CHAPTER FOUR
THE VERB

In 4.1 I present an overview of the morphological structure of the verb. A more detailed description of coverb morphology follows in 4.2. The semantics of the complex verb, particularly the role of the inflecting verb, is discussed in 4.3.1 and 4.3.2. In 4.3.3 I discuss the special functions of the framing verb =MA. 4.4 is a detailed description and analysis of pronominal prefixing. In 4.5 I discuss tense, aspect and mood in Wunambal and in 4.6 dual and trial markers are discussed. I describe the function of the directional suffixes in 4.6. Oblique suffix forms are listed in 4.7. In 4.8 I describe dual and paucal specification.

4.1 Morphological structure of the verb: Overview

In chapter three I introduced the simple verb comprising an inflecting verb only and the two word complex verb comprising a coverb and an inflecting verbal word. Coverbs and verbs are morphologically and functionally entirely distinct although lexically each contributes to the overall semantic content of the complex verb.

The Wunambal verb template

The maximal morphological structure of the Wunambal verb can be represented by the notional 'order' slots below. ¤ marks the obligatory slots for most finite verbs (non-finite verbs e.g. some imperatives and the potential mood, do not require TAM suffixes to the inflecting verb and there is no change to the basic verb stem). Specific TAM categories are also defined by reduplication of the coverb and/or the inflecting verb.

1 (REDUP) coverb
2 aspectual suffixes to the coverb

3 object (O (or S)) pronominal prefix
4 inverse marker *-n-* or negative *-nV-*
¤5 subject (S/A) pronominal prefix (and/or imperative mood *ba-*)
6 negative *-nV-*
7 plural marker (for 2/3 person A's only)
¤8 (REDUP) - Verb Root
¤9 TAM (tense, aspect and mood)

10 directionals: *-yanga* 'toward/from', *-nda* 'away'
11 duration/continuative aspect *-(yi)rri*
12 subordinator: *-ngarri*
13 oblique pronominals
14 number; dual *-miya* and paucal *-na*
15 emphatic: *-ja /-diya*

Slots 1 and 8 can be reduplicated. Reduplication in slot 1 has an intensifying effect. In slot 8 reduplication only occurs in habitual and immediate TAM types where it is compulsory.

In practice not all order 'classes' co-occur. Only slots 5/3, 8 and 9 are compulsory elements of finite verbs. The negative morpheme *-nV-* occurs in position 6 on monovalent roots and in one of either slot 4 or 6 on bivalent roots, depending on the person/number/gender configuration of object and subject.

Slots 3-7: Pronominal prefixes and mood

3 and 5 (or 3, 4 and 5) may be 'fused' either in a form that cannot admit *-nV*-NEG in a portmanteau prefix, or 5 may have an alternate form or a zero form depending on whether it is (formally) A or S (i.e. if the verb root is monovalent or bivalent and on what the O-A combination is. On monovalent verbs the negative prefix *-nV-* follows the subject. On bivalent verbs there is a paradigmatic split between those inflections that insert *-nV-* between the object and subject prefixes and those where the negative prefix follows the 'fused' object/subject prefix. Monovalent imperatives have a specific (inflecting) word-initial subject/mood prefix *ba-*. Pronominal and mood prefixation is discussed in more detail in Section 4.4. A plural marker *rr* follows the *-nV-* prefix when A is 2/3 person only.

Slot 8: Inflecting Verbs

Slots 8 and 9 can be difficult to segment in 'present' immediate and past TAM categories (See 4.5.2 and Table 5.9 for past tense stem forms and 4.5.5 and Table 4.10 for 'present' habitual and immediate stem forms). The 'bare' (or zero tense/mood suffixed) forms of inflecting verbs occur only in the imperative, potential and negative *-nV-* prefixed moods. Reduplicated verb roots are associated with the habitual and the immediate TAM categories.

Slot 9: Tense and mode

Past tense morphemes at slot 9 differ for different conjugation classes of inflecting verbs, in the negative past, and in reflexive-reciprocal 'voice'. *-(i)ya/* the DESirable mood suffix is invariant across conjugation classes. The aspectual non-past tense morpheme *-ga* 'immediate' also fills this slot.

Slot 11: Aspect

-rri, the continuative aspect marker indicates extended duration in time and space (for example when travelling). Either slots 1, 2, 8 and 9 or slots 1, 2, 8 and 11 interact to determine aspectual perspective. 10 and 12 also have a role in expressing aspectual perspective.

The order class 11 suffix *-rri* continuative, is identical in form to a suffix that appears on other parts of speech including coverbs, demonstratives and temporal and locational qualifiers, particles and interjections. How closely the function of *-rri* on inflecting verbs is related to these other functions needs to be determined.

Slot 12: *-ngarri,* Subordinate marker

Generally interpreted as a relative clause marker, *-ngarri* may also be interpreted as a marker of perfect aspect. Suffixed to nominals *-ngarri* can be translated as 'characterized by or having as a characteristic'. On verbs it often has a nominalizing or adverbal effect ('having .....ed'). In *-ngarri*'s role as 'relative' clause marker it is often translated as 'when', 'who' or 'that' in free translations.

Slots 13-15: obliques, number, emphasis

The morphemes that fill slots 13 and 14 are (with the exception of 3sg *-ngu*) more cliticlike, being more readily segmentable or more loosely attached to the verbal word, and generally retaining their phonological shape. They are identical in form to pronoun enclitics or suffixes on other parts of speech (e.g. some nominals) which have related, if not identical, functions. It is normal for the emphatic, confirmatory modal enclitic *-ja/-diya* 'indeed', assigned here to slot 15 to occur word-finally.

Some examples of verbs showing different order class slots being filled appear below: Note that both =YA 'go' and =YANG(A) 'go' are treated as verb stems below. These are discussed further in 4.5 (TAM).

Monovalent examples:

4.1 *Ngiyangga.*

5	=8	-9
ngi	*=yang*	*-ga*
1SG	=YA'go'	-IMM

'I'm going.'

4.2 *Nguwa jo: nginiyan gala.*

	1	5-	-6-	=8	
(nguwa)	*jo:*	*ngi*	*-ni*	*=YA(N)*	
NEG	drink	1SG	-NEG	=YA'go'	that

'I don't drink that.'

4.3 *Wana ngiyangayanga.*

1	5	=8	-10
wana	*ngi*	*=yanga*	*-yanga*
return	1SG	=YANG	-toward

'I return (come back from).' [WG96,tx2]

4.4 *Gadjin.ga nginiyanda.*

	5	-6	=8	-10
	ngV	*-nV*	*=YA*	*-nda*
CANNOT	1SG	-NEG	=YA'go'	-away

'I can't come away/go off.'

4.5 *Nguwa nguru bɨnangi.*

	1	5	-6	=8:9
nguwa	*nguru*	*bɨ*	*-na*	*=ngi*
NEG	hear	3B:SG-NEG=N'be':NEG.PAST		

'He didn't hear/understand/notice.'

4.6 *Rɨrr ayanganda.*

1	5	=8/9	-10
rɨrr	*a*	*-yang(a)*	*-nda*
pull	3A	=YANG'go'	-'away'

'(The fish) pulls/is pulling (away from).'

4.7 *Giyangerri?*

5	=8	-11
gI	*=yanga*	*-(yi)rri*
2SG	=YA'go'	-CONT

'(Are) you coming?'

4.8 *(biyanda) gurarra biyanggandерri.*

	1-2	5	=8	-9	-10	-11
	gura-?(wa)rra	*bV*	*=YANG*	*-ga*	*-nda*	*-(yi)rri*
	crawl-?	3SG	='go'	-IMM	-'away'	-CONT

'He (a child) is crawling off (away).' [WG?97]

4.9

Muju-muju	*nyarrawanerrinungu.*				
1-1	5	=8	-9	-11	-13
Muju-muju	*nyarra*	*-wan*	*-ne*	*-rri*	*-nungu.*
REDUP-grab	1ex:PL	=WAN'fall'	-PAST	-CONT	-3SG:OBL

'We were grabbing them (crocodiles by diving under and sneaking up).'

4.10

Ṙirrwa		*andirri.*		
1	-2	5	=8/9?10	-11
ṙirr	*-wa*	*a*	*-NDI*	*-rri*
pull-	IT	3A	=N:PAST	-CONT
(pull-IT		3A=YA'go'-NDA'away'-CONT)		

'It/they (the fish) was/were pulling/?started pulling/pulled over time.'

4.11

Gumamangarrira.			
5	=8-8	-12	-13
gu	*=ma-ma*	*-ngarri*	*-ra*
2SG	=REDUPL-MA	-SUBORD	-1SG:OBL

'When/as you tell me.' [WG96,tx2]

4.12

Wandi(j)	*nyanjirringarrimiya.*				
1	5	=8/9	-11	-12	-14
wandi(j)	*nya*	*=nji*	*-rri*	*-ngarri*	*-miya*
make	1ex:PL	=N:PAST	-CONT	-SUBORD	-DUAL

'We have been working (together/dually).' [WG96,tx 2]

Bivalent examples:

4.13

Nawurrmiṙangi.			
3	-5	=8	-9
na	*-wurr*	*=miṙa*	*-ngi*
3N	-3PL	=MiṙRA'grab'	-PAST

'They get it (kangaroo sinew).'

4.14

Ngunbiṙrmandangirri.					
3	-4	-5/7	=8	-9	-11
ngu	*-n*	*-biṙr*	*=manda*	*-ngi*	*-rri*
1SG	-INV	-3B:PL	=MiNDA'take'	-PAST	-CONT

'They took me along(duration).' [LyK96,tx1]

4.15

Gaya	*ngundumirrangiyanga:*					
	3/5			=8	-9	-12
Ga-ya	*ngu*	*-n*	*-du*	*=mirra*	*-ngi*	*-yanga*
neuter-DIST.DEM	1SG	-INV	-3B:SG	=MIRRA'come:to'	-PAST	-toward
there/then	he/she came to me					

'She came back there to me'/She came back from there (distant) for me.'

4.16 *Nguwa nguru janumindе.*

	1	3/4/5	-6	=8	-9
nguwa	*nguru*	*jan*	*-nu*	*=manda*	*-yi*
NEG	hear	1SG<2SG	-NEG	=MiNDA'take'	-PAST.NEG

'You didn't listen to (respond/take notice of) me.'

4.17 *Jarri winyarrnengumiya .*

1	3	-5	=8	-9	-13	-14
Jarri	*wi*	*-nyarr*	*=wun*	*-ne*	*-ngu*	*-miya*
Dig	3Wcl	-1ex:PL	=WUN'effect'	-PAST	-3OBL	-DUAL

'We (the two of us) dug (a cooking hole) for them.'

4.2 The complex verb

4.2.1 The coverb

Coverbs were introduced in chapter 3. They contain most of the lexical content of the complex verb and can be translated with English verbal meanings. The class of coverbs is an open one and English terms are sometimes substituted in this function but never as inflecting verbs. In the discussion below where I use terms like dynamic and stative for descriptive convenience, a comprehensive classification of coverbs types is not in fact implied. More research would be needed to attempt this.

When combined with different inflecting verbs there is usually an identifiable common semantic core component, defined by the coverb. Although a coverb may have an inherent transitivity value, the coverb meaning does not assume a particular type of transitivity value for the complex verb. Many coverbs can be combined with either a monovalent or a bivalent verb root. Although coverbs must precede the inflecting verb in complex construction, coverbs do sometimes occur without a following inflecting verb in either non-finite verbal or gerund-like function. There are also a limited number of morphemes which sometimes intervene between coverb and inflecting verb. These include some demonstrative terms and some particles. In the case of demonstratives they can substitute for a coverb when demonstrating an action.

bungga gawurrne
bungga ga-wurr=ø-ne[
this Wcl-3pl=WU'effect'-PAST

mila gawurrne,
mila ga-wurr-ø-ne,
lick.smooth Wcl-3pl=WU'effect'-PAST

'They do this, they lick it smooth.'

There are also times when a coverb is repeated following the inflecting verb, but without a second inflecting verb. In these sentences the 'missing' inflecting verb could be interpreted as an ellipsed element in that the appropriate inflecting verb is recoverable from context. However the function of the second coverb in these sentences is a little different to the first one and it may not be wise to assume ellipsis. The second coverbal mention confirms, reinforces or highlights the nature of the event or activity and is somewhat adverbal, modifying or gerund-like. The following example is taken from lines 20-21 of text 2 (Appendix 5). If the example is modelled on previous full repetitions of other complex verbs in the same text in lines 1, 5-6, 9-10, 11-12 and 19 then in the lack of a second *biyanga* could be interpreted as an ellipsed element. However the lack of a second inflecting verb could also be interpreted as a pragmatic stylistic device without assuming any ellipsis. My own impression is that the speaker was both confirming/emphasizing and pausing/buying time either to recall, or catch breath in the monologue before proceeding to explain the final step in the preparation process. A final interpretation is that some sort of compounding of *diwa* and *arrgu* is taking place rock-pounding (grinding/mincing/reducing to a mass of little pieces using a stone as a pestle), that is the speaker is defining the nature of the action a little more explicitly.

diwa biyanga diwa arrgu

dii	*-wa*	*bi*	*=yanga*	*dii*		*-wa*	*arrgu*
mince	-IT	3B	=YA(NG)'go':HAB	mince	-IT	stone	

'She pounds (it), pounding the stone/with a stone.'

4.2.2 Coverb morphology

Morphological processes applied to the coverb are chiefly aspectual in nature. The morphological processes that apply to coverb stems include reduplication and suffixation. As for other languages of the world these morphological processes may derive new lexical verbs, however in Wunambal these processes are best viewed as inflectional processes. Reduplication typically has an intensifying effect. The suffixes that adhere to coverbs are *-wa* 'IT' or *-wa* 'DUR' (or iterative/durative depending on coverb type), *-wa* (realized as [-wa, -ba or -a], which occurs with a large number of coverbs, and *-rra*, *-garr*, *-rri* and *-biji* which are all quite rare in my corpus. Suffixation with *-wa* is relatively common. It can be regarded as a partially inflectional category for iterative-durative aspect marking and partially as a derivational process associated with coverbs of nominal origin. Not all known coverbs can suffix *-wa*. It is not known if all coverbs can be reduplicated. The morpho-phonological aspects of reduplication and *-wa* suffixation are discussed below; some discussion of the range of functional roles for these two

processes follows. The rarer suffixes are described individually and glossed in the contexts they were found in.

4.2.2.1 Reduplication

Morpho-phonology of reduplication

Reduplication for coverbs is normally complete. The majority of coverb roots are either monosyllabic or disyllabic. Although there are some trisyllabic coverbs, coverbs of more than three syllables are normally the result of either reduplication or aspectual suffixation. For some reduplicated coverbs that have not yet been attested in their non-reduplicated form I cannot be certain that the coverb root is not a meaningless formative.

Table 4.1 Coverb reduplication

liliny	'watching'
lii or *liny*	'watch, look at, examine'
minjal-minjal	'eat with relish'
minja	'eat'
manyangan-manyangan	'fan forcefully'
?	

Functions of reduplication

While reduplication or partial reduplication of a coverb root usually signals *intensification* of an iterative or durative process, for dynamic/punctual processes an iterative interpretation tends to come with the intensifying effect. This makes it difficult to distinguish clearly between the effect of reduplication and that of *-wa* suffixing. No *-wa* ITerative suffixing takes place prior to reduplication; however, the *-wa* suffixed coverb is occasionally repeated before the inflecting verb.

The difficulties in systematically capturing the difference in meaning between the different forms of coverbs with English translations are illustrated in my own translations (based on the context in which one or two particular forms appear in sentences and texts) as well as in the English translations given by Vászolyi. For example I have recorded *barra* =MIRRA ', talk, talk about' [BDj], *barrara* 'talking altogether (still)'[BDj], and *barrabarrabarra* 'chat, tell stories, i.e. talk intensively, in detail or at length' [?WG]]. Vászolyi on the other hand (1976:638) contrasts *barra* 'talk' and 'derived' coverbs *barrawa* 'talk a lot' and *barrabarra* 'chat away', but conversely *minjal* 'eat', *minjala*,

'eat up', and *minjal-minjal* 'eat a lot'. The same coverbal activity (e.g.eating) combined with different inflecting verbs and aspectual marking (reduplication, *-wal-a* suffixing and/or *-ga* or *-rri* on the inflecting verb and/or *-ja* emphatic allows the same activity to be described from an number of aspectual perspectives.

As indicated in the chart below reduplicated roots normally appear with the same verb roots as the unreduplicated coverb but sometimes take different verb roots. There are a fair number of cases where stative/change of state =N'be' is used with reduplicated coverbs, for example. Further testing is needed to find out whether unreduplicated coverb roots can always collocate with the same verb root as the one the reduplicated form does. Where they do take different verb roots this could be taken as evidence for derivation of a new lexical verb. In the list below I have included *-wa* suffixed forms where they occur with the same coverb, for comparison. The tentative translations in the right-hand column illustrate the types of interpretations that are possible.

