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**A grammar of Barupu:
a language of Papua New Guinea**

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**Submitted in fulfilment of the requirements of the degree of
Doctor of Philosophy**

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This is to certify that:

1. except where otherwise indicated this thesis is my own work.
2. the study complied with the requirements of the University of Sydney Human Research Ethics Committee.



Miriam Corris

Abstract

This thesis is a descriptive grammar of Barupu, the easternmost member of the Skou family of languages. Barupu is spoken by around 3000 people on the north coast of New Guinea; its grammar has not previously been described.

Barupu is a tone language in which words belong to one of five tone classes and it exemplifies a type of pitch-accent system where for the most part tone is attracted to penultimate stressed syllables and spreads one syllable to the right. Some words, however, have tones lexically specified to one of the final two syllables of the word.

A key feature of Barupu grammar is that there is no oblique marking on NPs — no particles, adpositions or case markers provide information about a nominal's role in the clause. Instead, Barupu is head-marking. Underived verbs show multiple exponence of subject, which can take the form of double prefixing or prefixing and infixing.

There is a set of suffixing morphemes that function like applicatives in adding participants to the clause, but which are very atypical in appearing outside verbal inflection and showing extra agreement for subject. Barupu also has a prefixing Benefactive paradigm that replaces regular subject agreement and can be extended to mark external possession. Finally, Barupu is a polysynthetic language and, as such, makes almost no use of formal subordination.

Appendices to this thesis include a set of interlinearised texts and a draft of a Barupu-English dictionary with an English-Barupu finderlist.

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Glossing conventions and abbreviations

In this thesis I have mostly followed The Leipzig Glossing Rules (See <http://www.eva.mpg.de/lingua/files/morpheme.html> - Version accessed September 2004). The only exception is that I have not represented reduplication with a tilde, I have used a hyphen. The rules I have used are as follows:

Glossing conventions

- A hyphen (-) indicates a morpheme break (including reduplication);
- (=) represents cliticisation;
- infixes are enclosed in angle brackets (<>);
- when one word in Barupu requires glossing with two elements, these are separated by full stops, e.g. Barupu *-kôe* is glossed as ‘go.up’;
- person and number labels are not separated by fullstops, e.g. 1SG, not 1.SG;
- gender is separated with a full stop, e.g. 1SG.F;
- an asterisk (*) before an example sentence indicates that the sentence is ungrammatical;
- a hash (#) before an example sentence indicates that the sentence is grammatical but not with the intended meaning;
- a question mark (?) before an example sentence indicates that the sentence is borderline grammatical — that is, somewhat accepted in elicitation but not naturally attested;
- Tok Pisin and English words in example sentences are represented in roman font and glossed in upper case.

Where words have different meanings, the meaning that pertains for that example sentence will be the gloss it is given. For example, the word *pê* can be used to mean

'hair', 'fur' and 'leaf' and by extension it is used in compounds to express extremities of body parts — for example, fingers and nipples. If, for example, it is being used to mean 'hair', it will be glossed as 'hair'.

Where the orthographic representations are segmentable into morphemic glosses, they will appear in three-line glosses. If, however, the surface form is not segmentable example sentences will have four-line glosses; the second line will be a morphophonemic underlying representation.

Abbreviations

The following abbreviations are used in the glossing of example sentences:

1	first person	PURP ₁	purpose
2	second person	PURP ₂	purpose
3	third person	REAS	reason
AT	address term	REDUP	reduplication
ADV	adversative	REFL	reflexive
AG	agreement	REG	regarding
AMID	amid, among, through	RL	realis
APPL	applicative	SEP	separation
AWAY	thither, short while	SHORT	short distance, time
BEN	beneficiary	SG	singular
CONC	concessive	SIMUL	simultaneous
CQ	content question	SRND	surround
DDIST	distal deictic	TOWARD	hither, towards
DIRR	hypothetical deictic	TVF	truth value focus
DMID	middle deictic	UNDER	underneath
DOWN	downward	UP	upward
DPROX	proximal deictic	VAL	valency
DREF	discourse deictic	WITH	with, to, dative of interest
DU	dual	WITHOUT	without
EXCL	exclamation		
EXTV	exhaustive		
F	feminine		
FROM	from, detrimental		
FRUS	frustrative		
GIVE	dative		
HID	hidden		
INTS	intensifier		
IPQ	irrealis polar question		
IRR	irrealis		
M	masculine		
NEAR	near		
NEG	negative		
OBLG	obligation		
ON	on		
PL	plural		
PLN	place name		
PRM	prominence		
PN	proper name		
POL	polarity		
PQ	polar question		

Glossing complex verb agreement

Barupu verbs show multiple, and in some cases discontinuous, exponence of subject. There are four conjugation classes as described in full in Chapter 3 that take prefixes or infixes indexing most of the features of the subject.

For example, Class III Barupu verbs have prefixing and infixing agreement. The infix is a consonant which always appears between two final vowels, but the consonant by itself does not distinguish all the inflectional features — some of the information is located in at least a prefixed vowel, and in some cases by a longer prefix. The examples in Table 1 are shown with the realis prefix *k-*.

Table 1 Class III verbs

SG	1	M	<i>k-a-kô-n-e</i>
		F	<i>k-e-kô-n-e</i>
	2	M	<i>k-a-kô-m-e</i>
		F	<i>k-o-kô-m-e</i>
	3	M	<i>k-a-kôe</i>
		F	<i>k-o-kôe</i>
DU	1		<i>k-epi-kô-p-e</i>
	2		<i>k-oropu-kô-p-e</i>
	3		<i>k-ere-kô-p-e</i>
PL	1		<i>k-e-kô-m-e</i>
		2	M
	F		<i>k-eve-kô-r-e</i>
	3	M	<i>k-e-kô-p-e</i>
		F	<i>k-ere-kô-r-e</i>

As shown in the table and discussed in Chapter 3, it is not possible to divide the features consistently between the prefixes and the infix. Both affixes are thus glossed as marking the whole category. An infix will be indicated by angle brackets ($\langle \rangle$) in the Barupu examples and the gloss, and the gloss for the infix will appear before the gloss of the verb. Realis is glossed as RL.

- (1) *k-e-kô⟨n⟩e*
RL-1SG.F-⟨1SG.F⟩go.up
'I_F went up.'
- (2) *k-a-kô⟨n⟩e*
RL-1SG.M-⟨1SG.M⟩go.up
'I_M went up.'
- (3) *k-o-kô⟨p⟩e*
RL-2PL.M-⟨2PL.M⟩go.up
'You_M went up.'

- (4) *k-e-kô(p)e*
 RL-3PL.M-(3PL.M)go.up
 ‘They_M went up.’
- (5) *k-a-kôe*
 RL-3SG.M-go.up
 ‘He went up.’
- (6) *k-o-kôe*
 RL-3SG.F-go.up
 ‘She went up.’
- (7) *k-epi-kô(p)e*
 RL-1DU-(1DU)go.up
 ‘We two went up.’
- (8) *k-ere-kô(r)e*
 RL-3PL.F-(3PL.F)go.up
 ‘They_F went up.’
- (9) *k-oropu-kô(p)e*
 RL-2DU-(2DU)go.up
 ‘You two went up.’

A non-low vowel after a nasal can be omitted, in this case the word will be glossed as follows:

- (10) *k-e-kô(n)*.
 RL-1SG.F-(1SG.F)go.up
 ‘I_F went up.’

Phonological representations

In Chapter 2, phonemic representations will be enclosed within forward slashes (/ /) and phonetic representations will be enclosed in square brackets ([]). In the orthography discussion, graphemes are enclosed in angle brackets (< >). Elsewhere, unless specifically stated, examples will all be given in current orthography, represented in italics. The orthographic conventions are described in §2.5.

The exception is the representation of tone. Barupu has five tones: L, H, LH, HL and HLH and in the current Barupu orthography, tone is not consistently marked. In this thesis I use the following conventions:

- In surface realisations presented in phonetic square brackets, low-pitch is marked with a grave: [à] and mid-pitch is marked with a macron: [ā]. In orthographic representations these pitches are unmarked.

- In both phonetic and orthographic representations, falling pitch is represented by a circumflex: [â], rising pitch is represented by a wedge: [ǎ] and high pitch is represented by an acute: [á].
- In phonemic representations words with predictable tone assignment are represented between phonemic brackets with the tone in uppercase following the word: e.g. /neni/-LH 1SG.F — this word has rising tone and the predictable surface form [nění]. Words with tones lexically assigned to particular syllables are represented between phonemic brackets with the tone marked on the lexically specified syllable with a diacritic: e.g. /-méntan/ ‘small’, this word has an H tone lexically specified on the penultimate syllable and has the surface form [méntàn].

Sources

Many of the monoclausal examples in this grammar were gathered in personal elicitation sessions. Where possible, however, I have tried to use natural examples from narrative texts collected in Barupu village. Some data also comes from songs, written dictionary definitions as well as elicitations carried out by Donald Laycock. The source of an example sentence will be indicated in square brackets. The list of sources and abbreviations can be found in Appendix C. Where an example has no source, it should be taken as elicited.

Maps

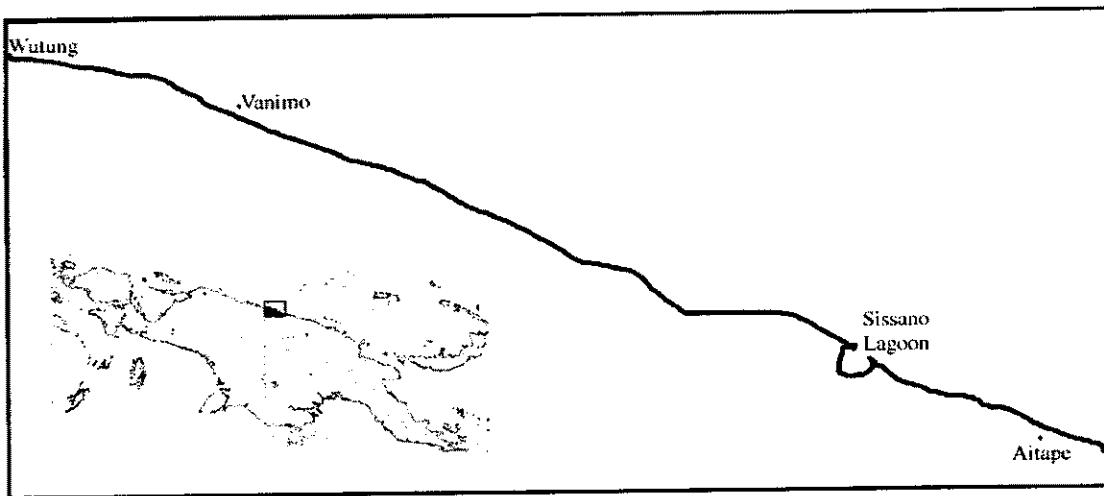


Figure 1 North coast of Papua New Guinea

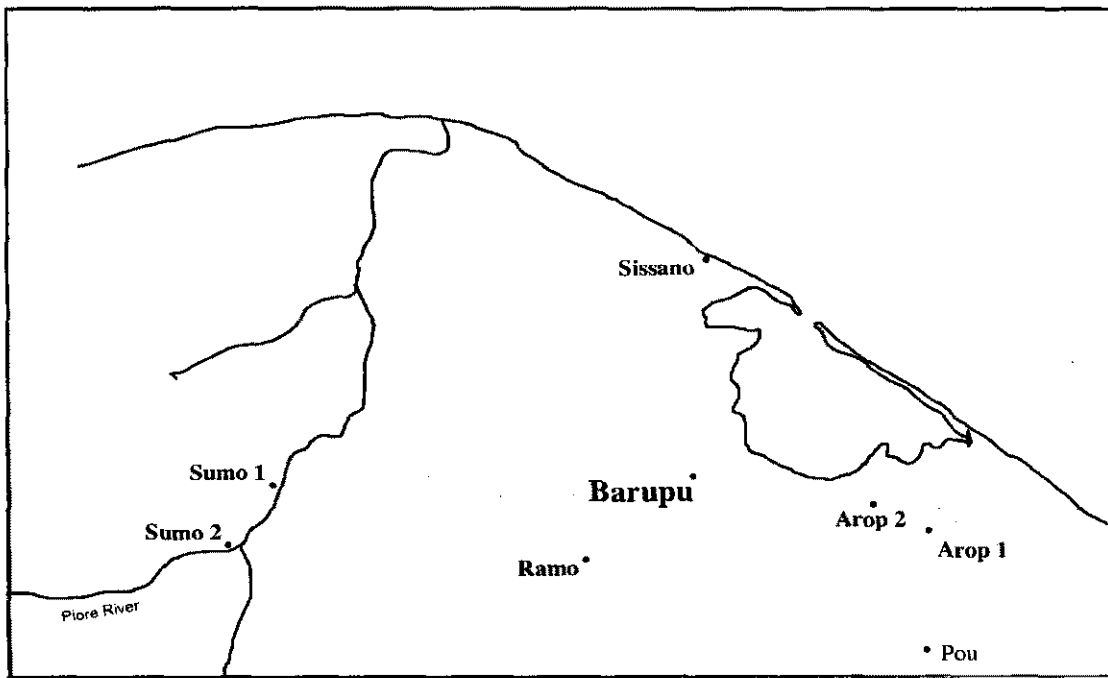


Figure 2 Barupu and surrounding villages. Approximate scale 1cm = 2.5kms

Chapter 1

Barupu language and speakers

Barupu is a Papuan (or non-Austronesian) language spoken by almost 3000 people in Sandaun Province on the north coast of Papua New Guinea (see pp xxi & xxii).

It is the eastern-most member of the Piore River branch of the Macro-Skou family (Donohue 2004). The main village site is inland from the Sissano lagoon and there are outlying coastal and bush camps. The language is officially called '*Bâuni*' (also the word for 'no'), but speakers often refer to it as Barupu (with stress on the second syllable) or Warapu (with stress on the first syllable), which are also the names of the current and former village sites respectively. Up until a tsunami on July 17th, 1998, the village of Warapu was located on a sandspit between the Sissano lagoon and the ocean. Since then, the village of Barupu has been established inland from the lagoon, near traditional garden sites.

Section 1.1 of this chapter traces the migration of Barupu speakers from Papua (formerly West Papua and Irian Jaya) to the current site. Subsequent sections describe Barupu economic and cultural life, sketch the general typological features of Barupu and the use of the language in the community and the effects of English and Tok Pisin. Section 1.5 lists previous works on the language. The final section of this chapter describes the fieldwork carried out for this study.

1.1 Linguistic grouping and history

Skou languages are found as far west as immediately over the border with Indonesia and as far east as Barupu. Laycock (1975:851) identified Barupu (=Warapu) as part of the Krisa family of the Skou phylum, in the configuration shown in Figure 1.1.

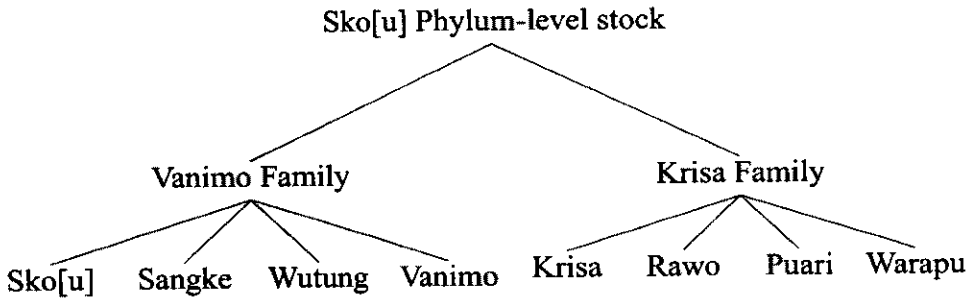


Figure 1.1 Laycock’s internal grouping of the Sko[u] Phylum

Donohue and San Roque, however, provides the following regrouping of the languages of the Skou phylum (I’saka = Krisa), based on a walking survey carried out in 2000.¹

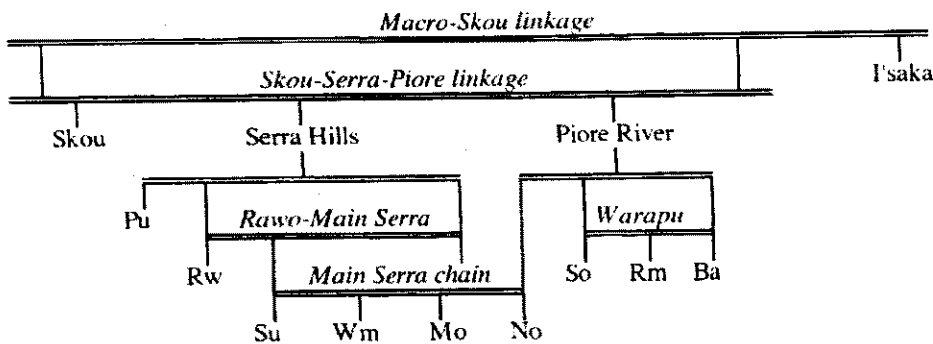


Figure 1.2: Macro Skou. Source: Donohue and San Roque (2004:7) Language codes: **Ba**, Barupu; **Mo**, Mori; **No**, Nouri; **So**, Sumo; **Pu**, Puari; **Rm**, Ramo; **Rw**, Rawo; **Su**, Sumararu; **Wm**, Womo.

¹The conventions are that ‘italics and double underlines represent linkages where there are no clear language boundaries and normal font names show[ing] separate languages. Vertical lines indicate genetic relationships’ (Donohue and San Roque 2004:7). Nouri is characterised as a ‘mixed language’. Laycock’s ‘Vanimo Family’ is submed under ‘Skou’.

As is clear from Figure 1.2, the most closely related languages to Barupu are Sumo and Ramo. Speakers refer to these as separate languages. A variety of Barupu, called Morom, is also spoken in nearby Pou village, see map on p.xxii. Speakers claim that Morom is essentially identical to Barupu.

According to Donohue (2004:5), the speakers of proto-Macro-Skou originally

lived along the middle Pual River area in Papua New Guinea. [They] were disrupted by the intrusion of people ancestral to the modern Bewani, Mbo and Ningera languages [and] they moved away from this region, towards hills to the north and east.

One branch of the eastern migration came down along the Piore river and by the mid-1800s had probably reached an area inland of where the Sissano lagoon is now. These people are the forebears of modern day Ramo and Sumo. According to oral histories, modern day Barupu speakers, however, arrived later and their migration path was along the coast. This group does not seem to have been Skou-speaking originally; one hypothesis is that they were originally an Austronesian group from around the Yotefa Bay area of Jayapura. Modern Barupu people have close relatives over the border, at Ormu, and there is quite regular contact; many Barupu people have Traditional Border Crossing (TBC) passes. There do not seem to be as strong traditional ties with Wutung people or the West Papuan Skou speakers.

Oral histories generally agree that groups of Barupu ancestors first started coming to Sandaun Province about 300 years ago. The first stop for these migrants was Vanimo. Amunti (2001:1) gives the following dates: 1700-1800 AD Barupu/Warupu ancestors left West Irian and came to Wutung and Vanimo.²

These people settled in the Wutung/Vanimo area until about 1850. Then, because a woman went into a spirit house, they were punished with fire. Many people

²Original: '1700-1800 AD tumbuna bilong Barupu/Warupu i lusim West Irian — ikam olsem long Wutung na Vanimo.'

died but others ran away. According to Amunti (2001:3),³

‘[t]hey came down the coast to the Otto river. They settled on two islands. Some old people settled on the island and some settled at the beach ... In 1884 white people came and named the village Warupu/Warapu.

Thomas (1941:163) noted that:

It would appear that about eighty or ninety years ago the headland where Vanimo station now is was occupied by the people of Warapu during the lifetime of the parents of some of the older men now living. Owing to the intrusion by a woman into the men’s house, it is said, these people migrated, to avoid divine retribution for the sacrilege. The majority of the people moved about two days’ journey to the east, and set up the village of Warapu on the Sissano lagoon. Owing to intermarriage with local villages, their dialect now differs considerably from the Vanimo coastal villages.

Laycock (1975:850) notes that this story is ‘unconfirmed by any other source. Even if true, it cannot have been Vanimo speakers who moved to Warapu ... Warapu cognates with Vanimo are unlikely to exceed 40%.’ These later migrants were probably mostly men who then intermarried with Ramo and Sumo women who were living around the inland shore of the lagoon. It is possible that the migrants gave up their language, however this hypothesis has not been explored in depth.

Written accounts of Barupu history begin in the 1890s. At this time people were living in two main settlement areas: two islands at the mouth of the lagoon and on a sandspit between the sea and the lagoon. Their gardens were situated inland, behind the lagoon. According to Davies (1999:43), after the arrival of German Society of the Divine Word (SVD) missionaries to Tumleo island in 1896 ‘young men were recruited for plantation work in Rabaul and Alexishafen, and some were educated at Vunapope.’

³Original: ‘Ol i kam bihainim nambis na kamap long Otto. Na ol i sindaun long tupela ailan. Sampela tumbuna i sindaun long ailan na sampela i sindaun long nambis ... Long 1884 ol waitman i kam na kolim dispela peles olsem Warupu/Warapu.’

Richard Parkinson visited the Aitape coast (then Berlinhafen) in 1893 and again in 1899. Parkinson (1979:38) noted in 1899 that the village site was on a sandspit.

After Sissano comes the lagoon village Warrpu or Warpull ... The hinterland is swampy right to the foot of the mountains. It is bounded near the coast by many lagoons. The largest one belongs to the lake village Warapu. It covers in my estimate an area of 50 kms. The settlements are built on the narrow strip of land lying between the sea and the lagoon. This land is only slightly raised above sea level.

At least some people, however, were living on islands near the mouth of the lagoon. On the night of 15-16th of December 1907 there was an earthquake which caused the island settlements to sink under water. Oral and written histories diverge here. Oral history has it that before this subsidence there was no lagoon, just a river. However, Parkinson is written record of the existence of a large lagoon.

Neuhauss, another German visitor to the lagoon in 1909, describes the scene of the subsidence two years later:

After a voyage of half an hour on the Sissano lagoon one emerges from a forest of coconuts suddenly upon the sunken district where the dead and leafless palm stems are a melancholy spectacle ... Soon we are in the open lagoon and steer directly for the sunken island where formerly 2000 Waropu lived. Many houses have already fallen in ruin before the dashing waves, some have remained, especially a small spirit house into which we crept in order to loot its heaped up treasures. In their superstition, the Waropu let everything after the catastrophe lie untouched, so that we were able to carry away decorated skulls, objects of magic-working, the rare dancing masks worn at the circumcision festivals, and other such objects (in Churchill 1916:13).

Two other Austronesian groups — Sissano and Arop — lived and still live on the coast on either side of the mouth of the lagoon and relations between these groups and Barupu were not friendly. Neuhauss (in Churchill 1916:13-14) wrote:

The Waropu formerly living between the Sissano and the Aróp had always been in fiercest enmity with their neighbors ... It was clearly a

judgement of God that the calamity of the earthquake fell upon the Waropu exclusively and that the sunken district ceased at the boundaries of the Sissano and Aróp ... A Sissano chief lost one after another of all five of his sons in the everlasting feuds with the Waropu.

Again there is some confusion in the various sources. Neuhauss (in Churchill 1916:13) has it that it was only after the earthquake that the Barupu people began to share land belonging to Sissano along the western shore of the lagoon. He wrote:

During the catastrophe the Waropu were able to embark quickly upon their boats, so that only two children were drowned. Early next morning they came for succor to the Sissano, who showed no sign of sympathy, but set themselves in readiness to massacre their ancient foes, now defenceless. Had Schulz [a retired copra farmer] not intervened there would have been a cruel bath of blood. The Waropu then built new towns on the shore of their lagoon.

However, as noted above, when Parkinson was there in the 1890s the sandspit site, Warapu, was already established but friendliness had never been achieved with the Sissano.

After the earthquake, the Warapu built more settlements along the inland shore of the lagoon, where they had previously been gardening. They established four or five villages around the inland shore, the main one called Aroporo. Aroporo, however, was abandoned in the 1930s. According to Catholic Mission archives (in Fasteurath (2003) and Stoner (2003)), people living at Aroporo moved to the sandspit site, Warapu, in 1937 after the death of the village catechist. Fasteurath (2003:5) writes,

the first Catechists were Jacob Kewatjawa and Petrus Kapira ... Kewatjawa died in April 1937 after a short illness of two days. Out of grief his wife burnt down their house. There was a strong wind blowing and soon the roof of the church caught fire and in no time the whole church was in flames ... In the same year the people moved their village down to the coast and built their village west of the Otow [Otto].

This version of events is supported by men who are now about seventy years old. These men recall being born at Aroporo and staying there when young, then moving to Warapu (Carl Aveni, Michael 'Mikhail' Morris & John 'Johannes' Tawiri, pers.comm. 2003).

What appears to have happened next, according to these same men, is that during the Pacific phase of WWII people moved from Warapu back to Aroporo to escape bombing. Then, as Laycock (1973b:250) suggested, after the war there was Australian administrative pressure to make Warapu the permanent site, probably for ease of patrolling; a new church and school were built in an attempt to encourage people to live there permanently.

Between 1945 and 1975, the year Papua New Guinea gained independence from Australia, Warapu was visited annually by patrol officers from the Australian Administration so some information is available on life during this period. For example, according to a patrol report of 1948, the bulk of the population was still living on the inland shore of the lagoon, rather than at the sandspit site (Morris 1948) — the patrol officer notes that they were living on reclaimed swamp and that there was much illness. A population of 791 was recorded. After WWII, villages on the Aitape coast were paid war damages. Morris (1948) reports that the Warapu had induced the surrounding villages to contribute their funds to a scheme aimed at buying a schooner to be used for transporting sago. It is not known what happened to this money but one account is that the widow of the ringleader rowed out to sea and threw the money overboard. In 1968 there was a dispute between the Sissano and the Warapu about some land near Aroporo (Kelly 1968). This dispute was never settled. Between 1975 and 1998 there is little in the way of written documentation about Barupu, with the exception of the linguistic work of Don Laycock, see §1.5, below.

At around 7pm on the 17th July 1998, three 10 - 15-metre tsunamis, caused by two magnitude 7 earthquakes offshore of Sissano Lagoon, hit the village (see Davies

1999). The tsunami destroyed all the houses, and about half the population of the village was killed, mostly babies and old people. Since then, Barupu people have lived inland in the current village, called Barupu. This site is quite a long way inland, behind Aroporo and very close to Ramo. Some border disputes are ongoing with Ramo.

1.2 Economic and cultural life

The staple diet of Barupu consists of sago, some fresh and smoked seafood — fish, prawns, crabs and shellfish — and ‘agroforestry’ (Terrell 2002) crops such as *aibika*⁴ and arboriculture: *tulip*⁵ and fruits such as coconuts, bananas, pawpaws and pineapples. Some people also maintain root crop gardens for taro and sweet potato.

There has been a period of adjustment to life away from the coast for Barupu people. People say that at the beach they had plenty of seafood but not much in the way of greens. Now they have plenty of greens but not as much seafood because the tsunami has apparently had an adverse effect on fish stocks in the lagoon, and the lagoon is now about an hour’s walk away from the top of the village. It also takes a long time to paddle from the Barupu side of the lagoon out to the ocean, where the big fish are. There are motor boats but the cost of fuel is prohibitive.

The nearest town is Aitape, one of the oldest European settlements in northern New Guinea. Aitape is about an hour and a half away by motor boat or a two-day walk. It has two supermarkets, a service station and hardware shop, as well as a police station, hospital and two high schools. It provides some avenues for employment for Barupu people.

There are two village-run schools in Barupu: an elementary school and a primary school which also has two additional ‘top-up’ years equivalent to the first

⁴*Hisbiscus manihot* or *Abelmoschus manihot*.

⁵*Ghetum Gnemon*.

two years of high school. These schools are currently in the process of implementing new nation-wide initiatives in Tok Ples (local language) literacy. All but two of the teachers in these schools are native speakers of Barupu. The first two years of schooling at the elementary school are in vernacular and some Tok Pisin. The third year of schooling is at the primary school and this year is designed as a transition from vernacular to English. Fourth year and above is conducted in English. Most children complete primary school. High schooling is expensive as it involves a move away from the village — the Catholic church provides some bursaries for promising students.

The main religion in the village is Catholicism, but other religions such as Seventh Day Adventist, Jehovah's Witness and Lutheran are also represented. Two Barupu men are ordained as Catholic priests.

There is very little paid employment in the village apart from teaching in the school and working in the Aid Post. Many Barupu families have been involved in vanilla planting since 2001, when Pacific countries were encouraged to plant vanilla to fill the gap in the market made by a blight on Madagascan vanilla crops. In the last two years, however, the Madagascan vanilla industry has revived and vanilla prices in Papua New Guinea have dropped dramatically.

1.3 Grammar overview

Barupu's segmental phonology is not particularly complex. There are nine consonant phonemes, which undergo some allophony, and six vowel phonemes. It is a word-tone language in which words belong to one of five tone classes: L, H, LH, HL or HLH. Tones are for the most part predictably associated to the stressed syllable of the word and then spread one syllable to the right. Some words, however, are lexically specified with a tone on one or other of the final two syllables of the root.

At the clause level, Barupu is overwhelmingly head marking but it is unusual in having no overt dependent marking at all — no case markers, adpositions or particles give any information about a nominal's role in the clause. The only nominal morphology is an optional clitic which is pragmatic in function. Word order is canonically SOV and does play a role in identifying arguments, but there are some pragmatic alternations.

Verb morphology is agglutinative and two verb classes take infixing. Verbs obligatorily index the person and number as well as gender (except in duals and first person plural) of the subject of the clause. Verbs belong to one of five major conjugation classes. Transitive verbs fall into two classes: those that take suffixing for their object arguments and those that do not. There is also a separate inflection paradigm for Beneficiaries which is extended to mark external possession. Experiencers of involuntary states such as 'hunger' and 'sickness' are coded as morphological objects.

Verbs also obligatorily take a status prefix which marks them as realis or irrealis and this is the only inflectional instantiation of TMA in the verb. Tense is not marked morphologically at all. Aspectual distinctions can be made with morphological processes, including reduplication, as well as analytically with particles and a serial verb construction.

Clauses are right-headed but noun phrases are left-headed. The noun is the first element in the NP and is followed by modifiers, possession and demonstratives. Barupu has eight demonstrative forms signalling three degrees of distance, whether the participant is old or new information and whether the participant is in some sense real or imagined.

Barupu has a set of incorporated adverbials, and a set of participant-adding morphemes. Many of these forms appear to be in the middle of grammaticalising

from independent serial verbs to derivational morphology. Although they form a single word with their hosts, they show two interesting deviations from derivational morphology. First, they are found after, or external to, inflectional morphology and second, several of these forms retain their own agreement for subject. Barupu also makes use of independent serial verbs.

As is quite common in polysynthetic languages, non-finite verb forms do not play a large role in the grammar of Barupu, and there is little or no embedding in complex sentence formation. Instead, clauses are grouped via parataxis or simple coordination with meaningful alternations in status marking.

1.4 Language use in the community

Barupu language is still the major language for communication inside the village.

Children learn Barupu as a first language and are actively encouraged to use it.

Barupu is used at home, in meetings and sometimes at church. There are hymns and prayers in Barupu and the Summer Institute of Linguistics has recently begun Bible translation work in Pou village. Since the 1998 tsunami, widely referred to as the disaster, Barupu people have become even more conscious of retaining their culture and their language, and speakers also feel that their language has features which set it apart from other languages — for example, tone and rich verbal inflection. In town, and with outsiders, Tok Pisin is used. Most people have at least a smattering of English and there are many fluent English speakers.

1.4.1 Loan words

There are four prevalent grammatical word borrowings from Tok Pisin in Barupu: the disjunction *o* ‘or’, the epistemic *ating* ‘maybe’, the temporal adverbial clause marker *taim* and the future *bai*; there do not seem to be Barupu equivalents to these words.

The future marker *bai* is also used to signal a purpose relationship between clauses.

There are two native purpose conjunctions *ke* and *bora* and the particle *bai* and the related *baimbai* can be substituted for either of the Barupu terms.

Tok Pisin lexical words also regularly crop up in everyday speech. There are established loan words for items that were not part of traditional life: for example *dokta* ‘doctor’, *marasin* ‘medicine’, *sule* ‘school’, but people also spontaneously use Tok Pisin or English words to replace Barupu words. Speakers more often substitute verbs than nouns, and it is not the rare or highly specific verbs that get replaced but high frequency words like *-yǎrá* ‘see, know’, replaced by Tok Pisin *lukim* ‘see’ or *save* ‘know’ and *-á* ‘make, do’ replaced by Tok Pisin *wokim* ‘make’.

When Tok Pisin verbs are used they receive Class I inflection (see Chapter 3) and fall into the L tone class.

- (11) *K-en-save.*
 RL-1SG.F-know
 ‘I know.’

1.5 Previous work

Previous published work on this language includes Laycock (1973a), Laycock (1973b), Laycock (1975) and Donohue (2003). Laycock (1973a) is a preliminary classification of the languages of the Sepik area; there is not much mention of Barupu (Warapu) in this work. Laycock (1973b) will be summarised in §1.5.1, below. Laycock (1975) places Warapu in the Sko Phylum and gives a typological overview of the family, as shown in Figure 1.1, above.

Donohue (2003) provides an analysis of the forms I have called participant-adding morphemes. His analysis of these forms is addressed in Chapter 7. Mentions of various aspects of Barupu in relation to other languages in the family can also be found in Donohue (2004) and Donohue and San Roque (2004).

A 205-item wordlist was taken by a patrol officer at Nori village in 1924 and appears in the 1924-25 administrative reports (Adams Wilkes 1926). In this list, about eighteen words bear a strong resemblance to words in modern Barupu. A comparison with modern day Nori has not been undertaken. A 131-item word list was taken by another patrol officer in Warapu village in 1950 (Murphy 1950). Allowing for differences in transcription (e.g. tone was not marked), there are no major differences between this wordlist and modern Barupu.

Unpublished works on Barupu are: San Roque (2001) — a thesis examining and comparing the uses of tone marking in the orthographies of Barupu and Krisa, another language of the Skou family, and Crowther (2000) — a paper presented to the Australian Linguistics Society describing some alternative realisations of word tones. Summer Institute of Linguistics workers Debbie Larkins and Beth Fuller have also produced a beginner alphabet book, some stories and translations of various books of the Bible.

1.5.1 Sissano contact — Laycock (1973b)

Laycock (1973b) contains some detailed information about Warapu, a brief phonology and a 175-item word list. This work is an attempt to trace the patterns and directions of borrowing between Warapu and the neighbouring Austronesian language, Sissano. On the basis of seventeen ‘fairly certain’ borrowings, Laycock (1973b:262) concludes that

[t]here is ... no doubt that Sissano has exerted considerable lexical influence on Warapu, and that such influence has extended over a considerable period of time ... virtually no influence has been exerted in the other direction.

The seventeen borrowings identified by Laycock are listed in Table 1.1. The first column shows the number of the item in Laycock’s wordlist, the second column

lists the Sissano forms, the third column lists the Proto-Oceanic (POC) reconstructions provided by Laycock and the fourth column is Laycock's transcription of Barupu words. In the fifth column, I have listed where my transcriptions differ from Laycock's — most notably, where Laycock transcribes /u/, I transcribe /o/ and Laycock does not transcribe tones.

Table 1.1 Borrowings from Sissano. *Source:* Laycock (1973b)

	Sissano	POC	Barupu (DL)	Barupu (MC)	English
6	prefix + apu	*apu (*mpu)	tyapu	chápò	'grandfather'
7	prefix + apu	*apu (*mpu)	kwopu	kwópù, kópù	'grandmother'
30	tus	*susu	tu	tó	'breast'
72	ai	*kai	ai	âi	'tree, wood'
80	to'	*topu	ku	kó	'sugarcane'
92	yeroín		yariri	yàriri	'betel leaf'
94	vu	*apuR	bui	bôi	'lime'
110	vio		biu	biyó	'cassowary'
112	main topar		men toupa	màintópa	'flying fox'
119	tapo	*ta+puqaya?	kapu	kâpó	'crocodile'
131	tail, tai	*tali	kai	kài	'string'
138	por	*parau	poro	pòrò	'dugout canoe'
139	vuak	*waŋkaŋ	wa	wà, buà	'outrigger canoe'
141	viəs	*ponse	biətu	biétò, biótè	'paddle'
151	yim		yin	îm	'hot'
152	marir	*ma(n)di(n)diŋ	mariri	màriri	'cold'
161	ayel		yara	yàrá	'see'

Laycock establishes the directionality of borrowing with sound changes and with reference to the POC forms. The three sound changes he identifies are:

- i Sissano /s/ > Barupu /t/ (141);
- ii Sissano /v/ > Barupu /b, mb/ (94, 110, 139 and 141);
- iii and Sissano /t/ > Barupu /k/ (80, 119 and 131).

He argues that at the time of borrowing Barupu lacked /t/, and that /k/ was the nearest equivalent; and that this in turn suggests that the current Barupu /t/ is a result

of a sound change from /s/ > /t/.⁶ He suggests that Barupu could have borrowed [v] as [b] because it was the closest sound. However, he also notes that other members of the Skou phylum ‘appear to have /w/ and /v/ corresponding to Warapu /b/, but there are no indisputable examples’ (1973b:254).

Laycock further argues that the the sound correspondences are irreversible because /k/ and /t/ would not have undergone any changes if the borrowings had gone in the other direction, and in the case of /v/ > /b, mb/, Sissano would have borrowed Barupu /b/ as /p/, not /v/. But this last argument does not hold if the original Barupu phoneme was /v/. Synchronically, [v] and [b] are allophones of the same phoneme; [v] occurs intervocally and [b] occurs elsewhere. Words beginning with this phoneme are, however, often produced with an initial [v] after vowel-final words in connected speech, see Chapter 2. Where the sound changes do not provide evidence, Laycock argues that the obvious correspondences between the Sissano forms and Proto-Oceanic forms suggest an Austronesian provenance for words, such as (6), (7) and (72). There is, however, nothing to rule out the possibility that these words did not enter Barupu through Sissano, but rather that later coastal migrants brought their own POC reflexes.

In addition to the seventeen ‘fairly certain’ borrowings, Laycock also points out four examples where the direction of borrowing is not so clear. These four are given in Table 1.2.

Table 1.2 Directionality of borrowing unclear

	Sissano	POC	Barupu (DL)	Barupu (MC)	English
55	na	*lau(d)?	na	na, nau	‘sea, salt’
87	vur, apone	*puti	apon	apón	‘banana’
91	pu’, musu	*pua(q)	mutu	mutu	‘betel nut’
109	apar		apara	apara	‘possum’

⁶He notes that the initial /t/ of (30) *tus* ‘breast’ should by his changes come out as /k/ and so suggests that either Sissano underwent a /s/ > /t/ change after Barupu borrowed this word, or Barupu borrowed it after Barupu already had a /t/.

He notes that in the cases of (87) and (91), where there are two forms in Sissano, one of them clearly corresponds to a POC form and the other resembles a Barupu form, but he makes no further claims as to directionality. He suggests that the directionality of (55) could best be thought of as Sissano to Barupu, due to its meaning, because ‘in the New Guinea area, words connected with marine technology are more readily borrowed from A[ustronesia]N languages by N[on]A[ustronesian]N languages than are other items’ (1973b:256) — also note (138), (139) and (141) in Table 1.1, above.

Laycock further shows that there are some semantic overlaps that do not necessarily have a lexical correspondence. An example that does involve a lexical borrowing as well is that Barupu has the Austronesian generic bird prefix *main-* — e.g. *mampai* ‘pigeon’, *maintaka* ‘wild fowl’ as well as the Austronesian trait of extending the generic bird species marker *main* to any flying creature, e.g. *maintópa* ‘flying fox’.⁷ Other semantic similarities that do not involve a lexical borrowing are that both languages have a single lexical item to refer to ‘head hair’ and ‘leaf’ (Barupu *pé*) and both languages use the same lexical item to refer to ‘tree’ and ‘wood’ (Barupu *âi*).

Finally Laycock argues that the only discernible influence Barupu has had on Sissano is in the counting system. Austronesian languages in the area, apart from Sissano and Sera (another Austronesian language abutting a non-Austronesian language), have ‘quinary counting systems with recognizable Oceanic numerals’ (1973b:261). In contrast, Sissano has a binary counting system, like Barupu and other non-Austronesian groups in the area.

⁷The Barupu word for generic bird is *râ*, and this also turns up in some other bird names, e.g. *rukóko* ‘chicken’, *rumâiro* ‘sea bird’.

1.6 Fieldwork for this study

Fieldwork for this study was carried out in January - July 2001, February - August 2003 and December 2004 - February 2005. Barupu was chosen as a fieldsite from a survey carried out by Mark Donohue, Melissa Crowther and Lila San Roque in 2000. During this survey it was discovered that Barupu speakers had great interest in making a dictionary for use in a vernacular literacy programme and this project began in 2000.

I arrived for the first time in January 2001, accompanied by Mark Donohue. My main focus at that time was the dictionary so I worked mostly with the teachers from the primary school. After Mark Donohue left, I lived with a family and my project gradually evolved into a grammatical description. I had many language teachers at home and learned much outside of structured elicitations.

On my second field trip a group of men organised themselves to come to my house every Monday for three months to record stories and lists of names of things for the dictionary. Many of the example sentences used in this thesis come from those sessions. Stories about women's lives were given by members of the Catholic Mothers Club of Barupu village, these texts also feature highly in the example sentences of this thesis.

1.6.1 Ethics

Ethical clearances were obtained, both from Sydney University and the National Research Institute of Papua New Guinea. A dialogue statement was drawn up and translated into Tok Pisin by two teachers from the primary school. Speakers either read the dialogue statement or had it read out to them and they were then recorded giving oral consent and outlining any special instructions they had for the storage of and access to the materials they had provided. The fieldwork for this study resulted in 36 hours of audio material. This material has been digitised and archived at

PARADISEC (The Pacific and Regional Archive for Digital Sources in Endangered Cultures).

Chapter 2

Phonology

This chapter describes the main features of the segmental and suprasegmental phonological system of Barupu. The segmental phoneme inventory consists of nine consonants /p t k b r m n j w/, and six vowels /i e a o ə u/. The two surface glides [j w] arise in three circumstances: unpredictably as consonant phonemes; as predictable observable allophones of non-low vowels and as observable epenthetic segments produced between two vowels (see §2.2.4 and §2.3.1). The phonological system presented here differs from that of Laycock (1973a) who described eleven consonants, /p t k b d g m n r/ plus /j w/, and six vowels, /i e ə a o u/. I will make comparisons with his wordlist where possible.

Words belong to one of five tone classes: L; H; LH; HL or HLH. For the most part, the assignment of tone interacts predictably with penultimate stress. However, there is also a class of words for which tone is lexically assigned to either of the final two syllables of the word. Tone assignment on these words is not predictable. This is discussed in §2.4.

2.1 Syllable structure

The following table shows the surface syllable structures found in Barupu. In the table C=any consonant, V=any vowel, G=glide (j,w), N=nasal(n,m), R=trill(r).

Table 2.1 Syllables

i	V	[á] ‘rain’
ii	VG	[ôj] ‘sago’
iii	VN	[îm] ‘owl’
iv	CV	[kâ] ‘roots’
v	CVG	[béj] ‘meat’
vi	CVN	[kôm] ‘leg’
vii	CVGN	[bâwn] ‘no’
viii	CRV	[br̄i.r̄i] ‘red’
ix	CGV	[njà] ‘still’
x	CGVG	[njàw] ‘log’
xi	CGVN	[bjám] ‘man’

A syllable can minimally consist of a single vowel and maximally consist of an onset, a nucleus and a coda. Codas can be simple, consisting only of a single glide or nasal, or complex, consisting of a glide followed by a nasal. Onsets can be simple, consisting of any single consonant, or complex, consisting of any consonant followed by a glide. The complex onset made up of a C followed by a trill is restricted to a few lexical items (see §2.1.2). Nuclei can only be simple; VV sequences are avoided by glide formation, glide epenthesis or vowel deletion (see §2.3.1, below).

There are no monosyllabic words in the data with CVGN structure, but syllables like this surface when a high vowel is dropped after a nasal as in the example [bâwn(i)] ‘no’ (see §2.3). Syllables like this also appear regularly in longer words, as in [rôjŋké] ‘rat’ and [bôjntin] ‘sago post’. Pattern (x), CGVG, is extremely rare in monomorphemic words; the monosyllabic example [njàw] is one of only two monosyllables with this form in the data (the other is [njàj] ‘frog.sp’). This syllable type can occur quite regularly however in polymorphemic words, due to glide formation processes, see §2.3.1. There are no syllables with the structure CGVGN.

Roots in Barupu are most often one or two syllables and less often three syllables. Four and five-syllable monomorphemic words are extremely rare, and while speakers accept them as one word synchronically, and they only have one stress and one tone, they can usually be analysed out as frozen compounds. For example, [àjpètârè] ‘green’, can be broken into [âj] ‘tree’, [pê] ‘leaf’ and [târe] ‘new’, but the tones of the first two morphemes are not realised. The stress and tone behaviour distinguishes frozen compounds from productive multi-word compounds in which each element retains its own tone, see below. Another, not so analysable, example is [pjàrútú] ‘tongue’. It is not clear what the exact breakdown of this compound is, but the form [pjà] is also found in an N+V complex predicate meaning ‘talk nonsense’ and [rútù] means ‘antennae’.

2.1.1 Reduplication

Reduplication is a derivational process applied to verbs, adjectives and verb modifiers only, with various effects such as intensification and iterativity (see Chapters 4 and 9). Reduplication is also restricted phonologically: vowel-initial words never reduplicate. On polysyllabic words, the first two syllables of the root are copied and prefixed to the root.¹ For example, when the word /bariri/-L ‘afternoon’ is reduplicated it becomes [-bàri-bàriri]. See §2.4.5 for discussion of the behaviour of tone in reduplication. Reduplication counts syllables not mora — for example, when a word containing heavy or closed syllables, such as /méntan/ [méntàn] ‘small’, is reduplicated, it becomes [-méntàn-méntàn].

When the first two syllables of a consonant-initial word are identical, only one of these syllables is produced in the surface form of the reduplication. For example, when the word /-méme/ ‘small’ is reduplicated, it becomes [-mé-mémè]. This is arguably due to a process of haplology: in the case of too many identical syllables,

¹Two verb classes include some inflectional material in reduplication, see Chapters 3 and 7.

delete one. When monosyllabic roots reduplicate the whole root is copied and prefixed to the word. For example, when the word /-tá/ ‘paddle’ is reduplicated it becomes [-tá-tá].

2.1.2 CR onsets

Three words invariably have a complex onset involving a CR cluster.

Table 2.2 CR-initial words

/briri/-L	[br̄iri]	‘bright, red’
/tribo/-L	[tr̄ivò]	‘tree.sp’
/trore/-L	[tr̄orè]	‘banana.sp’

Other words have two pronunciations in free variation, one with a cluster and one with a vowel between the stop and the trill.

Table 2.3 Alternating: CR ~ CVR

/p(u)rumo/-L	[pr̄umò] ~ [pur̄umò]	‘many’
/ak(o)rôn/	[akr̄ôn] ~ [akor̄ôn]	‘cloud’
/p(a)râ/	[pàrà] ~ [prâ]	‘other side’

A cluster is produced when an unstressed vowel between a stop and /r/ is reduced and elided. The three words with non-variant pronunciation may have been reanalysed as beginning with a cluster. Some evidence in favour of a disyllabic origin for these clusters comes from reduplication. When the words beginning with clusters are reduplicated, the reduplicant is the first CCV syllable, e.g. /prumo/-L → [prù-pr̄umò]; /briri/ → [brì-br̄iri], rather than the first two syllables: *[prùmò-pr̄umò]; *[briri-br̄iri].

2.2 Consonants

The consonantal system of Barupu has many features in common with the generalisations presented in Foley (1986:55-64) on the phonological systems found in

New Guinea. Relatively few phonemes undergo phonological processes to create a more elaborate system. Table 2.4 shows the sounds found in Barupu.

Table 2.4 Consonant phones

	bilabial	labio-dental	alveolar	palatal	labio-velar	velar
stop voiceless	p		t			k
stop voiced	(m)b					g
fricative	β	v		j		ɣ, x
affricate			tʃ			
nasal	m		n			ŋ
trill			r, ⁽ⁿ⁾ d _r			
approximant				j	w	

We can derive the sounds shown in Table 2.4 from a basic nine-way distinction, through processes of lenition, fortition, palatalisation and assimilation.

The phonemes can be arranged in phonological classes, as in Table 2.5.

Table 2.5 Consonant phonemes

	LABIAL	CORONAL	DORSAL
voiceless	p	t	k
voiced	b	r	
nasal	m	n	
approximant	w	j	w

In this arrangement, /b/ and /r/ appear as the voiced counterparts of /p/ and /t/ respectively. According to Foley (1986:55), [r] and [l] are very common intervocalic allophones of /t/ in New Guinea languages. There is also a partial /r/ > /t/ sound change between Barupu and one of its most closely related languages, Ramo. For example, Barupu:/rau/-L, Ramo:/tau/-L 'pig'; Barupu:/rara/-L, Ramo:/tara/-L 'road'.

Table 2.6 is a near-minimal set showing the nine-way contrasts word-initially. The words presented in the following list do have different tones but these have no effect on the realisation of consonant phonemes. (There is some interaction in the other direction, i.e. certain consonants affect the realisations of the tones. This is

discussed in section 2.4.)

Table 2.6 Word-initial contrasts

/pa/-(L)H	'behind'
/ta/-HLH	'skin'
/ba/-(L)H	'fish'
/ma/-(L)H	'child'
/na/-L	'ocean'
/ra/-(L)H	'one'
/ka/-HL	'roots'
/ja/-(L)H	'3SG.M'
/wa/-L	'canoe'

The following sections describe the various processes the nine phonemes undergo.

2.2.1 Stops /p,t,k,b/

There are four stop phonemes which contrast at the bilabial, alveolar and velar places of articulation, and there is one voicing distinction.

2.2.1.1 /k/

The velar stop, /k/, optionally lenites to [ɣ] intervocalically, or, more rarely, [x] (this process can also occur word-initially after vowel-final words within phrases), but it is also often heard as /k/. According to Foley (1986:56), lenition, which he defines as 'weakening and voicing of stops between vowels', is a common feature of Papuan languages, and especially lenition of /k/ in languages which lack /g/; a /ɣ/ phoneme is not common.

Rule: /k/ lenition

/k/ → [k, (x), ɣ]/V__V

A rare, rounded voiceless fricative allophone of /k/, [x^(w)] is commonly produced in the interjection *yake* 'enough'.

- (12) /jake/-L → [jākè] ~ [jāx^(w)è]
 'enough'

/k/ can show some voicing after a nasal.

Rule: /k/ post-nasal voicing

/k/ → [g]/N__

The voicing process is exemplified in (13). Note the nasal place assimilation with a following consonant (§2.2.3). The voicing of /k/ after a nasal and the intervocalic voiced fricative allophone accounts for examples of [g] in Laycock's 1973 wordlist.

- (13) /munka/-HL → [mũŋgà]
 'cat'

/k/ is realised as the palatal affricate [tʃ] when affected by palatalisation from a preceding or following [j], this will be discussed in §2.3.1.2.

2.2.1.2 /t,p/

There are several words in which /t/ varies with /s/ intervocalically. This is most likely a relic of an old sound change where the older /s/ became /t/ (as suggested by Laycock (1973b:254)).

- (14) /buto/-L → [būtò] ~ [būsò]
 'white'

/-katora/-L → [-kātōrà] ~ [-kàsōrà]
 'huge'

/t/ is realised as the affricate [tʃ] when preceded or followed by [j] (see §2.3.1.2).

The remaining voiceless stop /p/, is always realised as [p], usually with aspiration.

2.2.1.3 /b/

/b/ is always heard as [v] intervocalically. Word-initially it is mostly realised as [b], although it can also show some pre-nasalisation, especially for older speakers. When

it is not pre-nasalised, it can sometimes be heard as [v] word-initially after vowel-final words. It is always realised as [b] after nasals.

Rule: /b/ lenition

/b/ → [v]/V _ V

Another possible analysis for the [b] ~ [v] alternation would be that [v] is the phoneme and [b] the allophone. A historical argument in favour of this is that, as Laycock (1973b:255) noted, other Skou languages have cognates with /w/ and /v/ in place of Barupu /b/. Synchronically, however, the same arguments could be marshalled to support either a word-initial and post-nasal fortition process, or an intervocalic lenition process. I have simply chosen the word-initial allophone [b] as the abstract representation.

2.2.2 Trill /r/

Word-initially and after a nasal, /r/ can be pre-stopped: [ʰr]. The pre-stopped allophone can also be pre-nasalised word-initially depending on the age of the speaker [ⁿᵈr]. Older speakers show more pre-nasalisation.

- (15) a) /raka/-L → [rākà] → [ʰrākà] ~ [ⁿᵈrākà]
 ‘river’
- b) /monrai/-HL → [mônʰràj]
 ‘singsing’

These variations account for most instances of /d/ in Laycock’s wordlist. It also appears in a pre-stopped allophone of /j/, see §2.2.4. In children’s speech, /r/ is in free variation with /l/.

2.2.3 Nasals /m,n/

Nasals always assimilate to the place of the following consonant. This rule applies word-internally (16a) as well as across morpheme boundaries (16b). The process

across morpheme boundaries causes some syncretism in verb agreement (see Chapter 3).

- (16) a) /antam/-L → [āntām]
 'tree.sp'
 b) /n-om-raibi/-HLH → [nòndrâjví]
 IRR-2SG.F-cook
 'Cook!'

Rule: nasal place assimilation

N → N [αplace]/_C[αplace]

2.2.4 Glides

I include word-initial and intervocalic glides in the consonant phoneme inventory because they unpredictably create contrasts within that system, and they participate in some consonantal phonological processes. Other surface glides can be better analysed as operating within the vowel system, or as epenthetic — see §2.4.8, below.

/j/ and /w/ operate within the consonantal system, albeit with a very low functional load. For example, in the draft Barupu dictionary, /j/ is found initially in only eighteen words, and /w/ in only four. /j/ is found before and after every other vowel, including /i/ — e.g. /jin/-L 'beach', /ijija/-HL 'sugar glider'.

/j/ has a fricative allophone [j] which can also be pre-stopped word-initially and after a nasal. The pre-stopped allophone triggers nasal place assimilation. For example:

- (17) /k-om-jara-ø/-LH → [kònd^djä^jrâ]
 RL-2SG.F-see-3SG.F
 'You see her.'

When /j/ appears inter-vocalically there is an off-glide off the vowel of the first syllable. For example /-rajó/ 'hunger' sounds like [râ^j.jó]. This is reflected in the orthography as a vowel and a glide: e.g. *raiyó*. Some more examples follow.

Table 2.7 Intervocalic glides

orthography			
<i>aiyǎné</i>	/ajane/-LH	[à ^j .jǎ.né]	'fruit.sp' (taun)
<i>paiya</i>	/paja/-L	[pǎ ^j .jà]	'down below'
<i>-póiya</i>	/-pója/	[-pó ^j .jà]	'weave'
<i>kaiyânton</i>	/kajanton/-HL	[kà ^j .jân.tòn]	'tree.sp' (mangrove number three)
<i>éiyui</i>	/ejui/-HL	[é ^j .jùj]	dolphin

There are only four words with word-initial /w/. One of these is /wa/-L 'canoe', a loan-word,² and it can quite often be heard with a complex strengthened onset as [b^wà] or [β^wà]. Speakers almost always write this word as *buā*. Another non-native word with word-initial /w/ is /wawa/-L 'mother's brother, father's sister's husband'.³ The other words with initial /w/ are /wo/-L meaning 'saliva, foam, phlegm', and /-woniwonini/ 'dizzy'. /w/ can optionally be realised as [β] intervocalically and word-initially. When /w/ occurs intervocalically there is no audible off-glide on the preceding syllable — for example /néwai/ 'good' is pronounced [néwàj] ~ [né.βàj].

Two words have variant pronunciations in which [w] alternates with [m] and one of these words also shows a variation between [j] and [n]. The doubly variant word is /néwai/ [néwàj] ~ [néβàj] 'good' which alternates with /néman/ [némàn]. The other is the discourse-tracking demonstrative /(b)émo/ [bé^mò] which alternates with /(b)éwo/ [bé^wò] ~ [béβò]. There may be a diachronic explanation for these forms, but synchronically they are lexicalised options.

2.2.4.1 /b/ and /w/

It can be difficult to distinguish the intervocalic allophones of /b/ and /w/; [v] and [β] respectively. The main evidence that they are separate phonemes comes from careful speech — whereas the intervocalic allophone of /w/, [β], is apparently optional and

²Laycock (1973b:271): Sissano *vuak*; Proto-Oceanic *wanŋka(ŋ)*, as discussed in the previous chapter.

³Purba et al. (1997:20) Ormu *wawa* 'uncle'. As discussed in the previous chapter, Ormu is an Austronesian language, spoken near Jayapura. The coastal Barupu migrants are reported to have come from there.

can sometimes be heard as [w], the intervocalic allophone of /b/, [v], is the only possible realisation. Even in very careful speech, speakers never pronounce this as [b] intervocalically.

Another environment where it might be difficult to establish the difference between /v/ and /w/ is after a nasal. In this strengthening environment, we would expect /w/ to have a pre-stopped allophone, like /v/, /r/ and /j/ and this is the case; the verb /-wa/-H, which is always written *-bua*, means 'to construct a bucket out of bark' this verb is always heard with a strengthened onset, as [-βwa] which is especially strong after a nasal. Evidence from reduplication however suggests that this verb does begin with /w/ and not /b/: the reduplicated form of this verb is [-bwa-wá].

2.3 Vowels

Barupu has six contrastive vowels in stressed open syllables, shown in Table 2.8. Foley (1986:53) identifies this system as the second most common six-vowel system in New Guinea.⁴

Table 2.8 Vowels

	front	central	back
high	i		u
mid-close	e		o
mid-open			ɔ
low		a	

In unstressed and closed syllables the contrast is reduced to five — unstressed vowels are very short and the distinction between the mid-back vowels is collapsed. This distinction is also collapsed in closed syllables.

The front vowel phonemes /i/, /e/ and /a/ can be established by the following minimal or near minimal triplets:

⁴The most common involves /i e a o u/ and /ə/ (1986:53).

same tone	same onset	same coda
/i/-H 'spear'	/pi/-H 'water'	/im/-HL 'hot'
/e/-H 'tooth'	/pe/-HL 'hair'	/aitem/-HL 'pandanus'
/a/-H 'rain'	/pa/-L 'backside'	/am/-H 'husband'

The back-rounded vowel phonemes /u/, /o/ and /ɔ/ can be established with the following minimal or near minimal triplets in open monosyllables. In closed monosyllables, however, the contrast is reduced to /u/ and /o/.

same tone	same onset	same coda
/u/-HL 'snake'	/ru/-L 'bird'	/pum/-L 'make noise'
/o/-HL 'saucepan'	/ro/-L 'brother'	/kom/-L 'leg'
/ɔ/-HL 'namesake'	/rɔ/-L 'bottom'	

The following table shows the distribution of [o] and [ɔ] in open monosyllables. There are two full minimal pairs in the monosyllabic data: [ô] 'clay pot', [ɔ] 'namesake' and [rò] 'brother', [rɔ] 'bottom'. And there are two pairs of homophones both involving [ɔ]: [mô] 'mother' 'leech' and [nò] 'web' 'laplap'⁵ and no homophones involving [o]. However, two words have varying pronunciations: [tô] ~ [tɔ] 'breast' and [wò] ~ [wɔ] 'saliva' depending on the speaker. Further phonetic work is required, especially on the effect of sociolinguistic variables such as age on the realisation of these vowels.

⁵This could be semantic extension rather than just homophony.

Table 2.9 Distribution of [o] and [ɔ]

L	(L)H	HL	HLH
ø	[ɔ̃] 'breath, feeling'	[ô] 'clay pot' [ɔ̃] 'namesake'	[õ] 'pitpit'
b [bò] 'place'	[bó] '3SG.F'	[bô] 'work'	
p	[pó] 'mark, scar'		
t [tó] ~ [tɔ̃] 'breast'			
k [kò] 'sugar'			
m [mò] 'morota roofing'	[mó] 'dust'	[mô] 'mother' 'leech'	
n [nò] 'web' 'laplap'	[nó] 'blood'		
r [rò] 'opposite sex sibling' [rɔ̃] 'bottom'	[ró] 'mouth'		
y			
w [wò] ~ [wɔ̃] 'saliva'			

In the current polysyllabic data there is another handful of sub-minimal pairs in which the mid-back vowels contrast in stressed syllables. These are shown in Table 2.10. This table also shows whether there is also a word which distinguishes [u] from [o].

Table 2.10 Contrasts in stressed syllables: [o] and [ɔ]

[ɔ̃rò] 'net'	[ôrò] 'house'	[-órò] 'cut'	[-ūrù] 'rub'
[pɔ̃rò] 'canoe'			[-pûrù] 'be fat'
[-rôró] 'animal cry'	[rôró] 'night'		[rûrù] 'forehead'

These are the only sub-minimal pairs involving this contrast in the current data and they are notable in that they all involve the same vowel on either side of an /r/.⁶ Two older male speakers pronounced the word for 'tree kangaroo' as [àjvòrò], while two younger female speakers pronounced this word as [àjvóɔ̃rò]. This data does show, however, that tone does not seem to be a determining factor in vowel realisation. For example, both vowels are found with falling pitch — [ôrò] 'house', [-rôró] 'animal cry'; high pitch — [-órò] 'cut', [àjvòrò] 'tree kangaroo' and low pitch — [pɔ̃rò] 'canoe', [rôró] 'night'. The current data lacks any polysyllabic full minimal pairs,

⁶There seems to be some latent vowel harmony in that both mid-back vowels on either side of a consonant have the same quality.

and speakers show variation in the realisation of mid-back vowel in stressed open syllables. Nor are there any sub-minimal pairs that do not involve the same vowel on either side of an /r/.

More work is needed on the effects of surrounding segments as well as on speaker variation in the realisation of these vowels. The Barupu orthography makes no distinction between these vowels, both mid-back vowels are written with the same grapheme: ⟨o⟩.⁷

Vowels do not show much variation in realisation except that:

- Only the final two syllables of a monomorphemic word have the potential to bear tone; all other syllables are toneless and vowels in toneless syllables are very short.
- Final high vowels, in syllables without a lexically assigned tone (see §2.4 below), can be optionally deleted after a nasal.

/bauni/-HL ‘no’ → [bâw.nì] ~ [bâwn]

/momu/-LH ‘2SG.F’ → [mǒ.mú] ~ [mǒm]

/beni/-HL ‘already’ → [bê.nì] ~ [bên]

A high vowel in a syllable with a lexically assigned tone cannot be deleted — e.g. /miní/ ‘snake’ can never be pronounced as [min].

The schwa presented in Laycock’s phonemic inventory comes from one word in his wordlist — /biətu/ ‘oar’; a loan word from Sissano: *vias* (Laycock 1973b:271).

The most commonly heard form in Barupu now is /bióte/ [bjótè], where the schwa

⁷Laycock (1973b) and Murphy (1950) mostly transcribe [o] as [u] in unstressed environments, although it occasionally appears as [o]. For example, ‘taro’ Laycock [itu], Murphy [i.Ito]. The [o] in the sub-minimal pairs listed above mostly appears as [u], e.g. Laycock/Murphy ‘tree kangaroo’ [aivuru], although it can also appear as [ou]. For example, ‘house’ Laycock [uru] Murphy [ouro]. The transcriptions of the stressed vowel in other words can vary. For example, ‘children’ Laycock [mivova], Murphy [meibuwa], ‘shoulder’ Laycock [toom], Murphy [toum], ‘mountain’ Laycock [too], Murphy [to].

has been reanalysed as /e/, and the vowels /e/ and /o/ have metathesised.⁸ The pre-metathesised form is still heard occasionally but always with /e/ instead of [ə] — i.e. [bjétò].

Apart from the realisations above, the major process vowels undergo is glide formation and deletion. This is discussed in the next section.

2.3.1 Avoiding VV sequences

As mentioned in §2.1, above, sequences of two vowels are not found in the same syllable. Vowel sequences are avoided by processes of glide formation, glide epenthesis and vowel deletion.

2.3.1.1 *Glide formation*

Word-initial and intervocalic glides are analysed as operating within the consonantal system (see §2.2.4 above) or as epenthetic (see §2.4.8 below). Glides in codas and complex onsets are treated as resulting from a process of glide formation involving non-low vowels, partly because glide formation is a process that is directly observable across morpheme boundaries. Non-low vowels become glides before and after low vowels and vowels of opposite backness. For example, (18a) shows the high vowel /i/ of the 1DU prefix becoming a glide when it comes into contact with the initial /u/ of the verb *úte* ‘walk’. Example (18b) shows the /u/ of the same verb becoming a glide when it comes in contact with /a/ in the 1SG.M agreement prefix.

- (18) a) /k-epi-úte/ → [kè.pjú.tè]
 RL-1DU-walk
 ‘We two walked.’
- b) /k-ana-úte/ → [kà.náw.tè]
 RL-1SG.M-walk
 ‘I walked.’

⁸The apparent change from /u/ to /o/ probably reflects a difference in transcription rather than a sound change.

In (18a) the glide forms a complex onset with the preceding /p/; in (18b), the glide forms a coda.

When the two high vowels /u/ and /i/ come into contact as the final two segments of a word, the second vowel will always become a glide: /iu/ → [iw], e.g. /niu/-L [niw] ‘bee’ and /ui/ → [uj], e.g. /bui/-L [bùj] ‘shark’. If there is another syllable following, the first vowel desyllabifies. That is, /iu/ → [ju]; for example:

- (19) /k-epi-úte/ → [kè.pjú.tè]
 RL-1DU-walk
 ‘We two walked.’

and /ui/ → [wi]; for example:

- (20) /k-opu-irai/-HL → [kòpwîràj]
 RL-2SG.M-talk
 ‘You_{PL.M} talk.’

The mid-close vowels /e/ and /o/ can also be directly observed to become glides before and after the low vowel /a/ (see §2.3.1.4), and, like the high vowels, when they come into contact with each other, the first vowel becomes a glide before another syllable and the second vowel becomes a glide at the end of the word. When these vowels come into contact with high vowels, deletion or glide formation can occur, see §2.3.1.3.

In monomorphemic words, I treat all glides which surface as parts of complex onsets (e.g. [rwa]) as resulting from this process. One reason for this is that there are no other consonant clusters in the language (except the marginal CR) and in many cases where a glide is the second part of a complex onset in monomorphemic words, there is a careful pronunciation variation with a nuclear vowel and an epenthetic glide — for example, /niánta/ ‘prawn’ [njántà] ~ [ni.ján.tà]. Glides in codas are similarly treated as resulting from this process because word-final glide codas can also take tone, whereas nasal codas cannot (see §2.4), and glides can appear in complex codas

with nasals — e.g. /bointin/-HL ‘sago posts’ — and there are no other complex codas in the language.

Vowel and vowel-glide alternations Some words are in free variation with open final syllable and glide coda realisations. Table 2.11 presents some of these words. This seems to be age or dialectal variation; older speakers show a greater inclination to produce a glide coda.

Table 2.11 Vowel and vowel-glide alternations

/nau/-L	‘ocean’
/au/-L	‘something’
/neu/-L	‘coconut’
/eu/-L	‘bilum’
/yiu/-L	‘wild taro’
/riu/-(L)H	‘nut.sp’ (<i>kalip</i>)’
/keu/-(L)H	‘oyster’
/niu/-(L)H	‘bee’
/rau/-(L)H	‘one, another’
/eu/-(L)H	‘tooth’
/niu/-HLH	‘limbum’
/tau/-HLH	‘skin’
/tui /-HLH	‘tail’
/moriau/-HLH	‘lizard.sp’
/unkuriau/-L	‘ginger.sp’

The general pattern is for the word to vary between an open final syllable or a closed syllable ending in [w]. The exception is the word /tu/-HLH ‘tail’; the vowel in the open syllable version of this word is [u] and the glide coda is [j].

2.3.1.2 Palatalisation

A [j] coda can cause some palatalisation to the onset of a following syllable, while [j] in a complex onset can cause some palatalisation in the coda of a preceding syllable. In some cases the rightward palatalisation or rounding can move completely, to be realised in only the syllable following the original syllable. Example (21) shows a [j] coda triggering some palatalisation in the onset of the following syllable.

- (21) /roibéten/ → [ròjvétèn] ~ [ròjv^jétèn] ~ [ròv^jétèn]
 ‘jellyfish’

This process is also evident across word and morpheme boundaries. In the following example, a preceding glide coda can be realised in its own syllable, or it can trigger palatalisation of the following consonant and either still be realised as a glide in its own syllable, or as the palatalisation on the onset of the following syllable.

- (22) /oi/-HL + /ne/-L → [ôj nè] ~ [ôj n^jè] ~ [ô n^jè]
 ‘sago’ ‘coconut’
 ‘coconut and sago cake’

The following example shows a complex onset involving a glide causing a palatal off-glide in the coda of the preceding syllable. The original complex onset never simplifies.

- (23) /k-en-abe-a/-HL → [kènâvjà] ~ [kènâjvjà] *[kènâjvâ]
 RL-1SG.F-hold-3SG.M
 ‘I hold him.’

When the phonemes /k/ and /t/ are affected by palatalisation they are realised as an alveolar affricate [tʃ]. This process can be exemplified in polymorphemic words, as in the following examples.

In example (24), the vowel-initial verb /-úte/ ‘walk’ triggers desyllabification of the 3PL.M prefix /e-/ and this in turn triggers palatalisation of the preceding realis prefix /k-/.

- (24) /k-e-úte/ → [kjú.tè] ~ [tʃú.tè]
 RL-3PL.M-walk
 ‘Those men walked.’

In (25) the vowel-only 3SG.M suffix /-a/ triggers desyllabification of the vowel-final verb /-te/ ‘shoot’ and this triggers palatalisation of the preceding /t/ of the verb root. The optional retention of the palatal feature can be seen in the offglide in the first syllable of the pronunciation [kə^j.tʃa]

- (25) /k-a-te-a/-L → [k̄a.tjà] ~ [k̄a.tʃà] ~ [k̄aʲ.tʃà]
 RL-3SG.M-shoot-3SG.M
 ‘Those men shot it.’

An example with a preceding [j] is shown in (26). The initial /i/ of this verb desyllabifies when it comes into contact with the 3SG.M suffix /a-/ and this triggers palatalisation of the *following* /t/.

- (26) /k-a-ite-ni/-HL → [kàj.tê.nì] ~ [kàʲ.tʃê.nì] ~ [kà.tʃê.nì]
 RL-3SG.M-burn-1SG.F
 ‘He burned me.’

An example across word boundaries is the compound ‘kina shell’. This compound is made up of /roi/-L ‘kina’ (edible shellfish) plus /ta/-HLH ‘skin’ and pronounced [rò tã] ~ [rò tʃã] ~ [ròj tʃã]. Some monomorphemic words also show the sound [tʃ] initially, so it may be that this sound is becoming, or will become, reanalysed as a phoneme.

- (27) /tia/-(L)H → [tjá] ~ [tʃá]
 ‘head’

2.3.1.3 Vowel deletion

Sequences of two identical or very similar vowels are reduced to a single vowel.

Example (28) shows that when the /u/ of the 2PL.M prefix cluster, /o-pu/ comes into contact with the first /u/ of the verb root /úte/, the result is the single short vowel [u].

- (28) /k-opu-úte/ → [kòpùtè]
 RL-2PL.F-walk
 ‘You_{SG.M} walk.’

When the mid-close vowels precede high vowels, they delete. Example (29) shows that when the /o/ of the 3SG.F prefix comes into contact with the first /u/ of the verb root /úte/, the result is again the single short high vowel [u]. The /o/ is deleted.

- (29) /k-o-úte/ → [kùtè]
 RL-3PL.F-walk
 ‘She walks.’

Similarly, example (33) shows that when the /e/ of the 3PL.M prefix comes into contact with the first /i/ of the verb root /iro/-HL, the result is the single short vowel [i]. The /e/ is deleted.

- (30) /k-e-iro/-L → [kīrò]
 RL-3PL.M-fell
 ‘They_{PL.M} fell (a tree).’

Verbs beginning with /o/ sometimes trigger glide formation in the mid-vowel prefix /o-/ and sometimes the mid-vowel prefix deletes. These alternatives are in free variation.

- (31) /k-o-ora/-L → [kōrà] ~ [kuōrà]
 RL-3SG.F-plant
 ‘She plants.’

With the back low vowel prefix /a-, the initial /o/ always becomes a glide and the word is two syllables.

- (32) /k-a-ora/-L → [kāu.rà]
 RL-3SG.M-plant
 ‘He plants.’

2.3.1.4 /a/

The low vowel /a/ never becomes a glide. When two identical low vowels come into contact one of them deletes. For example, when the adjectival verb /-aipetâre/ takes a low vowel prefix the prefix deletes.

- (33) /k-a-aipetare/-HL → [kàipètâre]
 RL-3SG.M-green
 ‘He is green.’

2.4 Suprasegmental phonology — tone and stress

Barupu is a word tone language; words belong to tone classes in the lexicon. The five tone classes in Barupu are: L; H; LH; HL and HLH. There is, however, no distinction

between H and LH in monosyllabic words. Monosyllabic words display one of four tone melodies.

Polysyllabic words, however, display eight surface melodies. In the following sections I will argue that Barupu has penultimate stress and exemplifies a type of pitch accent system in which, for the majority of words, lexically specified tones are predictably attracted to the stressed syllable and then part or whole of the tone spreads one syllable to the right. This accounts for five of the eight melodies. Other words may have a lexically specified as H- or HL-toned but rather than being associated to the word by rule, these tones are lexically (i.e. unpredictably) associated with either the penultimate or final syllable of the word. This accounts for the other three surface melodies.

As will be exemplified in the following sections, inflectional morphology is toneless but it can surface with tone if it happens to fall within the tone-bearing domain. There are some participant-adding morphemes that have their own tone and there can be some tone sandhi effects between them and their hosts. Some interactions are also observed between tones on nouns in compounds and words in phrases. There is much to be discovered about the Barupu tone system but the following sections present its major features.

2.4.1 Monosyllables

Near minimal quadruplets showing the tone classes in open monosyllables are presented in Table 2.12, below. There is no contrast between H and LH in monosyllables — they are in free variation.

