

# Wargamay

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## 1. THE LANGUAGE AND ITS SPEAKERS

### 1.1 LINGUISTIC TYPE

Wargamay is a fairly typical Australian language with a suffixing, agglutinative structure and free word order. Its most notable characteristic is the fact that transitive verbs can occur in intransitive, as well as in transitive, construction types, mainly to satisfy an 'ergative' syntactic constraint on subordination. In chapter 5 it is suggested that the grammatical changes which have recently taken place in Wargamay could eventually lead to a shift from the present split-ergative morphology to an entirely accusative system.

The consonant inventory consists of four stops (labial, apical, laminal and dorsal), a nasal corresponding to each, one lateral, two rhotics and two semi-vowels. There are three vowels, with a length distinction occurring only in the initial syllable of a word. The dozen or so monosyllabic words all involve a long vowel. Stress goes onto a syllable involving a long vowel if there is one; otherwise onto the first syllable of a disyllabic word but onto the middle syllable of a trisyllabic form.

There are clearly defined classes of nominal (noun and adjective), locational qualifier, time qualifier, pronoun, demonstrative, verb, particle and interjection. Pronouns show singular, dual and plural forms for all three persons (although the 'third person singular' has a wide usage, and may not properly belong in the pronoun class).

There is a system of nine cases for nominals and pronouns, with locational and time qualifiers taking a limited selection from these. There are three systems of case marking for the main syntactic functions of transitive subject (A), transitive object (O) and intransitive subject (S). Nominals and the third person singular pronoun distinguish absolutive (S,O) from ergative (A) case; first and second person non-singular pronouns have separate forms for nominative (S,A) and accusative (O); the remainder -

first and second person singular, third person non-singular, and the interrogative pronoun - have distinct case forms for all three syntactic functions.

Verbs do not show any category of tense; there is instead a rich aspectual-type system. Verbal inflections comprise 'unmarked aspect', perfect, purposive, irrealis, positive imperative, negative imperative and subordinate. There is also a 'continuative' derivational affix, and a comitative suffix that derives transitive from intransitive stems. In addition, transitive and intransitive verbal stems can be derived from nominal and from some interrogative and local roots.

Almost every verbal suffix has two allomorphs - one used on verbs in intransitive constructions with the other being employed on verbs in transitive constructions. Verbal stems fall into two classes: 'intransitive' verbs occur only in intransitive constructions whereas 'transitive' roots can occur in transitive or in intransitive constructions (taking the appropriate inflectional allomorphs).

The scanty material available for Wargamay does not yield overmuch syntactic information. There are, however, well defined complement constructions and also relative clauses. A great deal of the work that is done by syntactic derivation in other Australian languages is achieved in Wargamay by careful employment of transitive verbs in either transitive or intransitive constructions; the kinds of correspondence between these two types of construction are important, both synchronically and diachronically.

Sentence modification is achieved through a set of non-inflecting particles ('not', 'perhaps', 'only' etc). It appears that polar questions can be shown only by a marked intonation pattern.

## 1.2 DIALECTS

What I refer to as the 'Wargamay language' appears to have had three distinct dialects (shown on the map):

(1) The people living in the rich forest country along the lower reaches of the Herbert River - from just west of the present town of Ingham, through Hawkins Creek, Long Pocket, Herbert Vale and Niagara Vale to Yamanic Creek and the Herbert Gorge - were called Wargamaygan, and referred to their language as Wargamay.

This group had territory on both sides of the river extending just a few miles from the banks; thus Wallaman Falls and the township of Stone River, on the south side, are said to have been included within Wargamaygan territory. *gu:n* was the name given to the Herbert River at the gorge and just downstream from it; and speakers of Wargamay can also describe themselves as *gu:nbara* (-*bara* 'belonging to' is a productive derivational affix - see 3.1.3). (It is not known for certain whether *gu:nbara* was synonymous with Wargamaygan, or whether it described just one local group of the tribe speaking Wargamay.)

The origin of the name 'Wargamay' is not known. There

may be something in William Craig's suggestion, made in 1898 (see 1.6 below) that the last syllable of 'Wargamay', and of 'Giramay' (which is spoken immediately to the north), is related to *maya*, the word for 'no' in these two dialects. Certainly the other dialects of the Wargamay language are directly named by their word for 'no'.

(2) The people living around the mouth of the Herbert River (including the present towns of Halifax and Bemerside) called their language *Biyay* (which was their word for 'no') and could refer to themselves as *Biyaygiri*, involving the productive derivational affix *-giri* 'with' (see 3.1.3). The *gu:nbara* would refer to speakers of *Biyay* as *guninbara* using the common noun *gunin* 'the coast, people/things from the coast'.

*Biyay*, from the mouth of the Herbert River, and *Wargamay*, spoken up river from it, are mutually intelligible dialects. They have about 90% common vocabulary and very similar grammars - morphological differences include the form of the 'continuative' verbal suffix, and the paradigm of the single irregular verb *gi:(gi)-* 'to sit' (differences of verbal morphology are detailed in 3.5.3; lexical differences are fully catalogued in the Vocabulary by semantic fields).

(3) The people living on Hinchinbrook Island and the adjacent mainland (south from the present town of Cardwell), a country of mountainous jungle and flat mangrove swamps, also appear to have spoken a dialect referred to as *Biyay* (and to have been themselves called *Biyaygiri*). Tindale quotes a tribal name 'Bandjin'; this is the common noun *banjin* 'sea water', and thus on a par with names *gu:nbara* and *guninbara*.

Hinchinbrook *Biyay* did show some lexical differences from Halifax *Biyay*, but more than 90% of their vocabularies are identical. Since no speakers survive for this dialect, and the only information is from a few short word lists of fifty and more years ago, no details of the grammar are known. However, from informants' comments it is likely that the grammar would have been very close to that of the other two dialects.

These three dialects are recognised, by their speakers and by those of neighbouring languages, to form a tight-knit group - to be, effectively, dialects of a single language. Indeed, the name 'Wargamay' is commonly used to refer to this language. Thus Nora Boyd, the informant for the Halifax dialect, would sometimes say that she spoke *Wargamay* but at other times (especially if emphasising some difference from the dialect spoken upstream) might specify it more exactly as *Biyay*. Similarly, speakers of *Giramay* would talk of *Wargamay* being spoken over the whole Cardwell/Herbert Vale/Halifax area, but would mention that the variety spoken at Cardwell itself was called *Biyay*.

We are thus taking over the usage of speakers in referring to (1-3) as the *Wargamay* dialect, the Halifax *Biyay* dialect, and the Hinchinbrook *Biyay* dialect of the *Wargamay* language. To avoid confusion *Wargamay* is used below for

the language name, with initial letters normally being employed to refer to dialects:

- W - (1) Wargamay dialect
- B - (2) Halifax Biyay dialect
- H - (3) Hinchinbrook Biyay dialect

### 1.3 SURROUNDING LANGUAGES

To the north of Wargamay is Giramay - the most southerly dialect of the large 'Dyirbal language' (see Dixon 1972) - spoken by the Giramaygan tribe. Giramay and Wargamay have around 48% common vocabulary, squarely within the 'equilibrium figures' predicted for languages that have been in contiguity for a substantial period (Dixon 1972:331-7, 1980a:254-60); a comparison of verb forms shows only 32% being completely or almost completely identical (differing only as regards vowel length, etc) suggesting that the languages may not be closely genetically related.

To the south-east is Nyawaygi which shows about 45% common vocabulary with Wargamay (the figure is about the same for verbs and for non-verbs). Again, there is no evidence for strong genetic connection.

Inland from Wargamay, to the west and south-west, is Waruṅu, the northmost member of the closely related 'Maric' group of languages that extends as far south as the New South Wales border. There is less lexical overlap here - the common vocabulary stands at 35% and a verb count shows 29%. (The Waruṅu data comes from Alf Palmer who also knows Dyirbal and Wargamay and tends to mix these languages together. As a result, the figures quoted for Wargamay-Waruṅu common vocabulary may be somewhat higher than they should be.)

When one turns to grammar there are again no overwhelming similarities in any one direction. Waruṅu is fairly different, but both Giramay and Nyawaygi show interesting points of congruence. Giramay, Wargamay and Nyawaygi do, in fact, have virtually identical paradigms for first and second person pronouns. Wargamay resembles Giramay in having only two verbal conjugations, in having separate inflections for dative and genitive, and in having no monosyllabic verb roots. It resembles Nyawaygi in having contrastive vowel length, in the form of some verbal affixes, and in the form of the interrogative pronoun.

In sum, although Wargamay shows strong similarities to the north (Giramay) and to the south (Nyawaygi) the evidence does not permit us to put forward a close genetic connection in either direction. (Dyirbal and Nyawaygi differ so markedly that there is no chance of connecting all three languages in terms of some 'low node' on the Australian language tree.)

## 1.4 SECTIONS

Some information about the life and beliefs of the Wargamaygan is included in Lumholtz (1887, 1888, 1889, 1921), and in Craig's letters to A.W.Howitt (see 1.5, 1.6).

Each member of the tribe belonged to one of the four sections. These interrelated as follows:

a man who is:	must marry a woman	their children being:
	who is	
wungu	guggugayngan	gurgila/gurgilayngan
guggugu	wungurayngan	wuguru/wugurayngan
gurgila	wugurayngan	wungu/wungurayngan
wuguru	gurgilayngan	guggugu/guggugayngan

Note that the feminine forms involve the addition of -ayngan to a disyllabic masculine form and -ayngan to a tri-syllabic form (with the -a- replacing the final -u of a masculine form); this is probably related to the feminine suffix -gan which occurs in a number of eastern languages (see Dixon 1972:12-13, 31, 319).

Lumholtz (1889:199) mentioned these terms in an interesting paragraph: 'The black man whom I had persuaded to go with me was related to one of my men, Yanki. He was Yanki's *Otero*. In the tribes the words *otero*, *gorgero*, *gorilla*, *gorgorilla* are found, which designate various kinds of relations. Sometimes a man would be called *otero* or *gorgero* without the addition of any other name, and still everyone knew who was meant. There are similar words to designate female relations, in which case the termination *ingan* is substituted for the final *o* or *a*, thus *oteringan*, *gorgeringan*, etc.' Lumholtz has clearly transcribed two of the section names reasonably well, but has used *gorilla* and *gorgorilla* where /gurgila/ and /wungu/ would be expected (the Dyirbal equivalent of wungu is *gigungara*, which is no more recognisable here). See also Birtles (1976:15).

In his correspondence with Howitt, William Craig transcribed the section names quite accurately: his letter of 2nd June 1898 give the masculine and feminine forms as *woon-goo/woon-goo-ringan*, *goorgoo-roo/goor-goo-ringan*, *goor-gil-ah/goor-gil-ingan*, *wooth-oo-roo/wooth-oo-ringan*. John Murray (1886) gives identical section names for Hinchinbrook Biyay: *woongo*, *kookooroo*, *koorkeela*, *woitcheroo*. Note that a corresponding four-section system is employed by the Dyirbalgan (Dixon 1972:27-31) and in fact over much of south-eastern Queensland (Murray 1886 states equivalences between Hinchinbrook and Wide Bay section names).

A little information has been obtained in the totems associated with each section. Speakers emphasised that there were many more totems, which they could not recall:

- wungu - gargay 'small hawk'  
 guggugu - guggunu 'thunderstorm'; guggugu 'small hawk'  
 (the latter totem was given by Craig, but is not remembered by present-day informants).  
 gurgila - 'eel'; yungubala 'black python'; yamani 'rainbow';  
 waga 'crow'

wuguru - walguwuçu 'brown snake'; gurigala 'eagle hawk'.

### 1.5 CONTACT HISTORY

The first Europeans to visit Wargamay territory were Captain King and the crew of the survey cutter *Mermaid* who anchored off Goold Island - five miles north of Hinchinbrook - from 19th to 21st June 1819. King (1827:199-203) records how he traded fishing hooks and lines for Biyaygiri baskets and turtle pegs, and describes the canoes, forms of bodily decoration, etc.

Goold Island became a favoured place of call for water. The first vocabulary - of some fifteen words - was procured by Mr Evans, master of Captain Blackwood's survey ship *Fly*, in late May 1843 (see Jukes 1847, I:93-4).

A settlement was established at Cardwell in January 1864. The inevitable clashes followed - Aborigines felt they had a right to spear European cattle feeding on their tribal lands and the settlers were so incensed by this that they took human life in return, whereupon the Aborigines retaliated by taking white lives. Dorothy Jones' *Cardwell Shire Story* (1961) provides an excellent history of settlement in the area, paying some attention to the affect it had on Aboriginal society.

On 9th March 1872 a party of police and troopers led by Sub-Inspector Robert Johnstone beat a cordon across Hinchinbrook Island and cornered almost all the tribe on a point. According to Jones' (1961:170-1) interview with an early settler 'those who were not shot on land were shot as they attempted to swim away'; she remarks that what was reported in the paper as the killing of 'a few unfortunates' amounted to 'almost total massacre of the tribe'. The slaughter was purportedly in retaliation for an attack by Aborigines on Europeans shipwrecked from the brig *Maria* (Jones 1961:164-70).

This massacre did attract national publicity. The *Pastoral Register*, a Sydney paper, mentioned that 'a writer in the *Central Australasian*, who proposes to give a narrative of the expedition to the wreck of the ill-fated "Maria" says:- "We brought off with us Mr Johnston, Sub-inspector of Native Police; and from hearing his conversation with some of our fellows, I got my first insight into the atrocious state of public opinion in North Queensland with reference to the blacks. He spoke of killing whole camps - not merely men, but girls and piccanninies - with the greatest coolness"'. The matter was brought up in the Queensland Parliament with the Colonial Secretary stoutly denying that the government 'pursued a policy of extermination in dealing with the blacks'; rather 'the policy of the Government towards the blacks had been for the repression of crime' (*Queensland Parliamentary Debates*, 5th Series, 1871, pp 323-4). Nowhere in the Colonial Secretary's statement, or in the cables he quoted from Johnstone, was there any denial concerning the Hinchinbrook slaughter.

Even after this the white attitude appears not to have softened and in the note by M. Armstrong, Esq., Inspector of

Police, on the Aborigines of 'Hinchinbrook Island and the Mainland Adjacent' in Curr's *Australian Race* (1886, II:418-21) it is said that 'the tribe wore no clothes in their original state, but *those who are now* (in 1880) *allowed to come to Cardwell do so*' (my italics). Indeed, Cardwell continues to this day to be a town with an intransigent attitude towards Aborigines. On commencing fieldwork in October 1963 I enquired of the Cardwell policeman (who was, under the laws in force then, local Protector of Aborigines) whether there might be anyone left with language competence and received the answer 'there are no niggers in this town'.

Murder was only one of the dangers to which the Biyay-giri were exposed. In 1882 a Mr Cunningham was sent by the American showman Barnum to bring back some Australian Aborigines for exhibition. He gathered five men, two women and one baby from Hinchinbrook Island and from Palm Island (twenty miles to the south-east). There was an incident in Melbourne when one Aborigine, Tambo, is said to have killed a policeman who complained about his lack of clothing. But, despite protestations in Parliament and in the press, the party left for America (one Aborigine dying en route); they were then 'exhibited' in London, Brussels, Cologne, Berlin and Paris (see Houzé and Jacques 1884:97-9). There is no record of whether they were ever returned to their tribal lands.

The Wargamaygan, up on the Herbert River, were less affected by European and Chinese contact. They had sufficient numbers and freedom to continue with a recognisable tribal life until the end of the century. The Norwegian zoologist Carl Lumholtz lived among them, by an abandoned cattle station at Herbert Vale, from August 1882 until July 1883. Lumholtz's classic *Among Cannibals* (1889, see also 1887, 1888, 1921), has a great many observations on the life and customs of the tribe. He said that their 'culture - if indeed they can be said to have any culture whatever - must be characterised as the lowest to be found among the whole genus *homo sapiens*' (viii). But Lumholtz himself must be assessed as an unobservant and uninsightful anthropological observer. For instance, he refers (201) to *Yamina*, a monster which lived in a certain water hole and 'of which the natives stood in mortal dread... A gun would be of no use, they said, for the monster was invulnerable'. This was almost certainly the rainbow-serpent, *yamani* - in this and other instances Lumholtz made no effort to delve below the surface of his informants' comments, and plainly did not realise they had such things as myths. However, despite the shallowness of Lumholtz's cultural understanding and insight (and his failure to learn to speak the language) the information he gives on the break-up of tribal life, in the face of European contact, is outstanding.

William Craig had been running a cattle station at Niagara Vale - a little higher up the Herbert River than Lumholtz's base at Herbert Vale - for some years before, in 1898, he opened up a correspondence with the anthropologist A.W.Howitt in Victoria (Craig mentions that he had written several articles on Aborigines for the *Queenslander*). The letters to Howitt give the section system, marriage laws,

totems and some other cultural information; they appear mostly to deal with the Wargamaygan although there may be some intrusions from Giramaygan (when quoting numbers, for instance, in the letter of 14th April 1898, he gives Giramay bulari 'two' rather than Wargamay yaga). (These letters are in the A.W.Howitt papers, National Museum of Victoria.)

Craig was concerned with the welfare of the Wargamaygan and on 26th January 1898 had written to Parry-Okeden, the Commissioner of Police in Brisbane:

'In the interests of the aboriginals here I take the liberty of writing to you. There are about 80 here who have not yet got down the river and mixed with the Chinese and colored races or learnt the opium habit to any great extent. While I have been here I have found horses and packed the Govt blankets allowed them and always permitted them to camp on my run and hunt through my cattle and gave them medicines as far as I was able. I also killed any waster cattle I had for them.

'As the ticks killed nearly all my cattle, and I am about to leave here, seeing that the Govt intend to do something for the amelioration of the aborigines I think it would not be amiss in the interests of those here to supply you with some information about them, so that if you think fit you may be able to do something for them, as other station owners do not care to have them hunt and camp about their runs or homesteads and they will surely drift down among the Chinese and Malays where the opium charcoal and disease will soon finish them.

'I think there is a splendid place here for the Govt to make a reserve in which they could gather most of the blacks from around the lower Herbert where they are mixed with the alien colored races and dying from opium charcoal and disease. This country has become useless for grazing on account of the heavy undergrowth but the blacks get a good deal of food from the Yu-boo-loo tree nuts (ground to flour) and the Wong-ah or Chestnut. [Craig is probably referring to *Jubula*, *Podocarpus amarus*, and *waga*, *Castanospermum australe*]. From here over to Cardwell in a straight line about 20 miles there is a range covered with dense coast scrubs in which this food with scrub turkeys eggs etc. is plentiful, and Sea View Range on the other side shuts the Herbert into a gorge and is good hunting and food ground also, while if any agriculture is desired there are enough isolated rich flats that will grow anything tropical...'

Craig's letter was forwarded to the Inspector of Police at Townsville, who asked Constable Holmes of Cardwell to comment. Holmes confirmed that 'the particular tribe of blacks spoken of by Mr Craig are rather a superior class of the general run of blacks in the district the greater proportion of them being free from disease and opium charcoal is a thing almost unknown to them. The Constable has seen these blacks in numbers of from 50 to 60 on the Bora ground about 14 miles to the North West of Cardwell on Saltwater Creek. Not only does the wild fruit that Mr Craig mentions grow here but a great many others.' Holmes was not, however, in favour of making a reserve at the location suggested by Craig because it was hard to reach from Cardwell (the very reason Craig thought it would be suitable, this inaccessibility serving as a protection against the temptations available on the coast). Craig's letter was acknowledged from Brisbane with the assurance that 'the subject is receiving attention'. (Craig's and Holmes's letters are



held in the Archives Section of the Public Library of Queensland.) But nothing positive was ever done. In fact those Aborigines who did not succumb to the Chinaman's opium stood a good chance of being hunted and shot by the 'native police' (cf Kennedy 1902); the only text obtained from Lambert Cocky (see 1.7) in 1972 told of attacks and massacres by this force around the turn of the century.

Still, those Aborigines who did survive were able to live a fairly free life. In 1896 E.J. Banfield went to live on Dunk Island - twenty miles north of Hinchinbrook - and his four volumes of diary and reminiscence (Banfield 1908, 1911, 1918, 1925) contain a good deal of information about Aborigines and their habits, with Aboriginal names for a fair number of plants, animals, etc. In *Confessions of a Beachcomber* (1908:8) Banfield stated that only four of the original 'Dunk tribe' were alive when he settled there, and maintained that their language was nearer to that of Hinchinbrook than to the mainland. Banfield's narrative freely mixes words from Biyay and from dialects of Dyirbal, but in one passage (1908:292-3) he does focus on language and gives parallel 18-word vocabularies from two Aborigines, Tom and Nelly. 'Tom's totemic title, "Kitalbarra", is derived from a splinter of a rock off an islet to the south-east of Dunk Island. "Oongle-bi", Nelly's affinity, is a rock on the summit of a hill on the mainland, not far from her birth-place.' Whereas the words from Nelly are recognisable as a dialect of Dyirbal, those given by Tom appear to be Hinchinbrook Biyay. This may be taken as evidence that Dunk Island was in fact part of Biyaygiri territory.

The period of freedom ended in 1914 when most of the surviving Aborigines were rounded up and taken, some in chains, to the Hull River Mission - Banfield expressed regret at what he considered an unnecessary step in *Last Leaves from Dunk Island* (1925). When the settlement at Hull River was destroyed by a cyclone, in 1918, its inmates were transferred to Palm Island.

It is worth noting that all my informants for Wargamay and Biyay would have been children at the time William Craig left Niagara Vale. No one born in the following generations learnt anything of the language.

## 1.6 PREVIOUS WORK ON THE LANGUAGE

There are several early vocabularies of the Biyay dialects:

(1) 15 words collected by Mr Evans of HMS *Fly*, May 1843 (Jukes 1847, I:93-4). All but two of these are clearly recognisable as H.

(2) Houzé and Jacques (1884) give about 200 words from 'Île D'Hinchinbrook', taken from 'Bob' and 'Billy'. In most cases only one item is quoted but where there are two variants that given by Billy appears to be Hinchinbrook Biyay whereas that from Bob is Halifax Biyay. There are some general comments on the language and its pronunciation; the quality of transcription is fair.

(3) Edward Curr in his compendium *The Australian Race* (1886, II:418-21) included under 'Hinchinbrook Island and the Mainland Adjacent' a few cultural notes by M. Armstrong, Esq. Inspector of Police, and a vocabulary of about 130 words (together with details of sections) by John Murray. Robert Johnstone wrote of Murray that he was a 'keen observer, a first class bushman with a thorough understanding of the blacks, [and that he] spoke fluently the languages of the tribes of Rockingham Bay, Wide Bay, Rockhampton, the Murray River and the Edward River of N.S.W.' (Jones 1961: 106, quoting from 'Spinifex and Wattle', a series of articles by Johnstone in *The Queenslander*, 1903-4). Murray's vocabulary is predominantly of H (although there may be a few Giramay words mixed in - both biyay 'no' and maya 'no' appear, for instance) and the standard of transcription is again fair.

(4) Banfield's (1908:292-3) 18-word vocabulary gathered from 'Tom' is of H, and is rather well transcribed. The majority of the commonest nouns and verbs Banfield quotes throughout his narratives belong to Dyirru or other dialects of Dyirbal, showing that he had more contact with speakers of this language than with the Biyaygiri (indeed there were at the time many more Dyirbal speakers around than there were Biyaygiri).

(5) On 28th October 1938 N.B. Tindale recorded on Palm Island a vocabulary of about 80 words that was headed 'Bandjin (Biyay)'. This was taken down from Jimmy Banfield, whom I met on Palm Island in 1964, being told that he was the last of the Hinchinbrook tribe; Banfield told me that he knew no Biyay and this was confirmed by other informants. It is thus not surprising that the vocabulary Banfield gave Tindale is almost straight Dyirbal with just a handful of Biyay words interspersed (kai 'ground', kakakau 'walk' and one or two more). It is worth noting that for 'no' Tindale first wrote down imba (the Dyirbal word is yimba) but then crossed it out and inserted bijai with the parenthetic comment 'this is the word which defines their language'.

(6) William Craig recorded a few Biyay words in a letter to Howitt - see (10) below.

(7) Archibald Meston's papers include seven words from Cardwell on page 6 of his notebook Folio 1 (in the Oxley Library, Brisbane); most of them are forms that occur in both Giramay and Wargamay.

The material gathered on the W dialect comprises:

(8) Lumholtz included a page of grammatical comments on the language in *Among Cannibals* (1889:308-9). About 120 words (with just a few Biyay and Giramay intrusions) are scattered throughout the text and also gathered together in a vocabulary at the end (312-3). Lumholtz's ear was not outstanding - thus he spent a great deal of his time trying to obtain a specimen of the tree-climbing kangaroo (*Dendrolagus lumholtzii*) called in Wargamay bulngari, but Lumholtz consistently called it 'Boongary', failing for a year to hear the -l-. But on the whole Lumholtz's language material is fair and useful. In view of the importance of Lumholtz's book a full commentary on his language material

is included in an Appendix at the end of this grammar.

(9) Kendal Broadbent noted about a dozen Aboriginal names for plants and animals in his diary of a trip collecting for the Queensland Museum in the Cardwell district, 1886 (the diary is now in the Queensland Museum Library). Some words are close to some of those obtained by Lumholtz; others appear to be Wargamay or Giramay.

(10) In a letter to A.W.Howitt dated 24th July 1898 William Craig correctly identified the 'tribes' of the region as Warga-mi, Kirra-mi, War-oong-oo, Bei and Nowa-gee. He did not like the term 'tribe', saying that they were more like Scottish clans. Craig took 'language' to be a defining characteristic of this grouping (cf Dixon 1976a), thus:

'I give below the groups or clans with their name; it appears to me it is connected with language more than anything else as it does not bind them for agression or tribal organisation nor prevent intermarrying... I give you the five groups close here and a few of their commonest words, so you can see what you can make out of it.

Group	Sun	Moon	Fire	Water	No	Yes	Where	go
(no)	Currie,		{Wiibara					
War-ga-mi <sup>a</sup>	Woo-ee }	Ballan <sup>ee</sup>	Wagoon	Ull-oo	Mia	I-ee	minya	yan-ee
(no)								
Kirra-mi <sup>a</sup>	Currie	Ballanoo	You-goo	Com-oo	Mia	In-yan	wan-ja	yan- <sup>ee</sup>
War-oong-oo	Yuln-gun	Ballanoo	Boor-ee	Com-oo	Nowa	Yae-oo	wan-ja	yan-ulgoo
(no)								
Bei	Woo-ee	Ballan	Mingoo	Com-oo	Be-i	Iba	wan-ja	moom-a-goo
(no)								
Nowa-gee	I cannot give you this just now but Nowa means No							

'I give you here some words that I have got from a boy who has been on the Johnstone to the N.of Cardwell and says he knows their talk Uth-an -

(yes)	Sun	Moon	Fire	Water	No	(yes)	(where)
Uth-an	Currie	Cug-a-lum	Boan-ee	Bun-a	Imba	Uth-a	min-ya-goo'

Most of the words in the Wargamay and Biyay lines are quite recognisable. 'Woo-ee' indicates wi: 'sun' (gari occurs only in Dyirbal), 'moon' is in fact balanu in W and balan in B, 'fire' is wagun, 'water' is ḡalu in W and gamu in H, 'no' is maya in W and biyay in B, 'yes' is in fact ḡayi in both dialects, 'where' is based on the root wanga- (mīna is 'what') and 'go' should be gaga- (yani is a Waruḡu form). 'Wiibara' may relate to wi: 'sun' and the derivational affix -bara 'belonging to' (3.1.3) but mingoo and moom-a-goo from the Biyay lines are not recognisable. The inclusion of gamu for 'water' indicates that Craig may have taken the Biyay line from a member of the Hinchinbrook group (Halifax Biyay has ḡalu, like W). The Giramay and Waruḡu lines have a similar sprinkling of errors and the last line (from the Johnstone River) appears to be a northerly dialect of Dyirbal, probably Ngajan (Craig's 'Uth-an').

(11) On 3rd November 1938 N.B.Tindale collected a Wargamay vocabulary on Palm Island. This is, like all Tindale's material, well transcribed and is clearly identifiable as W, with a few B intrusions.

However, Tindale's placement of Wargamay and Nyawaygi on his tribal maps (1940 and 1974) is not correct. He attributes the Bandjin/Biyay tribe solely to Hinchinbrook Island (presumably on Jimmy Banfield's testimony); in fact it occupied the adjacent mainland (attributed by Tindale to Giramay) and the land around the mouth of the Herbert River. In the case of Wargamay, Tindale describes the territory as 'coast at Halifax Bay, inland to slope of Coast Range; north to Ingham and Lucinda Point; south to Black River, twenty miles north of Townsville (seven hordes are mentioned in the literature)'. The literature cited by Tindale is the entry by Cassady and Johnstone in Curr (1886, II:424-31); but this in fact refers to the Nyawaygi tribe (the name is not given but comparison of vocabularies - for instance, those gathered by Tindale himself in 1938 - establishes this quite conclusively). In fact, the territory Tindale ascribes to Wargamay was occupied partly by Biyay but largely by Nyawaygi, a coastal people who Tindale mistakenly attributes to an inland tract. As already noted, the Wargamaygan occupied territory on both sides of the Herbert River - Tindale allocates that on the north bank to Giramay and the southerly portion to Nyawaygi.

(12) About 1961 La Mont West Jnr worked at Palm Island with Jimmy Johnson (Johnson died a few months afterwards). West lent me his notes in 1964. They involve 1300 numbered items (mostly single words), which appear to have been dictated almost randomly by Johnson, with West making no attempt to cross-check or systematise the data he was writing down, or to gain any understanding of the language. Glosses are often misleading and the transcription is phonetically poor - for instance, item 1032 is given as 'wuripa bulumbi wa·kunka - take stick away and chuck in bush'; this is almost certainly (following West's use of voiceless stop symbols) wurpi puɽmbi waku·nta 'big-ABS throw-IMP tree-LOC'. In most cases West missed the important, phonologically-distinctive vowel length in initial syllables.

West made a tape-recording of songs, pronouns and a few somewhat halting texts; the tape is deposited with the Australian Institute of Aboriginal Studies. The quality of recording is very poor, and when I played it to Alf Palmer, in 1967, he professed himself unable to make it out. However, it was possible to check with Palmer and with other informants some of the words and grammatical forms, from West's transcriptions of the tape and from my listening to it.

Johnson undoubtedly had a fair command of Wargamay and was said to be an excellent raconteur. But it is clear from the material (corroborated by other informants) that he tended to mix Giramay in with Wargamay. This, together with the poor quality of the Johnson material, severely limits its value. I did use it during my own field work to suggest forms, but always required careful corroboration from a Wargamay informant (see 1.7).

(13) In 1970 Peter Sutton contacted John Tooth, at Minnamoolka Station, and recorded a few minutes Wargamay on tape; no written notes were taken. Sutton made the tape available to me and suggested Tooth as a potentially useful

and reliable informant.

(14) About 1974 Tony Beale recorded a few score words from Nora Boyd, at Ayr, and passed these on to me. (I had previously contacted Mrs Boyd, but Beale discovered her whereabouts quite independently).

(15) Tasaku Tsunoda worked intensively at Palm Island with Alf Palmer (born about 1890) on what was described in 1971 as Kutjal and in 1972 as Waruḡu - see Tsunoda's MA thesis (1974). The material Palmer gave on Waruḡu is splattered with Dyirbal words and morphemes and ideally requires checking with another speaker of Waruḡu. Although Palmer's parents were Waruḡu, he has lived most of his life in Wargamay- and Dyirbal-speaking districts (and, for the last thirty or so years, Dyirbal has been the only one of these languages to be actively *spoken* in everyday affairs).

In September 1974 Tsunoda elicited some Wargamay material from Palmer (as I had done ten years before - see 1.7), making this available to me. A few months later Palmer told Peter Sutton that he had given Tsunoda some Wargamay, but was afraid that a bit of Waruḡu had got muddled in! This material does in fact contain intrusions from Waruḡu and from Dyirbal; it also mixes together the distinct W and B dialects of Wargamay (for instance, Palmer uses both the -*ba*li and -*ni* varieties of the continuative verbal suffix - 3.5.3).

Most tribes in this area have an extensive 'avoidance vocabulary' used in the presence of (amongst others) a parent-in-law of the opposite sex. The Dyirbal and Yidiḡ term for this speech-style is Dyalḡuy; it is often referred to in English as 'mother-in-law language'. I asked Palmer in 1964 concerning a Wargamay avoidance style and he affirmed there was one, but he could only remember three words (quoted in 1.7 below). However, during 1971-4 Palmer would, apparently randomly, tell Tsunoda that a certain Waruḡu or Wargamay item was 'Dyalḡuy' (especially when, say, two words had been given for the same thing). None of these later Dyalḡuy labellings has any veracity; almost all are straightforward Waruḡu, Wargamay or Dyirbal items.

## 1.7 SOURCES FOR THIS STUDY

I did some peripheral work on Wargamay in 1964 and 1967 (whilst primarily concerned with Dyirbal) gathering material from Alf Palmer (ḡimbiḡay) at Palm Island. A comparative vocabulary of some 500 items was elicited in Wargamay, Waruḡu, Dyirbal and Giramay and some basic grammatical paradigms in Wargamay were also obtained. In addition, Palmer spoke Waruḡu and Wargamay material of his own choosing (words and simple sentences) onto tapes after I left the field, under the auspices of Jack Doolan of Palm Island. He consistently declined to give any textual material. At this time Palmer volunteered just three words in the Dyalḡuy 'avoidance style' of Wargamay - biḡubara 'foot', guygara 'water' and mandila 'hand'; the correspondent forms in the unmarked 'everyday style' of Wargamay are biḡan, ḡalu and mala respectively. Note though that mandila

is the form for 'hand' in the H dialect (attested in sources (1) - (4) of 1.6). Palmer did not appear very certain of these items, and it was not possible to obtain confirmation from any other informants.

Intensive study of the language ran from 1972 to 1980 and involved work with John Tooth and Lambert Cocky (W dialect) and Nora Boyd (B dialect). Each of these informants was less liable to muddle in material from other languages than were Jimmy Johnson (1.6) and Alf Palmer but it was still necessary to exercise extreme care in separating out Wargamay from the Giramay dialect of Dyirbal. Every putative Wargamay lexical item - given by Alf Palmer and/or Jimmy Johnson - was checked with at least one, and preferably two or all three, of Tooth, Cocky and Boyd. Particular care was taken in checking items which appeared to coincide in Wargamay and Giramay. The grammar was also carefully sifted to exclude extraneous elements.

At first Giramay was used as a means of elicitation. But since Giramay forms and constructions are often close to - but not identical with - Wargamay this sometimes tended to confuse speakers; they would continue in Giramay, or say that Wargamay was 'the same' when in fact there were slight differences. Because of this, most of the later elicitation was done using just Wargamay and English (in which all of the informants were quite fluent).

John Tooth's name is *guraminbal*, literally 'shoot the cloud' (this relates to the thunderstorm, a totem of his section, *gurguru*). Born at Abergowie of a Giramay mother and Malay father, he was brought up by his Wargamay stepfather at Lannercost and Stone River; Tooth speaks the W dialect but is also quite at home in Giramay. He remembers as a boy walking with his tribe to a corroboree near Innisfail; to another at the Argentine Gold Mine, about 40 miles inland from Townsville; and to a third at the tin mine on the Charters Towers/Lynd road. Tooth has worked most of his life at cattle stations on the tablelands north of the Herbert and was contacted in 1972, 1973, 1974 and 1977 at Glen Ruth (formerly Cashmere). His knowledge of Wargamay was rather rusty but this was compensated by his intelligence and application. It was possible to record from him two very short texts, to obtain or check the best part of a thousand lexical items and to elicit on a wide range of grammatical points. John Tooth has a fine linguistic sense; if I made mistakes in trying to construct Wargamay sentences he would reject them because 'it doesn't seem to rhyme', his way of saying they were ungrammatical.

The fact that John Tooth also speaks Giramay (and of course there have been more people to speak to in Giramay than in Wargamay, over the last few decades) affects his Wargamay a little. Tooth tends to use the irrealis inflection -*m* mostly in the 'lest' sense, probably because the Giramay verbal inflection -*bi* is restricted to a 'lest' sense; he would use -*m* with a simple future sense sometimes but less often than would Cocky (or Boyd). Tooth would also use transitive verbs in intransitive constructions a little less often than Cocky or Boyd; in Giramay transitive verbs can *only* occur in transitive constructions.

Lambert Cocky (or Atkinson) is named *burayngubaçu* and belongs to the *wuguru* section. One parent was Wargamaygan and one Biyaygiri; thus although Cocky's dialect is predominantly W there is some B mixed in (but scarcely any Giramay). Like John Tooth, he was probably born a few years before 1900. Cocky was interviewed in 1972 and 1973 at Dan Sheahan's cane farm, on the bank of the Herbert River, just east of Abergowrie (in original Wargamaygan territory) and in 1974, 1975, 1977 and 1980 at the Eventide Home, Charters Towers. Cocky may have been more fluent in Wargamay than John Tooth but was at first a difficult informant, not inviting direct questions. Despite this, it was possible to check several hundred lexical items with him and to clarify a number of grammatical points; he also recorded one short text (see 1.5).

Nora Boyd, named at birth *girgul*, later called *gugucu*, was the only source for the Halifax Biyay dialect. She was interviewed at Ayr in 1973 and 1974 and at Halifax in 1975. Nora Boyd was reported to be in her nineties (she had a son in an old folks' home, and went to visit him periodically) but was as mentally agile as John Tooth or Lambert Cocky, each of whom was a dozen years her junior. Mrs Boyd spoke pure Biyay and although she could sometimes recognise preferred items to be in the W dialect or in Giramay she would never mix these into her own speech. Nora Boyd did not give texts but was unfailingly courteous in volunteering and checking all manner of lexical and grammatical points. Only a limited amount of work was possible with Nora Boyd, before her death in late 1976; it was not possible to check a number of grammatical points, or whether many W lexemes also occurred in B.

Arthur Wild, named *gububaçi*, (born at Abergowrie) was interviewed near Halifax in 1972 and 1973 (he died in 1974). Although most helpful, he was too old and semi-senile to yield any information that had not already been obtained from Tooth and Cocky.

## 2. PHONOLOGY

This description is in part conceived of as a section of an areal study of the languages in the Cairns/Townsville region. These are, from north to south, Yidiñ (Dixon 1977a); Dyirbal with major dialects *Ngagan*, *Mamu*, *Dyirbal* and *Giramay* (Dixon 1972); Wargamay with dialects *Biyay* and *Wargamay*; and *Nyawaygi*.

Yidiñ, Dyirbal and Wargamay have an identical set of sixteen segmental phonemes. In *Nyawaygi* original \*d has changed to r or ɟ except within a consonant cluster; in modern *Nyawaygi* [d] and [r] can be grouped together as allophones of a single phoneme, giving an inventory of just fifteen phonemes.

The four languages differ in the occurrence of vowel length. Length occurs only in initial syllables in *Nyawaygi* and *Wargamay*, only in non-initial syllables in *Yidiñ*, and in any syllable in the northerly dialects of *Dyirbal*.

The southern Dyirbal dialects do not show contrastive vowel length.

It is likely that Wargamay and Nyawaygi preserve a length distinction that was in a proto-language, ancestral to the four modern tongues (Dixon 1980a); this initial length contrast has simply been lost in Dyirbal and Yidiñ. Yidiñ has evolved a length distinction in non-initial syllables by a series of recent changes (documented in Dixon 1977a:42-88, 1977b), while the Ngagan and Waçi dialects of Dyirbal have developed long vowels in all types of syllables through a recent change of a quite different type (Dixon 1972:342-5, 1980b). A comparative survey of the occurrence of vowel length in languages of the Cooktown/Cairns/Townsville area is in Dixon, 1976a.

## 2.1 CONSONANTS

Wargamay has

	labial	apical	laminal	dorsal
stop	b	d	ɟ	g
nasal	m	n	ɲ	ŋ
lateral		l		

There are also

two semi vowels: dorso-labial w and laminal y

and two rhotics, distinguished mainly in terms of place of articulation (although the frontmost rhotic is more often a trill, and tends to involve more taps):

- r normally an alveolar trill (sometimes a single flap)
- ɽ either a semi-retroflex (post-alveolar) continuant or else a flap or short trill articulated towards the back of the alveolar ridge.

Rhotic minimal pairs include *gambara* 'cyclone', *gambaɽa* 'body'; *gurugu* 'grog' (a loan), *guɽugu* 'dove'. Minimal pairs distinguishing /r/ from /d/ include */bari/* 'stone', */baði/* 'hook fish'.

Apical stop, nasal and lateral involve the tip of the tongue touching the alveolar ridge; sometimes an apico-postalveolar (retroflex) allophone occurs following u. Intervocally, /d/ can be realised as an alveolar flap [ɽ]. It appears that [ɽ] can be an allophone of both /d/ and /r/ - we have [bari] in free variation with [baði] - featuring a trill - for */bari/* 'stone', and [bu:ɽiya] alternating with [bu:diya] for */bu:diya/* 'take!'.

Phonemes in the laminal column normally have lamino-palatal realisation. However, lamino-interdental allophones have been encountered before a and before u (following a normal Australian pattern - Dixon 1970): [ɲaɟa] alternates with [ŋaɟa] '1sg pronoun, A function' and [ɲana] with [ŋana] '3pl pronoun, S function'. Wargamay is mid-way between Dyirbal, which has no interdental sounds, and Nyawaygi, where interdental is the major allophone for laminal stop and nasal.

The labials and velars do not show as much allophonic variation. But /g/ can be labialised when u follows (and, probably, only when there is a dorsal consonant in the



following cluster) e.g. [g<sup>w</sup>uyga] 'long-nosed bandicoot'. And /b/ has been heard lenited to a bilabial fricative when non-utterance-initial e.g. [ŋi:ɕaβada], /ŋi:ɕa bada/ 'tie up the dog!'.

Most words beginning in /yi.../ can be realised either as [yi...] or as [i...]; thus /yimirigi/, [imirigi] 'be glad-PERFECT'; /yigara/, [igara] 'crayfish'. However, the initial /y/ must be pronounced in, for example, /yira/, [yira] 'tooth'; it may be that initial [y] can be omitted before [i] only when followed by a nasal or stop. Note that initial /w/ is always pronounced, even before /u/, thus [wudu] 'nose', [wurbi] 'big' (never [udu] or [urbi]). Compare with Yidiṁ where initial /y/ and /w/ are always pronounced (Dixon 1977a:34-5) and Dyirbal where either semi-vowel can usually be elided before a homorganic vowel (Dixon 1972:278).

## 2.2 VOWELS

In the second or later syllable of a word, Wargamay has three vowel phonemes:

- u close back
- i close front
- a open

In the initial syllable of a word there is a contrast between short and long vowels - effectively a six-term system, u, u:, i, i:, a, a:. The vowels occurring in non-initial syllables are most similar in length and quality to the short vowels in initial syllables.

Since Wargamay is an entirely suffixing language it will be seen that all long vowels occur in roots; affixes exclusively involve short vowels.

There are in fact just two examples of long vowels in a non-initial syllable - ɟi:ɟi: 'bird (generic)' and bi:|bi:| 'peewee (*Grallina cyanoleuca*)' (the latter, at least, is onomatopoeic). Note that these appear to be reduplicated, although the non-reduplicated forms (ɟi: and bi:|) are not attested. However, in other Australian languages roots that involve 'inherent reduplication' pattern phonologically like compounds - that is, the intramorphemic boundary half-way through the root allows the phonotactic possibilities normal for intermorphemic boundaries (cf Dixon 1977a:36-7 for Yidiṁ) - and these two forms do not therefore pose any serious counterexample to our generalisation that long vowels are restricted to initial syllables.

Minimal pairs involving a length contrast are:

ŋana	'1pl pronoun, SA form'	ŋa:na	'interrogative pronoun, O form'
badi-	'to hook a fish'	ba:di-	'to cry, weep'
giba	'liver'	gi:ba-	'to scratch'
gura	'cloud, sky'	gu:ra-	'to rub'
gulu	'buttocks'	gu:lu	'black'
nuba	'bark bag'	nu:ba-	'to sharpen'
ganda-	'to burn, cook'	ga:nda-	'to crawl'

Of the 920-word Wargamay lexicon, 90 items (almost 10%) involve a long vowel. And note that although verbs make up

only 16% of the total lexicon, 38% of long vowel items are verbs. (Comparative evidence suggests that Wargamay vowel length goes back to a proto-language. The fact that such a high proportion of verbs involves long vowels may be partly explained by the fact that, in the course of linguistic evolution, verbs are less likely to be tabooed - and replaced by a form borrowed from a neighbouring language - than are words from other parts of speech.)

Nineteen of the long vowel roots are trisyllabic and 56 are disyllabic e.g.

bu:ŋguray	'a snore'	gu:gal	'mud cod'
gu:gaɕa	'urine'	ga:la	'empty'
gu:lnɠuɕup	'navel'	ma:ŋgay	'silly (person)'

There are thirteen monosyllabic words in Wargamay, each containing a long vowel (that is, there are no monosyllables with just short vowels). Seven comprise a closed syllable:

gi:l	'a black bird'	gu:n	'spirit of a man'
gi:n	'eyebrow'	ma:l	'man'
gu:l	'salt' (a loanword)	yi:l	'name'
gu:n	'Herbert River/Gorge'		

and six an open syllable:

di:	'tea' (a loanword)	wi:	'sun'
ga:	'jaw' (B)	wu:	'hoe' and 'war' (two homonymous loan words)
ŋa:	'not'	ya:	'top of a tree'

The actual phonetic length of a vowel appears to depend on the following consonant (cf Lehiste 1970:27):

(a) the shortest variety appears before a stop - [gi:gin], /gi:gin/ 'swamp wallaby';

(b) a slightly longer variety occurs before a nasal - [ma:ni-], /ma:ni-/ 'hold in hand, catch hold of'.

(c) the longest variety of all is encountered before the semi-retroflex rhotic continuant (whether this is itself prevocalic or preconsonantal) - [du::ɕa-], /du:ɕa-/ 'to pull up', [gu::ɕɠuɕu], /gu:ɕɠuɕu/ 'beetle'.

In the case of the longest vowels, type (c), I sometimes heard (and transcribed) a long vowel, and sometimes a sequence of vowel-semivowel-vowel i.e. [duwuɕa] etc. Type (b) were consistently transcribed with a long vowel. Many type (a) words were noted sometimes to have a long vowel, and other times to have a short one, in my early transcription. Further questioning was undertaken to resolve the inconsistency, and I was corrected when I said, for instance, [gi:gin], the informant especially stressing and lengthening the vowel, [gi:gin], to indicate the correct pronunciation.

The realisations of Wargamay short vowels /u/ and /i/ range from close to half-close, and that of /a/ from open to half-open. It seems, however, that long close vowels can have more distant allophones - thus /yu:ɕigi/, [yɔ:ɕigi] 'grow-up-PERFECT' for instance.

In a monosyllable /u:/ can be realised as [u:] or [uwu], /i:/ as [i:] or [iyi], and /a:/ as [a:] or as [a?a]. Thus we have [iyiil] alternating with [yi:i], [ma:l] with [ma?a:l],

and [ŋa:], with [ŋa?a], etc. ([a?a] also occurs in inflected forms of /ma:l/ e.g. [ma:lɔdu]~[ma?aɔdu] 'man-ERGATIVE'; but [a?a] has not been encountered as the realisation of /a:/ in any form that involves a polysyllabic root.)

Note that there are arguments against interpreting long vowels as, phonologically, vowel-semivowel-vowel sequences; that is, against writing /bu:di-/ 'to take' as /buwudi-/, and so on. There is a critical morphophonological rule that is sensitive to the number of syllables in a word: for transitive verbs in the W dialect imperative is -ya after a disyllabic stem ending in -i, but is -∅ in all other circumstances (after any stem ending in -a, or after a trisyllabic in -i). Thus we get:

stem	wugi-	imperative	wugiya	'give!'
	baba-		baba	'spear!'
	gungari-		gungari	'cut!'
	bu:di-		bu:diya	'take!'

The fact that bu:di- (and also ma:ni- 'take hold of', da:lbi- 'scoop water up' and so on) takes -∅ imperative suggests that the root here involves just two syllables.

There is, however, no morphological criterion applying to monosyllables, and we could consider treating long vowels in monosyllables differently from those that occur in polysyllabic roots. There are no examples of contrast (in monosyllabic or polysyllabic forms) between -iyi- and -i:- or between -uwu- and -u:- so we could assign the sequences -iyi- and -uwu- to underlie surface [i:] and [u:]. There is difficulty, however, with [a:]. The most likely solution here is /awa/ but this is ruled out since it does contrast with /a:/. Thus /mawa/ 'shrimp' is never realised as [ma:] or [ma?a] and demands to be treated in a different way from [ma:l]~[ma?aɔ]. The only way completely to avoid postulating forms which are phonologically monosyllables would be to have an additional phoneme /ʔ/ that would appear in just four roots! The long vowel interpretation, outlined above, is surely preferable to this.

In Dyirbal, sequences /awa/, /uwu/ and /iyi/ can be realised as [a:], [u:] and [i:] respectively, but these are less frequent realisations than [awa], [uwu] and [iyi]; the latter pronunciations are always given in lexical elicitation (Dixon 1972:278). There are in Dyirbal morphological reasons for preferring a vowel-semivowel-vowel interpretation; for instance, locative case is -ŋga onto a disyllabic but -ga after a trisyllabic root ending in a vowel, and the locative of guwumba 'a wild fruit' is -ga (not -ŋga). Note that only about 1% of the Dyirbal lexicon involves /awa/, /uwu/ or /iyi/ sequences, whereas 10% of the Wargamay corpus shows a long vowel.

