td>
</tr>
<tr>
<td>bread</td>
<td>/manu/</td>
<td>/manu/</td>
</tr>
<tr>
<td>water</td>
<td>/ngaba/</td>
<td>/ngaba/</td>
</tr>
<tr>
<td>ashes</td>
<td>/budha/</td>
<td>/budha/</td>
</tr>
<tr>
<td>sand goanna</td>
<td>/barna/</td>
<td>/barna/</td>
</tr>
<tr>
<td>stinking</td>
<td>/buga/</td>
<td>/buga/</td>
</tr>
<tr>
<td>breast</td>
<td>/ngama/</td>
<td>/ngama/</td>
</tr>
</tbody>
</table>

But nga:madyi mother displays a long a:. Also walbala shows gemination in what looks like a second syllable: [wbalalal], 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:

<table>
<thead>
<tr>
<th>English</th>
<th>Muruwari</th>
</tr>
</thead>
<tbody>
<tr>
<td>head</td>
<td>/bambu/</td>
</tr>
<tr>
<td>wind</td>
<td>/yarga/</td>
</tr>
<tr>
<td>knee</td>
<td>/dhinkkal/³</td>
</tr>
<tr>
<td>house</td>
<td>/ngandi/</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>English</th>
<th>Muruwari</th>
</tr>
</thead>
<tbody>
<tr>
<td>fish</td>
<td>/gu:ya/</td>
</tr>
<tr>
<td>teeth</td>
<td>/di:ya/</td>
</tr>
<tr>
<td>or</td>
<td>/di:y/</td>
</tr>
<tr>
<td>camp</td>
<td>/ngu:ru/</td>
</tr>
<tr>
<td>nallanalla</td>
<td>/mu:ra/</td>
</tr>
<tr>
<td>meat</td>
<td>/wi:dhi/</td>
</tr>
<tr>
<td>fire</td>
<td>/bu:rdi/</td>
</tr>
<tr>
<td>dog</td>
<td>/mi:rrri/</td>
</tr>
<tr>
<td>hand</td>
<td>/ma:ra/</td>
</tr>
</tbody>
</table>

But nga:madyi mother displays a long a:. Also walbala shows gemination in what looks like a second syllable: [wbalalal], but evidently this was felt to be a compound white-fellow with the word fellow still retaining some independent status.
With the exception of wi:dhí [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-rr-a-dana guragany marinydyi-lu
   hit-CL-PAST-3pl. possum-ABS man-ERG
   The men killed a possum.

2) (bulu-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-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 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 Hornevill - a distinction which appeared particularly significant because of the fact the gloss is usually given as a blurred impersonal 'it' in Aboriginal English.

(20) ngu:-ga-rani
give-FM-3sg.0+2sg.S
Give it to her!

(21) ngu:-wa-rani
give-MM-3sg.0+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.0+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.0+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–
  - Muruwari: (yana–)
- **see**: nha:–
  - Muruwari: (nha–)
- **sit**: ni:–
  - Muruwari: (niy a–)
- **give**: *ngu:–
  - Muruwari: (nguwa–)
- **hit**: *ba:–/bara–
  - Muruwari: (ba–)
- **eat**: gura–
  - Muruwari: (dha–)
- **talk**: duwa–
  - Muruwari: (ya:–)
- **go up**: wundi–
  - Muruwari: (gula–)
- **bite**: *gu:/gura–
  - Muruwari: (yida–)
- **bath (bogey)**: gubi–
  - Muruwari: (gu:mbi–)
- **play**: gura–
  - Muruwari: (ngagi–)
- **take away**: wu-/wuri–
- **scratch**: *ma–
  - Muruwari: (yida–)
- **cry**: wu–
  - Muruwari: (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.

<table>
<thead>
<tr>
<th>I</th>
<th>Ngutta</th>
<th>Muruwari: (ngadhu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>you</td>
<td>Hinta</td>
<td>(yinda)</td>
</tr>
<tr>
<td>him</td>
<td>Nuanara</td>
<td>(nhumbu)</td>
</tr>
<tr>
<td>we</td>
<td>*Ngurrika</td>
<td>-</td>
</tr>
<tr>
<td>we</td>
<td>*Ngullinna</td>
<td>(ngali)</td>
</tr>
<tr>
<td>you</td>
<td>*Nhulawura</td>
<td>(nhula)</td>
</tr>
<tr>
<td>they</td>
<td>*Buraiaura</td>
<td>(bula)</td>
</tr>
<tr>
<td>we</td>
<td>*Wunna nhumma</td>
<td>-</td>
</tr>
<tr>
<td>we</td>
<td>-***</td>
<td>(ngana)</td>
</tr>
<tr>
<td>you</td>
<td>*Nhura</td>
<td>(nhura)</td>
</tr>
<tr>
<td>they</td>
<td>*Dhunna</td>
<td>(dhana)</td>
</tr>
</tbody>
</table>

*** 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. Innga (yingga/baga)
3sg. Ngurrani (buga/nhumbuga)
1du. *Ngurriga
   *Ngullinni (ngaliga)
2du. *Nhullinni (nhuraga or nhulaga)
3du. *Bulanii (buraga)
1pl. *Wannunii
   *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.0+2sg.S
You hit him back.

(27) gu-r-a-la:-nu
bite-CL-PAST-OM-1sg.0+3sg.S
He bit me.