Table 4.2: Coverb reduplication and inflecting verb collocation

Coverb	Coverb + inflecting verb(s)	Reduplicated coverb + inflecting verb
balya	=MA '(leave to) visit, follow or chase up' =MIRRA 'visit, meet up with' =WU [WG] 'visit' =MiNDA 'bring/take into contact with'	*balyabalya* =N [JK] 'be after/be visiting/chasing up'
?dii	? 'smash, bash, pound'	*diidii* =N 'smash up, pulverize' *diiwa* =N; =YANG 'mincing up'
durrbud	=WU [WG] 'tie'	*durrbirrdirrbirr* =N 'attach/fasten firmly or quickly (in anticipation)' *durrbudba* =N 'attaching'
jurrug	=MANDA; =MiRA 'carry'; 'lift'	*jurrug-jurrug* ? (non -finite 'adverbal use} 'carrying aloft ?(adverb)' ?'each carrying'
lii(ny)	=WU 'examine, look at, watch'	*li[:]liny* =WU 'watch with a purpose/ intently, observe closely (over time or on repeated occasions)' *limba* =WU 'watching' *manyangan-manyangan* =MA [WG] 'keep fanning, fan forcefully or rapidly'
minja(l)	=MA; =N 'eat; be eating or start to eat'	*minja(l)-minja(l)* =N 'start eating with relish' *minjala* =N 'start eating'
ngala	=N 'be sick'	*ngala ngala* =N 'be very sick'

Note that although there are clear cases where word forming reduplication takes place there are also cases where a coverb may be repeated for emphasis without being interpreted as a reduplication. The semantic effect of repetition of a coverbal word is almost identical to that of reduplication in the following example:

4.18

Ngala,	*ngala*	*binjirri.*		
ngala,	*ngala*	*bi*	*-nji*	*-rri*
sick	sick	3SG	=N'be':PAST	-CONT

'He (dreamtime quoll) was very sick.'

I have judged pausing between morphemes and separate intonation contours as the main indicators for separating words. These cases would need to be distinguished from reduplications on a synchronic morphological basis. Possibly there is a gradation between two and one word coverbal expressions, my dashes in the list above are meant to indicate this.

4.2.2.2 Iterative-durative *-wa*

Allomorphy

The elsewhere form of the iterative-durative suffix *-wa* [-wa] normally follows vowel and glide final coverbs, and also the trill. *-wa* strengthens to [-ba] following stops and nasals. Recall from Chapters two and three that, unlike other words, coverbs can end in *j* or *g*, as well as apical stops and nasals. Often the final palatal or stop is not pronounced or not fully released, introducing some variation in speaker's pronunciation. For example final *ny* and *l* are not articulated by some speakers. After apical laterals *-wa* apparently undergoes lenition to surface [-a]. The following morpho-phonological 'rules' apply[1]:

Figure 4.1

w >ø / lateral ## _
>b / stop, nasal ## _
>w elsewhere (vowels, glides and rr)

Table 4.3: Examples of -wa 'IT' allomorphic alternations

durru	'put, place'	>*durruwa*
bey	'light fire'	>*beywa*
minja(l)	'eat'	>*minjala*
gawal/gol	'share'	>*gawala*
garn	'sing'	>*garnba*
li(ny)	'watch, look at'	>*limba*
ngud	'hit'	>*ngudba*
wandi(j)	'work on or make'	>*wandi(j)ba*

The situation following word-final *rr* is somewhat ambiguous, and this may relate to a degree of dialectal alternation between *rr* and *d* or *rd* (and/or concurrent historical change, see McGregor 1988c:176-181) or possibly this linguist's failure to distinguish *d*, *rd* and *rr;* . Compare for example the following forms:

rirr	'pull'	> *rirrwa*	'drag, pulling (over time)'
dɨrr/dirr	'cut'	> *dirarra /dirrarra*	'cutting' [JK], open up'
dɨrr/dɨrd (*did* [Vas])	'cut/slash'	> *dɨrdba*	'cutting' [WG]
durrbud/ durrmud	'tie'	> *durrbuba/ dɨrrbɨrrba*	'fastening' [WG]
		> *dɨrrbɨrrdɨrrbɨrr*	'fasten firmly' [WG]).

There are only a few glide-final verbs, but it would appear that, as for vowel-final segments, they suffix *-wa*. *-r* final coverbs e.g *wɨr* 'fly' have not been found with iterative/durative suffixing.

There are a number of coverbs ending in *-a* that may derive from *-wa* or *-a* suffixing but for which no equivalent unsuffixed forms have been recorded. e.g. *rowa* =N 'whiten/go white'. These forms may be derived from *-wa* suffixing on nominals which usually derives a coverb; see below.

Grammatical and semantic functions of *-wa*.

-wa and *-a* final coverbs are of two types.

-wa suffixing on nominals

We already saw in 3.3.1 that when *-wa* is suffixed to a nominal expression it derives a 'stative-like' coverb which usually collocates with =N, although it can sometimes appear with other verb roots like the atelic =YA(NG).

marndu		'belly'
marnduwa	=N	'be pregnant'

4.19

Marnduwa	*bindi*		*geji.*
marnduwa	*bi*	*=ndi*	*geji*
pregnant	3BSG	=N:PAST	now

'She's pregnant now (after long time).'

Apart from these clear cases of derivation many nominals retain their form when used with =N. There are also coverbs that are homophonous with nominals with related meanings that collocate not only with =N 'be, become'.

minja(l)		'mouth'
minja(l)	=MA	'eat'
minja(l)	=N	'eat, be eating'
minjala	=N	'?(start to) eat'

There are numerous text excerpt examples below.

-wa suffixing on non-stative coverbs

The suffix *-wa* also occurs on inherently punctual coverbs like *ngud* 'hit', *durru* 'put or place', *dirr/did* 'slash, cut'. Here the *-wa* suffix generally denotes iteration of the punctual activity or process and thereby entails duration over time.

4.20 (a)

Ganyagu		*dirrba*		*gunbin.ga?*			[WG/PB96,ftrb3:43,ct46]
Ganya	*-gu*	*dirr*	*-ba*	*gu*	*=nbin*	*-ga*	
what-	DAT	cut-	IT	2SG	=REDUP:WU(N)	-IMM	

'Why are you cutting yourself?'

(b)

Gurlmerr	*dird*	*minyarrne*				*AN'*	*anggarru*	*dird*

...

Gurlmerr	*dird*	*mi*	*-nyarr*	*-wun*	*-ne*	*AN'*	*anggarru*	*dird*
tail	cut	Mcl	-1ex:PL	=WUN'effect'	-PAST	and	foot	cut

'We cut off the tail and the feet.'

The collocating verb root is usually, but not necessarily, the same as that used for the punctual action, as indicated in the table below:

Table 4.4 *-wa* ITerative suffixing on semantically punctual coverbs

ngud	=MA	'hit'
ngudba	=MA	'hitting, hit iteratively'
durrbud	=N	'fasten, attach, tie on (firmly)'
dirrbirrba	=N	'attaching, tieing on'
did /dird	=WU	'cut/slash, cut off'
didba /didba	=WU	'cutting, cut iteratively'
durru	=N	'relocate, put, place'
	=MA	'put over, cover'
	=WU	'put in or on, set'
durruwa	=N	're-locate, placing iteratively or one by one or bit by bit'
	=YANG	'motion of putting in place iteratively - one by one, or bit by bit'
rirr	=N	'pull, tug (telic, punctual)'
	=YANG	'pull, tug (atelic, punctual)'
rirrwa	=N	'drag/pull (telic, duration)'
	=YANG	'drag/pull (atelic, duration)'
wandi(j)	=N	'work on, make, write, record, build'
wandi(j)ba	=N	'working on, making, writing, recording, building'
	=YANG	'still working on (atelic)'

Note also that *-wa* often combines with either of the telic root =N or the atelic root =YANG for the dynamic coverbs. The complex verb may be perfective in the past (i.e the iterative or durative process is viewed as a complete whole). Some examples are 4.21(b). Often *-wa* suffixing combines with continuative *-rri* aspectual marking on the verb root as in 4.10 *rirrwa andirri* 'it was pulling' and 4.22(a) *dalyjawa ngiyanggerri* 'I was growing up'. The iterative also combines with the immediate (non-past progressive/ in progress) *-ga* as in 4.20(a) *dirrba gunbin.ga* 'you're cutting yourself'.

On other non-punctual verbs the effect of *-wa* suffixing is not so easily characterized. For example *mardug* 'walk' and *jarri* 'dig' may be thought of as *inherently* iterative activities/processes and *dalyja* 'grow up, rear' as inherently durative. (In the case of *jarri* however it is possible to view this as derivation from *jarri* 'hole', as suggested by Vászolyi, 1976, and therefore a coverb derived on the nominal pattern discussed above). That the essentially iterative activity was of some duration appears to be important when *-wa* is used here. In the following examples, *mardug* collocates with the atelic motion

verb =YANG'go' (in habitual aspect and in the past perfective) whereas *marduwa* appears with the telic motion verb =MIRRA'go.to' (past perfective tense/aspect).[2] I need to consider too that *marduwa* in (c) below could be behaving as an adverb, i.e. interpret =MIRRA as a simple verb with adverbal modification. As mentioned earlier, some collocations are looser than others and there are formal and syntactic similarities between coverbs and adverbs.

4.21 (a) *Mardug biyanga.*
mardug bi =yanga
walk 3SG =YANG'go'
'They walk.'

(b) *Mardug ngiyangge arrgungindalu.*
mardug ngi =yangge arrgu -ngindalu.
walk 1SG =YANG'go':PAST rock -LOC
'I walked/ went walking on the rocks.' [KAL'98]

(c) *Marduwa wunmirrangi.* [WG'97/98]
marduwa wu -ø -n =mirra -ngi
walking Wcl -2SG -?[3] =MIRRA'go.to' -PAST
'You walked across to it' (you went to/approached it by walking).'

In the next (a) example *-wa* suffixing is used on the coverb *dalyja* with atelic root =YANG and CONTinuative *-rri* suffixed to the inflecting verb to signify both internal duration and an 'imperfective' or incomplete (backgrounding) reading. The (b) example contrasts a past completive/perfective version using the active telic root =MA.

4.22 (a) *Biyanda ngindingarri gala, galaja dalyjawa*
Biyanda ngi -ndi -ngarri gala, gala -ja dalyja -wa
child 1SG -N'be':PST -SUBORD that that -EM grow -DUR

ngiyanggerri (yaa) jaja liiliny
ngi -yangge -rri (yaa) jaja lii-liny
1SG -YANG'go':PAST -CONT ? granny look.at-look.at

birrngawunerri birrinya ngayaningga
birr -nga =wu -ne -rri birri -nya ngaya -ningga
3PL -1SG =WU'effect' -PAST -CONT B:PL -this I -GEN

biija, abiyanjirra...
biija abiya -jirra...
father uncle/brother -COLL

'When I was a child, and then as I was growing up I used to observe my grannies, (my fathers, uncles etc...)' [LsK96, tx:1,25/9]

(b) *Dalyja nyirremeja galbaja, Garnmenyija.*
Dalyja nyirra =me -ja galba -ja, Garnmeny-ja.
grow:up 1SG =MA'do':PAST -EM there -EMPH Kunmunya
'I grew up/was raised there at Kunmunya.' [BDj96,tx:'journey']

The (a) example above and those below indicate that tense-aspect marking on the inflecting verb is related to the temporal relationships between clauses and sentences. The scope of *-wa* suffixing on coverbs, on the other hand, seems to be confined to the internal temporal structure of the process, situation or event described by a single clause. An iconic contrast can be noted between peripheral *-ga* and *-rri* aspectual marking which occurs as the 'final' TAM marker on the inflecting verb, and *-wa,* which by virtue of occurring suffixed to the coverb, is complex verb-medial or embedded.

Table 4.5 *-wa* ITerative suffixing on other coverbs

mardug	'walk'	=YANG
marduwa		=MIRRA
dalyja	'grow'	=MA, =WU
dalyjawa		=YANG
jarri	'dig'	=N,=YANG, =MA, =WU
jarriwa		=N

4.2.2.3 Other coverb suffixes

Like *-wa* other coverb suffixes have aspectual meanings.

-rri DISTRibutive

The two available examples below indicate that on coverbs *-rri* has a function distinct from that of *-rri* CONTinuative marking on verb roots. Suffixed to the coverb *-rri* signifies distributed action. By distributed action I include a plurality of actors/experiencers and occasions; 'each and every one individually (not as a collective)'. In the 4.23 and 4.24 *-rri* affixed to the coverb signifies a number of individual events rather than one event performed or experienced simultaneously by plural actors. Distribution over time is also implied. Note that *debarr* 'die/be dead' in 4.23 below normally collocates with atelic =YANG, here *-rri* suffixed *debarr* appears with =MA.

4.23 *Debarrarri* *bɨrrme.*
debarr -a -rri *bɨrr* *=me*
die -DISTR 3B:PL =MA'do':PAST
'They all died (one by one). / They're all dead.'

In 4.24 (a) it is not at first clear how the effect of *-rri* on the coverb differs from that of aspectual suffixes to the coverb like *-wa.* Given the context for the (a) example however - a group who have been travelling for a long period (maybe a year) from a distant settlement, have just been re-united with their relatives at Kalumburu - one can imagine the entire group or rather each member of the two groups of people crying 'all over the place' as they greet each other and mourn for common relatives who may have died in the meantime. The (b) example contrasts a single progressive occurrence of crying.

4.24 (a) *Galaja* *wala**rri*** *nyarrmenerri::::::*
Gala -ja *wala -rri* *nyarr =me* *-ne* *-rri::::::*
that -EMP cry -DISTR 1exPL =MA'do':PAST -?REFL -CONT
'Then we all cried together (at length).' [BDj96,tx:'Journey']

(b) *Wala* *bumingga.*
wala *bu* *=mingga*
cry 3SG =MA'do/say/emit':IMM
'She's crying.' [wdoc:pronominal prefixes]

In Worrorra this function is apparently achieved either through reduplication of the coverb or an *-i* coverb suffix (Clendon 1994). It is also interesting to note the formal similarity of *-rri* to *-rr-* (plural prefix) and that *-rri* suffixed to Ungarinyin inflecting verb roots is a dual marker. In Kwini McGregor (1993:47) also finds that under certain conditions for one verb root where the plural *-rr-* prefix is obscured by phonological processes a *-rri* suffix on the inflecting verb denotes a plural subject.

-rra, *-garr* and *-biji*

There may be a *-rra* alternate to *-wa* 'ITerative/durative in some phonological or lexical environments. I have only two examples that indicate a possible *-rra* suffix to coverbs. The origin of *-rra* final coverbs could be in a possible *-warra* suffix, like that identified for demonstratives and spatial terms. Another possibility is that *-rra* is an alternative to *-rri* distributive action:

*dɨra**rra***	=YANG	'chop open'
dɨrdba	=WU	'cutting'
dɨrr / dɨrd	=WU	'cut'

gɨrarra	=YANG	'crawling'
gɨraaj	=YANG	'crawl'
gɨra	(nom.)	'camp, hearth'; 'country'

-garr was attested on one verb only:

balya	=MA	'visit'
balyagarr	=MɨRA	'trace up'

-biji 'REP' was attested once only with the sense 'repeated action'. An example occurred in Chapter 3, example 3.17.

4.3 Semantics of the verb

4.3.1 The role of the inflecting verb in the complex verb construction.

The complex verb construction was introduced in Chapter three, and an attempt to characterize the effect of the verb root when used in complex verb constructions was made then in table 3.6. Most coverbs can appear with one or more, usually no more than two or three, different inflecting verb roots. The resulting differences in meaning range from subtle changes in view, aspect or transitivity of a 'core' action or state to quite discrete actions or states (at least in their English translation equivalents). Semantically and grammatically, each pairing of coverb and inflecting verb is lexically distinct. A coverb, however, does not so much 'change' in meaning when it collocates with a particular inflecting verb, as particular aspects of the coverb meaning are drawn on.

It appears that each coverb-inflecting verb pairing is learnt as a unit by speakers, that is, they are conventionalised rather than creative choices. Nevertheless the lexically determined selection of an obligatory inflecting verb root does amount to a type of (overlapping rather than discrete) verbal classification 'system'. Silverstein (1986: 497) argued that a similar phenomenon in Worrorra amounts to a system of verb classifiers not just a periphrastic verb plus auxiliary type of inflection. Silverstein (1986: 512) drew particular attention to the role of Worrorra verb classifiers with regard to aspectual classification, argument structure, and predicate perspective.

Classification by verb root defines aspectual information such as degree of telicity, and grammatical and semantic transitivity information (such as the relevance of, degree or type of affectedness of object or indirect object) of the verb complex, in such a way that the inflecting verb root itself largely functions as a grammatical morpheme. Capell (1984)

called this the function verb, Van Valin (1996), citing Vendler (1967) uses the term *aktionsart*, for the lexical-semantic classification of verbs by aspectual types. This 'grammatical/semantic' information is in turn supplemented by the further, and more or less obligatory tense, aspect, mood inflection; and person, number and class information on the verbal arguments and the way they are configured on the verbal word.

It is sometimes the case, however, that when translated into English it is difficult to adequately capture the differences in meaning when a lexical coverb combines with different inflecting verb roots, based solely on degrees of transitivity and 'aktionsart'. The semantic component of the verb root is not limited to valence/aspectual information. This section examines the classifying function of the verb roots a little more closely, in order 1) to suggest refinements to the earlier description of the classifying role of the verb root in complex verb constructions, and 2) to discuss the differences in meaning where the same coverb is used with different inflecting verb roots. At this stage of the analysis, and based on a relatively small number of collocations, the presentation is a preliminary one, intended to give an outline sketch of classifying verb function based on known collocation possibilities for less than a 100 lexical coverbs.

