

Chapter 2

Aspects of Bunuba grammar

2.1 Introduction

This chapter is devoted to non-verbal aspects of Bunuba grammar, to bring the reader up to speed on the key grammatical features of the language. Chapter 3 presents verbal morphology in a self-contained description of that part of Bunuba grammar.

PHONOLOGY

2.2 Segmental phonology

The phonological system of Bunuba is not dissimilar to phonological systems of other Australian languages, particularly languages of the region, in any significant way. It has twenty-three phonemes: twenty consonants and three vowels. The consonants include a series of stops with a corresponding nasal in all six places of articulation. There is a three-way lateral contrast, two rhotics, and three glides. The only feature in which the phonemic inventory is marked as a little unusual within the local region is the presence of three lamino-dentals, two consonants ([t̪] and [ɲ̪]) and one glide ([ɣ̪]). Neighbouring Gooniyandi has two lamino-dentals, the two consonants but not the glide (McGregor 1990); nearby Jaminjung has a lamino-dental stop [t̪] (Schultze-Berndt 2000); Kija has a lamino-dental stop [t̪] and also a lamino-dental nasal [ɲ̪] (Kofod 1996); and Unggumi and Worlaja distinguish between lamino-dental and lamino-palatal stops (McGregor 1993:14). The lamino-dental glide /ɣ̪/ is unusual in Australian phoneme inventories (although documented for Unggumi (Rumsey 2000:42). This glide occurs in one of the most textually frequent words in Bunuba, *miyha* ‘meat’, which clearly contrasts with the enclitic =*miya* ONLY (§2.12).

The three vowels are /a/, /i/ and /u/, with an infrequently attested length distinction between /a/ and /aa/ (Rumsey 2000:40, 43, 47). At least one word employs the vowel /e/ (a mid-vowel not considered a phoneme in Bunuba): *debarra-* (a Gun.gunma coverb, cf. Chapter 5). This is

an example of borrowing from a nearby language, Ungarinyin (Rumsey 1982a).¹

The phoneme inventory of Bunuba and orthography used in this thesis are presented in Tables 2-1 and 2-2. The phonemically bracketed symbols follow the orthographic symbols within each cell in this table. The allophonic realisation of these phonemes can be found in Rumsey (2000).

Table 2-1: Bunuba consonant phonemes

	Bilabial	lamino -dental	Apico -alveolar	Apico -postalveolar	Lamino -palatal	Dorso -velar
Stops	b /b/	th /t̪/	d /d/	ɖ /ɖ/	j /j/	g /g/
Nasals	m /m/	nh /n̪/	n /n/	ɳ /ɳ/	ny /ɲ/	ŋg /ŋ/
Laterals			l /l/	ɭ /ɭ/	ly /ʎ/	
Rhotics			rr /r̥/	r /r̥/		
Glides	w /w/	yh /y̠/			y /y/	

Table 2-2: Bunuba vowel phonemes

	Front	Back
High	i /i/	u /u/
Low	a /a/, aa /aa/	

The phoneme /aa/ occurs intramorphemically in a small number of words, mostly nominals: *baadi* ‘panikin’; *baali* ‘track’; *baaniy* ‘goanna’; *baanu* ‘spider’; *jarraa* ‘far away’; *laari* ‘sweet’; *maali* ‘creek’; *maangi* ‘mate’; *maaningarri* ‘morning’; *maaningga* ‘nighttime’; *nhaa* ‘bush honey’; *ngaa* ‘where’; *ngaala* ‘another’; *ngaanyi* ‘what’; *nyaanyi* ‘uncle’; and *waandu* ‘hut’. Otherwise the long vowel /aa/ most commonly occurs across a morpheme boundary, particularly in verbs where the coverb ends in /a/ and the auxiliary begins in /a/. In nominals, the /aa/ long vowel predominately occurs in the first syllable. In fact, *jarraa* ‘far away’ is the only case of the long vowel occurring in 2nd syllable position.²

2.3 Phonotactics and the word

Nominals in Bunuba are generally disyllabic, but at least two words are monosyllabic (*nhaa* ‘sugarbag’ and *ngaa* ‘where’). Two words have the phonemic vowel-glide-vowel sequence, which is phonetically monosyllabic (*luwu* ‘ankle’; *wiyi* ‘woman’).³ Coverbs stand out as the only word class which allow a significant number of monosyllabic members, often in the form of a closed syllable. The following list of phonotactic constraints summarise the word structure for Bunuba.

1. All words are consonant-initial except for two interjections (*aga* ‘no way!’, *ay* ‘ha!’). The following consonants never occur word-initially: /r/; /d/; /n/; /yh/; /l/; and /ly/. The phonemes /d/, /n/, /ny/, /nh/, and /th/ occur rarely in word-initial position. Notably, the stops /b/, /j/, /g/ and nasals /m/ and /ng/ account for approximately 62% of word-initial phonemes, and /w/ accounts for a further 14% of words.
2. All nominals in Bunuba end in vowels, except for a limited set of onomatopoeic forms referring to birds, which end in the nasal phonemes /n/; /ny/; and /ng/. There is one anomalous form *wirrimalmal* ‘eyebrow’.
3. Coverbs may end either in a vowel or in the consonants: /b/; /d/; /d/; /j/; /g/; /n/; /ny/; /ng/; /l/; /rr/; /y/. Of final vowels in coverbs, by far the most common is /a/, which accounts for 93% of vowel-final coverbs, and 73% of all coverbs.
4. All nasals may occur word-initially, except for the retroflex /ŋ/. The most common are /m/, /ng/ and /ny/. The frequency of word-initial /nh/ and /n/ is quite low. There are only two examples of words beginning with /nh/ (*nhungu* ‘husband’, *nhaa* ‘sugarbag’); but there is no evidence that these words are borrowings from neighbouring languages. Only a dozen or so words begin with /n/. All nasals occur word-medially, while only /n/, /ny/ and /ng/ have been found word-finally (see 2 above).
5. All consonant phonemes can occur word-medially, and some occur only in this position. For example, the post-alveolar stops, /ly/ and /rr/, and the lateral glide /yh/ occur exclusively word-medially.

As a footnote to item (2), it should be noted that in Bunuba word-initial glides may be omitted depending on the following vowel. Where /w/ precedes /u/, or /y/ precedes /i/, then the glide is optionally deleted (for example: *wura* ~ *ura* ‘nose’; *yingiy* ~ *ingiy* ‘name’).

2.4 Morphophonology

The most significant morphophonological process (in terms of its frequency) is that of fortition of /w/ and /y/ in certain environments. It occurs most commonly, but not exclusively, in the verbal morphology. The phoneme /y/ changes from [j] to [ɟ], and the phoneme /w/ changes from [w] to [b] following stop and nasal consonants. In verbs this process commonly occurs when a coverb which ends in a consonant precedes a pronominal prefix which begins with /y/ or /w/, as in examples (2-1b) and (2-2b). The change /y/ → [ɟ] also occurs when a pronominal prefix beginning with /y/ occurs without a preceding coverb where the conditioning factor is /y/ → [ɟ] (in verbs) when occurring word-initially (see examples 3-7; and 3-29a); and examples throughout Chapter 4).

In the nominal morphology /y/ hardens to [ɟ] when the LOCATIVE (-*yuwa*) or ALLATIVE (-*yawu*) markers are suffixed to stem-final stops or nasals (which usually are a result of borrowings). See example (2-3a) compared with (2-3b).

	a) No change:	vs	b) Fortition:
2-1	a) <i>Ngangga yinbida.</i> ngangga yinbirr-yha give 1sgO<3nsgA-YHA They gave us. (BO1;1/97.21)		b) <i>Wad jinbirra.</i> wad yinbirr-ra take 1sgO<3nsgA-RA2 They took us. (NR6.2,3)
2-2	a) <i>Yatha wurray.</i> yatha wurr-ra-y sit/stay 3nsgS-RA-PAST They sat. (MJ7.23)		b) <i>Ngalany burray.</i> ngalany wurr-ma-y sing 3nsgS-RA-PAST They sang. (NR/BO;2/98;8.142)
2-3	a) <i>tharrayawu</i> tharra-yawu dog-ALL to the dog		b) <i>jobjawu</i> job-yawu shop-ALL to the shop

The glide /w/ also occurs in the future tense marker *wu-*, and the iterative aspectual suffix *-wa*, as well as being the first segment of some pronominal prefixes. When /w/ or /y/ occur word-initially as part of simple verbs (§3.6), they also undergo fortition.

The main processes which occur between morphemes within the nominal morphophonology are: vowel change, root-final vowel displacement, and vowel lengthening. Most nominals end in vowels, while nominal suffixes and enclitics begin with either vowels or consonants. If a suffix or enclitic begins with a consonant, no phonological changes occur; but if it begins in a vowel, phonological changes and phonetic realisations affecting the vowel-vowel sequence occur. They include the following.

Root final vowel displaced (vowel loss):

/u/-i/ → [i]
/i/-u/ → [iu] ~ [u]

2-4 /gayangurru/-/ingga/ → /gayangurringga/ [ɟɛjʌŋʊrɪŋɡʌ] echidna-ERG

Vowel change (phonetic realisation):

/a/-i/ → [e]
/a/-u/ → [aʊ] ~ [o]

2-5 a) /tharra/-/ingga/ → /tharrayingga/ [tʰarɛŋɡʌ] dog-ERG
b) /garuwa/-/u/ → /garuwau/ [ɡarʊwau] water-ERG

If a nominal ends in a vowel and is followed by the same vowel in a nominal ending, the consequence is simply one of vowel lengthening.

Vowel lengthened:

/V₁/-/V₁/ → [V₁:]

2-6 /nhungu/-/u/ → /nhunguu/ [ŋʊŋu:] husband-DAT

2.5 Stress

The stress patterns on monomorphemic nominals and other word classes, such as mode particles, is straightforward and non-contrastive, and typical of other Australian languages. Words of between one and three syllables show primary stress on the first syllable. Words of four or five syllables show primary stress on the first syllable with secondary stress on the third syllable. Monomorphemic words of more than five syllables do not occur.

1-3 syllables:

2-7 *wíyi* [wi:] woman (1 syllable)
bálgá barramundi (2 syllables)
gúmani knee (3 syllables)

4-5 syllables:

2-8 *jálungùrru* good (4 syllables)
bályamàrada motorcar (5 syllables)

When case markers or enclitics are attached to a nominal the following stress patterns arise: if the case marker/enclitic is monosyllabic it receives no stress; if the ending is two or more syllables, it receives secondary stress on its first syllable.

Monosyllabic nominal endings:

2-9	<i>rárrgi-u</i>	money-DAT
	<i>mána-way</i>	older brother-PAIR

Multi-syllabic nominal endings:

2-10	<i>búga-yàni</i>	child-pl
	<i>míyha-bilinyi</i>	meat-PERL
	<i>gúrama-yàni</i>	man-pl

WORD CLASSES

Bunuba has five major word classes: nominals, verbs, adverbs, mode particles, and interjections. Nominals and verbs can be further divided into sub-classes. *Nominals* comprises three sub-classes: nouns (which also encompass kin terms), adjectives, and free form pronouns (Rumsey 2000:51ff). Free form pronouns can be further broken down into four sub-classes: personal pronouns (core and oblique), demonstrative pronouns, and interrogative/indefinite pronouns.⁴ *Verbs* comprise two sub-classes: coverbs and auxiliaries (Chapter 3). I list the word class of verbs as a single word class comprising of the sub-classes coverb and auxiliary. This is due to the fact that there is a high level of dependency of the coverb on the auxiliary, even though the coverb and auxiliary are extremely different from one another. The coverb inflects little and contains clear semantic content corresponding to the word class verb in English but does not occur on its own (without an auxiliary), whereas the auxiliary is a highly grammaticised element of the verb inflecting for person, number, tense and mood. The other word classes (adverbs, mode particles and interjections) are relatively minor. These groupings are summarised in Table 2-3.