(28) ba-r-a-la:-ra  bamba
hit-CL-PAST-OM-3sg.0+3sg.S head-ABS
He hit his head.

(29) ba-r-a-la:-ra  du:ru
hit-CL-PAST-OM-3sg.0+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 -\( ^{\text{ya}} \)) 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:

\( ^{\text{widiyan/wiya}} \) question marker (QM)
\( ^{\text{minara/mina}} \) what?
\( ^{\text{dalama}} \) where?
\( ^{\text{ga:nu}} \) 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

<table>
<thead>
<tr>
<th>Muruwari</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>wanggara; garawa</td>
<td>one</td>
</tr>
<tr>
<td>muggu (Mathews)</td>
<td>one</td>
</tr>
<tr>
<td>bulaya/buraya</td>
<td>two</td>
</tr>
<tr>
<td>bulagar (Mathews)</td>
<td>two</td>
</tr>
<tr>
<td>galga (Mathews)</td>
<td>several</td>
</tr>
<tr>
<td>wulliwal (Mathews)</td>
<td>several</td>
</tr>
<tr>
<td>gulli (Mathews)</td>
<td>a couple</td>
</tr>
<tr>
<td>babu ?</td>
<td>a couple</td>
</tr>
</tbody>
</table>

3.4.3 General particles

<table>
<thead>
<tr>
<th>Muruwari</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>dhagany</td>
<td>movement towards the speaker</td>
</tr>
<tr>
<td>nhuwa</td>
<td>that one</td>
</tr>
<tr>
<td>ya:wu</td>
<td>no!</td>
</tr>
<tr>
<td>bu:rda</td>
<td>tomorrow</td>
</tr>
<tr>
<td>darany</td>
<td>today</td>
</tr>
</tbody>
</table>

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 the dogs? 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.0+that? baby-ABS
   That fellow over there, he bit the baby.
(47) ganyugu ... ganiga balagu wa:-r-i-ga-na bi:bi ... dhagany wa:rigana
   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 pub­
lished and unpublished manuscripts, Wangaybuwan-Ngiyambai, 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:grundji (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 collec­
ted. However, it may be possible to draw some conclusions from it concerning
neighbour intelligibility between the languages concerned.
<table>
<thead>
<tr>
<th>LANGUAGE</th>
<th>No. of items compared with Barranbinya</th>
<th>Cognates with Barranbinya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General words</td>
<td>Pronouns</td>
</tr>
<tr>
<td>Muruwari</td>
<td>98</td>
<td>18</td>
</tr>
<tr>
<td>Marguny-Gunya</td>
<td>108</td>
<td>18</td>
</tr>
<tr>
<td>Baigandji</td>
<td>104</td>
<td>15</td>
</tr>
<tr>
<td>Wangaybuwan-Ngiyamba</td>
<td>59</td>
<td>-</td>
</tr>
<tr>
<td>Wiradjuri</td>
<td>42</td>
<td>2</td>
</tr>
<tr>
<td>Waljwan</td>
<td>35</td>
<td>-</td>
</tr>
</tbody>
</table>

(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
- bul: 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)