Table 2.12 Near minimal quadruplets showing tonal contrasts on open monosyllables

L	H/LH	HL	HLH
/yi(u)/ 'wild taro'	/ti/ 'navel'	/mi/ 'louse'	/bi/ 'ancestor'
/ku/ 'tree trunk'	/u/ 'offshoot'	/u/ 'snake'	/bu/ 'border'
/e/ 'garden'	/e/ 'tooth'	/e/ 'mosquito'	/-e/ 'write'
/ko/ 'sugar'	/o/ 'sap'	/o/ 'saucepan'	/o/ 'pitpit'
/ɾɔ/ 'bottom'	/ɾɔ/ 'mouth'	/ɔ/ 'namesake'	
/a/ 'something'	/a/ 'rain'	/ka/ 'tree roots'	/ta/ 'skin'

Note that the data is missing the vowel /ɔ/ with HLH. This probably represents a gap in the data rather than a gap in the language.

In Table 2.13, I list some examples of tones found on monosyllabic words with glide codas.

Table 2.13 Tones on words with glide codas

L	H/LH	HL	HLH
/kai/ 'string'	/bei/ 'meat'	/ai/ 'tree'	/nai/ 'aunt'
/bui/ 'shark'	/moi/ 'sting'	/oi/ 'sago'	/roi/ 'mushroom'
/rau/ 'pig'	/iu/ 'grass.sp'	/boi/ 'lime'	/-poi/ 'whistle'

Finally, Table 2.14 shows some examples of the tones found on monosyllables with nasal codas. The HLH tone does not appear on nasal final monosyllables arguably because HLH cannot all fit on the vowel of a closed syllable and there is a blanket ban on *assigning* tones to consonants.⁹

Table 2.14 Tones on words with nasal codas

L	H/LH	HL
/yam/ 'basket'	/am/ 'husband'	/kan/ 'kwila tree'
/im/ 'owl'	/tim/ 'sago shoot'	/-im/ 'hot'
/kom/ 'leg'	/om/ 'wife'	

In monosyllables, there is no contrast between H and LH — they are in free variation (evidence for a class of LH words comes from polysyllables, see below).

⁹Tones that are assigned to vowels can sometimes be partially realised on neighbouring nasals.

Crowther (2000) also noted that H and LH were in variation in Barupu open monosyllables. I have found no monosyllabic minimal pairs distinguishing H and LH, but there are H/LH homophones (e.g. [ú] ~ [ũ] ‘nest’ and [ú] ~ [ũ] ‘branch’). Further work on tone sandhi in compounds would perhaps uncover underlying class memberships of monosyllabic H/LH words. Below I present some fundamental frequency traces of H/LH monosyllables showing the variation between high and rising pitch realisations. See Rose (1988) and Yip (2002:5) for the difference between fundamental frequency, an acoustic measure, and pitch, a perceptual unit. These units often correlate but not always. For example, there is almost always a rise in fundamental frequency to a high pitch, but other factors such as the elapsed time between the release of a consonant and the start of the rise can determine whether this is *perceived* as rising or just high. The rises I will discuss in the F_0 traces in this chapter were perceived as rising by me, as well as by speakers, according to a fairly informal survey. The different contours were not felt to be contrastive.

Figure 2.1 shows fundamental frequency (F_0) traces for two different male speakers pronouncing the word *á* ‘rain’.¹⁰

¹⁰Male speakers are sampled at 75-300Hz; female speakers are sampled at 100-600Hz.

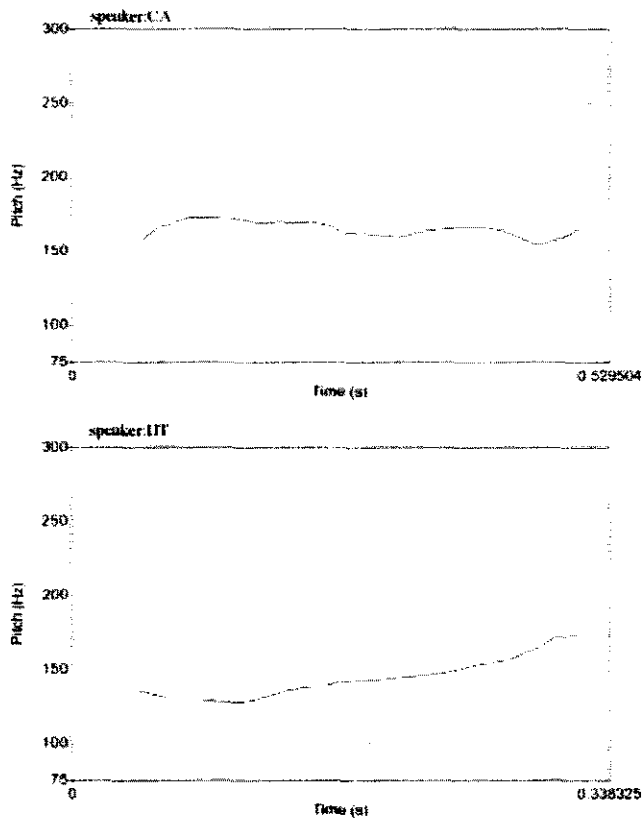


Figure 2.1 *á* 'rain'

The first speaker (CA) produces this word at a fairly level high pitch, while the second speaker (HT) produces it with a rising contour.

Figure 2.2 shows the fundamental frequency traces of the same two speakers pronouncing the word *bá* 'fish'. Again, CA produces it at a fairly level pitch. Note the sharp rise in F_0 from the release of the /b/ into the vowel — this rise is not perceptible; the bulk of the syllable is produced at a level high pitch.¹¹ HT produces this word with a rise that is perceptible over the whole syllable.

¹¹The final sharp rise is due to interference on the original recording.

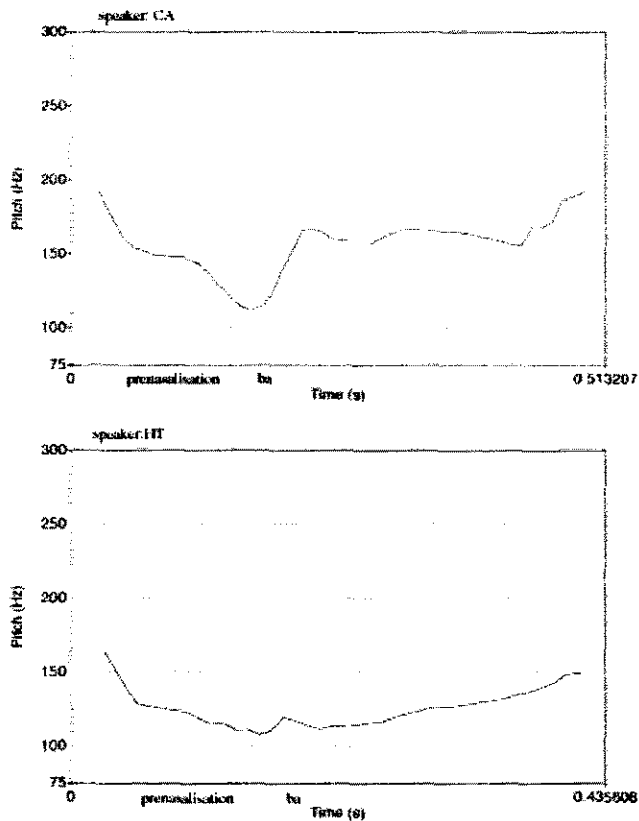


Figure 2.2 *bá* 'fish'

Figure 2.3 shows the fundamental frequency traces of the same two speakers pronouncing the word *fi* 'bellybutton'. In this case, CA produces a very exaggerated rise, while HT produces a level high. Note that for CA, the high pitch on the high vowel reaches almost 400Hz, for HT it reaches over 200Hz. These are higher on average than the 150–200Hz target pitches of the low vowel tokens. Both tokens also have much higher start points, arguably due to their voiceless onsets. Yip (2002:7) notes that '[the] connection between voiceless obstruents and high pitch and voiced obstruents and low pitch is widely attested in natural languages.'

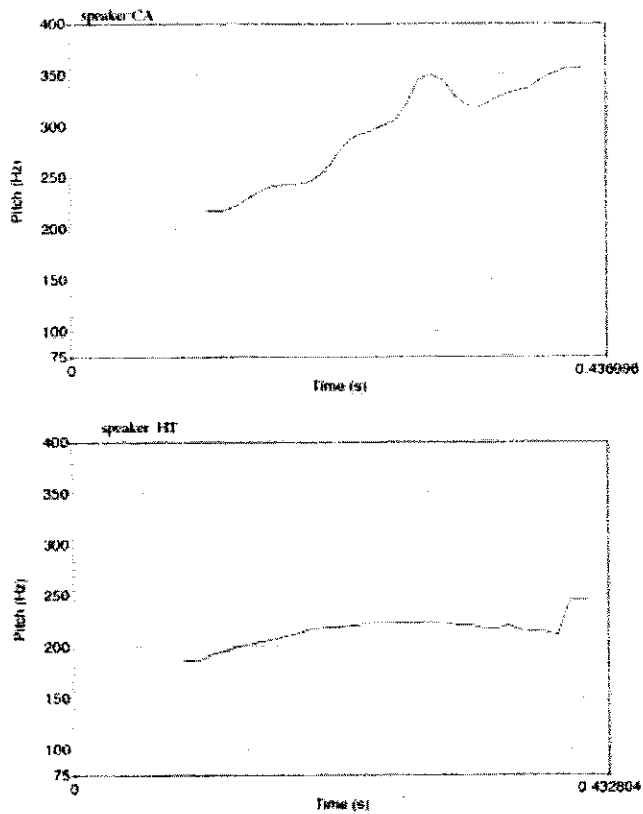


Figure 2.3 *ti* 'bellybutton'

The tones beginning with a fall, HL and HLH, often show a short rising onglide to the beginning of the fall, an F₀ trace of an HL word is shown in Figure 2.7, below.

2.4.2 Polysyllables

Polysyllabic words display eight surface tone melodies. Table 2.15 shows some examples of disyllabic words and their surface melodies.

Table 2.15 Disyllabic tone melodies

[M.L]	[bū.vù] ‘crown pigeon’
[H.H]	[-pú.pú] ‘fly’
[LH.H]	[-yǎ.rá] ‘see’
[L.H]	[mì.ní] ‘snake’
[H.L]	[ó.mòn] ‘ant’
[HL.L]	[ô.rò] ‘house’
[L.HL]	[kà.mô] ‘star’
[HL.H]	[ká.pó] ‘crocodile’

The following table shows some words of three syllables (as mentioned above, seemingly monomorphemic four and five-syllable words are usually analysable as frozen compounds).

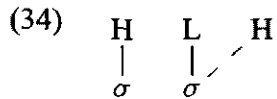
Table 2.16 Trisyllabic tone melodies

[L.M.L]	[à.pā.rà] ‘possum’
[L.H.H]	[i.pí.pó] ‘tall’
[L.LH.H]	[mà.rǐ.rí] ‘cold’
[L.H.L]	[in.tá.pà] ‘finger’
[L.L.H]	[bè.rè.rén] ‘fast’
[L.HL.L]	[à.kâi.rí] ‘stone’
[L.HL.H]	[à.pô.poi] ‘butterfly’

There are no minimal pairs distinguishing [H.H] from [LH.H] in polysyllables, but in contrast to monosyllables, words do not vary in realisation between these two patterns. Note that disyllabic and trisyllabic words show the same number of surface melodies.

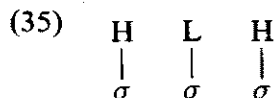
The fact that there are five tone classes, but eight melodies, observable over polysyllables shows that tones can not be assigned left-to-right with one tone per tone-bearing unit. For example, if tones were distributed tone to syllable from left to right, there should be disyllabic words with the surface melody something like [H.LH], because on an HLH-toned word, the first H should associate with the first syllable, L to the second and then the ‘left over’ second H should also associate to the second syllable and create a rising contour in combination with the L. This is shown

in (34).



But this pattern does not occur. Another possibility would be that the final unassociated H is deleted, resulting in the surface melody [H.L] — a melody that does occur. But the problem then is in accounting for [HL.H]; this melody should not occur under (34) because there would never be contours on the penultimate syllable. Whereas, with the exception of one melody, [L.HL], which has only four exemplars in the data,¹² contours are overwhelmingly found on the penultimate syllable of disyllabic words in Barupu.

Trisyllables show the same number of melodies as disyllables and non-L tone is only ever found on the final two syllables of the word, providing evidence that the final two syllables make up the only domain relevant to tone. For example, if syllables other than the final two were possible tone-bearing units, we would expect three-syllable HLH-toned words to surface with a melody something like [H.L.H], because H should associate to the first syllable, L to the next and H to the last. This is shown in (35).



However, this pattern does not occur; non-L is never found anywhere except on the final two syllables of the word.

In the following sections I will show that Barupu has predictable penultimate stress and that five of the melodies can be accounted for by a rule stating that roots fall into one of five lexically specified tone classes but the phonetic realisation of the tones is determined by rule: tone is attracted to stressed syllables and part or all of the

¹²One, /kamô/ 'star', is given in the table, the others are /kamâ/ 'in the meantime', /parâ/ 'other side' and /ak(o)rôn/ 'cloud'.

tone spreads right, see below. According to Yip (2002:235-236), a very similar system is found in Isthmus Zapotec: '[e]ach word has a two-tone melody, which shows up on the stressed syllable, and then spreads right. Syllables before the stressed syllable are L'. Yip characterises Isthmus Zapotec as 'simply a lexical tone language ... the tones are attracted to the stressed syllable. There is no reason to suppose that the tones are a property of that syllable underlyingly' (2002:236). The M tone arises due to stress and is not phonemic.

Three of the melodies, [L.H] [H.L] and [L.HL], however, arise when a word is lexically specified with a tone (i.e. belongs to one of the five tone classes), but in addition, the association of the tone to a particular syllable is also lexically specified and there is no spreading. The melody [HL.L] can arise due to either mechanism and will be discussed separately below.

Tables 2.15 and 2.16 summarise how the eight surface melodies arise from the two different tone-assignment mechanisms. Note that the melody [(L.)HL.L] appears in both tables, this is discussed below.

Table 2.17 Assignments by rule

		Disyllables	Polysyllables
L	[M.L]	[bū.vù] 'crown pigeon'	[L.M.L] [à.pā.rà] 'possum'
H	[H.H]	[-pú.pú] 'fly'	[L.H.H] [i.pí.pó] 'big'
LH	[LH.H]	[-yǎ.rá] 'see'	[L.LH.H] [mà.rí.rí] 'cold'
HL	[HL.L]	[ô.rò] 'house'	[L.HL.L] [à.kâi.rì] 'stone'
HLH	[HL.H]	[kâ.pó] 'crocodile'	[L.HL.H] [à.pô.pó] 'butterfly'

Table 2.18 Lexical specifications to particular syllables

		Disyllables	Polysyllables
H + penultimate	[H.L]	/ómon/ 'ant'	[L.H.L] /intápa/ 'finger'
H + final	[L.H]	/-iná/ 'call'	[L.L.H] /bererén/ 'fast'
HL + penultimate	[HL.L]	/pûru/ 'fat'	
HL + final	[L.HL]	/kamô/ 'star'	

2.4.3 Stress

One piece of evidence for stress in Barupu comes from the prominence of the penultimate syllable in the L tone class. An example of this is shown in Figure 2.4, an F_0 trace of a female speaking the word /oro/-L 'net', which has an [M.L] surface melody; the first syllable is slightly higher than the second.

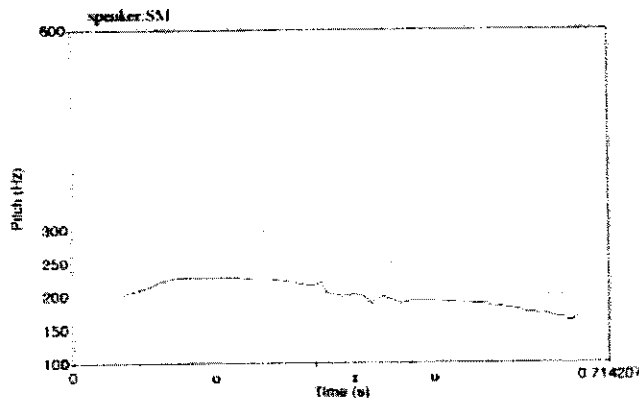


Figure 2.4 *oro* 'net'

In Figure 2.4 the word is disyllabic and the two syllables have roughly the same duration, thus duration is not a marker of stress in two-syllable words. Compare this to the trisyllabic example in Figure 2.5, a trace of another female saying the word /apara/-L 'possum' [L.M.L]. Here the penultimate and final syllables are more than twice as long, almost three times as long, as the first, or antepenultimate syllable.¹³

¹³Note that the pitch of the first syllable in these words is not as low as the pitch of the second syllable. This has not been systematically studied but there may be some anticipatory raising in pitch preceding stressed or H-toned syllables.

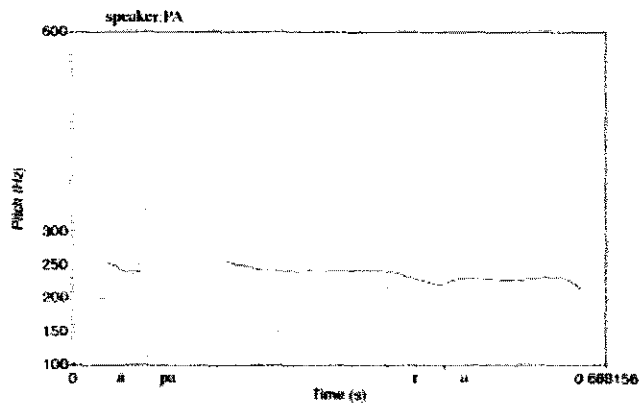


Figure 2.5 *apara* 'possum'

Syllables other than the final two in Barupu are always very short.

The higher pitch of the penultimate syllable on these words is nowhere near the height of an H-toned syllable. Compare Figure 2.4 to Figure 2.6, a trace for another female saying the word /aivóro/ 'tree kangaroo' [L.H.L].

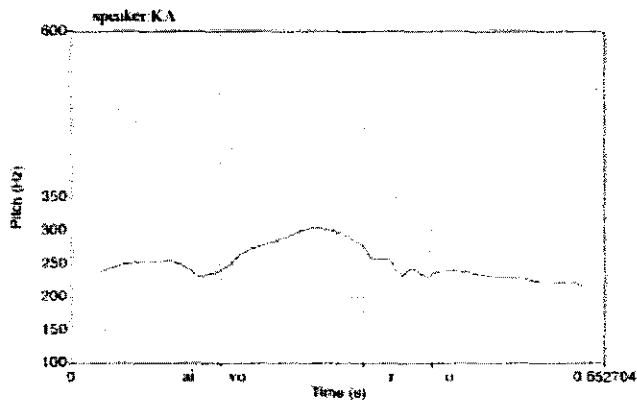


Figure 2.6 *aivóro* 'tree kangaroo'

The word /ɔrɔ/-L 'net' might also appear to have a slightly falling contour but the contour of a real HL is much more dramatic. For example, Figure 2.7 is a trace of a female saying the word /ôro/-HL 'house' [HL.L].

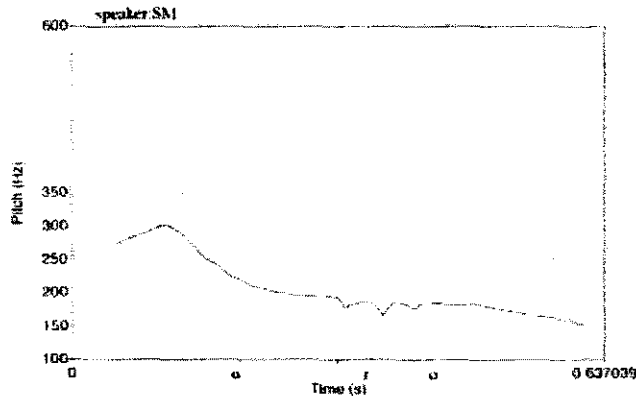


Figure 2.7 *oro* 'house'

Clearly, the higher pitch of the penultimate syllable on /*oro*/-L 'net' cannot be accounted for by an H or HL tone. One possibility is that it is marked with a mid tone /M/ or else another kind of fall, /ML/, but there is no other evidence for these tones as phonemic. Predictable penultimate stress provides a simple explanation for the slightly higher pitch and longer duration of penultimate syllables (final syllables are long because they are final). As will be explicitly modelled below, penultimate stress also provides the simplest explanation for the assignment of contour tones — with the exception of the lexically assigned final HLs, contour tones appear on the stressed syllable.

That stress is predictably penultimate can be shown by its behaviour on suffixing verbs. For example, the transitive verb *-te* 'shoot' belongs to the L tone class. When this verb takes a -CV object suffix such as *-re* 3PL.F, as shown in (36) (plus realis and subject prefixing /*k-a-*/, see Chapter 3), main stress falls on the verb itself (I am using the symbol (') before the syllable to indicate stress — this is to avoid confusion with tone-marking diacritics).

- (36) /*k-a-te-re*/-L → [*kà.'tē.rè*]
 RL-3SG.M-shoot-3PL.F
 'He shoots them_F.'

When this verb takes the 3SG.M toneless, low vowel suffix /-a/, the vowel of the verb desyllabifies and triggers palatalisation of the /t/. The whole word is now only two syllables and stress falls on the subject plus mood prefix.

- (37) /k-a-te-a/-L → [k̄a.tʃà]
 RL-3SG.M-shoot-3SG.M
 'He shoots him.'

However, when this verb takes the 3PL.M non-low vowel suffix -i, desyllabification of the suffix occurs, but the stress assignment does not reapply because the resulting closed syllable apparently satisfies the requirements of the foot.

- (38) /k-a-te-i/-L → [kà.'tēj] *[kà.tēj]
 RL-3SG.M-shoot-3PL.M
 'He shoots them_M.'

A final syllable with a glide coda does not normally attract stress in monomorphemic polysyllabic words — e.g. /aroi/-L [ʔā.ròì] 'crow'. That is, stress assignment is not normally weight-sensitive but a closed syllable can satisfy the requirements of the foot when it is the result of this morpho-phonological process.

Another example of this is that when this verb takes a nasal plus high vowel suffix, such as 1SG.F /-ni/, the final high vowel can be deleted under the optional process of high vowel deletion after a nasal. As the following example shows, stress assignment does not reapply because the foot is satisfied by the closed syllable.

- (39) /k-a-te-ni/-L → [kà.'tēn]
 RL-3SG.M-shoot-1SG.F
 'He shoots me.'

Again, final syllables closed by a nasal do not attract stress in monomorphemic polysyllabic words, e.g. /akorom/-L [à.'kō.ròm] 'food'; /beken/-L [ʔbē.kèn] 'smoking platform', they only satisfy the foot when they are the result of this morpho-phonological process.

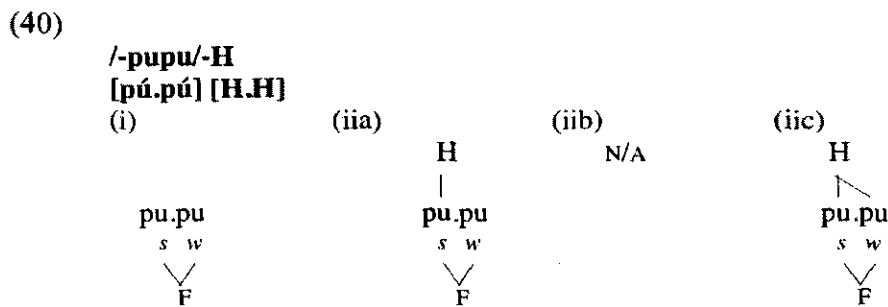
2.4.4 Interaction between stress and tone

As described above, stress is found on the penultimate syllable of the word and contour tones are assigned to stressed syllables and whole or part of the tone spreads right. The following summarises the stress assignment and tone association process:

- i build a left-headed, binary foot at the right edge of the word;
- ii associate the tone melody to the stressed syllable;
 - (a) associate the entire tone melody to the stressed syllable, except:
 - (b) if there are three tones, associate the third tone to the final syllable;
 - (c) if (iib) does not apply, associate the entire tone melody to the stressed syllable and spread the final tone of the melody one syllable to the right;
 - (d) assign a default L to toneless syllables.

The following examples show some derivations.

(40) shows how the pattern [H.H] arises from this process on /H/-toned words.

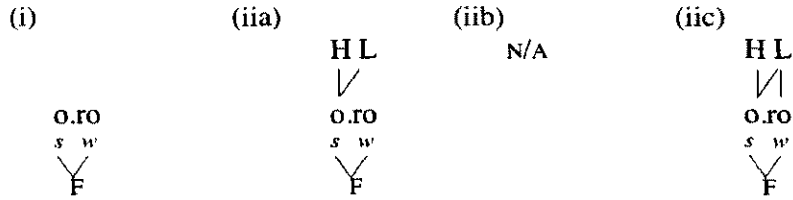


The next example shows how the melody [HL.L] arises from the association of HL to the stressed syllable and L spread onto the final syllable.¹⁴

¹⁴[LH.H] is similarly analysed as LH with LH attracted to the stressed syllable and H spread onto the final syllable. This is not shown.

(41)

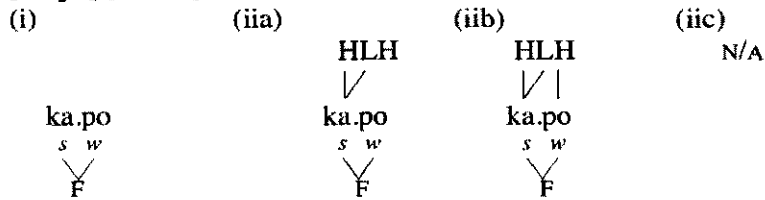
/oro/-HL
[ô.rò] [HL.L]



Example (42) shows how /HLH/ is realised over two syllables as [HL.H].

(42)

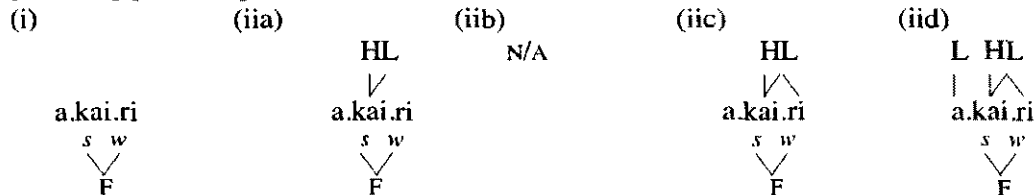
/kapo/-HLH
[ká.pó] [HL.H]



On trisyllabic words, only the final two syllables are footed. Example (43) shows the process on an /HL/ word.

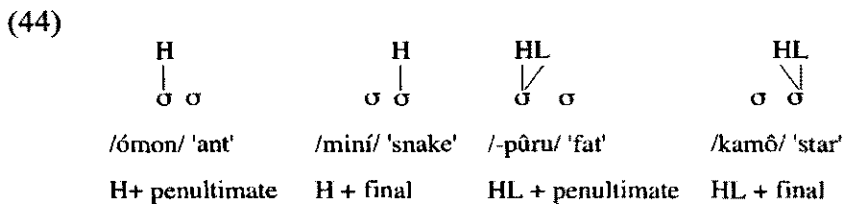
(43)

/akairi/-HL
[à.kâi.ri] [L.HL.L]

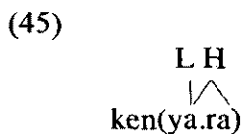


The three surface melodies [H.L], [L.H] and [L.HL], do not arise from the above associations. In this section I will argue that words displaying these melodies are lexically specified with an H that is also lexically associated with either of the final

two syllables or an HL which is lexically associated to the final syllable. [HL.L] can also sometimes be analysed as arising from words that are lexically specified with HL associated to the final syllable. These assignments are represented in (44). There is no intervening stress assignment stage, and there is no spreading. A lexically specified penultimate HL has the same surface realisation as an HL assigned by rule, evidence for an underlying distinction comes from reduplication, this is discussed below.



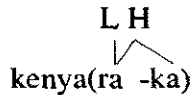
The major distinction between words with tones assigned to syllables by rule and those with tones assigned to syllables by lexical specification is comes from suffixing verbs. Further differences are discussed below. Tones assigned to syllables by rule move according to the assignment of stress; tones that are lexically assigned stay put. For example, the LH-toned verb /-yara/-LH 'see' has no lexical syllable association; tones are associated to this word by rule. When this verb takes a 3SG.F object suffix, which happens to be zero for this word, as well as realis prefixing and subject prefixing (*k-en-*, see Chapter 5) the assignment by rule produces [kènyărắ], with the rise on the penultimate syllable, as shown in (45).



When this verb takes an overt suffix, such as 3SG.M /-ka/ the result is [kènyărắká]; the tone pattern is the same, LH on the penultimate syllable and H on the final — only the segments falling into the tone-bearing domain, or right-edge

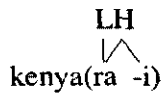
left-headed foot, have changed.

(46)

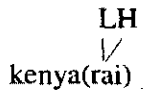


As with stress assignment, suffixes made up of a single high vowel desyllabify, and apparently satisfy the requirements of the foot, as shown in (47) and (48).

(47)

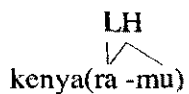


(48)

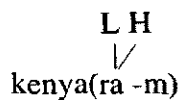


Suffixes consisting of a nasal plus a high vowel can be reduced to just the nasal under the rule of high-vowel deletion after a nasal as described above. In this case the LH is realised only on the final, now closed, syllable. This is shown in (49) and (50).

(49)



(50)



This final syllable can sometimes be produced with an LH contour and sometimes as a level H. This process allows us to directly observe that a tone which is

always produced as LH over two syllables can have varying realisations in a final syllable. These tone assignments are exactly what we would expect to find if tones are assigned to the stressed syllable.

In contrast, verbs with lexically specified syllable assignments do not show this mobility. If an H-toned verb has the H specified on one of the final two syllables, the tone stays on the lexically associated syllable regardless of any suffixing. For example, the H-toned verb /-áka/ ‘make tired’ has the H tone lexically specified on the penultimate syllable. In (51a) the verb takes a zero 3SG.F suffix and the H is realised on the penultimate syllable. So far, it resembles regular penultimate assignment, though without spreading. When the verb takes an overt 3SG.M suffix, however, as in (51b), the tone does not move (as shown in the ungrammaticality of (51c)), it stays on the original syllable.

- (51) a) H
 |
 kwa.ka
- b) H
 |
 kwa.ka -ka
- c) * H
 |
 kwa.ka -ka

The verb /-nepará/ ‘forget’ has an H tone lexically assigned to the final syllable. Example (52a) shows the realisation of this verb with a \emptyset suffix for 3SG.F. (52b) shows that with the addition of the 3SG.M suffix *-ka*, the tone does not move. The

tone stays on the final syllable of the root.

(52) a)

H
|
ko.ne.pa.ra

b)

H
|
ko.ne.pa.ra -ka

c)

* H
 |
ko.ne.pa.ra -ka

I noted above that a lexically specified penultimate HL has an identical surface realisation to an HL assigned by rule. If there are verbs with lexically specified penultimate HLs, they would be identifiable by displaying this behaviour, but to date there are no examples in the data.

A monosyllabic verb root can have a tone lexically assigned to the root itself — for example, the verb /-á/ ‘make, do, want’ is lexically specified with an H on the root: /k-e-n-á-ø/ (RL-1SG.F-1SG.F-make-3SG.F) [kená], /k-e-n-á-re/ (RL-1SG.F-1SG.F-make-3PL.F) [kenáre]; the H tone stays on the root regardless of any prefixing or suffixing.

Monosyllabic roots can also have tones assigned by rule, in which case tone can appear on prefixes or suffixes if they appear in the final foot — for example, the verb /-a/-LH ‘eat’ LH-toned with no lexical assignment: /k-e-n-a/-LH (RL-1SG.F-1SG.F-eat), [kěná]. But there are no examples of monosyllabic verb roots dictating that a tone should be lexically assigned to another syllable in the inflected

word — i.e. */k-é-n-a-ø/ or */k-e-n-a-ré/.

2.4.5 Reduplication and tone

Further differences between words with tones attracted predictably to stressed syllables and those with tones that are lexically assigned to particular syllables are observed in reduplication. On polysyllabic roots with tones that are predictably attracted to the penultimate stressed syllable (e.g. /-tumo/-LH ‘grow wild’), tone is not copied onto reduplicants because it is outside the tone-bearing domain of regular single-predicate words; the reduplicated form of this word is [-tùmòtùmó]. If tone is lexically assigned to a particular syllable of the root, and that syllable is in the reduplicant, the tone will also be copied: e.g. /méntan/ → [méntàn-méntàn].

As mentioned above, evidence for HLs lexically assigned to penultimately syllables can be drawn from this behaviour: when the word /-pûru/ ‘be fat’ is reduplicated it becomes [pûrùp¹ûrû] (the second fall has a lower start point than the first, see 2.4.7) with falling tone in two places on the word. In contrast the word /-putu/-HL ‘swollen’ becomes [pùtùpùtù] with only one falling tone. This difference could be explained by positing that /-pûru/ is an HL-toned verb with HL lexically associated to the penultimate syllable, while /-putu/-HL ‘swell up’ is an HL-toned verb with no lexical syllable assignment; HL is predictably attracted to the stressed syllable and that stress and tone attraction apply after reduplication.

When monosyllabic roots reduplicate, the whole root is copied and prefixed to the root. When a word which has a tone lexically assigned to a syllable such as /-tá/ ‘paddle’ is reduplicated it becomes [-tá-tá]; the tone is copied.¹⁵ Where the root has a predictable tone attraction, stress is reassigned after reduplication and regular tone attraction applies: e.g. /-toi/-HL ‘rinse’ → [-tôi-tòi].

¹⁵We know that this word has a lexically assigned final H and not a rule-assigned H because the inflected form of this verb is [k-ò-tá] (RL-3SG.F-paddle) ‘she paddles’, not *[kótá].

2.4.6 Tone lexically assigned to syllables and glide epenthesis

Another difference between tones assigned by predictable attraction to stressed syllables and lexically assigned tones to particular syllables is that when a non-low vowel appears in a syllable with a lexically assigned tone it does not become a glide if it would form part of a complex onset — i.e. before a low vowel. Rather, an epenthetic glide is inserted between it and the low vowel. For example, the monosyllabic verb root /-ró/ ‘happy’ has an HL lexically assigned to the only syllable of the root, and when this verb is followed by the low vowel 3SG.M object suffix /-a/ the vowel does not form a glide.

- (53) /k-o-rô-a/ → [kò.rô.βà] *[kò.rwá]
 RL-3SG.F-happy-3SG.M
 ‘He is happy.’

Compare this to the L-toned verb /-o/-L ‘give’ with no lexical assignment to a syllable. The vowel of this verb does become a glide before the /-a/ suffix.

- (54) /k-o-r-o-a/-L → [kō.rwà] *[kò.rō.wà]
 RL-3SG.F-3SG.F-give-3SG.M
 ‘She gives him.’

Another verb like this is /jé/ ‘hit, kill’ + /-a/ → [ko.jé^j.ja].

High vowels in syllables with lexically assigned tones can always become glides if they form a coda to a syllable, as in /k-ana-úte/ → [kànáwtè] in example (18) above.

2.4.7 Tone sandhi — verbs

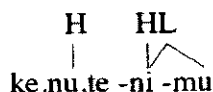
Verbs can also appear with morphemes that carry their own tones and there are some tone sandhi effects at these boundaries. I do not yet have a full understanding of tone sandhi in Barupu but at least two rules can be established.

1. toneless → H / H _ H(L)
2. HL → [!]HL/L_

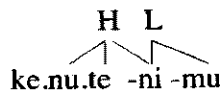
Rule 1 states that toneless syllables are realised as H between two Hs. For example, the verb /-úte/ ‘walk’ has penultimately assigned H tone and the final syllable is toneless; this verb can appear with a participant-adding morpheme /-î/ which can be roughly translated as ‘with’ (although see Chapter 7). The morpheme itself is HL with penultimate assignment (it is monosyllabic but forms a foot with an obligatory object suffix). When this morpheme appears after /-úte/, the toneless syllable at the end of /-úte/ is realised as high. This is shown in (56).¹⁶

(55) /k-en-úte/-/n-i-mu/-HL → [kè.nú.té.nî.mùl
 RL-1SG.F-walk-AG-WITH-2SG.F
 ‘I walked to be with you.’

(56) a)



b)



This rule does not seem to affect reduplicated forms — e.g. when the word /méntan/ is reduplicated it is realised as [méntàn-méntàn], not [méntán-méntàn], but this is still under investigation.

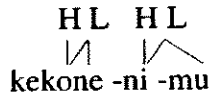
Rule 2 states that an HL tone following an L tone starts at the pitch of the preceding L and drops to a very low pitch. For example, the word /-kôe/-HL ‘go up’ belongs to the HL class. HL is assigned by rule to the penultimate syllable and spreads right: [kèkônè].¹⁷ When this word is followed by a participant-adding morpheme belonging to the HL class (e.g. /-i/-HL ‘with’), the HL on the

¹⁶These morphemes also agree with the subject of the verb; the actual morpheme is /-î/, the *n-* is 1SG agreement.

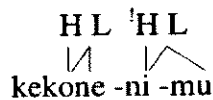
¹⁷This verb takes a prefix and an infix between the two final vowels indexing the subject. See the next chapter.

participant-adding morpheme is downstepped. That is, the highest point of the HL is much lower than in a non-downstepped HL: [kèkônèn'îmù]. This is shown in (57).

(57) a)



b)



2.4.8 Tones and epenthetic glides

There is one instance where non-low vowels do not form glides next to a low vowel: instead the vowel is produced and an epenthetic glide is inserted between it and the subsequent low vowel. This process is exemplified by the behaviour of those participant-adding morphemes with contour tones. For example, when the morpheme /-i/-HL 'with' takes a low-vowel suffix /-a/ 3SG.M, the high vowel of /-i/-HL does not become a glide, as it would under normal syllabification processes; instead it is produced as a nuclear vowel and an epenthetic glide is inserted between the two nuclear vowels. The gloss AG refers to extra agreement for subject.

- (58) /k-en-úte/-/n-i-a/-HL → [kè.nú.té.ní.jà] *[kè.nú.tè.njà]
 RL-1SG.F-walk-AG-WITH-3SG.M
 'I walked to be with him.'

The next example shows the same process with the LH-toned morpheme, /-e/-LH 'from'.

- (59) /k-en-úte/-/n-e-a/-LH → [kè.nú.tè.ně.já] *[kè.nú.tè.njà]
 RL-1SG.F-walk-AG-FROM-3SG.M
 'I walked away from him.'

The next example shows the same process with HL again.

- (60) /k-en-úte/-/n-o-a/-HL → [kè.nú.té.nô.wà] *[kè.nú.té.nwâ]
 RL-3SG.F-walk-AG-because.of-3SG.M
 'I walked on his behalf.'

Compare these to /-o/-L, which introduces a dative argument (see Chapter 7).

This morpheme is produced at a low pitch and is free to undergo glide formation, which suggests the possibility that this morpheme is underlyingly toneless, or perhaps that L is less active than the other tones.

- (61) /k-en-úte/-/n-o-a/ → [kè.nú.tè.nwà] *[kè.nú.tè.nō.wà]
 RL-1SG.F-AG-walk-GIVE-3SG.M
 'I walked with him.'

2.4.9 Tone and noun compounds

Nouns in compounds retain their own tones. Rule 1 applies; toneless syllables are produced as high between two Hs and this process also affects words in phrases. Rule 2 does not apply in compounds; there is no downstepping of HLs after L. Each element of a productive compound retains its own tone, but the left-hand member is somewhat reduced phonologically and the main stress of the compound appears on the right-hand member of the compound, see Chapter 5.

In compounds where the two elements now form a single word, the left-hand member of the compound loses its tone (and stress) entirely, and the word is produced with the stress and tone of the right-hand member, over the final two syllables. Where the right-hand member is monosyllabic, its tone is realised over the final syllable of the left-hand member. For example, the single-word compound, *orôka* 'area under the house', is arguably made up of /oro/-HL 'house' and /kâ/-HL 'roots'¹⁸ — /oro/-HL was stripped of its tone and the segments formed a single trisyllabic word with /kâ/-HL: [òrôkâ]. Stress was reassigned to the penultimate syllable and the HL of *kâ* predictably assigned to the stressed syllable. It should be pointed out that these

¹⁸One interesting feature of these single-word compounds is that speakers often deny that they can be analysed out.

single-word compounds are in the minority — most compounds are made up of separate phonological words.

2.5 Orthography

The practical orthography used by Barupu speakers is currently in a process of modernisation and shows some deviations from the orthography used in this thesis. Table 2.19, below shows the main areas of variation among speakers and outlines the orthographic conventions followed in this thesis. A hash (#) indicates a word boundary. The main areas of variation are in the representation of the sounds [tʃ] and the cluster [kw] as well as tone marking. As mentioned above in the local orthography [o] and [ɔ] are written with the same grapheme ⟨o⟩. Word-initial glides are represented by ⟨w⟩ and ⟨y⟩. Intervocalic glides are represented by ⟨w⟩ and ⟨iy⟩. Glides forming part of a diphthong in monomorphemic words are represented as ⟨u⟩ and ⟨i⟩.

Where the glide arises at a morpheme boundary and the underlying non-low vowel is part of a verb root it is written with the underlying form. For example:

- (62) ⟨k-a-ore⟩ /k-a-ore/ [kaure]
 RL-3SG.M-search
 ‘He searches.’

Older speakers have represented the sound [tʃ] as ⟨j⟩ since the 1950s, following the orthography devised when some missionaries translated prayers into Barupu. With more exposure to English, younger speakers wish to represent this sound as ⟨ch⟩.¹⁹ Teachers prefer the latter option because they feel that it facilitates transition between English and Barupu. They feel that ⟨j⟩ is a confusing choice because of its connection to the English sound [dʒ] and the Tok Pisin sound [ʒ] (sounds they argue are not found in Barupu). I will represent the sound as ⟨ch⟩ in this thesis for the

¹⁹This sound is not found in Tok Pisin — words like English ‘church’ become *sios* in Tok Pisin.

Table 2.19 Orthographic conventions

sound	spelling variants	thesis spelling
a	a	a
e	e	e
o	o	o
ɔ	o	o
i	i	i
u	u	u
#w	w	w
VwV	w	VwV
Cw	Cu	Cu
Vw	Vu	Vu
#j	y	y
VjV	ViyV	ViyV
Cj	Ci	Ci
Vj	Vi	Vi
j	y	y
tʃ	ch, j	ch
b	b	b
v, β	v	v
k, x, g, ɣ	k	k
t	t	t
ŋ	n	n
r, ɾ	r	r
kw	kw, ku, q, qu	kw k-u-

benefit of an English-speaking audience, and to avoid confusion with the phonetic symbol [j].

The cluster [kw] is also problematic as some younger speakers wish to represent this sound with ⟨q⟩. This is a more marginal area of variation. I represent this cluster as ⟨ku⟩. Where the cluster is formed from the realis prefix /k-/ plus glide formation on the 3SG.F subject prefix /o-/ preceding a vowel-initial root, it is still represented as ⟨k-u-⟩ orthographically.

Tone marking is the most fraught area of the orthography. I will use the diacritics in Table 2.20 in this thesis. L is not marked, regardless of whether it is underlyingly L or underlyingly ∅. Tone sandhi effects are not marked.

Table 2.20 Tone marking

	tone	orthography
monosyllables	L	<i>a</i>
	H/LH	<i>á</i>
	HL	<i>kâ</i>
	HLH	<i>tã</i>
polysyllables	[L.L]	<i>oro</i>
	[H.H]	<i>-púpú</i>
	[LH.H]	<i>-yără</i>
	[HL.L]	<i>ôro</i>
	[HL.H]	<i>tîró</i>
	[L.H]	<i>miní</i>
	[H.L]	<i>ómon</i>
	[L.HL]	<i>kamó</i>

See San Roque (2001) for an in-depth examination of tone marking choices in Barupu and another tonal Skou language, Krisa. The 1950s orthography did not mark tone, so there is no tradition here. One area of agreement is that, in principle at least, HL and HLH should both be marked with an apostrophe between two vowels: for example, /ru/-HL → ⟨ru'u⟩. Rising and high tones can be marked with an acute over the vowel or an apostrophe following the syllable. Low tones can be unmarked.

One group of speakers involved in Bible translation, however, have decided that not all high and rising words need to be marked with tone. They feel that high tone only needs to be marked where there are important minimal pairs. For example, as the translation group noted to me in an orthography workshop in 2003, the toneless conjunction *ya* and the H-toned 3SG.M pronoun *ya* are segmentally identical and when people write the words *ya k-a-íte* (and/he RL-3SG.M-walk), there is no way for the reader to tell immediately whether the conjunction or the pronoun is meant. Pronouns have pragmatic functions in Barupu (see Chapter 6), so this was a situation they wanted to avoid. The group's solution was to spell the pronoun with an ⟨h⟩ at the end: ⟨yah⟩. This solution was still being debated in the village in early 2005.

Chapter 3

Inflectional verb morphology

In this chapter I describe the structure of obligatory subject and object agreement and TMA marking on Barupu verbs. The four possible structures are summarised in Table 3.1.

Table 3.1 Structure of the verb

	prefix subject	prefix and infix subject
suffix object	TMA-SUBJ-ROOT-OBJ	TMA-SUBJ-RO⟨SUBJ⟩OT-OBJ
suprasegmental object	TMA-SUBJ-ROOT.OBJ	TMA-SUBJ-RO⟨SUBJ⟩OT.OBJ

Every verb takes an obligatory TMA prefix marking STATUS: realis (*k-*) or irrealis (*n-*) — this is discussed in Chapter 9. Every verb also obligatorily takes subject marking, either as prefixing only, or as prefixing and infixing. Subject marking will be discussed first in §3.1. One class of transitive verbs takes obligatory object marking, which is mostly suffixing, but in some cases there is no segmental exponent of object. Some verbs show final vowel mutation instead — this is described in §3.2.¹ As mentioned in the previous chapter, the inflectional morphemes are underlyingly toneless but they can surface with tone if they are in the final two syllables of the word.

¹I am using the terms subject and object for convenience. Generally speaking, ‘subject’ refers to the most Agent-like participant of a transitive verb and the single participant of an intransitive verb, and ‘object’ refers to the non-Agent of a transitive verb, but see Chapter 6 for a fuller exposition of grammatical functions in Barupu.

3.1 Subject marking

Verbs fall into one of four conjugation classes. In one of the classes, the person, number and gender of the subject is marked by a single prefix. In three of the classes, subject marking is complex; two separable morphemes work together to index the person, number and gender of the subject — this can take the form of two prefixes or a prefix and an infix. In this section each class will be described in turn.

3.1.1 Class I

Class I is the largest verb class; approximately three quarters of the 270 verbs in the draft Barupu dictionary belong to this class. Class I is also the unmarked, open verb class. Evidence for this is that when Tok Pisin or English words are borrowed and inflected they receive Class I inflection. In addition, verb roots in this class can be any phonological shape except that of a single vowel (see Table 3.5 below); other verb classes are more restricted in their phonological shapes.

The Class I subject prefixes are listed in Table 3.2. There are twelve prefixes which index the person and number of the subject. Gender is also distinguished except in the duals and first person plural.

Table 3.2 Class I prefixes

SG	1	M	ana-
		F	en(i)-
	2	M	ama-
		F	om(u)-
	3	M	a-
		F	o-
DU	1	M/F	epi-
	2	M/F	oropu-
	3	M/F	ere-
PL	1		em(i)-
	2	M	opu-
		F	eve-
	3	M	e-
		F	ere-

These forms are quite clearly related to the free pronouns, listed in Table 3.3.²

Table 3.3 Free pronouns

SG	1	M	<i>něná</i>
		F	<i>nění</i>
	2	M	<i>měmá</i>
		F	<i>mómú</i>
	3	M	<i>yá</i>
		F	<i>bó</i>
DU	1	M/F	<i>měpí</i>
	2	M/F	<i>mópú/běvé</i>
	3	M/F	<i>yéi/réré</i>
PL	1	M	<i>měmí</i>
		F	<i>běvé</i>
	2	M	<i>mópú</i>
		F	<i>běvé</i>
	3	M	<i>yéi</i>
		F	<i>réré</i>

The disyllabic CVCV free pronouns correspond to disyllabic VCV- subject prefixes with a change to the first vowel in 1SG.M and 2SG.M. For example, the 2SG.M free pronoun is *měmá* and the 2SG.M prefix is *ama-*. The monosyllabic CV(V) pronouns correspond to a monosyllabic vowel-only prefix (V-). For example, the 3SG.M pronoun is *yá* and the 3SG.M subject prefix is *a-*. The dual category is not distinct for second and third person pronouns; either one of the plural pronouns can be used instead. The trisyllabic 2DU prefix, *oropu-*, appears to be a combination of 3PL.F (*ere-*) plus 2PL.M (*opu-*) with some vowel changes. In this class, the third person dual prefix is the same as the 3PL.F prefix, but this is not the case in other classes.

The prefixes have slightly different realisations depending on the initial segment of the verb. In Table 3.4 I list full paradigms of Class I agreement on: a verb beginning with a non-nasal consonant, *-púpú* ‘fly’; a verb beginning with a vowel, *-úte* ‘walk’ and a verb beginning with a nasal: *-méntan*. The table presents the surface realisations of the morphemes and the allomorphy is described below. The examples in the table are shown with the realis STATUS prefix, *k-*.

²Pronouns in Barupu have no case distinctions.

Table 3.4 Class I example paradigms

			stop-initial	vowel-initial	nasal-initial
SG	1	M	k-àná-púpú	k-àná-wtè	k-àná-méntàn
		F	k-èm-púpú	k-èn-útè	k-èni-méntàn
	2	M	k-àmà-púpú	k-àmá-wtè	k-àmà-méntàn
		F	k-òm-púpú	k-òm-útè	k-ò-mù-méntàn
	3	M	k-à-púpú	k-á-wtè	k-à-méntàn
		F	k-ò-púpú	k-útè	k-ò-méntàn
DU	1		k-èpi-púpú	k-èpj-útè	k-èpi-méntàn
	2		k-òròpù-púpú	k-òròp-útè	k-òròpù-méntàn
	3		k-èrè-púpú	k-èrè/èj-útè	k-èrè-méntàn
PL	1		k-èm(i)-púpú	k-èm(j)-útè	k-èmi-méntàn
	2	M	k-òpù-púpú	k-òp-útè	k-òpù-méntàn
		F	k-èvè-púpú	k-èvj-útè	k-èvè-méntàn
	3	M	k-è-púpú	k-j-útè	k-è-méntàn
		F	k-èrè-púpú	k-ère/èj-útè	k-èrè-méntàn
			<i>-púpu</i> 'fly'	<i>-úte</i> 'walk'	<i>-méntàn</i> 'small'

The 1SG.F and 2SG.F prefixes are VC- (*en-* and *om-* respectively) before a non-nasal consonant and before a vowel. For example, on *-púpú* 2SG.F is *om-* and it is the same on *úte*. This is shown in (63).

- (63) a) /k-om-pupu/-H → [kòmpúpú]
 RL-2SG.F-fly
 'You fly.'
- b) /k-om-úte/ → [kòmútè]
 RL-2SG.F-walk
 'You walk.'

The 1PL prefix can be VC- (*em-*) or VCV- (*emi-*) in these environments, depending on the speaker, as in (64).

- (64) a) /k-em(i)-pupu/-H → [kèmpúpú] ~ [kèmiúpú]
 RL-1PL-fly
 'We fly.'
- b) /k-em(i)-úte/ → [kèmútè] ~ [kèmjútè]
 RL-1PL-walk
 'We walk.'

Before nasal consonants, however, all three of these prefixes are always VCV-

This is shown in (65).

- (65) a) /k-**eni**-méntan/ → [kèniméntàn]
 RL-1SG.F-small
 'I_F am small.'
- b) /k-**omu**-méntan/ → [kòmùméntàn]
 RL-2SG.F-small
 'You_F are small.'
- c) /k-**emi**-méntan/ → [kèmiméntàn]
 RL-1PL-small
 'We are small.'

The table also shows the results of the regular morphophonemic processes described in the previous chapter — nasal assimilation, glide formation and vowel deletion.

The nasal-final prefixes are subject to nasal assimilation. For example, on the verb *-púpú* 'fly', in Table 3.4, the 1SG.F prefix is *em-*, not *en-*, because the *n* has assimilated in place with the initial bilabial stop of the verb. This process causes syncretism between 1SG.F *en-* and 1PL prefix *em-*.

- (66) a) /k-**en**-púpú/ → [kèmpúpú]
 RL-1SG.F-fly
 'I_F fly.'
- b) /k-**em**-púpú/ → [kèmpúpú]
 RL-1PL-fly
 'We fly.'

As discussed in the previous chapter, when vowel-final prefixes come into contact with vowel-initial verbs, two processes of vowel cluster reduction apply: glide formation and deletion. A non-low vowel at the end of a prefix will become a glide next to a low vowel and a vowel of opposite backness. For example, in Table 3.4 the final /i/ of the 1DU prefix *epi-* desyllabifies before *-úte*, resulting in [kèpjútè].

- (67) /k-epi-úte/ → [kèpjútè]
 RL-1DU-walk
 'We walk.'

The mid-close vowels also form glides. For example, the 3PL.M prefix *e-*, becomes a glide before *-úte*; the resulting glide then triggers palatalisation in the realis prefix, so an alternative pronunciation of [kjútè] is [tʃútè].

- (68) /k-e-úte/ → [kjútè] ~ [tʃútè]
 RL-3PL.M-walk
 'They walk.'

If the initial vowel of the verb is high or mid-close and the final vowel of the prefix is low then the initial high vowel of the verb undergoes glide formation. For example, the initial /u/ of *-úte* becomes the glide [w] after a 2SG.M prefix *ama-*, resulting in [kámáwtè].

- (69) /k-ama-úte/ → [kámáwtè]
 RL-2SG.M-walk
 'You_M walk.'

High vowels are deleted in front of identical vowels — for example, the final /u/ of the 2PL.M prefix is deleted before the initial /u/ of *-úte*, resulting in [kòpútè].

- (70) /k-opu-úte/ → [kòpútè]
 RL-2PL.M-walk
 'You_M walk.'

The mid-close vowels are deleted in front of identical vowels and high vowels of the same backness. For example, the 3SG.F prefix *o-* is deleted before the initial /u/ of *ute*, resulting in [kútè].

- (71) /k-o-úte/ → [kútè]
 RL-3SG.F-walk
 'She walks.'

The 3PL.F prefix *ere-* is often produced with the /r/ elided, as simply [e]. This vowel does not form a glide; instead an epenthetic glide is produced between it and a vowel-initial verb, resulting in [kè'.júte].

- (72) /k-ere-úte/ → [kè'.júte]
 RL-3PL.F-walk
 'They_F walk.'

Table 3.5 shows some Class I verbs. Note that verb roots in this class can be any phonological shape except a single vowel.

Table 3.5 Some Class I verbs

-te	'shoot'	-ím	'be hot'
-úra	'swim'	-rín	'pull up'
-yǎrá	'see, know'	-pum	'make a loud noise'
-páko	'be big'	-méntan	'be small'
-títi	'dance'	-néwai	'be good'
-ráiví	'cook'	-pǒi	'whistle'
-parara	'run'	-írai	'speak, tell, say'
-ipóri	'fold'	-raurau	'yawn'

3.1.2 Class II

All Class II verb roots begin with a vowel and this is the only class in which roots can consist of just a vowel. Table 3.6 is a list of some Class II verbs.

Table 3.6 Some Class II verbs

vowel-only	other
-ǎ 'eat'	-itóro 'think'
-á 'make, do, want'	-íya 'fetch water'
-é 'carve, write'	-uru 'rub'
-o 'give to'	-úna 'get, buyPL'
-u 'pick (off)'	-árái 'throw'
	-ere 'put'
	-aro 'go (downwards or toward the coast)'
	-ori 'sharpen'
	-yé 'hit, kill'

This is quite a small class, but the verbs themselves are very high-frequency.

For example, ‘eat’ and ‘make, do, want’ belong to this class.

The prefixes found on Class II verbs are given in Table 3.7. Again there are twelve distinctions, and the duals are fully distinct from the plurals in this class.

Reasons for separating these prefixes into two separate morphemes are given below.

Table 3.7 Class II prefixes

SG	1	M	a- n-
		F	e- n-
	2	M	a- m-
		F	o- m-
	3	M	a- r-
		F	o- r-
DU	1		epi- p-
	2		oropu- p-
	3		ere- p-
PL	1		e- m-
		2	M
	F		eve- r-
	3	M	e- p-
		F	ere- r-

Class II prefixes are made up of two morphemes. The first morpheme is a prefix made up of either:

- a single vowel (V-) (1/2/3SG; 1PL; 2/3PL.M);
- a disyllabic (VCV-) prefix (1/3DU; 2/3PL.F);
- or a trisyllabic (VCVCV-) prefix (2DU).

Following one of these prefixes is a separate C- prefix. This is analysed as separate because it forms a tight-knit unit with the verb root that excludes the other prefix (henceforth ‘the V(CV..)- prefix’). That is, the C- prefix is included in reduplication; no other prefixing can be included in reduplication, and the Beneficiary/Possessor paradigm, which replaces the whole Class I subject prefix, only replaces the V(CV..)- prefix on Class II verbs. These points are discussed below.

There are four consonants found in the C- prefix slot (/n, m, p, r/), and three vowels in the simple V- prefix slot (/a, o, e/). The consonants and vowels cannot be analysed as consistently marking any one feature. For example, /n/ does mark first person singular but /m/ is found in both first person dual and second person singular, so the consonants cannot be said to mark person or number.³ Likewise /r/ is found in third person singular for both genders but also in second and third person plural feminine. Finally, /p/ is found in the duals and in the second and third person plural masculine. This is summarised in Table 3.8.

Table 3.8 Consonants and features

n	1SG
m	1PL; 2SG
r	3SG; PL.F
p	DU; PL.M

Nor do the vowels by themselves mark any one feature such as gender or number. Table 3.9 shows the vowels found in the simple V- prefixes.

Table 3.9 Vowels and features

a	SG.M
o	2SG.F; 3SG.F; 2PL.M
e	1SG.F; 1PL

Only /a/ can be assigned a discrete feature — SG.M. The other two vowels, /o/ and /e/, are harder to assign features. /o/ is found in second and third person singular feminine and second person plural masculine. /e/ is found in first person singular feminine and first person plural. Rather than give each morpheme a gloss showing the

³(Foley 1986:72) states '[a]n intriguing feature of many Papuan languages is the often transparent morphological association between the first and second persons, most commonly between the first person non-singular and the second person singular.' He notes that the conflation is only attested where there is no inclusive/exclusive distinction in first person and suggests that a possible motivation for it may be that the presence of an addressee (i.e. second person) is considered crucial to the formation of the first person non-singular, more so than the presence of a non-speech act participant (i.e. third person). That is, inclusive (speaker and addressee) is taken to be more salient than exclusive (speaker and non-speech act participant).

full potential of its uses, I gloss both prefixes as marking the same category. Example (73) shows a gloss for *k-o-m-á* ‘You do.’ with the full potential of each morpheme spelled out.

- (73) *k-o-m-á*
 RL-2/3SG.F:2PL.M-1PL:2SG-do
 ‘You do.’

In (74) the two morphemes are given the same gloss, and for the sake of readability this is the convention that is followed in this thesis.

- (74) *k-o-m-á*
 RL-2SG.F-2SG.F-do
 ‘You do.’

Table 3.24 shows full paradigms for *-ǎ* ‘eat’ and *-á* ‘make, do, want’. The verb *-ǎ* ‘eat’ has a rising tone which is predictably assigned to the penultimate syllable of the word and spreads right. The verb *-á* ‘make, do, want’ has an accented H assigned to it. The verbs in this class are all vowel-initial, the prefixes are all consonant-final and there is no allomorphy at the boundaries (the verb *-yé* is irregular, see §3.1.2.1).

Table 3.10 Class II example paradigms

SG	1	M	<i>k-ǎ-n-á</i>	<i>k-ǎ-n-á</i>
		F	<i>k-ě-n-á</i>	<i>k-è-n-á</i>
	2	M	<i>k-ǎ-m-á</i>	<i>k-ǎ-m-á</i>
		F	<i>k-ǒ-m-á</i>	<i>k-ò-m-á</i>
	3	M	<i>k-ǎ-r-á</i>	<i>k-ǎ-r-á</i>
		F	<i>k-ǒ-r-á</i>	<i>k-ò-r-á</i>
DU	1	M/F	<i>k-èpǐ-p-á</i>	<i>k-èpì-p-á</i>
	2	M/F	<i>k-òròpǔ-p-á</i>	<i>k-òròpù-p-á</i>
	3	M/F	<i>k-èrě-p-á</i>	<i>k-èrè-p-á</i>
PL	1	M/F	<i>k-ě-m-á</i>	<i>k-è-m-á</i>
		M	<i>k-ǒ-p-á</i>	<i>k-ò-p-á</i>
	3	F	<i>k-èvě-r-á</i>	<i>k-èvè-r-á</i>
		M	<i>k-ě-p-á</i>	<i>k-è-p-á</i>
		F	<i>k-èrě-r-á</i>	<i>k-èrè-r-á</i>
				<i>-ǎ</i> ‘eat’

Although the two prefixes work together to uniquely mark the features of the subject, as discussed above, the second C- prefix is separated out because it appears to be in a closer relationship to the verb than the V(CV.)- prefix and all the prefixes found in Class I. For example, the second C- in Class II is always included in reduplication. No other vowel-initial roots undergo reduplication — a reduplicant must always be at least CV. Following this rule, Class I vowel-initial roots cannot be reduplicated.

- (75) /k-em-úte-úte/ → *[kèm-útè-útè] *[k-è-mútè-mútè]
 RL-1PL-REDUP-walk
 ‘...’

Surprisingly, Class II verbs, even though they are all vowel-initial, can be reduplicated, because the C- prefix can be included in the reduplicated material. In example (76) the Class II verb *-ere* ‘put’ is inflected with the 1PL prefixes *e-m-*.

- (76) /k- e- m- ere/-L → [kèmèrè]
 RL- 1PL- 1PL- put
 ‘We all put (it).’

Example (78) shows the reduplicated form of this verb. The second C- prefix *m-* is included in the reduplication.

- (77) /k- e- m- ere- m- ere/ → [kèmèrèrè]
 RL- 1PL- 1PL- put- 1PL- put
 ‘We all put (it) repeatedly.’

The C- prefix cannot be left out.

- (78) */k- e- m- ere- ere/ → *[kèmèrèrè]
 RL- 1PL- 1PL- do- do
 ‘...’

The V(CV.)- cannot be included and no part of Class I prefixes can be included (hence the ungrammatical form *[kèmútèmútè] given in (75), above). These facts suggest that the C- prefixes are more closely integrated to the root than other prefixes.

Support for this can also be found in the structure of the Beneficiary/Possessor paradigm. The subject marking described in this chapter can be replaced by another separate paradigm that introduces a Beneficiary into the clause and can also be extended to mark external possession (see Chapter 8). The Beneficiary paradigm is made up of a vowel-only morpheme and agreement and it is probably derived from an ex-serial verb construction (see Chapter 8). On Class I verbs, this paradigm completely replaces normal subject prefixing. This is shown in the following examples. In (79) the Class I verb *-yǎrá* is inflected with the regular Class I prefix for 2PL.M, *opu-* and it also has a 1SG.F object suffix, *-ni*.

- (79) /k- **opu-** jara -ni/-LH → [kòpùjàràní]
 RL- 2PL.M- see -1SG.F
 ‘You see me.’

In (80) *opu-* is replaced by the Beneficiary/Possessor paradigm, and the Possessor of the object is now marked with suffixing on the Beneficiary/Possessor morpheme and no longer on the verb itself.

- (80) /k- **ep-e-ni-** jara/-LH → [kèpènjàrà]
 RL- 2PL.M-BEN-1SG.F- see
 ‘You can see mine.’

On Class II verbs the Beneficiary/Possessor morpheme only replaces the first V(CV.)-. The second C- remains. This is shown in the following examples. In example (81), the Class II verb *-úna* ‘get.PLO’ takes the Class II 2PL.M subject prefixes *o-p-*.

- (81) /n- **o- p-** úna/ → [nòpúnà]
 IRR- 2PL.M- 2PL.M- get.PLO
 ‘Get them.’

In example (82), the Class II verb *-úna* ‘get.PLO’ takes the Class II 3PL.F subject prefixes *ere-r-*.

- (82) /n- **ere-** r- úna/ → [nèrèrúnà]
 IRR- 3PL.F- 3PL.F- get.PLO
 ‘They will get them.’

In (83), the Beneficiary/Possessor paradigm replaces the first V- prefix of the 2PL.M, *o-*, but the second C- prefix, *p-* is still present, prefixed to the verb.

- (83) /n- **ep-e-ni-** p- úna/ → [nèpènipúnà]
 IRR- 2PL.M-BEN-1SG.F- 2PL.M- get.PLO
 ‘Get them for me.’

In (84), the Beneficiary/Possessor paradigm replaces the first VCV- prefix of the 3PL.F, *ere-*, but the second C- prefix, *r-* is still present, prefixed to the verb.

- (84) /n- **oror-o-mu-** r- úna/ → [nòròròmùrúnà]
 IRR- 3PL.F-BEN-2SG.F- 3PL.F- get.PLO
 ‘They will get them for you.’

The C- prefixes clearly have a closer relationship to the verb than other prefixes. An alternative view of Class II verbs is that they are not vowel-initial with a close-knit C- prefix at all. Instead, these verbs are consonant-initial, but there is a process of initial-consonant mutation marking the subject. Some support for an analysis such as this is that in the more conservative Skou languages spoken near the border with the Indonesian province of Papua, verbs are monosyllabic and initial consonant mutation, caused by the fusion of earlier prefixes, marks subject (Ross (1980); Donohue (2004)). Further support comes from the fact that speakers insist that the citation forms for these verbs in the dictionary should be consonant-initial (either [r], representing 3SG, or [m] representing 1PL) — they do not feel that way about vowel-initial Class I verbs. This alternative view will not be pursued here, but it would be an interesting area for further comparative work.

3.1.2.1 *Irregular Class II verb -yé ‘hit, kill’*

The verb *-yé* ‘hit, kill’ is phonetically [jé]. The fact that it inflects in Class II strongly suggests that the initial [j] is underlyingly vocalic, but it is irregular — it does not

take any of the *r-* prefixes. That is, in 3SG and PL.F, the prefixes found on this verb are exactly the same as those found on Class I verbs. The full paradigm for this verb is given in Table 3.11.

Table 3.11 *-yé* ‘hit’

SG	1	M	k-à-n-jé
		F	k-è-n-jé
	2	M	k-à-m-jé
		F	k-ò-m-jé
	3	M	k-à-jé
		F	k-ò-jé
DU	1	M/F	k-èpì-p-jé
	2	M/F	k-òròpù-p-jé
	3	M/F	k-èrè-p-jé
PL	1	M/F	k-è-m-jé
		M	k-ò-p-jé
	2	F	k-èvè-jé
		M	k-è-p-jé
	3	M	k-è-p-jé
		F	k-èrè-jé

3.1.3 Class III

Class III verb roots are, without exception, made up of either two vowels (VV) or a consonant followed by two vowels (CVV). Class III contains two definable semantic sub-classes that share the same final vowel. There are two direction of motion verbs *-kae* ‘come’ and *-kôe* ‘go up’ which share the same final vowel /e/ (*-noi* ‘go along’ has no specific directional component), and two posture verbs *-rôï* ‘stand up’ and *-kéï* ‘sit down’ which also share the same final vowel (*-rei* ‘fall down’ might also be included). The rest of the verbs in this class are not so easily classified — this will be explored further below.⁴ Table 3.12 is a list of verbs known to belong to Class III.

⁴Although this is a defining property of this class, Class I also has verbs with this shape: e.g. *pôï* ‘whistle’, *-ai* ‘rain’.

Table 3.12 Class III verbs

CVV	VV
- <i>kae</i> 'come'	- <i>õa</i> 'fight'
- <i>kôe</i> 'go (up/away from the coast)'	- <i>ão</i> 'basket-weave'
- <i>noi</i> 'go'	- <i>ûa</i> 'fish using a net'
- <i>kéi</i> 'sit down'	- <i>úi</i> 'dig'
- <i>rei</i> 'fall down'	- <i>ai</i> 'curse'
- <i>rõi</i> 'stand up'	- <i>îi</i> 'bite'
- <i>râi</i> 'dieSG'	- <i>éi</i> 'cover, protect'
<i>pí-nîi</i> 'wash'	- <i>îi</i> 'summon'
	- <i>éo</i> 'wear flowers in your hair'
	- <i>ua</i> 'spit'

Verbs in Class III take exactly the same morphemes as Class II in each category, but whereas both morphemes are prefixed to the Class II verbs, Class III verbs take a V(CV..)- prefix and a ⟨C⟩ infix between the two final vowels.

Table 3.13 Class III morphemes

SG	1	M	a-	⟨n⟩
		F	e-	⟨n⟩
	2	M	a-	⟨m⟩
		F	o-	⟨m⟩
	3	M	a-	⟨(r)⟩
		F	o-	⟨(r)⟩
DU	1		epi-	⟨p⟩
	2		oropu-	⟨p⟩
	3		ere-	⟨p⟩
PL	1		e-	⟨m⟩
		2	M	o-
	F		eve-	⟨r⟩
	3	M	e-	⟨p⟩
		F	ere-	⟨r⟩

Table 3.14 gives examples of the two types of verb found in this class: VV *-ûa* 'trawl' and CVV *-noi* 'go along'. Note that whereas the 3SG infix is present in *-ûa* 'trawl', it is absent in *-noi* 'go along'. This, and other allomorphy, is discussed below.

Table 3.14 Class III example paradigms

			VV	CVV
SG	1	M	k-â-w⟨n⟩à	k-â-nō⟨n⟩ì
		F	k-j-û⟨n⟩à	k-è-nō⟨n⟩ì
	2	M	k-â-w⟨m⟩à	k-â-nō⟨m⟩ì
		F	k-û⟨m⟩à	k-ò-nō⟨m⟩ì
	3	M	k-â-w⟨r⟩à	k-â-nōj
		F	k-û⟨r⟩à	k-ò-nōj
DU	1		k-èpj-û⟨p⟩à	k-èpì-nō⟨p⟩ì
	2		k-òròp-û⟨p⟩à	k-òròpù-nō⟨p⟩ì
	3		k-èrj-û⟨p⟩à	k-èrè-nō⟨p⟩ì
PL	1		k-j-û⟨m⟩à	k-è-nō⟨m⟩ì
		2	M	k-û⟨p⟩à
	F		k-èvj-û⟨r⟩à	k-èvè-nō⟨r⟩ì
	3	M	k-j-û⟨p⟩à	k-è-nō⟨p⟩ì
		F	k-èrè/èj-û⟨r⟩à	k-èrè-nō⟨r⟩ì
				-ûa 'trawl'

The expected processes of nasal assimilation, glide formation and deletion, as well as palatalisation of the realis prefix, as found in the Class I prefixes, are also found in Class III. The medial /r/ of the 3PL.F prefixes can also be elided.

The other major alternation found in Class III is that some of the verbs take ⟨r⟩ in third person singular and some do not. For example, in Table 3.14, the verb *-ûa* takes an ⟨r⟩ and the verb *-noi* does not. The conditioning factor is phonological: the ⟨r⟩ is found when the first of the final two vowels would form a glide or if one of the final two vowels would delete.

For example, if the two vowels of *-ûa* were allowed to meet, the first of these would form a glide, resulting in [wa], but this is avoided by the infix. Another example is the verb *-pí níi* 'wash'. The two vowels in this verb are the same and if they were allowed to meet, one of them would delete, but again this is avoided by the infix: /pí k-o-ní⟨r⟩i/ → [kòníri]. The vowels in *-noi*, however, are such that the second vowel would form a glide, resulting in [oj], and this is apparently allowed (these final syllables are stressed and attract tone — e.g. [kò.'nōj] not *[kò.nòj]).

The ⟨*r*⟩ is always present in the feminine plurals and when the Barupu paradigms are compared with those of the two closely related languages — Ramo and Sumo — it turns out that the 3SG and PL.F infixes probably have different origins. Ramo and Sumo have the same number of conjugation classes but, as the following table shows, there are some differences in the forms of the affixes. The 3SG infix in Ramo and Sumo is ⟨*t*⟩, corresponding to the regular B/r/ > R/S/t/ sound change, but the PL.F is ⟨*r*⟩.⁵

Table 3.15 Class III Ramo and Sumo

		Ramo	Sumo	
SG	1	M	<i>pi a-ni⟨n⟩i</i>	<i>pi r-a-ni⟨n⟩i</i>
		F	<i>pi e-ni⟨n⟩i</i>	<i>pi r-a-ni⟨n⟩i</i>
	2	M	<i>pi a-ni⟨m⟩i</i>	<i>pi r-a-ni⟨m⟩i</i>
		F	<i>pi o-ni⟨m⟩i</i>	<i>pi r-e-ni⟨m⟩i</i>
	3	M	<i>pi a-ni⟨t⟩i</i>	<i>pi r-a-ni⟨t⟩i</i>
		F	<i>pi o-ni⟨t⟩i</i>	<i>pi r-o-ni⟨t⟩i</i>
DU	1	<i>pi epi-ni⟨p⟩i</i>	<i>pi r-epi-ni⟨p⟩i</i>	
	2	<i>pi oropu-ni⟨p⟩i</i>	<i>pi r-u-ni⟨p⟩i</i>	
	3	<i>pi ere-ni⟨p⟩i</i>	<i>pi r-ere-ni⟨p⟩i</i>	
PL	1		<i>pi e-ni⟨m⟩i</i>	<i>pi r-e-ni⟨j⟩i</i>
		2	M	<i>pi o-ni⟨p⟩i</i>
	F		<i>pi eve-ni⟨r⟩i</i>	<i>pi r-eve-ni⟨r⟩i</i>
	3	M	<i>pi o-ni⟨p⟩i</i>	<i>pi r-e-ni⟨v⟩i</i>
		F	<i>pi ere-ni⟨r⟩i</i>	<i>pi r-e-ni⟨r⟩i</i>
			<i>pi -nii</i> ‘wash’	<i>pi -nii</i> ‘wash’

The Ramo and Sumo ⟨*t*⟩ is omitted in the same environments as the Barupu ⟨*r*⟩.