Plainly Dyirbal imposes its 'vowel-semivowel-vowel' interpretation on any phonetic long vowel (and this is related to a requirement that every word in Dyirbal have at least two syllables) whereas Wargamay would interpret a phonetically identical sound as a phonological long vowel. Thus we have correspondences:

Dyirbal	/giyil/	'starling'	Wargamay	/gi:l/
	/biyilbiyil/	'peewee'		/bi:lbi:l/
	/yawa/	'top of tree'		/ya:/
	/gawa/	'doorway'		/ja:/ 'jaw'

and close cognates:

Dyirbal	/guwuy/	'spirit of a man'	Wargamay	/gu:n/
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Both Dyirbal /giyil/ and Wargamay /gi:l/ could be pronounced [giyil] (and similarly for the second line). This does not, however, hold for the third and fourth pairs. Dyirbal allows /awa/ to be realised as [a:] whereas Wargamay maintains a distinction between /awa/ and /a:/ (the Wargamay phonetic sequence [a?a] is missing from Dyirbal).

### 2.3 STRESS

Stress is assigned as follows:

(1) if the first syllable involves a long vowel, then it must receive primary stress;

(2) if there is no long vowel in a word,  
and (a) the word is disyllabic or quadrisyllabic, primary stress goes on the first syllable;

(b) the word is trisyllabic or quinesyllabic, primary stress goes on the second syllable.

Secondary stress goes on the syllable next but one after primary stress, except that a final syllable can never bear stress.

Thus:

(1)	mú:ba	'stone fish'	gí:baça	'fig tree'
(2)(a)	báda	'dog'	gíçawùlu	'freshwater jewfish'
(b)	gagára	'dilly bag'	çuçágay-mìri	'Niagara Vale-FROM'

It will be seen that stress shifts between the absolute form of a noun (which involves zero inflection) and an oblique form, e.g.

múçan	'mountain-ABS'	muçán-da	'mountain-LOC'
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The Wargamay stress assignment rules make it impossible to get two successive stressed syllables; and two successive unstressed syllables are only possible in a word with an odd number of syllables and the initial vowel long, as gí:baça above.

A non-initial vowel that bears primary stress may be phonetically lengthened e.g. [muçánda] 'mountain-LOC'; this must be carefully distinguished from the phonologically contrastive length in initial syllables (which has stronger and more consistent quantitative realisation). Phonological and phonetic length specifications do in fact function at different 'levels'. Thus we have, in the following order:

1. Underlying forms with phonological length specification.
2. Stress rule - onto the first syllable of a disyllabic word, or a word of any length involving a long vowel; but onto the middle syllable of a trisyllabic word with all vowels short.

### 3. Optional phonetic lengthening of non-initial stressed syllable.

That is, phonetic lengthening is dependent on stress placement, which in turn depends on the occurrence of phonological length.

(Pre-Yidj probably had stress assignment and phonetic lengthening rules rather like modern Wargamay. It then introduced a rule deleting the final syllable of words with an odd number of syllables, under certain phonologically- and grammatically-defined conditions; this made the placement of stress in a word phonologically contrastive, as *malá·nu* > *malá·n* 'righthand-ABS' contrasting with *málan* 'river-ABS'. Finally, contrastive stress (with concomitant lengthening) was replaced by contrastive length (which determines stress placement) - /*malá:n*/ versus /*málan*/. See Dixon 1977a,b.)

## 2.4 PHONOTACTICS

A Wargamay root has phonological structure:

either  $C_1V:(C_3)$

or  $C_1V(:)C_2V(C_2V)^n(C_3)$  where  $n \geq 0$

In these structures:

V is any vowel (a, i or u);

$C_1$  can be any consonant except l or r; that is, it can be a stop, a nasal, a semi-vowel, or  $\zeta$ ;

$C_3$  can be  $\gamma$ , l, r or any nasal other than  $\eta$ ; that is, it cannot be a stop, w,  $\zeta$  or  $\eta$ ;

$C_2$  can be

- (i) any single consonant; or
- (ii) a homorganic nasal-stop sequence; or
- (iii) l, r,  $\zeta$  or  $\gamma$  followed by a non-apical stop, or nasal, or nasal-stop sequence, or by w; or
- (iv) n followed by a non-apical stop or nasal.

The following clusters, which would be predicted by these generalisations, have not been encountered:  $l\eta$ ,  $\eta\eta$ ,  $\zeta m$ ,  $\zeta n$ ,  $\gamma n$ ,  $\gamma w$ ; they are assumed to be 'accidental gaps' in the data. Only one example is known of each of  $lw$ ,  $\eta\eta$ ,  $rmb$ ,  $r\eta$ ,  $rw$ ,  $\zeta n\zeta$ ,  $\zeta\eta$ ,  $\zeta w$ ,  $\gamma\eta$ .

In addition,  $-iy-$  must be immediately followed by a vowel (that is, this sequence can never occur at the end of a syllable).

There are just three words not covered by the general statement. 'Male kangaroo' has been heard as *yáwuymbàçí* and as *yáwuynbàçí*, but when I enquired about the pronunciation it was said slowly as *yáwuy báçí*. It seems that a nasal is inserted between second and third syllables and can be assimilated in place of articulation *either* to the preceding *or* to the following segment. *gú:lnguçun* 'navel' was treated similarly - it was said slowly simply as *gú:l gúçun*, without the nasal segment. The third item is *yuçúynbi*

'bank of river', which occurs only in a song.

There are considerably wider cluster possibilities across a morpheme boundary, effectively C<sub>3</sub> followed by C<sub>1</sub> (affixes can begin with almost all segments that can commence words). Across a nominal stem+inflection boundary we can also get possibilities not included under C<sub>2</sub> e.g. -ld- or even -lnd- (for ergative case - see 3.1.1).

Loans generally follow the possibilities outlined above. The only exceptions noted (and these may be ad hoc 'loans', rather than items that were properly assimilated into the language at a time when it was actively spoken) are drayga 'tracker' and layn '(fishing) line'. The mapping of English into Wargamay phonotactics in loans generally follows the principles described for Dyirbal (Dixon 1972: 325-6). Noteworthy examples include bagir 'basket' - where English -s- is lost before the velar stop, and final -t is rendered as -r (Wargamay words cannot end in a stop) - and ɲabiɕbil 'Herbert Vale', where the initial consonant is supplied as ɲ, for an English loan that begins in an open vowel (or h plus open vowel).

2.5 PROBABILITIES OF OCCURRENCE

Relative probabilities of occurrence were calculated, from the 920-item lexicon, for initial, C<sub>1</sub>, and final, C<sub>3</sub>, consonants. The C<sub>1</sub> count covers all parts of speech whereas the figures for final consonants exclude verbs (which all have roots ending in -a or -i, see 3.5.2):

	root initial		root final	
b	0.19	} 0.60		
d	0.02			
g	0.15			
ŋ	0.24			
m	0.12	} 0.22	0.015	} 0.49
n	0.007		0.365	
ɲ	0.02		0.11	
ŋ	0.07			
y	0.07	} 0.17	0.16	
w	0.10			
l	0.001			
r			0.31	} 0.35
ɕ	0.01		0.04	

The relative probabilities for vowels are (with initial syllable figures covering all parts of speech but the non-initial count excluding verbs):

	initial syllable	non-initial syllable
a	0.43	0.47
i	0.18	0.21
u	0.39	0.32

There was no significant difference between figures for open or closed syllables, or for short versus long vowels.

About 63% of non-verbal roots end in a vowel; this compares with figures of 50% for Dyirbal, 44% for Yidip

and 60% for Nyawaygi.

At C<sub>2</sub>, homorganic nasal-stop clusters (mb, nd, ŋd, ŋg) outnumber non-homorganic clusters (nb, nŋ, ng) by about four-to-one. Nasal-nasal clusters are much rarer than in Dyirbal - only three examples of -nm- and one of -nŋ- were encountered.

## 2.6 PHONOLOGICAL PROCESSES

[A] *Yotic deletion*. This is the one important morphophonemic rule in Wargamay. We have already noted that a sequence -iy- must be followed by a vowel, never by a consonant or word-boundary. If an illicit sequence is generated by morpheme combination, then the -y- is simply dropped:

YOTIC DELETION RULE -iy- → -i  $\begin{cases} -C \\ -\# \end{cases}$

There is an identical rule in Dyirbal (Dixon 1972:287) and in Waruŋu, and a similar one - in which -iy is sometimes replaced by -i: - in Yidiŋ (Dixon 1977a:77-83).

[B] *Nasal insertion*. There are sporadic examples of a nasal being inserted between a syllable-final  $\gamma$  or  $l$  and a syllable initial stop. Three examples of apparent nasal insertion within roots were given in 2.4. Locative and ergative case inflections, with canonical shapes -da and -du, become -nda and -ndu after a stem ending in - $l$  (3.1.1). There is also a nasal in gubimbulu 'very wise man', presumably based on gubi 'wise man' and -bulu 'very' (3.1.3). An inserted nasal can be assimilated in place of articulation to the following, or sometimes to the preceding, segment.

Ergative and locative case allomorphs provide further examples of assimilation, this time of a stop to a preceding nasal or  $\gamma$  (3.1.1).

[C] *Haplology*. There are in the grammar a number of examples of a syllable being omitted from a longish form when it is phonologically identical to or similar to the preceding or to the following syllable.

(i) the inchoative verbaliser has allomorphs -mbi (following a vowel)~ -bi (following a nasal)~ -i (following  $l$  or r). The -bi- is omitted from the postvocalic allomorph -mbi when continuative suffix -bali follows. Thus:

nominal	bi:ɕa	'fear'	but	gubil	'whistle'
+inchoative	bi:ɕambi-			gubili-	
+inchoative+continuative	bi:ɕambali			gubilibali	

Note that -bi- is phonologically similar to the following -ba-, and that it *must* be omitted in this environment; a fuller discussion is in 4.9.1. The continuative suffix cannot be added directly to a nominal root, so there is no possibility of ambiguity here.

(ii) purposive inflection is -lagu onto an intransitive stem. However, the -la- is sporadically omitted after a trisyllabic stem - all the examples noted have third syllable -ra- or -li- (quite close in form to -la-). Thus guwaralagu and guwaragu were both recorded for 'stand-PURPOSIVE'; when elicitation was directed to this point the informant preferred the canonical form guwaralagu. In one of the texts

recorded by Jimmy Johnson the disyllabic root wula- 'to die' plus purposive -lagu was said as wulagu (not wulalagu). See 3.5.4.

(iii) we surmise in 3.5.3 that an original monosyllabic verb gi:- 'to sit' has effectively been reanalysed as having a disyllabic root gi:gi- in the W dialect. But the -gi- can optionally be omitted before continuative -bali; thus gi:gibali~gi:bali. This could be explained in either of two quite different ways - through the general syllable elision tendency of Wargamay, or in terms of the reanalysis of gi:- in terms of gi:gi- being not quite complete. Or it could be due to the intersection of these two rather disparate factors. (But note that -gi- is rather different in form from the following syllable -ba-; the preceding gi:- is unlikely to be relevant since -gi- does not drop from gi:gi- with any other suffix.) See 3.5.3.

(iv) there are other isolated instances of syllable elision in my corpus. For instance, gumba- 'put in, go in' plus -bali was heard as gumbali-, and gi:ba- 'scrape, scratch' plus -bali was said as gi:bali, as in (140) below (I was in fact corrected when I said gi:babali). But note that the reciprocal suffix -ba- is never dropped from buɟba-ba-y 'hit-RECIP-UNMKD'; if it were the verb would be indistinguishable from the non-reciprocal form buɟba-y (see 4.5).

Syllable elision could almost be described as a 'personality trait' of Wargamay grammar (nothing of this nature has been noticed in surrounding languages). It is - except in the case of (i) - almost always a sporadic phenomenon.

## 2.7. COGNATION WITH NEIGHBOURING LANGUAGES

The majority of words cognate between Wargamay and a neighbour are identical in form in the two languages. There are, however, some systematic differences:

[A] *Long vowels*. Generally, a long vowel in Wargamay simply corresponds to a short vowel in Dyirbal and Waruɟu, languages that have no contrastive length. Thus:

Wargamay	ba:lba- 'to roll'	Dyirbal, Waruɟu	balba-
	bu:di- 'to take, bring'	Dyirbal	budi- 'to carry'

In the case of most of the long/short vowel minimal pairs, listed in 2.2, only one member occurs in Dyirbal. For instance:

Wargamay	Dyirbal
ɲana '1pl pronoun, SA form,	ɲana
ɲa:na 'interrogative pronoun, 0 form'	wapuna
badi- 'to hook a fish'	badi-
ba:di- 'to cry, weep'	dungara-
giba 'liver'	giba (northern dialects)
	giba (Giramay dialects)
gi:ba- 'to scrape, scratch'	giba-

But there is one example of a minimal pair in Wargamay



corresponding to homophones in Dyirbal:

Wargamay	gura	'cloud, sky'	Dyirbal	gura
	gu:ra	'to rub'		gura-

Correspondences between long vowels in Wargamay monosyllables, and vowel-semivowel-vowel sequences in Dyirbal, were mentioned in 2.2.

Long vowels in Wargamay normally correspond to long vowels in Nyawaygi and in other, widely separated, languages (in cases where there is a corresponding form). For instance, Wargamay ma:ni 'hold in the hand' corresponds to ma:- 'hold in the hand' in Nyawaygi and also to ma:- 'take' in Guugu-Yimidhir (next language but two to the north of Yidiṁ, spoken around Cooktown). Similarly, 'cry' is ba:ri- in Nyawaygi, ba:di- in Wargamay and ba:ḍi- in Guugu-Yimidhir. It is this sort of correspondence which leads us to suggest that length in the initial syllables of Wargamay, Nyawaygi and Guugu-Yimidhir words is rather ancient, and has simply been lost in the intervening Dyirbal/Yidiṁ block (Yidiṁ has simply badi- 'to cry', and mani- 'to catch in a trap', for instance). (Further discussion of long vowel correspondences will be found in section 2.7 of my Nyawaygi grammar.)

[B] *Final* ɟ. The main phonotactic difference between Wargamay and its northerly neighbour is that in Dyirbal, but not in Wargamay, roots and words can end in the retroflex grooved continuant, ɟ. There are in fact a number of cognate pairs in which the Wargamay member simply has a vowel following what is final -ɟ in Dyirbal:

Wargamay	baguɟu	Dyirbal	baguɟ	'sword'
	gu:gaɟa		gu:gaɟ	'urine'
	ŋamiɟi		ŋamiɟ	'hungry'

In each of the nine examples of this type of correspondence, the vowel following ɟ in Wargamay is identical with the preceding vowel. It is thus, on this data, equally plausible that Dyirbal dropped a final vowel, or that Wargamay introduced one (say, at a time when it adopted a constraint that words could not end in ɟ). Eight other trisyllabic Wargamay roots ending in ɟ-plus-vowel have identical form in Dyirbal, e.g.:

Wargamay	yinaɟi	Dyirbal	yinaɟi	'cave'
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Five of these have the same vowel on each side of ɟ, and three have different vowels. (There are five quadrisyllabic Wargamay words ending in ɟ-plus-vowel that have cognates in Dyirbal - the Dyirbal and Wargamay forms are all identical.)

There is, however, phonotactic evidence that can help us decide between the two alternatives mentioned in the last paragraph. There is in Wargamay, as in most Australian languages, great similarity between the set of consonants that can commence a consonant cluster, and those that can end a word (that is, between the closing segments of non-final and of final syllables). Note that although ɟ cannot end a word, there are more than two dozen examples of medial clusters beginning with ɟ (and ɟ does here con-

trast with r - as in the minimal pair *wirga* 'nulla nulla (club)', *wiŋga-* 'to bathe'). This surely favours the hypothesis that originally Wargamay allowed ɕ at the ends of all syllables - as Dyirbal still does - and at a late stage eliminated word-final ɕ by simply repeating the vowel of the preceding syllable.

[C] *Initial* ɕ. Leaving aside loans, only 7 roots in my Wargamay lexicon begin with ɕ-, less than 1% of the total; in contrast, Dyirbal has 3% of its lexical roots commencing with ɕ-. (Four of the seven Wargamay roots do occur in identical form in Dyirbal.)

There are two isolated correspondences involving ɕ-initial items in Dyirbal:

Wargamay	wulguɖu guwa	Dyirbal	ɕugugu ɕuwa	'Torres Straits pigeon' 'west'
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[D] *Final* -ɲ. Eleven per cent of the consonant-final roots in Wargamay end in the laminal nasal, ɲ (2.5), a figure almost twice that for Dyirbal (Dixon 1972:279). There are in fact four cognate pairs in which Wargamay -ɲ corresponds to -y in Dyirbal:

Wargamay	ɖagan 'sand guana'	Dyirbal	ɖagay
	ɖawun 'hot'		ɖawuy 'steam'
	gu:ɲ 'spirit of a man'		guwuy
	wagun 'sea'		waguy 'sand'

And there are four correspondences in which Dyirbal also has a final -ɲ:

Wargamay	bundɲ 'grasshopper'	Dyirbal	bundɲ
	gulɲ 'east'		gulɲ
	wargɲ 'boomerang'		wargɲ
	ɖubun 'slow'		ɖubun 'gentle, quiet'

Note that all -ɲ final items in Wargamay also have the nasal in Dyirbal; the sequence -iy is not permitted at the end of a syllable in either language. But four out of the five roots ending in -aɲ or -uɲ in Wargamay have a final -y in Dyirbal. This suggests that final -ɲ was lenited to -y in Dyirbal in cases where it did not follow the homorganic vowel -i. (*ɖubun* could have been a loan from Wargamay after the lenition rule operated, or there may be some other explanation for this form.)

[E] *gi-* and *gi-*. In many languages of eastern Australia can be found cognate pairs involving a correspondence between *gi* and *gi* or *gi*. For instance:

(i) the comitative suffix on nominals is -*giri* in Wargamay (3.1.3), -*gi* in Nyawaygi, \*-*gir* in Waruɲu and Yidiɲ, -*gi* in Guugu-Yimidhir, etc. (see Dixon 1976b:203-310);

(ii) both Nyawaygi and Guugu-Yimidhir have a small closed verbal conjugation which includes *wu-* 'to give' and *pa:-* or *pa:-* 'to see'; the past/perfect inflection on this conjugation is -*gi* in Nyawaygi and -*gi* in Guugu-Yimidhir;

(iii) *giba* is 'liver' in Wargamay and in the Giramay dialect of Dyirbal, and 'stomach' in Nyawaygi; *giba* is 'liver' in

the northern dialects of Dyirbal and in Waruṅu, and ḡiba is 'liver' in Guugu-Yimidhir;

(iv) 'mother's father' is ḡagi in Dyirbal, ḡayginan in Wargamay, ḡaygi in Nyawaygi, ḡagi in Waruṅu and ḡaḡi in Guugu-Yimidhir.

It appears that this set of correspondences covers a large geographical area (and should not be regarded as something particular to Wargamay).

### 3. MORPHOLOGY

For Wargamay the following word classes, with mutually exclusive membership, can be set up:

noun	}	nominal
adjective		
locational qualifier		
time qualifier		
pronoun		
demonstrative		
verb		
particle		
interjection		

Noun and adjective have almost the same morphological properties; there is, of course, a clear semantic difference. Locational and time qualifiers take a subset of nominal inflections, but show enough minor differences to be considered separate word classes. Pronouns show inflections that are quite similar to those on nominals, but also demonstrate important differences (and some irregularities). Verbs have a separate set of inflections from nominals, pronouns, etc.

The closed classes are fully listed below: pronouns and demonstratives in 3.4, particles - which provide modal-type qualification of a complete sentence - in 4.10 and interjections in 4.12.

Members of the remaining, open, classes are listed in the vocabulary; the semantic content of these parts of speech is best seen from examination of this list. Generally, the semantic contents are quite close to those for Dyirbal (Dixon 1972:39-41). Significant differences are (i) Dyirbal has a set of adverbs, inflecting like verbs e.g. 'do well', 'do slowly'; Wargamay appears to specify value and speed entirely through adjectives; (ii) where Dyirbal has adjectives 'angry', 'sleepy', 'frightened', Wargamay appears to have abstract nouns 'anger', 'sleepiness', 'fear', a modifying stem being formed by the derivational affix -giri 'with' (3.1.3).

Each root in Wargamay belongs to just one word class. There are a number of processes that derive a stem of a different class - forming verbs from nominals, adjectives from nouns, etc. In Dyirbal, Yidiṅ and Nyawaygi every verbal root is strictly specified for transitivity (half-a-dozen exceptions are known in Dyirbal, none in the other

two languages); Wargamay is unusual among languages of this area in having a large number of verbal roots (probably, two-thirds of the total) able to take either the transitive or the intransitive conjugational inflections.

### 3.1 NOMINALS

A noun or adjective in Wargamay must involve a root and a case inflection (one choice being absolutive, which has zero realisation). Between root and inflection can come one or more derivational affixes, listed in 3.1.3. All nominals in a noun phrase must agree in case inflection.

3.1.1 CASE INFLECTIONS. The full set of case inflections is:

<i>absolutive</i>	}	$\emptyset$
<i>ergative</i>	}	-ŋgu~du
<i>instrumental</i>		
<i>locative</i>	}	-ŋga~da
<i>aversive</i>		
<i>dative</i>		
<i>allative</i>	}	-gu
<i>ablative</i>		
<i>genitive</i>		W -ŋip, B -p~-ip -ŋu~u

We now take these in turn, giving the formal and functional possibilities:

[1] *Absolutive*. This always has zero realisation, absolutive form coinciding with the stem. It marks intransitive subject and transitive object functions.

[2] *Ergative-instrumental*.

*FORM* - -ŋgu after a vowel e.g. bari 'stone', ERG baringu  
 -du after a consonant, with assimilation of the -d- in place of articulation to a stem-final nasal e.g. gi:gin 'wallaby', ERG gi:gindu; mupinip 'black ant', ERG mupinipgu; walam 'tick', ERG walambu.

After the yotic, y, there is again assimilation; the stem-final -y can optionally be dropped before ergative -gu e.g. ma:ŋgay 'silly', ERG ma:ŋgaygu~ma:ŋgaɟu.

After the lateral, l, an -n- can be inserted before ergative -du; the stem-final -l can be dropped only when the -n- is present. Thus ma:l 'man', ERG ma:lndu~ma:ldu~ma:ndu (but not \*ma:du).

After the trilled rhotic, r, ergative is simply -du e.g. guɟur 'brolga', ERG guɟurdu.

*FUNCTION* - A nominal in transitive subject function must bear ergative inflection. The same inflection is used to mark the instrument or tool used in an action e.g. 'hit with a stick', 'tie with a rope'; note that the instrument can be a body part e.g. 'hit with the hand', 'blow with the mouth'. With a verb of giving, instrumental inflection marks the noun phrase referring to 'that which is given' - 4.6.3.

If a basically transitive verb is used in an intransitive construction then its 'object' NP will bear ergative-

instrumental inflection - 4.2. Note that the interrogative *mipa* 'what' does have distinct ergative and instrumental case forms (3.1.5), supporting the recognition of two distinct cases, with identical realisation.

[3] *Locative-aversive*.

*FORM* -nga after a vowel e.g. *ɲalu* 'water', LOC *ɲalungga*  
 -da after a consonant, with assimilation of the -d-  
 in place of articulation to a stem-final nasal e.g. *muŋan*  
 'mountain', LOC *muŋanda*; *gulgiŋ* 'scrub', LOC *gulgiŋga*; *yiŋam*  
 'Ingham', LOC *yiŋamba*,

After *y*, locative is -ga e.g. *bu:ŋguray* 'snore', LOC  
*bu:ŋgurayga*; elision of the stem-final -y has not been encountered.

After *l*, locative is normally -nda e.g. *ɲagul* 'deep', LOC  
*ɲagulnda*. Elision of *n* or *l* (as for ergative) may be possible,  
 but has not been encountered.

After *r*, locative is simply -a e.g. *miɓbir* 'pine tree',  
 LOC *miɓbira*.

It will be seen that locative exactly parallels ergative (the two cases differing only in the final vowel) except after -r, where ergative is -du and locative -a. (There may also be different possibilities of elision after -y and -l.) Locative and ergative allomorphs after -r may be effectively reversed in *Biyay*. *Nora Boyd*, the only informant for this dialect, gave *yimbur* 'pelican', ERG *yimburu* and *miɓbir* 'pine tree', LOC *miɓbira*. (Or it may be that both types of allomorph are possible for both cases in all dialects!)

*FUNCTION* - The main use of locative case is to indicate a position of rest ('at', 'in' or 'on'):

(1) *ɲayba yugaray ɲalungga* I swam in the water

(2) *ɲayba muŋanda walagi* I climbed the mountain

Locative can also be used to indicate accompaniment; e.g. added to *yunguɟa* 'another one':

(3) *ɲayba gagabali yunguɟanga* I'm going with another fellow

And it can have a temporal sense; from *balanu* 'moon' is obtained *balanungga* 'in the moonlight':

(4) *ɲali ɲinba ɟagalagu balanungga ɟaɟaragu ɲunilagu*  
*ldu-SA 2sg-S go-PURP moon-LOC possum-DAT hunt-PURP*  
 You and I'll go hunting possums by moonlight.

There is similarity between the use of locative in (4) and that in

(5) *ɲayba ɲa: bungi / ɲinunda bu:ŋgurayga*  
*lsg-S NOT sleep-UNMKD you-LOC snore-LOC*  
 I couldn't sleep for your snoring.

In (5) *ɲinunda bu:ŋgurayga* could be glossed 'during your snoring', but the causal sense 'because of your snoring' is also implied. This usage merges into the aversive sense, where the inflection -nga~-da indicates some person or thing that is to be avoided, with the action referred to by the main verb normally being directed towards this avoidance:

- (6) ḡayba bimbirigi waybalanga  
 lsg-S run-PERF white man-AVERS  
 I ran away from the white man

This case is also used on the complement of a verb of fearing, 'that which is feared' - see (64) in 3.4.1. The nominal aversive inflection has close semantic connection with the apprehensional sense of the irrealis verbal inflection - 3.5.4.

The interrogative *mipa* 'what' has distinct locative and aversive case forms (3.1.5), supporting the recognition of two distinct cases, with identical realisation.

A final use of this inflection - probably best included under the 'locative' label - is to mark a language or speech-style being used e.g.

- (7) *ṇuṇa banmalagu wargamayga* He can talk Wargamay

[4] *Dative-allative*

FORM - -gu after all stems e.g. *miḡa* 'camp', DAT-ALL *miḡagu*; *ḡulḡin* 'scrub', DAT-ALL *ḡulḡingu*.

FUNCTION - This inflection can have a purely local usage ('allative'), indicating motion towards some place or thing, e.g.

- (8) ḡayba banalagu miḡagu I must return to the camp

Notice, though, that in some cases where English would use 'to', the locative is preferred in Wargamay; e.g. with *ḡumba*- 'to enter':

- (9) *miḡanga ḡumbaga* Come into the camp!

-gu also has a non-local use ('dative'), marking indirect object, etc - examples are in 4.3.1, 4.6.3. This use shows up in *miḡagu* 'what for, why?' from *mipa* 'what?', as in

- (10) *miḡagu ḡinba ba:digi* Why did you cry? (=What did you cry for?)

There is reason in Wargamay to distinguish allative and dative cases, that have identical realisation on nominals. Allative will cooccur with an allative deictic such as *ḡaḡunga* '(to) there' (3.4.3) whereas dative would choose the dative form of the third person pronoun, *ṇuṇangu* 'to/for him/her/it' (3.4.1). Compare:

- (11) *ḡinba ḡagaga ḡaḡunga miḡagu* You go there to the camp!

- (12) ḡayba ḡagay ṇuṇangu miḡagu (ḡundalagu) I'm going to the camp  
 (to look at it)

The inclusion of a dative NP in (12) implies that the actor is going to the campsite to do something to it (e.g. clear it, mend it, or look it over to see what condition it is in). There is the expectation of a verb in purposive inflection being included in a sentence with a dative NP - but not in one with an allative NP - to form a 'favourite construction' (4.3.3). Thus, when the first three words of (12) were put to Nora Boyd she added *ḡundalagu*.

Note that a sentence in Wargamay can involve both an allative and a dative NP:

- (13) *puŋa ma:ŋa buŋmbi / ŋalugu / ga:bugu*  
 3sg-SO line-ABS throw-UNMKD water-ALL fish-DAT  
 [I've] thrown the line, into the water, for fish

[5] *Ablative*

*FORM* - in W: -*ŋip* after all types of stems e.g. *ŋalu* 'water', ABL *ŋaluŋip*; *yŋam* 'Ingham (loanword)', ABL *yŋampip*. The initial -*ŋ*- can be dropped following a consonant e.g. *balgan* 'house', ABL *balganŋip*-*balganip*.

in B: -*ŋ* after a vowel e.g. *ŋalu* 'water', ABL *ŋaluŋip*  
 -*ip* after a consonant e.g. *yugan* 'rain', ABL *yuganip*

*FUNCTION* - This suffix has a predominantly local sense, indicating 'motion away from':

- (14) *pulanga ma:ldu du:ɽay ŋana ŋaluŋip*  
 3sg-A man-ERG pull-UNMKD lsg-0 water-ABL  
 The man pulled me from the water.

It can also be used with time qualifiers (3.3) and with nominals, indicating temporal sequence:

- (15) *wugarŋip ŋayba walay*  
 sleep-ABL lsg-S get up-UNMKD  
 I got up from sleep

In just one or two instances, -*ŋip* indicates the cause of some state:

- (16) *ŋayba wi:gimbigi magul(ŋ)ip*  
 lsg-S no good-INCHO-PERF work-ABL  
 I'm tired from work.

[6] *Genitive*.

*FORM* - -*ŋu* after a stem ending in a vowel, *l*, *r* or *y* e.g. *waybala* 'white man', GEN *waybalaŋu*; *ma:l* 'man', GEN *ma:lŋu*; *guɽur* 'brolga', GEN *guɽurŋu*; *gilbay* 'knowing', GEN *gilbayŋu*  
 -*u* after a stem ending in a nasal e.g. *gilap* 'old man', GEN *gilapŋu*; *gaɽamgaɽam* 'seagull', GEN *gaɽamgaɽamu*; *girawan* 'scrub hen', GEN *girawanu*.

*FUNCTION* - the syntactic behaviour of genitives is given in 4.6.1-2.

Note that pronominal genitives do decline, taking case inflections [1-5] above (3.4.1). Although, despite several attempts, no examples have been obtained of nominal genitives declining, it seems very likely that they will do so (as they do in every - or almost every - other Australian language). In view of this, genitive could well be regarded as a stem-forming (derivational) affix, rather than an inflection (for discussion of this point in Yidiŋ see Dixon 1977a:134ff).

It will be seen that there is, in the Wargamay case system, no strict morphological distinction between 'local' and 'non-local' functions. The inflections which indicate local relations all show, in addition, non-local senses. Thus allative coincides with dative, locative is the same as aversive, and -*ŋip* can have causal as well as ablative meaning.

3.1.2 ACCUSATIVE SUFFIX *-pa*. The suffix *-pa* is quite frequently encountered in Australian languages, marking transitive object function. It is normally found on pronouns but sometimes also on proper nouns, extended in a few cases to common nouns that have human reference (or even to all common nouns).

Non-singular pronouns in Wargamay involve the accusative affix *-pa* (3.4.1-2). There are also, in the corpus, half-a-dozen examples of *-pa* being suffixed to a common noun; in each case the noun is in transitive object function. Thus, from text 6 line 6:

- (17) [guriḡalangu ] yubaymay binbiḡalpa  
 [eaglehawk-ERG] stolen-CAUS-UNMKD parrot-ACC  
 [The eaglehawks] stole the parrots (in this myth the eaglehawks  
 took away the black wallabies' wives, the parrots, while the  
 wallabies were out getting water).

Another example is:

- (18) ma:lndu ḡulḡḡu banay / muymapa  
 man-ERG neck-ABS choke-UNMKD boy-ACC  
 The man choked the boy

The other nouns with which *-pa* has been found are *ḡaḡa* 'father', *wiḡiyan* 'white woman', *ma:l* 'man' and *wagun* 'tree, wood'. The last example shows that *-pa* is not confined to occurrence with human nouns. (In (17) *binbiḡal* is referring to two human females - the myth explains how they were turned into birds.)

The first segment of *-pa* can optionally be deleted following a stem-final consonant - thus *wagunpa* alternates with *waguna*.

It appears that *-pa* can be added to a nominal in O function almost at whim. Thus, when 'you go and kiss that girl' was asked, Lambert Cocky gave

- (19) wiḡiyana nu:nḡa / wiḡiyan nu:nḡa ḡinda  
 white woman-ACC kiss-IMP white woman-ABS kiss-IMP 2sg-A  
 Kiss the white woman! You kiss the white woman!

including the accusative suffix in the first clause but leaving it out on repetition.

3.1.3 STEM-FORMING SUFFIXES. There are nine derivational suffixes that derive nominal stems from nominal roots:

[1] *Comitative* *-ḡiri* 'with'. This can be added to any nominal and derives a stem that has both semantic and syntactic characteristics of a derived adjective.

*-ḡiri* forms frequently refer to characteristics of a person, thing or place. Either physical characteristics, as

- (20) pḡḡaḡi wagun maḡḡaḡiri  
 THAT tree-ABS flower-COMIT-ABS  
 That tree has a flower

- (21) ḡinu mala ḡiḡiḡiri  
 2sg-GEN-ABS hand-ABS fingernail-COMIT-ABS  
 Your hand is full of nails (i.e. your fingernails are long)



or some mental or physiological state:

- (22) *ḡayba bimbirigi/ bi:ḡagiri / ḡagay miḡagu*  
 1sg-S run-PERF fear-COMIT-ABS go-UNMKD camp-ALL  
 I had run away in fear, and went to the camp (Text 5.19)
- (23) *ḡayba ḡabingiri* I've got belly-ache (diarrhoea)
- (24) *ḡapa ma:ldu wuḡargiringu ḡunday*  
 1sg-0 man-ERG sleepiness-COMIT-ERG see-UNMKD  
 The sleepy man saw me

-*giri* can also be used to refer to something alienably possessed by a person:

- (25) *ḡuḡa ma:l wurbigiri wuḡungiri*  
 3sg-S0 man-ABS big-COMIT-ABS stick-COMIT-ABS  
 The man has a big stick

An NP that involves a modifier in comitative form can be used in a verbal sentence to indicate someone at rest or in motion, accompanied by some thing or person:

- (26) *ḡuḡa ma:l ḡuwarabali baḡayḡiri*  
 3sg-S0 man-ABS stand-CONTIN-UNMKD spear-COMIT-ABS  
 The man is standing with a spear (in his hand)
- (27) *ḡuḡa ḡulmbuḡu ḡi:ḡibali ḡaḡaḡiri*  
 3sg-S0 woman-ABS sit-CONTIN-UNMKD child-COMIT-ABS  
 The woman is sitting with a child
- (28) *ḡayba ḡagay ḡalugiri* I'm going with (i.e. carrying) water
- (29) *ḡuḡa ḡilan ḡabayḡiri wuḡabali* The old man is walking around  
 with (the aid of) a walking stick
- (30) *ḡuḡa ḡulmbuḡu wuḡabali ḡiḡuḡiri* The woman is walking around  
 with (her) baby

Note that -*giri* cannot be used to refer to a time or season (as the cognate affix -*ḡi* can in Yidiḡ - Dixon 1977a:297; cf Dixon 1976b:203-310); instead, locative inflection must be used, as in (4) above.

'Biyay-*giri*' is used for the name of the tribe which speaks the Biyay language, characterised by the particle *biyay* 'no' (1.2).

Like the other affixes described in this section, -*giri* derives a stem that takes the full range of nominal inflections - ergative was exemplified in (24). -*giri* can be added to a noun and to its modifying adjective, as in (25), deriving a modifying NP within an NP.

[2] *Privative*. -*biḡay* W, -*biyay* B 'without'. This is the complement of -*giri* and has an almost identical syntactic-semantic range. For instance:

- (31) *ḡayba ḡalubiḡay* I've no water
- (32) *ḡaḡa ḡulmbuḡugu ḡambibiḡaygu muḡuḡu / ḡambuḡu*  
 go-IMP woman-DAT clothes-PRIV-DAT naked-DAT clothes-INST  
 ḡinda wuḡiya  
 2sg-A give-IMP  
 Go to the woman who is naked, without any clothes. You give  
 some clothes (to her)!

Just as we have *gawangiri* 'anger-COMIT' for 'angry', so *gawanbiḡay* appears to be possible, for emphasising that a person is not angry. However, informants did not accept *bi:ḡabiḡay* 'fear-PRIV'.

[3] *-bara* 'belonging to, pertaining to'. This affix occurs with identical form and function in a large number of Queensland languages including *Dyirbal* (Dixon 1972:224-5), *Yidiñ* (Dixon 1977a:144-5) and *Nyawaygi*. It is typically used for the naming of local groups, in terms of the type of territory they inhabit (see 1.2). *-bara* can be suffixed to a nominal or to a deictic (3.4.3):

(33) *ḡayba yalanbara* I'm from here (i.e. I'm a person belonging to this place)

[4] *-bulu* 'very, lots of' occurs with a number of adjectives and a few nouns. *ḡagarambulu* 'very small' is in fact more frequent than *ḡagaram* 'small'. (Although it could be that this is at least partly due to the fact that *-m*-final forms are not common in *Wargamay* - my corpus of 900 forms showed only 4 roots ending in *-m*. There may be a progressive tendency towards eliminating *-m* in word-final position.) Other examples include *gundiḡbulu* 'very heavy', *ḡiyalbulu* 'very sweet', *gawanbulu* 'very savage (used of a dog)', *wupanbulu* 'very lustful, promiscuous' and *ḡalḡanbulu* 'lots of froth'. However, I was not able to elicit *-bulu* with other adjectives, suggesting that it is not fully productive.

The noun *gubi* refers to a clever man or 'doctor'; *gubimbulu* is used for 'very clever man' - this presumably involves *-bulu*, with a nasal inserted and assimilated in place of articulation to the following *b* (2.6).

[5] *-baḡun* 'really' can be suffixed to adjectives e.g. *wurbibaḡun* 'very big', or to nouns e.g. *ma:ḡbaḡun* 'really a man'. With *miḡa* 'what' it can emphasise the speaker's bewilderment, as in:

(34) *miḡa ḡuḡa/ miḡabaḡun/ ḡuyḡan* 'What's that?' 'I don't know  
*what* it is. [Maybe it is] a  
female ghost?' (Text 5.8-9)

See also 3.1.5.

[6] *-baḡa* is a comparative. In all but one of the instances obtained it was suffixed to an adjective e.g.

(35) *ḡawuḡu ḡaluḡu wuḡiya / maya ḡuḡa ḡiduḡ /*  
hot-INST water-INST give-IMP NO THIS cold-ABS  
*ḡawuḡabaḡuḡu wuḡiya*  
hot-COMP-INST give-IMP  
Give [me] some hot water! No, this is cold. Give [me] hotter  
[water]!

An example of *-baḡa* suffixed to a noun is in (245).

[7] *-miri* 'as a result of, from'. This appears to have a largely 'causal' sense:

(36) *ḡayba maḡḡay ḡuḡuḡmiri*  
1sg-S full-ABS food-miri-ABS  
I'm full from [eating] food

- (37) *ḡayba magulmiri /gi:baligu*  
 1sg-S work-miri-ABS sit-CONTIN-PURP  
 I'm (tired) from work, and need to sit down

But it has also been found in a local sense, 'from':

- (38) *ma:ḡangu bu:dipu gulipmiri*  
 God-ERG bring-PERF spirit home-miri  
 'God brought [spirits] from heaven' (here Lambert Cocky  
 was explaining how spirits are placed in unborn babies)

It seems that *-miri* is properly a derivational affix and not a further case inflection (Lambert Cocky gave *-miri* followed by ablative); but the data available are slim and not totally clear.

[8] *-ḡaru* 'like a', is used to mark a physical or behavioural resemblance. Only two or three examples have been noted, including:

- (39) *ḡaḡa ḡunday ḡulubuḡu / mīna ḡuḡa ḡu:ḡaru*  
 1sg-A see-UNMKD stump-ABS what-ABS 3sg-SO ghost-ḡaru-ABS  
 I saw a stump. What was it - it was like a ghost.

[9] *-ḡaman* can be suffixed to kin terms when the speaker is referring to the addressee's relationship to a person. Thus (80) and

- (40) *wanḡaḡa ḡinu yabuḡaman*  
 WHERE-LOC 2sg-GEN mother-KIN  
 Where's your mother?

Note that in replying the child could only say *ḡayḡu yabu* 'my mother' (and not \**ḡayḡu yabuḡaman*).

*-ḡaman* can only be employed with kinship terms (e.g. *ḡaḡa* 'father', *murḡin* 'son') and its use is always optional. It cannot be suffixed to terms that classify age-groups (i.e. *-ḡaman* is not a permissible suffix with *ḡaḡa* 'child').

The suffix *-yara* 'another' appears in a text given by Jimmy Johnson (*miḡayaragu* 'to another camp') and was given by John Tooth as the equivalent of *Giramay -gabun*, 'another' but was not recognised by Tooth on a later field-trip; nor could clear confirmation be obtained from other informants.

Four of these derivational affixes occur - with the same form and meaning - in *Dyirbal*; they are *-bara*, *-baḡun*, *-baḡa* and *-ḡaru*. (*-ḡaru* was only heard in *Wargamay* after it has been used in *Giramay* elicitation, and there must remain a slight element of doubt as to whether this is a bona fide *Wargamay* affix.)

3.1.4 REDUPLICATION. Nominal reduplication appears to indicate plurality, and to involve repetition of the complete form (as in *Dyirbal* - Dixon 1972:242-3). Thus *wurbi-wurbi* 'lots of big (things)', *ḡilḡilḡap* 'lots of old men', *ḡamiḡiḡamiḡi* 'lots of hungry (people)'. The nouns *yibi* 'child' and *ḡambi* 'old woman' are more frequently than not encountered reduplicated - *yibiyibi* 'children', *ḡambiḡambi* 'group of old women'. (But, outside these two instances, nominal reduplication has been obtained only through elicitation.)

3.1.5 INTERROGATIVE MEMBERS. There are two interrogatives relating to the class of nominals: *mipa* 'what' and *mipap* 'how many'.

[1] *mipa* 'what' effectively ranges over the class of nouns that have non-human reference (and over third person pronouns, when these refer to something non-human).

*mipa* inflects exactly like a noun in all cases but two. There are distinct forms for ergative, instrumental, locative and aversive:

<i>ergative</i>	<i>mipa</i> +ŋgu
<i>instrumental</i>	<i>mipa</i> +lu
<i>locative</i>	<i>mipa</i> +ŋga
<i>aversive</i>	<i>mipa</i> +la

Thus:

- (41) *mipangu*    *ŋapa*    *ŋanbay*  
 what-ERG 1sg-0 hit-UNMKD  
 What hit me? (Said by someone sitting under a tree, when something fell from the tree on his head)
- (42) *mipalu*    *ŋinda*    *buŋbay*    *ŋapa*  
 what-INST 2sg-A hit-UNMKD 1sg-0  
 What did you hit me with?
- (43) *mipanga*    *ŋinba*    *gi:gibali*  
 what-LOC 2sg-S sit-CONTIN-UNMKD  
 What are you sitting on?
- (44) *mipala*    *ŋinba*    *bi:ŋambali*  
 what-AVERS 2sg-S fear-INCHO-CONTIN-UNMKD  
 What are you frightened of?

Note that *baŋgu-ŋga* 'axe-LOC/AVERS' could be given as a reply to (43) or (44). In the first case it would indicate that the speaker was sitting on an axe (involving the 'locative' sense of the -ŋga nominal inflection), and in the second case that he was scared of the axe (the 'aversive' sense of the nominal suffix -ŋga). Typical examples of the use of *mipala* in discourse are in text 8, line 5 and text 9 line 2.

Over the continent, -lu alternates with -ŋgu as ergative inflection and -la with -ŋga as locative (Dixon 1980a: 301-21). In a number of North Queensland languages the regular inflections are -ŋgu and -ŋga, with -lu and -la occurring on just three or four nominals, almost always including *mipa* (we are here assuming that *mipa* 'edible animal' is cognate with the indefinite/interrogative form *mipa* - see Dixon 1980a:376, 495 for discussion of this point, and examples).

It is likely that in an earlier stage of *Wargamay* -lu and -la occurred only with *mipa*, for the ergative-instrumental and locative-aversive inflections respectively. And that the language then generalised nominal -ŋgu and -ŋga for ergative and locative marking, keeping -lu and -la just for the instrumental and aversive functions of *mipa*. Thus, -lu and -la, originally just allomorphic irregularities - adding complication to the grammar without making any contribution to its functional task - have been exploited in

order to distinguish between ergative and instrumental, and between locative and aversive, in the case of the important item *mipa*. (A further change might then be for *-lu* and *-la* to be generalised as instrumental and aversive markers with all nominals, thus consistently distinguishing these functions throughout the grammar.) See also 5.4.

*mipa* can be verbalised to form intransitive *mipambi-* and transitive *mipama-* 'do what?' - see 4.9.

[2] *mipap* 'how many' ranges over the subclass of number adjectives; it declines like a nominal. Thus:

- (45) A: *ɲina ɲunday mipaŋɟu*  
 2sg-0 see-UNMKD how many-ERG  
 How many [people] saw you?  
 B: *gumaŋbariŋɟu*  
 a lot-ERG  
 A lot [did].

In most Australian languages, a single form can bear both interrogative and indefinite sense. In elicitation *mipa-baɟun*, 'very' (see 3.1.3) was given for 'something'; it has not been possible to obtain corroboration of this. See also (34) above.

### 3.2 LOCATIONAL QUALIFIERS

This set of roots includes *galaga* 'up', *yu:nu* 'down', *gungari* 'north', *guyabay* 'the other side (of a river)', *bamba* 'a long way', *ga:lungal* 'in front' and so on.

These forms can occur with local (locative, allative, ablative) but not with syntactic case-inflections, e.g.

- (46) A: *wiŋɟingu ɲapa gunɟapu* / B: *wanɟanga* / A: *yu:nunga*  
 snake-ERG 1sg-0 bite-PERF where-LOC down-LOC  
 A: A snake bit me. B: Where? A: Down [there on my leg]

However, a locational qualifier can occur without any inflection, the context usually making it clear whether 'at', 'to' or 'from' is intended. An uninflected locational qualifier may occur with a nominal, which must have a local case inflection. In (47) the 'locational phrase' includes *muŋan* 'mountain', in locative case, and *galaga* 'up' without any inflection:

- (47) A: *ɲayba ɲamiɟi* / *gaɟaragu ɲuniɟagu* /  
 1sg-S hungry-ABS possum-DAT hunt-PURP  
 B: *wanɟanga* / A: *muŋanda galaga*  
 where-LOC mountain-LOC up  
 A: I'm hungry, and I'll hunt for possums.  
 B: Whereabouts. A: Up in the mountain.

### 3.3 TIME QUALIFIERS

A time qualifier will most frequently (although not invariably) begin a sentence. The semantics of time qualifiers is oriented to 'now'; probably the most frequent forms are *gaɲumbul* 'earlier on today' and *gaɲu* 'later

today' (for a discussion of other types of temporal semantics in Australian languages see Dixon 1977a:498-9).

Time qualifiers occur most often without any inflection:

- (48) *ḡayba n̄irwaḡa banama*  
 1sg-S tomorrow return-IRREAL  
 I'll return [home] tomorrow

However, words referring to a time in the future can take -*gu* with the meaning 'until' (note that this is identical with the dative-allative inflection on nominals); and words referring to past time appear able to take -*n̄ir* 'since' (this is identical with nominal ablative). See (103) and

- (49) *ḡayba gi:gibali n̄irwaḡagu* I'm staying here until tomorrow

The locative inflection -*ḡa~da* cannot, it seems, occur with 'temporal shifters' like 'yesterday' or 'later today' (words whose reference is constantly changing as time progresses), but it can be added to non-shifters, as in text 9, lines 12 and 19, and

- (50) *birgibaḡaḡa ḡayba giduligi*  
 winter-LOC 1sg-S cold-INCHO-PERF  
 I got cold in the wintertime

And see *balanunga* 'moon-LOC' used for 'in the moonlight' in (4) above. In (51) the shifter *n̄irwaḡa* occurs sentence-initially without inflection but *biligiḡa* 'at daybreak' follows the verb (note that this is the preferred position for words in locative inflection that have spatial reference):

- (51) *n̄irwaḡa ḡayba gaḡalagu biligiḡa*  
 tomorrow 1sg-S go-PURP daybreak-LOC  
 I'll go at daybreak tomorrow

Words referring to temporal duration - for instance, *garay* 'for a long time', *pamu* 'for a short time', *yurmay* 'all the time' - cannot, for semantic reasons, take any inflection.

There is a suffix -*mira* 'for -- nights' which derives temporal qualifiers from number adjectives e.g.

<i>yungul</i> 'one'	<i>yungulmira</i> 'for one night'
<i>yaga</i> 'two'	<i>yagamira</i> 'for two nights'
<i>gumaḡbari</i> 'a lot'	<i>gumaḡbarimira</i> 'for a lot of nights'

as in

- (52) *yagamira ḡayba bungilagu yala* I'm going to camp here for two nights

*Wargamay* has a single temporal interrogative, *waḡamira* 'when'. This appears to involve the suffix -*mira*, but it is attached to the locational interrogative root *waḡa* 'where' (3.4.3) (and not to *m̄in̄ap* 'how many' as we might have expected). Unlike 'number'+*mira* forms, *waḡamira* does not specifically refer to duration, but is used to enquire about the point in time at which something happened, or will take place e.g.