First I look at each of the simple verbs and classify them according to valency, telicity, motion type and contact type. This approach to describing the grammatical and semantic aspects is based on Rumsey (1982) and more recent work and ongoing work on Kimberley and nearby languages by Schultze-Berndt (1996, 2000), Clendon (1994), Knight (1999), Kofod (pers. comm.), Nicolas (1998), McGregor (1996b, 2000), and Stokes (1996). My aim is to give some idea of the relevant parameters to provide a basis for comparison with the role of verb roots used in this way in other Kimberley languages. The recent work in all of these languages should result in better descriptions of the semantic contribution of the inflecting verb in Kimberley languages.

Next I list some of the coverbs that collocate with each root in an attempt to see to what extent these parameters might motivate the selection of a verb root in the complex verb construction. Any further refinements, commonalities or possible metaphorical extensions of meaning were then noted. The survey of a hundred or so coverbs shows that when coverbs collocate with inflecting verbs they generally conform to the simple verb types in terms of telicity, valency, direction and type of movement and surface/contact, i.e the 'meaning' of a simple verb is a good guide to semantic classifying type, and to some extent this validates my characterizing the verb roots by their simple verb meaning in interlinear glosses. In the case of =N, =MA (which has a grammatically distinct simple verb function), and =WU the parameters are determined through coverb collocation alone. I have already demonstrated in Chapter three that =N functions chiefly as an indicator of changed or achieved state type. =WU is shown to have a chiefly

'grammatical' transitivizing role but also has related semantic content in the realm of 'effect' or 'impact on'. =MA deserves further attention and is discussed in 4.4.
Next I point out some of the possible contrasts that can be achieved by the use of different classifying verb roots with the same coverb. A table (Table 4.6) of the collocating verb roots summarizing their semantic contribution and based on table 3.7 is provided for reference. Finally I present sentence examples for a number of coverbs which appear with two or more verb roots. The examples were selected from coverbs which I had already recorded in collocation with 2 or more different verb roots, some were found with up to 5 different inflecting verbs. Although this is not usual they are used here in order to view the range of semantic types possible. I have tried to make sure that each of the nine verb roots that act as classifiers are represented in the sentence examples.

Complex verbs with =N 'be, become'
ada 'sit, stay'; *baran* 'widow / bereaved category'; *buju* 'finished'; *darag* 'enter'; *garnba* 'singing'; *doba* 'clap'; *jog* 'heap up, heaped up'; *joli* 'return'; *majerri* 'two'; *marnduwa* 'pregnant'; *minjala* 'be eating'; *minjaminja* 'be eating'; *ngala* 'be sick'; *ngoyiba* 'be breathing'; *nguru* 'listen'; *rarrba* 'clean'; *rowa* 'whiten'; *rirrwa* 'drag'; *wanjimaya* 'be good'; *waj* 'lose'; *wɨr* 'fly, take flight'; *wulun* 'lie/sleep'; *yawirra* 'rub'; *yandal* ?'creep'; *yeyey* 'chat, socialize'; *yorr* 'be together'; *yorryorr* 'enjoy'; *yug* 'be vomiting'.

Valence: Stative: 'S is X, resultative: S becomes X'; active: cause to be/become X
Telicity: telic: (reached/achieved a point/location).
Motion: 'static (the achieved change in location or state)'
Contact: not relevant

Other comments: used for changes of position/location as well as changes of state.

=YA(N)/YANG(A) simple verb 'go'
Valence: monovalent, S is agentive and semantic experiencer of the process
Telicity: inherently atelic, no end point
Motion: movement can be toward or away from the speaker (indicated by directional suffixes)
Contact: ?not relevant

Complex verbs with =YA(N)/YANG(A)

baa 'come out'; *dalyjawa* 'grow'; *dorl* 'burst'; *ee-ja* 'travel on foot'; *girarra* 'crawl'; *joo* 'drink'; *jarri* 'dig' / 'go digging'; *jodba* 'dance'; *mardug* 'walk'; *nuumba* 'roll into a ball, ball up'; *rirrwa* 'pull, tug'; 'chop up'; *wanarra* '?take out ?uncover'.

Extension: *debarr* 'die'

Valence: monovalent, S is agentive and semantic experiencer of the process

Telicity: inherently atelic, no end point

Motion: continuous motion, graded, progresses in stages or can be iterative motion; can be toward or away from speaker/S

Contact: not relevant

=MiNDA/MANDA 'bring' simple verb: 'carry - take or bring with'

Valence bivalent, O is patient/undergoer

Telicity: atelic no inherent goal or end point

Motion: accompanied (controlled) agentive motion, can be toward or away from speaker/S

Contact: non-specific but accompanied

Complex verbs with =MiNDA/MANDA

Opaque: *jurrug* 'lift, carry;' *manuwa* 'bear on shoulder'; *wari* (smoke) 'take smoke to'

Abstract: *nguru* 'listen to O, cognizance of O, take notice of O'

Comment on role in complex verb: The number of collocating coverbs is small suggesting limited role as a classifier. Simple verb meaning is retained in the complex verb although significant abstraction is possible. Coverb specifies the means of motion.

=MA

Simple: 'say, think, want'

Function: frames direct/indirect speech, thought and action/events

Valence: 'active, intransitive'

Telicity: 'telic'

Motion: projected (away from body)

Contact: non-specific

=MA 'do' complex verbs
buju 'finish up'; *dalyja* 'grow'; *darr* 'stand'; *dɨna* 'hold'; *gol/gawal* 'share'; *gowe-gowe* 'welcome'; *gurlaj* 'wash'; *guurl* 'attend school'; *jarri* 'dig'; *jord* ?'dance'; *lajarr* 'slice'; *minja* 'eat'; *ngadla/ nadla* 'make camp'; *juru* 'go under'; *waj* 'throw'; *wala* 'cry'; *wanda* 'camp out'; *wog* 'cook'; *wirrej* 'cook in ashes'; *yandal* ?'creep'; *wul/wurl* 'lie'.

Semantic core:	physical, bodily functions; do with body
Valence:	'active, intransitive, focus on action type rather than effect on undergoer'
Telicity:	'telic'
Motion:	high percentage away from body
Contact:	typically with hands, also with other body parts

=WU(N) 'effect' does not normally occur without a coverb. Sometimes a demonstrative is substituted when the effective action is not described but demonstrated.

Complex verbs with =WU 'effect' (impact on)
buju 'destroy'; *dalyja* 'rear'; *dɨrd* 'cut'; *durdu* 'wind'; *gurdu* 'chase'; *jarri* 'dig (a hole)'; *mara* 'find, see', *mɨla* 'lick to give a fine finish, smooth like a rasp'; *wog* 'cook up, roast'; *wandij* 'make'; *wurre/wurrey*, *wɨrrewa*; 'talk about (someone)' (gossip); *yarri(j)* 'descend upon, go down with intent'; *ye/yey* 'speak to'.

Valence:	'transitive, affective, impacts on'
Motion:	non-specific, includes circular and complex motions, made up of various sub-actions.
Telicity:	'telic'
Contact:	not relevant as such, it is the impact or result effected that is important rather than physical contact alone.
Comments:	relatively abstract, a super-category for transitive action, most coverbs occur with other inflecting verbs as well.

=MBU

Simple:	'strike, kill, spear'
Valence:	monovalent -agentive, undergoer suffixed OBLique
Telicity:	telic
Motion:	direct
Contact:	yes

Complex verbs with =MBU 'strike'
juru 'submerge (cause to be submerged)', *wulug* 'swallow', *miila* 'spear', extension:*wanga* 'leave, forget, neglect'.

Valence: monovalent formally, semantically agentive S, undergoer suffixed as oblique pronoun
Telicity: telic
Motion: direct
Contact: goes through, breaks surface, harms

=WAN 'fall.down'
Valence: monovalent
Telicity telic
Motion: downward or curved trajectory
Contact: at the end-point

Complex verbs with =WAN
Opaque: *ngarra/naarra* 'fall, go/get down'; ? ((might be =N); (*wundij* 'shoot '; *yarrij* 'climb down, go down, descend')), *mɨrnndaj* 'cross-over, cut across, (as in a short cut)'
Abstract: *layi* 'like'
Comment: few coverbs collocate, simple verb meaning is retained, but abstraction occurs, affective emotion (like)

=MɨRA simple verb 'grab, get, pick up, catch'
Valence: transitive O is patient/undergoer
Telicity telic
Motion: toward own body
Contact: with hands or feet

Complex verbs with =MɨRA
balyagarr 'trace'; *bɨranggaj* 'open', *dɨna* 'hold, cuddle', *jarrij* 'race off (running)'; *jilibud* =MɨRA(reflex) 'get/gather together'; ?*mɨrr* 'balance or grip?'; *ngayag* 'ask'; *ngela /ngayirla* 'bite'; *rɨrr* 'pull out'; *yawirr* 'rub on (body e.g. paint)'; *woo* '?feel (pain)'.

Valency/telicity: as above
Contact: bodily contact with (typically by instrumental use of hands-arms, feet or mouth/teeth).
Core: bodily contact with / bring toward own body with hands, extends to 'catch hold of', 'grip', make contact with the ground as in gripping.
Further extension: attain / examples: gain a physical or other goal e.g.'catchemap country', get to the other side / reach land (from water), *ngayag* 'ask'.

Simple verb =MIRRA 'go.to, come.to'
Valence: transitive, O is a goal
Telicity: telic O is an aspectual goal or end point
Motion: gradual but not iterative
Contact: neutral

Coverb collocations with =MIRRA 'go.to'
baa 'arrive; emerge at/to'; *wala* 'cry for, like, want'; *wundij* 'aim at'.

Comment: Collocations are few but included some common verbs. Again emotion verbs are included.

Summary of some coverbs found with two or more inflecting verbs:

baa =YANG 'come out' =MIRRA 'arrive, come out at'
balya =N 'visit'; =MA 'follow' =MiNDA, 'bring into contact with'; =WU 'visit, follow up'
buju =N 'be finished', =MA 'finish up, die'; =WU 'destroy'
darr =YANG 'rise (e.g. becoming daylight)'; =MA 'stand'
dIna =MA 'hold', =WU 'hold transitive'; =MiRA 'cuddle ?hold on lap'
jarri =YANG 'dig'; =MA 'dig'; =WU 'dig transitive e.g. a hole'
juru =WAN 'dive down' =MA swim/dive/go under =MBU 'submerge', =WU
lii/liny/limba =MA 'look'; =N, 'look'; =WU 'look.at, examine, watch'
minja =N 'be/begin eating'; =MA 'EAT'
nguru =N 'be listening'; =MiNDA 'listen to, take notice of'
jod/jord =YANG 'dance'; =MA 'dance'
rirr =N 'pull'; =YANG; pulling; =MiRA 'pull up/out from/for'
rirrwa ?=N 'drag', =?YANG 'pull, tug at'
yarrij =WAN 'descend'; =WU 'descend upon'
waj =N 'lose, be bereaved of', =MA 'throw'

wala =MA 'cry', =MIRRA 'want, miss, cry for'
wari =N 'smoke'(e.g. fire smokes), =MɨNDA 'carry smoke, take smoke to'
wundij =N 'aim at', =MIRRA 'shoot/fire at', =YANG(2) 'hunt, go after'
yey =WU 'speak to (with the purpose of cheering up)'; *yeyey* =N 'be chatting/ socialize, enjoy'

Some of the common contrasts achieved by inflecting verb collocation with known coverbs are listed below. Sentence examples illustrating some of these contrasts appear below.

=YANG vs. =MIRRA
intransitive vs. transitive
atelic vs telic
indirect repetitive motion vs. emergent direct motion or perceived travel

=YANG vs. =MA
describes atelic progressive 'they dance' vs. describes telic activity 'they danced'; become vertical by stages or gradually (as when daylight suffuses the sky) vs be actively 'standing up'

=N vs =MA
both monovalent
both telic
Stative/locational vs. active

=MA vs =MɨRA
formally monovalent vs bivalent
both telic
both active
outward (centrifugal) vs inward (centripetal) motion/activity e.g. *dɨna* =MA 'hold onto', *dɨna* =MɨRA 'hold close to the body'

=N vs. =MɨNDA
intransitive vs. transitive
telic vs. atelic
stative (smoke, listen) vs.active
neutral motion vs. accompanied motion- carry smoke, take notice)

=N vs. =MɨRA
intransitive vs. transitive
both telic
stative vs. active
neutral vs. motion
neutral vs bodily contact with

=MA vs. =WU
monovalent vs bivalent
both telic
both active
both diffuse motion
but focus on activity vs. focus on patient / effect or impact

=WAN vs. =WU
intransitive vs transitive
both telic
downward motion vs. diffuse motion
neutral contact vs. 'having an impact on'

The following table adapted from chapter 3 can be used for reference and summarizes the salient aspects of each inflecting verb root.

Table 4.6: Inflecting Verb Roots

Inflecting Verbs	Meaning in simple verb construction	Associated semantic quality/effect
#=N		stative, inchoative, resultative
monovalent roots		
YANG(A)/=YA(N)	'go/come'	atelic (progressive or iterative) motion
=WAN	'fall'	telic, vertical/downward or curved trajectory/ motion.
=MA	'do/say/think/want'	active, framing device, away from body
=(M)BU	'strike, kill/hit/spear'	active, pierces, breaks or passes through a 'surface'
bivalent roots		
=MANDA/MɨNDA	'take/bring'	atelic movement or perception of O by A, accompaniment / controlled motion
=MIRRA	'go/come to'	telic movement of A (A's volition) to O (location), smooth rather than iterative subactions
=MɨRA	'grab/pick up/catch/get'	movement of O by A toward A body with hands or feet.
#=WU(N)		active, O affected or perceived by A

not normally occurring as simple verbs.

The illustrative sentences that follow demonstrate the semantic and grammatical effect of inflecting verb selection. Most of the coverbs shown are unusual in that they have been found with more than three different classifiers. These are useful as examples in order to elucidate the range of classification possible. In order to demonstrate the use of each classifier at least once, a few more coverbs are included.

dɨna 'hold'

=MA

4.25 *Dina mamingga.*
dina ma =ming -ga.
hold 3SG =MA -IMM
'He's holding on (to the rope, i.e. with his hands).' [WG'96,Rsb:15]

=MiRA

4.26 *(biyanda) dina andumirimiringga.*
(biyanda) dina andu =miri - miri -ngga.
(child) hold 3Bsg<3Bsg =REDUP -MiRA -IMM
'He's holding her, a child (close in his arms and on his lap).'

=WU

4.27 *Marirri dina gambun.ga.*
marirri dina ga -ø -wun -bun -ga
green:parrot hold 3W -3B:SG =WUN -WUN'effect' -PRES:CONT
'He's holding a bird (in his hand).'

4.28 *Dina ambun.ga.*
dina a -ø =wun -bun -ga
hold 3Acl -3BSG =WUN -WUN -IMM
'She's holding it (a broom/fishing line e.g in her hand).'

juru 'submerge'

=WAN

4.29 *Juru buwane ngawa-ngindalu.*
Juru bu -wan -ne ngawa -ngindalu
submerge 3SG =WAN'fall' -PAST water -LOC
'He dived down into the water.' [WG'97,tx:bundungal'hornets',ct]

=MA

4.30 *Juru burrme yankun-gu.*
Juru burr =me yankun -gu.
submerge 3PL =MA'do':PAST waterplant -PURP
'They dived/swam for water lilies' [WG96,fnb2:9,ct4]

=(M)BU

4.31 *Juru biyambinbin-ngu?rr, gurlaj birramingga*
biya -mbin-bin -ngu -rr gurlaj birra=mingga
submerge 3PL =REDUP-NBUN'strike'-OBL-? clean 3PL =MA'do':IMM
'They submerge/?soak (prepared gurnu yam), washing (them in water).'

=WU

4.32 *goya juru binyarrne.*
goya juru bi -nyarr -ø -ne.
crocodile submerge 3COLL -1ex:PL =WU'effect'-PAST
'We went diving for (freshwater) crocodiles.' [JK96,tx:2Bushlife]

jarri 'dig'

=YANG'go'

4.33 *Jarri biyangga.*
Jarri bi -yang -ga.
dig 3SG =YANG -IMM
'She goes digging (for root foods i.e.).'

=MA'do'

4.34 *Jarri birramaja.*
jarri birra -ma -ja
dig 3PL =MA -INT
'They dig'

4.35 *Gurnu jarri birramingga.*
Gurnu jarri birra =ming -ga.
yam:type dig 3PL =MA'do' -IMM
'They dig (for) yams (discorea ?bulbifera).'

=WU'effect'

4.36 *Jarri winyarrnengumiya.*
Jarri wi -nyarr =wu -ne -ngu -miya.
dig Wcl -1ex:PL =WU'effect' -PAST -3SG:OBL -DUAL
'We (two) dug it (?a trench/ground oven to cook) for him/her/it. (the roo(s)/meat).' [JK96,tx:2]

jarri+ASPECT =N'be'

4.37 *Jarriwa bindi, jarri budme*
Jarri -wa bi =ndi jarri burr =me
dig -ASP 3PL =N'be'PAST, dig 3PL =MA'do':PAST

namarrga-ngindalu durru birrama.
namarrga -ngindalu durru birra =ma.
coolamon -LOC put 3PL =MA'do'
'They've dug, they dug and put (them) in a coolamon.'
[WG96/7tx:yanggu]

windij/wundij 'fire/shoot':

=N 'be'

4.38 *Windij/wundij ban.ga?/bangga lumba-ngindalu.*
Windij ba n.ga lumba -ngindalu
fire 3sg =N-:IMM tree -LOC
'He's aiming (a stone catapult) into the tree.' [WG96,Rsb9]

=MIRRA 'go:to'

4.39 *Wundij angamirriya.*
Wundij a -nga =mirr -iya
fire Acl -1sg =MIRRA'go:to' -DES
'I'll fire at it (animal, bird).' [WG98,fn1/2]

=?YANG(2) ?'go:after'[4]

4.40 *goya binya wulumara binya.*
goya bi -nya wulumara bi -nya
crocodile COLL -this long-neck turtle COLL -this

Wundij binyarranggerri.
wundij bi -nyarr =yangge -rri.
fire 3PL/COLL -1:EX:PL =?YANG?'go:for':PAST-CONT
'We hunted for/went after crocodile and turtle.' [JK96,tx2:bush:life]

nguru 'hear, listen, notice, understand'

=n

4.41 *Wajaga nguru naa gaangga?*
waja -ga nguru naa ga -angga
Dummy -INT hear you 2SG -N'be':IMM
'Are you listening?'