Infixing is usually analysed in one of two ways. It can be analysed as a synchronic morphophonological process where morphemes can interrupt lexemes at specific points in a prosodic template (i.e. before or after a particular consonant or syllable; first, last, stressed etc. — see, for example, McCarthy and Prince (2001)). Or it can be explained as the result of ‘entrapment’, which is ‘the fusion of an outer

⁵The realis prefix in Ramo is *ø*. In Sumo the realis/irrealis distinction found in Barupu and Ramo is a three-way tense distinction. The forms shown in Table 3.15 for Sumo are in present tense. The verb *pi-nii* ‘wash’ is a complex predicate made up of an adjunct nominal *pi* ‘water’ and the verb *-nii* ‘wash’ (see §6.2.6).

affix with a stem causing the intervening affix to become an infix' (Yu 2004:4), see also (Haspelmath 1993). There is a simple phonological statement for infixing in Barupu — infixes appear between two final vowels — however, in this section, I will speculate on an 'entrapment' analysis based on a possible historical development for the infixing classes.

Historically, the final vowel of Class III verbs may have been a separate morpheme (i.e. a Class II verb). Initial grounds for an analysis such as this were mentioned above — the fact that there are definable semantic classes which share a final vowel: the two direction of motion verbs ending in /e/ and the two posture verbs ending in /i/.

Other languages of the Skou family have comparable multi-word constructions that have been analysed as serial verbs or verb compounds. For example, Ross (1980:93) records complex verb forms in the Dumo dialect of Waremo, a distantly related language spoken near the Papua New Guinea border with Indonesia, in some cases verb combinations are used to mark perfective aspect. Example (85) shows the Dumo perfective form for 'he sat'. There are two verbs independently inflected for 3SG.M. First is the verb *hve* '3SG.M.sit' and second is the verb *mó* '3SG.M.be positioned', the second verb provides the perfective aspect. Subject inflection in Dumo is achieved with a combination of initial consonant mutation and in some cases vowel mutation. In a normal sentence these forms are preceded by the 3SG.M free pronoun.

- (85) *Hé hve mó.*
 he 3sm.sit 3sm.be.positioned
 'He sat.'

Given this form in Dumo, it is tempting to speculate on a possible earlier form for 'he sat' in Barupu, shown in (86). Historically there may once have been two verbs. The realis marking and first subject prefix may have made up a portmanteau

morpheme, or they may have come later.

- (86) **k-a ke (r)-i*
 ?RL-AG sit 3SG-be.positioned
 'he sat'

Eventually, as the Piore River branch of the family became more polysynthetic, this complex may have been reanalysed as a single word and received more prefixing by analogy with other verb classes. That these are now unanalysable single words in Barupu is evidenced by two facts: they have only one tone and speakers cannot offer independent definitions for the final vowels in these words.

At present this can only remain speculation; more comparative work is needed. However, we can note in passing that infixing is found in other members of the Skou family and Donohue (2004:234-237) suggests a similar possible process of grammaticalisation of an earlier complex form in one of these, the Serra Hills language, Puare. He presents the following table of sample paradigms of three verbs in Puare. In the first column the verb *lsi -o* 'cough' is a transparent two-word complex predicate with only the second element showing verb agreement. The second and third columns show single words with only partial prefixing and apparent infixing; Donohue suggests that these forms may, historically at least, derive from complex multi-word forms similar to that given for 'cough'.

Table 3.16 Puare sample paradigm. *Source:* Donohue (2004:235)

	'cough'	'drink'	'yell'
1 SG	lsi n-lo	n-luk-n-o	n-ka-n-e
2 SG	lsi m-lo	[-luk-m-o	[-ka-m-e
3 SG	lsi y-lo	[-luk-y-o	[-ka-[-e

Donohue also notes in a footnote that there is some evidence that some of these Puare verbs are starting to appear with optional extra subject proclitics.

3.1.4 Class IV

Class IV is a very small class. The known roots are given in Table 3.17. Class IV does not seem to constitute a semantic class — the verbs *-aichói* ‘sneeze’ and *-kwau* ‘vomit’ might be onomatopoeic, but this couldn’t be claimed for other verbs in this class. Phonologically, Class IV verbs end in two vowels like Class III verbs, but unlike Class III verbs, they are always larger than (C)VV.

Table 3.17 Some Class IV verbs

<i>-aichói</i>	/aitói/	‘sneeze’
<i>-kwau</i>	/kuau/	‘vomit’
<i>-puruei</i>		‘blossom, bloom’
<i>-risii</i>		‘smell’
<i>-raii</i>		‘lie’
<i>ro -raiu</i>		‘remove scrapings’
<i>-tíe</i>		‘open’
<i>-ropôe</i>		‘trick’

The morphemes found on these verbs are shown in Table 3.18. As the table shows, the verbs take the regular Class I prefixes, but they also take an infix between their two final vowels. The 3SG ⟨*r*⟩ is always present in this class.

Table 3.18 Class IV morphemes

SG	1	M	ana-	⟨n⟩
		F	en(i)-	⟨n⟩
	2	M	ama-	⟨m⟩
		F	om(u)-	⟨m⟩
	3	M	a-	⟨r⟩
		F	o-	⟨r⟩
DU	1		epi-	⟨p⟩
	2		oropu-	⟨p⟩
	3		ere-	⟨p⟩
PL	1		em(i)-	⟨m⟩
		M	opu-	⟨p⟩
	F	eve-	⟨r⟩	
	3	M	e-	⟨p⟩
		F	ere-	⟨r⟩

An example of the full paradigm is given in Table 3.19.

Table 3.19 Class IV example paradigm

SG	1	M	k-àná-kwā⟨n⟩ù
		F	k-èŋ-kwā⟨n⟩ù
	2	M	k-àmà-kwā⟨m⟩ù
		F	k-òŋ-kwā⟨m⟩ù
	3	M	k-â-kwā⟨r⟩ù
		F	k-ò-kwā⟨r⟩ù
DU	1	M/F	k-èpì-kwā⟨p⟩ù
DU	2	M/F	k-òròpù-kwā⟨p⟩ù
DU	3	M/F	k-èrè-kwā⟨p⟩ù
PL	1	M/F	k-èŋ-kwā⟨m⟩ù
		M	k-òpù-kwā⟨p⟩ù
	2	F	ke-èvè-kwā⟨r⟩ù
		M	k-è-kwā⟨p⟩ù
	3	M	k-è-kwā⟨p⟩ù
		F	k-èrè-kwā⟨r⟩ù

For some of these verbs the infix and final vowel appear to be in the process of being dropped. For example, *-aichoi* ‘sneeze’ can be heard without this final syllable (e.g. [kòpàitfó]). The medial /r/ of 3PL.F can also be elided in this class (e.g. [kè^j.jàj.tfó]).

3.2 Object marking

Most morphologically transitive verbs (see Chapter 4) take suffixing for the person, number and gender of their objects; transitive verbs come from all four conjugation classes and all four classes take the same suffixes. Suffixing transitive verbs are always vowel-final. Other transitive verbs show object marking through mutation of the final vowel or through root suppletion, as discussed below.

The object suffixes are presented in Table 3.20.

Table 3.20 Object suffixes

SG	1	M	-na
		F	-n(i)
	2	M	-ma
		F	-m(u)
	3	M	-a ~ -ka
		F	-u ~ ø
DU	1	M/F	-pi
	2	M/F	-pu
	3	M/F	-re
PL	1		-m(i)
	2	M	-pu
		F	-ve
	3	M	-i
F		-re	

For the most part the object morphemes are made up of a -CV that is phonologically identical to the final CV of the Class I prefixes and the final CV of the free pronouns. The exceptions are 3SG.F, 3SG.M and 3PL.M — recall that these are the categories that have V- prefixes in Class I. Since transitive verbs are always vowel-final in Barupu, it could be argued that the object suffixes made up of glides, 3SG.F *-u* [-w] and 3PL.M *-i* [-j] are versions of the corresponding prefixes /o-/ and /e/-, affected by glide formation.

The 3SG.M object suffix *-a* is identical to the 3SG.M prefix *a-* (the variant form *-ka* appears on verbs ending in /a/, see below).

The following table shows object agreement on the Class I verbs *-tóve* ‘be angry with’ and *-yára* ‘see’ and the Class III verb *pi -níi* ‘wash’. The verbs in the table are all inflected for realis status and 3SG.F subject. Tone placement and object suffixing were discussed in the previous chapter. The verbs *-tóve* and *-níi* have lexically specified Hs on their penultimate syllables; this tone remains on this syllable regardless of any suffixing. The verb *-yára* has LH tone assigned by rule. When a suffix is attached it falls in the final foot of the word; stress is assigned to the

penultimate syllable of the inflected word; LH is assigned to the stressed syllable and spreads one syllable to the right.

Table 3.21 Object suffix example paradigms with 3SG.F subject

			Class I /e/ final	Class I /a/ final	Class III /i/ final
SG	1	M	k-ò-tóvè-nà	k-ò-jàrà-ná	k-ò-ní(r)i-'a
		F	k-ò-tóvè-n(i)	k-ò-jàrà-n(i)	k-ò-ní(r)i-n(i)
	2	M	k-ò-tóvè-mà	k-ò-jàrà-má	k-ò-ní(r)i-mà
		F	k-ò-tóvè-m(ù)	k-ò-jàrà-m(ù)	k-ò-ní(r)i-m(ù)
	3	M	k-ò-tóvj-à	k-ò-jàrà-ká	k-ò-ní(r)j -à
		F	k-ò-tóvè-w ~ k-ò-tóvè	k-ò-jàrà-w ~ k-ò-jàrà	k-ò-ní(r)i-w ~ k-ò-ní(r)i
DU	1		k-ò-tóvè-pì	k-ò-jàrà-pí	k-ò-ní(r)i-pì
	2		k-ò-tóvè-pù	k-ò-jàrà-pú	k-ò-ní(r)i-pù
	3		k-ò-tóvè-rè	k-ò-jàrà-ré	k-ò-ní(r)i-rè
PL	1		k-ò-tóvè-m(i)	k-ò-jàrà-m(i)	k-ò-ní(r)i-m(i)
		2	M	k-ò-tóvè-pù	k-ò-jàrà-pú
	F		k-ò-tóvè-vè	k-ò-jàrà-vé	k-ò-ní(r)i-vè
	3	M	k-ò-tóvè-j	k-ò-jàrà-j	k-ò-ní(r)i
		F	k-ò-tóvè-rè	k-ò-jàrà-ré	k-ò-ní(r)i-rè
				-tóve 'scold'	-yàrà 'see'

The following table shows object agreement on the Class II verb *-o* 'give' and the Class I verb *-pútu* 'blow, blow up'. The verbs in the Table are all inflected for realis status and 3SG.F subject. The verb *-o* 'give' has L tone assigned by rule; stress is always on the penultimate syllable of the inflected word. The other verb *-pútu* has a lexically specified H on the penultimate syllable.

Table 3.22 Object suffix example paradigms with 3SG.F subject

			Class II /o/ final	Class I /u/ final
SG	1	M	k-ò-r-ò-nà	k-ò-pútù-nà
		F	k-ò-r-ò-n(i)	k-ò-pútù-n(i)
	2	M	k-ò-r-ò-mà	k-ò-pútù-mà
		F	k-ò-r-ò-m(ù)	k-ò-pútù-m(ù)
	3	M	k-ò-r-w-à	k-ò-pútw-à
		F	k-ò-r-ò	k-ò-pútù
DU	1		k-ò-r-ò-pi	k-ò-pútù-pì
	2		k-ò-r-ò-pu	k-ò-pútù-pù
	3		k-ò-r-ò-re	k-ò-pútù-rè
PL	1		k-ò-r-ò-m(i)	k-ò-pútù-m(i)
		M	k-ò-r-ò-pù	k-ò-pútù-pù
	2	F	k-ò-r-ò-vè	k-ò-pútù-vè
		M	k-ò-r-ò-j	k-ò-pútù-j
	3	F	k-ò-r-ò-rè	k-ò-pútù-rè
				-o 'give'

3.2.1 Allomorphy

There is age variation in the realisation of 3SG.F. For most older speakers, the 3SG.F suffix is [-w], except on verbs ending with rounded vowels, where it is zero. Younger speakers tend to mark this category with zero on all verbs. Various processes identify 3SG.F as the unmarked or default category — e.g. all abstract, inanimate and lower animate nouns are feminine (see Chapter 4) — so it is not unexpected that this should be the zero-marked category in the paradigm.

When a verb takes zero marking, stress and tones assigned by rule will be penultimate. For example, when the verb *-yǎrá* takes zero marking for 3SG.F, the stressed syllable is still penultimate and the LH contour appears on the penultimate syllable e.g. /k-en-yara-ø/-LH (RL-1SG.F-see-3SG.F) 'I see it.' → [kènyǎrá]. When this verb takes -w, the LH contour appears on the final syllable, e.g. /k-en-yara-w/-LH (RL-1SG.F-see-3SG.F) 'I see it' → [kènyàráw] ~ [kènyàráw].

The 3SG.M suffix is *-ka* on /a/-final roots, possibly to avoid deletion. If deletion were allowed to occur with 3SG.M *-a* on /a/-final roots, such as *-yǎrá*, there would no

longer be a contrast between those verbs inflected for zero-marked 3SG.F, and those inflected for 3SG.M. For the most part, the 3SG.M suffix /-a/ triggers glide formation in the final non-low vowel of a transitive verb. The exception, as discussed in Chapter 2, is if the final vowel has a lexically specified tone — here an epenthetic glide is inserted between the vowel of the root and the suffix, e.g. /k-o-rajó-a/ (RL-3SG.F-hunger-3SG.M) ‘He is hungry.’ → [kòràǰówà].

Vowel cluster reduction rules affect the surface realisations of object marking in various ways. As the tables show, the 3PL.M suffix is realised as [-j] on most verbs. On /i/-final verbs, there is no surface realisation of this category due to deletion. A high vowel after a nasal can optionally be dropped, so *-ni*, *-mu* and *-mi* can also be heard as *-n*, *-m* and *-m*.

3.2.1.1 3SG.F— vowel mutation

Three verbs show vowel mutation for 3SG.F object. The 3SG.F object marking is usually the +high,+round glide [-w], and those verbs with mutation take on either the round feature of this affix, as in *-täipé* and *-âve*, or the height, as in *-te*. This is shown in Table 3.23.

Table 3.23 Verbs with final vowel change for 3SG.F

	3SG.F
/taipe/-LH ‘bad’	[tǎǰpó]
/abe/-HL ‘hold’	[âvò]
/te/-L ‘shoot’	[tì]

Vowel mutation for feminine objects is also found in Skou (Donohue 2004) and Krisa (Donohue and San Roque 2004) — where rounding marks feminine and fronting marks plural. It is interesting to note that in Barupu, rounding occurs after labial segments while raising occurs after the coronal segment. More data could perhaps affirm or deny this as a pattern. All three of these verbs have tones assigned by rule and vowel mutation has no effect on tone or stress placement; the penultimate

syllable is still the locus of tone and stress on these examples. For example, the verb *-âve* has HL tone assigned by rule. With 1SG.M object suffixing, as in (87a), tone is on the penultimate syllable of the inflected word, but the final syllable of the root. In example (87b), there is no object suffix, and tone is still on the penultimate syllable of the word, the first syllable of the root.

- (87) a) /k-o-abe-ni/-HL → [kwâvêni]
 RL-3SG.F-hold-1SG.F
 ‘She holds me.’
- b) k-o-âbo → [kwâvò]
 RL-3SG.F-hold.3SG.F
 ‘She holds her.’

3.3 Other verbal inflection

3.3.1 Suppletion

One verb, *-ko* ‘get.SGO’, has a suppletive form, *-úna* ‘get.PLO’, to mark the plurality of the object. The ‘get.SGO’ verb can appear with plural subject marking to indicate that each of the plural participants got one thing: e.g. *rua k-e-ko* (spear IRR-3PL.M-get.SGO) ‘they each got one spear’.

Another verb suppletion marks the number of the subject *rai* ‘die.SG/DUS’ and *-viri* ‘die.PLS’.

3.3.2 Verbs taking co-referential prefix and suffix

Finally, there is a class consisting of only two known roots: *-bóvo-* ‘sleep’ and *-täipé* ‘bad’. These roots inflect with a co-referential Class I prefix series and an object suffix — for example, *N-em-bóvo-mi*. (IRR-1PL-sleep-1PL) ‘We are going to sleep.’ and *K-o-täipó*. (RL-3SG.F-bad.3SG.F) ‘She is bad.’ .

Table 3.24 *-tǎipé* 'bad' and *-bóvo* 'sleep'

SG	1	M	k-àná-tǎjpě-ná	k-àná-vóvò-ná
		F	k-èn-tǎjpě-ní	k-èm-bóvò-nì
	2	M	k-àmà-tǎjpě-má	k-àmà-vóvò-mà
		F	k-òn-tǎjpě-mú	k-òm-bóvò-mù
	3	M	k-à-tǎjǰ-á	k-à-vóvw-à
		F	k-ò-tǎjpó	k-ò-vóvò
DU	1	M/F	k-èpì-tǎjpě-pí	k-èpì-vóvò-pì
	2	M/F	k-òròpù-tǎjpě-pú	k-òròpù-vóvò-pù
	3	M/F	k-èrè-tǎjpě-ré	k-èrè-vóvò-rè
PL	1	M/F	k-èn/èmì-tǎjpě-mí	k-èm(ì)-b/vóvò-mì
		M	k-òpù-tǎjpě-pú	k-òpù-vóvò-pù
	2	F	k-èvè-tǎjpě-vé	k-èvè-vóvò-vè
		M	k-è-tǎjpé-j	k-è-vóvò-j
	3	F	k-èrè-tǎjpě-ré	k-èrè-vóvò-rè
				-tǎipé 'bad'

Chapter 4

Word classes

Barupu has two open word classes: nouns and verbs. Nouns most prototypically denote animals, people and things and their main syntactic function is reference to those objects as the heads of noun phrases, although they can also be used for modification and predication. There is no inflectional morphology associated with nouns.

Verbs most prototypically denote actions, states and properties. Their major function is predication. All verbs have the potential to be the heads of clauses where they show obligatory prefixing inflection for realis or irrealis, and the person, number and gender of the subject of the clause, as outlined in the previous chapter.

The broad morphological division is thus:

- verbs — words which have the potential to head clauses and take obligatory status and subject inflection;
- nouns — words with no inflectional potential.

The morphological classes do not quite determine syntactic distribution, however. For example, temporals have the ability to appear inflected as the heads of clauses; morphologically they belong to the verb class. However, unlike the vast majority of verbs, they can also function as sentential modifiers (§4.2.8).

Likewise, there is no separate morphological class of adjectives — morphologically, words denoting properties behave like verbs, in that when they are functioning as predicates they must take the full range of inflectional morphology associated with verbs — but there are four reasons for distinguishing a syntactic sub-class of adjectival verbs:

- adjectival verbs, unlike other verbs, can function as modifiers in noun phrases without any morphology at all;
- some adjectival verbs can function uninflected to modify other verbs;
- there is a dedicated word for conjoining two clauses headed by adjectival verbs;
- reduplication of an adjectival verb indicates degree of a property; on other verbs, reduplication indicates iterative or distributive aspect.

There is no morphology in Barupu that derives words from one class into another — if roots are used in different functions they are found in their root form. This chapter begins with a description of nouns and other nominals. This is followed by a description of the verb word class and its sub-classes. Finally I introduce the closed word classes: locationals; temporals; intensifiers; other verb modifiers; particles; demonstratives; quantifiers and various address terms, greetings and interjections. Where certain points are elaborated more fully in the thesis, chapter and section numbers are provided.

4.1 Nouns

There is no obligatory morphology associated with nouns. However, they do fall into underlying classes that surface only in inflectional morphology on verbs, or else dictate modification restrictions. These classes correspond to gender and mass/count distinctions.

Nominals are divided into two genders, masculine and feminine. The biggest group is feminine; most inanimate objects, lower animates, natural world phenomena

and abstract nominals belong to this class. Exceptions include culturally significant animals such as pigs, dogs, bandicoots and fish, which are usually masculine, or their biological sex. The sun and the moon are always masculine.

Examples of how gender surfaces in verb morphology are given in (88).

- (88) a) *Umo kachêni.*
 k-a-ite-ni
 sun RL-3SG.M-burn-1SG.F
 ‘The sun burned me.’
- b) *Pû k-o-pútu.*
 wind RL-3SG.F-blow
 ‘The wind is blowing.’

In (88a) the sun is masculine and this is reflected by 3SG.M subject prefixing on the verb *-ite* ‘burn’. In (88b) the wind is feminine and this is shown by 3SG.F prefixing on the verb *-pútu* ‘blow’.

Number is not marked morphologically on nouns, but there are two suppletive forms. The word *má* ‘child’ has the suppletive plural form *mevôva* (most likely a mutated fossilised compound: *má* ‘child’ + *vôva* ‘again, more’), and the word *bió* ‘person’ has the suppletive plural *aro* ‘people’. Otherwise the only indication of number is in the verb agreement. Examples (89 a & b) show that number is not marked on NPs but does surface in verb agreement.

- (89) a) *Rau k-á-ute.*
 pig RL-3SG.M-walked
 ‘The pig walked.’
- b) *Rau k-i-úte.*
 pig RL-3PL.M-walked
 ‘The pigs walked.’

In (89a) the pig is singular and this is reflected in the verb agreement. In (89b) the pigs are plural and the instantiation of this is on the verb, not the noun.

Another underlying distinction among nouns corresponds to a count vs. mass

distinction which is reflected in the fact that mass nouns like *ôi* ‘sago’ cannot be modified by numerals (e.g. **ôi riêmpin* (sago two) ‘two sago’ is not grammatical but *ôi owu* (sago some) ‘some sago’ is). Mass nouns are also treated as singular for the purposes of verb inflection, but this is not particularly distinctive because number marking on verbs is optional for inanimates (see below).

The major function of nouns is reference to participants as the heads of noun phrases. Nouns can also be used attributively in a compound with another noun — for example, a gender-neutral, but number-specific noun such as *aro* ‘people’ can be compounded with a gender-specific but singular noun like *bóm* ‘woman’ (e.g. *aro bóm* ‘women’). Compounding is a common process which is described in §5.1. Nouns can be modified by adjectives and quantifiers as well as be possessed. See Chapter 5 for a full description of noun phrase structure. There is one nominal discourse clitic (=a ~ =va), that operates at the phrase level, see §6.4.4.

Nominals can also be used for predication in nominal predicate clauses, as in example (90).

- (90) *Něni Barupu bóm.*
 1SG.F PLN woman
 ‘I’m a Barupu woman.’

Nominals in verbless clauses do not take any verbal morphology. The construction is only possible in realis clauses, including those set in past time; a copular is required for irrealis clauses (see §6.5.1).

4.1.1 Other nominals

Other words which have similar distributions to nouns are: personal and interrogative pronouns, and proper names. Nominals in these sub-classes do not appear with the same range of modification as common nouns.

4.1.1.1 Personal pronouns

Barupu free pronouns distinguish singular and plural number and feminine and masculine gender for second and third person. First person distinguishes dual number in addition to singular and plural and only marks gender in the singular.

Table 4.1 Free pronouns

SG	1	M	<i>něná</i>
		F	<i>nění</i>
	2	M	<i>měmá</i>
		F	<i>měmú</i>
	3	M	<i>yá</i>
		F	<i>bó</i>
DU	1	M/F	<i>měpí</i>
	2	M/F	<i>měpú/běvé</i>
	3	M/F	<i>yéi/rěré</i>
PL	1		<i>měmí</i>
	2	M	<i>měpú</i>
		F	<i>běvé</i>
	3	M	<i>yéi</i>
F		<i>rěré</i>	

There are no case distinctions on pronouns in Barupu — the same forms are found in all positions and semantic roles. These same forms are also used as possessive pronouns in NPs (see §5.3). The dual and plural forms of the first person pronoun can include both inclusive and exclusive reference.

4.1.1.2 Interrogative pronouns

There are three interrogative pronouns, which can function in the same slots as NPs. They are *arâpe* ‘what’, *nâpe* ‘who’ and *rô(pe)* ‘where’. *Arâpe* can also be heard as an interjection, *arâ*, meaning ‘What?’, as in ‘I didn’t hear what you just said’ and *nâpe*, can be heard as an interjection, *nâ*, meaning ‘Who?’. Interrogatives are discussed further in section 9.2.2.

4.1.1.3 Proper names

Barupu has two address terms (AT) which obligatorily appear before personal names and optionally appear before kin terms. Females are referred to as [kwa] (spelled *Kwa* or *Kua*) and males are referred to as [tʃa] (spelled *Cha* or *Ja*). The thesis spellings are *Kua* and *Cha*. For example, a man and a woman named Moses and Manuela would be referred to as *Cha Moses* and *Kua Manuela*. *Kua* and *Cha* alternate with vocative second person forms *Ma* and *O*. Everyone has a ‘hidden’ name and a ‘Catholic’ name, but people are never referred to or addressed by their hidden names. In addition, there is a strong tendency to avoid using even ‘Catholic’ names. Instead it is much more common to refer to someone by a kin term such as *nãi* ‘aunt’ or *tãita* ‘father’, or another relationship such as *ô* ‘namesake’. These kin terms also appear with the address terms *Kua* and *Cha*, for example, *Kua Nãi* and *Cha Tãita*.

When two people are in an avoidance relationship (e.g. in-laws, especially of the opposite sex) they commonly refer to, and address, each other with a teknonym¹ — a circumlocution that refers to their relationship to someone else — rather than use each other’s personal name. The relationships relevant to this process are typically parental and spousal (e.g. people are commonly referred to as ‘X’s mother’ or ‘X’s father’, where X is the name of the oldest child, or ‘X’s husband/wife’, if there are no children). A speaker would also use this construction if they were talking about someone who was in an avoidance relationship with the person they were talking to.

- (91) a) *Kua Betty mô*
 AT PN mother
 ‘Betty’s mother’
- b) *Kua Betty aka*
 AT PN father
 ‘Betty’s father’

See Chapter 5 for the structure of these compounds.

¹Teknonyms are a typically Austronesian, rather than Papuan, cultural trait (e.g. Geertz and Geertz 1975).

4.2 Verbs

Verbs in Barupu obligatorily inflect for realis or irrealis and the subject of the clause.

Five major classes of verb may be established on the basis of valency.

- i Intransitive
- ii Transitive
- iii Ditransitive
- iv Ambitransitive
- v Pseudotransitive

Intransitive verbs select one argument (subject). Transitive verbs select two arguments (subject and object) — see Chapter 6 for discussion of the use of the terms subject and object. Transitive verbs can be further divided into two sub-classes: those that take suffixing for the object argument, and those that do not. An ambitransitive root is one that can be used transitively or intransitively. Ditransitive verbs select three arguments (subject and two objects — one marked by a suffix and one not). Pseudotransitive verbs typically describe involuntary states such as hungry, sad, sick etc. These verbs take an Experiencer marked as an object on the verb and default 3SG.F subject marking. These verbs typically appear with a nominal indicating the Stimulus of the state, e.g. ‘sickness’, and these nominals can sometimes appear to be the subject argument of the clause, but they are better analysed as forming complex predicates with the verbs. These verb classes are described in turn below.

There is also a large class of adjectival verbs, discussed in §4.2.6. Finally, other minor classes of verbs include copulars (§4.2.7) and zero-intransitives: temporals (§4.2.8) and weather verbs (§4.2.9). Complement-taking predicates are discussed in Chapter 10.

Apart from status marking and agreement, other morphological processes associated with verbs are various valency increasers and location/direction suffixes

(see Chapter 7), a Benefactive/Possessor paradigm (see Chapter 8) and reduplication. Reduplication indicates degree on adjectival verbs and iterative or distributive aspect on other verbs (see Chapter 9).

4.2.1 Intransitive verbs

Intransitive verbs take a single argument. Agreement is nominative/accusative. Verbs can be unergative, where the argument is an Actor, or unaccusative, where the argument is an Undergoer — but these are not morphologically distinguished. Some examples of each are given in Table 4.2.

Table 4.2 Some intransitive verbs

unergative	unaccusative
<i>-kéi</i> ‘sit’	<i>-rei</i> ‘fall’
<i>-úte</i> ‘walk’	<i>-rái/-víri</i> ‘die’

The two intransitive verb types exemplified in (92) & (93) are identical morphologically; they both belong to the infixing Class III conjugation class.

- (92) *K-e-ké(n)i.*
 RL-1SG.F-⟨1SG.F⟩sit
 ‘I’m sitting.’

- (93) *K-e-re(n)i.*
 RL-1SG.F-⟨1SG.F⟩fall
 ‘I’m falling.’

4.2.2 Monotransitive verbs

Monotransitive verbs involve two arguments. One class of transitive verb takes a suffix indexing the object. Examples are given in (94) & (95).

- (94) *Něni rau k-en-yarǎ-ká.*
 1SG.F pig RL-1SG.F-see-3SG.M
 ‘I saw the pig.’

Table 4.4 shows some NSTVs. This class is far larger than the STV class.

Table 4.4 Some NSTVs

	gloss	typical Undergoer
- <i>úa</i>	'trawl' - 'fish with a net'	marine life
- <i>táura</i>	'mow' - 'cut grass with a bushknife'	grass
- <i>póiya</i>	'weave armbands'	armbands
- <i>tói</i>	'rinse sago or milk coconut meat'	sago, coconut
- <i>iro</i>	'chop down a tree with an axe'	tree
- <i>purutá</i>	'chop into pieces'	inanimate
- <i>ívó</i>	'carve meat'	meat
- <i>ě</i>	'write, carve'	letters, designs
- <i>ora</i>	'plant'	plants
- <i>táru</i>	'whittle, sharpen'	wood, axes
- <i>u</i>	'pick'	fruit
- <i>ríré</i>	'scatter, sow'	seeds
- <i>ǎ</i>	'eat'	food
- <i>tón</i>	'drink'	liquid

Non-suffixing transitive verbs are less transitive than suffixing transitive verbs according to at least one of the transitivity features first outlined by Hopper & Thompson (1980): Individuation of the Patient. Hopper & Thompson (1980:253) define Individuation of the Patient as 'the distinctness of the Patient from the A... and... its distinctness from its own background'. The first part of the definition, distinctness from A, is to do with reflexives and reciprocals. It is the second part of the definition that is relevant to Barupu verb morphology. Austin (1982) applied Individuation to six Australian languages and found that they have verbs which are semantically transitive in that they can be associated with two NPs, but morphologically intransitive because the NPs received intransitive-like case marking. He argued that the verbs were coded in this way because the Patient argument was somewhat predictable from the semantics of the verb and thus was not distinct 'from its own background, i.e. the verb itself' (1982:46).

In Barupu, for a verb to take a suffix its typical Undergoers must be individuated. Animacy is rated highly on the individuation scale and an Undergoer is

also considered to be individuated if it is distinct from its own background — that is, the semantics of the verb and other possible Undergoers. STVs have the potential to be performed only on animates or else a wide range of possible Undergoers, including animates, who are distinct from each other and not predictable from the semantics of the verb. In contrast, Undergoers of NSTVs like the ones given in Table 4.4 are not typically higher animate and the range of entities they can represent is largely dictated by the verb's own semantics, and hence not very distinct from the background.

The point about NSTVs not taking suffixes is complicated by the fact that all the NSTVs typically take inanimate objects (food, trees, baskets etc.) or lower animates (fish, insects etc.) as their semantically cognate objects, and that lower animates and inanimates (except the sun and the moon) are feminine. Because for some speakers, some of the time, suffixing transitive verbs take a zero suffix for 3SG.F objects, (see Chapter 3), an alternative analysis is that non-suffixing transitive verbs simply take zero marking for third person singular feminine, or put another way, that inanimates and lower-animates are just not marked on the verb. There are three reasons for rejecting these analyses.

The first is that even when a NSTV takes an atypical, animate Undergoer, this argument cannot be marked with a suffix. This is shown in the following example taken from a text about a man-eating demon. Example (97a) is the clause from the text. Example (97b) shows that the addition of a suffix renders the clause ungrammatical (the form *bai* is a future particle borrowed from Tok Pisin).

- (97) a) *Měmá tu bai n-ě-n-á ríká n-e-o(n)o-ke*
 2SG.M TOO FUT IRR-1SG.F-1SG.F-eat bone IRR-1SG.F-⟨1SG.F⟩pile.up-INTS
tirín.
 separately
 'I'll eat you too and pile up the bones in separate piles.' [U-EM:01]
- b) **Měmá n-ě-n-á-ma.*
 2SG.M IRR-1SG.F-1SG.F-eat-2SG.M
 ...

Third, the NPs functioning as the objects of STVs and NSTVs have slightly different syntactic distributions in the clause. Objects of STVs can appear after the verb in a special pragmatic environment, objects of NSTVs must always appear before the verb, see Chapter 6.

4.2.3 Ambitransitive verbs

There is a small class of ambitransitive verbs which can be used intransitively or transitively. Some examples are given in the following table.

Table 4.5 Some ambitransitive verbs

		intransitive	transitive
suffixing	<i>-tôve</i>	'get angry'	'tell off'
	<i>-bará</i>	'spy'	'spy on'
	<i>pi -nii</i>	'bathe'	'wash sthg'
	<i>-á</i>	'do'	'make'
	<i>-yără</i>	'know'	'see'
	<i>-pútu</i>	'blow'	'blow up'
non-suffixing	<i>-írai</i>	'speak'	'tell'
	<i>-bere</i>	'pour, drip, dribble'	'pour, drip, dribble sthg'

Example (102), shows the two uses of the complex ambitransitive verb *pi -nii* 'bathe, wash'. Note that in (102b) there are two overt NPs in addition to the nominal *pi*; *pi* is not an argument of the verb but rather forms a complex predicate with it (see §6.2.6).

- (102) a) *Kuáni pi k-o-ni(r)i.*
 mother water RL-3SG.F-(3SG.F)wash
 'Mother is washing (herself).'
- b) *Bió bóm mevôva bó pi k-o-ni(r)i-re.*
 person woman children 3SG.F water RL-3SG.F-(3SG.F)wash-3PL.F
 'The woman is washing her children.'

4.2.4 Ditransitive verbs

Ditransitive verbs take three arguments — a subject and two objects. The verb is marked with a suffix for the Recipient/Goal but is not marked for the Theme. This is

probably again due to individuation; prototypical Recipients are animate and prototypical Themes are inanimate, see §6.1. Example (103) shows the use of the ditransitive verb *-iritá* ‘teach’. The suffixes used to mark the Recipient/Goal are the same as those used to mark the objects of monotransitive verbs.

- (103) *Pókó Barupu k-a-m-iritá-ka má.*
 neck PLN RL-2SG.M-2SG.M-teach-3SG.M child
 ‘You are teaching the child Barupu.’

NPs representing the arguments of these verbs have fixed positions in the clause. The Theme must appear before the verb and the Recipient after (see Chapter 6).

4.2.5 Pseudotransitive verbs

Pseudotransitive verbs typically denote involuntary physical or mental states such as hunger, thirst, tiredness etc. They are morphologically transitive in that they take a prefix and a suffix, like suffixing transitive verbs. The Experiencer of the involuntary state is marked with an object suffix and can be an overt NP. However, the verb is also marked with a 3SG.F subject prefix and either there is no other NP in the clause that this prefix could be cross-referencing, or there is another NP in the clause, but its status as subject is somewhat doubtful.

Experiencer object constructions like this are very common in both the Papuan and Austronesian languages of New Guinea (Foley 1986; Pawley et al. 2000; Bugenhagen 1990). Cross-linguistically, the morphological encoding of the Experiencer as object can be nominal (case) or verbal (inflection) or both. In most cases there is also a ‘Stimulus’ nominal (e.g. hunger, sickness) present in the clause that may or may not be functioning as the subject; many authors have pointed out that any actor/subject morphology in clauses like this is often default or portmanteau and thus could be cross-referencing the Stimulus nominal or, just as plausibly, some sort of non-overt anonymous nominal (see, for example, Bee 1973; Bruce 1984;

Bugenhagen 1990; Davies 1985; Gravelle 1997; Haiman 1980; Olson 1975; Pawley et al. 2000; Roberts 2001). In this way these constructions resemble the impersonal or dative subject constructions of Germanic languages (Allen 1995; Andrews 1982). Yimas provides an interesting contrast in that the A marking is not ambiguous, it always agrees in noun class with the Stimulus (Foley 1991:99).

In addition to morphological ambiguity, another reason for being suspicious about the status of the Stimulus nominal is that very often, in languages with these constructions, syntactic processes, such as control, anaphoric antecedence, switch reference and word order, identify the Experiencer as the grammatical subject or pivot of the construction, and not the Stimulus, and the Stimulus nominal cannot take the full range of nominal modification. Pawley et al. (2000:154) note '[f]or the grammarian, the vexing problem is to understand the grammatical roles played by the other nominal or noun-like elements in Experiencer Object constructions.'

As mentioned above, there are two types of pseudotransitive in Barupu. In the first type there is no NP other than the Experiencer in the clause. Examples are given in (104), (105) and (106). These are the only three verbs known to belong to this type in Barupu.

- (104) *Cha Philip k-o-raiyó-wa.*
 AT PN RL-3SG.F-hunger-3SG.M
 'Philip is hungry.'
- (105) *Mevóva kónire.*
 k-o-óni-re
 children RL-3SG.F-diswant-3PL.F
 'The girls don't want to.'
- (106) *Mevóva k-o-miminrá-i.*
 children RL-3SG.F-paralyse-3PL.M
 'The boys were paralysed.' [ANR-MN:01]

In these examples there is no overt nominal that the 3SG.F subject agreement could potentially be cross-referencing. For these verbs, the agreement can only be

dummy or default agreement.³

In the other type of involuntary state clause in Barupu there is another nominal in the clause: a body part or an abstract noun, something like ‘sickness’, which could potentially be the referent of agreement. But, in fact, the Experiencer seems to have more of the usual characteristics of subject, see below. In many Papuan languages with similar constructions, the typical pattern is to match a semantically specific Stimulus nominal (such as sickness, sadness etc.) with a semantically bleached or ‘light’ verb (such as ‘do’, ‘hit’ etc.). Languages like this often have very small verb inventories. Barupu has the interesting twist that it is the Stimulus that is light rather than the verb; in most cases the verb does supply the semantics. Some examples of pseudotransitive verbs are given in Table 4.6.

Table 4.6 Some involuntary state verbs

	individual glosses	combined meaning
<i>ro -ómo</i>	stomach full	‘be full up, sated’
<i>chá -woniwoníni</i>	head dizzy	‘feel dizzy’
<i>íne -áka</i>	eye sore	‘feel tired’
<i>ó -nepará</i>	feeling forget	‘forget’
<i>ó -ró</i>	feeling happy	‘feel happy’
<i>ó -täipé</i>	feeling bad	‘feel sad’
<i>réka -yó</i>	skin embarrassed	‘feel embarrassed’
<i>X -árá</i>	anything not.understand	‘be unable’
<i>a -ǎ</i>	thing sick	‘feel sick’
<i>rí -ǎ</i>	stomach sick	‘feel sick in the stomach’

Sometimes any body part can be substituted in the body part constructions. This is true for *-áka* ‘be tired’ — any part of your body can get tired — but not for *-woniwoníni* ‘be dizzy’, for obvious reasons. Some body part Experiencer object constructions use the benefactive/possessive agreement paradigm; these are discussed in Chapter 8.

The two questions to be asked about the Stimulus nominals in these

³One of these verbs is irregular — the verb *-óni* ‘diswant’ takes co-referential subject and object marking in IDU only, e.g. *k-épi-óni-pi* (RL-IDU-diswant-IDU) ‘We don’t want to.’

constructions are: are they the subjects of the clause and, if not, what are they?

Because there are no non-finite or reduced verb forms in Barupu, there are no definitive cross-clausal tests for subject. Clause-internal properties can only point to these nominals not being subjects. For example, basic word order in Barupu is SOV; subjects precede objects. In these constructions the Experiencer always precedes the Stimulus, as in the following examples.

- (107) *Mevôva ó n-o-nepará-i.*
 children feeling IRR-3SG.F-forget-3PL.M
 'The children will forget.' [P-MG:03]
- (108) *Cha Matthew a k-o-r-ă-ká.*
 AT PN thing RL-3SG.F-3SG.F-sick-3SG.F
 'Matthew is sick.'

This is not a definitive argument, however, because animates and topics are often fronted (see Chapter 6); Experiencers are obviously always animate and more topic-worthy than the inanimate Stimuli. Experiencers also share with subjects the ability to optionally control agreement on participant adding morphemes (see Chapter 7). In (109a), the participant-adding morpheme *-î* 'with' appears with an *r-* indicating 3SG agreement; in (109b), the same form appears with an *n-* indicating 1SG agreement. The 3SG agreement could still be ambiguous between cross-referencing the Stimulus or some anonymous 3SG. In (109b) the 1SG agreement is definitely cross-referencing the Experiencer. There is no difference in meaning between these examples.

- (109) a) *A k-o-r-ă-nî-r-î-mu.*
 thing RL-3SG.F-3SG.F-sick-1SG.F-AG-WITH-2SG.F
 'I was sick with you.'
- b) *A k-o-r-ă-nî-n-î-mu.*
 thing RL-3SG.F-3SG.F-sick-1SG.F-AG-WITH-2SG.F
 'I was sick with you.'

Neither the word order, nor the potential agreement with participant-adding

morphemes gives a definite answer as to whether or not the Stimulus in these constructions is the subject, but they do suggest that it is not. This is further supported by the fact that the Stimulus nominals do not behave like nominal arguments at all; for example, they cannot be omitted under discourse identity, they cannot take the full range of nominal modification and they cannot be replaced by proforms. The fact that there are three verbs without a Stimulus nominal also provides evidence that verbs can take default agreement; that a clause need not necessarily have an overt NP subject.

I turn now to the second question, if these nominals are not subjects, what are they? In answering this question, it is useful to compare the Experiencer object construction to another common construction: N+V complex predicates (e.g. the combination of the nominal *pi* and the verb *-ni* in the ambitransitive complex predicate *pi -ni* ‘bathe, wash’). Complex predicates involving a combination of a verb and another non-verbal element are common in New Guinea. They have been called ‘verbal adjunct constructions’ in the literature (e.g. Pawley et al. 2000:156), and nominals participating in this construction are sometimes called ‘adjunct nominals’ (e.g. Foley 1986; Donohue 2004) — the terminology I adopt here. As in other New Guinea languages, in Barupu the ‘adjunct’ nominals are not arguments of the verbs they appear with. Whereas true arguments can be full NPs, can be replaced by proforms, or be omitted altogether (see Chapter 6), ‘adjunct’ nominals are never more than a bare nominal,⁴ they cannot be replaced by proforms and they cannot be omitted, see §6.2.6 for more detail. The Stimulus nominals in involuntary state constructions in Barupu share these properties and should also be seen as forming complex predicates with the verb rather than functioning as arguments of it.

This analysis finds support in the literature. Pawley et al. (2000:174), for example, conclude that in Kalam, a Papuan language of Madang Province,

⁴They can however appear with the prominence clitic, see Chapter 6.

Experiencer object constructions are ‘a mixed bag ... in many cases the Condition [=Stimulus] nominal is clearly the subject [this is not the case in Barupu. MC]. In others it is hard to find compelling grounds for choosing between an analysis that treats the Condition nominal as a “funny” Subject and one that treats it as a verbal adjunct within a complex verb’. Similarly, Bugenhagen (1990:183) identifies experiential constructions in Mangap Mbula, an Austronesian language of Morobe Province, in which ‘a body part plus a verb function together as a kind of composite predicate’.

-täipé ‘bad’ There is one root which can appear in an involuntary state construction and as an intransitive verb. In the involuntary state construction it appears with the adjunct nominal *ó* ‘feeling, breath’, to mean ‘feel sad’ (this is one of a small number of verbs which show 3SG.F object marking with a change to the final vowel, see §3.2).

(110) *Ó k-o-täipó.*
feeling RL-3SG.F-bad.3SG.F
‘She is sad.’

(111) *Ó k-o-taipě-ní.*
feeling RL-3SG.F-bad-1SG.F
‘I am sad.’

As discussed in the previous chapter, when this verb is used intransitively, it is one of two verbs that inflect with a coreferential subject prefix and object suffix.⁵

(112) a) *K-o-täipó.*
RL-3SG.F-bad.3SG.F
‘She is bad.’

b) *K-en-taipě-ní.*
RL-1SG.F-bad-1SG.F
‘I am bad.’

⁵The other is *-vóvo* ‘sleep’.

4.2.6 Adjectival verbs

Adjectival verbs all share two equally core functions: predication and noun modification. A subset of them can also modify other verbs. The following sections describe their form and behaviour in each of these three functions. Some words belonging in the class of adjectival verbs are listed in Table 4.7.

Table 4.7 Adjectival verbs

<i>avovo</i>	'white'
<i>néwai</i>	'good'
<i>páko</i>	'big'
<i>bererén</i>	'fast'
<i>nainai</i>	'soft'

These words can be used as predicates as the heads of adjectival clauses (see §6.5.2), where they take the obligatory status and subject inflection, as in (113). When these words are used in this function I will refer to them as adjectival verbs. An example of this usage is shown in (113).

- (113) *K-a-páko.*
 RL-3SG.M-big
 'He is big.'

These words can also be used with no morphology in NPs to modify nouns, as in (114). When these words are used in this function I will refer to them as adjectives. An example of this usage is shown in (114).

- (114) *rau páko nění*
 pig big ISG.F
 'my big pig'

The property of appearing uninflected in noun phrases clearly distinguishes this as a special sub-class of verbs. All adjectival verbs inflect using the Class I paradigm. More discussion of adjectives in noun phrases can be found in section 5.2.

A syntactic distinction between actions and states on one hand and adjectival verbs on the other, is that there is a conjunction *to* which is only used to link clauses headed by adjectival verbs.

- (115) *K-ama-páko to k-ama-pûru-pûru.*
 RL-2SG.M-big and RL-2SG.M-REDUP-fat
 ‘You are big and quite fat.’

Clauses headed by non-adjectival verbs can be coordinated by simple juxtaposition or be conjoined using various conjunctions introduced below (§4.3.7), they cannot be conjoined with *to*.

The other core function of these words, modifying nouns in noun phrases, is a major syntactic feature distinguishing these words from other verbs.⁶ The adjective is found in its root form with no morphology. An adjective cannot take any verbal morphology when found in this position. More adjectives can be added and they are freely ordered with one another; for example, with the addition of *buso* ‘white’ to *rau páko* (pig big), either of the following orders is acceptable: *rau páko buso* or *rau buso páko*.

Adjectives can be further modified for degree. In example (116) the intensifier *aka* ‘real(ly)’ modifies the adjective *páko*, to mean ‘really big pig’.

- (116) *rau páko aka*
 pig big real
 ‘really big pig’

The final function of a sub-set of adjectival verbs is modification of other verbs. A word like *-bererén* ‘fast’ can also be used to modify another verb.

- (117) a) *K-a-bererén.*
 RL-3SG.M-fast
 ‘He is fast.’

⁶There is a marginal non-finite relative clause (NFRC) construction, involving other verbs, which has surface similarities to adjectives modifying verbs, but it turns out to be somewhat different. For example, adjectives are freely ordered with respect to one another but a NFRC must directly follow the noun. See §5.1.3 for details.

- b) *K-a-parara bererén.*
 RL-3SG.M-run fast
 ‘He runs fast.’

In (117b) the root *-bererén* appears after the verb *-parara* ‘run’ in a modifying relationship. It appears in the same position as other non-inflecting words that modify verbs (§4.3.3, below) and it never takes status or subject inflection in this position. Nor can it be further modified for degree by intensifiers in this position.

Adjectival verbs do not encode a change of state. For example, there are two separate, but clearly semantically and phonologically related, roots *-ípo* ‘grow’ and *-ipípó* ‘tall, long’.⁷ The adjectival verb *-ipípó* ‘tall, long’ can be inflected like a verb, as in (118a) and it can modify a noun in a noun phrase as in (118b).

- (118) a) *Ái ino koka k-ere-ipípó k-ere-mé-méme.*
 tree NEG trunk RL-3PL.F-tall RL-3PL.F-REDUP-small
 ‘The trunk of this tree is not tall, it’s small.’ [P-MG:03]
- b) *K-a-kéi-tá-ø ái ipípó.*
 RL-3SG.M-sit-ON-3SG.F tree tall
 ‘He sits on a tall tree.’ [DICT-MF:01]

The non-adjectival verb *-ípo* expresses the change of state notion of ‘growing’, the resultant state of ‘being big’ is expressed with the adjectival verb *-páko* ‘big’. This is shown in the following example.

- (119) *Petapon k-en-e-ma-n-uru bora n-amá-ipo koka*
 flower.sp RL-1SG.M-BEN-2SG.M-1SG.M-rub PURP₁ IRR-2SG.M-grow trunk
n-ama-páko.
 IRR-2SG.M-big

‘I will rub *petapon* petals on you so that you will grow, your body will be big.’ [DICT-PB:01]

The verb *-ípo* ‘grow’ is never found modifying nouns in noun phrases.

⁷These two verbs may have come from the same root originally via reduplication, but there is no evidence that this is a synchronic process — no other verbs appear in alternations like this and synchronically, vowel-initial roots do not undergo reduplication.

There are two verbs that alternate between being used as non-suffixing transitive verbs and to encode a resultant state. They are *-ki* ‘grill, be grilled’ and *-tari* ‘break, be broken’. For example, the verb *-ki* can be used as a non-suffixing transitive verb, as in (120a) and as an intransitive adjectival verb, as in (120b).

- (120) a) *K-â-irai-r-o-re,* *Kapiak* *n-eve-ki*
 RL-3SG.M-say-AG-GIVE-3PL.F BREADFRUIT IRR-2PL.F-grill
n-ě-m-á.
 IRR-1PL-1PL-eat
 ‘He said to them, “Grill breadfruit so we can eat (it).”’ [DC-CA:03]
- b) ... *k-e-ki.* *K-o-ki,* *k-e-p-u-ká* ...
 RL-3PL.M-grill RL-3SG.F-grill RL-3PL.M-3PL.M-pick-TOWARD
 ‘... they grilled (it). When it was grilled they picked (it) off ... ’ [P-MG:03]

These are the only two verbs known to behave like this and they do not appear in noun phrases modifying nouns.

4.2.6.1 Numerals

The numerals *môike* ‘one’, *riêmpin* ‘two’ and another quantifying modifier *prumo* ‘many’ form a sub-class of adjectival verbs. For example, these words can take status and subject inflection and appear as the heads of clauses.

- (121) *K-epi-riêmpin bai n-epí-p-á.*
 RL-1DU-two FUT IRR-1DU-1DU-eat
 ‘When we are two we will eat.’ [CB-JT:01]

Equally these words can appear uninflected in NPs. They differ from other adjectives in not being further modified by degree.

- (122) *rau riêmpin*
 pig two
 ‘two pigs’

The numeral *riêmpin* can also express the cardinal relation ‘second’, as shown in the following example. There is a separate non-inflecting word *nini* for ‘first’.

- (123) *K-e-û(m)a vôva. K-em-âvo.*
 RL-1PL-(1PL)trawl again RL-1PL-hold.3SG.F
 ‘We trawl again. We catch [a crab].’

riêmpin k-e-m-ikoro-wo poro.
 two RL-1PL-1PL-put.in-DOWN canoe
 ‘We put the second (number two) [crab] right down in the canoe.’ [C-MW:03]

Like some other adjectival verbs, these words can also be found uninflected in the post-verbal verb modifying slot. This is shown in the following example:

- (124) *Aro buso beya k-e-kô(p)e prumo vai.*
 people white NEG RL-3PL.M-(3PL.M)go.up many POL
 ‘White people didn’t come in lots.’

K-e-kô(p)e moike-môike, riêmpin k-e-p-aro báru
 RL-3PL.M-(3PL.M)go.up REDUP-one two RL-3PL.M-3PL.M-go.down return
ôro yéi.
 place 3PL.M
 ‘They came in ones or twos and went back down to their place.’ [TP-MN:01]

As this example shows, the numeral *môike* can be reduplicated, *moike-môike*, to function as the distributive numeral ‘one at a time’. This could be a calque from Tok Pisin *wanwan* (one one) with the same meaning.

There is another class of quantifiers, described in 4.3.11 below, that do not inflect and appear in a different slot in the NP to the numerals described in this section. For example, both *rau páko riêmpin* and *rau riêmpin páko* are equally good ways of expressing ‘two big pigs’, although the first one is more common. In contrast, quantifiers have a fixed position after any adjectives, e.g. the quantifier *owu* means ‘some’, and only *rau páko owu* and not **rau owu páko* can express ‘some big pigs’.

Other numbers are formed by combinations of these words, e.g. *riêmpin ra môike* (two one/another one) ‘three’, *riêmpin ra riêmpin* (two one/another two) ‘four’. There are also two phrasal number expressions: *êno parâ môike* (hand side one) ‘five’ and *êno parâ riêmpin* (hand side two) ‘ten’. Further counting can involve toes as well but these are not lexicalised to the same extent.

4.2.7 Copulars

Copulars are described in full in Chapter 6. There are two locational/existential copulars: *-iniá* ‘be at’ and *-bâuni* ‘not be at’. Other copulars are: *-ăvé* ‘be, become’, used in equative and proper inclusion clauses with irrealis status (realis equative and proper inclusion clauses are verbless) and *-aka* ‘resemble’, used to compare two entities. These verbs appear with two arguments but do not take object suffixing and they are treated as a separate class because their clause structure is atypical, see Chapter 6. Another copular, *-iná* ‘name’ has three arguments — the namer, the named and the name. The named argument is marked as an object on the verb, the name is not marked and usually appears after the verb.

4.2.8 Temporal verbs

The class of temporal verbs is very small. It consists of two zero-intransitive verbs which can appear fully inflected in temporal clauses, and uninflected as temporal sentential modifiers. Morphologically, these temporals are a sub-class of verbs. There is also another closed class set of temporals, described in §4.3.1, below.

Table 4.8 Temporal verbs

<i>-úri</i>	‘tomorrow, early the next morning’
<i>-bariri</i>	‘afternoon, yesterday’

In (125) the temporal verb *bariri* ‘yesterday/afternoon’ is inflected like a verb, with default 3SG.F subject agreement, and when combined with the verb *-kae* ‘come’ means ‘getting on for afternoon’.

- (125) *K-o-bari-bariri* *k-o-kae* *yéi* *k-e-no(p)i*
 RL-3SG.F-REDUP-afternoon RL-3SG.F-come 3PL.M RL-3PL.M-(3PL.M)go.along
ôro.
 house
 ‘When it was getting on for late afternoon they went home.’[U-EM:01]

Temporal verbs also function as sentential modifiers to set events in time.

Example (126) shows *bariri* being used to mean ‘yesterday’.

- (126) *Bariri pí k-e-ní(n)i.*
 yesterday water RL-1SG.F-(1SG.F)wash
 ‘Yesterday I washed.’

Time is discussed in more detail in Chapter 9.

A temporal verb can also be the head of an NP modified by a quantifier. In the following example it is in an NP modified by the quantifier *ra* ‘one’.

- (127) *bariri ra*
 afternoon one/another
 ‘one afternoon’

This property clearly distinguishes temporal verbs from other verbs.

4.2.9 Weather predicates

Weather predicates are for the most part just like intransitive clauses. In the case of ‘rain’, the verb is not found in any other contexts.

- (128) *Á k-u-ai.*
 rain RL-3SG.F-raining
 ‘The rain is raining.’

In the next example the verb *-pútu* is an intransitive verb meaning ‘blow’.

- (129) *Pû k-o-pútu.*
 wind RL-3SG.F-blow
 ‘The wind is blowing.’

However, one weather verb, *-plenki* ‘lightning’, is zero-intransitive; it takes 3SG.F subject agreement, like the temporal verbs and there is no cross-referencing nominal in the clause. This is the only word in the language containing an /l/.

- (130) *K-o-ple-plenki.*
 RL-3SG.F-REDUP-lightning
 ‘There’s lightning.’

Very commonly, weather predicates have the NP *bo* ‘place’ as the subject of the clause. The next two examples use the adjectival verbs *-ura* ‘black’ and *-îm* ‘hot’.

(131) *Bo kura.*
 k-o-ura
 place RL-3SG.F-black
 ‘It’s cloudy.’ or ‘The place is black.’

(132) *Bo k-u-îm.*
 place RL-3SG.F-hot
 ‘It’s hot.’ ‘The place is hot.’

The following example is not as transparent in its meaning as the two above.

(133) *Bo k-o-rei.*
 place RL-3SG.F-fall
 ‘There’s thunder.’ (Literally: ‘The place is falling.’)

4.3 Closed word classes

In this section I present the minor word classes with pointers to where more information can be found elsewhere in the thesis. As the discussions below will show, there is a syntactic slot after the verb reserved for words that modify something about the event rather than one of the participants. When words appear in this slot they perform one of the functions of what would be called adverbs in English. However, because words from the two open classes can also appear in this slot, and because some of the words that appear in this slot can also appear in other parts of the clause, there does not seem to be a unified class of adverbs in Barupu. Some of the words that can appear in this post-verbal slot are discussed under semantic labels: temporals; locationals; manner words and intensifiers. Words that appear here but that do not fall neatly under one of these headings are discussed separately in §4.3.5.

4.3.1 Temporals

In addition to the sub-class of verbs with temporal meanings, described in §4.2.8, above, there is also a closed class of temporals which do not inflect like verbs, listed in Table 4.9. Some of these are idiomatic multi-word constructions. The temporal verbs *-bariri* ‘afternoon, yesterday’ and *úri* ‘morning, tomorrow’ share the same functions as the non-inflecting temporals — it is only because of their extra ability to inflect that they were distinguished in 4.2.8. Note that the word *roro* can be used to mean ‘night’ or ‘day’, this is discussed below.

Table 4.9 Temporals

<i>bó</i>	‘first (before doing something else)’
<i>kamá</i>	‘in the meantime’
<i>torua</i>	‘for a long time’
<i>mâre</i>	‘today, now’
<i>roro</i>	‘night’ ‘day’
<i>tatâre</i>	‘day before yesterday’
<i>tora</i>	‘long ago’
<i>tî chá</i> (line head)	‘in the beginning’ ‘first of all’
<i>tî chá nini</i> (line head front)	‘in the very beginning’ ‘very first’

When temporals provide information about the duration of an event or the time of an event with respect to another event, they appear in the post-verbal slot. The particular temporals in the following examples are always found after the verb.

(134) *N-o-ka(m)e* *kamá.*
 IRR-2SG.F-(2SG.F)come meantime
 ‘Come (here) in the meantime.’

(135) *N-o-ka(m)e* *bó!*
 IRR-2SG.F-(2SG.F)come first
 ‘Come (here) first!’

The word *bên* can mean ‘already’ but it is commonly used as a marker of perfect aspect, see Chapter 9.

- (136) *Bió k-a-noi bo táipó bèn.*
 person RL-3SG.M-go place bad.3SG.F already

‘The man has already been to the spririt house.’ (‘He has been initiated.’)
 [DICT-PB:01]

When temporals provide information about ‘temporal location’ as opposed to duration they appear at the very beginning of the clause, as shown in the following examples.

- (137) *Mâre ne=va nainkêpu.*
 n-a-a(n)i-kêpu
 now spell=PRM IRR-1SG.M-(1SG.M)curse-ADV-2PL.M
 ‘Now I’m going to cast a spell on you.’ [ANR-MN:01]

- (138) *Tĩ chá cha=va k-e-m-á-ø.*
 first net=PRM RL-1PL-1PL-make-3SG.F
 ‘First we make a net.’ [P-MB:03]

- (139) *Tora, bĩ mêmí Barupu bá k-e-p-á.*
 long.ago ancestors 1PL PLN fish RL-3PL.M-3PL.M-do
 ‘Long ago, our ancestors caught fish.’ [CF-MN:01]

Two of these words, *tora* ‘long ago’ and *mâre* ‘today, now’ can also modify nouns.

- (140) *K-e-n-á-ke anoku tora mêmí Barupu ra n-en-îrai.*
 RL-1SG.F-1SG.F-want-INTS legend long.ago 1PL PLN one IRR-1SG.F-tell
 ‘I am going to tell one of our Barupu legends from long ago.’ [U-EM:01]
- (141) *Mevôva mâre ó k-o-nepará-i.*
 children now feeling RL-3SG.F-forget-3PL.M
 ‘The children of today have forgotten.’ [P-MG:03]

Some temporals can appear in both clause-initial and post-verbal position. These words indicate temporal location when they appear at the beginning of a clause, as in (142) and (143), and indicate duration when they appear after the verb, as in (144).

- (142) *Bariri k-a-r-aro ôro.*
 afternoon RL-3SG.M-3SG.M-go.down house
 ‘In the afternoon he went home.’ [TP-MN:01]
- (143) *K-e-túrí úri n-e-kô(p)e uka.*
 RL-3PL.M-plan tomorrow IRR-3PL.M-(3PL.M)go.up bush
 ‘They were planning that tomorrow they would go to the bush.’ [ANR-MN:01]
- (144) *Mônrai k-emi-títí roro.*
 singsing RL-1PL-dance night
 ‘We dance all night.’ [U-GX:01]

The word *roro* has a wide range, it appears in two greetings, *roro* ‘goodnight’ and *roro nai* ‘good morning’ (*nai* is an unanalysable form that also appears in the greeting *umo nai* (sun ?) ‘good day’). *Roro* is the basic word for ‘night’.

- (145) *Roro bió prumo n-e-tá.*
 night person many IRR-3PL.M-paddle
 ‘At night, many men will paddle.’ [CF-MN:01]
- (146) *Roro ro kómomi. Roro ya n-em-bóvo-m.*
 night stomach RL-3SG.F-full-1PL night and IRR-1PL-sleep-1PL
 ‘At night, we will be full. Night and we will sleep.’ [CB-JT:01]

However, *roro* is also the basic word for ‘day’.

- (147) *Roro ra, biá buto ra, biá biám k-a-tá k-a-kae bére*
 day one person white one person man RL-3SG.M-paddle RL-3SG.M-come DDIST
parâ, k-a-kae Jayapura.
 other.side RL-3SG.M-come PLN

‘One day a white person, a white man, paddled from the the other side, he came from Jayapura.’ [WM-MN:05]

And as mentioned above, the two temporal verbs; *bariri* ‘afternoon’ and *úri* ‘morning’ are able to be inflected.

- (148) ... *kope kúrinâre.*
 k-o-úri-nâ-re
 then RL-3SG.F-morning-APPL-3PL.F
 ‘... then morning came upon them.’ [WH-RX:03]

4.3.2 Locationals

Words describing the location of an action appear directly after the verb, as in (149).

- (149) *K-ere-ké(r)i-ro-ki(r)é* *ǎrí.*
 RL-3PL.F-(3PL.F)sit-HID-(AG)AWAY inside
 ‘They sat hidden away inside.’ [WH-RX:03]

Locationals can also modify nouns — e.g. *ôro ǎrí* (house inside) ‘inside the house’. Example (150) shows the word *nake* ‘top’ in its locational sense.

- (150) *Má k-u-ĩniá* *nake.*
 child RL-3SG.F-be.at top
 ‘The child stayed on top.’ [U-EM:01]

Example (151) shows this word in combination with *âi* ‘tree’ to mean ‘tree top’ or ‘top of the tree’.

- (151) *K-o-kéi* [*âi nake*].
 RL-3SG.F-sit tree top
 ‘She sits in the tree top.’

This is discussed further in Chapter 5.

Following is a list of the known locationals.

Table 4.10 Locationals

<i>ǎrí</i>	‘inside’
<i>puô</i>	‘outside’
<i>nake</i>	‘top, at the top, up high’
<i>pika</i>	‘at the bottom, down low’
<i>ika</i>	‘side, at the side’
<i>parâ</i>	‘other side’
<i>nini</i>	‘front, in front’
<i>báru</i>	‘returning to the same place’
<i>chá</i>	‘head, at the front’
<i>pa</i>	‘back, behind’

Two words that can function as locationals are members of the open class of nouns: *pa* which is also a body part meaning ‘bottom’ or ‘back’ and *chá* ‘head’.

The locational *níni* ‘in front’ can also be used in a relative temporal sense, e.g. do something before someone else, or stand in front of somebody else. Context is necessary to establish the meanings.

Demonstratives are also found in the slot after the verb where they express notions such as ‘here’ and ‘there’, as discussed in §5.4.

4.3.3 Manner words

Manner words are those words which can appear after the verb and say something about the manner in which an action was carried out. Some examples of manner words are listed here. There can only be one of these in any clause.

Table 4.11 Manner words

<i>tororo</i>	‘badly’
<i>torópo</i>	‘quietly’
<i>kanǎpó</i>	‘for no reason’, ‘in vain’
<i>torón</i>	‘hard’
<i>tirín</i>	‘separately’
<i>rokorapo</i>	‘expertly’

These words appear after the verb.

- (152) *N-o-ké(m)i* *torópo*.
 IRR-2SG.F-(2SG.F)sit quietly
 ‘Take it easy.’

Some of these manner words can modify nouns. For example, in (153), the manner word *kanǎpó* modifies a verb to mean something like ‘for no reason’.⁸

- (153) *K-o-r-aka* *rǒi*
 RL-3SG.F-3SG.F-resemble mushroom
 ‘It’s like a mushroom,
 ino *rǒi=a* *k-o-kôe* *kanǎpó* ...
 NOT mushroom=PRM RL-3SG.F-go.up no.reason
 not a mushroom that just grows for no reason ...’ [TP-MN:01]

⁸This is from a text explaining the correlation between the size of mushrooms found growing in a woman’s rinsed out sago pith and the size of her breasts.

In the next example the same word modifies a noun phrase . In example (154) it means ‘empty’.

- (154) ... *ya pí méri kanǎpó pôn k-u-ĩniá.*
 and water soil empty only RL-3SG.F-be.at

‘... and there is only empty muddy water.’ (Describing the lack of fish in the lagoon after the 1998 tsunami.) [U-GX:01]

As mentioned above, some of the adjectival verbs, including the numerals, can also appear in this post-verbal verb-modifying position.

4.3.4 Intensifiers

Intensifiers can appear after adjectives in noun phrases (see §5.2) to indicate a greater degree of a property, but they can also modify verbs in the post-verbal slot.

Table 4.12 Intensifiers

<i>rewo</i>	‘very’	‘well’
<i>aka</i>	‘really’	‘honestly’

Example (155) shows an NP use of *rewo*.

- (155) *rau páko rewo*
 pig big very
 ‘very big pig’

Example (156) shows this word modifying a verb.

- (156) *Tó kipóri rewo.*
 k-e-ipóri
 breast RL-1SG.F-wrap well
 ‘They wrapped the breast well.’ [FF1-MN:01]

The word *aka* can also modify a noun to mean ‘real’. For example, in narratives involving the supernatural, a person might be referred to as *bió aka* (person true) ‘real person’, to distinguish them from ghosts or demons.

4.3.5 Other modifiers

In this section I present other words that can appear in the post-verbal modifying slot. Two of them can, however, also appear before the verb, after an NP. These words generally have scope over the word or constituent immediately preceding them, but they can have scope over the whole proposition.

Table 4.13 Other verb modifiers

<i>miniá</i>	'too'
<i>pôn</i>	'only', 'just'
<i>unake</i>	'alone'
<i>vôva</i>	'again'

The word *miniá* can appear after a verb meaning something like 'too' or 'as well', as in (157).

- (157) *Tata n-e-ã(n)ó miniá.*
 basket IRR-1SG.F-⟨1SG.F⟩weave too
 'I'll weave a basket too.' (As well as doing something else.) [U-GX:01]

With plural subjects, this word means something like 'together'.

- (158) *N-e-ké(m)i miniá.*
 IRR-1PL-⟨1PL⟩sit too
 'We'll sit together.' [CB-JT:01]

The word *pôn* 'only', 'just' can also appear after a verb or after an NP. In (159) and (160), *pôn* has an exclusive function: it singles out the referent of the NP as the only one of its kind, or the only one involved in the action, as in the following examples.

- (159) *Něna pôn mararacha n-ana-ko.*
 1SG.M only croton IRR-1SG.M-get.SGO
 'Only I will get the croton.' [DICT-PB:01]
- (160) *Bió biám pôn a bé n-e-p-á, bóm bâun.*
 person man only thing DPROX IRR-3PL.M-3PL.M-do woman not.be
 'Only men will do this, not women.' [DICT-PB:01]

The other function of *pôn*, while it still appears after a noun phrase, is an emphatic or focussing one, like the use of ‘just’ in English. This is shown in the following examples, where it seems to be saying more about the manner of carrying out the action than describing anything in particular about the participant.

- (161) *Chá ma pôn k-er-i-a-r-u.*
 head nape only RL-3SG.F-BEN-3SG.M-3SG.F-shave
 ‘She just shaved the back of his neck.’

Íne pé pôn k-o-bere-tá-ka.
 eye water only RL-3SG.F-drip-ON-3SG.M
 ‘Tears just dripped onto him.’ [NSC1-CA:03]

- (162) *Arápe pôn n-o-r-á?*
 what only IRR-3SG.F-3SG.F-do
 ‘Just what will she do?’ [U-EM:01]

Pôn can also appear after the verb, where it focusses attention on the action, as in (163) and (164).

- (163) *K-o-ro pôn.*
 RL-3SG.F-cry only
 ‘She just cried.’ [NSC1-CA:03]

- (164) *Nění bo n-en-ăvé rau mô,*
 1SG.F TVF IRR-1SG.F-be pig mother
 ‘As for me, if I were a mother pig,
n-e-rǒ(n)í pôn réi ărí.
 IRR-1SG.F-(1SG.F)stand only fence inside
 ‘I’d just stand inside a fence.’ [MP-EM:01]

The word *unake* ‘alone’, can appear in various positions in the clause (see Chapter 6) but it always has the subject in its scope.

- (165) *Yá unake tí chá k-a-noi é.*
 3SG.M alone line head RL-3SG.M-go DPROX
 ‘He alone, he was the first to go there.’ [DC-CA:03]

- (166) *Bió bóm unake má méntan k-u-âvo.*
 person woman alone child small RL-3SG.F-hold.3SG.F
K-o-kéi-nâ-ø ôro.
 RL-3SG.F-sit-APPL-3SG.F house
 ‘One woman alone had a small baby, so she stayed home with it.’ [FF1-MN:01]

Unake can also be found post-verbally, where it still has scope over the subject.

- (167) *K-a-kéi unake.*
 RL-3SG.M-sit alone
 ‘He sat by himself.’ [ANR-MN:01]

The word *vôva* ‘again’ is found after the verb, as in (168).

- (168) *Úri, n-o-tá vôva.*
 tomorrow IRR-3SG.F-paddle again
 ‘Tomorrow she will paddle again.’ [CB-JT:01]

4.3.6 Particles

The particles are listed in Table 4.14. The particles typically express modal or aspectual distinctions. The modal forms are discussed in Chapter 9. Particles are toneless and stressless. The polysyllabic particles are pronounced with a slight emphasis on the second syllable.

Table 4.14 Particles

<i>bo</i>	truth value focus	clause-initial
<i>to</i>	content question	clause-initial
<i>era</i>	polar question	clause-initial
<i>tara</i>	irrealis polar question	clause-initial
<i>beya</i>	negative	pre-verbal
<i>vai</i>	polarity tag	clause-final
<i>biaka</i>	‘should’	pre-verbal
<i>nia</i>	‘often’ ‘still’	pre-verbal

The particle *bo* has a truth-value focussing function — in realis clauses it counters the supposition that something might not be true. For example, in the following two examples one has *bo* and the other does not — one explanation of the

difference between these two clauses offered by one group of speakers is that in (169b) the speaker really went and one speaker elaborated: ‘*she didn’t change her mind.*’

- (169) a) *K-e-no(n)i* *Mumuru.*
 RL-1SG.F-⟨1SG.F⟩go.along PLN
 ‘I went to Mumuru.’
- b) *Bo k-e-no(n)i* *Mumuru.*
 TVF RL-1SG.F-⟨1SG.F⟩go.along PLN
 ‘I went to Mumuru.’

However, this particle is also commonly found in irrealis clauses that are in an adverbial coordination with another clause; this is discussed in Chapter 10.

4.3.7 Conjunctions

There are two nominal conjunctions: *rê-* used to conjoin singular participants and *avé-* used to conjoin plural participants. Conjunctions take object suffixes referencing either the combined person and number of the two conjoined NPs, or only the second conjunct (see §5.7).

There are four clause-linking words which can be used to express modifying relationships between two clauses (see §10.3), and two clause-linking words that link simultaneous or sequential events (see §10.2) — these are set out in Table 4.15. The final conjunction, *to*, conjoins two clauses headed by adjectival verbs. An example of this was given in (115), above. Clause-linking conjunctions are toneless and stressless but the disyllabic conjunctions *bora* and *kope* are pronounced with slight emphasis on the second syllable.

Unlike in many Papuan languages, there is no morphological switch-reference.

Table 4.15 Conjunctions

<i>bora</i>	‘future purpose’
<i>ke</i>	‘immediate purpose’
<i>ta</i>	‘reason’
<i>ra</i>	‘but’
<i>ya</i>	‘and’
<i>kope</i>	‘then’
<i>to</i>	‘and’

4.3.8 *bêku* ‘REFlexive’

The word *bêku* has two functions: the first is a reflexive (170a), the other is an intensifier. Reflexives are discussed in more detail in §6.2.2.1.

- (170) *K-en-yarǎ-ní nĕní bêku.*
 RL-1SG.F-see-1SG.F 1SG.F REFL
 ‘I see myself.’

4.3.9 *beka* ‘like’

The word *beka* is toneless but, in common with the conjunctions and particles, there is a slight emphasis on the second syllable. This word can be used in a similar way to ‘like’ in English.⁹ For example, it can be used for comparison, as shown in (171).

- (171) ... *eru pĕ=va k-e-p-á beka taveke.*
 bush.tobacco leaf=PRM RL-3PL.M-3PL.M-do like tobacco
 ‘... they smoked bush tobacco leaves like tobacco.’ [TP-MN:01]

But the two major functions of the word *beka* in narratives are:

- as a ‘discourse-deictic’ — it refers to sections of text or speech, often in combination with a demonstrative. This is discussed in §5.4.
- as a complementiser — it is used to introduce reported speech or thought and sometimes direct speech as well. This is discussed in Chapter 10.

⁹And *olsem* in Tok Pisin.

4.3.10 Demonstratives

Barupu has eight demonstratives which make distinctions on three different levels: spatial, discourse referential and epistemic. The first distinguishes between three degrees of proximity, the second distinction marks whether the referent has been mentioned before and the third establishes whether the referent is real or hypothetical. All of these demonstratives can function as locationals as well as modify noun phrases. They also help form relative clauses and impart some temporal information. The forms and function of demonstratives are described in §5.4.