Table 2-3: Bunuba word classes

nominals:	nouns: (including kin terms)
	adjectives
	free form pronouns:
	personal pronouns (core and oblique)
	demonstratives
	indefinite/interrogative
verbs:	coverbs
	auxiliaries
adverbs	
mode particles	
interjections	

These sub-category distinctions are made on the basis of formal, semantic and syntactic criteria. Nouns/adjectives are open sub-classes whereas free form pronouns and demonstratives are fixed, closed sub-classes not amenable to additions via procedures such as borrowing,

coining or calquing. In Bunuba the verbal sub-class of coverb is open and allows borrowings. However, the auxiliary sub-class is not open to these processes and its members can be listed exhaustively (Chapters 3 and 4).

2.6 Nominals

Nominals can be distinguished from the other word classes most clearly on formal grounds. They take morphological markers such as case or number endings which do not occur on members of the other word classes. Adverbs can take a limited number of case markers, including the ablative (§2.11.1.6), but nominals can take the full set.

2.6.1 Nouns and adjectives

According to Dixon, in most Australian languages, nouns and adjectives “generally show identical morphological possibilities” (1980:272) and this is the case in Bunuba. However, nouns and adjectives may be distinguished functionally. When an adjective modifies a noun, the basic word order is modifier–modified, i.e. adjective–noun; the opposite word order, i.e. modified–modifier, does occur but tends to express a more idiomatic sense (see McGregor 1990:272ff for a discussion of the comparable situation in Gooniyandi).

Adjectives take the same kinds of suffixes as nouns and may stand alone as a nominal phrase without acting as a modifier to a noun, although this can be viewed as ellipsis since the noun is always recoverable from the semantics of the phrase. Put another way, a noun can be a semantically complete or self-contained NP, but an adjective cannot.

In the data, all case markers have been attested to occur with adjectives (except that cardinal numbers do not take number marking). Example 2-11 shows the adjective *walay* ‘small’ modifying the noun *rarrgi* ‘rock’. Example 2-12 shows a typical noun occurring as an NP whereas example 2-13 shows an adjective occurring as an NP on its own, without a modified noun:

- 2-11 *Na rarrgi walay yatha wurrantha baburru garuwayuwa.*
 na rarrgi wal(y)ay yatha wurr-ra-ntha baburru garuwa-yuwa
 then rock small sit/stay 3nsgS-RA-dl below water-LOC
 Now there are two small rocks down there in the water. (CR2.14)

- 2-12 *Gurama waḍ jay.*
 gurama waḍ ø-ra-y
 man go 3sgS-RA-PAST
 The man went. (RM1.20)⁵

- 2-13 *Yuwana yatha wungira.*
 yuwana yatha wu-ng-i-ra
 one sit/stay FUT-1sgS-RA
 I’ll stay in one place. (AA4;2/98;10.26)

As mentioned, when adjectives modify nouns, the adjective generally precedes the noun, although the alternate ordering is possible (as example 2-11 above shows). This reverse ordering is used for idiomatic expression (examples 2-14b and 2-15b), as opposed to more literal senses (examples 2-14a and 2-15a) (Rumsey 2000). The ordering pattern in Bunuba differs from neighbouring Ungarinyin (Rumsey 1982a) and Gooniyandi (McGregor 1990), which both show a tendency for modified–modifier order. Rumsey (2000:112) comments further on the ordering of NP constituents.

modifier-modified vs modified-modifier (Rumsey 2000:113):

- | | | |
|------|---|---|
| 2-14 | a) <i>ngadi mulu</i>
blind eye
blind eye (Rumsey 2000:113, ex. 212) | b) <i>mulu ngadi</i>
eye blind
blind person (Rumsey 2000:113, ex.211) |
| 2-15 | a) <i>ganday bina</i>
bad ear
bad ear (Rumsey 2000:113, ex. 214) | b) <i>bina ganday</i>
ear bad
stupid person (Rumsey 2000:113, ex.213)
(deaf) |

Since nouns and adjectives in Bunuba exhibit no formal distinctions other than ordering rules, the label ‘nominal’ is employed in this work. This is in keeping with previous descriptions of Bunuba (Rumsey 1982b, 2000) and with descriptions of Australian languages generally.

2.6.2 *Kin terms*

Kin terms can be sub-categorised on formal criteria. They have “distinct vocative forms, a partially distinct system of number and possessive inflection, and can take the dyadic suffix” (Rumsey 2000:51). Kin terms take the suffixes *-way* third person possessive (§2.11.2.4), *-wulu* second person possessive (§2.11.2.5), and the *-langu* dyadic suffix (§2.11.2.6). No further attention is paid to them here.

2.6.3 *Free form pronouns*

Pronouns are a closed sub-class of nominals that refer to the participants within a clause. There are three sub-classes of free form pronoun: (i) personal pronouns (both core and oblique) with reference made to the subject or object through core pronouns and reference made to the possessor through oblique pronouns; (ii) demonstrative pronouns; (iii) interrogative/indefinite pronouns. Core free form pronouns take the full range of nominal endings which formally distinguish them from the other members of the pronoun sub-class. Oblique pronouns most commonly function as possessive pronouns and may take a limited set of nominal endings (§2.6.3.1). Demonstrative pronouns make reference to something within the context of an utterance or to something within the linguistic context (§2.6.3.2). Interrogative/indefinite pronouns fall into two different sets. The first is a set of pronouns

which may perform the dual roles of marking either questions or indefiniteness, while the second is purely an interrogative set (§2.6.3.3).

The Bunuban languages (Bunuba and Gooniyandi), and at least one other Kimberley language, Ungarinyin (Rumsey 1996), do not adhere as neatly as other languages to the traditional inclusive/exclusive distinction. Bunuba and Gooniyandi largely lack distinction between what is usually categorised as dual inclusive and dual exclusive, making the distinction only when the number is plural. In order to account for this, McGregor (1990, 1996) and subsequently Rumsey (1996, 2000) described the pronominal systems of Gooniyandi and Bunuba in terms of the categories *restricted* and *unrestricted* in the first person. Essentially, these terms correspond to the traditional categories in the following ways:

RESTRICTED	=	first person dual inclusive first person dual exclusive first person plural exclusive
UNRESTRICTED	=	first person plural inclusive

I employ the terms *restricted* and *unrestricted* throughout this thesis. For a detailed account, the reader is referred to McGregor and Rumsey and to the works cited herein.

2.6.3.1 Personal pronouns

Core personal pronouns

Table 2-4 displays the core free form personal pronouns according to the restricted/unrestricted analysis.

Table 2-4: Core free form pronouns

	sg	nsg
1	<i>ngayini</i>	<i>yaarri</i> (UNRESTRICTED) <i>ngiyirri</i> (RESTRICTED)
2	<i>nginji</i>	<i>yinggirri</i>
3	<i>niy</i>	<i>biyirri</i>

This presentation gives the impression that there is no distinction between dual or plural in Bunuba; however, this is not strictly the case, since number marking can be employed to distinguish between dual and plural core free forms. If the *-way* PAIR number marker (§2.11.2.3) is added to *ngiyirri*, then this can only refer to ‘first person dual exclusive’. If the *-yani* plural number suffix (§2.11.2.2) is attached to the root pronoun *ngiyirri*, then this can refer only to

‘first person plural exclusive’. Examples are given in 2-16 to 2-18. This strategy is rarely employed, however, since the difference is normally clear either from cross-referencing in the verb or from context.

ngiyirri-way (1dl.excl):

- 2-16 *Nguyirriway gurraga iyidiyngarri.*
ngiyirri-way gurraga iyirr-ni-yngarri
 1dl.excl.PRO-PAIR cross.over 1R.S-NI-PAST-HAB
 The two of us crossed over. (B02.98)

ngiyirri-yani (1pl.excl):

- 2-17 *Nguyirri girrgara yiyirrmiygi ngurru na. Nguyirriyani.*
ngiyirri girrgara yiyirr-ma-iy-gi ngurru na ngiyirri-yani
 1R.PRO run.away 1RS.PAST-MA-PAST-pl over.there then 1pl.excl.PRO-PL
 Us (R), we (R) all ran away over there then. All of us (R). (NR/BO1;2/98;12.176-7)

biyirri-way (3pl):

- 2-18 *Waya wurrmiythangarri biyirriway bugayani:*
waya wurr-ma-iy-ntha-ngarri biyirri-way buga-yani
 be.calling.out 3nsgS-MA-PAST-dl-HAB 3pl.PRO-PAIR child-PL

“ban.ga wunggurragali!”.
ban.ga wu-nggurr-ra-g(v)-ali
 come.back FUT-2nsgS-RA-pl-DIR
 They (two) called out to all their kids: “you all come back this way!”. (NR6.14)

Oblique personal pronouns

The oblique pronouns occur as free forms to indicate possession, both alienable and inalienable. They can take a number of nominal endings, except for *-guda* comitative2 (§2.11.1.9). Rumsey (2000:119) states that oblique pronominals do not occur with the *-ingga* ergative marker, although I have examples of this occurring (e.g. example 2-21). Oblique pronominals may also occur as the cross-referenced overt S NP of a reflexive/reciprocal verb.

The free form oblique pronouns are listed in Table 2-5. Alternate forms are indicated by the ‘~’ symbol.

Table 2-5: Oblique free form pronominals

	sg	dl	dl/pl	pl
1	<i>ngarragi</i>	<i>ngiyirrantha</i> (RESTRICTED)	<i>ngiyirranggi</i> ~ <i>ngiyirrang(g)u</i> (RESTRICTED)	<i>yarranggi</i> ~ <i>yarrang(g)u</i> ~ <i>yarra</i> (UNRESTRICTED)
2	<i>nganggi</i>	<i>yinggirrantha</i>		<i>yinggirrang(g)i</i>
3	<i>nhi</i> ~ <i>nhu</i> ~ <i>nhingi</i>	<i>biyirrantha</i>		<i>biyirranggi</i> ~ <i>biyirrang(g)u</i>

Some examples of oblique pronouns marking possession follow:

- 2-19 *Garuwa biyirangi.*
 garuwa biyirangi
 water 3pl.OBL
 Water for them/their water. (MJ4;1/97;3.73)
- 2-20 *Ngindaji wad jay ngaa ngarragu manggaymiya?*
 ngindaji wad ø-ra-y ngaa ngarragi-u manggay=miya
 this go 3sgS-RA-PAST I/I.PRO 1sg.OBL-DAT wife=ONLY
 Where has this wife of mine gone? (MJ3;1/97;3.13)
- 2-21 *Ngarragingga ngawungu.*
 ngarragi-ingga ngawungu
 1sgOBL-ERG father
 My father. (CR4.47)

2.6.3.2 Demonstratives

The demonstrative pronouns are displayed in the Table 2-6. The demonstrative pronouns may host the same nominal case markers as core pronouns, but they differ from core and oblique pronouns in that adverbs may be derived from them through the addition of various nominal markers (§2.8).

The exophoric demonstratives are used when referring to something “in the context of situation” (Rumsey 2000:73). They are pronouns used to refer to the extralinguistic situation, that is, anything outside the context of the narrative. The difference between *proximal* and *distal* demonstratives lies in the relationship between the speaker and the event or referent. If the event or referent is in close proximity to the speaker *ngindaji* is used, but if distant from the speaker then *ngurru* is used. Examples follow in 2-22 and 2-23; see also 2-20 above.