- (53) waŋamira ŋinba banalagu/ gaŋu 'When are you going to return home?' 'Later on today'
- (54) waŋamira ŋinda ruŋa ŋundapu/ ʒugulu 'When did you see him?' 'Yesterday'

There is a formal-semantic similarity between -mira and the Yidiŋ affix -m 'during -- days/nights' (which also forms a time interrogative, but in this case from 'how many?') - Dixon 1977a:201-3.

### 3.4 PRONOUNS AND DEICTICS

3.4.1 PERSONAL PRONOUNS - FORM AND FUNCTION. We can recognise ten personal pronouns for Wargamay - singular, dual and plural numbers for first, second and third person, and an interrogative pronoun 'who' (that is not specified for number). The main forms are set out in Table 3.1.

Wargamay does not have separate forms for inclusive and exclusive varieties of non-singular pronouns. Inclusion can be shown by placing the 2sg pronoun in apposition to a 1du or 1pl form (or, presumably, 2du to 1pl) - ŋali ŋinba 'you and I' appears in (4) above. Exclusion can be shown by juxtaposing a noun, or else the 3sg pronoun, to 1du or 1pl:

- (55) ŋali bada ɟumbagi miŋaŋa  
 1du-SA dog-ABS enter-PERF camp-LOC  
 The dog and I went into the camp

An alternative way of indicating 'me and someone else' is shown in (3).

The ten personal pronouns in Table 3.1 are not in fact semantically homogeneous. Eight of them - the first and second person forms, as well as 3du and 3pl - are strictly specified for number and can only be used with human reference (occasionally extended to include tame dogs). But what we have termed 'third person singular', ruŋa, can refer to anything - human or non-human. Further, although its unmarked reference is to singular number it *can* be used for two or more things, or even for something uncountable. ruŋa typically occurs in an NP with nominals, or with other pronouns.

An example of ruŋa in an NP with a nominal that has human reference is:

- (56) ŋapa wuŋalgani ruŋa bulimandu  
 1sg-0 chase-CONTIN-UNMKD 3sg-A policeman-ERG  
 The policeman was chasing me

and with a nominal that has non-human reference:

- (57) maya ruŋa ŋalu wurbimbigi  
 NO 3sg-SO water-ABS big-INCHO-PERF  
 No, the water [hole] has become [too] deep [to swim in]

and with the third person plural pronoun (which always has human reference):

TABLE 3.1 - Main pronominal forms

	intrans- itive subject [S]	trans- itive subject [A]	trans- itive object [O]	genitive	oblique stem	
1 sg	ɲayba	ɲaɟa	ɲana	ɲaygu	ɲaygun-	'I'
1 du	ɲali		ɲaliɲa	ɲaliɲu	ɲalin-	'We two'
1 pl	ɲana		ɲanaɲa	ɲanaɲu	ɲanan-	'We all'
2 sg	ɲinba	ɲinda	ɲina	ɲinu	ɲinun-	'You'
2 du	ɲubula		ɲubulaɲa	ɲubulaɲu	ɲubulan-	'You two'
2 pl	ɲura		ɲuraɲa	ɲuraɲu	ɲuran-	'You all'
3 sg	ɲuɲa	ɲulanga	ɲuɲa	ɲuɲaɲu	ɲuɲan-	'He/she/it'
3 du	bula	bulangu	bulana	bulanu	bulan-	'They two'
3 pl	ɟana	ɟanangu	ɟanaɲa	ɟanaɲu	ɟanan-	'They all'
Interr- ogative	ɲa:ɲga	ɲa:ndu	ɲa:na	ɲa:nu	ɲa:nun-	'Who'

Dative-allative -gu, locative-aversive -da and ablative -in are all added to the oblique stem.

- (58) ɲuɲa ɟana ɲuɟigi  
 3sg-SO 3pl-S dance-PERF  
 A lot of people danced

Indeed, ɲuɲa can occur with a first or second person pronoun. A common form of greeting, corresponding to English 'Hello' is ɲinba ɲuɲa ɟaɟaɲu 'Oh, you've come'. (Greetings in Wargamay, as in most Australian languages, normally refer to speaker and/or addressee's motion to and from the place of encounter. There are no absolutely set forms, it being more in the nature of 'variations on a theme'. One way of saying 'goodbye' is ɲayba ɟaɟabali 'I must be going now'.)

The 'A form' of ɲuɲa can also be used to refer to an instrument, as in (217) and

- (59) ɲaɟa ma:l babay / ɲulanga ɟaɟayɟu  
 1sg-A man-ABS spear-UNMKD 3sg-INST spear-INST  
 I speared the man with a spear.

Note that all of the other forms in the A column of Table 3.1 are restricted to transitive subject function.

From a semantic point of view we could think of the personal pronouns (with human reference) as constituting a 3 x 3 matrix with a gap in the 3sg box. ɲuɲa is then a form outside this system, ranging over all numbers and all persons (but with an unmarked sense '3sg' that does correspond to the empty box).

Deictic verbs derived from ɲuɲa - transitive ɲuɲama- and intransitive ɲuɲambi- - are described in 4.9.

What we have called the 'interrogative pronoun' ɲa:n- always has human reference, and is thus complementary to



the interrogative nominal *mɪɲa* that is restricted to non-human use (3.1.5). *ɲa:n-* effectively ranges over the set of eight personal pronouns with human reference, and over the human nominals. It can cooccur with *ɲuɲa*:

- (60) *ɲa:ɲga ɲuɲa gagay*  
 WHO-S 3sg-SO go-UNMKD  
 Who's that going?

Parallel to *mɪɲabaɲun* 'something' (3.1.5), John Tooth added *-baɲun* (3.1.3) to a *ɲa:n-* form to translate 'someone' e.g. *ɲa:nabaɲun* 'someone-O'; but it was not possible to obtain corroboration of this.

We saw in 3.1.1 that nominals follow an 'absolutive-ergative' paradigm. One case form ('ergative') indicates transitive subject (A) function, whereas the unmarked 'absolutive' form shows intransitive subject (S) and transitive object (O). The extra-systemic pronoun, *ɲuɲa*, inflects in the same way.

The remaining nine pronouns, however, inflect on a quite different pattern from nominals and *ɲuɲa*. There are two subtypes - non-sg 1st and 2nd person pronouns use one form for A and S subject functions and a different form for object function. The remaining five forms - 1sg, 2sg, 3du, 3pl and interrogative - have distinct forms for the three major syntactic functions S, A and O.

Genitive pronouns can decline, the case inflection being added directly onto the forms given in Table 3.1. A genitive pronoun (and presumably also a genitive noun) functions like an adjective, and takes the normal set of nominal inflections e.g.

- (61) *ɲɪnɲgu badɲgu ɲana ɲuɲgay / waga*  
 you-GEN-ERG dog-ERG 1sg-O bite-UNMKD shin-ABS  
 Your dog bit my shin

-*gu* forms of pronouns can have both dative and allative sense - 'he came for me', and 'he came to me'. An ablative pronoun will indicate 'motion away from', just like an ablative nominal:

- (62) *ɲɪnba gagaga ɲayɲunɪ* You get away from me!

The locative-aversive forms of pronouns appear to have the range of usage available to locative-aversive nominals:

- (63) *ɲuɲa ɲɪnunda gagay* He passed you by  
 (64) *ɲa:nunda ɲɪnba bi:ɽambali* Who is it you're scared of?

3.4.2 PERSONAL PRONOUNS - ANALYSIS. The non-singular first and second person pronouns show the most transparent structure, with

<i>Roots</i>	1du - <i>ɲali</i>	2du - <i>ɲubula</i>
	1pl - <i>ɲana</i>	2pl - <i>ɲura</i>

The root alone is used for S and A functions, while O and genitive forms involve inflections identical to those on nominals:

Accusative (O) -pa

Genitive - -ŋu

We can now consider 1du dative-allative ŋalingu, locative-aversive ŋalinda and ablative ŋalinip (and similar forms for 1pl, 2du and 2pl). If we regarded these as involving suffixes added to the root ŋali, the forms of the inflections would be significantly different from those on nominals - dative-allative -ŋu rather than the expected -gu, locative-aversive -nda where a nominal would have -ŋga, and ablative -nip instead of -nip. The simplest solution is to say that the root is augmented by a stem-forming suffix -n, yielding ŋalin, and that ŋalin does take the expected allomorphs for the three oblique cases (save that the first segment of ablative -nip, which is optionally dropped after a nominal stem ending in a consonant, is obligatorily lost after a pronominal stem ending in n).

3du and 3pl show roots bula and ɠana which - like the 1du, 1pl, 2du and 2pl roots - occur in many other Australian languages (see Dixon 1980a:327-62). They decline on the pattern just described with one exception - the root alone is restricted to S function, and an ergative inflection -ŋu (identical to that on nominals) is brought in to mark A function.

1sg, 2sg and interrogative pronouns cannot, in the same way, be given a synchronic analysis. However, reference to comparative work on a wide range of Australian languages and reconstruction of the original singular pronominal forms for an ancestor language (Dixon 1980a:339-46) does provide a diachronic explanation. Basically, the proto-language allowed all types of monosyllables (not just monosyllables with a long vowel, like modern Wargamay). The 1sg and 2sg roots were ŋay and ŋin respectively, and these were probably used in S function; oblique cases were formed on the nominal pattern, by ergative -du (with assimilation), accusative -pa and probably genitive \*-gu. Thus:

<i>proto-forms</i>	<i>S</i>	<i>A</i>	<i>O</i>	<i>GENITIVE</i>
1sg	ŋay	ŋay+du	ŋay+pa	ŋay+gu
2sg	ŋin	ŋin+du	ŋin+pa	ŋin+gu

Development to modern forms included (see also Dixon 1980a: 339-46): (i) dropping of -y- before -g- and -p-, probably to satisfy a phonotactic constraint; (ii) replacement of final -u by -a in the A forms; this is a change that has occurred in many Australian languages, its isogloss almost coinciding with the change \*u>a in the past tense inflection \*-pu; (iii) augmentation of S forms by -ba, when phonotactic constraints shifted so that monosyllabic roots which involved only short vowels were proscribed; (iv) simplification of 2sg accusative ŋin+pa>ŋina; one example of -ŋp- is known for modern Wargamay but this cluster is not a popular one; (v) dropping of -g- from the 2sg genitive ŋin+gu; this cannot be explained, although it does appear to relate to ŋa:n+gu>ŋa:nu in the interrogative pronoun.

Comparative work also suggests an original interrogative root \*ŋa:n-, which inflected on the same pattern as 1sg and 2sg pronouns (Dixon 1980a:372-4). There are two important differences: the change of final u to a in A

forms has not applied to ɲa:ndu; and the final syllable of the S form ɲa:nga is -ga, against -ba for 1sg and 2sg. (No explanation is known for this -ga.)

Finally, we can consider the ubiquitous 'third person singular' pronoun. Most of the forms of this pronoun are most similar to those of non-sg pronouns, with genitive involving the addition of -ɲu to the root ɲuɲa and other oblique inflections being based on a stem ɲuɲan-. Note, however, that the root covers S and O functions, whereas the roots of non-sg 1st and 2nd person pronouns cover S and A functions.

Comparative reconstruction suggests an original 3sg form \*ɲu in a distant proto-language, with A form \*ɲulu. This form is found in a number of eastern languages, and in others the final vowel has shifted to a, giving 3sg A ɲula (see Dixon 1980a:356-62). It is possible that Wargamay 3sg A form ɲulanga relates to ɲula (which is the 3sg form for both A and S functions in Waruɲu) plus ergative -ɲgu, with the shift from final u to a having applied a second time. This is, however, a fairly speculative hypothesis. (Further work may conceivably show that the Wargamay 3sg root ɲuɲa is also related to an original \*ɲu.)

In sum, leaving aside the A form, it will be seen that 3sg ɲuɲa inflects on a nominal pattern, save that dative-allative, locative-aversive and ablative are based on a stem derived from the root by the addition of -n, and not directly on the root.

Wargamay first and second person pronouns are almost identical to those of Giramay and of Nyawaygi. The only differences are (a) 2du has root ɲubula in Wargamay and Nyawaygi but ɲubila in Giramay; (b) genitive is just -ɲu in Wargamay and Nyawaygi whereas Giramay has -ɲu after disyllabic and -nu after trisyllabic stems; (c) dative of non-singulars is based on the accusative form in Giramay (just as dative of non-singulars is based on genitive) but on the root in Wargamay and Nyawaygi (and also in the northerly dialects of Dyirbal); (d) Nyawaygi has distinct inclusive forms of 1du and 1pl (involving an increment to ɲali and ɲana, which are here the exclusive forms), unlike Wargamay and Nyawaygi.

In Giramay bula functions both as the 3du pronoun and as the number adjective 'two'. Wargamay and Nyawaygi restrict bula to pronominal function and have yaga for 'two'. bula and yaga can cooccur in an NP in Wargamay, to stress that *exactly two* people are involved:

(65) yaga bula ma:l bimirigi The two men had run away (Text 5.18).

3.4.3 LOCAL FORMS. There are two deictics - 'here' (near speaker) and 'there' (distant from speaker) - that have allative, locative and ablative forms, parallel to the local cases of nominals. These are shown in table 3.2, together with the interrogative deictic 'where'.

Morphologically this is a highly unusual pattern. Most languages - in Australia and elsewhere - would have roots for 'here' and 'there' with affixes for allative, locative and ablative (locative often having zero realisation). This is what is found with the interrogative in Wargamay - alla-

TABLE 3.2 - *Deictic paradigm*

	allative	locative	ablative
'here'	nagu	yala	yalan
'there'	nagunga	yalanga	yalangan
'where'	wanɔgagu	wanɔganga	wanɔgan

tive -gu, locative -nga and ablative -ɲ are added to the root wanɔga. But with the non-interrogatives we have suppletive forms nagu 'to here' and yala 'at here' from which 'there' deictics are obtained by adding -nga. Ablative involves the addition of -ɲ to the locative (with the -nga- in yalanga being simplified to -ga- in yalangan). That is, we would expect one root for each row in Table 3.2, with inflections distinguishing the columns; but we find that suffixes derive some of the forms in the second row from corresponding forms in the first row.

These forms are very common in Wargamay and there is no doubt as to the correctness of Table 3.2. Equivalences with Giramay (which has a more usual system - Dixon 1972:57) were given by informants as a further check. Thus (G = Giramay):

nagu = G yalu      yala = G yalay      yalan = G yanum  
 nagunga = G balu      yalanga = G balay      yalangan = G banum

A deictic will typically cooccur with a nominal, with which it must agree in case - an example was given at (11) above.

There is a further set of deictics that appear to have aversive function; they involve -ga, the regular locative-aversive allomorph after -ɲ, added to the ablative form -yalanga, yalanganɔga, wanɔganga. Thus, in a text about early massacres, Lambert Cocky said:

(66) nayba bimbirigi/ yalanga      bulimanda      / gulgingu  
 lsg-S run-PERF      HERE-ABL-AVERS policeman-AVERS scrub-ALL  
 I ran away, from the policeman here, into the scrub (Text 7.1)

Note also

(67) wanɔganga ɲinba bi:ɕambigi      Where did you get frightened of?  
 (i.e. What place were you frightened of?)

The time interrogative wanɔgamira 'when' appears to be based on the root wanɔga - see 3.3.

3.4.4 DEMONSTRATIVES. There are two demonstratives in Wargamay:

ɲunɔga 'this one (near speaker)'  
 ɲunɔgaji 'that one (distant from speaker)'

Each has a single form and can be used only in S or O function. (When I tried to obtain these in A form, the informants insisted that one could only use ɲunɔnga, the A form of the 3sg pronoun - 3.4.1).

A demonstrative can be used - alone or in an NP with a nominal - for deictic reference to any kind of person, ob-

ject or place. Thus, John Tooth was eating a mango during one elicitation session and then said, holding out the stone:

- (68) *punga mayngu naga gulbambagu/ mamu yu:ɕilagu*  
 THIS mango-ABS lsg-A bury-PURP by-and-by grow up-PURP  
 I'm going to bury this mango [stone], so that by-and-by  
 it'll grow [into a mango tree]

Other examples include

- (69) *punga bada walmbari* This dog's barking

A demonstrative can occur in an NP with a 3du or 3pl pronoun e.g.

- (70) *pungagi gana / nalunga yugarabali*  
 THAT 3pl-S water-LOC swim-CONTIN-UNMKD  
 All those people are swimming in the water

or even with a first person pronoun - line 13 of text 7. Note also that *pungagi miɕa* was given as the translation of Giramay balabawal miɕa 'camp over there' (cf Dixon 1972:44-5, 48).

### 3.5 VERBS

3.5.1 PARADIGM IN W. DIALECT. A verb in Wargamay involves an obligatory root and inflection. Between these may occur one (or more) of a set of derivational affixes, i.e.

Root (+ Derivational affix(es)) + Inflection

There are two conjugational patterns, depending on whether the construction in which the verb occurs is transitive or intransitive. These are shown in Table 3.3.

Table 3.3, in fact, deals with just the W dialect. Differences found in B are given in 3.5.3.

The continuative allomorph *-bali*, added to an intransitive root, derives an intransitive stem that again takes inflections from the first column. Continuative form *-lɕani* is added to transitive roots and derives transitive stems, taking inflectional allomorphs from the second column. Comitative *-ma* is added to intransitive roots and derives a transitive stem, taking an inflection from the right-hand column. Instrumental *-ma* effectively derives a ditransitive from a transitive form; this still takes transitive inflections.

The only morphological alternation that is not fully determined by transitivity concerns positive imperative. With intransitives this is simply *-ga*, but with transitive stems it is *-ya* after a disyllabic root ending in *-i* but  $\emptyset$  in all other cases (that is, after a trisyllabic stem ending in *-i*, or after any stem ending in *-a*).

The Yotic Deletion Rule *-iy→i /-#* (2.6) plays an important role in verbal morphology. One effect of this rule is that the most frequent inflection, that we are calling 'unmarked aspect', is realised as *-y* after *a* but as  $\emptyset$  after *i*; thus:

TABLE 3.3 - *Verbal suffixes in W dialect*

Conjugation:	Intransitive	Transitive
Inflections:		
Positive imperative	-ga	-ya~-∅
Negative imperative	-ga	-lga
Irrealis	-ma	-lma
Purposive	-lagu	-gu
Perfect	-gi	-nu
Unmarked aspect	-y	-y
Subordinate	-nu	-nu
Derivations - transitivity-preserving		
Continuative	-bali-	-lgani-
Derivations - transitivity-changing		
Comitative	-ma-	—
Instrumental	—	-ma-

	Root	+unmarked inflection	+perfect inflection	+continuative unmarked	+continuative perfect
<i>intr</i>	wiɽga 'bathe'	wiɽgay	wiɽgagi	wiɽgabali	wiɽbaligi
	wa:gi 'laugh'	wa:gi	wa:giɽgi	wa:giɽbali	wa:giɽbaligi
<i>tr</i>	ɽunda 'see'	ɽunday	ɽundanu	ɽundalgani	ɽundalganiɽu
	balmbi 'smell'	balmbi	balmbiɽu	balmbilgani	balmbilganiɽu

In the case of transitive trisyllabic stems ending in -i, positive imperative thus falls together with the unmarked inflection, both being just the stem.

Sporadic syllable dropping from purposive -lagu (to give -gu), with some intransitive stems, all of them trisyllabic, is detailed in 3.5.4.

It will be noted that -nu occurs twice in the transitive column of Table 3.3. That is, perfect and subordinate inflections, which are distinct in the case of intransitive verbs, fall together on transitives i.e.

	intransitive	transitive
perfect	-gi	} -nu
subordinate	-nu	

In most Australian languages -nu (or some reflex of \*-nu) marks past tense; this would be closest in meaning to perfective -nu in Wargamay. (Note that in Dyirbal the relative clause inflection on verbs, -nu, appears to be taking on a perfective meaning - Dixon 1972:104).

Detailed discussion and exemplification of the inflectional and derivational suffixes is in 3.5.4-6.

There is in Wargamay just one irregular verb ɽi:gi- 'to sit'. In the W dialect it behaves as a regular intransitive root with the following exceptions:

(i) positive imperative was consistently given as ɽi:giya by John Tooth, but as the expected ɽi:giɽga by Lambert Cocky;

(ii) the -gi- of the stem may optionally drop before continuative -bali. That is, ɽi:giɽbali- alternates with ɽi:ɽbali- (see 2.6); ɽi:ɽbali is the most frequent form before non-zero inflections e.g. ɽi:ɽbaliga, and ɽi:giɽbali is preferred with the

unmarked inflection, which is  $\emptyset$  after a stem ending in *i*.

The paradigm of *gi:gi* in *W*, and in *Biyay*, is in 3.5.3.

3.5.2 CONJUGATIONAL SETS. Verbal roots in *Wargamay* fall into two, mutually exclusive, sets:

[a] *Intransitive* e.g. *gaga* 'go, come', *barma* 'talk', *wa:gi* 'laugh'. These can only take the 'intransitive allomorphs', from the first column of Table 3.3. They occur only in intransitive constructions, that is, with an S NP (they cannot occur with a nominal in ergative, or with a pronoun or nominal in accusative case).

[b] the other set can be termed '*transitive*' - it includes *bu:di* 'take, bring', *muga* 'eat', *ḡunda* 'see' and so on. Roots in this class can occur *either* in transitive constructions (with A and O NPs) and then take allomorphs from the transitive column of Table 3.3, *or* in intransitive constructions (with just an S NP) and then take suffixes from the intransitive column. Thus we can have both (with English translations exactly as given by informants):

(71) *ḡaḡa ma:l ḡundalgani* I'm looking at the man

(72) *ḡayba ḡundabali (ma:lndu)* I'm having a look (at the man)

The syntactic consequences of this 'double transitivity' behaviour of what we have termed 'transitive roots' is dealt with in 4.2, while chapter 5 puts forward a hypothesis about the diachronic development of this feature of present-day *Wargamay*. In the surrounding languages each root is (with very few exceptions) strictly specified for conjugation and also for transitivity; the parameters of conjugation and transitivity do not coincide in any of *Wargamay*'s neighbours (or, indeed, in languages from other parts of Australia - Dixon 1980a:378-430).

Note that although all 'transitive roots' *can* occur in intransitive constructions they are always more frequently encountered in transitive function - the circumstances in which a 'transitive root' is likely to occur in an intransitive construction are discussed in 4.2, 5.3.

Roots in the 'intransitive set' in *Wargamay* are definitely restricted to intransitive inflections, and occurrence in intransitive constructions. That is, we can have

(73) *ḡayba wa:ḡibali* I'm laughing

but not \**ḡaḡa ma:l wa:ḡilgani*. Transitive stems can be derived from intransitive roots, but this process is always morphologically marked by the comitative suffix *-ma*. Thus:

(74) *ḡaḡa ma:l wa:ḡimalgani* I'm laughing at the man

Examination of Table 3.3 shows that transitive negative imperative and irrealis allomorphs are identical to the intransitive forms save for an initial *-l-*. This affix-initial *-l-* also occurs in the derivational form *-lgani* (and in the transitive allomorph *-lani* of the continuative in the B dialect - 3.5.3). We can regard the *-l-* as constituting a distinct 'conjugation marker' morpheme that intrudes between a transitive stem and these four suffixes. It is certainly appropriate to do this in other Australian langu-

ages, where the conjugation marker appears before almost all verbal suffixes (Yidiñ is a very clear example - Dixon 1980a:382-99, 1977a:207). In Wargamay -l- is more restricted in occurrence, so that although we do prefer to recognise it as a separate morpheme the decision is a fairly marginal one. In contrast, the intransitive column can be said to have zero conjugation marker. (The -l- in -lagu, the *intransitive* allomorph of purposive, is probably derived from the *transitive* conjugation marker -l-, through a process of diachronic reanalysis - see 5.3.)

Of the 140 verbal roots in my corpus just one-third belong to the intransitive set, and are restricted to intransitive function. The remaining two-thirds belong to the 'transitive set', and can function either transitively or intransitively.

Verb roots all end in -a or -i, never in -u. It is probably significant (within the context of a comparative study of the development of conjugational systems in the Australian language family) that 56% of the intransitive roots end in -i, whereas only 24% of the transitive set do.

There are no monosyllabic verb roots in the W dialect (ǵi:- in B is discussed in 3.5.3). Two roots in the corpus are quadrisyllabic, 30 are trisyllabic and the remainder disyllabic. 14 of the trisyllabics are intransitive, and 16 out of the 30 end in -i.

Dyirbal has just a few verbal roots ending in -u, all of them in the predominantly transitive -l conjugation. There are two cognates in Wargamay:

<i>Dyirbal</i>	baygu-l 'shake, wave, bash'	<i>Wargamay</i>	bayguri
	buybu-l 'spit at'		buybuǵi 'make "raspberry" at'

In each case Wargamay has a trisyllabic root. There are altogether ten trisyllabic verbal roots in Wargamay whose third syllable is -ri-, like bayguri (but there are no further examples of a third syllable -ǵi-, as in buybuǵi, a verb form which is probably onomatopoeically based). It is possible (but of course by no means certain) that what was originally a productive affix -ri has been incorporated into some modern root-forms, and that it is this which has helped to eliminate verbal roots ending in -u. (There is no affix -ri in present-day Wargamay. The Dyirbal reflexive -rǵi~-yirǵi~-mǵari is not a likely candidate since it always derives intransitive stems; of the -ri-final roots in Wargamay only half are intransitive. Similar remarks apply in the case of the verbal comitative/instrumental suffix -ǵi in Waruñu; this always derives transitive stems - Tsunoda 1974). An alternative hypothesis would be that *no* earlier stage of Wargamay allowed verbs to end in -u, and that Dyirbal originally had roots bayguri and buybuǵi with the modern forms being obtained by elision of the final syllable.

3.5.3 DIFFERENCES IN BIYAY DIALECT. Verbs in B are almost identical to those in W. Although the following differences are minor, they are crucial to an investigation of the historical developments that have led to the verb systems



TABLE 3.4 - *The irregular verb 'to sit' in W and B*

	W dialect	B dialect
positive imperative	gi:giga~gi:giya	gi:ga
negative imperative	gi:giga	?
irrealis	gi:gima	gi:gima
purposive	gi:gilagu	gi:gigu
perfect	gi:gigi	} gi:gi
unmarked aspect	gi:gi	
subordinate	gi:gipu	gi:gipu
continuative stem	gi:(gi)bali-	gi:gani-
comitative stem	gi:gima-	?

of modern dialects (5.3). Differences from W are:

[i] B has, like Nyawaygi but unlike W, a *reciprocal derivational suffix* -ba. This is discussed in 4.5 below.

[ii] The *continuative derivational suffix* is -ni in the intransitive and -lani in the transitive column. Thus:

	continuative+unmarked			
	root	W dialect	B dialect	
<i>intransitive</i>	wi[ga]-	'bathe'	wi[ga]+bali	wi[ga]+ni
<i>transitive</i>	ɲunda	'see'	ɲunda+lani	ɲunda+lani

It may be that the B continuative goes back to \*-gani, with developments \*-gani>-ni in the intransitive and \*-l+gani>-lani in the transitive column. (Note that -gani- 'do repeatedly' is a verbal derivational affix in Dyirbal, occurring there with verbs from both conjugations - Dixon 1972:248.) The full form -lani is maintained for transitive verbs in W; no origin is known for the intransitive W allomorph -bali.

[iii] The *irregular verb 'to sit'* has a rather different paradigm in B. Whereas in W the root can be taken as gi:gi-, in B the root appears to be basically just gi:-. This is the only monosyllabic verb root in the language; but note that it must take an inflection that is at least one syllable long, so that each verb word has at least two syllables. (The twelve nominals and a particle that actually form monosyllabic words were listed in 2.2.)

The paradigm of 'to sit' in the two dialects is shown in Table 3.4.

In the right-hand column positive imperative and perfect/unmarked appear to involve the regular inflections -ga and -gi added to root gi:-. Other inflections are added to these forms. Thus, irrealis -ma and purposive -gu (not -lagu, the regular intransitive allomorph) are added to gi:gi-, while continuative -ni is based on gi:ga. (Negative imperative and comitative forms were not obtained from Nora Boyd, the only B informant, before her death in 1976).

We remarked that -ni, the continuative suffix in B, may be related to -gani, the transitive allomorph in W. The form gi:gani, which could be analysed as gi:+gani, might be thought to provide support for this position. But it is not the strongest type of support, since the paradigm of gi:- is highly irregular, and gi:ga is an independently motivated

form within it.

[iv] In B the *positive imperative inflection* on intransitive verbs is -ga, exactly as in W. In the case of verbs functioning transitively B has -∅ for the positive imperative on stems ending in -a, again exactly like W. With transitive stems ending in -i, however, the inflections are quite different. Whereas W has -ya with a disyllabic and -∅ with a trisyllabic root, B has -∅ with a disyllabic root and in the case of trisyllabics it substitutes -a for the stem-final -i. Thus

	root		positive imperative in W	positive imperative in B
<i>intransitive</i>	gaga	'go'		gagaga
	wa:gi	'laugh'		wa:giga
	migiri	'wait'		migiriga
<i>transitive</i>	ṅunda	'see'		ṅunda
	bu:di	'take'	bu:diya	bu:di
	wagiri	'overturn'	wagiri	wagira

There are in addition just two disyllabic transitive verbs - in B only - that replace final -i by -a in the positive imperative:

root	positive imperative	
ma:ni 'hold in hand'	W ma:niya	B ma:na
wugi 'give'	W wugiya	B wuga

We can suggest that originally all -i-final transitive stems took positive imperative -ya. The affix was dropped from trisyllabic stems in W, while in B the change:

$$\text{---i} + \text{ya} > \text{---a}$$

root      inflection

took place. With disyllabics -ya was retained in W but dropped in B.

The two odd disyllabics that undergo a vowel change can be explained historically. Some Australian languages (including Nyawaygi) have a few monosyllabic verbs, normally including (ṅu~~)wu- 'give' and ma:- 'hold in the hand'; these typically have imperatives wuga and ma:na and tense forms wugi, ma:ni (a full discussion is in Dixon 1980a:382-430). It is likely that a recent ancestor of Wargamay had these monosyllabic verbs, and that they have - in the modern language - been reanalysed as having disyllabic roots; but the original imperative form is maintained in B and now correlates well with the -i→-a rule for trisyllabic imperatives.

We could suggest that in B the root of 'to sit' is simply gi:gi (as in W) and that positive imperative gi:ga is formed by the type of process just dealt with. But there are other oddities in the paradigm of 'to sit' in B (positive gi:gigu rather than gi:gilagu, and continuative gi:gani-) so that there is still need for an ad hoc analysis of this verb in terms of a root gi:-. (It is very probable that gi:- is the last of a number of original monosyllabic verb roots in Wargamay which have been reanalysed as having disyllabic roots. This diachronic change, with gi:gi- taking over from

gi:-, is all but complete in W - although the alternation gi:gibali~gi:bali in the continuative stem may show a relic of the original root gi:- - but has only proceeded part-way in B.)

[v] Finally, B differs from W in the *association of conjugation with transitivity*.

Dyirbal is typical of surrounding languages in that it has two conjugation classes, there being a statistical correlation - but far from an exact coincidence - with transitivity classes; the -y conjugation in Dyirbal has about 80% intransitive members and the -l conjugation around 80% transitive members. A major point of interest concerning the W dialect of Wargamay is that conjugation exactly coincides with transitivity. Comparing the verbs cognate between the two languages we find that all the intransitive members of the -y conjugation in Dyirbal do, of course, fall into the 'intransitive set' in W; and the transitive members of the Dyirbal -l conjugation are in the 'transitive set' in W. But there are also two or three verbs common to the two languages that, although intransitive, are members of the -l conjugation in Dyirbal; in W these receive intransitive inflectional allomorphs. This can be illustrated with a sample inflection (purposive) of representative verbs in each language (conjugational membership in Dyirbal is shown by -y or -l suffixed to the stem; the purposive inflection in Dyirbal is -ygu onto a stem of the -y conjugation and -li onto a form from the -l class):

<i>W dialect</i>			
	<i>root</i>		<i>purposive</i>
intransitive	{	wula 'die'	wula+lagu
		bungi 'lie down'	bungi+lagu
transitive		gi:ga 'tell to do'	gi:ga+gu

  

<i>Dyirbal</i>			
	<i>root</i>		<i>purposive</i>
-y conjugation (intransitive)	wula-y	'vanish'	wula+ygu
-l conjugation	{	(intransitive) bungi-l	'lie down' bungi+li
		(transitive) giga-l	'tell to do' giga+li

It looks from this as if W has reanalysed conjugational membership to coincide exactly with transitivity subclasses. That is, the 'exceptions' like bungi-l have been transferred to the class with which their transitivity value has the strongest connection.

However, this has not happened in the B dialect. Here the intransitive root bungi takes only allomorphs from the transitive column of Table 3.3. Sample forms in the two dialects are:

	<i>W dialect</i>	<i>B dialect</i>
positive imperative	bungi+ga	bungi
purposive	bungi+lagu	bungi+gu
irrealis	bungi+ma	bungi+lma

Note, however, that John Tooth consistently gave bungi+ya as the positive imperative, parallel to his gi:guya 'sit-IMP' mentioned earlier; Lambert Cocky gave bungiga and gi:giga.

The slender evidence available suggests that two other

intransitive verbs take allomorphs from the 'transitive' column in B (but regular intransitive allomorphs in W); these are *ga:nda-* 'crawl' and *wala-* 'ascend'; there are no cognates in Dyirbal. The only other verbs which are intransitive members of the -l conjugation in Dyirbal and also occur in Wargamay are Dyirbal *walŋga-l*, W *walŋga-* 'float' and Dyirbal *galba-l*, W *ga:lba-* 'be stuck'. These occur only with the unmarked inflection in the limited B corpus; they take normal intransitive inflections in W (except that the irrealis form *ga:lbalma*, rather than expected *ga:lba<sup>m</sup>*, was once given by John Tooth; the other forms he gave were regular intransitive *ga:lbabali* and *ga:lbagi*, besides *ga:lbay*).

The inchoative verbaliser, deriving intransitive verbal stems from nominals etc (4.9.1) is *-mbi~bi~i* in Wargamay, surely cognate with the corresponding suffix *-bi-l* in Dyirbal. This belongs to the -l conjugation in Dyirbal, although it does form intransitive stems. However, the inchoative suffix takes only intransitive allomorphs in Wargamay, in both W and B dialects (Nora Boyd gave *ganu-mbi-gi* 'broken' and *magul-i-gi* 'worked', for instance). It seems that that reassignment of original -l-conjugation intransitive forms to the intransitive class probably commenced with this derivational affix, which now belongs in the intransitive set in both W and B; but for lexical verbs such as *bungi-* 'lie down' the reassignment has thus far taken place only in the W dialect.

It has already been stressed that what we are calling 'transitive roots' in W and B can occur with either transitive inflection (corresponding to -l conjugation endings in Dyirbal) or with intransitive inflection (corresponding to Dyirbal -y conjugation allomorphs), depending on the type of construction in which the verb is functioning. Most transitive verbs cognate between the two languages belong to the -l conjugation in Dyirbal, but there are a few verbs - such as *galgi-* 'cook' - that are in the Dyirbal -y class. There has plainly been a shift here too. A verb like *galgi-* would originally have occurred only in transitive constructions, and would then have taken inflections from the first column of Table 3.3. It now takes endings from the right-hand column of Table 3.3 in transitive sentences, and when it takes endings from the left-hand column it is functioning in intransitive constructions. (A full account of the diachronic changes that can be surmised to have taken place in the development of the modern Wargamay verb system - which are presupposed by the comments above - is in chapter 5.)

3.5.4 INFLECTIONS. We will now take the seven inflections in turn, describing their form and function.

[1] *Positive imperative.*

intransitive -ga

transitive

on stems ending in -a,  $\phi$

on disyllabics ending in -i, -ya W,  $\phi$  B

on trisyllabics ending in -i,  $\phi$  W, -a B (where this -a replaces the stem-final vowel i.e.  $V_1V_2 \rightarrow V_2$ )

The irregular forms of the imperative for *gi:(gi)-*, *ma:ni-wugi-*, and *bungi-* were described in 3.5.1, 3.5.3.

The function of imperatives follows the pattern of most other Australian languages. The (A or S) subject is normally a singular, dual or plural second person pronoun, which can freely be omitted - see (9), (11), (35), (62), (82), (85). One example has been recorded in which the subject of an imperative is a 1du pronoun (implied: inclusive):

- (75) *ɲali bari buɽmbiya ɲalugu*  
 1du-SA stone-ABS throw-IMP water-ALL  
 We must throw the stone into the water

[2] *Negative imperative.* This construction is the same as positive imperative but for the obligatory inclusion of particle *ɲaru* 'don't' before the verb, and the use of inflections

intransitive -*ɲa*  
 transitive -*lɲa*

Examples are at (83-4) and (166) below.

[3] *Purposive.*

intransitive -*lagu*  
 transitive -*gu*

The intransitive allomorph is occasionally shortened to -*gu* after trisyllabic stems. The only examples that have been remarked are *ɲuwara+gu* 'stand-PURP', *bandali+gu* 'burst-PURP', *magul+i+gu* 'work-INCHO-PURP' and *gi:+bali+gu* 'sit-CONTIN-PURP' (see (37)). However, when elicitation was directed to these words the informants gave *ɲuwara+lagu*, *magul+i+lagu* etc as the 'correct' forms. It seems that this sporadic elision of -*la* (after -*ra-* or -*li-*) is an instance of the haplologic-type syllable omission that occurs at a number of places in the grammar of Wargamay (2.6). The truncation of -*lagu* to -*gu* has only been encountered on a basically intransitive root, never with a 'transitive stem' used intransitively (if it did happen in the latter case it would obscure the difference between intransitive and transitive variants of purposive with roots from the 'transitive set').

Purposive has an important syntactic function, marking an 'in order to' complement clause - see 4.3.2-3. But purposive inflection can also occur in a main clause (that is, in the first clause of a discourse) and then indicates necessity - that the subject wants to or has to undertake some action. See (4), (51-3), (68) and:

- (76) *ɲinba wagunda biɽbalagu ɲulgaɽaŋga*  
 2sg-S wood-LOC jump-PURP log-LOC  
 You'll have to jump over the log
- (77) *ɲayba gagalagu magulgu*  
 1sg-S go-PURP work-DAT  
 I want to go for work
- (78) *mamu ɲayba ɲuwaragu*  
 by-and-by 1sg-S stand-PURP  
 I'll stand up by-and-by

- (79) *ŋaŋa ŋina bu:digu mamu / ŋinba miŋirilagu ŋaygungu /*  
 lsg-A 2sg-O take-PURP by-and-by 2sg-S wait-PURP lsg-DAT  
*magulgu*  
 work-DAT  
 I'll take you by-and-by. You should wait for me (and I'll take  
 you) for work.

Purposive can also be used to indicate ability, as in (7).

[4] *Irrealis*.

intransitive -ma  
 transitive -lma

This inflection can be used on the verb in a main clause for unmarked reference to the 'future' e.g. (48), (230) and:

- (80) Q - *ŋubula bulguŋaman waŋdamira gagama*  
 2du-SA wife-ŋaman WHEN go-IRREAL  
 When are you and your wife going?  
 A - *ŋirwaŋa ŋali gagama* We'll go tomorrow
- (81) *ŋayba ŋa: walama*  
 lsg-S NOT ascend-IRREAL  
 I'm not climbing (any more, because I'm tired)

It is also, with an 'apprehensional' sense, used to refer to something unpleasant that might happen; a -ma clause is then often subordinated to a main clause (which will typically be in positive or negative imperative - or in the unmarked - inflection), indicating action that should be taken to avoid this unpleasant possibility e.g. (125) and

- (82) *ŋinba mu:ŋambiga / bulimandu ŋundalma*  
 2sg-S hidden-INCHO-IMP policeman-ERG see-IRREAL  
 You hide, lest the policeman see (you)!
- (83) *ŋaru ŋilwalŋa / ba:dima*  
 DON'T kick-NEG IMP cry-IRREAL  
 Don't kick (him) lest (he) cry!
- (84) *ŋaygu bundurup ŋaru ma:nilŋa / ŋibunŋu ŋina*  
 lsg-GEN-ABS bag-ABS DON'T touch-NEG IMP ŋibu-ERG 2sg-0  
*gunŋalma*  
 bite-IRREAL  
 Don't touch my bag, or the Nyibu (a 'mythical spider', who is  
 supposed to punish some types of wrongdoing) might bite you!

Note that if there is an NP common to main and subordinate clauses, and if it is in O or S function in each clause, it can be deleted from the second clause, as in (82), (83) and (125).

A verb in irrealis inflection can be used to explain why an instruction is not followed:

- (85) A: *ŋinda ŋanba / B: maya ŋana ŋundalma*  
 2sg-A follow-IMP NO lsg-0 see-IRREAL  
 A: You follow (him)! B: No, (he) might see me.

See also text 8, line 6 and text 9 line 3. There is a close semantic connection between this sense of irrealis and the aversive nominal inflection - 3.1.1, 3.1.5.

Dyirbal and Yidiñ each has a verbal suffix that has an exclusively 'unpleasant' meaning - corresponding to (82-5) here. (The forms are -bila~ba in Dyirbal and -di in Yidiñ - Dixon 1972:112-3, 1977a:350-7.) Wargamay -ma~lma refers to 'something that might happen and should be avoided' in more than half its occurrences, but it *can* also have a straightforward predictive function, as in (48) and (80-1) and it is in view of this that we name it 'irrealis'. (For the corresponding suffix, -ma, in Nyawaygi the straightforward future meaning is rather more frequent than the 'undesirable' sense. It appears that there is a gradual shift in the semantic effect of this category as one proceeds south from Yidiñ and Dyirbal through Wargamay to Nyawaygi.)

Any action in the future must be referred to by one of the four verbal inflections we have described thus far. Commands and instructions involve the positive or negative imperative. An action that the subject is likely to have volitional control over will be shown by purposive inflection - something he wants to do, or has to do to fulfil some social obligation or physiological need. An action that is outside the sphere of control of the subject - something that just 'might happen', a simple prediction - is shown by irrealis.

There appears to be some overlap of meaning between purposive and irrealis. Thus, the English sentence 'I'll go by-and-by' could be rendered by either of

- (86) mamu ḡayba gaḡalagu  
 (87) mamu ḡayba gaḡama

But there can be a difference in meaning between these two sentences: (86) could indicate that the speaker has a reason for going soon, whereas (87) would suggest that he might take it into his head to depart, although there is no real need to.

[5] *Perfect*.

intransitive -gi  
 transitive -ḡu

This inflection indicates that some action is irretrievably finished. Thus gaḡay - unmarked inflection on gaḡa 'go' - can be used to indicate that someone has gone away; in contrast, the perfect gaḡagi suggests that he has gone away for good (with the implication that he may never return). There is a tendency for verbs in perfect inflection to be referring to an event in the distant past (a few days or longer ago) but this is not necessarily the case.

Note the contrast between a shout of discovery (involving unmarked inflection on the verb):

- (88) ḡaḡa ḡunḡa baḡgi ḡaymbay I've found this bag

and a narrative recounting a past discovery (with perfect inflection):

- (89) ḡu:ḡaḡa ḡaymbaḡu ḡunḡa baḡgi [I] found this bag a long time ago

The meaning of a perfect form can often be brought out

by comparison with a continuative (in unmarked inflection)  
e.g.

(90) wagon gandabali  
wood-ABS burn-CONTIN-UNMKD  
The wood is burning

(91) puṅa miḡa gandagi  
3sg-SO camp-ABS burn-PERF  
The camp has all burnt up

and see (101-2) below.

Perfect inflection is frequently used with non-durative verbs e.g. biḡbagi 'jumped (with fright)', dagigi 'fell down', wulagi 'died'. However, it can also be used with durative verbs, as in (91).

Sequence of actions can be shown by the use of perfect, in conjunction with unmarked inflection. Thus, in

(92) bulimandu ḡana wuḡay / ḡayba bimbirigi  
policeman-ERG lsg-O search-UNMKD lsg-S run-PERF  
The policeman searched for me; but I had run away.

the speaker indicates that he had left a given locality *before* the policeman commenced to search for him there.

As a final illustration, an informant gave for ma:ni, in unmarked inflection, the gloss 'I grab something, catch hold of it' but for the perfect ma:nipu he gave 'I bought it up', plainly showing that the action is finished.

[6] *Unmarked aspect*, has realisation -y with all verbs (the -y being eliminated after i by the yotic deletion rule, 2.6).

This is the most frequent verbal inflection in Wargamay and can most simply be described as complementary to the four 'future' possibilities (imperatives, purposive and irrealis) and to perfect. It can, in addition, be used where any of the three non-imperative and non-subordinate inflections are possible e.g. 'he died' could be either puṅa wulagi or puṅa wulay, and 'I'll go' might be ḡayba ḡagama, ḡayba ḡagalagu or just ḡayba ḡagay.

It will be noticed that Wargamay does not have anything that could be referred to as a tense system. It is, instead, possible to make a positive aspectual or modal specification by use of perfect, irrealis, purposive, etc inflections. But if this is not considered necessary, or if none of these choices would be appropriate (e.g. for an action begun in the past and continuing into the present) then the verb is suffixed by the 'unmarked aspect' -y. (Wargamay does, of course, have lexical time qualifiers, for explicit reference to points in the past and future, or to the present - 3.3.)

Verbs in -y inflection can refer to past, present or future time:

(93) ḡanumbul ḡayba ḡagay  
earlier on today lsg-S go-UNMKD  
I went earlier on today.

(94) piṛwaḡa ḡayba ḡagumbi  
tomorrow lsg-S HERE-INCHO-UNMKD



I'll come tomorrow

An example of present time reference is (60) above.

-y is the normal inflection for narratives - see texts 5-9.

[7] *Subordinate* -ru. This suffix marks the verb in a relative clause. A full discussion of its syntactic possibilities is in 4.4.

3.5.5 TRANSITIVITY-PRESERVING DERIVATIONAL SUFFIXES. There is one frequent and well-attested transitivity-preserving suffix - the continuative. Two other affixes, -lga- and -yandi, that have only been encountered in a handful of examples, are mentioned under [2], [3] below.

[1] *Continuative*.

intransitive -bali W -ni B  
transitive -lgani W, -lani B

This is a very common suffix, being followed in the overwhelming majority of cases by the unmarked inflection (realised as zero after stem-final -i). -bali~-lgani etc then indicates either that an action is now taking place and has a fair duration ('present continuous') or that the subject typically performs this action ('habitual') e.g. (49), (70) and

(95) *ḡayba ḡalunga ḡuwarabali/ I'm standing in the water.*  
*ḡalu ḡidul The water's cold.*

(96) *miḡagu ḡuḡa ḡagaram ḡuyibali*  
what-DAT 3sg-SO small-ABS cry-CONTIN-UNMKD  
What is the child crying for?

(97) *ḡaḡan ḡi:ḡindu muḡalgani*  
grass-ABS wallaby-ERG eat-CONTIN-UNMKD  
Wallabies eat grass

(98) *ḡulanga ḡayḡu muḡalgani He [always] eats my [food]*

See also (182) below. And note that *yaraman bimbirini* 'horse-ABS run-CONTIN-UNMKD' was translated as 'that's a fast horse'.

The contrast between a verb with the continuative suffix and one without is brought out by an informant's translations for:

(99) *ḡulanga ḡapa ḡundalgani 'He stand there one place watching me'*

(100) *ḡulanga ḡapa ḡunday 'He only just seen me there, he went away'*

An important contrast is between continuative (plus unmarked inflection) and perfect inflection, as in (90-1) and:

(101) *maya ḡayba ḡa: buyabali No, I don't smoke*

(102) *maya ḡayba ḡa: buyagi No, I never smoked*

-bali~-lgani etc can refer to an action performed a number of times in quick succession e.g. *miḡbalgani* 'hit and hit and hit and hit...' It can also be used to indicate an habitual association of actions. Thus, in Text 7, Lambert

Cocky tells how about the turn of the century his tribesmen were hunted and shot at by the 'native police'. He uses a series of verbs, all in the continuative form - a black tracker would show (milbalgani) the policeman the tracks of the Wargamaygan, the policeman would follow (ḡanbalgani) them, and then shoot (buḡalḡani) at the Aborigines.

A verb with continuative plus unmarked inflection can refer to the present, the past or the future. Thus wuḡabali was normally glossed 'He's walking about now' but an informant pointed out that it could refer to a person who was going to set out soon (and could be specified more exactly by insertion of an appropriate time qualifier - 3.3).

Although continuative is normally followed by the unmarked inflection it can take the full range of verbal inflections. It is followed by purposive in (37), by imperative in (103) and by perfect in (104):

(103) ḡi:baliga        yalanga mamugu  
sit-CONTIN-IMP THERE by-and-by-UNTIL  
Sit down there for a while!

(104) miḡagu    ḡinda ḡundalḡaniḡu    ḡulmbuḡu  
WHAT-DAT 2sg-A see-CONTIN-PERF woman-ABS  
Why did you keep on watching that woman? [A wife berating her husband]

Examples of -bali~-lḡani etc with the subordinate inflection are in (186) and (189) of 4.4. No non-zero inflections were recorded following B -ni~-lani in the limited corpus obtained from Nora Boyd.