<table>
<thead>
<tr>
<th>A. PEOPLE</th>
<th>BARRANBINYA</th>
<th>Oates Mathews</th>
<th>A.M.T.</th>
<th>MURUWARI</th>
<th>WANGAYBUNANGYIAMBA:</th>
<th>WALJWAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. man</td>
<td>marinyi</td>
<td>Bullu</td>
<td>Werrenga</td>
<td>mayiny</td>
<td>dhu:r</td>
<td>mayi</td>
</tr>
<tr>
<td>2. men collectively</td>
<td>dhamuga</td>
<td>Thummuga</td>
<td>Warrena</td>
<td>muginy</td>
<td>wirin-ga</td>
<td></td>
</tr>
<tr>
<td>3. woman</td>
<td>gu:duha</td>
<td>Thummuga</td>
<td>Warrena</td>
<td>muginy</td>
<td>winar</td>
<td></td>
</tr>
<tr>
<td>4. father</td>
<td>yabu</td>
<td>Murrin</td>
<td>(mArrin)</td>
<td>baba</td>
<td>baba</td>
<td></td>
</tr>
<tr>
<td>5. mother</td>
<td>ngamadyi</td>
<td>gaya</td>
<td>baba</td>
<td>guni</td>
<td>guni</td>
<td></td>
</tr>
<tr>
<td>6. older sister</td>
<td>biri:ga</td>
<td>guwira</td>
<td>gadi</td>
<td></td>
<td>gadi</td>
<td></td>
</tr>
<tr>
<td>7. younger sister</td>
<td>nga:bu</td>
<td>buwin</td>
<td>buray</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. cousin; uncle's daughter</td>
<td>nga:bumba:/</td>
<td>Thumagu-balululu</td>
<td>Warrela;</td>
<td></td>
<td>gin; bula*</td>
<td></td>
</tr>
<tr>
<td>9. child of either sex</td>
<td>gu:ruwururu</td>
<td>guwany</td>
<td>gada:yi</td>
<td></td>
<td>gu:angu</td>
<td></td>
</tr>
<tr>
<td>10. young woman</td>
<td>Thumagu-balululu</td>
<td>Thumagu-balululu</td>
<td>Malayan</td>
<td></td>
<td>Malayan</td>
<td></td>
</tr>
<tr>
<td>11. young male</td>
<td>gu:ruwula</td>
<td>yimamuru</td>
<td>yambar</td>
<td></td>
<td>yambar</td>
<td></td>
</tr>
<tr>
<td>12. doctor (cousin)</td>
<td>gu:rayi</td>
<td>gudhara</td>
<td>gira</td>
<td></td>
<td>gira</td>
<td></td>
</tr>
<tr>
<td>13. baby</td>
<td>gu:bili2</td>
<td>gubri</td>
<td>gubri</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. white man</td>
<td>gu:ruwula</td>
<td>guwany</td>
<td>gu:ruwululu</td>
<td></td>
<td>gu:ruwululu</td>
<td></td>
</tr>
<tr>
<td>15. police</td>
<td>gu:rayi</td>
<td>guwany</td>
<td>gu:rayi</td>
<td></td>
<td>gu:rayi</td>
<td></td>
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<tr>
<td>16. ear</td>
<td>bina</td>
<td>bina</td>
<td>bina</td>
<td></td>
<td>bina</td>
<td></td>
</tr>
<tr>
<td>17. teeth</td>
<td>d:i:ya; d:i:rr</td>
<td>d:rr</td>
<td>d:rr</td>
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<td>d:rr</td>
<td></td>
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<tr>
<td>18. foot</td>
<td>dha</td>
<td>dhina</td>
<td>dhina</td>
<td></td>
<td>dhina</td>
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</tr>
<tr>
<td>19. nose</td>
<td>mi:nga</td>
<td>ngama</td>
<td>ngama</td>
<td></td>
<td>ngama</td>
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<td>20. head</td>
<td>bambu[bnmphu]</td>
<td>bambu</td>
<td>bala</td>
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<td>bala</td>
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</tr>
<tr>
<td>21. breast</td>
<td>ngama[ngam:ma]</td>
<td>ngama</td>
<td>ngamu</td>
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<td>ngamu</td>
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</tr>
<tr>
<td>22. breast</td>
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<td>guwany</td>
<td>guwany</td>
<td></td>
<td>guwany</td>
<td></td>
</tr>
<tr>
<td>23. blood</td>
<td>guma</td>
<td>mara</td>
<td>mara</td>
<td></td>
<td>mara</td>
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</tr>
<tr>
<td>24. hand</td>
<td>mara</td>
<td>dhinkal3</td>
<td>dhinbir</td>
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<td>dhinbir</td>
<td></td>
</tr>
<tr>
<td>27. bone</td>
<td>gu:na</td>
<td>gulya</td>
<td>gulya</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>28. rib</td>
<td>barrga</td>
<td>birla</td>
<td>birla</td>
<td></td>
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<tr>
<td>29. spine</td>
<td>m:ru:li; m:li:ny</td>
<td>m:ru:li; m:li:ny</td>
<td>dugu</td>
<td></td>
<td>dugu</td>
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</tr>
<tr>
<td>30. vagina</td>
<td>gadyi</td>
<td>gini</td>
<td>gini</td>
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<tr>
<td>31. possum</td>
<td>gura:ganay</td>
<td>Kuranyi</td>
<td>gugay</td>
<td>gu:raga:y</td>
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</tr>
<tr>
<td>32. couple of possums</td>
<td>gu:rayi</td>
<td>Kuranyigulli</td>
<td>gu:rayi</td>
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<td>gu:rayi</td>
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<td>33. several possums</td>
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<td>Kuranyigalga</td>
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<tr>
<td>34. kangaroo</td>
<td>danda</td>
<td>Thunta</td>
<td>gula</td>
<td>girba</td>
<td>marawi?</td>
<td></td>
</tr>
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<td>35. pademelons</td>
<td>daguny</td>
<td>Thunay</td>
<td>gula</td>
<td>girba</td>
<td>marawi?</td>
<td></td>
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<tr>
<td>36. snake</td>
<td>dhu:ru</td>
<td>Durroo</td>
<td>nagara</td>
<td>dhuru</td>
<td>waru</td>
<td></td>
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<tr>
<td>37. porcupine</td>
<td>dandyina</td>
<td>gara</td>
<td>dhuru</td>
<td>dhuru</td>
<td>waru</td>
<td></td>
</tr>
<tr>
<td>38. sand goanna</td>
<td>barna</td>
<td>barna</td>
<td>barna</td>
<td>barna</td>
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<td></td>
</tr>
<tr>
<td>39. &quot;pineapple&quot;</td>
<td>birimbila</td>
<td>birimbila</td>
<td>gula</td>
<td>gula</td>
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<td></td>
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<td>40. iguana</td>
<td>gala:yi; ngururu</td>
<td>Warlee</td>
<td>nguru:y</td>
<td>nguri</td>
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<td>41. emu</td>
<td>galayi</td>
<td>gu:wa</td>
<td>gulya</td>
<td>gula</td>
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<tr>
<td>42. red kangaroo</td>
<td>ngururu</td>
<td>gu:wa</td>
<td>gula</td>
<td>gula</td>
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<tr>
<td>BARRANBINYA</td>
<td>Oates</td>
<td>Mathews</td>
<td>A.M.T.</td>
<td>MURUWARI</td>
<td>WANGAYBUWAN-NGIYAMBA: WALJWAN</td>
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<tr>
<td>44. turtle</td>
<td>gagara?</td>
<td></td>
<td></td>
<td>wamba</td>
<td>gamba; gabu gabu</td>
<td></td>
</tr>
<tr>
<td>45. egg</td>
<td>abunya</td>
<td></td>
<td></td>
<td>gabuny</td>
<td>gabu gabu</td>
<td></td>
</tr>
<tr>
<td>46. bird</td>
<td>wi:dhi</td>
<td></td>
<td></td>
<td>widyi/widyi</td>
<td>gundarri gabu</td>
<td></td>
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<tr>
<td>47. dog</td>
<td>mirri</td>
<td>mirri</td>
<td></td>
<td>mirri/mirri</td>
<td>mirri mirri</td>
<td></td>
</tr>
<tr>
<td>48. sheep</td>
<td></td>
<td></td>
<td></td>
<td>dhumba*</td>
<td>yarama</td>
<td></td>
</tr>
<tr>
<td>49. horse</td>
<td></td>
<td></td>
<td></td>
<td>dhumba*</td>
<td>yarama, dhu mba*</td>
<td></td>
</tr>
<tr>
<td>50. male of sp.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>51. female of sp.</td>
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<tr>
<td>D. ELEMENTS</td>
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<tr>
<td>52. fire</td>
<td>burdi</td>
<td></td>
<td></td>
<td>wi:</td>
<td>wi: N wi</td>
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</tr>
<tr>
<td>53. rain</td>
<td>murnka</td>
<td></td>
<td></td>
<td>burdu</td>
<td>yuru yurung</td>
<td></td>
</tr>
<tr>
<td>54. cloud</td>
<td>dharingara</td>
<td></td>
<td></td>
<td>yagun</td>
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<td>96. fleshly, stout</td>
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<td>Errijoo-gurrah</td>
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<td>102. young?</td>
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<td>ya:-</td>
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<td>113. go up</td>
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<td>115. bathe (bogey)</td>
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<td>116. play (children)</td>
<td>gura-</td>
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<td>118. sleep</td>
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<td>119. arratch</td>
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<td>(y)inda</td>
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<td>123. he, she, it</td>
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<td>124. we two</td>
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<td>126. they two</td>
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<td>127. we all</td>
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<td>128. you all</td>
<td>Nhua</td>
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<td>129. they</td>
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<td>131. your(sg.)</td>
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<td>133. our two</td>
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<td>134. your two</td>
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<td>136. ours</td>
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<td>137. your(pl.)</td>
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<td>138. their</td>
<td>Dhunnanni</td>
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1. Mathews' bAlu young, bAlubAlu very, very young may be compared with Ba:gândji 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