Table 2-6: Demonstratives and deictic pronouns

	exophoric demonstratives	endophoric deictics	
Proximal	<i>nginda</i> ~ <i>ngindaji</i> this(one)	<i>nyirra</i> ~ <i>nyirraji</i> that(one)	(the same)
Distal	<i>ngurru</i> that(one)	<i>ngaala</i> that other one	(other)

- 2-22 *Ngurru gurama baburru wiyi ngayi yatha ray.*
 ngurru gurama baburru wiyi ngayi yatha ø-ra-y
 that(one) man down woman no/not sit/stay 3sgS-RA-PAST
 That man over there had no wife. (B02.4)

- 2-23 Bini^j rarrgi niy na nyirraji rarrgi baga ray.
 binij rarrgi ø-ni-y na nyirraji rarrgi baga ø-ra-y
 finished stone 3sgS-NI-PAST now this(one) stone is.there3sgS-RA-PAST
 He became stone then and that stone has been there ever since. (CR2.16)

Endophoric demonstratives are used to refer to something in the “nearby linguistic context” (Rumsey 2000:73). They are used to maintain cohesion within a narrative and form part of the structure of the text itself. *Nyirra* (or *nyirraji*) is used for normal anaphoric reference, i.e. to indicate that the intended referent is the same as previously mentioned. *Ngaala* is used to refer to something or someone ‘different’, as in 2-24 to 2-26. The semantic contrast, in other words, is between ‘the same’ (*nyirra*) and ‘other’ (*ngaala*). Rumsey (2000:74) treats *ngaala* as an indefinite pronoun, but the analysis presented in this thesis provides a more regular paradigm for the pattern of demonstrative pronouns than Rumsey’s analysis.

- 2-24 *Ngaala* *ban.ga* *wurrayngarri*.
 ngaala ban.ga wurr-ra-y-ngarri
 another(lot) come.back 3nsgS-RA-PAST-HAB
 Another lot would come back. (NR4.46)

- 2-25 *Gayga mangarragingarri* *ngaala* *nhaa*.
 gayga ø-ma-ngarragi-ngarri ngaala nhaa
 cut 3sgO<3sgA-MA2-1sg.OBL-HAB another(lot) sugarbag
 He’d cut another sugarbag for me. (CR4.23)

- 2-26 *Ngindaji baburru ngaala malwajaywa baga wurragingnya*.
 ngindaji baburru ngaala malwaja-yuwa baga wurr-ra-g(v)-nya
 this below another mud-LOC lie.down 3nsgS-RA-pl-SUB
 This other part is what stays underneath the mud. (NR2.10)

Rumsey comments on the possible relationship between *ngaala* and the interrogative pronoun *ngaanyi*. He states that these forms are functionally and formally related to *ngaa*, but that they do not combine the roles of interrogative and indefinite as does *ngaa* (Rumsey 2000:74). There seems to be no evidence for the productivity of either *-la* or *-nyi* as suffixes, however, so little more can be said.⁶

As mentioned, the locative case marker (§2.11.1.4) may combine with demonstrative pronouns to form temporal and locative adverbs such as ‘here’ and ‘there’.

- 2-27 *ngindaywa* *nyirraywa*
 nginda-yuwa nyirra-yuwa
 this-LOC this.that-LOC
 here there

2.6.3.3 Interrogative/indefinite pronouns

The interrogative/indefinite pronouns are listed in Table 2-7. There are a set of pronouns which can be either indefinite or interrogative, and two specifically interrogative pronouns.⁷

Table 2-7: Interrogative/indefinite pronouns

	Interrogative/Indefinite	Interrogative
<i>ngunda</i>	who/someone	
<i>nginjaga</i>	what/something	
<i>ngaa</i>	where/somewhere	
<i>nginjayha ~ nginjaya</i>	when/sometime	
<i>nginjagau</i>		why
<i>ngaanyi</i>		what/where/how(?)

The interrogative/indefinite pronominals (the first four in Table 2-7 above) may take the interrogative/indefinite enclitic =*ma* which functions either as an indefinite or interrogative marker depending on context (§2.12); compare examples 2-28 and 2-29.

2-28 *Wad jay ngaa?*
wad \emptyset -ra-y *ngaa*
 go 3sgS-RA-PAST I/I.PRO
 Where did he go? (BO.2001)

2-29 *Wad jay ngaama.*
wad \emptyset -ra-y *ngaa=ma*
 go 3sgS-RA-PAST I/I.PRO=I/I
 He went somewhere./Where did he go? (MJ6.6)

The interrogative/indefinite pronouns may combine with various case endings. Example 2-30 shows the use of the dative case marker (§2.11.1.3) creating a different interrogative when it attaches to the interrogative/indefinite pronoun *nginjaga*. Example 2-31 shows the ablative case marker (§2.11.1.6) in its usual function.

2-30 *Nginjagau?*
nginjaga-u
 I/I.PRO-DAT
 Why? (MO.2001)

2-31 *Gilinymana wad jay ngaanhingima.*
gilinymana wad \emptyset -ra-y *ngaa-nhingi=ma*
 moon go 3sgS-RA-PAST/I/I.PRO-ABL=I/I
 Moon came from somewhere./Where did the moon come from? (MJ6.1)

The interrogative pronoun *ngaanyi* combines with verbs forming the interrogatives ‘what’ and ‘where’ (and possibly this could be interpreted as meaning ‘how’). It does not occur on its own as an interrogative but must combine with a verb to function in this way, the verb determining which sense is being conveyed. It also differs from *ngaa* in that there is no indefinite reading available (Rumsey 2000:74).

‘What’:

- 2-32 *Ngaanyi gilima?*
 ngaanyi(g)i-li-ma
 I/I.PRO- PRES-1sgS-MA:DO
 What will I do now? (RM1.16)

‘Where’:

- 2-33: *Ngaanyi wad jay?*
 ngaanyiwad ø-ra-y
 I/I.PRO- go 3sgS-RA-PAST
 Where did he go? (Rumsey 2000:74)

2.7 Verbs

See Chapter 3 for a full discussion of verbs as a word class.

2.8 Adverbs

Adverbs are a minor word class which differ from nominals in that they are not able to take any case marking. They provide information about time, manner, or place of an event and co-occur with verbs in carrying out this function. Adverbs differ from mode particles (§2.9) on formal grounds, in the position in which they occur and also in the fact that adverbs allow a limited range of borrowings, whereas mode particles is a closed class. Adverbs are also able to occur in coverb position unlike particles.

Some adverbs are monomorphemic, while others are di- or tri-morphemic derived by means of nominal affixes such as locative (§2.11.1.4) or ablative (§2.11.1.6). However, adverbs do not take the case markers such as the agentive or dative or instrumental thus distinguishing them from the word class *nominal*. A selection of the three sub-classes of adverbs are presented in Table 2-8 below. Some textual examples follow.

- 2-34 *Nyirrajinhingi garrwaru yoagamabga wudangarri donggi.*
 nyirraji-nhingi garrwaru yoagamab-ga wurr-yha-ngarri donggi
 this.that-ABL afternoon harness/yoke-PUNCT 3nsgA>3sgO-YHA-HAB donkey
 After that, they’d harness the donkey in the afternoon. (BO/MJ1;2/98;7.24-25)

- 2-35 *Ngindajinhingi wulug gilanya*
 ngindaji-nhingi wulu(g) gi-li-ra-nya
 this-ABL drink ins-1sgA>3sgO-RA2-SUB

mala balarra nginiy.
 mala balarra ngi-ni-y
 belly fill 1sgS-NI-PAST
 After that, because I was drinking it my bladder became full. (elicitation)

Table 2-8: Adverbs without nominal affixation

Adverb	Translation
Space:	
without affixation:	
<i>rawurra</i>	above
<i>baburru</i>	below
<i>rawurraga</i>	upwards
<i>baburruga</i>	downwards
<i>wathila</i>	near
<i>jarraa</i>	far
with affixation:	
<i>ngin<u>day</u>wa</i>	here (- <i>yuwa</i> LOCATIVE §2.11.1.4)
<i>ngin<u>dang</u>arriingga</i>	this side (- <i>ngarri-ingga</i> INSTRUMENTAL §2.11.1.2)
<i>ngurru<u>ng</u>arriingga</i>	that side (as above)
<i>jarra<u>ng</u>arriingga</i>	far side (as above)
<i>ngurru<u>biliny</u>alu</i>	from there, towards here (- <i>bilinyi</i> PERLATIVE §2.11.1.7; -(<i>n</i>) <i>alu</i> DIRECTION §2.11.3)
<i>rawurru<u>ran</u>alu</i>	from above towards here (-(<i>n</i>) <i>alu</i> DIRECTION §2.11.3)
<i>minaluga</i>	to here ⁸
Time:	
without affixation:	
<i>nyirramiya</i>	yesterday
<i>yani<u>ng</u>a ~ yani<u>ng</u>iya</i>	now ~ now/today
<i>maani<u>ng</u>arri</i>	tomorrow/morning
<i>garrwaru</i>	afternoon
with affixation:	
<i>nyirra<u>jin</u>hingi</i>	after that
<i>ngin<u>daj</u>inhingi</i>	after that
Manner:	
<i>baliya</i>	quickly
<i>barrba</i>	on foot

2.9 Mode Particles

Mode particles in Bunuba are a small closed set of two words: *ngayi* ‘not’ and *mayhay* ‘maybe’.⁹ They do not take any case, number or other inflectional marking. They most frequently occur before the clause over which the particle has scope. In distinguishing mode particles from adverbs, Rumsey states that the ordering of constituents is the essential criterion: “a class of *mode* particles can be clearly distinguished from adverbs and other word classes on syntactic grounds, in that they are strictly ordered with respect to the verb complex, and do not occur with verbs of all six tense/mode categories” (2000:100). The senses conveyed by particles express a speaker’s attitude to a situation or event. *Ngayi* ‘not’ is the most commonly

attested of the two. It most commonly has scope over a verb complex indicating that something didn't happen ('You didn't give us any meat. '), or that something isn't happening ('They don't cut hay anymore. '), or that something won't or shouldn't happen ('Don't do that. ') (examples 2-36, 2-37). It may also occur in non-verbal sentences with a privative sense (example 2-38 below).

- 2-36 *Ngayi baga iyangiya.*
ngayi baga (g)iy-ø-ra-ngiy(a)
 no/not lie.down IRR-3sgS-RA-PRES.IRR
 He doesn't sleep. (BO4;1/97;6..30)
 The one with no wife. (B02.72)
- 2-37 *Ganbalamanganya ngayi minangga adiy.*
ganbalamanganya ngayi minangga (g)a-arr-yha-iy(a)
 [place.name] no/not visit IRR-1U.A>3sgO.NONPAST-YHA-PRES.IRR
 We don't visit Lily Hole (anymore). (MJ5;1/97;5.19)
- 2-38 *Wiyi ngayi nyirraingga.*
wiyi ngayi nyirra-ingga
 woman no/not this.that-ERG
 The one with no wife.

2.10 Interjections

Interjections are a small morphologically inert word class, taking no nominal case or number marking. They may occur as an utterance on their own. In many Australian languages interjections show phonological anomalies compared with the rest of the lexicon (Dixon 1980:284), and this is the case with some interjections in Bunuba. Of the Bunuba interjections listed below (Table 2-9), *aga* and *ay* are the only two free form words beginning with a vowel. Interjection *ay* also has unusual nasalisation for Bunuba /ãy/, as does *ngayi* /ŋãy/ (Rumsey 2000:105). *Gaj* is one of the few free form words that end in a stop.

