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THE MORROBALAMA (UMBUYGAMU) LANGUAGE OF CAPE YORK PENINSULA, AUSTRALIA

THESIS SUBMITTED AS PARTIAL REQUIREMENT FOR THE DEGREE OF MASTER OF ARTS IN LINGUISTICS AT THE AUSTRALIAN NATIONAL UNIVERSITY

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In interlinear glosses, the following contractions for names of grammatical categories are used:

ABL	ablative (case)	LOC	locative (case)
ABS	absolutive (case)	NOM	nominative (case)
ACC	accusative (case)	NP	noun phrase
ALL	allative (case)	PAST	past tense
BEN	beneficiary (case)	Pl	plural (number)
COM	commitative (case)	PRIV	privative
DAT	dative (case)	REFL	reflexive
ERG	ergative (case)	RECIP	reciprocal
FUT	future (tense)	PRES	present (tense)
INSTR	instrumental (case)	VP	verb phrase
IMP	imperative (verbal affix)		

For person-number combinations (in free or bound pronouns) the following abbreviations are used:

1	first person	du	dual
2	second person	pl	plural
3	third person	INCL.	inclusive
sg	singular	EXCL.	exclusive

The following abbreviations are used for Language Names:

BP	Barrow Point
FI	Flinders Island
KT	Kuku Thaypan
KW	Kuku Warra
LL	Lamalama
Mor	Morrobalama
Rim	Rimanggudinhma
Umb	Umbindhamu
Yd	Yidiny

Historical Conventions

*	Reconstructed (proto) form
pNP	Proto Northern Paman
pMP	Proto Middle Paman
pP	Proto Paman
pA	Proto Australian

Morphological Conventions

-	Morpheme Boundary
N	Nasal
T	(non-nasal) Stop

Phonological Conventions

C	consonant
V	vowel
/ /	phonemic representation (orthography)
[ ]	phonetic representation (IPA)

1. MORROBALAMA AND ITS SPEAKERS

1.1 LINGUISTIC TYPE

Morrobalama is a Pama-Nyungan language, originally spoken in the Princess Charlotte Bay region of the eastern coast of Cape York, in northern Australia. Like too many Australian languages, it is a language on the edge of extinction. The two remaining main speakers now live in Umagico, on the north-western tip of Cape York. It is hoped that this record will contribute to the preservation of the language, perhaps even be a tool for its revitalisation; at the very least, a linguistic insight into a fascinating and typically complex Australian language.

Morrobalama displays some features which are distinctive of Pama-Nyungan languages (and especially Northern Pama-Nyungan languages). It is a non-prefixing language, with nominal case inflections, verb inflections and pronominal cross-referencing. From the limited data available, word order appears to be free, with a complex verbal structure containing fixed order of verbal stem, tense/aspect markers, and the pronominal clitics. Morrobalama has a large phonemic inventory, unusual for Australian languages, yet typical of languages which have undergone initial dropping. It has a five vowel system (contrasting in length), fricative sounds, voicing contrasts, and prestopped nasals.

1.2 TRIBAL AND LANGUAGE NAMES

"Umbuygamu" is actually the Umpila name for this language. The Umpila were the language group whose land lay to the north of the Umbuygamu. It has been the most common name used by anthropologists and linguists when referring to the language. However, the remaining speakers of Umbuygamu tell me that their people call themselves and their language "Morrobalama". Rigsby (1992a:356) has written that this is one of the three clan names for the 'Umbuygamu' language grouping. The only clan which he

names is 'Morrobolam'. I was unable to confirm the other clans with Nancy and Mabel. Nevertheless, whether 'Morrobalama' is the name of the entire grouping or just one clan name of the language, it is definitely the name for the language described here - the name which the people call themselves - hence the name which I shall use in this thesis.

Before now, very little has been documented on this language. Most early records grouped the Morrobalama with their neighbours, giving generic labels such as:

Koko-Lama-Lama, Barungguan, Yetteneru	Hale and Tindale (1933)
Yintjinga, Koko Ompindamo	Sharp (1939)
Yeiya	SIL (1954)
Bay Pama	O'Grady, Wurm, Hale (1966)
Umbuykamu Subgroup of Lamalamic	Laycock (1969)
Umbuigamu	Oates & Oates (1970)
Barungguan, Jeteneru	Tindale (1974)
Bay Paman	Sommer (1976)

It seems possible that the languages of Princess Charlotte Bay form a subgroup of their own. Sommer (1976:20) suggests that Morrobalama ('Umbuygamu') and Lamalama form a subgroup which he calls 'Bay Paman'. This subgroup neighbours two other subgroups which he labels 'Central Paman' and 'Waric Paman'. It will be shown in Chapter 3 that Morrobalama and its neighbouring languages (especially Lamalama) display evidence of relationship. My own comparison of the lexicon belonging to Morrobalama and the other languages of Princess Charlotte Bay (ie. Lamalama (LL), Rimanggudhinma (RIM), Kuku Warra (KW), Flinders Island (FI), Barrow Point (BP), Umbindhamu (Umb), and Kuku Thaypan (KT)) showed the following cognate percentage scores:

	LL	**RIM**	**KW**	**FI**	**BP**	**Umb**	**KT**
Mor	76	59	24	51	38	54	35

(See Section 3.1 for more details)

1.3 Land and Language in the Princess Charlotte Bay Region

The language and social groupings of the people living in the Princess Charlotte Bay region cannot be strictly defined in terms of 'tribal territories' (as is the norm for most Australian languages). The everyday social groupings of people in this area consist of a mixture of people (living together) from a series of different 'patriclans', speaking different languages. [They have been labelled 'patriclans' by anthropologists such as Rigsby and Sutton (1980), because their members are united by patrifiliation - not to be confused with patrilineal descent groups]. These patriclans hold important and complex meaning. They define **land-ownership** and **language-ownership**, as distinct from **land-usage** and **language-usage**.

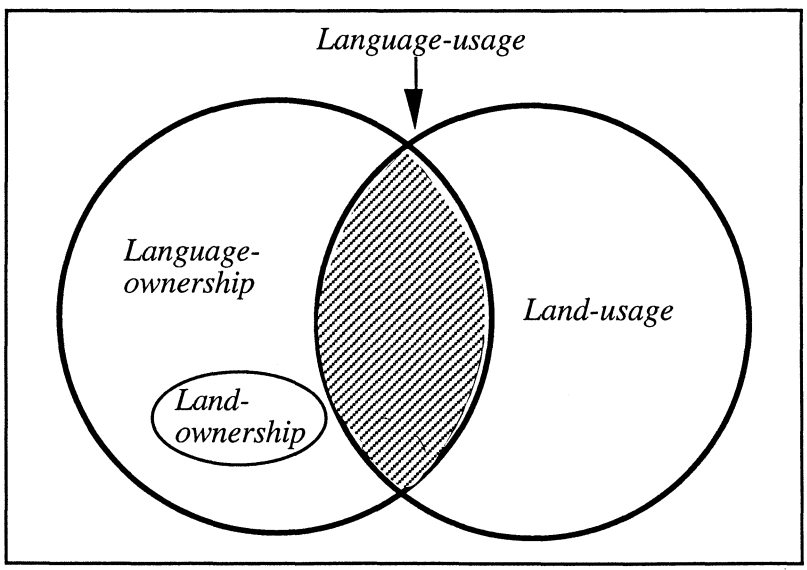
It is necessary to distinguish between **ownership** and **usage** in order to fully understand the unique land-and-language relationship which exists here. This became apparent to me when I asked a member of the Morrobalama 'tribe' where her people come from. She replied "south of the Massey River in the North, and north of the Normanby River in the south". This area encompasses <u>all</u> of the Princess Charlotte Bay region! And I knew that other 'tribes' (such as the Lamalama, Umbindhamu and Rimanggudinma) come from this region too. So why did she say that she came from it all, rather than a particular part of the region? Was it because she considered her people to 'own' all of the Princess Charlotte Bay, or was it because she considered that her people could 'use' (and did use and live on) all of the region? More discussion highlighted the latter.

I discovered that the social groupings of the region were more complex than the traditional notion of 'tribes', where language and land ownership and usage is usually easily defined in terms of discrete geographical boundaries. Basically, patriclans own certain tracts of land (contiguous or non-contiguous) which they may own solely, or in some cases, in partnership with other clans. Each patriclan owns a language of its own - differing from another distinctly or by just a few words. These different patriclans usually came together to live in the same place, forming a 'social grouping'. As members

of the same social grouping, they would live together and use the same land. Hence, this social grouping only defines land-usage, not land-ownership nor language-ownership.

A member of one patriclan would marry someone from a different patriclan. Patriclan membership, and subsequent language ownership, would be determined by the father's membership. Even today within the language community of Umagico, when talking about language and who speaks what, a person is said to 'speak' or 'mock' her/his mother's language (or languages of patriclans other than their own), while that person is said to 'talk' her/his father's language. An interesting semantic distinction between 'talk' and 'speak'.

The implication of this is that language-ownership does affect language-use within a social grouping (ie. a person is more inclined (for social reasons) to 'talk' their language, than 'mock' anothers language). Similarly, language-use is affected by land-usage (and the subsequent social grouping). Therefore, language-ownership and land-usage directly affect language-use in a social grouping. Consequently, land-ownership can be considered a subset of language-ownership. These complex relationships between land/language ownership and land/language usage can be summarised in the following Venn Diagram:



Venn Diagram depicting Land/Language Relationship in the Princess Charlotte Bay region. Language ownership and Land usage directly affect Language usage. Land ownership and land usage have no direct relationship.

Each patriclan has its own name - generally, that of a significant landmark in their country, or a totem. Social groupings are named according to their male leader eg. the social grouping lead by Jimmy Kullakulla, is referred to as "Jimmy Kullakulla Mob".

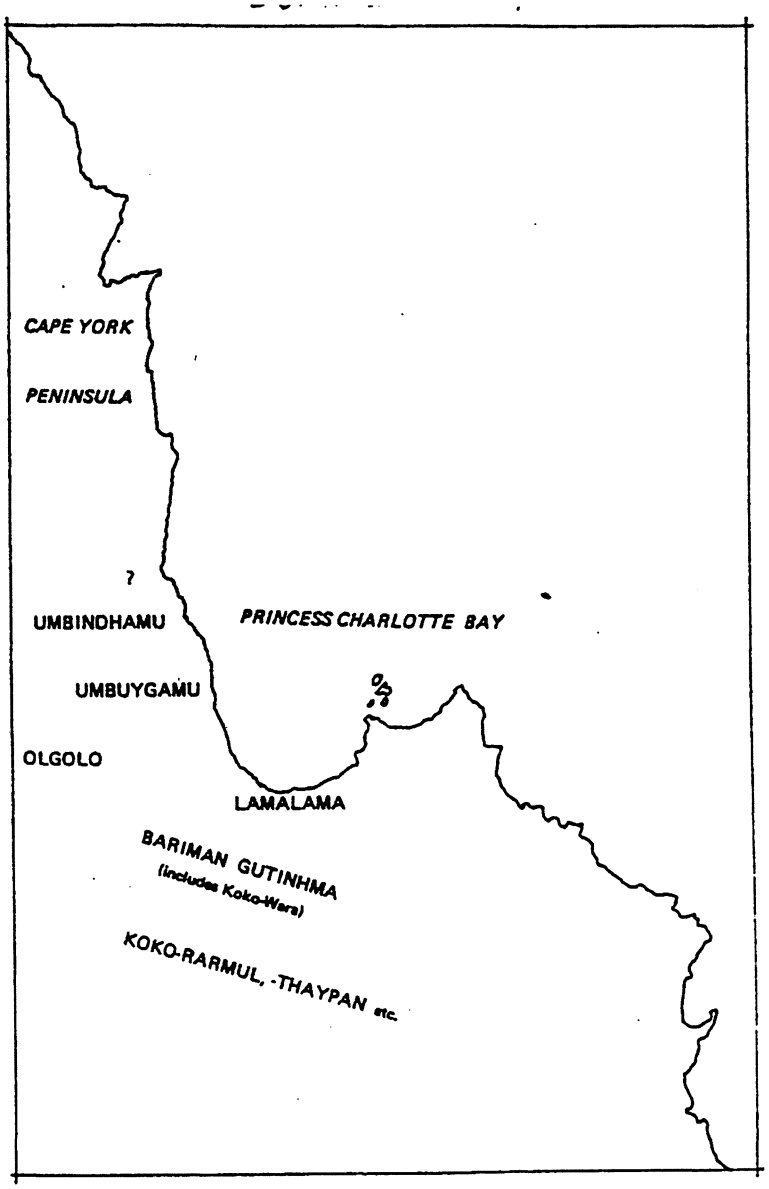
1.4 TERRITORY AND NEIGHBOURS

It is for these reasons that there is difficulty in defining exact language boundaries. In the Princess Charlotte Bay region, the place where a speech community resided did not necessarily correlate to traditional territory. To determine traditional territory, language speakers must be asked which portions of country are 'owned' by their people (not just where they lived).

It seems that I am in good company when it comes to not asking the right questions (or not listening properly) in order to ascertain this sort of information. For example, Bruce Sommer (1976) defines the traditional territory in terms of where the groups lived, rather than owned. Although it is possible that the two may have overlapped in some cases, it is improbable that this occurred in all cases. Nevertheless, he defines the territories of the Umbuygamu, Lamalama, Bariman Gutinhma, Olgolo, Umbindhamu and Umpila as follows:

> The Umbuygamu dwelt along the coast of the Bay in the vicinity of Balaclutha Creek, while the shores of the Bay to the south and east were occupied by the 'proper Lamalama' of Daisy Salt's close kin. To the south of them, Bariman Gutinhma speakers claimed the land behind the coastal clans and merged to the south with the Koko-Rarmul group of Roth (1898). To the west of the Umbuygamu were the Olgolo, a central Paman linguistic group; to the north they encountered speakers of Umbindhamu and southern Umpila dialects. Sommer (1976:15)

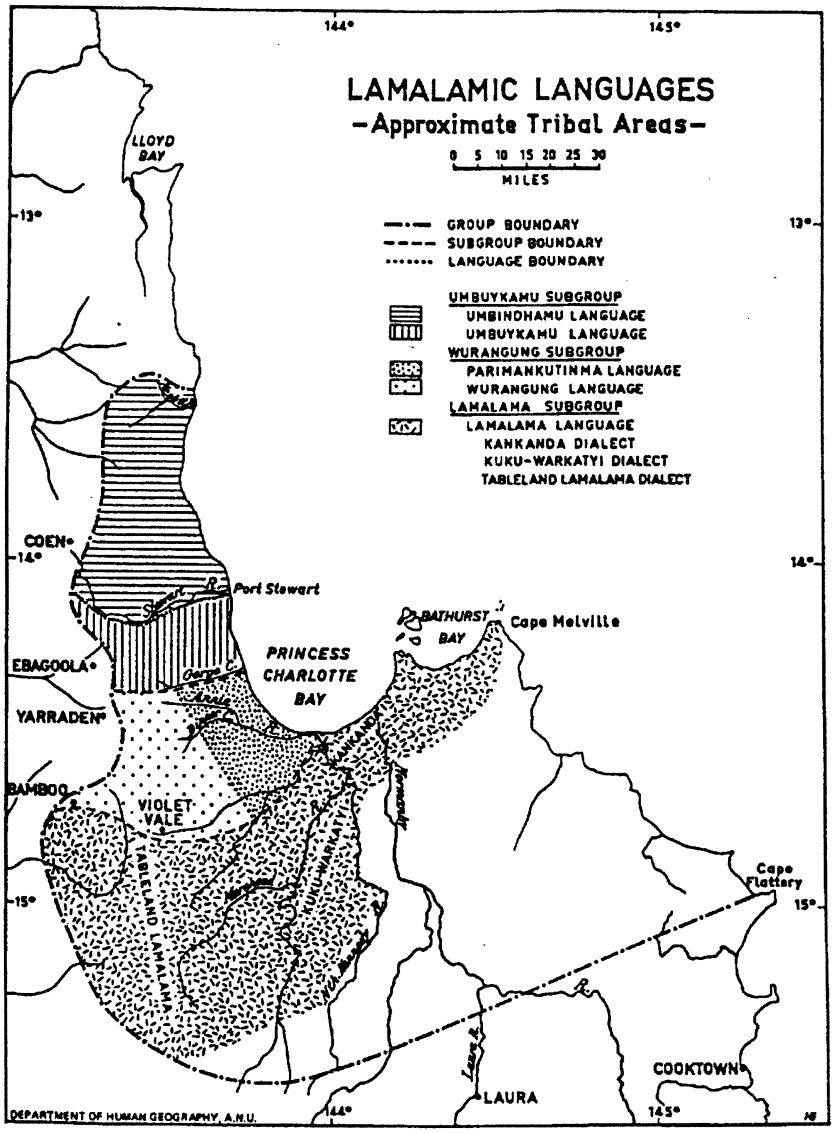
With this description, one is led to believe that there is nothing different between the tribal territorial organisation of these language groups and those of most other regions of Australia. He represents this by means of the following map:



Sommer's (1976) Map showing tribal territories in Princess Charlotte Bay

Laycock (1969) side-steps the territorial dilemma, by grouping five main languages of the region - 'Lamalama, Parimankutinma, Umbuykamu, Wurangung and Umbindhamu' - into what he called the 'Lamalamic group':

> The boundaries of the group, as of the individual languages comprising the group, are not difficult to determine, but it seems that virtually all languages spoken in the area between the coast and the Great Dividing Range from Nesbit River in the north to about Laura in the south are - or were, since the group can be regarded as virtually extinct - Lamalamic.
>
> Laycock (1969:71)



Laycock (1969:72-73) also observes language affiliations associated with marriage, such that "children learn the language of both parents, but use only that of the father". He associates these different languages with a 'moiety' system, rather than a patriclan system:

> As husband and wife are usually or always of different linguistic backgrounds, it appears that the languages (or dialects) divide along moiety lines. The moiety divisions follow the subgroupings; thus speakers of Kankanda, Umbuykamu, and (less certain) Wurangung, belong to one moiety, and speakers of Kuku-Warkatyi, Parimangutima and (less certain) Umbindhamu, belong to the other. Laycock (1969:73)

Having more than one group in each 'moiety', and no obvious terms for the division, would suggest that the marriage arrangements did not strictly function as moieties. There is also no evidence of section names, and hence no subsections either. However, Helen Peter (a younger member of the Morrobalama People) confirmed these rough marriage rules. And added that her mother (Lamalama) would call Old Frank Salt (Rimanggutinhma) her 'brother'; rendering marriage with him illegal. So perhaps Lamalama could be added to Laycock's former languages, probably under the banner of 'Wurangung'. (Exactly which clan of the Lamalama she belonged to, Helen was unsure).

Barry Alpher(1976) draws some interesting correlations between sociocultural practices and linguistic innovations. Morrobalama and the surrounding languages of Princess Charlotte Bay prove to be exceptions to one of his generalisations correlating the presence of sections with initial dropping:

> ...the farthest extension of the four-section system into Cape York coincides with the northern, eastern and western boundaries of I(nitial) D(ropping). Alpher (1976:88)

Morrobalama is an exception because it does not boast section terms, yet it has undergone initial dropping.

Another correlation between linguistic innovations and social organisation is that of initial softening (ie. initial stop > glide) and 'maternal personal totemism with divination by tooth-avulsion'. Alpher classifies the Lamalamic peoples of Princess Charlotte Bay as those who practised personal totemism. This is explained as a "ritual association of a person after puberty with his mother's patriline" (Alpher (1976:93)).

Although initial dropping has removed any trace of a possible lenition of the initial stop (to a glide), Alpher suggests that the lenition could have taken place before initial dropping. Hence, he concludes that the Princess Charlotte Bay languages can be grouped with Kuuku Ya'u, Umpila, Kaandju, and Wuthadi as languages which underwent initial softening and also practised personal totemism which was "decided by divination at the rite of tooth avulsion (removal of the right and left upper incisor)" (Alpher (1976:93)). This ritual took place for both males and females after puberty.

Bruce Rigsby has had contact with older members of these groupings since 1972, and has been able to gather information supporting a series of 'patriclans' who interrelate. He observed that these clans may own countries which are in a contiguous tract, or discontinuously distributed. When combined, these clans united to 'own' six different languages in the region. These are Lamalama, Umbuygamu, Rimanggudinhma, Umbinhamu, Ayapathu and Umpila. For each of these languages, Rigsby (1992) discusses how many clans own the language, and where the main owned land lies. His findings are summarised below:

(i) **Lamalama** Rigsby (1992:356)

Owned by:	12 clans - only mentions one: the Mbarrukarraw clan
Owned-land:	Normanby River mouth - North Kennedy River mouth
	Jane Tableland (owned by Mbarrukarraw clan)

(ii) **Umbuygamu** Rigsby (1992:356)

Owned by:	3 clans - only mentions one: the Morrobolam clan
Owned-land:	Dinner Hole (10km west of North Kennedy mouth)
	Cliff Islands
	'non-contiguous countries inland and on coast'

(iii) **Rimanggudinhma** Rigsby (1992:356)

Owned by:	2 clans - mentions both:
	(a) Bighurrnggudinh
	(b) Badhorrnga
Owned-land:	North: Annie River - Ngawal
	South: Five Mile River

(iv) **Umbindhamu** Rigsby (1992:357)

Owned by:	1 clan - mentioned Umpitamu
Owned-land:	Goose Swamp (inland + south of Running Creek)
	inland and coastal countries to north

(v) **Ayapathu** Rigsby (1992:357)

Owned by:	'These clans have died out'
Owned-land:	Ebagoolah - Coen (along range)
	Running Creek - Stewart River

(vi) **Umpila** Rigsby (1992:358)

Owned by:	[not mentioned]
Owned-land:	Olive River mouth - range (in west)
	North and south of Stewart River ("Kuuku Yani")

Massey Valley ("Kuku-Yin")
Three Mile Lagoon - Rocky Creek ("Umpila")

With many of the listings above, Rigsby states the number of clans owning each language, but he fails to name them all. For example, Lamalama is said to have twelve clans, but Rigsby only mentions one - 'Mbarrukarraw' (Rigsby(1992:356)); and Umbuygamu is said to have three clans, but Rigsby only mentions one - 'Morrobolam' (Rigsby(1992:356)). I was unable to confirm the clan names and numbers with people in Umagico, and subsequently am unable to name the clans which Rigsby fails to list. Having these names would be further evidence for this interpretation and would be a valuable linguistic and anthropological record.

1.5 Early European Contact

Most documentation of early European contact with the Cape York Peninsula is couched in heroic terms and depicts courageous struggles against impenetrable topography, elements of nature, and 'local savages'. They are eurocentric descriptions of expeditions to 'discover' and possess new land and gold, bequeath their names to rivers and innocent mounds of dirt, and pillage for white 'posterity' aspects of a rich culture.

The earliest description of European contact with the Aborigines of Western Cape York, is the Journal of Jan Carstenszoon, the Commodore of the Dutch Expedition aboard the ship 'Pera', in 1623. The Pera was to follow a Brief (from the States of the United Netherlands) to acquire geographical and 'commercial' knowledge of the "northern extremity and east side of the South Land". As is evident from the following extract (from the letter of instruction, dated 29th September, 1622), these instructions also contained orders regarding the capture of slaves:

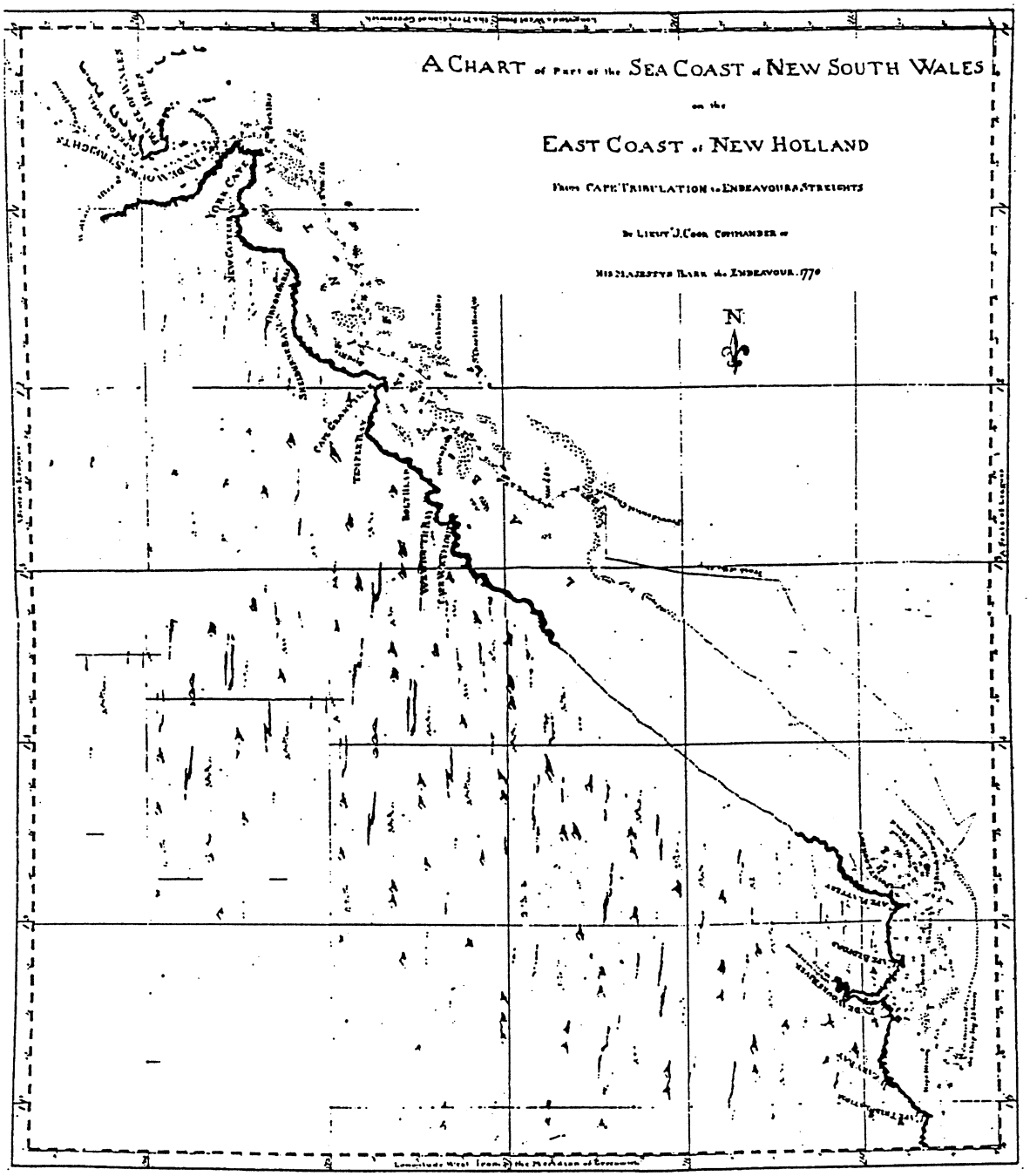
> In places where you meet the people, you will by dexterity [behendlicheyt] or otherwise, get hold of some adults, or, still better, young lads or girls, to the end that they should be brought up here, and later, when opportunity offers, be broken in at the said quarters.
>
> Heeres (1899)

May 6th, 1623, was the day for such a capture. The following account (translated from Carstenszoon's journal) describes an encounter with the Aborigines of Western Cape York (13° 7', to be precise) which resulted in the forced capture of a member of the local tribe:

> When we got into the boat again, the blacks emerged with their weapons from two different points of the bush and came out on the strand. There we enticed them with iron and beads which we held out, till we got close to them, and one of them, who had dropped his weapon, was seized round the waist by the skipper, and then the quartermaster threw a noose round his neck, by which he was dragged to the boat. The others, seeing this, tried to help the captive, furiously throwing their assegais, so that, in our defence, one of them was shot dead, and the others ran away, upon which we embarked without further delay.
>
> Jack(1921:49)

European contact with the Princess Charlotte Bay region came comparatively late. Unlike the rest of the eastern coast of Cape York, Princess Charlotte Bay had no white contact until about 150 years ago. As described above, the western side of Cape York had contact as early as the 1600's. The eastern side of Cape York was left alone until the late 1700's. In fact, James Cook in 1770 (aboard the 'Endeavour') was the first to travel the eastern coast.