I wish to express my appreciation to Luise Hercus for her encouragement and professional expertise in preparing this sketch for publication. Without her help and enthusiasm this may very well not have seen the light of day.

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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,
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.
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

<table>
<thead>
<tr>
<th>OUTER PERIPHERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>INNER PERIPHERY (MARGINS)</td>
</tr>
<tr>
<td>NUCLEUS</td>
</tr>
</tbody>
</table>

4 Finis (in this position functioning on paragraph/discourse level only),

3 Exclam-Response, Tag Question,

2 Discourse Conj

1 Attention-Vocative,

Hesitation,

Mistaken Utterance ...

<table>
<thead>
<tr>
<th>Topic: /</th>
<th>Inception, Setting, Prior Time, Concurrent Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>Merged</td>
</tr>
<tr>
<td>Reference</td>
<td>,Finis</td>
</tr>
<tr>
<td>,Subsequent Time</td>
<td>Exclam-Resp</td>
</tr>
<tr>
<td>Complement φ</td>
<td>Descriptive φ</td>
</tr>
<tr>
<td>Indeterminate φ</td>
<td></td>
</tr>
<tr>
<td>Conjoining &amp; Quotation</td>
<td></td>
</tr>
<tr>
<td>Linked</td>
<td>Extra Sequence, Correlative φ</td>
</tr>
<tr>
<td></td>
<td>Coordinate, /φ</td>
</tr>
<tr>
<td></td>
<td>Alternative,</td>
</tr>
<tr>
<td></td>
<td>Juxtaposed</td>
</tr>
<tr>
<td></td>
<td>Intra Sequence, Consequence, Amplification, Comparison-Contrast, and</td>
</tr>
<tr>
<td></td>
<td>Quasi Embedded/Merged</td>
</tr>
<tr>
<td></td>
<td>Generic-Specific φ</td>
</tr>
<tr>
<td></td>
<td>Direct Quote</td>
</tr>
<tr>
<td></td>
<td>Indirect Quote φ</td>
</tr>
<tr>
<td></td>
<td>Indirect Question φ</td>
</tr>
</tbody>
</table>

(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. φ 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

She threw them out (yams from hole she was digging), she threw them out, finished. (Amplification 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-nerrra 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 jurrja 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?
   Tag Q Att-Voc
   Eh, old man, shall I give it to you? (Simple Sentence)

(b) Nginyipa ny-jarlapuna, ya, an-jarral?
   Tag Q Att-Voc
   You made it, did you, old man? (Simple Sentence)

(c) Ngu-boy barra, yuwa?
   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
   gun-nika a-nganabitimarna, gu-manggarna gun-burrail.
   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
fongoing 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 narra-
tive 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-garlmija, 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) Rrapangarrripa 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
Is 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 bubirra arrburrrwa 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-anggiya whatchamacallit. A further example follows.