=MINDA/MANDA

4.42 *Geji nguru nyandumandamanda.*
geji nguru nya -n -du =manda-manda.
now hear 1ex:PL -INV -3SG =REDUP-MANDA'take'
'He always takes notice of us (exclusive).'

ba(a) 'emerge, come out'

=YANG

4.43 *Ba(a) ayangaja.*
Ba(a) a =yanga -ja
emerge Acl =YANG'go' -EMPH
He (a bat) comes out.

=MIRRA

4.44 *Baa mungamirrangi.*
ba(a) mu -nga =mirra -ngi
emerge M -1SG =MIRRA'go:to' -PAST
'I arrived/came out at (the house).' [WG97,fnb1]

balya 'go for, follow up'

=N

4.45 *Gɨra-? nyarrangga balyabalya nyaandi.*
Gɨra-? nyarr =yangga balya -balya nyaa =ndi
country 1ex:PL =YANG'go':IMM?? chase.up -chase.up 1ex:PL =N'be'

bolngga bugala gundala gawurrnangarri.
bolngga bu -gala gundala ga -wurr -wuna- ngarri.
salt-water crocodile Bcl -that eggs 3W -3PL/2PL =WUN -SUBORD

'We'd go looking (visit that country) to see if the salt-water crocodile had laid eggs.' [JK96,tx:2Bushlife]

=MA

4.46 *Balya maminga.*
balya ø =ma -mingga
visit 3SG =REDUP -MA'do':IMM
'She's leaving (to go visiting).'

4.47 *Balya baminga bumera.*
ba =ma -yanga bu =me -ra
follow IMP(2sg) =MA -toward 3B =say:PAST -1SG.OBL
"you should follow on hither", he said to me.'
'He told me (I should) go/to visit.'

=WU

4.48 *Bugalangurru balya bunganbinangga.*
bu -gala -ngurru balya bu -nga -n -bɨn -nangga
Bcl -that -maybe go 3B -1SG =WUN -WUN- IMM
'Maybe I'll go visit him there.'

=MANDA/=MɨNDA

4.49 *Balya namɨndangi balarlon-ngindalu.*
balya na -ø =mɨnda -ngi balarlon -ngindalu
follow 3Ncl -3B =MɨNDA'take' -PAST mortar -LOC

winya galaja diiwa bindi.
wi- nya gala -ja diiwa bi =ndi.
Wcl -this that -EM grinding 3B =N'be':PAST

'She brought it (dried leaves of bunu plant) to the mortar and ground it.'

4.3.2 Two 'compound' types or degrees of compounding

There are evidently degrees of 'knittedness' for different coverb-inflecting verb combinations in Wunambal. Some inflecting verb roots seem to act more or less as semi-independent verbs. For example, many =YANG 'go' compounds translate to English 'go x-ing' with 'x' as the coverb activity. My impression is that some complex

constructions with verbs that commonly appear as simple verbs such as =WAN 'fall' and =MANDA 'take', seem to be more loosely linked semantically than those with =N 'be' and =WU 'effect', for example. However, this may be simplistic as it is particular coverb-inflecting verb *combinations* that are more closely bound than others. In the case of *nguru* =MiNDA 'hear, listen' and *layi* =WAN 'like' the classifying function of the two verbs seems to be quite abstract. Another difficulty of course is that English translations can be misleading indicators in this discussion.

Note also that some coverbs are more nominal-like than others and thus lend themselves to being treated as arguments rather than as co-nuclear. It is difficult too for a non-speaker or speakers of other languages to make judgements about lexical/semantic linkedness. A broader survey and/or tests for tolerance of other elements, coverb occurrence with other roots, as well as a better analysis of morphosyntactic constraints might give some more formal evidence and further elucidate the classifying function of the inflecting verb. Possibly some kind of semantic metalanguage is also called for here.

There is some evidence from other Kimberley languages for distinguishing between complex verb types. McGregor (1996b) distinguished the classifying function of an inflecting verb in a complex construction from those where the coverb is essentially dependent on the inflecting verb, but admitted that it is difficult to draw a line between the two types.

Worrorra has noun classes, an inflecting verb template, and a complex verb construction very similar to that of Wunambal. Clendon (pers. comm. - forthcoming thesis) has also drawn attention to 'compound' verb constructions in Worrorra where the finite (inflecting) verb does not function as a classifier. He likens these to the serial verb construction, but following Foley and Van Valin (1984) describes these constructions (in morphosyntactic terms) as core co-subordinate clauses (as opposed to the nuclear co-ordinate clauses where the verb does function as a classifier, which also occur in Worrorra).

Clendon points out that in the non-classifier constructions the subject of the infinitive (coverb) in Worrorra can be the same as that of the inflecting verb (the prefixed S or A argument in my terms), or can be co-referential with the undergoer argument which may be a prefixed O argument, or an argument instantiated by the Oblique suffix (the 'reference point argument' in Clendon's terms). Furthermore, he states that the infinitive (i.e coverb) itself can be an argument of the verb.

Where two coverbs appear I have tended to treat one of them as an adverbal qualifier, as discussed in 3.1.4. In the following example, the suffixed form of the coverb *wul* 'lie' may lend support to this position:

4.50 *Wularru durru burrme*
Wul -arru durru burr =me
lie -?ASP put 3B:PL =MA:PAST
'They left (them) lying (their clothes: lying ?scattered on the ground).'

There are also situations in Wunambal reminiscent of the serial verb construction, in which two coverbs appear with only one inflecting verb but can be assumed to share an S argument and TAM, here I assume that the inflecting verb can be ellipsed.

Since most Wunambal inflecting verbs also act as simple verbs it is sometimes unclear whether a word appearing preverbally (i.e. in the coverb position) functions as a peripheral NP that is a non-core, non-verbally instantiated argument of the verb, a verbally cross-referenced core argument or simply a lexical coverb in a complex construction.

4.51 *Wari bungarrmandiya binya burrundi-burrundi*
wari bu -ngarr =manda -iya bi -nya burrundi-burrundi
smoke 3B:SG 1in:PL =MɨNDA -DES 3B -this hornet-hornet
'?Lets smoke them.'
'?Lets take smoke to them.'
'?Lets take them (the hornets) by smoke.'

In this sentence it is not immediately clear if it is the hornets or perhaps the smoke (or the smoking sticks) that are verbally indexed by the O prefix *bu-* (recall that collectives are indexed with B-class markers, and this is confirmed by the following NP *binya burrundi-burrundi* 'the hornets'.) The more likely candidate is the hornets, but even so *wari* 'smoke' could be a nominal of the unindexed, non-individuated, less salient type discussed in Chapter Three, including a quasi-instrumental. It is not uncommon for 'objects' to appear in the pre-verbal position and indeed this is probably a factor in the development of the construction under discussion.

The following sentence is much clearer, not only because the construction is recognizable (because it is common for nominals to collocate with =N in this way), but also because of the clear extra-linguistic and the previous discourse context with regard to a particular place where the fire under discussion actually burns/burnt.

4.52 *Nyɨnda wari winji.*
nyɨnda wari wi -nji
here smoke Wcl =N'be':PAST
'(The fire-W class) smokes here.'

4.3.3 =MA 'say; think; wish' clauses in Wunambal

=MA when used as a simple verb usually frames speech, thoughts or wishes and sometimes events. (Some coverbs are also used with =MA with reference to speech or other utterances, e.g. *yee* 'speak', *ngayag* 'ask' *ayi* 'hail'; here it is simplest to examine =MA in its simple verb context). Rumsey (1982; 1990) has discussed the semantics of =MA in Ungarinyin. As in Ungarinyin, no grammatical distinction is made between direct or indirect speech in Wunambal. Although the frame represents the speech, thought or wish as direct quotation, the sense is not that this is an <u>exact</u> replication of the speech, thought or wish. This is the only way to represent indirect speech, thought or wishes. Some Wunambal examples are:

4.53 (a) *"Girriyangga nyinda", burrme-nyarru.*
girri =yang -ga nyinda burr =me -nyarru
2PL =YANG -IMM here 3PL =MA'say':PAST-1EX:PL:OBL
'"You people come here", they said to us.'/ 'They told us to come here'

(b) *"Ay bunbu" gunaminggira.*
ay bun =bu gu -na =ming -gi -ra.
hail 3B:SG<2SG(IMP) =WU'effect' 2 -NEG =MA'say' -IMM -1SG:OBL
'Don't tell me to sing out for him.' [fnb96-V, p20; ct51]
'"(You) sing out for him." Don't tell me.'

4.54 *Aag luu ngurru ngirrame,*
Aag <u>luu</u> <u>ngurru</u> <u>ngirra</u> =<u>me</u>,
EXCL snake maybe 1SG =MA'think':PAST
'"Oh", <u>I thought, maybe it's a 'snake!'</u> / Oh, <u>I thought (it was/ might be a) snake</u>!'[5]

4.55 *[CASSETTE nguru anguminja] ngume.*
cassette nguru a -ngu =mindi -ya ngu =me
tape hear Acl -1SG =MiNDA'take' -DES 1SG =MA'want':PAST
'I wanted [to listen to that tape].'

More examples of the 'want' type appear in 4.5.3 (desirable mood). Note that this type can be distinguished from the others in that the verb of the framed 'wanted' material is always inflected with the desirable mood suffix *-(i)ya*. That is to say, the 'want' framing sense of =MA is polysemous with 'say' in Goddard and Wierzbicka's (1994:32) terms, and can be distinguished on morphosyntactic grounds. (See also Wierzbicka's (1994: 459-460) comments on a similar situation in Kalam for the verb *ag-* 'say; want' as described by Pawley in the same volume).

=MA 'do/happen' also occurs as a simple verb where the framed material/complement is again treated somewhat like a coverb.

Gala gu -nu =mingga.
that 2SG -NEG =MA'do':IMM
'Don't do that.'

Nginda gu =me.
something 2SG =MA'do'
'What happened to you.'

Grammatical aspects

In this construction the complement of =MA (i.e. the framed speech, thought or wish) is not verbally indexed. An addressee can be optionally suffixed as an oblique argument. McGregor (1994) and Rumsey (1994) discuss semantic and grammatical aspects of similar constructions in Gooniyandi and Bunuba, respectively. Rumsey refers to the notion of a transitivity continuum (citing Hopper and Thompson 1980), examining the different clause types in Bunuba in order to elucidate the grammatical status of the framed material.

Wunambal does not have ergative marked free nominals as in Bunuba and Gooniyandi, but as discussed in Chapter Three the optional occurrence of suffixed oblique objects and that of low individuated, low saliency NP 'objects' in clauses with monovalent verbs like X(coverb) =MA'do' is also relevant to the overall degree of transitivity of the =MA framing clauses.

4.4 Pronominal prefixes

Prefixes to the Wunambal inflecting verb include the markers of person, number and class of pronominal arguments, imperative mood and negative polarity (Order classes 3-7). The pronominal prefixes identify the person, number and class of S and O arguments and the person and number of A arguments. Although the same categories are indexed by pronominal prefix and free form pronouns, the prefixes are unlike free form pronouns in their ability to identify the S/O and A argument roles. This syntactic function of the pronominal prefix was demonstrated in Chapter three. Here the forms and functions of the prefixes are presented in more detail. The presence of '-*n*-' final O allomorphs in some parts of the bivalent prefix paradigm is claimed to represent a system of inverse hierarchy marking where objects are marked whenever they are equal to or higher than A on an animacy scale: 1/2 > 3B-class > A/ N/ M/ W-classes.

In negative clauses and in some other clauses an additional prefix-*nV*- 'NEG' is inserted between the pronominal prefix and the inflecting verb root for formally monovalent verbs, and either between O and A prefixes or after O-A prefixes (but preceding the A plural marker) for formally bivalent verbs. The placement of -*nV*- appears to be influenced by the presence or absence of inverse marking, but more importantly by whether A is first-person or second/third-person. This has implications for the preferred segmentation of morphemes.

Below I discuss the monovalent S prefixes first, then the bivalent O/A prefixes, with particular reference to the function of inverse -*n*- marking in Wunambal. The form, functions and placement of the NEGative prefix -*nV*- are then introduced. Presentation of the *ba*- IMPerative mood prefixes, the use of negative marking in combination with suffixed progressive TAM marker-*ga* 'right now (IMMediate)' for negative imperatives, and the use of monovalent prefixes on bivalent verbs to produce reflexive-reciprocal forms follow.

4.4.1 The monovalent prefixes

Bound pronominal prefixes to monovalent inflecting verbs can identify the person, number and noun class of the subject argument, as indicated in the table below:

Table 4.7: Pronominal prefixes: Monovalent

		Singular	Plural
1st	(inclusive)	*ngV*-	*ngarr(a)*-
1ex	(exclusive)		*nyarr(a)*-
2nd		*gV*-	*gVrr(a)*-
3rd		*bV*-	*bVrr(a)*-
	A-class	*a*-	
	W-class	*wV*-	
	M-class	*mV*-	
	N-class	*nV*-	

Three variant singular monovalent prefixes also appear in my corpus: 1) In the non-past only, the verb =MA 'say, do, think, want' sometimes takes a "zero" 3sg prefix, in place of *bu*-. This is the only place where I have recorded zero 3sg S form for a monovalent verb.

4.56 *Maminggan u.*
ø *=ma* *-mingga* *-nu*
3SG =REDUP -MA'do':IMM -2SG:OBL
'He's telling you.'

4.57 *Balya mamingga.*
balya *ø* *=mamingga*
visit 3SG =REDUP-MA'do':IMM
'She's leaving (to go visiting).'

2) An alternate W-class prefix *da-* is used with the non-past =N 'be' form only:

4.58 *Wanjimaya daanga.*
wanjimaya *da* *-anga*
good da =N:NON-PAST
'It's good.'

3) A couple of informants [BDj and LyK] both living at Kalumburu, but associated with the Southern Wunambal region, used first person singular *ngirra-* with the inflecting verb =MA only:

4.59 (a) *Guurl ngirramerri::::*
guurl *ngirra* *=me* *-rri::::*
school 1SG =MA'do':PAST -CONT
'I was attending school.' [BDj, KAL96, tx:Journey]

(b) *Galumburrugu, ada ngirrima(nda)/?ngirramingga*
Galumburru -gu *ada* *ngirri* *=ma(nda)* */ ?ngirra* *=mingga*
Kalumburu -PURP sit 1SG =MA-'away'/ 1SG =MA:IMM
'To Kalumburu, I'm living/staying (at Kalumburu) now.'
[LyK, KAL96, tx]

My primary informant (WG) identified *ngirra-* as 'seaside language' and associated it with the Wilawila language. Mr Goonak used it himself only once in a taped message prepared for speakers at Kalumburu, where the usage alternated with *ngu-*.

4.60 *Winya ngumaminggan urru*
wi -nya *ngu* *=ma* *-mingga* *-nurru*
W -this 1SG =REDUP -MA:IMM -2PL:OBL

galali		*ngirramingganurru*	
gala	*-li*	*ngirra*	*=mingga* *-nurru*
that	-MNR	1SG	=MA:IMM -2PL:OBL

'This is what I'm saying to you, I'm telling you like that.'

The monovalent plural prefix allomorphs *nga-*, *nya-*, *gi/gii-* and *bi/bii-* prefixes to 'past tense' or change of or resulting state/posture =N'be/become' where *-rr-* is ellided before N only was discussed in chapter 3.

Table 4.8: Monovalent prefix examples: =MA'do; say'[6]

	Singular		Plural	
			(inclusive)	
1	*ngu=ma-mingga*	'I'm saying'	*ngarra=ma*	'we say'
	(ngud) ngu=me-ngu	'I hit him'	*ngarr=me*	'we said'
1ex			(exclusive)	
			nyarra=ma	'we say'
			nyarr=me	'we said'
2	*gu=ma-mingga*	'you're saying'	*girra=ma*	'you (PL) say'
	(ngud) gu=me-ra	'you hit me'	*gurr=me*	'you (PL) said'
3B	*ø=ma-mingga*	'he's saying'	*(jarri) birra=ma*	'they dig
	(ngud) bu-me-ngu	'he hit him'	*burr=me*	'they said'
A class	*a=ma*	'it does'		
W class	*wu=mamingga*	'its saying'		
M class	*mu=ma*	'it does'		
N class	*nu=ma*	'it does'		

Morphophonemics and segmentation of morphemes

Singular and non-human class prefixes

The status of the final vowel of singular prefixes was mentioned in Chapter 1. The phonetic quality of the vowel differs for different verbs as illustrated by the first-person singular forms below; second and third person singular forms behave similarly.