However, he and other explorers (eg. Matthew Flinders in 1802, (aboard HMS 'Investigator')) missed Princess Charlotte Bay. Their early maps show the coast line continuing (without any sign of the large bay) directly north-west from just north of Cape Flattery to Cape Weymouth. Princess Charlotte Bay seems to be the only portion of the eastern coast to be overlooked.



Map showing passage of Cooks ship

It was probably bypassed because of a large coral reef, (separating the bay from the reef), discouraging entry, and forcing more ships to veer east away from the mainland. As described by Lort Stokes (1846) from aboard HMS 'Beagle':

> Between the rocks off Cape Melville, and a reef encircling the two small islets, the channel is not more than a mile in width and indeed, I consider passing this point and Cape Flinders the most intricate part of the inner route.....
> After clearing this danger, and passing the Cape, we steered across Princess Charlotte Bay, keeping wide to the southward of the reefs fronting it, in order that we might the more easily distinguish them; the sun at the time of the day being in the direction of the shipshead.
>
> Stokes (1846:352)

In 1819, Phillip Parker King (aboard the 'Mermaid') documented passage into the bay. This journey was particularly famous because of the Botanist, Cunningham's, discovery of the Aboriginal cave paintings on Clack Island (near Cape Melville). These paintings are a prime example of the rich culture that existed in the Princess Charlotte Bay region. Parker King returned in 1821 aboard the 'Bathurst', but like his 1819 journey, he only seems to have flirted with the islands of the Bay, not the mainland.

Despite this, the naming of a very prominent table topped mountain called 'Jane's (Jeanette) Tableland' (lat. 14°29'15", long. 144° 4'45") is (mistakenly) accredited to Phillip Parker King. Logan Jack (1921:220) notes that "This conspicuous table ('Jane's Tableland') was probably named by King, in the 'Bathurst', in 1821". However, there is no evidence of this naming in the primary documentation of King's 'Survey of Australia 1818-1822'. Parker King describes the coastline and islands, and their topography. If he were to make any mention of the Tableland, an obvious opportunity would have been in this entry for July 16, 1819; yet there is no mentioned of 'Jane's Tableland' (or the 'Jeanette Tableland', as it is now more commonly known).

> July 16th
> At sunset we anchored at the bottom of Princess Charlotte's Bay, in three fathoms, from which the low shore was visible as far as west; an opening among the back hills in the South East probably affords a fresh stream..... About four miles from the anchorage was a small opening in the mangroves, but of too little importance to take any notice of.
>
> King (1819:233-34)

Ironically, Phillip Parker King is not the only person who is given false credit for naming this mountain. The naming of Jane's Tableland is also accredited to James Cook (sailing fifty years before King's journey). Stokes, aboard MHS 'Beagle', declares confidently:

> There is over the head of this bay a remarkable level topped hill, called by Captain Cook, Jane's Tableland; rendered the more conspicuous from the low nature of the surrounding country. Stokes (1846:353)

W.H. Wells (1848:348) also gives James Cook the false credit for this naming; he quotes Stokes word for word:

> There is, over the head of this bay, a remarkable level topped hill, called, by Captain Cook, Janes's Tableland, rendered conspicuous from the low nature of the surrounding country. Wells (1848:348)

Cook's journals (Beaglehole (1955)) make no mention of this Tableland.

The credit should go to Charles Jeffreys. In June 1815, aboard HMS Kangaroo, this Englishman was the first to enter the Bay. He named it 'Princess Charlotte Bay' in honour of the daughter of George IV, Charlotte. And he named this 'remarkable level topped hill' - "Jane's Tableland" - after Jane Gill, of London, whom he had married in 1810. He also named the Cliff Islands (which Rigsby (1992:356) notes is land owned by 'Umbuygamu' speakers) due to their appearance:

> From Flinders Group a WSW course by compass should be taken across the extensive Bay, called Princess Charlotte Bay, the land at the bottom of which is very low, and thickly covered with lofty trees, there is a remarkable table hill on the SE side of it called 'Jane's Table', by pursuing the above course, you will fall in with Cliff Islands on your starboard bow; so named from their formation, and leave the SW part of the extensive reefs mentioned above, on the starboard hand a few miles. Cliff Islands should be approached to within 3 miles, after which a course should be steered along shore towards Point Crocker in Lat. 13^{o} 5'9. Long 143^{o} 48'3. Jeffreys (1819:356)

Jeffreys makes no mention of the local inhabitants.

Edmund Kennedy was the first European to penetrate the mainland behind Princess Charlotte Bay. This ill-fated expedition began on May 22nd, 1848, with a party of thirteen at Rockingham Bay (18° S.lat). It finished on December 29th, 1848 with a party of three at Weymouth Bay (12° 5'S.lat) (for Carron and Goddard) and further north at Pudding-Pan Hill (11°19'S.lat) (for Jacky-Jacky). These survivors were emaciated, malnourished, and close to death. The worst of the three, Carron, describes his physical appearance:

> I was reduced almost to a skeleton. The elbow bone of my right arm was through the skin, as also the bone of my right hip. My legs were also swollen to an enormous size.
>
> Jack (1921:248)

Such a fate may have been predictable from the ambitious beginnings at Rockingham Bay. Kennedy lead a team of twelve men and the following (far from modest) entourage:

> Our livestock consisted of twenty-eight horses, one hundred sheep, three kangaroo dogs and one sheep dog. Our dry provisions comprised one ton of flour, ninety lbs of tea, and six hundred lbs of sugar...twenty-four pack-saddles, one heavy square cart, two spring carts, with harness for nine horses, four tents, a canvas sheepfold, twenty-two pounds gun powder, one hundred and thirty lbs. shot, a quarter cask of ammunition, twenty-eight tether ropes, each twenty-one yards long, forty hobble chains and straps, together with boxes, paper etc., for preserving specimens, firearms, clocks blankets, tomahawks, and other minor requisites for such an expedition, not forgetting a supply of fish-hooks and other small articles, as presents for the natives. Carron (1849:1)

On rescue at Weymouth Bay, by the boat 'Ariel' under the command of Dobson, only a portion of Carron's detailed botanical journal could be retrieved. This portion only described the final two months of the expedition - after they had already passed through the inland portion of Princess Charlotte Bay. Regretably, Kennedy's journal perished

with him at Pudding-Pan Hill, leaving no documentation of the Aborigines of the Princess Charlotte Bay region.

It was twenty five years until another European ventured close to Kennedy's path. This was William Hann in 1872. He blazed an inland trail northwards from Maryvale (19° 33' Lat. 145°15' Long.) to the Coleman River (14° 31' Lat.), and returned southwards along the coast. It was on this return journey that he and his party passed through the western portion of the Princess Charlotte Bay land.

There is little record of encounters with the Aborigines of Princess Charlotte Bay. The only descriptions are of panicked 'collisions' with the locals, like the one on 14 September, 1872. Hann tells of an encounter on the banks of the Normanby River (core Lamalama and Morrobalama land, in southern Princess Charlotte Bay):

> Whilst Stewart and Jerry were out for the horses, two lots of natives simultaneously made their appearance from a dry lagoon and the river, with the evident intention of cutting off their retreat to the camp; the horses were quickly collected; spears were thrown at Stewart when retreating, and Jerry was making his tracks as quickly as possible towards the camp, while all were shouting and yelling at the top of their might; the horses passed at a thundering pace, and came the blackfellows from every direction with bundles of spears each, and painted for mischief. ..... I collected my party together and sallied out to meet our enemies, who, when they saw us advancing towards them, stopped and drew close together, while the stragglers were coming up from every direction. I deemed this the proper moment to make a demonstration, and, with this view, requested two of my party to give them two long shots as a warning what nearer ones might effect, if they persisted in approaching us. The result was magical; every blackfellow turned and retreated with greater rapidity than he had used in this advance, which ended the affair. Hann (1872:9)

Other descriptions reassured the readers that the Aborigines from Princess Charlotte Bay did possess the same breathing apparatus, rendering them fully human:

> These people have well-shaped noses, moderately-sized mouths, and sufficiently well-formed foreheads, to redeem them from ugliness. Hann (1872:7)

The main objective of the Hann expedition was:

1.6 RECENT HISTORY

Between the 1870's and the1930's, the Aboriginal people of this region were dispossessed. Just before the turn of the century, Roth (1898) reported a population of over 1000 for the Princess Charlotte Bay area. Within the next sixty years, this population decreased by at least 90%.

If they were not murdered in situations similar to that described above, many were forcibly removed to missions and reserves outside the area while white gold diggers and pastoralists took their place. Many of them were the victims of introduced diseases such as the Spanish Flu epidemic in 1919, or the earlier fatal spread of Syphilis.

In fact, it is likely that Dr Roth's appointment as Northern Protector in 1898, was specifically due to his medical knowledge and therefore appropriate skills to deal with the outbreak of disease throughout Cape York. For example, Sergeant James Whiteford, after a tour of the Musgrave district in September 1897, saw 450 Aborigines "reeking with syphilis" (Evans, Saunders, and Cronin (1975:101)). Later that year, Inspector James Lamond wrote:

> Nearly all the blacks are more or less diseased and it seems almost useless curing isolated cases - what is really necessary is a Doctor to go amongst the tribes ... Dr Roth should be the very man. (Evans, Saunders, and Cronin (1975:101))

Many of those who survived the introduced diseases, joined crews aboard trepanging, pearling and trochus boats (Flinders and Sutton (1986:327)). The scattered remnants of the Princess Charlotte Bay tribes who remained formed a community whose homebase was along the Stewart River. In 1927, Herbert Hale and Norman Tindale were commissioned by the South Australian Museum to visit there. They observed two local groups (the 'Apowuna' and the 'Entinga') living on the northern banks of the river, while on the southern bank lived the 'Yuinbata' people.

> ... the southernmost is the Yuinbata, who frequent the country south of Stewart River, on the southern bank of the mouth of which they make their northernmost camp...the

> Entjinga live along the banks of the Stewart River, the mouth of which is also known as Entjinga. Formerly, they ranged inland, in search of honey and small game, for some thirty miles, but since the stocking of the main range with cattle they have been compelled to confine themselves to the relatively infertile sand beaches, coastal swamps, and mangrove lined foreshores. At Entjinga they camp only on the northern bank of the river... the Apowuna (also called Konanununa) clan have their main camps along Massey River. In recent years they have become greatly diminished in numbers, and have linked themselves with the Entjinga survivors, although they still keep their camps about fifty yards apart. Hale and Tindale (1933:70)

A year later, Donald Thomson observed that these groups had mingled into one group which he called the 'Yintjingga'.

> I went back to the Yintjingga, with whom I had made friends on the first expedition, and whose territory lies in Princess Charlotte Bay at the mouth of the Stewart River and extends northwards to Claremont Point, and remained with them for nearly twelve months. Thomson (1956:34)

While there, Thomson documented a great deal about the people and their lifestyle, and took many excellent photographs of the Morrobalama people. There are particularly excellent photos of the late Jimmy Kullakulla (father of Nancy Gunnawarra and Mabel Kullakulla), who was clan leader. These photograghs and other cultural artefacts which returned South with Thomson, are now housed in the Museum of Victoria, Melbourne. From his descriptions, the Yintjingga were a people whose homebase was along the lower Stewart, yet whose lifestyle required them to move out along the coastal strip and hinterland; limited to using only the land which was 'available' to them by new white 'owners'of stations like (from South to North respectively) Lakefield, Marina Plains, Ebagoolah, Lily Vale, and Silver Plains.

In the early 1930's, many of these people were moved north to the Old Lockhart River mission at Bare Hill (just south of the present day Lockhart River settlement). Those who remained at the Stewart River camp were members of three tribes - the Morrobalama, the Lamalama and the Umbindhamu. These people remained based at Port

Stewart during the Second World War, up until the 1960's. Helen Peter (Morrobalama Tribe), was born there in the 1950's. She continues this history from her perspective:

> ... the Morrobalama (my dad's), the Lamalama (my mum's) and the Umbindhamu - we were the only ones left at the Port Stewart area. Most of the tribal people went off to work at the various cattle stations around the Princess Charlotte Bay area or were killed by the mounted police. My people were living quietly at Port Stewart going about their own business, hunting and gathering foods. They received food ration from the Aboriginal Protector in Coen once a month. Helen Peter (in Ogilvie (1994:1))

To the west of where the Port Stewart mob were living, lay a large and well-known property. This property was leased by a very prominent and wealthy, white Queensland family. In 1961, a member of this family had a liaison with a young Aboriginal woman (from the Port Stewart Community). She fell pregnant and decided to give her baby it's father's family name. The family considered this an embarrassment and great insult. In retribution, they organised (in conjunction with the Queensland Government) for the removal of the entire community.

> In approximately 1961, I can just remember, the police from Coen together with the husband of the Silver Plain Station owner came to our settlement and told the three families (Kullakulla, Liddy and Jelas) to pack up their belongings and get on the government boat 'Melbidir' which was anchored offshore. When the people were on the boat, they saw smoke rising from the place where their houses stood. They knew their houses were burnt down. Helen Peter (in Ogilvie (1994:1))

The MV Melbidir displaced them 500km north to the tip of Cape York, at Cowal Creek (now known as 'Injinoo'). The people were told that the Melbidir was taking them to the tip of Cape York for mandatory medical treatment. They were told that they would be returned to their homeland in one week. These were lies.

> They asked the Manager of DNA (Department of Native Affairs) of the NPA (Northern Peninsula Area) at the time when they will be able to return home. They were told they will be going home soon. But as the years passed, they knew that they would

never see their tribal land again. The old people were dying one by one by the time we were resettled at Umagico in 1974.

Helen Peter (in Ogilvie (1994:1))

1.7 PRESENT SITUATION

Since being dispossessed, and being the blatant victims of white domination, the speakers of Morrobalama have dwindled in number to only a handful of traditional speakers.

By the late 80's, some of them moved to Coen; only four people of the original group are still living in Umagico. Of the four people, only two speak the Morrobalama language on an everyday basis, though most of the younger people understand the language but can't speak it. Helen Peter (in Ogilvie (1994:1))

These main speakers are two elderly sisters - Nancy Gunnawarra and Mabel Kullakulla. They were my teachers while living in Umagico, which is an Aboriginal and Islander Community situated on the western tip of Cape York Peninsula. Today (in 1994), Umagico has a population of about 230 people. Of this population, about 80% speak (or have contact with) languages of the Torres Strait, while 20% speak (or have contact with) Australian Aboriginal languages.

The Torres Strait languages which are spoken in Umagico are Kala Lagaw Ya and Meriam Mer. The Australian Aboriginal languages spoken in the Community are Morrobalama, Lamalama, Umbindhamu, Kaantju, Wuthadi, Kuku Ya'u, Umpila, Anggamuthi, and Atambaya. Apart from these traditional languages, most of the time all members of the Community speak Torres Strait Creole or Cape York Creole.

2. MORROBALAMA PHONOLOGY

2.1 PHONEMES AND THEIR REALISATION

One of the most outstanding aspects of the Morrobalama language is its phoneme inventory. In comparison with other Australian languages, the Morrobalama phonemic inventory is very large, and contains 'unusual' sounds such as fricatives, voiced contrasts, and prestopped nasals.

Australian languages are known to be relatively homogeneous in their phonemic inventories. Typically, they display four to six paired stops and nasals (bilabial, apico-alveolar, apico-post alveolar, lamino-dental, lamino-palatal, and dorso-velar), two rhotics (trill and retroflex), no fricatives, no voicing contrasts, and a three vowel system.

The Morrobalama phonemic inventory is an exception to this norm. It has fricative sounds, voicing contrasts, prestopped nasals, and a five vowel system (contrasting in length). It has seven places of articulation (including two laminal series - lamino-dental and lamino-palatal, and a glottal stop). It has three rhotics (two of which contrast for voice) and two glides. While a typically 'Australian' inventory usually consists of about 17 phonemes, the Morrobalama inventory has expanded to include 36 phonemes.

Consonants:

	APICO-		LAMINO-		DORSO-		
	Alveolar	Postalv.	Dental	Palatal	Velar	Bilabial	Glottal
Stop (+voice)	d		d̪ (dd)	ɟ (dj)	g	b	
Stop (-voice)	t		t̪ (tt)	c (tj)	k	p	ʔ (')
Fricative (+voice)			ð (dh)			β̪ (v)	
Fricative (-voice)		ʃ (sh)	θ (th)		x (h)	ɸ̪ (f)	
Nasal	n		n̪ (nh)	! (ny)	ŋ (ng)	m	
Lateral	l	l̻ (rl)	l̪ (lh)	ʎ (ly)			
Rhotic (+voice)	r (rr)	ɻ (r)					
Rhotic (-voice)	r̥ (rh)						
Semi-vowel			y		w		
Prestop Nasal (-voice)	^{t}n (tn)		t̪n̪ (ttnh)		^{k}ŋ (kng)	^{p}m (pm)	
Prestop Nasal (+voice)					^{g}ŋ (gng)		

THE MORROBALAMA PHONEME INVENTORY
(Orthography used, shown in brackets)

Vowels:

	front	middle	back
high	i (ii)		u (uu)
mid	e (ee)		o (oo)
low		a (aa)	

The Morrobalama Vowel Chart

Minimal and near-minimal pairs include:

/i/	arh**i**lu	'sting ray'
/ii/	t̻alarh**ii**l	'lightning'
/e/	**e**ram	'urine'
/ee/	**ee**ra	'ground'

/a/	aw**a**rr	'salt-water turtle'
/aa/	aw**aa**rr	'white'
/o/	m**o**thanmama	'small, long-tailed ray'
/oo/	m**oo**tharr	'dead person'
/u/	wulrh**u**m	'white man'
/uu/	ak**uu**m	'long-grass string'
/e/	el**e**nh	'louse'
/i/	el**i**nh	'cooked, ripe'
/o/	b̬ **o**tju	'fresh-water rockcod'
/u/	arran b**u**tjinh	'small child'

2.1.1 STOPS AND NASALS

	APICO-		LAMINO-		DORSO-		
	Alveolar	Postalv.	Dental	Palatal	Velar	Bilabial	Glottal
Stop (+voice)	d		d̪ (dd)	ɟ (dj)	g	b	
Stop (-voice)	t		t̪ (tt)	c (tj)	k	p	ʔ (')
Nasal	n		n̪ (nh)	! (ny)	ŋ (ng)	m	

Apart from Cape York, the only other place in Australia where the **glottal stop** occurs as a phoneme, is in Arnhem Land. In the two places the glottal stop seems to occur in different environments. In Arnhem Land, the glottal stop usually occurs syllable-finally. Contrastively, in Cape York (as in Morrobalama) the glottal stop usually (but not always) occurs intervocalically.

o'amal	'string fishnet'
o'aya	'uncle'
e'an	'plains turkey'
e'anam	'double-ended yamstick'
orha'alma	'left arm'
orha'ayenma	'right arm'
leve'arro	'porcupine'
tha'arranh	'light'
tho'ogal	'anus'
wa'arrnu	'catfish'
lam'awarr	'middle three fingers'
lam'arran	'little finger'
nyeerhe'	'raw meat'
eloy'	'temple (head)'

Like most Australian languages, in Morrobalama there is a **nasal** consonant corresponding to each **stop** consonant (except the glottal stop). Thus for the labial stops 'b' and 'p' there is the labial nasal 'm'; for 'd' and 't' there is 'n'; for 'g' and 'k' there is 'ng'. Corresponding to the interdental stops 'dd' and 'tt' there is the interdental nasal 'nh'; and corresponding to the palatal stops 'dj' and 'tj' there is the palatal nasal 'ny'.

Minimal and near-minimal pairs include:

/t/	a**t**a	'lower leg'
/d/	a**d**a	'gummy shark'
/tt/	a**tt**a	'rotten'
/dd/	o**dd**a	'blood'
	irra**dd**angarr	'black flying fox'
/th/	a**th**a	'fire'
/tj/	a**tj**an	'egg'
/th/	i**th**am	'black ant'
/dh/	me**dh**em	'armpit'
/dj/	the**dj**err	'ashes'
/tj/	arra**tj**an	'eye'
/k/	a**k**uum	'long grass string'
/g/	wa**g**un	'mouth'
/p/	o**p**a	'coolamon'
	ee**p**a	'short yam'
/b/	ee**b**a	'long yam'
	o**b**an	'woomera'
/n/	erampi**n**	'fresh-water mussel'
/nh/	erampi**nh**	'shrub tree'
/n/	iya**n**	'marchfly'
/ng/	iya**ng**	'shoulder'
/nh/	orha**nh**	'bees honey'
/ng/	orha**ng**	'black snake'
/ny/	banan**y**a-	'to untie'
/n/	banan**a**	'kidney'
/ny/	i**ny**a	'meat, minya'
/nh/	i**nh**a-	'to hear'
/ng/	i**ng**arr	'thin'

Almost all the languages of Cape York (except Yir Yoront and Guugu Yimidhirr) lack the retroflex consonants /rt/ and /rn/. Morrobalama is no exception (the only retroflex

phonemes it has are /rl/ and /r/). An added feature to the Morrobalama inventory (which occurs rarely in Australian languages) is prestopped nasals.

2.1.2 PRESTOPPED NASALS

	APICO-		LAMINO-		DORSO-		
	Alveolar	Postalv.	Dental	Palatal	Velar	Bilabial	Glottal
Prestop Nasal (-voice)	tn		ttnh		kng	pm	
Prestop Nasal (+voice)					gng		

Prestopped Nasals are also found in the Arandic languages of the Central Desert, in Andyamathanha, Guyani, and Nukuna in the Thura-Yura group (Hercus (1992)), and in Wangkanguru, Arabana, and Diyari in the Karnic group. In Morrobalama, there is no palatal prestopped nasal. Each prestopped nasal has the same distribution as nasals, therefore are justified to be single, separate phonemes.

Minimal and near-minimal pairs include:

/g/	o**g**al	'hole, cave'
/kng/	o**kng**al	'mosquito'
/ng/	o**ng**adharr	'sawfish'
/k/	tjo**k**on	'red male kangaroo'
/kng/	i**kng**al	'boomerang'
/gng/	i**gng**arr	'vein'
/nh/	a**nh**a	'liver'
/ttnh/	a**ttnh**arr	'salt water crocodile'
/tn/	i**tn**arr	'big eel'
/kng/	a**kng**arr	'preying mantis'
/m/	a**m**arr	'brown snake'
/pm/	a**pm**a	'person'

Prestopping of nasals in Morrobalama seems to have developed from nasals in Proto-Northern Paman. This change can be summarised in the rule:

N > TN / #C[-nas]V_ where T = non-nasal stop (except the palatal)
N = any nasal (except the palatal)

eg. *kuna > utna 'intestine'

This is substantial incentive to analyse the sound as a 'prestopped nasal', in preference to a 'nasalized stop' (see Section 3.2.1 for more detail on the development of prestopping).