Nyiwurr-bena yangiya, 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-bural 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-jerrarra, aa minypa gun-gata jambay.
my father high he is fire he sent it and uh like that one same thing
-- ---------------| Link Compar 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-yimmiya 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)
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
   He got up [and] went.  (Simple Sentence)

(b) Awirriny-buna: A-bungguna, jiny-jarlmana, a-buna,
   they two fem hit him fell down she got up she hit him
   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-garlmana, aburr-jekarra rrawa.
   finish then they got up they returned camp
   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 arrburrrwa.
    Setting Margin
    They were going along [when] they came to us way over there. (Simple Sentence)

(b) Gu-yartkujamurra jiny-jamuna, gu-bungguna.
    Setting Margin
    She was chopping [the tree and] it fell down. (Simple Sentence)

(c) Gulukula awurriny-jarl awurriny-jamuna, a-numurra.
    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 proposed 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 wura 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) \textit{Gu-gata wenga ngaypa ngu-nana ngana gu-jirra gu-lapkujamiyana gu-ji.} \hspace{1cm} \text{After that I saw the door was open. (Complement Merged Sentence)}

(b) \textit{Gun-gata nip a-molamiyana, lika a-bona a-workiyana, jama a-ji.} \hspace{1cm} \text{When he had recovered, then he went all the time [and] worked. (Intra Sequence Sentence)}

(c) \textit{Gatiya lika mampa nuya rrapa nyanyapa nuya, birrinjipa it's there then mother to him and father to him they two fem } \hspace{1cm} \text{(Simple Sentence)}

(d) \textit{Gata waypa a-bena, burr-nana burr-guya aburr-ruwja aburr-ni.} \hspace{1cm} \text{(Concurrent Time M)}

(e) \textit{Lika gun-gatiya gun-nerranga gu-ni, mola wurra gama gorlk then it's that one another one it was again man woman swag } \hspace{1cm} \text{(Simple Sentence)}

(f) \textit{Gun-gatiya birripa aburr-wena aburr-ni, nip a-bena burrwa.} \hspace{1cm} \text{(Simple Sentence)}

(g) \textit{Lika gawatiya ji-maywapa marnnga jel gu-ngorrkiyana then it's there further acc same sun earth it wobbled } \hspace{1cm} \text{(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 ---
She took care of him until he would be weaned.  (Simple Sentence)

(e) Waypa a-bena rrawa awurr-gapulga brr-nana.

*Concurrent Time Margin*  
When he arrived at the camp 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.

*Cause Margin*  
He as the cause he hit himself.  (Simple Sentence)

(b) Nipa nyanma jichicha ana-jerrmarra nggula.

*Cause Margin*  
He as the cause he sent seafood to you.  (Simple Sentence)

(c) Rrawa ji-moch gu-gurrmurra jiny-bona nipa nyanma Wangarr.

*Cause Margin*  
The dreaming went along putting the country, he God as the cause.  (Simple Sentence)

(d) Wangarr nipa wupa nyanma gu-jarlapuna rrawa.

*Cause Margin*  
God, just he as the cause, he made the country.  (Simple Sentence)
(e) Jichicha ana-jerrmarra nggula gululuapa 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 minyapa bichuman barra nyanma gala gu-yinmiya bugula

he painted it like bitumen fut cause neg it do how water

Comparison Margin 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 proposed 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 non-nuclear sentence see section 6(c).

(a) Minja motor car a-jarlapa, nguwwurr-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 nguwwurr-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 nguwwurr-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-yulpa, minja rraka

I could go fut tea I could cook isn't it and potentially

Purpose Margin -------- Condition Margin ... 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 preruclear 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-barnjingga wurra Wangarr gu-barnjingga, 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 frequently 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 relations 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-guyinarnda
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)

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.

Concession Margin

Even though trouble he got it but work he does he habitually

Link

Even though he has trouble, but he [still] works all the time. (Simple Sentence)

(c) Wuriya. Buburr-ninya, wurra ngaypa ngu-walagiya barra.

Concession Margin

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.

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

Concession Margin

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.

Concession Margin

They two speared a wallaby, except then it didn't die. (Simple Sentence)

(g) Jimarna jichicha ngu-rakawurra, wurra gaparla wupa jarra.

Supposition 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.

Concession Margin

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 gwu-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

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

So that we can eat food, daughter, you will cook plenty. (Simple Sentence)

(c) Gun-bural 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

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: Coordinate 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

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 barga 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
   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
   --------------------------------
   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
   --------------------------------
   Wangarr nipa nyanma.
   God he cause
   (Cause Margin-------)
   (Topic II)
   He does good work all the time, as God, he is the cause. (Simple Sentence)
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
(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 + ngacha indeed
(i) gu-guyinda in one that does like
(j) gu-guyinarda in one that does like that

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 ngayurrpa 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-bormunga 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-bormunga, gun-gaya gata hand thing to keep camp belonging to it compatible one it is there
gun-burral gun-bormunga.
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 nyamma, rrawa nulawa, wurra nulawa, that one story true one God cause camp for it man for him
(Cause Margin)
jarlakarr nulawa, gun-burral gun-bormunga, gun-molamola, gun-burral, magaya, road for it true one compatible one good one true one perfect
gala gun-nga gindirrkindirr gu-yu, gun-nerra, gindirrkindirr - minypa neg what messy it is bad one messy like
(Topic Margin) (Compar
gun-nerr a, gun-gugalar lachkorndiya, minypa gun-nerr a janguny, gun-nerr a
bad one chopped up like bad one story bad one