[2] -lḡa. In Text 7 (lines 8 and 15) Lambert Cocky twice said wuḡa-lḡa-y, suffixing -lḡa- to the transitive root wuḡa 'chase'. He explained that it meant 'chase a lot of people' (thus corresponding in meaning to the verbal affix -ḡa- in Dyirbal - Dixon 1972:249-50). However when the text was replayed he seemed to prefer wuḡalḡani over wuḡalḡay.

Other informants were not happy with -lḡa- as a Wargamay suffix, and gave instead -bali~-lḡani etc forms. When elicitation was directed to this point Lambert Cocky did give wuḡalḡalḡani pulanga bulimandu 'The policemen are chasing [Aborigines] all the time', involving -lḡa- and -lḡani-; but he did not use -lḡa- spontaneously on any other occasion.

-lḡa- may be an intrusion from Giramay or, speculatively, a derivational affix that was used in the now-extinct Hinchinbrook Biyay dialect.

[3] -yandi. In the texts recorded by La Mont West Jr from Jimmy Johnson (1.6) there are half-a-dozen occurrences of a verbal affix -yandi-; in every case but one it is followed by -may (that is, presumably comitative -ma- plus unmarked inflection -y). Of my informants Lambert Cocky recognised this form but did not use it himself (preferring -bali). -yandi (which is not similar to any Dyirbal affix) may have occurred only in Hinchinbrook Biyay. Examination of the glosses given by Jimmy Johnson suggests that its meaning may possibly have been 'away', 'going' e.g. bimbiri-yandi 'run away', gagayandimay 'take away'. Alternatively it

could conceivably have been the Hinchinbrook Biyay equivalent of -bali~-lgani etc.

3.5.6 SYNTACTIC DERIVATIONAL SUFFIXES. There are three affixes that change the syntactic function of a stem to which they are attached:

[1] comitative -ma-, added to an intransitive stem derives a transitive stem. Discussion and exemplification is in 4.7.

[2] instrumental -ma-, added to a transitive stem derives a stem that still takes transitive inflections, but functions ditransitively - see 4.8.

[3] in B only there is a reciprocal suffix -ba. Details are in 4.5.

Just three verbs have been recorded with both a transitivity-preserving and a syntactic derivational affix - comitative -ma- followed by continuative -lgani. One example was quoted at (74), another is at (207), and the third is bayibayimalgani 'REDUP-be tangled up-COMIT-CONTIN-UNMKD' i.e. 'keep tangling [something] up'.

3.5.7 REDUPLICATION. Verbal reduplication is used very sparingly. It appears to involve repetition of the first two syllables of the root and to indicate that an action is repeated over and over again. For example, with verbal roots gaga 'go' and bayguri 'shake':

(105) ḡayba gagagagagi I kept on going and going

(106) bada puḡa baygubayguriḡi ḡungiri  
dog-ABS 3sg-SO REDUP-shake-PERF tail-ABS  
The dog swished its tail (Literally, the dog's tail swished)

### 3.6 POST-INFLECTIONAL AFFIXES

There are a number of affixes that follow inflections. Only two or three examples of each have occurred. They appear not to have any clear semantic or syntactic effect but rather to involve a type of stylistic emphasis. These affixes are:

- ḡan - see Text 6 lines 10 and 16;
- ban e.g. miḡaguban 'I don't know' from miḡagu 'what-DAT';
- bi e.g. puḡgabi 'Will this one do?' from demonstrative puḡga 'this';
- bal - occurred in the texts given by Jimmy Johnson to La Mont West Jr. Its meaning and function are not understood.

## 4. SYNTAX

### 4.1 SIMPLE SENTENCES

4.1.1 CORE. Each sentence must involve a 'core' of obligatory elements in order to constitute a complete semantic unit. There are two types of core configuration:

TABLE 4.1 - *Types of case marking.*

A	} pubula	{ ɲaɲa	pulanga	ma:Indu	
S		{ ɲayba	}	puna	ma:l
O	pubulana	ɲana			
	2du	1sg			
	i	ii	iii		

*Intransitive construction* - NP in 'intransitive subject function' (S) and VC showing intransitive inflection;

*Transitive construction* - NP in 'transitive subject function' (A), NP in 'transitive object function' (O) and VC showing transitive inflection.

Here NP (noun phrase) indicates a number of nominal and/or pronominal elements, and VC (verb complex) is one or more verbs (agreeing in inflection); details of NP and VC composition are in 4.1.3-4.

Different parts of speech have different ways of marking the three core syntactic functions, S, A and O. Representative forms are shown in Table 4.1.

In column i non-singular first and second person pronouns have a single ('nominative') form for S and A functions, and a different marked form - involving the 'accusative' suffix -pa -for O function. This is usually referred to as a 'nominative-accusative' pattern of inflection. Thus:

(107) ɲali gagay We two are going

(108) pubula gagay You two are going

(109) ɲali pubulana ɲunday We two are looking at you two

(110) pubula ɲaliɲa ɲunday You two are looking at us two

At the opposite extreme, iii, nominals (nouns and adjectives) and what we are calling the 3sg pronoun have one form ('absolute case') for S and O functions, and a marked form ('ergative case') for A function. Examples of sentences involving forms that inflect in an 'absolute-ergative' pattern are:

(111) puna gagay It is going

(112) ma:l gagay The man is going

(113) pulanga ma:l ɲunday It is looking at the man

(114) ma:Indu puna ɲunday The man is looking at it

In the middle of the diagram, at ii, we find that there exist distinct forms for all three functions; this applies to 1sg, 2sg, 3du, 3pl and the interrogative pronoun. (A

general semantic account of 'split' case systems, which perfectly covers the Wargamay situation, is in Silverstein (1976).

Sentences can, of course, mix NPs of all these types. Consider for instance:

(115) ɲali ma:l ɲundaɪma

Now ɲunda- 'see, look' can occur with transitive or intransitive inflections. -ɪma identifies it as transitive in this instance (see Table 3.3 in 3.5.1) and we would then look for an A NP and an O NP. We know that the form ɲali can be used for S or A function and ma:l for S or O function. Hence ɲali must here be A and ma:l O, so that (115) can only mean 'we two will look at the man'.

There is a possibility of ambiguity here, due to the free occurrence of 'transitive roots' with transitive or intransitive inflections, and to the fact that two of the seven inflections have identical form in intransitive and transitive conjugations (3.5.1). Suppose that the verb were in unmarked inflection, which is -y irrespective of transitivity. Then:

(116) ɲali ma:l ɲunday

could be taken as transitive, like (115) - 'We two are looking at the man'. Or (116) could be taken as intransitive with a single S NP involving both ɲali and ma:l - 'we two men are looking'.

Note that this ambiguity could only happen with a 'non-inative' non-singular first or second person pronoun, and with the verb in unmarked (or possibly in subordinate) inflection. 1sg and 2sg pronouns have distinct forms for S and A functions, so that corresponding to the two senses of (116) we have two distinct sentences:

(117) ɲaɟa ma:l ɲunday I am looking at the man

(118) ɲayba ma:l ɲunday I, a man, am looking.

Further discussion, explaining the two interpretations of (116), is in 4.2.

4.1.2 SYNTACTIC AND LOCAL EXTENSIONS. To the obligatory core members of a sentence (whether transitive or intransitive) can be added one or more NPs indicating, for instance, the purpose (dative case) or cause (ablative case) of the action:

(119) ɲuɲa ɲaygungu ɟagabali He's coming for me

See also (16), (77), (79). Purposive NPs are discussed further in 4.2, 4.3.

Other syntactic extensions of the core are an aversive NP indicating something that is feared, as in (6), or an NP referring to some instrument that is used (see 4.8.1).

There are also local extensions, indicating motion 'to' or 'from' or rest 'at' some place. Thus (75), (76) and:

(120) ɲayba ɟagay ɲalugu I'm going to the water (river)

(121) ɟilganɪp ɟu:ɲɟigi ɟaɟara  
hole-ABS emerge-PERF possum-ABS

A possum came out of the hole

- (122) *ŋaŋa gagaranga ɟaɟa buyŋgari*  
 lsg-A dillybag-LOC child-ABS hang up-UNMKD  
 I hung the baby up in a dilly-bag.

Further examples were given in the discussion of nominal cases - 3.1.1.

4.1.3 NP STRUCTURE. It appears that an NP, whatever its syntactic function, can involve any collection of nominals, deictics, pronouns, so long as semantic plausibility is preserved; every constituent in the NP must bear the appropriate case marking. Thus, we encounter noun plus adjective:

- (123) *ŋaŋa biɟal ɟagardagar ŋu:may*  
 lsg-A bark-ABS rough-ABS feel-UNMKD  
 I felt the rough bark

and pronoun plus adjective, as in:

- (124) *ŋaŋa puŋa bu:di / ŋamiŋingu ŋaŋa muɟagu*  
 lsg-A 3sg-SO take-UNMKD hungry-ERG lsg-A eat-PURP  
 I took it, I'm hungry so I'll eat it

In (124) the 'transitive subject' NP involves the ergative form of *ŋamiŋi* 'hungry' and the A pronoun *ŋaŋa* 'I' (the translation provided is a fairly free one).

An NP can involve two nouns, as *wagun* 'tree, wood' plus *ɟulgaga* 'log' in (76); an example of an NP with two pronouns is an 'inclusive' combination such as *ŋali ŋinba* - see (4) and 3.4.1. A noun and a pronoun can cooccur, as in (116) and (118). In (65) the NP involves a noun *ma:l* 'man', an adjective *yaga* 'two' and the 3du pronoun *bula*; there is a similar structure in line 17 of text 9.

The so-called 'third person pronoun' *puŋa* appears to be able to feature in an NP with any other constituents (3.4.1). The demonstratives are restricted to S or O function (3.4.4).

In 4.6 we discuss the occurrence within an NP of an embedded genitive NP (normally indicating alienable possession), or of an apposed 'part' noun (inalienable possession).

Note that although the subject of a transitive sentence is normally animate, it can be inanimate, as:

- (125) *miɟanga ɟumbaga / yugandu bargilma*  
 house-LOC enter-IMP rain-ERG wet-IRREAL  
 Come into the house, lest the rain wet you!

- (126) *ŋalungu ŋapa gu:ɟay*  
 water-ERG lsg-0 wash away-UNMKD  
 The water (i.e. flood) washed me away

4.1.4 VC STRUCTURE. Although most simple sentences involve a single transitive or intransitive verb, the VC *can* involve more than one verb; these must have been the same inflection (which implies that they must, of course, agree in transitivity). Typically, the second element in a VC may be a verbalised adjective, providing adverbial-type modification of the lexical verb. See (194), (232-3), (238)

and

- (127) galguçu pulanga wi:gimay                      ganday  
 meat-ABS 3sg-A no good-CAUS-UNMKD cook-UNMKD  
 She cooked the meat badly (glossed by the informant as 'She  
 burnt the meat')

4.1.5 MINIMAL SENTENCES. Like other Australian languages, Wargamay does have a minor sentence type which involves no verb. This typically involves an adjectival or locational 'comment' (in absolutive case) on a nominal or pronominal 'topic' (which is in S function). See the second clause of (95) and:

- (128) ŋalu bamba    The water's (too) far away  
 (129) ŋayba gidul    I'm cold

4.1.6 ORDER OF ELEMENTS. Wargamay shares with Dyirbal the property of allowing great freedom of ordering - not only of words within a phrase and phrases within a sentence, but also of words within a sentence. (In contrast, the order of morphemes within a word is quite fixed.) Little textual material is available so that it is not possible even to suggest ordering preferences. The wide range of possibilities encountered can be seen from examination of the examples quoted throughout this grammar (leaving aside sentences (130-41), (143-155), (274-8), (284-7) in some of which the word order has been normalised in order to draw attention more easily to particular grammatical correspondences). See also 3.3.

#### 4.2 CORRESPONDENCES BETWEEN TRANSITIVE AND INTRANSITIVE CONSTRUCTIONS INVOLVING TRANSITIVE VERBS

We mentioned in 3.5 that each verb root falls into one of two classes. Intransitive verbs can only occur in intransitive constructions - with a single S NP - and must take intransitive inflections, from the first column of Table 3.3. Thus we can have *yugarabali* 'is swimming' but not \**yugaralɣani*. (Transitive stems can be *derived* from intransitive roots by suffixing the comitative *-ma*; this takes transitive inflections. See 4.7.)

A root from the 'transitive set' can occur in a transitive construction - with A NP and O NP - taking an inflection from the transitive column, or in an intransitive inflection - with just an S core NP - taking an intransitive inflection. In neither case is any syntactic derivational affix required.

The NP accompanying a verb from the intransitive set must involve forms from the 'S row' of Table 4.1:

- (130) puɓula yugarabali    You two are swimming  
 (131) ŋayba yugarabali    I am swimming  
 (132) puŋa ma:l yugarabali    The man is swimming

In a transitive construction one NP must involve forms from the 'A row' of Table 4.1 and one NP forms from the 'O

row':

- (133) *pubula ŋaŋa ŋundalgani* You two are watching me  
 (134) *ŋaŋa ŋuŋa ma:l ŋundalgani* I'm watching the man  
 (135) *ŋulanga ma:lndu ŋubulana ŋundalgani* The man is watching you two

An NP like *ŋuŋa ma:l* occurs in S and in O functions. Its precise function in any particular sentence can be inferred from the pronominal forms that may fill the same slot. Thus *ŋuŋa ma:l* in (132) is interchangeable with *pubula* and *ŋayba*, indicating S function; and in (134) it is interchangeable with *ŋaŋa* and *ŋubulana*, indicating O function. Similarly, whether a non-singular first or second person pronoun like *pubula* is in S or A function in a particular sentence can be inferred from comparison with singular pronouns and nominals that can occur in the same slot.

We can now turn to intransitive constructions involving transitive verbs. There are basically two varieties.

[1] *Subject effectively identified with object, reflexive-type meaning.* Here, if the agent does something to himself, an intransitive construction will be used. Often a body-part noun - referring to the effective 'object' - will be included in the S NP, apposed to the head noun or pronoun (in an 'inalienable possession' construction - 4.6.2). Thus, corresponding to transitive

- (136) *ŋaŋa wagun gandapu*  
 lsg-A wood-ABS burn-PERF  
 I've burnt the wood  
 (137) *ma:lndu gaŋan gi:balgani*  
 man-ERG grass-ABS scratch-CONTIN-UNMKD  
 Man is scratching up grass  
 (138) *ŋaŋa gaŋguŋu gunbay*  
 lsg-A meat-ABS cut-UNMKD  
 I've cut the meat

we have the intransitive constructions, with reflexive-type meaning:

- (139) *ŋayba mala gandagi*  
 lsg-S hand-ABS burn-PERF  
 I've burnt my hand  
 (140) *ma:l gambaŋa gi:bali*  
 man-ABS body-ABS scratch-CONTIN-UNMKD  
 Man is scratching his body  
 (141) *ŋayba bingap gunbay*  
 lsg-S foot-ABS cut-UNMKD  
 I've cut my foot

and see (106). In each of these sentences the body-part noun could be omitted - thus *ŋayba gandagi* 'I've burnt myself', *ma:l gi:bali* 'Man is scratching himself' and *ŋayba gunbay* 'I've cut myself' are all perfectly acceptable Wargamay sentences.

Note, though, that an intransitive construction is not obligatory for describing someone doing something to himself



(although it does seem to be preferred). Instead of (141) one could use a transitive construction

- (142) *ŋaɟa gunbay bingap ŋaygu*  
 lsg-A cut-UNMKD foot-ABS lsg-GEN  
 I've cut my foot

Here the O NP has *bingap* 'foot' as head, modified by the possessive pronoun *ŋaygu* 'my' (see 4.6.2).

In the W dialect, reciprocal sense is also shown by using a transitive verb in an intransitive construction, with a plural S NP. Examples are given in 4.5.

[2] *Distinct subject and object*. For most intransitive constructions involving a transitive verb the subject and object are quite distinct, just as in a normal transitive construction. The A NP in the corresponding transitive sentence becomes the intransitive S NP and the transitive O NP now normally takes on ergative-instrumental inflection. Thus:

- (143) *Transitive* *ŋaɟa gungul muɟalgani*  
 lsg-A vegetables-ABS eat-CONTIN-UNMKD  
 I'm eating vegetables

- (144) *Intransitive* *ŋayba gungulndu muɟabali*  
 lsg-S vegetables-ERG/INST eat-CONTIN-UNMKD  
 I'm having a feed of vegetables

There is at most a very slight difference in meaning between (143) and (144), shown by informants' glosses 'I'm eating' / 'I'm having a feed' (and 'I'm looking' / 'I'm having a look' for (71-2) in 3.5.2). The reasons for having 'deep transitive subject' in surface S function are most frequently syntactic; this can help satisfy the complementation and subordination rules of Wargamay, which work in terms of identity of S and O NPs (never A NPs) between clauses. Discussion of these complementation and subordination processes is in 4.3, 4.4.

Note that most transitive verbs can occur in both type [1] and also type [2] of intransitive constructions. Thus, in addition to (143-4) we can have the reflexive construction:

- (145) *ŋayba (mala) gunɟabali* I'm biting my (hand)

In (143-5) the transitivity was immediately apparent from the form of the singular pronouns (quite apart from the form of the verb) - *ŋaɟa* is only used for A and *ŋayba* only for S function. But where both NPs involve just nominals, their function can be harder to determine. Take, for instance, the B sentence

- (146) *ɟa:bungu yimbur muɟani*  
 fish-ERG pelican-ABS eat-CONTIN-UNMKD

Leaving aside any extra-linguistic knowledge we may already have concerning which of pelicans and fish eat the other, let us determine this from syntactic analysis. If this were a transitive sentence we would expect the A NP to be in ergative case and O NP to be in absolutive. If it were

intransitive then S NP (corresponding to transitive A) should be in absolutive and the NP which corresponds to transitive O should be in ergative-instrumental inflection. That is, the form of the NPs is perfectly compatible with a transitive interpretation 'fish eat pelicans' or with an intransitive interpretation bearing the opposite meaning 'pelicans eat fish'.

It is in fact the form of the verbal suffix that resolves this difficulty. The continuative suffix (in B) is *-lani* in the transitive conjugation and *-ni* with intransitives (3.5.3). Thus *yimbur* is to be identified as S NP in (146) and the sentence translated as 'pelicans eat fish'.

Note, though, that (146) would involve a syntactically-irresolvable ambiguity if the verb had just unmarked inflection, since this is *-y* for both transitive and intransitive conjugations. This relates to our comments in 4.1.1 on the ambiguity of (116).

Now in an intransitive construction involving a transitive verb, if the verbal inflection is anything other than purposive, the 'deep object' will normally take ergative-instrumental inflection, as in (144) and (72).

But if the verb is in purposive inflection (in a main clause or in a subordinate clause) then the 'deep O' NP can take either ergative-instrumental or dative case inflection. Thus corresponding to transitive

(147) *ɲali biya ɲanɲagu* We want to drink beer

either of the intransitive alternatives

(148) *ɲali biyaɲgu ɲanɲalagu* <=(147)>

(149) *ɲali biyagu ɲanɲalagu* <=(147)>

is acceptable. Whereas with an inflection other than purposive, the transitive

(150) *ɲali biya ɲanɲalgani* We're drinking beer

has a single corresponding intransitive:

(151) *ɲali biyaɲgu ɲanɲabali* <=(150)>

(Most of these constructions are exemplified in text 5.)

This is one example of the strong syntactic connection that exists in Wargamay between nominal dative inflection *-gu* and verbal purposive *-laɲu~gu*. The formal similarity between these suffixes recurs in many Australian languages so that it seems likely that they do have a common genetic origin (cf Capell 1956:77-8, Dixon 1972:11, 141-7, 1976b:421-82).

In fact, more than half the occurrences of transitive verbs in an intransitive construction are with purposive inflection, often as the second clause of a conjunction 'X in order to Y' where purposive marks the 'in order to' relation between events (see 4.3).

All the examples we have given thus far of transitive verbs in an intransitive construction have involved a nominal 'deep O'. We can now ask what happens in the case of a pronominal transitive object, as in

- (152) *ninda napa na:ra*  
 2sg-A lsg-O listen-IMP  
 You listen to me!

There is no ergative-instrumental inflection of pronouns so that we cannot form an intransitive correspondent of (152) along the lines of (143-4). It seems, in fact, that dative can be used in this instance, even though the verbal inflection is not purposive:

- (153) *ninba naygungu na:raga* <=(152)>

In another instance locative was used to mark a pronominal 'deep O' NP in an intransitive construction:

- (154) *transitive* *yugandu napa bardilgani*  
 rain-ERG lsg-O wet-CONTIN-UNMKD  
 Rain is falling on me.

- (155) *intransitive* *yugan naygunda bardibali*  
 rain-ABS lsg-LOC wet-CONTIN-UNMKD  
 <=(154)>

Note that the A form of a pronoun can *not* be used for the 'deep O' NP in a transitive sentence. That is, \**ninba naga na:raga* and \**yugan naga bardibali* (with the sense 'the rain wet me') are totally unacceptable. *naga* can only be used in an NP that is in surface as well as deep 'transitive subject' function.

Confronted by (146) the reader may have wondered why it could not be called a special type of transitive construction - after all it does have a subject and an object, and formal marking of absolutive and ergative-instrumental inflections. The reasons for calling it 'intransitive' are

(a) the 'subject' NP in a construction like (146) is always chosen from the middle row in Table 4.1, involving lsg *nayba* and 2sg *ninba* (forms that only occur in S function for intransitive sentences);

(b) whereas a nominal in A function in a transitive sentence *must* be in ergative case and one in S or O function *must* be in absolutive case, the 'deep O' NP (*ga:bu*) in a sentence like (146) can be in ergative-instrumental or dative or even in locative case;

(c) the suffixes available to the verb in sentences like (146) are all from the intransitive column of Table 3.3; these are the inflectional allomorphs that *must* be used with intransitive roots like *yugara* 'swim' and *wa:gi* 'laugh'.

A sentence will normally be expected to have the full set of core elements (4.1.1). Although some of these may be deleted in running texts, in elicitation informants would tend always to supply an A NP and an O NP for a transitive sentence, and so on. In contrast, the 'deep O' NP in an intransitive construction need not be stated at all. In fact a transitive verb is sometimes used in an intransitive construction simply because the speaker does not want to, or cannot, specify the 'object'. Contrast:

- (156) *pulanga bada nundalgani* He is looking at the dog

(157) puḡa ḡundabali He is looking around

In this way, the 'deep O' NP in an intransitive construction behaves like an 'extensional' (4.1.2) and not like a core NP. (Compare ḡayba ḡunday in line 17 of Text 5 with ḡaḡa ḡunday in line 7.)

In the discussion so far we have implied that the S NP in an intransitive construction is always coreferential to the A NP in the corresponding transitive construction (involving the same transitive root). There is just one known exception to this generalisation - ḡumba can mean 'go in' or 'put in' e.g.

(158) puḡa bada ḡumbagi balganda  
3sg-SO dog-ABS go in-PERF house-LOC  
The dog went into the house

(159) bada ḡaḡa ḡumbay balganda  
dog-ABS 1sg-A put in-UNMKD house-LOC  
I put the dog into the house

Note that the S NP in (158) is coreferential to the O (and not the A) NP in (159). Since this is a unique example we can perhaps suggest that there are two homophonous verbal roots - intransitive ḡumba 'go in' and transitive ḡumba 'put in'. We would then, of course, expect the transitive root to be able to occur in an intransitive construction in the normal way. But in fact

\*(160) ḡayba puḡaḡa badangu ḡumbagi

appears not to be acceptable. We can put this down to 'interference' from the homonymous intransitive root, as in (158); to avoid the possibility of ambiguity it seems that the transitive root ḡumba- can only be used in transitive constructions.

We have said that all or almost all 'transitive verbs' can occur in transitive or in intransitive constructions. In fact, each of them functions transitively the majority of the time, this being the unmarked construction type for 'transitive verbs'. They occur in intransitive constructions for specific reasons - to indicate reflexive meaning, to put the 'deep A' NP into surface S function in order to satisfy coordination and subordination constraints, to avoid having to specify the 'object', or for reasons of semantic or stylistic emphasis. About half the transitive roots collected did appear in both transitive and intransitive construction types; checking a sample of the remainder suggests that almost all of these also have the potentiality of occurring in intransitive constructions (with, potentially, any intransitive inflection).

In fact, some transitive verbs commonly occur in intransitive constructions, others do so occasionally, and others almost never do. This is simply a function of their semantic nature, and consequent syntactic behaviour. A verb like ḡi:ba- 'to scratch' will often be used reflexively (and note that the pair of roots ḡiba-y/ḡiba-l 'scratch' is one of only five known intransitive/transitive pairs in Dyirbal - see 5.1.2 and Dixon 1972:315-6); and with verbs like ḡunda- 'to see, look' ḡa:ra- 'to hear, listen', baya- 'to sing', buya-

'to blow' and *muga-* 'to eat', the speaker occasionally may not wish to specify an object. Other verbs typically occur in complement clauses - *ɲuni-* 'to hunt for' often occurs in sentences like 'go to hunt for animals' - and will then take the intransitive purposive inflection *-lagu*. But *gi:ga-* 'tell to do, let do' has none of these properties - it has never been encountered used reflexively, the object is always specified, and it tends to occur in the main clause (not the subordinate clause) of a complement construction (e.g. 'tell him to catch animals'). It is thus quite natural that *gi:ga-* should not have been encountered in an intransitive construction, and could not be elicited in one. Another verb that has never been heard in an intransitive sentence - and could not be elicited in one - is *wugi-* 'give'.

### 4.3 COMPLEMENTS

4.3.1 DATIVE AND PURPOSIVE. In his brief comments on the grammar of Wargamay, Lumholtz (*Among Cannibals*, 1889:308) singled out for special mention the suffix *-gu*:

'The suffix *go* literally means "with regard to", and is usually added to nouns to give them a verbal meaning, but it is also sometimes added to verbs. The question *Wainta Morboro?* - that is, "Where is Morbora?" - can be answered by saying only *tityengo* (he has gone hunting *tityen*) (wallaby), (literally, with respect to wallaby); or, for example, *mittago* he is at home (literally, with regard to the hut). *Mottaigo* means "he is eating" (literally, with regard to eating). "Throw him into the water," is expressed simply by *ngallogo*. As is evident, this is a very convenient suffix, as it saves a number of moods and tenses.'

There does seem to be, as Lumholtz suggested, a connection between the dative case *-gu* and verbal purposive *-lagu* *~gu*. Thus, in

(161) *ɲinba midirilagu ɲaygungu*  
 2sg-S wait-PURP 1sg-DAT  
 You must wait for me

(162) *ɲinda baya gama ɲaygungu / ɲaɖa ɲa:ragu*  
 2sg-A sing-PURP songstyle-ABS 1sg-DAT 1sg-A hear-PURP  
 You sing a gama-style song for me. I want to hear (it).

the dative NP and purposive verb have in each case similar semantic overtones, indicating 'need' and 'desire'.

We can however go beyond semantic feelings and demonstrate a fairly formal syntactic relationship between the nominal and verbal inflections. First, note that a core sentence may be extended by either a dative NP, or a purposive verb, to indicate something to which the action referred to by the main verb is directed, as in:

(163) *ɲayba gagay wubirigu* I'm going for sugar-bag (i.e. bee's honeycomb)

(164) *ɲayba gagay wiɟgalagu* I'm going to bathe

In 3.5.4 we gave examples of purposive inflection on the verb in a main clause, marking necessity or desire (a kind of 'volitional future'). (164) shows a rather different

use of purposive, to mark the verb in a complement clause; -lagu in (164) seems to link the action referred to by the verb in the main clause with that in the complement clause - 'go *in order to* bathe'.

4.3.2 COMPLEMENT CLAUSES. The condition for two clauses to be joined in a complement construction is that they have a common NP that is in surface S or O function in each clause. The verb of the main clause can bear any inflection (except subordinate) and the verb of the complement clause shows purposive inflection. Semantically, the action of the main clause was performed *so that* the action of the complement clause should be possible.

We can thus recognise four types of complement construction, according to the functions of the common NP.

[a] S function in main clause and in subordinate clause  
e.g. (164).

[b] S in main clause and O in subordinate clause e.g.

(165) ruṅa ma:l gu:ngigi / ruṅbuṅgu ruṅdagu  
3sg-SO man-ABS emerge-PERF woman-ERG see-PURP  
The man came out so that the woman would see him

[c] O in main clause and S in subordinate clause e.g. (68)  
and

(166) ruṅu ruṅaruṅga wagu / wana / ruṅwaragu  
DON'T cut-NEG IMP tree-ABS leave-IMP stand-PURP  
Don't cut the tree down! Leave it to stand (there)!

(167) ruṅa ruṅbu ruṅa / ruṅdagu  
1sg-A throw-UNMKD 3sg-O burst-PURP  
I threw it (a bottle) down, so that (it) burst.

[d] O in main and in subordinate clause e.g. the last two clauses in line 1 of Text 7, and

(168) ruṅda ruṅa gi:gin / ruṅa ruṅdagu  
2sg-A spear-IMP wallaby-ABS 1sg-A cut-PURP  
You spear a wallaby, so that I can cut it up.

4.3.3 'FAVOURITE CONSTRUCTIONS'. Suppose that we wish to join in a complement construction two clauses, and that they have a common NP which is in S or O function in the first but in A function in the second e.g.

(169) ruṅba ruṅgu I'm going

(170) ruṅa ruṅbu ruṅgu I want to cut sugar-bag

In order to form a complement construction the common NP must be in S or O function in each clause; to meet this syntactic constraint we have to use not (170) but the corresponding intransitive construction (4.2) i.e.

(171) ruṅba ruṅbu ruṅgu <=(170)>

We then obtain, with the normal deletion of the second occurrence of the common NP:

(172) ruṅba ruṅgu ruṅbu ruṅgu I'm going to cut sugar bag

Note the similarity between (172) and

(163) *ḡayba ḡaḡay wubirigu* I'm going for sugar-bag

In fact, any sentence with a dative NP, such as (163), can be extended by a transitive verb in *-lagu* inflection, indicating what the referent of the S/O NP of the first clause wants to do to the referent of the dative NP. A dative NP thus carries the expectation of a following transitive verb, in intransitive purposive inflection (cf (12) in 3.1.1).

We can refer to (172) as a 'favourite construction'. (There are parallels to the 'favourite construction' described for Dyirbal - Dixon 1972:73-4. Further discussion is in Chapter 5.) The first clause can be transitive or intransitive; its S or O NP will be coreferential with the 'deep A' NP of the second clause - this actually appears in surface S function through choice of the intransitive construction (which was necessary to meet the S/O condition on coreferential NPs for complement constructions).

Further examples of favourite constructions with intransitive main clause are line 15 in text 5 and line 4 in text 6. A favourite construction with transitive main clause is

(173) *waybalangu ḡana ḡi:ḡay ḡalḡuḡugu ḡalḡilagu*  
 whiteman-ERG lsg-O tell-UNMKD meat-DAT cook-PURP  
 The white man told me to cook the meat

Note that the main clause can involve any inflection including purposive (as in (4)). Or the main clause can be a 'minimal sentence' involving, say, an adjective (but no verb), as in (47).

The crucial role of intransitive constructions involving transitive verbs can thus be seen - they are needed to form complement clauses where the underlying A NP is coreferential to S or O NP in the main clause. We noted in 4.2 that if a transitive verb appears in an intransitive construction with purposive inflection, then the 'deep O' NP can be in dative or in ergative-instrumental inflection, that is, we can have either *ḡayba ḡaḡay ḡanḡalagu biyagu* or *ḡayba ḡaḡay ḡanḡalagu biyangu* 'I went to have a drink of beer' (cf. (148-9)). But in purposive complement clauses, dative is much the commoner marking on the 'deep O' NP, as in (172-3), (12), (4) and (47).

Little text material is available in Wargamay and little can be said about conditions for coordination of two sentences that fall outside complement constructions (i.e. where the second sentence does not show purposive verbal inflection). The indications are, though, that it is again necessary for there to be a common NP that is in S or O function in each clause. In 3.5.4 we mentioned a type of subordinate clause whose verb is marked by irrealis inflection *-ma~lma*, referring to something unpleasant that is to be avoided. For this construction-type there is generally an NP common to the two clauses and it is usually in S or O function in each clause; certainly the common NP can only be deleted from the second clause if this syntactic condition is satisfied - see (82), (83) and (125).

We have not said anything about complex sentences where

there is a common NP that is in A function in the main clause but in S or O function in the subordinate clause. In fact there are no examples of this type in the corpus collected, and when elicitation was directed to this point a straightforward sequence of transitive and intransitive clauses was obtained, with no syntactic interrelation between their noun phrases, and no NP deletion:

- (174) *ɲaɲa ɲulanga ɟayɟay / ɲuɲa buɲɟilagu*  
 lsg-O 3sg-A hunt away-UNMKD 3sg-SO lie down-PURP  
*wugargiri*  
 sleepy-COMIT-ABS  
 He sent me away then he could sleep.

#### 4.4 RELATIVE CLAUSES.

The syntax of relative clauses is almost identical to that of complement clauses. There must be a common NP that is in S or O function in each clause. The verb of the main clause can bear any inflection except subordinate, while the verb of the relative clause must be in subordinate inflection. A relative clause refers to an action that is simultaneous with, or previous to, the action of the main clause.

Exemplifying in terms of the function of the common NP:

[a] S function in main clause and also in relative clause

- (175) *ɲayba wi:ɟimbigi wuɲaɲu*  
 lsg-S no good-INCHO-PERF walkabout-SUBORD  
 I, who had been walking about, felt no good (i.e. tired)

- (176) *ɲayba magulɲu ɟi:ɟilagu*  
 lsg-S work-INCHO-SUBORD sit-PURP  
 I, who have been working, want to sit down

[b] S in main clause and O in subordinate clause

- (177) *ɲuɲa biɟbabali ɲaɟa ɲundaru*  
 3sg-SO jump-CONTIN-UNMKD lsg-A see-SUBORD  
 It (the kangaroo) which I saw was jumping

- (178) *gu:ɟaɟa ɲaɟa bayɟurɲu wulay*  
 goanna-ABS lsg-A bash-SUBORD die-UNMKD  
 The goanna which I had bashed (on a tree) died

- (179) A: *ɟumubuɟuɲgu ɲaɟa wuɟɲu / ɲulmbuɟu ɟagigi /*  
 beef-INST lsg-A give-SUBORD woman-ABS fall-PERF  
 B: *miɲambɲu / A: ɟumubuɟu ɟundiɲ /*  
 what-INCHO-PERF beef-ABS heavy-ABS  
 A: 'The woman, whom I had given meat to, fell down'.  
 B: 'How was it (she fell)?' A: 'The meat was (too) heavy.'

- (180) *ɲaɟa ɟanbaɲu / ɲuɲa ɟagigi*  
 lsg-A hit-SUBORD 3sg-SO fall-PERF  
 He, who I had hit, fell down.

[c] O in main clause and S in subordinate clause

- (181) *ɲaɟa ɲulmbuɟu ɟanbay ba:ɟɲu*  
 lsg-A woman-ABS hit-UNMKD cry-SUBORD  
 I punched the woman who was crying.



(182) ɲaɟa ɲuɲa ɟumubuɟu buɟmbilgani /  
 1sg-A 3sg-SO beef-ABS throw-CONTIN-UNMKD  
 buɟambɪnu  
 rotten-INCHO-SUBORD  
 I throw away beef which has gone rotten.

(183) ɲaɟa ɲa:ray ɲina bu:ɲɟuraymbɪnu  
 1sg-A hear-UNMKD 2sg-O snore-INCHO-SUBORD  
 I heard you snoring (last night)

[d] O function in both clauses

(184) ɲaɟa ɲunday ɲuɲa ɟilwɲu  
 1sg-A see-UNMKD 3sg-SO kick-SUBORD  
 I saw him being kicked

(185) ɲana ɟanɲay ɲalu waybalɲu bu:dɪnu  
 1pl-SA drink-UNMKD grog-ABS whiteman-ERG bring-SUBORD  
 We are drinking the grog which the white man brought

A continuative suffix can, of course, come between root and subordinate inflection, as in:

(186) ɲuɲa ɲulmbuɟu ɲunda wa:ɟibalɪnu  
 3sg-SO woman-ABS look-IMP laugh-CONTIN-SUBORD  
 Look at that woman laughing!

We described two uses of the purposive inflection *-lagu ~-gu*, marking a main verb, or the verb in a complement clause. If we were restricted to the transitive conjugation we could suggest that *-ɲu* patterned in a similar way - as a perfect inflection in the main clause, and as the marked of a relative clause. The similarity between main and subordinate uses of *-lagu~-gu* (both implying futurity and purpose) is paralleled by a semantic overlap between main and subordinate uses of *-ɲu* (the former must and the latter can refer to completed actions). But in the intransitive conjugation perfect is *-gi*, quite distinct from subordinate *-ɲu*, and it is partly in view of this that we recognise two separate inflections in this case (as against one inflection, with two functions, for *-lagu~-gu*).

It is in fact sometimes difficult to decide whether a verb in *-ɲu* form should be regarded as 'perfect' or 'subordinate'. (176) is a typical example: we could take *ɟi:ɟilagu* as the main verb and *magulɪnu* as a subordinate clause; or alternatively *magulɪnu* could be the main verb in perfect inflection with *ɟi:ɟilagu* a complement clause. On semantic grounds the first interpretation seems most plausible in this instance - that is, we prefer 'I, who have been working, want to sit down' over 'I worked in order to sit down'.

In many cases there is a considerable semantic difference between perfect and relative interpretations. In (181), for instance, if *ba:dɪnu* were in perfect inflection the sentence could only mean 'I punched the woman (after she) had completely finished crying' (and if this interpretation had been intended *ba:dɪnu* should normally have preceded *ɲaɟa danbay*).

If the common NP involves just nominals they will have the same form for S and O functions; then the second occurrence of the common NP is likely to be deleted. In the case

of pronouns, different forms are used for the two functions and both occurrences may be retained, as in:

- (187) *ɲayba bimbirigi /ma:lɔdu ɲapa wuɲapu*  
 1sg-S run-PERF man-ERG 1sg-O chase-SUBORD  
 I, who was being chased by the man, ran away (i.e. 'I ran away with the man chasing me')
- (188) *pulanga ma:lɔndu ɲapa du:ɽapu / ɲayba dagigi*  
 3sg-A man-ERG 1sg-O pull-SUBORD 1sg-S fall-PERF  
 I, having been pulled by the man, fell down (out of the tree-fork)

Just as in the case of complement clauses, a transitive verb may be used in an intransitive construction in order to meet the syntactic condition on relative constructions e.g.

- (189) *ɲulmbuɽunggu ɲunday giŋgu muɟabalɪnu*  
 woman-ERG see-UNMKD child-ABS eat-CONTIN-SUBORD  
*gungulɔndu*  
 vegetables-ERG/INST  
 The woman watched the child eating vegetables

Another way of dealing with this situation (of the common NP occurring in A function in one clause) is simply to employ two separate sentences:

- (190) *ɲaga giɽway ɲuɲa wigiyan / ɟalgiɲu ɲulanga*  
 1sg-A kick-UNMKD 3sg-SO white woman-ABS burn-PERF 3sg-A  
*ɟalguɽu*  
 meat-ABS  
 I kicked the white woman. She had burnt the meat.

No example is known of a relative clause construction in which a common NP can be in surface A function in either clause.

It will be noticed that a relative clause normally follows the main clause. It may, however, precede it (normally forming a separate intonation group in this case) as in (179-80), (188). And there are examples of relative clauses being inserted into the main clause, normally after the occurrence of the common NP - as (176), (178).

#### 4.5 RECIPROCAL

There is, in the B dialect only, a suffix *-ba* that can be added to transitive verb roots, deriving an intransitive stem with reciprocal meaning:

- (191) *ɲali mayɲababay yala* We'll talk together here (literally 'tell each other')
- (192) *gawanbigi ɲuɲa buɽbabagu*  
 anger-INCHO-PERF '3sg'-SO hit-RECIP-PURP  
 They have become angry and want to fight each other.

In text 9 line 15 John Tooth used a B reciprocal form *buɽbababay*.

Note that in (192) the purposive inflection is *-gu*, from the transitive column in Table 3.3, rather than intransitive *-lagu*. This was given on two separate occasions,

and buɕbabalagu explicitly rejected, so that it is unlikely to be an error.

In (193) ɲunda+ba-, literally 'look at oneself', has the semi-idiomatic sense 'wait (for)':

(193) ɲayba yala ɲundabay ɲinungu I've been waiting here for you.

A reciprocal verb can, of course, function in a subordinate clause e.g.

(194) ɲaɕa ɲubulana yagamay ɲingay buɕbabanu  
 1sg-A 2du-0 two-CAUS-UNMKD stop-UNMKD hit-RECIP-SUBORD  
 I stopped you two from fighting

The W dialect will simply use a transitive verb in an intransitive construction in order to show reflexive and also reciprocal sense e.g. ɕana buɕbabali 'they are fighting' ɕana bunɕabali 'they are shooting each other'; the inclusion of adjective ɲalma 'on one's own' can emphasize the reflexive interpretation.

Nyawaygi also shows a reciprocal verbal suffix -ba, identical to that in B.

#### 4.6 POSSESSION

In common with most Australian languages, Wargamay distinguishes between inalienable possession - covering whole-part relationship - and alienable possession - covering possession of artefacts, pets, language, and also kinship relations.

4.6.1 ALIENABLE POSSESSION. The genitive case -ɲu must be used to mark alienable possession. Genitive is added to each word of the 'possessor' NP, and this NP then modifies the 'possessed' head noun. The inflection appropriate for the head noun is added after the genitive inflection, on words of the 'possessor' NP. (The only examples of a declined genitive that have been gathered involve pronouns e.g. (61).)

See (84) and

(195) ɲuɕa bada ɲagunɕa ɕambiɕambiɲu  
 3sg-SO dog-ABS THERE old woman-REDUP-GEN-ABS  
 The dog over there belongs to the old women

(196) bada ɲaɕa ɲunday ɕanaɲu  
 dog-ABS 1sg-A see-UNMKD 3pl-GEN-ABS  
 I saw the dog belonging to all (those people)

4.6.2 INALIENABLE POSSESSION. For indicating a part of some object either a genitive construction can be used, as for alienable possession, or else the 'part noun' can just be apposed to the 'whole noun' in an NP (modifying it as an adjective would). In this 'appositional' construction there is no overt marking of possession; both nouns simply take the case inflection appropriate to the function of their NP.

Either a genitive or an appositional construction can be used quite freely for inalienable possession, although

apposition is probably a little commoner. (In this Wargamay is quite different from Dyirbal, which cannot use the genitive for inalienable possession - Dixon 1972:61-2. The data available for Wargamay is not rich enough to allow us to investigate whether there is a semantic hierarchy motivating the alternation, as there is for Yidiñ - Dixon 1977a: 360-4.)

Thus, one could say either of

(197) ḡaygu bingān wiḡiḡ My foot is sore

(198) ḡayba bingān wiḡiḡ <=(197)>

Other examples of the appositional construction are at (61), (106), (139-41), (243) and line 11 of text 9. A minimal sentence with adjectival comment and a topic NP that involves inalienable possession is:

(199) ḡayilḡara ḡayba marḡa  
neck-ABS lsg-S sore-ABS  
My neck is sore

Note also:

(200) ḡayba yira ḡamugay My tooth aches (literally 'My tooth has toothache')

It appears that a person's name is regarded as inalienably possessed, just like a body part - either the genitive *mipa ḡinu yi:l* or appositional *ḡinba mipa yi:l* can be used for 'what's your name?'

4.6.3 'GIVING' CONSTRUCTIONS. The most frequent construction involving the verb *wugi* 'give' has the 'giver' in A function, the 'recipient' in O function, and 'what is given' in instrumental inflection. Thus (32), (35), (179) and

(201) bugāngu ḡumubuḡungu ḡapa pulānga waybalāngu wugiḡu  
rotten-ERG/INST beef-INST lsg-O 3sg-A whiteman-ERG give-PERF  
The white man gave me rotten beef

(202) yuḡuḡāngu ḡapa baḡḡayḡu wuga  
another-INST lsg-O spear-INST give-IMP  
Give me another spear!

The alternative 'giving' construction is to have 'giver' in A function, 'what is given' in O function, and 'recipient' as alienable possessor (marked by genitive) within the O NP e.g.

(203) A: ḡa:nu ḡinda wugi ḡayḡamali /  
WHO-GEN-ABS 2sg-A give-UNMKD flour-ABS  
Who did you give the flour to?

B: ḡaḡuḡa ḡulmbuḡuḡu wugi  
THERE woman-GEN-ABS give-UNMKD  
(I) gave it to the woman over there

Note that the recipient would not normally be in dative case. The possibility of using dative (but not to mark ultimate recipient) with *wugi* is seen in (204). John Tooth had asked me to take a trunk full of crockery to his son in Cairns, and told me to say:

- (204) bagigi nunga ganangu wugiru ḡaygungu/ wugigu  
 trunk-ABS THIS father-ERG give-PERF 1sg-DAT give-PURP  
 ḡinu  
 2sg-GEN-ABS  
 (Your) father gave this trunk to me (for me) to give (it) to  
 you

Here the dative ḡaygungu 'to me' indicates that I (who was intended to be the speaker of this sentence) was not the eventual recipient of the crockery; I had to deliver it to the intended addressee, John Tooth's son, and ḡinu 'your' is in genitive form.

#### 4.7 COMITATIVE CONSTRUCTIONS

The addition of derivational suffix *-ma* to an intransitive root derives a transitive stem. John Tooth contrasted:

- (205) balbay bandaligi The bottle burst  
 (206) balbay bandalimay (Someone) burst the bottle

The first sentence involves the intransitive verb *bandali-*, and implies that the explosion was spontaneous. In contrast, the inclusion of transitive *bandali+ma-* in (206) indicates that there was an agent (and an A NP could of course be included in this sentence).

The S NP in (205) corresponds to the O NP in (206), with an agent brought in as A - literally 'Someone made [the bottle burst]'; note that here there is a change of state, for the bottle. However, in most of the *-ma* constructions I have collected it is transitive A NP which corresponds to intransitive S (and there is no change of state involved). For instance:

- (207) pulanga ḡulmbuḡuḡu ḡiḡu wuḡamalḡani  
 3sg-A woman-ERG child-ABS walkabout-COMIT-CONTIN-UNMKD  
 malanga  
 hand-LOC  
 The woman is walking about with the child [holding it] by the  
 hand  
 (208) puḡa ḡulmbuḡu wuḡabali ḡiḡugiri  
 3sg-SO woman-ABS walkabout-CONTIN-UNMKD child-COMIT-ABS  
 <=(207)>

Here the A NP in (207) is identical to the head noun (and 3sg pronoun) of the S NP in (208); and *ḡiḡu*, which is in O function in (207), takes the nominal comitative suffix *-giri* (3.1.3) to function as a modifier within the S NP in (208).

In most of the *-ma* examples collected there is a correspondence between the O NP in the transitive comitative construction and a noun in nominal comitative form in the underlying intransitive sentence, as in (207-8); it is in view of this that we refer to *-ma* as the verbal comitative suffix (and (206-7) as 'comitative constructions'). Other examples are

- (209) muḡma ḡinda banama  
 boy-ABS 2sg-A return-COMIT-IMP

You return with the boy!

- (210) *ŋaɟa ŋulmbuɟu ɟi:ɟimay*  
 lsg-A woman-ABS sit-COMIT-UNMKD  
 I'll sit with the woman (this has the idiomatic meaning 'I'll marry the woman')

But there are some comitative constructions where the O NP corresponds to a dative or locative NP in the corresponding intransitive sentence; see (74) and

- (211) *ŋaɟa ŋaygu yibi ba:dimay*  
 lsg-A lsg-GEN-ABS child-ABS cry-COMIT-UNMKD  
 I'm crying for my child (if, say, she is lost)
- (212) *gi:balgani pulanga ɟaɟangagan /*  
 scratch-CONTIN-UNMKD 3sg-A grass-REDUP-ABS  
*bungimagu pulanga*  
 lie down-COMIT-PURP 3sg-A  
 He (the bandicoot) scratches grass together, to lie down on it

Intransitive verbs - like *bandali*- 'burst', *bana* 'return', *wa:ɟi* 'laugh', *ɟi:(gi)* 'sit' and *ba:di* 'cry' - can only take intransitive inflections. But comitative *-ma* derives transitive stems which can then take either transitive or intransitive inflections (according to the circumstances outlined in 4.2). Thus we can have both

- (213) *transitive* *ŋaɟa ɟaɟa banamagu* I must take the child home  
 (214) *intransitive* *ŋayba ɟaɟagu banamalagu* <=(213)>

Note the contrast between intransitive use of the transitive stem *bana+ma-* 'go home with, take home' and the intransitive root *bana* in:

- (215) *intransitive* *ŋayba banalagu ɟaɟagu* I must go home to the child

(Word order is *not* significant in any of these examples.)

The comitative derivational affix *-ma* coincides in form with the intransitive irrealis inflection *-ma*. Thus *ɟagama* could be intransitive 'go-IRREAL' or transitive 'go-COMIT-POS IMP'. In most cases the other constituents in the sentence would help resolve this ambiguity. We can also, of course, get comitative *-ma* followed by irrealis *-lma:*

- (216) *ɲuɲa ɟaɟangu bu:dilma / wuɲamalma*  
 3sg-ABS child-ERG take-IRREAL walkabout-COMIT-IRREAL  
 The child might pick it up and walk around with it

## 4.8 INSTRUMENTALS

4.8.1 INSTRUMENTAL NPs. If an action crucially involves a weapon or tool then this can be shown by an NP in instrumental inflection, as in (59) and

- (217) *ɲuɲa waguɲ guɲgari pulanga baɟuɲgu*  
 3sg-SO tree-ABS cut-IMP 3sg-INST axe-INST  
 Cut the tree with the axe!
- (218) *ɲuɲa ɟurɟa ɟubungu ŋinda*  
 3sg-SO tie-IMP rope-INST 2sg-A

You tie it up with rope!