2.1.3 FRICATIVES

	APICO-		LAMINO-		DORSO-		
	Alveolar	Postalv.	Dental	Palatal	Velar	Bilabial	Glottal
Fricative (+voice)			ð (dh)			β (v)	
Fricative (-voice)		ʃ (sh)	θ (th)		x (h)	ɸ (f)	

Morrobalama is one of the handful of Australian languages with **fricative** sounds. There are other languages in Cape York which also display fricative phonemes. These include other Princess Charlotte Bay languages, Uradhi (of the tip of Cape York), and Anguthimri (of the Western coast of Cape York). Elsewhere in Australia, fricatives are found in Marrithiel (in the Northern Territory), Thargari in Western Australia (Klokeid (1969)), and they are found in Adnyamadhanha of South Australia (Schebeck, Hercus and White (1973)).

The places of articulation for fricatives in Morrobalama seem to correlate with the positioning of fricatives in these other languages. For example, Anguthimri and Marrithiel also have the apico-postalveolar fricative 'sh' ; Anguthimri, Marrithiel and Thargari also have lamino-dental fricatives; Uradhi and Anguthimri also have a velar fricative; and Uradhi, Anguthimri, Marrithiel, and Adnyamadhanha also have bilabial fricatives.

Minimal and near-minimal pairs include:

/th/	eth**e**th**a**	'bower bird'
/t/	eth**e**t**a**	'flood'
/sh/	**ish**an	'cabbage tree'
/th/	**ith**am	'native cat'
/t/	**i**tam	'heart'
/th/	o**th**an	'white poison tree'
/h/	o**h**an	'mopoke bird'
/g/	o**g**an	'vagina'
/tt/	o**tt**al	'belly button'
/th/	o**th**al	'black'
/dd/	o**dd**a	'blood'

/th/	a**th**a	'fire'
/dh/	oha**dh**arr	'shovelnose shark'
/v/	ahu**v**irr	'butterfish'
/f/	tu**f**u	'type of cabbage tree'

2.1.4 RHOTICS

	APICO-		LAMINO-		DORSO-		
	Alveolar	Postalv.	Dental	Palatal	Velar	Bilabial	Glottal
Rhotic (+voice)	r (rr)	ɽ (r)					
Rhotic (-voice)	r̥ (rh)						

Morrobalama has three **rhotic** phonemes - the retroflex continuant /r/, the voiced trill /rr/ and the voiceless trill /rh/. While the first two rhotics (/r/ and /rr/) are common for an Australian language, the latter rhotic phoneme (/rh/) is quite unusual (it occurs in other Princess Charlotte Bay languages and Yaygir of the NSW northern coast). Minimal and near-minimal pairs include:

/r/	e**r**en	'fish bait'
/rr/	e**rr**ema	'stone tommy hawk'
/rh/	e**rh**e	'raw, unripe'
/r/	i**r**ang	'shoulder'
/rr/	i**rr**akngaram	'steel axe'
/rh/	i**rh**ang	'native cat'
/th/	i**th**ang	'black cockatoo'
/rr/	a**rr**am	'plains wallaby'
/rh/	a**rh**am	'sand goanna'
/r/	o**r**a	'worm'
/rh/	o**rh**a	'upper arm'

2.1.5 SEMIVOWELS

	APICO-		LAMINO-		DORSO-		
	Alveolar	Postalv.	Dental	Palatal	Velar	Bilabial	Glottal
Semi-vowel			y		w		

It is quite typical for Australian languages to have the glides /w/ and /y/. In Morrobalama, they occur in all word positions. Below are examples of semi-vowels occurring word-initially, word-medially, and word-finally:

/w/	**w**agun	'mouth'
	tarra**w**arr	'jabiru'
	a**w**	'down'
/y/	**y**alparr	'hill'
	otta**y**amba	'small shellfish'
	utn̪ a**m**a**y**	'large intestine'

2.1.6 LATERALS

	APICO-		LAMINO-	
	Alveolar	Postalv.	Dental	Palatal
Lateral	l	ɭ (rl)	l̪ (lh)	ʎ (ly)

It is not unusual for Australian languages to have a lateral phoneme for each of the (four) non-peripheral places of articulation. Minimal pairs include:

/rl/	ema**rl**	'salt-water crayfish'
/lh/	ema**lh**	'groper fish'
/l/	o**l**arr	'long-tailed spotted ray'
/lh/	o**lh**arr	'small lizard'
/ly/	o**ly**warr	'green ant'

2.2 PHONOTACTICS

2.2.1 WORD-INITIAL POSSIBILITIES

Word-initially in Morrobalama, we can have:

(a)	any of the five **nasals**:	n	nh	ny	ng	m
(b)	any of these **stops**:	d t	dd tt	dj tj	g k	b p
(c)	the **lateral**:	l				
(d)	any of these four **fricatives**:	sh	th		h	f
(e)	any of the three **rhotics**:	rr rh	r			
(f)	either of the **semi vowels**:		y		w	
(g)	any **short vowel**:	i	e	a	o	u
(h)	either of these **long vowels**:		ee	aa		

It is interesting to note that the following consonants and long vowels **never** occur **word-initially**:

Stop (-voice)							'
Fricative (+voice)			dh			v	
Fricative (-voice)		sh					
Lateral		rl	lh	ly			
Prestop Nasal (-voice)	tn		ttnh		kng	pm	
Prestop Nasal (+voice)					gng		

	front	middle	back
high	ii		uu
mid			oo

Also, no consonant clusters occur word-initially (depending on how we interprete labialised consonants - see Chapter 2.2)

2.2.2 WORD-FINAL POSSIBILITIES

Word-finally in Morrobalama, we can have:

(a)	any of these **nasals**:	n		nh	ng	m
(b)	only this stop (**glottal stop***):				'	
(e)	any of these **laterals**:	l	rl	lh		
(f)	only this **fricative***			dh		
(g)	either of these **rhotics**:	rr	r			
(h)	either of the **semi vowels:**			y	w	
(c)	any **short vowel**:	i	e	a	o	u
(d)	either of these **long vowels**:		ee	aa		

(* In the 536-item lexicon (the 602-item lexicon excluding verbs), only 3 words ended in a stop. Each of these three words ended in a glottal stop. Only two words ended in a fricative. Both of these ended in the voiced interdental fricative /dh/.)

The following consonants and long vowels **never** occur **word-finally**:

Stop (+voice)	d	dd	dj	g	b
Stop (-voice)	t	tt	tj	k	p
Fricative (+voice)					v
Fricative (-voice)	sh	th		h	f
Nasal			ny		
Lateral			ly		
Rhotic (-voice)	rh				
Prestop Nasal (-voice)	tn	ttnh		kng	pm
Prestop Nasal (+voice)				gng	

	front	middle	back
high	ii		uu
mid			oo

It is interesting to note that no consonant clusters occur word finally, and there is no lamino contrast word finally (ie. neither /ly/ nor /ny/ occur finally).

2.2.3 INTERVOCALIC POSSIBILITIES

Intervocalically in Morrobalama we can have ANY consonant (see phoneme chart) or a consonant cluster (listed below). All clusters occur only intervocalically.

The two member clusters attested are:

	k	n	m	l	rl	r	y
d		nd				rd	
g		ng					
b			mb	lb			
t				lt		rt	
tt			mtt				
k				lk	rlk		
p		np	mp	lp	rlp	rp	
f				lf			
th							yth
ng							
m		nm		lm	rlm	rm	
l	kl	nl				rl	
r			mr				
rh			mrh				
y			my				
ddnh						rddnh	

2.2.4 PROBABILITIES OF OCCURRENCE

Relative probabilities of occurrence can be calculated for word-initial and word-final phonemes. The word-initial calculations cover all parts of speech whereas the figures for the word final phonemes exclude verbal stems (which never occur in isolation). Hence the word-initial probabilities were calculated from a 602-item lexicon, and the word-final probabilities were calculated from a 536-item lexicon.

2.2.4.1 WORD-INITIAL PROBABILITIES

The following word-initial probability figures were calculated from the entire corpus of 602 words (covering all parts of speech).

(a) Vowels

In the 602-item lexicon, the majority (55%) of all words begin with a vowel. (54% begin with a short vowel; 1% begin with a long vowel).

i	.09		
e	.085	**ee**	.005
a	.155	**aa**	.005
o	.175		
u	.035		

(b) Nasals

In the 602-item lexicon, 14% of all words begin with nasal.

n	.025
nh	.005
ny	.02
ng	.01
m	.08

(c) Stops

In the 602-item lexicon, 12% of all words begin with a stop (nearly 50% of these begin with a bilabial stop).

d	.01	**dd**	.002	**dj**	.005	**g**	.011	**b**	.03
t	.02	**tt**	.01	**tj**	.002	**k**	.005	**p**	.025

(d) Laterals

In the 602-item lexicon, 6.5% of all words begin with the lateral 'l'.

l .065

(e) Fricatives

In the 602-item lexicon, 4% of all words begin with a fricative

sh	.005	**th**	.02	**h**	.013	**f**	.002

(f) Semi-Vowels

In the 602-item lexicon, 5.5% of all words begin with a semi-vowel.

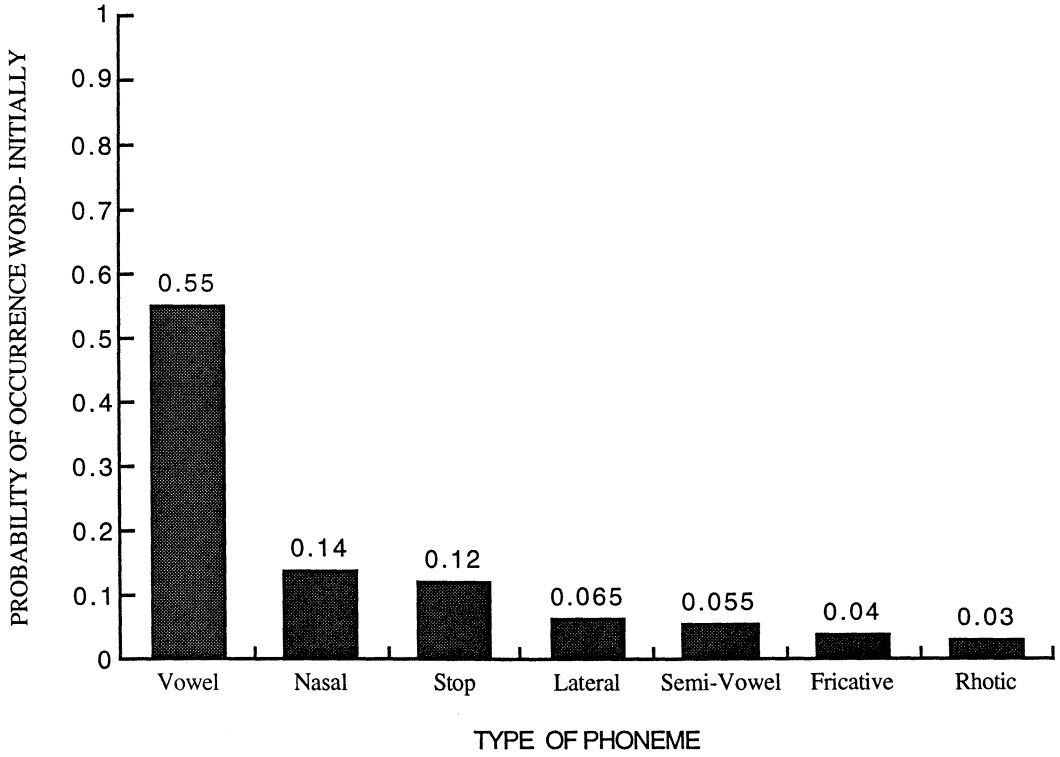
y	.015	**w**	.04

(g) Rhotics

In the 602-item lexicon, 3% of all words begin with a rhotic.

rr	.005	**r**	.015
rh	.01		

The following Bar Graph shows the comparative probabilities of phonemes occurring word-initially:



Such a large majority of words beginning with vowels in Morrobalama would suggest that the language is one of the northern Cape York languages that has undergone 'initial dropping'. A typical feature of an 'initial dropping language' is a wide range of consonant phonemes, plus vowels occurring in word initial position. This is evident in Morrobalama. Suggesting that before C' (and possibly also V') were dropped, C_1 and V_1 varied allophonically. Once C' and V' dropped, the C_1 and V_1 became phonologically significant. (See Section 3.5 for more on initial dropping).

2.2.4.2 WORD FINAL PROBABILITIES

The following word-final probability figures were calculated from the same corpus as used to calculate the word-initial probabilites, except the verbs were extracted from the corpus leaving a 536-item lexicon. The verbs were extracted because (as explained in Chapter 4) they consist of a verbal stem which is always suffixed by at least

a pronominal clitic; thus, the final phoneme of a verbal stem is never a word-final phoneme.

(a) Vowels

In the 536-item lexicon, 27% of all words ended in a vowel. (26% ended with a short vowel; 1% ended with a long vowel).

i	.01		
e	.01	**ee**	.006
a	.18	**aa**	.004
o	.01		
u	.05		

(b) Nasals

In the 536-item lexicon, the majority (32%) of all words end in a nasal

n	.13
nh	.05
ng	.02
m	.12

(c) Stops

In the 536-item lexicon, only .5% of all words end in a stop. The only stop which words end in is the glottal stop '.

'	.005

(d) Laterals

In the 536-item lexicon, 13.5% of all words end in a lateral.

l	.12
rl	.01
lh	.005

(e) Fricatives

In the 536-item lexicon, only .5% of all words end in a fricative. The only fricative which a word ends in is the voiced inter dental fricative /dh/.

dh .005

(f) Semivowels

In the 536-item lexicon, 1.5% of all words end in a semivowel.

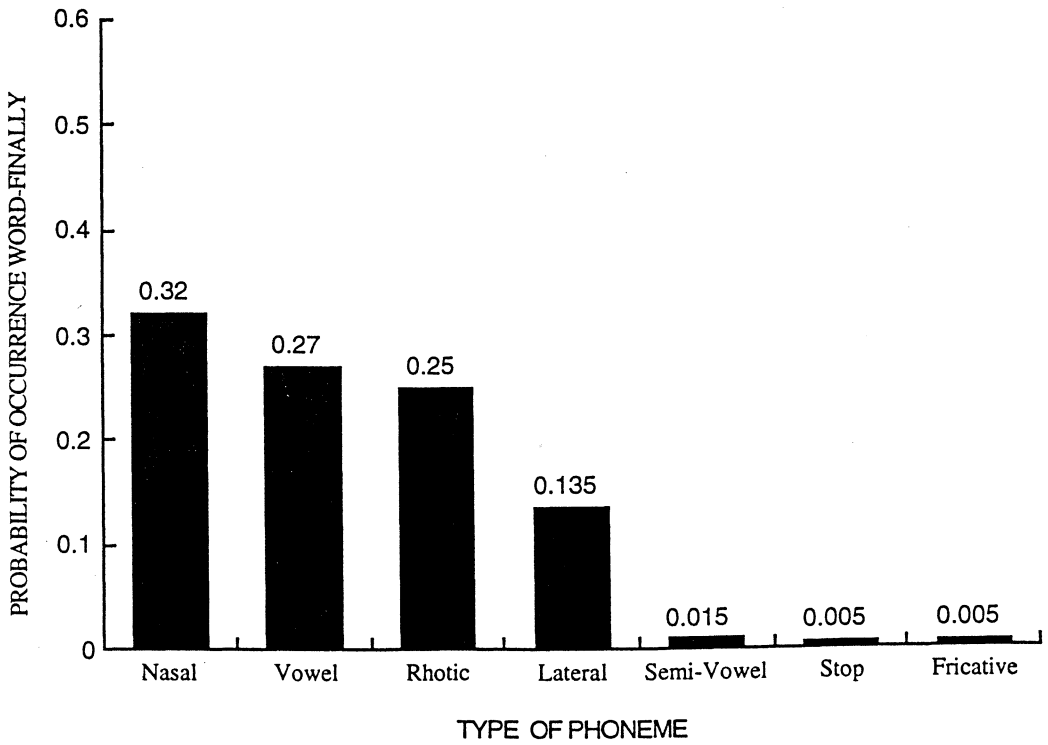
y .013 **w** .002

(g) Rhotics

In the 536-item lexicon, 25% of all words end in a rhotic. The voiced trill /rr/ is the phoneme which occurs most commonly (19%) in word-final position.

rr .19 **r** .06

The following Bar Graph shows the comparative probabilities of phonemes occurring word-finally.



2.3 STRESS PATTERNS

The majority (75%) of stress falls on the vowel following the first consonant.There is an obvious difference in stress between compound words and non-compound words. Compound words make up 20% of the lexicon; and the stress on these words will be discussed below in Section 2.3.2. The other 5% of the lexicon consists of words where stress falls on the vowel following the second consonant. For example, **wapárr** 'beard'; **nohá** 'throat'.

2.3.1. NON-COMPOUNDS

In words which are not compounds, stress usually (95% of the time) falls on the vowel following the first consonant. Therefore, as is shown below, if the word begins with a consonant, stress will fall on V_1 (which follows C_1).

médhem	'armpit'	**túfu**	'type of cabbage tree'
gáparr	'belly'	**tjókon**	'red, male kangaroo'
túwar	'dugong'	**wánham**	'bailor shell'

If the non-compound word begins with a vowel, then stress will fall on V_2 (which follows C_1).

itná	'ear'	**irháng**	'native cat'
adárr	'tongue'	**abí**	'whitefish'
alílirr	'carpet snake'	**arránh**	'birds nest'

Since the majority (55%) of words begin with a vowel, this is the preferred stress pattern for non-compounds.

2.3.2 COMPOUNDS

Stress usually falls on the second element of the compound. For example, if the compound is of the form "COMPOUND = 'GENERAL-SPECIFIC'" construction; stress will fall on the SPECIFIC element, as though the GENERAL component acted as a clitic. And stress will occur as though the SPECIFIC element were in isolation (ie. normally on the vowel following the first consonant).

lam / eethál	**nul / eethál**
[hand] [bone]	**[hip] [bone]**
'bone of hand'	'bone of hip'
"back of the hand"	**"hip bone"**
mala / mátham	**lam' / áwarr**
[foot] [big]	**[hand] [many ≥ 3]**
'big of the foot'	'≥3 of the hand'
"big toe"	**"middle three fingers"**

There are never two consonants on a morpheme boundary. They are always separated by a vowel, which is inserted as follows:

lam**a**gáparr	mal**a**gáparr
[hand] [belly]	**[foot] [belly]**
'belly of the hand'	'belly of the foot'
"palm"	**"sole"**

Compounds are not always of this 'general-specific' type, often they contain three constituents:

marr / angi / pinh	**thal / angirl / pinh**
[face/nose] [lung] [COM]	[black] [lung] [COM]
'with nose and lung'	'with black lung'
"pig"	**"black bream"**

The COMITATIVE case '**-pinh**' often acts as a lexical formative by being suffixed to a word to form a compound '**x - pinh**' meaning 'with x'.

eram / pinh	**ithi / pinh**	**lirrin / pinha**	**marr / pinh**
[urine][COM]	[bone][COM]	[smoke][COM]	[face][COM]
'with urine'	'with bone'	'with smoke'	'with face'
"freshwater mussel"	"boney bream"	"stream ship"	"red faced flying fox"

There is only one minimal pair in the corpus distinguished only by stress:

awárr 'goose'

áwarr 'many (≥3)'

2.4 SYLLABLE STRUCTURE

$$\textbf{WORD} = \sigma_1 (\sigma_2) (\sigma_3) (\sigma_4) (\sigma_5)$$

A word can contain up to five syllables:

orangowupmál 'nullanulla'

A syllable can contain:

$$\sigma = (C_1)\ V_1\ (C_2)\ (C_3)$$

where C_1 = all consonants
V_1 = all vowels
C_2 = stops, laterals, rhotics, glides
C_3 = nasals

In Morrobalama, it is possible to have a monosyllabic word of a single vowel, an open syllable, or a closed syllable:

For example, **a** 'north'
w o 'west'
gar 'east'
a w 'down'

3. HISTORICAL PHONOLOGY

All existing vocabulary for the seven languages and two reconstructions listed below was collated and compared. From this comparison, 101 cognates (shared by a minimum of three languages) were selected. The languages are listed below (with their respective sources):

Lamalama:	Rigsby, Sommer, SIL
Rimanggudinhma:	Rigsby, Sommer, Laycock
Flinders Island:	Sommer, Sutton, Tindale, Dixon
Umbindhamu:	Rigsby, Sommer, SIL
Kuku Thaypan:	Rigsby, West, Roth
Barrow Point:	Tindale, Sutton, Sommer, Haviland
Kuku Warra:	Roth, Dixon, Dutton
Proto Northern Paman:	Hale
Proto Middle Paman:	Hale

Ayabadhu was originally part of the comparison, but was found to share no cognates, and therefore excluded from the final list. Instead, it shares a high proportion of cognates with the "Wik" languages [in particular Bakanha (Dixon has 59%) and Wik Mungkan (Dixon has 48%)]. From the sources, it was only possible to collect 47 words for pNP and 21 words for pMP. Therefore, if scores for each of these seem low, it is because of the low database.

The following three pages contain the 101 word lexicon. The bold printed entries represent (those which the author identifies as) cognates. Empty cells indicate that an entry could not be found for that word in that language.

ENGLISH	MORROBALAMA	LAMALAMA	RIMAN	KUKU WARRA	FLINDERS Is	BARROW Pt	UMBINDHAMU	KUKU THAYPAN	pNP	pMP	OTHER
'husband'	oray	aruy	arodd		*dooddul*	*ulbal*	orratta	ruudh	*muuyu		
'person'	apma	mba	ba	apma	aaba	ama	ama	me	*pama		
'young sg man'	manamudhum	mbanambuyum	olmban			*walnggu*	*mantendindi*	*ndang*			
'mother'	may	may'	mar	ama	aamu	amu(-ddu)	amitta	maang(a)	*ngama		
'wife'	arra	rra	worr	wurr	djeral	iraal	apirri	nheerra			
'green ant'	oly arr	yurr	odjarr	ru	oodi	wunhddu	wuyarra	yuurr			
'fly'	orrawal	rhuwal	*gor*		*odamu*	orrolwol	wolul	urrwa			
'louse'	elenh	linh	linh	*(a)paar*	*meldjirri*	*urru*	*arrkil*	*alpuna*			
'mosquito'	okngal	unggul	gol	*buuwar*	*oobu*	wunguul	*ewen*	ngil(u)			*kungul (pP)
'worm'	ora	oru	aro		waalpan	*awaraga*	*unanhddan*	*yaandu*			
'dog'	otuwa	toarr	ota	tua	woda	otea	*elewin*	tu	*kuta(ka)	*kuta(ka)	
'kangaroo r-m'	tjokon	*ndolilwi*	tjokon		dhugun	tokanba	ukanbal	*laarrambin*			
'kangaroo g-m'	urr ar	arror	*kopan*		*daawu*	urruy	*yirrpiwi*	*konbalung*	*yuri		
'meat / minya'	inya	nye	nyangarr	inya	inya	inya	minya	nyenggeerr	*minya	*minya	
'cooked meat'	nyeelinh	nyelinh	nya		ina	anhddi	*minyanhttin*	nyenhddiin(a)			
'porcupine'	leve'arro	laferru	*katalwa*	*arirrdil*	*arrgingili*	arriyil	*wattayi*	*(nye)kuurrye			
'possum'	ol an	kuluen	olan	(a)luuwan	*alpimlaay*	*ulnaarr*	*wimpu*	luwan	*kulan	*kulan	
'brown snake'	amarr	kumarr	marr		*wooba*	*ngambwir*	*ngampu*	*mbeelalkal*			
scrub wallaby	utn ul orr	*kulili*	*borrarr*	*nyewu*	*arralin*	*dhaw'u*	unyan	alnggirru	*pangkul		
'sm. cabb tree'	ogang	*dirhi*	ilkan		akanly		ongkong	*arrwula*			
'red apple tree'	maneyaverr	*rengolunhu*	*iwi*		aborra		apirri	*kuwayrr*			
'boat/canoe'	arrir	rhi	rhana		*agala*	*gulnguy*	weren	*almuuxu*			
'yes'	yaa	ya	*kanay*		e'a		yaw				
'bird(generic)'	ettarr	*djem*	idarrarr		*ngaawuy*	*ddurrir*	otjerri	*ambeyul	*tjuti		
'jabiru'	tarrawarr	turr	nyandorr			muunduurr	montorro	*tyiilpa			
'king parrot'	abal	kurrpal	arpol		*nguumay*	arrblil	*penpa	*teta			
'willywagtail'	ttarrapedhem	*rumarrpilam				iddiddarr	etteritterri				
'dying'	thaadim	ttuti	*borr			*unde			*Cutjuma	*Cutjuma	
many >=3	awarr	awarr	*alpapa	*ambiiyerr	warrga	urra	yawiyawal	*arrwanynge			
'rotten'	atta	*nggirr	*nggarratah		worramatta	adda	katta		*katja	*katja	
'two'	sh orr	sorr	adherr		odiyerra	*uddiirra	utterri	*arrmbe	*kuutji(rra)	*kutji(-ma)	
'ashes'	theedjerr	thantjirr	ddiiddi		dheedi	*urrgan	*wurkan	*molaw			
'bark (tree)'	thottanan	munhanha	kwo ittin		*ddagur	*almbuurr	wati	*kukaalmba			
'boomerang'	ikngal	*arrndjel	*kokanyalnyal		ngulmanhi	*ulm'een	wiingal	*maalkerr	*wangal		