4.3.11 Quantifiers

There are three quantifiers which appear before possessive pronouns inside the NP: *pîn* ‘some (of)’; *owu* ‘some (of)’ and *ra* ‘one, another (of)’. The position and function of NP-internal quantifiers are described in §5.5. There is another quantifying word *nóte* ‘all’, that is found after the NP it is quantifying — evidence for this is that it appears after possession and demonstratives. This word cannot appear after the verb.

- (172) *Rau yá nóte k-eni-mama-i.*
 pig 3SG.M all RL-1SG.F-look.after-3PL.M
 ‘I look after all his pigs.’

- (173) *Aro=émo, yéi nóte bió béi=a k-ě-p-á.*
 people=DREF 3PL.M all person meat=PRM RL-3PL.M-3PL.M-eat
 ‘Those people, all of them eat men’s flesh.’ [DICT-PW:01]

Nóte can appear inside an NP, that is, before a possessive or a demonstrative — but then it is no longer interpreted as a quantifier. In (174), below, *nóte* appears between a modifier and a determiner and it takes on the intensifier function of modifying *páko* for degree. Note that the subject of the verb is singular.

- (174) *Rau páko nóte nění k-a-rái.*
 pig big all 1SG.F RL-3SG.M-die.SGS
 ‘My altogether huge pig died.’

4.3.12 Greetings, interjections and address terms

There are four greetings which are used at specific times of the day. They can be used on their own or with *néwai/néman* ‘good’. Typically you will be met by a plain greeting and the expected response will be with *néwai/néman*, except in the case of ‘good night’ which is always plain.

The time when morning turns into day depends on when the sun (*umo*) is judged to be sufficiently high (usually about 10 or 11 am); people commonly look up at the sky before deciding which greeting to use.

Table 4.16 Greetings

<i>roro nai</i>	‘good morning’
<i>umo nai</i>	‘good day’
<i>bariri</i>	‘good afternoon’
<i>roro</i>	‘good night’

Greetings can also be found with a suffixing morpheme indexing the addressee, as in the following example.

- (175) *Roro nai-nâ-mu.*
 morning-APPL-2SG.F
 ‘Good morning to you.’

A common interjection expressing sympathy is *merěrá-*. This gets inflected for object. For example, inflected for 2SG.F, *mererã-mú*, it means something like ‘Poor you!’ (Tok Pisin *trangu* or *sori tru*). Another inflecting interjection is *anié-*. Inflected for 2SG.F, *anié-mu*, it means ‘shame on you’.

Another, non-inflecting, interjection is *eson-ke ~ eton-ke* (*-ke* is an intensifier suffix) meaning something like ‘yes that’s right’ (Tok Pisin *em nau*). Another interjection is *yake*, used when indicating that you’ve got enough of something. This word is also commonly used as a discourse organiser, signalling the end of an episode (Tok Pisin *inap* or *orait*).

‘Yes’ *áwo* is quite simple. ‘No’ *-bâuni* is more complex — the form is morphologically a verb and it performs many functions. On its own it is the interjection ‘no’. With the intensifier suffix *-ke* it means ‘not yet’ (§9.3.6). Inflected with realis and 3SG.F it is the non-existential locational copular ‘not be at’ (§6.5.3). Inflected like this and with a participant-adding morpheme it functions as a negative possessive predicate ‘not have’ (§6.5.3). Inflected with realis and with the hither suffix *-kie* it appears in a serial verb construction where it means ‘done to completion’ (§7.1.3), and finally, with irrealis marking it helps form a counterfactual conditional (see Chapter 10). A clearly related interjection is *bâuve-ke* which can mean something like ‘Who knows?’ or ‘Maybe’.

Chapter 5

Noun phrases

A fully expanded Barupu NP has the following structure:

Noun (Nominal/Locational/Verb) (Adjective (Intensifier)) (RC) (Quantifier) (Determiner)

Figure 5.1 Ordering of elements in the noun phrase

The head of the noun phrase identifies the real-world or abstract referent of the NP. Nothing can come before the head. The head can be simple (i.e. made up of a single noun) or compound (i.e. made up of two nouns or a noun and a verb or a noun and a locational). This is described in §5.1.

The ordering of elements after the head is fixed. The head is optionally followed by adjectives, as defined in Chapter 4. Adjectives describe properties of the referent such as size, shape, colour and so on. Theoretically, any number of adjectives can appear here but more than one is rare. An adjective can be optionally modified for degree by an intensifier.

The Determiner position can be filled by: a possessive pronoun; a demonstrative or a quantifier. Demonstratives and possessive pronouns cannot appear in the same NP and are both always definite. A quantifier is indefinite when used in the Determiner position, but it can also precede a possessive or demonstrative Determiner

in which case it is ‘partitive-definite’ (Givón 2001a:4), see §5.5 below.

It is possible for NPs to appear without a head. In these cases the NPs are made up of an adjective or quantifier which takes as its understood referent a participant whose identity is recoverable from context and/or verb agreement (see §5.2 and §5.5). Nouns can also be modified by clauses, which appear before the Determiner; their structures are discussed in §5.6.

This chapter begins by introducing compound heads. Following this, each of the positions after the head and their functions in the NP will be described. It is rare to find fully expanded NPs in natural discourse. More common are NPs with one or two elements. Nominal conjoining is described in §5.7.

5.1 Compound heads

There are three different types of compound head. The first is a very tight-knit compound where two nouns combine to confer age, gender and number information on each other. The compound is non-interruptible; any further modification appears after, and has scope over, the whole. The second type of compound head involves two nouns which are in a looser relationship with one another — each can be independently modified. In this second type, two nouns may be apposed which have a part/whole or possessive relationship, or a noun can be compounded with a locational. The final type of compound head involves a noun and a verb root. The verb typically describes something about the manner in which the entity referred to by the noun was created, its resultant state or what it can be used for. This construction is also non-interruptible but it shows some agreement phenomena which are characteristic of clausal relationships.

These constructions all provide basic lexical items which have the same distribution in the NP and share that distribution with simple nouns. Although the

behaviour of tone on compound heads is not yet fully understood, it is the case that there is very little tone sandhi. Each element of a compound retains its own stress and tone, although the rightmost element has more prominence in terms of duration and pitch realisations.

5.1.1 Tight compounds

Tight compounds are non-interruptible. The main function of these constructions is to specify the gender, number and age of otherwise unspecified roots.

- (176) a) *bió biám*
 person man
 'man'
- b) *aro bóm*
 people woman
 'women'
- c) *má bóm*
 child woman
 'girl' 'female child'

On one hand it would be possible to argue that in the above examples gender is being conferred on the non-gender-specific human nouns *bió* 'person', *aro* 'people' and *má* 'child' by the nouns *bóm* 'woman' and *biám* 'man'. However, because the nouns *biám* and *bóm* can also be used on their own to mean 'man' and 'woman' it could equally be argued that in (176b) number is being established on *bóm* 'woman' with the suppletive plural *aro*, while in (176c) age could be being conferred on *bóm* with *má* 'child'. It is thus not entirely clear that one of these elements is undeniably the head of the compound. A better alternative might be to posit something like (177), where neither is the head but both equally contribute.

- (177)
- N
- / \
- root root

The set of nouns referring to human adults is somewhat unstable.

Synchronically, the nouns *aro* 'people', *bió* 'person', *biám* 'man' and *bóm* 'woman' form a symmetrical system, as shown in Table 5.1.

Table 5.1 Current system

<i>biám</i>	'man'	cf. <i>ám</i> 'husband', <i>yá</i> 3SG.M
<i>bóm</i>	'woman'	cf. <i>óm</i> 'wife', <i>bó</i> 3SG.F
<i>bió</i>	'person'	
<i>aro</i>	'people'	

But, there is one further human noun, *biá*, which sometimes means 'women' or 'woman', sometimes means 'men' or 'man' and sometimes just 'people' or 'person' and has to be further modified by one of the other human nouns to indicate gender. There may have been an earlier system something like the one shown in Table 5.2. The form *aro* 'people' was perhaps borrowed from somewhere, making the system unbalanced.

Table 5.2 Possible earlier system

<i>biám</i>	'man'
<i>bóm</i>	'woman'
<i>bió</i>	'?person' or '?women'
<i>biá</i>	'?people' or '?men'

The nouns *mó* 'mother' and *aka* 'father' can be used to specify gender for animals, and baby animals are referred to as such with *má* 'child'. In these constructions it is clearer that the animal is the head of the compound, being modified by the other nouns which provide gender and age information.

- (178) a) *rau mó*
 pig mother
 'mother pig' 'female pig'
- b) *rau aka*
 pig father
 'father pig' 'male pig'
- (b) *aimâna má*
 dog child
 'puppy'

Any further modification of compounds like this must modify the whole — for example, *bió bóm páko* (person woman big) ‘big woman’, not **bió páko bóm*; *aimâna má páko* ‘big puppy’, not **aimâna páko má*.

The noun *má* ‘child’ is also used for young trees. Here, however, an adjective, *târe* ‘new, alive, raw’, comes between the two nouns:

- (179) *ûram târe má*
 fruit.sp new child
 ‘*uram* sapling’

The form *târe má* appears to be a frozen expression and not the result of a productive process. A bigger than average sapling is still modified after *má* (e.g. *ûram târe má páko* ‘big *uram* sapling’).

Both elements of a tight compound retain their original tone, but the left-hand noun is somewhat reduced phonologically (vowels are shortened and consonant lenition is common). This has an effect on the realisation of tone on the first element. For example, the word *má* ‘child’ has high tone. As described in §2.4, there is no distinction between H and LH on monosyllables; H-toned monosyllables can sometimes be realised with a rising pitch. When *má* is the left-hand noun in a tight compound, as in *má biám*, its vowel is short and the tone is realised as a simple high pitch with no perceivable rising. When *má* is the right-hand noun, as in *aimâna má*, its vowel is long and the tone can be realised with a rising contour.

5.1.2 Loose compounds

Loose compounds are exemplified in (180a - f).

- (180) a) *êno pé*
 hand leaf
 ‘finger’
 b) *âi ú*
 tree offshoot
 ‘tree branch’

- c) *pí ú*
water offshoot
'rivulet'
- d) *rú ru*
bird egg
'bird's egg'
- e) *nâkí ã*
dog excrement
'dog shit'
- f) *áiró puru*
beadfruit bundle
'bundle of breadfruits'

In this construction the nominals express part/whole or possessive relationships (English equivalents might use 'of', e.g. 'egg of a bird').

These compounds are called loose compounds because the first noun can be independently modified by an adjective. For example: *âi páko ú* (tree big branch) 'branch of a big tree', and *áiró páko puru* 'bundle of big breadfruits'. If modification appears after the compound then it has scope over the whole: *áiró puru páko* 'big bundle of breadfruits'; *âi ú páko* 'big tree branch'. Quantifiers and determiners such as demonstratives and possessive pronouns, as well as relative clauses, always appear after these compounds.

The behaviour of tone on these looser compounds is the same as that found on the root compounds. The behaviour of tone is thus not a defining factor between the two types of nominal compound heads. The major defining factors appear to be semantic function and interruptibility.

Nouns can also be compounded with locationals in loose compounds to express similar possessive or part/whole relationships, as was described in Chapter 4.

- (181) *ôro íka*
house side
'side of a house'

5.1.3 N+V compounds

The final compound head is made up of a noun and a verb root. In this construction the verbs typically provide factive, resultative and instrumental information about a noun. The factive construction is where the entity is brought into existence by the action, as shown in (i) & (ii) below. The resultative describes the resultant state of an entity after the action has taken place, as in (iii), (iv) & (v). The instrumental expresses the relationship (*N is used for V*), as in (vi) & (vii).

Table 5.3 Some NFRCs

i	<i>ora buá</i>	(bark.bucket sew)	'sewn bark.bucket'
ii	<i>au trai</i>	(thing say)	'story/remark'
iii	<i>ôí ráiví</i>	(sago fry)	'cooked sago'
iv	<i>bió rái</i>	(person die.SGS)	'dead person'
v	<i>bo tâura</i>	(place mow)	'mown grass'
vi	<i>bióte tá</i>	(oar paddle)	'wooden spoon, flipper'
vii	<i>âi rati poi</i>	(stick jelly stir)	'stick for stirring sago jelly'

This process is not highly productive. The combinations of nouns and verb roots only ever refer to habitual relationships between things and actions. For example, in (iii) *ôí* is the generic term for sago, but it is also the specific term for the flat sago pancake eaten at nearly every meal. The root *-ráiví* is the verb that describes cooking in a pot or pan (as opposed to straight over the fire), so together *ôí ráiví* also refers to the pancake, since it is the result of cooking sago in a pan. This construction is used if you especially want to contrast this type of sago with any other type. Similarly, the combination in (vi) can be used to describe a flat spoon used for stirring but it is also the name of the flippers of turtles; essentially it describes any oar-like thing commonly used in a paddling-type motion.

Two intransitive verbs ('die' and 'bad') are found in this construction modifying their subjects, but no other intransitive verbs (e.g. **rau úte* 'walking pig', *rau kéi* 'sitting pig'). This kind of modification must be made with finite relative clauses (see §5.6). Nor are suffixing transitive verbs found in this construction (e.g.

*rau ti (pig shoot) ‘shot pig’).

There is nothing actually marking the verbs in this construction as non-finite. The only indication of non-finiteness is their lack of mood and person marking and their presence in the noun phrase.

The verb *-täipé* ‘be bad’ appears in this construction and when it does it must appear with object inflection marking the person and number of the noun it is modifying. This verb normally takes a co-referential subject and object prefix.

- (182) a) *Aro k-ere-taipě-ré.*
 people RL-3PL.F-bad-3PL.F
 ‘Those women are bad.’
- b) *Ne taipě-ré k-a-rívó.*
 magic bad-3PL.F RL-3SG.M-hear
 ‘He knows about bad magics.’ [DICT-PW:01]

An NP head made up of a noun and a verb is non-interruptible — any further modification must occur after it (see §5.2.2). On the surface this construction strongly resembles that of nouns modified by adjectives. In §5.2.2, after a discussion of adjectives, I will show how they differ.

5.1.4 Combinations of compounds

Some complex compounds have been recorded, such as the following, in which the compound *bió kûro* (person deep) is a common lexical item for ‘demon’, and the compound *âi nake* (tree top) is also a common lexical item, ‘tree top’.

- (183) *bió kûro âi nake*
 person deep(=buried) tree top
 ‘tree top devil’ [DICT-PW:01]

5.2 Adjectives

The first position after the head of an NP is the adjective position. Words found in this position can describe inherent properties of the head such as size or colour. They

are also used to ascribe subjective value judgements like ‘good’, as well as relative situations in space, such as ‘near’ and ‘distant’. This is also where the ordinal numerals are found. As discussed in the previous chapter, numerals can be distinguished from other quantifiers primarily by their position in the NP and their ability to inflect like verbs.

As described in section 4.2.6, most of the words which appear in this position are morphologically a sub-class of verbs. Without any derivation they can modify nouns in a noun phrase or appear as the head of a main clause. Not all the words found in this slot of the NP have exactly the same characteristics, however. For example, some members of the class of manner words (defined in the previous chapter as those words that do not inflect and that appear after the verb, modifying the verb) are also available for use in this position. Numerals are also morphologically verbs but they differ from other adjectival verbs in that they cannot be modified for degree. Some examples of the words found in the adjective slot are given in Table 5.4.

Table 5.4 Some adjectives

adjectival verbs		
<i>páko</i>	‘big, much’	dimension, quantity
<i>ririvá</i>	‘long, distant’	dimension, distance
<i>kukén</i>	‘short, near’	dimension, distance
<i>méntan</i>	‘small, not much’	dimension, quantity
<i>târe</i>	‘new, fresh, alive’	
<i>tororo</i>	‘slippery’	
<i>buso, avovo</i>	‘white’	colour
<i>ura, roro</i>	‘black’	colour
<i>opo</i>	‘yellow’	colour
<i>bumbûm</i>	‘blue’	colour
<i>aipetâre</i>	‘green’	colour
<i>briri</i>	‘red, bright’	colour
<i>néman, néwai</i>	‘good’	value
<i>totopo</i>	‘evil’	human propensity
numerals		
<i>môike</i>	‘one’	quantity
<i>riêmpin</i>	‘two’	quantity
<i>prumo, maumau</i>	‘many’	quantity
manner words		
<i>rokorapo</i>	‘expert, expertly’	
<i>kanăpó</i>	‘empty, in vain, for no reason’	

Some adjectives are quite polysemous and can describe different properties, depending on the meaning of the noun they are modifying. For example, if the word *ririvá* ‘long’ modifies a discrete object with the possibility for dimension like *mini* ‘snake’, as in *mini ririvá*, then its most probable meaning is ‘long’. If, however, it modifies a somewhat indeterminate noun like *bo* ‘place’, as in *bo ririvá*, then the most normative interpretation is ‘distant’.

Non-numeral adjectives can subsequently be modified by the intensifiers *aka* ‘really’ and *rewo* ‘very’. Any more than two adjectives is very rare, but two is quite common. Some examples of nouns modified by adjectives and intensifiers follow.

- (184) a) *ái koka páko rewo*
 tree trunk big very
 ‘a very big tree trunk’ [DICT-PW:01]
- b) *Mómú rau mō pepana aka rewo.*
 2SG.F pig mother strong really very
 ‘You are a really very strong mother pig.’ [MP-EM:01]

An adjective can also appear in an elliptical NP where the referent of the head recoverable from immediate context, as shown in the text fragment below. The modifiers are *târe* ‘new, alive, raw’ (unsmoked in this context) and *ura* ‘black’ (from being smoked).

- (185) *Bariri nâkí taveke târe, ura, írí k-a-r-o-a yá. Cha*
 afternoon dog tobacco new black seed RL-3SG.M-3SG.M-give-3SG.M 3SG.M AT
Menriri taveke írí k-a-poro-ke, târe k-a-tí. Ura
 PN tobacco seed RL-3SG.M-wrap-INTS new RL-3SG.M-tie.up black
k-a-róró k-a-r-á.
 RL-3SG.M-roll RL-3SG.M-3SG.M-do.

‘In the afternoon the dog-spirit gave him fresh tobacco, dry [tobacco] and seeds. Cha Menriri put away the tobacco seeds and tied up the fresh [tobacco]. He rolled up and smoked the dry [tobacco].’ [FF1-MN:01]

The identities of the heads are only recoverable from the immediate context, preferably no more than one clause away.

An example of the numeral *riêmpin* ‘two’ in the adjective slot is given in (186).

- (186) *Áuká rápi riêmpin bó n-ere-putu-pûtu.*
 shoulder gooseflesh two 3SG.F IRR-3PL.F-REDUP-swollen
 ‘Her two armpits will be very swollen.’ [DICT-PW:01]

An example of the manner word *kanăpó* ‘empty, in vain’ in the adjective slot is given in (187).

- (187) *Ôro kanăpó pôn k-u-îniá.*
 village empty only RL-3SG.F-be.at
 ‘There was just an empty village.’ [U-EM:01]

5.2.1 Reduplication

Some adjectives can be reduplicated to indicate gradations of the property.

Reduplication indicates a greater degree of the property, e.g. *nó bri-briri* (blood REDUP-red) ‘very red blood’. Some, such as *néman* ‘good’, however, are always modified by an intensifier. There is no way of predicting whether a consonant-initial adjective will be available for reduplication or not. Vowel-initial adjectives, such as *aipetâre* ‘green’, do not reduplicate due to a language-wide ban on reduplicating vowel-initial words.

Reduplication is also used in forming superlatives. In Barupu, there are two gradations of superlative: ‘biggest’ and ‘next biggest’. The superlative is formed with the suffix *-ki*¹ on an adjectival verb, e.g. *má páko-ki* ‘biggest (oldest) child’. The meaning, ‘next biggest’, is achieved by reduplicating the adjective and adding *-ki*, e.g. *má páko-páko-ki* ‘middle or next biggest child’.

5.2.2 Adjectives vs. N+V compounds

There is an obvious similarity between adjectives modifying nouns and the N+V compounds described above (both involve non-finite verbs) but the similarity is only

¹This is a multi-purpose morpheme described in full in Chapter 7.

on the surface. There are four main differences.

First, an N+V cannot be further modified for degree. For example, it is not possible to say something like **ôî râivî aka* ‘really fried sago’. This could only be said with a finite relative clause using an intensifier *rewo* ‘well’ (e.g. *ôî [bé k-o-râivî rewo] bé* ‘the sago she cooked well-done’, see §5.6).

Related to this is that while verbs in N+V compounds can be reduplicated, reduplication indicates distributive or iterative aspect, not degree. For example, *aro viri-vîrî* (people REDUP-dead) means many dead people all over the place, not very dead people.² There is no superlative construction on N+V compounds.

Second, there can be only one V in an N+V compound and it is not freely ordered with regard to an adjective. The compounded verb must appear next to the noun. For example, *ora buá páko* ‘big sewn basket’, not **ora páko buá*. In contrast, there can be more than one adjective and adjectives are freely ordered with respect to one another, although an indication of the special status of numerals is that they do tend to come after other adjectives.

Third, a verb in a compound can never subsequently stand in for the head in an unheaded NP.

Finally, according to the criteria introduced in Chapter 4, the verbs found in the compound construction are non-adjectival; clauses headed by these verbs cannot be conjoined with *to*.

²The singular form cannot be reduplicated: **bio ráirái* ‘very dead person’. Further evidence that this verb is not an adjectival verb ‘be dead’ is that the way to describe someone as dead is with the verb ‘die’ plus the perfect particle *bên*, e.g. *Aka yá k-a-rái bên* (father 3SG.M RL-3SG.M-die.SGS already) ‘His father is dead.’ (‘His father has died.’)

5.3 Possession

Possession is always formed with a possessive pronoun in the determiner position. Barupu has only one set of pronouns which do not change their form in their different functions (see §4.1.1.1). A possessive pronoun is identical in form to a personal pronoun. The possessive pronoun can be optionally followed by an NP specifying the identity of the possessor, as in (188), below. This combination of the pronoun plus possessor NP is called the possession complex.

- (188) *ôro yá Cha Charlie*
 house 3SG.M AT PN
 'Charlie's house'

In the above example the possession complex is made up of the pronoun *yá* 3SG.M followed by an NP headed with a proper name. Recursive possession is formed by stacking possession complexes one after the other, as in (189), below.

- (189) *Ae! Tó bó óm něná bé.*
 EXCL breast 3SG.F wife 1SG.M DPROX
 'Hey! This is my wife's breast.' [FF1-MN:01]

5.4 Demonstratives

Barupu has five basic demonstratives, some of which have free and clitic variants. Three are primarily spatial; they indicate three distances from the speaker or deictic centre. The proximal form is also used to express the temporal notion 'now'. In addition to the spatial demonstratives, there is a tracking demonstrative which refers to things that have been mentioned before, and what I will call an irrealis demonstrative which may occur in negated, questioned or hypothetical clauses, as well as in declarative clauses when it points to imaginary/unreal objects or places.

The tracking and irrealis demonstratives replace the spatial ones where appropriate. Tracking is a very common function of demonstratives

cross-linguistically, and it is not unusual to find dedicated forms for this function (Anderson and Keenan 1985; Himmelmann 1996; Dixon 2003). Irrealis demonstratives are not as common, although they are found in Austronesian languages, e.g. in the Micronesian language Trukese (Anderson and Keenan 1985:299), where they often perform something like an evidential function.

As will be shown below, demonstratives can be used adnominally and they can also appear in the verb modifying slot. As adnominals they can modify any common noun (not pronouns or proper names). They cannot be used pronominally to mean something like ‘this one’, instead they must combine with the generic noun *a* ‘thing’. Demonstratives can also appear after the verb in the regular slot for verb modifiers and provide locational and/or temporal information. In combination with *beka* ‘like’, the tracking and irrealis demonstratives can be used to refer to sections of narrative and direct speech. Himmelmann (1996:224) calls this use ‘discourse-deictic’. The demonstratives also play important roles in verbless clauses (§6.5.1) and relative clauses (§5.6).

The demonstratives are summarised in Table 5.5. Some of the sets show variation between a consonant-initial and a vowel-initial form. Except for the proximal, the vowel-initial forms cliticise to the preceding word. For the most part the variation appears to be free but there is some difference in distribution in the forms for the proximal. This is discussed below.

Table 5.5 Demonstratives

spatial	<i>é, bé</i>	DPROX
	<i>boró</i>	DMID
	<i>ére, bére</i>	DDIST
tracking	<i>émo, bémo</i>	DREF
irrealis	<i>éro</i>	DIRR

5.4.1 *é/bé* — DPROX

The basic proximal demonstrative is *bé*. It can be used adnominally, as shown in the following examples from the Barupu dictionary. The first example is from the definition of the nominal conjunction *rê* ‘and’. In this example *bé* is deictic in that it refers to the word *rê* which is printed on the page just above the definition.³

- (190) *Awó bé k-o-r-ikoro-r-î-ø miniá au îrai owu.*
 name DPROX RL-3SG.F-3SG.F-put.in-AG-WITH-3SG.F too thing say some
 ‘She puts this word in together with some other words.’ [DICT-MM:01]

The next example is also from the dictionary but it is in reported speech from an example sentence. This example shows one of the metaphorical temporal uses of *bé* — the vowel-initial form of the proximal demonstrative, *é*, can also be used in the verb modifying slot to mean ‘now’, this is discussed below. Even though it may be daytime at the moment of utterance and ‘this moon’ may not be visible, it can be taken to always have current reference, e.g. this year, this week.

- (191) *Cha Vava k-â-irai beka*
 AT uncle RL-3SG.M-say like
 ‘Uncle said that
- ura bé n-a-rei ya bo táipó nīniánāmi.*
 moon DPROX IRR-3SG.M-fall then place bad.3SG.F IRR-3PL.M-be.at-APPL-1PL
 next month (after this moon falls) they will initiate us.’ [DICT-PW:01]

Bé can also be used as a locational — (192) is a straightforward example of conversational use.

- (192) *N-o-ka(m)e bé!*
 IRR-2SG.F-(2SG.F)come DPROX
 ‘Come here!’

The next two examples are from direct speech quoted in narratives. When demonstratives are used as locationals in narratives, it is not uncommon for them to

³The examples taken from the dictionary are from written sources — I have regularised the spellings used in the dictionary entries to reflect the spellings used in this thesis.

be followed by an NP identifying the location, e.g. *pita* ‘down below’ in example (193) and *erôra* ‘garden’ in (194).

(193) *Něni pôn unake n-e-ké(n)i-para-ma bé, pita.*
 1SG.F only alone IRR-1SG.F-(1SG.F)sit-UNDER-2SG.M DPROX down.below
 ‘And me, I’ll just sit by myself under you here down below.’ [U-EM:01]

(194) *Úri ya n-epi-ka(p)e bé, erôra.*
 tomorrow then IRR-1DU-(1DU)come here garden
 ‘Tomorrow we’ll come back here to the garden.’ [TP-MN:01]

Other locational words (see Chapter 4) can also appear between verbs and location NPs, such as *báru* ‘return’ in the following example .

(195) ... *kope n-ere-ruworo báru rikeren.*
 then IRR-3PL.F-smoke return grill
 ‘... then they smoke it back on the grill.’ [DC-MM:03]

The vowel-initial form of the proximal demonstrative is *é*. It is never used adnominally. It is only ever found following a verb and while it can mean ‘here’, it can often also be interpreted as ‘now’. The consonant-initial form *bé* does not ever seem to have this temporal meaning. Example (196) would frequently occur when I would arrive to see people and other people would be trying to hurry them up.

(196) *K-o-kae k-o-kéi é.*
 RL-3SG.F-come RL-3SG.F-sit DPROX
 ‘She’s come, she’s sitting here/now.’

The next example is a ubiquitous introduction to narrated stories.

(197) *K-a-n-á au îrai n-anâ-irai é.*
 RL-1SG.M-1SG.M-want thing say IRR-1SG.M-tell DPROX
 ‘I’m going to tell a story here/now.’

Examples (196) & (197) are somewhat ambiguous as to whether the demonstrative means ‘here’ or ‘now’ but ‘now’ is a very likely interpretation. The next example may be an unambiguous example where the demonstrative only means ‘here’, but the

speaker is concerned with saying that she hasn't moved from the exact same spot she is sitting in now, so there might still be some ambiguity.

- (198) *Bâuni!* Ino *biá* *k-en-yarã-ká*.
 no NOT person RL-1SG.F-see-3SG.M
 'No I didn't see the man.'

Bo nén k-e-ké(n) k-e-ké(n) é.
 TVF 1SG.F RL-1SG.F-(1SG.F)sit RL-1SG.F-(1SG.F)sit DPROX
 'I've just been sitting here.' [FF2-CA:03]

Where once *é* and *bé* might have been in free variation (this is still true for the distal and tracking demonstratives) there now seems to be a semantic split where *bé* can be used adnominally or after a verb, but the vowel-initial form *é* can only be found post-verbally, providing locational or temporal information.

5.4.2 *boró* — DMID

The demonstrative *boro* refers to a point in the middle distance. In the following text extract a woman is sitting inside her house and a demon is outside telling her to heat up a clay pot on the fire. The fire is nearer the demon than the clay pot.

- (199) *Okutari pôn n-em-e-n-ki boró âi kéra bé.*
 clay.pot only IRR-2SG.F-BEN-1SG.F-grill DMID fire DPROX
 'Just heat up that clay pot there for me on this fire.' [U-EM:01]

There is no vowel-initial variant of this form.

5.4.3 *ére/bére* — DDIST

The distal demonstratives are *bére* and *ére*. There is a tonal variation for these two forms; with H on the first syllable, they indicate a point in the distance, however the H can be moved to the final syllable, *eré*, *beré* to indicate an even further distance.

Both the consonant-initial and vowel-initial forms can be used adnominally or post-verbally in apparently free variation. The following example shows the two uses

of *bére*, first as the post-verbal locational and second as an adnominal in the location NP *kíkom bére* ‘that mangrove’.

- (200) *N-o-m-aro-m-o-n*
 IRR-2SG.F-2SG.F-go.down-AG-REG-1SG.F
 ‘Come with me
ke n-epi-tá bére, kíkom bére.
 PURP₂ IRR-1DU-paddle DDIST mangrove DDIST
 so we can paddle there, to that mangrove.’ [NS-MM:03]

Example (201) shows another adnominal use.

- (201) *bo ririvá bére, bo Rapi*
 place long DDIST place Serra
 ‘that faraway place, Serra’ [U-EM:01]

The following example shows the use of *ére* as an adnominal. This form cliticises to the preceding word. As discussed in Chapter 2, sequences of two vowels are dispreferred in Barupu and various processes of glide formation and deletion work to eliminate them. When the vowel-initial demonstrative cliticises to a vowel-final word, these same processes take effect. In the following example, the host ends in a back low vowel, so the initial /e/ of the demonstrative becomes a glide. In this particular example, the final syllable of the host *biá* ‘person’ is H-toned, as is the first syllable of the clitic; the two Hs coalesce and the word is produced with one H on the low back vowel of the resulting diphthong. Other tone sandhi effects between clitics and their hosts are still under investigation.

- (202) *Biá=ere k-ere-ropo(r)ê-ni.*
 person=DDIST RL-3PL.F-(3PL.F)trick-1SG.F
 ‘Those women tricked me.’

The following example shows *ére* as a locational.⁴ This example also shows that the distant demonstrative can be used to express an unidentified location. In the

⁴There are no examples of this demonstrative as temporal — i.e. ‘then’.

context of the following, the implied meaning is that the speaker doesn't care where the addressee goes, as long as it's a long way away. It can still be thought of as deictic, however, because in this sense it means 'anywhere that's not here'.

- (203) *N-om-púpú n-o-no(m)=ére.*
 IRR-2SG.F-fly IRR-2SG.F-⟨2SG.F⟩go.along=DDIST
 Fly over there! (Go away.) [U-EM:01]

5.4.4 *émo/bémo* — DREF

The spatial demonstratives described above are replaced by *bémo* or *émo* if the participant or location has been mentioned before. These forms can also be heard as [béwo] or [béβo], and [éwo] or [éβo], some speakers use one form more than another, but they are not distinct semantically.⁵ In this chapter they will be written *bémo* and *émo*, elsewhere in the thesis they will be spelled according to the original written source or as reflecting the pronunciation of the oral source.

The following example shows *bémo* as an adnominal. This is from a narrative about how people traditionally made paint. This particular section is about how they made yellow paint, which was made from leaves from certain trees. The speaker describes how the paint is made with each of the different leaves and at the end of the yellow paint discussion he wants to make the point that the suitable trees only grow at the old village site on the beach. They don't grow at the new village site in the bush.

- (204) *Âi bémo k-ere-kô(r)e nau, uka bâuni.*
 tree DREF RL-3PL.F-⟨3PL.F⟩go.up beach bush no
 'These trees grow at the beach, not in the bush.' [P-MG:03]

The following text extract shows *émo* in the same function. The subject under discussion is some game meat which the husband doesn't know he's been tricked out of. The wife comes to tell him it's not in his bag and he tells her to have a better look:

⁵/m/ ~ /w/ and /n/ ~ /j/ alternations are also found in the variants of the word 'good': *néman* ~ *néwai*.

- (205) 'N-om-yără-ø-wo(m)o ekókó k-a-n-ere-ke.'
 IRR-2SG.F-see-3SG.F-(2SG.F)DOWN string.bag RL-1SG.M-1SG.M-put-INTS
 “‘You’ll see it inside the string bag I put (there)!”

Óm=a k-u-írai-r-o-a,
 wife=PRM RL-3SG.F-say-AG-GIVE-3SG.M
 His wife says to him,

'Ekókó kanǎpó, akâiri pôn k-ey-ĩniá ekóko=émo.'
 string.bag nothing stone only RL-3PL.F-be.at string.bag=DREF
 “‘The string bag’s empty, there’s only stones in this string bag.’” [ANR-MN:01]

In the following example *bémo* is used to refer to the place that was just mentioned in the previous clause. The following example also shows the use of demonstratives in relative clauses. Notice the two demonstratives (*bé* and *é*) in the NP containing the relative clause (*bo bé biá kevĩri nenopi é*) — demonstratives are very common in relative clauses, see §5.6, below.

- (206) ... ya k-a-rói bo bé, [bo bé biá k-e-vĩri
 and RL-3SG.M-stand place DPROX place DPROX people IRR-3PL.M-die.PLS
n-e-no(p)i é],
 IRR-3PL.M-(3PL.M)go.along DPROX
 ‘... he stood at this place, this place where when people die they will go,
 k-a-rói *bémo* ya k-â-irai-ká-r-o-ø óm ...
 RL-3SG.M-stand DREF and RL-3SG.M-say-TOWARD-AG-GIVE-3SG.F wife
 he stood there and said to his wife ...’ [DC-CA:03]

The speaker felt the need to further identify where the man was standing with a relative clause, and in doing so he got off the main track of the discourse. To get back to where he was he repeats ‘stand’ and uses the tracking locational *bémo*.

The next example shows *émo* in a similar situation. This is part of the same story as (198), above. Some bees have captured a man and were planning to eat him but an old bee was left behind and has helped him run away. In (198) above they had come back to find him gone and the old bee was protesting that she had nothing to do with it, that she had been sitting in the same place the whole time. At this point the narrator realised he had forgotten to tell part of the story (that the reason the old bee

had let the man go was that she was angry because the young bees hadn't given her any food). The next example comes when the narrator finishes telling the background story and wants to return to the argument between the old bee and the younger bees.

- (207) *Bóm biá moro-moro k-o-kéi=émo*
 woman person REDUP-wrinkled RL-3SG.F-sit=DREF
 'So the old woman sitting there,
kópu k-o-kéi=émo k-u-írai-r-o-re ...
 grandmother RL-3SG.F-sit=DREF RL-3SG.F-say-AG-GIVE-3PL.F
 the grandmother sitting there, said to them ...' [FF2-CA:03]

The following example show the use of *beka* and *émo* together in the 'discourse-deictic' function.

- (208) ... *ya kope k-â-irai-r-o-ø mó,*
 and then RL-3SG.M-say-AG-GIVE-3SG.F mother
 '... and then he says to his mother,
'Mán n-om-ore-o(m)o bére, nâpe k-e-ka(p)e?'
 mama IRR-2SG.F-search-(2SG.F)DOWN DDIST who RL-3PL.M-(3PL.M)come
 "Mama look down there, is anyone coming?"
K-u-ore-o beká=emo kope k-u-ore-ko ...
 RL-3SG.F-search-DOWN like=DREF then RL-3SG.F-search-UP
 She looked down, like he said, and then she looked up ...' [DC-CA:03]

Only the vowel-initial form ever appears with *beka* 'like' to refer to the contents of speech. As example (191) above showed, one use of *beka* is introducing reported speech. It can also refer to tracts of narrated text. In the following, a man's wife and baby have been killed and the perpetrator has piled up their bones on the fire; this has all been related in a previous episode. In the example here, the man has come home and seen what has happened.

- (209) *Ám=a k-a-kae, k-a-yără-ø beká=emo.*
 husband=PRM RL-3SG.M-come RL-3SG.M-see-3SG.F like=DREF
 'The husband came and saw all this.' [FF2-CA:03]

In texts *beka=émo* very commonly refers to the contents of direct speech as a sort of framing device to kick off the next part of the text. For example, narrators

might quote some direct speech but, before going on to the next bit of the story, they might round up what has just happened. Another example follows:

- (210) *K-a-rívó-r-o-ø* *beká=emo ya k-a-kèi torópo.*
 RL-3SG.M-hear-AG-GIVE-3SG.F like=DREF and RL-3SG.M-sit quietly
 ‘He heard what she said and sat quietly.’ [U-EM:01]

5.4.5 *éro* — DIRR

Éro often appears in hypothetical or negated clauses and polar questions. It can also appear in declarative clauses to refer to imaginary entities. I call this demonstrative irrealis and as Givón (2001b:327) notes, irrealis is related to evidentiality in that ‘irrealis is so weak and tentative that it falls below the threshold of the need to bother with evidence’. The use of this demonstrative is not obligatory in any context; speakers appear to have the choice of weakly asserting the reality of a thing or place with the use of the irrealis demonstrative.

The irrealis demonstrative can be found in realis-marked clauses which nonetheless have a degree of irreality about them: negatives, polar interrogatives, declaratives about imaginary entities, as well as in irrealis-marked clauses, such as hypotheticals. It is not, however, found in all irrealis-marked clauses; for example, future clauses do not always use this demonstrative (see (193), above), and nor do imperatives (192), although these are both examples of irrealis clauses.

The following example shows *éro* in a hypothetical clause. This is from the bee narrative and here the old bee is telling the captured man to run away. This demonstrative does not have a consonant-initial variant, and cliticises to a preceding word if there is one.

- (211) *N-a-ké(m)i=éro,* *k-ere-kô(r)e* *k-ey-ore*
 IRR-2SG.M-(2SG.M)sit=DIRR RL-3PL.F-(3PL.F)go.up RL-3PL.F-search
 ‘If you just sit there, while they’ve gone foraging,
n-ere-r-aro *n-ere-yé-ma.*
 IRR-3PL.F-3PL.F-go.down IRR-3PL.F-kill-2SG.M
 they’ll come back and kill you.’ [FF2-CA:03]

The next examples show the use of this demonstrative in negative clauses.

- (212) *Éro bâun!*
DIRR not.be.at
'Not there!' (as in 'Don't put it there.')
- (213) *Cha Raeyau k-â-irai-r-o-i,*
AT PN RL-3SG.M-say-AG-GIVE-3PL.M
'Raeyau said to them,
'Bâuni, bó=ero beya n-e-no(m)i vai.'
no place=DIRR NEG IRR-1PL-{1PL}go POL
'No, that place, we're not going.'" [ANR-EM:05]

The next example shows the use of this demonstrative in a polar interrogative. There are no generic nouns of the type 'someone' or 'anyone', instead polar questions can be framed as content interrogatives with interrogative pronouns. In a way the demonstrative is not only appearing in this clause because it is hypothetical but is also contributing some of the irrealis interpretation.

- (214) *Ei! nâpe aniania něná k-e-p-u=éro?*
EXCL who fruit.sp 1SG.M RL-3PL.M-3PL.M-pick DIRR
'Hey is someone picking my fruit there?' [ANR-MN:01]

In the above examples the places and objects might be real but the situations are not. Another use for *éro* is when the objects and places themselves are not real. It is used very often in example sentences in the Barupu dictionary. Example (190) above, was from a definition of the word *rê-*, visible on the page above the definition. Example (215) below is a made up sentence about a made up tree.

- (215) *Áiten=éro, chápo něná k-a-ora-r-o-na.*
tree=DIRR grandfather 1SG.M RL-3SG.M-plant-AG-GIVE-1SG.M
'This *aiten* tree, my grandfather planted it for me.' [DICT-PB:01]

The next sentence is also from an example sentence in the dictionary and there is something borderline about the reality of ghosts and demons.

- (216) *Bió kúro, rãre yéi bió târe k-e-viri-vĩri=éro*
 person buried ghost 3PL.M person new RL-3PL.M-REDUP-die.PLS=DIRR
k-em-ĩrai. Puru anai aka 'aro vĩri'.
 RL-1PL-say bundle large real people die.PLS

'What we say about demons, ghosts, all those real people who die. The cover term is "aro vĩri".' [DICT-PW:01]

The following is an example of a borderline-real location. This is the first mention of the 'place where dead people go'. Later in the story, as was shown in (206), the place is referred to with one of the spatial or tracking demonstratives. Even here in the immediately following location NP, a real spatial demonstrative is used. But in the first mention the place is established as one which no living person has seen.

- (217) *K-a-ore-ki(r)é*
 RL-3SG.M-search-⟨AG⟩AWAY
 'He looked all around

bo bió biá vĩri k-e-no⟨p⟩i=éro bo bére.
 place man person die.PLS RL-3PL.M-⟨3PL.M⟩go=DIRR place DDIST
 the place where dead people go, that place.' [DC-CA:03]

The form *éro* can also appear with *beka* 'like' in the discourse-deictic function. In (218) a man has put a spell on a piece of fruit so that he can throw it a long way away and escape; *beká=ero* here is referring to a previous clause where he has laid out his plan in full in his mind. The hypothetical demonstrative is used because it is talking about a hypothetical event.

- (218) *K-a-kina-kina, 'A bé n-a-n-á beká=ero,*
 RL-3SG.M-REDUP-think thing DPROX IRR-1SG.M-1SG.M-do like=DIRR
 'He thinks, "If I do it like I thought,

biá=emo núte rirĩvá
 n-o-úte
 person=DREF IRR-3SG.F-walk long
 this woman will go a long way away,

ya n-a-n-aro ya n-aná-ute.'
 and IRR-1SG.M-1SG.M-go.down and IRR-1SG.M-walk
 then I'll come down and run away.'" [FF2-CA:03]

5.5 Quantifiers

As discussed in section 4.3.11, the NP-internal quantifiers are *pîn* and *owu*, both of which mean ‘some, not all’; and *ra* ‘one, another’.⁶ Examples (220a & b) show the quantifiers *ra* ‘one’ and *owu* ‘some’ functioning in the Determiner slot.

- (219) a) *roro ra*
 day one
 ‘one day’
- b) *K-epi-ké(p)i au îrai owu kepîrai.*
 k-epi-îrai
 RL-1DU-⟨1DU⟩sit thing say some RL-1DU-say
 ‘We’re sitting telling some stories.’ [CF-MN:01]

These quantifiers can also appear before a possessive or demonstrative, where they have a partitive function, e.g. ‘one of’, ‘some of’.

- (220) *K-â-irai-r-o-i miniâ râi owu yá.*
 RL-3SG.M-say-AG-GIVE-3PL.M too sibling some 3SG.M
 ‘He told some of his brothers about it too.’ [U-EM:01]

Like adjectives, quantifiers can appear in un-headed NPs where they always have a partitive function, because in the absence of an overt NP, third person verb agreement morphemes are almost always definite. First and second person verb agreement morphemes are always definite, see Chapter 6.

- (221) *Ra n-amá-ute, owu n-o-ké(p)i.*
 one IRR-2SG.M-walk some IRR-2PL.M-⟨2PL.M⟩sit
 ‘One of you will go, some of you will stay.’

The verbs *-úte* ‘walk’ and *-kéi* ‘sit’ are intransitive, thus there is no recoverability problem over the identity of the referents of *ra* and *owu*. It is interesting to note that *-úte* takes singular agreement even though the statement is obviously being addressed to a group.

⁶As discussed in §4.3.11, there is another quantifying word *nóte* ‘all’, that is found after the NP it is quantifying — evidence for this is that it appears after possession and demonstratives.

5.6 Relative clauses

Relative clauses are clauses which modify nouns. They come in two main forms: restrictive and non-restrictive. According to Comrie (1989:143), a restrictive relative clause ‘consists necessarily of a head and a restricting clause. The head ... has a certain potential range of referents, but the restricting clause restricts this set by giving a proposition that must be true of the actual referents of the overall construction.’ In non-restrictive relative clauses the relative clause simply provides more information about a head whose real-world referent is not under question. Barupu uncontroversially has restrictive relative clauses, but does not seem to make use of non-restrictive relative clauses.

Relative clauses in Barupu can take the form of either a plain clause or clauses following the head, or they can appear with a determiner such as a pronoun, demonstrative or quantifier. The verbs in relative clauses are fully finite and there is no special verbal marking of relativisation. However, there is a strong tendency to lenite realis marking in relative clauses.

The relativised NP is external to the relative clause, but if it would normally be represented by verb morphology then that morphology is retained. The plain relatives can be seen in the following examples. Any participant may be relativised on — example (222) shows a relativised subject. The =*va* is not obligatory. It is possible to demonstrate that all non-subject relativised NPs are external, because they are not in their normal position in the clause. Subject relativised NPs, however, could be analysed as internal or external.

- (222) *Bió [tôman=a k-a-ti-a] k-en-yarǎ-ká.*
 man bandicoot=PRM RL-3SG.M-shoot-3SG.M RL-1SG.F-see-3SG.M
 ‘I saw the man who shot the bandicoot.’

Example (223) shows a relativised object of a suffixing transitive verb.

- (223) *Tôman [bió=va k-a-ti-a] k-en-yarã-ká.*
 bandicoot man=PRM RL-3SG.M-shoot-3SG.M RL-1SG.F-see-3SG.M
 'I saw the bandicoot that the man shot.'

Example (224) shows a relativised object of a non-suffixing transitive verb.

- (224) *Awei=a [k-amâ-irai] beya k-u-îniá vai.*
 game.meat=PRM RL-2SG.M-say NEG RL-3SG.F-be.at POL
 'The game you talked about is not here.' [ANR-MN:01]

Example (225) shows a relativised location.

- (225) *K-a-rói-ro-wo âi koka nai*
 RL-3SG.M-stand-HID-DOWN tree trunk large
 'He stood hidden in the large tree trunk
 [nâki k-a-kéi-ro-ko para].
 PN RL-3SG.M-sit-HID-UP post
 that the dog-spirit (usually) sat hidden up in the roots of.' [TP-MN:01]

That the head is external is shown most clearly with relativised on locations. In example (226), below, a relativised location is embedded inside another relative clause. The head of the 'outer' relative clause is *ûram târe má* 'uram sapling' and the relative clause is [*korói ôro ika bó rê ám kereképi*] 'it stands at the side of the house that she and her husband live in'. *Ûram târe má* is represented inside the relative clause by 3SG.F agreement on the verb *-rói* 'stand'. The head of the 'inner' relative clause is *ôro ika*, a compound meaning 'side of house' and the relative clause is [*bó rê ám kereképi*] 'she and her husband sit(=live)'.

- (226) ... *ya k-u-amo-ko ûram târe má*
 and RL-3SG.F-hang-UP fruit.sp new child
 '... then she hung upside down in the *uram* sapling
 [*k-o-rói ôro ika [bó rê ám k-ere-ké(p)i.]*]
 RL-3SG.F-stand house side 3SG.F and husband RL-3DU-(3DU)sit
 that stood at the side of the house where she and the husband lived.' [U-EM:01]

In a main clause, the normal place for a location is after the verb. For example:

- (227) *Bó rê ám k-ere-ké(p)í ôro.*
 3SG.F and husband RL-3DU-(3DU)sit house
 ‘She and her husband live in a house.’

When the location is relativised on, it is moved out of its regular position and is not represented in the relative clause at all. It is very common for the realis marker *k-* to be lenited to [x] and sometimes even \emptyset in relative clauses.

A restrictive relative clause is one of the ways in which speakers of a language can ‘delimit the potential referents’ (Comrie 1989:139) of common nouns. Demonstratives are another and the two often go together in Barupu. In many cases a demonstrative occurs twice, once at the beginning of the relative clause and once at the end of the NP. In (228) and (229) the default, proximal demonstrative is used both to at the beginning of the relative clause and at the end of the NP.

- (228) *A bé k-o-p-á bé beya k-o-néman vai.*
 thing DPROX RL-2PL.M-2PL.M-do DPROX NEG RL-3SG.F-good POL
K-o-táipó.
 RL-3SG.F-bad.3SG.F
 ‘This thing that you all do is not good. It’s bad.’ [NSC1-CA:03]
- (229) *Imo=va bé k-ere-r-á-ø bé k-ere-bere*
 armband=PRM DPROX RL-3PL.F-3PL.F-make-3SG.F DPROX RL-3PL.F-pour
ríná.
 sago.bark
 ‘They filled the sago bark with those armbands that they made.’ [WH-RX:03]

Only the spatial demonstratives can be used at the beginning of the relative clause. Usually the two demonstratives are the same, as shown in the following example.

- (230) *Bió bóm bé k-en-írai-n-o-ø bé k-ama-yără-ø.*
 person woman DPROX RL-1SG.F-say-AG-GIVE-3SG.F DPROX RL-2SG.M-see-3SG.F
 ‘You saw the woman that I was speaking to.’

However, the second demonstrative can also be whichever demonstrative is required by the discourse or irrealis status of the relativised participant. Some

examples from texts follow. In (231) the proximal demonstrative is used at the beginning of the relative clause but the tracking demonstrative is used as the second demonstrative, because this is the second mention of this definition in the dictionary entry.⁷

- (231) *Au bé mēmi bió k-e-ké(m)i-romō-ré-ke béwo:*
 thing DPROX 1PL person RL-1PL-(1PL)sit-AMID-3PL.F-INTS DREF
 ‘These things that we people sit amongst:

au beka âi bió ame pí pû mēri akorom.
 thing like tree person animal water wind soil food
 things like trees, people, animals, water, wind, ground, food.’ [DICT-CM:01]

In (232) the middle distance demonstrative is used first and the irrealis demonstrative is used as the second demonstrative, possibly because the clause is negative or because it is from a translation of a literacy primer and the pig is not real.

- (232) *Bâuni, beya rau boró k-a-páko to k-a-pûru-pûru=éro.*
 no NEG pig DMID RL-3SG.M-big and RL-3SG.M-REDUP-fat=DIRR
 ‘No, not this pig that is big and fat.’ [C-EM:03]

Quantifiers can also appear in place of the second demonstrative, as shown in example (233). They always have a partitive function.

- (233) ... *awei=a [bére k-a-n-ere-nâ-u ekókó] ra=va*
 game.meat=PRM DDIST RL-1SG.M-1SG.M-put-APPL-3SG.F string.bag one=PRM
n-o-m-yé-ya.
 IRR-2SG.F-2SG.F-hit-3SG.M
 ‘... kill one of the game animals that I put with the string bag.’ [ANR-MN:01]

There are no non-specific heads in Barupu. Instead the construction *a be* ‘this thing’ is used.

- (234) *A [bé ám=a k-â-irai-r-o-ø] (hes) émo*
 something DPROX husband=PRM RL-3SG.M-say-AG-GIVE-3SG.F DREF
k-o-r-á bèn ...
 RL-3SG.F-3SG.F-do already
 ‘She had done this thing that her husband had told her ...’ [ANR-MN:01]

⁷In both (230) and (231) the relativised participant is an added object; in (231), for example, the relativised on argument is *au* ‘thing’, an added object introduced by the locational *rómó-* ‘among’; objects of these morphemes are called added objects and they unmarkedly appear after the verb. Added objects are discussed more fully in Chapters 6 and 7.

5.7 Nominal conjunction

Barupu has four nominal conjunction strategies: simple listing of participants with no conjunction; the use of a pronoun which indexes all participants plus listing of any or all of the participants; the use of an inflecting conjunction *ré-*, which will be glossed as ‘and’; and the use of an inflecting comitative *avé-*, which will be glossed as ‘with’. These will be described in turn. Disjunction is formed with the borrowed Tok Pisin particle *o* ‘or’. It simply appears between two NPs.

5.7.1 Listing

A very common strategy is to list the participants one after the other and if the participants are both animate, the verb agrees with the dual or plural form of the participant highest on the following hierarchy.

1st > 2nd > 3rd human > non-human animate > inanimate

Figure 5.2 Person hierarchy

The listing strategy is most commonly used for conjoining either a human with a lower animate or inanimates. In the former, the verb agrees only with the human.

- (235) *Bió bĩ nâki k-a-tiriri-nâ-i rau.*
 person ancestor dog RL-3SG.M-hunt-APPL-3PL.M pig
 ‘An ancestor [and] dog went hunting for pigs.’ [TP-MN:01]

- (236) *Mô apón oti n-o-r-o-a má.*
 mother banana pawpaw IRR-3SG.F-3SG.F-give-3SG.M child
 ‘The mother will give bananas [and] pawpaws to the boy.’ [DICT-PB:01]

Another common strategy related to listing is to add any other participants as afterthoughts after the verb.

- (237) *Imo k-e-p-úna, ari tũ.*
 armband RL-3PL.M-3PL.M-get.PLO apron tail
 ‘They got their armbands, and their long bark aprons worn at the back.’
 [U-EM:01]

- (238) *Měmá rua n-ama-ko, âimon kamo.*
 2SG.M bow IRR-2SG.M-get.SGO axe
 ‘You get your bow, and your axe.’ [NSC1-CA:03]

Their status as afterthoughts is signalled by an intonation break. Also note the singular form of *-ko* ‘get’ in (238).

5.7.2 Inklusory construction

An extension of the listing strategy uses a pronoun indexing all the participants, followed by a list of any particular participants the speaker feels are relevant. The verb always agrees with the pronoun.

- (239) *Měpi Cha Charlie n-epi-p-aro Aitape*
 1DU AT PN RL-1DU-1DU-go.down PLN
 ‘We two, [me and] Charlie, will go to Aitape.’

5.7.3 Singular conjunction — *rê-*

The conjunction, *rê-*, is only used to conjoin two singular participants and the verb agrees with a combination of the participants, so always appears with dual marking. The conjunction itself also takes suffixing dual inflection, which is obligatory when one of the conjuncts is first or second person but optional, and quite rare, if both conjuncts are third person. Person agreement on the verbs and the conjunction follows the same person hierarchy outlined above. The suffixes found on the conjunctions are the same as the object suffixes found on verbs. This is shown in examples (240a - c).

A combination of first person and second or third person results in 1DU marking on the conjunction and the verb, as in (240a). A combination of second and third person results in 2DU marking on the conjunction and the verb, as in (240b). Example (240c) shows no marking on the conjunction between two third person participants but 3DU marking on the verb.

- (240) a) *Něná rê-pi Kua Miriam k-epi-ké(p)i.*
 1SG.M and-1DU AT PN RL-1DU-(1DU)sit
 ‘Miriam and I are sitting.’
- b) *Mómú rê-pu Cha John k-oropu-ké(p)i tirín.*
 2SG.F and-2DU AT PN RL-2DU-(2DU)sit separately
 ‘You and John live alone.’ (away from your parents)
- c) *Cha Táita rê kuáni k-ere-no(p)i uka.*
 AT father and mother RL-3DU-(3DU)go.along bush
 ‘Father and mother went to the bush.’

This conjunction can also be used to conjoin inanimate objects as in *oti rê apón k-ě-n-á* ‘I ate a pawpaw and a banana.’

5.7.4 Dual and plural conjunction — *avé-*

This conjunction is used in situations where the second conjunct is dual or plural and all participants are animate. On the surface the plural conjunction *avé-* ‘with’ appears very similar to the singular conjunction *rê-* in that it inflects and appears between two NPs, but there are some differences:

- *avé-* agrees with the second conjunct only (never both);
- the verb may agree either with a combination of the two conjuncts according to the person hierarchy, or with the first conjunct;
- both the first and second conjuncts can be omitted, provided their identities are recoverable from preceding discourse or verb agreement.

The two possibilities for verb agreement are shown in (241). In (241a) the verb agrees only with the first conjunct — 1SG.F. In (241b) the verb agrees with the combined participants — 1PL. In both cases the *conjunction* agrees with the second conjunct only — 3PL.M.⁸

- (241) a) *Nění avé-i mevôva akorom k-ě-n-á.*
 1SG.F with-3PL.M children food RL-1SG.F-1SG.F-eat
 ‘I ate with the children.’

⁸I am using the suppletive plural noun *mevôva* to make the point clearer but a noun does not have to be morphologically marked for number to be used as a plural.

- b) *Něni avé-i mevôva akorom k-ě-m-á.*
1SG.F with-3PL.M children food RL-1PL-1PL-eat
'I ate with the children.'

This conjunction can appear with the conjuncts omitted, given the right discourse conditions; that is, the identities of both conjuncts are recoverable. This is shown in the following example.

- (242) *Avé-i k-a-kae.*
with-3PL.M RL-3SG.M-come
'He is coming with them.' [FF1-MN:01]

Chapter 6

Clause structure

In this chapter I describe the basic structure of clauses in Barupu. Out of keeping with polysynthetic typology, there is linear ordering of grammatical functions in the clause, but there is no strong evidence of hierarchical structure within that ordering, see §6.2. Section 6.3 discusses the grammatical status of verbal affixes and their interaction with overt NPs. In §6.4, I present an overview of mechanisms for marking the pragmatic status of participants, including deviations from canonical word order. Finally, in §6.5 I discuss non-verbal predicates. I begin with definitions and a summary of grammatical functions in Barupu.

6.1 Grammatical functions

Every verb in Barupu shows agreement for at least one argument and some obligatorily show agreement for two. One consequence of obligatory agreement is that there is no deletion of arguments under identity conditions, or control of infinitives, meaning that many of the usual syntactic tests used for identifying grammatical relations cannot be appealed to. This also means that there is no need to identify a privileged ‘grammatical subject’ or ‘pivot’ function. In addition, any participant can be relativised in Barupu and there are no voice operations. The

functions I will identify for Barupu have clause-internal definitions only.

Another factor complicating the identification of grammatical functions in Barupu is the lack of any NP marking. There are no case markers, adpositions or particles which give any information about the role an NP has in the clause. There are indications of an NP's role (e.g. word order) but there is no overt marking. The lack of NP marking, coupled with the lack of cross-clausal operations targetting specific arguments, makes it difficult to define a class of core arguments and draw the familiar line between them and obliques.

Following is a list of the seven possible functions an NP might be performing in a Barupu clause and their identifying characteristics. Three of these can be instantiated in a simple or complex verbal word, the others are only identified by distributional characteristics such as word order and, in some cases, inherent meaning.

- Subject: we can identify the subject relation as encompassing the single argument of an intransitive verb (S) and the most Actor-like participant of a transitive verb (A). This argument is marked directly on the verb root by prefixes, as well as, in some conjugation classes, infixes. Any NP co-referencing this argument must be pre-verbal. The words *unake* 'alone' and *béku* REFL have scope over this argument.

Identifying an object relation is less straightforward. Non-subjects of underived clauses are the *obligatory* non-Actor-like participants of monotransitive verbs (P), and the Themes (T) and Recipients (R) of ditransitive verbs. These arguments have the following characteristics:

- P: monotransitive verbs fall into two classes according to the morphological treatment of their Ps. As discussed in detail in §4.2.2, verbs with typically

inanimate, unindividuated Ps do not cross-reference their Ps with suffixes. The NP representing an unindividuated P (Pu) always appears before the verb. Verbs with typically animate, individuated Ps obligatorily cross-reference their Ps on the verb with a suffix. The NP representing an individuated P (Pi) unmarkedly appears pre-verbally but can appear after the verb in a pragmatically-marked construction (§6.4.1).

- T: like Pu, this argument is not marked on the verb; its only instantiation in the clause is an NP, and again like Pu, the NP must be pre-verbal.
- R: this argument is obligatorily cross-referenced on the verb by suffix and the NP unmarkedly appears post-verbally.

As well as the obligatory participants of underived clauses discussed above, the following NPs may also be found in the clause:

- Instrument: an optional participant which is not case marked nor marked on the verb. An NP referencing this participant is most often pre-verbal but can also be found post-verbally.
- Location/Reason: an optional participant which is not case marked nor marked on the verb. An NP referencing this participant is unmarkedly post-verbal. When a nominal found here has inherently locational semantics e.g. *bo* 'place', it supplies a Goal/Source/Location role depending on the verb; when a nominal without any locational semantics is found here it supplies a sort of 'Reason' role, see below.
- 'Adjunct' nominal: a nominal which, for reasons given in §6.2.6 below, I will argue forms a complex predicate with the verb rather than acting as a participant. This nominal always appears directly before the verb.

- Added object: introduced into the clause by one of twelve participant-adding suffixes or the Beneficiary/Possessor prefix. The added object is obligatorily marked by a suffix directly on the participant-adding morpheme. Added objects can play many different semantic roles, depending on the meaning of the participant-adding morpheme and the meaning of the verb. They fulfil most of the functions of adpositions and semantic cases in other languages (see Chapter 7). NPs co-referencing these participants are unmarkedly post-verbal.

Leaving out the non-participant adjunct nominals and the objects added by extra morphology, we can list the possible participants of simple clauses and schematise their characteristics as in Table 6.1.

Table 6.1 Participants and their coding

	verb agreement	NP position
subject	prefix/infix	pre-verbal
P (individuated)	suffix	pre/post-verbal
P (unindividuated)	-	pre-verbal
R	suffix	post-verbal
T	-	pre-verbal
Instrument	-	pre/post-verbal
Location/Reason	-	post-verbal

As is shown in the Table there are only two ways — verb agreement and word order — to potentially group the obligatory sub-categorised arguments (subject, Ps, T and R), and distinguish them from the optional non-subcategorised adjuncts (Instrument and Location/Reason).

Turning first to the obligatory arguments set and the difficulty of uniquely identifying the object relations, we can see that unindividuated Ps of monotransitive verbs receive the same treatment as Ts of ditransitive verbs. Neither is cross-referenced on the verb and both must appear pre-verbally. Rs of ditransitive verbs receive the same morphological marking as individuated Ps of monotransitive

verbs but the two argument types have different word order distributions in the clause; individuated Ps are unmarkedly pre-verbal while Rs are unmarkedly post-verbal.

In establishing object systems Dryer (1986:29) shows that a system which treats P and T in the same way in contrast to R, has a direct/indirect object distinction like that found in English. A system which treats P and R in the same way in contrast to T has a primary/secondary object distinction. This can be seen in Figure 6.1.

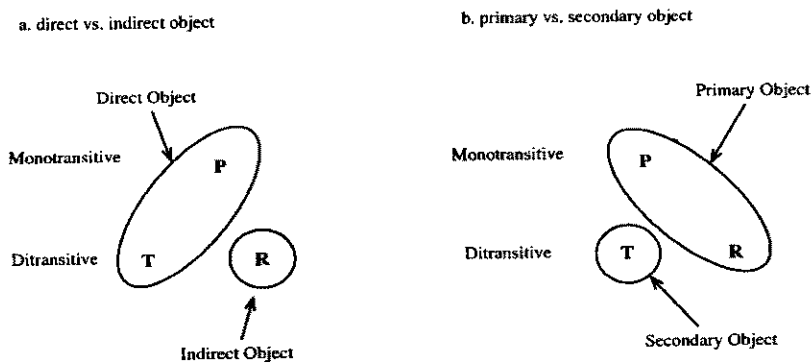


Figure 6.1 Groupings of P, T and R. Source: Dryer (1986:29)

Adapting this system to Barupu is not straightforward. For example, in Barupu, we must identify two different Ps of monotransitive verbs: individuated (Pi) and unindividuated (Pu). The Barupu groupings are shown in Figure 6.2.

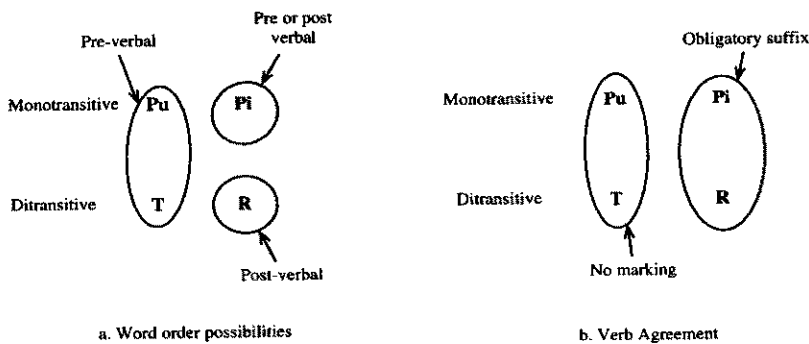


Figure 6.2 Barupu groupings of Pu, Pi, T and R

We can see from Figure 6.2 that the Barupu object system is mixed. Word order treats Pu in the same way as T in contrast to both R and Pi.¹ Verb morphology, on the other hand, treats Pi and R the same in contrast to Pu and T — yielding something similar to a primary/secondary object distinction.

There does not seem to be a simple way of reducing the object relations to grammatical functions — Pu and T can be conflated to one function, which I will call secondary object. However, Pi and R cannot be grouped into the one function of primary object, because of their different positions in the clause. I will refer to the suffix on the verb as the object slot even though it seems more closely related to individuation/animacy than to a grammatical function, but I will continue to make a distinction between Pi and R in discussions of word order.

I turn now to the agreement and word order characteristics of the optional participants and the difficulty of giving a clear morpho-syntactic statement about the difference between core and oblique participants in Barupu. Neither Instruments nor Location/Reason participants are cross-referenced on the verb. Instruments are unmarkedly pre-verbal and Location/Reason participants are unmarkedly post-verbal. One argument might be that lack of verb agreement indicates non-core status. The problem with this is that Pu and T are not marked on the verb and yet they are obligatory. If these participants could be shown to be non-arguments (e.g. incorporated) then this analysis would hold. However, they do seem to have all the characteristics of full arguments (e.g. they can be full NPs).

Another argument might be that the post-verbal position occupied by Location/Reason is the oblique position because all other arguments in simple clauses have the potential to appear pre-verbally. This grouping would mean singling out

¹It is interesting to consider the pragmatic permibility of Pi in terms of Barupu's incipient polysynthetic typology. For example, we could speculate that it is a sign of movement away from fixed word order to a more discourse-figurational clause structure. At the same time, the lack of verbal agreement and fixity of the Pu could be a movement towards incorporation of these arguments.

Instrument for special treatment because it can appear before the verb, but that may be alright because it is not always clear whether Instruments are sub-categorised or not (Andrews 1985:91-92). However, Rs also appear post-verbally and these are obligatorily marked on the verb and clearly obligatory sub-categorised arguments.

In summary, we cannot identify a unified object relation in Barupu and nor can we make a clear morphosyntactic statement about a distinction between core arguments and obliques. The word order and verb morphology each encode different aspects of the P, T and R roles. Verb morphology encodes notions of animacy and individuation: Rs are more likely to be animate, and therefore individuated, than Ts so it is not unexpected that they should receive morphological marking. Word order suggests that Rs could be thought of as individuated Goals (this is returned to below) but there is no other morphosyntactic reason to label them oblique.

6.2 Verbal clauses

In this section I exemplify the various points made above about the positions and characteristics of grammatical functions in Barupu.

6.2.1 Intransitive clauses

The single argument of an intransitive verb always appears before the verb and is obligatorily marked on the verb by prefix, as in (243), or prefix and infix as in (244).

(243) *Kuáni k-o-kôe.*

mother RL-3SG.F-go.up

S V

'Mother went up.'

(244) *Tĩ chá tora bĩ k-e-no(p)i mônrai n-e-tĩtĩ.*

line head old ancestor RL-3PL.M-(3PL.M)go singsing IRR-3PL.M-dance

'A long time ago some ancestors went off to go dancing.' [U-EM:01]

6.2.2 Monotransitive clauses

In a clause headed by a suffix-taking monotransitive verb (245), the A and Pi are both obligatorily marked on the verb — A by prefix/infix and Pi by suffix — and any NPs co-referencing these arguments both appear before the verb. The basic ordering of NPs in transitive clauses is thus A Pi V.

- (245) *Kuáni aka k-o-yarǎ-ká.*
 mother father RL-3SG.F-see-3SG.M
 A Pi V
 ‘Mother saw father.’

In the above example, the gender specification in the verb’s obligatory prefix and suffix helps to assign the right interpretation to the clause. But, as the following example shows, when the verb agreement does not disambiguate, word order does. Given equal animacy — and neutral pragmatic status of — participants, the following example would have an A Pi V interpretation (see §6.4.2, below, for examples of when Pi A V ordering is appropriate).

- (246) *Bió biám má biám k-a-yarǎ-ká.*
 person man child man RL-3SG.M-see-3SG.M
 A Pi V
 ‘The man saw the boy.’

There is a preferred order of arguments, but there are no movement or substitution processes which positively identify a constituent, so there do not seem to be compelling reasons for positing a VP constituent consisting of the verb and the Pi.

In clauses headed by non-suffixing monotransitive verbs the Pu must always appear before the verb and is not cross-referenced on the verb. An example of a clause with a Pu is given in (247).

- (247) *Ói k-ǎ-r-á.*
 sago RL-3SG.M-3SG.M-eat
 Pu V
 ‘He ate sago.’

The totally fixed position of this argument with respect to the verb might suggest the existence of a constituent, but again, as there are no substitution or movement processes, it is unclear that a VP analysis is useful. Secondary objects are full, modifiable NPs, as shown in examples (248) and (249), suggesting that they are not incorporated.

(248) *Râi páko nění ekókó páko k-o-châró.*
 sibling big 1SG.F string.bag big RL-3SG.F-carry.on.head
 ‘My big sister carries a big string bag on her head.’ [DICT-PA:01]

(249) *Ei! nâpe aniania něná k-e-p-u=éro?*
 hey who fruit.sp 1SG.M RL-3PL.M-3PL.M-pick.fruit=DIRR
 ‘Hey, who’s picking my fruit?’ [ANR-MN:01]

The secondary object NP can be omitted but only if its identity is fully recoverable (see §6.3.3, below).

6.2.2.1 Reflexive and reciprocal

A verb in a reflexive clause takes the same number of affixes in the same positions as it would in a non-reflexive clause and it takes two NP arguments. However, a reflexive object is always post-verbal on suffixing transitive verbs. The construction is marked in three ways. First, a suffixing transitive verb will take co-referential subject and object affixes. Second, an overt pronoun is obligatory and followed by the reflexive particle *bêku*. Third, the reflexivised pronoun appears after the verb. This is shown in the following example. Here the suffixing monotransitive verb *-yé* ‘hit’ takes a prefix and a suffix, both referring to the same participant, and the overt reflexivised pronoun is post-verbal.

(250) *Kua Manuela k-o-yé-ø bó bêku.*
 AT PN RL-3SG.F-hit-3SG.F 3SG.F REFL
 ‘Manuela hit herself.’

With dual and plural pronouns a clause with a post-verbal reflexive NP is ambiguous between reflexive and reciprocal.

- (251) *K-epi-p-yé-pi mēpi bêku.*
 RL-1DU-1DU-hit-1DU 1DU REFL
 ‘We hit ourselves/each other.’

Some intransitive verbs are inherently reflexive or reciprocal and require no operations. For example, the intransitive verb *pi-nii* ‘wash’ is inherently reflexive and the intransitive verb *-õa* ‘fight’ is always found with dual or plural subject agreement and implied reciprocity. This is shown in examples (252) and (253).

- (252) *Pi k-e-ni(n)i.*
 water RL-1SG.F-(1SG.F)wash
 ‘I wash (myself).’

- (253) *K-ere-õ(p)á.*
 RL-3DU-(3DU)fight
 ‘Those two fought (each other).’

The reflexive particle *bêku* is also used in Barupu for emphasis (as in English ‘I did it myself’).

- (254) *Yá bêku k-a-kae k-a-ore-o ekókó.*
 3SG.M REFL RL-3SG.M-come RL-3SG.M-search-DOWN string.bag
 ‘He himself came and had a look in the string bag.’ [ANR-MN:01]

Reflexive possession also uses regular word ordering, as in the following example. The possessed reflexive *Pi óm yá bêku* ‘his own wife’ appears before the verb in the normal position for *Pi*.

- (255) *Anranae óm yá bêku k-a-yé-u k-o-rái.*
 demon wife 3SG.M REFL RL-3SG.M-hit-3SG.F RL-3SG.F-die
 ‘The demon killed his own wife.’ [ANR-MN:01]

- (256) *Owu k-e-víri, réká bêku=va k-e-p-yé-u.*
 some RL-3PL.M-die.PLS body REFL=PRM RL-3PL.M-3PL.M-hit-3SG.F

‘Some men died, they took their own lives.’ (‘They hit their own body.’)
 [DC-MM:03]

- (257) *Au êno bêku k-o-r-á.*
 thing hand REFL RL-3SG.F-3SG.F-do
 ‘She committed suicide.’ (‘She did something with her own hand.’)

The non-suffixing transitive verbs do not appear with reflexive objects but this may be due to the facts that the types of participants they take as Undergoers are not very highly animate and thus unlikely to act on themselves, and that the 3SG.F personal pronoun *bø* cannot be used to refer to inanimates, e.g. **âi k-u-iro bó bêku* (tree RL-3SG.F-fell 3SG.F REFL).

Another way to indicate a reciprocal action is by reduplicating the modifier *báru* 'return' following a verb marked with dual or plural subject, as in (258).

- (258) *K-ere-tere báru-báru.*
 RL-3DU-ask REDUP-return
 'They asked (each other) back (and forth).' [TP-MN:01]

6.2.3 Ditransitive clauses

The following example shows the structure of a clause headed by the ditransitive verb *-o* 'give'. The Theme *bá=va* 'fish=PRM', like Pu, appears before the verb and there is no instantiation of this argument in the verb. The Recipient, *nâki* 'dog', is marked on the verb with a suffix *-ka*, like a Pi, but it appears after the verb.

- (259) *Cha Menriri bá=va k-a-r-o-a nâki.*
 AT PN fish=PRM RL-3SG.M-3SG.M-give-3SG.M dog
 'Cha Menriri gave the dog-spirit a fish.' [TP-MN:01]

All NPs, including Pu and T, can be omitted if their identities are recoverable from context. And, even when the T NP is omitted, the R still appears after the verb. This is shown in the following example from a procedural text about how to make paint. The Theme has already been established and so is not overt in these clauses.