Table 2-9: Interjections

Interjection	Translation
<i>aga</i>	not so!
<i>ay</i>	hah!
<i>gaj</i>	come on!
<i>bu</i>	go/shoo!
<i>wilagurru</i>	alright/finished
<i>ngay</i>	yes/that's right
<i>ngayi</i>	no
<i>yaninja</i>	alright/that's all/ok
<i>yuway</i>	yes

2.11 Nominal morphology

The case and nominal number markers are listed in Tables 2-10 (case), 2-11 (number), and 2-12 (minor marking), and described briefly in this section. Rumsey (2000) discusses them in detail. Other than the function of the ergative case marker and the ergative/instrumental marking, the case and number markers are presented here purely for reference within this thesis. The case markers are labelled suffixes in Rumsey (2000), but they behave similarly to what are described as postpositions in Gooniyandi (McGregor 1990), Ungarinyin (Rumsey 1982a) and Wunambal (Carr 2000). That is, the case marker needs only to be present on one constituent of an NP, usually the first element in each NP. The term ‘suffix’ is retained here since the distinction between ‘suffix’ and ‘postposition’ is not relevant to this study.¹⁰

Table 2-10: Case endings

<i>-ingga</i>	ERGATIVE/INSTRUMENTAL
<i>-ngarringga</i>	INSTRUMENTAL
<i>-u/-gu</i>	DATIVE
<i>-yuwa/-juwa</i>	LOCATIVE
<i>-yawu/-jawu</i>	ALLATIVE
<i>-nhingi/-nhi</i>	ABLATIVE
<i>-binyi ~ -bilinyi</i>	PERLATIVE
<i>-ngarri</i>	COMITATIVE1
<i>-guda</i>	COMITATIVE2
<i>-winja</i>	CAUSAL
<i>-jangi</i>	SEMBLATIVE ¹¹

Table 2-11: Number marking

<i>-arri</i>	dual (DL)
<i>-yani</i>	plural (PL)
<i>-way</i>	PAIR
<i>-way</i>	3rd person possessive
<i>-wulu/-bulu</i>	2nd person possessive
<i>-langu</i>	DYADIC

Table 2-12: Minor marking

<i>-wangu</i>	COUNTRY
<i>-warrawarra</i>	COUNTRYFOLK
<i>-mili</i>	CHARACTERISED BY
<i>-aji</i>	INTENSIFIER
<i>-wurru</i>	EMPHASIS
<i>-alu</i>	DIRECTIONAL
<i>-ala</i>	FIRST

2.11.1 Case marking

2.11.1.1 *-ingga* ERGATIVE

The *-ingga* ergative suffix may be used to perform three functions, which will be described and exemplified in turn: (i) to indicate agency: the *-ingga* marked NP, which can be cross-referenced either as an A or (occasionally) as an S; in this case the NP is clearly internal to the clause;¹² (ii) to clarify agency when an overt NP occurs as an ‘after-thought’, distanced from the verb through paralinguistic factors such as a pause; (iii) to mark a low-animacy agent which performs an action on a higher animate participant.

First, in narrative texts *-ingga* typically occurs where the NP is cross-referenced by the A of a transitive verb (example 2-39), but it can also be cross-referenced by the S of an intransitive verb (example 2-40), although this is rare.

NP(A)-ERG:

2-39	<i>Warranaingga</i>	<i>nyaga</i>	<i>wunu.</i>
	warrana- <i>ingga</i>	nyaga	∅-wu-n(v)
	eagle-ERG	spear	3sgO<3sgA-WU2-PAST
	Eagle speared it. (B02.55)		

NP(S)-ERG:

2-40	<i>Thuthuluingga</i>	<i>birayga</i>	<i>raynhingi.</i>
	thuthulu- <i>ingga</i>	birayga	∅-ra-y-nhingi
	pheasant-ERG	arrive	3sgS-RA-PAST-3sg.OBL
	Pheasant came up to him. (B02.14)		

In example 2-39, *-ingga* indicates that Eagle has done the spearing. The sentence would also be grammatical without *-ingga* (see Blake 1987b:198 for comparison of this with other Australian languages). In example 2-40, the use of *-ingga* indicates that it is Pheasant who arrives at Eagle’s place. Notice that the verb is formally intransitive.¹³

Second, the ergative marker may also be used with ‘after-thought’ NPs, separated from the clause by a distinct pause (marked by ‘....’ in the first line of text).

2-41	<i>Manyirr</i>	<i>miynhi,</i>	<i>lunggurayingga.</i>
	manyirr	∅-ma-iy-nhi		lunggurra- <i>ingga</i>
	win	3sgS-MA-PAST-3sg.OBL		blue.tongue.lizard-ERG
	He won (the fight) from him, the Blue Tongue Lizard. (BO4;1/97;6.16-17)			

Third, the ergative marker may indicate that an actor which is low in animacy, or even inanimate, performs some action on a participant which is higher in animacy. Under these conditions, *-ingga* is obligatory.

- 2-42 *Gurradga wunagi malwajaingga.*
 gurradga wurr<n<ø-ra-g(v) malwaja-ingga
 jump 3nsgO<INV<3sgA-RA2-pl mud-ERG
 The mud (toy horse) would buck them. (JmM1.6)
- 2-43 *Mulurruingga nyaga winbininyangarri. Guju.*
 mulurru-ingga nyaga wurr<n<ø-wu-n(v)-nya-ngarri guju
 catfish-ERG spear 3nsgO<INV<3sgA.PAST-WU2-PAST-SUB-HAB bone
 When the catfish spikes them. The catfish spike. (NR1;1/97;2.72-3)

The *-ingga* marker occurs on one nominal in an ergatively-marked NP; but occasionally there may be multiple occurrences of *-ingga* within the same sentence, each marking a single NP referring to the same participant, in an appositional construction.¹⁴

- 2-44 *Nyirrayingga nyirrajiingga olmaningga:*
 nyirra-ingga nyirraji-ingga olman-ingga
 this-ERG this-ERG old.man-ERG
- “*Wad gingira garrga anggirrinybugu na.*”
 wad (g)i-ngi-ra garrga anggirriny-wu-g(v) na
 go PRES-1sgS-RA leave 1sgA>2nsgO.NONPAST-WU2-pl now
 This one, the old man (said): “I’m going, I’m leaving you all now.” (CR2.11)
- 2-45 *Baiyiga wurrmag bugayingga mabilyiingga.*
 baiyiga wurr-ma-g(v) buga-ingga mabilyi-ingga
 meet 3nsgA>3sgO-MA2-pl child-ERG little(one)-ERG
 The kids met him half way, the little ones. (RM1.49)

If the NP includes an oblique pronominal in the role of possessor, then the oblique pronominal tends to be marked with the ergative case marker.¹⁵

- 2-46 *Dagad ay ngarragi ngawungingga.*
 dagad ø-ra-y ngarragi ngawungu-ingga
 eat 3sgS-RA-PAST 1sg.OBL father-ERG
 My father ate. (CR4.70)
- 2-47 *Ngarragiingga ngawungu diyga ngarriyngarri.*
 ngarragi-ingga ngawungu diyga ø-ngarri-y-ngarri
 1sg.OBL-ERG father find 3sgO<3sgA-NGARRI-PAST-HAB
 My father would find it. (CR4.35)

2.11.1.2 *-(ngarri)ingga* INSTRUMENTAL

The nominal ending *-ingga* is also used for instrumental case marking. Homophony of case markers with different functions is not unusual in Australian languages (Dixon 1980:304; Blake 1987a:41). For the agentive reading, the NP with *-ingga* attached to it must be cross-referenced by pronominal prefixes within the verb (example 2-48). Instrumental NPs, in contrast, are not cross-referenced as A or S within the verb (example 2-49).

Ergative *-ingga*:

- 2-48 *Ngayiniingga* albima *liyangarri*.
ngayini-ingga albima li-yha-*ngarri*
 1sg.PRO-ERG help.trans 1sgA>3sgO-YHA-HAB
 I'd help him (CR4.49)

Instrumental *-ingga*:

- 2-49 *Nyaga wurrungarri* *ngayi* raibalingga.
 nyaga wurr-wu-n(v)-*ngarri* *ngayi* raibal-*ingga*
 spear 3nsgA>3sgO-WU2-PAST-HAB no/not rifle-INSTR
 They'd spear it, without any rifle. (BO/MJ2;2/98;7.6)

In languages like Ngan'gityemerri (Reid 1990:328), where the markers for agent and instrument are homophonous, the two senses can be differentiated within a single sentence solely by cross-referencing. In Bunuba, however, cross-referencing is not a strategy for distinguishing the two functions. In addition to the suffix (when not cross-referenced by the pronominal prefix within the verb), instrumental function can also be signalled by *-ngarriingga*, which consists of the comitative¹ suffix *-ngarri* followed by *-ingga*.

- 2-50 *Yurrga wurragingarri* *garuwangarriingga*.
 yurrga wurr-ra-g(v)-*ngarri* *garuwa-ngarri-ingga*
 water 3nsgA>3sgO-RA2-pl-HAB water-COM1-INSTR
 They watered it with water. (MJ1;2/98;12.147)

In Bunuba, it is ungrammatical for two *-ingga* marked NPs to co-occur in the same clause, one marking agency and the other instrumental. In this situation the double suffix *-ngarriingga* marks the instrumental NP, whereas *-ingga* marks the ergative NP.

NP-ERG + NP-INSTR:

- 2-51 *Guramaingga muwurrungarriingga*
gurama-ingga muwurru-*ngarri-ingga*
 man-ERG club-COM1-INSTR
- dangayba nganbuni*.
dangayba ngi<n<∅-wu-n(v)
 hit 1sgO<INV<3sgA-WU2-PAST
 The man hit me with a club. (Rumsey 2000:54)

Double instrumental marking is only obligatory when the ergative and instrumental cases co-occur (cf. Rumsey 2000:53). Nevertheless, it is the most textually frequent strategy for marking instrumental case, so it may be on the way to becoming the only way of marking this relationship in Bunuba.

NPs marked as instrumental tend to be inanimate objects which are easily manipulated with the hands, such as tools or weapons (examples 2-49 and 2-51). However, larger, more animate agents such as horses can also be marked with instrumental case. It is interesting that

in languages where ergative/instrumental cases are marked by a homophonous morpheme, the comitative case marker tends to take over. As stated by Reid (1990:329) for Ngan'gityemerri: "the less that entity falls within the full control of the subject, the more likely it is to function as a comitative rather than instrumental NP". The Bunuba *-ngarri-ingga* double suffix also occurs on a number of nominals deriving spatial and temporal adverbs (§2.8); Rumsey (2000:54) also notes that a locative role is performed through the same suffixing.

2.11.1.3 *-u/-gu* DATIVE

The dative ending performs several functions including the following: indicating purposive on nominals; marking indirect object (not cross-referenced in the verb); marking possession, both alienable and inalienable; as a derivational suffix on coverbs creating nouns; and changing the sense of some interrogative/indefinite pronouns (§2.6.3.3). The most common function is to mark the purposive construction. The form of this case marker is phonologically conditioned: the *-gu* form occurs after word-final nasals and stops, which tend to occur in borrowings from English/Kriol.

Nominals marked by *-u* can indicate a purposive role performed by the verb, such as 'the meat one is wishing to hunt' (example 2-52). Alternatively a dative-marked nominal can denote a benefactive role, that is, the person for whom the action is being carried out (examples 2-53 and 2-54).