ENGLISH	MORROBALAMA	LAMALAMA	RIMAN	KUKU WARRA	FLINDERS Is	BARROW Pt	UMBINDHAMU	KUKU THAYPAN	pNP	pMP	OTHER
'creek'	logaparrtalrhayil	lorrkabatjilahayi	*tterr*		aaya	*wirri*	*yangala*	*adhunda*			
'down'	aw	aw	*ku*			ada	*yinhttu*		*pakay		
'east'	gar	arr	*kadhnggokana*	aka	aka	age	aawara	kaay(e)	*kaaway	*kaaway	
'fire'	atha	*rhan*	*arrtjuwa*	aturr	*ngaawu*	atharr	*yuma*	*mo*	*tjuma		
'grass'	uwon	*lar*	ukan		wooban	*adde*	*kuy'i*	kwilnu			
'ground'	eera	ari	iwur	ddawur	*yiiwala*	awurr	akurra	myuurre	*raaku(r)		
'leaf'	alir	lir	alwer		*maadja*	*yigiil*	*akil*	*angaa*	*pirra		
'flame, light'	arranh	rhanh	*ddeliti*		*ddadar*	*uddi*	yirra	*nhderra*			
'north'	a	wongarr	*ugal*	*guel*	ungga		ungkara	nggworra	*kungka(rr)	*kungkar	
'sand'	of a	fowa	*dhan*		woray	*ddugiir*	*nani*	awo	*yuuka		
'spear'	ala	la	alka	alga	alka	alga	ayka	alka	*kalka	*kalka	gala (Yd)
'thunderstorm'	aparran	arrparran	*olkarradhen*	*nggarrngiyal*	daparra	ddabarrin	yaparran	mbuuparr		*kaapa	
'fresh water'	oknganamrha	nggu	kwol	*gawudd*	*aadi*		ngoki	ngo	*nguku	*nguku	
'salt water'	okngoduwam	nguttan	*kodhalmborr*	*attiyen*	oogu	addilrr	ngoklyaypu	*ngolmbyun(u)*			
'west'	wo	*kul*	*dir*	ewul	uwa	uwee	kuwa	*peerra*	*kuwa	*kuwa	
'upper arm'	orha		arho		marda	*wariil*	*wenpin*	*ndanggerr*	*tjirri		
'armpit'	medhem	mirram	*ipalpa*		*abalbal*	*aawalwal*	*ngamurru*	maawa	*ngaamurr		
'beard'	waparr	warrbarr	gulparr	dalpuurr	kalalparr	walarr	waparr	tjelparr			*ttyalparr (pP)
'belly'	gaparr	(arr)kaba	bul	*ngundirr*	wawu	ambul	amporo	*rhoom*	*kampu(r)		
'blood'	odda	tjutjar	kwodhaddo	nyatu	*mendey*	*umeerr*	*yaman*	*meerr*			
'breast'	oyang	yum	tyong	yuunga	oyonga	uyuu	nilngu	yuung			
'bottom'	thagarr	thakarr	bonanggarr	*nhddey*	*wobu*	*muyu*	konawangkarra	adhunggerr			
'ear'	itna	*lamburi*	adharr	tharr	ooddela	*uyiin*	wina	*nambuurh*	*pina	*pina	*mana (pP)
'eye'	arratjan	arrarrttal	*ikanddorr*	tjarr	wanbarraay	*urngguul*	*malikan*	*amiil*	*kura-kuran- *maari	*kuRa/*maRi	
'faeces'	utn a	unduwu	uttan	anhttiel	oda	un.ga	kuna	nuwa	*kuna	*kuna	
'foot'	apmal	mbaldo	mbal	buul	*yiida*	ttamal	*ya'o*	maal	tjamal	*tjamal	
'large intestine	utn amay	ndomay	ottanmar		*ddoolgu*	*nganha*	kunamitta	anomadha			
'hand'	alam	lamdu	*alngul*	*ario*	mangal	*anbi*	*yu'u*	*arhi*	*mala	*maRa	
'heart'	itam	*burum*	kolitam	*awurr*	*worgel*	*wurrgwul*	tantu	*rromulkuulu*			
'lower leg'	ata	da	ittir		ttalmba	*wunduul*	*apa'al*	taatyembo			
'lung'	anga		djingan			*wara*	nanga	*nhddertwung*			
'milk'	yangot a	yumardduwa	djongitta		uyongttilka	uyuu		*yuungalkool*			
'mouth'	wagun	wakwun	gukol	gaaga	anggul	*arrgiir*	yapun	*tya*	*nyangka		
'navel'	ottal	*ninkanham*	dhelarr		wodu(R)	*wunhuurr*	ngottil	*romulpurr*			

ENGLISH	MORROBALAMA	LAMALAMA	RIMAN	KUKU WARRA	FLINDERS Is	BARROW Pt	UMBINDHAMU	KUKU THAYPAN	pNP	pMP	OTHER
'nape of neck'	orruyathal	arrottal	*kereko*		wungarddal	*ddun.gu*	kokoyuuru				
'nipple'	yangeera	yumara	djongikarr			uyuu	*manu*	yuungamiil			
'penis'	ud a	*firrmber*	*norako*	*dwaamburr*	wunda	umbiirr	nganhttara				
'shoulder'	lrang	*rhemttal*	*xal*	*arriladdan*	*ddambal*	*wariil*	aanggal	*nda*	*paangkal		
'skin'	ottanan	*durr*	*ittin*	*nggaarr*	*ulgul*	*almbuurr*	wi'an	tayln	*patin(a)	*patin(a)	
'testicles'	ut al	arrdol	ddo(')		oddulutiyarra	*urru*	*ngapul*				
'throat'	noha	nafu	noka		*arrgin*	manu	manuuku	*nggu*	*manu	*manu	
'tongue'	adarr	*ttayna*	darr	anhddar	wattatta	wattatta	*yapi*	nderr	*nganytjar		*nganytjar (pP)
'tooth'	lrrata	erretta	*lidh*	*(a)loola*	wanda	lrrwan	*ina*	*agaal*	*rirra		
'vagina'	ogan	kun	konh	*mutwan*		*inggaal*	oyan	*anhe*			
'vein'	lgngarr	ngerr	ingarr		ngarra						
'vomit'	alin	linharham	lilim			*nganha*	*ayka*				
'barramundi'	op ar	arrbor	opar	arrbworr		*imwirr*	*oomulu*	*alveng*			
'red bream'	eperhem	birham	perrang			*arrwunh*	omporokoro				
'dugong'	tuwarr	nyuttarr	ottarr			wuyaarr	utjarra	*alpawrrwutta			
'kingfish'	mangamyatanu	muntjelnganhaddanha					maywuynggayttanu				
'beach crab'	ender	ttar	*ngolndong*			*wand'un*	yanhtteri				
's-w crocodile'	attnharr	kunddarr	ddarr	addnharr	addaarra	anheerr	anarra	nharra	*kanyarr(a)		*kanyarr (pP)
'big eel'	itnarr	*pyerrpe*	tter		*umbunangan*	*anggala*	yutja				
'big oyster'	walnggal	uwalnggal				*wam'an*	owolngga				
's-w turtle'	awaarr	kuwarr	*rraydderr*	aruwuda	*ngabooy*	*wugulubu*	ikarranhddi	kyerrwunhdde			
'to bite'	tta-	dda-	tta-		idjale-	yinda-	atala	*nggawla-	*patja		
'to burn'	athalam-				*ngawuuwal	anhddi-			*yaatji		
'to dig'	da-	tta-	ti-		yiddela	*aga-	*wa'il	tyi-			
'go (away)'	garra-	karra-	*wenda-		ogayi	*ada-	*ya-		*kali-		
'to give'	tuwa-	*yu-	*mba-		addi	uddi-	uwe-		*tjampa-/ *wu(-tji)	*wa	
'to hit'	nya	nyi	*ndo-		*algal	*imba	ngay	*twi-	*kunta		
'to tie up'	ttalttal	ddalddal	ttalttal			*alnga	ttal	tta-	*katja	*katja	
'to wait'	manya	nya			aliminalgi	*an.gi	nina	ni-			
'to yarn'	fobulo	fu	wolo-		*oogunyal	*arnhi	yapala	*ni-			
FUTURE	y	y	y		y		*ngg		*-tja		
IMPERATIVE	l	l	l		l		l		*-l		
PAST	n	n	n		n		n		*-n		

3.1 LEXICOSTATISTICS

Below is given a "cognate density matrix" which shows (in a very tentative way only) the internal relationships of the Princess Charlotte Bay languages as reflected by lexicon. The figures in the matrix are the percentage of basic meanings (out of the list of 101) which are represented by morphs shared as cognates by each pair of Princess Charlotte Bay languages.

	LL	RIM	KW	FI	BP	UMB	KT	pNP	pMP
Mor	76	59	24	51	38	54	35	47	20
LL		48	24	31	32	41	35	36	18
RIM			26	43	37	44	35	30	12
KW				15	20	12	19	13	7
FI					24	28	22	21	9
BP						23	20	23	13
UMB							24	28	16
KT								19	15
pNP									20
pMP									

3.2 SOUND CHANGES

Overview of Morrobalama Sound Changes

A series of sound changes had the following effects:

1. creation of prestopped nasal consonant phonemes: /pm/, /tn/, /ttnh/,etc.
2. creation of interdental stop phonemes: /tt/, /nh/, etc.
3. creation of fricative phonemes: /th/, /sh/

4. creation of labialised consonants (which could be interpreted as phonemes) b_{w}, p_{w} etc.

5. loss of initial consonant/syllable

3.2.1 NASAL PRESTOPPING

N > TN / # C [-nas] V_
where T = non-nasal stop (except the palatal)
where N = any nasal (except the palatal)

A nasal consonant became prestopped when it followed a short vowel that was preceded by an initial non-nasal consonant. The stop phase has been explained by Koch(1994) to have "resulted from a timing lag between the oral closure and the velic opening components of the nasal consonant". And when the initial consonant was a nasal, presumably the following vowel was nasalised; thus, the velic was already open for the articulation of the nasal which followed. (Hence, no time lag and no prestopping). Etymologies which show the development of nasal prestopping:

N > TN / # C[-nas] V_

*	**pa**ma > a**p**ma	'person'
*	**ku**na > u**t**n_{w}a	'faeces'
*	**pi**na > i**t**na	'ear'
*	**kany**arr(a) > a**ttnh**arr	'saltwater crocodile'
*	**kung**ul > o**kng**al	'mosquito'

The above rule is accompanied by an intial dropping rule in which *C1 is dropped when it is followed by a short vowel which precedes a consonant. The two rules are ordered as follows:

Rule (1):	**N > TN / # C[-nas] V _**
Rule (2):	**C > Ø / # _ V C**

Etymologies that show these Rules include:

'person'	*	**pama** > papma	Rule (1)
		papma > **apma**	Rule (2)
'faeces'	*	**kuna** > kutna	Rule (1)
		kutna > kutn̰a	labialisation
		kutn̰ a > **utn̰ a**	Rule (2)
'ear'	*	**pina** > pitna	Rule (1)
		pitna > **itna**	Rule (2)
'saltwater crocodile	*	**kanyarr(a)** > kattnharr	Rule (1)
		kattnharr > **attnharr**	Rule (2)
'mosquito'	*	**kungul** > kukngul	Rule (1)
		kukngul > ukngul	Rule (2)
		ukngul > okngul > **okngal**	vowel lowering

As has been explained, when the initial consonant was a nasal there was no prestopping. Infact, the following nasal was preserved, as can be seen in the following etymologies:

N > N / # N V _

*	mi**ny**a > i**ny**a	"meat'
*	ngaa**m**urr > **m**edhem	'armpit'
*	ma**n**u > **n**oha	'throat'
*	nga**m**a > **m**ay	'mother'

3.2.2 CREATION OF INTERDENTAL STOP PHONEMES

C[+pal, +stop] > C [+dental, +stop] / # C[-nas] V[-back] _

Palatal stops following a [-back]vowel, which was preceded by a non-nasal intial consonant, were fronted to interdental stops. Etymologies indicating this change:

*pa**tj**a-	>	**tt**a-	'to bite'
*ka**tj**a	>	a**tt**a	'rotten'
*ka**ny**arr(a)	>	a**ttnh**arr	'salt water crocodile'

Since there are no palatal prestopped nasals in Morrobalama, this final example of 'salt water crocodile' *** kanyarr (a) > attnharr** suggests that fronting of palatal stops occurred before the prestopping of nasals and hence, before the initial dropping rule:

***kanyarr (a) >**		kanharr	palatal stop fronting rule
kanharr	>	kattnharr	Rule (1) - prestopping
kattnharr	>	**atthnarr**	Rule (2) - initial dropping

3.2.3 CREATION OF FRICATIVE PHONEMES

C[+pal, +stop] > C [+fric] / V[+back] _ V[+back]

A palatal stop which was followed by or preceded by a back vowel, was lenited to a fricative. In most cases, initial dropping then exposed these fricatives, forcing a phonemic contrast. Etymologies showing this lenition:

*Cu**tj**uma	>	**th**aadim	'dying'
kuu**tj**i(-rra)	>	**sh** ̯orr	'two'
tjuma	>	a**th**a	'fire'

3.2.4 CREATION OF LABIALISED CONSONANTS

There are examples in the data where the following twelve consonants are labialised.

Labialised Consonants:

			g̯	b̯
t̯				p̯
n̯	sh̯			
l̯			y̯	
rr̯		ly̯		
rh̯				
tn̯				

Labialisation could be interpreted in two different ways - either allophonically or phonemically. There is evidence for either interpretation, and choice would depend on whether simpler phonotactics were preferred (ie. labialisation being phonemic), or whether simpler phonemes were preferred (ie. labialisation being allophonic). Both interpretations will be analysed below.

Labialised Consonants as Allophones:

The high occurrence of back vowels before the labialised consonants would support an allophonic interpretation. This would simplify phonemes (by not adding the extra twelve labialised consonants), but complexify phonotactics (by having to allow consonant clusters word-initially). Below are examples of consonants which are labialised after back vowels:

Labialised Consonant	Realisation	
n$_{w}$	lamun$_{w}$ár	'thumb'
t$_{w}$	yangot$_{w}$á	'milk'
tn$_{w}$	utn$_{w}$á	'shit'
p$_{w}$	malup$_{w}$ár	'top of foot'
ng$_{w}$	ong$_{w}$á	'rat'
g$_{w}$	og$_{w}$á	'geko lizard'
rh$_{w}$	orh$_{w}$ángal	'catfish(fresh water)'
b$_{w}$	ob$_{w}$álh	'longtailed ray'
ly$_{w}$	oly$_{w}$ár	'green ant'
r$_{w}$	ur$_{w}$ánh	'leech'
l$_{w}$	orangol$_{w}$ár	'messmate tree'

Labialised consonants occur word initially. For these instances where no back vowel precedes the labialised consonant cluster we can presume that initial dropping has occurred, and the conditioning environment has disappeared. Examples where the conditioning environment has been dropped:

b$_{w}$	b$_{w}$álal	'small sugarbag'
t$_{w}$	t$_{w}$álam	'short tailed ray'
g$_{w}$	g$_{w}$arr	'sore'

Perhaps labialisation first developed as a process of methathesis where **uCa > uCua**. One such etymology could be:

***kuna > utnua** 'faeces'

Labialised consonants are the only consonant clusters that occur word-initially in Morrobalama. Hence, to interprete labialised consonants as clusters (rather than phonemes) would necessitate changing the phonotactics to allow consonant clusters to occur word-initially.

Phonotactics would change from $\sigma = (C_1)\ V_1\ (C_2)\ (C_3)$ to $\sigma = (C_1)\ (C_2)\ V_1\ (C_3)\ (C_4)$

Labialised Consonants as Phonemes:

The following near-minimal pairs show that labialised consonants could be analysed as separate phonemes:

/b̬/	ob̬arr	'forehead'
	b̬al̬al	'small sugarbag'
/b/	balam	'frightened'
	oban	'woomera'
/g̬/	ag̬u	'afternoon'
	og̬a	'geko lizard'
	g̬arr	'sore'
/g/	gar	'east'
	ogal	'hole, cave'
	agutharr	'saratoga fish'
/r̬/	or̬a	'kookaburra'
/r/	ora	'worm'
/rh̬/	orh̬a	'2plS'
/rh/	orha	'upper arm'
/tn̬/	utn̬a	'faeces'
/tn/	utnolarr	'antbed parrot'
/t̬/	ut̬al	'testicles'

It has been shown how interpreting the labialised consonants as allophones keeps the phonemic inventory simple, but changes the phonotactics. Alternatively, to interprete the labialised consonants as phonemes would leave the phonotactics simple, but would add twelve more phonemes to the inventory:

Phonotactics: $\sigma = (C_1)\ V_1\ (C_2)\ (C_3)$

New phonemic inventory:

	APICO-		LAMINO-		DORSO-		
	Alveolar	**Postalv.**	**Dental**	**Palatal**	**Velar**	**Bilabial**	**Glottal**
Stop (+voice)	d		dl	dj	g	b	
Stop (+ voice) (+labial)					g$_w$	b$_w$	
Stop (-voice)	t		tt	tj	k	p	'
Stop (-voice) (+labial)	t$_w$					p$_w$	
Fricative (+voice)			dh			v	
Fricative (-voice)		sh	th		h	f	
Fricative (-voice) (+labial)		sh$_w$					
Nasal	n		nh	ny	ng	m	
Nasal (+labial)	n$_w$						
Lateral	l	rl	lh	ly			
Lateral (+labial)	l$_w$			ly$_w$			
Rhotic (+voice)	rr	r					
Rhotic (+voice) (+labial)	rr$_w$						
Rhotic (-voice)	rh						
Rhotic (-voice) (+labial)	rh$_w$						
Semi-vowel			y		w		
Semi-vowel (+labial)			y$_w$				
Prestop Nasal (-voice)	tn		ttnh		kng	pm	
Prestop Nasal (-voice) (+labial)	tn$_w$						
Prestop Nasal (+voice)					gng		

3.2.5 LOSS OF INITIAL CONSONANT

C > Ø / # _

Initial dropping can be simply explained as the loss of an initial consonant. It is a phonological change which has happened in three areas of Australia - Cape York (eg. Princess Charlotte Bay languages and Northern Paman), Central Australia (eg. Arandic languages) and New England (eg. Nganjaywana).

While other Princess Charlotte Bay languages dropped the entire initial proto syllable (*C_1V_1), Morrobalama sometimes only dropped *C_1. Perhaps *V_1 determined this. If *V_1 was short and front, then it dropped with *C_1. If *V_1 was long and back, then it was retained in Morrobalama (in the shortened form).

In Morrobalama, the minority (3.5%) of words which begin with a vowel, begin with /u/. For example:

i (9%) e (8.5%) a (15.5%) o (17.5%) **u (3.5%)**

This suggests that most word initial */u/ were lowered to /o/ in Morrobalama (pNP has a three vowel system). The majority (14%) of words which begin with a consonant, begin with a front consonant. For example:

m (8%) b (3.5%) p (2.5%)

(1) Proto long vowels in the first syllable of the word were shortened in Morrobalama:

if *V_1 = V[+back, +long] then *C_1V_1 > V_1' (where V_1' = V[+short])

(2) Proto short vowels in the first syllable of the word were dropped with *C_1 in Morrobalama.

if *V_1 = V[+front, +short] then *C_1V_1 > Ø

High, back vowels (*/u/) were lowered (to /o/).

Examples: * nyura > orhwa '

* pula > olwa

* nyundu > oda

* nyulu > olwa

This change would have happened after many of the other sound changes (which are conditioned by the initial consonant). Looking at other languages which have undergone initial dropping, it is possible that Morrobalama underwent intermediate stages of lenition before total loss of the initial consonant. For example, in the Thura-Yura languages, laminal stops and nasals lenited to 'y'. Although such stages of development towards initial dropping are possible in Morrobalama, lack of evidence in the present language suggests that they are improbable.

As a consequence of initial dropping, the difference between labialised and non-labialised consonants may have become phonemic. (See Section 3.4 for further discussion). All examples of other sound changes (shown above) exemplify the loss of the initial consonant.

3.3 A Comparison of Pronominal Systems in Princess Charlotte Bay Languages

By comparing and reconstructing the pronominal systems of eleven Northern Paman languages - Uradhi, Mpalitjanh, Luttigh, Yinwum, Linngittigh, Alngitt, Awngttim, Ntra'ngitt, Ngkott, Aritinngittigh and Mbiywom - Hale came up with the following 'proto Northern Paman Pronoun Paradigm':

	SG	DUAL	PLURAL	
1 S	*ngayu~ngaya		*ngana	EXCL.
	*nganyi	*ngali	*ngampul	INCL.
2 S	*nyuntu~nyintu	*nyupul~nyipul	*nyura~nyirra	
3 S	*nyulu~nyilu	*pula	*tjana	

Hale (1976:24-26)

Below we shall compare the pronouns from four languages of Princess Charlotte Bay - Morrobalama (Mor), Lamalama (LL), Rimanggudinhma (Rim), and the Flinders

Island Language (F.I.) - with Dixon's proto-Australian (pA) and Hale's proto Northern Pamam (pNP). From these, I suggest proto-forms. Some of these coincide with pA and pNP, others do not.

1 sg S **protoform *ngadju**

Mor	ya
LL	ya
Rim	dju
F.I.	ngayu
pA	*ngadju ~ ngayu
pNP	*nayu ~ ngaya

Mor	***ngadju** > ngayu	lenition dj > y
	ngayu > ngaya	vowel lowering
	ngaya > **ya**	initial dropping ($*C_1V_1 > Ø$)
LL	as above	
Rim	***ngadju > dju**	initial dropping ($*C_1V_1 > Ø$)
F.I.	***ngadju > ngayu**	lenition dj > y

2 sg S **protoform *nyundu**

Mor	da
LL	ta
Rim	ndo
F.I.	yundu
pA	*ngindu ~ nyundu
pNP	*nyuntu ~ nyintu

Mor	***nyundu** > nyudu	nasal dissimilation
	nyudu > nyuda > nyoda	vowel lowering
	nyoda > **da**	initial dropping ($C_1V_1 > Ø$)
LL	***nyundu** > nyudu	nasal dissimilation
	nyudu > nyutu	lenition (devoicing d >t)
	nyutu > nyatu > nyata	vowel lowering
	nyata > **ta**	initial dropping ($C_1V_1 > Ø$)
Rim	***nyundu** > nyundo	vowel lowering
	nyundo > **ndo**	initial dropping ($C_1V_1 > Ø$)
F.I.	***nyundu** > **yundu**	lenition ny > y

3 sg S **protoform *nyulu**

Mor	la
LL	luy
Rim	lo
F.I.	ngulu
pA	*nyulu ~ nyula ~ ngula
pNP	*nyulu ~ nyilu

Mor	***nyulu** > nyolu > nyola	vowel lowering (x2)
	nyola > **la**	initial dropping ($C_1V_1 > Ø$)
LL	***nyulu** > yulu	lenition (ny > y)
	yulu > luyu	methathesis
	luyu > **luy**	V# > Ø

Rim	***nyulu** > nyulo	vowel lowering
	nyulo > **lo**	initial dropping ($C_1V_1 > Ø$)
F.I.	***nyulu > ngulu**	assimilation (to back V)

1 du EXCL.S. **protoform *ngalulu**

Mor	lala
LL	lala
Rim	lela
F.I.	ngalulu, -lulu
pA	-
pNP	-

Mor	***ngalulu** > ngalalu > ngalala	vowel lowering
	ngalala > **lala**	initial dropping ($C_1V_1 > Ø$)
LL	as above	
Rim	***ngalulu** > ngalula	vowel lowering
	ngalula > ngalela	vowel fronting
	ngalela > **lela**	initial dropping ($C_1V_1 > Ø$)
F.I.	***ngalulu**	

1 du INCL.S. **protoform *ngalundu**

Mor	lada

LL	lata
Rim	lenda
F.I.	ngalandu
pA	-
pNP	*ngali

Mor	***ngalundu** > ngaludu	nasal dissimilation
	ngaludu > ngaladu > ngalada	vowel lowering
	ngalada > **lada**	initial dropping ($C_1V_1 > Ø$)
LL	***ngalundu** > ngaludu	nasal dissimilation
	ngaludu > ngalutu	lenition (d > t)
	ngalutu > ngalatu > ngalata	vowel lowering
	ngalata > **lata**	initial dropping ($C_1V_1 > Ø$)
Rim	***ngalundu** > ngalendu > ngalenda	vowel fronting
	ngalenda > **lenda**	initial dropping ($C_1V_1 > Ø$)
F.I.	***ngalundu**	

2 du S. **protoform *nyupulu**

Mor	pul
LL	bol
Rim	pal
F.I.	yupala, -pala
pA	*NHu(m)buLV
pNP	*nyupul ~ nyipul

Mor	***nyupulu** > nyupul	V# > Ø
	nyupul > **pul**	initial dropping ($C_1V_1 > Ø$)

LL	***nyupulu** > nyupul	V# > Ø
	nyupul > nyubul	fortition (voicing)
	nyubul > nyobul > nyobol	vowel lowering
	nyobol > **bol**	initial dropping (C_1V_1 > Ø)
Rim	***nyupulu** > nyupul	V# > Ø
	nyupul > nyapul > nyapal	vowel lowering
	nyapal > **pal**	initial dropping (C_1V_1 > Ø)
F.I.	***nyupulu** > nyupalu > nyupala	vowel lowering
	nyupala > **yupala**	lenition (ny > y)

3 du S. **protoform *pula**

Mor	lo
LL	lo
Rim	ala
F.I.	wula
pA	*bula
pNP	*pula

Mor	***pula** > pola > polo	vowel centralisation
	polo > **lo**	initial dropping (C_1V_1 > Ø)
LL	as above	
Rim	***pula** > pala	vowel lowering
	pala > **ala**	initial dropping (C_1V_1 > Ø)

F.I. ***pula > wula** lenition (ny > y)

1 pl EXCL.S. **protoform *ngalana**

Mor	lana
LL	landa
Rim	dada
F.I.	ngalada, -lada
pA	-
pNP	*ngana

Mor ***ngalana > lana** initial dropping ($C_1V_1 > Ø$)

LL ***ngalana** > ngalanda n > nd / (C_1 = stop or nasal)

The nasal dissimilation rule must precede this nasal > nasal-stop cluster rule.

ngalanda > **landa** initial dropping ($C_1V_1 > Ø$)

Rim ***ngalana** > ngalada n > d / (C_1 = stop or nasal)

ngalada > lada initial dropping ($C_1V_1 > Ø$)

lada > **dada** fortition (l > d / _Vd)

F.I. ***ngalana** > ngalada n > d / (C_1 = stop or nasal)

1 pl INCL.S. **protoform *ngalapal**

Mor	lapal
LL	labal
Rim	lipal
F.I.	ngalapal, -lapal
pA	-
pNP	*ngampul

Mor	***ngalapal > lapal**	initial dropping ($C_1V_1 > Ø$)
LL	***ngalapal** > ngalabal	fortition (voicing p > d)
	ngalabal > **labal**	initial dropping ($C_1V_1 > Ø$)
Rim	***ngalapal** > ngalipal	vowel fronting
	ngalipal > **lipal**	initial dropping ($C_1V_1 > Ø$)
F.I.	***ngalapal**	

2 pl S. **protoform *nyurra**

Mor	orh$_w$a
LL	rhoy
Rim	rha
F.I.	yarra, -rra
pA	*nyurra
pNP	*nyurra ~ nyirra

Mor	***nyurra** > nyurha	lenition (devoicing rr > rh)
	nyurha > nyorha	vowel lowering
	nyorha > yorha	lenition (ny>y)
	yorha > **orh$_w$a**	labialisation

LL	***nyurra** > nyurha	lenition (devoicing r r> rh)
	nyurha > yurha	lenition (ny > y)
	yurha > rhayu	metathesis
	rhayu > rhoyu	vowel centralisation
	rhoyu > **rhoy**	V# > Ø
Rim	***nyurra** > nyurha	lenition (devoicing rr > rh)
	nyurha > **rha**	initial dropping (C_1V_1 > Ø)
F.I.	***nyurra** > nyarra	vowel lowering
	nyara > **yara**	lenition (ny > y)

3 pl S. **protoform *tjana**

Mor	na
LL	nda
Rim	da
F.I.	yada
pA	*dhana
pNP	*tjana

Mor	***tjana** > na	initial dropping (C_1V_1 > Ø)
LL	***tjana** > tjanda	n > nd / (C_1 = stop or nasal)
	tjanda > nda	initial dropping (C_1V_1 > Ø)
Rim	***tjana** > tjada	n > d / (C_1 = stop or nasal)
	tjada > **da**	initial dropping (C_1V_1 > Ø)
F.I.	***tjana** > tjada	n > d / (C_1 = stop or nasal)
	tjada > **yada**	lenition (tj > y)

4. MORPHOLOGY

4.1 OUTLINE OF PARTS OF SPEECH

The following word classes can be established:

nouns	}nominals
adjectives	}nominals
pronouns	
verbs	

Like many other Australian languages, Morrobalama has a split-ergative morphology. The following abbreviations are used:

S intransitive subject

A transitive subject

O transitive object

Personal pronouns have one form (NOMINATIVE) for S and A, and another (ACCUSATIVE) for O. Nouns and adjectives have one form (ABSOLUTIVE) for S and O, and another (ERGATIVE) for A.