- (260) *Mâre k-anâ-irai,*
 now RL-1SG.M-say
 'Now I'm telling (it),
- bai n-e-m-iritá-i mevôva mâre nau, ápo mém vôva.*
 FUT IRR-1PL-1PL-teach-3PL.M children now NOW grand.relation 1PL again
- so we can teach (it) to the children of today, and our grandchildren again.'
 [P-MG:03]

The above example shows that it is not just the structural presence of the Theme which forces a Recipient to follow the verb.

6.2.4 Instruments

The Instrument in Barupu is not case-marked nor marked on the verb, and often appears before the verb, making it look very like a secondary object. Unlike secondary objects, however, Instruments can appear after the verb. In clauses with transitive verbs and pre-verbal Instruments, the following orders are attested: A Inst V Pi (261a); A Pi Inst V (261b) and A Inst Pi V (261c). The Instrument and Recipient are in bold in the following examples.

- (261) a) *Kuáni **âi** k-o-yé-ya má.*
 mother tree RL-3SG.F-hit-3SG.M child
 A Inst V Pi
 ‘Mother hit the child with a stick.’
- b) *Kuáni má **âi** k-o-yé-ya.*
 mother child tree RL-3SG.F-hit-3SG.M
 A Pi Inst V
 ‘Mother hit the child with a stick.’
- c) *Kuáni **âi** má k-o-yé-ya.*
 mother tree child RL-3SG.F-hit-3SG.M
 A Inst Pi V
 ‘Mother hit the child with a stick.’

Example (261c) requires some extra remarks. This ordering is almost indistinguishable from another very common way to express Instrument relations. This way involves a serial verb construction (see Chapter 7) with a ‘get’ verb (either *-ko* ‘get.SGO’ or *-úna* ‘get.PLO’). This construction is shown in the following example.

- (262) *Kuáni **âi** k-o-ko má=va k-o-yé-ya.*
 mother tree RL-3SG.F-get.SGO child=PRM RL-3SG.F-hit-3SG.M
 A Pu V Pi V
 ‘Mother got a stick and hit the child.’

But, this construction is most commonly realised in abbreviated form, with the ‘get’ verb elided, as in the following example. Speakers refer to this as a ‘short cut’ to the serial verb construction.

- (263) *Kuáni âi ... má=va k-o-yé-ya.*
 mother stick ... child=PRM RL-3SG.F-hit-3SG.M
 A Pu (V) Pi V
 ‘Mother got a stick and hit the child.’

The short cut is usually accompanied by a slight intonation break at the site of the missing verb, but it is almost impossible to distinguish between this construction and a simple clause with the structure A Inst Pi V in connected speech.

As mentioned above, the Instrument can also appear after the verb, as in the following example.

- (264) *Kuáni má k-o-yé-ya âi.*
 mother child RL-3SG.F-hit-3SG.M tree
 A Pi V Inst
 ‘Mother hit the child with a stick.’

The factors motivating the different word orders appear to be discourse-pragmatic; new or important information is preferably pre-verbal. When the Instrument is the only overt nominal in a clause, its preferred position is before the verb. A possible reason for this preferred position might be that the Instrument is sub-categorised for and that clauses with Instruments are treated as something like ditransitive clauses: Instruments are conceptualised as similar to Themes.

Non-suffixing monotransitive verbs with Instruments show a slightly different pattern. Again the Instrument can appear before or after the verb, but, as always, the Pu object cannot appear after the verb. The subject NPs have been omitted from the following examples; the Instruments are in bold-face type.

- (265) a) *Ái=a k-ana-iro **âimon** kamo.*
 tree=PRM RL-1SG.M-fell axe
 Pu V Inst
 ‘I chopped the tree with an axe.’

- b) *Âi=a âimon kamo k-ana-iro.*
 tree=PRM axe RL-1SG.M-fell
 Pu Inst V
 'I chopped the tree with an axe.'
- c) *Âimon kamo âi=a k-ana-iro.*
 axe tree=PRM RL-1SG.M-fell
 Inst Pu V
 'I chopped the tree with an axe.'
- c) **Âimon kamo k-ana-iro âi.*
 knife steel RL-1SG.M-fell tree
 Inst V Pu
 ...

Even though it can be fairly clearly established that Pus and Instruments do have differing behaviour, it seems that speakers prefer constructions where they are maximally differentiated. That is, many speakers prefer the serial verb construction over a simple clause involving both a secondary object and an Instrument (again Inst Pu V ordering is difficult to distinguish from the abbreviated serial-verb construction), while others seem to have a strong preference for post-verbal Instruments in these cases. Both of these preferences can probably be attributed to the fact that they are not disambiguated by verb agreement and speakers may wish to distinguish them using word order.

It is also true that the semantics of the nominals themselves can serve to disambiguate. The noun *âi* can mean either 'tree' or 'piece of wood', and when it is in a clause about chopping and there is an axe present, its most likely interpretation is as the secondary object; a tree or piece of wood that has an axe taken to it. When *âi* is in a clause about hitting and there is a hittable object, like a child or dog, present, its most likely interpretation is as the Instrument.

6.2.5 Location and Reason

Locative and Reason participants are not marked on the verb and appear after the verb. As the following examples will show, the interpretation of the unmarked

post-verbal NP as a locative participant — Goal, Path, Location, Source — or Reason, depends heavily on the semantics of the verbs and nouns involved. These participants are always optional and sentences are perfectly grammatical without them.

In the following example, both mother and father are in the house. To specify that only one of them is in the house, a relative clause would be used (see §5.6).

- (266) *Kuáni aka k-o-yarǎ-ká ôro.*
 mother father RL-3SG.F-see-3SG.M house
 S O V Loc
 ‘Mother saw father in the house.’

There can be no more than one locative argument in any one clause. It is impossible to say things like ‘go along the road to the house’ in a single clause.

- (267) **K-en-úte rara ôro.*
 RL-1SG.F-walk road house
 ...

Instead, the information must be spread over two clauses or two verbs in a serial verb construction. An example of this is given in (268), but see Chapter 7.

- (268) *K-en-úte rara k-e-n-aro ôro.*
 RL-1SG.F-walk road RL-1SG.F-1SG.F-go.down house
 ‘I’m walking along the road, going home.’

Non-case-marked, non-iterative, post-verbal locatives are found in Skou languages (Donohue 2004), as well as in the areally close Torricelli languages (see McGregor and McGregor 1982:53). McGregor and McGregor (1982:53) label post-verbal nouns functioning as Locations ‘adverbs of place’, e.g. *le rati uf* (he stayed village) ‘he stayed in the village’. They do not explicitly discuss Goals or Sources, but according to their example sentences these arguments apparently either appear unmarked after the verb, e.g. *mampeis ki keli uf* (afterwards I go village) ‘Afterwards I will go to the village.’ (p.66), or else as objects of what they call ‘a

preposition marker', *-f* at the end of a verb, e.g. *pele les laule-fwënem* (dog will come-prep house) 'The dog will come to the house.' (p.65) .

The following examples show how the meanings of the verbs and the nouns themselves are important in determining the interpretation of the post-verbal participant in Barupu. Example (269), shows that a nominal with receptacle or place semantics will be interpreted as a Goal on 'putting' verbs.

(269) **Goal**

K-e-m-ikoro-wo(m)o poro.
 RL-1PL-1PL-put.in-(AG)DOWN canoe
 'We put (them/it) down in the canoe.' [P-MB:03]

Example (270) shows that a place noun with a posture verb will be interpreted as an Location.

(270) **Location**

K-o-kéi ôro.
 RL-3SG.F-sit house
 'She sits in her house.'

As a general rule, a post-verbal place noun with a direction of motion verb will be interpreted as a Goal, (as in 271).

(271) **Goal**

K-ere-tá k-ere-p-aro kikom.
 RL-3PL.F-paddle RL-3DU-3DU-go.down mangrove
 'They (two) paddled to the mangrove.'

However, the direction of motion verbs in combination with an established deictic centre are also used to indicate how a post-verbal place noun should be interpreted. For example the interpretation of a place-noun after the 'hither' verb *-kae* 'come' can depend on context. If the hither verb is followed by a place that is shared by the discourse participants, or is an established deictic centre, then that place can be interpreted as the Goal (i.e 'come to'). If, however, the place is not shared and is not a

deictic centre then it could be interpreted as a Source (i.e. ‘come from’). One verb, *-bere*, determines that the following place is interpreted as a Source.

(272) **Source**

Cha Paivi pevara k-a-yará-i k-e-bere-ká Baro.
 AT PN magician RL-3SG.M-see-3PL.M RL-3PL.M-leave-TOWARD PLN
 ‘Mr Paivi saw magicians coming here from Baro.’

The fact that direction of motion verbs govern the semantic role of the post-verbal NP does strongly suggest the possibility that these NPs are arguments rather than adjuncts and they are not marked on the verb because they are unindividuated. In a sense they are to R what Pu is to Pi, but Goal and Source NPs are never obligatory.

With manner of motion verbs a post-verbal place noun is always interpreted as a Path/Location, as in (273). Manner-of-motion verbs need to appear in serial verb constructions with direction of motion verbs if they are Goal-directed. This is shown in (274) (see also §7.1.1).

(273) **Path/Location**

K-ere-tá raka.
 RL-3PL.F-paddle river
 ‘They paddled along/in the river.’

(274) **Path/Location**

K-ere-tá k-ere-r-aro raka.
 RL-3PL.F-paddle RL-3PL.F-3PL.F-go.down river
 ‘They paddled down to the river.’

Examples of nouns with place semantics, that is, potential Paths, Locations, Goals and Sources are: proper place names; nouns denoting places like *yin* ‘beach’ or *ôro* ‘house’; or receptacles for putting verbs such as *ríná* ‘sago bark’ or *ekókó* ‘string bag’.

Nominals without inherently place or receptacle semantics, such as *ôí* ‘sago’, *awei* ‘meat’ and *amori* ‘namesake party’ can be interpreted as a sort of Reason role,

something equivalent to NPs introduced by ‘for’ in English. This is shown in the following examples.

- (275) *K-ere-r-aro* *ôi.*
 RL-3PL.F-3PL.F-go.down sago
 ‘They’ve gone to (work) sago.’
- (276) *K-emi-tá* *awei.*
 RL-1PL-paddle meat
 ‘We paddle for fish (to eat).’ [U-GX:01]
- (277) *N-e-p-yé-ma* *amori.*
 IRR-3PL.M-3PL.M-kill-2SG.M namesake.party
 ‘They’re going to kill you for (eating at) a namesake party.’ [NSC1-CA:03]

Animates can never appear as Paths, Locations, Sources, Goals or Reasons of simple verbs. Instead, they must be added objects which are introduced into the clause by the participant-adding morphemes, see Chapter 7 and §6.2.9, below. The relative locations, ‘on’, ‘amid’, ‘around’ and ‘under’ are also specified with participant-adding morphemes.

Some locative relations which would be specified with prepositions like ‘beside’ or ‘inside’ in a language like English, are achieved through nominal compounding in Barupu. For example, *ôro* ‘house’ is a potential place and it can be compounded with a locational such as *ări* ‘inside’ to *ôro ări* ‘inside of a/the house’ (see §5.1.2).

Another possible interpretation for an unmarked post-verbal NP is Instrument. A post-verbal Instrument precludes the appearance of a locative, which is unsurprising given the non-interativity of post-verbal adjunct NPs. The following example demonstrates that a clause with a post-verbal Instrument as well as a Location is ungrammatical.

- (278) **Kuáni má k-o-yé-ya* *âi ôro ări.*
 mother child RL-3SG.F-hit-3SG.M tree house inside
 S O V Inst Loc
 ‘Mother hit the child with a stick in the house.’

If speakers wanted to specify a locative and an Instrument in the same clause, they would have to use a pre-verbal Instrument.

- (279) *Chakán âi=a k-a-yé-ya nâkí uka.*
 grandfather tree=PRM RL-3SG.F-hit-3SG.M dog bush
 S Inst V O Loc
 'Grandfather hit the dog with a stick in the bush.'

Another alternative, with a Location and Instrument in the same clause, is the serial verb construction.

- (280) *Kuáni âi=a k-o-ko má k-o-yé-ya ôro ári.*
 mother tree=PRM RL-3SG.F-get.SGO child RL-3SG.F-hit-3SG.M house inside
 S Inst V O V Loc
 'Mother hit the child with a stick in the house.'

Path/Location/Reason NPs can co-occur with Recipients.

- (281) *Kuáni bá karua aka erôra.*
 k-o-r-o-a
 mother fish RL-3SG.F-3SG.F-give-3SG.M father garden
 'Mother gave father a fish in the garden.'

There are no examples of a clause with both a Recipient and a Goal or Source.

6.2.6 'Adjunct' nominals

Multi-word predicates involving a nominal-like word and a verb are widespread in Papuan languages.² The construction is commonly referred to as the 'adjunct nominal construction' (Donohue 2004; Foley 1986), which is the term I use here. In general, the nominal is present to provide most of the semantic information while the verb is present to contribute some semantic information, but mostly to carry inflection.

²These predicates have been called 'periphrastic' or 'augmented' verbs (Davies 1985:40,49ff) and 'verb compounds' (Haiman 1980:117-124), among other things. The verb roots in the constructions have been referred to as 'support verbs' (Haiman 1980; Davies 1985) and more recently 'light verbs' (Foley 2000:inter alia), or 'generic verbs' (Pawley 1993). The nominal-like element has been called 'verbal adjunct' (Gravelle 1997; Pawley et al. 2000), 'complement' (Ross 1980), 'root' Haiman (1980) and 'adjunct nominal' Foley (1986).

Importantly, as Foley (2000:385) points out, the adjunct nominals ‘form a close-knit syntactic unit with their light verbs as befits a single predication.’

The adjunct nominal constructions found in Barupu can be divided into two main types: those which use a light verb, ‘do’ where the nominal provides all the semantics, and those which use a verb with its own specific semantics. In both kinds, the nominals can be frequently used nouns or have limited or no use outside the constructions (e.g. the nominal *aware* ‘cooking’ is only ever found as an adjunct nominal).

Some examples of the first type are given in Table 6.2. In some cases the construction is the only way to describe a certain event (e.g. *mônrai -á* (singsing do) ‘have a singsing’). However, in other cases there are specific verbs to refer to an action but speakers can choose to use this construction instead (e.g. there are many different verbs of fishing, but speakers can also say *bá -á* ‘fish do’).

Table 6.2 Adjunct nominals with ‘light’ verbs

	adjunct nominal	verb	gloss
<i>mônrai -á</i>	singsing	do	‘have a singsing’
<i>aware -á</i>	cooking	do	cook
<i>roma -á</i>	fight	do	fight
<i>bá -á</i>	fish	do	go fishing
<i>awá -á</i>	string game	do	play string games

(282) *Mônrai k-e-n-á.*
 singsing RL-1SG.F-1SG.F-do
 ‘I’m in a traditional singsing.’

(283) *Aware k-e-n-á.*
 cooking RL-1SG.F-1SG.F-do
 ‘I’m (doing the) cooking.’

The second type is where the verbs have limited or no use outside an adjunct nominal construction. A sample of this type is given in Table 6.3. Where the verbs and nominals have no attested uses outside this construction, it is not always possible

to give an exact gloss for either of them, indicated by a question mark in the table.

Table 6.3 Adjunct nominals with ‘heavy’ verbs

	adjunct nominal	verb	gloss
<i>tîró -tîró</i>	body fluid	secrete fluid	‘urinate’
<i>ne -ai</i>	power	curse	‘put a spell on’
<i>pí -nii</i>	water	bathe	‘bathe, wash’
<i>nau -nii</i>	saltwater	bathe	‘swim’
<i>mônrai -tîti</i>	singsing	dance	‘dance’
<i>ope -u</i>	?	?	‘very busy’
<i>ró -e</i>	mouth	?	‘full to the brim’
<i>ê -iria</i>	?	smell	‘stink’
<i>pa -i</i>	bottom	motion?	‘follow’
<i>têvé -rôró</i>	ear	sing out	‘silent’
<i>aro -ro</i>	cry	cry	‘cry’
<i>iki -iya</i>	red seed	paint	‘paint’
<i>pí -yau</i>	water	bail	‘bail’

An example of an intransitive adjunct nominal construction is *tîró -tîró* ‘urinate’.

- (284) *Tîró n-o-tîró.*
 body.fluid RL-3SG.F-secrete
 ‘She’ll urinate.’

The words are glossed as ‘body.fluid’ and ‘secrete’, because even though the noun *tîró* is commonly used to mean ‘urine’, the verb *-tîró* is also found to describe other secreting events, as in example (285), which is about dead bodies being smoked over a fire. When the bodies begin to decompose they secrete liquid.

- (285) *Ái=a k-e-p-ere-p-o-i k-e-tîró ...*
 tree=PRM RL-3PL.M-3PL.M-put-AG-GIVE-3PL.M RL-3PL.M-secrete

‘They make a fire for them (dead people) and they (the dead people) secrete liquid ...’ [DC-MM:03]

It is only the adjunct nominal construction using both the noun and the verb that specifically means ‘urinate’. (Other secreting verbs like ‘sweat’ have a dedicated lexeme: *-bene* ‘sweat’)

Some analyses of these constructions have likened them to cognate objects familiar from languages like English — constructions like ‘have a bath’ or ‘smile a happy smile’. These are defined by Fillmore as ‘the object or being resulting from the action or state identified by the verb, or understood as part of the meaning of the verb’ (in Baron 1971:72). And this may well be the best analysis for the Barupu constructions using the light verb ‘do’ — the only distinction between the nominals found in these constructions and the unmarked secondary objects described above is that in the adjunct nominal construction the nominals cannot be modified or further specified; they must be generic.

In the constructions using semantically specific verbs there is clearer evidence that the nominals are not objects. For example, ‘adjunct nominal’ constructions can also take their own direct objects. The construction *pí-níi* ‘wash’ can be found with a Pi.

(286) *Aro bóm má pí k-ere-ní(r)i-a.*
 people woman child water RL-3PL.F-(3PL.F)wash-3SG.M
 ‘Women washed the child.’

Adjunct nominals *are* similar to secondary objects both in terms of their position in the clause — directly before the verb — as well as in the types of relationships holding between them and the verb (for example, semantically cognate, unindividuated, objects — e.g. *secrete.body.fluid body.fluid*). Adjunct nominals can also appear to have an Instrumental-like relationship with the verb (e.g. *water wash*). It is true that the distinction between secondary objects and adjunct nominals is not always clear-cut (as in the ‘light’ verb constructions described above). However, in the semantically-specific verb constructions the nominals can be distinguished from Instruments and secondary objects by the following characteristics:

- i Both secondary objects and Instruments can be full, referential NPs and secondary objects can be replaced by pronouns. Adjunct nominals cannot be

6.2.6.2 Obligatoriness

The second major difference between secondary objects and adjunct nominals is that whereas secondary objects can be omitted from the clause if their identities are fully recoverable, adjunct nominals are never omitted. The verb *nii* is never found without either the noun *pi* ‘water’ or another noun *nau* ‘ocean’, as shown in (291).

- (291) *Nau n-e-ni(n)i.*
 water IRR-1SG.F-⟨1SG.F⟩bathe
 ‘I’m swimming around in the sea.’

With *pi* the verb means ‘bathe’ or ‘wash’. With *nau* the verb means to swim for pleasure in the ocean. It doesn’t matter how often this verb appears in a stretch of text, the nominal will always be present. Speakers do not accept this verb without the nominal and all speakers claim that the verb means nothing on its own.

If the adjunct nominals are arguments of the verb, they differ from all argument types previously identified for Barupu — subject, Pi, R, secondary object — in that they cannot be omitted without seriously altering the meaning of the predicate, as in (285), or rendering the sentence meaningless. The verb *-nii*, for example, means nothing on its own.

6.2.7 Post-verbal modifying slot

There is a slot directly after the verb for words providing manner, locational or duration information. Evidence that this is a separate slot to the locative NPs is that the two can co-occur; the modifier always appears before a locative NP, as shown in the following examples.

- (292) *K-or-u-âvo-ki(r)é-na* *rewo maiku bó bió*
 RL-3SG.F-BEN.3SG.F-hold.3SG.F-⟨AG⟩AWAY-EXTV well torso 3SG.F person
târe.
 alive
 ‘She held it hard against the woman’s whole torso.’ [FF1-MN:01]

- (293) ... *ya k-ere-tá n-ere-kô(p)e báru óro.*
 and IRR-3DU-paddle IRR-3DU-(3DU)go.up return house
 ‘... and they paddled back up to the house.’ [DC-MM:03]

As discussed in Chapter 4, temporals appear at the beginning of the clause if they are providing clock or calendar time information, and in the post-verbal modifying position if they are expressing the duration of an event.

6.2.8 Summary of word order in underived clauses

The following figures summarise the structures described in the preceding sections. Neither of the ditransitive verbs in my data are compatible with an Instrument participant so there is no data on the position of Instruments in ditransitive clauses.

Intransitive:	Time	S	(Inst)		(AdjN) V	Modifier	(Loc/Inst)
Transitive:	Time	S	(Inst),	Pi/Pu	(AdjN) V	Modifier	(Loc/Inst)
Ditransitive:	Time	S		T	V	R	Modifier (Loc)

6.2.9 Added objects

The final NP-type needing introduction is the added object. Added objects are added to the clause by extra morphemes on the verb. They usually appear after the verb. The types of participants introduced by these morphemes include relative locations, such as ‘under’ and ‘on’, adversatives, benefactives, comitatives and datives, among others, see §7.2.3 for a detailed treatment of the semantics of added objects.

The following example shows the NST verb *-árai* ‘throw’. This verb almost always appears with an incorporated direction of motion element, which is *-oo* DOWN in the following example. This element agrees with the subject through infixing. Following the directional is a participant-adding morpheme *-o* ‘GIVE’, this morpheme also always appears with a C prefix indexing the subject, although see Chapters 2 and 7 for some complications. The added object in the following example is *ya* 3SG.M pronoun ‘him’.

- (294) *Aikéké inei k-ere-r-âraí-[o(r)o]-[r-o-a]* *yá.*
 ladder vine.sp RL-3PL.F-3PL.F-throw-[(AG)DOWN]-[AG-GIVE-3SG.M] 3SG.M
 Pu V O_A
 ‘They threw a rope ladder down to him.’ [FF2-CA:03]

The added object does not replace or demote a Pi or secondary object. The next example shows a Pi, *aimâna*, and an added object, *Cha Charlie*, in the same clause.

- (295) *Aimâna_i k-e-n-yé-ya_i-[n-o-a_j]* *Cha Charlie_j.*
 dog RL-1SG.F-1SG.F-hit-3SG.M-[AG-GIVE-3SG.M] AT PN
 O V O_A
 ‘I beat the dog for Charlie.’

Added objects appear before locatives.

- (296) *E=va k-a-awe-[ki]-[nâ-i]* *mevôva âi ú.*
 bag=PRM RL-3SG.M-hang-[AWAY]-[APPL-3PL.M] children tree branch
 Pu V O_A Loc
 ‘He hung the bilum with the children in it on a branch.’ [ANR-MN:01]

Verb modifiers can precede or follow added objects. In example (297) the added object *râi owu yá* ‘some of his brothers’ appears after *miniá* ‘too’.

- (297) *K-â-irai-r-o-i* *miniá râi owu yá bé.*
 RL-3SG.M-say-AG-GIVE-3SG.M too sibling some 3SG.M DPROX
 V Mod O_A
 ‘He spoke to some of his brothers as well.’ [U-EM:01]

In example (297), the added object *mevôva* ‘children’ appears before the modifier *mariro* ‘softly’.

- (298) *K-en-îrai-r-o-i* *mevôva mariro.*
 RL-1SG.F-say-3SG-GIVE-3PL.M children softly
 V O_A Mod
 ‘I spoke to Charlie softly.’

The semantics of the verb and the relationship of the post-verbal elements to it affects the preferred orderings of post-verbal elements. For example, a proprietive participant might be expected to precede a Goal participant because establishing that

something is in a bag or on somebody's person is semantically prior to where the bag or the person is going.

The position of various elements with regard to the added object can be summarised as follows. In this schema, naturally attested orderings are given preference over elicited ones.

Complex verb: A/S Pu/Pi V-V Modifier, Oa Loc

6.3 The grammatical status of verb agreement

As noted above, subject affixes are always obligatory and object affixes are obligatory for those verbs that take them. Inflected verbs can stand alone as grammatical clauses; NPs are often left out after the first mention until they do something unexpected like change grammatical function (see below), or an ambiguity needs to be avoided. Foley (1999:135) notes that this is very common cross-linguistically and he puts it down to the following principle: 'if the referent of a constituent is already known or activated in the discourse context, attenuate its formal representation'.

The following examples are grammatical, NP-less clauses.

- (299) *K-o-kôe.*
 RL-3SG.F-go up
 'She ascended.'
- (300) *K-o-yarǎ-ká.*
 RL-3SG.F-see-3SG.M
 'She saw him.'

Obligatory affixes like this are often called bound pronominals and are treated as the arguments of the verbs they appear on and any co-referring external NPs are treated as adjuncts (Baker 1996; Jelinek 1984). However, another view is that presented by Evans (2002:16). Writing specifically about object affixes (but the same

can be true for subject affixes as well³), Evans argues,

... bound object affixes in at least some polysynthetic languages pattern more like subject agreement morphology in European languages than like free pronouns, in that they specify person and number information while remaining non-committal about reference and discourse status. A corollary of this is that, in order to obtain a full referring expression, external material needs to be integrated more closely than can be captured simply by treating it as an adjunct.

Evans goes on to say that he does not disagree with the proposition that bound pronominals can saturate the argument structure of the verb, only with ‘the specific equation of these inflections with pronouns, and the corollary that external material is therefore always some kind of adjunct’ (2002). The alternative view is that while obligatory bound pronominals in polysynthetic languages can function as anaphoric pronominals in the absence of overt nominals, they are not functionally equivalent. When overt nominals are present, the bound pronominals function much more like agreement than anaphors. I argue this to be the case in Barupu. In the following sections I give a summary of some of the interactions between nominals and agreement in Barupu.

6.3.1 Bound pronominals and referentiality

The main argument against analysing obligatory bound pronominals as equivalent to free pronouns is that whereas free pronouns and optional bound pronominals almost always index activated, referential participants (with some exceptions, see below), bound pronominals can index both referential and non-referential participants. For example, in the absence of any external nominal, a bound pronominal in Barupu will most often be interpreted as referential. In the following example, both 3PL.M referents are probably identifiable to the hearer.

³Evans (2002:20) argues that in the Australian language Bininj Gun-Wok, ‘[s]ubject and object prefixes are comparable to agreement suffixes in well-known European languages in being referentially open.’

- (301) *K-e-te-i.*
 RL-3PL.M-shoot-3PL.M
 ‘They shoot them.’

However, with the addition of an overt NP, agreement in Barupu is no longer necessarily referential. In the following example, there is no assertion of any particular pigs or any particular people, but the verb still takes its obligatory 3PL.M cross-referencing.

- (302) *Aro rau k-e-te-i.*
 people pig RL-3PL.M-shoot-3PL.M
 ‘People shoot pigs.’

Similarly, bound pronominals must co-reference questioned participants. This is shown in examples (303) and (304). As B. Baker (2004:66) points out, when bound pronominals co-reference questioned participants ‘the questioned referent ... (from the speaker’s point of view at least) can only be characterised as indefinite and non-specific’.

- (303) *Erôra, nâpe k-a-r-á-ke?*
 garden who RL-3SG.M-3SG.M-make-INTS
 ‘This garden, who made it?’ [TP-MN:01]
- (304) *Bió nâpe wa k-a-r-á k-o-koru-kí?*
 person who canoe RL-3SG.M-3SG.M-make RL-3SG.F-capsize-AWAY
 ‘Who made the canoe capsize?’ [C-EM:03]

Notice that in the above examples the verb is inflected with masculine subject. Both of these examples were taken from texts and clearly the narrator knew the sex of the questioned participant. In other contexts the choice of gender in questioned arguments seems to be a matter of choice coupled with real world knowledge. For example, some verbs suggest possible participants — a question such as ‘who’s cooking?’ is likely to have feminine subject marking (see Chapter 9).

In addition, generic or non-specific NPs such as ‘kind’ referents must also be indexed even though they are non-referential.

- (305) *Petapon tí k-o-buto.*
 flower.sp blossom RL-1SG.F-white
 ‘The *petapon* blossom is white.

Petapon pê n-ă-m-á pí n-a-ni(m).
 flower.sp leaf IRR-2SG.M-2SG.M-eat water IRR-2SG.M-(2SG.M)wash
 You chew up the leaves and wash (with them).’ [DICT-PB:01]

The absence of an NP almost always signals that the argument is referential, but there are several common constructions where a bound pronominal can have a generic, or non-referential, interpretation in the absence of an overt nominal. One example, the generic second person, can be seen in (305), above. Here there is no referent for the 2SG.M pronominal agreement except the understood reader of the text. Another is the generic use of 1PL. This is shown in (306), where the 1PL prefix does not refer to any of the people involved in the actual discourse but it is interpretable as Barupu people generally. This is an example sentence from the dictionary under the entry for ‘chicken/rooster’.

- (306) *Rú ôro. K-e-rôró, béi=a k-ě-m-á, pê k-em-oro.*
 bird house RL-3PL.M-crow meat=PRM RL-1PL-1PL-eat feather RL-1PL-decorate
 ‘House bird. They crow, we eat the meat and decorate with the feathers.’
 [DICT-EM:01]

Another example is the vague 3PL.M, as shown in the following. Here there is no overt NP but the 3PL.M prefix is not referring to any specific group of men (except perhaps the ancestors who named the spot).

- (307) ... *k-e-p-iná Toeyoro.*
 RL-3PL.M-3PL.M-name PLN
 ‘.. they call it Toeyoro.’ (‘It’s called Toeyoro.’)

All of these are special cases and as the free translations show, they are equivalent to grammatical uses of non-referential free pronouns in English as well. However, there are also examples in Barupu of bound pronominals being used

non-referentially in the absence of external material in situations that would be absolutely impossible in English.

Consider the following opening section from a text about making canoes. In the opening lines the narrator talks about cutting down a tree and hollowing it out. The 3PL.M verb agreement on the verb *-rín* ‘pull’ does not co-reference any external nominal; it can only be interpreted as something like ‘some people’. Likewise the 3SG.M added object addressee on the verb *-írai* in the second section has no anaphoric referent, it can only be interpreted as referring to ‘someone’. These clauses could not be felicitously translated into English using pronouns instead of generic NPs.

- (308) *Něná poro k-ana-iro. K-a-n-eri k-a-n-á*
 1SG.F tree RL-1SG.M-cut.down RL-1SG.M-1SG.M-hollow RL-1SG.M-1SG.M-do
k-o-bâun-kí.
 RL-3SG.F-not.be.at-AWAY
 ‘I cut down a canoe-making tree. I hollow it out, I work until it’s done.
- K-e-rín-p-ô-na k-o-kae k-u-íniá bé*
 RL-3PL.M-pull-AG-REG-1SG.M RL-3SG.F-come RL-3SG.F-be.at DPROX
oróka.
 under.house
They(=Some men help me pull it up under the house.’ [CB-JT:01]

Three lines of text intervene in which the narrator talks about painting the canoe and taking it out on the lagoon and coming back.

- (309) ... *N-ana-rín n-a-kô(n)e nake ya*
 IRR-1SG.M-pull IRR-1SG.M-⟨1SG.M⟩go.up on.top and
n-a-kô(n)-ro.
 IRR-1SG.M-⟨1SG.M⟩go.up-SHORT
 ‘I’ll pull it up on top and walk a little way up.
- N-anâ-irai-n-o-a poro k-ana-rín k-u-íniá raka.*
 IRR-1SG.M-say-AG-GIVE-3SG.M canoe RL-1SG.M-pull RL-3SG.F-be.at river
 I’ll tell **him(=a man)** I’ve pulled my canoe up, it’s at the river.’ [CB-JT:01]

The above discussion has shown that free pronouns in more analytic languages and obligatory bound pronominals in polysynthetic languages are not functionally equivalent. Two further differences are that *free* pronouns in Barupu are always referential (there are no generic uses), and those pronouns co-referencing subjects

and primary objects have the special pragmatic functions of marking a participant as the focus of a contrast or as having switched role. This is discussed in §6.4 along with other pragmatic marking.

6.3.2 Unification of information

The second problem with the traditional claim that external NPs are adjunctive is argued to be that verb agreement or an external NP may be underspecified to certain degrees and often information from both must unify to create ‘full referring expressions’ (Evans 2002:17). For example, in (310) *bió* is unspecified for gender (cf. *bió bóm* person woman ‘woman’, *bió biám* person man ‘man’), but the object agreement on *-yé* is fully specified for masculine gender. The combination of the non-gender-specific noun *bió* ‘person’ and masculine verb agreement allows the translation of the NP to be ‘man’.

- (310) *Kuiniarí bió n-o-yé-ya n-o-rái-tá-ka réká târe.*
 can person IRR-3SG.F-hit-3SG.M IRR-3SG.F-die.SGS-ON-3SG.M body new
 ‘She can kill a man and die with him to come back to life.’ [DICT-PW:01]

Another example can be seen in (311). Headless NPs consisting of only an adjective or quantifier can also unify with information in the affixes. This is shown in the following example where the quantifier modifies the bound pronominal 2SG.M, to create a partitive-definite construction.

- (311) *Beya ra=va n-amá-ute vai.*
 NEG one=PRM IRR-2SG.M-walk POL
 ‘Not one of you will go.’ [ANR-MN:01]

External NPs and internal cross-referencing each contribute important information needed to interpret the clause.

6.3.3 Omission of secondary objects

A question arises as to the omission of obligatory arguments without any morphological representation — namely secondary objects. Secondary objects can be omitted from clauses, but only when their identities are recoverable from fairly immediate context, ideally in the same complex sentence (see Chapter 10). In the following example *rau* is the primary object of the first clause headed by *-yé* ‘hit’. This same participant is also understood as the secondary object Theme of the second verb *-o* ‘give’ as well as the secondary object of the third verb *-ǎ* ‘eat’.

- (312) *Rau pôn n-opu-te-i, n-o-p-o-i aro ó,*
 pig only IRR-2PL.M-shoot-3PL.M IRR-2PL.M-2PL.M-give-3PL.M people namesake
 bai *n-ě-p-á.*
 FUT IRR-3PL.M-3PL.M-eat
 ‘Just shoot pigs and give (them) to the namesakes so they can eat (them).’
 [NSC1-CA:03]

An absent secondary object is always referential and identifiable. Verbs like *-ǎ* ‘eat’ are never found without a secondary object unless it is recoverable. It is not grammatical to say something like *k-ě-n-á* (RL-1SG.F-1SG.F-eat) ‘I am eating’, out of context with ‘food’ an understood object. A secondary object must be present (e.g. *akorom kěná* (food RL-1SG.F-1SG.F-eat) ‘I am eating food.’).

6.4 Word order variations and other pragmatic marking

In this section I summarise the known mechanisms speakers have for marking information structure.

6.4.1 Post-verbal Pi

When an event is old information that is being reiterated, a Pi of a monotransitive verb appears pre-verbally in the first mention but may appear post-verbally in the second mention. In example (313) the object, *biá*, is pre-verbal in the first clause but post-verbal when the same clause is repeated. Note that the whole event, not just the

post-posed participant, must be old information. It is also interesting that the NP is realised at all, since the participant is fully activated and referential.

- (313) *Bâuni!* Ino *biá* *k-en-yarã-ká.*
 no NOT person RL-1SG.F-see-3SG.M
 ‘No I didn’t see a man.

Bo nén k-e-ké(n) k-e-ké(n) é.
 TVF 1SG.F RL-1SG.F-(1SG.F)sit RL-1SG.F-(1SG.F)sit DPROX
 I’ve just been sitting here.

Ino *k-en-yarã-ká* *biá.*
 NOT RL-1SG.F-1SG.F-see-3SG.M person
 I didn’t see a man.’ [FF2-CA:03]

Another textual example is provided below.

- (314) *K-a-kôe* *ári* *k-a-yãrá-ø* *óm yá* *beya k-o-kéi vai.*
 RL-3SG.M-go.up inside RL-3SG.M-see-3SG.F wife 3SG.M NEG RL-3SG.F-sit POL
Maintópa k-o-yé-u.
 flying.fox RL-3SG.F-hit-3SG.F
 ‘He went inside and saw that his wife wasn’t there. The flying fox killed her.

K-ere-ø(p)á, *k-o-yé-u* *ya k-ø-r-á.* *Má*
 RL-3DU-(3DU)fight RL-3SG.F-hit-3SG.F and RL-3SG.M-3SG.F-eat child
k-o-yé-ø *k-ø-r-á* *k-o-bâun.*
 RL-3SG.F-hit-3SG.F RL-3SG.F-3SG.F-eat RL-3SG.F-no.
 The two fought and she ate her. She killed the child and ate her.

Mô k-ere-ø(p)á *vôva k-ere-ø(p)á* *k-o-noi* *k-o-noi.*
 mother RL-3DU-(3DU)fight again RL-3DU-(3DU)fight RL-3SG.F-go RL-3SG.F-go
Maintópa k-o-yé-u *mô.*
 flying.fox RL-3SG.F-hit-3SG.F mother

As for the mother, the two fought again, they fought and fought. The flying fox killed the mother.’ [U-EM:01]

In this example, the clause with the post-verbal Pi is not an exact repetition of any of the preceding clauses. That is, there is no clause *maintópa mô koyéu*, but the event described in the clause takes place in the preceding clauses. The construction does not occur with great frequency in narratives and its frequency in conversation is not known. The post-verbal ordering in Barupu seems to signal something like finality, indicating that it’s all the speaker has to say on the matter.

Post-verbal Pis precede adverbs and locative participants, suggesting that they are not post-posed to the clause, but only to the verb. This is shown in examples (315 a & b)

- (315) a) *Cha John k-a-yé-ya nâki torón.*
 AT PN RL-3SG.M-hit-3SG.M dog hard
 'John hit the dog hard.'
- b) *Cha John k-a-yé-ya nâki yamankoko.*
 AT PN RL-3SG.M-hit-3SG.M dog verandah
 'John hit the dog on the verandah.'

A verb and post-verbal Pi cannot be separated by an adjunct. The verb followed by a Pi is thus another candidate for a possible VP constituent, but there is still a lack of positive evidence from movement or substitution, and it would be very unlikely given Barupu's right-headed typology.

6.4.2 Topicalisation

There is an external topic position in Barupu. A topicalised NP is set off from the sentence by comma intonation and can also be marked off by an optional pronoun. Obligatory bound pronominals pose a problem for the traditional distinction between left-dislocation, in which the pre-posed NP is reiterated inside the sentence by a pro-form, and topicalisation, where it is not reiterated, because it is not clear whether they should be treated as pronominal reiterations of an pre-posed NP, or as obligatory agreement. I have argued above that obligatory bound pronominals are in some respects similar to agreement and this, coupled with the fact that pre-posed NPs are never reiterated by a *free* pronoun, leads me to analyse the Barupu construction as topicalisation.

In example (316), the Pi is of higher animacy than the subject. In this case it will almost always be topicalised and appear before the subject. This is a decontextualised, written, example sentence from the dictionary. It is not preceded or

followed by any other text about Peter or the snake; animacy is the only motivation for the move. A topicalised NP is offset by a pause and comma intonation.

(316) PAV — higher animate P

Cha Pita, mini k-u-i(r)i-a.
 AT PN snake_F RL-3SG.F-⟨3SG.F⟩bite-3SG.M
 ‘Peter, the snake bit him.’ [DICT-EM:01]

Lower animate primary objects can also be topicalised if they are of higher discourse importance — for example, if they are the topic (in the sense of ‘what the clause is about’) of the clause. The next example is from the example sentence for the dictionary definition of *epa* ‘citrus tree’. Clearly this is the topic under discussion and so, even though it is inanimate, it is placed at the front of the clause before the animate subject, *chápo* ‘grandfather’.⁴

(317) *Epá=ero, Chápo k-a-r-ere-ø-r-a(r)i-ø* *bũ.*
 citrus=DIRR grandfather RL-3SG.M-3SG.M-put-3SG.F-AG-⟨AG⟩SRND-3SG.F border
 ‘This citrus tree, Grandfather put it around (it) as a border.’ [DICT-PB:01]

Example (318) shows a topicalised secondary object. In the first clause, the secondary object *korá* ‘half’ appears before the subject *Cha Carl*. In the second clause of example (318), there is no subject NP, but the secondary object *kora* ‘half’ is still marked off by a pronoun and a pause so it is analysable as topicalised here as well.

(318) *Korá bó, Cha Carl k-â-irai bên.*
 half 3SG.F AT PN RL-3SG.M-say already
 ‘Half, Cha Carl told already.’

Orait korá bó, k-a-n-á-ke n-anâ-irai é.
 ALRIGHT half 3SG.F RL-1SG.M-1SG.M-want-INTS IRR-1SG.M-say DPROX
K-ana-joinim
 RL-1SG.M-JOIN
 ‘Alright, half, I’m going to tell now. I’m joining it.’ [NSC2-MM:03]

⁴Note the use of the irrealis demonstrative; this is a made up sentence about a made up tree.

The next example is also from the dictionary. The topicalised secondary object *epi éro* (tree.sp DIRR) ‘this tree’ is marked off by a pronoun.

- (319) *Epi=éro bó, kópu k-u-ora-r-o-na nĕná.*
 tree.sp=DIRR 3SG.F grandmother RL-3SG.F-plant-AG-GIVE-1SG.M 1SG.M
 ‘This tree, my grandmother planted for me.’ [DICT-PB:01]

The following example shows a topicalised Goal.

- (320) *Chá=va, bôí=a k-o-cha k-o-r-o-á=evo.*
 head=PRM lime=PRM RL-3SG.F-fill.up.with RL-3SG.F-3SG.F-give-3SG.M=DREF
 ‘His head, she filled up with lime and gave it to him there.’ [DC-CA:03]

The next example shows a topicalised Reason participant.

- (321) *Íki, bĩ=a k-e-táu mĕri briri k-e-ko.*
 red.paint ancestor=PRM RL-3PL.M-paddle soil red RL-3PL.M-get.SGO
 ‘For red paint, the ancestors paddled and got red soil.’ [P-MG:03]

Subjects can also be topicalised. In the following examples the topicalised subject is marked off by a pronoun. Many of the dictionary definitions show this feature.

- (322) *Ame bó, k-o-ramo-ramo âi nake.*
 animal 3SG.F RL-3SG.F-REDUP-clamber tree top
 ‘This animal, it clambers around in the tree tops.’ (a possum) [DICT-EM:01]

- (323) *Ame yá, k-a-kéi âi nake.*
 animal 3SG.M RL-3SG.M-sit tree top
 ‘This animal, it sits in the tree tops.’ (a tree kangaroo) [DICT-EM:01]

Recapitulating pronouns also feature in equative verbless clauses and clauses using the copular verb *-ăvé* (see §6.5.1).

6.4.3 Free pronouns

As in many polysynthetic languages, free pronouns in Barupu have particular pragmatic effects. As the following examples will show, when free pronouns

co-reference the obligatory bound pronominals of underived verbs, they typically function to compare the actions of two participants or signal a switch in topic from one participant to another. These free pronouns are always topicalised. Free pronouns that do not share reference with a bound pronominal (secondary objects), or else share reference with a suffix attached to a participant-adding morpheme (added objects), do not have any special pragmatic function. These points will be exemplified in this section.

In (324) a husband wants to go to a singsing, but because his wife is nursing a newborn she can't come. He checks with her to see if she minds if he goes, and she replies.⁵ The two participants will be carrying out different actions.

- (324) *N-a-no*(*m*). *Něni* bai *n-e-ké*(*n*)*i*.
 IRR-2SG.M-(2SG.M)go.along 1SG.F FUT IRR-1SG.F-(1SG.F)sit
 'Go. And me, I'll stay.' [U-EM:01]

In the next example a man has a hidden garden and he has been arguing with another man who has discovered it. Finally the owner of the garden says to the intruder:

- (325) *Yake. Měmá n-a-kô*(*m*)*e. Něná n-a-n-aro.*
 enough 2SG.M IRR-2SG.M-(2SG.M)go.up 1SG.M IRR-1SG.M-1SG.M-go.down
 'Enough. You, you go. And me, I'll go.'

Úri ya n-epi-ka(*p*)*e bé erôra.*
 morning and IRR-1DU-(1DU)come DPROX garden
 'When it's morning then we'll come here to the garden.' [TP-MN:01]

The next day the same two men sit smoking; one asks the other:

- (326) *To měmá arâpe k-a-m-á be?*
 CQ 2SG.M what RL-2SG.M-2SG.M-do DPROX
 'And you, what are you smoking here?' [TP-MN:01]

In the next example, a spirit has returned from hunting and tells his wife he's caught some little boys for them to eat. He tells her that he's going to sleep and that she should get things ready to cook and eat.

⁵The form *bai* is a Tok Pisin future particle currently being borrowed into Barupu.

- (327) *N-ana-vóvo-na-ki méntan-méntan. Mǒmú n-o-no(m)i*
 IRR-1SG.M-sleep-1SG.M-AWAY REDUP-small 2SG.F IRR-2SG.F-(2SG.F)go
âi=a n-om-ore ...
 tree=PRM IRR-2SG.F-search

'I'm going to sleep for a little while. And you, you go looking for firewood ...' [ANR-MN:01]

The following example shows a Pi pronoun. The following clause comes after a list of instructions from a dead man to his wife. It details all the ways she might have of killing herself before she can come looking for him. The free pronoun signals a change in topic away from the woman and back to the man.

- (328) ... *ya pa n-o-m-e-kê-na.*
 and back IRR-2SG.F-2SG.F-go-ADV-1SG.M
 '... and you can follow me.

Něná n-on-yarã-ná bo bé.
 1SG.M IRR-2SG.M-see-1SG.M place DPROX
 And me, you will see me at this place.' [DC-CA:03]

Example (329) comes after some men have cooked and killed an animal. They are carving it up and handing out pieces. *Ro mô* (stomach mother) is a compound meaning the stomach and intestines.

- (329) *Ro mô yá chápo. Yá k-a-mompe-ke. 'Něná, ro*
 stomach mother 3SG.M grandfather 3SG.M RL-3SG.M-claim-INTS 1SG.M stomach
pôn n-o-p-o-na.'
 only IRR-2PL.M-2PL.M-give-1SG.M

'The stomach was the grandfather's. Him, he claimed it. "And me, just give me the stomach."' [FF2-CA:03]

As discussed above, the Recipient of the verb 'give' is normally post-verbal, but in this example, because it is a topicalised free pronoun, it appears first in the clause before the secondary object, *ro* 'stomach'. This is the first mention of this man in the story, and he goes on to be the main protagonist of the rest of the story. This example also has a third person subject pronoun, the 3SG.M *yá*. Third person free pronouns do

not have such a pragmatically marked effect as first and second person pronouns; they are typically used when a participant is introduced as a topic. It is significant that there are no examples of clauses with Pi or Recipient third person free pronouns in the data. I have elicited clauses with third person non-subject pronouns, but it has not been possible to determine their pragmatic force. Following are some third person subject examples, also taken from narratives.

Example (330) is taken from a story which starts out with boys talking about what they are going to do. They set off and find a fruit tree belonging to a spirit. They climb it and start picking fruit. The narrative then moves over to the owner of the fruit tree sitting in his house listening to the boys. He yells out at them and the next clause is as given in (330). Here the narrative returns to the boys and they go from being the objects of the previous clause to the subjects of this one.

- (330) *Yéi ero=va k-e-toro-p-eri*
 3PL.M noise=PRM RL-3PL.M-make.noise-PL.M-SEP.SG
 ‘Them, they were making lots of noise

beya k-e-rívó-p-o-a vai.
 NEG RL-3PL.M-hear-AG-GIVE-3SG.M POL
 and didn’t hear him.’ [ANR-MN:01]

When a participant is reintroduced and there is possible confusion about the identities of the participants — for example, they are both 3SG.F — the free pronoun can be followed by an identifying noun phrase. In the following example a grandmother has been sitting looking at her old skin and she goes to ask her granddaughter to come to the bush with her. Up till now the focus has been fully on the grandmother. In the next clause the granddaughter asks a question. She is not a new participant because the grandmother has been talking to her previously but she has not been the main topic before.

- (331) *Bó, ópu târe, k-o-tere-r-o-ø bó ...*
 3SG.F grand.relation new RL-3SG.F-ask-AG-GIVE-3SG.F 3SG.F
 ‘Her_i, the granddaughter_i, she_i asked her_j ...’ [NS-MM:03]

Note that there are two 3SG.F pronouns in the above example. The second one, after the verb, is the object of the serialised verb GIVE. There is no pragmatic effect associated with added object free pronouns. Secondary object pronouns are rare since secondary objects are rarely animate and there are no inanimate pronouns.

6.4.4 NP clitic

As can be seen scattered throughout example sentences in this thesis, any or up to two pre-verbal NPs (except pronouns, proper names or NPs with demonstratives), can appear with a clitic =*a* or =*va*. The form is toneless and phonologically conditioned by the final sound of the word it attaches to. It is =*a* after a consonant (including glides) and =*va* after a vowel.

This clitic is entirely optional. In some texts it appears once or twice or not at all; in others it appears much more often. The exact function of this clitic is not known, but some possibilities can be ruled out. It appears overwhelmingly on objects, Instruments and adjunct nominals (i.e. non-subjects) but it also appears on intransitive and transitive subjects, so it is not an accusative or absolutive marker.

Cross-linguistically it has been shown to be preferable for sentences to be cast with transitive subjects as old information, sometimes called Topic, while new participants are preferably introduced as absolutive arguments — that is, intransitive subjects or objects (Dubois 1987). One possibility is that the correlation between absolutive and =*va* might be to do with new information or Focus. However, it is extremely common for this clitic to attach to a particular participant and appear on it every time it is mentioned throughout a text, even in contiguous clauses, so it is not a marker of new information.

Nor does it seem to mark definiteness, as the following text extract show, it can appear on definites but it can also appear on generics. This is especially clear in the following text extract discussing the correlation between the size of a women's

breasts and the size of mushrooms that grow in the waste product of their sago.

- (332) *Yaru k-u-ĩniá k-u-ĩniá k-o-pirotu, ya k-o-r-aka*
waste RL-3SG.F-be.at RL-3SG.F-be.at RL-3SG.F-rot and RL-3SG.F-3SG.F-resemble
rõi. Rõi=a k-o-kôe bé yaru é. Mâre
mushroom mushroom=PRM RL-3SG.F-go.up DPROX waste DPROX now
n-emi-yãrá-ø, k-o-r-aka rõi. Beya rõi=a
IRR-1PL-see-3SG.F RL-3SG.F-3SG.F-resemble mushroom NEG mushroom=PRM
k-o-kôe kanãpo, émo tó bó biá bóm bé. Yake.
RL-3SG.F-go.up nothing DREF breast 3SG.F person woman DPROX enough
Rõi=a bé k-o-kôe ôi yaru. Bóm ôi=a
mushroom=PRM DPROX RL-3SG.F-go.up sago waste woman sago=PRM
n-ere-tôi, yaru=a n-ere-bere-bere-kí,
IRR-3PL.F-rinse waste=PRM IRR-3PL.F-REDUP-throw.away-AWAY
n-ere-r-i-ke n-u-ĩniá. Rõi=a k-o-kôe.
IRR-3PL.F-3PL.F-put-3SG.F-INTS IRR-3SG.F-be.at mushroom=PRM RL-3SG.F-go.up
Rõi=a k-ere-r-ere-ø, k-ere-ave. Rõi=a
mushroom=PRM RL-3PL.F-3PL.F-put RL-3PL.F-bear.fruit mushroom=PRM
k-u-ave.
RL-3SG.F-bear.fruit

‘There is waste and it rots and (the breast) comes up like a mushroom. A **mushroom** grows up here in the waste. You can see it now, it’s like a mushroom. It’s not a **mushroom** that just comes up for no reason, it’s the woman’s breast. Alright. A **mushroom** grows up in the sago waste. Women wash **sago**, they wash the **waste** off and leave it and a **mushroom** grows up. Lots of **mushrooms** grow.’

In this extract one of the major functions of this clitic is to draw the hearer’s or reader’s attention to a particular participant and keep their attention on it. This stretch of text is all about mushrooms that grow up in sago waste, hence the mushrooms, the sago and the waste all receive the clitic at various times.

Similarly, in the following text important plot developments are highlighted with the clitic. The spell is very important, as is the bilum. Even more important is the devil’s need to go to the toilet (‘shit’ is an adjunct nominal in all these clauses), because it is this action that allows the boys to run away.

- (333) *Ne=va kaikêi ya k-o-miminra-i.*
k-a-ai-ke
spell=PRM RL-3SG.M-curse-ADV-3PL.M and RL-3SG.F-paralyse-3PL.M
‘He put a **spell** on them and they were paralysed.’

Kâvei k-a-r-ikiro ekókó yá.
 k-a-âve-i
 RL-3SG.M-hold-3PL.M RL-3SG.M-3SG.M-put.in string.bag 3SG.M
 He caught them and put them in his string bag

K-a-ko k-a-icha k-a-kôe-ro-nâ-ø
 RL-3SG.M-get.SGO RL-3SG.M-carry.on.side RL-3SG.M-go.up-SHORT-APPL-3SG.F
ôro yá.
 house 3SG.M
 he picked it up, put it on and went home with it.

K-a-kae rara, ã=va k-o-r-ê-r-o-a.
 RL-3SG.M-come road shit=PRM RL-3SG.F-3SG.F-shit-AG-GIVE-3SG.M
 As he was coming along the road he needed to **shit**.

E=va kawekínâi mevôva âi ú.
 k-a-awe-kí-nâ-ø
 bag=PRM RL-3SG.M-hang-AWAY-APPL-3PL.M children tree branch
 He hung **the bag** with the children in it on a tree branch

K-a-noi ã=va k-a-r-ê. ã=va
 RL-3SG.M-3SG.M-go.along shit=PRM RL-3SG.M-3SG.M-shit shit=PRM
k-a-r-ê toroa.
 RL-3SG.M-shit long.time
 and went off to **shit**. He was **shitting** for a long time.'

Note that the participant, *ekókó*, *e* 'string bag' is not marked with the clitic on first appearance (more evidence that this clitic is not marking Focus) but only on second. We are being told to keep our eye on the bilum because something's about to happen (the boys are going to cut it open and come tumbling out).

More than one participant per clause can be marked with the clitic, as shown in the following extract.

(334) *Amori mém chápo k-e-p-á.*
 namesake.party 1PL grandfather RL-3PL.M-3PL.M-do
 'Our namesake parties, as our grandfathers did them.

Biá méntan=a k-o-r-á n-o-r-o-i aro
 person small=PRM RL-3SG.F-3SG.F-want IRR-3SG.F-3SG.F-give-3PL.M people
ô, aro vava.
 namesake people uncle
 A woman is going to give a small child to his namesakes and uncles.

Mô=va yun=a k-u-oro-r-a-ka. Chá ma=va
 mother=PRM flower=PRM RL-3SG.F-decorate-AG-VAL-3SG.M head nape=PRM
k-ey-a-r-u rewo.
 RL-3SG.F.BEN-3SG.M-3SG.F-shave well
The mother decorates him with **flowers**. She shaves his **nape** well.

Yake ... Mo=va chá ma=va k-ey-a-r-u,
 enough mother=PRM head nape=PRM RL-3SG.F.BEN-3SG.M-3SG.F-shave
k-o-koku-r-ô-wa.

RL-3SG.F-worry-AG-REG-3SG.M

Alright. **The mother** shaves **his nape** and worries about him.

Má=va k-a-yără-ø beka. K-a-tere-r-o-ø mô,
 child=PRM RL-3SG.M-see-3SG.F like RL-3SG.M-ask-AG-GIVE-3SG.F mother
The child sees this and asks his mother,

'Mán! To au arâpe k-o-m-á ta ine pé
 mama CQ thing what RL-3SG.F-3SG.F-do REAS eye water
k-or-o-m-bere?'

RL-3SG.F-BEN-2SG.F-drip

"Mama, why are you crying?"

As this text develops, the child, the mother and the namesakes are often marked with the clitic.

A participant does not have to have continuing importance to be marked with the clitic, it can simply be locally important, but it is not at all clear to me yet what rules govern the use of this clitic, or if there are circumstances when it cannot be used. Its failure to appear on pronouns, proper names and NPs with demonstratives may be to do with the fact that these kinds of NPs are inherently or already marked as important.

6.5 Non-verbal predicates

In this section I follow Dryer (2005) in using the term non-verbal predicate as distinct from verbless clause. A verbless clause is a kind of non-verbal predicate but Dryer argues that in clauses involving a copular verb, even though the copular is a verb, the real predicate is the nonverb not the verb.

6.5.1 Nominal predicates

Dryer (2005:8) distinguishes between 'true nominal predicates' and equational clauses. In equational clauses the two entities are exactly the same and the statement should be reversible with exactly the same meaning.

(335) *Awó nění Kua Meriam.*
 name 1SG.F AT PN
 'My name is Miriam.'

(336) *Kua Meriam awó nění.*
 AT PN name 1SG.F
 'Miriam is my name.'

In 'true nominal predicates' the subject NP is a member of, or has the properties of, the class of items specified in the nominal predicate. The two NPs cannot be reversed with the same meaning. Examples (337 - 339) are nominal predicate verbless clauses.⁶ The subject is most often set off by the topicalising pronoun described in §6.4.2, above, or else a Determiner such as a possessive pronoun or demonstrative.

(337) *Biá=ere (yá) aka nění.*
 person=DDIST (3SG.M) father 1SG.F
 'That man is my father.'

(338) *Cha John yá tikse.*
 AT PN 3SG.M teacher
 'John is a teacher'

(339) *Mô nění bó Barupu bôm.*
 mother 1SG.F 3SG.F PLN woman
 'My mother is a Barupu woman.'

This construction has other functions as well. It is commonly used to talk about what something is used for, as shown in example (340).

(340) *Karapa rau bó a riri.*
 ginger leaf 3SG.F thing sweep (exorcism)
 'Ginger leaf is for getting rid of bad spirits.' [DICT-PB:01]

It can also be used to describe what a story is about, as shown in example (341).

(341) *Au írai bó maintópa.*
 thing say 3SG.F flying.fox
 'This story is about a flying fox.' [U-EM:01]

⁶Whereas a sentence like that in (337) would be an equative clause in English, where people generally only have one father, in Barupu your father's brothers and your mother's brothers-in-law are all your fathers.

6.5.1.1 Genitive predicates

A sub-type of nominal predicate is the genitive predicate. Some examples follow.

- (342) *Au bére au mǒmú.*
 thing DEM thing 2SG.F
 ‘That thing is your thing.’ (‘That’s yours.’)

It is not necessary to repeat the noun denoting the possessum, as shown in the following example.

- (343) *Bió méntan rôpe mǒmú.*
 person small where 2SG.F
 ‘Which of those children is yours?’

6.5.1.2 -ǎvé ‘be, become’

As shown above nominal predicates do not require a copular in simple past and present time frames. In irrealis clauses (such as those set in the future or conditionals, see Chapter 9) a copular -ǎvé ‘be, become’ is required. As shown in examples (344) and (345), this verb takes prefixes for the subject. The predicate nominal is a distinct grammatical relation — it cannot be matched to one of the object relations described at the beginning of this chapter. It is not cross-referenced on the verb so it is not a Pi or Recipient, but it appears after the verb, so it is not a secondary object.

Example (344) shows this verb in a conditional clause.

- (344) *Bo n-en-ǎvé rau mô ...*
 TVF IRR-1SG.F-be pig mother
 ‘If I was a mother pig ...’ [MP-EM:01]

Example (345) shows this verb in a future time frame.

- (345) *N-u-ǎvé tikse bora ké tã n-a-ko-r-o-mi.*
 IRR-3SG.F-become teacher PURP₁ oyster skin IRR-3SG.M-get.SGO-AG-GIVE-1PL
 ‘She will become a teacher to get money for us.’

However, as the following examples show, unlike secondary objects, the name argument regularly appears after the verb. In the following example the name argument is the post-verbal *kéu* ‘oyster, shell axe’ and the named is the pre-verbal marked *aimon kamo* ‘steel axe’.

- (350) *Áimon kamo tora k-e-p-iná-ø kéu_F.*
 axe_F long.ago RL-3PL.M-3PL.M-name-3SG.F oyster(shell axe)
 ‘They called traditional axes *keu*.’ [S-MN:03]

Another example is given below. Here the named argument is *boko* and the name it is called is the unmarked, post-verbal *Toeyoro o Maemae*.

- (351) *K-a-kôe uka, boko k-e-p-iná-ø Toeyoro o Maemae.*
 RL-3SG.M-go.up bush place RL-3PL.M-3PL.M-name-3SG.F PLN OR PLN
 ‘He went up to the bush, to a place called *Toeyoro* or *Maemae*.’

6.5.2 Adjectival predicates

As described in Chapter 4, adjectival predicates in Barupu are simply a type of intransitive verbal clause. In most adjectival predicates an adjective is inflected, just like an intransitive verb, for realis or irrealis status and the person, gender and number of the subject. This is shown in example (352).

- (352) *Poró k-o-méntan k-o-ruvoro-nâ-n.*
 canoe RL-3SG.F-small RL-3SG.F-capsize-APPL-1SG.F
 ‘The canoe was small and capsized with me in it.’ [U-GX:01]

As discussed in Chapters 4 and 5, some words that can appear in the adjective slot in an NP cannot be inflected. Instead they belong to the class of manner words that can also appear after verbs. These words can also be found in verbless adjectival predicate clauses where they are juxtaposed with nouns. Non-inflecting adjectives typically describe properties of inanimate objects (such as ‘sharp’, ‘blunt’ etc), but not always, as shown in (354).

(353) *Áimon kamo ekoku.*
 axe blunt
 'The axe is blunt.'

(354) *Aro yéi rokorapo.*
 people 3PL.M expert
 'These men are expert.'

6.5.3 Locative and existential predicates

Locative predicates mostly use the posture verb *-ĩniá* 'lie' as a locative/existential copular. There is no formal difference between locative and existential predicates.

(355) *Niánta prumo k-ey-ĩniá pí páko mém.*
 prawn many RL-3PL.F-lie water big 1PL
 'There are many prawns in our lagoon.' 'Many prawns are in our lagoon.'
 [U-GX:01]

-ĩniá is the default locative/existential copular. The above clause could mean that prawns are literally lying in the lagoon, but it would normally be interpreted as the default copular. Other positional verbs such as *-rói* 'stand' and *-kéi* 'sit' can be used in locative/existential predicates to reflect the shape and size of the subject. For example, in (356) the verb *-rói* 'stand' is used because trees are tall and stand straight.

(356) *Ái k-o-rói ôro ika.*
 tree RL-3SG.F-stand house side
 'A tree stands at the side of a house.' 'There is a tree at the side of a house.'

The use of different posture verbs as locative/existential copulars is not uncommon cross-linguistically. Dryer (2005:15) points out that because there is some meaning in the verbs in constructions like this, they are no longer strictly non-verbal predicates, but he nonetheless treats them as the same type of construction.

Locative/existential predicates can be negated with regular clausal negation (§9.2.1), but there is also a lexical non-existential copular *bâuni* 'not be at'. Examples of this follow.

- (357) *Bo=va, anranae=a k-e-bâuni.*
 place=PRM demon=PRM RL-3PL.M-not.be.at
 ‘In that place, there are no demons any more.’ [ANR-MN:01]

6.5.3.1 Predicate possession

The existential locative/existential copular *-ĩniá* ‘be at’ is also used to express what Dryer (2005:18) calls predicate possession: ‘X has Y’. The copular receives different morphological marking depending on whether the possessum is a body part or not.

When the possessum is not a body part, *-ĩniá* appears with a participant-adding morpheme *-ô* REG whose object suffix indexes the possessor. The possessor is in bold font in the following example.

- (358) *Ké tã k-u-ĩniá-r-ô-mi-ke.*
 oyster shell RL-3SG.F-be.at-AG-REG-1PL-INTS
 ‘We have money.’ (‘Money is with us.’)

There are two ways to indicate non-possession. In the first, a predicate possession clause can be negated, as in example (359).

- (359) *Ké tã beya k-u-ĩniá-r-ô-mi-ke vai.*
 oyster shell NEG RL-3SG.F-be.at-AG-REG-1PL-INTS POL
 ‘We don’t have money.’ (‘Money is not with us.’)

The other way of indicating non-possession uses the non-existential copular *-bâuni* ‘not be at’. This is shown in example (360). This copular appears with a different participant-adding morpheme, *-ě* FROM.

- (360) *Ké tã k-o-bâuni-r-ě-mi-ke.*
 oyster shell RL-3SG.F-not.be.at-AG-FROM-1PL-INTS
 ‘We don’t have money.’ (‘Money is not here to our detriment.’)

If the possessum also has a quality or number attributed to it there are two possibilities. Example (361) shows the predicate possession construction with an NP modified by the numeral, *riêmpin* ‘two’.

- (361) *Rau riêmpin k-u-îniá-r-ô-mi-ke.*
 pig two RL-3SG.F-lie-AG-REG-1PL-INTS
 ‘We have two pigs.’ (‘Two pigs are with us.’)

The other possibility is exemplified in (362). Here the NP is modified with a possessive pronoun in a verbal adjectival predicate clause, see §6.5.2, above.

- (362) *Rau mẽmi k-o-riêmpin.*
 pig 1PL RL-3SG.F-two
 ‘We have two pigs.’ (‘Our pigs are two.’)

The body-part predicate possession construction uses the Benefactive/Possession agreement paradigm on the locative/existential copulars. This paradigm is fully exemplified in Chapter 8, but some examples follow.

- (363) *Ŏpó ririvá k-or-u-îniá.*
 neck long RL-3SG.F-BEN.3SG.F-be.at
 ‘She has a long neck.’
- (364) *Tũ k-or-u-bâuni.*
 tail RL-3SG.F-BEN.3SG.F-not.be.at
 ‘She doesn’t have a tail.’

Chapter 7

Complex predicates and complex verbs

In this chapter I describe the complex predicates found in Barupu. I use the term ‘complex predicate’ in its broadest sense, as defined by Alsina et al. (1997:1): ‘predicates which are multi-headed; they are composed of more than one grammatical element (either morphemes or words), each of which contributes part of the information ordinarily associated with a head.’

Under this definition, complex predicates can be multi-word or single word. In Barupu, the multi-word complex predicates are serial verb constructions (SVCs).¹ Single word complex predicates in Barupu strongly resemble both serial verbs and applicative constructions, with some unusual behaviour, see §7.2, below.

¹Strictly speaking, adjunct nominal constructions are also complex predicates, because there are two grammatical elements involved in making up the predicate — a noun and a verb — but they are described in Chapter 6 because it is important to establish the status of the adjunct nominals in the context of other nominals found in the clause.

7.1 Serial verbs

Serial verbs are defined as ‘constructions in which verbs sharing a common actor or object are merely juxtaposed, with no intervening conjunctions’ (Foley and Olson 1985:18). It is not necessary for the verbs to share all core arguments but the two verbs must function together in a single clause (Foley and Van Valin 1984; Foley and Olson 1985; Durie 1997).

According to Durie (1997:302-303), serial verb constructions can be structurally defined according to two cross-cutting parameters: incorporation and contiguity. In incorporated serial verbs, ‘the verb sequence forms a single phonological word’; in non-incorporated serial verbs there are two independent verbs. Both incorporated and non-incorporated serial verbs can be contiguous, where ‘any arguments are placed outside the verb string’, or non-contiguous, where ‘arguments can intervene between verbs’ (1997:302). Under Durie’s classification, SVCs in Barupu are non-incorporating and they can be either contiguous or non-contiguous.

Functionally, serial verbs are used to add manner or direction of motion information or to express cause-effect notions. They can also be used to add participants like Instruments and Beneficiaries to the clause.

It is often claimed that a defining characteristic of SVCs is that they describe what is conceptualised as a single event, but Foley (2003) has recently argued, based on a cross-linguistic study, that this cannot hold as a general claim for SVCs. For example, Foley (2003) shows that the event ‘kill’ is expressed in some languages as a single word (e.g. Yimas), in others as an SVC (e.g. Watam or Yabem) and in others as a string of coordinated clauses (e.g. Mangap Mbula) and that, even within the same language, there can be various formal realisations of the same event. In addition, Foley (2003:6) argues that the event ‘kill’ is not a single event even in languages that encode it in a single lexical item, it is rather a macro-event that ‘necessarily involves

two sub-events, an act that someone does and a change in the state of being alive'. He concludes that 'our knowledge in this area is woefully insufficient to allow us to read off from the formal crosslinguistic variation in the data, semantic and perhaps ultimately conceptual notions like single or multiple eventhood' (2003:26).

SVCs in Barupu involve two fully inflected finite verbs operating within a single clause. This type of verb serialisation in Barupu is apparently restricted to quite specific event types. Those identified to date are shown in Table 7.1, below.

Barupu makes heavy use of asyndetic, or unmarked, coordination so it can sometimes be difficult to determine whether a given string of verbs is an SVC or a string of coordinated clauses with zero conjunction. The constructions in Table 7.1 are numbered from (1) - (6) reflecting a cline from most clearly mono-clausal (1) to tending towards bi-clausal (6). The constructions (1) - (3) are mono-clausal according to some language-internal criteria outlined below, but the constructions (4)-(6) are less clear-cut. They are included here as possible serial verbs because they are the types of collocations commonly found in serial verb constructions cross-linguistically, and there is some evidence that at least some of the time they are operating within the one clause. But the tests for showing that they are SVCs are more subtle than for those given as (1) - (3), and there is the possibility that the same collocations of verbs are sometimes in an SVC and sometimes not.

Table 7.1 Serial verbs by semantic type

type	V ₁	V ₂
1 goal-directed manner of motion	ITR manner of motion	ITR direction of motion
2 cause goal-directed downward motion	TR drip/pour/etc	ITR go down
3 aspectual	any action	ITR go (ITR finish)
4 goal-directed carrying	TR hold/get/carry	ITR direction of motion
5 instrumental	TR get (instrument)	TR action
6 cause-effect	e.g. TR 'shoot'	e.g. ITR 'die'

Barupu makes primary use of what has been called 'asymmetrical serialisation' (Durie 1997; Foley and Olson 1985), where one of the verbs comes from a largish set

of verbs and the other comes from a restricted closed set of verbs. For example, there are only four direction of motion verbs but many more manner of motion verbs. Other verbs that could be expected to combine with direction of motion verbs in SVCs like 'look up', 'throw down' etc. instead take an incorporated directional. This is described in §7.2, below.

The serial verb constructions (1) - (3) have the following characteristics:

- i they always have the same status marking;
- ii they have the same subject marking (in one case regardless of the fact that the two verbs arguably have different underlying subjects), or else, in the case of (3) the subject marking on the 'go' and 'finish' verbs is default 3SG.F;
- iii they must be negated together;
- iv they have mono-clausal intonation (although in the absence of a detailed formal study of intonation this can not be taken as a sole diagnostic);
- v they never appear with conjunctions.

The serial verbs (4) - (6), differ from (1) - (3) with respect to criteria (iv) and (v). That is, the same collocations of verbs can be found in the data with or without conjunctions and with or without an intonation break (characterised by a slight rise at the end of the first clause and a pause between the two clauses). Serial verb (6) also differs with respect to criterion (ii). These two verbs have different subjects; the object of the first verb is the subject of the second.

Because Barupu has no subordinate verb forms, and limited use of complementisers, SVCs must also be distinguished from complex sentences involving paratactic complements (see §10.1). As mentioned above, SVCs must also be distinguished from complex sentences making use of unmarked, or asyndetic, coordinations. The key differences in Barupu between parataxis and coordination on one hand and verb serialisation on the other are:

- serial verbs must have the same status marking, whereas alternations in status marking are often meaningful in parataxis and coordination. For example, the verb ‘want’ is always realis and its complement is always irrealis;
- serial verbs must be negated together, inside discontinuous negation (see §9.2.1) whereas paratactic complements and two coordinated clauses can be negated independently (see §10.1, §10.2 and §10.3).

The possibility of being negated together is not evidence of mono-clausal structure because two paratactic or coordinated clauses can appear within discontinuous negation (see Chapter 10), but the *inability* for verbs in a serial verb construction to be independently negated does strongly suggest mono-clausal structure.

7.1.1 Goal-directed manner of motion

As discussed in Chapter 6, the interpretation of post-verbal nominal adjuncts rests heavily on the inherent meanings of the verbs and the nominals themselves. A nominal with place-like semantics appearing after a manner of motion verb will be interpreted as an outer location, as in example (365).

- (365) *K-o-púpú kikom.*
 RL-3SG.F-fly mangrove
 ‘She flew (around) at the mangrove.’

When a manner of motion event requires a Goal, it must be combined with a direction of motion verb in a serial construction, as in examples (366) and (367).

- (366) *K-o-tá k-o-kôe é.*
 RL-3SG.F-paddle RL-3SG.F-go.up DPROX
 ‘She paddled up here.’
- (367) *K-o-púpú k-o-r-aro kikom.*
 RL-3SG.F-fly RL-3SG.F-3SG.F-go.down mangrove
 ‘She flew down to the mangrove.’

In this serial verb construction, both verbs must have the same subject and status marking, and the two verbs cannot be independently negated. As will be described in Chapter 9, negation is made up of two elements — the negation particle *beya* which appears after the subject at the beginning of a simple or complex sentence, plus the polarity particle *vai* which appears at the very end of the sentence. Serial verbs always appear together inside negation. Example (368a) shows the ‘goal-directed manner of motion’ serial verb ‘fly-go down’ and example (368b) shows the negated version.

- (368) a) *K-o-púpú k-o-r-aro kikom.*
 RL-3SG.F-fly RL-3SG.F-3SG.F-go.down mangrove
 ‘She flew down to the mangroves.’
- b) *Beya k-o-púpú k-o-r-aro kikom vai.*
 NEG RL-3SG.F-fly RL-3SG.F-3SG.F-go.down mangrove POL
 ‘She didn’t fly down to the mangroves.’

When discussing these constructions, speakers consistently reject any attempts to insert conjunctions between the two verbs, negate these verbs separately or give the verbs different status markings.

A Path can, however, intervene between the two verbs. This serial verb construction is thus potentially non-contiguous.

- (369) *K-en-úte rara k-e-kô(n)e sule.*
 RL-1SG.F-walk road RL-1SG.F-(1SG.F)go.up school
 ‘I’m walking on the road up to school.’

There is also what speakers call a short cut to this construction. In the short cut, the manner of motion verb is uninflected and preposed to the direction of motion verb.

- (370) *Tá k-epi-kô(p)e ôro.*
 paddle RL-1DU-(1DU)go.up house
 ‘We paddle to the house.’