2-52 *Gamanba ray* *ngaalau* *miyha.*
 gamanba \emptyset -ra-y *ngaala-u* miyha
 go.hunting 3sgS-RA-PAST another-DAT meat
 He went hunting for more meat. (RM1.22)

2-53 *Ban.ga* *rangarribiyirrantha* *wiyiu*
 ban.ga \emptyset -ra-*ngarri*-biyirrantha wiyi-u
 take.back 3sgO<3sgA-RA2-HAB-3dlOBL women-DAT

ngangga *windantha.*
ngangga wirr<n< \emptyset -yha-ntha
 give 3nsgO<INV<3sgA-YHA-dl
 He'd bring (meat) back for the two women and give it to them. (B02.4)

2-54 *Ngaya* *burragi* *miyhau.*
ngayag(a) wurr-ra-g(v) miyha-u
 ask(for) 3nsgA>3sgO-RA2-pl meat-DAT
 They asked for meat. (NR/BO1;2/98;12.14)

The dative case marker can be used to indicate indirect object status although this function is not textually frequent. More commonly the oblique pronominal suffix to the verb performs this function (Rumsey 2000:56). This suffix may also be used to denote possession though again, this function is textually rare. Although it is possible to mark inalienable possession in this manner, it is not the usual way in which this function is encoded. Possession of body

parts in particular is normally indicated through the use of oblique pronouns (Rumsey 2000:55, §2.6.3.1), but see example 2-20 above and 2-55 below.

- 2-55 *Guramau mingali.*
 gurama-u mingali
 man-DAT hand
 The man's hand. (Rumsey 2000:55)

The dative case marker can be used to derive nominals from coverbs. I have no examples of this function of *-u*, but the following examples are from Rumsey (2000:55).

- | | | | |
|------|--|------|---|
| 2-56 | <i>yathayathau</i>
yatha-yatha-u
RED-sit-DAT
saddle | 2-57 | <i>gan.gan.gu</i>
gan.gan-u
clap-DAT
clap sticks |
|------|--|------|---|

2.11.1.4 *-yuwa/-juwa* Locative

This suffix places a person or thing in the spatial or temporal location. It occurs with position/stance verbs to indicate the static location of the NP referent to which it attaches. It can most easily be glossed as the following: 'on'; 'at'; 'in'; 'into'; 'onto' (Rumsey 2000:56). The form is phonologically conditioned by the process of fortition (§2.4), whereby /y/ hardens to /j/ following word-final nasals and stops (which most usually occur in borrowings from English/Kriol).

Spatial location:

- | | | |
|------|--|--|
| 2-58 | <i>Gawiy marrawarrayuwa</i>
gawiy marrawarra-yuwa
fish river-LOC
Fish live in the river. (NSM) | <i>baga ray.</i>
baga ø-ra-y
lie.down 3sgS-RA-PAST |
| 2-59 | <i>Wurriga wula</i>
wurriga wu-li-ra
put FUT-1sgA>3sgO-RA2
I'll put the damper in the fire. (MO1;1/97;2.34) | <i>winthaliyuwa mayi.</i>
winthali-yuwa mayi
fire-LOC damper |

Locative case is also used to locate a person or event in a temporal location, e.g. to refer to a time of day or a period in a person's life.

- | | | |
|------|--|---|
| 2-60 | <i>Burij jiyirraynthangarri</i>
burij yiyirr-ra-y-ntha-ngarri
play 1R.S-RA-PAST-dl-HAB
We'd play, my mate and me, there when we were small. (BO 1;1/97.4) | <i>jimarri nyirraywa walyaywa.</i>
jimarri nyirra-yuwa walyay-yuwa
mate this.that-LOC small-LOC |
| 2-61 | <i>jirali(yuwa)</i>
jirali-yuwa
before-LOC
yesterday (Rumsey 2000:56) | <i>garrwaruyuwa</i>
garrwaru-yuwa
afternoon-LOC
in a day (Rumsey 2000:56) |

This suffix can also be used on body part terms, thus creating a more metaphorical sense.

- 2-62 *Gulguyuwa wad burali gulguyuwa garuwa.*
 gulgu-yuwa wad wu- \emptyset -ra-ali gulgu-yuwa garuwa
 waist-LOC go FUT-2sgS.FUT-RA-DIR waist-LOC water
 It's only waist-deep come on the water's only waist-deep. (B02.97)
- 2-63 *Wad jiyirrangarri mingaliyuwa.*
 wad yi(yi)rr-ra-ngarri mingali-yuwa
 take 1R.A>3sgO.PAST-RA2 hand-LOC
 We took them (the cattle) in hand. (B03.27)

2.11.1.5 -yawu/-jawu ALLATIVE

The allative case marker is used on NPs in the semantic role of goal.¹⁶ The participants wish to move in the direction of a place, person, thing or activity (Rumsey 2000:57). The form of this case marker is phonologically conditioned by the process of fortition (§2.4) and so again, the /y/ hardens to a /j/ following word-final nasals and stops (see example 2-3b)).

- 2-64 *Ban.ga wurrayntha muwayawu.*
 ban.ga wurr-ra-y-ntha muway-yawu
 go.back 3nsgS-RA-PAST-dl camp-ALL
 They came back to camp. (B01.19)
- 2-65 *Ban.ga yiyirrangarri ngarranyiyawu ngawunguyawu.*
 ban.ga yiyirr-ra-y-ngarri ngarranyi-yawu ngawungu-yawu
 go.back 1R.S-RA-PAST-HAB mother-ALL father-ALL
 We'd come back to mother and father. (NR6.21)

2.11.1.6 -nhingi/-nhi ABLATIVE

The ablative case marker indicates that the NP to which it attaches is the source referent of the activity described by the verb. Host nominals can be either animate or inanimate. The short form of this case marker tends to be used in rapid speech, although the convention in this thesis is to represent the full form.

- 2-66 *Nyirraji yatha wurraynya rawurra lunduyuwa,*
 nyirraji yatha wurr-ra-y-nya rawurra lundu-yuwa
 this sit/stay 3nsgS-root-PAST-SUB up.top tree-LOC
- tharrga wudiy lundunhingi.*
 tharrga wurr-ni-y lundu-nhingi
 lower 3nsgS-NI-PAST tree-ABL
 The one that was sitting up in the tree climbed down from the tree. (NR/BO1;2/98;12.199)

Ablative case can also mark spatial or temporal sources, and it is through the use of -nhingi that various temporal or spatial adverbs are derived (§2.8). The most common use of -nhingi in this way is as a discourse marker. *Nyirrajinhingi* 'after that' is a high-frequency text linking device in narratives (see examples 2-34, 2-35).

As in many Australian languages the ‘cause’ function may be expressed by the ablative case marker (Rumsey 2000:59; see Arrente (Wilkins 1989)); Yankunytjatjara (Goddard 1985).

2-67 *Tharranhingi milwa niy.*
 tharra-nhingi milwa ø-ni-y
 dog-ABL mad 3sgS-NI-PAST
 He got mad because of the dog. (Rumsey 2000:59, ex.29)
 (or: he became mad from the dog)

2-68 *Yunggumilinhingi yatha raynyangarri yungguyuwa.*
 yunggu=mili-nhingi yatha ø-ra-y-nya-ngarri yunggu-yuwa
 scrub=CHAR-ABL sit 3sgS-RA-PAST-SUB-HAB scrub-LOC
 Because (he was a) scrub man he always used to sit down in the scrub.
 (Rumsey 2000:59, ex.30)

The ablative case ending can be used as a derivational suffix. In this function, the nominal to which this suffix attaches forms an NP modifying another nominal. Examples from Rumsey (2000:59) follow:

2-69 *gunjilanhingi malngarri*
 gunjilan-nhingi malngarri
 Queensland-ABL european
 a Queenslander

2-70 *jalnggangurrunhingi lundu*
 jalnggangurru-nhingi lundu
 doctor-ABL stick
 stethoscope

2.11.1.7 *-binyi/-bilinyi* PERLative

The alternative forms of this marker are dependent on dialect. The shorter form, *-binyi* is the light dialectal version whereas *-bilinyi* is the heavy version (§1.3.1). Individual speakers tend not to stick to one form or the other (Rumsey 2000:60).

The Bunuba perlative is similar to the dative and allative in that it can be used as a marker of a semantic goal. However, it seems to have a different stylistic effect. In narratives, it frequently attaches to nominals which represent the goal in the context of a story, i.e. it tends to be used on food and plant nominals, marking them as the goal referred to by the verb within a narrative, without the speaker having any particular animals or plants in mind. In the data, *-bilinyi/-binyi* occurs only on non-human nominals such as meat, kangaroos or plant food. The most frequent use of this marker is on nominals used when referring to hunting and gathering stories, a type of stylised function it would seem. McGregor (1990:186) describes the cognate Gooniyandi form *-binyi* as referring to “directed or oriented motion with respect to a non-terminal end-point”, which is clearly the function that the perlative case marker performs in Bunuba.

- 2-71 *Gamanba ray miyhabilinyi.*
 gamanba ø-ra-y miyha-bilinyi
 search.for 3sgS-RA-PAST meat-PERL
 S/he searched for meat.

The perlicative case marker may attach to body part terms indicating the location of an inanimate entity, for example the side of a house.

- 2-72 *Jaid rayil ban burrmiyngarri lamanibilinyi wilagurru.*
 jaid rayil ban wurr-ma-iy-ngarri lamani-bilinyi wilagurru
 side rail nail 3nsgS-MA-PAST-HAB rib(side)-PERL completely

Ngindama manbabilinyi wilagurru.
 nginda=ma manba-bilinyi wilagurru
 this=I/I backside-PERL completely

They nail on one side completely. And the other (back) side completely.
 (BO/MJ1;2/98;7.437-8)

Example 2-73 shows that the nominal to which the perlicative case marker attaches, need not be the endpoint goal. In this example, the footprints are being followed but they are not the goal of the pursuers; it is the people who have left the footprints who are being pursued.

- 2-73 *Diyga wunbirrariyngarri thinga*
 diyga wurt<n<wirr-ngarri-y-ngarri thinga
 find 3nsgO<INV<3nsgA-NGARRI-PAST-HAB footprint

duduga wundumangarri thingabinyi.
 duduga wurt<n<d-u-ma-ngarri thinga-bilinyi
 follow 3nsgO<INV<3nsgA-ins-MA2-HAB footprint-PERL
 They'd find tracks and they'd follow them by their footprints. (NR4.9)

It will be evident that Bunuba usage does not really correspond to the canonical usage of the term 'perlicative' in descriptions of Australian languages, which is glossed by Blake (1994:204) as 'through', 'across' or 'along'. Rumsey (2000:60-1) argues, however, that some uses which can be glossed as 'from', such as 2-74, may really originate from a "basic sense" of 'through': "it may be that the basic sense here is 'through' the sense of 'from' being conditioned by its context of use: 'He came through the behind' being interpreted as 'He came from behind'" (Rumsey 2000:61).

- 2-74 *Wad jay baljuwabinyi diyga wunarriyngarri.*
 wad ø-ra-y baljuwa-binyi diyga wurt<n<ø-ngarri-y-ngarri
 go 3sgS-RA-PAST behind-PERL find 3nsgO<INV<3sgA-NGARRI-HAB
 He came from behind and found them. (Rumsey 2000:60, ex.37)

In any case, the term 'perlicative' is retained in this thesis to maintain consistency with previous descriptions.

2.11.1.8 *-ngarri* comitative1

This case marker has several functions. Firstly, it can be glossed as ‘with’ or ‘accompanied by’ where there tends to be an unequal relationship of accompaniment between the two NPs: either a part-whole relationship or one entity being higher in animacy than the other (examples 2-75, 2-76). As an extension of this function, it may be used in coined expressions where an entity is described as having a certain attribute which is highly defining. In such constructions *-ngarri* performs an associative function, that is, an entity is described as being associated with a particular feature (examples 2-77, 2-78). As mentioned earlier, *-ngarri* may be used together with the *-ingga* ergative marker to form a double-marked instrumental (§2.11.1.2).