The instrument may be a body part, as in

(219) *nuna bingangu gilwa* Kick him with (your) foot!

(220) *mulindu naqa wagun buyay*  
lip-INST lsg-A fire-ABS blow-UNMKD  
I blew the fire with (my) mouth

(221) *gaqan pulanga mulindu du:caigani*  
grass-ABS 3sg-A lip-INST pull-CONTIN-UNMKD  
It (the bird) kept pulling up grass with (its) mouth

Instrumental NPs can also refer to liquids:

(222) *gurmaIndu banga ninda*  
blood-INST paint-IMP 2sg-A  
You paint (it) with blood!

Note that the instrumental inflection will only be used if the tool or body part is crucial to the action and if it is used to *affect the state* of the referent of the O NP. Thus in (221) the bird used its beak to pull the grass out of the ground, and instrumental inflection is appropriate. But in

(223) *gaqan pulanga mulinda bu:dilgani*  
grass-ABS 3sg-A lip-LOC take-CONTIN-UNMKD  
It (the bird) carries grass in (its) mouth

the bird simply carries the uprooted grass back to its nest in its beak; here locative inflection is used.

A further use of instrumental is to mark 'what is given' in the most common type of giving construction - 4.6.3.

4.8.2 INSTRUMENTAL CONSTRUCTIONS. There are in my corpus just four or five examples of a derivational suffix *-ma* added to a transitive root. For instance:

(224) *waray naqa bu:digu ginbamu ga:bugu*  
fishspear-ABS lsg-A take-PURP spear-INST-PURP fish-DAT  
I'll take the fishspear to spear fish with

This appears to have the same meaning as

(225) *waray naqa bu:digu* I'll take the fishspear

(226) *ga:bu naqa ginbamu waraydu* I'll spear fish with the fishspear

We can thus suggest that *-ma* effectively derives from (226):

(227) *waray naqa ginbamu ga:bugu* <=(226)>

That is, it places the instrumental NP in surface O function (absolute case) so that it can enter into complement constructions etc (which demand a common NP in S or O function in each clause); and the deep O NP is now marked with dative case; (224) involves (225) as main and (227) as complement clause, with the common O NP *waray* - and also the repeated A pronoun *naqa* - being deleted from the second clause. (This is, in fact, syntactically identical to the instrumentive construction in Dyirbal - Dixon 1972:95-6.)

Another example is:

- (228) puṅa gagara bu:diya / waṅagu gumbamagu  
 3sg-SO dillybag-ABS bring-IMP beans-DAT put in-INST-PURP  
 Bring the dillybag to put beans in!

In view of its connection with nominal instrumentals, we call the suffix *-ma*, when added to a transitive verb, an 'instrumental' derivational affix

No example has been gathered of *-ma* added to *wugi-* 'give' with the 'what is given' NP (normally in instrumental case with *wugi-*) going into absolutive case with *wugima-*. 'What is given' NP's do behave like other types of instrumental NP in Dyirbal, and it is quite likely that they would also do so in Wargamay.

Note that only an instrumental NP can go into absolutive case within a *-ma* construction. Although ergative and instrumental have identical formal realisation, ergative is not affected by the *-ma* derivation.

#### 4.9 VERBALISATION

4.9.1 INCHOATIVES. From any noun or adjective can be derived an intransitive verbal stem, through the addition of an inchoative derivational affix that has the following allomorphs:

- mbi following a vowel,
- bi following a nasal (n, ŋ or m),
- bi~mbi following y
- i following l or r.

Inchoatives take the full set of intransitive suffixes, from Table 3.3. There is just one irregularity in that before the continuative suffix *-bali*, *-bi* drops from the post-vocalic inchoative allomorph *-mbi*. Thus (cf. (44)):

nominal	bi:ṅa	gawan	gubil
inchoative stem	bi:ṅambi-	gawanbi-	gubili-
+perfect inflection	bi:ṅambigi	gawanbigi	gubiligi
+continuative+unmarked	bi:ṅambali	gawanbibali	gubilibali
	'fear'	'anger'	'whistle'

This *-bi* dropping - which appears to be obligatory - is a further instance of the haplologic-like syllable deletion tendency mentioned in 2.6.

The intransitive verbaliser is most frequently added to adjectives or abstract nouns and indicates a state of 'becoming'. Examples have been given at (50), (57), (64), (67) (82), (182), (192); there are in addition examples throughout the texts. Also:

- (229) ṅayba palambuṅumbigi  
 1sg-S good-INCHO-PERF  
 I feel good
- (230) gilap gawanbima  
 old man-ABS anger-INCHO-IRREAL  
 The old man might get mad

It is also frequently used to derive intransitive verbs from nouns such as *bu:ṅuray* 'snore' - as in (183) - and *magul*



'work' - as in (176) and (240). The verbaliser is often found with nouns referring to noise - thus *gubil* 'a whistle', *gubili-* 'to whistle'; *gawal* 'a call', *gawali-* 'to call out'. The W verb *banma-* 'to speak' is missing from B and instead *mayay(m)bi-*, a verbalisation of *mayay* 'language', is employed. (In W *mayay(m)bi-* can be used in alternation with *banma-*.)

In fact, any sort of noun can be verbalised. In line 18 of Text 6 *waɟuɟala+mbi+gi* refers to two 'dreamtime men' changing into black wallabies, *waɟuɟala*. And in:

- (231) *ɲani ɲuɲa ma:l gi:ɟinbigi*  
 face-ABS 3sg-SO man-ABS wallaby-INCHO-PERF  
 The man's face has become like a wallaby's

inchoative *-bi* is used as an alternative to the nominal suffix *-ɲaru* 'like a' (3.1.3).

When added to *mipa* 'what' the intransitive verbaliser derives an interrogative verb *mipambi-* 'do what, do how' - see (179), line 14 of Text 6 and line 4 of Text 9. With the locational root *waɲa* 'where' we obtain *waɲambi-* 'do where', as in

- (232) *ɲuɲa waɲgambilagu yugaralagu* Which way will he swim?

With what we called the third person pronoun, *ɲuɲa*, *-mbi* derives a deictic verb 'do like this':

- (233) *ɲinba ɲugiga ɲuɲambiga* You dance like this!

There is also a verb *ɲagumbi-* 'to come' that is based on the form *ɲagu* 'to here' (3.4.3); it is used in (94). It appears, however, that *-mbi~-bi~-i* cannot be productively added to all forms from Table 3.2.

4.9.2 CAUSATIVES. A transitive verbal stem can be formed by adding *-mato* to any noun or adjective root. These causatives have much the same properties as inchoatives; examples are at (17), (127), (194) and

- (234) *ɲalu gidul / ɟawuɲma* The water is cold, heat it up! (literally 'make it hot')

- (235) *wiɲɲingu ɲana bi:ɟamay*  
 snake-ERG 1sg-S fear-CAUS-UNMKD  
 The snake frightened me

- (236) *ɲulanga ɲana ɟilbaymay*  
 3sg-A 1sg-O know how to do-CAUS-UNMKD  
 He taught me (how to do it)

- (237) *ma:ldu ɲana gungamay*  
 man-ERG 1sg-O alive-CAUS-UNMKD  
 The man cured me

- (238) *ɲaɟa ɟalɟuɟu ɟargiɟimay gunbay*  
 1sg-A meat-ABS finished-CAUS-UNMKD cut-UNMKD  
 I finished cutting the meat up

There are also transitive verbs *mipama-* 'do what', *ɲuɲama-* 'do like this' and *ɲaguma-* 'bring':

- (239) *mipamagu ɲuɲa ma:l*  
 what-CAUS-PURP 3sg-SO man-ABS  
 What will (you) do to the man?

## 4.10 PARTICLES

There is a set of non-inflecting particles that provide modal/logical-type qualification of a complete sentence. With the exception of *ɲuri*, they have only been encountered occurring before the verb.

[1] *ɲa*: 'not'. This is used to negate any clause (excepting imperatives). Examples are (5), (101-2), Texts 5.24, 6.17, 7.10 and

(240) *ɲuɲa wi:gina / ɲa: maguligi ma:l* He's no good, the man won't work

(241) *wi:gi ɲulan / ɲa: wagun gungari* The axe is no good, it won't cut wood

(242) *ɲuɲa ɲunigi ɲaygungu / maya ɲana ɲa: ɲunday*  
3sg-SO look for-PERF lsg-DAT NO lsg-O NOT see-UNMKD  
He was looking for me - but no, (he) didn't see me.

(243) *mala ɲana gungay / maya ɲaga ɲa: gi:gay*  
hand-ABS lsg-O bite-UNMKD NO lsg-A NOT let go-UNMKD  
(She) bit my hand - but no, I didn't let go (of her)

[2] *ɲaru* 'don't'. This is used in negative imperative sentences, in conjunction with verbal inflection -*ga~-lga*. See 3.5.4.

[3] *wara* indicates that an event concerned the wrong person or thing as referent of the S or O NP e.g.

(244) *ɲulanga wagun wara gunbay* He cut the wrong tree down

(245) *...wara ɲamunbipu / maya bandaɟabaɟanga*  
PARTICLE breastmilk-INCHO-PERF NO bottle-COMP-LOC  
(When I was a small child I was fed milk) that was not the right type; it was like mother's milk but no, it was in a bottle

[4] *mari* 'might be' e.g.

(246) *mamu mari ɲaga ɲuɲa gandagu* I might burn it by-and-by

Only five examples of *mari* are in the corpus but in each it is second element in the sentence, suggesting that it may properly be regardable as a clitic to the first word of the sentence.

[5] *gamu* 'just, only', as in

(247) Q: *minagu ɲinba gagay* Why did you go (to that man)?

A: *gamu / ɲaga baɟbay* I just went to ask (him something)

(248) *gamu ɲinba migirilagu* You must just wait (here for me)

[6] *ɲuri* 'in turn':

(249) *ɲaga ɲuɲa buɟbay ɲuri* I'll hit him back

[7] *ɲa:ɟa* 'can't do (despite trying)

(250) *gumubuɟu muguru / ɲa:ɟa ɲaga gungay*  
beef-ABS hard-ABS PARTICLE lsg-A bite-UNMKD  
The meat is hard, I can't bite it

There is also a transitive verb  $\eta\alpha:\zeta\text{amba-}$  'try to do, but fail' e.g.

- (251)  $\eta\alpha:\zeta\text{ambay } \eta\alpha\zeta\text{a } \text{wagun } \text{gungari}$   
 fail-UNMKD lsg-A tree-ABS cut-UNMKD  
 I tried to cut the tree but couldn't

Six of these particles -  $\eta\text{aru}$ ,  $\text{wara}$ ,  $\text{mari}$ ,  $\zeta\text{amu}$ ,  $\eta\text{uri}$  and  $\eta\alpha:\zeta\text{a}$  - appear with similar or identical meaning in Dyirbal (Dixon 1972:118-21).

#### 4.11 QUESTIONS

We have mentioned the various interrogatives used in non-polar questions:

- $\text{mipa}$  'what' - 3.1.5, 4.9 (and  $\text{mipar}$  'how many' - 3.1.5);  $\text{mipagu}$  'what-DAT' means 'what for' or 'why' - see Text 5 line 22, Text 8 line 2 and Text 9 lines 8 and 10.  
 $\eta\alpha:\text{n-}$  'who' - 3.4.1, 3.4.2.  
 $\text{wanga-}$  'where, when' - 3.4.3, 3.3, 4.9

There is no segmental indicator of polar questions in Wargamay; these are simply shown by final rising intonation (and also, of course, by various extralinguistic expressions and gestures).

#### 4.12 INTERJECTIONS

Interjections either make up a complete utterance, or else normally begin a sentence. Those encountered are:

- $\text{W maya}$ ,  $\text{B biyay}$  'no' - see (242-3)  
 $\eta\text{ayi}$  'yes'  
 $\text{gawu}$  'come on!'  
 $\text{gala}$  'try again'  
 $\text{guli}$  exclamation when startled.

### 5. HISTORICAL DEVELOPMENT

There are a number of remarkable features of Wargamay grammar, when measured against the normal patterns encountered in languages of the Australian family. Firstly, every Australian language clearly distinguishes transitive from intransitive verbal stems, and almost every language has two or more distinct verbal conjugations, but Wargamay is the only example known to me where transitivity classes and conjugation classes exactly coincide. The second noteworthy feature is the free occurrence of 'transitive stems' with either transitive or intransitive inflectional allomorphs, while intransitive stems are confined to intransitive inflections.

In this chapter we compare Wargamay with the prevailing patterns found in Dyirbal and in other Australian languages, and attempt to explain the evolution of these two features. We also try to explain the occurrence of  $-\text{lagu}$  as intransi-

tive allomorph of the purposive inflection, and suggest that the -l- in this form is a reflex of the transitive conjugation marker. Finally, we speculate on the likely direction Wargamay might move in if the changes that have begun were carried to a logical conclusion.

## 5.1 NOTEWORTHY FEATURES OF WARGAMAY

5.1.1 TRANSITIVITY CLASSES AND CONJUGATION CLASSES. The typical situation in an Australian language is for each verbal root, and each derived verbal stem, to have fixed transitivity. That is, it is either intransitive, and must occur with an S NP, or it is transitive, and occurs with an A NP or an O NP. (These types of NP are easily recognisable from the case inflection appropriate to nouns and to pronouns in S, A and O functions respectively.) A transitive stem can usually be derived from an intransitive root, and an intransitive stem from a transitive root, but this will always be marked by a derivational affix.

We can illustrate from the Giramay dialect of Dyirbal (which has a paradigm for first and second person pronouns that is almost identical to that for Wargamay, and similar nominal case inflections). The intransitive verb *yugara-y* 'swim' can only occur in an intransitive construction, as (252-3), and not in the transitive (253-4).

(252) *bayi yaɟa yugarapu* The man is swimming

(253) *ɲayba yugarapu* I am swimming

\*(254) *baŋgul yaɟaŋgu balan ɟaɟa yugarapu*

\*(255) *ɲaɟa ɲina yugarapu*

Whereas the transitive verb *gunba-l* 'cut' can only occur in a transitive construction, (258-9), never in intransitives, (256-7).

\*(256) *bayi yaɟa gunban*

\*(257) *ɲayba gunban*

(258) *baŋgul yaɟaŋgu bala yugu gunban* The man cut the tree

(259) *ɲaɟa ɲina gunban* I cut you

(Note that (256) could be an elliptical version of a transitive sentence with the A NP deleted, 'The man was cut (by someone)'. This interpretation is possible since absolutive case marks either S or O function. It is the unacceptability of (257) which indicates that *gunba-l* cannot occur in an intransitive construction.)

We can form a derived transitive stem *yugaraymba-l* 'swim with' by adding the comitative suffix *-mba-l*:

(260) *baŋgul yaɟaŋgu balan ɟaɟa yugaraymban* The man is swimming  
with the child

(261) *ɲaɟa ɲina yugaraymban* I am swimming with you

And similarly the reflexive stem *gunbari-y* will function intransitively:

(262) bayi yaça gunbaripu The man cut himself

(263) ŋayba gunbaripu I cut myself

I have chosen to use two verbs that also occur in Wargamay. *yugara-* is intransitive in Wargamay, and can only occur in intransitive constructions - compare (130-2) with (252-3). *gunba-* is in the complementary Wargamay class - that we have called 'transitive' - and can occur in either transitive or intransitive constructions. Compare (256-9) with (138) and (141) above.

The point we are making is that in most Australian languages a verb is strictly categorised as transitive or intransitive. We do not come up against the difficulty involved with the English verb *eat*, for instance. *Eat* is clearly transitive in *I have eaten lunch* but it also occurs in grammatical sentences like *I have eaten*. It is not clear whether it is functioning intransitively in the latter case (as in *I have slept*) or whether *I have eaten* is a reduced form of a transitive sentence, with the O NP being non-specified in this instance.

Wargamay does have two mutually exclusive transitivity classes; as for other Australian languages it is a straightforward matter to decide which class any given stem belongs to. It differs from other languages in that the transitive class can function in either type of construction whereas the intransitive class cannot. We return to this point in 5.1.2.

The second type of classification of verbal stem that is encountered in almost all Australian languages is into conjugation classes. There are usually two open classes, one whose members are predominantly transitive and the other with predominantly intransitive membership. Some languages also have a number of smaller, closed conjugations, often involving mostly monosyllabic roots (Nyawaygi is a language of this type).

Generally, the most revealing analysis of verbal forms in Australian languages is to take the root to end in a vowel, and to recognise a 'conjugation marker' morpheme that intrudes between stem and most suffixes. For instance, the forms for four out of the seven verbal inflections in Yidiñ are (cf. Dixon 1977a:207)

	-n conjugation (56% intransitive)	-l conjugation (81% transitive)	-ɕ conjugation (87% transitive)
present-future	-ŋ	-l	-ɕ
past	-ŋu	-l+ŋu	-ɕ+ŋu
purposive	-na	-l+na	-ɕ+na
'lest'	-n+gi	-l+gi	-ɕ+gi

We can recognise past tense as -ŋu, purposive inflection as -na and 'lest' as -gi. The conjugation markers -l- and -ɕ- intervene between stem and each of these three suffixes whereas the -n- marker only occurs before 'lest'.

But, typically, not every suffix can be explained in this way. The most frequent and important inflections may not show a conjugation marker (in synchronic analysis at least) or may have other irregularities. Thus 'present-past' in Yidiñ has -ŋ in the -n conjugation but -l and -ɕ (appar-

ently, just the conjugation markers) in the other two cases.

The combination of regular 'conjugation marker plus invariable suffix' for some categories, with irregularities in the case of the more frequent inflections, is well exemplified in the Giramay dialect of Dyirbal:

	-y conjugation (80% intransitive)	-l conjugation (80% transitive)
present-past	-pu	-n
future	-n+gay	-l+gay
purposive	-y+gu	-li
participial	-y+muṅa	-l+muṅa
repetitive aspect	-n-gani-y	-l-gani-y

In this paradigm the invariable morphemes -gay future, -muṅa participial and -gani-y repetitive aspect are preceded by marker -l- for the second conjugation and by either -n- or -y- in the first column. One purposive allomorph can be segmented into -y+gu (the -gu recurring in Wargamay, and in many other Australian languages) but the -li is not susceptible to analysis (there is no record of a purposive -i). And present-past forms -pu~-n do not relate, in a synchronic analysis, to the conjugation markers (although there is evidence that -pu<\*-y+pu and -n<\*-l+pu - see Dixon 1972:354-8).

Now the open conjugation which has predominantly transitive membership has, in a wide range of languages from every part of the continent, a conjugation marker -l-, as in the Yidip and Dyirbal paradigms just given. The other recurrent open conjugation, with mostly intransitive membership, has as conjugation marker sometimes -y-, occasionally -n- (or even -y~-n- as in Dyirbal), and often  $\phi$ .

Wargamay does have two conjugational patterns, corresponding to the Australian norm. And examination of Table 3.3 shows that there are grounds for recognising -l- as conjugation marker for the transitive column, contrasting with  $\phi$  in the corresponding intransitive forms (3.5.2).

What is unusual about the W dialect of Wargamay is the exact coincidence of transitivity with conjugation classes. Every intransitive verb occurs only with allomorphs from the left-hand column of Table 3.3 (with conjugation marker  $\phi$ ); every transitive verb occurs predominantly with allomorphs from the right-hand column (conjugation marker -l) although it can also function intransitively and then takes allomorphs from the left-hand column. It appears that the W dialect has reassigned conjugational membership for those items that are exceptions in related languages. We mentioned in 3.5.3 that intransitive bungi 'lie down' belongs to the -l conjugation in Dyirbal, but it takes only intransitive inflections in W. (The Biyay dialect, in contrast, appears not to have undertaken this reassignment and in B bungi still takes inflections from the transitive column of Table 3.3, although it only functions intransitively.)

In summary, whereas most Australian languages show statistical correlation between transitivity and conjugational classes, the W dialect is a unique example of conjugational and transitivity classes exactly coinciding.

5.1.2 DOUBLE TRANSITIVITY. A survey of 'ergative languages' (both inside and outside of Australia) suggests that they tend to show stricter transitivity than 'accusative languages'. That is, a verb in an ergative language will normally be classified as one and only one of intransitive, transitive, ditransitive, and so on; whereas a verb in an accusative language may have more fluid transitivity membership and be able to occur equally easily with one or two (or three) core NPs. It will pay us to look into possible reasons for this phenomenon before considering in more detail the ability of 'transitive verbs' in Wargamay to function in transitive or in intransitive constructions.

First note that a language may typically have a number of pairs of verbs that have the same (or almost the same) semantic content, but differ in transitivity. We can exemplify from Dyirbal (Dixon 1972:296-9):

<i>transitive</i>		<i>intransitive</i>	
buwa-y	'tell'	wurba-y	'talk, speak'
ganga-y	'eat'	manḡa-y	'eat (to appease hunger)'
banḡa-l	'follow'	mari-l	'follow'
bundi-l	'take out'	mayi-l	'come out'

What could be more natural than for the transitive and intransitive members of such a pair to have *the same form* and to differ only in conjugational membership. There are, in fact, just five such pairs known for Dyirbal; with -l conjugation inflectional allomorphs they function transitively and with -y conjugation allomorphs they function intransitively. These pairs include (Dixon 1972:315):

<i>transitive</i>		<i>intransitive</i>	
yalama-l	'do like this to'	yalama-y	'do like this'
giba-l	'scratch, scrape'	giba-y	'scratch (oneself)'
ḡaba-l	'immerse in water'	ḡaba-y	'bathe'

A simple event could be described using either the transitive or the intransitive member of a pair:

(264) banḡul yaḡanḡu balan ḡaḡa buwapu The man told the child

(265) bayi yaḡa wurbanu The man spoke

Most transitive-intransitive pairs involve semantic identification of A and S NPs as here: the A NP, banḡul yaḡanḡu, in (264) and the S NP, bayi yaḡa, in (265) are coreferential. (Note that not all pairs involve S  $\equiv$  A identification. In fact two of the pairs just quoted are of the S  $\equiv$  O type - thus *he took it out (of the hole)/it came out (of the hole)* and *he immersed her in water/she bathed*. But S  $\equiv$  O pairs are outnumbered by S  $\equiv$  A pairs in Dyirbal and it is likely that S  $\equiv$  O items are greatly outnumbered by S  $\equiv$  A pairs in most other languages.)

Suppose that a single verb root can function either transitively or intransitively (and that it is of the majority syntactic type S  $\equiv$  A). That is, in an 'accusative language' it can occur either with just a nominative (S) NP, or with both a nominative (A) and an accusative (O) NP. It is likely that an NP could be deleted from a transitive sentence, so that if we encounter

## (266) 'alligator'-NOM 'eat'-PAST

we could not be sure whether it was a complete intransitive sentence, or an elliptical form of a transitive construction with the object (which would be in accusative case) omitted. But in the case of a nominative-accusative language this syntactic indeterminacy is semantically quite inconsequential. In either case (266) would be translated by 'the alligator ate'. That is, there is no possibility of semantic confusion.

Consider the corresponding example in an 'ergative language'. Suppose that a verb could occur either with just an absolutive (S) NP, or with both an ergative (A) and an absolutive (O) NP; and that an NP can be omitted from the surface representation of a transitive sentence. Then

## (267) 'alligator'-ABS 'eat'-PAST

is ambiguous between a reading where 'alligator'-ABS is the S NP, or where it is the O NP in a transitive construction (with deleted A NP). In this case the syntactic ambiguity leads to a real semantic impasse - in the one case (267) means 'the alligator ate', and in the other it indicates that '(something) ate the alligator'.

We thus see that the consequences of allowing verbs to have fluid transitivity can lead to unacceptable semantic ambiguity for a language with ergative case marking (but not to the same extent if the case marking follows a nominative-accusative paradigm). This is likely to be at least one reason why ergative languages tend to have a fairly rigid assignment of verbal roots into transitivity classes.

Of course a verb could be permitted to function either transitively or intransitively if it took a different set of conjugational affixes in the two functions (ideally, there would have to be a distinct allomorph of each inflection for the two conjugations). In this case transitivity would be inferrable from conjugation; the meaning of a sentence like (267) would be unequivocally known on the basis of whether 'transitive' or 'intransitive' allomorph of past tense were used.

In most Australian languages transitivity correlates statistically with conjugation class but does not coincide with it; that is, transitivity can not definitely be inferred from conjugational membership. This may in part account for the small number of transitive/intransitive pairs *with the same form* (as Dyirbal *yalama-l/yalama-y*) in comparison with the larger number of pairs *with different forms* for intransitive and transitive function (e.g. Dyirbal *buwa-y/wurba-y*).

But in the W dialect of Wargamay transitivity does coincide with conjugation. The type of construction involved can be inferred from the conjugational class of the verb ending. It is, in view of this, perfectly reasonable that roots from the 'transitive set' should *all* be 'double transitivity verbs' (like the five pairs known for Dyirbal).

(There may be a connection between the *degree* of correlation between transitivity and conjugation classes in a given language, and the *number* of verb roots which can fun-



ction transitively or intransitively. Thus Yidiñ has a relatively low degree of correlation - 81% of -l conjugation and 87% of -ŋ conjugation roots are transitive, but only 56% of -n conjugation roots are intransitive. Yidiñ has no verbal roots that can function transitively or intransitively according as they take different conjugational endings. Dyirbal has a better correlation - about 80% of -l conjugation roots are transitive and around 80% of -y conjugation roots are intransitive; here there are five transitive/intransitive pairs. Then Wargamay has coincidence of conjugation and transitivity classes, and two-thirds of its verbs (i.e. all or almost all those in the 'transitive set') have double transitivity.)

It will be seen from Table 3.3 that each Wargamay inflection has different allomorphs in the intransitive and transitive columns excepting 'subordinate' -nu and the most frequent ending of all, 'unmarked aspect' -y. If a 'transitive root' is in one of these inflections a Wargamay sentence like (267) is indeed ambiguous, with the two possible readings being completely opposite in meaning. (This has already been pointed out in 4.2, and in the discussion of (116) in 4.1.1.)

There is, however, one further factor that mitigates possibilities of this sort. Nominals in Wargamay follow an absolutive-ergative pattern but pronouns do not. The singular first and second person pronouns have in fact distinct forms for all three of the major syntactic functions, S, A and O. We are thus only likely to find ambiguity of the type exemplified in (267) if the verb is in unmarked or subordinate inflection (and in the latter case there may well be other clues in the construction to help resolve things) and if the single NP is a nominal or the third person singular pronoun. (There *is still* a real possibility of confusion; and it seems to be the price that must be paid for the extensions and generalisations that have recently taken place in Wargamay grammar - 5.3.)

One important question to ask about Wargamay is *why*, although the set of 'transitive roots' can occur in either transitive or intransitive constructions (with the appropriate inflectional allomorphs), the set of intransitive verbs is restricted to intransitive constructions. If transitivity is inferrable from conjugational ending why should the property of 'double transitivity' be restricted to only two-thirds of the verbs, and not extended to apply to every verb in the lexicon?

This question is in essence a diachronic enquiry. From comparison with other Australian languages we infer that the 'transitive roots' in Wargamay - which correspond to verbs that can *only* function transitively in other languages - must at one time have been confined to occurrence in transitive constructions. Their function has been extended so that they now also function in intransitive constructions, taking intransitive inflections. What has motivated this generalisation? And why have intransitive roots not had their function extended analogously, to allow them to occur with transitive inflection in transitive constructions? We return to these two questions in 5.3 below.

5.2 SYNTACTIC CONSTRAINTS IN DYIRBAL AND WARGAMAY

In Dyirbal two clauses can be coordinated if they have a common NP which is in S or O function in each clause (that is, there are four possibilities: S-S, S-O, O-S and O-O). If the NP involves only nominals they must be in absolutive case in each clause - which is the reason this type of constraint has been referred to as an example of 'absolutive-ergative' syntax (but note that the S=O constraint also applies if the common NP involves pronouns, which do not have the same form for S and O functions - Dixon 1972:130-4).

The same constraint applies to the formation of complement clauses in Dyirbal (these are subordinate clauses whose verb bears the purposive inflection). Thus (quoting examples in the Giramay dialect), from

(268) bayi yaça banaganu The man returned

(269) bayi yaça bangun gumbuçu pungalı For the woman to kiss the man  
we can derive the complement construction:

(270) bayi yaça banaganu bangun gumbuçu pungalı The man returned to  
be kissed by the woman

Here bayi yaça is the S NP in (268) and O NP in (269), thus satisfying the syntactic condition on coordination/complementation.

However, (268) and

(271) balan gumbul bangun yaçangu pungalı For the man to kiss the  
woman

cannot be simply combined, since the common NP bayi yaça is in S function in (268) but in A function (showing ergative case) for (271).

In cases such as this Dyirbal derives an antipassive version of a transitive sentence - the deep A NP goes into surface S function, the deep O NP into dative (or, occasionally, into instrumental-ergative case) case, and the verb takes the derivational affix -l+(η)a-y (onto an -l conjugation stem)~-na-y (onto a -y conjugation stem). Thus from (271) is derived:

(272) bayi yaça bagun gumbulgu pungalaygu <=(271)>

where bagun gumbulgu is in dative case. Thus (268) and (272) can be combined to form

(273) bayi yaça banaganu bagun gumbulgu pungalaygu The man return-  
ed to kiss the woman

Note that the antipassive suffix -l+(η)a-y~-na-y derives an intransitive stem that takes the full set of derivational and inflectional possibilities. For instance:

	<i>intransitive root</i>	<i>derived</i> <i>intransitive stem</i>	<i>transitive root</i>
	banaga-y 'return'	pungal(η)a-y 'kiss'	punga-l 'kiss'
present-past	banaganu	pungal(η)anu	pungan
future	banaganğay	pungal(η)anğay	pungalğay
purposive	banagaygu	pungal(η)aygu	pungalı

The occurrence of *-ŋ-* in the antipassive suffix is a dialect-determined phenomenon. The northerly Mamu dialect always includes *-ŋ-*, the central Dyirbal dialect can include or omit *-ŋ-*, whereas Giramay, the most southerly dialect, obligatorily omits it. We thus get:

Mamu dialect	<i>puŋɔalŋa-y</i>
Dyirbal dialect	<i>puŋɔal(ŋ)a-y</i>
Giramay dialect	<i>puŋɔala-y</i>

If we were writing a grammar of the Giramay dialect alone we should doubtless set up the antipassive suffix (onto an *-l* conjugation stem) as simple *-a-y*, preceded by the conjugation marker *-l-*. But dealing with the language as a whole we prefer to posit a canonical form *-ŋa-y*, and then state a rule of '*-ŋ-* dropping' that is optional for the Dyirbal dialect but obligatory in Giramay.

The syntactic constraint on complementation in Wargamay is identical to that in Dyirbal. There must be a common NP that is in S or O function in both main and subordinate clauses (4.3). That is, from

(274) *ma:l banay* The man returned

and

(275) *ma:l ŋulmbuɕuŋgu pu:ŋɔagu* For the woman to kiss the man  
is derived:

(276) *ma:l banay ŋulmbuɕuŋgu pu:ŋɔagu* The man returned to be  
kissed by the woman

*pu:ŋɔa* 'to kiss' belongs to the transitive set of verbs in Wargamay and appears most frequently in transitive constructions, like (275). However, if a sentence like 'for the man to kiss the woman' is required to be joined to (274) then *pu:ŋɔa* must be put into an intransitive construction:

(277) *ma:l ŋulmbuɕuŋgu pu:ŋɔalagu* For the man to kiss the woman  
yielding

(278) *ma:l banay ŋulmbuɕuŋgu pu:ŋɔalagu* The man returned to kiss  
the woman

Thus the fact that the NP which is subject of the intransitive main clause is deep transitive subject (A) for the complement clause is marked in different ways in the Dyirbal sentence (273) and in the Wargamay sentence (278). In (273) the verb shows antipassive derivational affix *-(ŋ)a-y* whereas in (278) it simply takes the intransitive allomorph of purposive, *-lagu*. When *-(ŋ)a-y* is absent - as in Dyirbal (271) - or when *pu:ŋɔa* takes the purposive allomorph from the transitive column of Table 3.3 - as in Wargamay (276) - then the main clause S is understood to be identified with the deep transitive *object* (O).

### 5.3 DIACHRONIC CHANGES IN WARGAMAY

It is worthwhile carefully comparing the forms of the verb in a complement clause whose deep A NP is coreferential

with the main clause S or O NP - that is, in a sentence like (273) or (278). We can compare these forms over the three dialects of Dyirbal, in north-to-south order, and in Dyirbal's southerly neighbour Wargamay:

Dyirbal language	{	Mamu dialect	pungalɣaygu
		Dyirbal dialect	pungal(ŋ)aygu
		Giramay dialect	pungalaygu
Wargamay language			pu:ŋgalagu

We have purposely chosen the cognate roots *punga-l* and *pu:ŋga-*. The only other difference between the Giramay and Wargamay forms is the absence of *-y-* in the latter. But *-y-* is a conjugation marker in the Giramay form and we know that the intransitive conjugation in Wargamay has  $\emptyset$  marker. In view of this, are the forms in Giramay and Wargamay not grammatically identical?

In fact they are not. Morphemic segmentation yields

*Giramay*    *punga-l-a-y-gu*  
kiss-CONJ MARKER-ANTIPASSIVE-CONJ MARKER-PURPOSIVE

whereas we cannot go beyond

*Wargamay*    *pu:ŋga-lagu*  
kiss-PURPOSIVE

In Wargamay *-lagu* is simply the allomorph of the purposive inflection onto the verb in an intransitive construction (whether the verb belongs to the intransitive or the transitive set). An example of *-lagu* onto an intransitive root is in

(279) *ma:l banay yugaralagu*    The man returned to swim

It is impossible to obtain *-la-* followed by any other inflection (thus *\*-lay*, for instance, is quite unacceptable as a verbal ending); so *-lagu* cannot be segmented in terms of a synchronic analysis of Wargamay. And while Giramay *pungalaygu* and Wargamay *pu:ŋgalagu* are almost identical in form, the first can be analysed into five morphemes and the second only into root plus *-lagu*.

However, the similarity between these Giramay and Wargamay forms is significant, and surely suggests that there may be a diachronic connection between them.

Let us look again at those verbal affixes in W and B that involve *-l-*:

	<i>intransitive</i>	<i>transitive</i>
negative imperative	-ɣa	-lɣa
irrealis	-ma	-lma
purposive	-lagu	-gu
continuative derivational suffix	W -balli-	-lgani-
	B -ni-	-lani-

There are four occurrences of *-l-* as 'conjugation marker' in the transitive column (we suggested in 3.5.3 *\*-gani>-ni* and *\*-lgani>-lani* for the continuative forms in B). The odd man out here is *-lagu*, where an *-l-* appears in the intransitive column, but not on the transitive side.

Now the *-l-* in *-lagu* might be quite unconnected with the transitive conjugation marker. On the other hand, the simi-

ilarity between Giramay *pungalaygu* and Wargamay *pu:ngalagu* - forms which fill the same syntactic slot in exactly parallel construction types - suggests that it may be worthwhile pursuing the hypothesis that there *is* a relation here.

We will posit a hypothetical earlier stage of Wargamay (in which it is syntactically more like its neighbours than is the modern language) and then investigate whether any natural series of changes could yield the modern system. Firstly consider, at some time in the past:

*STAGE A*

Suppose that at this time pre-Wargamay showed the following features:

(i) Like other Australian languages, each verbal stem was strictly specified for transitivity. A transitive form could only occur in a transitive construction, just as an intransitive form could only appear in an intransitive construction (any other possibility had to involve explicit syntactic derivation, morphologically marked by an appropriate affix).

(ii) As in other Australian languages, conjugation classes correlated statistically with, but did not totally coincide with, transitivity classes.

(iii) Like modern Wargamay and Dyirbal, Stage A had an 'absolute-ergative'-type syntactic constraint on coreferential NPs in complement constructions. That is, the surface S or O NP of the main clause had to be coreferential with the surface S or O NP of the subordinate clause (and the latter token could then be deleted).

In order to satisfy (iii), within the restrictions imposed by (i), pre-Wargamay would have had to have a transformation that put a deep A NP into surface S or O function. The most likely possibility is an antipassive construction, parallel to that in modern Dyirbal.

The Dyirbal antipassive was alluded to in 5.2. The deep A NP goes into surface S function, deep O NP takes dative or instrumental(-ergative) inflection, and the verb is marked by the antipassive derivational affix *-l+(ŋ)a-γ~ -na-γ*. Thus a Dyirbal transitive construction such as (quoting Giramay forms, with verbs in present-past inflection):

(280) *balan gumbul baŋgul yaŋaŋgu nuŋan* The man kissed the woman  
or

(281) *ŋaŋa balan gumbul nuŋan* I kissed the woman  
can be transformed into

(282) *bayi yaŋa*  $\left\{ \begin{array}{l} \text{bagun gumbulgu} \\ \text{baŋgun gumbuŋu} \end{array} \right\}$  *nuŋgalapu* <=(280)>

or

(283) *ŋayba*  $\left\{ \begin{array}{l} \text{bagun gumbulgu} \\ \text{baŋgun gumbuŋu} \end{array} \right\}$  *nuŋgalapu* <=(281)>

respectively.

Now in Dyirbal an antipassive construction will only normally appear in a non-initial clause, and it is used in order to meet the coreferentiality demands of coordinate constructions (thus (282) could be the second clause in

'the man returned and kissed the woman'). Most frequently the verb in such a non-initial clause will be in purposive inflection, marking a complement construction, as (273). (And whereas the deep O NP can be in dative or in instrumental(-ergative) inflection in an antipassive construction if the verb is not in purposive inflection, if the verb takes purposive inflection -gu then this NP can only be in dative case, also realised by -gu. See Dixon 1972:69, 170-6.) An important point here is that while the *overall* most frequent inflection on a verb root is present-past -pu~-n, the most commonly encountered inflection *on an antipassive stem* (involving derivational affix -l(η)a-y~-na-γ) is undoubtedly purposive -y+gu.

Suppose, for the sake of exemplification, that Wargamay had an antipassive derivational affix similar to that in Dyirbal, with form -a- preceded by the conjugation marker -l-. We would then have had, for 'the man returned to kiss the woman':

(284) ma:l banay ŋulmbuɽuɽu nu:nɽalagu

This is identical to the attested modern construction, (278). However, we are supposing that at Stage A the verb was segmentable into nu:nɽa+l+a+gu. That is, we posit an original system of verbal inflections that would have been, in part:

	<i>predominantly intransitive conjugation</i>	<i>predominantly transitive conjugation</i>
irrealis	-ma	-lma
purposive	-gu	-gu
pos.imperative	-ga	-ya

Our suggestion is that antipassive stems, ending in -la- would take the full range of intransitive inflections. Thus, increments to the root would comprise:

(A)	<i>derived</i>		
	<i>intransitive root</i>	<i>antipassive stem</i>	<i>transitive root</i>
irrealis	-ma	-l+a+ma	-l+ma
purposive	-gu	-l+a+gu	-gu
pos.imperative	-ga	-l+a+ga	-ya

So that typical complement sentences would be (284), with a (deep) transitive complement clause, and

(285) ma:l banay puɽigu The man returned to dance  
with a (deep) intransitive complement clause.

#### STAGE B

Sentences (284) and (285) are parallel constructions, and in each case the complement clause is intransitive at the surface level. It would thus be quite possible for the ending on the verb in (284) to be generalised, so that it also functioned as the ending on the verb in (285). We are suggesting that -lagu replaced -gu as the purposive inflection for intransitive verbs. Paradigm A would then be superseded by:

(B)		<i>derived</i>	
	<i>intransitive</i>	<i>antipassive</i>	<i>transitive</i>
	<i>root</i>	<i>stem</i>	<i>root</i>
irrealis	-ma	-l+a+ma	-l+ma
purposive	-lagu	-l+a+gu	-gu
pos.imperative	-ga	-l+a+ga	-ya

The most frequent type of complement construction is one in which the underlying A NP of the subordinate clause is co-referential with the S or O NP of the main clause (indeed, this is referred to as the 'favourite construction' in 4.3.3 above, and also in my grammar of Dyirbal - Dixon 1972: 73-4); thus, -lagu would probably have been the commonest ending on a complement clause verb. This may have been part of the explanation for why -lagu was generalised to replace -gu in the left-hand column. We can also note that -gu could scarcely have been generalised from the left-hand column to replace -lagu in the middle column without a form like *nu:nga-gu* becoming irretrievably ambiguous between the interpretation as a simple verb in a transitive sentence, e.g. (275-6), and that as the verb in a derived antipassive intransitive construction, like (277-8).

At this stage -lagu would have become the purposive inflection on intransitive roots in complement clauses, like (279), and also in *main* clauses, like (76-8) in 3.5.4. A crucial point here is that in an antipassive clause -lagu is segmentable into transitive conjugation marker -l-, plus antipassive derivational suffix -a-, plus purposive -gu, whereas with intransitive roots -lagu is functioning as a simple morph, the (unanalysable) intransitive allomorph of purposive.

#### STAGE C

The next obvious generalisation (or, really, simplification) is to have just one set of forms for the first and second columns in the paradigm. We have suggested that antipassive -lagu was extended to the intransitive column, partly because of its greater frequency. But for the other verbal inflections (irrealis, imperative, and so on) the intransitive allomorphs would be much more frequent than the antipassive variety; and, unlike purposive, all of the other inflections (leaving aside the unmarked ending -y) do have different forms in the left-hand and right-hand columns. We might thus expect that for inflections other than purposive (and also for the 'continuative' derivational suffix), the intransitive allomorph might be generalised to the second column, giving:

(C)	<i>intransitive root in</i>	<i>transitive root in</i>	
	<i>intransitive construction</i>	<i>intransitive construction</i>	<i>transitive construction</i>
irrealis		-ma	-lma
purposive		-lagu	-gu
pos.imperative		-ga	-ya~ $\emptyset$

and so on.

This would only work if there were, at approximately the same time, a tidying-up of conjugation-transitivity membership. Exceptional items - transitive verbs in the

ø conjugation or intransitive stems in the -l class - would have to be reassigned to the majority class, if severe confusion were not to result. We can see that such a tidying-up must have taken place very recently in the W dialect, simply because it has not been completed in the B variety (in 3.5.3 we mentioned that B has a few verbs like bungi- 'lie down' which take transitive inflections although they do only occur in intransitive constructions).

With the replacement of -lama by -ma, -laga by -ga and so on in the middle column, the justification for analysing -lagu into three morphemes would have disappeared; since -la *only* occurs in -lagu it cannot be segmented out as a distinct morpheme. Now -lagu would be felt to be indivisible, simply an allomorph of purposive, whether affixed to intransitive or to transitive roots.

(It is likely that Stage C very quickly followed Stage B; indeed the changes may have been more-or-less simultaneous, so that Stage A effectively gave way to Stage C. The original -laga in the middle column of Paradigm A was analysed into -l+a+gu, the last element being the intransitive allomorph of purposive; once this allomorph, -gu, had been replaced by -lagu a pivotal point for the analysis of -lagu would have been lost. If, in the middle column, -lagu - and also -lama and -laga - were no longer felt to have recognisable components, what more natural than that the latter two forms should have been replaced by -ma and -ga from the left-hand column.)

This diachronic hypothesis explains the modern intransitive allomorph -lagu as being derived from the transitive conjugation marker -l-, plus -a- as a residue of an original antipassive derivational affix, plus the early intransitive allomorph of purposive, -gu. We can posit a form \*-Ca- for the antipassive suffix at Stage A (where C indicates some consonant that can occur word/affix initially). Suffixes in Wargamay, as in surrounding languages, almost invariably have canonical forms commencing with a consonant, and the change \*-l+Ca->-l+a- exactly parallels \*-l+gani>-l+ani suggested for the continuative suffix in the B dialect.

The antipassive form *could* have been -ŋa-, identical to the suffix in modern Dyirbal, and then the reduction \*-l+ŋa->-l+a- in Wargamay would exactly parallel that in Giramay. But there is no way of verifying this. Dyirbal and Wargamay do show striking similarities but there are also many differences, and there is simply not enough evidence to support their close genetic relationship (that is, to justify suggesting proto-Dyirbal-Wargamay as the ancestor of these two languages and of no others).

It does seem a little surprising that the transitive allomorph of purposive is -gu rather than -lgu, which would parallel -lma, -lga and -lgani- in the transitive column of Table 3.3. We can note, however, that Nyawaygi has a verbal system that shows important similarities to that of Wargamay; a number of the inflectional allomorphs for the -l conjugation in Nywaygi do begin with -l (e.g. irrealis -lma, negative imperative -lgam) but in Nyawaygi - as in



modern Wargamay - the purposive inflection is just -gu in the -l conjugation. This makes it seem quite likely that at Stage A purposive was -gu for *both* Wargamay conjugations; indeed, this identity is one of the reasons why the intransitive inflection could scarcely have been generalised onto the middle column in the change from A to B.

In summary, we have suggested that Wargamay had a derivational process that formed an intransitive stem from a transitive root, and that this was largely motivated by the 'absolute-ergative' syntactic constraint on complementation (and perhaps on coordination generally). Through morphological generalisation - allied to an 'elimination of exceptions' that led to an exact coincidence of conjugation and transitivity subclasses - this has developed into the possibility of using transitive verbs in either transitive or intransitive constructions, with the appropriate conjugational allomorphs in each case.

Transitive verbs occur the great majority of the time in transitive constructions; it appears that all or almost all of them *can* function intransitively although - for the syntactic and semantic reasons outlined at the end of 4.2 - some do so more frequently than others. A transitive verb will generally only appear in an intransitive construction in marked syntactic circumstances - to signify a reflexive relation, or to satisfy the constraint on complement constructions, and so on. There is no such syntactic reason for intransitive verbs to function transitively, and there has thus been no change to the original restriction that intransitive verbs can occur only in intransitive constructions.

(As a final note, it is worthwhile comparing the case assignment in intransitive constructions involving transitive verbs, for Wargamay, with case assignment in an antipassive construction, in Dyirbal. The deep O NP from a transitive construction in Wargamay must be in ergative-instrumental inflection in the corresponding intransitive sentence *unless* the verb has purposive inflection (-lagu) in which case it can take either ergative-instrumental or dative (-gu) case. The deep O NP in a Dyirbal antipassive can be in ergative-instrumental or dative inflection *unless* the verb has purposive inflection (-qu) when it can only take dative inflection (-gu). This underlies the recurrent connection - first pointed out by Capell (1956:77-8) - between nominal dative -gu and verbal purposive -gu. And it also emphasises that - whatever the syntax of the postulated antipassive construction in Stage A - intransitive constructions with transitive roots in modern Wargamay do not by any means bear an *exact* syntactic correspondence to antipassive constructions in Dyirbal.)

#### 5.4 EXAMPLES OF SEMANTICISATION

Languages typically have a number of alternations that are morphologically determined - one set of roots may take one allomorph while another set may take an allomorph of a quite different shape (with the membership of the sets

often having simply to be learnt, as a list). These alternations add nothing to the communicative function of the language but simply provide complication, and take some of the users' efforts away from the main semantic task in hand - that of communicating meaning between speaker and hearer.

There is always a tendency to eliminate irregularities and contentless alternations in order to simplify and streamline the language, and to enable its speakers to concentrate their energies on the major semantic tasks. This process of rationalisation can often proceed very slowly; typically, new irregularities crop up as old ones are being ironed out.

Wargamay, and especially the W dialect, shows a pronounced tendency (more than any of its neighbours) to do something about irregularities or morphologically-conditioned alternations. It will sometimes eliminate them; at other times it will provide reinterpretation so that they come to fulfil a useful communicative role. We can quote four examples of this tendency:

[a] *Inflections on mipa* 'what' (see 3.1.5).

In other languages of the area -ŋgu serves for both ergative and instrumental functions, and -ŋga for locative and aversive functions. There are sometimes two or three irregular items that take -lu in place of -ŋgu and -la instead of -ŋga; mipa is a frequent member of this 'irregular subset' (see Dixon 1980a:376,495).

This is likely to have been the situation at an earlier stage of Wargamay. But the language has now taken the previously contentless alternation between -lu, -la (on mipa) and -ŋga, -ŋga (on all other nominals) and invested it with semantic power. In the case of mipa, -lu indicates instrumental and -la aversive functions, while -ŋgu and -ŋga have been generalised from the remainder of the class for ergative and locative functions. This is a paradigmatic example of morphological change, with a given morpheme being replaced - by analogic generalisation - in its primary function (ergative, locative), but retained in what was originally the secondary function (instrumental, aversive) - see Kurylowicz 1964:11.

A possible next step would be for the semantic contrast between -lu and -ŋgu, and between -la and -ŋga, to be generalised to *all* nominals.

[b] *The irregular verb gi:--gi:gi-* 'to sit' (see 3.5.3).

Data from the B dialect suggests that in an earlier stage of Wargamay there was an irregular verb, with monosyllabic root, gi:-. We showed in 3.5.3 that this appears to be in the process of being reinterpreted as a regular disyllabic form gi:gi-, and that it has proceeded much further in this direction in the W than in the B dialect. Thus is an irregularity apparently in the process of being eliminated through creation of a disyllabic in place of an original monosyllabic root. (See also the comment in 3.5.3 on irregular imperatives ma:na and wuga suggesting that two more originally monosyllabic verbs, ma:- 'hold in hand' and wu- 'give', have been restructured as disyllabic roots ma:ni- and wugi- respectively.)