It is not possible to use any verb with a direction of motion verb like this. For example, using *-põi* ‘whistle’ would be ungrammatical: e.g. **põi nepinopi* intending

‘we whistle and go’ or ‘whistling we go’. Only manner of motion verbs plus direction of motion verbs can enter into this construction, supporting speakers’ claims that the serial verbs and the short cut are related.

7.1.2 Causing Goal-directed downward motion of substances

In these serial verbs, the subject of the causing verb must be cross-referenced as the subject of the direction of motion verb, despite the fact that the two verbs have different underlying subjects. For example, in (371) the underlying subject of *-aro* ‘go down’ is arguably the object of the causing verb *-oi* ‘crumble’.

- (371) *N-e-ô(p)i* *n-e-p-aro* *apón pê.*
 RL-3PL.M-(3PL.M)crumble IRR-3PL.M-3PL.M-go.down banana leaf
 ‘They’ll crumble (tobacco) down into the banana leaf.’ [P-MG:03]

This agreement pattern has been called ‘concordant dependent inflection’ (Durie in Aikhenvald 1999:476), and it is quite common cross-linguistically in what have been called ‘causative serial verb constructions’ (Foley and Olson 1985:25). Another example can be found in Anamuxra (Ingram 2001:268).²

- (372) ... *ikx-a-ŋ* *tama-N-tama mudu-m* ...
 lime.shell-ND-PL put-N-RDL go.up-1SGS
 ‘... I stacked the lime shells and ...’

In this example only *V*₂ is inflected for subject, but, like Barupu, it agrees with the actor of the first verb (1SG), rather than its own actual actor (the lime shells).

Andrews (1997) accounts for the concordant dependent inflection of SVCs like this as resulting from the fact that they are complex predicates:

The idea of a complex predicate is that two distinct argument-taking lexical items combine in such a way as to take their arguments as a single array of grammatical relations. On such an analysis, both the Cause

²ND = near distal deictic; RDL = reduplicant; N = underspecified nasal segment.

[pour] and Effect [go down] verbs will have the same subjects, objects, etc., so the agreement of the Effect verb with the Cause verb's subject is not problematic (1997:4).

In Barupu, the two verbs must also share status marking and be negated together.

- (373) *Beya pí n-ana-bere n-a-n-aro* *baket vai.*
 NEG water IRR-1SG.M-pour IRR-1SG.M-1SG.M-go.down BUCKET POL
 'I will not pour water down into the bucket.'

If the verbs are independently negated the result is apparently nonsensical.

- (374) *#? Pí n-ana-bere beya n-a-n-aro* *baket vai.*
 water IRR-1SG.M-pour NEG IRR-1SG.M-1SG.M-go.down BUCKET POL
 'I will pour water and I will not go down into the bucket.'

As shown in (375), there are examples in the data where 'go down' is cross-referenced with its own subject marking. When this occurs, the status marking on the two verbs can be different and they can be independently negated, which means that they are no longer in a serial verb construction, they are coordinated clauses.

- (375) *K-e-tôî-toi* *k-o-r-aro* *inentako.*
 RL-3PL.M-REDUP-rinse RL-3SG.F-3SG.F-go.down coconut.shell
 'They rinse (dye) out and it goes down into the coconut shell.' [P-MG:03]

There are no SVCs using the other direction of motion verbs (e.g. of the type 'push' 'go up' — meanings like these are expressed with an incorporated directional, see below) which gives weight to the claim that for verbs to serialise they must together express an event which is commonplace and 'a culturally important concatenation of events' (Durie 1997:28); see also Bruce (1984). Capturing and containing liquids like water and loose dry substances like lime and tobacco is part of everyday life in Barupu and the most common way of doing so is to cause them to go down into something.

7.1.3 Aspect

Aspectual serial verbs involve the verbs *-noi* ‘go along’ and *-baun-ki* (-not.be.at-AWAY) ‘finish’. These two verbs are always marked with 3SG.F, regardless of the subject of the first verb. Some examples follow and more discussion of these forms can be found in Chapter 9.

- (376) *K-ere-perete k-o-noi.*
 RL-3PL.F-strip RL-3SG.F-go.along
 ‘They stripped (leaves) for a long time.’ [WH-RX:03]

Completive aspect can be indicated with the negative existential verb *-baun(i)* ‘not be at’, which usually has an incorporated directional *-kie* AWAY as well. This verb often follows *kono*.

- (377) *K-ere-perete k-o-noi k-o-bâun-ki.*
 RL-3SG.F-strip RL-3SG.F-go.along RL-3SG.F-not.be.at-AWAY
 ‘They stripped (leaves) for a long time until there were no more left.’
 [I-MW:03]

- (378) ... *kure kure k-o-noi k-o-bâun-ki.*
 k-o-ure k-o-ure
 RL-3SG.F-roll RL-3SG.F-roll RL-3SG.F-go.along RL-3SG.F-not.be.at-AWAY
 ‘... and she rolled and rolled string for a long time until she was finished.’
 [I-MW:03]

This is an example of what Crowley (2002:42) calls ‘ambient serialisation’. An ambient verb ‘makes a general predication about the world without referring to any participants’. In ambient serialisation, ‘if anything ... the second verb takes the entire event encoded by the initial verb as its subject’ (2002:42).

7.1.4 Goal-directed carrying

There are no single lexical items corresponding to English ‘bring’ and ‘take’ in Barupu. Instead, as shown in (379), a ‘get’ or ‘carry’ verb is combined with a manner of motion verb in what appears to be a serial construction.

- (379) *Apón n-ama-ko n-a-ka(m)e.*
 banana IRR-2SG.M-get.SGO IRR-2SG.M-⟨2SG.M⟩come
 ‘Bring a banana.’

Note that the verb *-kae* ‘come’ does not necessarily have to introduce an overt Goal participant — the Goal is understood as the deictic centre of the discourse.

- (380) *N-en-ko n-e-no(n)i ôro.*
 IRR-1SG.F-get.SGO IRR-1SG.F-⟨1SG.F⟩go.along house
 ‘I took it home.’

In an alternative to this pattern which is especially prevalent in casual or rapid speech, the three direction of motion verbs that take infixing for subject can be extremely reduced, losing all their mood and subject information: e.g. *k-a-ko kae* (RL-3SG.M-get.SGO come) or *n-en-ko noi* (IRR-1SG.F-get.SGO go.along).³

Bring and take constructions can also be formed with the specific manner of carrying verbs and direction of motion verbs, as in the following examples. In these multi-clause examples the serial construction is in bold type.

- (381) *Tamamai tãu ne=va k-o-vái ya k-o-châró*
 flowering.shrub skin string=PRM RL-3SG.F-strip then RL-3SG.F-carry.on.head
k-o-noi *ôro.*
 RL-3SG.F-go.along house

‘She stripped some tamamai skin string and took it home on her head.’
 [DICT-PB:01]

- (382) *Cha táita néná áiró puru riêmpin k-a-poi*
 AT father 1SG.M breadfruit bundle two RL-3SG.M-carry.on.shoulder
k-a-kae *ôro.*
 RL-3SG.M-come house.

‘My father brought two bundles of breadfruit home on his shoulder.’
 [DICT-PB:01]

As with the Goal-directed manner of motion verbs, these verbs must share the same subject and status marking and they should be negated together. However, this

³If this was simply phonological reduction the 1SG.F would reduce to *noni* or *non*.

collocation of verbs can sometimes be found in the data with bi-clausal intonation as well as with conjunctions. See §7.1.5 for more discussion of alternations between bi-clausal and SVC expressions of the same event.

7.1.5 Instrumental

An example of Instrumental serialisation is given in (383). The ‘get’ verb always precedes the action – this is a cross-linguistic universal property of Instrumental serial verbs.

- (383) *Tamoriri pôn k-ere-ko k-ere-yé-u.*
 broom only RL-3PL.F-get.SGO RL-3PL.F-hit-3SG.F
 ‘They just hit her with a broom.’ [FF2-CA:03]

One major difference between Instrumental serial verbs and those described in the preceding sections is that whereas the ones above combined either two intransitive verbs (manner-direction, aspect) or else a transitive verb with an intransitive verb (cause-downward motion, Goal-directed carrying, aspect), the two verbs in the Instrumental construction are both transitive and have two different objects. In each case of a transitive and intransitive combination the transitive verb is V1 and the intransitive verb is V2 which means that they all have the structure: (S) O V1 V2. The Instrumental construction typically has the structure: (S) O V1 O V2. That is, the two verbs are usually separated by the object of the action verb, if it is overt. This is shown in (384).

- (384) *Bió bóm âi=a k-o-ko nâkí k-o-yé-ya.*
 person woman stick=PRM RL-3SG.F-get.SGO dog RL-3SG.F-hit-3SG.M
 ‘The woman beat the dog with a stick.’

Negation can surround the whole construction and it has vague scope. Equally plausible construals for (385) are that the woman didn’t hit the dog at all, or that she did hit the dog but not with a stick.

- (385) *Bió bóm beya âi=a k-o-ko nâkí k-o-yé-ya vai.*
 person woman NEG stick=PRM RL-3SG.F-get.SGO dog RL-3SG.F-hit-3SG.M POL
 'The woman didn't hit the dog with the stick.'

However, on other occasions the same collocation of verbs, with an implied Instrumental interpretation, can be clearly shown to be two clauses. In (386) the two clauses are linked by the conjunction *ya*. In this example there is an afterthought, *âimon kamo* 'axe', in the first clause, and this may have had an effect on the structure.

- (386) *Měmá, rua n-ama-ko, âimon.kamo, ya n-ama-te-i.*
 2SG.M bow IRR-2SG.M-get.SGO axe and IRR-2SG.M-shoot-3PL.M
 'And you, get a bow and arrow, and axe, and shoot them.' [NSC1-CA:03]

Even without an overt conjunction, intonation can sometimes show that there are two clauses instead of one. For example, (387) is identical to an Instrumental construction without intonation information, and is also semantically plausible: e.g. 'I'll paddle with an oar.' However, its intonation pattern is coordinate; there is a rise at the end of the first verb like a comma intonation and a pause between the two verbs. Speakers also translated this example as two coordinated clauses.

- (387) *Yake. Biôte n-en-ko,[.202sc] n-en-tá.*
 enough oar IRR-1SG.F-get.SGO IRR-1SG.F-paddle
 'Alright. I get my oar and paddle.'

As discussed in Chapter 6, there is also an Instrument construction, where the Instrument is in the clause as a bare NP. Consider example (383), above, again. The event described in that example appears four times in the same text in four formally different constructions. In (388), below, the first time it appears in the text, it is expressed with bi-clausal intonation; there is a rise at the end of *kereko* and the two verbs are separated by a 1.46- second pause.

- (388) *Rěré, tamoriri pôn k-ere-ko[1.46sc], k-ere-yé-u.*
 3PL.F broom only RL-3PL.F-get.SGO RL-3PL.F-hit-3SG.F
 'As for them, they got a broom and hit her.' [615.172-619.700]

As the time codes next to the English translations show, the event is repeated almost immediately, this time without the overt 3PL.F pronoun and without any intonation breaks. This was the example given in (383), repeated here as (389).

- (389) *Tamoriri pôn k-ere-ko k-ere-yé-u.*
 broom only RL-3PL.F-get.SGO RL-3PL.F-hit-3SG.F
 ‘They just hit her with a broom.’ [620.819-622.885]

A little over a minute later in the text, after some other things have happened, the speaker repeats the event again. This time there is a conjunction between the two clauses, as in (385). In this example, the first verb *kereko* also has an incorporated directional *-ká* TOWARD, see §7.2.2, below.

- (390) *Rěré, tamoriri pôn k-ere-ko-ká ya k-ere-yé-u.*
 3PL.F broom only RL-3PL.F-get.SGO-TOWARD and RL-3PL.F-hit-3SG.F
 ‘Them, they got a broom and hit her with it.’ [737.498-740.104]

And finally, the same event appears again in the conclusion to the story. This time the Instrument is realised as a bare NP in the clause headed by *-yé* ‘hit’.

- (391) *Tamoriri=va k-ere-yé-ø-ki pôn beka, réká pôn*
 broom=PRM RL-3SG.F-hit-3SG.F-AWAY only like skin only
k-o-voro-voro.
 RL-3SG.F-REDUP-bumpy
 ‘They only hit her with a broom like that, just so her skin was very bumpy.’
 (i.e. she didn’t die.) [759.744-763.456]

It appears that information is strung over two clauses in the first instance and a more compressed mono-clausal form is used in recapitulations.⁴ Some support for this can be seen in another example of a condensed recapitulation, again of an Instrumental event. In the following text extract, the bi-clausal Instrumental event is in bold type. There is a pause between ‘get’ and ‘cut’ and rising intonation on ‘get’.

⁴Foley (2003:19) shows that in Watam the same event can be expressed through clause-chaining or an SVC. In Watam there is a textual, discourse motivation for the choice: the final clause in a complex sentence will typically be the one expressed as an SVC because they are ‘more important, more highlighted ... In a sense they are the climax of the sentence’.

- (392) *Bió méntan aka, awó yá Cha Vava, aura kora*
 person little real name 3SG.M AT uncle bamboo piece
k-a-r-i-ro ari tũ yá.
 RL-3SG.M-3SG.M-put-DOWN waist tail 3SG.M
 ‘The littlest boy, Cha Vava, had a piece of bamboo tucked into his apron.

K-a-ko-ká(r)é[.389sec] ekókó pa=va k-á-oro.
 RL-3SG.M-get.SGO-⟨AG⟩TOWARD string.bag bottom=PRM RL-3SG.M-cut
 He got it out and cut the base of the string bag.

K-e-bere k-e-p-aro k-i-úte.
 RL-3PL.M-pour RL-3PL.M-3PL.M-go.down RL-3PL.M-walk
 They poured out and ran away.’ [226.621-249.621]

Later in the story, the boys have got away and they are recounting the story of their escape to their parents. In this version the Instrumental event is expressed in one clause with an Instrument NP *aura* ‘bamboo’.

- (393) *Cha Vava aura ekókó pa=va k-á-oro ya k-em-bere*
 AT PN bamboo string.bag bottom=PRM RL-3SG.M-cut and RL-1PL-pour
 ‘Cha Vava cut the bottom of the string bag with bamboo and we poured out
k-e-m-aro ya k-e-m-aro-m-o-î-pu=émo.
 RL-1PL-1PL-go.down and RL-1PL-1PL-go.down-AG-SHORT-WITH-2PL.M=DREF
 and came down this short way to you like so.’[310.644-317.727]

Speakers have a choice as to how to represent an Instrumental event: a) a single clause with an Instrumental NP; b) an SVC; c) an unmarked coordination or d) a marked coordination. The choice appears to be about packaging information.

7.1.6 Cause-effect

In many serialising languages, verbs such as ‘shoot’ and ‘die’ are serialised as the only way to express something like ‘kill’ (other verbs like ‘hit’ or ‘spear’ can be substituted for ‘shoot’). In Barupu, it is not entirely clear whether examples like these should be thought of as serial verbs or not. For example, speakers always translate a collocation like those in (394) and (395) into English as two clauses with a conjunction.

- (394) *Rau=a k-a-ti-a k-a-rái.*
 pig=PRM RL-3SG.M-shoot-3SG.M RL-3SG.M-die
 'He shot a pig (and) it died.'

- (395) *Ái=a k-a-iro k-o-rei.*
 tree=PRM RL-3SG.M-fell RL-3SG.F-fall
 'He felled a tree and it fell.'

For the clear SVCs described in sections 7.1.1 - 7.1.3, the serial verb construction is the only way to express the event. For the less clear SVCs, discussed in §7.1.4 and §7.1.5, there are sometimes different ways of expressing the same events. This is also true for the cause-effect; the wounding verbs can be used on their own even when they have caused death. For example, in (396), the pigs are shot and smoked; the pigs' deaths do not have to be explicitly mentioned.

- (396) *Rau k-e-te-i k-e-ruworo.*
 pig RL-3PL.M-shoot-3PL.M RL-3PL.M-smoke
 'They would shoot pigs and smoke (them).' [NSC2-MM:03]

This is similar to English where verbs such as 'shoot' and 'stab' can either have death built in, or they can be further specified with a resultative, such as 'to death'.

Another example of this in Barupu is in fishing and hunting narratives where the verb *-áve* 'hold' is often followed by a 'put' verb to express something like 'catch', but in the event that the prey is not put into something or that part of the story is not relevant, *-áve* is sufficient to express the meaning 'catch'.

In textual examples of this collocation, intonation varies between what I have characterised as the mono-clausal and bi-clausal intonations. Collocations like this can also appear in texts with or without overt conjunctions. It is not yet clear that collocations like this should be treated as serial verbs or simply as very commonly collocated verbs.

7.2 Complex verbs

In addition to the multi-word complex predicates described in the preceding section, Barupu also has a system of single-word complex predicates. I will call these complex verbs. A complex Barupu verb may have the following structure (the elements under discussion in this section are in bold):

STAT-SBJ/[BEN-**OBJ**]-SBJ-V-**OBJ**-**ADVB**₁-[**LOC**-**OBJ**]-**DIR**-[**VAL**₁-**OBJ**]-[**VAL**₂-**OBJ**]-**ADVB**₂-INTS

Figure 7.1 Structure of the Barupu complex verb

The above structure represents a single grammatical word; no NPs, adverbials or particles or pauses separate the various elements. Each element following the verb's object agreement has its own tone and the verb also retains its tone. As with multi-word nominal compounds, the rightmost morpheme in a complex verb has the most prominence.⁵ Elements must appear in the order shown in the figure with the one exception that the unmarked ordering of the **LOC** and **DIR** is dependent on the semantics of the verb, as exemplified below. This section is concerned with the elements appearing after the main verb. The structure of **BEN** is discussed in Chapter 8.

From the figure, Barupu appears to be a fairly polysynthetic language. However, there are four reasons for believing that this is probably a recent development.

- i it is rare for all of these elements to be represented on a single verb — one or two at the most is common;
- ii if the verb is transitive, everything must appear after, or external to, the verb's object suffix;
- iii each element retains its own tone;
- iv some of the forms show their own agreement with the subject of the main verb.

⁵Single-word 'frozen' nominal compounds have only one tone.

Those elements which show their own agreement with the subject of the verb have a clearly verbal origin. Those without subject inflection may also have a verbal origin. This is discussed below.

Some of the forms presented in this chapter have previously been discussed by Donohue (2003). He focusses on the group that I call *VALence*₂, and is mainly concerned with showing: a) that these forms are at an intermediate stage between a serial verb construction and an applicative construction (this claim is explored in §7.2.3); and b) that the subject inflection is a result of adherence to a morphological template called the ‘reduplicant’. This is explored in §7.2.5 — I am generally in agreement with these aspects of Donohue’s analysis. Donohue further argues, however, that agreement on the reduplicant is within the scope of the subject prefix on the main verb, and that its position outside inflection is a result of structure; his model is summarised and some objections to it are also raised in §7.2.5.

The elements can be summarised as follows:

- **ADVB₁**: This is a small set of two incorporated adverbials which are apparently quite unproductive, but they do show their own inflection for subject. These are discussed in §7.2.1.
- **LOC**: this set consists of four morphemes which introduce a locative participant. They specify the location of one participant with respect to another participant, i.e. whether it is *ON*, *UNDER*, *NEAR* or *AMID* the other participant. The other participant is indexed by a suffix directly on the locative. These forms do not show agreement with the subject.
- **DIR**: there are two forms which describe the elevation of an action, i.e. whether it is carried out in an *UP* or *DOWN* motion. Another two describe the direction of an action, i.e. whether it is carried *AWAY* from or *TOWARD* a deictic centre. Two of these (one of the directionals and one of the elevationals) are

homophonous with a synchronic Class III verb, and like their corresponding free verb they take a consonantal infix between two final vowels indexing the subject. The other two forms do not have a corresponding synchronic root but they, too, take an infix, revealing their verbal origins.

One definite sign of grammaticalisation — i.e. that the bound and free forms are separate lexical entries — is that the infix and final vowel are optional on all the bound forms (this is not the case for the free forms). All four bound forms also combine with an incorporated adverbial *-ro* to indicate that something is sheltered or hidden.

- **VALEnce₁**: this set consists of: *-nâ* which is quite general and introduces few different argument types depending on the verb; *-kê* which introduces mostly adversely affected participants but not always, and *-bo* meaning WITHOUT. These forms do not agree with the subject.
- **VALEnce₂**: this set consists of four morphemes which introduce various different roles depending on the semantics of the verb they appear on, and a further complex made up of two morphemes which has a consistent meaning. This set appears with a consonantal prefix, indicating the subject of the verb again. One of these is homophonous with a synchronic Class II verb, see below.
- **ADVB₂**: the **ADVB₂** forms are **SIMultaneous** and **CONCessive**, and they appear on verbs in the functional equivalents of adverbial clauses. They are discussed in Chapter 10. One of these morphemes ends in two vowels and takes an infix indexing the subject, the other is vowel-only and takes a consonantal prefix indexing the subject.
- **INTS**: Finally there is a suffix *-ke* which can be found at the very end of the verb. This suffix is not fully understood but it appears to have an emphasising or intensifying function.

Each of the elements following the verb root is discussed in turn, beginning with the first small set of adverbials. The agreement consonants on all the agreeing morphemes are the same as those found in close-knit Class II prefixes and the Class III and Class IV infixes described in Chapter 3. They are shown here in Table 7.2.

Table 7.2 Agreement consonants

<i>n</i>	1SG
<i>m</i>	2SG ; 1PL
<i>r</i>	3SG ; PL.F
<i>p</i>	DU ; PL.M

These morphemes are glossed as AG- or <AG>. The questions of how and why the morphemes agree with the subject are addressed in §7.2.5, below.

7.2.1 ADVB₁

These morphemes are called ADVERBial because they function to modify the verbs they are found with, but their origins are clearly verbal, since they show extra agreement for subject.

7.2.1.1 -eri/-ari SEParation

Two unproductive morphemes are *-eri* and *-ari* which attach to certain verbs to indicate something like ‘SEParation’. The verbs shown in Table 7.3 are never heard without these morphemes. The varying vowel indicates plurality; *-eri* is singular and *-ari* is plural. These morphemes take a consonantal prefix indexing the subject.⁶

Some examples are given below. As shown in (397a) these forms appear directly after the verb root, before the directionals. They do not appear on any suffix-taking transitive verbs — i.e. all the transitive verbs known to end in this morpheme have non-individuated Ps — so their position with regard to object

⁶The tonal behaviour of these morphemes has not been established.

- (402) *K-emi-ike(m)ari.*
 RL-1PL-(1PL)chew
 'We chew it up.'

However, at least one verb appears on its own as well as with one of these morphemes, as shown in (403).

- (403) a) *Kanro k-a-ivó.*
 turtle RL-3SG.M-carve
 'He carved the turtle.'
- b) *K-a-ivó-r-eri.*
 RL-3SG.M-carve-AG-SEP.SG
 'He carved it up.'

This is quite rare, there is only one example in the data, but it does suggest that the forms *-eri/-ari* are still productive.

7.2.1.2 *-ro/-o* SHORT *distance/time*

This morpheme only occurs on direction of motion and posture verbs. On direction of motion verbs it indicates that the motion is only a short or measurable distance, say within the confines of the village or town. On posture verbs, speakers suggested that it means something like 'for five minutes'. When this morpheme appears on the verb *-kôe* 'go up' it is always the fixed form *-ro*; on other verbs it is *-o* with an extra prefix indexing the subject.

The following examples show that *-ro/-o* is appropriate for use when the distance is walkable and within the village but inappropriate if the distance is a long way or involves a journey by boat or car.

- (404) a) *N-e-kô(n)e-ro* *sule.*
 IRR-1SG.F-(1SG.F)go.up-SHORT school
 'I'm going up to the school.'
- b) **N-e-kô(n)e-ro* *Vanimo.*
 IRR-1SG.F-(1SG.F)go.up-SHORT PLN
 'I'm going up to Vanimo.'

The next examples show this morpheme on two other direction of motion verbs, in these cases, with extra subject agreement.

- (405) a) *K-e-n-aro-n-o* *raka.*
 IRR-1SG.F-1SG.F-go.down-AG-SHORT river
 'I'm going to the river.'
- b) *K-e-no(n)i-n-o.*
 IRR-1SG.F-(1SG.F)go.along-AG-SHORT
 'I'm going a short way.'

The next example is a short text extract showing the use of this morpheme in context on a posture verb.

- (406) *N-o-r-ere-ø* *óté.*
 IRR-3SG.F-3SG.F-put-3SG.F supports
 'She puts it (the sago) in the sago processor supports.'

N-o-tôî *n-o-tôî* *n-o-bâun-kí.*
 IRR-3SG.F-rinse IRR-3SG.F-rinse IRR-3SG.F-no-AWAY
 She rinses and rinses until it is done.

N-o-kèi-r-o-ke *pí âi n-o-bere-kí.*
 IRR-3SG.F-sit-AG-SHORT-INTS water tree IRR-3SG.F-pour-AWAY

She sits for a bit (to let the water rise to the top) and then she pours off the waste water. [S-MN:03]

7.2.2 Directionals

This group indicates the direction of an action. There are two elevations: UP and DOWN, and two directions: TOWARD and AWAY.

The directional forms are presented in Table 7.4. The table also indicates if the forms have a corresponding current verb. Only the first two are segmentally identical to a synchronic direction of motion free form (the tones are different), but all four of them take an infix which agrees with the subject of the verb. The bound elevational is semantically more restricted than the free verb *-kôe* in that the free form has directional meanings on a horizontal plane, i.e. it can indicate upward motion as well

as motion away from the coast (although this could be seen as elevational too, since the mountains are inland), but the bound form only refers to elevation on a vertical plane.

Table 7.4 Inflecting intransitive directionals

bound form	gloss	current free verb
<i>-koe</i>	UP	<i>-kôe</i> 'go up, away from the coast'
<i>-kâe</i>	TOWARD	<i>-kae</i> 'come'
<i>-oo</i>	DOWN	<i>-aro</i> 'go down, towards the coast'
<i>-kie</i>	AWAY	<i>-noi</i> 'go'

Subject agreement consists of a consonant which is infix between the two final vowels. An example of this can be seen in (407).

- (407) *K-en-ore-ko⟨n⟩e*.
 RL-1SG.F-search-⟨AG⟩UP
 'I search upwardly.'

Like the free forms, the bound forms can also undergo the optional phonological process of non-low vowel deletion after a nasal. This can be seen in (408).

- (408) *K-en-ore-ko⟨n⟩e*.
 RL-1SG.F-search-⟨AG⟩UP
 'I search upwardly.'

But there are two areas where the bound forms and the free forms diverge: the bound forms have a quirk in 3SG agreement, and in some cases they do not inflect at all. These facts are discussed in turn.

Example (409), below, shows the use of the UP elevational *-koe* on the intransitive directed attention verb *-ore* 'search'. Here the subject of the verb is 3SG.F and the person and number of the subject is marked again by an ⟨*r*⟩ infix in the elevational.

- (409) *K-u-ore-ko⟨r⟩e*.
 RL-3SG.F-search-⟨AG⟩UP
 'She searches upwardly.'

Recall from Chapter 3 that on infixing Class III verbs the ⟨*r*⟩ is only found in 3SG if the final two vowels of the root were such that the first vowel would delete or form a glide if it came into contact with the second vowel. Example (410a) shows a deletion environment and example (410b) shows a glide formation environment.

- (410) a) *Pi k-a-ni⟨r⟩i.* *[kani̯i] *[kani̯]
 water RL-3SG.M-(3SG.M)wash
 ‘He is washing.’
- b) *K-o-u⟨r⟩a.* *[koua] *[kua] *[kwa]
 RL-3SG.F-(3SG.M)spit
 ‘She is spitting.’

If the second vowel would become a glide, then the the 3SG ⟨*r*⟩ infix is not found, as shown in (411).

- (411) *K-a-kôe.* [kakoi] *[k-a-kô⟨r⟩e]
 RL-3SG.M-go.up
 ‘He goes up.’

In the bound forms, however, if the morpheme takes agreement then the 3SG ⟨*r*⟩ is always present **k-u-ore-koe* (RL-3SG.F-search-UP) is not grammatical.

Major evidence of grammaticalisation of the bound directionals is that agreement is not obligatory on the bound forms. If the agreement is left off, so is the final vowel. This means that the directional affixes can be heard as simply *-ko*, *-(w)o*, *-ká* and *-kí*.

- (412) *K-en-ore-ko.*
 RL-1SG.F-search-UP
 ‘I search upwardly.’

The use of the full form, with agreement, appears to be stylistic. Speakers describe it as ‘pulling the word out’ and use it for emphasis.

On intransitive verbs, incorporated directionals describe the direction of motion of the subject, as shown in example (413).

- (413) *N-a-rö(m)i-ki(m)é!*
 RL-2SG.M-(2SG.M)stand-(AG)AWAY
 'Stand aside!'

When they are found on transitive verbs, they appear after the object suffix and describe the direction of motion of the object. For example:

- (414) *N-en-túra-mu-ko(n)e.*
 IRR-1SG.F-push-2SG.F-(AG)UP
 'I'll push you up.' (e.g. helping someone over a wall)

Example (414), above, carries the necessary interpretation that the object will be moved in an upward direction as a result of the actions of the speaker. As in 'causative', or cause-effect, serial verbs (Foley and Olson 1985), and above, even though it is the 2SG.F object who actually moves up, the UP morpheme still agrees with the 1SG.F subject of the main verb.

On verbs of directed attention or speech, nothing concrete moves; the directionals represent the direction of attention of the subject. This can be seen in (415), below.

- (415) *K-u-îrai-ko(r)e.*
 RL-3SG.F-speak-(AG)UP
 'She spoke upwardly.'

The elevationals make absolute space references, AWAY and TOWARD deal with relative space reference. In most cases they can be interpreted as indicating motion away from or towards the subject.

- (416) *K-a-ko-ká(r)é.*
 RL-3SG.M-get.SGO-(AG)TOWARD
 'He brings it towards himself.'

- (417) *K-e-n-ere-ø-ká(n)é.*
 RL-1SG.F-1SG.F-put-3SG.F-(AG)TOWARD
 'I put it towards me.'

- (418) *K-a-r-âraí-ki(r)é.*
 RL-3SG.M-3SG.M-throw-⟨AG⟩AWAY
 ‘He threw it away (from himself).’

In some contexts, motion towards or away from an established deictic centre, rather than the subject, may be the direction intended, as in the following text excerpt.

- (419) *Bó, bió îâre=va, k-o-tóve-ø-ki(r)é,*
 3SG.F person new=PRM RL-3SG.F-scold-3SG.F-⟨AG⟩AWAY
 ‘She, the woman, shouted angrily out at her,
kope boki bió kûro, k-o-tóve-ø-ká(r)é.
 then flying.fox person buried RL-3SG.F-scold-3SG.F-⟨AG⟩TOWARD
 then the flying fox-spirit, shouted angrily back. [U-EM:01]

In this excerpt the deictic centre has previously been established as the woman sitting inside. A devil has come to sit on a fruit tree outside her house and eat all the fruit. When the woman shouts out, she shouts away from herself, and when the spirit shouts back she is shouting towards the established centre of the discourse, the woman.

The directionals are intransitive. They cannot introduce new participants. This can be shown with the verb *-turuké*, a transitive verb meaning ‘slide’. It is not possible to use *-ka* as an allative, hence (420a) is ungrammatical. Instead you must move it away from yourself and use one of the valency morphemes, described below, to index the Goal, as in (420b). Here it means something like ‘push’.

- (420) a) **K-en-turuké-ø-ká(n)é-mu.*
 RL-1SG.F-slide-3SG.F-⟨AG⟩TOWARD-2SG.F
 ...
 b) *K-en-turuké-ø-ki(n)é-n-o-mu.*
 RL-1SG.F-slide-3SG.F-⟨AG⟩AWAY-AG-GIVE-2SG.F
 ‘I pushed it (away from myself) to you.’

It is also not possible to have more than one of these directionals on the same verb. For example, you can’t form a like meaning back and forth by using *-káe* and *-kie* together, **k-en-turuké-ki-ká*, **k-en-turuké-ká-ki*. This meaning is achieved with two verbs: *k-en-turuké-ki k-en-turuké-ká*. The same applies for UP and DOWN. All

four directional suffixes can, however, be used in conjunction with the transitive locationals described in §7.2.3.1, below.

7.2.2.1 *Comparison of directionals and independent serial verb constructions using direction of motion verbs*

Clearly these incorporated directionals and the independent serial verbs using direction of motion verbs described in the first section of this chapter are very similar. What differentiates them is that the directionals are much more productive: they can appear with any verb, while independent SVCs are restricted to specific semantic types. In some cases the same verb can appear in both constructions with clear meaning differences. For example, the verb *-ko* ‘get.SGO’ can appear in the Goal-directed carrying SVC with an independent direction of motion verb as shown in (421).

- (421) a) *K-a-ko* *k-a-kae*.
 RL-3SG.M-get.SGO RL-3SG.M-come
 ‘He brought it.’
- b) *K-a-ko* *k-a-kôe*.
 RL-3SG.M-get.SGO RL-3SG.M-go.up
 ‘He took it.’

But the same verb can also appear with a directional, as in (422). Whereas in the independent SVC the subject clearly moves from one place to another along with the Theme, there is no such indication in the directional construction. In the following examples, only the Theme moves — the subject remains in the same place.

- (422) a) *K-a-ko-ká(r)é*
 RL-3SG.M-get.SGO-⟨AG⟩TOWARD
 ‘He brought it out.’
- b) *K-a-ko-ko(r)e*
 RL-3SG.M-get.SGO-⟨AG⟩UP
 ‘He took it up.’

In the case of the causing downward motion SVC, however, there is no difference between the SVC and the directional construction. Examples (423a & b) are semantically equivalent. They differ only in that (423a) uses the directional and (423b) uses the independent serial verb construction.

- (423) a) *Pi k-en-bere-o(n)o* *baket.*
 water RL-1SG.F-pour-⟨AG⟩DOWN BUCKET
 ‘I pour the water down into the bucket’
- b) *Pi k-en-bere k-e-n-aro* *baket.*
 water RL-1SG.F-pour RL-1SG.F-1SG.F-go.down BUCKET
 ‘I pour the water down into the bucket.’

7.2.2.2 -*kie* and -*oo*

-*kie* is pressed into action as more than just a directional, it has acquired an aspectual meaning — something like ‘for a little while’. This use will be described in Chapter 9. It also has a wider distribution than the other directionals: it is able to appear not just on verbs but on adjectives and manner words, where it indicates ‘a little bit more’ of the given property, as was discussed in Chapter 5. On anything other than a verb -*kie* does not appear with the final vowel and thus cannot take an infix. There is no synchronic verb corresponding to this directional, but the bound form bears an obvious similarity to both -*kôe* and -*kae* so it may not be too much of a stretch to posit an earlier verb -*kie*.

-*oo* has some allomorphy. An initial epenthetic glide [w] is inserted when the suffix follows /i/, /u/, /a/ and /o/, as illustrated in the following examples.

- (424) *Bôi k-e-ti-o(p)o.* [kètìwōpò]
 lime RL-3PL.M-sprinkle-⟨AG⟩DOWN
 ‘They sprinkle lime down.’ [P-MG:03]
- (425) *N-o-yarä-má-o(r)o.* [nòyärämáwōrò]
 RL-3SG.F-see-2SG.M-⟨AG⟩DOWN
 ‘She looked down at you.’

In contrast, there is no [w] inserted after /e/. Instead /e/ becomes a glide.

- (426) *k-en-ore-o(n)o* [kènòrjònò]
 RL-1SG.F-1SG.F-search-(AG)DOWN
 'I search down.'

The form can not be related to any synchronic verb and it does not look much like the others, but there is a similar form *-woe* that is found in the complex 'shelter' construction, described in §7.2.2.3 below. This form looks a lot more like the other forms.

It seems reasonable to posit an earlier stage of the direction of motion verb paradigm where the final *-e* was the motion component and *-ka*, *-ko*, *-ki* and *-o* were the direction components. The two forms which are not related to current verbs have diverged from possible earlier verbs either semantically, in the case of *-kie*, or phonologically in the case of *-oo*. That they are not related to any current forms and have undergone some extension and changes suggests that they are further along the road to grammaticalisation than the other two directionals.

7.2.2.3 *-ro* HIDDEN

The directionals also contribute to another complex form. They combine with an incorporated adverbial *-ro*, meaning 'hidden' or 'sheltered' (here it will be glossed as HIDDEN).

Table 7.5 Hidden

<i>-ro-koe</i>	'hidden up'
<i>-ro-woe</i>	'hidden down, in'
<i>-ro-káe</i>	'hidden behind'
<i>-ro-kie</i>	'hidden away'

-ro-koe 'hidden up'

- (427) *K-e-ké(n)i-ro-ko(n)e* *ôro*.
 RL-1SG.F-(1SG.F)sit-HID-(AG)UP house
 'I'm hiding up in the house.' (houses are on stilts)

-ro-kie ‘hidden away’

All four of these forms can be found with transitive and intransitive verbs. On transitive verbs they appear after the object inflection. Note that on intransitive verbs the morpheme has scope over the subject. On transitive verbs the morpheme has scope over the object.

- (428) *K-ere-ké(r)í-ro-kí(r)é* *ǎrí.*
IRR-3PL.F-(3PL.F)sit-HID-(AG)AWAY inside
‘They sat hidden away inside.’ [WH-RX:03]

- (429) *K-ere-r-ere-a-ro-kí(r)é.*
RL-3PL.F-3PL.F-put-3SG.M-HID-(AG)AWAY
‘They hid him away.’ [FF2-CA:03]

-ro-káe ‘hidden behind’

As the next example shows, the meanings are not entirely compositional. It is not clear how ‘come’ relates to being hidden behind something; it is possibly because whatever is hidden is not visible from the point of view of the deictic centre.

- (430) *K-e-ké(m)í-ro-ká(m)é.*
RL-1PL-(1PL)sit-HID-(AG)TOWARD
‘We are hidden behind something.’

-ro-woe ‘hidden down’

This is used to indicate that something is right inside something else, to the point where you can’t see it any more. Again, the directional elements can appear with or without agreement. Example (431) shows this morpheme with agreement infixing — note that when it is found in the hidden construction, DOWN is *-woe*, not *-oo*, the form of the DOWN bound directional described in §7.2.2.

- (431) *K-a-rói-ro-wo(r)e* *âi ku k-o-nai*
RL-3SG.M-stand-HID-(AG)DOWN tree root RL-3SG.F-large
‘He stood hidden inside the tree with the large roots.’ [TP-MN:01]

7.2.3 Adding participants

The next three sets of morphemes share the feature of adding participants to the clause. In this respect they resemble what have been called applicative constructions. An applicative is a piece of derivational morphology attached to a verb allowing a usually non-subcategorised argument or oblique to be coded as a core argument. When applicative morphemes appear on transitive verbs they sometimes force a demotion of the original core object, so that it is now realised as an oblique, or omitted altogether.

The participant-adding morphemes in Barupu have the same primary function as common applicative constructions (they allow extra arguments to be marked on the verb), but some of their behaviour is very atypical for applicatives cross-linguistically:⁷

- there are twelve separate forms, more than in any other reported language, which means they add a lot more semantic content than is usual;
- they appear external to inflectional morphology;
- they take their own object suffixes, and when they appear on transitive verbs there is no demotion of the original object;
- some of them take a consonantal prefix indexing, in most cases, the subject of the clause.

Adding participants to the clause is also one of the classic functions of serial verbs cross-linguistically and at least one of the inflecting participant-adding morphemes can be related to a synchronic verb, but there are no obvious ancestors for the non-inflecting participant-adding morphemes.

Donohue (2003) argues that all the forms to be discussed in this section are applicatives. The forms in §7.2.3.1 and §7.2.3.3 he analyses as unproblematic, typical

⁷The third of these characteristics, taking their own object suffixes and not causing demotion of the original object on a transitive verb, is also a feature of applicatives in Abaza, a Northwest Caucasian language (O'Herin 2001).

applicatives (2003:122). But he was not aware that they all appear outside object inflections, and they are also still quite atypical in there being so many, each contributing such specific semantic content. The forms in §7.2.3.4 he analyses as ex-serial verbs tending towards applicatives, and I am generally in agreement with his analysis that they are ex-serial verbs.

7.2.3.1 *Locationals*

This set of morphemes introduces a locative participant. These are the least morphologically complex forms and they relate to no synchronic verb forms. The forms and their meanings are presented in Table 7.6.

Table 7.6 Transitive locationals

<i>-tá</i>	ON
<i>-para</i>	UNDER
<i>-ya</i>	NEAR
<i>-rǒmó</i>	AMID

The following examples show some uses of these morphemes.

-tá ON

Example (432) shows the use of this suffix on an intransitive verb ‘sit’. Here it simply attaches straight after the verb and seemingly allows a non-subcategorised location participant to be indexed like a regular object.

- (432) *K-a-kéi-tá-ø* *ái niau.*
 RL-3SG.M-sit-ON-3SG.F tree log_F
 ‘He is sitting on a log.’

But recall from Chapter 6 that all verbs can appear with a locative argument without any morphological adjustment, as long as that argument is inherently locative. Thus, *kéi* ‘sit’ can also appear with a location argument, and no locational morpheme, as shown in the following example.

- (433) *K-e-ké(m)i ôro.*
 RL-1PL-⟨1PL⟩sit house
 ‘We sit in the house.’

This might appear to be an example of what has been called ‘dynamic’ alternation (Donohue 2003:112), where an applicative construction is in alternation with a construction where the new argument is coded as an oblique (either with an adposition or case-marking). The following Yimas examples show this kind of alternation (Foley 1997:368).

- (434) a) *ipa kantk pu-mampi-wa-t*
 1PL with 3PL S-again-go-PERF
 ‘They again went along with us.’
- b) *pu-kra-mampi-caŋ-wa-t*
 3PL A-1PL O-again-COM-go-PERF
 ‘They again accompanied us.’

In (434a) the ‘accompanier’ is encoded obliquely with the postposition *kantk*. In (434b) this argument is now coded as a core argument (marked on the verb), licensed by the applicative morpheme *-taŋ*. Discourse factors control which strategy is used.

The difference in Barupu is that only inherently locative nouns can be locations without the use of the locational morphemes. These nominals include place names and nouns denoting spaces which are commonly thought of as places — *bo* ‘place’, *yin* ‘beach’, *uka* ‘bush’, *ôro* ‘house, village’. People, animals and non-place inanimates cannot function as locations without one of the locational morphemes (*âi niau* ‘log’ is apparently not inherently locative). This is shown in example (435b). This sentence could only mean something like ‘we are sitting here because of father’ because nominals which are not inherently locative receive a purpose interpretation (see Chapter 6).

- (435) a) *K-e-ké(m)i-tá-ka aka.*
 RL-1PL-⟨1PL⟩sit-ON-3SG.M father
 ‘We are sitting on father.’

- b) **K-e-ké(m)i aka.*
 RL-1PL-(1PL)sit father.
 ...

Using the locative morphemes to introduce inherently locative nominals is not usual, as is shown in example (436). This sentence was an attempt to elicit the locational *-para* ‘under’ with the inherently locative nominal *ôro* ‘house’.

- (436) ? *K-e-ké(m)i-para-u ôro.*
 RL-1PL-(1PL)sit-UNDER-3SG.F house
 ‘We are sitting under the house.’

Several speakers accepted it with this intended meaning, but it was not repeated and there are no natural examples. One speaker offered the sentence given in (437) as a better alternative to (436). In this example, rather than use a locational morpheme, the speaker expresses the notion of under the house with the frozen compound *orôka* ‘area under the house’. In Barupu village, the space under a house is often used for storage and as a shady sitting area.

- (437) *K-e-ké(m)i orôka.*
 RL-1PL-(1PL)sit area.under.the.house
 ‘We are sitting in the area under the house.’

The locational morphemes do not only allow non-subcategorised arguments to be realised in the clause, or be marked on the verb. Although that is one of their functions, another important part of their function seems to be to allow certain types of participants to fill roles they couldn’t otherwise fill. This function does not feature in any descriptions of applicatives that I am aware of.

Furthermore, as the following examples show, when the locationals appear on transitive verbs there is no change to the argument structure of the root itself. The locational appears after the object agreement of the main verb and is followed by its own object suffix. The object suffixes found on all the participant-adding morphemes are the same as the regular object suffixes.

- (438) a) *N-e-n-ere-ma-tá-ø* *aikéké.*
 IRR-1SG.F-1SG.F-put-2SG.M-ON-3SG.F ladder
 'I'll put you on the ladder.'
- b) *N-e-n-ere-ma-tá-ka.*
 IRR-1SG.F-1SG.F-put-2SG.M-ON-3SG.M
 'I'll put you on him.'

The verb *-ere* 'put' can also appear with a post-verbal NP. If this NP has locative semantics it will be interpreted as a Goal. This is shown in example (439).

- (439) *Rau aka k-e-p-ere-i* *réi.*
 pig real RL-3PL.M-3PL.M-put-3PL.M fence
 'They put real pigs inside a fence.' or 'They tamed real pigs.' [NSC2-MM:03]

In this context *réi* 'fence' is a discrete location which is fenced in (like 'paddock'). Again, even though an NP following this verb will usually be interpreted as a Goal, only certain types of entities can be that argument, otherwise a locational is necessary.

The introduced locative participant does not have to appear as an overt NP, but when it does, it almost always appears directly after the verb, as an added object, as in (438a). There is, however, one example in the corpus of an object of a locational appearing before the verb. This is a written example from the dictionary.

- (440) *Apón ro âi=a k-a-n-ere-ø_i-tá-u_j.*
 banana ripe_i tree=PRM_j RL-1SG.M-1SG.M-put-3SG.F-ON-3SG.F
 'I put the ripe banana on the stick (for carrying).' [DICT-PB:01]

Pre-verbal position does not automatically mean that an argument is core (see Chapter 6). Without independent tests for core/oblique there is no way of telling whether this movement has involved a promotion to core. One possible analysis of this is a double topic construction but because it is a written example we have no intonation information.

Common uses of *-tá* involve accompaniments to food, as shown in the following examples.

- (441) ... *ya k-o-noi bió ra=va n-o-yé-ya*
 and RL-3SG.F-go.along person one=PRM IRR-3SG.F-hit-3SG.M
n-o-râivi-tá-ø aro.
 IRR-3SG.F-cook.in.a.pot-ON-3SG.F greens
 ‘... and she went to kill one of the boys to cook with greens.’ [ANR-MN:01]

- (442) *Apón k-ě-n-á pé ìm k-en-tón-tá-u.*
 banana RL-1SG.F-1SG.F-eat water hot IRR-1SG.F-drink-ON-3SG.F
 ‘I’m eating banana and I’m washing it down with tea.’
 (I’m eating banana and drinking tea on top of it.)

This section concludes with textual examples of uses of the other locationals.

-para UNDER

In (443) the intransitive verb ‘sit’, with the addition of *-para* ‘under’, can now index an animate locative participant (2SG.M) as well as appear with an unmarked locative *be pita* ‘here down below’.

- (443) *Něni pôn unake n-e-ké(n)i-para-ma bé pita.*
 1SG.F only alone IRR-1SG.F-(1SG.F)sit-UNDER-2SG.M DPROX down.below
 ‘As for me, I’ll just sit by myself under you, here down below.’ [U-EM:01]

In this example the object of *-para* is realised only as a suffix on the locational and the unmarked location ‘here down below’ is realised as an overt NP. Another example of this is (444).

- (444) *K-a-rói-para-i aniania ku.*
 RL-3SG.M-stand-UNDER-3PL.M tree.sp root
 ‘He stood under them at the roots of the *aniania*.’ [ANR-MN:01]

In the next example the locational is reduplicated for distributive aspect. It indicates that the men stood in different places around the base of a tree.

- (445) *Ya k-e-rõ(p)í-para-para-ø ...*
 and RL-3PL.M-(3PL.M)stand-UNDER-UNDER-3SG.F
 ‘And they came and stood around under her ...’ [U-EM:01]

-ya NEAR

Example (446) is taken from a narrative about a flying fox. Here the intransitive verb is *-vóvó* ‘circle’ (in this case ‘flying in circles’). When *-ya* is added, it is possible to specify that the subject is circling around someone in particular.

- (446) *K-o-vóvó. K-o-vóvó-ya-i.*
 RL-3SG.F-circle RL-3SG.F-circle-NEAR-3PL.M
 ‘She circled. She circled around them.’ [U-EM:01]

The morpheme is glossed as NEAR because the ‘aroundness’ of the previous example comes from the circling semantics of the verb. The following example helps to explicate the semantics of this morpheme.

- (447) *K-en-úte k-e-no(n)i-ya-mu.*
 RL-1SG.F-walk RL-1SG.F-go.along-NEAR-2SG.F
 ‘I walked past you.’

-rǒmó AMID

The final suffix in this set is *-rǒmó*, which means something like ‘among’, ‘amid’, ‘between’ or ‘through’. I gloss it as AMID.

- (448) *N-e-ké(n)i-romǒ-ré pirimáká.*
 IRR-1SG.F-(1SG.F)sit-AMID-3PL.F grass
 ‘I would sit amid the pirimaka grasses.’ [MP-EM:01]

- (449) *K-a-kôe k-a-kôe k-a-tari-romǒ-ré bo e bo*
 RL-3SG.M-go.up RL-3SG.M-go.up RL-3SG.M-break-AMID-3PL.F place garden place
anai o erôra nâkí k-a-r-á-u.
 large OR garden dog RL-3SG.M-3SG.M-make-3SG.F

‘He went along and then he broke through (the tobacco plants) in the garden that the dog had made.’ [TP-MN:01]

In the next example the pre-verbal added object is the head of a relative clause.

- (450) *au bé mēmí bió kekémíromǒ-rékémo*
 k-e-ké(m)i-romǒ-ré-ke=émo
 thing DPROX 1PL person RL-1PL-(1PL)sit-AMID-3PL.F-INTS=DREF

‘these things we people sit among’

In the next example the locational is reduplicated to indicate distributive aspect. This clause describes how men paint canoes. They paint the coloured sections first and then they fill in around them with white to make the colours stand out more.

- (451) *K-o-buso-romo-rómó-ø.*
 RL-3SG.F-white-AMID-AMID-3SG.F
 ‘It is white here and there inside/between (other colour).’

There is no evidence of a verbal source for these morphemes and none of them takes subject inflection. But as will be shown in §7.2.5, the subject inflection probably has a phonological explanation and these forms do not fit the phonological profile, so a verbal origin is not ruled out. Their position after object inflection strongly suggests that they were only quite recently separate words.

7.2.3.2 Combinations and ordering

I have no natural examples of two *locationals* appearing on the same verb but it is quite common for the locational *-tá ON* to co-occur with the *directional -oo DOWN*.

In the next two examples the elements have different orders.

- (452) *Bôî=a k-e-tí-wo(p)ø-ta-ø.*
 lime=PRM RL-3SG.M-sprinkle-(AG)DOWN-ON-3SG.F
 ‘They sprinkle lime down onto it.’ [P-MG:03]
- (453) *Okutari k-e-p-ere-ø-tá-ø-wo(p)ø kera.*
 saucepan RL-3PL.M-3PL.M-put-3SG.F-ON-3SG.F-(AG)DOWN fire
 ‘They put the saucepan on the fire.’ [P-MG:03]

The order in which these two elements appear is determined by the semantics of the verb. The parameter controlling the unmarked ordering of the *locationals* and *directionals* is whether the verb views the action from the perspective of the movement of the object or its final location. For example, the verb *-ârái* ‘throw’ is

arguably focussed more on the motion of the object than its final location. This focus is reflected in the ordering of the suffixes: the direction is indicated first and then the location. This is shown in (454).

- (454) *K-o-r-ârái-o-tá-ka.*
 RL-3SG.F-3SG.F-throw-DOWN-ON-3SG.M
 ‘She threw it down onto him.’

In contrast, the verb *-ere* ‘put’, is arguably more focussed on the final location of the object than the direction of the putting, thus the locational appears first, as in (455), below.

- (455) *Ôi=a n-o-m-ere-ø-tá-ø-wo ríná.*
 sago=PRM IRR-2SG.F-2SG.F-put-3SG.F-ON-3SG.F-DOWN sago.bark
 ‘Put the sago down on the sago bark.’

7.2.3.3 VALency₁

The morphemes introduced in this section are quite disparate semantically. They are treated together because they occupy the same position on the verb, they introduce participants and they do not show any inflectional behaviour. There are no clear verbal origins for these forms.

-ná APPL

The semantic role of participants introduced by *-ná* can only be determined by context and the semantics of the verb. This morpheme has the widest range of meaning, and so is closest in function to a prototypical applicative, although it is still found after inflection. As the following examples will show, it is not possible to give this morpheme a consistent semantic gloss, so it is glossed as APPLICATIVE. There is a proto-Macro Skou applicative **na*, also attested in Isaka and Skou (Donohue and San Roque 2004; Donohue 2004).

One of the most common functions of this morpheme is to introduce a

propriative participant — that is, a participant that is involved in the action but is not in control of the action.

- (456) *Rua k-a-ko, k-a-rói-nâ-ø kamo.*
 bow RL-3SG.M-get.SGO RL-3SG.M-stand-APPL-3SG.F door
 ‘He got his bow and stood with it at the doorway.’ [NSC1-CA:03]

- (457) *Kavêmi k-a-r-ikiro ekókó*
 k-a-âve-mi
 RL-3SG.M-hold-1PL RL-3SG.M-3SG.M-put.in string.bag
 ‘He caught us and put (us) in his string bag

k-á-ute-nâ-mi n-a-kôe ôro yá.
 RL-3SG.M-walk-APPL-1PL IRR-3SG.M-go.up house 3SG.M
 and he walked along carrying us as if to go to his house.’ [ANR-MN:01]

- (458) *Tói k-a-ipóri k-a-ko avé-i*
 breast RL-3SG.M-wrap RL-3SG.M-get.SGO with-3PL.M
k-a-kae-nâ-ø; rara.
 RL-3SG.M-come-APPL-3SG.F road

‘He got the breast he’d wrapped and, with them, came down the road with it.’
 [FF1-MN:01]

In (459) *-nâ* adds a purposive element to the clause.

- (459) a) *K-en-tova.*
 RL-1SG.F-walk.around
 ‘I’m walking around aimlessly.’
 b) *K-en-tova-nâ-re bíyó.*
 RL-1SG.F-walk.around-APPL-3PL.F cassowary
 ‘I’m hunting cassowary.’

- (460) *Miní páko k-ă-iniá-tá-ø taravai târe má*
 snake big RL-3SG.M-be.at-ON-3SG.F tree.sp new child
k-o-bia-ká(r)é-nâ-ka rewo raka.
 RL-3SG.F-crooked-(AG)TOWARD-APPL-3SG.M very river

‘There is a big snake on the taravai sapling that is bent right over the river because of it.’ [DICT-PB:01]

It can also have something like an ‘about’ meaning.

- (461) *Era k-ama-yôyô-nâ-ni?*
 PQ RL-2SG.M-deam-APPL-1SG.F
 ‘Do you dream about me?’

This form can also be reduplicated to indicate iterativity. In this example the added object NP *akorom* is topicalised.

- (462) *Akorom k-u-ore-na-nâ-re.*
 food RL-3SG.F-search-REDUP-APPL-3PL.F
 ‘She searches around for foods.’

The verb root *-ore* is not available for reduplication because it is vowel-initial (see Chapter 9). The transitive morpheme *-nâ* is consonant-initial and so is available for reduplication.

***-kê* ADV & *-bo* WITHOUT**

As the following examples show *-kê* has a fairly broad range in terms of the semantic roles it introduces, but most often there is a general feeling that the added object is adversely affected; it is thus glossed ADV. In the following example *-kê* is used with ‘rain’, this contrasts with the use of *-tá* on this same verb in that with *-kê* there is more of a negative effect on the participant being rained on.

- (463) *Kua Betty á k-u-ai-kê-u.*
 AT PN rain RL-3SG.F-rain-ADV-3SG.F
 ‘It’s raining on Betty.’

The next example shows ADV on the adjectival verb *-nai* ‘large’.

- (464) *Era k-a-nai-kê-mu?*
 PQ RL-3SG.M-large-ADV-2SG.F
 ‘Are you finding him too big (to carry)?’

The *-bo* morpheme is very specific and can always be glossed as WITHOUT.

- (465) *Mônrai n-opu-ítí-bo-na.*
 singsing IRR-2SG.M-dance-WITHOUT-1SG.M
 ‘You carry on dancing without me.’ [U-EM:01]

- (466) *K-o-kéi-bo-wa. Má páko-páko-ki pôn*
 RL-3SG.F-sit-WITHOUT-3SG.M child REDUP-big-AWAY only
k-a-kéi-r-i-ø.
 RL-3SG.M-sit-AG-WITH-3SG.F
 ‘She sat without him. Just her second oldest child stayed with her.’ [U-EM:01]

7.2.3.4 VALency₂: -î, -é, -ô, -o, -aí-

These five morphemes also allow extra participants to be marked on the verb, but they show the further complexity of taking a consonant prefix which indexes the subject of the main verb, this is discussed in §7.2.5. The agreement prefixes are the same as those found on the bound directionals and presented in Table 7.2, above. At least one of these morphemes (-o) can be traced to a synchronic verb and, like the directionals, this construction is probably derived from a recent serial verb construction. If they were once verbs, the forms are now obviously grammaticalising; for example, one form is losing inflection, and only one synchronic root can be found. The forms introduce different semantic roles depending on the meaning of the verb. Each form will be exemplified in turn.

-ě FROM

On motion verbs this morpheme encodes something like an animate Source, as shown in (467).

- (467) *K-en-úte-n-ě-mú.*
 RL-1SG.F-walk-AG-FROM-2SG.F
 ‘I walked away from you.’

On non-motion verbs this morpheme has a seemingly adverse meaning. But the difference between this morpheme and the adversative *-kê* is that whereas *-kê* indicates that something is happening and this event is adversely affecting the object, *-ě* indicates something more along the lines that something is not happening, or that there is a lack of something and this lack is to the detriment of its object.

- (468) *Âimon.kamo k-o-bâun-r-é-i.*
 axe RL-3SG.F-not.be.at-AG-FROM-3PL.M
 ‘They (ancestors) didn’t have iron axes.’ [S-MN:03]

- (469) *K-ana-ko-n-ě-mú.*
 RL-1SG.M-get.SGO-AG-FROM-2SG.F
 ‘I took it from you.’

- (470) *K-em-îrai-m-ě-mú.*
 RL-1PL-talk-AG-FROM-2SG.F
 ‘We’ve finished talking, you missed it.’

This form is also used on adjectives in comparative constructions, as in the following example.

- (471) *Rôinké k-ere-mé-méme-r-é-i* *tóman.*
 rat_F RL-3SG.F-REDUP-small-AG-FROM-3PL.M bandicoot_M
 ‘Rats are smaller than bandicoots.’

-î WITH

On non-motion verbs this morpheme means approximately ‘while with’. On ‘cook’, for example, it means something like the subject and the added object were together cooking, but the the object of *-î* does not actually have to be cooking, she can just be there, involved in the cooking or not.

- (472) *K-en-râiví-n-î-mu.*
 RL-1SG.F-cook-AG-WITH-2SG.F
 ‘I was cooking and you were there too.’

The next example shows this morpheme on the verb *-ko* ‘get.SGO’.

- (473) *Q: Taveke k-ama-ko* *rôpe?*
 tobacco RL-2SG.M-get.SGO where
 ‘Where did you get the tobacco from?’

- A: K-ana-ko-n-î-ya* *nâki bió bére Toeyoro.*
 RL-1SG.M-get.SGO-AG-WITH-3SG.M dog man DDIST PLN
 ‘I got it from/while I was with a dog-man spirit there at Toeyoro.’ [TP-MN:01]

On a motion verb like *-úte* ‘walk’, however, this form introduces something like an animate Goal. You might use the following if you were telling someone you were planning to visit them.

- (474) *N-en-úte-n-í-mu.*
 IRR-1SG.F-walk-AG-WITH-2SG.F
 ‘I will walk to (be with) you.’

The form *-ô* REG, discussed below, is used to indicate something like comitative on motion verbs.

Agreement is falling out of use on this one form; most casual uses leave it out. Thus, the following could also be heard:

- (475) *A: K-ana-ko-í-ya* *nâki bió bére Toeyoro.*
 RL-1SG.M-get.SGO-WITH-3SG.M dog man DDIST PLN
 ‘I got it from/while I was with a dog-man spirit there at Toeyoro.’

The now vowel-initial form does not undergo glide-formation; instead an epenthetic [w] is produced during the transition from /o/ to /i/, and an epenthetic [j] is produced between *-í* and the object suffix *-a*, giving: [ka.na.ko.wí.ja]. As discussed in Chapter 2, this is arguably because the morpheme has an HL tone and it must consist of at least one binary foot.

For the most part, the agreement variation presents no problems; agreeing and non-agreeing are simply in free variation. But apparently the change is not moving fast enough because some forms change meaning depending on whether they are inflected or not. Consider the following minimal pair.

- (476) a) *K-o-r-á-í-ya.*
 RL-3SG.F-3SG.F-do-WITH-3SG.M
 ‘She is doing (it) with him.’
 b) *K-o-r-á-r-í-ya.*
 RL-3SG.F-3SG.F-do-AG-WITH-3SG.M
 ‘She is having sex with him.’

The examples above are identical in every respect except that in (476b) the applicative agrees while in (476a) it does not.

The form can also be used in a dative-of-interest function.

- (477) *Má a k-o-r-ǎ-ká-î-mu.*
 child thing RL-3SG.F-3SG.F-sick-3PL.M-WITH-2SG.F
 ‘(Your) child fell sick.’
- (478) ‘*A bé beya k-en-yǎrá-ø-î-ve vai.*’
 thing DPROX NEG RL-1SG.F-see-3SG.F-WITH-2PL.F POL
 ‘I haven’t seen the thing you’re asking about.’ [FF2-CA:03]

-ô REG

This form introduces somewhat of a ‘with regard to, because of’ argument, shown in the following examples. In (479) the implication is that the added object is going somewhere and the subject goes along too, so there can be a comitative reading, but the subject is usually not the instigator of the event.⁸

- (479) *K-en-úte-n-ô-mu.*
 RL-1SG.F-walk-AG-REG-2SG.F
 ‘I went along with you.’ (e.g. because you asked me to)

The following examples show some other uses of this form.

- (480) *K-en-îrai-n-ô-mu.*
 RL-1SG.F-talk-AG-REG-2SG.F
 ‘I talked about you.’

Example (481) means that the added object has gone somewhere and the subject has stayed behind, perhaps to look after his children.

- (481) *K-e-ké(n)î-n-ô-wa.*
 RL-1SG.F-(1SG.F)sit-AG-REG-3SG.M
 ‘I’m staying behind because of him.’

⁸Where several participants equally carry out the action, nominal conjunction is used, see Chapter 5.

When this form is followed by the 3SG.M suffix *-a* an epenthetic [w] is inserted between it and the object suffix and it is often fricativised to [β]. For example, [kekeninôwa] ~ [kekeninôβa]. This is again because the morpheme has an HL tone and must consist of at least a foot and cannot utilise any of the syllables of the root.

Example (482) means that the subject is making something for some reason to do with the added object; perhaps he is sick and can't finish it.

- (482) *K-e-n-á-n-ô-wa.*
 RL-1SG.F-1SG.F-make-3SG.F-AG-REG-3SG.M
 'I'm making it because of him.'

Example (483) shows another use of this form.

- (483) *K-emi-páko-m-ô-ø aro.*
 RL-1SG.F-pig-AG-REG-3SG.F green.vegetable
 'We are big because of (eating) greens.' [DICT-PB:01]

-o GIVE

This form introduces roles like Benefactive or Recipient. It is related to the synchronic verb *-o* 'give', which is a classic valency-increasing serialising verb cross-linguistically. Example (484) can either mean 'I went away and left you to it' or, 'I went on your behalf'.

- (484) *K-en-úte-n-o-mu.*
 RL-1SG.F-walk-AG-GIVE-2SG.F
 'I walked for you.'

This form is also used to code the addressee of speech verbs, as in example

(485).

- (485) *K-en-îrai-n-o-mu.*
 RL-1SG.F-talk-AG-GIVE-2SG.F
 'I talked to you.'

This form does undergo glide-formation when followed by the 3SG.M suffix *-a*, arguably because it is L-toned.

- (486) *K-e-ké(n)i-n-o-a.* [kèkénínuà]
 RL-1SG.F-⟨1SG.F⟩sit-AG-GIVE-3SG.M
 'I am sitting for him.'

The meaning difference between this example and (481) above with the same verb but with the REG morpheme is that this time the subject is quite specifically staying behind to look after the added object; care is crucial here.

On some verbs the added object is quite clearly a recipient.

- (487) *K-en-ráiví-n-o-mu.*
 RL-1SG.F-cook-AG-GIVE-2SG.F
 'I cooked for you.' (i.e. 'I cooked food and gave it to you to eat.')

- (488) *K-e-n-á-ø-n-o-mu.*
 RL-1SG.F-1SG.F-make-3SG.F-AG-GIVE-2SG.F
 'I'm making it for you.' (i.e. 'I'm making it to give to you.')

***-a-t* SRND**

The final form to be discussed is complex; it inflects twice. I will gloss the first prefix as a prefix and the second as an infix. Its core meaning is one of SURROUNDING.

- (489) *Á k-u-ai-r-a(r)t-ni.*
 rain RL-3SG.F-rain-AG-⟨AG⟩SRND-1SG.F
 'The rain is blocking me.' (i.e. 'I can't go out because it's raining.')

The next example shows the reduplication of this morpheme to indicate iterative aspect. The verb itself cannot reduplicate because it is vowel-initial.

- (490) *K-i-óro-papí-p-a(p)t-ø.*
 RL-3PL.M-cut-REDUP-AG-⟨AG⟩SRND-3SG.F
 'They cut and cut (the tree) all around her.' (She was hiding inside the trunk.)

But some other examples showing extended meanings follow.

- (491) *K-o-ké⟨m⟩i-m-a⟨m⟩t-ni.*
 RL-2SG.F-⟨2SG.F⟩sit-AG-⟨AG⟩SRND-1SG.F
 ‘You are sitting in my way.’

As the following example shows, when this morpheme takes a 3SG.M object suffix, the final high vowel does not become a glide. Instead, it is produced as a full vowel and an epenthetic glide is inserted between it and the suffix.

- (492) *K-a-ore-r-a⟨r⟩t-ya* *nâki.*
 RL-3SG.M-search-AG-⟨AG⟩SRND-3SG.M dog
 ‘He was on the lookout for the dog spirit.’ [TP-MN:01]

-a VAL There is one other possible morpheme like this: *-a VAL*, but it appears on only one verb: *-oro* ‘decorate’. It is glossed as VAL.

- (493) a) *K-i-oro.*
 RL-3PL.M-decorate
 ‘They are decorating.’
 b) *K-i-oro-p-a-ka.*
 RL-3PL.M-decorate-AG-VAL-3SG.M
 ‘They are decorating him.’

7.2.4 Combinations and ordering

As shown in Figure 7.2 at the beginning of this section 7.2, the VALency₂ forms appear after the directionals and locationals described above. The following example shows GIVE in combination with the directional *-koe* UP.

- (494) *K-u-îrai-ko⟨r⟩e-r-o-u.*
 RL-3SG.F-talk-⟨AG⟩UP-AG-GIVE-3SG.F
 ‘She spoke up to her.’ [U-EM:01]

The following shows GIVE in combination with the locational *-tá* ON. Although a verb can take more than one participant-adding morpheme, there are no examples of clauses with more than one added object NP. Typically, as in the following example,

one of the added objects features in a previous clause and its only realisation in the subsequent clause is with agreement on the participant-adding morpheme.⁹

- (495) *Niánta n-i-û(n)a n-e-kô(n)*
 prawn IRR-1SG.F-(1SG.F)trawl IRR-1SG.F-(1SG.F)go.up
 'I'll catch prawns, go (back) up
- aro n-en-râiví-tá-u-n-o-a ám nění.*
 greens IRR-1SG.F-cook-ON-3SG.F-AG-GIVE-3SG.M husband 1SG.F
 and cook greens with them for my husband.' [U-GX:01]

VALency₂ forms are also positioned after VALency₁ forms.

- (496) *K-en-úte-nâ-ka-n-î-mu*
 RL-1SG.F-walk-APPL-3SG.M-AG-WITH-2SG.F
 'I'm bringing him back to you.'

There can be more than one VALency₂ form per verb. These were elicited quite easily, however there is not one natural textual example in the data.

- (497) *K-e-ké(n)i-n-ě-mú-n-î-ya.*
 RL-1SG.F-(1SG.F)sit-AG-FROM-2SG.F-AG-WITH-3SG.M
 'I didn't go with you, I stayed with him.'

- (498) *K-e-ké(n)i-n-î-ya-n-ě-mú.*
 RL-1SG.F-(1SG.F)sit-AG-WITH-2SG.F-AG-FROM-3SG.M
 'I stayed with him to annoy you.'

7.2.5 Subject inflection and position

The agreement behaviour of some of the elements discussed above suggests that recent verb serialisation is a very likely source for the structure of the agreeing complex verbs. The origins of the non-agreeing forms are not so clear. Donohue (2003) argues that the inflectional behaviour can be explained with reference to a morphological template called the 'reduplicant'. He writes:

⁹Number marking for lower animates is optional. In the second clause the 'prawns' of the first clause are given singular agreement on the relative locational *-tá*.

[T]here is a minimal unit that may be referred to by the grammar, and that unit does ... contain some inflectional material. The integration of a verbal base into a predicate with another verbal base ... involves the assignment of pronominal agreement to both bases in cases where the second base does not fulfill the phonotactic conditions that are set for the 'reduplicant'. (2003:135)

Recall from Chapter 3 that the reduplicant in Class II verbs consists of the root plus the tight-knit consonant prefix. The following table shows the agreement paradigm for the L-toned Class II verb *-o* 'give', a very probable source for the GIVE morpheme.

Table 7.7 *-o* 'give'

		SG	DU	PL
1	M	<i>k-a-n-o</i>	<i>k-epi-p-o</i>	<i>k-e-m-o</i>
	F	<i>k-e-n-o</i>		
2	M	<i>k-a-m-o</i>	<i>k-oropu-p-o</i>	<i>k-o-p-o</i>
	F	<i>k-o-m-o</i>		<i>k-eve-r-o</i>
3	M	<i>k-a-r-o</i>	<i>k-ere-p-o</i>	<i>k-e-p-o</i>
	F	<i>k-o-r-o</i>		<i>k-ere-r-o</i>

Stripping away the status prefix plus any V(CV..)- subject prefixes leaves the bolded consonant matching the consonants found on the agreeing bound forms. This unit is defined as the 'reduplicant', because it is reduplicated when Class II verbs are reduplicated. Vowel-initial Class I and III verbs cannot be reduplicated, but Class II verbs, even though they are all vowel-initial, can, because the extra agreement consonant can be included in the reduplication. The next example shows reduplication on the Class II verb *-a* 'make, do, want', repeated from Chapter 3. Example (499a) shows this verb with 3PL.M inflection and example (499b) shows this verb with 3PL.M inflection and reduplication.

- (499) a) *K-e-p-á*.
 RL-3PL.M-3PL.M-do
 'They do (it).'

- b) *Au=ère beka bĩ mèm k-e-p-á-p-á.*
 thing=DDIST like ancestors 1PL RL-3PL.M-3PL.M-do-3PL.M-do
 ‘Those things like our ancestors used to do.’ [U-EM:01]

The consonant subject prefix *p-* is included in the reduplication. Under Donohue’s analysis, it is this unit, ‘the reduplicant’, that is incorporated.¹⁰ The non-inflecting valency morphemes are all consonant-initial and thus would not have belonged to Class II, so it is not ruled out that they, too, have a verbal origin.

Donohue (2003) further proposes, however, that in these constructions the subject prefix on the main verb ‘has scope over the entire following multi-predicate unit’. Figure 7.2 is Donohue’s model of the structure of a verb with a ‘putative applicative’. In this analysis both ‘reduplicants’ are under the scope of the same subject agreement marking.

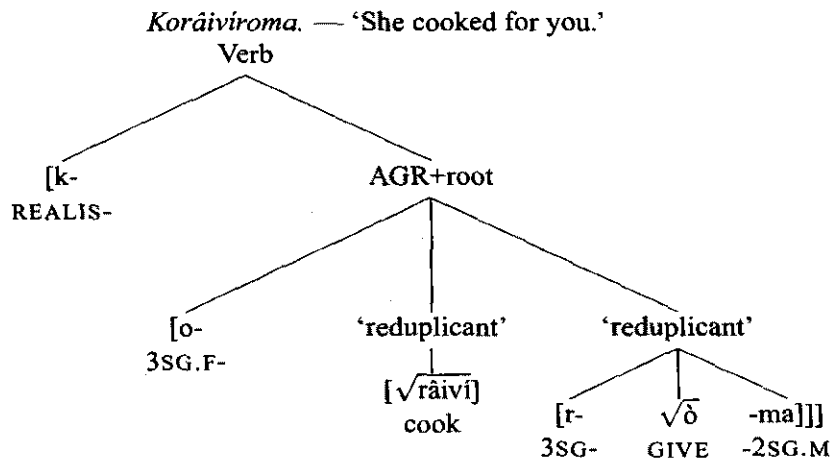


Figure 7.2 Structure of a verb with a ‘putative applicative’. Source: Donohue (2003:136)

He presents and explicitly rejects another possible model, given in Figure 7.3 (He would analyse this as having the same structure as in Figure 7.2).

¹⁰In Chapter 3 I raised the possibility that Class II roots might be consonant-initial with consonant mutation for subject. If the agreeing consonant is part of the root rather than simply a prefix it is not surprising that it would have been incorporated along with the rest of the root.