2-75 *Yawadangarri binarriya yiyidiyntha.*
yawada-ngarri binarriya yiyirr-ni-y-ntha
 horse-COM1 learn 1R.S-NI-PAST-dl
 With horses we learned (about stock work). (BO 1;1/97.74)

2-76 *Guramangana ngayi wathila wara anya,*
gurama-ngana ngayi wathila wara ø-ra-nya
 man=LINK no/not close stand 3sgS-RA-SUB

garrga wurrunu muwurrungarri.
garrga wurr-wu-n(v) muwurru-ngarri
 leave 3nsgA>3sgO-WU2-PAST club-COM1
 The man isn’t too far away, they leave him with a club. (BO5;1/97;6.11-12)

2-77 *gulumangarri mulurru*
guluma-ngarri mulurru
 bristles-COM1 catfish
 Bristly catfish (BO3;1/97;2.24)

2-78 *birrinyingarri*
birrinyi-ngarri
 sky-COM1
 helicopter (Rumsey 2000:143)

Part-whole relationships may also be marked by the *-ngarri* suffix as example 2-79 shows.

2-79 *Lundu baaburrugangarri, balarri rawurrugangarri.*
lundu baaburruga-ngarri balarri rawurruga-ngarri
 wood downward-COM1 blade upward-COM1
 The wood is the bottom (part) and the blade is the top (part). (elicited)

2.11.1.9 *-guda* comitative2

This case marker is similar in function to the *-ngarri* comitative1 suffix, in that it can be glossed as ‘accompaniment’, but it tends to be used when there is a more equal relationship between the accompanied and the accompanier. Human participants may be marked by either *-ngarri* or *-guda*, but Rumsey notes that there appears to be a semantic criterion for the choice between these two markers of accompaniment: *-guda* tends to mark human or other animate actors; whereas *-ngarri* tends to mark inanimate actors (Rumsey 2000:62). Based on the data, it seems that *-guda* marks an equal relationship regardless of animacy, but where the two

participants are affected equally or are considered to be co-participants in the event (see example 2-82).

Nominals marked with *-guda* may be cross-referenced by a pronominal prefix in the verb, whereas nominals with *-ngarri* attached cannot be so cross-referenced (Rumsey 2000:62). Furthermore, *-guda* may occur on pronouns (example 2-81), whereas *-ngarri* may not.

Equal relationship (and cross-referenced in the verb):

- 2-80 *Ngawungu ngarranyi, bugaguda wad jinbirrangarri.*
ngawungu ngarranyi buga-guda wad yi(yi)rr<n<wirr-ra-ngarri
 father mother child-COM2 take 1R.O<INV<3nsgA-RA2-HAB
 Father and mother would take us kids too. (NR3.5-6)

Equal relationship (without cross-referencing):

- 2-81 *Mamiguda wad gira. Ngayiniguda yuwana ngayini.*
mami-guda wad gi-ø-ra ngayini-guda yuwana ngayini
 mummy-COM2 go PRES-3sgS-RA 1sg.PRO-COM2 one 1sg.PRO
 Mummy goes with him. And I (went) with them too, only me. (MJ 1;1/97.37-8)
- 2-82 *Lundugudaya manibara muba waniy.*
lundu-guda manibara muba ø-wu-aniy
 stick-COM2 everything drown 3sgS-WU-PAST
 Stick and all he drowned (i.e., Both he and the stick drowned). (BO2.107)

2.11.1.10 *-winja* CAUSAL

This rare marker never occurs in the texts I have recorded and Rumsey has encountered it only three times (Rumsey 2000:64). The causal nature of this marker involves a harmful or negative effect, as compared with the neutral causal sense conveyed by *-nhingi* (Rumsey 2000:64, §2.11.1.6).

- 2-83 *Jirali gurama wudijga rayningarri wiyiwinja.*
jirali gurama wudijga ø-ra-y-ni-ngarri wiyi-winja
 before man spear 3sgS-RA2-R/R-PAST-HAB women-CAUS
 The olden-days blackfellas used to spear one another over women.
 (Rumsey 2000:64, ex.47)
- 2-84 *Malngarriwinja garuwa nyaga wirriyningarri.*
malngarri-winja garuwa nyaga wirr-wu-iy-ni-ngarri
 european-CAUS water spear 3nsgS-WU2-R/R-PAST-HAB
 They used to fight each other because of (the effect) of ‘whitefella water’ (grog).
 (Rumsey 2000:64, ex.48)

2.11.1.11 *-jangi* SEMBLATIVE

Rumsey (2000) lists this marker as an enclitic, providing the following example:

- 2-85 *Galgajangi miy.*
galgala-jangi ø-ma-iy
 laugh-SEMB 3sgS-MA:SAY(?) -PAST
 He smiled. (Rumsey 2000:103, ex. 173)

This is problematic in that it seems better to analyse *-jangi* as a nominal marker deriving a nominal from a coverb. If this analysis were correct, the verb *miy* is simply co-occurring with a nominal expression indicating ‘he did (it)’ (see chapter 4 for this use of MA as a simple verb). There are no other examples of *-jangi* attached to a coverb either in my data or in Rumsey 2000. This requires further investigation but, on the data available so far, it looks like *-jangi* should be included within the class of nominal endings and not be treated as an enclitic. The occurrence of *-jangi* 19 times in the data as a nominal ending, as opposed to a single occurrence of it on a coverb, further supports the nominal analysis.

2.11.2 Number marking on nominals

2.11.2.1 *-arri* Dual

The dual marker *-arri* and plural marker *-yani* (§2.11.2.2) occur on nouns, demonstratives, and interrogative/indefinite pronouns. Only the plural number marker *-yani* may occur on proper names (see example 2-88); the dual number marker *-arri* gives way to the pair marker *-way* on this sub-class of nouns. Nominal number markers are different in form from the dual and plural number markers which occur in verbs (§3.12). The nominal dual number marker is always *-arri*. However, the final vowel of the nominal to which it attaches tends to be elided.¹⁷

Number marking on nominals is obligatory only on oblique pronouns (§2.6.3.1). Nominal number marking on core pronouns, although optional, enables the inclusive/exclusive person distinction to be disambiguated.

2-86 *Ngindajiarri buga rawurruga wurruga widantha.*
ngindaji-arri buga rawurruga wurruga wirr-yha-ntha
 this-DL child upward place 3nsgA>3sgO-YHA-dl
 These two children had taken it up (into the sky). (B01.38)

2-87 *Miyha ban.ga rabiyrantha wiyiarri thurranda.*
miyha ban.ga ø-ra-biyirantha wiyi-arri thurranda
 meat take.back 3sgO<3sgA-RA2-3dl.OBL woman-DL two
 He took the meat back to his two wives. (B02.16)

Nominal number marking is not always consistent with verbal number marking. For this reason Rumsey (2000:65) uses the glosses ‘DL’ and ‘PL’ for nominal markers number, and ‘dl’ and ‘pl’ for the verbal markers. However, in all the examples I have of the *-arri* number marker, it is cross-referenced by the dual number marking in the verb, or by the dual oblique pronominal suffix to the verb. The cross-referencing of number marking is governed by the animacy of the nominal to which the number marker attaches. If the nominal is animate, then cross-referencing on the verb matches that of the nominal, but if the nominal is inanimate, singular cross-referencing more commonly occurs in the verb. In the third person, NPs are not

usually marked for number, even though number marking may occur within the verb (Rumsey 2000:65).

2.11.2.2 -yani Plural

The function of this marker is to indicate that the number of the referent is greater than two. When the nominal is animate, number cross-referencing in the verb matches that of the nominal. Inanimates are more usually cross-referenced by singular marking in the verb (Rumsey 2000:65). The marker may also attach to proper names, indicating ‘that person and others’.

2-88 *Yatha wurraygi nyirraywa. Jirramburaliyani.*
 yatha wurr-ra-y-g(v) nyirra-yuwa jirramburali-yani
 sit/stay 3nsgS-RA-PAST-pl this.that-LOC [proper.name]-PL
 They all stayed there. *Jirramburali* and the others. (MJ 1;1/97.78-9)

2-89 *Gurrijga wunagi nhuyani tharra.*
 gurriyga wurr-n-ø-ra-g(v) nhu-yani tharra
 hold.onto 3nsgO<INV<3sgA-RA2-pl 3sg.OBL-PL dog
 He’s keeping all his dogs. (MJ6.11)

2.11.2.3 -way PAIR

The PAIR marker *-way* can be distinguished from the dual marker *-arri* as they occur on different types of nominals (Rumsey 2000:65). The PAIR marker occurs on personal names and relationship terms such as ‘husband’, ‘wife’, ‘brother’, whereas the *-arri* dual number marker tends to occur on all other types of nominals including demonstratives. Interestingly, the PAIR marker *-way* and the dual marker *-arri* can co-occur in a sentence referring to the same two participants. When *-way* is used the other member of the pair is not necessarily overtly named, but both participants are cross-referenced within the verb.

2-90 *Ngindarri buga, ngajangiway, wad burraynthangarri.*
 nginda-arri buga ngajangi-way wad wurr-ra-y-ntha-ngarri
 this-DL child young.brother-PAIR go 3nsg-RA-PAST-dl-HAB
 These two kids, younger brother and older brother, they’d go. (B01.1-2)

2-91 *Yatha wurrantha Laylayway Manyanji.*
 yatha wurr-ra-ntha laylay-way manyanji
 sit/stay 3nsgS-RA-dl [proper.name]-PAIR [proper.name]
Laylay and *Manyanji* are there. (B03.9)

The PAIR marker *-way* may be used to disambiguate the person/number category of first person dual exclusive (1dl.excl) from first person dual inclusive (1dl.incl), though this is textually rare (see example 2-16).

2.11.2.4 -way Third person possessive¹⁸

The *-way* third person possessive marker occurs on human relationship terms “where it relates them to some textually given participant (whether singular or non-singular) from whom the

relationship is reckoned” (Rumsey 2000:66). Although this suffix is homophonous with the PAIR suffix, its function is different. This marker may co-occur with the number markers, either dual (*-arri*) or plural (*-yani*).

2-92	<i>majaliway</i> madjali-way mother-in-law-3PP his mother-in-law (Rumsey 2000:67)	<i>nhunhinguway(yani)</i> nhu-nhingu-way-yani RED-husband-3PP-PL their husbands (Rumsey 2000:67)
2-93	<i>manggaywayarri</i> manggay-way-arri wife-3PP-DU his two wives (B02.3)	<i>bugaway(yani)</i> buga-way-yani child-3PP-PL her children (more than two) (BO.2001)

2.11.2.5 *-wulu* Second person possessive

This marker occurs only on human relationship terms and indicates the second person possessive relationship to that person. It may be glossed as ‘your’ either singular or non-singular. This marker does not occur in the texts which I have analysed, but Rumsey has documented its form and function (2000:67). The form this marker takes is affected by the process of fortition (§2.4), whereby /w/ → [b] following words ending in a consonant or a nasal followed by a vowel. Two examples follow (Rumsey 2000:67).

2-94	<i>gundawulu</i> gunda-wulu cousin-2PP your cousin	<i>ngarrinybulu</i> ngarrinyi-wulu mother-2PP your mother
------	---	--

2.11.2.6 *-langu* DYADIC

This marker occurs on human relationship terms marking a reciprocal relationship. Only one of the pair need be labelled with the marker. That is, the logical counterpart to the overt nominal with *-langu* is understood to be included in the reference. In some cases it may occur on reduplicated forms of the nominal which indicates a number of members (example 2-96). Examples are from Rumsey (2000:66):

2-95	<i>majalilangu</i> majali-langu mother-in-law-DYAD mother-in-law and son-in-law	<i>jimarrilangu</i> jimarri-langu mate-DYAD two mates
2-96	<i>jimajimarrilangu</i> jima-jimarri-langu RED-mate-DYAD three or more mates	

There is no indication by Rumsey of cross-referencing within the verb. However, I would expect that verbs accompanying *-langu*-marked nominals would cross-reference two (or more)

referents through pronominal prefixing and that verbal number marking would be in agreement with the number of participants referred to by the nominal which has *-langu* attached to it.