Table 4.9: Prefix vowel alternation

V stem	Monovalent 1sg prefixed forms	
=N	*(ada) ng**a**=ngga (ng**i**ndi)*	'I'm sitting' ('I sat')
=YA(NGA)	*ng**i**=yangga*	'I'm going'
=WAN	*ng**u**=wanban.ga*	'I'm descending'
=MA	*ng**u**=mamingga*	'I'm saying'
=(N)BU	*ng**a**=(m)bunbun.ga ~*	'I'm hitting'
	*ng**a**=[m]b**i**ne-ngu*	'I killed it'

A combination of morphophonological, historical and dialectal analysis needs to be invoked to account fully for the phonetic variation in the singular prefix vowels. Capell (1972b) regarded these vowels as 'belonging' to the verb stem. In fact, he based a whole theory of prefixation (including prefixes on nominals) in the Northern Kimberley (i.e. Worrorran) languages on his "no prefixation without vowel initial stem" (1972b:56) principle, believing that the motivation for prefixing was at least partially phonotactic. Rumsey showed that for Ungarinyin at least, the opposite formulation of the rule applies, i.e. where roots do begin with vowels they are normally prefixed: "no initial vowel without prefixation" (1982:42).

Rumsey explored different ways of segmenting prefix and stem for prefixed nominal (bound) roots and established that for some, positing underlying consonant-initial stems provides a more consistent analysis. Rumsey also notes that in Ungarinyin "no (inflecting) verb begins in a stop consonant". I have analysed each of the (monovalent) Wunambal verb roots as consonant-initial. Because Wunambal has so few inflecting verbs, far fewer than Ungarinyin, it is more difficult to determine what, if any, phonological restrictions there may be on inflecting verb roots.

The final-vowel of the singular S prefixes could be regarded as epenthetic before consonant initial verb stems. This seems to have been the analysis of Vászolyi (1976), who cited the prefixes without a final vowel (but without suggesting that the vowel of prefixed forms belonged to the inflecting verb). I prefer to say that the underlying form has vowel V which is affected by regressive assimilation. The initial consonant of the verb root conditions the realization of the final prefix vowel:

Figure 4.2

V^7	>	i	/ _ ## palatal
	>	u	/ _ ## labial
	>	a/ɨ	/ _ ## elsewhere

(Notice though that in order to account for *ngambune-ngu* 'I killed (it)' the rule must apply to =(N)BU, before subsequent place of articulation assimilation of the root-initial consonant /n/ > [m] / _ /b/.)

The realization of the prefix vowel is also influenced by dialect. One of the speakers associated with the Southern Wunambal region has an invariable *a* final prefix for =MA i.e. *ngamamingga* in the 1st person. (According to Capell (1984), who argued that all prefixing stems were vowel initial (see earlier discussion), an *a* initial stem for =MA is associated with Wunambal and an *u* initial stem with Gamberre, Gunin and the Forrest River languages; however, many of the inflected verb examples he gives show *u* for Wunambal.) My other four Wunambal teachers use the *u*-final prefixes for =MA. Vászolyi (1976) also has *u* final prefixes for Wunambal =MA. Some of my sentence examples in other parts of the thesis may display the Southern *a*-final singular prefix forms for =MA.

In the main the same rules seem to apply to N and M and W gender classes. The W-class *wu-* prefix behaves as expected for *wV-* before =MA, and, as with the other prefixes, *u* > *i* / _ =YA. I have not recorded any *wa-* prefix forms. The alternate W-class prefix *da-* was recorded before =N (non-past, positive) only, and *wɨ-* or *wi-* occurs before the past tense form of =N (=NDI). I did not record any examples of the verbs =WAN or =(N)BU with W-class prefixes.

The A-class prefix *a-*, which does not conform to the CV structure of the other non-plural prefixes is always realized as /a/ e.g. a=MA 'it says' (or phonetic [ɛ:] for e.g. *a*=YA-*ngga* 'its (A-class) going' and X(coverb) a=N(DI) 'it (A-class) became X'.

Other *a* final prefixes, plural and *ba-*

The *final* vowel of the plural pronominal prefixes when it surfaces is usually *a*, although in the examples below some reduction of 'weak' vowel-glide-vowel and vowel-*rr*-vowel syllables has taken place. In the case of =MA, *a*-final non-past prefixes seem to be epenthetic. There may be a preference for an extra mora here. Past forms without a final prefix vowel (e.g. *nyarr=me* 'we said'), for example, have a phonetically long verb-final vowel (which conforms with *a* =MA+*yi* analysis for the past form =ME, see 4.5.2 past tense) .

The (2 sg) imperative prefix *ba-* does vary a little, [a ~ ɨ], but always contrasts with 3sg *bV-* . The maintenance of this contrast is assisted by the facts that =MA has an alternative zero third B-class singular form, and that =N has an irregular non-past form =NGA, unlike the other verbs.

Table 4.10: *-a* final prefixes

verb root	(2sg) Imperative *ba-*		Plural *-rr-* and *-rra*-final prefixes	
=N	*(ada) ba=ni!*	'sit/be seated'	*nyandi*	'we were/became...'
			giindi	'you were/became..'
			biindi	'they were/became..'
=YA(N)	*ba=ya!*	'go'	*nyarrangga*	'we're going'
			ngarrangga	'we're going'
			girrangga	'you're going'
			birrangga	'they're going'
=WA(N)	*yarrij ?ba=wa*	'go	*yarrij ?birranban*	
	down!'		*yarrij ?birrane*	'they went down'
	/ ?ba=ra'			
=MA(/MING)	*(yee) ba=ma!/*		*minja nyarra=ma*	'we (ex) (can) eat'
	bɨ=ma	'speak!	*ngarr=me*	'we said'
			burr=me / bɨrr=me	'they said'
=(N)BU	?		*nyambɨne-ngu*	'we speared/ killed it'

Plural prefixes

The category plural applies only to first and second persons, and to the human B-class third person. Except in the case of 1ex:PL plural, morphemes appear to be formed by affixing *-rr-* to the singular forms, but for the first person forms at least these are best regarded as fused because the */a/* preceding '*rr*' there is invariant. Although this is to be expected before a non-labial, non-palatal segment, the initial vowel of plural *second and third person* vowels do vary immediately before *-rr*. (Plural first person vowel quality varies only when *-rr* is elided and then only as phonologically expected for the /a/ phoneme; before present tense =N /a/ > [ɛː] e.g. *ngarr(a)* =N+*nga* > [ŋɛːŋʌ] and *nyarr(a)* =N+*nga*: [ɲɛːŋʌ].). I take this to indicate that both first person inclusive and exclusive plural monovalent prefixes are synchronically fused forms. It also provides some evidence that the underlying vowel for 1SG *ngV-* is /a/.

Second and third person prefixes do show some variation in vowel quality [u ~ ɨ ~ i] (in fact the vowel is sometimes extremely short) immediately preceding *-rr*, typical of variation at a morpheme boundary before apical consonants (as well as in some words that are not known to contain a morpheme boundary). For consistency, I will also regard second and third person monovalent prefixes as unitary forms, although for these forms there is no reason not to regard *-rr(a)-* as a separate plural prefix. The fact that, unlike some bivalent A prefixes, the monovalent subject prefixes (and O prefixes, see below) are never separated from the person/class forms renders it unnecessary to treat them separately in interlinear glosses.

Separate plural allomorphs for =N yielding present tense plural prefixed forms *ngenga* (vs. *nganga* singular), *nyenga*, *gaanga*, *baanga* and past tense foms: *ngendi/ngaandi, nyandi/nyaandi, gindi/giindi, bindi/biindi* have been discussed earlier. I have charted them below for ease of reference as the plural prefixed =N forms are otherwise difficult to distinguish from plural prefixed =YANG forms in the present (habitual and immediate) 'tense'.

Table 4.11: =N'be/become' irregular forms

	singular present (habitual)	past	plural present	past
1ex	*nganga*	*ngɨndi*	*nyenga*	*nyendi*
1in			*ngenga*	*ngendi*
2	*ganga*	*gɨndi*	*?gaanga*	*giindi*
3B	*banga*	*bɨndi*	*ba(a)nga*	*biindi*
Acl	*anga*	*endi*		
Ncl	*nanga*	*nɨndi*		
Wcl	*danga*	*wɨndi*		
Mcl	*manga*	*mɨndi*		

4.4.2 Bivalent prefixes

Bivalent pronominal prefixes code O and A arguments. Most bivalent prefixes are segmentable into separate O and A prefixes. The invariant O-A order of the morphemes identifies O and A arguments respectively. The O and A prefix forms each resemble the S prefixes (without the final vowel for plural forms) of monovalent verbs, except that (1) there are "zero" A person allomorphs in some parts of the paradigm (2) some O forms have a final *-n-* segment, and (3) a portmanteau 1>2 form *jan-* occurs and for 3SGB<3B

there is an O form *an-*. The first point is discussed immediately below. For this discussion it may be necessary to also refer to the chart in Appendix 2 illustrating the complete set of transitive prefix combinations or to some of the examples that appear with the discussion in the following section, 4.3.4 inverse alignment, where the other three variations are discussed.

Table 4.12: Segmented O and A forms

	S forms	O forms	A forms
1sg	*ngV-*	*ngun-, ?jan-*	*-nga, -ø*
1ex	*nyarr-*	*nyan-*	*-nyarr, ?-ø*
1in	*ngarr-*	*ngan-*	*-ngarr, ?-nga*
2sg	*gɨ-*	*gun-*	*-du, ø*
2pl	*gɨ-rr*	*gun-*	*-bu-rr, -gu-rr, -ø-rr*
3sg	*bɨ*	*bV-, an-, bun-*	*-du, ø*
3pl	*bɨ-rr*	*bɨ-rr-, ?bɨ-, ?ban-, bun-*	*bɨ-rr, -wu-rr*
A		*a-, an*	-
N		*nV, nVn*	-
W		*wV, ga, wVn*	-
M		*mV, mVn*	-

Both zero A forms and second person *bu*, *du* and *gu*, and third person *bu*, *du*, zero alternation are at least partially explained by the fact that second-person and third-person B-class A forms are susceptible to phonological changes. For example, both second person *-gu-* and third person *-bu-* > ø after vowel-final O prefixes (presumably g/b > w and VwV > V as occurs elsewhere; see sentences numbers 4.62 to 4.64 for examples), but surface after the consonant-final O allomorphs (sentences examples 4.66 to 4.69).. Where third person *-bu-* alternates between *-bu-* and *-du-*, and second person *-gu-* also alternates between *-bu-* and *-du-* after-*n-*, but is realized as *-gu-* immediately following plural bVrr-. (This is the *only* combination where [*-gu-*] surfaces as an A prefix)[8]. This leads to neutralization in those parts of the paradigm where 2/3-SG and 2/3-PL A's combine with first person Os, except where the unique 2(A):1(O) *jan-* form is used.

Having offered this phonological explanation for neutralization and the occurrence of zero surface forms, however, it needs to be noted that Wunambal is not the only language where neutralization of certain person and/or number in some O/S combinations occurs, suggesting that phonological factors alone are not a sufficient explanation. Mayali is an example from a more distant Australian language where 2/3 A's are also neutralized when O is first person. In Mayali the distinction between second and third person non-singular

subjects is neutralized when they are combined with first person objects in the divalent prefixes (Evans 1991: 200). In Wunambal, second and third person A neutralization also occurs in combinations with *singular* 2/3 A's (but not plural 2/3 A's) with non-B class Os.

Phonological explanations do not account for zero first person A (and possibly 1ex:PL A's as well) forms that occur with the *n*-final second person Os. In fact, this is a dialectal variant. I have consistently recorded *gun-ø-* here whereas Vasse recorded *gu-nga-*. However *gu-nga* was also used by some of the speakers I recorded at Kalumburu. Capell recorded *gung* - in other Wunambalic languages.

4.61	*Wuguli*	*mara*	*gunbiya.*				
	wuguli	*mara*	*gu*	*-n*	*-ø*	*=WU*	*-(i)ya*
	tomorrow	find	2SG	-INV	-1SG	=WU	-DES
	'I'll see you tomorrow.'						

4.4.3 Inverse alignment

The contrast between O forms that are identical to S forms and *n*-final O forms can be accounted for by a system of inverse marking. Wherever O is higher than or equal to A on a hierarchical "animacy" scale:

1/2 > 3B > 3 non-B-class

then *-n-* appears. Apart from singling out the human B-class the Wunambal hierarchy is not sensitive to, or does not discriminate between, noun classes.

In the table below illustrating *-n* alternation for different O-A combinations, only singular forms are presented for simplicity. Plural forms follow a similar pattern, although as elsewhere plural *-rr* or *-rra* is elided before *-n*. (The complete range of O and A forms including plurals are presented in Tables 1 and 2 in the Appendix). The shaded areas indicate forms with inverse *-n* marking and display the hierarchical pattern. The unshaded areas display unmarked 'direct' relations.

Table 4.13: Bivalent prefixes (Non-plural forms): Inverse and direct
(shaded area indicates inverse marked relations, unshaded direct relations; the bracketed forms were recorded by Vasse)

Objects>	1sg	2sg	3sg (B)	A class	N class	W class	M class
	me	you	him/her	it	it	it	it
1sg A		*gu-n-*	*bu-nga*	*a-nga*	*nu-nga*	*wu-nga*	*mu-nga*
I - *nga*		*(gu-nga)*					
2sg A	*jan-*		*bu-*	*a-*	*(nu-)*	*wu-*	*mu-*
You - ø							
3sg A	*ngu-n-du*	*gu-n-du*	*a-n-du*	*a-*	*na-*	*ga-*	*ma-*
(s)he - *du*, -ø				*(a-wu)*	*(na-wu)*	*ga-wu*	*(ma-wu)*
3 other A	*ngu-n-*	*(gu-n-)*	*bɨ-n-*	*a-n-*	*(nu-n)-*	*wu-n-*	*(mu-n)-*
it - ø							

The following examples illustrate unmarked direct relations in Wunambal:

Direct relations:

M(O)<1SG(A) examples:

4.62 (a) *Baa* *mungamirrangi.*
Baa *mu* *-nga* *=mirra* *-ngi*
emerge 3M -1SG =MIRRA'go.to' -PAST
'I arrived at /came out at (the house).' [WG?97/21:2]

(b) *Wandi(j)* *mungone.*
wandij *mu* *-nga* *=WU(N)* *-ne*
make M(O) -1SG =WU(N)'effect' -PAST
'I built it (the house).'

3SG<2SG:

4.63 *Bumindimindiga* *gayanba*
bu -ø *=mindi* *-mindi* *-ga* *gayanba*
3BSG -2SG =REDUP -MɨNDA -IMM over.there
'You're taking her over there.'

Mclass<2SG:

4.64 (a) *Baa* *mumirrangi.*
Ba: *mu -ø* *=mirra* *-ngi*
emerge 3M -2SG/3SG =MIRRA'go.to' -PAST
'You arrived (at the house).'

Nclass<3BSG:

4.65 *Jurrug* *namandangi.*
na -ø *=manda* *-ngi*
carry 3N -3B =MiNDA'go.to' -PAST
'She carried it (an N class coolamon or the ground bunu leaves in the coolamon (also N-class).'

Inverse alignment operates as a grammatical system in a number of the prefixing languages of Northern Australia. Heath discusses inverse alignment in Ngandi (Heath 1976, 1978 and 1985) and in Nunggubuyu (1976, 1984). (In Heath 1976 he also suggested that Ngarinyin has an *-n* accusative marker). Little attention has been given to the phenomenon in Worrorran languages. Rumsey (1982) alludes to the situation only indirectly, simply stating that if one were to segment the Ungarinyin prefixes, allomorphs for some of the person/number categories would need to be set up and that the system for Ungarinyin is "partly 'global'", citing Silverstein (1976:134ff). More recently Clendon (1994, forthcoming) has drawn attention to inverse marking in Worrorra. E. Knight has also proposed a system of inverse marking for Bunuba (1999; pers. comm.). This suggests that the occurrence of inverse *-n* marking may be more widespread in non-Pama-Nyungan Kimberley languages.

McGregor (1993), on the other hand, describes Wunambal's close relative Kwini as having a nominative-accusative system based on *-n* 'accusative' marking, except that the *-n* final O prefixes occur only where absolutely necessary, that is, in prefix combinations which have zero A forms. This is clearly not the case for Wunambal where, as illustrated in the direct examples above, zero A forms occur for second and third person non-plural A's, in combination with Os that are not *-n* marked. While it could be argued that *n* marking in Wunambal is simply an accusative marker which is obscured by the nasal-initial consonant of following first-person A prefixes, comparison with the O forms for combinations with second-person A forms (including plural forms) do not support this interpretation. The *-n* final O allomorphs of Wunambal instead mark inverse alignment.

Inverse relations:

1SG<3SG:

4.66 (a) *ngundumirriyanga.*
ngu -n -du mirri -yanga
1SG -INV -3SG =MIRRA'go.to' -toward
'He can come to me / let him come to me.'

(b) *Liny ngundubin.ga.*
liny ngu -n -du wun -bin ga
look 1SG -INV -3B =REDUP -WU(N) -IMM
'He's looking at me.'

2SG<3SG:

4.67 *Wala gundumirrengga.*
wala gu -n -du -mirre -ngga
cry 2SG -INV -3SG =REDUP -MIRRA'go.to' -IMM
'She's crying for you.'