[c] *Conjugation-transitivity iconicity*

Distinct verbal conjugations are plainly a complexity that can serve no communicative function if they do not, say, coincide with transitivity classes. In Yidiñ, for instance, 56% of verbs in the -n conjugation are intransitive and 44% transitive; plainly no speaker could make a sure syntactic inference from conjugational class membership. Wargamay has taken this morphologically-determined alternation and, by making transitivity exactly coincide with conjugation, given it an important syntactico-semantic role. The fact that this tidying-up has not fully taken place in the B dialect confirms that pre-Wargamay must have been like modern Yidiñ and Dyirbal and had only a *degree* of correlation between conjugation and transitivity classes. The W dialect has assigned a communicative role to this previously asemanic distinction. This has, in turn, paved the way for the fourth example of simplification in modern Wargamay.

[d] *Loss of antipassive derivational affix.*

It will plainly be to the advantage of a language to use the smallest number of morphemes in some grammatical task. Originally, in order to use a transitive verb in an intransitive construction - to satisfy a syntactic constraint - the antipassive derivational suffix must have been required between root and inflection. Presumably one had to say, in pre-Wargamay, something like:

(286)   ŋinba gagaga baya-l-a-ga   You go and sing!

Nowadays the transitive verb baya- can simply be used with the intransitive inflection:

(287)   ŋinba gagaga baya-ga    You go and sing!

This is a clear gain in simplicity and cannot fail to assist the communicative power of the language. It is only possible, of course, because of the coincidence of conjugation and transitivity, mentioned under [c].

We thus have four examples of the semanticisation or elimination of irregularities/alternations that had no semantic force in pre-Wargamay. (It will be seen that this tendency is most pronounced in the W dialect, although points [a] and [d] do appear also to hold for Biyay.)

## 5.5 FUTURE SYNTACTIC DEVELOPMENT

Wargamay has not been actively spoken for some years, and is only 'remembered' by the last two or three users. It will thus not be possible to observe the further changes that would surely have occurred, following on from the sequence outlined in 5.3. Would 'intransitive verbs' have been generalised also to appear in transitive constructions, taking transitive inflections? If this happened, *every* verb in the language could appear in a construction of either transitivity type, marked by an appropriate inflection.

It is possible to do no more than speculate about the

changes that might have occurred. But one line of development - that seems to me more likely than that mentioned in the last paragraph - deserves to be briefly followed through, because of its important theoretical implications.

Recall that the developments in 5.3 were motivated by a syntactic constraint that identifies intransitive subject (S) and transitive object (O) functions. Because of this a co-referential deep A NP in a complement clause has to be placed in surface S function. This may originally have been achieved through a derivational process but is now handled by simply letting transitive verbs appear, with intransitive inflection, in intransitive constructions.

Transitive verbs still occur much more often in transitive than in intransitive constructions. But, unlike antipassive clauses in Dyirbal, an intransitive Wargamay clause involving a transitive verb *can* occur as an utterance-initial main clause. Suppose that this state of affairs gradually shifted so that:

*First* - transitive verbs appeared more frequently in intransitive than in transitive constructions;

*Then* - original transitive constructions eventually ceased to be used; A forms of 1sg and 2sg pronouns (*ŋaŋa* and *ŋinda*) dropped out of use and the transitive allomorphs in Table 3.3 were simply discarded.

Transitive verbs would now only occur with their subject (A) NP in what we have called absolutive case - this is also used for the subject (S) of an intransitive verb - and their object (O) NP in ergative-instrumental (or perhaps, in specially marked circumstances, in dative) inflection. But this is simply a 'nominative-accusative' case system, and it would surely be appropriate to rename absolutive as 'nominative' and ergative-instrumental as 'accusative'.

Now the syntactic constraint on complement constructions, that the common NP must be in surface S or O function in each clause, would become 'the common NP must be in surface S or A function in each clause'.

More details would of course have to be worked out, but the end result is clear enough. By extending the natural set of changes described in 5.3, that were orientated towards meeting 'absolutive-ergative'-type syntactic constraints, Wargamay would change so that it was, morphologically and syntactically, a 'nominative-accusative' language!

(Some other Australian languages have followed changes of the type just described and in two instances this *has* led to the development of a fully nominative-accusative morphology. Discussion and further references are in Dixon 1980a:449-57, 498).

## APPENDIX - CARL LUMHOLTZ ON WARGAMAY

Lumholtz did not give any tribal or language names, but his grammatical and lexical comments clearly concern the W dialect of Wargamay with just a few intrusions from the B dialect of Wargamay and from the Giramay dialect of Dyirbal. In the left-hand column below we quote Lumholtz, providing phonemicisation and commentary on the right.

*Among Cannibals*, p.308-9

*Commentary*

The language of the natives on Herbert river is imperative and brief. A single word frequently expresses a whole sentence. 'Will you go with me?' is expressed simply by the interrogation *nginta?* (thou?), and the answer, 'I will stay where I am,' by *karri ngipa* (I remain). 'I will go home,' *ngipa mittago* (literally, I in respect to the hut).

*nginda* 'you (singular)'  
*ngayba* 'I'; 'karri' is not recognised by modern speakers.  
*ngayba migagu* 'I camp-to'

The suffix *go* literally means 'with regard to', and is usually added to nouns to give them a verbal meaning, but is also sometimes added to verbs. The question *Wainta Morbora?* - that is, 'Where is Morbora?' - can be answered by saying, only *tityengo* (he has gone hunting *tityen*) (wallaby), (literally, with respect to wallaby); or, for example, *mittago* he is at home (literally, with regard to the hut). *Mottaiigo* means 'he is eating' (literally, with regard to eating). 'Throw him into the water,' is expressed simply by *ngallogo*. As is evident, this is a very convenient suffix, as it saves a number of moods and tenses. It may also be used to express the genitive - for example, *toolgil totoberogo*, the bones of the ox.

-gu is dative-allative case with nouns, and purposive inflection with verbs in transitive sentences.  
*wanganga* 'where'

There frequently is no difference between nouns, verbs, and adjectives. *Kola* means wrath, angry and to get angry. *Poka* means smell, to smell and rotten; *oito* means a jest, and to jest.

*gi:gin* 'wallaby' (Lumholtz's accent is clearly motivated by the long vowel) + dative-allative -gu  
*miga+gu* as above  
*muga+gu* 'eat-purposive'

*ngalu+gu* 'water-dative/allative'

*gulgil* is 'bone' and *gumubuçu* 'bullock' but genitive is -*ngu* not -*gu*

*guli* 'wild, angry'; *buga* 'rotten, stinking'; 'oito' is not recognisable (informants suggested *wudu* 'nose' or *wa:gi-* 'laugh' when this was read to them). Verbs are in fact derived from nominals by the inchoative suffix -*mbi~-bi~-i* (4.9).

'It is noon' is *vi õrupi* (sun big). 'It is early in the morning,' is *vi naklam* (sun little). 'It is near sunset', is *vi molle mongan*. *Kolle* is a very common word. It is, in fact, used to call attention to a strange or remarkable sound, and means 'hush!', *Kolle mal!* 'Hush,

*wi: wurbi* 'sun big'  
*wi: pagaram* 'sun tiny'

*vi molle mongan* means 'the sun is near the mountains' (*Among Cannibals* p 177); it involves *mulu* 'near' and

there is a strange man!' *Kólle* is also used to express indignation or a protest, 'far from it'. A superlative of an adjective is expressed by repetition - for example, *krally-krally*, 'very old'.

The vocabulary is small. The language is rich in words describing phenomena that attract the attention of the savage, but it lacks words for abstract notions. The natives, being utterly unable to generalise, have no words for kinds or classes of things, as tree, bird, fish, etc. But each variety of these things has its own name. Strange to say, there are words not only for the animals and plants which the natives themselves use, but also for such as they have no use for or interest in whatever...

On Herbert River I found, to my surprise, various names for flame and coals. *Vákkun* meant camp fire, coals, or the burning stick of wood, while the flame was called *koyilla*.

...Several tribes have three numerals, as, for instance, Herbert Vale tribe - 1 *yóngul*, 2 *yákkán*, 3 *kárbo*, 4, etc. is usually expressed by *taggin* (many).

*muñan* 'mountain'.

Surprisingly, in view of Lumholtz's comments, 'kolle' is not used by present-day speakers. *ma:!* is 'man'

'krally' was not recognised.

I collected 900 words from informants who have not spoken the language actively for two score years (whereas Lumholtz only collected 140 in a year!). These comments are a reflection on Lumholtz's lack of interest in learning the language. Wargamay would certainly have had a vocabulary of at least 5-10,000 words, like every other natural language.

Generic terms include *ganal* 'frog', *wiŋgi* 'snake', *gi:gi:* 'bird', *ga:bu* 'fish', *gugdal* 'bee', *bangay* 'spear', *bari* 'stone', *wagun* 'tree', *gungul* 'vegetables'. Each of these has a number of specific terms included under it.

Wargamay is particularly rich in abstract nouns e.g. 'anger', 'fear', 'odour' (-*giri* can be suffixed to derive an adjective, or -*mbi~bi~i* to form an intransitive verb).

*wagun* is used for tree, wood and fire. *guyila* was said to mean 'charcoal' by Lambert Cocky (although he did not seem very certain about this word). Note that accents here correctly identify the stressed syllable (but there is no long vowel in *wagun*, as in *gi:gin* above).

*yungul* 'one', *yaga* 'two', *gaɕbu* 'three', *ɖagin* 'a lot'

*Among Cannibals*, pp.312-3  
 COLLECTION OF WORDS FROM HERBERT RIVER  
 (g before i and a pronounced hard)

Commentary

Allínkpa, we two	ɲali ɲinba - 'we two', first person dual pronoun, plus 'you', second person singular pronoun added to mark it as 'inclusive'
Ámmery, hungry	ɲamiɽi
Ámmon, breast	ɲamun
Átta [Moreton Bay and Rockhampton: atta], I.	ɲaga, transitive subject form of first person singular pronoun
Bággoro, sword, serpent-liver	baguɽu
Bállan, moon	balanu W, balan B
Bámbo, egg	bambu
Bámpa, distant	bamba
Bátta, take	possibly bu:di- 'take, bring'
Bému, brother's son	bimu 'father's elder brother'
Bíngan, foot, footprint	bingan
Bínna, ear	bina
Boongary, <i>Dendrolagus lumholtzii</i>	bulɲgari 'tree-climbing kangaroo'
Bórboby, battle, duels	buɽbabay 'hit each other'
Bórrogo, a variety of <i>Pseudochirus</i>	buɽugu
Deerbera, tomorrow	possibly gidalgu
Dómbi-dómbi, woman	gambiɽambi, 'old women'
Era, teeth	yira
Etaka, tuft	not recognised
Evin, <i>Calamus australis</i>	gamin
Farínga, stone, rock	bari+ɲga 'stone' plus locative inflection
Gangítta, handkerchief	plainly a loan from English
Gilgla [the l to be pronounced with thick palatal sound], cassowary	gilɲgiɽa
G'rauan, <i>Megapodius tumulus</i> (bird, egg, nest)	girawan 'scrub hen and nest'
-Go [suffix, Moreton Bay: -co], in regard to.	-gu dative-allative case inflection on nouns; purposive inflection on verbs in transitive constructions.
Gómbian, Echidna	gumbiyan
Góri, blood	guɽi
Hánka, whence?	possibly wanɽa- 'where?'
Káddera, opossum ( <i>Iriechosurus vulpecula</i> )	gaɽara
Kádjera, <i>Cycas media</i>	gaɽira 'zamia fern'
Kainno, to-day	ganu 'later on today'
Kainno-kainno, well, sound	not recognised
Kakavagó, go	gaga- 'go' probably with purposive inflection -lagu
Kalló, come on!	probably one of the two interjections gawu 'come on!', gala 'try again'

Kāmin, climbing implement

Kāmo, water

Kárbo, 3

Kárri, remain

Kawan, nausea

Káwri, axe

Kedool, cold

Kelan, old man, sir [word of address]

Kóbi, arts of witchcraft

Kola [subst and adj], anger, angry

Kólle, hush!

Kómorbory, many, large multitude

Kóna, excrements

Kónka, unharmed, raw, not roasted

Kóntagan, nice weather

Kontáhberan, dark, dark night

Koorduno, thunder

Koráddan, a kind of fruit

Koyílla, flame

Králly, old

Kuroonguy, thirsty

Kootjary, *Talegalla lathamii*Kvíkkal, *Perameles nasuta*

Kvíngan, evil spirit, devil

Mah, } not, no  
Maja, }

Mal [Moreton Bay: malar. Yelta: malle], man, especially of a strange and hostile tribe

Mállan, hand

Mally, good, excellent

Mami, master

Mánta, *membrum virile*

Manta korán, an oath of uncertain meaning, also a word of abuse

Márbo, louse

Márgin, gun

Máwa, crawfish

Mílka [verb], produce rain

gamin, a loya vine and climbing implement made from it

gamu is 'water' in Giramay and HB; the term in W and B is ḡalu

gaḡbu

not recognised

gawan 'anger'

not recognised

gidul

gilap

gubi, 'doctor' who practises these arts

guli 'wild, angry'

not recognised

gumaḡbari

guna

gunga 'unripe (vegetable), raw (meat), alive (person)'

possibly gundabaḡa 'fine weather'

gundambula

gunḡunu

not recognised

guyila 'charcoal' (?)

not recognised

Nora Boyd suggested that ḡulḡu 'throat' might have been intended; ḡulḡu ḡarala 'dry throat' can mean 'thirsty'.

guyḡari 'scrub turkey'

guyḡal 'long-nosed bandicoot'

guyḡḡan 'spirit of a woman'

maya 'no'

ma:l 'man' (not necessarily of a strange or hostile tribe)

mala

mali

not recognised

manda 'penis'

this could conceivably involve guran 'long'

maḡbu

margin

mawa

milḡa is actually a noun, referring to a piece of painted bark (in later days, iron) placed in the root of a tree just in the water, as a 'rain-maker'. It is



	mentioned by Banfield in <i>My Tropic Isle</i> p.278 and <i>Last leaves from Dunk Island</i> p.127
Míll, eye	not a Wargamay item
Minná [cf. Moreton Bay: menäh], how?	mína 'what?'
Minná-minnana-gó, how in the world?	mína-mína-gu 'what-REDUP-DAT' i.e. 'why?'
Míttá, hut	míga
Mogil [Moreton Bay: magul] head	muga!
Mólle, near	mulu
Móngan, mountain	mungan
Móngan, <i>Pseudochirus herbertensis</i>	mungan
Móttai [verb and subst.], eat, food	muga- 'to eat' (only a verb)
Móyo, anus	muyu
Nahyee, no	not recognised
Naiko [verb], own	ṅaygu 'my', first person singular possessive pronoun
Naklam [the ʎ to be pronounced with thick palatal sound], little	ṅagaram 'tiny'
Ngallo, water	ṅalu
Ngalloa, <i>Dactylopsila trivirgata</i>	ṅaluwa 'flying squirrel'
Nginta, you	ṅinda, transitive subject form of second person singular pronoun
Ngipa, I	ṅayba, intransitive subject form of first person singular pronoun
Nongáshly, only	not recognised
Nili, girl	nayili, girls
Oito, jest	not recognised
Oonda, see	ṅunda- 'to see, look'
Ōrupi, large	wurbi
Peera [subst and adj], fear, afraid	bi:ɕa
Pipu [from the English], pipe	baybu
Poka, hair; smell [Echuca: boka]	buga 'rotten, stinking'
Pókkán, grass-land, grass	bugan 'grassland'
Pul [verb], smell	Nora Boyd suggested that this could only relate to buga 'smelly' (see above)
Púlli, flea	buli
Sinchen, rash, syphilis	not recognised
Suttúngo, tobacco	not recognised
Tággín, many, much, also the numeral 4	gagin 'a lot'
Takólgoro [a word of exclamation], poor fellow	gagul 'sorry, pitiful' perhaps with an affix such as -bulu 'very'
Tálgoro, human flesh	gálguru '(any) meat'
Tállan, tongue	galan
Tamin, fat	gami is 'fat' in Giramay
Tchíggá, sit	gi:ga 'sit-IMPERATIVE'
Títyen, wallaby	gi:gín 'swamp wallaby'
Tobola, a kind of fruit	gubula 'black pine'
Tomóbero, cattle, meat	gumubuɕu
Toollah, <i>Pseudochirus archeri</i>	gula 'striped possum'
Toolgil, bone, bones	gulgil

Toolgin, scrub	gulgin
Toongna, drink	ganga- 'to drink'
Toongu, sweet	guṅu 'odour'
Towdala, <i>Orthonyx spaldingii</i>	possibly Giramay dawugala
Vákkun, coals	wagun, 'tree, wood, fire'
Vaneera, hot	baniga 'sweat'
Vee, sun	wi:
Veera, a kind of fig which grows on grass-land	wira 'black fig'
Vikku, bad	wi:gi 'no good'
Víndcheh, snake	wingi 'snake (generic)'
Vómba, belly	wumba
Vónda, an edible root of a climbing plant	bundu
Vooly [adj], dead	wula-, verb 'to die' plus unmarked aspect -y
Vooroo, nose	wudu or wuṅu
Vótel, sleep	wudil, adjective 'asleep'
Vukka, thigh	waga 'shin'
Wainta, where?	wanga+nga 'where?'
Yáby, <i>Pseudochirus lemuroides</i>	Giramay yabi 'light grey possum'
Yákkán, 2	yaga
Yálla, remain	yala 'here'
Yamina, a monster (p 201)	yamani 'rainbow'
Yanky, a kind of fig	not recognised
Yárrí, <i>Dasyurus</i>	not recognised (but yari is <i>Dac-</i> <i>yurus maculatus</i> in Giramay)
Yári, honey	Nora Boyd suggested wubiri might have been meant
Yeergilíngera, star	yirgingara
Yókkán, fog, rain	yugan 'rain'
Yóngul, 1	yungul
Yopolo, <i>Hypsiprymnodon moschatus</i>	not recognised

## TEXTS

Texts 5-7, which were tape-recorded from John Tooth and Lambert Cocky, and Texts 8 and 9, dictated by John Tooth, are given here. These have been slightly edited, by the omission of repetitions and false starts.

Texts 1-4 were recorded by La Mont West Jr from Jimmy Johnson at Palm Island in 1964. The transcription and analysis that can be provided is not sure enough to merit inclusion here.

Tapes of Texts 1-7 (and West's transcription of Texts 1-4) have been deposited with the Australian Institute of Aboriginal Studies, P.O. Box 553, Canberra City, A.C.T., 2601, Australia.

### TEXT 5

A story told by John Tooth about seeing a ghost after having been drinking. (Recorded 4th November 1972 at Glen

Ruth Station; lasts 2½ minutes.)

1. ma:l naða baɽbay / ɟannaɟaɟu ɟaluŋgu I asked a man, for a drink.
2. nuɟaŋga ga:may / ɟali ɟinba ɟannaɟaɟu ɟaluŋgu / He said 'We'll have a drink'.
3. ɟayi / yuŋguɟaŋgu ga:may / ɟayi / ɟannaɟaɟu 'Yes', the other man said, 'yes, (we'll) drink.'
4. ɟaɽbu ɟagay / ɟaɽbu ɟayba ɟagay / The three of us went.
5. ɟalu waybaɟaŋgu bu:diɟu / The white man had brought grog.
6. ɟaɽbu ɟannaɟabali / ɟaluŋgu ɟannaɟabali / guɟuɟuŋgu ɟannaɟu / We three were drinking, drinking liquid - drinking grog.
7. *by-and-by* naða ɟunday guyŋgan / ɟagabali / By-and-by I saw a female ghost. (It) was walking about.
8. yuŋguɟaŋgu ma:lɟu ga:may / miɟa nuɟa / The other man said (to me) 'What's that?'
9. miɟabaɟun / guyŋgan *I think* / guyŋgan / ɟayi / 'I don't know what. A female ghost, I think - yes.' (I replied.)
10. maya maya waybala nuɟa / *torch*-giri wuɟabali / 'No, no, no, that's a white man. Walking about with a torch.' (Another said.)
11. ɟayi / 'Yes' (I replied)
12. ɟannaɟabali ɟannaɟabali / (We) continued drinking.
13. naða ɟunday *again* / I saw (it) again.
14. nuɟa ɟuwarabali / guyŋgan / 'That ghost, she's standing (there).'
15. naða biɟbagi / ɟanbaɟaɟu I had jumped, to hit (it).
16. maya buɟulbigi / But no, it had disappeared.
17. ɟayba ɟunday / maya / I looked. There was nothing.
18. yaga bula ma:l bimbirigi / The two men (who were with me) had run away.
19. ɟayba bimbirigi / bi:ɟagiri / ɟagay miɟaɟu / I had run away (too) with fright; I went to the camp.
20. naða baɽbay / nuɟa ma:l / ɟannaɟaɟu / I asked the (two) men to have a drink.
21. maya maya bi:ɟambigi ɟayba / 'No, no, I'm frightened' (they each said).
22. miɟaɟu / 'What of?' (I asked them).
23. ɟayba ɟagay / ɟayba bi:ɟambigi *too* / ɟayi / I went. I was frightened too, yes.
24. ɟa: ɟunday naða / yaɟaŋga buɟuligi / I didn't see (the ghost); (it) had disappeared there.
25. naða ɟalu naða / banamay / I brought the drink back (to my friends).
26. yaɟaŋga ɟalu ɟannaɟay / (We) drink the grog there.

Note that alcoholic drink is at first referred to by ɟalu ('water, any drinkable liquid') and then in line 6 is specified more explicitly as

guɽuɽu 'grog'.

The perfect inchoative form of buɽul 'vanished' was said as buɽulbigi in line 16, but corrected to buɽuligi on playback; it was said as buɽuligi in line 24 (see 4.9.1).

When the three men saw the ghost for the second time they dropped the bottle and ran off (lines 18-19). At the end John Tooth returns alone to retrieve the bottle.

## TEXT 6

A traditional myth told by John Tooth. (Recorded 5th November 1972 at Glen Ruth station; lasts 2½ minutes.)

The story concerns six mythical people. The two Gurigala, who were good hunters, had no wives, whereas the two Waɽuɽala each had a wife called Binbiɽal. One day the two Gurigala asked the Waɽuɽala to go and get water; while they were away the Gurigala stole their wives. When the two Waɽuɽala came back they looked everywhere for Gurigala and Binbiɽal. They heard a cooing noise that they thought might be them, but it was only two trees rubbing against each other. Then they saw all four of them way down in the Herbert Gorge. The Waɽuɽala descended the gorge but the Gurigala and their captives were on the opposite side of the river and the Waɽuɽala could not swim. They threw stones into the water to make a bridge across, but then everything started to change. The Waɽuɽala saw the others high up on a ridge. Then the Waɽuɽala men turned into black wallabies (waɽuɽala), Gurigala into eaglehawks (gurigala) and Binbiɽal into parrots (binbiɽal). The eaglehawks and parrots flew away, into the scrub.

Text 1, by Jimmy Johnson, is another version of the same myth. Johnson said that the sparrow-hawk taught Waɽuɽala how to hear a hunter, and that in revenge Gurigala stole the sparrow-hawk's wife and opened her vagina with a sliver of quartz.

1. gurigalangu / miɽa binday / The eaglehawk (gurigala) built a camp.
2. nuɽa gana waɽuɽala / wuɽabali (on playback John Tooth corrected gana to bula) The two black wallabies (waɽuɽala) were walking about.
3. *by-and-by* nuɽa gi:ɽay ɽalugu / gurigalangu / waɽuɽala / *By-and-by* the eaglehawks told the black wallabies (to go) for water.
4. gaɽay ɽalugu / bu:dilagu / (The black wallabies) went to fetch water.
5. nuɽa gaɽay / (The wallabies) went out.
6. yubaymay / binbiɽalna / (The eaglehawks) stole the parrots (binbiɽal) (who were the wives of the black wallabies).
7. waɽuɽala gawaligi / gawaligi gawaligi / nuɽa nuɽa nuɽa galaga / nuɽa ɽuɽuɽa / The black wallabies cried out, they called out (in every direction). 'There they are, up on the ridge!'
8. ɽali gaɽabali / 'We're going' (the black wallabies said to each other, as they traced a cooing noise).

9. maya gunbin punga / wayumbigi / 'No, (there's just) these twisted trees rubbing together. (It) has changed into something.' (they said)
10. gu:ngudan / gana biray / waꞩuḡalangu ḡunday / They (the eagle-hawks and their captives) all went down to the gorge, and were seen by the black wallabies.
11. pungaḡi gana / ḡalunga yugarabali / 'There they are, swimming in the water' (the wallabies exclaimed).
12. waꞩuḡala bimbirigi / bimbirigi / The black wallabies ran (down to the bottom of the gorge).
13. yaluga puḡa gana / guḡabay ḡuwarabali / 'They're all there, standing on the other side' (one wallaby said to the other).
14. miḡambilagu / 'What are we going to do now?' (one wallaby said).
15. maya ḡamu ḡali / bari buḡmbiya ḡalugu / 'We must just chuck stones into the water (to make a bridge', the other wallaby replied).
16. ḡali ḡinba gaḡalagudan / 'You and I must go now' (one eaglehawk said to the other).
17. maya puḡa *all together* / puḡa gaḡabali ḡuḡuḡa / bamba *now* / bamba bamba / ḡa: ḡunday / (The wallabies watch the eaglehawks progress and say to each other:) 'They're all going along the ridge now. Now they're a long way off, and no longer visible.'
18. miḡa puḡa wayuwayumbigi / waꞩuḡalambigi / They (the eaglehawks) changed into something. (And the Waꞩuḡala changed from men) into black wallabies.
19. puḡa ḡurigaḡa yinbi / binbiḡal yinbi *too* / yaḡaḡa buḡuligi / The eaglehawks flew away, and the parrots flew away too. They vanished from sight there.

#### TEXT 7

A reminiscence of massacres by the native police, as told to Lambert Cocky by his father and grandfather. (Recorded by Lambert Cocky, 6th November 1972 at Sheahan's farm near Ingham; lasts 2 minutes.)

1. ḡayba bimbirigi / yaḡaḡa bulimanda / ḡulḡingu / bulimandu ḡana wuḡay / buḡagu ḡana ḡaybulndu / I had run away, from the policeman here, into the scrub. The policeman was chasing me, to shoot me with a rifle.
2. maya puḡaḡa drayḡangu miḡbalḡani ḡayḡuḡu / buḡagu ḡana / The trackers would show (the white police where) I (was) so that (they) could shoot me.
3. ḡana yubagi / ḡulḡiḡulḡingu / gaḡaligi / We all ran away, from scrub to scrub, calling out.
4. puḡa drayḡa ḡanbalḡani / bulimandu / The policeman would follow the trackers.
5. ḡagu ḡulḡingu / muḡanmuḡangu ḡana gaḡay / We went into this scrub, and then (from hilltop to scrub) to hilltop.

6. maya nuṅa bulimandu ṅanbalgani / buṅday yuṅguṅa / But no, the policeman would follow them (my tribesmen), and shoot one.
7. ṅayba nuṅga dagigi / I fell down.
8. galaga gagay muṅangu / gaymbiri gaymbiri ṅanapa wuṅalḡay bulimandu / (We) went up the hill, but the policeman chased us everywhere.
9. drayga / gawaligi ṅanangu / waṅga ṅinba / The tracker called out to us 'Where are you?'
10. maya ṅana ṅa: ṅa:ray/... ṅana bi:ḡambigi / No, we didn't listen, we were frightened.
11. bulimandu buṅalḡani / ṅapa / The policeman would always shoot at me.
12. galaga ṅana gagay / We went up.
13. nuṅga ṅayba / ṅinda ṅa:ra gu:ṅaḡa / gu:ṅaḡanin / *where* ṅa:ralma ṅapa / I'm that one. You listen to (this story) from a long time ago. (Now) you'll listen to me (telling another story).
14. gi:ḡigin / ṅa:ra ṅapa / gi:ḡigin ṅayba *Hawkins-Creek*-miri / yalaṅga ṅanapa bulimandu naṅḡay / Romulus (gi:ḡigin) - listen to me - I'm Romulus from Hawkins' Creek. The policemen rushed us there.
15. ṅanbay ḡanapa ma:ḡ / malaṅmalan / galaga / muṅangu / gala gagay / ḡulḡingu / gaymbiri ḡanapa wuṅalḡay / buṅday / buṅday / bulimandu / (Policemen) followed all the (Aboriginal) men, up the rivers, up the hills. They went into the scrub, and were chased everywhere (by the policemen); and shot by the policemen.

Note that Romulus was an Aboriginal leader during Lambert Cocky's youth.

TEXT 8

An ad hoc conversation dictated by John Tooth (at Glen Ruth, 13th December 1974).

1. A: ṅayba balganda ḡumbagi / I went into the house
2. B: miṅagu / What for?
3. A: ḡulmbuḡugu ḡundalagu / To see the woman.
4. B: ṅinba mulḡaḡa / You're game!
5. A: miṅala ṅayba bi:ḡambilagu / What should I be frightened of?
6. B: ma:ḡindu ḡina buḡbalma / The man (belonging to that woman) might hit you.
7. A: maya / ḡulmbuḡu ṅaḡa yuṅḡul ḡaymbay / No, I only found one woman there (no men)
8. B: ḡina nu:ṅay / Did (she) kiss you?
9. A: ṅayi / ṅaḡa mala ma:ni / ṅaḡa yubaymay / Yes. I grabbed (her) hand, I stole (her) away.
10. B: waṅḡagu ḡinda bu:di/ Where did you take (her) to?

11. A: gungari nayba gagay / nalwagirigu / waybalangu nana /  
gulbunmay nana / I went north to Abergowie (nalwagiri).  
And the white man married me (to the woman).
12. B: biringgu ninda / You're a bugger (marrying another  
man's woman).
13. B: ninba mulgaca / You're game.
14. A: nayi Yes.

## TEXT 9

An ad hoc conversation dictated by John Tooth (at Glen Ruth, 8th November 1977).

1. A: ninba mu:ɽambiga / You hide!
2. B: mipala / For fear of what?
3. A: waybalangu nina gundalma / Lest the white man see you.
4. A: ninba yubaybiru / mipibiru ninba bimbirigi / You ran away  
(from him). Why did you run away?
5. A: waybalangu nana buɽbaru / The white man hit me.
6. B: mipala nina buɽbay / What did (he) hit you over?
7. A: yaramanda nana buɽbay / (He) hit me over a horse.
8. B: mipagu ninda buɽbay / What did you hit (the horse) for?
9. A: yaramandu nana buɽmbi / The horse threw me.
10. B: ruŋa wayabala gawanbigi / mipagu / Why did the white man  
get wild?
11. A: naga yaraman mugal buɽbay / I hit the horse in the head.
12. A: gulumɽungga nayba yubaybigi / (That) night I ran away.
13. A: yala nana waybalangu gaymbay / The white man found me here.
14. A: nana waybalangu bu:di / nana balgangu banamay / The white  
man took me back to the house.
15. A: yalanga nali buɽbabay / The two of us had a fight there.
16. A: naga ganbay / gagal / ruŋa dagigi I hit (him) in the jaw;  
and he fell down.
17. A: yunguɽangu waybalangu yagangu nana ma:ni / ɽubungu nana  
ni:ɽay / yalanga nana wagunda ni:ɽay / Two other  
white men grabbed me, and tied me up with rope, tied me  
to a tree there.
18. A: nayba yalanga gulumɽugu gi:gi / I stopped there until  
the night (and all through the night).
19. A: biliginga / buliman gu:ngigi / In the morning the policeman  
arrived.
20. A: bulimandu nana bu:di / burgumangu / yalanga nana wanay /  
The policeman took me to Palm Island, and left me there.

## VOCABULARY

## ALPHABETICAL VOCABULARY

The vocabulary by semantic fields gives the fullest available information on meanings (with example sentences and cross-references to grammar and texts), dialect distribution, etc. This alphabetical listing is intended for cross-reference purposes; many glosses are given only in abbreviated form. The alphabetical order followed is:

a, a:, b, d, g, g, i, i:, l, m, n, p, q, r, [, u, u:, w, y

Word class membership is indicated by:

- |   |                       |
|---|-----------------------|
| N - noun  | Time - time qualifier |
| Adj - adjective   | Part - particle       |
| Loc - locational qualifier  | Int - interjection    |
| Proper - proper name, of person or place  |                       |
| Vint - intransitive verb (occurs only in intransitive constructions)                    |                       |
| Vtri - transitive verb (attested in both transitive and intransitive constructions)     |                       |
| Vtr - transitive verb (attested only in transitive constructions in the data collected) |                       |

As discussed in 3.5.2 and 4.2 it appears likely that all or very nearly all transitive verbs can also occur in intransitive constructions, with the appropriate inflectional allomorphs and case marking on noun phrases. Almost all the more frequently occurring verbs were encountered in both construction types, but some of those for which only two or three instances were recorded were only in transitive constructions - shown by Vtr. No systematic effort was made to obtain *all* transitive verbs in intransitive constructions; it is likely that most or all Vtr could be extended to Vtri.

The few proper names recorded are included in the alphabetical list, but not in the vocabulary by semantic fields. Grammatical words such as pronouns and demonstratives are in neither list - they are fully discussed in the grammar, section 3.4.

baba, Vtri: pierce, spear  
 babi(lan), N: father's mother  
 bada, N: dog  
 badi, Vtri: hook fish  
 baqa, Adj: shut, blocked  
 baqala, N: flat rock  
 baqigal, N: saltwater turtle  
 baqingila, N: spangled drongo  
 baquru, N: money  
 baqidi, N: box, trunk (Loan)  
 bagir, N: basket (Loan)  
 Bagir, Proper: Ingham  
 bagucu, N: sword  
 balan ~ balanu, N: moon  
 balangal, N: dugong  
 balbala, N; Adj: fat  
 balban, N: lumps

balbay, N: bottle  
 balbi, N: sloping bank  
 balbirigan, N: large shark  
 balgin, N: male cross-cousin  
 balgan, N: house, hut  
 balgubalgu, N: hat  
 balgun, Adj: clear, open  
 balmbi, Vtr: smell  
 balmbuca, N: drum, its noise  
 balggira, N: throwing implement  
 bama, N; Adj: male  
 bamba, Loc: long way  
 bambaga, Adj: white  
 bambu, N: egg  
 bana, Vint: return, go/come home  
 bana, Vtri: bend, choke  
 banba, N: red fig tree



- bandaḡala, Adj: full  
 bandali, Vint: burst, smash, break  
 bandaḡa, N: bottle  
 baniḡa, N; Adj: sweat, heat from sun, summertime; hot from sun  
 banma, Vint: talk  
 baḡin, N: sea, saltwater  
 baḡal, N: water goanna  
 banga, Vtri: paint, write  
 baḡal, N: upper arm, shoulder  
 baḡara, N: blue-tongue lizard  
 baḡay, N: spear (generic)  
 baḡila, N: woomera  
 baḡipu, N: a tree fern  
 baḡuru, N: freshwater turtle  
 baḡi, Vtr: (rain) falls on, wets  
 baḡil, N: brown rat  
 baḡi, N: stone  
 baḡul, N: vine-like plant  
 baḡba, Vtri: ask  
 baḡgu, N: English axe  
 baḡḡan, N: kangaroo rat  
 bawuḡu, N: rock wallaby  
 baya, Vtri: sing  
 bayal, N: yellow native bee  
 baybu, N: pipe (Loan)  
 baygaḡi, N: river fig  
 baygi, N: bag (Loan)  
 bayguri, Vtr: shake, wave, bash  
 bayi, Vint: go around, get tangled up  
 bayil, N: file (Loan)  
 bayima, Vtr: buy (Loan)  
 bayḡaḡa, Adj: tired  
 bayḡiḡa, Adj: hot  
 bayuḡa, N: a coastal ginger  
 bayumbi, Vtri: shake, wave, swing, turn  
 ba:di, Vint: cry, sob, weep  
 ba:lba, Vtr: roll  
 ba:lballi, Vint: roll  
 bidaman, N: conjoboy plant  
 bidi, Vint: shake with cold  
 bigal, N: bark of tree  
 bigilbara, N: whistling duck  
 bigin, N: shield  
 bilga, N: pitch/gum from grass tree  
 bili, Vint: run  
 biligi, Time: daybreak, early in morning  
 billil, N: rough-necked turtle  
 bilmba, Vtr: push  
 bilmbu, N: hip, side, flank  
 bilḡiri, Adj: wide  
 bilu, N: hip(bone)  
 bilun, N: hook spear  
 bima, N: death adder  
 bimbiri, Vint: run, run away  
 bimu, N: father's elder brother  
 bimulan, N: father's sister  
 bina, N: ear  
 binbiḡal, N: king parrot  
 binda, N: shoulder  
 binda, Vtri: put standing up, build; defecate, urinate, spit  
 bindi, N: female genitalia  
 binḡa, Vtr: make fire blaze up  
 bingan, N: foot  
 bingira, Adj:(do) quickly, hurry up  
 bini, N: black beetle  
 bira, Vint: descend  
 biranbiran, N: bee bird  
 birbubirbu, N: throwing implement of crossed sticks  
 birgibaḡa, N: wintertime  
 birigi, Adj: nuisance  
 birḡga ~ birḡanbirḡan, N: grey hair, grey-haired person  
 birugay, N: umbilical cord  
 biḡba, Vint: jump  
 biya, N: beer (Loan)  
 biyay, Int: no  
 Biyay, Proper: name of dialect  
 biyu, N: small creek, gully  
 bi:bal, N: small budgerigar  
 bi:lbi:l, N: pee-wee  
 bi:ḡa, Adj; N: frightened; fear  
 bubun ~ bubunba, N: pheasant  
 budam, N: matter inside a blister  
 buḡi, Vint: fall down  
 buḡi, N: fart  
 buḡu, N: paperbark tea-tree  
 buḡul, Adj: vanished, disappeared  
 buga, Adj: rotten, stinking, dead  
 bugan, N: forest, grasslands  
 bugan, N: big bush or grass fire  
 bugawu, N: long-neck turtle  
 bugulbay, N: scrub wallaby  
 bula, 3 du pronoun  
 bulal, N: firefly  
 bulbu, N: old person  
 bulbuḡu, N: spotted gum  
 bulgan, N: shrimp, prawn, lobster  
 bulgu, N: wife  
 buli, N: flea  
 bulibuli, N: nightowl  
 buliman, N: policeman (Loan)  
 buliḡi, N: staghorn fern  
 bulḡari, N: tree-climbing kangaroo  
 bumaga, N: wasp  
 bumba, N: dust  
 bunabuna, N: weeds, rubbish, couch grass

bundip, N: grasshopper  
 bundu, N: edible root  
 bundurup, N: English-style bag  
 bunga, Vtri: shoot  
 bunggi, Vint: lie down  
 bunu, N: smoke  
 bunul, N: march fly  
 bunan, Adj: stinking  
 bunga, Vint: swell up  
 bunggal, Adj: glad, proud, happy  
 bunggil, N: rock wallaby  
 bungu, N: knee  
 bungul, Adj: full with food  
 bunun, N: drum and its noise  
 Burayngdubaçu, Proper: Lambert  
 Cocky  
 burganu, N: snake species  
 Burguman, Proper: Palm Island  
 burubay, N: boil, pus  
 bučan, N: song style  
 bučba, Vtri: hit with stick, etc  
 bučmbi, Vtri: throw  
 bučngan, N: white ant and nest  
 bučgul, Adj: rotten (e.g. wood)  
 bučugu, N: possum species  
 bučun, N: fighting ground  
 buya, N: shooting star  
 buya, Vtri: blow, smoke  
 buyana, N: white cockatoo feather  
 decoration  
 buybuči, Vtr: make a raspberry at  
 buyin, N: eyebrow  
 buymaran, N: sand  
 buyngul, N: small tree lizard  
 buyngari, Vtr: hang up  
 buyu, N: head  
 bu:di, Vtri: take/bring, carry  
 bu:giya, N: mullet  
 bu:nguray, N: snore  
  
 dabugay, N: a wild cherry  
 dagi, Vint: fall down  
 dagu, N: carpenter bird,  
 hammer bird  
 Dali, Proper: Tully (Loan)  
 dalga, Adj: hard  
 dalngal, N: spider and web  
 dalu, N: palm tree  
 daman, N: new-born baby  
 dača, N: wing of bird  
 Dawunbil, Proper: Townsville  
 (Loan)  
 da:lbi, Vtri: scoop up water  
 di:, N: tea (Loan)  
 drayga, N: tracker (Loan)  
 dubi, N: worm  
 Dumban, Proper: Ripple Creek

dumbil, N: flange of tree  
 dumbul, N: bump on shield opposite  
 handle  
 dumbulan, N: ant species  
 du:ča, Vtri: pull  
  
 gabali, N: whip-tail kangaroo  
 gabini, Adj: sharp(ened) (Loan)  
 gača, N: baby  
 gagabača, N: grass tree  
 gagal, N: jaw  
 gagap, N: sand goanna  
 gagargagar, Adj: rough, prickly  
 gagari, N: fat  
 gagin, Adj: a lot, much  
 gagul, Adj: worried, sorry, pitiful  
 galaba, N: a long yam  
 galan, N: tongue  
 galbača, N: beard  
 galgawuču, N: big parasitic fig  
 galgi, Vtri: cook  
 galguču, N: meat  
 galmbu, N: younger brother  
 galmbuyan, N: younger sister  
 galngiča, N: moaning funeral chant  
 galngan, N: froth  
 galngulan, N: tongue  
 galnguy, N: avoidance speech style  
 galun, N: short spear with hook  
 gambal, N: snake (generic)  
 gambara, N: large nulla nulla  
 gambi, N: old woman  
 gambun, N: grub  
 gamiya, N: stone tomahawk  
 gamu, Part: only, just  
 gamugan, N: daughter  
 gana, 3 pl pronoun  
 ganba, Vtri: hit with rounded  
 implement  
 gandi, N: older sister  
 ganču, N: small grass dilly-bag;  
 kangaroo pouch  
 ganguča, N: turpentine tree  
 ganča, Vtri: drink  
 ganu, Adj: broken  
 gača, N: father; father's younger  
 brother  
 gačal, N: honey  
 gačala, N: obscene song style  
 gačali, N: stinging tree  
 gangumbi, Vtr: fan  
 gara, N: thigh  
 garin, N: woomera  
 garuđa, N: trousers (Loan)  
 gačgala, N: mangrove tree  
 gawun, Adj: hot from fire  
 gayga, Vtr: hunt away

- gaymba, Vtr: find  
 gayngiri, N: scrub carpet snake  
 ga:, N: jaw  
 ga:bu, N: fish (generic)  
 ga:gi, N: cousin (Loan?)  
 ga:la, Adj: empty  
 ga:lba, Vint: be stuck  
 ga:lungal, Loc: in front  
 Dya:ni, Proper: Johnny (Tooth)  
     (Loan)  
 ga:ngi, Vint: sleep  
 ga:yaçi, N: horse  
 gidalgu, Time: tomorrow  
 gidu, N: chider hardwood tree  
 gigari, Vtri: put down  
 giguluruy, N: forest kingfisher  
 giga, N: cigarette (Loan)  
 gigubina, N: falling star  
 gilba, Vtr: dig  
 gilbay, Adj: know how to do  
     something  
 gilgan, N: hole  
 gilin, N: hot coals, charcoal  
 giliwuru, N: lungs  
 gilnga, Vtr: pour water on  
 gilwa, Vtr: kick, shove with knee  
 giman, N: firestick; species of  
     tree from which it is obtained  
 gimbara, N: small throwing stick  
 ginaman, N: boots, shoes  
 ginambaçan, N: cramp  
 ginaça, N: root  
 ginba, Vtri: spear in water  
 Dyimbilhay, Proper:  
     Alf Palmer  
 ginda, N: waterfall  
 ginda, Vtr: blaze tree  
 gindaçigan, N: grass tree  
 gindi, N: chest  
 gingibiri, Adj: big (of fish  
     only)  
 gingila, N: moreton bay ash/  
     messmate tree  
 gingara, Adj: shallow  
 gingu, Loc: down (hill??)  
 gingara, Vint: dream  
 gingili, N: singlet (Loan)  
 gingin, N: female genitalia  
 gingirigingiri, N: willy  
     wagtail  
 Dyirbal, Proper: name of  
     language  
 girbinga, Adj: very good-look-  
     ing (woman, girl)  
 giçibi, N: quail  
 giwural, N: pubic hair  
 giya, N: chair (Loan)  
 gi:~ gi:gi, Vint: sit down, live  
 gi:gi:, N: birds (generic)  
 gi:gin, N: swamp wallaby  
 gi:l, N: shining starling  
 gi:n, N: eyebrow  
 Dyubaru, Proper: Peter Wallace  
     (a Dyirbal man)  
 gubi, N: married couple  
 gubula, N: black pine  
 gubun, Adj: slow, slowly  
 gudu ~ gudulu, Adj: short  
 gula, N: striped ringtail possum  
 gulbamba, Vtr: bury (deeply)  
 gulbun, Adj: married  
 gulbungin, N: woman who claims her  
     promised husband  
 gulgaça, N: log  
 gulgil, N: bone  
 gulgin, N: scrub  
 gulngu, N: throat  
 gulu, N: buttocks  
 gulumbara, Adj: straight  
 gumba, Vtri, go in, enter, put in  
 gumubuçu, N: bullock  
 gungiri, N: tail  
 gunguru, Adj: (do) hard  
 gunguy, N: tendon, sinew, gristle  
 gunma, Vtr: squeeze, knead  
 gungaça, N: erection of penis  
 guçu, N: odour  
 gura, N: cloud, sky  
 gurala, N: flood  
 gurğa, Vtr: tie up, join on  
 Dyuçagay, Proper: Niagara Vale  
 Dyuçaminbal, Proper: John Tooth  
 guçbay, N: fishing rod and line  
 guçu, N: shoulder, upper arm, ridge  
 guwara, Vint: stand  
 gu:birin, N: small bark lizard  
 gu:ğaça, N: urine  
 gu:guru, N: navel  
 gu:ga, Vtri: swive, copulate with  
 gu:l, N: salt  
 gu:lnguçu, N: navel  
 gu:lu, Adj: black  
 Dyu:n, Proper: Herbert River at the  
     Herbert Gorge  
 gu:nga, Adj: black  
 gu:ngi, Vint: come out, arrive  
 gu:ra, Vtr: rub, wipe  
 gu:yi, Vint: feel around  
 gabağala, N: small bream  
 gaban, N: acacia tree; grub in it  
 gabangiça, N: dollar bird  
 gabay, N: walking stick  
 gabin, N: belly ache, diarrhoea

- gabugala, N: plains turkey  
 gabul, N: forest carpet snake  
 gadala, Adj: dry, shallow  
 gağan, N: blady grass  
 gağara, N: grey possum  
 gağaru, N: small striped fish  
 gağın, N; Adj: female; yamstick  
 gağira, N: zamia fern  
 gağiya, N: young girl  
 gağu, N: white tree ant and nest  
 gaga, Vint: go/come  
 gagal, Adj: hard  
 gagara, N: cane dilly-bag  
 gagul, N: white-breasted heron  
 gala, Int: try it!, try again!  
 galaga, Loc: up hill, up in sky  
 galambu, N: grub in gum tree  
 galbay, N: wattle  
 galgabara, N: she oak  
 galgay, N: spear (generic)  
 galmaça, Time: long time ago  
 galmbula, N: ironbark tree  
 galmuçu, N: yellow clay  
 galuğu, N: scrub mouse  
 galun, N: testicles  
 gama, N: song-style  
 gamanday, N: spear (generic)  
 gambara, N: cyclone  
 gambaça, N: body  
 gambay, N: big lawyer vine  
 gambi, N: clothes  
 gambila, N: bark blanket  
 gambunu, N: black duck  
 gamin, N: a lawyer vine  
 gamu, N: water  
 ganal, N: frog (generic)  
 ganbaymu, Adj: very old  
 ganda, Vtri: burn, make fire  
 gandil, N: jabiru, stork  
 gandu, N: dog  
 gani, Loc: up river  
 ganibara, N: dingo  
 ganğa, Adj; Vtr: stealing; steal  
 ganğaba, Vtri: spear  
 ganu, Time: later on today  
 ganumbul, Time: earlier on today  
 ganaligan, N: mythical devil woman  
 garay, Time: for a long time  
 garba, Adj: stupid  
 gargagarğa, N: prickle  
 gargal, N: arm, limb of tree  
 gargay, N: little chicken hawk  
 gargiçi, Adj: finished  
 garğda, N: spittle  
 gaçamgaçam, N: seagull  
 gaçamu, Adj: huge  
 gaçağgala, Adj: strong (man)
- gaçbu, Adj: three  
 gaçingi, Adj: cranky (Loan)  
 Gaçul, Proper: Cardwell (Loan)  
 gaçwun, N: green ant  
 gawal, N: a call  
 gawamba, Vint: vomit  
 gawan, N; Adj: anger; angry, savage  
 gawanan, N: mother's younger brother  
 gawangawan, N: rice  
 gawar, N: large intestine  
 gawarala, N: crane, ibis  
 gawu, Int: come on!  
 gawulgawul, N: wind  
 gawuy, Adj: quickly  
 gayambula, N: white cockatoo  
 gayba, Time: now  
 gayga, N: eye  
 gaygamali, N: (non-flesh) food  
 gayi, N: ground  
 gaymbiri, Adj: (do) everywhere  
 ga:guçu ~ ga:guçuğ, N: cockroach  
 (Loan)  
 ga:ma, Vtr: do (say) like this  
 ga:nda, Vint: crawl  
 ga:ça, N: centipede  
 giba, N: liver  
 gida, Vtr: poke with stick  
 gidul, Adj: cold  
 giğa, Adj: small  
 giğawulu, N: freshwater jewfish  
 Giğubal, Proper: Rosevale  
 gilap, N: old man  
 gilangan, N: old woman  
 gilğan, N: a bad cold  
 gilngiça, N: cassowary  
 gimbi, Vtr: (wind) blow  
 ginba, N: bark water container  
 giñdu, N: offspring, chick  
 Giramay, Proper: language name  
 girawan, N: scrub-hen  
 Girđul, Proper: Nora Boyd (name  
 given at birth)  
 girgingan, N: lady finger tree  
 giçugiçu, N: small intestine  
 giyabay, N: brown rock lizard  
 giyal, Adj: sweet, savage, poisonous  
 gi:ba, Vtri: scratch, scrape, shave  
 gi:baça, N: large fig tree; mark  
 on message stick 'one hundred'  
 gi:ga, Vtr: tell to do, let do  
 Gi:çigin, Proper: Romulus (an olden-  
 days Wargamay man)  
 gubana(n), N: father's father  
 gubaça, N: tree with red bark  
 gubi, gubimbulu, N: wise man  
 gubil, N: whistle  
 gubu, N: small leaf