4.2 NOMINAL MORPHOLOGY

Nouns in Morrobalama have an ABSOLUTIVE case covering both S and O functions and an ERGATIVE case for A function. The data available shows that there are at least ten nominal cases. The suffixes differ slightly depending on the final phoneme of the nominal stem. All case marking is suffixed to the last constituent of the NP. Case

and its relevant marking (according to the final phoneme of the nominal stem) can be shown as below:

CASE	FINAL PHONEME OF NOMINAL STEM*							
	V	**rr**	**n**	**l**	**n**	**m**	**w**	**ng**
ABSOLUTIVE	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
ERGATIVE		-a						
DATIVE	-rra	-a	-a	-a		-a		
INSTRUMENTAL	-yi		-o	-o	-o	-i		-o
LOCATIVE	-l	-o						
ABLATIVE	-m	-am	-am					
BENEFACTIVE		-man						
ALLATIVE		-i						
COMITATIVE	-pinh							
PRIVATIVE	-rinh							

(*This table lists all possible environments that are discernable from the limited data available.)

4.2.1 ABSOLUTIVE CASE

Morrobalama is consistent with most Paman-Nyungan languages, in that the ABSOLUTIVE CASE is marked by zero (**-Ø**) on both the Subject(S) of an intransitive verb and the Object(O) of a transitive verb.

Zero marking on Subject (S):

(1) S-Ø **atha -Ø la-ngan**

fire-**ABS** burn - 3sgO

"The fire is burning now." (EST 034)

Zero marking on Object (O):

(2) O-Ø **djena rhingirr -Ø ma-l-da-ngan**

man old - **ABS** find-IMP-2sgA-3sgO

"You go look for (find) old man!" (EST 074)

(3) **inya-Ø wa-l-da-ngan**

meat - **ABS** cook-IMP-2sgA-3sgO

"You cook that meat now!" (EST 035)

(4) **rawrarr -Ø nya-l-da-ngan aw**

stone - **ABS** leave on-IMP-2sgA-3sgO down

"You put the stone down!" (T2A 225)

4.2.2 ERGATIVE CASE

In Morrobalama, the ERGATIVE CASE is marked by '**-a**' suffixed to the subject (A) of a transitive verb. All examples in the data only show the ERGATIVE case being suffixed to nominal stems ending in /-rr/. There is an example sentence where the subject noun phrase consists of the head noun plus adjective. In this situation, since the adjective is the last constituent of the NP, '-a' is suffixed to the adjective, not the head noun.

(5) **djena rhingirr -a pipim magal nya-y-na-la**

man **old - ERG** tomorrow might hit-FUT-1sgO-3sgA

"Old man might hit me tomorrow" (T2A 068)

When the noun phrase consists of a head noun plus adjective plus numeral, '-a' is suffixed to the numeral (since the numeral is the last constituent of the NP). There are two examples of this:

(6) **bee rhingirr sh̬orr -a ogal eeba da-m-lo**

woman old two - **ERG** hole yam dig-PRES-3duA

"Those two old ladies dig yam" (T2A 128)

(7) **otuwa sh̬orr -a tta-n-lo-ttan**

dog two - **ERG** bite-PAST--3duA-?

"Two dogs bit me" (EST 039)

There is one example sentence in the corpus where the subject noun phrase consists of only a head noun. It is surprising to notice that this head noun 'otuwa' is not marked.

(8) **otuwa tta-n-lo-ttan**
dog bite-PAST--3sgA-?
"Dog been bite me" (EST 038)

Perhaps, it is marked and the final phoneme of 'otuwa' is lengthened to 'otuwaa' with the addition of the ERGATIVE '-a'. (The speed of the utterance and the quality of the tape recording makes this difficult to decipher). Or perhaps the mysterious presence of '-ttan' has some significance? I cannot explain the meaning of '-ttan' ; it occurs also in sentence (7) above, and in sentence (9) below:

(9) **aran ttan arrarr - a yanya - m - la**
child ? girl - ERG cry-PRES-3sgS
"That small girl, she cry" EST 064

(It is unlikely that '-ttan' could substitute for the absence of ergative marking, especially since we have the sentence above in which both '-ttan' and the ergative marker '-a' co-exist).

4.2.3 DATIVE CASE

In Morrobalama, the DATIVE CASE is marked by '**-rra**' when the final phoneme of the nominal stem is a vowel, or by '**-a**' otherwise. It appears in a variety of diverse sentences, which can be grouped according to different functions.

(a) Aversive Function

There is only one example sentence where the DATIVE CASE indicates this aversive function. It marks the noun which is the object of dislike or aversion of some kind.

(10) **nyamarr-a** **bala - m -ya**
type of brown snake-**DAT** afraid-PRES-1sgS
"I'm afraid from (of) that snake" (T2A 255)

(b) Purposive Function

There are two example sentences in the corpus where the DATIVE CASE indicates purposive function. Here '-a' marks the goal of an action.

(11) **aarram-a** **ala-pinh** **garra - m - ya**
wallaby - **DAT** spear-with go-PRES-1sgS
"I go (look for) wallaby with spear" (T2A 060)

(12) **aarram-a** **garra-m-ya** **ala - pinh**
wallaby - **DAT** go-PRES-1sgS spear-with
"I go (look for) wallaby with spear" (T2A 060)

(c) Indirect Object

The rest of the sentences in the corpus containing the DATIVE CASE, are ones where the DATIVE '-a' and '-rra' mark the indirect object of an action. These example sentences can be divided according to the verbs present. There are three verbs: **gela** - 'go ask', **tuwa** - 'give' and **apayala** - 'look for'.

(i) **gela 'go ask'**

(13) **ala-rra gela - l - da - ngan**

spear - **DAT** go ask IMP 2sgA - 3sgO

"You go ask him for spear!" (T2A 039)

(ii) **tuwa ' to give'** (note here, the DATIVE '-a' marks the last constituent of the NP (the adjective))

(14) **nye sh_worr - a tuwa - l - na - da**

fish two - **DAT** give - IMP - 1sgO - 2sgA

"You give me two fish!" (T2A 109)

It is interesting to note here that the gift is marked with the DATIVE case '-a', and the recipient is O.

(iii) **apayala ' look for'**

(15) **apayala - m - ya ledherre - rra**

look for - PRES - 1sgA wire spear - **DAT**

"I look for the wirespear now" (T2A 109)

4.2.4 INSTRUMENTAL CASE

In Morrobalama, the INSTRUMENTAL case is marked by '**-yi**' when the final phoneme of the nominal stem is a vowel, by '**-i**' when the final phoneme of the nominal stem is the bilabial nasal 'm', and by '**-o**' otherwise. All example sentences in the corpus show the INSTRUMENTAL case marking on an object or body part used to perform an action.

(16) **belbe - l - da - ngan nhibilbinh - o**

cut - IMP - 2sgA - 3sgO knife - **INSTR**

"You cut 'im with knife!" (T2A 235)

(17) **atjan - o** **da - l - da - ngan eeba**

type of yamstick - **INSTR** dig - IMP - 1sgA - 3sgO yam

"You dig that yam with stick!" (T2A 018)

(18) **alam - i** **nya - l - da - ngan**

hand - **INSTR** hit - IMP - 2sgA - 3sgO

"You hit him with your hand!" (T2A 007)

Another example where the final phoneme of the nominal stem is a bilabial nasal (The INSTRUMENTAL CASE is '-i'):

(19) **rengalm - i** **nya - l - da - ngan**

type of tommy hawk - **INSTR** hit - IMP - 2sgA - 3sgO

"You hit him with tommy hawk!" (T2A008)

An example where the final phoneme of the nominal stem is a vowel (the INSTRUMENTAL CASE is '-yi'):

(20) **ala-yi** **nya - l - da - ngan**

spear - **INSTR** hit - IMP - 2shA - 3sgO

"You hit him with spear!" (T2A 010)

4.2.5 LOCATIVE CASE

In Morrobalama, the LOCATIVE case is marked by '**-l**' when the final phoneme of the nominal stem is a vowel, and by '**-o**' after 'rr-'. (This is the extent of the data). The LOCATIVE case indicates the location/position of an object eg. in, on, at, by.

(21) **'in'** **onga - l** **rhanya - l - da - ngan**

water - **LOC** put - IMP - 2sgA - 3sgO

"You put 'im in water!" (T2A 021)

(22) 'on' **eera - l nya - l - da - ngan aw**

ground - **LOC** leave on - IMP - 2sgA - 1sgO down

"You leave 'im on ground!" (T2A 019)

(23) 'by' **a'am logaparr - o langa - n - ya - ngan**

close river- **LOC** go spear - PAST - 1sgA - 3sgO

"I speared 'im close to (by) river" (EST 014)

4.2.6 ABLATIVE CASE

In Morrobalama, the ABLATIVE case is marked by '**-m**' when the final phoneme of the nominal stem is a vowel, and by '**-am**' otherwise. The ABLATIVE case indicates the motion away from a place eg. 'out of', 'from'.

(24) **onga - m hanya - l - da - ngan**

water - **ABL** take - IMP - 2sgA - 3sgO

"You take 'im out of the water" (T2A 027)

(25) **atha - m hanya - l - da - ngan**

fire - **ABL** take - IMP - 2sgA - 3sgO

"You take 'im from fire!" (T2A 028)

(26) **theedjerr-am hanya - l - da - ngan**

smoke - **ABL** take - IMP - 2sgA - 3sgO

"You take 'im from ashes!" (T2A 031)

(27) **lirrin - am hanya - l - da - ngan**

smoke - **ABL** take - IMP - 2sgA - 3sgO

"You take 'im from smoke" (T2A 027)

4.2.7 BENEFICIARY CASE

There is only one example sentence where '**-man**' may be indicating that the marked noun is receiving benefits from the action of the verb.

(28) **bee rhingirr - man tuwa - l - l̠ al - da nyisharr**
woman old - **BEN** give - IMP - 3duO - 2sgA fish
"You give fish to them two old women!" (T2A 118)

4.2.8 ALLATIVE CASE

There is only one example sentence where '**-i**' is suffixed to an object, signifying motion 'to' or 'towards' that object.

(29) **Iogaparr - i inur langa - n - ya - ngan**
river - **ALL** near go spear - PAST - 1sgA - 3sgO
"I been speared him close to river" (EST 014)

4.2.9 COMITATIVE CASE 'with'

The comitative case is marked by '**-pinh**' suffixed to the object which accompanies the subject.

(30) **atha - pinh ya**
fire - **COM** 1sgS
(lit: 'I (am) with matches')
"Me got matches" (T2A 066)

(31) **otuwa - pinh da**
dog - **COM** 2sgS
(lit: '(Are) you with dog?')
"You got dog?" (T2A 143)

4.2.10 PRIVATIVE CASE 'without'

The privative case is marked by '**-rinh**' suffixed to the object which does not accompany the subject.

(32) **ala - rinh garra - m - ya**
spear - **PRIV** go - PRES - 1sgS
"I go without spear" (T2A 063)

(33) **atha - rinh ya**
fire - **PRIV** 1sgS
"I (am) without fire" (T2A 065)

(34) **otuwa - rinh ya**
dog - **PRIV** 1sgS
(lit: 'I (am) without dog')
"I got no dog" (T2A 145)

(35) **inya - rinh lapal**
meat - **PRIV** 1plINCL.S
"We (are) short for meat" (T2A 183)

Originally, the corpus of data only contained example sentences (like those above) where the verb, or independent pronoun, followed the noun and morpheme denoting 'without' or 'with'. Therefore, it could be debated whether to analyse these morphemes as nominal cases or verbal stems. To differentiate the two, it was necessary to check with the speakers whether the word order could be changed around and if the word order could be changed, to observe whether the morpheme denoting 'without' or 'with' always

suffixes the noun. (If it were obligatory for the morpheme to always follow directly after the noun, then it would confirm that it was a nominal case, not a verbal stem).

The following sentences (elicited in July 1994) reveal that the morphemes '**-rinh**' and '**-pinh**' must always follow the noun. They are therefore nominal cases and not verbal stems. For example, it was not acceptable to say:

(36) *** rinh-ya atha**
without-1sgA fire
***"I (am) without fire"** (T2A 065)

(37) *** rinh-ya otuwa**
without-1sgA dog
(lit: *'I (am) without dog')
***"I got no dog"** (T2A 145)

(38) *** pinh-ya atha**
with-1sgA fire
***"Me got matches"** (SJS 088)

The following sentences were acceptable:

(39) **aya atha - rinh**
IsgA fire - **PRIV**
"I (am) without fire" (SJS 092)

(40) **aya otuwa - rinh**
IsgA dog - **PRIV**
"I got no dog" (SJS 093)

(41) **aya atha - pinh**

IsgA fire - **COM**

"Me got matches" (SJS 094)

4.3 PRONOUNS

Numerals '1', '2' and '3' will be used to refer to first, second and third persons; and 'sg', 'du' and 'pl' for singular, dual and plural numbers respectively. 'INCL' and 'EXCL' abbreviate 'inclusive' (a pronoun whose reference includes the addressee) and 'exclusive' (a pronoun whose reference does not include the addressee).

The Morrobalama pronominal system contains sg, du and pl forms in 1, 2, and 3 distinguishing between S/A and O. The system shows an INCL/EXCL distinction in 1du and 1pl only. Morrobalama is like most Australian languages in that, although the nouns have an ABSOLUTIVE case covering both S and O functions and an ERGATIVE case for A function, the pronouns have the same (NOMINATIVE) form for S and A functions, with a distinct (ACCUSATIVE) form for O function. Pronouns can occur both independently or bound.

4.3.1 BOUND PRONOUNS

Nearly all example sentences in the collected data show the use of bound pronominal forms.

BOUND PRONOUN PARADIGM

	SG		DUAL	PLURAL
1S/A	-ya	EXCL INCL	-lala -lada	-lana -lapal
1O	-na		-lingi	-lipa
2S/A 2O	-da -nan		-pul -lin	-rh̲a -rhan
3S/A 3O	-la -ngan		-lo -l̲al	-na -nyin

These are found bound to the verb as the final constitutent of the verbal structure:

VERB -->	**Stem** + (RECIP)+	(IMPERATIVE) + (TENSE)	**p/n clitic(s)**

As explained in Section 4.4, the verbal stem and the pronominal clitic(s) are the only compulsory constituents of the verb.

4.3.2 INDEPENDENT PRONOUNS

In the two instances (in the data) where the pronouns are independent, they reveal that the bound forms are derived from the independent forms by simply dropping the initial vowel and being suffixed to the verb. From the few examples which exist in the data, it would be fair to conclude that free-form pronouns have virtually dropped out of use. To form independent pronouns (from the bound-forms), the speaker just adds a vowel to the beginning of the bound form. The only examples of sentences containing independent pronouns are:

(42) **ola** **nya - la - nan**

3sgA(INDEP) hit-3sgA-2sgO

"He (EMPH.) hit you!" (SJS 004)

(43) **oda** **nya - l - da** **garra - na - ya**

2sgS(INDEP) leave-IMP-2sgS go-1sgO-1sgA

(lit: 'You, you leave! I go, me.')

"You stop here; me go now" (T2A 219)

I cannot explain why in sentence (43) we have both 1sgA and 1sgO suffixed to the verb **garra-** 'to go'.

4.3.3 POSSESSIVE PRONOUNS

Possessive pronouns are formed by adding these suffixes to the last constituent of the 'possessed' NP:

POSSESSIVE PRONOUNS

	SG	DUAL		PLURAL
1	-ttal	-lingal	**EXCL** **INCL**	-rlingil -lipilirl
2	-nal	-polil		-rhol
3	-ngal	-rlol		-nil

Most examples contain an NP consisting of only a head noun:

nyibilbinhu-**ttal**
knife-**1sgPOSS**
"my knife"

nyibibinhu-**nal**
knife-**2sgPOSS**
"your knife" SJS 110

nyibilbinhu-**ngal**
knife-**3sgPOSS**
"her/his knife"

nyibibinhu-**lingal**
knife-**1duPOSS**
"our(2) knife" SJS 114

nyibilbinhu-**polil**
knife-**2duPOSS**
"your(2) knife"

nyibibinhu-**rlol**
knife-**3duPOSS**
"their(2) knife" SJS 117

nyibilbinhu-**lipilirl**
knife-**1plINCL.POSS**
"our(INCL) knife"

nyibibinhu-**lingil**
knife-**1plINCL.POSS**
"our(EXCL) knife" SJS 120

nyibilbinhu-**rhol**
knife-**2plPOSS**
"your(pl.) knife"

nyibibinhu-**nil**
knife-**3plPOSS**
"their(pl.) knife" SJS 122

There is one sentence where the NP consists of the head noun plus the quantifier/adjective **áwarr** '≥ 3, many'. We notice that the possessive pronoun is always suffixed to the last constituent of the NP - hence it is suffixed to **áwarr** '≥ 3, many' :

(44) **otuwa áwarr - ttal**

dog ≥ 3 - 1sgPOSS

"I have three dogs" T2A 146

4.4 VERBAL MORPHOLOGY

All verbs must contain at least a **verbal stem** plus a **pronominal subject clitic.**

(45) **garra - ya**
go - lsgS
'I go' **(T2A 072)**

These compulsory constituents may be accompanied by either or both:

(i) **RECIPROCAL marker** **-nya-**
(ii) **IMPERATIVE marker** **-l-** OR
TENSE marker
(a) **FUTURE** **-y-**
(b) **PRESENT** **-m-**
(c) **PAST** **-n-**

The one existing exception to the above generalisation that "all verbs must contain at least a verbal stem plus a pronominal subject clitic" is the following sentence where there is no subject clitic (only tense marker):

(46) **ala - ttal** **gowa - n**
spear - 1sgPOSS break - PAST
'My spear broke' **(T2A 035)**

Despite this exception, the most common verbal word in Morrobalama contains at least

(i) a verbal stem
(ii) a pronominal subject clitic

Thus, the order of constituents within the verb can be generalised as:

VERB -> stem + (RECIP) + (IMP) (TENSE) + PRONOM.

4.4.1 The RECIPROCAL marker -nya-

There is only one example of this marker in the corpus. It occurs suffixed to the verbal stem **fobulo-** 'to yarn'. It occurs directly after the stem, and before the IMPERATIVE marker **-l-** and the pronominal clitic **-pol** '2duS'. The RECIPROCAL marker -**nya**- is used to indicate that the dual or plural subjects are doing the action of the verb to eachother:

(47) **fobulo - nya - l - pol**
yarn - **RECIP** - IMP - 2duS
"You two yarn!" **(T2A 092)**

4.4.2 The IMPERATIVE marker -l-

The IMPERATIVE marker -**l**- always comes after the stem and before the pronominal clitics; never with TENSE markers. It is used to form a command.

(48) **ala - rra** **gela - l - da - ngan**
spear - DAT. ask - **IMP** - 2sgA - 3sgO
'You ask him for the spear!' **(T2A 039)**

4.4.3 TENSE MARKERS

Tense is marked for future, present and past. It never occurs with the IMPERATIVE marker and it is always positioned between the verbal stem and the pronominal clitic/s, within the verbal construction.

4.4.3.1 FUTURE TENSE marker -y-

Like all of the tense markers, the FUTURE tense always occurs after the verbal stem and before a pronominal clitic. A TENSE marker never occurs with the IMPERATIVE marker.

(49) **ngalagi ddanga - y - da** (rising intonation)
INTERR. return-**FUT**-2sgS
(lit: 'You will return?')
"What time will you come back?" **(T2A 095)**

(50) **djenu rhingirr - a pipim magal nya-y-na-la**
man old - ERG tomorrow might hit-**FUT**-1sgO-3sgA
"Old man might hit me tomorrow." **(T2A 068)**

4.4.3.2 PRESENT TENSE marker -m-

The PRESENT tense always occurs after the stem and before a pronominal clitic:

(50) **gamla - m - la aha**
live - **PRES** - 3sgS over there
"He lives other there" **(T2A 150)**

(51) **ngalagi rra - m - da** (rising intonation)
INTERR. say - PRES - 2sgS
(lit: 'You say?')
"What are you saying?" **(T2A 093)**

4.4.3.3 PAST TENSE marker -n-

The past tense always occurs after the stem and before a pronominal clitic:

(52) **ala rha - n - ngan - ya**
spear lose - **PAST** - 3sgO - 1sgA
"I lost the spear" **(T2A 089)**

(53) **otuwa nal nya - n - la - ngan**
dog QUES kill - PAST - 3sgA - 3sgO
(lit:'Did he kill that dog?')
"Who killed that dog?" **(T2A 160)**

4.4.4 PRONOMINAL CLITICS

The majority of Australian languages have bound pronouns. Pronominal prefixing is found in Northern Australia. And pronominal suffixing is common in Western and Southern Australia. But in Queensland, there is no pronominal cliticisation, except in the languages of Princess Charlotte Bay, the Wik languages, Biri, and Koko Bera. In Morrobalama, pronouns are bound to the verbal stem (see Section 4.3.1 for paradigm).

4.4.4.1 ORDER OF PRONOMINAL CLITICS

There is no absolute rule to the ordering of the pronominal clitics in Morrobalama. The only observation that can be made is that (from all data available - seven instances) the 1st person Object (O) always goes first. And 1st person Subject (A) is first in all except three instances out of thirteen (example sentences (3), (4), and (25) show the exceptions).

But there is not a complete set of data, and perhaps other patterns would emerge if more data were available. For the 99 possible combinations of A and O ordering, the data only fills 27 combinations. Some of these combinations allow both orderings of A-O and O-A. With 73% of the paradigm incomplete, not a great deal can be generalised.

The lack of data (and hence the incompleteness of the following paradigm) contributes greatly to the difficulty in identifying a pattern. Other reasons could be that Morrobalama is a language for which there is no fixed ordering to pronominal clitics. The order may be free (ie. either A-O or O-A), and the preference of ordering may be left to an individual speaker. The tendency for this (relatively) free order to be A-O (60%) rather than O-A (40%) could be an example of language change (ie. the influence of English word order (within the last 30 years), and evidence of a gradual process of language death).

The following paradigm gives the ordering of A and O for the respective person and number combinations. (Gaps in the paradigm correlate with gaps in the data.) Listed

with the A/O ordering is a number which corresponds to a sentence (listed after the paradigm) which exemplifies the respective ordering.