3SG<3SG:

4.68 (a) *Ngayag andumirimiringga.*
ngayag a -n -du =miri -miri -ngga
ask 3B(O) -INV -3B =REDUP -MiRA'grab' -IMM
'She's asking him.' [WG98/1:]

(b) *Mara andubun*
mara a -n -du =bun
find 3B -INV -3BSG =REDUP:WU(N)'effect' ?
'He finds (catches sight) of her' [WG96, tx:Wijingarre]

2SG<1SG examples:

4.69 (a) *Baa gunmirrangi.*
baa gu -n -ø =mirra -ngi
emerge 2SG(O) -INV -1SG =MIRRA'go.to' -PAST
'I came out to you.'

(b) *mara gunbune*
mara gu -n -ø =bu -ne
find 2SG(O) -INV -1SG =WU'effect' -PAST
'I saw you.'

Inverse relations (which includes equal or equipollent grammatical relations in Wunambal) are thus highlighted or marked by *-n* in the bivalent prefix series, whereas direct relations are unmarked. This accords with the other, more general, morphosyntactic tendency discussed in Chapter 3 i.e. that OBLIQUE argument suffixing

prevails for first, second and third person B-class singular and plural, but not for the various other noun classes, which are less individuated and lower in potential saliency, agency or topicality. Rather than operating on a nominative-accusative system as has apparently previously been assumed for many other non-Pama Nyungan prefixing languages (see e.g. Donahue's 1998 reference to the broader literature and Blake's assertion that "there is clear evidence in these cross-referencing pronoun systems of accusative marking" (1979: 343) or that an accusative system underlies bound pronouns in non-Pama-Nyungan languages where A, S and O forms are obscured by morphophonemic constraints, hierarchical rules and/or person number neutralization rules etc, 1979:369)[9], Wunambal verb prefixes, like those of Worrorra and Nunggubuyu, reveal a rigid morphologically marked inverse system which is synchronically relevant to the marking of Wunambal grammatical relations. This obligatory type of inverse marking or 'alignment' is distinguished from pragmatic marking (Gildea 1994).

Functions of inverse marking in Wunambal

The function of inverse alignment in other languages has been said to differentiate O and A (Heath 1985, Gildea 1994, Dunne 1999). In Wunambal (and in Worrorra and Ungarinyin) it is O-A morpheme order that has this function. With the partial exception of the portmanteau *jan-* 2SG>1SG there are no zero O forms in Wunambal so *-n* always follows the O prefix. The *primary* function of inverse marking in Wunambal is simply to draw attention to the O whenever it is equal to or higher than A on the hierarchical scale. Inverse marking does, however, play a role in one part of the paradigm in disambiguating between zero realized (2/3B) A's and unmarked 3(A, N, W or M) class A's when objects are third person, by establishing whether or not the person and class of the A is "lower" on the hierarchy than O. In example (a), below the B-class A is higher on the hierarchy than an A-class O and we find direct relations. In (b) inverse marking signals that the animacy/saliency of the A and O are on a par.

4.70 (a) *Durru awune.*

	a-	*ø*	*=wu*	*-ne*
put	3Acl(O)	-3B(A)	=WU(N)'effect'	-PAST

'He put it down.'

(b) *Baa anmirrangi.*

baa	*a-*	*n-*	*(ø)*	*=mirra*	*-ngi*
emerge	3Acl(O)	-INV	-(3Acl(A))	=MIRRA'go.to'	-PAST

'He (A class 'it') came to him (A class 'it') i.e. non-human wanjina to the non-human owl).'

Note that in the case of a W-class O the choice of *ga-* vs *wu-* allomorphs disambiguate between third-person B-class A's (as in the (a) example below) and 2SG A's (as in the (b) example below):

4.71 (a) *Marrirri dina gambin.ga.*
ga =(wu)n-wun -ga
parrot hold 3W =REDUP:WU(N) -IMM
'He's holding a parrot.'

(b) *(Naa) dina wumbun.ga.*
(Naa) dina wu -ø =(wu)n-wun -ga
(You) hold 3W -2SG =REDUP:WU(N) -IMM
'You are holding it (a W class parrot).'

4.72 (a) *Gamindimindiga.*
ga -ø =mindi-mindi -ga
3W -3B =REDUP:'take' -IMM
'She's bringing it.'

(b) *Wumanda.*
wu -ø =manda
3W -2SG ='take'
'You can take it.'

For third-person non B-class A's, however *-n* is needed to distinguish between a 2SG A argument (as in example (a) below) and a third-person non-B-class A argument (b example) with a W class object. Unfortunately this point is somewhat obscured in (a) below. Owing to reduplication of the verb root =WU(N)'effect' in the present form, and subsequent elision of the initial glide-vowel CV, an '-n' initial sequence *=nbun* immediately follows the prefix.

4.73 (a) *(Naa) dina wumbun.ga.*
(Naa) dina wu -ø =(wu)n-bun -ga
(You) hold 3W -2SG =REDUP:WU(N) -IMM
'You are holding it (a W class parrot).'

(b) *Wirarr buju wunbune-wurru.*
Wirarr buju wu -n =bu(n) -ne -wurru
?devils finish 3W -INV =WU(N) -PAST -3PL:OBL
'It (devils, malevolent forces) wiped it (the place) out on them.'

Despite the role of inverse marking in disambiguating between possible A arguments in these cases, there remain *-n*-marked combinations where 2/3B are not distinguished (cf. 4.4.2 above). They are shown in Figure 4.3

Figure 4.3

2 < 2SG/3BSG *gundu-*;
2 < 2PL/3B:PL *gunbɨrr-*,
1SG < 2SG/3B:SG *ngundu-* and
1SG < 2 < 2PL/3B:PL *ngunbɨrr-*

Conversely, there are also direct bivalent prefixes without *n*-marking, which are ambiguous. Namely:

Figure 4.4

(A-class Object with either a zero 2SG A or a zero 3SG A) *a-ø-*

In some other Australian languages[10] with inverse alignment there is a tendency for pronominal elements that are higher on the hierarchy (whether A or O) to precede other prefixes (Heath, 1985: 92, Knight pers. comm. for Bunuba, Kofod 1978). Blake (1987: 106) speaking of bound pronouns in general comments, "It is common for first and second person forms to precede third person forms irrespective of which is A and which is O". No such tendency can be noted for Wunambal. However the unique form *jan-* is open to interpretation. [I have recorded a single instance of a possible 2(O)-1exPL(A) prefix *janya-* which supports treating *ja-* as second person allomorph and not a first-person one.] Comparison with Ungarinyin and also the Jarragan languages which have second person *ja*-allomorphs (in Jarragan languages *ja-* is the second person 'middle' and A prefix. Frances Kofod pers. comm.) suggests that *ja-* was originally a second-person form, and thus for 2>1SG only there may be a preference for a second-person singular A to occur first with *-n* marking but zero O marking. Note that this is not the case for second person plural A's in Wunambal, which follow the normal O-n-A pattern as in 4.74 (b and c) below. Language-internally, *jan-* must be regarded as a unique portmanteau 2SG(A):1SG(O) form.

4.74 (a) *Nguru janmandangi.*

nguru	*jan*	*=manda*	*-ngi*
hear	2SG>1SG	=MɨNDA'take'	-PAST

'You heard me.' [PBWG98/1/2]

(b) *Ngunburrmandangi.*

ngu	*-n*	*-bɨ*	*-rr*	*=manda*	*-ngi*
1SG	-INV	-2/3	-PL	=MɨNDA'take'	-PAST

'You (plural) took me.' [Vasse]

(c) *Wuguli ngunbirr(iya)mirringa-miya.*[11]
wuguli *ngu* *-n* *-bɨ* *-rr* *-(iya)* *=mirra* *-yanga* *-miya*
morning 1SG -INV -2 -PL ?DES =MIRRA'go.to' -toward -DUAL
'You two can come to me tomorrow.' [PB, 97fnb 20, p1]

Summary and further comments on O

The O prefixes occur wherever the O argument is equal to or higher than the A argument in 'animacy'. This includes all the first and second person O forms and just those third-person B-class O forms that are acted on by third-person A's of any class[12]. We already noted that third-person B-class objects have a unique allomorph *an-* when acted on by a third-person B-class A. There is no confusion with A-class objects because A-class objects do not take *-n* when acted on by a third-person B-class A, nor is an A surface form realized. The *an-* allomorph for an A-class object is restricted to combinations with non-B-class third-person A's (imperatives are usually *ban-*); where A is either not marked or realized by ø. The *-n* final forms for the portmanteau 1>2 prefix *jan-* and the third-person non-B-class Os resemble bivalent imperative prefixes (see Imperatives 4.4.5). The *ga-* variant for W-class objects occurs only when A is a third-person B-class.

Lack of overt *-rr* plural marking for inverse marked Os can be accounted for by lenition. The sequence V-rr-V > V-y-V > V. For example when 1ex:PL *nyarra-* is followed by the inverse marker *nyarran-* > *nyayan-* > *nyan-* . Another possible interpretation is that /rr/ > [ø] / _ ## n, that is *nyarr+n* > *nyan* as discussed elsewhere.

4.4.4 The negative series prefixes

The negative morpheme *-nV--* is used in all negative verbal clauses, sometimes with, and sometimes without, NEG particles *nguwa* 'never' or *gajin* 'cannot'. *-nV--* also appears without a modal particle, in which case it sometimes translates as 'might' (in the hypothetical sense) when referring to an undesirable, unwanted, or unintended outcome or a hypothetical consequence, comparable to an evitative:

4.75 (a) *Ngunuwan ngurru.*
ngu *-nu* *=wan* *ngurru*
1SG -NEG =WAN'fall' maybe
'I might fall.'

(b) *Rulug baya ngɨnambɨn-nu.*
rulug *ba* *=ya* *ngɨ* *-na* *-mbɨn* *-nu*
move IMP =YA'go' 1SG -NEG -MBU'hit' -2SGOBL
'Shift, (so) I don't/can't spear you'
'Move away, I might spear you (by mistake you know).'

Sometimes they are simply translated as though *nguwa* 'negative' or *gajin* 'cannot' were ellipsed:

4.76 (a) *Nguru ngɨnin.*
nguru ngɨ -ni =n
listen 1SG -NEG =N
'I can't hear.'

(b) *Anangumɨnda.*
a -na -ngu =mɨnda
A(O) -NEG -1SG =take
'I can't take it (for example, the horse).' [WG97/22:5]

Vaszolyi labelled this prefix negative-conditional (conditional sentence examples are not included here because the ones recorded were ambiguous, the condition clause was also negative). Capell referred to it as the irrealis. An equivalent morpheme in Ungarinyin is also labelled irrealis by Rumsey, but mostly in order to maintain continuity with the languages described by Capell. I do not use the term irrealis (1) because a clear negative meaning is implied in most cases where *-nV-* is used and (2) because the unmarked potential and *-ya* suffixed 'wish/desire' moods are not marked by *-nV-* except to deny potential or declare undesirable. The irrealis (believed by the speaker to be 'untrue or in doubt') force of *-nV-* has more in common with changing polarity, i.e. negation of situations in the past, negation of potential situations and of desirable situations. In the past it refers to events that did not occur.

4.77 *Ada gunumi.*
ada gu -nu =mi
sit 2SG -NEG =MA'do':NEG
'You haven't sat down.' i.e 'You ought to sit down.'

In the non-past *-nV-* is used for situations that do not (generically) or cannot occur (as in the examples above) or are undesirable potential occurrences (see TAM-DESirable mood).

Morphophonology of *-nV-*

The identity of the V appears to be determined by the vowel of the preceding prefix. Usually the vowel of *-nV-* is the same as the vowel of the positive prefixes. Progressive vowel harmony would appear to operate here (or the same vowel rules apply to *-nV-* as to the person/class prefix).[13]

Table 4.14: *-nV-* Vowel harmony

Example	Translation[14]
nguru ngɨ-nɨ =n hear 1SG-NEG=N'be'[15]	'I can't hear'
gadjin.ga ngi-ni =yanda ?cannot 1SG-NEG=YA-'away'	'I can't go off'
ngu-nu =wan ngurru 1SG-NEG=WA(N)'fall' maybe	?'I might fall'
nguwa ngud ngu-nu=ma-nu NEG hit 1sg-NEG=MA'do'-2SG:OBL	'I won't hit you'
ngɨ-na=mban-nu 1SG-NEG-MBU'hit'-2SG:OBL	'I ?(might /won't /can't) hit you'

Order slots for *-nV-*

On monovalent inflecting verbs the negative *-nV-* morpheme is always inserted between the S prefix and the verb stem, as in the examples above. A glance at the negative bivalent pronominal prefixes in Appendix 3 demonstrates that the bivalent series is more complex. For the first-person A, O-A prefixes *-nV-* is inserted between O and A prefixes.

4.78 *Ananguminda.*
a- na -ngu =minda
A(O) -NEG -1SG =take
'I can't take it (for example, the horse).' [WG97/22:5]

For inverse marked O-A prefixes *-nV-* is affixed between the O-A prefixes and the verb stem:

4.79 (a) *Nguwa nguru ngunbinuminde.*
nguwa nguru ngu -n -bV -nu =MiNDA -yi
NEG hear 1SG -INV -3SG -NEG =MiNDA'take' -PAST
'He didn't hear/listen to me (e.g. respond to /take notice of me).' [WG]

(b) *Nguwa nguru gunuminde.*
nguwa nguru gu -n -nu -ø =MiNDA'take' -PAST
NEG hear 2SG -INV -1SG -NEG =MiNDA'take' -PAST
'I didn't hear you.' / (Speaker/Kriol trans: "I never hear you.")

For *inverse marked prefixes* with plural second and third person A's however, *-nV-* 'NEG' is inserted between the A prefix and its plural marker, regularly appearing before the *rr* final segment of the plural A, O-n-A forms.[16]

4.80 *Gunbunurrmiṅda.*
gu -n -bu -nu -rr =miṅda
2(O) -INV -3B(A) -NEG -PL(A) =MiṄDA'take'
'They can't take you (singular and plural).'

4.81 *Bunurrmiṅda.*
bu -ø -nu -rr =miṅda
3SG(O) -2(A) -NEG -PL(A) =MiṄDA'take'
'You can't take them.'

This suggests that the inverse marked O-A forms are treated as fused forms for the purposes of *-nV-* NEG marking but that the A plural marker remains a separate prefix, or at least a possible insertion point for *-nV-*. The phonological motivation could be to retain the integrity of *n*-marking which would be obscured if *-nV-* were to appear after the O forms. However, the 3PL<2PL form *burr-gu-rr* recorded by Vasse does not involve *n*-marking and it is also treated as though *burrgu-* were fused for the purposes of *-nV-* marking. (In other words negative-*nV-* always follows second and third person A forms, regardless of inverse *n-* marking).

4.82 *Burrgunurrmanda.*
burr -gu -nu -rr =manda
3PL(O) -2(A) -NEG -PL(A) =MiṄDA
'You (plural) can't take her.'

There are a number of ways in which prefix 'slot' structure can be formulated. Firstly, if we treat inverse *-n* as having a separate slot as in Figure 4.5 below rather than as occurring inside fused (O:inv:A) forms

Figure 4.5

3	O/S
4	INVERSE *-n-*, (NEG *-nV-*)
5	A
6	(NEG *-nV-*)
7	(A)PL

Whenever 5 is 2/3 person, then *-nV-* is marked at 6. I have already decided against segmenting S/O plural markers and believe *-n* marking to be highly significant, so the first formulation of verb structure is the one I use for interlinear segmentation.

If, however, we were to separate *-n* into a separate slot, and segment O/S plural markers from O/S person markers, the prefix slot structure would be expanded to:

Figure 4.6

3 O/S
4 PL (of O/S)
5 INVERSE *-n*, (NEG *-nV-*)
6 A
7 (NEG *-nV-*)
8 (A)PL

If 6 is 2/3B person, neg *-nV-* goes to 7.

A third possibility is to treat inverse marked O-n-A(2/3) as fused and we then treat each other prefix which can have another element inserted between it and a following morpheme, as occupying a separate slot in verb structure, then the following prefix order slots apply:

Figure 4.7

3 O / (O:A) /(O:inv:A)/S slot
4 NEG slot
5 A 'person' slot
6 A (PL) # slot

In this formulation S and O plurals are treated as fused (person/class +number forms), but the first-person A forms occupy a separate 'slot', slot 5. For *-nV-* 'NEG' marked forms, slots 3, 4 and 5 are filled for first person A bivalent prefixes; 3 and 4 are filled for monovalent inflecting verbs and 2/3 SG singular A 'fused' bivalent prefixes. Slots 3, 4 and 6 are filled for fused 2/3 PL A's. O-2/3PL(A) + (-NEG-) + (-PL(A)-).

4.4.5 Imperatives

4.4.5.1 *ba-* prefixing on monovalent verbs

There is one more modal category that is marked by prefixation, the positive imperative *ba-* [17]. *Ba-* is mainly found prefixed to a bare monovalent root, without any other pronominal prefixing (replacing slots 3 and 4) and without tense/aspect/mood suffixes (directionals are suffixed), where it is normally understood to be a 2SG command:

4.83 *Ada bama!*
ada ba =ma!
sit IMP =MA'do'
'Sit!'

Other 2SG command forms for monovalent inflecting verbs appeared in table 4.10.

The second-person *plural* prefix for commands with a monovalent inflecting verb is a normal non-negative prefix:

4.84 *Ada girrama.*
ada girra =ma
sit 2PL =MA'do'
'You (all) sit'.