- Gububagi, Proper: Arthur Wild  
gubur, N: sticky black native bee  
gubuça, N: magpie  
guda, Vtri: block, shut, close  
gudi, N: water rat  
guğagay, N: alligator  
guğila, N: short-nose bandicoot  
guğiyan, N: boil, pus  
guğulbara, N: whirlwind  
gugi, N: black flying fox  
gugigugi, N: butterfly, moth  
gugu, Time: meanwhile  
gugulu, N: stick for accompany-  
ing çanala-style songs  
gugun, N: older brother  
gugungal, Loc: behind  
guguwun, N: blue pigeon  
gulalbi, N: black cockatoo  
gulaçu, N: blue gum tree  
gulawun, N: Leichardt tree  
gulbila, Loc: south  
gulbiça, N: spear grass  
gulbu, Adj: foreign, strange  
gulgal, N: black pigeon  
gulgiçi, Adj: prettily painted  
gulguma, Vtr: bring in, muster  
guli, Int: exclamation when  
startled  
gulip, N: land of spirits in east  
gulmbal, N: good friend  
gulmbuça, N: woomera  
gulngu, N: nulla nulla  
gulubu, N: wind  
gumaçbari, Adj: a lot, many  
gumbay, N: mother  
gumbi, N: forest carpet snake  
gumbi, N: thumb  
gumbiyan, N: echidna, porcupine  
gumbuna(n), N: mother's mother  
gumbur, N: dew  
gumburu, N: fog, mist  
gumu, N: mosquito  
gumul, N: bark blanket  
guna, N: faeces, shit  
gunayngil, N: white cockatoo  
gunba, Vtri: cut into, cut open,  
cut a piece out  
gunbin, N: two trees rubbing  
together; noise they make  
gundabaça, N: fine weather  
gundambula, N: very dark (night)  
gundamu, N: freshwater garfish  
gundaŋga, Time: last night  
gundil, Adj: heavy  
gundulu, N: emu  
gunga, Adj: unripe, green (vege-  
tables), raw (meat), alive  
(person)  
gungari, Vtri: cut down, cut through  
gungul, N: non-flesh food  
gunugunu, N: sandfly  
gunğa, Vtri: bite  
gunji, N: top grinding stone  
gunjunu, N: thunderstorm  
gunin, Loc: people, goods and places  
from south; 'coast'  
gungaga, N: grey kookaburra  
gunğari, Loc: north  
guran, Adj: long  
gurga, N: back of neck  
gurgiga, N: ring-tail rat  
gurgila/gurgilayngan, N: section  
gurigala, N: eaglehawk  
gurmäl, N: blood, vein  
gurugan, N: bloodwood  
gurugu, N: grog (Loan)  
guçalal, N: grey kookaburra  
guçambal, N: blue mountain parrot  
guçbal, N: half-caste  
guçbala, N: wild banana tree  
guçgal, N: bee, sugarbag (generic)  
guçgaça, N: billy-can  
guçgay, N: big grey kangaroo  
guçguçu/guçguçayngan, N: section  
guçi, N: blood, vein  
guçil, N: storm bird  
guçna, N: mud  
guçugu, N: dove  
guçur, N: native companion, brołga  
guwa, Loc: west  
guyabay, Loc: other side of river  
guyan, N: quartz, sharp quartz knife  
guyğari, N: scrub turkey  
guygal, N: long-nose bandicoot  
guyguy, N: mosquito  
guyi, Vint: cry, sob, weep  
guyibara, N: curlew  
guyila, N: charcoal, flame  
guyma, Vtri: give birth to  
guymbi, N: eel (generic)  
guymbiça, N: cicatrices (tribal  
marks) and men who bear them  
guyngan, N: spirit of a dead woman;  
white woman  
guyngin, N: honey  
guyumulu, N: quandong  
gu:ba, Vtr: cover with water  
gu:ğa, Vtr: (water) washes away  
gu:gal, N: mud cod  
gu:gaça, N: black goanna  
gu:n, N: spirit of a dead man; white  
man; 'devil'; 'ghost'  
gu:naça, N: rubbish (e.g. in river)  
gu:naça, Time: very long time ago  
gu:çguçu, N: beetle (generic)

layn, N: fishing line (Loan)

mada, Adj: salty  
 mada, Vtri: paint  
 maḡal, N: cocky apple tree  
 maḡila, N: white clay  
 maḡuwargi, N: mate  
 maḡira, N: red clay  
 maḡu, N: arm, wing of bird  
 maḡul, N: work  
 mala, N: hand  
 malan, N: creek  
 malanbaḡa, N: right hand  
 mali, Adj: good  
 malugan, N: chicken snake  
 mamu, Time: by-and-by  
 manda, N: penis  
 mandi, N: hand  
 mangi, N: a lawyer vine  
 mani, N: money (Loan)  
 maḡabagay, Adj: ugly  
 maḡalmaḡal, Adj: stinking,  
     bitter, dirty  
 maḡaḡay, Adj: full up with food  
 maḡaḡa, N: big kangaroo  
 maḡa, N: flower  
 maḡu, N: mango (Loan)  
 maḡuḡu, N: big flying squirrel  
 maḡuḡu, N: mother's elder sister  
 mara, N: leaf  
 margara, N: youth ready for  
     initiation  
 margin, N: gun (Loan, from musket)  
 mari, Part: might be  
 marpa, Adj: wet  
 marḡa, Adj: sore; bitter, salty  
 maḡaḡa, N: cherry tree  
 maḡbal, N: fly  
 maḡbu, N: louse  
 maḡgun, Adj: grey  
 mawa, N: shrimp, prawn, lobster  
 maya, Int: no  
 mayay, N: (everyday style)  
     language  
 mayba, N: fire  
 maybaḡa, N: alligator  
 mayḡala, N: lightning  
 mayḡa, Vtri: tell  
 mayḡu, N: mango (Loan)  
 ma:ḡa, N: boss, 'God'  
 ma:ḡaya, N: bee's wax  
 ma:l, N: man  
 ma:ni, Vtri: hold in hand, hold  
     onto, catch hold of, catch, grab  
 ma:nḡa, N: fishing line, string  
 ma:nḡay, Adj: silly  
 midi, N: leech

midin, N: grey possum  
 miḡa, N: camp, house  
 miḡiri, Vint: wait  
 miḡu, N: brain  
 miḡulu, N: white man (Loan)  
 milara, N: ribs  
 milba, Vtr: show  
 milbir, N: slippery blue fig  
 milburu, Adj: straight  
 milḡun, N: type of cousin  
 milga, N: painted bark rainmaker  
 milgal, Adj: greedy  
 milmuḡu, Adj: spinning, fast  
 minba, V: hit with thrown stick etc  
 mindi, N: grass dilly-bag  
 mindi, N: corroboree ground  
 mudan, N: lump on body  
 mudiga, N: motor car (Loan)  
 muḡa, Vtri: eat  
 muḡi, N: semen  
 muḡuḡaḡa, N: mud crab  
 muḡuḡu, N: big locust  
 muḡal, N: head  
 muḡaḡu, N: fish net  
 muḡay, N: elbow  
 muḡul, N: knee  
 muḡulan, N: mother's elder brother  
 muḡunduru, N: hailstone  
 muḡuru, Adj: hard, strong  
 mulga, Adj: half-blind  
 mulḡaḡay, N: green ginger  
 mulḡaḡa, Adj: game, brave  
 mulḡun, N: backbone  
 mulin, N: lip, mouth, bird's beak  
 mulmbin, Adj: blunt  
 mulu, Loc: near, close up  
 munma, N: paperbark hornet  
 Munuḡgul, Proper: Younger Creek  
     (place in Giramay territory)  
 muḡara, Adj: by oneself, alone  
 muḡal, Adj: soft, weak  
 muḡu, Adj: naked  
 muḡi, Vint: blink  
 muḡinin, N: small black ant  
 muḡunmuḡun, N: chocolate bats  
 muḡan, N: mountain  
 muḡḡan, N: Herbert River ringtail  
     possum  
 muray, N: head hair  
 murgalḡan, N: seven sisters  
 murgin, N: son  
 muḡmbal, N: quandong  
 muwari, N: any big shady tree  
 muyma, N: boy  
 muymba, Vtr: extinguish fire/light  
 muyḡgul, N: oldest boy  
 muyḡgulḡan, N: oldest girl

muyu, N: bottom, arse  
 muyun, N: large blue kingfisher  
 mu:ba, N: stone fish  
 mu:guɽu, N: perch  
 mu:gil, N: freshwater black bream  
 mu:ngi, Vtr: make cold, make  
 shiver  
 mu:ɽa, Adj: hidden, out of sight  
 mu:ɽi, N: tree with small blue  
 fruit

naybu, N: knife (Loan)  
 nayi (plural: nayili), N: young  
 girl  
 nibal, N: coals, opium  
 nuba, N: bark water container  
 nugumba, Vint: vomit  
 nu:ba, Vtr: sharpen, grind

naba, Adj: ripe  
 nagaram, Adj: tiny  
 nagumbi, Vint: come  
 nalambuɽu, Adj: good  
 nalbay, N(Adj?): totemic  
 identification  
 nalmu, N: large nulla nulla  
 nalngirgan, Adj: pretty  
 (woman, girl)  
 namu, Time: for a short while  
 pandu, Int (or Adj?): I don't  
 know  
 paŋgal, Adj: heavy  
 paŋga, Vtri: rush in on, raid,  
 arrest  
 pa:ɽa, N: light (in distance)  
 nibu, N: mythical spider  
 nigin, N: finger-/toe-nail  
 nimbaɽa, N: body hair, fur  
 ninga, Vtr: stop, block  
 nirwaɽa, Time: tomorrow  
 niɽinara, N: maggot  
 nubi, N: (classifactory)  
 father-in-law  
 nugɽi, Vint: dance  
 nurbira, Vint: be ill, sick,  
 feverish  
 nurqu, N: hitting/bumping noise  
 nu:nɽa, Vtri: kiss

naba, Vtr: soak  
 Ngabila, Proper: a mountain  
 near Sheahan's farm (which is  
 where the Abergowrie road  
 crosses the Herbert River)  
 Ngabiɽbil, Proper: Herbert Vale  
 (Loan)  
 nadaymbi, Vint: come

naguba, N: Burdekin plum tree  
 nagul, Adj: N: deep; deep waterhole  
 nalma, Adj: one's own  
 nalmanara, N: light  
 nalu, N: fresh water  
 naluwa, N: black and white flying  
 squirrel  
 Ngalwagiri, Proper: Abergowrie  
 nama, N: shield handle  
 namɽi, Adj: hungry  
 namugay, N: toothache  
 namun, N: (female) breast  
 namuɽu, N: armpit  
 nanba, Vtri: follow  
 nangul, N: chin  
 nani, N: face  
 narala, Adj: dry, shallow  
 narinɽi, N: orange (Loan)  
 naru, Part: don't  
 narɽi, N: country (generic)  
 narɽun, N: chin  
 narɽi, Vtr: answer  
 nayaba, N: vine used as fish poison  
 naygina(n), N: mother's father  
 nayi, Int: yes  
 nayi, N; Adj: voice; thirsty  
 nayinara, N: neck  
 na:, Part: not  
 na:ba, N: bottom of ribs  
 na:ra, Vtri: hear, listen  
 na:ɽa, Part: can't do (despite  
 trying)  
 na:ɽamba, Vtri: try to do (but fail)  
 niɽɽima, Vtri: tickle (in sex play)  
 niɽɽiniɽi, N: 'nymphomaniac'  
 niyanma, Vtr: ask  
 niyara, N: ribs  
 niyawuda, Vtr: grab with hand  
 ni:ɽa, Vtri: tie up  
 nudan, N: large black snake  
 nugɽu, Adj: pretending, lying,  
 malingering  
 nugɽi, Adj: stinking, bad smell  
 nugɽu, N: mopoke owl  
 nulan, N: stone tomahawk  
 nulganga, Time: yesterday  
 nulmbuɽu, N: woman  
 nulmuɽu, N/Time: darkness, night  
 nulnɽiɽin, Adj: wet  
 nulniri, N: lots of noise  
 nulubuɽu, N: stump  
 numbulu, N: black snake with red  
 tail  
 nunda, Vtri: see, look  
 nuni, Vint: search for, hunt for  
 nunin, N: reflection, shadow,  
 spirit

- Nguṅuṅu, Proper: Nora Boyd (name given later in life)  
 ṅuri, Part: in turn/retribution  
 ṅuṅgi, N: a ginger species  
 ṅuṅmbun, N: tapping noise  
 ṅuṅu, N: nose  
 ṅu:ḡa, Vtri: test, taste, try out  
 ṅu:ma, Vtri: feel  
 ṅu:ṅu, N: heel
- ḡaba, N: forked stick, fork of tree  
 ḡabi, Adj: (do) quickly  
 ḡaybul, N: rifle (Loan)  
 ḡaygi, N: old clothes (Loan, prob. from rag)  
 ḡimbi, N: forehead  
 ḡubu, N: rope (Loan)  
 ḡugulu, Time: the other day OR yesterday  
 ḡulgu, N: heart  
 ḡulmbura, N: ashes  
 ḡuḡḡa, Vtr: suck  
 ḡuyu, Adj: playing around
- waḡa, N: crow  
 waḡa, N: mud  
 waḡan, N: small native bee  
 waḡangara, N: crow  
 waḡiri, Vtr: overturn, spill, pour  
 waga, N: shin(bone) W, thigh B  
 wagaḡala, N: yellow flying fox  
 Wagaḡaba, Proper: Long Pocket  
 wagun, N: fire, wood, tree  
 waguṅ, N: sea, saltwater  
 wala, Vint: arise, go up  
 walam, N: tick  
 walguwuṅu, N: poisonous brown snake  
 walmbari, Vint: (dog) barks  
 walmbi, Vtri: lift up, pick up, waken  
 walṅan, N: a river tea-tree  
 Walṅanbara, Proper: Peacock Siding (up Stone River)  
 walṅga, N: air in lungs  
 walṅga, Vint: float on water  
 walṅgarpin, N: eldest child in family  
 wambuy, N: fire, wood, tree  
 wana, Vtr: leave (it) be  
 wangawa, N: bird like pigeon  
 wanuy, N: round yam  
 waṅa, N: black bean  
 waṅal, N: boomerang  
 wangu, N: small ganna
- wanguri, Vint: kneel down, squat  
 wara, Part: inappropriate S or O NP  
 warḡal, Adj: sharp  
 warḡan, N: raft  
 Wargamay, Proper: language name  
 wargayḡa, N: spear with stingaree sting  
 wargin, N: boomerang  
 wargubala, N: left hand  
 warguy, N: left hand  
 warṅay, N: fish spear  
 warumbil, N: whistle  
 warup, N: sand  
 waḡabi, N: dog  
 waḡḡumba, Vtr: wash  
 waḡḡala, N: black wallaby  
 waḡḡgay, N: short fishing rod and line  
 waḡuwagu, Adj: crooked  
 waybala, N: white man (Loan)  
 wayili, N: red bream  
 waymin, N: (classificatory) mother-in-law  
 wayu, Adj: turning into  
 wa:ba, Vint: look up (for sugarbag only)  
 wa:ḡi, Vint: laugh  
 wa:ḡan, N: crow  
 wa:nda, Vtr: rouse on, tell on  
 wiḡiyan, N: white woman  
 wiṅḡi, N: snake (generic)  
 wiṅḡin, Adj: sore  
 wira, N: black fig  
 wiran, N: blood  
 wirga, N: small nulla nulla  
 wiri, N: bird's nest  
 wiru, N: husband  
 wiḡba, N: little stick  
 wiḡḡu, N: frilly lizard  
 wiḡḡa, Vint: bathe, bogey  
 wi:, N: sun  
 wi:ḡi, wi:gina, Adj: no good  
 wubiri, N: English bee  
 wuda, Vtr: take off  
 wudil, Adj: asleep  
 wudu, N: nose  
 wudugalgugu, N: bird like ibis  
 wuguru/wugurayṅan: section  
 wugar, Adj; N: sleepy; sleepiness  
 wugi, Vtr: give  
 wugu, N: breastbone  
 wula, Vint: die  
 wulbu, N: pheasant  
 wulgamu, N: green scrub pigeon  
 wulgu, N: bark canoe  
 wulguḡu, N: Torres Strait pigeon  
 wulman, N: old man (Loan)



- wuma, N: shade  
wumba, N: belly, stomach, bowels, guts  
wumbugiri, N: star  
wunduy, N: freshwater shark  
wungu/wungurayngan, N: section  
wupan, Adj: lustful, larrikin  
wuṅa, Vint: go walkabout  
wuṅa, Vtr: chase  
wurbi, Adj: big  
wuṅamba, N: scrub turkey  
wuṅigala, N: barramundi  
wuyga, N: snake skin (after having been shed)  
wuygul, N: whip snake  
wuymbi, Vtr: lick  
wu:, N: war (Loan)  
wu:, N: hoe (Loan)
- yabu, N: mother and mother's younger sister  
yabuḡu, N: son  
yabulga, N: morning star  
yabun, N: big camp  
yaga, N: two  
yagabayan, N: large gum tree  
yagal, N: pandanus  
yalbaṅ, N: flat ground  
yalgay, N: road  
yalṅgabaṅa, Adj: a very large number  
yalngay, N: a single person  
yaluga - although included in text 6.13 this is a Giramay form (Dixon 1972:259)  
yamani, N: rainbow  
Yamani, Proper: Yamanie Creek  
yamaṅa, N: man  
yanbaṅa, N: kangaroo spear  
yaṅal, yaṅabaṅa, yaṅandari, N: long, tall  
yaṅabula, N: long eel species  
yaṅgal, N: freshwater black bream  
yaraman, N: horse (Loan)  
yawuyṅbaṅi ~ yawuyṅbaṅi, N: big grey kangaroo
- yayimbali, Vint: play about  
ya:, N: top of tree  
yibi, N: child  
yigara, N: crayfish  
yigir, N: disease like smallpox  
yilgan, N: moon  
yimba, Vtr: put on (clothes)  
yimbur, N: pelican  
yimiri, Vint: feel glad, be glad  
yinbi, Vint: fly  
yiṅgin, N: (cane train) engine (Loan)  
Yiṅam, Proper: Ingham (Loan)  
yiṅaṅi, N; Adj: cave; hollow  
yira, N: tooth  
yirawuṅu, N: forest carpet snake  
yirgal, Adj: itchy  
yirgaṅgi, Loc: people, goods and places from north  
yirgingara, N: star (generic)  
yiribara, N: blue gum tree  
yiringila, N: horse fly  
yi:l, N: name  
yubay, Adj: be away  
yubaybi, Vint: run away  
yubayma, Vtr: steal, take  
yudi, N: long-nosed frog  
yugan, N: rain  
yugara, Vint: swim (from A to B)  
yulba, N: end of branch  
yulgu, N: belly, stomach, bowels, yulguguy, Loc: inside  
yumbuṅu, N: late stage of tadpole  
yumuru, N: son (said by mother)  
yungun, N: swamp  
yungga, N: skin  
yungubala, N: copper-headed python  
yungul, Adj: one  
yunguṅa, Adj: another one  
yurmay, Time: do all the time  
yuṅalbara, N: big river  
yuṅuyṅbi, N: river-bank (in song)  
yumba, Vtri: bury (to shallow depth)  
yu:nu, Loc: down (river?)  
yu:ṅa, Vtr: swallow  
yu:ṅi, Vint: grow, sprout

VOCABULARY BY SEMANTIC FIELDS

Dialect attestation of lexemes is shown to the left of each entry. There are three columns (see 1.2 above):

- column 1 W - occurs in Wargamay proper  
column 2 B - occurs in Halifax Biyay  
column 3 H - occurs in Hinchinbrook Biyay

A dash, -, in a column indicates that informants stated this item did *not* occur in that dialect.

All lexemes included here (for the W column) have been fully checked out with at least two speakers; this has always included at least one, and usually both, of John Tooth and Lambert Cocky. Words in B which differ from those in W were generally checked on two occasions with Nora Boyd. Information on H comes only from old sources - see 1.6.

In a small number of cases different informants gave rather different meanings for a form. These are noted below, using abbreviations.

JT - John Tooth	AP - Alf Palmer
LC - Lambert Cocky	JJ - Jimmy Johnson
NB - Nora Boyd	

Several hundred words that were at one time suggested as Wargamay were eliminated from the final vocabulary since corroboration could not be obtained of this. Most of them are in fact from Giramay, Waruṅu or Nyawaygi although a number are not attested for any surrounding language (some of these are probably from the H dialect, for which no speakers remain).

A few words for which full corroboration could not be obtained are included here, preceded by a star to indicate that they could not be checked as fully as the remainder of the vocabulary. These are:

(i) Obtained from LC, and checked with him, but not checked with any other speaker (some were given by LC in 1980 and I did not have the opportunity to revisit JT after that, to obtain his corroboration): bayṅgaṅa, bumba, gaṅṅulan, ga:ngi, ḡnambaṅaṅ, ḡngili, gargaṅga, guli, muwari, ḡiyaṅma, ḡuḡiri, wa:nda, waḡḡumba, wiran, yayimbali.

(ii) Given by JT and checked with him as definitely W items, but could not be obtained from LC: ḡagabaṅa, galmbula, maḡal, yabun, yimba.

(iii) Given by NB but could not be checked with her before her death (the identification of the rhotic is uncertain in each case, at the least): biṅgira, daṅa, ḡuḡḡiriṅ (NB alternated between this form and ḡuḡḡiriṅ), warumbil.

(iv) ḡulmbuṅa 'woomera' was given by Arthur Wild and recognized by LC but not JT; but when asked on a later occasion LC did not acknowledge this item. yaḡbaṅ was in the material recorded by La Mont West Jr from Jimmy Johnson. LC recognised it but JT did not. However, on a later date LC would not admit it as a W form.

There must without doubt be further mistakes, of transcription and glossing, in a project of this nature, despite the care that has been taken in checking.

Abbreviations int, tri and tr for verbs correspond to Vint, Vtri and Vtr above; they are explained in the introductory note to the alphabetical vocabulary.

#### NOUNS

A - *Body parts*  
 W- mugal, head  
 -BH buyu, head  
 W miḡu, brain

WB muray, head hair  
 W birṅga ~ birṅṅanbirṅṅan, grey hair, grey-haired person  
 W ḡimbi, forehead  
 W H ḡapi, face

- WBH gayga, eye  
 WB -gaygabağa, blind  
 W -gaygabala, blind  
 W- buyin, eyebrow  
 -B gi:n, eyebrow  
 W- wudu, nose, point, headland,  
     end of penis, pencil  
 -BH ruçu, nose, etc.  
 WBH bina, ear  
 WB -binabağa, deaf  
 W-H gagal, jaw  
 -B ga:, jaw  
 W- ngangul, chin  
 -B narçun, chin  
 WBH mulin, lip, mouth, bird's  
     beak  
 WB galbağa, beard  
 WBH yira, teeth, seed, point  
     of spear  
 W namugay, toothache  
 WBH galan, tongue  
 W \*galngulan, tongue  
 WBH garğa, spittle  
 W nayilngara, neck  
 WBH gulngu, throat  
 W gurga, back of neck  
 W nayi, voice (also Adj,  
     thirsty)  
 W binda, shoulder  
 W guçu, shoulder, upper arm,  
     ridge  
 WB namuçu, armpit  
 WB mugay, elbow  
 W bangal, upper arm (JT, JJ);  
     shoulder along to neck (LC)  
 W H magu, arm, wing of bird  
 W gargal, arm, limb of tree  
 WB mala, hand  
 --H mandi, hand  
 W malanbağa, right hand  
 W- wargubala, left hand  
 -B warguy, left hand  
 WB gumbi, thumb  
 W H nigin, fingernail, toenail,  
     claw of bird - see (21)  
 WBH namun, breast  
 W gindi, chest  
 W guymbiça, cicatrices  
 WBH wugu, breastbone  
 W- niyağa, ribs  
 -B milara, ribs  
 W na:ba, bottom of ribs  
 W H bilu, hip(bone)  
 -B bilmbu, hip, side, flank  
 W- yulgu, belly, stomach, bowels  
     guts (and front of boomerang,  
     woomera)  
 W -yulgugiri, full of food  
 -BH wumba, belly, etc (as yulgu)  
 W- gu:lnguçu, navel  
 -B gu:guru, navel  
 WB birugay, umbilical cord  
 W gawar, large intestine, 'tripe'  
     (and 'big paunch')  
 W girugigü, small intestine  
 W çulgu, heart  
 W giba, liver  
 B giliwuçu, lungs  
 W walnga, air in lungs  
 W mulgun, backbone (and back of  
     boomerang, woomera)  
 WB gulu, buttocks  
 WB muyu, bottom, arse  
 W H gara, thigh  
 W- bungu, knee  
 -BH mugul, knee  
 WB waga, shin(bone) W; thigh B  
 WBH bingar, foot  
 WB ru:çu, heel  
 W manda, penis  
 W çungaga, erection of penis  
     e.g. manda çungarambigi  
 W H galun, testicles  
 W muçi, semen  
 W giwural, pubic hair  
 W bindi, female genitalia (pre-  
     ferred term in W)  
 W çinggin, female genitalia  
     (Giramay term, also used in W)  
 WBH guna, faeces, shit  
 W buçi, fart, e.g. nayba  
     buçimbigi 'I farted'  
 W gabin, belly-ache, diarrhoea  
 W gu:gağa, urine  
 W gambağa, body  
 W pimbağa, body-hair, fur  
 WBH yunga, skin  
 WBH gulgil, bone  
 W- gurmäl, blood, vein  
 -BH guçi, blood, vein  
 W \*wiran, blood  
 WB çunguy, tendon, sinew, gristle  
 W balbala, fat (also used to  
     describe fat person)  
 W gagari, fat (e.g. kidney fat)  
 WB baniça, sweat, hot sun (making  
     one sweat), summertime  
 W gilnan, a bad cold  
 W- burubay, boil, pus  
 -B guçiyän, boil, pus  
 -B budam, matter inside a blister  
 W yigir, a disease like smallpox  
     that makes one scratch (per-  
     haps Jiggers)  
 W- balban, a lump on body (and  
     warts on bark of tree)

W -balbanbalban, lumpy all over  
body  
-B mudan, lumps on body  
W \*ginambaḡan, cramp (+ body  
part)  
WB ḡungiri, tail (on animal or  
fish)  
W \*gargagarga, any prickle (e.g.  
echidna spike, or lawyer  
cane prickle)

*B - Human classification*

W bama, male (human or animal)  
W ḡaḡin, female (human or animal)  
WBH ma:l, (Aboriginal) man  
W yamaḡa, (Aboriginal) man [may  
be preferred for referring to  
a group of men]  
WBH ḡulmbuḡu, (Aboriginal) woman  
W ḡinḡu, offspring (human child  
or animal chick)  
WB daman, new-born (human) baby  
W ḡaḡa, baby  
WBH yibi, child (especially re-  
duplicated, yibiyibi,  
children)  
WB walḡarḡin, eldest child in  
family  
WB muyma, boy  
W margara, teenage boy (of age  
for initiation but not yet  
initiated)  
W ḡuymbiḡa, cicatrices (tribal  
marks) and man with them  
W-H ḡilan, old man  
W -ḡilangan, old woman  
-B bulbu, old person  
W wulman, old man (Loan)  
W ḡaḡiya, young girl  
-B nayi (pl nayili), young girl  
WBH ḡambi, old woman (especially  
reduplicated to refer to  
group of old women,  
ḡambigambi)  
W yaḡḡay, single person (spins-  
ter/bachelor, or widow/  
widower)  
W ḡubi, wise man  
W ḡubimbulu, very wise man  
WB maḡuwargi, mate, friend  
WB ḡulmbal, mate, friend  
WB ḡupin, reflection, shadow,  
spirit (semi-corporeal)  
W ḡu:n, spirit of a dead man  
(non-corporeal); also  
white man, 'ghost', 'devil'  
W waybala, white man (Loan)

W migulu, white man (Loan)  
W ḡuyḡan, spirit of a dead wo-  
man (these are believed to  
exist as birds); white  
woman  
WBH wiḡiyān, white woman  
W ḡuḡbal(ḡuḡbal), half-caste  
W ḡaḡaligan, mythical 'devil  
woman', invoked to frighten  
people not to stray too far  
W nibu, mythical spider e.g.  
nibunḡu ḡina mani:lma  
'Nyibu might catch you (and  
make you sick)', and (84)  
W buliman, policeman (Loan)  
W ma:ḡa, boss (also used by LC  
for God, described as 'big  
boss in heaven')  
W drayga, (black) tracker (Loan)

*C - Kinship*

W mugulan, mother's elder brother  
W ḡawanan, mother's younger  
brother  
W maḡuḡu, mother's elder sister  
WB yabu, mother, mother's younger  
sister  
H ḡumbay (?), mother and younger  
sister  
W bimū, father's elder brother  
WB ḡaḡa, father, father's  
younger brother  
WB bimulan, father's sister  
(elder or younger)  
W- ḡumbunan, mother's mother  
-B ḡumbuna, mother's mother  
W- ḡayḡinan, mother's father  
-B ḡayḡina, mother's father  
W- babilan, father's mother  
-B babi, father's mother  
W- ḡubanan, father's father  
-B ḡubana, father's father  
WBH ḡandi, elder sister  
W ḡalmbuyan, younger sister  
W H ḡugun, elder brother  
WBH ḡalmbu, younger brother  
Above four terms also cover  
father's brother's and  
mother's sister's children  
WB ḡamugan, daughter  
W murgin, son  
-B yabuḡu, son  
W yumuru, 'son' (said by mother  
to avoid using his name)  
W muyḡul, eldest boy  
W -muyḡulgan, eldest girl  
W balḡin, mother's brother's son;

father's sister's son  
 W milgun, mother's brother's  
 daughter, etc.  
 W ga:gi, cousin (Loan?)  
 WBH bulgu, wife  
 WB wiru, husband  
 W gubi, man and wife  
 W waymin, (classificatory)  
 mother-in-law  
 W nubi, (classificatory)  
 father-in-law

*Ca - Sections and  
 Identification*

W H gurgila/gurgilayngan, wuguru/  
 wugurayngan, wungu/  
 wungurayngan/, guruguru/  
 gurugurayngan, male/female  
 section labels - see 1.4  
 W nalbay, identification with  
 totem or country e.g.  
 gungunu nalbay naygu 'the  
 thunderstorm is my totem'

*D - Mammals*

WB gumbiyan, echidna,  
 porcupine  
 W gurgida, ring-tail rat  
 WB bargil, brown rat and/or  
 house mouse  
 W galugu, scrub mouse  
 WB gudi, water rat  
 WB gugila, short-nose  
 bandicoot  
 W guygal, long-nose  
 bandicoot  
 W- gagara, grey possum  
 -BH midin, grey possum  
 W gula, striped ringtail possum  
 (Pseudocheirus archeri)  
 W mungan, Herbert River ringtail  
 possum (Pseudocheirus  
 herbertensis)  
 W buçugu, a possum species  
 WB galuwa, black and white  
 flying squirrel (Dacty-  
 lopsila trivirgata)  
 W mangguçu, large flying  
 squirrel  
 W bulngari, tree-climbing  
 kangaroo (Dendrolagus  
 lumholtzi)  
 W mañaça, large kangaroo  
 W yawuyñbari ~ yawuymbaçi,  
 big grey kangaroo (male)  
 W gurçgay, big grey kangaroo  
 (female)

W gabali, whip-tail kangaroo  
 W waçugala, black wallaby  
 W gi:gin, swamp wallaby  
 W bulgulbay, scrub wallaby  
 W- bawuçu, rock wallaby  
 -B bungil, rock wallaby  
 WB baçnan, kangaroo rat  
 WB gugı, black flying fox  
 W wagaçala, yellow flying fox  
 WB mununmunun, chocolate bat  
 WB bada, dog  
 W waçabi, dog  
 W ganibara, dingo  
 H gandu, dog  
 W yaraman, horse (Loan)  
 W ga:yaçi, horse  
 WB gumubuçu, bullock, beef

*E - Reptiles and Amphibians*

W H gugagay, alligator ('main  
 Wargamay word')  
 W maybaça, alligator (alternative  
 term, less preferred)  
 WBH bağigal, saltwater turtle  
 WB bağuru, freshwater turtle with  
 round belly  
 W bilil, freshwater turtle with  
 flat belly and long rough neck  
 W bugawu, long-neck turtle (not  
 good to eat)  
 WB bangara, blue-tongue lizard  
 W giyabay, brown rock lizard  
 WB wiççu, frilled lizard  
 W buyñgul, small tree lizard  
 WB gu:birin, small bark lizard  
 WB gu:gaça, black goanna  
 WB çagan, sand goanna  
 W baçal, water goanna  
 W wangu, small goanna  
 WBH wiñgi, snake (generic)  
 (preferred Wargamay term)  
 W gambal, snake (generic) (said to  
 be a Giramay term, also used  
 in Wargamay)  
 W wuyga, snake skin (after being  
 shed)  
 WB gabul, forest carpet snake  
 (female)  
 W- yirawuçu, forest carpet snake  
 (male)  
 -B gumbi, forest carpet snake (male)  
 W gayngiri, large tree-climbing  
 scrub carpet snake (also used  
 as generic term for any carpet  
 snake)  
 WB malugan, chicken snake (edible)  
 W bima, death adder

- WB nudan, large black snake  
W numbulu, small poisonous black snake with red tail  
W wuygul, whip snake  
W walguwuꞑu, poisonous brown snake  
W burgapu, big, lazy brown snake (also said to be tiger snake; taipan)  
W yungubala, copper-headed python  
WB ganal, frog (generic)  
W yudi, long-nosed frog (used as bait for barramundi)  
WB yumbuꞑu, late stage of tadpole
- F - Birds*  
W gi:gi:, bird (generic)  
WBH bambu, egg  
W wiri, bird's nest  
-B \*daꞑa, bird's wing  
WB giŋgiꞑa, cassowary  
W H gundulu, emu  
W guꞑur, native companion, brolga  
W gawarala, crane, ibis  
W wudugaŋguꞑu, bird like ibis  
W gandil, jabiru, stork  
W gagul, brown heron with white chest  
-B yimbur, pelican  
W guyibara, curlew  
W gabugala, plains turkey  
W- wuꞑamba, scrub turkey  
WB guydari, scrub turkey  
WB girawan, scrub hen  
W guꞑugu, dove  
WB guguwuꞑ, blue pigeon  
W gulgal, black flock pigeon  
W wulgamu, green scrub pigeon  
WB wulguꞑu, Torres Strait pigeon  
W wangawa, a bird like a pigeon, which scratches around on the ground  
WB ŋugu, mopoke owl  
W bulibuli, night owl  
W bi:lbi:l, pee wee  
W gubuꞑa, magpie  
W- waꞑa, crow  
-B- waꞑangara, crow  
WB -waꞑaꞑa, big mob of crows  
--H wa:gaꞑ, crow  
W-H guꞑgaga, grey jackass, kookaburra  
B guꞑalal, grey jackass, kookaburra  
W muyun, large blue kingfisher  
W giꞑuluruy, small forest kingfisher
- WB giŋgirigiŋgiri, willy wagtail  
W-H gayambula, white cockatoo  
-B gunayngil, white cockatoo  
W gulalbi, black cockatoo  
W binbiꞑal, king parrot  
W guꞑambal, blue mountain parrot  
W bi:bal, small needle-tail budgerigar, eats bees  
W biranbiran, a needle-tail bee bird  
W giꞑiꞑibi, quail  
W gabangiꞑa, dollar bird  
W baꝼiŋꝼila, spangled drongo  
W gi:l, shining starling  
W -gi:lgi:l, flock of these  
W dagu, carpenter bird, hammer bird  
W guꝼil, storm bird  
WB gurigala, eagle hawk  
W gargay, small chicken hawk  
W gambunu, black duck  
W bigilbara, whistling duck  
W- bubunba, pheasant  
-B bubun, pheasant  
-B wulbu, pheasant  
W gaꝼamgaꝼam, sea gull
- G - Fishes, etc*  
WBH ga:bu, fish (generic)  
W giŋgibiri, big (used only of fish)  
WB giꝼawulu, freshwater jewfish (catfish)  
WB gu:gal, mud cod  
W bu:giya, freshwater mullet  
W gaꝼaꝼu, small white fish with black stripes, used as bait for catching barramundi  
W- mu:giŋ, freshwater black bream  
-B yaŋgal, freshwater black bream  
W wayili, freshwater red bream  
W gabaꝼgala, smaller bream  
W mu:ꝼuru, perch  
W wuꝼiꝼgala, barramundi  
WB mu:ba, stone fish  
W gundamu, freshwater garfish  
W balbirigan, large saltwater shark  
W wunduꝼy, freshwater shark  
W balangal, dugong  
WB guymbi, eel (generic)  
W yaŋabula, a species of long eel  
W muꝼuꝼgaꝼa, mud crab  
WBH yigara, crayfish, yabby  
W bulgan, shrimp, prawn, lobster (preferred Wargamay term)  
WB mawa, shrimp, prawn, lobster

H - *Insects, etc*

- W buḡḡan, white ant (and its antbed)  
 WB gaḡu, white ant on tree (and antbed)  
 WB dumbulan, sugar ant (JT), big red ant (LC), bull ant (AP)  
 W muninip, little biting black ant  
 W gaḡwun, green ant (makes a nest on a tree like a hornet)  
 B bumaga, wasp  
 W- munma, paperbark hornet (makes nest in gum tree)  
 WB ga:ḡa, centipede  
 W niḡinara, maggot  
 WBH maḡbal, (common) fly  
 W bunul, march fly  
 W yirinḡila, horse-fly  
 W bulal, firefly  
 W- gumu, mosquito  
 -BH guyguy, mosquito  
 -B gunugunu, sandfly  
 W gugigugi, butterfly, moth  
 WB ḡambun, grub  
 WB gaban, grub in acacia tree  
 W ḡalambu, grub in gum tree  
 WB gu:ḡḡuḡu, beetle (generic), including cane beetle  
 -B bini, black beetle (as on lamp) NOTE that NB gave these as two distinct designations in B, but LC said that gini was the B equivalent of Wargamay gu:ḡḡuḡu  
 WB ga:ḡuḡu(ḡ), cockroach (Loan), LC included a final ḡ but NB did not  
 WB midi, leech  
 WB dubi, earthworm  
 WB bundip, grasshopper  
 WB muḡuḡu, large locust  
 WB maḡbu, louse  
 WB walam, tick  
 WB buli, flea  
 W ḡuḡḡal, bee, sugarbag (generic)  
 WB ḡubur, large black savage sticky native bee  
 W waḡan, small yellow native bee with white behind  
 WB bayal, a yellow native bee  
 WB wubiri, English bee  
 W ḡaḡal, honey  
 W guyḡin, honey

- W ma:ḡaya, bee's wax  
 W daḡḡal, spider, web

 I - *Language, ceremony, noise*

- WB mayay, language (everyday style)  
 W -mayay(m)bi, Vint, talk  
 W ḡalḡuy, avoidance style  
 W ḡawal, a call  
 W -ḡawali, Vint, call out  
 W yi:l name  
 W ḡama, song-style  
 W buḡan, song-style borrowed by Wargamaygan  
 W ḡaḡala, song style (predominantly obscene)  
 W- ḡalḡḡiḡa, moaning funeral chant recounting deeds of dead person  
 WB buḡun, drum used by women (and noise)  
 W balmbuḡa, as buḡun  
 W wu:, war (Loan)  
 W bu:ḡḡuray, a snore; see (5)  
 W -bu:ḡḡuray(m)bi, Vint, snore; see (183)  
 W ḡubil, a whistle  
 W -ḡubili, Vint, whistle  
 -B \*warumbil, whistle  
 W \*ḡulḡiri, lots of noise (e.g. cattle lowing, or from people)  
 WB ḡurḡu, a noise e.g. hitting a drum, breaking a stick, bumping into something  
 W ḡuḡmbun, a tapping noise e.g. tapping feet  
 W ḡunbin, two trees rubbing together, and the noise they make

 J - *Artefacts*

- WBH wargin, boomerang (the 'best' Wargamay word)  
 W waḡal, boomerang  
 W birbubirbu, throwing implement made of two crossed sticks  
 W balḡira, as birbubirbu [balḡira may possibly be an adjective 'crossed']  
 WB ḡimbara, small throwing stick, 2-3' long, big head and tapering body, mostly a toy  
 WB ḡambara, larger nulla nulla (throwing stick), for fighting  
 W wirḡa, small nulla nulla, a little bigger than ḡimbara,

- mostly used to throw up into tree to knock fruit down
- WB gulngu, a nulla nulla
- WB palmu, large nulla nulla, 5-6' in length with big head, used by women in fighting
- B gagin, yamstick
- W gabay, walking stick
- W gugulu, stick for accompaniment in gajala song-style
- W- bangay, spear (generic)
- B gamanday, spear (generic)
- H galgay, spear (generic)
- W galun, short spear with hook, used for fighting
- W yanbaça, long spear, used for hunting kangaroos
- W wargayça, prickly spear, with stingaree sting
- W bilun, hook spear
- W warŋay, fish spear
- W ɟarin, (straight) woomera
- B bangila, (straight) woomera
- W \*gulmbuça, (straight) woomera
- WB baguçu, sword
- WBH bigin, shield
- W ɟama, shield handle
- W dumbul, bump at reverse of handle on shield
- WB ɟulan, stone tomahawk
- B gamiya, stone tomahawk
- WB baçgu, English axe
- W guyan, quartz, sharp knife made from quartz
- W naybu, knife (Loan)
- W bayil, file (Loan)
- W wu:, hoe (Loan)
- W gunḡi, (top) grinding stone
- W giman, firestick
- W mugaçu, fish net
- W ma:ɲa, fishing line, string
- W guçbay, fishing rod (about 4' long) and line
- W waçugay, fishing rod (about 1' long) and line
- W layn, fishing line (Loan)
- B çubu, rope (Loan)
- WB wulgu, bark canoe
- W wargan, raft
- WB gagara, cane dilly-bag
- W mindi, grass dilly-bag
- W gangu, smaller grass dilly-bag (used for carrying valuables around); kangaroo pouch
- W nuba, bark water container
- WB ginba, bark water container
- W ma:ɟaya, bee's wax, used for sealing nuba/ginba
- W bilga, pitch/gum from grass tree, used for sealing
- W guçgaça, billy can
- W bandaça, bottle
- W balbay, bottle
- W bundurun, English bag
- W baygi, bag (Loan)
- W bagir, basket (Loan)
- W bagiçi, box, trunk (Loan, prob. from baggage)
- WB gambi, clothes
- W gambila, bark blanket
- B gumul, blanket from stinging tree bark
- W balgubalgu, hat
- B çaygi, old clothes (Loan, prob. from rag)
- W ginaman, boot, shoe
- W ɟaruça, trousers (Loan)
- W \*ɟingili, singlet (Loan)
- WB milga, water-maker: piece of painted bark (later, iron) placed in the submerged root of a tree just below water level. See Lumholtz and Banfield references given on p.104-5 above.
- W buyana, white feather from chest of white cockatoo (corroboree decoration)
- W mani, money (Loan)
- bari 'stone' also used; and biba 'paper' for paper money
- B bağuru, money (probably a yaraman-type loan)
- W baybu, pipe (Loan)
- W çaybul, rifle (Loan)
- W margin, gun (Loan, from musket)
- W mudiga, motor car (Loan)
- W giya, chair (Loan)
- W yinḡin, (cane train) engine (Loan)
- K - Food, fire, water*
- W H galguçu, meat
- WB gungul, non-flesh food i.e. fruit, vegetables, honey
- W gaygamali, (non-flesh) food
- W ɟu:l, salt (Loan)
- W gawangawan, rice
- WB- wagun, fire, tree, wood
- W mayba, fire (less-used alternative to wagun)
- H wambuy, fire, tree, wood
- WB guyila, charcoal (Lumholtz: flame)



W bugan, big bush fire or big grass fire  
 W gilin, hot coals, charcoal  
 WB nibal, coals, opium  
 WB çulmbura, ashes  
 WBH bunu, smoke  
 W ƚalmangara, light, e.g. lighted torch  
 W -ƚalmangarama, Vtr, make a light  
 W na:ça, light (in distance)  
 W giga, cigarette (Loan)  
 WB ƚalu, (fresh) water  
 --H gamu, (fresh) water  
 W wagun, sea, salt water  
 H banƚin, sea, salt water  
 W yuçalbara, big river  
 WB malan, creek  
 W biyu, small creek, gully  
 W gurala, big flood  
 W ƚinda, waterfall  
 W yungun, swamp  
 W ƚaƚƚan, froth (on waterfall or gully)  
 W gurugu, grog (Loan)  
 W biya, beer (Loan)  
 W di:, tea (Loan)

*L - Celestial, weather*  
 WB wi:, sun (sometimes pronounced [wui])  
 W- balanu, moon, month  
 -B balan, moon, month  
 --H yilgan, moon, month  
 W yirƚingara, star (generic)  
 WB wumbugiri, star  
 W yabulga, morning star  
 WB murgalƚan, seven sisters  
 WB buya, shooting star  
 W ƚigubina, falling star (mythical person 'ugly old bugger')  
 W ƚulmuçu, dark, darkness, night  
 W gundambula, very dark (night)  
 W biligi, daybreak, early in morning  
 W gundabaça, fine weather  
 W baniça, summertime, hot sun, sweat  
 W birƚibaça, wintertime  
 WB wuma, shade  
 W H yamani, rainbow  
 WB ƚura, cloud, sky  
 WB gumburu, fog, mist  
 B gumbur, dew  
 W- gulubu, wind

-B gawulƚawul, wind  
 W guƚulbara, whirlwind  
 WB ƚambarara, cyclone  
 WBH guƚƚunu, thunderstorm, thunderclap  
 WB mayƚala, lightning  
 WBH yugan, rain  
 WB mugunduru, hailstone

*M - Geography, etc*

W H miƚa, camp, house  
 W H balgan, house, hut  
 W \*yabun, large camp, lots of people camping together  
 W mindi, corroboree ground  
 WB buƚun, fighting ground  
 WB yalƚay, road, track, path  
 WBH ƚayi, ground, earth, dirt  
 W \*bumba, dust  
 WB warun, sand  
 WB buymaran, sand  
 WB guƚƚa, mud  
 BH waƚa, mud, clay  
 WB maƚila, white clay  
 W ƚalmuçu, yellow clay (and any yellow object)  
 W H magira, red clay  
 WB ƚilgan, hole  
 WB yiqaçi, cave, hollow (also Adj, hollow)  
 W \*yalbaç, flat ground  
 WBH bari, stone (generic)  
 W guyan, quartz, quartz knife  
 W baƚala, flat rock  
 W -mugal baƚala, bald head  
 W muƚan, mountain  
 W balbi, sloping bank  
 W ƚuçu, ridge, shoulder, upper arm  
 W yuçu yubi, river bank (only in song)  
 W bugan, forest, grasslands  
 WB ƚulƚin, (thick) scrub  
 WB ƚaçƚi, country (generic) e.g. ƚayƚu nuƚa ƚaçƚi 'this is my country'  
 W ƚupin, coast (also 'south')

*N - Flora*  
 WB wagun, tree, wood, large stick, fire  
 --H wambuy, tree etc  
 W wiçba, small stick  
 W \*muwari, any big tree (providing shade)  
 WB mara, leaf [LC and NB gave mara but JT gave maça]