A	O								
	1sg	**2sg**	**3sg**	**1du**	**2du**	**3du**	**1pl**	**2pl**	**3pl**
1sg		A-O (1)	A-O (2) O-A (3)			O-A (4)		A-O (5)	A-O (6)
2sg	O-A (7)		A-O (8)	O-A (9)		A-O (10) O-A (11)			A-O (12)
3sg	O-A (13)	A-O (14)	A-O (15)	O-A (16)			O-A (17)	A-O (18)	
1du EXCL									
1du INCL			A-O (19)			A-O (20)			A-O (21)
2du	O-A (22)								
3du			A-O (23)						
1pl EXCL		A-O (24)				O-A (25)			
1pl INCL			A-O (26)		A-O (27)				
2pl	O-A (28)		A-O (29)						
3pl									

Sentences exemplifying the ordering of pronominal clitics in Morrobalama (sentence numbers correspond to numbers listed in the paradigm):

(1) 1sgA-2sgO	naya - m - **na - da**	
	listen - PRES - **1sgA - 2sgO**	
	"I listen you now"	EST 045
(2) 1sgA-3sgO	logaparr-i inur langa - n - **ya - ngan**	
	river - ALL near go spear - PAST - **1sgA - 3sgO**	
	"I speared him close to the river"	EST 014
(3) 3sgO-1sgA	ala rha - n - **ngan - ya**	
	spear lose - PAST - **3sgO - 1sgA**	
	"I lost the spear"	T2A 089
(4) 3duO-1sgA	nyisharr sh̬ orr pa - **l̬ al - ya**	
	fish (gen.) two catch - **3duO - 1sgA**	
	"I caught two fish"	EST 020
(5) 1sgA-2plO	nyee - **ya - rhan**	
	hit(FUT) - 1sgA - 2plO	
	"I'll hit all of you kids!"	SJS 002
(6) 1sgA-3plO	maga - **ya - nyin**	
	see - **1sgA - 3plO**	
	"I see them"	EST 089
(7) 1sgO-2sgA	nye sh̬ orr - a tuwa - l - **na - da**	
	fish two - DAT give - IMP - **1sgO - 2sgA**	
	"You give me two fish!"	T2A 109

(8) **2sgA - 3sgO**

alam - i nya - l - **da - ngan**

hand - INSTR hit - IMP - **2sgA - 3gO**

"You hit him with your hand" T2A 007

(9) **1du0 - 2sgA**

nye sh$_{w}$orr - a tuwa - l - **lingi - da**

fish two - DAT give - IMP - **1duO - 2sgA**

"You give us (two) fish!" T2A 111

(10) **2sgA - 3duO**

bee rhingirr - a manya - l - **da - l$_{w}$al**

woman old - DAT wait - IMP - **2sgA - 3duO**

"You wait for those (2) old women!" T2A 055

(11) **3duO - 2sgA**

bee rhingirr - man tuwa - l - **l$_{w}$al - da** nyisharr

woman old - BEN give - IMP - **3duO - 2sgA** fish(gen.)

"You give fish to those (2) old women!"T2A 118

(12) **2sgA-3plO**

ma - biru manya - l - **da - nyin**

person - many wait - IMP - **2sgA - 3plO**

"You wait for that big mob!" T2A 057

(13) **1sgO - 3sgA**

eeba tuwa - **na - la**

yam give - PAST - **1sgO - 3sgA**

"He gave me yam" T2A 131

(14) 3sgA - 2sgO

ola nya - **la - nan**

3sgA (INDEP) hit - **3sgA - 2sgO**

"He (EMPH.) hit you" SJS 004

(15) 3sgA-3sgO

otuwa nal tta - n - **la - ngan**

dog QUES bite - PAST - **3sgA - 3sgO**

"Did that dog bite him?" T2A 155

(16) 1duO - 3sgA

nya - **lingi - la**

hit - **1duO - 3sgA**

"He hit us (two)" SJS 005

(17) 1pl) - 3sgA

tjuki nhaparra - m - **lipa - la**

chook sneak - up - PRES - **1plO - 3sgA**

"The chook sneaks up on us now" T2A 246

(18) 3sgA - 2plO

nyee - **la - rhan**

hit (-FUT) - **3sgA - 2plO**

"He'll hit you all" SJS 006

(19) 1duINCL.A - 3sgO

nyee - **lada - ngan**

hit(-FUT) - **1duINCL.A - 3sgO**

"We (2) will hit him" SJS 007

(20) 1duINCL.A - 3duO

nyee - **lada - l̪al**

hit(-FUT) - **1duINCL.A - 3duO**

"We (2) will hit them (2)." SJS 008

(21) **1duINCL.A - 3plO** nyee - **lada - nyin**

hit(-FUT) - **1duINCL.A - 3plO**

"We (2) will hit them (all)." SJS 009

(22) **1sgO - 2duA** naya - l - **na - pul**

listen - IMP - **1sgO - 2duA**

"You (two) listen to me!" EST 049

(23) **3duA - 3sgO** nya - n - **lo - ngan**

hit - PAST - **3duA - 3sgO**

"They (2) hit it" SJS 010

(24) **1pl.EXCL.A - 2sgO** ngarra - n - **lana - nan**

kick - PAST - **1plEXCL.A - 2sgO**

"We kicked you" SJS 011

(25) **3duO - 1pl.EXCL.A** pa - n - **l̰ al - ana**

catch - PAST - **3duO - 1pl EXCL.A**

"We caught those (two)." SJS 013

(26) **1pl.INCL.A - 3sgO** nyee - **lapa - ngan**

hit(-FUT) - **1pl.INCL.A - 3sgO**

"We (all) will hit him." SJS 012

(27) **1plINCL.A - 2duO** nyee - lapal - in

hit(-FUT) - **1plINCL.A - 2duO**

"We (INCL) will hit you (two)." SJS 001

(28) **1sgO - 2plA** nya - n - **na - rh$_w$a**

hit - PAST - **1sgO - 2plA**

"You (all) hit me." SJS 014

(29) **2plA-3sgO** nya - y - **rh$_w$a - ngan**

hit - FUT - **2plA - 3sgO**

"You all hit her!" SJS 016

4.4.4.2 PRONOMINAL CLITIC NUMBER INFORMATION

The pronominal clitics carry number for the subject or object in such a way that number for the subject or object does not have to be specified. That is, it is understood from the information carried by the clitics.

bee rhingirr - a | **manya - l - da - l$_w$al**

woman old - DAT wait - IMP - 2sgA - 3**du**O

"You wait for them two old women!" T2A 055

Here we see that the adjective **sh$_w$orr** 'two' did not have to be stated. The number 'two' is understood from the 3duO clitic '**l$_w$al**', referring to the two old women. However, this information can also be included:

bee rhingirr sh$_w$orr-a ogal eeba da - m - lo

woman old two - ERG hole yam dig - PRES - 3duA

"Those two old ladies been dig yam" T2A 128

5. VOCABULARY

5.1 ENGLISH - MORROBALAMA

A

adult man	mamudh	N
afraid, to be afraid	bala-	iV
afternoon	ag̲u	N
alive	egerr	ADJ
ankle	koleerra	N
ant, black ant	itham	N
ant, green ant	oly̲arr	N
antbed	ipmirrim	N
antbed parrot	utnolarr	N
anus	tho'ogal	N
apple fruit, white	manorhar	N
apple tree, red	maneyaverr	N
arm, left arm	orha'alma	N
arm, lower arm	rhoban	N
arm, right arm	orha'ayenma	N
arm, upper arm	orha	N
armpit	medhem	N
ashamed	biwim	ADJ
ashes	theedjerr	N
ask	gel̲a-	tV
auntie	nariya	N
axe, steel axe	irrakngaram	N

B

baby	arran	N
back	theethal	N
back of hand	lameethal	N
bad, old	rhingirr	ADJ
bailor shell	wanham	N
bamboo	iparr	N
banana bird	otham	N
bandicoot	epmen	N
bar spear	ngaapulpul	N
bark, tree bark	thottanan	N
barramundi	op̲ ar	N
base, grindstone base	aarral	N
bat	alivirr	N
beach crab	ender	N
beach, sandbeach	aran	N
beard	waparr	N
bee, beeshoney	orhanh	N
beefwood tree	alanam	N
beeshoney, bee	orhanh	N
beeswax	orhamrha	N
belly	gaparr	N
belly button	ottal	N
belong	ma-	iV
big	matham	ADJ
big bushfire	wanob̲ arram	N
big eel	itnarr	N
big finger, thumb	lamamatham	N

big jellyfish	owon	N
big long tailed ray	ob̲odh	N
big mouth fish	ila	N
big oyster	walnggal	N
big road	reela matham	N
big shark	avinu	N
big shellfish	op̲anh	N
big sugarbag	el̲arr	N
big toe	malmatham	N
billycan	arrabam	N
bird, banana bird	otham	N
bird, crane	malbinu	N
bird, jabiru	tarrawarr	N
bird, mopoke	ohan	N
bird, peewee	eteltel	N
bird, plover	ilarr	N
bird, sandpiper	okngal	N
birds (generic)	ettarr	N
birdsnest	arranh	N
bite	tta-	tV
black	othal	ADJ
black ant	itham	N
black bream	thalangirlpinh	N
black cherry tree	arrtann	N
black cockatoo	ithang	N
black duck	ogerhu	N
black flying fox	irraddangarr	N
black fruit tree	attnhul	N
black ibis	alban	N

black seagull	erraknganma	N
black snake	orhang	N
black-headed python	nangadharr	N
blackspot l-tailed ray	olarr	N
blind	unyu	ADJ
blood	odda	N
bloodwood tree	orrangoddawu	N
blow	weetham-	tV
blowfly	orrawunam	N
blue fruit tree	manapararl	N
blue kingfisher	epmenherrma	N
blue mountain parrot	ida	N
blue pigeon	athufunum	N
blue-tongue lizard	agarr	N
boat, canoe	arrir	N
bohemia tree	orrangobàan	N
bone	ethal	N
boney bream	ithipinh	N
booby bird	opmarrlan	N
boomerang	ikngal	N
bottom	thabam	N
bottom, cheek of bottom	thagarr	N
bowerbird	ethetha	N
boy	aya	N
boy, small boy	maya	N
break	towalyangan-	tV
bream, black bream	thalangirlpinh	N
bream, boney bream	ithipinh	N
bream, red bream	eperhem	N

bream, silver bream	djamarl	N
breast	oyang	N
broken, to be broken	towal-	iV
brolga	egerru	N
brother, older	orraya	N
brother, younger	rraya	N
brown pigeon	korratutum	N
brown snake	amarr	N
build	emam-	tV
bullet spear	ladangar	N
burdekin duck	irharhal	N
burn	athalam-	tV
burst	angawanim-	tV
bushfire, big	wanob̰ arram	N
bushfire, small	wanalirrin	N
butterfish	ahuvirr	N

C

cabbage tree	ishan	N
cabbage tree, small	ogang	N
call out	darra-	tV
canoe, boat	arrir	N
carpet snake	alilirr	N
cat, native cat	irhang	N
catch	pa-	tV
caterpillar	wabarrattanu	N
catfish, fresh water	orhongal	N
catfish, salt water	wa'arrnu	N
centipede	amarram	N

charcoal	theyelarr	N
cheek	uloy	N
cheek of bottom	thagarr	N
cherry tree, red	manattarr	N
chest	tooram	N
chest, meat of chest	tuweyarral	N
child, small child	arran butjinh	N
chin	parrorarr	N
cliff	irraparrpanham	N
climb up	dalda-	tV
cloud	orraharr	N
cockatoo, black cockatoo	ithang	N
cockatoo, white cockatoo	attirr	N
coconut	gamyarr	N
cold, sour	lampra	ADJ
cook	wa-	tV
cook kupmari style	lirrinapa-	tV
cooked	elinh	ADJ
cooked meat	nyeelinh	N
coolamon	opa	N
cotton tree	alil	N
cow	puligi	N
crab	oklambin	N
crab, beach crab	ender	N
crab, mud crab	evewu	N
crab, sand crab	orhawanwan	N
crab, soldier crab	arrarhil	N
crane, bird	malbinu	N
crayfish, fresh water	oparrpan	N

crayfish, salt water	emarl	N
creek	logaparrtalrhayil	N
crocodile, fresh water	agurlmal	N
crocodile, salt water	attnharr	N
crooked	ingalingal	ADJ
crow	wunipinh	N
cry	yanya-	iV
curlew	iwarr	N
cut	belbe-	tV

D

day	lawnarr	N
day after tomorrow	pipimirha	N
day before yesterday	ottaram	N
day, midday	pimarra	N
dead, dead person	mootharr	N
deaf	inhitinhu	ADJ
deaf, 'ringing in ears'	inha oharr	ADJ
death adder	utnomttal	N
deep-sea mullet	oralham	N
dew	aya	N
die	hade-	iV
dig	da-	tV
dingo	alirr	N
dog	otuwa	N
dog, wild dog	tuwalirr	N
dollarbird	adanam	N
double-ended yamstick	e'anam	N
down	aw	ADV

dream	itarr-	iV
dress	arragatta	N
drink, to swallow	ya-	tV
dry	newettal	ADJ
dry season	loru ttalttal	N
duck	emer	N
duck	eve	N
duck, black duck	ogerhu	N
duck, burdekin duck	irharhal	N
duck, spoonbill duck	oyeyatharr	N
duck, whistle duck	op_w adharr	N
dugong	tuwar	N
dying	thaadim	tV, ADJ

E

eagle hawk	eten	N
ear	itna	N
east	gar	N
eat, to swallow	ya-	tV
eel	iramam	N
eel, big eel	itnarr	N
eel, small eel	negerru	N
egg	atjan	N
elbow	erreyo	N
emu	erhelh	N
eye	arratjan	N
eyebrow	arreyapal	N
eyebrow ridge	arritha	N

F

face	upmarr	N
faeces	utn̰a	N
fall	de-	iV
far	banmar	ADJ
fat	ahar	N, ADJ
father	yay	N
feather	ut̰arranh	N
female kangaroo, grey	ittal	N
female kangaroo, red	ahinu	N
fight, to growl	nyarra-	tV
find	ma-	tV
finger, little finger	lam'arran	N
fingernail	lameyarhan	N
fingers, middle three	lam'awarr	N
fire	atha	N
firestick	thilhinu	N
fish (generic)	nyisharr	N
fish spear	nyalangam	N
fish, big mouth fish	ila	N
fish, saratoga	agutharr	N
fish, sawfish	ongadharr	N
fishbait	eren	N
fishhook	ilaman	N
fishing line	layna	N
fishnet	yarrwirr	N
fishnet, string	elanhanh	N
fishnet, string	o'amal	N
flame	arranh	N

flood	etheta	N
fly	orrawal	N
fly, blowfly	orrawunam	N
fly, march fly	iyan	N
flying fox, black	irraddangarr	N
flying fox, red-faced	marrpin	N
follow	arra-	tV
foot	apmal	N
foot, sole of foot	malagaparr	N
foot, top of foot	malup̲arr	N
forehead	ob̲arr	N
forget	ngaanyenye-	iV
fork of tree	orrangeyeren	N
fresh water	oknganamrha	N
fresh water catfish	orhongal	N
fresh water crayfish	oparrpan	N
fresh water crocodile	agurlmal	N
fresh water jewfish	utnongan	N
fresh water mussel	erampinh	N
fresh water rockcod	b̲otju	N
fresh water turtle	utnoyar	N
f-water l-necked turtle	everru	N
frightened	balam	ADJ
frilled neck lizard	utnorlka	N
frog	panpan	N
frog, green pandanus frog	adir	N
frogmouth owl	awiderro	N
fruit	managun	N
fruit, green fruit	managun erhe'	N

fruit, pandanus fruit	manisharr	N
fruit, red tree fruit	manata	N
fruit, ripe fruit	managun elinh	N
fruit, white apple fruit	manorhar	N
fruit, white tree fruit	abar	N
fry pan	atipinh	N

G

galah	alatharr	N
gap, tooth gap	irrata'ogal	N
geko lizard	og$_w$a	N
get up, to rise	shaldi-	iV
ghost gum tree	orrangorrangddarr	N
girl	arrarr	N
give	tuwa-	tV
glass	lawarilanham	N
glider, sugar glider	attawar	N
go away	garra-	iV
go inside	awo-	iV
go walkabout	pa-	iV
goanna	irarrwirr	N
goanna, sand goanna	arham	N
goanna, sand goanna	elhverr	N
good	hadhar	ADJ
goose	awarr	N
goose, pygmy goose	ewan	N
grandfather	epaya	N
grandmother	bee maya	N
grass	uwon	N

grass tree	aattinu	N
grasshopper	errarrorrarr	N
grasshopper, katydid	omeyan	N
green ant	oly̲ arr	N
green fruit	managun erhe'	N
green pandanus frog	adir	N
grey female kangaroo	ittal	N
grey male kangaroo	urr̲ ar	N
grindstone	orhanam	N
grindstone base	aarral	N
groperfish	emalh	N
ground	eera	N
ground	rahalnhamdem	N
growl, to fight	nyarra-	tV
grub	nyanam	N
grub, witchity grub	warrwirr	N
gummy shark	ada	N
guts (large intestine)	utnàamay	N
guts (small intestine)	utno'arran	N
gutta-percha tree	orrangarhirr	N

H

hair	warapal	N
hand	alam	N
hand, back of hand	lameethal	N
hand, palm of hand	lamagaparr	N
hard	waatal	ADJ
hard/strong wood	orrang wayttal	N
hat	waranhdder	N
hawk, eagle hawk	eten	N
head	awar	N
headring	nathithin	N
hear	inha-	tV
heart	itam	N
heavy	gamngarr	ADJ
heavy stone	rawrarr gamngarr	N
her/him/it	ngan	PRON
heron, salt water heron	huvirr	N
hide	la-	tV
hill	yalparr	N
hip	itnul	N
hipbone	nuleethal	N
hit	nya-	tV
hold	pal$_{w}$ a-	tV
hole, cave	ogal	N
honey	maniwarr	N
hook, fishhook	ilaman	N
hook, woomera hook	banana	N
horse	yarraman	N
hot	l$_{w}$ athar	ADJ

house	hayangal	N
hungry	beewim	ADJ
husband	oray	N

I

I	ya	PRON
ibis, black ibis	alban	N
ibis, white ibis	obatham	N
intestine, large	utn̰amay	N
intestine, small	utno'arran	N
ironwood	orrangiyirram	N
island	belhenmerr	N
itch	balata-	tV

J

jabiru, bird	tarrawarr	N
jellyfish, big jellyfish	owon	N
jellyfish, small jellyfish	eber	N
jewfish, fresh water	utnongan	N
jump	hama-	tV

K

kangaroo rat	ong̰a	N
kangaroo, grey female	ittal	N
kangaroo, grey male	urr̰ar	N
kangaroo, red female	ahinu	N
kangaroo, red male	tjokon	N
katydid grasshopper	omeyan	N
kerosine wood tree	anharrnharr	N

kick	ngarra-	tV
kidney	banana	N
king brown snake	opirru	N
king parrot	abal	N
kingfish	mangamyatanu	N
kingfisher, blue	epmenherrma	N
kiss	lamsh$_{w}$ arrbe-	tV
knee	norrawar	N
knife	nhibilbinhu	N
know	eerra-	tV
kookaburra	or$_{w}$ a	N

L

lagoon	okngarhim	N
large intestine, guts	utn$_{w}$ amay	N
laugh	alal-	iV
leaf	alir	N
leave on	nya-	tV
leech	urr$_{w}$ anh	N
left arm	orha'alma	N
leg, lower leg	ata	N
leg, upper leg	errar	N
leichhart tree	ipa	N
lick	be-	tV
lie down	n$_{w}$ a-	iV
light	tha'arranh	N
light (weight)	ewarl	ADJ
lightning	t$_{w}$ alarhiil	N
lightweight stone	rawrarr eewal	N

line, fishing line	layna	N
lip	wottanan	N
listen	naya-	iV
little finger	lam'arran	N
little toe	mal'arran	N
live	gamla-	iV
liver	anha	N
lizard	ithnhanwirr	N
lizard, blue-tongue	agarr	N
lizard, frilled neck lizard	utnorlka	N
lizard, geko lizard	og̲a	N
lizard, small lizard	olharr	N
locust	lanarrowan	N
long	owan	ADJ
long grass string	akuum	N
long pandanus	isharram	N
long shellfish	ottayamba	N
long tailed blackspot ray	olarr	N
long tailed ray (big)	ob̲odh	N
long tailed ray (small)	mothanmama	N
long yam	maneeba	N
l-necked turtle, f-water	everru	N
look for	yala-	tV
lose	rha-	tV
louse	elenh	N
louse eggs	iman	N
lower arm	rhoban	N
lower leg	ata	N
lung	anga	N

M

maggot	omal	N
make	watja-	tV
male kangaroo, grey	urr̰ ar	N
male kangaroo, red	tjokon	N
man, adult man	mamudh	N
man, old man	djenu rhingirr	N
man, white man	wulrhum	N
man, young married man	malanyin	N
man, young single man	manamudhum	N
mangrove	aganh	N
many	birru	ADJ
many, three or more	awarr	ADJ
march fly	iyan	N
married adult woman	bee matham	N
married man, young	malanyin	N
married woman, young	marirru	N
marry	ama-	tV
match	maatjiyarra	N
matchbox	maatjiyarhanh	N
me	na	PRON
meat of chest	tuweyarral	N
meat, cooked meat	nyeelinh	N
meat, minya	inya	N
meat, raw meat	nyeerhe'	N
message stick	orrangama	N
messmate tree	orrangol̰ arr	N
midday	pimarra	N

middle three fingers	lam'awarr	N
milkwood tree	orrangapan	N
minya, meat	inya	N
moon	ebarrawarr	N
mopoke, bird	ohan	N
mosquito	okngal	N
mother	may	N
mountain parrot, blue	ida	N
mouse	itnayewal	N
mouth	wagun	N
mud	oharr	N
mud crab	evewu	N
mulga tree	sharrathanam	N
mullet	orhol	N
mullet, deep sea	oralham	N
mussel, fresh water	erampinh	N
mussel, salt water	awar	N

N

nape of neck	orruyathal	N
native cat	irhang	N
neck	naythal	N
net, fishnet	yarrwirr	N
net, string fishnet	elanhanh	N
net, string fishnet	o'amal	N
night	pingimi	N
nipple	yangeera	N
nit	ipman	N
no	meti	

nonda tree	utnorrawarr	N
north	a	N
nose	marrata	N
nosering hole	errogal	N
nosering, shell nosering	mareyade	N
nullanulla	orrangowupmal	N

O

old man	djenu rhingirr	N
old woman	bee rhingirr	N
old, bad	rhingirr	ADJ
one	oparr	ADJ
other side	ahawanma	N
owl, frogmouth owl	awiderro	N
oyster, big oyster	walnggal	N
oyster, small oyster	irhin	N

P

paddle	irino	N
paint, red paint	oharrattan	N
paint, to rub	ngarra-	tV
paint, white paint	oharrawarr	N
palm of hand	lamagaparr	N
pan, frypan	atipinh	N
pandanus	isharr	N
pandanus frog, green	adir	N
pandanus fruit	manisharr	N
pandanus, long pandanus	isharram	N
pannikin	narhirpinh	N

pants	erraylanhu	N
parrot, antbed parrot	utnolarr	N
parrot, blue mountain	ida	N
parrot, king parrot	abal	N
pearlshell	rremal	N
peewee, bird	eteltel	N
pelican	oderr	N
penis	ud̲a	N
person	apma	N
pick up, to take	hanya-	tV
pierce, to spear	langa-	tV
pierced ear	itnogal	N
pig	marrangipin	N
pigeon, blue pigeon	athufunum	N
pigeon, brown pigeon	korratutum	N
pigeon, torres strait white	orralh	N
plains turkey	e'an	N
plains wallaby	aarram	N
plover, bird	ilarr	N
porcupine	leve'arro	N
porpoise	oyer	N
possum	ol̲an	N
preying mantis	akngarr	N
pull	l̲a-	tV
put	rhanya-	tV
pygmy goose	ewan	N
python, black-headed	nangadharr	N

Q

queenfish	attnhanh	N

R

rain	ot_w al	N
rainbow	everr	N
rat, kangaroo rat	ong_w a	N
raw meat	nyeerhe'	N
raw, unripe	erhe	ADJ
ray, long tailed blackspot	olarr	N
ray, long tailed ray , big	ob_w odh	N
ray, long tailed ray, small	mothanmama	N
ray, short tailed ray	t_w alam	N
ray, sting ray	arhilu	N
red	arhil	ADJ
red apple tree	maneyaverr	N
red bream	eperhem	N
red cherry tree	manattarr	N
red female kangaroo	ahinu	N
red male kangaroo	tjokon	N
red paint	oharrattan	N
red tree fruit	manata	N
red-faced flying fox	marrpin	N
rest	nyana-	iV
return	ddanga-	iV
rib bones	harreyarral	N
ridge of eyebrow	arritha	N
right arm	orha'ayenma	N
ripe fruit	managun elinh	N
river	logaparr	N

road	reela	N
road, big road	reela matham	N
rock wallaby	otawarr	N
rockcod, fresh water	b$_w$ otju	N
rockcod, salt water	arral	N
root, tree root	orrangeyarral	N
rotten	atta	ADJ
rub, to paint	ngarra-	tV
run	ebal gara-	iV