2.11.3 *Minor marking*

The nominal marking in this section are far less productive and less homogenous than either case marking or number marking. For these reasons they are presented together briefly.

-wanggu ‘Country’

This suffix is used on nominals and refers to tracts of country (Rumsey 2000:68). The Bunuba community is made up of people from different areas within Bunuba country. Although everyone is Bunuba, all are associated with a particular area depending upon where that person was born or where that person’s parents and grandparents were born. An individual is ideally associated with an area of country to which that person may refer as his/her *dreaming* (or place of conception) (McGregor 1990:150). Through the change in cultural practices and diminution of traditional life styles brought about by contact with Europeans, this applies less strictly today.

The suffix *-wanggu* is used on the Bunuba country name and used in reference to a person whose origins lie in that area. It is used in the third person singular category only. Such terms are often used by Bunuba speakers to refer to a person who is no longer alive, thereby maintaining the cultural taboo on the use of personal names in this circumstance. For example, a deceased Bunuba elder I worked with during my time at the KLRC is now referred to as *Miliwindiwanggu* ‘the man from Millie Windie’.

-warrawarra ‘Countryfolk’

This suffix is similar to *-wanggu* (above), and attaches specifically to place name nominals. It refers to a group of people who belong to a particular area of country (Rumsey 2000:68). McGregor states that the cognate term in Gooniyandi is ideally used in reference to a group’s *dreaming* (or to their conception site), but that more recently it has come to be used also when referring to a group of people and their place of residence, without the implication that the residents were conceived there (McGregor 1990:150). Bunuba examples include the following: *Yaranggiwarrawarra* ‘the Yaranggi (or Leopold Station) mob’; *Mawanbanwarrawarra* ‘the Mawanban (or Oscar Range) mob’.

-aji INTENSIFIER

Except for a single textual example, this suffix has been attested only through elicitation. It tends to attach to nominals (specifically those that might be viewed as adjectives) and adverbs. It intensifies the quality of the word to which it attaches and so can be glossed as ‘very’ in

English. The intensifier ending follows any case marker, as example 2-98 shows. If the preceding element ends in a vowel, then that vowel is elided.

- | | | | |
|------|---|--|---|
| 2-97 | <i>jalungurraji</i>
jalungurru-aji
good-INTENS
very good/really good | | <i>gandayaji</i>
ganday-aji
bad/old-INTENS
very bad/very old |
| 2-98 | <i>Guyhu</i> <i>wadba</i> <i>arrma</i>
guyhu wadba arr-ma
lily.root get 1U.A>3sgO.NONPAST-MA2 | | <i>baburrunhingaji</i>
baburru-nhingi-aji
below-ABL-INTENS |
| | <i>yilaga</i> <i>arrma</i>
yilaga arr-ma
dig 1U.A>3sgO.NONPAST-MA2 | <i>lunduguda</i>
lundu-guda
stick-COM2 | <i>ngindaji</i>
ngindaji
this |
- We get the lily root from very far down below, we get it with this stick. (MJ4.1)

-mili CHARACTERISED BY

This marker occurs on nominals and coverbs as a derivational morpheme, deriving a nominal. When it is used (either on nominals or coverbs) it creates a nominal which is used as a term of reference for an animate being, referring to a 'salient feature' of the animate being's behaviour. It is textually rare but there is no doubt that it is a productive ending. A few examples follow:

Nominal-*mili* → nominal:

- 2-99 *garuwamili*
garuwa-mili
water-CHAR
drunkard (Rumsey 2000:67)

Coverb-*mili* → nominal:

- 2-100 *Ganjali* *ngindaji* *matha wulanhi* *ngarrungumili.*
ganjali ngindaji matha wu-li-ra-nhi ngarrungu-mili
kitehawk this tell FUT-1sgA>3sgO-RA2-3sgOBL bludge-CHAR
I'll tell it about the Kitehawk, the bludger. (JnM1.1)

-wurru EMPHASIS

It is possible to analyse this marker only partially. It tends to have an emphatic or intensifying meaning in some of the examples. I have only one example of this suffix, whereas the other examples below are from Rumsey (2000:68).

- 2-101 *Yininggawurru!*
yiningga-wurru
just.like.that-EMPH
Yeah just like that! (elicited)
- 2-102 *Yaninjawurru*
yaninja-wurru
alright-EMPH
Yes indeed!/so be it! (Rumsey 2000:68)

- 2-103 *balanggarrawurru*
balanggarra-wurru
 many-EMPH
 big mob (Rumsey 2000:68)

-alu/-nalu DIRECTIONAL

The role of this suffix is similar to the verbal proximal suffix which occurs in the auxiliary, and is closely related to that verbal affix (Rumsey 2000:68, §3.14). It occurs on nominals and spatial adverbs indicating the source of an action, but differs from the ablative case marker in that it indicates that the referent not only leaves from somewhere but heads ‘towards here, in this direction’. It has the form *-nalu* following vowels, and *-alu* elsewhere (where the final vowel is elided, as in example 2-105).

- 2-104 *Girrgara miy rawurranal*
girrgara ø-ma-y rawurra-alu
 run(away) 3sgS-MA-PAST above-DIR
 He swooped down from above. (CR1.7)

- 2-105 *ngurrubilinyalu*
ngurru-bilinyi-alu
 that(one)-PER-DIR
 from over there towards here

-ala/-gala FIRST

This marker indicates that a participant carries out an action or process on the *-ala*-marked referent before performing any other action. It may also be used as a temporal marker in a similar way to the ablative case marker *-nhingi* (§2.11.1.6). Rumsey (2000:104) lists it under ‘qualifying clitics’ but gives no examples of it occurring on members of any word class other than nominals; neither does he state whether he has found it in any other location. In my data it occurs only on nominals. It has the form *-gala* following vowels, and *-ala* elsewhere.

- 2-106 *Wad jiyirrayngarri nhaabinyiala.*
wad yiyirr-ra-y-ngarri nhaa-binyi-ala
 go 1R.S-RA-PAST-HAB sugarbag-PERL-FIRST
 We’d go for sugarbag first (before doing anything else). (CR4.14)

- 2-107 *Wa wuningarri bandaliala yaninja.*
wa ø-wu-n(v)-ngarri bandali-ala yaninja
 singe 3sgO<3sgA-WU2-PAST-HAB hair-FIRST o.k/alright
 He’d singe the hair off first (before doing anything else in preparing the kangaroo).
 (CR4.52)

2.11.4 Reduplication

Reduplication can express three different semantic effects depending on the word class of the original root. Reduplication of nouns turns a singular referent into plural (e.g. ‘mother’ →

‘mothers’); reduplication of an adjective can result in it becoming a noun (e.g. ‘small’ → ‘small ones’, although an alternative function is intensification, as in ‘big’ → ‘very big’ (Rumsey 2000:69). Reduplication of adverbs also tends to express intensification (e.g. ‘east’ → ‘way over east’). There are various strategies of reduplication of nominals including the following: the first syllable is reduplicated; the first vowel and all consonants before the second vowel are reduplicated; or the whole word is reduplicated. Reduplicated nominals may take case or number endings (see example 2-96).

Table 2-13: Reduplication

Singular form	Translation	Reduplicated form	Translation
nouns (singular):	→	nouns (plural)	
<i>mamu</i>	devil	<i>mamumamu</i>	devil-devil (Rumsey 2000:69)
<i>nhungu</i>	husband	<i>nhungunhungu</i>	husbands (Rumsey 2000:69)
<i>ngarranyi</i>	mother	<i>ngarrangarranyi</i>	mothers (Rumsey 2000:69)
adjective:	→	nouns:	
<i>mabilyi</i>	small	<i>mamabilyi</i>	small ones
<i>yimangali</i>	little(one)	<i>yimamangali</i>	little ones
<i>gilandirri</i>	big	<i>gilalandirri</i>	big ones
<i>jalungurru</i>	good	<i>jalujalungurru</i>	good ones (Rumsey 2000:69)
<i>jalungurru</i>	good	<i>jalalungurru</i>	good ones (Rumsey 2000:69)
<i>minthini</i>	heavy	<i>minthinthini</i>	heavy ones (Rumsey 2000:69)
adverbs:	→	adverbs (intensified):	
<i>jibirri</i>	downstream	<i>jibjibirri</i>	way downstream
<i>ngilamungga</i>	east	<i>ngilangilamungga</i>	way over east

2.12 Enclitics

Enclitics operate at phrase level rather than at the level of the phonological word. The Bunuba enclitics are listed in Table 2-14, along with a general gloss giving a brief indication of their function. The position in which they have been attested to occur is also listed, along with the frequency of occurrence in my text corpus.

Table 2-14: Enclitics

Enclitic	Gloss	Position/statistics
= <i>ma</i>	Interrogative/Indefinite	nominal: 14; coverb: 3
= <i>miya</i>	ONLY (only, just, exactly)	nominal: 59; coverb: 1?
= <i>nga(na)</i>	LINK	nominal: 66; coverb: 3
= <i>wiya</i>	DEFINITE (definitely, completely)	nominal: 3; coverb: 5; auxiliary: 1
= <i>yarra</i>	DUBITATIVE (perhaps)	nominal: 21; coverb: 1; auxiliary: 1
= <i>yha(y)</i>	REP (again)	nominal; coverb; auxiliary

All enclitics are attested to occur on coverbs as well as nominals, except for =*miya* which has only been attested to occur on nominals. This placement on coverbs implies that the coverb-auxiliary construction is not a single word but rather consists of two words. Other evidence, however, suggests the coverb-auxiliary does have single-word status. This issue is discussed more fully in §3.3. It must be noted, however, that the frequency of coverbs taking enclitics is exceedingly rare. Following are all attested examples of coverb=enclitics from both the narrative texts I have analysed (comprising 58 texts amounting to approximately 200 pages of analysed data) and from Rumsey (2000). As will be obvious, the occurrence of enclitics on coverbs is not common.

=*ma*

2-108 *Binarriyama* *wirrirag* *buga.*
 binarriya=*ma* wu-irrir-ra-g(v) buga
 teach/show=*i*/I FUT-3nsgO.NONPAST>1R.A-RA2-PL child
 Maybe we will all show all of the kids. (MJ2;1/97.12)

2-109 *Thanmilima* *warra?*¹⁹
 thanmili=*ma* wu-arr-ra
 GG.listen=*i*/IFUT-1U.A>3sgO.NONPAST-RA2
 Are we going to listen to it? (NR/MJ1;1/97;2.98)

2-110 *Ngayagama* *iyma.*
 ngayag=*ma* iy-ma
 ask=*i*/I 3sgO<2sgA-MA2
 Have you asked him? (Rumsey 2000:102, ex. 166)

=*miya*

There are no examples of enclitic =*miya* attaching to a coverb, or indeed to an auxiliary. However, there are numerous examples of =*miya* attaching to nominals, as in examples 2-111 and 2-112 below.

2-111 *Ngurrumiya* *jarraangarriingga.*
 ngurru=*miya* jarraangarriingga
 DEM=ONLY other.side
 Only over there, the other side. (BO/MJ1;2/98;7.itx unum 210)

2-112 *Bandamiya* *nhaa* *ngayi.*
 banda=*miya* nhaa ngayi
 dirt=ONLY sugar.bag(bush honey) no/not
 (there was) only dirt there, no honey. (BO1.4-5)

=*nga(na)*

This enclitic is difficult to gloss but performs the function of linking the verb to which it attaches to some previously occurring text.