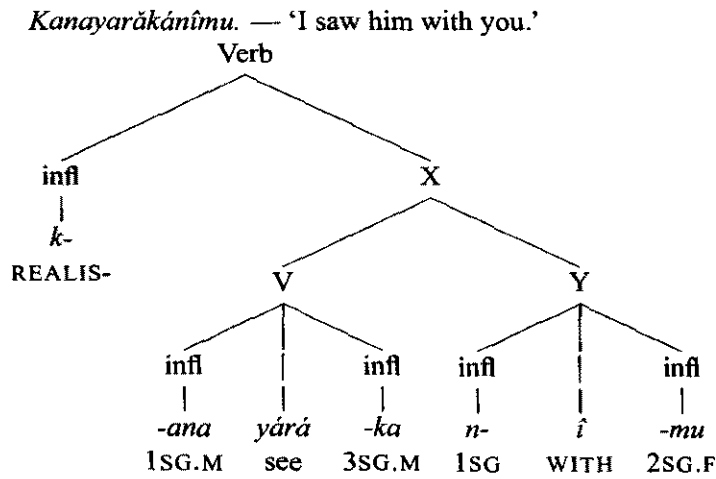


Figure 7.3 Apparent structure. *Source:* Donohue (2003:131)

Donohue argues that 7.2 is a desirable analysis for two reasons: first that the ‘structure of the putative applicatives guarantees that there will be agreement between the V(C(V))- prefix and subsequent agreement markers, none of which can morphologically mark all the distinctions present in the prefix ... [t]he V(C(V))- prefix, then, represents the sum of all personal agreement material’ (2003:135). Second, he argues ‘when we do find serialization of two fully inflected verb roots the features of the [main] prefix are shared over two verbs, and so can be taken as more “transparent” to the syntactic environment in which they occur’ (2003:135).

While it is true that the subject inflection on main verbs and incorporated participant-adding morphemes is mostly identical, there is one construction, involving Experiencer objects, where the inflection on the incorporated form agrees with either the subject or the object of the main verb. This means that agreement on the reduplicant cannot be completely reliant on the prefix on the main verb.

The following examples show the use of inflecting valency morphemes on Experiencer object verbs. The examples are semantically identical. Neither means

that hunger afflicted both participants, only that the object of the valency morpheme was there at the same time as the hungry person. In (500a) the consonant on WITH agrees with the subject of the verb: 3SG.F. In (500b) the consonant on WITH agrees with the Experiencer, morphologically the object of the verb: 1SG.F.

- (500) a) *K-o-raiyó-ni-r-î-mu.*
 RL-3SG.F-hunger-1SG.F-AG-WITH-2SG.F
 ‘I was hungry in your presence.’
- b) *K-o-raiyó-ni-n-î-mu.*
 RL-3SG.F-hunger-1SG.F-AG-WITH-2SG.F
 ‘I was hungry in your presence.’

This behaviour cannot be reconciled with an analysis where the agreement is governed by the subject prefix of the main verb. In fact it is better suited to the first analysis Donohue presents and then rejects, because the ‘putative applicatives’ must be able to take different inflection to the main verb.

Under a complex predicate analysis, differing inflection for the incorporated element is to be expected. In complex predicates, agreement is determined with reference to the argument structure of the combined predicate and, in keeping with the nature of Experiencer object constructions cross-linguistically, Experiencers can be singled out as being more salient than Stimuli by being given subject-like properties (see §4.2.5), in this case showing up in reduplicant inflection.

Donohue (2003:136) also suggests that it is the phonotactic constraint of the ‘reduplicant’ that dictates the morphemes’ positions outside inflectional morphology. But since all the non-inflecting valency and other derivational morphology is also found here, recent polysynthesis provides a ready explanation.

Chapter 8

Beneficiary and Possessor

Barupu has a separate agreement paradigm for marking Beneficiaries and Possessors on the verb. I will gloss it BENeficiary because special Beneficiary marking is relatively common in Papua New Guinea (Foley 1986; Donohue 2002), and, cross-linguistically, languages quite commonly allow Possessors to be indexed by another, already established, paradigm in a process known as external possession (Payne and Barshi 1999). However, the paradigm is used more widely in its Possessor marking function than its Beneficiary function, at least in narratives. Also, out of context, a verb inflected with this paradigm will most likely be interpreted as marking a Possessor. This is perhaps because there are now other ways to mark Beneficiaries — the morphemes discussed in the previous chapter. Reasons for believing Beneficiary marking to be older than the participant-adding morphemes discussed in the previous chapter, are given below.

The chapter is organised as follows. Section 8.1 describes the structure and function of the Benefactive in Barupu and compares it to other Papuan languages. Section 8.2 describes its external possession function. Finally, section 8.5 presents the full paradigm.

8.1 Beneficiary

I will begin with an example. As shown in (502), the verb *-kôe* ‘go up’ usually takes Class III subject agreement and because it is intransitive it does not take object suffixing.

- (501) *N-a-kô(m)e.*
 IRR-⟨2SG.M⟩-⟨2SG.M⟩go.up
 ‘Go up.’ ‘You will go up.’

This verb combines with *-ko* ‘get.SGO’ to form a serial verb construction meaning ‘get and come’ or ‘bring’ (see §7.1.1). The serial verb construction is transitive. The grammatical number of the thing brought is marked by the suppletive singular form of ‘get’.

- (502) *Bá ra n-ama-ko n-a-kô(m)e.*
 fish one IRR-2SG.M-get.SGO IRR-2SG.M-⟨2SG.M⟩go.up
 ‘Take one fish!’

It is also possible to mark a Beneficiary of the serial verb construction on the intransitive verb *-kôe*, using the Benefactive paradigm, as shown in example (503). The paradigm is in bold face.¹

- (503) *Úri bá ra n-ama-ko **n-em-e-na**-kô(m)e.*
 morning fish one IRR-2SG.M-get.SGO IRR-2SG.M-BEN-1SG.M-⟨2SG.M⟩go.up
 ‘Tomorrow bring a fish for me.’ [TP-MN:01]

The Benefactive paradigm replaces regular subject prefixing, but note that infixes remain. It can be analysed out as a vowel-only morpheme with a subject prefix and an object suffix indexing the Beneficiary. The suffixes are the same as those found on suffixing transitive verbs. The quality of the vowel of the Benefactive

¹The Benefactive marker could go on either verb in this series, e.g. *nemenako nakôme* is also grammatical, but it could not go on both, **nemenako nemenakôme*. Normally the ‘bring’ SVC would be formed with the hither direction of motion verb, *-kae* ‘come’, but in this narrative the two participants live in opposite directions from a particular location, so the direction of motion verbs can be used instead.

morpheme varies; it appears to be determined by leftward copying from the object suffix, which in turn determines the vowel of the subject prefix in most subject/Beneficiary combinations. The full paradigm is given in §8.5 below, followed by a discussion of the forms.

The very next sentence in the text that (503) was taken from, is shown in (504). In this example, the participant, which is in some sense semantically equivalent to the BEN-marked participant in (503), is marked with the participant-adding morpheme *-o* GIVE.

- (504) *Něná, úri taveke úra ra n-ana-ko*
 1SG.F tomorrow tobacco black one IRR-1SG.M-get.SGO
n-a-n-aro-n-o-ma.
 IRR-1SG.M-1SG.M-go.down-AG-GIVE-2SG.M
 ‘And me, tomorrow I will bring a dry tobacco roll to you.’ [TP-MN:01]

The distinction between these two strategies is quite subtle. One speaker described the first example (503) as being as if the speaker assumes the addressee already has a fish that he can bring. In example (504), however, there is apparently an implication that the speaker will first have to go and get some some tobacco and then he can bring it.²

Structurally, Beneficiary NPs behave like added objects in appearing after the verb. The second clause in example (505) shows both a Beneficiary NP (*ám* ‘husband’) and an added object (the object of *-tá* ON; *ái kukumó* ‘fireplace’) in the same clause — both following the verb. The order of the NPs is dictated by the order of the verbal morphology from left to right — the BEN morpheme appears first so the Beneficiary NP appears first.

²Of course, another possibility is that in this particular instance the first sentence is an SVC and the second is a pair of coordinated clauses — the different Beneficiary marking strategies may have no effect on the interpretation at all — but see the previous chapter for discussion of the difficulties of distinguishing SVCs from asyndetic coordination in Barupu.

Foley calls these arguments ‘dative nominals’ and shows that Papuan languages split into three groups with respect to them: the first group, exemplified by Yimas, assimilates datives as core arguments (indicated by verbal affixation); the second group treats Beneficiaries and Recipients alike as peripheral arguments (indicated by case marking); and, in the final group, Recipients are unexceptionally core and Beneficiaries show some alternation between being coded as core or oblique. This group is exemplified by Barai.

The examples in (509a) and (509b) show that Barai has a primary object/secondary object alternation (Dryer 1986); that is, Recipients are core arguments, marked the same way as objects of primary transitive verbs.

- (509) a) *Fu na kan-ie.*
 he I strike-1SG
 ‘He struck me.’
- b) *Bu iro fu-one a vaj-a.*
 they yam he-POSS you give-2SG
 ‘They gave you his yams.’

The next examples in (510a & b) show the alternating status of the Beneficiary. In (510a) the Beneficiary is an oblique argument, as witnessed by case marking on the nominal and lack of agreement on the verb. In (510b) the Beneficiary is a core argument, as witnessed by the lack of case marking on the nominal and the presence of verb agreement.

- (510) a) *Na fu-efuo ire kira-ke.*
 I he-BEN food prepare-FUT
 ‘I will prepare food for him.’
- b) *Na a ire kira-j-e.*
 I you food prepare-BEN-2SG
 ‘I will prepare food for you.’

Barupu has no case marking and although the Recipient is morphologically marked in the same way as an individuated P, the word orders are different and there

is no clear differentiation between core and oblique arguments. It is thus not an exact match with Barai, but it falls into the same general pattern. As Donohue (2002) has pointed out, in some languages at least, a separate morpheme can be identified as marking the Beneficiary and since this morpheme has the function of creating core arguments, ‘applicative’ is a possible name for it. Foley (1986) also suggests that the Beneficiary construction can be a historical development from the serial verb Beneficiaries found in Trans New Guinea languages. This is exemplified in Hua.

- (511) a) *Dgai-si? zu kie.*
 I-BEN house build 3SGDECL
 ‘He built a house for me.’
- b) *Zu ki-na d-te.*
 house build-3SG 1SG-put 3SG DECL
 ‘He built a house for me.’

A possible historical development for Barupu is the same as this, only with the verbs reversed. The Beneficiary verb would have preceded the main verb, as in (512).

- (512) *k en-e-ma kô(m)e*
 ?RL 1SG.M-put/give-2SG.M (2SG.F)go.up
 ...

The Benefactive ex-verb would have been a Class II vowel-only verb.³ This possible pathway is somewhat problematic because it goes against Durie’s observation that in Benefactive SVCs, the verb introducing the Beneficiary usually follows rather than precedes the other verb (1997:344). He argues that this ordering is predictable due to iconicity — the ‘action’ precedes the ‘giving’. Durie (1997:338-339) does, however, give examples of languages in which the reverse is true, and suggests that other linguistic pressures can affect the iconicity principle. For example, in Mandarin Chinese a strong preference for verbs to be final in the clause

³I have treated the subject prefixes of the Benefactive/Possessor paradigm as one prefix (rather than separating them out like the Class II prefixes). This is partly to simplify the representation, but also because there is no synchronic evidence that parts of the prefix are separable.

has meant that ‘erstwhile serial verbs [that] have been grammaticized to co-verbs’ (1997:338) have moved to a position in front of the main verb.

If the Barupu Benefactive paradigm is an ex-serial verb, it must have incorporated much earlier than the ones discussed in Chapter 7, because it appears inside status inflection, and it no longer has its own tone. It can take stress and tone if it falls in the final foot of the word, like other inflectional morphemes. For example, the word /-ko/ ‘get.SGO’ is L- toned. Inflected for realis /k-/ and 2SG.M subject prefixing /ama-/ its surface realisation is [kà.’mā.kò], with stress and a mid tone on the second syllable of the subject agreement. With the 2SG.M subject/1SG.M object benefactive combination /emena-/ the surface realisation is [kè.mè.’nā.kò], with stress and a mid tone on the 1SG.M suffix.

As described in Chapter 3, the Benefactive is attached between status marking and the verb stem. This means that on Class II and III verbs there are still two instantiations of subject. In (513a) the subject is marked twice: in the vowel prefix and the tight-knit subject prefix consonant. In (513b) the subject is marked twice: in the Benefactive subject prefix, and the tight-knit subject prefix.

- (513) a) *N-ǎ-m-á.*
 IRR-2SG.M-2SG.M-eat
 ‘Eat (it)!’
- b) *N-em-e-nǎ-m-á.*
 IRR-2SG.M-BEN-1SG.M-2SG.M-eat
 ‘Eat (it) for me!’

As noted above, on the Class III and IV infixing verbs, the Benefactive paradigm replaces the prefixes but the infixes remain. On Class I verbs the Benefactive replaces the CV subject prefixing. In (514a) there is one instantiation of subject, the vowel after the status prefix and the dedicated morpheme *ma-*. In (514b) there is still only one instantiation of subject, the prefix on the Benefactive morpheme. The regular subject morpheme *ama-* is no longer present.

- (514) a) *N-ama-ko.*
 IRR-2SG.M-get.SGO
 ‘Get (it)!’
- b) *N-em-e-na-ko.*
 RL-2SG.M-BEN-1SG.M-get.SGO
 ‘Get (it) for me!’

8.2 Possessor marking

Although the Benefactive use for this paradigm is found in texts, it is more often found marking external possession. External possession is quite a common extension of Benefactive marking in Papua New Guinea. For example, according to Donohue (2001:7), the geographically contiguous Torricelli language, Olo, has an applicative morpheme which marks direction, location, beneficiary, adversative and accompaniment on intransitive verbs and exclusively marks external possession on transitive verbs. Foley (1991:306-308) also reports that the comitative applicative *-taŋ* in Yimas can be used to mark alienable possession, as well as being Benefactive in the sense that the action results in the Beneficiary becoming in possession of something.

In Barupu, the Benefactive most commonly marks possessed body parts but other alienable items can be possessed as well. Possessor marking can be introduced by looking at a verb like *-yără* ‘see’. This is a Class I suffixing transitive verb. It is shown with its regular object suffix inflection in (515).

- (515) *K-ana-yără-má.*
 RL-1SG.M-see-2SG.M
 ‘I see you.’

When the object is a body part, the Beneficiary paradigm can be used, instead, to index the Possessor. The Possessor is usually marked as the object of the Benefactive morpheme (although see §8.4, below). With this agreement, the Class I subject prefix (*ana-*) is replaced by the Benefactive paradigm. The regular object suffix of *-yără* does not appear when the primary object is possessed.

- (516) *Ro k-en-e-ma-yǎrá.*
 bottom RL-1SG.M-BEN-2SG.M-see
 ‘I can see your bottom.’

In Payne and Barshi’s (1999) ‘core instances’ of external possession, the Possessor ‘is expressed like a direct, governed, argument of one of the three universally attested basic predicate types (intransitive, transitive, or ditransitive)’ (1999:3). Clearly, the Barupu examples do not fit the core instance definition, because the construction uses a totally different paradigm to the three ‘basic predicate types’ found in Barupu (recipients of ditransitives are morphologically transitive objects but post-verbal). However, Payne and Barshi do not discount external possession where there is also an applicative involved.

The participants that can be possessed using this paradigm are: morphological objects (as shown in (516), above); secondary objects; and Locations. When an argument is possessed, there is no change to its word order or its grammatical function. That is, a possessed primary object NP will still appear before the verb and a possessed Location NP will still appear after the verb, in their canonical positions. Possessor marking can also be used on adjectives and in predicate possession (§8.3) and adjunct nominal constructions (§8.4), typically using body parts.

8.2.1 Possessed secondary object

Animate possessors of secondary objects can be marked on the verb with Benefactive marking. For example, the verb *-ton* ‘drink’ takes a secondary object which is not marked on the verb, as in the following example.

- (517) *Pi n-e-tón.*
 water IRR-3PL.M-drink
 ‘They drink water.’

When talking about her children breastfeeding, a mother might say something like example (518).

In (523) the possessed secondary object is the noun *anoku* ‘story’. This example shows a verb with both Benefactive marking and a participant-adding morpheme. There are no examples in the data with both a Benefactive added object NP and another added object NP, again this is due to the fact that it would be unlikely for two new participants to be introduced into a single clause, and even more unlikely for them to be introduced as added objects. Old participants are not generally realised as NPs, see Chapter 6.

- (523) *Anoku k-er-e-nâ-irai-r-o-re.*
 story RL-3SG.M-BEN-1SG.M-say-AG-GIVE-3PL.F
 ‘He told stories about me to them.’ or ‘He told stories of me to them.’

8.2.2 Possessed locative

A possessed body part locative can be seen in the following examples using the verb *-bere* ‘drip, pour’. The first example here shows a verb with an unmarked non-possessed post-verbal Goal.

- (524) *Pi n-ana-bere-o(n)o* *baket.*
 water IRR-1SG.M-pour-(AG)DOWN BUCKET
 ‘I’ll pour the water down into the bucket.’

As discussed in the previous chapter, animates can not normally function as locatives unless introduced by one of the locational suffixes, as shown in (525), in this case using *-tá ON*. The added object nominal appears after the verb. Possession in this clause is marked by the possessive pronoun *měmá* 2SG.M.

- (525) *Pi n-ana-bere-tá-ma* *chá pê měmá.*
 water IRR-1SG.M-drip-ON-2SG.M head hair 2SG.M
 ‘I’ll drip the water onto your hair.’

The next example shows the same verb but with Benefactive/Possessor marking. In this case there is no longer any need for the locational suffix.

- (526) *Cha Rota marasin=a k-er-e-na-bere-o(r)o ine.*
 AT doctor medicine=PRM RL-3SG.M-BEN-1SG.M-pour-(AG)DOWN eye
 ‘The doctor pours medicine into my eye.’

Some more examples follow. The verb *-pum* is onomatopoeic and it stands for a noise made by something going quickly through the air; I have glossed it as ‘whoosh’.

- (527) ... *ya k-ar-u-pum-kiré rokorapo ine.*
 and RL-3SG.M-BEN.3SG.F-whoosh-(AG)AWAY expertly eye
 ‘... and he whooshed it right in her eye.’ [DC-CA:03]

The next example shows that the possessed Goal does not have to be a body part.

- (528) *Akâiri pôn k-ep-i-a-p-ikiro ekókó.*
 stone only RL-3PL.M-BEN-3SG.M-3PL.M-put.in string.bag
 ‘They just put stones in his string bag.’ [ANR-MN:01]

8.3 Adjectival predicates and predicate possession

A very common use of the Benefactive/Possessor paradigm is for body-part predicate possession. This is shown in the following example, from the definition of *kanro* ‘turtle’ in the dictionary.

- (529) *Biôte tá k-or-u-ĩniá — chá rê pa.*
 oar paddle RL-3SG.F-BEN.3SG.F-be.at front and back
 ‘It has flippers — front and back.’ [DICT-EM:01]

Clauses involving both predicate possession and attribution of qualities can take two forms: a possessed NP and Possessor marking on *-ĩniá* ‘be at’ or an unmodified NP and Possessor marking in an adjectival predicate.

The following examples are taken from the Barupu dictionary and were all written by the same person. Example (531) is taken from the definition of *apara* ‘cuscus, possum’ in the dictionary. The NP *tũ* ‘tail’ is modified by *ririvá* ‘long’ and the existential/locational copular verb *-ĩniá* ‘be at’ is inflected with Benefactive/Possessor marking.

- (530) *Tũ rirívá keyǎiniá.*
 k-er-e-a-ĩniá
 tail long RL-3SG.F-BEN-3SG.M-be.at
 ‘He has a long tail.’ [DICT-EM:01]

In the next example, the writer broke the information up into two clauses. In the first clause the existential verb takes the Benefactive/Possessor marking and it is followed by an adjectival verb with 3SG.F subject marking, indexing the tail.

- (531) *Tũ keyǎiniá, k-o-rirívá.*
 k-er-e-a-ĩniá
 tail RL-3SG.F-BEN-3SG.M-be.at RL-3SG.F-long
 ‘He has a tail, it’s long.’ [DICT-EM:01]

In example (532) the NP *pê* ‘leaf, hair’ is unmodified but the adjectival verb *-pum* ‘plentiful’ is given benefactive/possessive marking.

- (532) *Pê=va k-or-u-pum.*
 fur=PRM RL-3SG.F-BEN.3SG.F-plentiful
 ‘Its fur is plentiful.’ [DICT-EM:01]

This is the minority pattern. The modified predicate possession construction is much more common.

Likewise, lack of something is expressed with the non-existential copular verb *-bâuni* ‘not be at’, also inflected with Benefactive/Possessor marking. The following example is taken from the definition for *bǎyó* ‘cassowary’.

- (533) *Ame uka. Kom riêmpin k-or-u-ĩniá.*
 animal bush leg two RL-3SG.F-BEN.3SG.F-be.at
 ‘A bush animal. It has two legs.’

Tũ k-or-u-bâun.
 tail RL-3SG.F-BEN.3SG.F-not.be.at
 It doesn’t have a tail.’

- (534) *Têvé k-or-o-m-bâun.*
 ear RL-3SG.F-BEN-2SG.F-not.be.at
 ‘You are stubborn.’ (‘You have no ears./You don’t listen.’)

The subject agreement in all the adjectival and predicate possession clauses is 3SG.F, agreeing with either the body part or some default dummy subject — is not yet clear which — but it does not agree with the possessor; the possessor is marked with the suffix.

8.4 Adjunct nominal constructions

There are two main sets of adjunct nominal constructions (see §6.2.6) that are always found with Benefactive/Possessor marking. In these constructions the adjunct nominal is interpretable as either:

- i a body part of an Actor;
- ii a body part of an Experiencer.

For example, the verb *-pom* means ‘make a cracking noise’. In the following example, the noun *êno* ‘hand’ is interpretable as a body part of the Actor but it is the person slapped who is marked with a suffix on the Benefactive/Possessor morpheme.

- (535) *Êno k-en-e-ma-pom-pom-ko.*
 hand RL-1SG.F-BEN-2SG.M-REDUP-crack-UP
 ‘I made a cracking noise against you with my hand.’ (‘I slapped you.’)

Another example with the same body part but a different verb is given in (536).

- (536) *Êno k-en-e-ma-túta.*
 hand RL-1SG.F-BEN-2SG.M-poke
 ‘I poked you.’

The Actor is not barred from appearing in the clause, as shown in (537).

- (537) *Cha Moses êno k-ar-o-mu-pom-pom-ko.*
 AT PN hand RL-3SG.M-BEN-2SG.F-REDUP-crack-UP
 ‘Cha Moses slapped you.’

In all the examples in the previous sections the *suffix* on the Benefactive/Possessor morpheme marked a participant bearing one of three roles:

- the Beneficiary of an action performed intransitively, or performed on some other Undergoer;
- the Possessor of a non-subject participant, often a body part;
- or the Possessor in the predicate possession and adjectival predicate constructions.

In the examples presented in this section, the suffixed participant is semantically the Undergoer of the action. In these constructions it appears that the *Actor* is the Possessor of the body part. The body part might have originally been an Instrument, but it now forms a complex predicate with the verb rather than functions as a full argument. This is evidenced by the fact that it cannot be omitted without seriously altering the meaning of the verb; it cannot be modified or replaced by a proform and it cannot be moved out of the position directly before the verb (see §6.2.6).

In the examples presented so far in this section, it is possible to argue that the construction is being used because the Undergoer is being affected on some part of the body — e.g. you tend to get slapped or poked on some part of your body — and the body-part adjunct nominal is just a coincidence. However, a counter-example is the construction *íne -vóvo* (eye sleep) ‘wink’, as shown in (538).

- (538) *Íne k-ar-u-vóvo.*
 eye RL-3SG.M-BEN.3SG.F-sleep
 ‘He winked at her.’

In this example, there can be no doubt that no part of the suffix-marked participant is physically involved in the action; the Possessor marking strategy is used because of the involvement of the body part of the subject.

Table 8.4 shows some common Actor body-part adjunct nominal constructions.

The second adjunct nominal construction commonly found with Benefactive/Possessor marking is the Experiencer object construction. As in other adjunct nominal constructions, the body-part nominals are obligatory and cannot be

Table 8.1 Some body-part Actor predicates

	individual gloss	gloss
<i>rûrú -pari</i>	head ?impact	'headbutt'
<i>êno -túta</i>	hand poke	'poke'
<i>íne -vóvo</i>	eye sleep	'wink'

modified, replaced by a proform or moved. Some of these complex predicates, like 'thirsty', are obviously quite specific about the body-part adjunct nominal; others like 'pain' and 'numb' can substitute different body parts.

In the Experiencer object constructions the Undergoer/Experiencer and the Possessor refer to the same participant, indexed in the suffix of the Benefactive. Subject marking in these constructions is always 3SG.F, and as with the pseudotransitive Experiencer object constructions discussed in Chapter 4, it is not clear whether the subject agreement indexes the body part or is anonymous or dummy agreement.

- (539) *Êno k-er-e-ni-pom-pom.*
 hand RL-3SG.F-BEN-1SG.F-REDUP-crack
 'I'm cracking my knuckles.' ('My hands are cracking on me.')
- (540) *To arâpe k-o-m-á ta ine pê k-or-o-m-bere?*
 CQ what RL-2SG.F-2SG.F-do REAS eye water RL-3SG.F-BEN-2SG.F-drip
 'Why are you crying?' ('Why are your tears falling on you?') [NSC1-CA:03]
- (541) *Rî=va keyaperukí.*
 k-er-e-a-peru-kí
 stomach=PRM RL-3SG.F-BEN-3SG.M-flip-AWAY
 'He was surprised.' ('His stomach flipped on him.')

Table 8.2 shows some body-part Experiencer object constructions.

Table 8.2 Some body-part Experiencer adjunct nominal constructions

	individual gloss	gloss
<i>ó -rôró</i>	breath yell	'feel angry'
<i>kom -rere</i>	leg be in pain	'have a sore leg'
<i>kom -vĩri</i>	leg die	'have pins and needles'
<i>êno -pompom</i>	hand crack	'crack knuckles'
<i>tã -ki</i>	skin grill	'feel very hot'
<i>é -ti</i>	tooth shoot	'have a sore tooth'
<i>no -rove</i>	neck be dry	'feel thirsty'
<i>béi -vori</i>	meat lose weight	'lose weight'
<i>ine -néwai</i>	eye good	'look good'

In example (542) it is not clear who the Possessor of the body part is.

- (542) *Íne k-or-o-mu-néwai.*
 eye RL-3SG.F-BEN-3SG.F-good
 'You look good.' (? 'You are good to one's eye.')

8.5 Full paradigm and discussion

The full Benefactive paradigm is given in Table 8.3. There is no dual distinction in this construction; the plural forms are used instead. The gaps in the table represent logically unavailable combinations (e.g. 1SG.F/1SG.M) or combinations where a reflexive or reciprocal would be used instead (e.g. 1SG.F/1SG.F).

The forms given in italics in the heading are the regular object suffixes. The prefixes found on the Beneficiary/Possessor morpheme have the same CV skeleton as the Class II prefixes but with some differences in the vowels. The forms given in italics in the vertical column are the Class II prefixes, listed for comparison.

- If the suffix has /a/ in it (the first and second person masculine *-na* and *-ma*), the vowel of the benefactive morpheme is [e], and the vowel of the subject prefix is also [e] in all combinations. This causes syncretism in the singular subject prefixes.
- If the suffix consists of only /-a/ (the third person singular masculine *-a*) then the benefactive morpheme is a palatal glide and the vowel of the subject prefix is [e]. The sequence [erja] can also be realised as [eja].

- If the suffix has /u/ in it (the feminine second person singular *-mu* and second person plural masculine *-pu*), the vowel of the benefactive morpheme is [o]. The prefix vowel is also [o] except in the case of the 3SG.M where the prefix vowel is [a].
- The 3SG.F has no segmental exponent, it is realised by vowel mutation in the benefactive morpheme which is [u] — the vowel of the subject prefix is [o] except in the case of the 3SG.M where the prefix vowel is [a].
- If the suffix contains /i/ (*-ni* 1SG.F, *-pi* 1DU, *-mi* 1PL & *-i* 3PL.M) or /e/ (the plural feminine series *-ve* 2PL.F & *-re* 3PL.F), the Benefactive morpheme is [e] except in the case of the 3SG.M where the prefix vowel is [a].

Table 8.3 Subject Beneficiary/Possessor combinations — underlying

			SG						PL					
			1		2		3		1		2		3	
			M	F	M	F	M	F	M	F	M	F	M	F
			<i>-na</i>	<i>-ni</i>	<i>-ma</i>	<i>-mu</i>	<i>-a</i>	<i>-u</i>	<i>-mi</i>	<i>-pu</i>	<i>-ve</i>	<i>-i</i>	<i>-re</i>	
SG	1	M	<i>a-n-</i>	-	-	en-e-ma	an-o-mu	en-i-a	an-u	-	an-o-pu	an-e-ve	an-e-i	an-e-re
		F	<i>e-n-</i>	-	-	en-e-ma	on-o-mu	en-i-a	on-u	-	on-o-pu	en-e-ve	en-e-i	en-e-re
	2	M	<i>a-m-</i>	em-e-na	am-e-ni	-	-	em-i-a	am-u	am-e-mi	-	-	am-e-i	am-e-re
		F	<i>o-m-</i>	em-e-na	em-e-ni	-	-	em-i-a	om-u	em-e-mi	-	-	em-e-i	em-e-re
	3	M	<i>a-r-</i>	er-e-na	ar-e-ni	er-e-ma	ar-o-mu	er-i-a/eya	ar-u	ar-e-mi	ar-o-pu	ar-e-ve	ar-e-i	ar-e-re
		F	<i>o-r-</i>	er-e-na	er-e-ni	er-e-ma	or-o-mu	er-i-a/eya	or-u	er-e-mi	or-o-pu	er-e-ve	er-e-i	er-e-re
PL	1		<i>e-m-</i>	-	-	em-e-ma	om-o-mu	em-i-a	om-u	-	om-o-pu	em-e-ve	em-e-i	em-e-re
	2	M	<i>o-p-</i>	ep-e-na	ep-e-ni	-	-	ep-i-a	op-u	ep-e-mi	-	-	ep-e-i	ep-e-re
		F	<i>eve-r-</i>	ever-e-na	ever-e-ni	-	-	ever-i-a	ovor-u	ever-e-mi	-	-	ever-e-i	eve-r-e-re
	3	M	<i>e-p-</i>	ep-e-na	ep-e-ni	ep-e-ma	op-o-mu	ep-i-a	op-u	ep-e-mi	op-o-pu	ep-e-ve	ep-e-i	ep-e-re
		F	<i>ere-r-</i>	erer-e-na	erer-e-ni	erer-e-ma	oror-o-mu	erer-i-a/ereya	oror-u	erer-e-mi	oror-o-pu	erer-e-ve	erer-e-i	erer-e-re

Chapter 9

Status, modality and aspect

The only inflectional category in the Barupu TAM system is status. Every verb must appear with a prefix which marks it as either realis (*k-*) or irrealis (*n-*). The status prefixes indirectly contribute some time information, but there are no other obligatory tense or aspect operators on the verb.

Barupu clauses are thus grammatically tenseless. This does not mean, however, that there is no way of indicating time. As Comrie (1985:51) notes, ‘it is ... possible for ... deductions about time reference to be made from other aspects of the sentence, perhaps in conjunction with the real world.’ In the following sections I will make reference to the behaviour of status and various particles in different time frames — using the terms ‘past time’, ‘present time’ and ‘future time’ — even though there is no overt realisation of tense in the clause. Some of the clauses in this chapter were elicited through the contact languages of Tok Pisin and English, which do have ways of disambiguating tense, or they came from discussions of clauses found in texts (these discussions were also in Tok Pisin and English).

The division of events into realis and irrealis can be broadly characterised as marking something about the ‘actuality of the event, whether it has been realised or not’ (Foley 1986:158). But, as Foley goes on to say, even though ‘the basic

distinction here is a binary one, realis versus irrealis ... few languages express it in just this way. Many languages, English included, make a number of distinctions along the continuum from real to unreal' (1986:158). The treatment of reality as a continuum is present, even in languages like Barupu that make an obligatory binary morphological division in every clause.¹ That is, the structural, morphological category of status may be binary and discrete — all events are marked as either realis or irrealis — but the notions of reality and unreality are themselves fuzzy. Cross-linguistically, languages with binary morphological distinctions do not all mark the same event types the same way. For example, all non-declarative clauses are marked as irrealis in some languages but not in others. In Barupu, for example, negative and interrogative clauses receive the same marking as they would in their declarative or affirmative form. Irreality can, however, optionally be instantiated in these modes with the use of the irrealis/evidential demonstrative *éro*, this is exemplified in sections 9.2.1 and 9.2.3, below.

This chapter proceeds as follows: §9.1 discusses the status system with regard to time. The following section, §9.2, describes the negative and non-declarative modalities: negatives (§9.2.1); questions (§9.2.2 and §9.2.3); imperative/jussive (§9.2.4) and the counterfactual particle *biaka* (§9.2.5).

The final section of this chapter, §9.3, presents the various strategies for marking aspect in the clause: morphology (§9.3.1 §9.3.2 & §9.3.3); verb serialisation (§9.3.4) and particles (§9.3.5 §9.3.6 & §9.3.7).

¹This includes languages with indicative/subjunctive systems, but they can be differentiated from realis/irrealis systems by virtue of other typological features — e.g. the subjunctive, unlike irrealis, is mostly found in subordinate clauses (Palmer 2001:5). Languages which mark a *basic* realis/irrealis distinction on every verb should also be differentiated from other languages having structural units which may correspond to a notion of irreality but which do so within a system that is primarily tense or aspect based; these will have their own idiosyncracies.

9.1 Status and time

Foley (1986:158) has observed that languages in Papua New Guinea tend to be tense dominated or status dominated, and it has also been found in a world-wide typological study that realis/irrealis systems rarely co-occur with tense systems (Palmer 2001:5).² Barupu is not unusual, however, in using the status marking to make a basic time distinction between future and non-future. In a simple declarative clause, a verb marked with irrealis is interpreted as future (events which will happen); this is shown in (543a). A verb marked with realis is interpreted as non-future; either past or present (events which have happened or are currently happening); this is shown in (543b).

- (543) a) *Pi n-o-ni(m)i.*
 water IRR-2SG.F-(2SG.F)wash
 'You will wash.'
- b) *Pi k-o-ni(m)i.*
 water RL-2SG.F-(2SG.F)wash
 'You are washing.' 'You washed.'

The remainder of this chapter will show that although the language does use status to make a time distinction, it is not the primary function of the marking. It is interesting to note that in the closely related language Sumo (spoken in a village of the same name about four hours' walk away), morphemes in the same position on the verb do express a three-way time distinction: *b-* for past events, *k-* for present and *r-* for future. Sumo is in a state of severe endangerment and may be under areal pressure to adopt a tense system. According to Palmer (2001:105) it is not unusual for status markings to develop into tense markers: he notes 'there are plenty of examples of future tenses that are historically derived from subjunctives'.

In languages that do not mark tense morphologically, there is often a set of

²This is another of the typological differences between realis/irrealis and indicative/subjunctive systems. The latter do tend to co-occur with tense — witness Germanic and Romance languages (Palmer 2001:5).

particles or time words that can be used to set events in time. There are time expressions in Barupu, but the meanings of the most common: *bariri* ‘afternoon, yesterday’; *mâre* ‘now, these days, soon’ and *úri* ‘morning, tomorrow’ interact with the status system and the temporal context of the utterance, so they can not really be seen as expositions of tense. This is summarised in the following table, and exemplified below.

Table 9.1 Temporal words

	realis	irrealis
<i>mâre</i>	‘now’, today’	‘immediately’
<i>úri</i>	‘morning’, earlier this morning’	‘tomorrow, a morning in the future’
<i>bariri</i>	‘yesterday, afternoon’	‘later this afternoon, an afternoon in the future’

Take *bariri* as an example. If this word appeared in a clause containing a verb marked with realis, and without any temporal context, it would probably be interpreted as referring to ‘yesterday’.

(544) *Bariri, k-e-n-aro* *Aitape.*
 yesterday RL-1SG.F-1SG.F-go.down Aitape
 ‘Yesterday, I went to Aitape.’

However, if the utterance was part of a narrative, an equally good interpretation would be ‘In the afternoon, I went to Aitape’. Similarly, if the utterance was spoken at night it could refer to the afternoon just gone: i.e. ‘This afternoon I went to Aitape’. Although in this case you could modify *bariri* with *mâre* and say *Bariri mâre k-e-n-aro Aitape* (afternoon/yesterday now/soon RL-1SG.F-1SG.F-go.down Aitape) ‘This afternoon I went to Aitape’ to make yourself clear.

When *bariri* appears in a clause containing an irrealis-marked verb it will be interpreted as referring to the coming afternoon if it is spoken before lunchtime, although again *mâre* is available to mark same-day reference if necessary.

(545) *Bariri, n-e-n-aro* *Aitape.*
 yesterday IRR-1SG.F-1SG.F-go.down Aitape
 ‘In the afternoon I will go to Aitape.’

If (545) were to be uttered at night, it would probably be referring to the following afternoon, or some other afternoon in the future. Likewise *úri* usually refers to ‘tomorrow’ in an irrealis clause, and just ‘morning’ in realis clauses. There is one word, *tora* ‘long ago’, that does not interact with the status marking; it always sets events as occurring back in time.

9.1.1 Irrealis in the past

Irrealis plays a large part in the interpretation of complex sentences and it is also found in various unreal modalities. For example, counterfactuals and obligation clauses are in irrealis, see Chapter 10 and §9.2.5, below.

However, in common with many other languages with a realis/irrealis distinction, straight declarative clauses can also be marked with irrealis, especially in texts describing procedures or habitual events (Blewett 1991; Bugenhagen 1994). This can be exemplified with reference to the following text extract. In the extract the speaker is talking about the various ways his ancestors used to catch fish, and how it is still done today. The story moves from realis to irrealis, even though it is all set in the present or past. Realis is used in the statement of fact: in this particular fishing technique women made coconut-leaf fences and put traps at the opening. Irrealis is used when describing what could reasonably be expected to have happened during this activity.

(546) *Ra aro bóm. Aro bóm réi.*
 one people woman people woman fence
 ‘One way is a women’s way. Women used a fence.’

Réi=a k-ere-r-á-ø. Ne pê k-ere-r-á-ø.
 fence=PRM RL-3PL.F-3PL.F-make-3SG.F coconut leaf RL-3PL.F-3PL.F-make-3SG.F
 ‘They made a fence. They made it out of coconut leaves.’

Iye k-ere-r-ârái-o kamo.
 woven.trap RL-3SG.F-3PL.F-throw-DOWN door
 They put a trap at the opening of the fence.

Pí n-o-raiyo.

water IRR-3SG.F-shallow

The water would be shallow.

Bá n-e-p-aro

n-e-no(p)i

iyé

fish IRR-3PL.M-3PL.M-go.down IRR-3PL.M-(3PL.M)go.along woven.trap

The fish would go down and into the trap.

Ró n-e-p-e,

n-ere-ko

n-ere-bere

poro.

mouth IRR-3PL.M-3PL.M-fill IRR-3PL.F-get.SGO IRR-3PL.F-pour canoe

When they had filled it the women would pick it up and pour (them) into the canoe.

Iyé pa n-ere-parata, bá n-e-bere poro, târe

woven.trap bottom IRR-3PL.F-unstop fish IRR-3PL.M-pour canoe new

n-ere-r-ârái-o

vôva.

IRR-3PL.F-3PL.F-throw-DOWN again

They would unstop the bottom of the trap, the fish would come pouring out into the canoe, and they would do it all over again.' [CF-MN:01]

9.2 Non-declarative speech acts

This section discusses how different modalities are expressed in simple clauses.

Discussed here are: negation; interrogation; imperative and hortative/jussive and obligation.

9.2.1 Negation

There are two components for negation: the particle *beya*, which usually occurs after the subject (if the subject is not overt, the particle appears first in the clause); and the particle *vai*, which must appear after the verb, usually, but not necessarily, at the very end of the clause.

- (547) *Pú beya k-o-pútu vai.*
 wind NEG RL-3SG.F-blow POL
 'The wind isn't blowing.'

The clause-final particle is not confined to negative clauses, it is also optionally found at the ends of polar interrogative clauses, where it functions as a kind of tag

(§9.2.3). For this reason the two negation particles will be glossed as two separate morphemes rather than as discontinuous negation: *beya* will be glossed as NEGATION, and *vai* will be glossed as POLarity. The realis/irrealis marking does not interact with negation in simple clauses. Negative clauses in Barupu appear with the prefix that the corresponding affirmative would take.

(548) *Beya k-e-rívó-p-o-a vai.*
 NEG RL-3PL.M-hear-AG-GIVE-3SG.M POL
 ‘They didn’t hear him.’ [ANR-MN:01]

(549) ... *beya n-a-i⟨r⟩î-n vai.*
 NEG IRR-3SG.M-⟨3SG.M⟩bite-1SG.F POL
 ‘... it won’t bite me.’ [C-MW:03]

The negation particle usually appears after subject NPs and has scope over the whole clause. Example (550) shows the particle appearing after the subject NP *aro buso* ‘white people’.

(550) *Aro buso beya k-e-kô⟨p⟩e prumo vai.*
 people white NEG RL-3PL.M-⟨3PL.M⟩go.up many POL
 ‘White people didn’t come in great numbers.’ [TP-MN:01]

When the subject is not overt, as in example (551), the particle appears first in the clause.

(551) *Beya ne n-o-p-êri vai.*
 NEG dry.coconut IRR-2PL.M-2PL.M-break.open POL
 ‘Don’t break open coconuts.’ [DICT-PW:01]

The following example shows the negation particle appearing after an external topic.

(552) *Biá maiki, beya n-o-no⟨m⟩i-nâ-ka_i i révá vai.*
 person small NEG IRR-2SG.F-⟨2SG.F⟩go-APPL-3SG.M shoot bone POL
 ‘A child, don’t take him to the bony shoots (of a palm tree).’ [DICT-PB:01]

Non-argument participants can be negated with the non-existential copular *bâuni*. For example, (553) with clausal negation is, like the English gloss, ambiguous; it could also mean the person was hit but not with a stick,

- (553) *Kuáni âi=a beya k-o-yé-ni vai.*
 mother tree=PRM NEG RL-3SG.F-hit-1SG.F POL
 ‘Mum didn’t hit me with a stick.’

This ambiguity is shown clearly in (554):

- (554) *Kuáni âi=a beya k-o-yé-ni vai, êno pôn.*
 mother tree=PRM NEG RL-3SG.F-hit-1SG.F POL hand only
 ‘Mum didn’t hit me with a stick, just her hand.’

It is possible, however, to specifically negate only the Instrument as opposed to the whole clause, with a construction using *bâuni*. An example of this is given in (555).

- (555) *Aka âi bâuni k-a-yé-u Kua Mô.*
 father tree not.be.at RL-3SG.M-fight-3SG.F AT mother
 ‘Father hit Mother, not with a stick.’

This example is no longer ambiguous; only the Instrument is negated. Example (556) shows an Event location being negated in this way. The fact that the true Event location *yin* ‘beach’ is also mentioned suggests that the constituents made up of [X *bâuni*] are not participants of the clause, but adjunctive to it.

- (556) *Âi béwo k-o-kôe yin, uka bâuni.*
 tree DREF RL-3SG.F-go.up beach bush not.be
 ‘This tree grows at the beach, not in the bush.’

Although *beya* usually appears after a subject NP, it is also found before it in a particular construction. In (557), below, the quantifier *ra* is in a headless noun phrase, as described in §5.5. In both examples the quantifier modifies the subject of the clause, represented by pronominal marking on the verb. Both clauses are addressed to

a group of men. In (557a) the quantifier appears outside the scope of negation, meaning that one of the group will not go; in (557b) the quantifier appears inside the scope of negation and the reading is now that none of them will go.³

- (557) a) *Ra beya n-amá-ute vai.*
 one NEG IRR-2SG.M-walk POL
 ‘One of you will not go.’
- b) *Beya ra n-amá-ute vai.*
 NEG one IRR-2SG.M-walk POL
 ‘Not one of you will go.’ [ANR-MN:01]

There are two ways to mark negation on verbless clauses: first with the non-argument negation *bâuni*, which is the preferred method, as shown in (558).

- (558) *Ôro bé nění bâuni.*
 house DPROX 1SG.F no
 ‘This house is not mine.’

The second way is with clausal negation *beya ... vai*, as shown in (559). This strategy is acceptable but it is not the first response in elicitation.

- (559) *Ôro bé beya nění vai.*
 house DPROX NEG 1SG.F POL
 ‘This house is not mine.’

Speakers can indicate irrealty in verbless clauses with the optional use of the hypothetical/evidential demonstrative *éro*.

- (560) *Éro bâuni!*
 DIRR no
 ‘Not there!’ (i.e. Don’t put it there.)

The other functions of this demonstrative were described in §5.4.

³There are no examples in the data of this construction with full NPs.

9.2.2 Content interrogation

There are three simple content interrogatives: *arâpe* ‘what’; *nâpe* ‘who’ and *rô(pe)* ‘where’, and a complex interrogative *beka rô(pe)* (like where) ‘how, how much’.⁴

The simple interrogatives function pronominally and there is no special word order associated with questions; they replace the questioned participant *in situ*. The pair in (561) show the questioning of the secondary object argument *ôî* ‘sago’.

- (561) a) *Ôî k-ere-râivî.*
 sago RL-3PL.F-cook
 ‘Women are cooking sago.’
- b) *Arâpe k-ere-râivî?*
 what RL-3PL.F-cook
 ‘What are they cooking?’

The above examples involve secondary object arguments that are not marked on the verb. The pair in (562), below, show questioning of a primary object. In these constructions the questioned argument must also be represented on the verb and since verb agreement is specific about number and gender, the question arises as to which suffix to use to mark an unknown participant on the verb. At least part of the decision, when the questioned argument is the object, must rely on presupposition or partial knowledge of likely participants.

- (562) a) *Cha Charlie k-o-m-yé-ya.*
 AT PN RL-2SG.F-2SG.F-hit-3SG.M
 ‘You hit Charlie.’
- b) *Nâpe k-o-m-yé-ya?*
 who RL-2SG.F-2SG.F-hit-3SG.M
 ‘Who_M did you hit?’

When the questioned argument is the subject as in (563) below, it is sometimes easy enough to choose the gender of the questioned argument by virtue of the

⁴The locative *rô* sometimes appears as *rôpe*. When *nâpe* and *arâpe* are used as interjections (like ‘who?’ and ‘what?’ meaning ‘can you repeat what you just said?’) they appear as *nâ* and *arâ* respectively. This indicates that there was probably a morpheme *-pe* at one point but it seems to have lost its productivity.

semantics of the verb; a verb like ‘hit’ is more likely to have a masculine subject (563a), while a verb like ‘cook’ is more likely to have a feminine subject (563b).

- (563) a) *Nâpe k-a-yé-mu?*
 who RL-3SG.M-hit-2SG.F
 ‘Who_M hit you?’
- c) *Nâpe k-o-râivi?*
 who RL-3SG.F-fry
 ‘Who_F is cooking?’

However, it is not clear what governs the choice on verbs which are gender-neutral like *-noi* ‘go along’.⁵

The pair in (564) show the questioning of the post-verbal locative argument with *rô(pe)*.

- (564) a) *N-o-m-aro* *Aitape.*
 IRR-2SG.F-2SG.F-go.down Aitape
 ‘You will be going down to Aitape.’
- b) *N-o-m-aro* *rô?*
 IRR-2SG.F-2SG.F-walk where
 ‘Where will you be going?’

In the following example the question word is a post-verbal added object.

- (565) *K-a-m-ere-m-ô-ø* *arâpe?*
 RL-2SG.M-2SG.M-like-AG-REG-3SG.F what
 ‘What do you want?’ [TP-MN:01]

It is also possible to use these words to modify other nouns.

- (566) *Bió nâpe k-a-yé-ma?*
 person who RL-3SG.M-hit-2SG.M
 ‘Which man hit you?’
- (567) *K-om-îniá ôro rôpe?*
 RL-2SG.F-sleep house where
 ‘Which house do you sleep in?’

⁵This question can not be answered by looking at narrated texts, since the narrator knows the gender of all the participants.

There is also an optional sentence-initial particle *to* which can be found at the very beginning of a question containing an interrogative, as in the following.

- (568) *To arâpe k-o-m-á?*
 CQ what RL-2SG.F-2SG.F-do
 ‘What are you doing?’

This particle has the function of forewarning that the clause is a question. The particle can be separated from the question word: e.g. *To mêmá arâpe k-a-m-á bé* (CQ 2SG.M what RL-2SG.M-2SG.M-do DPROX) ‘What are you smoking?’ Interrogative pronouns also have a part to play in a sub-type of polar question, described below.

The examples in (569) show content questioning in verbless clauses. Example (569a) shows a simple verbless clause; example (569b) shows its interrogative equivalent.

- (569) a) [*Bió méntan aka bére*] *Barupu.*
 peson small real DDIST PLN
 ‘That very small child is from Barupu.’
- b) [*Bió méntan aka bére*] *rôpe?*
 peson small real DDIST where
 ‘Where is that very small child from?’ (‘Who is that child?’)

There is no dedicated question word to mean something like ‘why’. Instead a circumlocution like the following is generally employed.

- (570) *Arâpe k-o-m-á ta ine pé=va*
 what RL-2SG.F-2SG.F-do REAS eye water=PRM
k-or-o-m-bere-tá-na.
 RL-3SG.F-BEN-2SG.F-fall-ON-1SG.M
 ‘Why are you crying on me?’
 What did you do so now you are crying? [NSC1-CA:03]

Similarly there is no dedicated question word meaning something like ‘how’. Instead there is a construction *beka rô(pe)* literally ‘like where’ that appears post-verbally.

- (571) *Taveke pé k-o-kae beka rôpe?*
 tobacco leaf RL-3SG.F-come like where
 ‘How did we get tobacco?’ [TP-MN:01]

Beka rô can also be used as an interjection to mean ‘how much’. For example, at a market you could hold up an item and ask *Beka rôpe?* ‘How much?’

9.2.3 Polar interrogation

There are two types of polar question, introduced by two different particles *tara* and *era*. In questions introduced by *tara*, speakers are asking for the hearer’s opinion as to the likelihood of the event taking place. This type of question can only be used for irrealis-marked events.

- (572) *Tara á n-u-ai?*
 IPQ rain IRR-3SG.F-rain
 ‘Do you think it will rain?’

Another use for this particle is in talking about potential. It is used as a sort of rhetorical question to express doubt about what might happen.

- (573) *Tara n-e-ké(n)i kân vai?*
 IPQ IRR-1SG.F-⟨1SG.F⟩sit tree.sp POL
 ‘Will I sit in the *kan* tree?’ [FF2-CA:03]

In the second type of polar question the speaker expects that there is a yes or no answer and that the addressee knows it. Polar questions introduced by *era* receive the same marking they would have in declarative form.

- (574) a) *Era k-o-m-aro Aitape?*
 PQ RL-2SG.F-2SG.F-go.down Aitape
 ‘Did you go to Aitape?’ ‘Are you going to Aitape?’
- b) *Era n-o-m-aro Aitape?*
 PQ IRR-2SG.F-2SG.F-go.down Aitape
 ‘Will you be going to Aitape?’

Questions introduced by *tara* and *era* can both appear with *vai* at the end of the clause. It seems to be used as a tag to indicate that the speaker expects an affirmative answer — for example, you might be asked (575b) if someone met you on the road to Aitape — but this needs more investigation. Note that it is present in the rhetorical question in (573), above.

- (575) a) *Úri, tara á n-u-ai vai?*
 tomorrow IPQ rain IRR-3SG.F-rain POL
 ‘It might rain tomorrow, mightn’t it?’
- b) *Era k-o-m-aro Aitape vai?*
 PQ RL-2SG.F-2SG.F-go.down Aitape POL
 ‘You’re going to Aitape, aren’t you?’

The two particles *era* and *vai* can be used together as an interjection: *Era vai?*
 ‘Is that so?’

The following examples show polar questioning on a verbless clause.

- (576) a) *Biá bére Barupu.*
 person DDIST Barupu
 ‘He is a Barupu man.’
- b) *Era biá bére Barupu vai?*
 PQ person DDIST PLN POL
 ‘Is that man from Barupu?’

In *era* polar interrogatives and content interrogatives, the status marking is the same as if it were declarative. However, as in negatives, irreality in interrogatives can be instantiated with the use of the hypothetical/evidential demonstrative *éro*.

- (577) a) *Ei! Nâpe k-â-irai aniania nëná k-o-p-u=éro?*
 excl who RL-3SG.M-speak fruit 1SG.M RL-2PL.M-2PL.M-pick=DIRR
 ‘Hey! Who said you could pick my fruit here?’ [ANR-MN:01]
- b) *Era rau=éro?*
 PQ pig=DIRR
 ‘Is this a pig?’

Although the example in (577a) is formally a content question, its function is polar. There are no generic nouns like ‘someone’, ‘anyone’, so an interrogative

pronoun can also function in a polar question — example (577a) is effectively asking ‘Did someone tell you you could come and eat my fruit?’.

9.2.4 Imperative and hortative/jussive

The only information needed to form an imperative is irrealis marking and second person subject marking.

- (578) *Pi n-a-ni(m)i.*
 water IRR-2SG.M-(2SG.M)wash
 ‘Wash!’

This clause is formally identical to ‘You will wash’.

The following example shows the hortative/jussive. It is formed with 1DU or 1PL subject agreement and irrealis marking.

- (579) *N-epi-no(p)i.*
 IRR-1DU-(1DU)go
 ‘Let’s go.’

Again this is formally identical to ‘We two will go’.

9.2.5 *biaka*

This particle appears immediately after the subject, but if the subject is not overt it is found at the beginning of the clause. *Biaka* is only found in irrealis marked clauses set in past time — it always indicates a counterfactual: certain events did not take place, and because of this, something bad happened.

In the following examples, the parts of the glosses enclosed in parentheses are explanations given by speakers of plausible contexts in which the clauses might be uttered. In example (580) the subject NP is not present and *biaka* appears at the beginning of the clause.

- (580) *Biaka kanro n-e-n-ikoko.*
 OBLG shoe IRR-1SG.F-1SG.F-wear
 ‘I should have worn shoes.’ (to avoid mimosa cuts)

As mentioned above, *biaka* indicates a counterfactual. It cannot be used to talk about the future; there is no dedicated way of doing this. The following example is grammatical, but not with the translation intended. It can only mean ‘In the morning you should have only spoken Barupu to her’.

- (581) *Úri biaka pôkó Barupu pôn n-opu-îrai-p-o-ø.*
 tomorrow OBLG neck PLN only IRR-2PL.M-speak-AG-GIVE-3SG.F
 (*‘Tomorrow, you should only speak Barupu to her.’)

Clauses containing *biaka* are negated with clausal negation. The negation particle follows *biaka*. In the following example, the event of sitting in the sun did take place, but the verb is marked with irrealis because the event of ‘not sitting in the sun’ did not.

- (582) *Bariri, nění biaka beya n-e-ké⟨n⟩i-n-o-a umo vai.*
 yesterday 1SG.F OBLG NEG IRR-1SG.F-(1SG.F)sit-AG-GIVE-3SG.M sun POL
 ‘Yesterday, I should have not sat in the sun.’ (because I got sunburnt.)

The examples in this section are all elicited; this particle does not appear once in the data. Textual examples would give a fuller understanding of how this particle works.

9.3 Aspect

Aspect is not obligatorily marked on every verb in Barupu. Instead, aspectual information is imparted through derivational morphology or other analytic means. The first strategy to be discussed here is reduplication (§9.3.1). Following that are descriptions of the aspectual meanings that can be made with: an incorporated directional (§9.3.2 & §9.3.3); verb combinations (§9.3.4); aspectual particles (§9.3.5 & §9.3.6) and a temporal (§9.3.7).

9.3.1 Reduplication — iterative

The main use of reduplication on non-adjectival verbs is to indicate iterativity. It thus only appears on bounded events. Duration of unbounded events is a separate category that is not marked by reduplication. On adjectival verbs, reduplication indicates more of the property (see Chapters 4 & 5). This section discusses only the aspectual uses of reduplication.

Reduplication takes the first two syllables of the root and prefixes them to the root, unless the first two syllables of the root are identical, in which case only one of the syllables is reduplicated (see Chapter 2). Both of the following two clauses are taken from a recorded oral text about a flying fox. The clause in (583) is accompanied by a sound effect — someone claps their hands to imitate the sound of repeated flapping. The phonological characteristics of reduplication were discussed in Chapters 2 and 3.

- (583) *Pê=va k-o-papan-pâpan.*
 wing=PRM RL-3SG.F-REDUP-flap
 ‘She flapped her wings.’ [U-EM:01]

In (584) the verb *rero* is reduplicated to indicate that the subject swung back and forth repeatedly.

- (584) *K-o-rero-rero-nâ-ø.*
 RL-3PL.M-REDUP-swing-APPL-3SG.F
 ‘She swung back and forth with it.’ [U-EM:01]

The next example is about squeezing yellow dye out of mango leaves to make paint.

- (585) *N-em-tôi-toi n-e-m-aro nentakoi roi tã*
 IRR-1PL-REDUP-rinse IRR-1PL-1PL-go.down coconut.shell kina skin
 ‘We squeeze it repeatedly down into the coconut shell or kina shell.’ [P-MG:03]

As discussed in Chapter 7, vowel-initial verbs, except those belonging to Class II, cannot be reduplicated because the reduplicated element must be at least CV and

verbs in these two classes cannot include any inflectional material in the reduplicant. In these cases, the whole inflected verb is repeated. For example, in (587) the vowel-initial verb *-iro* ‘fell’ cannot be reduplicated, instead the whole verb is repeated.

- (586) *Kiro kiro kironâu.*
 k-e-iro k-e-iro k-e-iro-nâ-u
 RL-3PL.M-fell RL-3PL.M-fell RL-3PL.M-fell-APPL-3SG.F
 ‘They chopped and chopped at the tree with her in it.’ [FF2-CA:03]

Another way to mark iterativity on a verb like this is to reduplicate a participant-adding morpheme:

- (587) *Kiopapipipi.*
 K-e-iro-papí-p-a(p)í-ø
 RL-3PL.M-fell-REDUP-AG-(3PL.M)SRND-3SG.F
 ‘They chopped all around her.’ [FF2-CA:03]

Vowel-initial Class II verbs can reduplicate because the prefixing consonant can be part of the reduplicant, as discussed in Chapter 3.

- (588) *Ôi k-e-paka-p-aka*
 sago RL-3PL.M-REDUP-3PL.M-pound.sago
 ‘They pounded and pounded sago.’ [S-MN:03]

In the above example the secondary object of *-aka* ‘pound sago’ is *ôi* ‘sago’; *ôi* is a mass noun so the iterativity is in the act of pounding the same sago. When a secondary object is a count noun such as *ruati* ‘cane’ as in the next example, a side effect of reduplication marking iterativity is that it can also indicate plurality of arguments that otherwise wouldn’t have any instantiation of grammatical number.

- (589) *Ruati aka n-e-târu. Ruati aka n-e-târu-târu.*
 cane real IRR-3PL.M-whittle cane real IRR-3PL.M-REDUP-whittle
 ‘They whittle out (a) cane/s. They whittle out canes.’ [DC-MM:03]

The most common verbs to undergo reduplication describe events which are bounded punctual events like ‘flap’, ‘drip’ and ‘swing upside down’. There is one

example in the data of reduplication on a motion verb (590), but rather than indicating duration, the effect of reduplication is to make the motion event bounded. In (590) the speaker uses reduplication to indicate that ‘she kept running away and coming back again’; a series of accomplishments rather than a single durative event. The serialised verb *k-o-noi*, indicates that the same series of actions were repeated over a long period of time, see below.

- (590) *K-o-re-r-e* *k-o-noi*.
 RL-3SG.F-REDUP-3SG.F-go RL-3SG.F-go
 ‘She ran back and forth for a long time.’ [FF2-CA:03]

Manner of motion verbs that involve separate bounded events can reduplicate. For example, the verb *-tá* ‘paddle’ in (591) is reduplicated. Arguably this is possible because paddling involves a series of repetitions of putting the oar in the water, stroking and pulling it out again.

- (591) ... *ya kope târe k-emi-tá-tá* *vôva*.
 and then new RL-1PL-REDUP-paddle again
 ‘... and then we’ll paddle and paddle again.’ [P-MB:03]

Reduplication can also mark distributive aspect, which here marks multiple occurrences of the same kind of action carried out by different subjects. Example (592) is from the dictionary and is part of a definition for a certain type of tree.

- (592) *K-ere-tumo-túmó*.
 RL-3PL.F-REDUP-grow.wild
 ‘They grow wild.’ [DICT-PB:01]

Although here the subject is plural anyway, speakers explained that this clause specifically focusses on the fact that these trees self-germinate and spring up all the time, all over the place.

9.3.2 *-kie* — ‘for a while’

A durative verb can appear with the AWAY morpheme *-kie* — to indicate that the action happened or is happening for a short time. As described in §7.2.2, this morpheme is probably derived from a Class III verb and therefore it optionally takes a consonant infix which indexes the subject of the verb.

- (593) *Boki bió kûro k-o-kéi-ki(r)é.*
 flying.fox person deep RL-3SG.F-sit-(AG)AWAY
 ‘The demon flying fox sat for a little while.’ [U-EM:01]

The following example shows that *-kie* can also appear without the final syllable, in which case it no longer takes agreement. Speakers do not recognise a specific meaning difference between when the final syllable is there and when it is not, beyond describing it as ‘shortening’ or ‘pulling out’ the words for emphatic effect.

- (594) *Rau k-eni-mama-i-ki bó kope n-en-úte báru.*
 pig RL-1SG.F-look.after-3PL.M-AWAY first then IRR-1SG.F-walk return
 ‘I’m just seeing to these pigs for a bit first, then I’ll return home.’

It is not always possible to distinguish this use from the directional AWAY use. For example, *n-o-rõ(m)i-ki* (IRR-2SG.F-(2SG.F)stand-AWAY) could mean ‘stand aside’ or ‘stand for a little while’.

9.3.3 *-kie-na* — exhaustive

With the addition of another morpheme *-na*, the ‘for a while’ construction indicates that something has been done to completion. On a transitive verb this usually indicates that something has been completely affected to the extent that there is nothing left of it.

- (595) *Ūram=a k-õ-r-á-ki(n)é-na.*
 fruit.sp=PRM RL-3SG.F-3SG.F-eat-(AG)AWAY-EXTV
 ‘She ate all the *uram* fruit.’ [FF2-CA:03]

It can also be used on intransitive verbs with plural subjects.

- (596) *K-e-rai(p)u-kl-na.* *Ôro kanăpó pôn k-u-ĩniá.*
 RL-3PL.M-(3PL.M)go.single.file-AWAY-EXTV village empty only RL-3SG.F-be.at
 ‘They all left in single file. Only an empty village remained.’ [U-EM:01]

In this way, this morpheme modifies absolutive arguments; P and S. As the examples show, the *-kie* part of the morpheme can appear with infixing agreement, as in (595), or without, as in (596).

9.3.4 Verb + ‘go along’ — ‘for quite a while’

Verbs can be combined with the verb *-noi* ‘go along’ to indicate that an action happens over a long period of time. The verb *-noi* is always inflected for 3SG.F.

- (597) *K-ere-ð(p)á k-ere-ð(p)á k-o-noi k-o-noi k-o-noi.*
 RL-3DU-(3DU)fight RL-3DU-(3DU)fight RL-3SG.F-go RL-3SG.F-go RL-3SG.F-go
 ‘They fought and fought for a long time.’ [U-EM:01]

As the above example shows, both verbs can be repeated. Each verb can be said a maximum of three times. This construction comes with special intonation where the pitch rises and reaches a crescendo at the end.

9.3.5 *nia* — persistive

The particle *nia* can indicate ‘often’, or ‘still’. It always appears directly before the verb.

- (598) *Bió maumau=a ito=va nia k-e-ko-ĩ-na*
 person many=PRM taro=PRM often RL-3PL.M-get-WITH-1SG.M
 ‘Many people often bought taro from me. ‘People kept on buying taro from me.’ [DICT-PB:01]

- (599) *Nó nia k-o-bere.*
 blood still RL-3SG.F-drip
 ‘Blood was still dripping.’ [U-EM:01]

9.3.6 *bâuni* — contrastive persistent

Persistent events can also be marked with the negative existential *bâuni* ‘not be’, which, when it is performing this function, always appears uninflected. The persistent construction using *bâuni* differs from the one only using *nia* in that it conveys a sense of contrast; it seems to be used when countering a possible supposition that something has been completed. For example, (600) came up in a conversation with a speaker about whether we had transcribed all his stories yet.

- (600) *Riêmpin bâuni k-u-ĩniá.*
 two not.be RL-3SG.F-be.at
 ‘There are two left.’

The two persistives, *bâuni* and *nia*, can both appear in the same clause, as shown in 601; *bâuni* counters the supposition that the speaker might be finished, and *nia* supplies further persistent information.

- (601) *Něni bâuni akorom nia k-ě-n-á*
 1SG.F not.be food still RL-1SG.F-1SG.F-eat
 ‘I’m still eating.’

Persistent *bâuni* is also often heard with the intensifier suffix *-ke* — e.g. *bâun-ke!* as an interjection meaning ‘not yet’.

9.3.7 *bêni* — perfect

The final aspectual distinction to be discussed here is perfect. The temporal word *bêni* ‘already’ indicates that the action has, had or will have taken place at a relevant other time, and so can appear in present, past and future time settings. Unlike *nia* and *bâuni*, this word appears after the verb, usually at the very end of the clause. It is optionally heard without the final vowel, under the rule of high vowel deletion after a nasal. Example (602) shows the use of this word in present time.

- (602) *K-en-yǎrá bēni.*
 RL-1SG.F-know already
 ‘I already know.’ (I have understood.)

Example (603) shows this in a past time setting.

- (603) *A bé ám=a k-â-irai-r-o-ø émo k-o-r-á*
 thing DPROX man=PRM RL-3SG.M-say-AG-GIVE-3SG.F DREF RL-3SG.F-3SG.F-do
bēn.
 already
 ‘She had done what her husband told her to do.’ [ANR-MN:01]

Example (604) shows *bēni* in a future time setting, indicating that the person will have already left by the relevant other time.

- (604) *N-en-úte bēn.*
 IRR-1SG.F-walk already
 ‘I will have gone (by then).’

Chapter 10

Complex sentences

There are no special subordinate verb forms in Barupu. Infinitives do not play a role in complex sentence formation. This is not typologically unusual; Evans and Sasse (2002:9) note ‘the lack or weak development of subordinate constructions in polysynthetic languages, especially the paucity or total absence of non-finite constructions’.¹

Instead, complement clauses in Barupu are linked via parataxis, defined by Palmer (2001:200) as ‘the juxtaposition of two sentences, though with, potentially, a subordinate relationship between them, and typically lacking a conjunction to mark that ... relationship’. There is also one complementiser: *beka* ‘like’.

Otherwise, clauses are simply coordinated with or without conjunctions. Coordinated clauses can have the same status marking, in which case they are usually describing simultaneous or sequential events, or alternatively one clause is interpretable as modifying the other, i.e. one of the clauses is in an adverbial relationship to the other. When two coordinated clauses have different status marking, they are no longer interpretable as simultaneous or sequential, only the

¹They cite Yimas from Papua New Guinea (Foley 1991) and Rembarngga from Australia (Nordlinger and Saulwick 2002) as exceptions. These are both polysynthetic languages with infinitives.

adverbial relationship pertains. The formal structure is the same, but for ease of exposition, I divide discussion of coordination into two parts — simultaneous and sequential coordination (§10.2), and adverbial coordination (§10.3).

10.1 Complements

Complement-taking verbs are those of immediate perception: *-yără* ‘see’ and *-rívó* ‘hear’; cognition: *-yără* ‘know, believe’ *-itôro* ‘think’, *-kina* ‘think’ and *o -kina* ‘remember’; utterance: *-îrai* ‘say’ and *-tere* ‘ask’ and the modals: *-á* ‘want’, *kuiniarî* ‘can’, *-á* ‘make’ and *-în* ‘let’. These verbs are always in a paratactic relationship with their complements.

Formal characteristics of parataxis in Barupu are that grouped clauses can appear together inside discontinuous negation or the complement clause can be independently negated, and they are typically produced under the same intonation contour. One heuristic I have used to identify complementation in Barupu is that if bilingual speakers use an English complement structure in a translation of a stretch of Barupu text, then I take that to be evidence of complexity in Barupu.²

10.1.1 Immediate perception

The immediate perception predicates *-yără* ‘see’ and *-rívó* ‘hear’ take paratactic clausal complements. Clauses which describe perceived actions or states follow the perception verb. This is shown in examples (605) - (607). The verb in the perception clause, *-yără* ‘see’, takes obligatory suffixing object inflection that is co-referential with the subject of the second clause.

- (605) *K-en-yarǎ-ká k-a-ukoru ...*
 RL-1SG.F-see-3SG.M RL-3SG.M-crouch
 ‘I see him crouching ...’ [C-MW:03]

²See Mithun (1984:494) for a similar approach.

- (606) *K-a-yără-ø mō tó parâ k-or-u-óro*
 RL-3SG.M-see-3SG.F mother breast side RL-3SG.F-BEN.3SG.F-cut
k-o-r-ere-kí.
 RL-3SG.F-3SG.F-put-AWAY

‘He saw her cut off one of the mother’s breasts and put it to one side.’
 [U-EM:01]

- (607) *N-ama-yará-i Cha Vava, Cha Mō n-e-ka(p)e*
 IRR-2SG.M-see-3PL.M AT uncle AT namesake IRR-3PL.M-(3PL.M)come
n-e-rõ(p)i ...
 IRR-3PL.M-(3PL.M)stand
 ‘You will see Uncle and Namesake come and stand ...’ [NSC1-CA:03]

As Mithun (1984:495) points out, constructions like this in polysynthetic languages are ‘somewhat like the results of raising in English’. There is no non-raised alternative in Barupu — i.e. the verb always takes object suffixing — so there is no motivation for positing a productive process of raising.

In the example (607), above, from a spoken source, the NP representing the argument that is shared between the two clauses as the object of the first clause and the subject of the second (*Cha Vava, Cha Mō* ‘Uncle and Namesake’) appears after the perception verb and seemingly belongs to the second clause. Interestingly, in almost all the written examples of these constructions, the shared NP appears before the perception verb and seemingly belongs to the first clause. The following examples are taken from the dictionary and were written by various speakers as example sentences for various words. The shared argument NPs are in bold type.

- (608) *Bariri roro Cha Toma biá ùvó k-a-yără-ká*
 yesterday night AT PN person nose RL-3SG.M-see-3SG.M
k-a-puru(r)o ôro yá Cha Vava Pai.
 RL-3SG.M-(3SG.M)hide house 3SG.M AT uncle PN

‘Last night Toma saw a magician hiding around uncle Pai’s house.’
 [DICT-PW:01]

- (609) *Rumâiro k-en-yără-ø k-o-kéi-tá-ø âi páko.*
 bird.of.paradise RL-1SG.F-see-3SG.F RL-3SG.F-sit-ON-3SG.F tree big
 ‘I saw a bird of paradise sitting on a big tree.’ [DICT-MF:01]

Speakers translate both the written and spoken constructions with complement clauses in English, and there does not seem to be a meaning difference. Instead, there appears to be a difference in the spoken and written language. More investigation is needed into this interesting area.

A question arises as to the clause-membership of the shared argument in the spoken construction. In the written examples, the shared argument is clearly the object of the perception clause. In the spoken examples, however, it appears to be the subject of the complement clause.

According to Noonan (1985:77), a ‘criterial characteristic’ of paratactic complementation is that ‘only the first verb ... can have an overt subject NP’. In order for the examples above to count as parataxis under Noonan’s definition, the NP *Cha Vava*, *Cha Mô* must function syntactically as the object of the first clause and not the subject of the second.

The first problem with this criterion for Barupu is that the NP is in the wrong position to be the object of the first verb, but, as discussed in §6.4.1, objects can appear after the verb if they are marked by a suffix and the whole event is old information, so this is not conclusive.

A major problem with analysing the intervening NP in the spoken clauses as the object of the first clause is that the information structure clitic, $=(v)a$, can appear on this NP. This is shown in example (610). This clitic can never appear on post-verbal NPs so the only conclusion is that this is not a post-verbal primary object of the first clause but the subject of the second.

- (610) *K-o-yarã-ká* *ám=a* *mônrai k-a-tít-r-î-i*
 RL-3SG.F-see-3SG.M husband=PRM singsing RL-3SG.M-dance-AG-WITH-3PL.M
yéi ...
 3PL.M
 ‘She saw the husband dancing with them ...’ [U-EM:01]

Hence, either this construction in Barupu is not paratactic complementation, in which case it is simply another kind of coordination, or the definition of paratactic complementation must be expanded to include examples such as these.

There is a complementiser, *beka* 'like', that can optionally appear between a clause and its complement:

- (611) *K-en-yarǎ-ká beka ám=a mônrai k-a-títí.*
 RL-1SG.F-see-3SG.M like husband=PRM singsing RL-3SG.M-dance
 'I saw your husband dancing.'

As mentioned above, paratactic clauses can appear together inside discontinuous negation. An example of discontinuous negation is given in (612).

- (612) *Beya k-en-yarǎ-ká má bo=va k-a-tâura vai.*
 NEG RL-1SG.F-see-3SG.M child place=PRM RL-3SG.M-mow POL
 'I didn't see the child cutting grass.'

As discussed in the previous chapter, one of the factors formally distinguishing parataxis from verb serialisation is that, in parataxis, there is also the option of only negating the complement clause, as in (613).

- (613) *K-en-yarǎ-ká má beya bo k-a-tâura vai.*
 RL-1SG.F-see-3SG.M child NEG place RL-3SG.M-mow POL
 'I saw the child not cutting grass.'

If only the *first* clause is negated, however, the relationship between the two clauses is lost (i.e. speakers translate them into English as separate sentences). This is shown in (614).

- (614) *Beya k-en-yarǎ-ká vai. Bo k-a-tâura.*
 NEG RL-1SG.F-see-3SG.M POL place RL-3SG.M-mow
 'I didn't see him. He is cutting grass.'

The verb *-rívó* 'hear' behaves similarly to *-yǎrá* 'see' except that this verb takes an added object that is co-referential with the subject of the second clause. In example (615) the added object is *mevóva* 'children'. This is cross-referenced as a

3PL.M added object on the participant-adding morpheme, *-o*, and the 3PL.M subject of the second verb.

- (615) *K-a-rívó-ká-r-o-i* *mevôva ero k-e-p-u*
 RL-3SG.M-hear-TOWARD-AG-GIVE-3PL.M children noise RL-3PL.M-3PL.M-pick
é.
 DPROX
 ‘He heard the children making noise.’ [ANR-MN:01]

Another example of a shared NP *maintópa* ‘flying fox’ follows.