There is thus no contrast with 'you (all) can sit / can you sit?' (see unmarked potential, generic mood below).

4.4.5.2 Bivalent imperatives

Some commands using bivalent inflecting verbs appear to be normal positive prefixes (e.g. 1<2 *jan-*):

4.85 *Janmanda.*
jan =manda
1SG<2SG ='take'
'Take me! / Can you take me?'

However the B<2SG *bɨn-* and A<2SG *ban-* forms may be unique to 2SG imperatives. (*Ban-* fits *Ba-* (IMP)+ *an-* (3Acl(<nonB).

4.86 *Bumban bɨnmɨra.*
bumban bɨn =mɨra
slap IMP:3B(O)<2SG =MɨRA'grab'
'Slap him!'

4.87 *Jebarra bumban banmɨra!*
jebarra bumban ban =mɨra!
?ba -an =MɨRA
emu slap IMP -3A(O)<2SG =MɨRA'grab'
'Hit it!' (for example, an [A class] emu)

The remaining W<2SG, M<2SG and N<2SG imperative prefixes are identical to the various inverse marked 3(O)-inverse-(non-human B class A) prefix forms discussed in 4.4.3 (see also Table 4.13).

4.88 (a) *Bumban munmɨra.*
bumban mun =mɨra
slap IMP:3M(O)<2sg =MɨRA'grab'
'Hit/slap it [M class]!'

(b) *Bumban nunmɨra.*
bumban nun =mɨra
slap IMP:3N(O)<2sg =MɨRA'grab'
'Hit/slap it [W class]!'

(c) *Bumban wɨnmɨra.*
bumban wɨn =mɨra
slap IMP:3W(O)<2sg =MɨRA'grab'
'Hit/slap it [W class]!' [PB, WG]

Assuming a second person subject for imperatives the *-n* final prefixes for bivalent imperatives are not consistent with the analysis of '*-n*' as a marker of inverse alignment as I have done for non-imperatives. The *-n-* final element of the imperatives could however, and in this case only, be regarded as a third person accusative marker where A is unrealized, as McGregor (1993:45) has proposed for Kwini.[18]

4.4.5.3 Negative imperatives

Negative imperatives are formed with normal *-nV-* negative prefixed second person subject S, O-A or O/A prefixes, with *-ga* 'IMMediate, right now' suffixed to a bare stem. No negative particle is used in negative commands but the *-nV-* prefix is always employed.

The forms also differ from other negative forms and from the IMMediate (See 4.4) aspect category by suffixing *-ga* to a bare root, rather than to a reduplicated root. All the negative commands recorded to date suffix *-ga* to a bare root stem. Prefixes are either 2SG *gV-* or 2PL *gɨrr-* + *-nV-*. In other words the negative imperatives closely resemble forms for 'you can't x/never x.... '. Only the use of the *-ga* suffix and lack of modal particle distinguish negative imperatives from the negative potential forms discussed in 4.5.1.

4.89 *Ada gunumingga.*
ada gu -nu -mingga
sit 2SG -NEG =MA'do':IMM
'Don't sit down!'

4.90 *Bunumirringga.*
bu -nu -mirringga
3SG<2SG -NEG ='go.to':IMM
'Don't go to him!'

The use of *-ga* may add some urgency to the warning; recall bare (i.e. without an accompanying negative modal particle) *-nV-* forms alone are sometimes translated as 'might'. In Ungarinyin, which has a similar construction, the continuative marker *-rri* is used in place of *-ga.*

4.4.6 Reflexives

Monovalent reflexive-reciprocal forms are formed simply by prefixing a monovalent pronoun/number/class prefix to what is normally a bivalent stem. Those bivalent verbs that suffix *-ngi* for past tense (see tense/aspect/mood below) suffix *-ne* when they take monovalent (reflexive) prefixes.

4.91 *Nyarrmandane.*
nyarr =manda -ne
1ex:PL =MɨNDA'take' -RFL:PAST
'We took ourselves (across the water).'

4.92 *Jilibud nyarrmɨrane.*
jilibud nyarr =mɨra -ne
gather 1ex:PL =MɨRA -RFL:PAST
'We gathered together (with people from another place).'

4.93 *Dɨrr ngune.*
dɨrr ngV ={WU} -ne
cut 1SG =WU'effect' -PAST
'I cut(past) myself.' [WG96]

4.5 Tense, aspect and mood

Apart from *-nV-* and *ba-* prefixing tense, aspect and mood are always marked either by the form of the inflecting verb root itself and/or by suffixes. Five tense-aspect-mood types can be identified: potential (unmarked), PAST (perfective), DESirable, HABitual and IMMediate. Only the potential, past and desirable tense/mode categories have negative *-nV-* marked equivalents. Aspectual suffix *-rri* CONTinuative is used with each category, except for the non-past habitual and immediate where *-ga* has a similar though distinct function.

4.5.1 Potential

Potential, generic events or situations which are not actually occurring in the present and can be translated by English 'can' in either the permissive or the abilitative sense are

unmarked. Forms with *-nV-* marking and a 'negative' *nguwa* or *gajin.ga* 'cannot' modal particle are negatives of potential or ability:

4.94 (a) *Minja nyarrama.*
minja nyarra =ma
eat 1ex:PL =MA'do'
'We (can) eat (it). / We eat (it).'

(b) *Nguwa minja nyaanama.*
nguwa minja nyaa -na =ma
neg eat 1ex:PL -NEG =MA'do'
'We don't eat (it).'

4.95 (a) *Mee-gu janmanda?*
mee -gu jan =mɨnda?
veg.food -PURP 1SG<2SG ='take'
'Can you take me for lunch?'

(b) *gajin.ga gunumɨnda*
gajin.ga gu -nu =mɨnda
CANNOT 1SG -NEG ='take'
'I can't take you.'

Negative *-nV-* prefixed forms also appear without a modal particle, but with the same translation. In these cases I assume that the particle is ellipsed or understood from the previous context (where the particle was used).

4.96 *Nguru ngɨnin.*
nguru ngɨ -ni =n
listen 1SG -NEG =N
'I can't hear.'

4.5.2 PAST tense

Past tense suffixes have different forms for positive and negative polarities. This unusual phenomenon also occurs in Ungarinyin. As shown in Table 4.15, in Wunambal a regular *-yi* suffix can be discerned for the negative, and *-ne* vs. *-ngi* classes for positive past. Suffix *-ne* is found with both monovalent and bivalent roots, *-ngi* exclusively with bivalent roots. (As mentioned above, the bivalent *-ngi* taking roots take *-ne* when they take monovalent prefixes to form reflexive verbs.) =N, =YANG and =MA have irregular past positive forms. =MA is the only verb root with an irregular negative past form. The form suggests *-yi* is suffixed to a bare root =MI, rather than to =MA.

Table 4.15: Past tense forms

V stem	Positive (past perfective)	Negative ('past')	
monovalent			
=N'be'	=NDI	=?	
=YANG(a)'go'	=YANGGE	=YANGI	{YANG +yi}
=WAN'fall'	=WAN-ne	=WANYI	{WAN+-yi}
=MA'say'	=ME	=MI	{?MI+yi}
=(M)BU'spear'	=MBUN-ne	?	
Reflexive-reciprocals			
=MɨNDA'take'	=MɨNDA-ne		
=MɨRA'grab'	=MɨRA-ne		
bivalent			
=MɨNDA'take'	=MɨNDA-ngi	=mɨnde	{MɨNDA+yi}
=MIRRA'go.to'	=MIRRA-ngi	=mirre	{MIRRA+yi}
=MɨRA'grab'	=MɨRA-ngi	=mɨre	{MɨRA+yi}
=WU(N)'effect'	=WU(N)-ne	?=	
A(L)NGA(N)'give'	=A(L)NGA-ne	=alnge*	{ALNGA+yi}

* from Vasse paradigms.

The positive forms could be interpreted as consisting of a bare root plus a tense/conjugation marker N, N(a) or NG +tense (*-yi*), where *na+(y)i* > *ne* and *ng+(y)i* > *ngi*. However, it would have to be assumed that forms like =YA(NGA) and =MA have been reinterpreted. I prefer to recognize positive past tense morphemes *-ne* and *-ngi* and to treat =N, =YA(NG) and =MA as having irregular past perfective forms.

The negative forms, where *a*-final roots (apart from =MA) become *e*-final, fit the formulation Vstem *+(y)i* past. Apart from the examples below, I have not segmented *-yi* in interlinear glosses as the surface result is usually a change of vowel. The following are comparable examples of past tense suffixes, in positive and negative contexts.

4.97 (a) *Debarr ayangge.*
debarr a =yangge [e:ngge]
die A =YANG'go':PAST(PERFECTIVE)
'He (a male dog) died/is dead.'

(b) *Debarr aniyangi.*
debarr a -ni =yang -yi
die 3'a -NEG =YANG'go' -NEG:PAST
'He didn't die, i.e. he's not dead (i.e. a dog).'

4.98 (a) *Yarrij buwane.*
yarrij bu =wan -ne
descend 3SG:B =WAN'fall' -PAST
'He went down.'

(b) *Bunuwanyi.*
bu -nu =wan -yi
3SG:B -NEG =WAN'fall' -NEG:PAST
'He didn't fall.'

4.99 (a) *Manuwa bungarrmindangi.*
manuwa bu -ngarr =minda -ngi
shouldering 3SG -1PL =MiNDA -PAST
'We carried him/it on the shoulder.'

(b) *Nguwa nguru gunumande.*
nguwa nguru gu -n -ø -nu =manda -yi
neg hear 2SG -INV -1SG -NEG =MiNDA -NEG:PAST
'I didn't hear you.'

When not accompanied by a negative modal particle i.e. *nguwa* 'NEG' or *gajin.ga* 'cannot' the interpretation of a 'past negative' is dependent on context. For example, in 4.98(b) above the negative particle *nguwa* may have been ellipsed. The sentence below:

4.100 *Ada gunumi.*
ada gu -nu =mi
sit 2SG -NEG =MA:PAST
'?Couldn't you sit down?'

was (roughly) translated by a speaker as 'You ought to sit down'. The pragmatic force was of an invitation rather than a direct command. I understand the implication to be: 'You did not sit down, but you should/could/ought to have'.

The continuative suffix *-rri* can be suffixed to the past forms to indicate continuous activity or duration (keep X-ing) in the past. Examples include 4.9-10, 4.12, 4.14, and 4.18 in section 4.1.

4.5.3 DESirable

As speakers frequently translate positive/indicative *-ya* clauses as 'want to X' I have designated this modal category as 'DESirable' (to distinguish it from other potential events expressed by the bare root). Cross-linguistically future and optative are other labels which are sometimes used for this mood category . Although it is used for

potential future events, however an essential component expressed by the category is the speaker's or subject's desire, wish or intention.

4.101 *Yarrij buwanya.*
yarrij bu =wan -ya
descend 3BSG =WAN'fall' -DES
'She wants to go down.'

4.102 *Burda limba bungaya.*
burda limba bu -nga =WU -ya
granny find:ASP 3BSG -1SG -WU'effect' -DES
'I'd like to see my granny.' [Ig, fnbKAL97-7:4]

In some sentences where a future intention is described, the illocutionary force is that of a promise:

4.103 (a) *Joli ngangiya.*
joli nga =ng -iya
return 1SG =N'be' -DES
'I'll be back '

(b) *Gunmɨndiya/gunmanja wuguli.*
gun =mɨnda -iya
2SGO>1SG =MɨNDA -DES tomorrow
'I'll take you tomorrow.' [PB: S, fnb22, p6]

A common usage for *-(i)ya* DESirable is in clauses about desired future or optative events, framed by =MA 'say; want' (see also example 4.55):

4.104 *Amandiya bamangu.*
a =manda -iya ba =ma -ngu
Acl-ø =MɨNDA'take' -DES IMP =MA'say' -3OBL
'"You can take (eat) it" you tell him (when a boy receives permission to eat freshwater turtle).' 'You tell him (its OK/desirable) to eat it'.
'You give him permission to eat it.' [WG?98]

4.105 *Wandiba ngaya ngumamingga.*
wandi -ba nga =ø -ya ngu =ma -mingga [WB]
make -DUR 1SG=?YA'go' -DES 1SG =REDUP =MA:IMM

OR

Wandiba ngangiya ngamingga.
wandi -ba nga -ng -iya nga =ø -mingga [PB]
make -DUR 1SG =N'be' -DES 1SG =MA-MA-IMM
'I want to (keep) working on a coolamon.'

4.106 *Ngiyangia?* *gumamingga.*
ngi =yang -iya *gu =ma -mingga*
1SG ='go' -DES 2SG =MA'say':IMM
'(Are) You're asking(me) if I want to go.' [PB/WG, fnb22:15]
'LIT: You're saying '(Do) I want to go?'.

4.107 *Ngarrangiyamiya* *maminggnanu.*
ngarra =yang -iya -miya *ma -mingga -nu*
1inPL =YANG'go' -DES -DUAL ø =REDUP -MA'say':IMM-2SG:OBL
'"You want to come with me", she's telling you. (She's asking if you want to come with her).' [PB, fnb22:15]
LIT: '"Shall we two go", she's saying to you.'

I have a couple of examples of a negative marked DESirable clause which I am assuming to refer to an undesirable event. Vasse/Vaszolyi (no date, 1976) recorded complete paradigms for what he termed negative-conditional 'future':

4.108 (a) *Nguwa ngayag gunamɨreya.*
nguwa ngayag gu -n -ø -na =mɨra -iya
never ask 2SGO -INV -1SG -NEG =MɨRA'grab' -DES
'I don't want to ask you.' [WB, KAL]

(b) *Nguwa-ja wila wanga ngɨ-nambɨnyanu*
Nguwa -ja wila wanga ngɨ -na -mbɨn -ya -nu
not -EM ?W-it leave 1SG -NEG =MBU(N)'pierce' -FUT -2SG
'I don't mean to leave/forget/ignore you. (I just want to get something).'

4.5.4 HABitual

Reduplication of the verb root signifies habitual action. It occurs frequently in texts relating traditional and customary practices. The *gurnu* (preparing bitter yam) text in Chapter 3 has many examples. No tense-mood suffix is attached to the verb root.[19] While reduplication of the verb root indicates repetition or iteration, there is no limit on the time frame which may refer to habitual actions in the past or non-past.

4.109 *Geji nguru nyandumandamanda.*
geji nguru nya -n -du =manda-manda.
now hear 1ex:PL -INV -3sg =REDUP-MANDA'take'
'He always takes notice of us (exclusive).'

4.110 *Gawarrmɨramɨra* *gangiya, wog.*
ga -warr =mɨra-mɨra *gangiya wog*
Wcl -3B:PL =REDUP-MɨRA ashes cook

awurrɨmbɨn.
a -wurr =wun-wun
Acl -3B:PL =REDUP-WUN'effect'

'They get ashes and cook them (karnmanggu yam).'

4.111 *Balyagarr gawurrmɨramɨra, jarri birrama.*
balya-garr ga -wurr =mɨra-mɨra jarri birra =ma
follow-? Wcl -3B:PL =REDUP-MɨRA'grab' dig 3B:PL =MA'do'
'They trace them (the stems of the underwater plant), and dig.'

Reduplicated stems can also be interpreted as punctual or inceptive depending on the inherent lexical aspect of the coverb and temporal qualification. For example, *mara* 'find, catch sight of' is inherently inceptive.

4.112 *Jerrgewe mara gunbunbun.*
jerrge -we mara gun =bun-bun
today -SPEC find 2SG-INV-ø =WU(N)-WU(N)'effect'
'This is the first time that I see you'

The reduplicated verb root also occurs in subordinate clauses:

4.113 *Galyba-nyale-ngurru ngiyangga,*
Galyba -nyale -ngurru ngi =yang -ga
there -again -maybe 1SG =YANG'go' -IMM

buju ngumamangarri.
buju ngu =ma-ma -ngarri
finish 1SG =REDUP-MA'do' -SUBORD
'When I finish, I may go there as well.'

Negative habitual does not occur. The sentence in (b), a negative of potential is the negative equivalent of (a).

4.114 (a) *Layi nguwanban-nu.*
layi ngu =wan-ban -nu
like 1SG-NEG =WAN'fall' -2SG
'I like you.'

(b) *Nguwa layi ngunuwan-nu.*
nguwa layi ngu -nu =wan -nu
NEG like 1SG -NEG =WAN'fall' -2SG
'I don't like you.'

Reduplication of the verb stem for the habitual is not evident for either =N'be' or =YA(N/NG)'go', two verbs that display other tense/mode marking irregularities. For =N, =*nga* is the habitual form. =*nga* is interesting because it is the bare form for a verb stem with a similar function in some of the Nyulnyulan languages and -*nga* is a 'present/past tense' suffix in some of the other Worrorran languages. In the case of =YA reduplication would be obscured by Wunambal's tendency to lenite V-glide-V sequences to V, i.e. =YAYA > =YA. Reduplication of =YANG(A), on the other hand would be homophonous with =YANG(A)+*yanga* 'toward', the directional. =YANGA seems to be used as a habitual form.[20]

4.5.5 IMMediate

Non-past events that are in progress 'right now' with respect to the tense locus, or will be in progress in the near future, reduplicate the verb stem and suffix -*ga*.