2-113 *Ngangga yanbida gulanga wada.*
ngangga yarr<n<birr-ra gula=ngana wu-arr>ø-yha
 give 1U.O<INV<3nsgA-RA2 try=LINK FUT-1U.A>3sgO-YHA
 They gave it to us, so we'll try [to make something of it]. (Rumsey 2000:99, ex.145)

2-114 *Ngayag gina wulanga wulun.*
ngayag(a) (g)i-n-ra wula=nga(na) wu-li>ø-wu-n(v)
 ask PRES-1sgA.O<3sgA-RA2 talk=LINK FUT-1sgA>3sgO-WU2-EXCL
 He's asking me, so I'll answer him. (Rumsey 2000:99, ex. 146)

=*yha(y)*

I have no examples of this enclitic occurring on verbs, and Rumsey (2000:101-2) does not present any examples of it in either verbal position. The equivalent morpheme in Gooniyandi does occur attached to the coverb in that language (McGregor 1990:459ff). Little more can be said due to the lack of evidence for its occurrence in Bunuba.

=*wiya*

The =*wiya* enclitic is glossed as DEFINITE to mark the verb to which it attaches as reflecting a situation that is indisputable. Perhaps in this sense it performs the function of emphasis as in 'there definitely isn't any leichardt pine around here!' (see example 2-115 below).

2-115 *Marrira ngayi warawiya angiya ngindaywa.*
marrira ngayi wara=wiya ø-ra-ngiy(a) nginda-yuwa
 leichardt.pine no/not stand=DEF 3sgS-RA-PRES.IRR here
 There isn't any leichardt pine around here (anymore). (BO/MJ1;2/98;7.392)

2-116 *Yilngarriwiya yathawiya ngira ngindayuwa.*
yingarri=wiya yatha=wiya ngi-ra nginda-yuwa
 completely=DEF sit=DEF 1sgS-RA here
 I stay here for good. (Rumsey 2000:103, ex. 176)

=*yarra*

The enclitic =*yarra* is glossed as DUBITATIVE (in opposition to =*wiya*, above) to mark the verb to which it attaches as reflecting a situation that is in doubt. Depending on context, this enclitic can be glossed as 'perhaps;', 'maybe', or 'might' as in example 2-117 below.²⁰

2-117 *Garrgayarra wanbini.*
garrga=yarra wu-arr<n<ø-wu-n(v)
 leave=DUB FUT-1U.O<INV<3sgA-WU2-PAST
 He might leave us. (Rumsey 2000:104, ex. 178)

2.13 Lexicon

All languages have various strategies available which enable speakers to create new lexical items. Those employed by speakers of Bunuba include borrowing, calquing, coining, and onomatopoeia. These strategies as they apply to Bunuba are discussed in this section.

Borrowing

Nouns and coverbs are particularly amenable to borrowing, the most obvious contemporary source being Kriol (§1.6.4). There may also be borrowings from neighbouring traditional languages but these are difficult to discern. Bunuba and Gooniyandi have a cognacy rate of about 40-45% (§1.2), while other neighbouring languages have cognacy rates of between 11% and 24% with the Bunuba lexicon. A complete historical analysis of these languages and the contact between the different language groups would be necessary in order to differentiate borrowings from normal levels of cognacy.

As in other Aboriginal languages, name tabooing is observed after a Bunuba person dies, it is no longer acceptable to use that person's name. If the deceased person's name sounds similar to a common word in the Bunuba lexicon, then this common word needs to be replaced. Apparently the contemporary word for 'tea' (*nalija*) was introduced into the Bunuba lexicon in this fashion. A person with a name similar to the old word for 'tea' died and so the word used by other traditional languages of the region was adopted by the Bunuba people (Rumsey 2000:121, ex. 255). Borrowings from other traditional languages also occur within Gun.gunma, the respect register of Bunuba (Chapter 5). These borrowings show evidence of social contact between the Bunuba and speakers of other neighbouring languages, particularly those of Gooniyandi and Ungarinyin (§5.1).

Borrowings from Kriol appear to be more common than borrowings from other traditional languages, if not only more obvious. The clearest examples are words for introduced items; Bunuba speakers have been in contact with Europeans for over one hundred years. Some examples are listed in Table 2-15.

Table 2-15: Some Kriol borrowings

Kriol	Translation
badag	paddock
begbeg	backpack/saddlebag
bilij dejin	police station
yad	yard
birayjinbid	brace and bit (hand-held drill)
waiya	wire
jirimab	spoon ²¹

There are also many examples of Kriol words appearing as coverbs in Bunuba. In such cases, 'nonce borrowing' or 'spontaneous borrowing' (Romaine 1995:153) seems to be the more appropriate description. That is, these borrowings have not become established loan words in the language and so are not always used by speakers all of the time.

Naturally, phonological changes often take place when an English word is incorporated into Bunuba via Kriol. A few examples of the kinds of changes that occur are listed in Table

2-16. They are all as one would expect given the differences between English and Bunuba phonologies, e.g. loss of aspiration, replacement of sibilants by stops, initial CC clusters being broken up by insertion of a vowel. Semantic shifts or extensions are also common, as expected in the development of creole languages or in situations of language contact (Dixon 1980:120ff).

Table 2-16: The phonology of some Kriol borrowings

English word	English pronunciation	Kriol pronunciation (by Bunuba speakers)
blanket	[blæk ^h ət]	[bilɛŋgʌd]
calico	[k ^h ælik ^h ou]	[galigou]
supper	[sʌp ^h ə]	[ʃʌbʌ]
snake	[sneik]	[ʃineik]
finished	[fɪnɪʃt]	[bɪnɪʃ]

There are occasions where the Bunuba lexicon has developed using specifically Bunuba elements to name an introduced item, either through semantic shift or extension or by coinage of new expressions from purely Bunuba lexical and grammatical tools. Some examples of these two strategies are given in Table 2-17.

Table 2-17: New lexicon through extension or coining

Bunuba word	Bunuba literal meaning	New/extended meaning
Extension:		
<i>malngarri</i>	red	European
<i>rarrgi</i>	stone/rock	money
Coining:		
<i>midmidmili</i>	tie up=CHAR	policeman
<i>birrinyingarri</i>	sky-COM1	helicopter
<i>yathayathau</i>	sit-sit-DAT	saddle
<i>mulurru gulumangarri</i>	catfish bristles-COM1	bristly catfish

1 See Schultze-Berndt (2000:41) for the same situation in Jaminjung where a phoneme occurs but can be identified as the result of borrowing rather than a phoneme existing within the language.

2 The long vowel in *jarraa* ‘far away’ might be explained via stress, with concomitant lengthening, being placed on the second syllable to emphasise distance in an iconic manner. In narratives speakers occasionally drag out the final vowel quite conspicuously, resulting in *jarraaaaaa*, which could be glossed as ‘faaaaaaar away’.

3 The orthographic convention used in this thesis marks long vowels of [u:] and [i:] as the vowel-glide-vowel sequence of /uwu/ and /iyi/ respectively. It is arguable whether there are phonetic long vowels corresponding to these vowel-glide-vowel sequences occurring in Bunuba. As this point needs further investigation the above convention is maintained throughout. See Rumsey (2000:46) for his discussion on this point where his analysis identifies the phonetic long vowels [i:] and [u:] which are realised as /iyi/ and /uwu/ respectively.

4 Rumsey (2000) lists demonstrative/deictics as a sub-class of nominals rather than a sub-class of pronouns. This regrouping on my part is a matter of reorganisation rather than interpretation.

5 The *-jay* variant of the 3sgS-RA-PAST auxiliary occurs after stops and nasals, whereas the form of the auxiliary is either *-ray* after vowels; *-ay* mainly after continuants; or occasionally *-yay* after vowels and continuants instead of the *-ray* form (Rumsey 2000:82).

6 Another interrogative pronoun is *wina*. This can be glossed as ‘(is there) any?’, but since there is only one example of it in the data little can be said about it.

2-1fn *Wina mayi wuba yangirrange?*
wina mayi wuba (i)y-yha-ngiyirrange
 I/1.PRO- food cook 2sgA>3sgO-YHA-1R.OBL
 Did you cook any tucker for us? (RM1.27)

7 Australian languages commonly distinguish between human and non-human entities in the grammar through such pronouns (Dixon 1980:277), and other than in some of the verbs ‘to be’ where there is a tendency for a human/non-human distinction, this is also the case in Bunuba.

8 *Minaluga* is unanalysable in Bunuba today but seems to include the directional suffix *-alu*. It may be a borrowing into Bunuba from Ungarinyin *munowalu* ‘from over there to here’. The *-walu* suffix in Ungarinyin is much more productive than the comparable suffix in Bunuba and so the word *munowalu* contrasts with the following (Rumsey 1982a:132, 2000:69):

Ungarinyin: Translation:

jinowalu from him over there to here
nyinowalu from her over there to here

9 Note that *ngayi* is a mode particle in this syntactic environment, but when it occurs as an utterance on its own it performs the function of an interjection (see §2.10).

10 See Schultze-Berndt (2000:52) for a similar approach. Although, it is the case that Rumsey (2000:107) does on one occasion make reference to *-ingga* as a postposition.

11 Rumsey (2000) lists *-jangi* as an enclitic, but this analysis is not supported by the data available to me (see §2.11.1.11).

12 It is possible that the occurrence of *-ingga* on an overt S NP could be a situation of ‘ergative hopping’ (Blake 1987b).

13 The use of a nominal ending as a discourse marker of agency rather than as a grammatical marker of ‘transitive subject’ is not uncommon in non-Pama-Nyungan languages which are nominative/accusative in their pronominal prefix patterning. See for example, Jaminjung (Schultze-Berndt 2000:55); Ngan’gityemerri (Reid 1990:327); and Warrwa (McGregor 2002b).

14 Note this example from Rumsey (2000:121) where the ergative case marker attaches to the first element of the NP which happens to be a subordinate-marked verb complex:

2-2fn	[<i>Nyaga wuninyaingga</i>	<i>gurama]</i>	<i>gamanba</i>	<i>raynhi.</i>	
	nyaga	∅-wu-n(v)-nya- ingga	gurama	gamanba	∅-ra-y-nhi
	spear	3sgO<3sgA-WU2-PAST-SUB-ERG	man	look.around	3sgS-RA-PAST-3sg.OBL
	[The man who speared him] was looking around for him. (Rumsey 2000:109, ex.195)				

15 Again, this is evidence against the claim by Rumsey that oblique pronouns do not occur with the ergative case marker (Rumsey 2000:72).

16 The allative case marker may occasionally be glossed as ‘for’ in some textual examples. This is not to be confused with the role of the dative case marker discussed above (§2.11.1.3). It is sometimes the case that ‘for’ works better than ‘towards’ in the English glosses. The functions of the two case markers are clearly different.

17 Rumsey (2000:65) notes one exception: */ngurru-arri/* -> [ŋʊɾʊaɾɪ] ‘those two’.

18 Rumsey (2000:66-7) labels this ‘third person propositus’, a label deriving from the anthropological literature.

19 The bolded text is used throughout this thesis to mark specifically Mother-in-law, or Gun.gunma, lexicon/features. See Chapter 5 for a detailed discussion of Gun.gunma.

20 But note the following example where a case marker (*-nhingi*) follows =*yarra*:

2-3fn	<i>Yininggayarranhingi.</i>
	yiningga= yarra-nhingi
	just.like.that=DUB-ABL
	Perhaps just like that. (BO4:1/97.6)

21 This word can be analysed in the following way:

jirramab
jirr-am-ab
stir-transitive.mkr-up
‘stir it up’ or ‘spoon’