Margin --------------------------------- (Comparison Margin -----------------------------------
|-----------------------------------------------|-----------------------------------------------|

gun-guwork a, 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, jarma, 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, what­
chamacallit, lie: untruth has got itself off to the side, it's like that
indeed. (Simple Sentence; the Topic Margin being interrupted by two Hes­
titation Tagmemes and having an embedded Reference Margin)

3.14 The SUBSEQUENT TIME MARGIN consists of a relator-axis sentence having the preposed relator nuwurr a afterwards. Subsequent Time Margin occurs in post­nuclear 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-rrongga, nuwurra jurdach awurr-bena.

The bushfires burned, and afterwards lastly they arrived. (Simple Sentence)

(b) Burdak gun-guna ay-mungba barra, nuwurra.

Wait until we finish this, then [we will go]. (Simple Sentence)

(c) [A-bona.] Nuwurra waypa ana-jeka, balaja m-bay.

[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-garlmana.

The [aeroplane] already took off. (Simple Sentence)

(b) Gu-ngarda yerrcha, yina awurr-gaya?

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 (1) 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

<table>
<thead>
<tr>
<th>Loose</th>
<th>Tight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Complement</strong></td>
<td><strong>Descriptive</strong></td>
</tr>
<tr>
<td><strong>Same Subject</strong></td>
<td>gu-ngardapa-negiya&lt;br&gt;make selves one,&lt;br&gt;agree&lt;br&gt;naya see self&lt;br&gt;ngurrjiya tell about&lt;br&gt;self</td>
</tr>
<tr>
<td><strong>Same/Diff Subject</strong></td>
<td>borrwa consider&lt;br&gt;galiya hear, feel&lt;br&gt;jal ni want, need&lt;br&gt;marn.gi nega teach&lt;br&gt;marn.gi + ni know&lt;br&gt;marr balcha trust&lt;br&gt;marrkapcha be happy with someone&lt;br&gt;marrnguwa ni be thankful, expect&lt;br&gt;yarlanga nega explain</td>
</tr>
<tr>
<td><strong>Different Subject</strong></td>
<td>na see&lt;br&gt;ngurrja tell about&lt;br&gt;barripa find (doing)&lt;br&gt;ngiwja beg (to)&lt;br&gt;wenggana ask (to)</td>
</tr>
</tbody>
</table>
(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
He explained to them how we should live in God's care. (Complement Merged Sentence: Indeterminate Merged Sentence embedded in second Base)

(1) Ngu-nana gipa a-bena.
   I saw him already he arrived
   I saw that he already arrived. (Complement Merged Sentence)

(m) Abu-ngurrjunga nip a-yinmiya 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-barnjingga, 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)
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.
We lived without tobacco. (Descriptive Merged Sentence)

(d) Gun-burrural janguny, gun-borrmun-ga, gun-guburrmanyba janguny, true story compatible one calling by kin term story

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 arrkku wugupa arrkula jama arr-ji
Our Father (God) was with us all the time as we worked. (Descriptive Merged Sentence)

(f) Gun-mola nggula ny-boy.
It's all right for you to go. (Descriptive Merged Sentence)
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-benga.
    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-boyat? 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-boyat?
   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 inter-related 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

<table>
<thead>
<tr>
<th></th>
<th>Loose</th>
<th>Juxtaposed</th>
<th>Tight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progression</td>
<td>Extra Sequence</td>
<td>Intra Sequence</td>
<td>Generic-Specific yinda do/say like -yinagata do/say like that</td>
</tr>
<tr>
<td></td>
<td>lika and then</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correspondence</td>
<td>Correlative</td>
<td>Consequence</td>
<td>Direct Quote yinda do/say like -yinagata do/say like that</td>
</tr>
<tr>
<td></td>
<td>rraka and potentially</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addition</td>
<td>Coordinate</td>
<td>Amplification</td>
<td>Indirect Quote wengga speak na see</td>
</tr>
<tr>
<td></td>
<td>rrapa and also</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>wurra but, or</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>aa and uh</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o or uh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance</td>
<td>Alternative</td>
<td>Comparison-Contrast</td>
<td>Indirect Question wenggana ask</td>
</tr>
<tr>
<td></td>
<td>waygaji maybe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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-garlmana gurdya.  

\[
\text{she ate it she did then they two fem got up to here}
\]

--- Link ---

She was there eating, and then they [dog and woman] got up to come back.  
(Extra Sequence Sentence)

(b) Awurriny-garlmana gurdya, lika rrawa awurriny-bena, lika they two fem got up to here then camp they two fem arrived then

--- Link ---

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 ---

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

\[
\text{container neg you didn't bring it and so potentially}
\]

--- Link ---
THE STRUCTURE AND SYSTEM OF BURARRA SENTENCES

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, ngardawu then Alfie his flesh he poorly he was he went along because
Disc Conj

garragarra an-nyagara rraka a-walagiyarna.
crest feathers he nothing and so potentially he could have danced

Then Alfie was going along sad, because he had no crest feathers so he could
have danced. (Simple Sentence: Correlative Sentence embedded in Circumstan
tial 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 comp and man woman belongings

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

ngarrira 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 alterna­
tive possibilities. The second Base obligatorily contains the mood word (Glasgow
1984, section 17) waygaji maybe which functions as a Link between the two alter-
natives. 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 waygají nyirri-boy barra, waygají 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) Waygají nyiwurr-garlma barra motor car waygají 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, waygají ngu-ní barra.