S

salmon	kaparrdarrwarr	N
salt	uddom	N
salt water	okngoduwam	N
salt water catfish	wa'arrnu	N
salt water crayfish	emarl	N
salt water crocodile	attnharr	N
salt water fish	otang	N
salt water heron	huvirr	N
salt water mussel	awar	N
salt water rockcod	arral	N
salt water turtle	awaarr	N
salty	odom	ADJ
sand	of$_w$ a	N
sand crab	orhawanwan	N
sand goanna	arham	N
sand goanna	elhverr	N
sandbeach	aran	N
sandpaper tree	orrangala	N

sandpiper, bird	okngal	N
saratoga fish	agutharr	N
sawfish	ongadharr	N
say	rra-	tV
scorpian	odiwu	N
scrape	iwa-	tV
scrub	otha	N
scrub turkey	pelpema	N
scrub wallaby	utn̰ al̰ arr	N
seagull, black seagull	erraknganma	N
seagull, white seagull	urhar	N
season, dry	loru ttalttal	N
season, wet	nhayaparr	N
see	maga-	tV
shark, big shark	avinu	N
shark, gummy shark	ada	N
shark, shovelnose shark	ohadharr	N
shark, small shark	manatham	N
sharp	erraman	ADJ
she/he/it	la	PRON
shell nosering	errogal	N
shell nosering	mareyade	N
shell, bailor shell	wanham	N
shellfish, big shellfish	op̰ anh	N
shellfish, long shellfish	ottayamba	N
shellfish, small shellfish	ogalal	N
ship, steam ship	lirrinpinha	N
shoes	malaknganam	N
short	maylimimirr	ADJ

short tailed ray	t̪alam	N
short yam	maneepa	N
shoulder	irang	N
shovelnose shark	ohadharr	N
shrub tree	erampin	N
sick	og̪orru	ADJ
silver bream	djamarl	N
sing	indji-	tV
single man, young	manamudhum	N
single woman, young	maarrarr	N
sister, older	paya	N
sister, younger	rraya	N
skin	ottanan	N
sleep	iranh-	iV
small	ttalharr	ADJ
small boy	maya	N
small bushfire	wanalirrin	N
small cabbage tree	ogang	N
small child	arran butjinh	N
small eel	negerru	N
small intestine, guts	utno'arran	N
small jellyfish	eber	N
small lizard	olharr	N
small long tailed ray	mothanmama	N
small oyster	irhin	N
small shark	manatham	N
small shellfish	ogalal	N
small sugarbag	b̪al̪al	N
small sugarbag	arriwinma	N

smell	tuwa-	tV
smoke	lirrin	N
snake, black snake	orhang	N
snake, brown snake	amarr	N
snake, carpet snake	alilirr	N
snake, death adder	utnomttal	N
snake, king brown snake	opirru	N
snake, taipan snake	ahulirr	N
sneak up	nhaparra-	tV
snot	marrerranh	N
soapy-leaf tree	aliyamboyama	N
soft	mutjin	ADJ
soft/light wood	orrang eewal	N
soldier crab	arrarhil	N
sole of foot	malagaparr	N
sore	g̱arr	ADJ
sour, cold	lampra	ADJ
south	aha	N
spear	ala	N
spear, bar spear	ngaapulpul	N
spear, bullet spear	ladangar	N
spear, fish spear	nyalangam	N
spear, to pierce	langa-	tV
spear, wire spear	ledherre	N
spearhead	leyarra	N
spider	ayaa	N
spit	wonha	N
spoonbill duck	oyeyatharr	N
spring, water spring	okngayarr	N

squeeze	larri-	tV
stand	rha-	iV
star	erepen	N
stay, to stop	nya-	iV
steam ship	lirrinpinha	N
steel axe	irrakngaram	N
stick, message stick	orrangama	N
sting ray	arhilu	N
stinking turtle	aparr	N
stone (generic)	lawarar	N
stone tommy hawk	errema	N
stone, heavy stone	rawrarr gamngarr	N
stone, lightweight stone	rawrarr eewal	N
stonefish	ttarranwirr	N
stop, to stay	nya-	iV
stormbird	rhawapmarr	N
straight	l̰uyar	ADJ
string	ishar	N
string fishnet	elanhanh	N
string fishnet	o'amal	N
string, long grass string	akuum	N
sugar glider	attawar	N
sugarbag, big	el̰arr	N
sugarbag, small	arriwinma	N
sugarbag, small	b̰al̰al	N
sun	reyara	N
sunrise	reyara shaldemla	iV
sunset	reyara nguyemla	iV
swallow, to eat, to drink	ya-	tV

sweet	errangan	ADJ

T

taipan snake	ahulirr	N
take away	mera-	tV
take bogey	rram-	iV
take, to pick up	hanya-	tV
talk	irra-	iV
taro	manopar	N
tea tree	orrangeerra	N
temple (head)	oloy'	N
termite	iwarr	N
testicles	ut̬al	N
them (all)	nyin	PRON
them (two)	l̬al	PRON
they (all)	na	PRON
they (two)	lo	PRON
thin	ingarr	ADJ
this side	alama	N
three or more, many	awarr	ADJ
throat	noha	N
throat region	noman	N
throw	wanya-	tV
thumb	lamunwarr	N
thumb, big finger	lamamatham	N
thunder	parran	N
thunderstorm	aparran	N
tick	tharamram	N
tide	eeban	N

tie-up	ttaltta-	tV
tincan	wanhalanham	N
tired	nayendem	ADJ
today	galpangan	N
toe, big toe	malmatham	N
toe, little toe	mal'arran	N
toenail	maleyerhan	N
tommy hawk, stone	errema	N
tomorrow	pipim	N
tongue	adarr	N
tooth	irrata	N
tooth gap	irrata'ogal	N
top of foot	malup̲arr	N
torres strait white pigeon	orralh	N
track	malup̲ar	N
tree (generic)	orrang	N
tree bark	thottanan	N
tree fruit, red	manata	N
tree fruit, white	abar	N
tree root	orrangeyarral	N
tree, 'soapy-leaf' tree	aliyamboyama	N
tree, beefwood tree	alanam	N
tree, black cherry tree	arrtann	N
tree, black fruit	attnhul	N
tree, bloodwood	orrangoddawu	N
tree, blue fruit	manapararl	N
tree, bohemia tree	orrangob̲an	N
tree, cabbage tree	ishan	N
tree, cotton tree	alil	N

tree, fork of tree	orrangeyeren	N
tree, ghost gum	orrangorrangddarr	N
tree, grass tree	aattinu	N
tree, gutta-percha tree	orrangarhirr	N
tree, ironwood	orrangiyirram	N
tree, kerosine wood tree	anharrnharr	N
tree, leichhart tree	ipa	N
tree, messmate tree	orrangol$_{w}$arr	N
tree, milkwood tree	orrangapan	N
tree, mulga tree	sharrathanam	N
tree, nonda tree	utnorrawarr	N
tree, red apple tree	maneyaverr	N
tree, red cherry tree	manattarr	N
tree, sandpaper tree	orrangala	N
tree, shrub	erampin	N
tree, small cabbage tree	ogang	N
tree, type of cabbage tree	tufu	N
tree, white poison tree	othan	N
tree, young gum tree	orrangepe	N
turkey, plains turkey	e'an	N
turkey, scrub turkey	pelpema	N
turtle, f-water l-necked	everru	N
turtle, fresh water	utnoyar	N
turtle, salt water	awaarr	N
turtle, stinking turtle	aparr	N
two	sh$_{w}$orr	ADJ

U

uncle	o'aya	N

unripe, raw	ethe	ADJ
untie	bananya-	tV
up	ohay	N
upper arm	orha	N
upper leg	errar	N
urine	eram	N
us (all)	lipi	PRON
us (two)	lini	PRON

V

vagina	ogan	N
vein	igngarr	N
vomit	alin	N, iV

W

wait	manya-	iV
wallaby, plains wallaby	aarram	N
wallaby, rock wallaby	otawarr	N
wallaby, scrub wallaby	utn̰al̰arr	N
water spring	okngayarr	N
water, fresh water	oknganamrha	N
water, salt water	okngoduwam	N
waterfall	okngikngal	N
waterhole	erheta	N
wax, beeswax	orhamrha	N
we (all) EXCL	lana	PRON
we (all) INCL	lapal	PRON
we (two) EXCL	lala	PRON
we (two) INCL	lada	PRON

west	wo	N
wet	ongingu	ADJ
wet season	nhayaparr	N
whale	ipmanavige	N
whirlpool	okngadjorarr wannyima	N
whistle duck	op̲ adharr	N
white	awarr	ADJ
white apple fruit	manorhar	N
white cockatoo	attirr	N
white ibis	obatham	N
white man	wulrhum	N
white paint	oharrawarr	N
white poison tree	othan	N
white seagull	urhar	N
white tree fruit	abar	N
white woman	ngarrabi wulrhum	N
whitefish	abi	N
wife	arra	N
wild dog, dingo	tuwalirr	N
willy wagtail	ttarrapedhem	N
wind	arral	N
wire spear	ledherre	N
witchity grub	warrwirr	N
woman	ngarrabi	N
woman, married adult	bee matham	N
woman, old woman	bee rhingirr	N
woman, white woman	ngarrabi wulrhum	N
woman, young married	marirru	N
woman, young single	maarrarr	N

wood	orrang	N
wood, hard/strong wood	orrang wayttal	N
wood, soft/light wood	orrang eewal	N
woomera	oban	N
woomera body	bani irram	N
woomera handle	banata	N
woomera hook	banana	N
woomera lower end	banarraman	N
woomera lower end	banarraman	N
worm	ora	N
wrong	harra	ADJ

Y

yam, long yam	maneeba	N
yam, short yam	maneepa	N
yamstick	djanapnganam	N
yamstick, double-ended	e'anam	N
yarn	fobulo-	iV
yawn	wagun papa-	iV
yes	yaa	
yesterday	irrapa	N
you	da	PRON
you (all)	orh̬a	PRON
you (two)	pul	PRON
young gum tree	orrangepe	N
young married man	malanyin	N
young married woman	marirru	N
young single man	manamudhum	N
young single woman	maarrarr	N

5.2 SEMANTIC FIELDS

Below, you will find the Morrobalama vocabulary sectioned according to semantic fields. Within these sections, the words are listed alphabetically - giving the Morrobalama first, followed by the English equivalent.

SECTION (1)	**BODY PARTS and PRODUCTS**
SECTION (2)	**HUMAN and KIN**
SECTION (3)	**CULTURAL and HUMAN ARTEFACTS**
SECTION (4)	**FOOD, COOKING and FIRE**
SECTION (5)	**DIRECTIONALS and TEMPORALS**
SECTION (6)	**WATER, EARTH and ELEMENTS**
SECTION (7)	**LAND ANIMALS**
SECTION (8)	**SEA ANIMALS**
SECTION (9)	**FISH**
SECTION (10)	**REPTILES**
SECTION (11)	**BIRDS**
SECTION (12)	**INSECTS**
SECTION (13)	**PLANTS and TREES**
SECTION (14)	**DESCRIBING WORDS**
SECTION (15)	**VERBS**
	(a) WORDS OF MOTION
	(b) BODILY FUNCTIONS
	(c) VOCALISING
SECTION (16)	**CONVERSATION**

SECTION (1)	**BODY PARTS and PRODUCTS**	
adarr	tongue	N
ahar	fat	N
alam	hand	N
alin	vomit	N
anga	lung	N
anha	liver	N

apmal	foot	N
arratjan	eye	N
arreyapal	eyebrow	N
arritha	eyebrow ridge	N
ata	leg, lower leg	N
atjan	egg	N
awar	head	N
banana	kidney	N
eram	urine	N
errar	leg, upper leg	N
erreyo	elbow	N
errogal	nosering hole	N
ethal	bone	N
gaparr	belly	N
harreyarral	rib bones	N
igngarr	vein	N
irang	shoulder	N
irrata	tooth	N
irrata'ogal	tooth gap	N
itam	heart	N
itna	ear	N
itnogal	pierced ear	N
itnul	hip	N
koleerra	ankle	N
lam'arran	finger, little finger	N
lam'awarr	fingers, middle three	N
lamagaparr	hand, palm of hand	N
lamamatham	thumb, big finger	N
lameethal	hand, back of hand	N

lameyarhan	fingernail	N
lamunwarr	thumb	N
mal'arran	toe, little toe	N
malagaparr	foot, sole of foot	N
maleyerhan	toenail	N
malmatham	toe, big toe	N
malup̲arr	foot, top of foot	N
mareyade	nosering, shell nosering	N
marrata	nose	N
marrerranh	snot	N
medhem	armpit	N
nathithin	headring	N
naythal	neck	N
noha	throat	N
noman	throat region	N
norrawar	knee	N
nuleethal	hipbone	N
ob̲arr	forehead	N
odda	blood	N
ogan	vagina	N
oloy'	temple (head)	N
orha	arm, upper arm	N
orha'alma	arm, left arm	N
orha'ayenma	arm, right arm	N
orruyathal	nape of neck	N
ottal	belly button	N
ottanan	skin	N
oyang	breast	N
parrorarr	chin	N

rhoban	arm, lower arm	N
thabam	bottom	N
thagarr	bottom, cheek of bottom	N
theethal	back	N
tho'ogal	anus	N
tooram	chest	N
tuweyarral	chest, meat of chest	N
ud$_{w}$a	penis	N
uloy	cheek	N
upmarr	face	N
ut$_{w}$al	testicles	N
utn$_{w}$a	faeces	N
utnàamay	guts (large intestine)	N
utno'arran	guts (small intestine)	N
wagun	mouth	N
waparr	beard	N
warapal	hair	N
wonha	spit	N
wottanan	lip	N
yangeera	nipple	N
yangotàa	milk	N

SECTION (2) HUMAN and KIN

apma	person	N
arra	wife	N
arran	baby	N
arran butjinh	child, small child	N

arrarr	girl	N
aya	boy	N
bee matham	woman, married adult	N
bee maya	grandmother	N
bee rhingirr	woman, old woman	N
da	you	N
djenu rhingirr	man, old man	N
epaya	grandfather	N
l̠ al	them (two)	PRON
la	she/he/it	PRON
lada	we (two) INCL	PRON
lala	we (two) EXCL	PRON
lana	we (all) EXCL	PRON
lapal	we (all) INCL	PRON
lini	us (two)	PRON
lipi	us (all)	PRON
lo	they (two)	PRON
maarrarr	woman, young single	N
malanyin	man, young married man	N
mamudh	man, adult man	N
manamudhum	man, young single man	N
marirru	woman, young married	N
may	mother	N
maya	boy, small boy	N
na	me	PRON
na	they (all)	PRON
nariya	auntie	N
ngan	her/him/it	PRON
ngarrabi	woman	N

ngarrabi wulrhum	woman, white woman	N
nyin	them (all)	PRON
o'aya	uncle	N
oray	husband	N
orh ̲ a	you (all)	PRON
orraya	older brother	N
paya	older sister	N
pul	you (two)	PRON
rraya	younger sister, brother	N
wulrhum	man, white man	N
ya	I	PRON
yay	father	N

SECTION (3) CULTURAL and HUMAN ARTEFACTS

aarral	grindstone base	N
akuum	string, long grass string	N
ala	spear	N
arrabam	billycan	N
arragatta	dress	N
arrir	boat, canoe	N
atipinh	fry pan	N
banana	hook, woomera hook	N
banarraman	woomera lower end	N
banata	woomera handle	N
bani irram	woomera body	N
djanapnganam	yamstick	N
e'anam	yamstick, double-ended	N
erraylanhu	pants	N

errema	stone tommy hawk	N
hayangal	house	N
ikngal	boomerang	N
irino	paddle	N
irrakngaram	axe, steel axe	N
ishar	string	N
ladangar	spear, bullet spear	N
lawarilanham	glass	N
ledherre	spear, wire spear	N
leyarra	spearhead	N
lirrinpinha	ship, steam ship	N
maatjiyarhanh	matchbox	N
maatjiyarra	match	N
malaknganam	shoes	N
narhirpinh	pannikin	N
ngaapulpul	spear, bar spear	N
nhibilbinhu	knife	N
nyalangam	spear, fish spear	N
oban	woomera	N
oharrattan	paint, red paint	N
oharrawar	paint, white paint	N
opa	coolamon	N
orhanam	grindstone	N
orrangama	stick, message stick	N
orrangowupmal	nullanulla	N
thilhinu	firestick	N
wanhalanham	tincan	N
waranhdder	hat	N
yarrwirr	net, fishnet	N

SECTION (4)	FOOD, COOKING and FIRE	
abar	fruit, white tree fruit	N
arranh	flame	N
arriwinma	sugarbag, small (and long)	N
atha	fire	N
b ̲ al ̲ al	sugarbag, small	N
el ̲ arr	sugarbag, big	N
gamyarr	coconut	N
lirrin	smoke	N
managun	fruit	N
managun elinh	fruit, ripe fruit	N
managun erhe'	fruit, green fruit	N
manata	fruit, red tree fruit	N
maneeba	yam, long yam	N
maneepa	yam, short yam	N
manisharr	fruit, pandanus fruit	N
maniwarr	honey	N
manopar	taro	N
manorhar	fruit, white apple fruit	N
orhamrha	wax, beeswax	N
orhanh	bee, beeshoney	N
tha'arranh	light	N
theedjerr	ashes	N
theyelarr	charcoal	N
thottanan	tree bark	N
uddom	salt	N
wanalirrin	little bushfire	N
wanobàarram	big bushfire	N

SECTION (5)	DIRECTIONALS and TEMPORALS	
a	north	N
ag ̱ u	afternoon	N
aha	south	N
ahawanma	other side	N
alama	this side	N
aw	down	ADV
galpangan	today	N
gar	east	N
irrapa	yesterday	N
lawnarr	day	N
ohay	up	ADV
ottaram	day before yesterday	N
pimarra	day, midday	N
pingimi	night	N
pipim	tomorrow	N
pipimirha	day after tomorrow	N
w o	west	N

SECTION (6) WATER, EARTH and ELEMENTS

aparran	thunderstorm	N
aran	sandbeach	N
arral	wind	N
aya	dew	N
belhenmerr	island	N
ebarrawarr	moon	N
eeban	tide	N
eera	ground	N
irraparrpanham	cliff	N
lawarar	stone (generic)	N
logaparr	river	N
logaparrtalrhayil	creek	N
loru ttalttal	dry season	N
malupàar	track	N
nhayaparr	wet season	N
of ̱ a	sand	N
ogal	hole, cave	N
oharr	mud	N
okngadjorarr wannyima	whirlpool	N
oknganamrha	water, fresh water	N
okngarhim	lagoon	N
okngayarr	spring, water spring	N
okngikngal	waterfall	N
okngoduwam	water, salt water	N
orraharr	cloud	N
ot ̱ al	rain	N
parran	thunder	N

rahalnhamdem	ground	N
rawrarr eewal	stone, lightweight stone	N
rawrarr gamngarr	stone, heavy stone	N
reela	road	N
reela matham	road, big road	N
reyara	sun	N
reyara nguyemla	sunset	iV
reyara shaldemla	sunrise	iV
t$_w$ alarhiil	lightning	N
uwon	grass	N
erepen	star	N
erheta	waterhole	N
etheta	flood	N
everr	rainbow	N
yalyarr	hill	N

SECTION (7)	**LAND ANIMALS**	
aarram	wallaby, plains wallaby	N
adir	frog, green pandanus frog	N
ahinu	kangaroo, red female	N
alirr	dingo	N
alivirr	bat	N
attawar	sugar glider	N
epmen	bandicoot	N
inya	meat, minya	N
irhang	native cat	N
irraddangarr	flying fox, black flying fox	N

itnayewal	mouse	N
ittal	kangaroo, grey female	N
leve'arro	porcupine	N
marrangipin	pig	N
marrpin	flying fox, red-faced	N
nyeelinh	cooked meat	N
nyeerhe'	meat, raw meat	N
ol ̱ an	possum	N
ong ̱ a	rat, kangaroo rat	N
otawarr	wallaby, rock wallaby	N
otuwa	dog	N
panpan	frog	N
puligi	cow	N
tjokon	kangaroo, red male	N
tuwalirr	wild dog, dingo	N
urr ̱ ar	kangaroo, grey male	N
utn ̱ al ̱ arr	wallaby, scrub wallaby	N
yarraman	horse	N

SECTION (8)	**SEA ANIMALS**	
agurlmal	crocodile, fresh water croc.	N
aparr	turtle, stinking turtle	N
arhilu	ray, sting ray	N
arrarhil	crab, soldier crab	N
attnharr	crocodile, salt water	N
awaarr	turtle, salt water	N
awar	mussel, salt water	N

ender	crab, beach crab	N
erampinh	mussel, fresh water	N
everru	turtle, f-water long-necked	N
evewu	crab, mud crab	N
iramam	eel	N
irhin	oyster, small oyster	N
itnarr	eel, big eel	N
mothanmama	ray, long tailed ray (small)	N
negerru	eel, small eel	N
ob ̠ odh	ray, long tailed ray (big)	N
oklambin	crab	N
olarr	ray, long tailed (blackspot)	N
orhawanwan	crab, sand crab	N
oyer	porpoise	N
rremal	pearlshell	N
t ̠ alam	ray, short tailed ray	N
utnoyar	turtle, fresh water	N
walnggal	oyster, big oyster	N
wanham	bailor shell	N

SECTION (9)	**FISH**	
abi	whitefish	N
ada	shark, gummy shark	N
agutharr	saratoga fish	N
ahuvirr	butterfish	N
arral	rockcod, salt water rockcod	N
attnhanh	queenfish	N

avinu	shark, big shark	N
b̰otju	rockcod, fresh water	N
djamarl	bream, silver bream	N
eber	jellyfish, small jellyfish	N
elanhanh	net, string fishnet	N
emalh	groperfish	N
emarl	crayfish, salt water crayfish	N
eperhem	bream, red bream	N
eperhem	groperfish	N
eren	fishbait	N
ila	'big mouth' fish	N
ilaman	hook, fishhook	N
ipmanavige	whale	N
ithipinh	bream, boney bream	N
kaparrdarrwarr	salmon	N
layna	fishing line	N
manatham	shark, small shark	N
mangamyatanu	kingfish	N
nyisharr	fish (generic)	N
o'amal	net, string fishnet	N
ogalal	shellfish, small shellfish	N
ohadharr	shark, shovelnose shark	N
ongadharr	sawfish	N
op̰anh	shellfish, big shellfish	N
op̰ar	barramundi	N
oparrpan	crayfish, fresh water	N
oralham	deep-sea mullet	N
orhol	mullet	N
orhongal	catfish, fresh water catfish	N

otang	salt water fish	N
ottayamba	shellfish, small shellfish	N
owon	jellyfish, big jellyfish	N
thalangirlpinh	bream, black bream	N
ttarranwirr	stonefish	N
tuwar	dugong	N
utnongan	jewfish, fresh water	N
wa'arrnu	catfish	N

SECTION (10)	**REPTILES**	
agarr	lizard, blue-tongue	N
ahulirr	snake, taipan snake	N
alilirr	snake, carpet snake	N
amarr	snake, brown snake	N
arham	goanna, sand goanna	N
elhverr	goanna, sand goanna	N
irarrwirr	goanna	N
ithnhanwirr	lizard	N
nangadharr	python, black-headed	N
og ̲ a	lizard, geko lizard	N
olharr	lizard, small lizard	N
opirru	snake, king brown snake	N
orhang	snake, black snake	N
utnomttal	snake, death adder	N
utnorlka	lizard, frilled neck lizard	N

SECTION (11)	BIRDS	
abal	parrot, king parrot	N
adanam	dollarbird	N
alatharr	galah	N
alban	ibis, black ibis	N
arranh	birdsnest	N
athufunum	pigeon, blue pigeon	N
attirr	cockatoo, white cockatoo	N
awarr	goose	N
awiderro	owl, frogmouth owl	N
e'an	turkey, plains turkey	N
egerru	brolga	N
emer	duck	N
epmenherrma	blue kingfisher	N
erhelh	emu	N
erraknganma	seagull, black seagull	N
eteltel	bird, peewee	N
eten	hawk, eagle hawk	N
ethetha	bowerbird	N
ettarr	birds (generic)	N
eve	duck	N
ewan	goose, pygmy goose	N
huvirr	heron, salt water heron	N
ida	parrot, blue mountain	N
ilaman	hawk, stinking hawk	N
ilarr	bird, plover	N
irharhal	duck, burdekin duck	N
ithang	cockatoo, black cockatoo	N

iwarr	curlew	N
korratutum	pigeon, brown pigeon	N
malbinu	bird, crane	N
obatham	ibis, white ibis	N
oderr	pelican	N
ogerhu	duck, black duck	N
ohan	bird, mopoke	N
okngal	bird, sandpiper	N
op̲adharr	duck, whistle duck	N
opmarrlan	booby bird	N
or̲a	kookaburra	N
orralh	pigeon, torres strait white	N
otham	bird, banana bird	N
oyeyatharr	duck, spoonbill duck	N
pelpema	turkey, scrub turkey	N
rhawapmarr	stormbird	N
tarrawarr	bird, jabiru	N
ttarrapedhem	willy wagtail	N
urhar	seagull, white seagull	N
ut̲arranh	feather	N
utnolarr	parrot, antbed parrot	N
wunipinh	crow	N

SECTION (12)	**INSECTS**	
akngarr	preying mantis	N
amarram	centipede	N
ayaa	spider	N

elenh	louse	N
errarrorrarr	grasshopper	N
iman	louse eggs	N
ipman	nit	N
ipmirrim	antbed	N
itham	ant, black ant	N
iwarr	termite	N
iyan	fly, march fly	N
lanarrowan	locust	N
nyanam	grub	N
odiwu	scorpian	N
okngal	mosquito	N
oly ̱ arr	ant, green ant	N
omal	maggot	N
omeyan	grasshopper, katydid	N
ora	worm	N
orhanh	hornet	N
orrawal	fly	N
orrawunam	fly, blowfly	N
tharamram	tick	N
theyalarr	centipede	N
urr ̱ anh	leech	N
wabarrattanu	caterpillar	N
warrwirr	grub, witchity grub	N