- W gubu, small leaf (including tea leaves), typically in piles
- W manga, flower
- W bigal, bark
- WB ginaga, root
- W dumbil, flange of tree
- W ya:, top of tree e.g. gajara  
wagunda ya:nga 'the possum is at the top of the tree'
- W gargal, branch, arm
- W yulba, end of branch
- WB ɲulubuɟu, stump
- W gulgaga, log
- W ɟaba, forked stick, fork of tree
- W gagan, blady grass (used for grass huts)
- W gulbiɟa, cane grass, spear grass
- W bunabuna, couch grass, weeds/rubbish
- W gu:ɲaga, rubbish, weeds
- W \*gardagarda, (any) prickle
- WB bulbuɟu, spotted gum, bubbly gum (possum eats leaves)
- W yagabayan, large hollow gum tree in scrub - *Eucalyptus grandis*
- W- yiribara, blue gum tree
- B gulaɟu, blue gum tree
- WB gurugan, bloodwood
- W galgabara, she-oak (on river)
- W gidu, chider hardwood tree, and light made from it - *Halfordia scleroxyla*
- W gingila, moreton bay ash (JT); messmate tree (LC)
- W giman, firestick tree
- W \*galmbula, iron bark tree
- W milbir, slippery blue fig, used for shields
- W gubaga, coastal tree with red bark, used for yamsticks
- W gulawun, Leichardt tree
- W gubula, black pine - *Podocarpus amarus*
- WB waɲa, black bean - *Castanospermum australe*
- W maɟaga, river cherry tree
- WB dabugay, wild cherry (clusters of sour fruit on a small plant, used for jam)
- W gaɟgala, mangrove (used for boomerangs and spears)
- W galbay, wattle tree
- W walngan, river tea-tree (fruit eaten by birds)
- W buɟu, larger paperbark tea-tree, bark used for humpy and torch
- W galaba, long wild yam (can be eaten after minimal cooking)
- WB wapuy, round yam (requires cooking)
- W bundu, edible root of a climbing plant (see vondo in Lumholtz 1889:207,313)
- W gamin, lawyer vine
- W gambay, big lawyer vine - *Calamus australis*
- W mangi, lawyer vine used for dilly-bags
- W ɲayaba, seaside vine, grows in the sand just above high water level, used as fish poison
- W bidaman, conjiboy plant
- WB barul, a vine-like plant in the mountains
- W gi:baɟa, very large fig tree
- W banba, red fig - prob. *Ficus destruens*
- W wira, black fig, with rough sandpaper leaf
- W baygaɟi, a river fig
- W galgawuɟu, big fig, grows as parasite on another tree
- W ɲaguba, Burdekin plum
- W gindaɟigan, grass tree on river bank (used for dilly bags) - *Lomandra longifolia*
- W \*gagabaga, a grass tree
- W gagira, zamia fern and fruit
- W buliɟi, staghorn fern
- W bangipu, a tree fern
- W yagal, pandanus
- W dalu, palm tree - *Archontophoenix alexandrae*
- W muɟmbal, quandong (edible blue fruit)
- W guyumulu, quandong (edible blue fruit)
- W mu:ɟi, tree with small blue fruit, size of a peanut (bark used for canoes)
- W guɟbala, wild banana tree
- WB girgingan, lady finger tree, edible berry-like fruit
- W mulgalgay, green ginger
- W bayuɟa, a coastal ginger
- W ɲuɟgi, ginger, bears no fruit but leaves used to wrap fish for baking
- W gaban, acacia tree, and the

	white grub in it	WB	gaḡali, stinging tree - Dendrocnides moroides
W	*maḡal, cocky apple tree		
W	ḡanguḡa, turpentine tree, bark used for canoes	W	maḡgu ~ mayḡgu, mango (Loan)
		W	ḡaripḡi, orange (Loan)

O -ADJECTIVES

*Number and identity*

WBH	yungul, one
W	yunguḡa, another one
WBH	yaga, two
WBH	gaḡbu, three
WB	gumaḡbari, a lot, many (e.g. people, animals, leaves)
WBH	ḡaḡin, a lot, much (e.g. dirt, fish, water, food)
	The difference in meaning between these two words is not clear.
W	yaḡḡabaḡa, a very large number e.g. big mob of cockatoos, huge pile of leaves
W	ḡi:baḡa, mark on message stick to indicate approximate number of people from a group planning to attend a corroboree, glossed as 'a hundred'
WB	mupara, by oneself, alone - ḡayba mupara ḡaḡabali pirwaḡa 'I'll be going on my own tomorrow'; ḡayba ḡi:ḡibali mupara 'I was sitting by myself'; ḡinda ḡi:ba mupara 'you scratch yourself!'
W	ḡalma, one's own (object or section, etc) - waḡal ḡalma 'one's own boomerang'; puḡa ḡalmambigi ḡunbaḡi 'he cut his own [foot]; puḡa ḡalmambigi baḡaḡi 'he paints himself'; ḡayḡu ḡinba ḡalma 'you're my friend'
W	ḡulbu, anything strange (strange thing or foreign person)

*Colour*

W-	ḡu:lu, black - muray ḡu:lu 'black hair'
WB	ḡu:nḡa, black
W	bambaḡa, white
W	maḡḡun, grey

*Dimension*

WBH	wurbi, big - waḡun wurbi 'big tree'; wurbi yuḡan 'big rain'; ḡungul wurbi 'plenty of tucker'
W	gaḡamu, huge - biḡan gaḡamu 'huge feet'
W	ḡiḡibiri, big (used only of fish)
WB	ḡiḡa, small (also used as N, child)
W	-ḡiḡaru, mob of small children
W	paḡaram, tiny (especially paḡarambulu, very tiny); shallow (water)
W-	yaḡal, long, tall; and also yaḡabaḡa, yaḡandari with same gloss
-B	ḡuran, long, tall
W-	ḡudulu, short
-B	ḡudu, short
WB	biḡḡiri, wide - wurbi puḡa biḡan biḡḡiri 'he has large wide feet'
W	balbala, fat (person)
W	ḡaḡul, deep (also used as N, deep water hole)
W	ḡiḡara, shallow (water) [see also ḡadala/ḡarala, dry, shallow]
W-	ḡulumbara, straight
W	miḡburu, straight - yaḡḡay miḡburu 'straight road'
W	waḡuwaḡu, crooked

*Physical property*

- WB bandaḡala, full - ḡaygu gagara bandaḡala 'my dilly-bag is full'  
 W ga:la, empty  
 WB ḡawun, hot (from fire) - ḡilin ḡawun 'hot coals'  
 B bayngiḡa, hot  
 WB baniḡa, hot (sun), summertime, sweat, hot (from sun)  
 WBH ḡidul, cold - ḡana ḡiduldu mu:ngi 'the cold makes me shiver';  
 ḡulubungu ḡana ḡidulmay 'the wind makes me cold'; see also (50)  
 W- marna, wet  
 -B \*ḡulḡirip, wet  
 W- ḡadala, dry, shallow  
 -B ḡarala, dry  
 W ḡabini, sharp(ened) (Loan) - ḡuna ḡabinima bayindu 'sharpen it  
 with a file.'  
 WB wargal, sharp - ḡamiya wargal 'sharp tomahawk'  
 W mulmbin, blunt  
 W ḡundil, heavy - ḡaygu muḡal ḡundiligi 'my head feels heavy'  
 W ḡanḡal, heavy (a Giramay word, also used in Wargamay)  
 W ḡagardagar, rough, prickly (skin, leaf, etc)  
 W ḡagal, hard, solid - wagun ḡagalḡagal 'solid tree'; ḡamun  
 ḡagalḡagal 'firm breasts (on woman)'  
 W- dalḡa(dalḡa), hard - ḡalḡuḡu dalḡadalḡambigi 'the meat got hard'  
 -B muḡuru, hard (e.g. meat, wood), strong (e.g. person, spear)  
 WB yiḡaḡi, hollow (also N, cave, hollow)  
 WB muḡal, soft (e.g. cooked meat), weak (e.g. person)  
 WB ḡaba, ripe  
 WB ḡunga, green, unripe (vegetables), raw (meat), alive (person)  
 W- ḡuḡu, (good or bad) odour [this is probably best regarded as an  
 abstract noun]  
 W ḡuḡi, bad smell, stinking  
 W ḡiyal, sweet (food, honey), savage (e.g. dog), poisonous (e.g.  
 fangs of snake)  
 B mada, salty  
 WB marḡa, salty, bitter, sore  
 W maḡalmaḡal, stinking, bitter, dirty - ḡaru muḡalḡa ḡawambama  
 maḡalmaḡal 'don't eat the stinking thing, it will make you  
 spew up'  
 W- buḡan, stinking  
 WB buḡa, rotten, stinking, dead - see (182)  
 W buḡul, rotten (e.g. wood - dry and light)  
 WB ḡanu, broken - wargin ḡanumbigi 'the boomerang broke'; waḡal ḡanu  
 'the boomerang is broken'; ḡaraḡa ḡulḡil ḡanumbigi 'a bone  
 broke in [his] thigh'; yulba ḡanuma 'break the branch!'  
 W baḡa, shut, blocked - ḡayba bina wi:ḡimbigi/ baḡambigi 'I forget  
 it' (literally 'my ear has become no good, has become blocked');  
 also bina baḡa 'deaf', ḡayga baḡa 'blind'  
 WB muḡu, naked - see (32)  
 W balḡun, clear, open - ḡayba balḡunda ḡuwaray 'I stand out in the  
 open (when a cyclone comes)'

*Age and value*

- W ḡanbaymu, very old (person, object, or action - done many years  
 ago)  
 WB ḡalambuḡu, good (general term) - ḡinu ḡayi ḡalambuḡu 'you have a  
 good voice (for singing)'; and see (229)  
 WB mali, good, pleasing (especially food and drink, but can be  
 applied to anything)  
 These two terms seem fairly synonymous, and can be alternated

- for felicity of discourse e.g. Question yalgay nalambuꞑu 'is the road good?', Answer ŋayi, mali 'yes, it's good'
- WB nalŋgirgan, good-looking, pretty (woman, girl) - puṅa yibi nalŋgirgan/ ḡara wurbi 'that girl's pretty, she has big thighs'
- W- ḡirbinga, very good-looking (woman, girl)
- W gulḡiꞑi, prettily painted (e.g. man) - puṅa gulḡiꞑimay baṅgay 'he is painted prettily'
- WB wi:gi, no good - gambaṅa ŋayba wi:gimbigi 'my body feels no good (e.g. I'm tired)'
- W wi:gina, no good - wi:gina puṅa buga 'that fellow no good, he stink'; ṅaḡa wi:ginamay 'I made a mess of it'
- The difference in meaning between these two words is not clear
- W maṅabagay, ugly - miṅagu wa:ḡibali/ ṅana ṅunday maṅabagay 'why is he laughing?' 'he saw me looking ugly'

*Human propensity*

- W ḡilbay, know how to do something - see (236)
- W mulḡaṅa, game to do something, brave, see text 8.4,13
- W bungal, glad, proud, happy - puṅaṅa babay baṅgayḡu/ puṅa buṅaligi 'he speared [a kangaroo] and now he's proud'
- W ma:ṅgay, stupid, silly - puṅaṅa ma:ṅgaḡu ḡunbagi biṅan 'the silly person cut his own foot (on purpose)'
- B garba, stupid
- W biriḡi, general term of disapproval, to describe someone who is a nuisance or 'no bloody good'; translated as 'bugger' or 'bastard'; see text 8.12.
- W ṅuḡu, pretending, lying, malingering
- WB ḡaṅḡa, stealing (see Vtr, ḡaṅḡa, steal) - wi:gi puṅa ḡaṅḡabulu 'he's no good, a real thief'
- WB milgal, greedy
- W bi:ṅa, frightened (also N, fear) - ŋayba bi:ṅambigi 'I was frightened'; see also (44), (64), (67), (235)
- W ḡaḡul, worried, sorry, pitiful, 'poor fellow'
- W ṅuyu, playing around - yibiyibi ṅuyumbigi 'lots of kids are playing around'; see also yayimballi, Vint under V - Corporeal verbs
- W wuṅan, lustful, promiscuous; and wuṅanbulu, larrikin, harlot
- W ḡawan, angry, cheeky (person), savage (dog) (also N, anger) - ŋayba ḡawan 'my temper is up'; and see (230)
- W ḡaṅṅi, cranky (Loan) - ḡaṅṅibara 'cranky person'

*Corporeal*

- W ḡaṅḡala, strong (man)
- B muguru, strong (person, spear), hard (meat, wood)
- WB muṅḡal, weak (person), soft (e.g. meat)
- W balbala, fat (person)
- WB ḡamiꞑi, hungry - ŋayba ḡamiꞑimbigi/ miṅagu/ ḡungul ḡaḡa muḡagu 'I'm hungry' 'What for?' 'I want to eat vegetables'
- W maṅḡay, satiated, full up with food - ŋayḡu yulḡu maṅḡay 'my belly is full'; see also (36)
- B buṅul, satiated, full up with food
- WB ŋayi, thirsty (also N, voice) - ŋayba ŋayu ṅalugu/ ḡaṅḡalagu 'I'm thirsty for a drink of water'
- W wuḡar, sleepy (and N, sleepiness) - puṅa wuḡargiri 'he's sleepy'; wuḡar puṅa ma:l buṅilagu 'this sleepy man wants to lie down (and sleep)'; and see (15), (24), (174)
- WB wudil, asleep, - ṅaḡa ṅina wanay/ ṅinba wudilgiri buṅilagu 'I left you to lie sleeping (i.e. I didn't wake you, although your snores

- disturbed me)
- W \*bayngaɟa, tired (from work or other effort), rendered by LC as 'buggered up'
- B yirgal, itchy - yirgal/ ɲayba gi:bay 'I'm itchy and I scratched myself'
- WB marŋa, sore (+ body part), bitter, salty - ɲayba ɲayilŋara marŋa 'my neck is sore'
- WB wiŋiŋ, sore - biŋaŋ ɲaygu wiŋiŋ 'my foot is sore'
- W mulga, half-blind (and see gayga baɟa 'blind')
- WB gunga, alive (person), raw (meat), green, unripe (vegetable) - see (237)

*Speed and adverbial*

- W milmuɟu, spinning (e.g. top or boomerang), moving fast (of wheeled vehicle - literally, wheels are spinning) - wargiŋ milmuɟumbigi 'the boomerang is spinning'
- WB gawuy, (do) quickly - bu:diya gawuy 'pick it up quickly!'
- W ɟabi, (do) quickly - ɟabi bimbiriga 'run quickly!'
- These two words were said to be synonyms
- B \*biŋira, (do) quickly, hurry up
- WB ɟubun, slow, slowly - biŋba ɲinda ɟubun 'push it slowly'
- WB ɟunguru, (do) hard - ɟulubungu gimbi ɟunguru 'the wind blew hard'; ɟunguru ɲayba bimbirigi 'I ran hard (to escape the bullock that was chasing me)'; ɲana ɲunday ɟunguru '[he] stared at me'; ɟunguru ɲi:ɟa 'tie it tight'
- WB gargiɟi, finished - ɲaɟa muɟay gargiɟi ɟungul 'I've eaten all the food up'; ɲaɟa gargiɟimay ɟunbay, translated by informant as 'cut finish'

*Positional*

- W- gaymbiri, everywhere, all over the place - see text 7.8,15
- W mu:ɟa, hidden, out of sight, (fire) extinguished - ɲinba mu:ɟambiga 'you hide!'; ɲulmbuɟungu mu:ɟamay ɲaɟa ɲundalma 'the woman hid [the food] lest I see it'
- W buɟul, vanished, disappeared - see texts 5.16,24, 6.19

*Miscellaneous*

- W wayu, turning into - see text 6.9,18
- WB ɟulbun, married - ɲa:ndu ɟulbunmay 'who married her?'; and see text 8.11
- WB -ɟulbunma, Vtr, marry (alternative is ɟi:gima, from ɟi:(gi) 'sit down')
- W -ɟulbungin, N woman who claims her promised husband - ɲuɲa ɟulbungin ɲulmburu ma:lgu ɲunigu 'the woman is going to search for her promised man'
- W magul, working (also N, work); most often verbalised - wanɟanga ɲinba magulɲu 'where do you work?'; see also (16), (37), (77), (176), (240)
- W yubay, be away
- W -yubayma, Vtr, take, steal - ma:lndu yubaymay ɲulmbuɟu 'he stole the woman'; see also text 6.6
- W -yubaybi~yuba, Vint, run away - ɲulmuɟungu ɲayba yubaybigi 'that night I ran away'; see also texts 7.3, 9.4,12

## VERBS

*P - Motion and induced motion*

- WB gaga, int, go/come. The unmarked sense is motion away from speak-

- er - *ŋaru gagaga yulbanga* 'don't go to the end of the branch (lest it break)!'. However it is sometimes used to indicate motion towards the speaker - *ŋuŋa ŋaygungu gagabali* 'he's coming for me'
- WB *ŋadaymbi*, int, come. This has the form of a verbalisation, although no root *ŋaday* has been encountered
- WB *ŋagumbi*, int, come. This involves productive verbalisation of the deictic *ŋagu* 'to here' (3.4.3) - see (94). One informant contrasted *ŋadaymbiga* 'come here!' and *ŋagumbiga* 'come closer!'; this meaning difference has not been confirmed
- WB *wuŋa*, int, go walkabout - *wanganga nura wuŋabali* 'where are you going walkabout'; and see (29), (30), (175), (207-8), (216)
- WB *wuŋa*, tr, chase - *gumubuŋgu ŋana wuŋalɔani* 'the bullock is chasing me'; see also text 7.1,8,15 and (56), (92), (187)
- W *gu:ŋgi*, int, come out, emerge, arrive - *ŋuŋa walŋga gu:ŋgigi* 'he sighed'; see also text 9.19 and (121), (165)
- W *gumba*, tri, go in, enter, put in - *gulgiŋga ŋayba gumbagi* 'I went into the scrub'; *ŋulanga maŋa gumbalɔani* 'he [a bird] keeps putting leaves into [a nest he is building]'; *ŋaru ŋalu di:ŋga gumbalɔa* 'don't put water in the tea!'; *ŋaluŋga gumbay miŋga/yugangu* '[I] put the rainmaker [in position] in the water, for [to make] rain'; *gumba ŋuŋa* 'put it [a handle on the axe]'; and see (125), (158-9), (228)
- W *wuda*, tr, take off - *ŋinda gambi wuda* 'you take [your] clothes off!'; *biŋal wuda* 'take the bark [off a tree, to make a canoe]!'
- W *\*yimba*, tr, put on (clothes) - *balgubalgu ŋaŋa yimbay* 'I've put [my] hat on'
- WB *bayi*, int, go around, get tangled up - *wagunda ŋuŋa bayigi/mu:ɔambigi ŋaygunda* 'he went around the tree, hiding from me'
- W *bana*, int, return (person or boomerang), go home, come home - *ŋayba banalagu miŋagu* 'I must return to the camp'; see also (209), (213-5)
- W *ŋanba*, tri, follow (person, tracks, path, river) - *ŋinda ŋanba yalgay* 'you follow the path!'; see also (85)
- W *gayga*, tr, hunt away (person, dog, etc) - see (174)
- W *ŋarŋga*, tri, rush in on, raid, arrest - see text 7.14
- W *ba:lba*, tr, roll - *bari ŋinda ba:lba* 'you roll the stone over'
- W *ba:lballi*, int, roll, tumble over and over - *bari ŋuŋa ba:lballigi* 'the stone rolled [down the hillside]'; *ŋayba ba:lballigi* 'I rolled over'
- WB *ga:nda*, int, crawl. Data in B from NB has transitive inflections on this intransitive verb - *ga:ndalma*, *ŋaru ga:ndalga*, *ga:ndalani*; data from LC on the W dialect shows regular intransitive inflections e.g. *ga:ndabali* (see 3.5.3)
- WB *biŋba*, int, jump - *gi:giŋ biŋbay* 'the wallaby is jumping'; *ŋayba biŋbagi/wiŋgiŋgu ŋana bi:ɔamanu* 'I jumped when frightened by the snake'; see also (76), (177)
- W *ŋugi*, int, dance - *miŋgiŋga ŋayba ŋugilagu* 'I want to dance in the corroboree ground'; see also (58), (233)
- W *yinbi*, int, fly - *gi:gi: yinbigi* 'the bird flew away'; *ŋuŋa maŋbal yinbiyinbibali* 'the fly is flying around'
- WB *bimbiri*, int, run, run away - see (6), (187)
- B *bili*, int, run
- W *dagi*, int, fall down - *biŋgaŋga ŋuŋa dagigi* 'it [the boomerang returned and] fell at my feet'; *ŋayba gagima* 'I might fall down (if I go that way)'; see also (179), (180), (188)
- B *buŋi*, int, fall down - *buya buŋigi* 'the shooting star fell'

- (through the sky)'
- WB wala, int, arise, go up (tree/mountain) - *ɲayba walagu gaɟaragu ya:ŋa* 'I go up to the top of the tree for possums'; *ɲaɟa ɟanbanu/ puɲa ɟagigi/ puɲa walay/ puɲa bimbirigi/ ɲaɟa wuɲay* 'I hit her and she fell down, then she got up and ran away, and I'm chasing her'; and see (2), (15), (81) [This verb may take transitive inflections in B.]
- WB bira, int, go down, descend
- WB wiɟga, int, bathe, bogey - *ɲayba gagabali wiɟgalagu* 'I'm going for a bathe'; see also (164)
- WB yugara, int, swim (i.e. travel through water to get from one point to another - most instances of English 'swim' i.e. 'swim about in one area' would be rendered by wiɟga)
- W ɲaba, tr, soak (food or tea, etc) - *ɲaluɲga ɲaba ɟubula* 'soak the black pine nuts in water!'
- W \*waɟɟumba, tr, wash (e.g. children, clothes) - *puɲa ɲaɲga gambi waɟɟumbagu ɲaygu* 'he [went] to wash my clothes'
- W walmbi, tri, lift up, pick up, wake (someone) up - *ɟalaba ɲinda walmbiya* 'pull up that yam'; *ɲaɟa puɲa walmbipu/ wugargiri* 'I woke him from sleep'
- W da:lbi, tri, scoop up water in container - *ɲinba gagaga/ ɲalugu da:lbiɲagu/ guɟaɟa ɲinda bu:diya* 'you go and scoop up some water and bring the billy-can [full of water, back here]!'; *ɲalu da:lbiya* 'scoop up some water!'
- WB ma:ni, tri, hold in hand, hold onto, catch hold of, catch something thrown, grab - *ɲaɟa puɲa mala ma:ni* 'I grabbed her hand'; *ɲana ɲayilɲgara ma:ni* 'he choked my neck'; *ɟarindu bangay ma:na* 'hold the spear in the woomera!'; see also (84)
- W- ɲiyawuda, tr, grab with hand (e.g. grab woman)
- WB bu:di, tri, take/bring, carry - *ɲaɟa puɲa ma:l bu:di/ ɲaygungu gulmbal* 'I take this man [to go] with me as a mate'; *ɲaguma ɲinda bu:diya* 'you bring it!'; see also (38), (79), (185), (216), (224-5)
- WB gulguma, tr, bring in, muster - *ɲaɟa wagun gulgumay* 'I bring the wood up'
- WB gu:ɟa, tr, (water) washes (something) away - *gu:ɟalma* 'flood might wash me away'; and see (126)
- WB gu:yɪ, int, feel around e.g. put hand into log to see if possum or sugarbag is there - *ɲinba gu:yiga/ wagunda gida* 'you feel in the log, poke with a stick!'; *ɲayba gu:yigi/ maya* 'I felt around, there is nothing there'
- WB gida, tr, poke (something) with a stick e.g. poke stick into hole to see if an animal or sugarbag is there - *wiɟbangu ɲinda gida gaɟara* 'you poke for possum with a stick!'
- WB du:ɟa, tri, pull, pull up, pull out - *gaɟan ɟingirigingiringu mulindu du:ɟalɲani bayibayimalɲani* 'the willy wagtail pulls up grass with his mouth and tangles it up [for his nest]'; *mala ɲinba ɟumba/ gaɟara ɲinda du:ɟa* 'you put your hand in [hollow in tree] and you pull out a possum!'; and see (14), (188)
- WB bilmba, tr, push - *puɲa bilmbay gu:ɲaɟa* 'the flood washed all the rubbish down'
- WB buɟmbi, tri, throw, chuck, throw away, cast line into water - *gaɲambul ɲana buɟmbi yaramandu* 'a horse threw me earlier on today'; *gu:ɟbay puɲa bu:diya/ buɟmbilagu ɟa:bugu* 'take the fishing line, to throw it out for fish'; *gaɲɲa buɟmbilɲani puɲaɲga badagu* 'he spat at (literally, chucked spittle at) the dog'; and see (13), (75), (167), (182)



- W gilnga, tr, pour water on - wagan gilnga/ minagu/ gagan gandama 'pour water on the fire [to extinguish it]!', 'why?', 'lest the grass catch on fire'; naru nalungu gilngalga/ di: gidulmalma 'don't pour water into the tea, lest it make it too cold'
- WB wagiri, tr, overturn, capsizе, spill/pour (water) - naga wagiri nalu 'I spilt the water'
- W bayumbi, tri, shake (e.g. tree), wave (e.g. hand), swing anything round, turn oneself around - naga wagan bayumbi 'I waved a stick OR I shook a tree'; nuga wagan bayumbigi 'the tree is waving (in the breeze)'
- WB gangumbi, tr, fan - balgubalungu gangumbi nuga wagan 'fan the fire with [your] hat!'

Q - *Giving*

- WBH wugi, tr, give - see 4.6.3; also namundu wugiya 'breastfeed [baby]'; gilngangu nana wugi '[he] gave me [his] cold'
- W bayima, tr, buy (Loan from buy, verbalised) - naga bayimay ginaman 'I bought the boots'
- WB ganga, tr, steal (see also Adj, stealing) - pulanga gangalgani mani 'he's stealing money'

R - *Position and induced position*

- WBH gi:(gi), int, sit, sit down, live (see 3.5.3) - wumanga nayba gi:gibali 'I'm sitting in the shade'; nulubungga nayba gi:gilagu 'I'll sit on the stump'; yingamba nayba gi:gibali 'I live in Ingham'; see also (49), (103), (176), (210)
- W -gi:gima, tr, marry - naga nuga gi:gimay 'I married her'
- W wanguri, int, kneel down, squat on haunches
- W guwara, int, stand, stand up - see (78), (95), (166)
- W binda, tri, put standing up, build (house); defecate, urinate, spit (with faeces/urine/spittle in instrumental or absolute case): nayba gu:ga:ga/gu:ga:ngangu bindalagu 'I need to pee'; mi:ga naga bindagu 'I'll build a camp'; pulanga ma:Indu milga binday 'the man put the rainmaker in position'
- WBH bunggi, int, lie down, sleep, live (takes transitive inflections in B - 3.5.3) - nayba yaga balan bungilma 'I'll camp here for two months'; and see (52), (174)
- W \*ga:ngi, int, sleep [Obtained only from LC who then said that bunggi was properly 'lie down' and ga:ngi 'sleep'. However bunggi does have the sense 'lie down to sleep' in other elicitation.]
- WB walnga, int, float (on water)
- WB ga:lba, int, be stuck e.g. person stuck in mud or fence etc, meat stuck in throat, branch stuck and can't be budged - nayba ga:lбай gilganda 'I got stuck in the hole (in the ground)'
- WB gigari, tri, put down - wumanga naga nuga gigari/ gidulilagu 'I put it down in the shade, to cool'
- W buyngari, tr, hang up - see (122)
- W wana, tr, leave (it) be - ninba gagaga/ nulmbucu ninda wana 'you go away, you leave the woman alone'; gurugu naga wanay 'I've left off grog (i.e. stopped drinking it)'
- W guda, tri, block, shut (door), close - guda gilgan 'shut the door (literally: shut the hole)'; manga gudagi 'flower closed up'
- WB bana, tri, bend (e.g. to describe manufacture of boomerang by warming and bending) - gulngu bana 'choke'  
See gagal/ga: bana 'yawn' under Corporeal.

*S - Affect*

- WB buɕba, tri, hit with long rigid implement, held in the hand -  
 nulaŋga ɲaɲa buɕbay wagundu 'he hit me with a stick'; ɲana  
 buɕbalagu wu:ŋga 'people have to fight each other in a war';  
 bunun ɲulbuɕuŋgu nulaŋga buɕbalgani malaŋgu 'the women are  
 continually banging drums with their hands'; see also (192),  
 (194), (249)
- W minba, tr, hit with long rigid implement (e.g. stick or boomerang)  
 which is thrown - ɲaɲa ɲuɲa wagundu minbay 'I hit him with a  
 stick'
- WB bunɲa, tri, shoot - bunɲa ɲuɲa bada 'shoot that dog'
- WB ɲanba, tri, hit with rounded implement, held or thrown (e.g. stone,  
 fist) - malaŋgu ɲana ɲanbay '[he] punched me'; see also text  
 5.15 and (180-1)
- WB ɲilwa, tr, kick - bingangu ɲaɲa ɲilway; or shove with knee -  
 ɲilway buŋuŋgu; see also (184), (190)
- WB bayguri, tr, shake (e.g. dog swings its tail), wave, bash i.e. put  
 in motion in trajectory, holding on to it (may or may not impact  
 on some other object) - ɲaɲa gu:ɲaɲa bayguri ɲuŋgiringa 'I  
 [picked up] the goanna by its tail [and] bashed it [on a tree,  
 to kill it]'; and see (106), (178)
- WB ɲinda, tr, blaze, make steps up tree to assist climbing
- WB bargi, tri, (rain) falls on, wets (someone) - see (125), (154-5)
- WB ɲunma, tr, squeeze e.g. knead flour for damper - ɲalu ɲunma  
 'squeeze water [out of something]'; ɲaɲa ɲunmay ɲuŋgul 'I  
 squeezed the fruit'; ɲaɲa ɲunmagu budam 'I must squeeze matter  
 (from the blister)'
- W badi, tri, hook (fish); also hook woman (to take as wife) - ɲaɲa  
 ɲulbuɕu badi/ ɲaygu bulɲumagu 'I'm hooking the woman, to make  
 her my wife'
- W- baba, tri, pierce, spear (specifically: spear on land), rub fire-  
 stick to make fire - ɲa:ndu ɲi:ɲin babay 'who speared the  
 wallaby?'; ɲaɲa ɲiman babagu 'I must spin the firestick'; see  
 also (59), (168)
- B ɲaŋɲaba, tri, spear (probably = baba)
- W ɲinba, tri, spear something in the water - ɲaɲa ɲa:bu ɲinbay 'I  
 speared a fish'; see also (224), (226-7)
- WB ɲilba, tr, dig - ɲaɲa yaga ɲilbay ɲilgan 'I dug two holes'; ɲaɲa  
 ɲagan ɲilbay 'I dug the grass'
- W ɲulbamba, tr, bury (deeply) e.g. bury a body in a graveyard - see  
 (68)
- WB yu:mba, tri, bury (to shallow depth); in intransitive construc-  
 tions it was glossed as 'hide [oneself]'
- W nu:ba, tr, sharpen, grind - nu:ba ɲuɲa baɲgu baɲingu 'sharpen the  
 axe on a stone!'
- WB ɲi:ba, tri, scratch, scrape, shave - ɲayi ɲaɲa ɲi:bay 'I scratched  
 up the ground'; ɲayba ɲambaɲa ɲi:baɲi 'I scratched my body';  
 ɲalbaɲa ɲaygu ɲi:balagu 'I want to shave'; ɲuɲilangu ɲi:balgani  
 ɲagan/ buŋimagu nulaŋga 'the bandicoot is scratching up grass  
 (heaping it up) to camp on it (i.e. for a nest to lie on)'; see  
 also (137), (140), (212)
- WB ɲungari, tri, cut down, cut through - see (166), (170-2), (217),  
 (241)
- WB ɲunba, tri, cut a piece out of, cut into, cut open - ɲulubuɲuŋgu  
 ɲana ɲunbay 'the stump cut me (when I backed into it)'; ɲayba  
 ɲunbay ɲurmaligu 'I cut myself so that blood flowed'; see also  
 (138), (141), (142), (168)

- W bandali, int, burst, smash, break (e.g. chicken comes out of egg) - see (167), (205-6)
- WB ganda, tri, burn, make fire, be burning - galguçu ṅaḡa ganday 'I burnt the meat'; ḡiman ṅinda baba/ wagun gandagu/ ṅayba gidul 'you rub the firestick to make fire, I'm cold'; see also (90-1), (127), (136), (139), (246)
- WB galgi, tri, cook - ṅinda ḡumubuçu ṅaygu galgi 'you cook beef for me!'; ḡungulndu ṅayba galgibali 'I'm cooking tucker'; and see (173), (190)
- WB binḡa, tr, make fire blaze up (by fanning, blowing on it, stoking it up, etc) - ṅinda wagun binḡa galgiḡu midin 'you make the fire blaze, to cook the possum [on it]'
- W muymba, tr, extinguish fire, put light out - wagun muymba ḡaluḡu 'extinguish the fire with water'; ma:ni ṅuṅa muymba 'press the button and the light goes out!'
- WB ḡurḡa, tr, tie up with rope, join on - see (218)
- W ṅi:ḡa, tri, tie up - ḡaḡa ḡumaḡbari yaraman ṅi:ḡay 'I've tied up lots of horses'; ḡubunḡa ḡapa ṅi:ḡay '[someone] tied me with rope'
- WB ḡu:ra, tr, rub, wipe
- W banḡa, tri, paint (e.g. shield, person) (with lawyer cane brush), write - see (222)
- WB mada, tri, paint (e.g. shield, person for corroboree) - ṅinda biḡin mada 'you paint the shield!'
- WB ḡu:ba, tr, cover with water e.g. the moon covers grass with dew  
See Corporeal for ḡimbi, (wind) blow

*T - Attention*

- WB miḡiri, int, wait - yala ṅayba miḡiribali/ ḡaḡara ḡu:ḡilagu/ ḡaḡa ma:nigu 'I'm waiting here [by the possum hole], for the possum to come out, then I can catch him'; ṅinba ḡaḡa/ maḡanda ṅinba miḡiriga ṅayḡungu 'you go ahead, you wait for me at the river!'; see also (79), (248)
- WBH ṅunda, tri, see, look - ṅulanga ḡapa ṅundalgani 'he's watching me'; ṅuṅa ṅundabali 'he's looking'; ḡaḡa ṅunday ḡaluḡa ḡuṅin 'I saw my shadow (or reflection) in the water'; see also (12), (54), (71-2), (82), (99-100), (156-7), (177), (193)
- WB wa:ba, int, look up, for sugar-bag (bee's nest) only - ṅayba wa:balagu wubirigu 'I'll look up (in the tree) for English bee's nests'
- W ḡuni, int, search for, hunt for - bambugu ṅayba ḡuniḡagu 'I'll search for [scrub-hen] eggs'; see also (4), (47), (242)
- W ḡaymba, tr, find - yala ḡapa waybalangu ḡaymbay 'the white man found me here'; see also text 8.7, (88-9)
- W miḡba, tr, show - wariḡin ḡaḡa miḡbay ma:ḡu 'I showed the boomerang to the man'; see also text 7.2
- WB ḡa:ra, tri, hear, listen - ḡaḡa ḡawal ḡa:ray 'I heard a shout'; ḡuḡuḡuḡu/ ḡaru ḡa:raḡa 'he's a liar, don't listen to him!'; see also (152-3), (162), (183)
- WB ḡu:ma, tri, feel - ḡulmuḡunḡa ṅayba ḡu:maḡu:mabali 'I'm feeling around in the night'; ḡara ḡaḡa ḡu:may 'I felt the [woman's] leg'; see also (123)
- WB ḡinḡara, int, dream

*U - Talking, etc*

- W- banma, int, talk - ṅuṅa banmabali ṅayḡungu 'he's talking to me'; see also (7). NOTE that NB gave mayay-bi, a verb derived from

- mayay 'language' as the B equivalent of banma
- WB maynga, tri, tell (addressee as Object) - ḡa:ndu ḡina mayḡgay 'who told you?'; bulimangu mayḡgalagu '[you] should tell the police'; see also (191)
- W \*wa:nda, tr, rouse on, tell on i.e. tell someone that the referent of the Object NP has done something e.g. tell the police that people are fighting - pulanḡa ḡana wa:nday ḡuri 'he roused on me in return'
- W ḡi:ga, tr, tell to do, let do - when JT recommended I contact LC he told me to say to him: ḡa:niḡgu ḡana ḡi:gay baḡbalagu/ ḡinda mayḡgagu ḡana wargamaygu 'Johnny told me to ask you to tell me about Wargamay'; ḡa:na ḡinda ḡi:gay wagungu 'who did you send for wood?'; walḡga ḡi:ga 'sigh (literally: let wind go)'; see also (243)
- W ḡinga, tr, stop someone, block something - see (194)
- WB baḡba, tri, ask - puḡa waybala gungulgu baḡba 'ask the white man for vegetable food!'
- W \*ḡiyapma, tr, ask (LC said this was the 'high word' corresponding to baḡba)
- W- ḡaḡi, tr, answer - ḡaḡa puḡa ḡaḡilma mamu 'I'll answer him by-and-by'
- WBH baya, tri, sing (Object is song or song-style) - ḡana bayalagu mindiḡga 'we'll sing at the corroboree ground; see also (162)
- W walmbari, int, (dog) barks - puḡa bada walmbaribali miḡagu 'what's the dog barking for?'; see also (69)
- See also ga:ma 'do like this, say' in W; and derived verbs gubil-i 'whistle', bu:ḡguray-mbi 'snore', gawal-i 'call-out', mayay-(m)bi 'talk' under I.

*V - Corporeal*

- WBH muḡa, tri, eat (meat or vegetables) - ḡayba ḡamiḡi muḡabali gungulndu 'I'm eating vegetables [because I'm] hungry'; see also (97-8), (124), (143-4), (146), (189)
- WBH guḡga, tri, bite - gumungu guḡgalma 'the mosquitos might bit [us]'; see also (46), (61), (84), (145), (243), (250)
- W yu:ḡa, tr, swallow
- W ḡuḡḡa, tr, suck
- WBH ḡanḡa, tri, drink - ḡalu bu:diya ḡaygungu ḡanḡagu ḡaḡa 'bring me some water so that I can drink it!' - see also text 5, (147-51), (185)
- W gawamba, int, vomit - ḡayba gawambay/ buganḡu gumubuḡuḡgu ḡana pulanḡa waybalanḡu wuḡinu 'I vomited because of the rotten beef the white man gave me'
- WB nugumba, int, vomit
- W ḡagal bana, int, yawn
- B ḡa: bana, int, yawn - ḡayba ḡa: banay 'I'm yawning'
- These forms involve the noun 'jaw' and transitive verb 'bend' - literally 'bend jaw'. Although bana 'bend' is basically transitive 'yawn' appears to be intransitive. They are probably compound verbs (and should then be written each as one word).
- W muḡi, int, blink (eyes) - gayga muḡibali 'blinking eyes'
- W H balmbi, tr, smell - ḡinda balmbiya bada buga 'you smell the dead dog'
- WB buya, tri, (person) blow, smoke (tobacco) - ḡinda wagan buya 'you blow the fire!'; ḡaḡa baybu buyalḡani 'I smoke a pipe'; see also (101-2), (220)
- W- ḡimbi, tr, (wind) blow - ḡambaranḡu ḡana ḡimbi 'the cyclone is

- blowing me away'
- W *niɕɕima, tri*, tickle (mainly or wholly sexual petting) - *ɲaɕa ɲulmbuɕu niɕɕiniɕɕimay* 'I tickled the woman'; *ɲayba ɲulmbuɕugu niɕɕimalagu* 'I want to tickle the woman'
- NOTE *niɕɕiniɕɕi* was also given as N, glossed 'nymphomaniac'
- WB *nu:ɲa, tri*, kiss - *ɲinda nuɲga ɲulmbuɕu nu:ɲa* 'you kiss this woman!'; *ɲinba ɲagumbiga nu:ndalagu* 'you come here to kiss [someone]'; see also text 8.8, (19)
- W *buybuɕi, tr*, make a raspberry at someone in derision [<sup>h</sup>pe] - *ɲana ɲulɲaɲga buybuɕi* 'he made a raspberry at me'
- Compare with *garɲga binda, garɲga buɕmbi* 'spit at' (under R and P above)
- W *wuymbi, tr*, lick - *badangu ɲana mala wuymbi* 'the dog licked my hand'
- W *ɕu:ga, tri*, swive, copulate with, fuck - *ɲinda ɲulmbuɕu ɕu:ga* 'you fuck the woman!'
- W *guyma, tri*, give birth to (used of human or animal) - *yabungu gubu bu:diɲgani guymagu ɲulɲaɲga* 'mother [rat] takes leaves [into her hole] so that she can give birth [to her young in an adequate nest]'
- W *yu:ɕi, int*, grow (children, animals), sprout (plants) - see (68)
- WB *ɲurbira, int*, be ill, sick, feverish
- W *bidɪ, int*, shake with cold - *ɲayba bidibidigi* 'I shook with cold'
- W *mu:ɲgi, tr*, make cold, make shiver (subject generally winter or wind or similar) - *birɕibaɕaɲgu ɲana mu:ɲgilma* 'winter might make me cold'
- See also *gidul* 'cold', *gidul-i* 'become cold' under O, Physical property.
- W *bungga, int*, swell up - *ɲaygu waga badangu guɲɲay/ ɲaygu waga bunggay* 'my shin was bitten by a dog, and my shin has now swelled up'; *gurmaɪ bungagi malɲaɲga* 'a vein swelled up on [someone's] hand'
- WB *wula, int*, die - *mamu ɲayba wulalagu* 'I want to die by-and-by'; *ɲuɲa wulama* 'he might die'; see also (178)
- W- *ba:di, int*, cry, sob, weep - *ɲana ɲulmbuɕu ba:diɕi ɲaygungu* 'the woman cried for me'; *ɕana ɕalɲɕiɕa ba:diɕi* 'a mob of people all cry and mourn'; see also (10), (83), (181), (211)
- WB *guyi, int*, cry, sob, weep - see (96)
- WB *wa:ɕi, int*, laugh - *ɲana waybalangu wa:ɕimay* 'the white man is laughing at me', *ɲuɲa wa:ɕibali ɲaygungu/ ɲaɕa buɕbay* 'he was laughing at me and I hit him'; see also (186)
- W *yimiri, int*, be glad, feel glad - *ɲayba yimirigi* 'I felt glad'
- W *\*yayimbali, int*, play about (having joke, or making nuisance of oneself). See also *ɕuyu, Adj* under O, Human propensity

*W - Adverbial*

- W *ga:ma, tr*, do like this (without any accompanying verb the unmarked sense is 'say [like this]', with reported speech following) - *ga:ma ɲinda guɲgari* 'you cut [the tree] like this!'; *ɲaru ga:malɕa* 'don't do (or say) that!'
- W *ɲa:ɕamba, tri*, try to do (but fail) - *waguɲ ɲaɕa guɲbay ɲa:ɕambay* 'I tried to cut the tree down'. This is plainly related to the particle *ɲa:ɕa* 'can't do' - see 4.10.
- W *ɲu:ɕa, tri*, test, taste, try out - *ɲaɕa ɲalu ɲu:ɕay/ maya/ ɲuɲa ɲalu wi:ɕina* 'I tried the water but no, the water was no good'

X - LOCATION	a week ago ('the other day');
W gungari, north(wards)	LC: yesterday
W gulbila, south(wards)	W gulganga, LC/JT: yesterday; NB:
W guwa, west, tablelands	tomorrow (NB gave as W
W yirgandi, people, goods and	equivalent of B gidalgu)
places from north	WB gundanga, last night
W gupin, people, goods and	W gapumbul, earlier on today
places from south;	W gayba, now
'coast'	WBH gapu, later on today, directly,
W gulip, place way out east	immediately; NB gave as
where spirits come from	'yesterday' in B, possibly
and go to (variously	an error
glossed by LC as 'heaven',	WB mamu, by-and-by
'hell')	W- nirwaga, tomorrow
W bamba, long way off - bamba	-BH gidalgu, tomorrow
ngayungu 'too far for me	W biligi, daybreak, early in
[to jump]'	morning
W mulu, near, close up	W nulmucu, night-time
WB galaga, up hill, up in the	WB gugu, meanwhile, wait-a-while
sky	W namu, for a short while
WB gani, up river	W garay, for a long time
W yu:nu, down (river?)	WB yurmay, do all the time - ruṅa
W giṅgu, down (hill??)	wa:ḡini ngayungu yurmay
W guyabay, other side of river	'he's laughing at me all
W ḡa:lunḡal, in front, ahead	the time'
W gugunḡal, behind - ḡa:lunḡal	Z - INTERJECTIONS
ḡinba/ ḡayba gugunḡal 'you	W- maya, no
go ahead and I'll come	-BH biyay, no
behind'; gugunḡal balganda	WBH ḡayi, yes
'behind the house'	WB gawu, come on!
WB yulguḡuy, inside - ḡayba	B gala, try it!, try again!
yulguḡuy balganda 'I [went]	W pandu, I don't know (this
inside the house'; guranga	might possibly be an Adj,
yulguḡuy 'inside a cloud'	knowing nothing, the
Y - TIME	opposite of ḡilbay - see
WB gu:ḡaḡa, very long time ago	0, Human propensity)
WB galmaḡa, long time ago (a	W *guli, exclamation when
year to a few days)	startled - jump with
W ḡugulu, JT: from a few days to	fright and say [gulé:]

## LIST OF AFFIXES

As an aid to the reader, the following list shows all affixes from the grammar, with reference to the sections containing major discussion of their form and functions. Allomorphs formed by assimilation or shortening etc are referred to the appropriate canonical form.

-a, see -da locative-aversive	-ba, see -da locative-aversive
-a, see -pa accusative	-baḡun, 'really' - 3.1.3
-a, see -ya positive imperative	-bal, post-inflectional affix -
-ani, see -lani continuative	3.6
-ba, reciprocal - 3.5.3, 3.5.6, 4.5	-bali (W), continuative - 3.5.1,
	3.5.3, 3.5.5

- ban, post-inflectional affix - 3.5.3, 3.5.5  
3.6
- bara, belonging to, pertaining to' - 3.1.3
- baça, comparative - 3.1.3
- bi, inchoative - 4.9.1
- bi, post-inflectional affix - 3.6
- biçay, (W), 'without' - 3.1.3
- biyay (B), 'without' - 3.1.3
- bu, see -du ergative-instrumental
- bulu, 'very, lots of' - 3.1.3
- da, locative-aversive - 3.1.1, 3.1.5, 3.2, 3.4.1
- du, ergative-instrumental - 3.1.1, 3.1.5, 3.4.2, 4.2, 4.6.3, 4.8
- ğa, negative imperative - 3.5.1, 3.5.4
- ğa, see -da locative-aversive
- ğaman, addressee's kin relation - 3.1.3
- ğan, post-inflectional affix - 3.6
- ğu, see -du ergative-instrumental
- ga, positive imperative - 3.5.1, 3.5.4
- gani (W), continuative - 3.5.1, 3.5.3, 3.5.5
- gı, perfect - 3.5.1, 3.5.4
- giri, 'with' - 3.1.3
- gu, dative-allative - 3.1.1, 3.2, 3.3, 3.4.1-3, 4.3
- gu, purposive - 3.5.1, 3.5.4, 4.3
- i, see -bi inchoative
- iñ, see -niñ ~ -n ablative
- l-, conjugation marker - 3.5.2, 5.1.1, 5.3
- la, aversive - 3.1.5, 5.4
- lagu, purposive - 3.5.1, 3.5.4, 4.3, 5.3
- lani (B), continuative - 3.5.3, 3.5.5
- lu, instrumental - 3.1.5, 5.4
- ma, irrealis - 3.5.1, 3.5.4
- ma, comitative - 3.5.1, 3.5.6, 4.7
- ma, instrumental - 3.5.2, 3.5.6, 4.8
- ma, causative - 4.9.2
- mbi, see -bi inchoative
- mira, 'for - nights' - 3.3
- miri, 'as a result of, from' - 3.1.3
- nda, see -da locative-aversive
- ndu, see -du ergative-instrumental
- ni (B), continuative - 3.5.3, 3.5.5
- n ~ niñ, ablative - 3.1.1, 3.2, 3.3, 3.4.1-3
- na, accusative - 3.1.2, 3.4.2
- nu, perfect - 3.5.1, 3.5.4
- nu, subordinate - 3.5.1, 3.5.4, 4.4
- naru, 'like a' - 3.1.3
- ngu, locative-aversive - 3.1.1, 3.1.5, 3.2, 3.4.1
- nga, 'there' - 3.4.3
- ngü, ergative-instrumental - 3.1.1, 3.1.5, 3.4.2, 4.2, 4.6.3, 4.8
- nu, genitive - 3.1.1, 3.4.2, 4.6.1
- u, see -nu genitive
- y, unmarked aspect - 3.5.1, 3.5.4
- ya, positive imperative - 3.5.1, 3.5.3, 3.5.4
- The following affixes have occurred in data gathered, but it has not proved possible to check them out:  
-lğa - 3.5.5  
-yandi - 3.5.5  
-yara - 3.1.3

## ACKNOWLEDGEMENTS

My major debt is of course to the remaining speakers of of Wargamay and Biyay who shared their language with me - John Tooth, Lambert Cocky (or Atkinson), Nora Boyd, Alf Palmer and Arthur Wild. Whatever I have been able to salvage at this late stage is due entirely to their intelli-

gence, patience, and wish to see the language recorded for posterity.

Field research involves a fair amount of detective work and depends on good leads. It is thus appropriate to thank the late Chloe Grant for suggesting Alf Palmer as informant; Peter Sutton for suggesting John Tooth; John Tooth for suggesting Lambert Cocky; George Watson for mentioning Arthur Wild; and all of Chloe Grant, John Tooth and Lambert Cocky for urging me to seek out and work with Nora Boyd.

Financial support came from the Australian Research Grants Committee and, in the earlier stages, from the Australian Institute of Aboriginal Studies.

I am grateful to N.B.Tindale, Tony Beale, Tasaku Tsunoda, Peter Sutton and La Mont West Jr for making available material that they had recorded on Wargamay. Barry Blake and Sue Kesteven made valuable comments on an earlier draft. Sheldon Harrison provided useful ideas concerning the hypothesis in Chapter 5. Karl Rensch listened to the tapes and helped me make phonetic decisions concerning vowel length and stress. Alison Dixon sorted, arranged and copied the La Mont West Jr notes.