I go fut maybe I stay fut

Maybe I'll go, maybe I'll stay. (Alternative Sentence)

(d) Gun-ngajál nyi-ní, waygají di, waygají 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 sub-
ject 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 Amplifi-
cation Sentence is an Indeterminate Merged Sentence; the second Base of the
embedded Amplification Sentence has its own Cause Margin; the axis of the embed-
ded 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: Amplifica-
tion 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-naya gun-molamola Wangarr gu-barnjinga, Wangarr nyanma interrog place is good one God he put it God from
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, [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 Margin ____________________________)

   an-borrmgunga, an-burral an-borrmgunga, an-gata gu-rrimanga,
   compatible one true compatible one that one there he has it
   ___________________________

   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 identi-
cal 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-borrmun
gun-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-burr
another another nothing another true

ngaypa marmanja yerrcha nyibl-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 embed-
ded 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

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) Wu le y gun-gunega gun-nerra arrkulawa, o
taken away from a thing for making be bad for you and me or uh

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
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. (Amplifi-
cation 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

"Ya, yama marrka ay-jarlapa rraka a-yinda a-benga?"
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 para-
graph 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 rrenganenga 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.

\[
\text{he spoke neg fut we all go}
\]

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.

\[
\text{he asked me isn't it so work I do I habitually}
\]

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!
\textit{finish yes indeed}
\texttt{Finis Exclam-Response}
\textit{It's finished, yes indeed!} (Sentence Fragment)

(b) Ganapiya ya, An-jarral?
\textit{finished is it old man}
\texttt{Finis Tag Q Att-Voc}
\textit{It's finished, is it, Old Man?} (Sentence Fragment)

(c) Gala barra ny-bay
\texttt{neg fut you eat it}
\texttt{Purpose Margin}
\textit{You mustn't eat it.} (Sentence Fragment)

(d) Nuwurra ngulam.
\texttt{afterwards morning}
\texttt{Subsequent Time Margin}
\textit{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.
\textit{auntie like my father he has her as sibling.}
\texttt{Topic Margin preposed to one or two Comparison Margins}
\textit{Auntie: that's like my father has her as sibling.} (Definition Sentence)

(b) Gun-nardiya rrapa ganapiya, amen.
\textit{that's it and it's finished amen} (loanword)
\texttt{Ref Margin Link Finis Exclam-Response}
\textit{That's it and it's finished, amen.} (Prayer Closure Formula)

(c) Minja motor car a-jarlapa, nuwurra nguwurr-boy.
\textit{isn't it so motor car he fix it afterwards we go}
\texttt{Condition Margin preposed to Subsequent Time Margin}
\textit{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 extrasytemic, 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

<table>
<thead>
<tr>
<th>Merged:</th>
<th>Loose</th>
<th>Tight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Con-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>joining</td>
<td></td>
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<tr>
<td>and</td>
<td></td>
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<tr>
<td>Quota-</td>
<td></td>
<td></td>
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<tr>
<td>tion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progression:</td>
<td>Complement</td>
<td>Descriptive</td>
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<tr>
<td>Correlative</td>
<td>Extra Sequence</td>
<td>Intra Sequence</td>
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<td>Consequence</td>
<td>Direct Quote</td>
</tr>
<tr>
<td>Additions:</td>
<td>Coordinate</td>
<td>Amplification</td>
</tr>
<tr>
<td>Alternative</td>
<td>Comparison-Contrast</td>
<td>Indirect Question</td>
</tr>
</tbody>
</table>

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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PITTMAN, Richard and Harland KERR, eds
CASE RELATIONSHIPS IN NYANGUMARTA
Helen Geytenbeek

ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>agent (transitive subject)</td>
</tr>
<tr>
<td>ABL</td>
<td>ablatitive case</td>
</tr>
<tr>
<td>ABS</td>
<td>absolutive case</td>
</tr>
<tr>
<td>ACC</td>
<td>accusative case</td>
</tr>
<tr>
<td>ALL</td>
<td>allative case</td>
</tr>
<tr>
<td>AVERS</td>
<td>aversive case</td>
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<td>COM</td>
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<td>irrealis</td>
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<td>LOC</td>
<td>locative case</td>
</tr>
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<td>nominative case</td>
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<td>NOMLSR</td>
<td>nominaliser</td>
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<td>non-future tense</td>
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<td>NP</td>
<td>noun phrase</td>
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<tr>
<td>O</td>
<td>transitive object</td>
</tr>
<tr>
<td>PAST</td>
<td>past tense</td>
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<td>POT</td>
<td>potential</td>
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<td>PRES</td>
<td>present tense</td>
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<td>remote past</td>
</tr>
<tr>
<td>REP</td>
<td>repetitive aspect</td>
</tr>
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<td>S</td>
<td>intransitive subject</td>
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<tr>
<td>sg</td>
<td>singular</td>
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<tr>
<td>STAT</td>
<td>stative</td>
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<tr>
<td>UNM</td>
<td>unmarked</td>
</tr>
<tr>
<td>VB</td>
<td>verbaliser</td>
</tr>
</tbody>
</table>