SECTION (13)	PLANTS and TREES	
aattinu	tree, grass tree	N
aganh	mangrove	N
alanam	tree, beefwood tree	N
alil	tree, cotton tree	N
alir	leaf	N
aliyamboyama	tree, soapy leaf tree	N
anharrnharr	tree, kerosine wood tree	N
arrtann	tree, black cherry tree	N
attnhul	tree, black fruit	N
erampinh	shrub tree	N
ipa	tree, leichhart tree	N
iparr	bamboo	N
ishan	tree, cabbage tree	N
isharr	pandanus	N
isharram	pandanus, long pandanus	N
manapararl	tree, blue fruit	N
manattarr	tree, red cherry tree	N
maneyaverr	tree, red apple tree	N
ogang	tree, small cabbage tree	N
orrang	wood	N
orrang	tree (generic)	N
orrang eewal	wood, soft/light wood	N
orrang wayttal	wood, hard/strong wood	N
orrangala	sandpaper tree	N
orrangapan	tree, milkwood tree	N
orrangarhirr	tree, gutta-percha tree	N
orrangeerrra	tea tree	N

orrangepe	tree, young gum tree	N
orrangeyarral	tree root	N
orrangeyeren	tree, fork of tree	N
orrangiyirram	tree, ironwood	N
orrangob ̱ an	tree, bohemia tree	N
orrangoddawu	tree, bloodwood	N
orrangol ̱ arr	tree, messmate tree	N
orrangorrangddarr	tree, ghost gum	N
otha	scrub	N
othan	tree, white poison tree	N
sharrathanam	tree, mulga tree	N
tufu	tree, type of cabbage tree	N
utnorrawarr	tree, nonda tree	N

SECTION (14)	**DESCRIBING WORDS**	
a'am	close, near	ADJ
ahar	fat	ADJ
arhil	red	ADJ
atta	rotten	ADJ
awarr	many, three or more	ADJ
awarr	white	ADJ
balam	frightened	ADJ
banmar	far	ADJ
beewim	hungry	ADJ
birru	many	ADJ
biwim	ashamed	ADJ
egerr	alive	ADJ

elinh	cooked	ADJ
erraman	sharp	ADJ
errangan	sweet	ADJ
erhe	raw, unripe	ADJ
ewarl	light (weight)	ADJ
g̲arr	sore	ADJ
gamngarr	heavy	ADJ
hadhar	good	ADJ
harra	wrong	ADJ
ingalingal	crooked	ADJ
ingarr	thin	ADJ
inha oharr	deaf, 'ringing in ears'	ADJ
inhitinhu	deaf	ADJ
irang	asleep	ADJ
l̲athar	hot	ADJ
lampra	cold, sour	ADJ
l̲uyar	straight	ADJ
matham	big	ADJ
maylimimirr	short	ADJ
mootharr	dead, dead person	N
mutjin	soft	ADJ
nayendem	tired	ADJ
newettal	dry	ADJ
odom	salty	ADJ
og̲orru	sick	ADJ
ongingu	wet	ADJ
oparr	one	ADJ
othal	black	ADJ
owan	long	ADJ

rhingirr	bad, old	ADJ
sh ‿ orr	two	ADJ
thaadim	dying	tV, ADJ
ttalharr	small	ADJ
unyu	blind	ADJ
waatal	hard	ADJ
wanothal	half-burnt	ADJ
waytal	strong	ADJ

SECTION (15) VERBS

(a) WORDS OF MOTION

ama-	to marry	tV
angawanim-	to burst	tV
arra-	to follow	tV
athalam-	to burn	tV
awo-	to go inside	iV
bananya-	to untie	tV
belbe-	to cut	tV
da-	to dig	tV
dalda-	to climb up	tV
ddanga-	to return	iV
de-	to fall	iV
ebal gara-	to run	iV
emam-	to build	tV
gamla-	to live	iV
garra-	to go away	iV
hade-	to die	iV

hama-	to jump	tV
hanya-	to pick up, to take	tV
iwa-	to scrape	tV
la-	to hide	tV
l̰ a-	to pull	tV
langa-	to pierce, to spear	tV
larri-	to squeeze	tV
lirrinapa-	to cook kupmari style	tV
ma-	to find	tV
manya-	to wait	iV
mera-	to take away	tV
nàa-	to lie down	iV
ngarra-	to kick	tV
ngarra-	to rub, to paint	tV
nhaparra-	to sneak up	tV
nya-	to hit	tV
nya-	to leave on	tV
nya-	to stop, to stay	iV
nyana-	to rest	iV
nyarra-	to growl, to fight	tV
pa-	to catch	tV
pa-	to go walkabout	iV
pal̰ a-	to hold	tV
rha-	to lose	tV
rha-	to stand	iV
rhanya-	to put	tV
rram-	to take bogey	iV
shaldi-	to get up, to rise	iV
towal-	to be broken	iV

towalyangan-	to break	tV
tta-	to bite	tV
ttaltta-	to tie-up	tV
tuwa-	to give	tV
wa-	to cook	tV
wanya-	to throw	tV
watja-	to make	tV
yala-	to look for	tV

(b) BODILY FUNCTIONS

alin-	to vomit	iV
bala-	to be afraid	iV
balata-	to itch	tV
be-	to lick	tV
eerra-	to know	tV
inha-	to hear	tV
iranh-	to sleep	iV
itarr-	to dream	iV
lamsh ̬ arrbe-	to kiss	tV
ma-	to belong	iV
maga-	to see	tV
naya-	to listen	iV
ngaanyenye-	to forget	iV
tuwa-	to smell	tV
wagun papa-	to yawn	iV
weetham-	to blow	tV
ya-	to drink, to swallow	tV
ya-	to eat, to swallow	tV

(c) VOCALISING

alal-	to laugh	iV
darra-	to call out	tV
fobulo-	to yarn	iV
gel ̯ a-	to ask	tV
indji-	to sing	tV
irra-	to talk	iV
rra-	to say	tV
yanya-	to cry	iV

SECTION (16)	**CONVERSATION**
arrarr weya	'shake-a-leg' going now!
hattama garraya	bye-bye, I'm going
meti	no
narro garayda	where are you going?
ngalavi ddangayda	when will you come back?
ngalavi rramda	what are you saying?
oda orha nala	what's your name?
yaa	yes

5.3 MORROBALAMA - ENGLISH

A

a	north	N
aarral	grindstone base	N

aarram	wallaby, plains wallaby	N
aattinu	tree, grass tree	N
abal	parrot, king parrot	N
abar	fruit, white tree fruit	N
abi	whitefish	N
ada	shark, gummy shark	N
adanam	dollarbird	N
adarr	tongue	N
adir	frog, green pandanus frog	N
ag ̠ u	afternoon	N
aganh	mangrove	N
agarr	lizard, blue-tongue	N
agurlmal	crocodile, fresh water	N
agutharr	saratoga fish	N
aha	south	N
ahar	fat	N, ADJ
ahawanma	other side	N
ahinu	kangaroo, red female	N
ahulirr	snake, taipan snake	N
ahuvirr	butterfish	N
akngarr	preying mantis	N
akuum	string, long grass string	N
ala	spear	N
alal-	to laugh	iV
alam	hand	N
alama	this side	N
alanam	tree, beefwood tree	N
alatharr	galah	N
alban	ibis, black ibis	N

alil	tree, cotton tree	N
alilirr	snake, carpet snake	N
alin	vomit	N, iV
alir	leaf	N
alirr	dingo	N
alivirr	bat	N
aliyamboyama	tree, 'soapy-leaf' tree	N
ama-	to marry	tV
amarr	snake, brown snake	N
amarram	centipede	N
anga	lung	N
angawanim-	to burst	tV
anha	liver	N
anharrnharr	tree, kerosine wood tree	N
aparr	turtle, stinking turtle	N
aparran	thunderstorm	N
apma	person	N
apmal	foot	N
aran	sandbeach	N
arham	goanna, sand goanna	N
arhil	red	ADJ
arhilu	ray, sting ray	N
arra	wife	N
arra-	to follow	tV
arrabam	billycan	N
arragatta	dress	N
arral	wind	N
arral	rockcod, salt water	N
arran	baby	N

arran butjinh	child, small child	N
arranh	flame	N
arranh	birdsnest	N
arrarhil	crab, soldier crab	N
arrarr	girl	N
arratjan	eye	N
arreyapal	eyebrow	N
arrir	boat, canoe	N
arritha	eyebrow ridge	N
arriwinma	sugarbag, small	N
arrtann	tree, black cherry tree	N
ata	leg, lower leg	N
atha	fire	N
athalam-	to burn	tV
athufunum	pigeon, blue pigeon	N
atipinh	fry pan	N
atjan	egg	N
atta	rotten	ADJ
attawar	sugar glider	N
attirr	cockatoo, white cockatoo	N
attnhanh	queenfish	N
attnharr	crocodile, salt water	N
attnhul	tree, black fruit	N
avinu	shark, big shark	N
aw	down	ADV
awaarr	turtle, salt water	N
awar	head	N
awar	mussel, salt water	N
awarr	white	ADJ

awa/rr	goose	N
a/warr	many, three or more	ADJ
awiderro	owl, frogmouth owl	N
awo-	to go inside	iV
aya	boy	N
aya	dew	N
ayaa	spider	N

B

b̠al̠al	sugarbag, small	N
bala-	to be afraid	iV
balam	frightened	ADJ
balata-	to itch	tV
banana	kidney	N
banana	hook, woomera hook	N
bananya-	to untie	tV
banarraman	woomera lower end	N
banata	woomera handle	N
bani irram	woomera body	N
banmar	far	ADJ
b̠otju	rockcod, fresh water	N
be-	to lick	tV
bee matham	woman, married adult	N
bee maya	grandmother	N
bee rhingirr	woman, old woman	N
beewim	hungry	ADJ
belbe-	to cut	tV
belhenmerr	island	N
birru	many	ADJ

biwim	ashamed	ADJ

D

da	you	PRON
da-	to dig	tV
dalda-	to climb up	tV
darra-	to call out	tV
de-	to fall	iV

DD

ddanga-	to return	iV

DJ

djamarl	bream, silver bream	N
djanapnganam	yamstick	N
djenu rhingirr	man, old man	N

E

e'an	turkey, plains turkey	N
e'anam	yamstick, double-ended	N
ebal gara-	to run	iV
ebarrawarr	moon	N
eber	jellyfish, small jellyfish	N
eeban	tide	N
eera	ground	N
eerra-	to know	tV
egerr	alive	ADJ
egerru	brolga	N
elàarr	sugarbag, big	N

elanhanh	net, string fishnet	N
elenh	louse	N
elhverr	goanna, sand goanna	N
elinh	cooked	ADJ
emalh	groperfish	N
emam-	to build	tV
emarl	crayfish, salt water crayfish	N
emer	duck	N
ender	crab, beach crab	N
epaya	grandfather	N
eperhem	bream, red bream	N
epmen	bandicoot	N
epmenherrma	blue kingfisher	N
eram	urine	N
erampin	shrub tree	N
erampinh	mussel, fresh water	N
eren	fishbait	N
erepen	star	N
erhe	raw, unripe	ADJ
erhelh	emu	N
erheta	waterhole	N
errakngan ma	seagull, black seagull	N
erraman	sharp	ADJ
errangan	sweet	ADJ
errar	leg, upper leg	N
errarrorrarr	grasshopper	N
erraylanhu	pants	N
errema	stone tommy hawk	N
erreyo	elbow	N

errogal	nosering hole	N
eteltel	bird, peewee	N
eten	hawk, eagle hawk	N
ethal	bone	N
etheta	flood	N
ethetha	bowerbird	N
ettarr	birds (generic)	N
eve	duck	N
everr	rainbow	N
everru	turtle, f-water long-necked	N
evewu	crab, mud crab	N
ewan	goose, pygmy goose	N
ewarl	light (weight)	ADJ

F

fobulo-	to yarn	iV

G

g$_w$arr	sore	ADJ
galpangan	today	N
gamla-	to live	iV
gamngarr	heavy	ADJ
gamyarr	coconut	N
gaparr	belly	N
gar	east	N
garra-	to go away	iV
gel$_w$a-	to ask	tV

H

hade-	to die	iV
hadhar	good	ADJ
hama-	to jump	tV
hanya-	to pick up, to take	tV
harra	wrong	ADJ
harreyarral	rib bones	N
hayangal	house	N
huvirr	heron, salt water heron	N

I

ida	parrot, blue mountain	N
igngarr	vein	N
ikngal	boomerang	N
ila	'big mouth' fish	N
ilaman	hook, fishhook	N
ilarr	bird, plover	N
iman	louse eggs	N
indji-	to sing	tV
ingalingal	crooked	ADJ
ingarr	thin	ADJ
inha oharr	deaf, 'ringing in ears'	ADJ
inha-	to hear	tV
inhitinhu	deaf	ADJ
inya	meat, minya	N
ipa	tree, leichhart tree	N
iparr	bamboo	N
ipman	nit	N

ipmanavige	whale	N
ipmirrim	antbed	N
iramam	eel	N
irang	shoulder	N
iranh-	to sleep	iV
irarrwirr	goanna	N
irhang	native cat	N
irharhal	duck, burdekin duck	N
irhin	oyster, small oyster	N
irino	paddle	N
irra-	to talk	iV
irraddangarr	flying fox, black flying fox	N
irrakngaram	axe, steel axe	N
irrapa	yesterday	N
irraparrpanham	cliff	N
irrata	tooth	N
irrata'ogal	tooth gap	N
ishan	tree, cabbage tree	N
ishar	string	N
isharr	pandanus	N
isharram	pandanus, long pandanus	N
itam	heart	N
itarr-	to dream	iV
itham	ant, black ant	N
ithang	cockatoo, black cockatoo	N
ithipinh	bream, boney bream	N
ithnhanwirr	lizard	N
itna	ear	N
itnarr	eel, big eel	N

itnayewal	mouse	N
itnogal	pierced ear	N
itnul	hip	N
ittal	kangaroo, grey female	N
iwa-	to scrape	tV
iwarr	curlew	N
iwarr	termite	N
iyan	fly, march fly	N

K

kaparrdarrwarr	salmon	N
koleerra	ankle	N
korratutum	pigeon, brown pigeon	N

L

l̰ al	them (two)	PRON
la	she/he/it	PRON
la-	to hide	tV
l̰ a-	to pull	tV
l̰ athar	hot	ADJ
lada	we (two) INCL	PRON
ladangar	spear, bullet spear	N
lala	we (two) EXCL	PRON
lam'arran	finger, little finger	N
lam'awarr	fingers, middle three	N
lamagaparr	hand, palm of hand	N
lamamatham	thumb, big finger	N
lameethal	hand, back of hand	N
lameyarhan	fingernail	N

lampra	cold, sour	ADJ
lamsh ̱ arrbe-	to kiss	tV
lamunwarr	thumb	N
lana	we (all) EXCL	PRON
lanarrowan	locust	N
langa-	to pierce, to spear	tV
lapal	we (all) INCL	PRON
larri-	to squeeze	tV
l ̱ uyar	straight	ADJ
lawarar	stone (generic)	N
lawarilanham	glass	N
lawnarr	day	N
layna	fishing line	N
ledherre	spear, wire spear	N
leve'arro	porcupine	N
leyarra	spearhead	N
lini	us (two)	PRON
lipi	us (all)	PRON
lirrin	smoke	N
lirrinapa-	to cook kupmari style	tV
lirrinpinha	ship, steam ship	N
lo	they (all)	PRON
logaparr	river	N
logaparrtalrhayil	creek	N
loru ttalttal	dry season	N

M

ma-	to find	tV
ma-	to belong	iV

maarrarr	woman, young single	N
maatjiyarhanh	matchbox	N
maatjiyarra	match	N
maga-	to see	tV
mal'arran	toe, little toe	N
malagaparr	foot, sole of foot	N
malaknganam	shoes	N
malanyin	man, young married man	N
malbinu	bird, crane	N
maleyerhan	toenail	N
malmatham	toe, big toe	N
malup ‿ ar	track	N
malup ‿ arr	foot, top of foot	N
mamudh	man, adult man	N
managun	fruit	N
managun elinh	fruit, ripe fruit	N
managun erhe'	fruit, green fruit	N
manamudhum	man, young single man	N
manapararl	tree, blue fruit	N
manata	fruit, red tree fruit	N
manatham	shark, small shark	N
manattarr	tree, red cherry tree	N
maneeba	yam, long yam	N
maneepa	yam, short yam	N
maneyaverr	tree, red apple tree	N
mangamyatanu	kingfish	N
manisharr	fruit, pandanus fruit	N
maniwarr	honey	N
manopar	taro	N

manorhar	fruit, white apple fruit	N
manya-	to wait	iV
mareyade	nosering, shell nosering	N
marirru	woman, young married	N
marrangipin	pig	N
marrata	nose	N
marrerranh	snot	N
marrpinh	flying fox, red-faced	N
matham	big	ADJ
may	mother	N
maya	boy, small boy	N
maylimimirr	short	ADJ
medhem	armpit	N
mera-	to take away	tV
mootharr	dead, dead person	N
mothanmama	ray, long tailed ray (small)	N
mutjin	soft	ADJ

N

na	me	PRON
na	they (all)	PRON
n̪ a-	to lie down	iV
nangadharr	python, black-headed	N
narhirpinh	pannikin	N
nariya	auntie	N
nathithin	headring	N
naya-	to listen	iV
nayendem	tired	ADJ
naythal	neck	N

negerru	eel, small eel	N
newettal	dry	ADJ
noha	throat	N
noman	throat region	N
norrawar	knee	N
nuleethal	hipbone	N

NG

ngaanyenye-	to forget	iV
ngaapulpul	spear, bar spear	N
ngan	her/him/it	PRON
ngarra-	to kick	tV
ngarra-	to rub, to paint	tV
ngarrabi	woman	N
ngarrabi wulrhum	woman, white woman	N

NH

nhaparra-	to sneak up	tV
nhayaparr	wet season	N
nhibilbinhu	knife	N

NY

nya-	to hit	tV
nya-	to leave on	tV
nya-	to stop, to stay	iV
nyalangam	spear, fish spear	N
nyana-	to rest	iV
nyanam	grub	N
nyarra-	to growl, to fight	tV

nyeelinh	meat, cooked meat	N
nyeerhe'	meat, raw meat	N
nyin	them (all)	PRON
nyisharr	fish (generic)	N

O

o'amal	net, string fishnet	N
o'aya	uncle	N
ob̲ arr	forehead	N
oban	woomera	N
ob̲ odh	ray, long tailed ray (big)	N
obatham	ibis, white ibis	N
odda	blood	N
oderr	pelican	N
odiwu	scorpian	N
odom	salty	ADJ
of̲ a	sand	N
og̲ a	lizard, geko lizard	N
og̲ orru	sick	ADJ
ogal	hole, cave	N
ogalal	shellfish, small shellfish	N
ogan	vagina	N
ogang	tree, small cabbage tree	N
ogerhu	duck, black duck	N
ohadharr	shark, shovelnose shark	N
ohan	bird, mopoke	N
oharr	mud	N
oharrattan	paint, red paint	N
oharrawarr	paint, white paint	N

ohay	up	N
oklambin	crab	N
okngadjorarr wannyima	whirlpool	N
okngal	bird, sandpiper	N
okngal	mosquito	N
okngan amrha	water, fresh water	N
okngarhim	lagoon	N
okngayarr	spring, water spring	N
okngikngal	waterfall	N
okngoduwam	water, salt water	N
ol̠ an	possum	N
olarr	ray, long tailed (blackspot)	N
olharr	lizard, small lizard	N
oloy'	temple (head)	N
oly̠ arr	ant, green ant	N
omal	maggot	N
omeyan	grasshopper, katydid	N
ong̠ a	rat, kangaroo rat	N
ongadharr	sawfish	N
ongingu	wet	ADJ
opa	coolamon	N
op̠ adharr	duck, whistle duck	N
op̠ anh	shellfish, big shellfish	N
op̠ ar	barramundi	N
oparr	one	ADJ
oparrpan	crayfish, fresh water	N
opirru	snake, king brown snake	N
opmarrlan	booby bird	N

ora	worm	N
or ̲ a	kookaburra	N
oralham	deep-sea mullet	N
oray	husband	N
orh ̲ a	you (all)	PRON
orha	arm, upper arm	N
orha'alma	arm, left arm	N
orha'ayenma	arm, right arm	N
orhamrha	wax, beeswax	N
orhanam	grindstone	N
orhang	snake, black snake	N
orhanh	bee, beeshoney	N
orhawanwan	crab, sand crab	N
orhol	mullet	N
orhongal	catfish, fresh water catfish	N
orraharr	cloud	N
orralh	pigeon, torres strait white	N
orrang	tree (generic), wood	N
orrang eewal	wood, soft/light wood	N
orrang wayttal	wood, hard/strong wood	N
orrangala	sandpaper tree	N
orrangama	stick, message stick	N
orrangapan	tree, milkwood tree	N
orrangarhirr	tree, gutta-percha tree	N
orrangeerra	tea tree	N
orrangepe	tree, young gum tree	N
orrangeyarral	tree root	N
orrangeyeren	tree, fork of tree	N
orrangiyirram	tree, ironwood	N

orrangobàan	tree, bohemia tree	N
orrangoddawu	tree, bloodwood	N
orrangolàarr	tree, messmate tree	N
orrangorrangddarr	tree, ghost gum	N
orrangowupmal	nullanulla	N
orrawal	fly	N
orrawunam	fly, blowfly	N
orraya	older brother	N
orruyathal	nape of neck	N
ot ̠ al	rain	N
otang	salt water fish	N
otawarr	wallaby, rock wallaby	N
otha	scrub	N
othal	black	ADJ
otham	bird, banana bird	N
othan	tree, white poison tree	N
ottal	belly button	N
ottanan	skin	N
ottaram	day before yesterday	N
ottayamba	shellfish, small shellfish	N
otuwa	dog	N
owan	long	ADJ
owon	jellyfish, big jellyfish	N
oyang	breast	N
oyer	porpoise	N
oyeyatharr	duck, spoonbill duck	N

P

pa-	to catch	tV

pa-	to go walkabout	iV
pal ̠ a-	to hold	tV
panpan	frog	N
parran	thunder	N
parrorarr	chin	N
paya	older sister	N
pelpema	turkey, scrub turkey	N
pimarra	day, midday	N
pingimi	night	N
pipim	tomorrow	N
pipimirha	day after tomorrow	N
pul	you (two)	PRON
puligi	cow	N

R

rahalnhamdem	ground	N
rawrarr eewal	stone, lightweight stone	N
rawrarr gamngarr	stone, heavy stone	N
reela	road	N
reela matham	road, big road	N
reyara	sun	N
reyara nguyemla	sunset	iV
reyara shaldemla	sunrise	iV

RH

rha-	to lose	tV
rha-	to stand	iV
rhanya-	to put	tV
rhawapmarr	stormbird	N

rhingirr	bad, old	ADJ
rhoban	arm, lower arm	N

RR

rra-	to say	tV
rram-	to take bogey	iV
rraya	younger sister, brother	N
rremal	pearlshell	N

SH

shaldi-	to get up, to rise	iV
sh̬ orr	two	ADJ
sharrathanam	tree, mulga tree	N

T

t̬ alam	ray, short tailed ray	N
t̬ alarhiil	lightning	N
tarrawarr	bird, jabiru	N
tooram	chest	N
towal-	to be broken	iV
towalyangan-	to break	tV
tufu	tree, type of cabbage tree	N
tuwa-	to give	tV
tuwa-	to smell	tV
tuwalirr	wild dog, dingo	N
tuwar	dugong	N
tuweyarral	chest, meat of chest	N

TH

tha'arranh	light	N
thaadim	dying	tV, ADJ
thabam	bottom	N
thagarr	bottom, cheek of bottom	N
thalangirlpinh	bream, black bream	N
tharamram	tick	N
theedjerr	ashes	N
theethal	back	N
theyelarr	charcoal	N
thilhinu	firestick	N
tho'ogal	anus	N
thottanan	tree bark	N

TJ

tjokon	kangaroo, red male	N

TT

tta-	to bite	tV
ttalharr	small	ADJ
ttaltta-	to tie-up	tV
ttarranwirr	stonefish	N
ttarrapedhem	willy wagtail	N

U

ud̠a	penis	N
uddom	salt	N
uloy	cheek	N
unyu	blind	ADJ

upmarr	face	N
urhar	seagull, white seagull	N
urr̲anh	leech	N
urr̲ar	kangaroo, grey male	N
ut̲al	testicles	N
ut̲arranh	feather	N
utn̲a	faeces	N
utn̲al̲arr	wallaby, scrub wallaby	N
utn̲amay	guts (large intestine)	N
utno'arran	guts (small intestine)	N
utnolarr	parrot, antbed parrot	N
utnomttal	snake, death adder	N
utnongan	jewfish, fresh water	N
utnorlka	lizard, frilled neck lizard	N
utnorrawarr	tree, nonda tree	N
utnoyar	turtle, fresh water	N
uwon	grass	N

W

wa'arrnu	catfish	N
wa-	to cook	tV
waatal	hard	ADJ
wabarrattanu	caterpillar	N
wagun	mouth	N
wagun papa-	to yawn	iV
walnggal	oyster, big oyster	N
wanalirrin	little bushfire	N
wanhalanham	tincan	N
wanham	bailor shell	N

wanob ̬ arram	big bushfire	N
wanya-	to throw	tV
waparr	beard	N
waranhdder	hat	N
warapal	hair	N
warrwirr	grub, witchity grub	N
watja-	to make	tV
weetham-	to blow	tV
w o	west	N
wonha	spit	N
wottanan	lip	N
wulrhum	man, white man	N
wunipinh	crow	N

Y

ya	I	PRON
ya-	to eat, to drink, to swallow	tV
yala-	to look for	tV
yalparr	hill	N
yangeera	nipple	N
yanya-	to cry	iV
yarraman	horse	N
yarrwirr	net, fishnet	N
yay	father	N

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