Table 4.16: Habitual and Immediate

V stem	Habitual	Immediate
=N'be'	=*nga*	=*ngga*
=YA(N) / =YANG 'go'	=*yanga*	=*yangga*
=WAN 'fall'	=*wanban*	=*wanban.ga*~=*wanbanangga*
=MA 'do'	=*mama*	=*mamingga*
=NBUN 'strike'	=*nbunbun*	=*nbunbun.ga*~=*nbunbunangga*
=MIRRA 'go.to'	?	=*mirrimirringga*
=MɨNDA 'take'	=*mandamanda*	=*mɨndimindi.ga*
=MɨRA 'grab'	=*mɨramɨra*	=*mɨrimɨringga*
=WU(N) 'effect'	=*(wu)nbun*	=*(wu)nbun.ga*~=*(wu)nbunangga*
simple verbs		
=A(L)NGA(N)	=*lnganngan*	?

-ga or -ngga or -nangga?

It is only in the Southern dialect that -*(n)angga* occurs for these forms. Alternation between -*ngga* and -*ga* is more difficult to account for. Based on the -*ga* suffix it seems that -*ng* preceding -*ga* is an example of epenthesis of a homorganic prestop nasal. The general pattern seems to be that after vowel-final stems =MA, =MIRRA, MɨNDA and MɨRA, vowel reduction/raising /a/ > /i/ and pre-stop nasalization occurs (or posit +YINGGA instead of -*ga*) whereas the apical N-final verb stems =WAN and =WUN

simply suffix +*ga*. This analysis requires us to view MɨNDA as *n* final and indeed I have a few examples where this is so (note that /n/ would have to be deleted or assimilate to /m/ before M initial Verb stems to fulfil phonotactic requirements):

4.115 *Gadjin.ga nguru nga -nu =mɨnda -n.*
cannot listen 1?PL(?reflex) -NEG =MɨNDA -?
'We can't hear ourselves.'

There is stem-final vowel alternation when reduplication occurs with -*ga* suffixed verbs whereby monosyllabic monovalent =MA retains a final /a/ in the first syllable (the reduplicated portion), whereas in the disyllabic bivalent /a/-final roots /a/ > /i/. This could be vowel reduction to fit in the extra -*ga* syllable. Elsewhere I have noted an assimilating V which is opposed to an /a/ that does not assimilate. These forms for =MA, MɨRA and MIRRA seem to reveal vestiges of a conjugation marker or just an -*ng* final segment which cannot occur word-finally.

4.116 *Baj bangga.*
baj ba =ngga
climb 3SG =N:IMM
'She's climbing.'

4.117 *Ngiyangga.*
ngi =yangga
1SG =YANG:IMM
'I'm going.'

4.118 *Yarrij nguwanban.ga.*
ngu =wan-ban -ga
descend 1SG =REDUP-WAN -IMM
'I'm going down.'

4.119 *Balya ngumamingga.*
balya ngu =ma-mingga
visit 1SG =REDUP-MA'do':PRES:IMM
'I'm visiting.'

4.120 *Bungamindimindiga.*
bu -nga =mindi-mindi -ga
3SG -1SG =REDUP -'take' -IMM
'I'm taking her.'

4.121 *Dɨna bungamɨrimɨringga.*
dɨna bunga =mɨri-mɨring -ga
hold 3B:SG -1SG =REDUP-MɨRA'grab' -IMM
'I'm holding her (close).'

As in English, future events are often represented by the immediate / progressive form:

4.122 *Ngiyangga.*
ngi =yangga
1SG =YANG'go':IMM
'I'm going / I'm going to go (immediately).'

As expected this tense/aspect configuration which has an emphatic ring about it has not been found with *-nV-* NEG prefixing. The negative equivalent in the sentence below is a negative of potential.

4.123 *Lewa angamindimindiga,*
lewa a -nga =mindi-mindi -ga,
dog A(O) -1SG =REDUP-'take' -IMM

(gadjin.ga) ananguminda yawurda.
(gadjin.ga) a -na -ngu =minda yawurda.
(cannot) Acl -NEG -1SG ='take' horse

'I'm taking the dog, I can't take the horse.'

A similar contrast to that between past perfective and past continuous is achieved by *-ga* suffixing. In examples (a)-(c) below, the clauses with 'habitual' verbs occur in similar syntactic environments. The *-ga* marked clause is backgrounded and the non-*ga* marked clauses are foregrounded. The reduplicated clauses have habitual readings in (a) and (b), and an effect similar to the vivid present in English in (c):

4.124 (a) Wala gundumirimiringga
wala gu -n -du =miri-miringga
cry 2SG -INV -3SG =REDUP-MiRA'grab':IMM

nerri layi buwanbannu.
nerri layi bu =wan-ban -nu
alone like 3SG =REDUP-WAN'fall' -2SG

'He's crying for you, he only wants/likes you.'

(b) *Balya ngumamingga, mara*
balya ngu =ma -mingga mara
chase.up 1SG =REDUP -MA:IMM find

gunbunbun, ada ganga-ngarri.
gun =bun-bun ada ganga =ngarri
2SG<3SG =WU(N)-WU(N)'effect' sit 2SG =N'be':non-PAST:SUBORD

'(When) I visit (come visiting) you, I (always) see you sitting there.'

4.125 (b)

Balygarra	*mamingga,*				*mara*		
	ø	*=ma*	*-mingga*		*mara*		
chase	3SG	=MA	-MA'do':IMM		find		
andubun,					*ayi*	*mama*	
a	*-n*	*-du*	*=(wu)n-bun*		*ayi*	*ma-ma*	
3SG(O)	-INV	-3SG	=WU(N)-WU(N)'effect'		hail	ø =REDUP	-MA'say'

'He's following her, he sees her (catching sight of her), he calls out.'

4.5.6 Continuative aspect suffix *-rri*

As mentioned earlier the continuative aspect suffix *-rri* normally follows TAM for non-immediate tense/aspect and denotes a continuous period of activity, duration, background action, and/or extension of the action/event in time and space i.e to keep on X-ing, usually in a defined period in the past. Examples in this chapter include 4.9, 4.10, 4.12, 4.18, 4.22, 4.24, 4.40 and 4.59.

4.6 Directional suffixes *-yang* 'toward' and *-nda* 'away'

The directional suffix *-yanga* 'toward' indicates the direction of the activity, usually motion toward the speaker or deictic centre, that is, 'this way'. I have characterized it as 'toward', but in many examples it translates as 'come from' or motion 'away from' in the sense 'from somewhere else (usually an unspecified location) toward the speaker or subject', or centripetal motion. Other linguists have used the terms 'hither' (Clendon 1984) or 'proximad' (Rumsey 1982:110, 2000) for the same function. In most examples *-yang* appears with the motion verbs =YA(N/NG)'go' or =MIRRA'go.to', as in examples 4.3 and 4.15. The suffix *-yanga* 'toward' on the verb is more common than the postposition *-yanga* 'from' marking ablative on nominals.

The centrifugal directional suffix *-nda* 'away' indicates activity or motion directed from the speaker or deictic centre of the speech event. Other linguists have used the terms 'thither' (Clendon), 'distal' (Rumsey 2000) or 'from'.

4.126

(biyanda)		*gurarra*		*biyangganderri.*		
(biyanda)	*gurarra*	*bV*	*=YANG*	*-ga*	*-nda*	*-(yi)rri*
(child)	crawling	3B:SG	=YA'go'	-IMM	-'away'	-CONT

'He (a child) is crawling off.' [WG97:8]

The *-nda* suffixed forms are most often found with the motion verb =YANG. Sentence examples 4.4, 4.6, 4.8 (and probably 4.10) at the beginning of this chapter are all examples of =YANG'go' with *-nda* 'away'. Like the sentence above, sentence example 4.6 'The fish pulls away' illustrates the idea particularly well with the fish on the other end of the line, having taken the bait, possibly pulling in a number of directions but all of them away from the fisher holding the handline.

4.7 Oblique suffixes

The role of oblique pronoun suffixes in verbal clauses was discussed in 3.3 verbal clauses. A number of examples appeared in 3.3. and 4.1. The forms of the oblique suffixes are as below. They were compared to the free pronoun forms in 3.1.1. As stated in chapter three unlike pronoun prefixes obliques do not mark noun class. However there may be a human - non-human distinction in the variant third-person singular.

Table 4.17 Oblique pronoun suffixes and clitics

Singular		Plural	
First person	*-ra*	inclusive:	*-ngarru*
		exclusive:	*-nyarru*
Second person	*-nu*		*-nurru*
Third person	*-ngu* ~ *-nungu*		*-wurru*

4.8 Dual and paucal number marking on the verb

-Miya specifies that there are two participants in a particular plural argument role. *-Na* is used to specify a number greater than two but usually no more than three or four. 'A few' is a common translation. *-Miya* can be used to indicate a dual first person inclusive category or a dual exclusive, that is, the minimal exclusive category. Usually dual and paucal specify the number of S participants, as in examples 4.127-129.

4.127 *Ngud ngarrmengu-miya.*
ngud *ngarr* *=me* *-ngu* *-miya*
hit 1in:PL =MA'do':PAST -3:OBL -DUAL
'You and me hit him.'

4.128 *Ngud nyarrmengu-miya.*
Ngud *nyarr* *=me* *-ngu* *-miya.*
hit 1ex:PL =MA'do':PAST -3:OBL -DUAL
'Me and her hit him.'

4.129 *Ngud nyarrmengu-na.*
Ngud *nyarr* *=me* *-ngu* *-na.*
hit 1ex:PL =MA'do':PAST -3:OBL -PAUC
'Three of us hit him.'

In the following example dual applies to the oblique argument:

4.130 *Ngud bumewurru-miya.*
Ngud *bu* *=me* *-wurru* *-miya.*
hit 3B:SG =MA'do':PAST -3:OBL -DUAL
'He hit them (two).'

The next example indicates that dual or paucal number marking on the verb is not obligatory for third person obliques.

4.131 *Majerri nganbɨne-wurru.*
Majerri *nga* *-nbɨn* *-ne* *-wurru*
two 1SG =WU'strike' -PAST -3PL:OBL
'I speared them.'

Dual and paucal marking can also refer to a prefixed object. In the following example, with bivalent verb =*WU*, this is highlighted by the use of *majerri* 'two' in a common position for object focus.

4.132 *Majerri bɨrrngane-miya.*
Majerri *bɨrr* *-nga* *=ø* *-ne* *-miya.*
Two 3B:PL -1SG =WU'effect' -PAST -DUAL
'I speared two.'

NOTES

1 could just as easily be rewritten in terms of a lenition hierarchy:
b >w / vowel, glide, trill, lateral ## _
w >ø / lateral ##_
and b elsewhere
I prefer strengthening because vowel-final morphemes are more common than stop/nasal finals.

2 The non-occurence of *mardug-ba* as predicted by the rules above suggests that *-g* may be also be a morpheme, a suffixed 'punctual' marker.

3 *-n* marking here appears to be of the accusative type described for Kwini by McGregor i.e. *-n* accusative appears whenever A is zero or nothing, as Wunambal prefixes do not normally have *-n* marking in this position except for bivalent imperatives. I will take this example to be a dialectal variation associated with Kwini.

4 I have only this one occurrence of bivalent prefixing to =YANG, hence it is not listed amongst the verb roots I am familiar with. It appears in the context above to be a transitive version of =YA/YANG'go' meaning 'go for the purpose of' or 'go after'. It is also possible that this is a normal monovalent example of =YANG and that the demonstrative word *binya* may possibly have been inserted between the coverb and verb.

5 The coverb *nii* 'think' is used with the classifiers =N'be' and =MɨNDA'take' in the sense 'think about, 'reflect on'.

6 Available forms are cited as they occurred in actual sentences i.e. some examples are from complex constructions.

7 I prefer not to call V 'a' because it is then necessary to distinguish between two different 'a' archi-phonemes, and 2) because the vowels of 2/3B persons behave differently before plural *-rr*. For a phonological explanation one could invoke the effect of velar initial vs labial initial, but it seems that before *-rr* the V of 2/3 is more readily reduced.

8 Examination of Vasse's transitive verb paradigms sheds further light on b~d alternation. The prefixed verb forms indicate that *-dV* occurs only preceding labial-initial verb roots. In the paradigms for bivalent =RA 'be afraid, fear' (a verb root which I have not attested) and =ALNGA'give' (for which I rely on Vasse for the full paradigm) many /b/ (following inverse marked n-final O's i.e) prevails. This could also explain why the *-bu* and not *-du* forms always appear for the plural A forms (preceding apical *-rr*) and in the negative paradigms, to be discussed in 4.3.5. In the negative marked prefixes *-bu* is always followed by an apical *n*-initial CV. Note also that in my examples the vowel of singular *-bV-* and *-dV-* is almost always realised as *-u*, presumably because except for the simple verb (A)(L)NGA'give', the bivalent verb roots that I am familiar with begin with either a labial =M or =W/B.

9 Blake 1987 shows that accusativity is historically rather than synchronically relevant in prefixes to languages like Rembarrnga (Blake cites data from McKay 1975, 1976).

10 and possibly languages in general (Curnow and Dunne 1998).

11 This speaker appeared to insert *-iya* 'DESirable' before the verb root in this and in another example:

(a) *yawu, wuguli janyamirringa {yes morning jan(2<1)-ya(FUT)=MIRRA'go.to'-yanga(toward)}*
yes morning 2-?INV-?1exPL='go.to'-?(DES)-toward

'Yes, we'll come ?(back) to you tomorrow!' [PB, 97fnb 20, p1]

(This example also caused me to entertain the notion that *ja-* really is a second person morpheme in Wunambal as it is in Ungarinyin and Jarraagan languages: {ja-?2SGn-?nyarr(1exPL)=MIRRA('go.to')-?(ya'DES')-yanga'toward'}. Unfortunately the example is too ambiguous to indicate for certain either way.) Posssibly this is allowable where the *-iya* suffix would be obscured by a following suffix like *-yanga*. Alternatively this could be another example of dialectal variation or even language interference. In Ungarinyin and Worrorra for example a future/subjunctive optative prefix occurs in this position.

12 The anomalous 3PL(O)<2SG(A) prefix *ban-bu* recorded by Vaszolyi suggests that 3PL may be equipollent with 2SG but not 2PL in some dialect. I have recorded *banbu* in a context where it was unclear to me whether the *-bu* segment is 2SG or an =WU Vroot. (*birra+n* gives *ban*)

	Ngayag	*banbine?*				
		ba	*-n*	*-bi*	*=ø*	*-ne*
OR		*ba*	*-n*	*-ø*	*=WU*	*-ne*
	ask	2PL	INV	2SG	=WU	PAST

'(Did) you ask them?

13 McGregor (1993:46) suggests that the V of an identical *-nV-* 'irrealis' prefix in Gunin/Kwini is determined by the vowel of the immediately following syllable. This analysis doesn't work for Wunambal (or for the two Gunin/Kwini examples cited by McGregor with same verb root but different vowels, harmonizing with the vowel of the *previous* syllable or the person/class prefix vowel).

14 these translations were made in different contexts and do not necessarily reflect the semantic nature of *-nV* accurately. This is discussed further in the next section. Here I wish to focus only on the phonetic shape of the morpheme under discussion, using examples gleaned from a variety of sources in my corpus each with 1SG and non 'tense' marked.

15 It is not clear what the appropriate segmentation for this form would be. An alternative is to regard final-*n* as an irrealis present/non past tense marker or even a conjugation marker resulting in a zero surface form for inflecting verb =N'be'. ngI-nI=ø-n, 1sg-IRR=IVR-tense/conj

16 Because I lack negative marked (2/3(O)<2/3-plural(A)) forms in my corpus all three plural agent examples above are taken from Vászolyi's unpublished verb paradigms. The segmentation and translations are my own.

17 In Worrorra *ba-* is an inflecting verb-initial prefix with functions similar to those of *-nV-* in Wunambal.

18 A similar situation to the Wunambal one obtains in Worrorra where Clendon (pc) notes that the S of the bivalent imperatives is treated as though it were third person. Wunambal however differs from Worrorra having the non-zero B-class A prefixes (which are not used here). Nevertheless the notion of an impersonal 'one' as the S of an imperative although less direct, could be considered a more culturally appropriate way of giving a direction: 'someone X it', rather than' YOU X it'.

19 A single exception is noted in my corpus: *bu-ngarr=MiRA-MiRA-ngi.* {3BSG-1in:PL=REDUP-MiRA-PAST}, 'we got her ? we were getting her / ?we used to get (people in her kin / clan classification by tradition)'. The speaker was referring to the situation whereby he and his brothers called a particular man in-law (by virtue of) being married to the man's ?aunt. Here in the simple verb context (where there is no coverb) reduplication could indicate distributive -- several men relating to the one man through either a particular woman or many women in the same category or simple and/or a habitual which is marked past (complete) to indicate at least one actual case of "getting" a wife.

20 For most tense/mood/aspect inflections =YANG is treated as the base (see desirable and negative past forms), however for the imperative (*baya!*) and negative (potential) non-past *biniyan* =YA(N) appears to be the base. In Worrorra *-nga* is treated as a present/past "tense" marker for =YA'go' Clendon (1984).

	baya	'go!' (IMP)
	bayanga	'come!' (IMP:toward)
	bayanda	'go away!' (IMP:away)
	biyanga	'he can go' (POT)
	biyanga	'He goes' (HAB)
jo	biyanga	'He drinks' (HAB)
jo	biniyan	'He doesn't drink' (NEG POT)
ngiyangiya~ngayanga~ngiyangaya		'I want to go' (DES)
	biyangga	'He is going' (IMM)
jo	biyangge	'He went' (PAST)
	biyanggerri	'He was going / He kept going' (PAST CONT)