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 Nyangumarta¹ (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.²

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 (Pr 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

<table>
<thead>
<tr>
<th>Case:</th>
<th>Ergative and Nominative</th>
<th>Accusative</th>
<th>Dative and Locative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg</td>
<td>-rna</td>
<td>-nyi</td>
<td>-ji</td>
</tr>
<tr>
<td>1du.incl</td>
<td>-li</td>
<td>-ngalinyi</td>
<td>-ngalika</td>
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<td>-nganyjurrinyi</td>
<td>-nganyjurruka</td>
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<td>1pl.excl</td>
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<td>-nganaka</td>
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<td>-n ∼-npa</td>
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<td>-nga ∼-ngu</td>
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<td>2du</td>
<td>-nyumpulu</td>
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<td>2pl</td>
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<td>3sg</td>
<td>-ø*</td>
<td>-ø</td>
<td>-lu**</td>
</tr>
<tr>
<td>3du</td>
<td>-pulu</td>
<td>-pulinyi</td>
<td>-puluka</td>
</tr>
<tr>
<td>3pl</td>
<td>-yi</td>
<td>-janinyi</td>
<td>-janaka ∼-janaku</td>
</tr>
</tbody>
</table>

* 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. See (1), (2) and (3).

(1) paliny-mila-lu nyupaji-lu-jirri japam ji-ni-kiyiny-pulu-ø
he-GEN-ERG spouse-ERG-DU stop VB-NF-REP-3duERG-3sgACC
His two wives kept trying to stop him.
The two children were staying.

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.

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).

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.

The child is waiting for his mother.

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:

<table>
<thead>
<tr>
<th>Case</th>
<th>Description</th>
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<tr>
<td>DATive</td>
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<td>LOCative</td>
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<td>ALLative</td>
<td>GENitive</td>
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<td>ABLative</td>
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</table>

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) ngulu ma-rna-Ø-lu marrngu-lu yawarta-Ø ngajumila-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) ngaarnar-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-lsgACC 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) purrika-nga karni-nyi-Ø-li mirta-mirta
  bullock-LOC climb-NF-3sgNOM-3sgLOC grey-greyUNM.LOC
He climbed onto a white bull.

(22) ngaju-lu rankurrji-nga 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-ju jinmurtu ka-nganyi-kinyi-yi-janinyi
  Aborigine-ACC-CONJ policeman-ERG chained take-NF-REP-3plERG-3plACC
pala-ngu 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-ngu 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 wurr-rra-Ø-la kujarra-ju 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 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-ngimarrra 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-lu⁵ 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 stoneUNM.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-3p1ERG-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.
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 -mila 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' (oamp).

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.
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) mirtawayjarri-lu kampa-rni-ri-Ø mayi-Ø pala-nga muwarr-ja-ku
    women-ERG cook-NF-3p1ERG-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.
(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.

(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.

(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 INCHOMO-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.

(64) ngurnipali jana- lu jija-lapi- yi- janaku nyirrini- karti- ja- nga per ipha y they-ERG show- FUT-3plERG-3p1LOC 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.
CASE RELATIONSHIPS IN NYANGUMARTA

(65) partany-ja-∅ wani-nya-rna wani-kinyi-yi kuwiyi-∅ rapiti-∅
    child-ABL-NOM stay-NF-1sgNOM stay-REP-3plNOM animal-NOM rabbit-NOM
    marlu-∅
    many-NOM
    When I was a child there were many rabbits.

(66) wika-∅ kampa-nya-∅-∅ kupalya-ja-∅
    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-∅ partany-ja-∅ miranu jarri-nyi-rni station-ji
    I-NOM child-A BL-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 probably be viewed as being in agreement.

(68) pipi-∅ ngaju-∅ ka-nganyi-kinyi-nyi-∅ jarna-nga-∅
    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) wurruru-ngu-∅ mirrarn-ji-∅ wirri-rni-kinyi-nyi-∅
    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-∅ nyungu-ngu mirti jarri-nyi-yi
    children-NOM this-LOC run INCHO-NF-3plNOM
    The children are running around here.
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.

(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.

(73) ngaju-Ø ku l i 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 whiteUNM.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-yi-rni-janinyi kukurnjayi-∅ 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-∅ ka-nganyi-kinyi-nyi-∅ jarna-nga-∅
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-∅ jilaman-∅ 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-∅-lu ngurnungu-mili-∅
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
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- give7 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-nga
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-ju
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 wi-kaØ jungka-lu
woman-ERG put.out-NF-3sgERG-3sgACC fire-ACC dirt-INST
The woman put out the fire with dirt.

(94) wi-kaØ 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 thatUNM .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-ru 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) partanyØ wupartu-Ø ngangkanji-ninyi-Ø
child-NOM small-NOM cry VB-PRES-3sgNOM
The little child is crying.

(101) pipiØ ngangkanji-ninya-Ø-Ø 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) nyunguØ mirlimirliØ 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-1u  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  wurr-ka-ra-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.

wuurr-∅-pa  nganirrnganirn-∅  kalku-rnaku  ngalypa-∅  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 -∅ '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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