- (616) *Ma táita! K-en-rívó-n-o-ø* *maintópa k-o-yé-ø*
 AT.VOC father RL-1SG.F-hear-AG-GIVE-3SG.F flying.fox RL-3SG.F-fight-3SG.F
Kua Mán.’
 AT mother
 ‘Dad! I heard a flying fox kill mum.’ [FF2-CA:03]

In these cases the shared NPs, *mevôva* and *maintópa*, are post-verbal and thus in the canonical position for added objects; there are no examples of the prominence clitic appearing on these arguments.

10.1.2 Cognition

The verb *-itôro* ‘think’ can be transitive but only with a secondary object. That is, this verb does not take object suffixing, arguably because abstract thought is not individuated. For example:

- (617) *A k-a-r-itôro.*
 something RL-3SG.M-3SG.M-think
 ‘He thought something.’

This verb can also be used intransitively or take a paratactic complement clause. When the verb is referring to what someone thinks might happen, it takes an irrealis complement, as shown in examples (618) & (619). These examples also show another of the differences between parataxis and verb serialisation: the two verbs in a serial construction must have the same status marking.

- (618) *K-o-r-itôro n-o-noi-ro ke tîro*
 RL-3SG.F-3SG.F-think IRR-3SG.F-go.along-SHORT PURP₂ secretion
n-o-tîró kîkom.
 IRR-3SG.F-secrete mangrove

‘She thought she might be going a short way to urinate in the mangrove.’
 [NS-MM:03]

- (619) *K-e-p-itôro n-a-r-aro bé raka bé.*
 RL-3PL.M-3PL.M-think IRR-3SG.M-3SG.M-go.down DPROX river DPROX.
 ‘They thought he might be paddling down here to this river.’ [WM-MN:05]

This verb can also be used to talk about someone thinking about something that has just happened. In (620) it is followed by a realis clause.

- (620) *Ya k-a-r-itôro arâpe pôn k-o-rei-o-tá-ka.*
 then RL-3SG.M-3SG.M-think what only RL-3SG.F-fall-DOWN-ON-3SG.M
K-a-yără-ø-wo, k-a-ko-ko, k-a-peri-kê-ø.
 RL-3SG.M-see-3SG.F-DOWN RL-3SG.M-get.SGO-UP RL-3SG.M-stare-ADV-3SG.F

‘Then he wondered what fell on him. He looked down at it, picked (it) up and stared at it.’ [FF1-MN:01]

There are also examples of this verb followed by nominals rather than a verbal clause, as shown in (621) and (622), but as I have tried to show in the English translations, these are best thought of as verbless nominal predicates rather than NPs.

- (621) *K-e-p-itôro bió kûro mēm Barupu.*
 RL-3PL.M-3PL.M-think person buried 1PL PLN
 ‘They thought (he was a) dead Barupu ancestor.’ [WM-MN:05]

The following example comes after a demon has been telling a woman to heat up a pot on the fire. The woman doesn’t know that the demon is intending to use the heated pot to burn the woman’s skin, she thinks the demon is giving her a sincere instruction.

- (622) *Ya bió aka k-o-r-itôro au aka.*
 and person true RL-3SG.F-3SG.F-think something true
 ‘And the person thought something true (was being requested).’ [U-EM:01]

Another cognition verb is the verb *-kina* which can also be glossed as ‘think’; this verb can take a complement, as in the following example, but the difference between *-kina* and *-itôro* is that the complement of *-kina* is direct, rather than reported, thought.

- (623) *K-a-kina-kina* ‘a bé n-a-n-á beka rô ...’
 RL-3SG.M-REDUP-think thing DPROX IRR-1SG.M-1SG.M-do like where
 ‘He was thinking over and over, “How will I do this ...”’ [FF2-CA:03]

This verb root also appears in a complex predicate with an adjunct nominal, *ó* ‘feeling, breath’ to form the complex predicate, *ó-kina* ‘remember’. The complex predicate can take an added object NP (see example (682), below) or it can take a paratactic complement, as in (624).

- (624) *Ó k-a-kina-ko(r)e tó k-a-ruworo-ke yaru bé.*
 feeling RL-3SG.M-think-(AG)UP breast RL-3SG.M-tuck.in-INTS sago.waste DPROX
 ‘He remembered he’d tucked the breast into the the sago waste.’ [FF1-MN:01]

The verb *-yără* is ambitransitive; when it is used transitively it means ‘see’ and can take an NP or clausal complement, as discussed above. When it is used intransitively it means ‘know’ or ‘believe (by deduction), reckon’. The intransitive verb can also appear followed by a clause it is semantically related to, but as the following example shows, the verb no longer takes object suffixing and the word *beka* ‘like’ links the two clauses.

- (625) ... *ya k-a-yără beka ating riêmpin pôn k-u-îniá, riêmpin ra*
 and RL-3SG.M-reckon like MAYBE two only RL-3SG.F-be.at two one
môike o ...
 one OR
 ‘... and he reckoned thus: there were maybe only two left, or three, or ...’
 [FF2-CA:03]

Another use of this verb is with a partly cognitive sense.

- (626) *K-a-kôe ărí k-a-yără-ø óm ino k-o-kéi.*
 RL-3SG.M-go.up inside RL-3SG.M-see-3SG.F wife NOT RL-3SG.F-sit
 ‘He went inside and saw that his wife wasn’t there.’ [FF2-CA:03]

10.1.3 Utterance

The verb *îrai* is ambitransitive between a non-suffixing transitive verb meaning ‘tell, say, speak (languages)’ which can take a secondary object noun phrase that always precedes the verb or a direct or reported speech complement which follows the verb, and an intransitive verb meaning ‘speak’ that takes no secondary object but can appear with a complement clause introduced by *beka*.

There is only a small selection of nouns that are feasible secondary objects of the transitive *-îrai* (e.g. *a* ‘something’, *au îrai* ‘story’, *pôkó* ‘neck(=language), *anoku* ‘legend’). Noun complements of this verb are coded like other secondary objects — they appear before the verb but are not marked on the verb. This is shown in (627) and (628).

- (627) *Anoku tora k-anâ-îrai.*
 legend long.ago RL-1SG.M-tell
 ‘I’m telling a legend of long ago.’
- (628) *K-a-n-á a n-anâ-îrai.*
 RL-1SG.M-1SG.M-want something IRR-1SG.M-say
 ‘I want to say something.’

Addressees are marked as added objects.

- (629) *K-a-n-á a n-anâ-îrai-n-o-mu.*
 RL-1SG.M-1SG.M-want something IRR-1SG.M-say-AG-GIVE-2SG.F
 ‘I want to say something to you.’

This verb can also appear followed by direct speech.

- (630) *K-u-îrai-r-o-a,*
 RL-3SG.F-say-AG-GIVE-3SG.M
 ‘She said to him,
- ‘Bâuni, akâiri pôn k-ey-îniá ekókó.’*
 no stone only RL-3SG.F-be.at bilum
 ‘No, only stones are in the bilum.’’

Reported speech is almost always linked with *beka*.

- (631) *Cha Vava k-â-irai beka,*
 AT PN RL-3SG.M-say like
 ‘Uncle said that

ura bé n-a-rei ya bo täipó n-e-inia-nâ-mi.
 moon DPROX IRR-3SG.M-fall then place bad.3SG.F IRR-3PL.M-initiate-APPL-1PL
 when this moon falls they will initiate us.’

However, direct speech can also be preceded by *beka*. One analysis is that these examples reflect a stylistic choice to use the intransitive *-irai* plus *beka* instead of the transitive *-irai* plus direct-speech complement.

- (632) *K-i-óro-wo(p)o k-u-irai beka,*
 RL-3PL.M-cut-(AG)DOWN RL-3SG.F-say like
 ‘They chopped and she spoke thus,

‘Ei! ro mô=va k-o-p-á n-ep-e-n-óro
 EXCL stomach mother=PRM RL-2PL.M-2PL.M-want IRR-2PL.M-BEN-1SG.F-cut
bé!’
 DPROX
 ‘‘Hey, you’re about to chop my stomach!’’ [FF2-CA:03]

- (633) *Ni=va kope k-ey-irai beka,*
 bee=PRM then RL-3PL.F-say like
 ‘The bees spoke thus,

‘Au aka n-om-irai.’
 thing true IRR-2SG.F-tell
 ‘‘Tell the truth!’’ [FF2-CA:03]

Another utterance verb is *-tere* ‘ask’, which also requires an added object addressee, as in (634).

- (634) *K-e-n-á a n-en-tere-n-o-mu.*
 RL-1SG.F-1SG.F-want something IRR-1SG.F-ask-AG-GIVE-2SG.F
 ‘I want to ask you something.’

In example (635) the verb is followed by direct speech.

- (635) *Cha Menriri k-a-tere-r-o-a nâkí,*
 AT PN RL-3SG.M-ask-AG-GIVE-3SG.M PN
 ‘Menriri asked the dog-spirit,

‘To mēmá arâpe k-a-m-á bé?’
 so 2SG.M what RL-2SG.M-2SG.M-do DPROX
 “So what are you smoking?” [TP-MN:01]

This verb can also take reported speech complements, without the use of *beka*.

- (636) *Bó ópu târe k-o-tere-r-o-ø bó*
 3SG.F female.grand.relation new RL-3SG.F-ask-AG-GIVE-3SG.F 3SG.F
n-o-noi-r-ô-ø ke arâpe n-ere-p-á.
 IRR-3SG.F-go-AG-REG-3SG.F PURP₂ what IRR-3DU-3DU-do

‘The granddaughter asked her why they were going to the bush.’ (she would go to the bush with her so that they could do what) [NS-MM:03]

The verb *-viti* ‘blame’ takes an addressee introduced with the adversative morpheme *-kê*. In the following example it is followed by direct speech. Since this verb otherwise only behaves intransitively — i.e. it never appears with an NP object — it doesn’t appear with *beka*, and the two clauses appear under separate intonation contours. The two clauses in this example are better thought of as semantically or logically related but not grammatically so.

- (637) *Ám=a k-a-viti-kê-ø.*
 husband-PRM RL-3SG.M-blame-ADV-3SG.F
 ‘The husband blamed her.

‘K-ana-vóvo-na toro mōmú awei=a unake
 RL-1SG.M-sleep-1SG.M long 2SG.F meat=PRM alone
k-ō-m-á-m-ě-ná-ke.’
 RL-2SG.F-2SG.F-eat-AG-FROM-1SG.M-INTS
 “I slept for a long time and you ate all the meat yourself.”

10.1.4 Modals

Wanting and ability are expressed through apparently paratactic constructions — modal verbs followed by finite clauses. However, there is some evidence, discussed

- (639) *K-o-m-á* *n-e-m-yé-mu* *au=éro?*
 RL-2SG.F-2SG.F-want IRR-1PL-1PL-hit-2SG.F thing=DIRR
 ‘Do you want us to hit you over this?’ [FF2-CA:03]

Example (640) shows the shared argument as a secondary object of the second clause.

- (640) *K-o-m-á* *n-ě-n-á?*
 RL-2SG.F-2SG.F-want IRR-1SG.F-1SG.F-eat
 ‘Do you want me to eat you?’

The shared participant can also be an added object. In the following example the object of the participant-adding morpheme *-o* GIVE is 2SG.F, and this is the same as the subject of ‘want’.

- (641) *K-o-m-á* *au* *îrai n-en-îrai-n-o-mu?*
 RL-2SG.F-2SG.F-want thing say IRR-1SG.F-tell-AG-GIVE-2SG.F
 ‘Do you want me to tell you a story?’

The identity between the two participants does not have to be absolute. The shared participant can be a member of a subset or superset of the agreement on ‘want’. In the following example the agreement on ‘want’ is 1SG.F, whereas the agreement on ‘walk’ is 1DU.

- (642) *K-e-n-á* *n-epi-úte.*
 RL-1SG.F-1SG.F-want IRR-1DU-walk
 ‘I want us two to go.’

The main reason for arguing that this verb is defective and possibly grammaticalising into an auxiliary is that there is no irrealis form of ‘want’; (643) is ungrammatical. There is apparently no way of talking about the possibility of wanting something in the future.

- (643) **Úri*, *n-e-n-á* *n-e-no(n)i* *uka.*
 tomorrow IRR-1SG.F-1SG.F-want IRR-1SG.F-(1SG.F)go bush
 ‘Tomorrow, I will want to go to the bush.’

It is possible to negate both the modal verb and the second clause by placing the regular negator *beya* before the modal verb and *vai* at the end of the complex sentence. This is shown in (644a). As with the perception construction, it is also possible, however, to negate only the second clause, by placing *beya* before the verb there and *vai* at the end, as shown in (644b). The explanations in parentheses were given by speakers to explain when the different strategies might be used.

(644) a) *Beya k-a-n-á n-ǎ-n-á vai.*
 NEG RL-1SG.M-1SG.M-want IRR-1SG.M-1SG.M-eat POL
 ‘I don’t want to eat it.’ (I’m not hungry.)

b) *K-a-n-á beya n-ǎ-n-á vai.*
 RL-1SG.M-1SG.M-want NEG IRR-1SG.M-1SG.M-eat POL
 ‘I want to not eat it.’
 (I never eat it. I don’t like it or it’s taboo for me to eat it.)

It is not possible to only negate the modal verb. Negation must surround both verbs or just the second verb.

(645) **Beya k-e-n-á vai n-ě-n-á.*
 NEG RL-1SG.F-1SG.M-want POL IRR-1SG.F-1SG.F-eat
 ...

Two common extensions for this modal are ‘try’ (646) and to indicate inceptive aspect (see 647 & 647, below). These are also common uses for *laik* ‘want’ in Tok Pisin.

(646) *K-e-n-á imo n-e-n-á.*
 RL-1SG.F-1SG.F-want armband IRR-1SG.F-1SG.F-make
 ‘I’m trying to make an armband.’

Another reason for arguing that this verb might actually be grammaticalised and embedded into a main clause rather than truly paratactic, is that the object of the main clause quite regularly appears before the modal. This is shown in examples (647) and (648).

- (647) *Au irai k-a-n-á n-anâ-irai é.*
 thing say RL-1SG.M-1SG.M-want IRR-1SG.M-say DPROX
 ‘I’m going to tell the story now.’
- (648) *Chá=va k-o-p-á n-ep-e-n-óro!*
 head=PRM RL-2PL.M-2PL.M-want IRR-2PL.M-BEN-1SG.F-cut
 ‘You’re about to cut my head!’ [FF2-CA:03]

One argument might be that this is topicalisation, where the NPs *au irai* and *chá* are pre-posed to the whole complex sentence. However, more strikingly, the modal can intrude between an adjunct nominal and a verb, as in example (649), showing its inceptive use. In this example, *tó* ‘breast’ is the subject of the modal. The adjunct nominal *ê* ‘smell’ forms a complex predicate with the verb *-iria* ‘stink’. The modal verb intrudes between the elements of the complex predicate. Adjunct nominals cannot normally be left-dislocated and even if the adjunct nominal in the following example were left-dislocated, it should appear before the subject *tó*.

- (649) *Ya tó ê k-o-r-á n-u-iria.*
 and breast smell RL-3SG.F-3SG.F-want IRR-3SG.F-stink
 CONJ S AdjN V V
 ‘Then the breast began to stink.’ [FF1-MN:01]

It therefore appears that the modal verb is embedded in the main clause, at least in these constructions.

As mentioned above, when there is no shared argument, a different verb, *-ere* ‘like, love’, must be used. Example (652) shows this verb with suffixing on the participant-adding *ô* REGARDING. The added object NP *yá* 3SG.M is not obligatory.

- (650) *K-e-n-ere-n-ô-wa yá.*
 RL-1SG.F-1SG.F-like-AG-REG-3SG.M 3SG.M
 ‘I love him.’ or ‘I want what he wants.’

In the next example the participant-adding morpheme takes zero 3SG.F agreement for the non-gender specific interrogative *arape* ‘what’.

- (651) *K-a-m-ere-m-ô-∅ arâpe?*
 IRR-2SG.M-2SG.M-like-AG-REG-3SG.F what
 ‘What do you want?’ [TP-MN:01]

Two more examples follow. Regardless of the subject of the second clause, the modal verb is always inflected for 3SG.F. Similarly, regardless of the temporal time frame of the utterance, the modal verb is always realis and the second clause is always irrealis.

- (655) *Kuiniarî bió n-a-yé-ya n-ǎ-r-á.*
 can person IRR-3SG.M-fight-3SG.M IRR-3PL.M-3SG.M-eat
 ‘He can kill a man and eat him.’ [DICT-PW:01]

- (656) *Bariri, kuiniarî ekókó n-en-ávo.*
 yesterday can string.bag IRR-1SG.F-carry.3SG.F
 ‘Yesterday I could carry the string bag.’

Again, there seems to be evidence of grammaticalisation here. The modal meaning is not immediately recoverable from the parts of the form *kuiniarî*. As discussed in Chapter 6, the verb *-iniá* ‘be at’ is commonly used in existential constructions; with a non-3SG.F agreement and with the addition of a non-3SG.F added object, and the rising tone on *-iniá*, the verb reverts to its locational meaning.

- (657) *K-ǎ-iniá-r-î-mu.*
 RL-3SG.M-be.at-AG-WITH-2SG.F
 ‘He is with you.’

In common with *-á* ‘want’, the object of the second clause can often appear before the modal.

- (658) *Bariri ekókó kuiniarî n-en-ávo.*
 yesterday string.bag can IRR-1SG.F-hold.3SG.F
 ‘Yesterday I could carry the string bag.’

Also in common with *-á* ‘want’, negation surrounds both the modal and the complement clause, or only the complement clause.

- (659) a) *Beya kuiniarî n-en-rívó vai.*
 NEG can IRR-1SG.F-hear POL
 ‘I couldn’t understand.’

- b) *Kuiniarí beya n-en-rívó vai.*
 can NEG IRR-1SG.F-hear POL
 ‘I couldn’t understand.’

There is apparently no meaning difference between these two constructions.

10.1.4.3 Control

As I mentioned above, for *-á* to be interpreted as ‘want’ it must be in realis and it must share an argument with its complement. If *-á* appears with a complement it does not share an argument with, it is interpreted as the control verb ‘make’. The control verb and its complement appear with the same status marking. Hence, the control verb, unlike ‘want’, does have an irrealis variant.

Example (660) shows the ‘make’ use of this verb. In this example, the control verb and its complement are both in realis and have no shared arguments.

- (660) *Má nění beya k-a-r-á n-a-noi uka vai.*
 child 1SG.F NEG RL-3PL.M-3SG.M-want IRR-3SG.M-go.along bush POL
 ‘My son didn’t want to go to the bush.’

Nění k-e-n-á k-a-noi uka.
 1SG.F RL-1SG.F-1SG.F-make RL-3SG.M-go.along bush
 ‘I made him go to the bush.’

An irrealis example is given in (661).

- (661) *Má nění beya n-a-noi sule vai.*
 child 1SG.F NEG IRR-3SG.M-go school POL
 ‘My son won’t go to school.’

Nění n-e-n-á n-a-noi sule.
 1SG.F IRR-1SG.F-1SG.F-make IRR-3SG.M-go bush
 ‘I will make him go to school.’

The verb *-irai* ‘say’ can also be used to express the idea of compelling someone to do something.

(662) *Má něni beya k-a-r-á n-a-noi uka vai.*
 child 1SG.F NEG RL-3SG.M-3SG.M-want IRR-3SG.M-go bush POL
 ‘My son didn’t want to go to the bush.’

Něni k-en-irai-n-o-a k-a-noi uka.
 1SG.F RL-1SG.F-say-AG-GIVE-3SG.M RL-3SG.M-go bush
 ‘I told him to go the bush (and he did).’

10.1.4.4 Permission

The verb used for permission is *-în* ‘let’. An example of this verb in use is given in

(663).

(663) *Má něni k-a-r-á n-á-ute danis=a*
 child 1SG.F RL-3SG.M-3SG.M-want IRR-3SG.M-walk DANCE=PRM
n-a-r-á
 IRR-3SG.M-3SG.M-do
 ‘My son wanted to go dancing

ya k-e-n-în k-á-ute.
 and RL-1SG.F-1SG.F-let RL-3SG.M-walk
 and so I let him go.’

10.1.5 Properties and value judgements

In Barupu, verbs do not take clausal complement subjects. According to Givón (2001b:157-160), typical verbs taking clausal subjects are verbs which describe properties of, or ascribe a value judgement to, some action. These can be intransitive involving an adjective: ‘That he did it is incredible’, or transitive where the object is usually ‘mentally affected by a state or event in the clausal subject’ (2001b:159): ‘That she should say such a thing shocked everybody’. Meanings like this are achieved in Barupu through the conventionalised use of a finite clause modifying the noun *a* ‘thing, something’ as the subject of an adjectival verb. This is shown in example (664).

- (664) *A bé [bió k-a-te-i yéi, mevóva] beya k-o-néman*
 thing DPROX person RL-3SG.M-shoot-3PL.M 3PL.M children NEG RL-3SG.F-good
vai. K-o-táipó.
 POL RL-3SG.F-bad.3SG.F

‘This thing, where a man kills them, children, is not good. It’s bad.’
 [DC-MM:03]

10.2 Simultaneous and sequential coordinations

Clauses in a simultaneous or sequential relationship with each other can be linked with no overt conjunction, as in (665). The typical intonation pattern of unmarked coordination is a slight rise at the end of the first clause and a short pause before the beginning of the next clause. This type of intonation is marked in the examples with a comma.

- (665) *Úri, k-e-táu. Poro k-e-tí, k-i-úte*
 morning RL-3PL.M-paddle canoe RL-3PL.M-tie.up RL-3PL.M-walk
k-e-kô(p)e.
 RL-3PL.M-(3PL.M)go.up

‘In the morning they paddled. They tied up their canoes and walked up.’
 [ANR-MN:01]

Alternatively, clauses can be conjoined overtly, with conjunctions. The two conjunctions are *ya* ‘and’ which is typically used for simultaneity as well as temporal sequence, and *kope* ‘then’ which is typically only used for temporal sequence. Apart from this, the main difference between the two conjunctions in marking sequential events is that *ya* tends to be used to conjoin events that take place at the same scene, such as, for example, activities to do with preparing and then eating dinner or catching fish; *kope*, on the other hand, is used when there is a change of scene: for example, going from having dinner to going to bed. Both *ya* and *kope* can be used between two clauses, but they often appear after the first non-verbal constituent of the second clause. *Ya* and *kope* can also be used together to mean something like ‘and

then'. Another particle signalling a coordinate relationship is the disjunctive *ra* 'but'.

This particle appears between two clauses.

10.2.1 *ya* 'and'

The following examples show the use of *ya*. These examples show that *ya* links events that all happen at the same scene.

- (666) *Yake. K-e-m-ikoro poro ya k-emi-táu.*
 enough RL-1PL-1PL-put.in canoe and RL-1PL-paddle
 'Alright. We put (it) in the canoe and paddle.' [P-MB:03]
- (667) *K-em-yără-ø-wo ya ró k-o-r-e*
 RL-1SG.F-see-3SG.F-DOWN and mouth RL-3SG.F-3SG.F-full
 'We look down at it and it's full.' [C-MW:03]
- (668) *N-o-râiví ya n-ě-n-á ...*
 IRR-3SG.F-cook and IRR-1SG.F-1SG.M-eat
 'She'll cook (it) and I'll eat (it).' [CB-JT:01]
- (669) *Anranae=a k-a-kéi ôro ya k-a-rívó-ká.*
 devil=PRM RL-3SG.M-sit house and RL-3SG.M-hear-TOWARD
 'The devil was sitting in the house and he heard (something).' [ANR-MN:01]
- (670) *K-a-rói bémo ya k-â-irai-ká-r-o-ø óm ...*
 RL-3SG.M-stand DREF and RL-3SG.M-say-TOWARD-AG-GIVE-3SG.F wife
 'He stood there and said to his wife ...' [ANR-MN:01]

10.2.2 *kope* 'then'

The particle *kope* is used when there is a change of scene or action which is unrelated to the previous actions. In the following example the two events of going down to look at something and then coming back up are conjoined using *kope*.

- (671) *N-a-r-aro-r-ô-na n-a-yără-ø kope*
 IRR-3SG.M-3SG.M-go.down-AG-REG-1SG.M IRR-3SG.M-see-3SG.F then
k-a-kae-ro-î-na ya n-epi-ké(p)í.
 RL-3SG.M-come-SHORT-WITH-1SG.M and IRR-1DU-(1DU)sit
 'He goes down with me to see it, then he comes back to me and we sit down.'
 [CB-JT:01]

- (672) *Bĩ k-e-vĩri k-e-no(p)i kope reke*
 ancestor RL-3PL.M-die RL-3PL.M-(3PL.M)go then sheddable.skin
k-e-tai-p-ari.
 RL-3PL.M-shed-AG-sep
 ‘Ancestors died and left, then they shed their skins.’ [NS-MM:03]

Kope can also be found in instances of pseudo coordination, where a possible interpretation of the relationship between two coordinated clauses is one of causation. The following example shows *kope* appearing between a modal and a main clause.

- (673) *Korá bó Cha Carl k-â-irai bên. K-a-n-á, kope, kora*
 piece 3SG.F AT PN RL-3SG.M-say already RL-1SG.M-1SG.M-want then piece
n-ana-turo vóva.
 IRR-1SG.M-join again
 ‘One part, Cha Carl has already told. I want, then, to join another part.’
 [NSC2-MM:03]

As mentioned above, coordinated clauses can quite commonly be interpreted as one clause modifying another as ‘adverbial coordinations’ discussed in §10.3, below.

In the next example *kope* appears in the first position of the second clause after the external 3PL.F topic pronoun.

- (674) ... *ya k-á-ute. Rěré, kope k-ere-r-aro.*
 and RL-3SG.M-walk 3PL.F then RL-3SG.F-3SG.F-go.down.
 ‘... and he ran away. And them, then they came down.’ [FF2-CA:03]

Kope can also appear with other conjunctions that have more adverbial connotations; for example, the conjunction *ta* expresses a causal relationship between two coordinated clauses, see 10.3.2.3, below.

- (675) *K-a-r-â-râi-o(r)o-r-o-ø n-õ-r-á ta*
 RL-3SG.M-3SG.M-throw-(AG)DOWN-AG-GIVE-3SG.F IRR-3SG.F-3SG.F-eat REAS
kope k-o-tere-ko(r)e vóva.
 then RL-3SG.F-ask-(AG)UP again
 ‘He threw (fruit) down for her to eat so then she asked again.’ [FF2-CA:03]

Ya and *kope* can also be used together.

(676) ... *ya kope ra pôn k-a-r-u,* *ne=va*

and then one only RL-3SG.M-3SG.M-pick spell=PRM

kaikê.

k-a-ai-kê-ø

RL-3SG.M-curse-ADV-3SG.F

'... and so then he picked just one and worked a spell over it.' [FF2-CA:03]

(677) *Úri, ya kope n-epi-ka(p)e bé erôra.*

morning and then IRR-1DU-(1DU)come DPROX garden

'Morning, and then we two will come here to this garden.' [TP-MN:01]

10.2.3 *ra* 'but'

Clauses expressing that something was expected to occur but did not are conjoined with the disjunction *ra* 'but'.

(678) *K-e-n-aro âi=a n-en-ore ra âi=a*

RL-1SG.F-1SG.F-go.down tree=PRM IRR-1SG.F-search FRUS tree-PRM

k-o-bâun.

RL-3SG.F-not.be

'I went looking for firewood, but there was none.'

10.3 Adverbial coordinations

In a sentence consisting of coordinated clauses, one of the clauses can often be interpreted as modifying the other one — I call these adverbial coordinations. For example, one clause might provide information about the time or location of the action described in the other clause, or give the reason an action is performed.

Adverbial coordinations often utilise meaningful oppositions in status marking.

These are summarised in Table 10.1 and discussed below.

Table 10.1 Status oppositions in adverbial coordinations

clause 1	clause 2	semantic relation
REALIS	REALIS	temporal/manner
REALIS	IRREALIS	purpose
IRREALIS	IRREALIS	temporal/conditional
IRREALIS	REALIS	temporal/conditional

Two identically marked clauses can also be given a sequential or simultaneous reading, as described in §10.2, above.

Other adverbial relations are established through the use of meaningful conjunctions, or more rarely, morphological marking on one of the verbs.

10.3.1 Conditional, temporal, purpose, manner

Conditional constructions consist of a clause describing a hypothetical event whose realisation is conditional on events in another clause. The hypothetical event is called the apodosis and the conditioning event is called the protasis. In Barupu the protasis appears first. Simple conditional readings can be formed simply by coordinating two irrealis clauses, as in examples (679) - (681).

- (679) *N-en-âve-a* *toro n-a-i(r)î-ni.*
 IRR-1SG.F-hold-3SG.M badly IRR-3SG.M-(3SG.M)bite-1SG.F
 ‘If I hold him badly, he’ll bite me.’ [C-MW:03]

- (680) *Bôï aka, bôï tã=va, n-o-r-o-a, mutu bai*
 lime real lime skin=PRM IRR-3SG.F-3SG.F-give-3SG.M betel.nut FUT
n-o-néman.
 IRR-3SG.F-good

‘If she gives him proper lime, lime made from shells, the betel nut will be good.’ [DC-CA:03]

- (681) *Bá n-a-ike-r-eri* *n-a-r-irovo,*
 fish IRR-3SG.M-chew-AG-SEP.SG IRR-3SG.M-3SG.M-swallow
n-i-âve-a.
 IRR-3PL.M-hold-3SG.M
 ‘When/If a fish bites it and swallows it right down, they catch it.’ [CF-MN:01]

Context is important, however; the above clauses could just as easily have a simultaneous or sequential interpretation. Another possible interpretation is that the first clause is providing temporal information. For example, when (681) was taken out of context, some speakers translated it with the conditional reading given in the

translation above, while some gave it a sequential translation: ‘the fish swallows it right down and they catch it’, and others gave it a temporal translation: ‘when the fish swallows it right down, they catch it’. This underlines the point that the ways speakers have of indicating these relationships between clauses is identical; only the interpretation is different.

The following example has the same structure as the above examples and was translated into English with a temporal rather than conditional clause.

- (682) *Bo nuraki(r)é, bo=va n-o-rei*
 n-o-ura-ki(r)é
 place IRR-3SG.F-black-(AG)AWAY place=PRM IRR-3SG.F-fall
 ‘When it’s dark and stormy,
n-om-kina-kina-m-ô-na.
 IRR-2SG.F-REDUP-think-AG-REG-1SG.M
 you will think of me.’ [DC-CA:03]

Speakers often use the Tok Pisin temporal adverbial particle *taim* ‘when’ in temporal adverbial coordinations. This is shown in examples (683) and (684).

- (683) *Taim pí k-e-bere-o(p)o, poro=va iki*
 WHEN water RL-3PL.M-pour-(AG)DOWN canoe=PRM paint
k-op-u-p-îya.
 RL-3PL.M-BEN.3SG.F-3PL.M-paint
 ‘When they’ve poured the water (onto the dry paint powder), they paint her canoe.’ [P-MG:03]

In the following example the speaker started out with *bó* 3SG.F and then stopped and started again with *taim*.

- (684) *Bó (hes) ... Taim bó tó=va k-o-r-ârai-o-tá-ka,*
 3SG.F WHEN 3SG.F breast=PRM RL-3SG.F-3SG.F-throw-DOWN-ON-3SG.M
ya k-o-púpú báru.
 and RL-3SG.F-fly back
 ‘She ... When she’d thrown the breast on him, then she flew back.’ [U-EM:01]

As shown in the next example, (685), the apodosis of a conditional can also be in realis.

- (685) *Bió ám=a n-o-r-a-ka tru, e*
 person husband=PRM IRR-3SG.F-3SG.F-please-3SG.M TRULY bag
k-u-awe-ko k-u-ĩniá,
 RL-3SG.F-hang.3SG.F-UP RL-3SG.F-sleep
 ‘If she truly pleases her intended, the bilum she’s hung up stays put,
bió n-a-pilei-pilei bó, a=va k-o-rei pita.
 man IRR-3SG.M-JOKE-JOKE 3SG.F thing=PRM RL-3SG.F-fall bottom
 if the man is mucking her about, the thing falls down.’ [WH-RX:03]

When two coordinated clauses have different status marking, they can no longer be interpretable as simultaneous or sequential. Clauses in a temporal sequence, or played out simultaneously, have the same status marking.

Conditional and temporal clauses often begin with the particle *bo*.

- (686) ***Bo n-en-ávé rau mó ...***
 TVF IRR-1SG.F-be pig mother
 ‘If I were a mother pig ...’ [MP-EM:01]

This particle has a truth-value focussing function in simple clauses; it counters the supposition that something might not be true. In adverbial coordinations it is not really clear what the function of this particle is: speakers sometimes translate it into Tok Pisin as *sapos* ‘if’, but they also use it in clauses that they translate as temporal, as in (687) — the verbless temporal clause is in bold face.

- (687) ***Bo unake uka, beya ne n-o-p-êri vai, ne***
 TVF alone bush NEG coconut IRR-2PL.M-2PL.M-break POL coconut
n-o-p-êri, yake, k-u-ĩ(p)ĩ-a
 IRR-2PL.M-2PL.M-break enough RL-2PL.M-(2PL.M)call-3SG.M
n-a-r-e-r-o-pu roma n-a-r-á.
 IRR-3SG.M-3SG.M-go-AG-GIVE-2PL.M fight RL-3SG.M-3SG.M-do.

Writer’s translation: ‘When you are alone in the forest, [don’t break open a dry coconut], if you break open a dry coconut, then you are calling him to chase you and kill you.’ [DICT-PW:01]

Speakers can also translate one of a sequence of realis clauses as temporal, as shown in (688), but a sequence of realis clauses is never translated as conditional, because at least one part of a conditional must be hypothetical — that is, irrealis.

- (688) *Banono írí=va k-emi-rire-riré bo e. K-ere-kô(r)e*
 bean seed=PRM RL-1PL-REDUP-plant place garden RL-3PL.F-(3PL.F)go.up
k-ey-ave. K-e-m-u k-ě-m-á.
 RL-3PL.F-bear.fruit RL-1PL-1PL-pick RL-1PL-1PL-eat

Writer's translation: 'Corn and bean seeds are planted in the garden. When grown big they bear beans and corn. Then they are harvested and eaten.'
 [DICT-PB:01]

The temporal verbs *bariri* 'afternoon' and *úri* 'morning' can be inflected as verbs and appear in adverbial relationship with another clause. Because both clauses in the following examples are in realis, they could equally be given a simultaneous/sequential reading.

- (689) *Ya k-o-bari-bariri k-o-kae, yei*
 and RL-3SG.F-REDUP-afternoon RL-3SG.F-come 3PL.M
k-e-no(p)i=ére.
 RL-3PL.M-(3PL.M)go.along=DDIST

'And it was getting on for afternoon and they left.'
 'And when it was getting on for afternoon, they left.' [U-EM:01]

The next example shows that a temporal verb can take the participant-adding morpheme *-nâ* to index the participants affected by the changing time.

- (690) *Kope kúrinâre k-ere-bere-ká(r)é batirón.*
 k-o-uri-nâ-re
 then RL-3SG.F-morning-APPL-3PL.F RL-3PL.F-leave-(AG)TOWARD clearing

'Then morning came upon them and they came from the clearing.'
 'Then when morning came upon them, they came from the clearing.'
 [WH-RX:03]

Clauses headed by a temporal verb can also be found after another clause where, given the right context, they indicate something like 'until'.

- (691) *Poro k-a-r-á k-o-bariri-nâ-ka.*
 canoe RL-3SG.M-3SG.M-make RL-3SG.F-afternoon-APPL-3SG.M

'He works on his canoe and afternoon comes upon him.'
 'He works on his canoe until afternoon comes upon him.' [CB-JT:01]

- (695) *Ramo târe má k-ana-iro poro má*
 tree.sp new child RL-1SG.M-cut canoe child
n-a-n-á-ø-n-o-ø *kuán* ...
 IRR-1SG.M-1SG.M-make-3SG.F-AG-GIVE-3SG.F mother

‘I’m cutting down a young *ramo* tree to make a small canoe for my mother ...’
 [DICT-PB:01]

Purpose clauses can also be found with the particle *bo*. Here *bo* seems to express that something is done in case of another event.

- (696) *Béi ré nó n-e-p-ere, bo íne târe n-e-ĩniá-nâ-i*
 meat and blood IRR-3PL.M-3PL.M-put TVF eye new IRR-3PL.M-be.at-APPL-3PL.M
vôva.
 again

‘They will put aside the meat and blood if/when they want them for use in initiations.’ [DICT-PW:01]

This example could also be viewed as a temporal or conditional clause with the normal clause order reversed (e.g. ‘If/When they want to use them in initiations, they put aside the meat and blood’).

There is one example of an unmarked coordinated manner clause in the data, shown in (697).

- (697) *Ro pa k-a-m-ere-o pita, k-e-ké(m)i-tá-ø*
 bottom back RL-2SG.M-2SG.M-put-DOWN below RL-1PL-(1PL)sit-ON-3SG.F
aikéké.
 table

Writer’s translation: ‘Sit down [Put your bottom down], to rest your buttocks, as you do when sitting at a desk.’

10.3.2 Conjunctions

In addition to the unmarked adverbial coordinations, there are some meaningful conjunctions. There are two purpose conjunctions (*ke* and *bora*); the verbs in purpose clauses are always marked with irrealis. There is also a reason conjunction (*ta*), with no restriction on the status marking.

- (702) *Ú k-ana-puere bora n-ana-iro poro*
 branch RL-1SG.M-strip PURP₁ IRR-1SG.M-fell canoe
n-a-n-á-ø.
 IRR-1SG.M-1SG.M-make-3SG.F

‘I strip the branches off (a tree) to cut it down to make a canoe.’ [DICT-PB:01]

There is no switch-reference associated with the choices: both conjunctions can be used when the two clauses have the same or a different subject. Some more examples follow.

- (703) *Kua Miriam k-u-irai-r-o-na au irai yéi,*
 AT PN RL-3SG.F-say-AG-GIVE-1SG.M thing say 3PL.M
 ‘Miriam asked me to tell her their story,

aro buso kekapeí chápo,
 k-e-ka(p)e-i-i
 people white RL-3PL.F-(3PL.F)come-WITH-3PL.M grandfather
 white people who came to our grandfathers,

n-a-n-á-n-o-ø bora n-o-r-ê.
 IRR-1SG.M-1SG.M-make-AG-GIVE-3SG.F PURP₁ IRR-3SG.F-3SG.F-write
 I will make it for her so she can write it.’ [WM-MN:05]

- (704) *Ói=a n-o-kupwana bora n-erě-r-á.*
 sago=PRM IRR-3SG.F-strong PURP₁ IRR-3PL.F-3PL.F-eat
 ‘The sago will be hard so they can eat it.’ [WH-RX:03]

- (705) *N-e-mere-m-ere-m-ô-re akere owu beka ura opo bora ine*
 IRR-1PL-REDUP-1PL-put-AG-REG-3PL.F design some like black yellow PURP₁ eye
n-o-néman.
 IRR-3SG.F-good

‘They’ll put it (white paint) in some designs like yellow and black (ones) so that it will look good.’ [P-MG:03]

- (706) *N-ă-r-á bora ro nómuá.*
 n-o-ómo-a
 IRR-3SG.M-3SG.M-eat PURP₁ stomach IRR-3SG.F-fill-3SG.M
 ‘He’ll eat to be full.’ [U-GX:01]

10.3.2.3 *ta* ‘reason’

The reason for doing something or feeling something can be expressed through a reason conjunction *ta*.

- (707) *Biám maumau k-e-p-á-u ta rûrui=a*
 man many RL-3PL.M-3PL.M-please-3SG.F REAS hibiscus=PRM
k-u-é(r)o.
 RL-3SG.F-⟨3SG.F⟩wear.in.hair

‘Many men please her, so she wears hibiscus flowers in her hair (to signal to them).’ [DICT-PB:01]

- (708) *K-ě-m-á-m-ô-wa ta*
 RL-1PL-1PL-eat-AG-REG-3SG.M REAS

kavêmi k-a-r-ikiro ekókó.
 k-a-âve-mi
 RL-3SG.M-hold-1PL RL-3SG.M-3SG.M-put.in bilum

‘We ate his food so he caught us and put us in his bilum.’ [ANR-MN:01]

10.3.3 Verb morphology

There are two pieces of verbal morphology that signify a modifying relationship between two clauses. They mark **SIMULTANEOUS** and **CONCESSIVE**. These morphemes are similar to those discussed in Chapter 7 in that they take extra agreement for the subject of the verb.

10.3.3.1 *Simultaneous*

Clauses that describe events occurring simultaneously with a preceding clause can optionally appear with a suffix *varao* ‘at the same time’. This morpheme takes an infix between the final vowels indexing the subject of the verb.

- (709) *Akorom=a k-epi-p-á ya a kepîraivara(p)o.*
 food=PRM RL-1DU-1DU-eat and something RL-1DU-say-⟨AG⟩SIMUL
 k-epi-îrai-**bara(p)o**
 ‘We were eating and talking at the same time.’

- (710) *Akorom=a k-ě-n-á* *měmá k-ama-vóvo-ma-vara(m)o.*
 food=PRM RL-1SG.F-1SG.F-eat 2SG.M RL-2SG.M-sleep-2SG.M-⟨AG⟩SIMUL
 ‘I ate and you slept at the same time.’

The use of this morphology is extremely rare; it occurs naturally only once in my data, shown in (711). In this example it appears to be transitive — i.e. it takes 3PL.F object suffixing and it is also reduplicated to indicate iterativity.

- (711) *K-ey-írai-r-o-ø* *kope beka*
 RL-3PL.F-say-AG-GIVE-3SG.F then like
k-u-írai-r-o-re-vara-vara(r)o-re *beká=emo.*
 RL-3SG.F-say-AG-GIVE-3PL.F-REDUP-⟨AG⟩SIMUL-3PL.F like=DREF
 ‘They spoke to her and then she kept talking back to them at the same time as them, like I said.’ [FF2-CA:03]

According to a loose translation given by speakers, a good interpretation of this clause is that everyone was speaking at the same time, back and forth and over the top of each other. More commonly, simultaneity is expressed through simple coordination, whether unmarked, or using *ya*, as described in §10.2, above.

10.3.3.2 Concessive

Concessives, whether they are conditional or not, are expressed with the same morpheme: a suffix *-é*. This suffix appears at the very end of the main verb and (like the participant-adding morphemes) is always preceded by an inflectional morpheme showing agreement with the subject.

Example (712) shows a concessive conditional; the protasis is marked as irrealis (note the use of *bo* in this clause) and the verb in the main clause is marked with the CONCESSIVE suffix.

- (712) *Bo á n-u-ai,* *úri* *n-em-úte-m-é* *uka.*
 TVF rain IRR-3SG.F-rain tomorrow IRR-1PL-walk-AG-CONC bush
 ‘Even if it’s raining, tomorrow we’ll still go to the bush.’

Example (713) shows a plain concessive; both verbs are in realis and the second clause contains a verb marked with the concessive suffix.

- (713) *Bariri á k-u-ai k-em-úte-m-é uka.*
 yesterday rain RL-3SG.F-rain RL-1PL-walk-AG-CONC bush
 ‘Yesterday it rained and we went to the bush anyway.’

10.3.4 Place

There is no adverbial coordination expressing a place relationship, instead speakers might use an added object construction (714) or a relative clause (715).

- (714) *N-e-ké(n)i-tá-ø-n-ô-wa Cha Robert.*
 IRR-1SG.F-⟨1SG.F⟩sit-ON-3SG.F-AG-REG-3SG.M AT PN

‘I’ll sit where where Robert was sitting.’ (‘I’ll sit on something to do with Robert.’)

- (715) *O Maria n-o-ka(m)e n-o-ké(m)i-tá-ø bo pó*
 AT.VOC PN IRR-2SG.F-⟨2SG.F⟩come IRR-2SG.F-⟨2SG.F⟩sit-ON-3SG.F place scar
[yá Cha Hudson k-a-kéi].
 3SG.M AT PN RL-3SG.M-sit

‘Maria, come and sit where Hudson was sitting.’ (‘Come and sit on the marked place where he, Hudson, was sitting.’)

Appendix A

Texts

In the texts the following conventions are used:

- Italics indicate Barupu orthography.
- In the orthographic sections Tok Pisin words will be written in roman font.
- Where the Tok Pisin is a mistake and is followed by the Barupu word or phrase, the Tok Pisin word or phrase is enclosed in parentheses.
- In the interlinear glosses, the Tok Pisin and English words are glossed in upper case.
- Where part of a word has been left out in the original written or oral source it is indicated in the interlinear gloss within square brackets.

***Bió venavěná* ‘Witch’ — Peter ‘Stonney’ Wampai**

This text is a dictionary definition for *bió venavěná* ‘witch’. I have typed out the definition as written by Peter Wampai and then broken it down into interlinear glosses. Peter Wampai also translated this text into English. His translation is given in full below. I have also given each interlinear gloss a free translation.

1. *Bio bom noma, ma kakei ro, konoí ura vo ma noaivia novaun rari yake reka taipo noko. Auka rapi reyempin vo nere putuputu, roro nere bririki, vaka avariroi ipipo, tu noru raro oreva baka rau. Raka noavo roma nora na. Kuiniari bio noyeiya noraitaka reka tare.*

2. *Bia taipia koroiyi cha katiro, noroi noarara roro, umo nai bo teve roro. Ra au eno veku nora, konoí a koturuwe bo taipo.*

- (1) **Bió bóm n-o-ô má**
 person woman IRR-3SG.F-pregnant
 A pregnant woman
- (2) **má k-o-kéi-r-ô-ø k-o-noi ura bó má**
 child RL-3SG.F-sit-AG-REG-3SG.F RL-3SG.F-go.along moon 3SG.F child
n-o-âve-a n-o-bâun-r-a(r)í-ø
 IRR-3SG.F-carry-3SG.M IRR-3SG.F-not.be.at-AG-(AG)SRND-3SG.F
 She is pregnant and her month for giving birth will come but it won't happen.
- (3) **yake réká táipó n-o-ko.**
 enough body bad.3SG.F IRR-3SG.F-getsGO
 Alright she'll get a bad body.
- (4) **Âuká rápi riêm pin bó n-ere-putu-pûtu**
 armpit gooseflesh two 3SG.F IRR-3DU-REDUP-swollen
 Her armpits will swell up.
- (5) **roro n-ere-briri-kí beka awarîroi ipípó**
 night IRR-3DU-bright-AWAY like firefly tall
 At night they will be bright like a big firefly.
- (6) **tũ n-or-u-r-aro oreva beka rau.**
 tail IRR-3SG.F-BEN.3SG.F-3SG.F-go.down back like pig
 A tail will grow down her back like a pig.
- (7) **Raka n-u-âvo roma n-o-r-á-nâ-ø**
 husking.stick RL-3SG.F-carry.3SG.F fight IRR-3SG.F-3SG.F-do-APPL-3SG.F
 She will carry a husking stick to fight with.
- (8) **Kuiniarî bió n-o-yé-a n-o-rái-tá-ka réká târe.**
 can person RL-3SG.F-hit-3SG.M IRR-3SG.F-die.SGS-ON-3SG.M body alive
 She can kill a man and die with the real person.

- (9) **Biá tǎipe-á k-o-rói-î-o chá k-a-tiró**
 person bad-3SG.M RL-3SG.F-stand-WITH-3SG.F head RL-3SG.M-guide
n-o-rói n-o-arara roro, umo nai bɔ tēvé rôró.
 IRR-3SG.F-stand IRR-3SG.F-roam.around night daytime place ear cry.out
 An evil spirit can possess her and guide her to roam around all night and all day when there is no-one around.

- (10) **Ra au êno bêku n-o-r-á k-o-noi a**
 one thing hand REFL IRR-3SG.F-3SG.F-do RL-3SG.F-go.along thing
k-o-turǔvé bɔ tǎipó.
 RL-3SG.F-poke.in place bad.3SG.F
 Another one is where she kills herself by going and poking things into a spirit house.

Writer's translation:

1. A pregnant woman or mother who does not give birth on time (9 months) etc... Can adapt or has encounter[ed] this sort [of] problem. She may develop some signs such as swollen armpits that can give off or produce small lights at night and develop or has a tail as of a pig and carries a sharp husking stick as a deadly weapon. Can kill a human being specially man and both die[d] together.

2. An evil spirit possesses or guides or leads her to roam around at night or during daytime alone to do evil things to humans. Or sometimes when a pregnant woman or mother used bits of her clothes especially pants in sacred places or evil places the evil spirit of that place then possessed her.

Niánta kemavêi ‘Catching prawns’ — Maria Bakema

This is a spoken text, recorded on tape and transcribed with help from the speaker, Maria Bakema and others.

- (1) *Cha, cha kokim rò k-emi-tí pinis.*
 basket basket small bottom RL-1PL-tie.up PERF
 The net, we finish tying the bottom of the small trawling basket.
- (2) *K-e-m-á-u ya k-e-m-ârí.*
 RL-1PL-1PL-do-3SG.F and RL-1PL-1PL-weave.cane
 We make it, we weave it with cane.
- (3) *Yake k-e-m-ikoro poro ya k-emi-táú*
 enough RL-1PL-1PL-put.in canoe and RL-1PL-paddle
 Alright, we put them in the canoe and paddle.
- (4) *K-en-tá bióte k-e-mere-m-ere niánta k-o-totua-ki*
 RL-1PL-paddle oar RL-1PL-REDUP-1PL-put prawn RL-3SG.F-jump.around-AWAY
ya k-i-û(m)a
 and RL-1PL-(1PL)trawl
 We paddle and put our oars in and out of the water and a prawn jumps around
 and we fish using the basket.
- (5) *K-i-û(m)a k-em-âvo k-e-m-ikoro-wo poro.*
 RL-(1PL)-(1PL)trawl RL-1PL-hold.3SG.F RL-1PL-1PL-put.in-DOWN canoe
 We catch it in the basket, and put it in the canoe.
- (6) *K-i-û(m)a vóva k-em-âvo (tupela uh) riêmpin*
 RL-1PL-(1PL)trawl again RL-1PL-hold TWO hes two
k-e-m-ikoro-wo poro.
 RL-1PL-1PL-put.in-DOWN canoe
 We catch one in the net again, hold it and put the second one in the canoe.
- (7) *Yake k-em-yára-ø-wo ya ró k-o-r-ê ya*
 enough RL-1PL-see-3SG.F-DOWN and mouth RL-3SG.F-3SG.F-full and
k-emi-tá
 RL-1PL-paddle
 Alright, we look down and the basket is full and we paddle off.
- (8) *K-e-rö(m)[i] pí k-e-ní(m)i-ø ya k-en-tá*
 RL-1PL-(1PL)stand water RL-1PL-(1PL)wash-3SG.F and RL-1PL-paddle
k-e-m-aro.
 RL-1PL-1PL-go.down
 We stand and wash them and then we paddle down.

- (9) *k-em[i]-tá k-e-m-aro ôro ya k-em-ríri ya k-e-no(m)[i]*
 RL-1PL-paddle RL-1PL-1PL-go.down house and RL-1PL-heap and RL-1PL-go.along
ôro ya k-emi-râivi.
 house and RL-1PL-cook
 We paddle home and heap up (the prawns) and go home and cook (them).
- (10) *Pîn=a k-emi-ruvoro ya k-ě-m-a.*
 some=PRM RL-1PL-smoke and RL-1PL-1PL-eat
 We smoke some and eat them.
- (11) *A yake*
 thing enough
 The end.

Ôi ‘Sago’ — Maria Walan

This is a spoken text, recorded on tape and transcribed with the help of the speaker, Maria Walan and others in 2001.

- (1) Ok *úri roro nai n-en-bari-ko (na singautim) ya*
 OK morning day early IRR-1SG.F-stand-UP (AND CALL OUT) and
n-e-ĩ(n)-á-ko ám nění Cha Paulus
 RL-1SG.F-1(1SG.F)call.out-3SG.M-UP husband 1SG.F AT PN
 OK. In the morning I get up and call up to my husband, Cha Paulus,
- (2) *‘N-ama-bari-ko.*
 IRR-2SG.M-stand-UP
 ‘Get up.
- (3) *Têrú=va n-ama-ko raka=va n-ama-ko*
 sago.iron=PRM IRR-2SG.M-get.SGO husking.stick=PRM IRR-2SG.M-get.SGO
n-a-no(m)i n-a-m-ikoro poro.
 IRR-2SG.M-(2SG.M)go.along IRR-2SG.M-2SG.M-put.in canoe
 Get your sago iron, get your husking stick and put them in the canoe.
- (4) *Nění ora=va n-en-ko rîná=va n-en-ko*
 1SG.F bucket=PRM IRR-1SG.F-get.SGO limbum=va IRR-1SG.F-get.SGO
n-e-n-ikoro poro.
 IRR-1SG.F-1SG.F-put.in canoe
 And me, I’ll get my bucket and I’ll get my limbum and I’ll put them in the canoe.
- (5) *N-epi-tá (ôî=a) n-epi-kô(p)e uka*
 IRR-1DU-paddle (sago=PRM) RL-1DU-(1DU)go.up bush
 We’ll paddle up to the bush.
- (6) *Ôî=a n-ama-iro-m-o-ni ôî bârêm*
 sago=PRM IRR-2SG.M-fell-AG-GIVE-1SG.F sago thorn
n-ama-iro-m-o-ni
 IRR-2SG.M-fell-AG-GIVE-1SG.F
 You’ll cut down a sago palm for me, you’ll cut down a thorny sago palm for me.
- (7) *N-ama-ti pinis n-a-m-aka.*
 IRR-2SG.M-strip PERF IRR-2SG.M-2SG.M-pound.sago
 Once you’ve stripped it, you’ll pound the sago.
- (8) *Nění óté n-en-rîrá âî=a n-en-iro óté*
 1SG.F support IRR-1SG.F-stake tree=PRM IRR-1SG.F-fell support
n-e-n-á-ø.
 IRR-1SG.F-1SG.F-make-3SG.F
 And me, I’ll set up the supports, I’ll cut down a tree and set up the supports.

- (9) *Bôintin n-en-rewu paipaka n-e-n-á-u ôi=a*
 shute RL-1SG.F-place.flat box IRR-1SG.F-1SG.F-make-3SG.F sago=PRM
n-en-tôi.
 IRR-1SG.F-rinse
 I'll place the shute and make a box and wash sago.
- (10) *Rîná n-e-n-ere ôi=a n-en-tôi (pinis)*
 limbum IRR-1SG.F-1SG.F-put sag=PRM IRR-1SG.F-rinse PERF
 I put down some limbum and wash sago.
- (11) *n-en-tôi-kí n-o-bâun-kí.*
 IRR-1SG.F-rinse-AWAY IRR-3SG.F-not.be-AWAY
 I'll wash it until it's done.
- (12) *Bariri orau n-en-buáú óko n-en-órá rau=a*
 afternoon bucket IRR-1SG.F-sew.up.bucket box IRR-1SG.F-stand ginger.leaf=PRM
n-en-kiri<n>o ya ôi=a n-en-ríri .
 IRR-1SG.F-(1SG.F)line and sago=PRM IRR-1SG.F-heap
 In the afternoon I sew up a limbum bucket and line it with ginger leaves, I
 stand the box up and I heap the sago (into the bucket).
- (13) *Ôi=a n-en-ríri. Yake. Bariri umo k-a-r-aro*
 sago=PRM IRR-1SG.F-heap enough afternoon sun RL-3SG.M-3SG.M-go.down
bén ya tá n-epi-p-aro báru yin.
 already and paddle IRR-1DU-1DU-go.down return beach
 Alright, in the afternoon, when the sun has gone down, then we'll paddle
 back to the beach.
- (14) *N-en-rín-ko ôi=a n-en-châró n-e-no<n>[i]*
 IRR-1SG.F-pull-UP sago=PRM IRR-1SG.F-carry.on.head IRR-1SG.F-(1SG.F)go.along
n-en-órá-ko ôro.
 IRR-1SG.F-stand-UP house
 I'll pull the canoe ashore and carry the sago on my head and put it up in the
 house.
- (15) *Pí=va n-e-ní<n>[i] (pinis). Pí n-e-ní<n>[i]*
 water=PRM IRR-1SG.F-(1SG.F)bathe PERF water IRR-1SG.F-(1SG.F)wash
bén noréká n-e-n-ikoko chá n-en-chara
 already laplap IRR-1SG.F-1SG.F-wear head IRR-1SG.F-comb
n-e-no<n>[i] n-e-ké<n>[i] âi mó.
 IRR-1SG.F-(1SG.F)go.along IRR-1SG.F-(1SG.F)sit tree dust
 After I've washed, I'll put on some clothes, comb my hair and go and sit at
 the fireplace.

(16) *Âi=a n-e-n-ere ôi=a n-en-râivi.'*
wood=PRM IRR-1SG.F-1SG.F-put sago=PRM IRR-1SG.F-fry
I'll get a fire going and fry sago.'

(17) *A yake*
thing enough
The end.

Taveke pê keko rôpe? ‘Where did they get tobacco?’ — Matthew Nakombo

This text was originally hand-written by Matthew Nakombo in 2001. I have typed it out here, following his spelling and punctuation exactly. This speaker generally uses a hyphen between two vowels to indicate the HL and HLH tones. In some cases complex words are written as one word, while in other cases there are spaces between morphemes. The separation of the text into paragraphs also follows the original. The glossed examples are transposed into the thesis orthography. Each numbered example will refer to a portion of the original text separated by full stops.

(1) *Tora Rayau, apo memi Barupu taveke eko rope.* (2) *Tora bi-iy memi ti-iy erru-pe va ke pa veka taveke.* (3) *Bom bi-iy biam bi-iy erru pe pana nerue-re.* (4) *Neperu pua ummo o ne ta-ta rikeren.* (5) *Novotata ya neroro o ne-pa.* (6) *Neopi neparo apon o torore pe ya ne pa.*

- (1) **tora raiyau ápo mēmí barupu taveke [k]-e-ko**
 long.ago great.grandparent grandparent 1PL PLN tobacco RL-3PL.M-get.SGO
rôpe
 where
- (2) **tora bĩ mēmí tĩ eru pê=va k-e-p-á beka**
 long.ago ancestor 1PL vine bush.tobacco leaf=PRM RL-3PL.M-3PL.M-do like
taveke
 tobacco
- (3) **bóm bĩ biám bĩ eru pê pana n-e-ruere**
 woman ancestor man ancestor bush.tobacco leaf strong RL-3PL.M-pick
- (4) **n-e-p-ere-p-o-a umo o n-e-tata**
 IRR-3PL.M-3PL.M-put-AG-GIVE-3SG.M sun OR RL-3PL.M-lay.flat.on
rikeren
 smoking.platform
- (5) **n-o-votata ya n-e-róró o n-e-p-á**
 IRR-3SG.F-hard and IRR-3PL.M-roll OR RL-3PL.M-3PL.M-do
- (6) **n-e-ô(p)i n-e-p-aro apón o torore pê**
 IRR-3PL.M-(3PL.M)crumple IRR-3PL.M-3PL.M-go.down banana OR tree.sp leaf
ya n-e-p-á
 and IRR-3PL.M-3PL.M-do

In the old days, where did our Barupu great-grandparents and grandparents get tobacco? In the old days, our ancestors smoked bush tobacco as tobacco. Our female ancestors, our male ancestors picked strong bush tobacco leaves there. They would dry them in the sun or put them on a smoking platform. When it was dry, they would roll, or smoke, it. They would crumple it down onto a banana or *torore* leaf and smoke it.

(7) *Erru-pe tora bi-iy memi kepa ato ke.* (8) *Kokae kuinia riy apo raeyau memi.*
 (9) *Kokae apo ti-vova epere-rei yo aka memi mare.* (10) *Erru pe va kepa kuinia ri-iy*
aro buso kekope, yei baun ke pa kono.

- (7) **eru** **pê tora** **bĩ** **měmí k-e-p-á** **ato-ke**
 bush.tobacco leaf long.ago ancestor 1PL RL-3PL.M-3PL.M-do long.time-INTS
- (8) **k-o-kae** **k-u-ĩniá-r-ĩ-i** **ápo** **raiyau**
 RL-3SG.F-come RL-3SG.F-be.at-AG-WITH-3PL.M grandparent great.grandparent
měmí
 1PL
- (9) **k-o-kae** **ápo** **tí vôva**
 RL-3SG.F-come grandfather rope again
[k]-e-p-ere-ø-r-é-i **bió aka měmí mârê**
 RL-3PL.M-3PL.M-put-3SG.F-AG-FROM-3PL.M person father 1PL now
- (10) **eru** **pê=va** **k-e-p-á** **k-u-ĩniá-r-ĩ-i**
 bush.tobacco leaf=PRM RL-3PL.M-3PL.M-do RL-3SG.F-be.at-AG-WITH-3PL.M
aro buso k-e-kô(p)e **yéi bân k-e-p-á**
 people white RL-3PL.M-(3PL.M)go.up 3PL.M not.be RL-3PL.M-3PL.M-do
k-o-noi.
 RL-3SG.F-go.along

That bush tobacco, our ancestors smoked that for a long time. It came down to our great great grandfathers and great grandfathers. It came down to the next generation after that who gave it to our fathers now. They smoked bush tobacco. When white people came they were still smoking it.

(11) *Aro buso beya ekope purumo vae.* (12) *Ke kope moeke riyepin.* (13) *Ke paro baru oro yey.*

- (11) **aro buso beya [k]-e-kô(p)e** **prumo vai**
 people white NEG RL-3PL.M-(3PL.M)go.up many POL
- (12) **k-e-kô(p)e** **môike riêmpin**
 RL-3PL.M-(3PL.M)go.up one two
- (13) **k-e-p-aro** **báru ôro yéi**
 RL-3PL.M-3PL.M-go.down return house 3PL.M

White people didn't come in big lots. They came in ones and twos. Then they went back to their place.

(14) Roro ra bio bi-iy avo ya cha Menriri naki katiriri nae rau. (15) Kakoe uka bo-ko keipina Toe-yoro o Maemae. (16) Kako-oe, kako-oe ka tari romore boe anae o ero-ra. (17) Naki ara rore taveke pe bo ko reiki rore. (18) Umo po kokei ko noe. (19) Bio kaore ki biakuro kepe-peya. (20) Kairai kuro-kuro ya boe koka nape aki ke.

- (14) **roro ra bió bĩ awó yá cha menriri nâkí**
 day one person ancestor name 3SG.M AT PN dog
k-a-tiriri-nâ-i rau
 RL-3SG.M-hunt-APPL-3PL.M pig
- (15) **k-a-kôe uka boko k-e-p-iná Toeyôro o Maemae**
 RL-3SG.M-go.up bush place RL-3PL.M-3PL.M-name PLN OR PLN
- (16) **k-a-kôe k-a-kôe k-a-tari-romô-ré bə e anai**
 RL-3SG.M-go.up RL-3SG.M-go.up RL-3SG.M-break-AMID-3PL.F place garden huge
o erôra
 OR garden
- (17) **nâkí [k]-a-r-á-r-o-re taveke pê bə**
 dog RL-3SG.M-3SG.M-do-AG-REG-3PL.F tobacco leaf place
k-o-rei-kí-r-ô-re
 RL-3SG.F-fall-AWAY-AG-REG-3PL.F
- (18) **ũmó pó k-o-kéi k-o-noi**
 smoke mark RL-3SG.F-sit RL-3SG.F-go.along
- (19) **bió k-a-ore-kí biá kûro**
 person RL-3SG.M-look.around-AWAY person deep
k-e-p-e-p-ě-á
 RL-3PL.M-3PL.M-go-AG-FROM-3SG.M
- (20) **k-â-irai kuro-kûro yá bə e koka nape [k]-a-ki-ke**
 RL-3SG.M-say REDUP-deep 3SG.M place garden huge who RL-3SG.M-grill-INTS

One day a man called Menriri went hunting for pigs with his dog. He went to the bush to a place called *Toeyoro* or *Maemae*. He walked and walked and he broke through into a huge garden. The dog-spirit had planted lots of tobacco. The place was full of tobacco. There was telltale smoke. The man looked around and all his devils ran away (he was surprised). He asked deep inside himself, ‘This huge garden, who made it?’

(21) *Ka-po va ka kiro.* (22) *Nape bova ara ke rara ya akoe.* (23) *Oro va ve.* (24) *Kararo oro ya.* (25) *Uri ya unake rua va kako.* (26) *Kaute kakoe.* (27) *Karoe rowo ae ko ka nae naki akei roko para.* (28) *Bio kakei kuri ki.* (29) *Ummo rutu kara-rae.* (30) *Naki ya kara-ro rara ya nararo e-rora ya.*

- (21) **kapo=va k-a-kiro**
footprint=PRM RL-3SG.M-look.around
- (22) **nâpe bo=va [k]-a-r-á-ø-ke rara yá**
who place=PRM RL-3SG.M-3SG.M-make-3SG.F-INTS road 3SG.M
[k]-a-kôe
RL-3SG.M-go.up
- (23) **ôro=va bé**
house=PRM DPROX
- (24) **k-a-r-aro ôro yá**
RL-3SG.M-3SG.M-go.down house 3SG.M
- (25) **úri ya unake rua=va k-a-ko**
morning and alone bow=PRM RL-3SG.M-get.SGO
- (26) **k-á-ute k-a-kôe**
RL-3SG.M-walk RL-3SG.M-go.up
- (27) **k-a-rói-ro-wo âi koka nai nâkí [k]-a-kéi-ro-ko para**
RL-3SG.M-stand-HID-DOWN tree trunk large dog RL-3SG.M-sit-HID-UP post
- (28) **bió k-a-kéi k-o-úri-kí**
man RL-3SG.M-sit RL-3SG.F-morning-AWAY
- (29) **umo rútu k-a-r-ârái**
sun antenna RL-3SG.M-3SG.M-throw
- (30) **nâkí ya k-a-r-aro rara yá n-a-r-aro erôra**
dog and RL-3SG.M-3SG.M-go.down road and IRR-3SG.M-3SG.M-go.down garden
yá
3SG.M

He looked around for footprints. Whoever made this garden, his road goes up. This is the way to his house. He went down to his house. The next day (very early), and he got a bow went up all alone. He stood hidden in the tree that the dog normally hid up in the roots of. The man sat there until daybreak. The sun threw its rays. The dog-spirit then came along his road to go to his garden.

(31) *Bio Cha Menriri ka kei rowuo ae uru para ka-ore rari ya Naki.*

- (31) **bió cha menriri k-a-kéi-ro-wo âi uru parâ**
man AT PN RL-3SG.M-sit-HID-DOWN tree root other.side
k-a-ore-r-a(r)í-a nâkí
RL-3SG.M-look.out-AG-⟨AG⟩SRND-3SG.M dog

(31) The man, Menriri, sat hidden behind the other side of tree roots looking out for Naki.

(32) *Naki kararo ka-kae ae-uru para.* (33) *Rere-tora ka taereri ko, ka rere rowuo ae-uru para.* (34) *Bio tare kairai.* (35) *awa.* (36) *bio va kana yaraka ve.en.* (37) *Bio ve bova kara we.*

- (32) **nâkí k-a-r-aro** **k-a-kae** **âi uru parâ**
 dog RL-3SG.M-3SG.M-go.down RL-3SG.M-come tree roots other.side
- (33) **reretora k-a-tai-r-eri-ko** **k-a-r-ere-ro-wo** **âi**
 skin RL-3SG.M-shed-AG-SEP.SG-UP RL-3SG.M-3SG.M-put-HID-DOWN tree
uru parâ
 root other.side
- (34) **bió târe k-â-irai**
 person new RL-3SG.M-say
- (35) **a=va**
 thing=PRM
- (36) **bió=va k-ana-yarâ-ká bân**
 person=PRM RL-1SG.M-see-3SG.M already
- (37) **bió bé bɔ=va k-a-r-á-u** **bé**
 person DPROX place=PRM RL-3SG.M-3SG.M-make-3SG.F DPROX

The dog-spirit came to the other side of the tree roots. He took off his disguise and hid it in the tree roots on the other side. The man said, 'That's it! This man I've just seen, is the man who made the garden.'

(38) *Katova kanoi.* (39) *Bariri.* (40) *Kakae karoe rowo kaore rariya naki.*

- (38) **k-a-tova** **k-a-noi**
 RL-3SG.M-walk.around RL-3SG.M-go.along
- (39) **bariri**
 afternoon
- (40) **k-a-kôe** **k-a-rói-ro-wo**
 RL-3SG.M-go.up RL-3SG.M-stand-HID-DOWN
k-a-ore-r-a(r)í-a **nâkí**
 RL-3SG.M-look.out-AG-(AG)SRND-3SG.M dog

He went for a walk. In the afternoon, he went back up and hid and looked out for the dog-spirit.

(41) *Bariri ya Naki ka-kae ke reretora narikio ya na koe oro ya.*

- (41) **bariri ya nâkí k-a-kae** **ke** **reretora n-a-r-ikio** **ya**
 afternoon and dog RL-3SG.M-come PURP₁ skin RL-3SG.M-3SG.M-put.on and
n-a-kôe **ôro yá**
 IRR-3SG.M-go.up house 3SG.M

It was afternoon and Naki came to put his skin back on and go home.

(42) *Cha Menriri ka roi rari taa ya nâki ya kai rai rua naki. (43) Bo na-nom ro?*

- (42) **cha menriri k-a-rói-r-a⟨r⟩i-ø** **tã yá nâki ya**
 AT PN RL-3SG.M-stand-AG-⟨AG⟩SRND-3SG.F skin 3SG.M dog and
k-â-irai-r-o-a **nâki**
 RL-3SG.M-say-AG-GIVE-3SG.M dog
- (43) **bo n-a-no⟨m⟩i** **rô**
 TVF IRR-2SG.M-⟨2SG.M⟩go.along where

But Menriri was standing in the way of the dog.spirit's skin and he said to him, 'Where do you think you're going?'

(44) *Naki kairai rua Cha Menriri. (45) Narom ki mo-na ke. (46) Kana nakone oro nena. (47) Rara karom mamina. (48) Naki kara kobaun naka. (49) Ya ka tere rua bio Cha Menriri. (50) Ameremo arape?*

- (44) **nâki k-â-irai-r-o-a** **cha menriri**
 dog RL-3SG.M-say-AG-GIVE-3SG.M AT PN
- (45) **n-a-rô⟨m⟩i-kí-m-o-na-ke**
 IRR-2SG.M-⟨2SG.M⟩stand-AWAY-AG-GIVE-1SG.M-INTS
- (46) **k-a-n-á** **n-a-kô⟨n⟩e** **ôro něná**
 RL-1SG.M-1SG.M-want IRR-1SG.M-⟨1SG.M⟩go.up house 1SG.M
- (47) **rara k-a-rô⟨m⟩i-m-a⟨m⟩i-na**
 road RL-2SG.M-⟨2SG.M⟩stand-AG-⟨AG⟩SRND-1SG.M
- (48) **nâki k-a-r-á** **k-o-bâun[i]-nâ-ka**
 dog RL-3SG.M-3SG.M-make RL-3SG.F-not.be-APPL-3SG.M
- (49) **ya k-a-tere-r-o-a** **bió cha menriri**
 and RL-3SG.M-ask-AG-GIVE-3SG.M person AT PN
- (50) **[k]-a-m-ere-m-ô-ø** **arâpe**
 RL-2SG.M-2SG.M-like-AG-REG-3SG.F what

The dog-spirit said to Menriri, 'Get out of my way. I want to go home and you are blocking my path.' The dog-spirit tried but had no luck and he asked the man, Menriri, 'What do you want?'

(51) *Menriri ka tere rua naki. (52) Bauni. (53) Kana nana tere noma erora nape ara ke?*

- (51) **menriri k-a-tere-r-u-a** **nâki**
 PN RL-3SG.M-ask-AG-GIVE-3SG.M dog
- (52) **bâuni**
 not.be
- (53) **k-ana-tere-n-o-ma** **erôra nâpe [k]-a-r-á-ø-ke**
 RL-1SG.M-ask-AG-GIVE-2SG.M garden who RL-3SG.M-3SG.M-make-3SG.F-INTS

Menriri asked the dog, 'No, I want to ask you, "This garden, who made it?"'

(54) *Naki kairai bauve ke!*

- (54) **nâkí k-â-irai bauve-ke**
dog RL-3SG.M-say not.know-INTS

The dog spirit said, 'No idea!'

(55) *Cha Menriri kairai rua naki beka. (56) Nanom ae kera ra kona kam taveke nepi roro.*

- (55) **cha menriri k-â-irai-r-o-a nâkí beka**
AT PN RL-3SG.M-say-AG-GIVE-3SG.M dog like
- (56) **n-a-no(m)[i] âi kéra ra [n-a]-ko**
IRR-2SG.M-(2SG.M)go.along wood fire one IRR-3SG.M-get.SGO
n-a-ka(m)[e] taveke n-epi-róró
IRR-2SG.M-(2SG.M)come tobacco IRR-1DU-roll

Menriri spoke to the dog-spirit like this, 'Go and bring some firewood back and we'll roll a smoke.'

(57) *Naki kanoe aekera kako kakae. (58) Cha Menriri rei Naki taveke kere roro apon pe.*

- (57) **nâkí k-a-noi âi kéra k-a-ko k-a-kae**
dog RL-3SG.M-go.along wood fire RL-3SG.M-get.SGO RL-3SG.M-come
- (58) **cha menriri rê nâkí taveke k-ere-róró apón pê**
AT PN and dog tobacco RL-3DU-roll banana leaf

The dog-spirit went and brought some firewood back and Menriri and the dog-spirit rolled tobacco in banana leaves.

(59) *Naki ya taveke pe karoro. (60) Cha Menriri erru pe karoro. (61) Cha Menriri katere rua naki. (62) To mema arape ama we? (63) Naki kai rai rua Cha Menriri. (64) To mema taveke arape kama we? (65) Kere tere varu-varu.*

- (59) **nâkí yá taveke pê k-a-róró**
dog 3SG.M tobacco leaf RL-3SG.M-roll
- (60) **cha menriri eru pê k-a-róró**
AT PN bush.tobacco leaf RL-3SG.M-roll
- (61) **cha menriri k-a-tere-r-o-a nâkí**
AT PN RL-3SG.M-ask-AG-GIVE-3SG.M dog
- (62) **to mēmá arâpe [k]-a-m-á bé**
CQ 2SG.M what RL-2SG.M-2SG.M-do DPROX
- (63) **nâkí k-â-irai-r-o-a cha menriri**
dog RL-3SG.M-say-AG-GIVE-3SG.M AT PN
- (64) **to mēmá taveke arâpe k-a-m-á be**
so 2SG.M tobacco what RL-2SG.M-2SG.M-do DPROX

- (65) **k-ere-tere báru-báru**
RL-3DU-ask REDUP-return

The dog-spirit rolled tobacco. Menriri rolled bush tobacco. Menriri asked the dog, 'What are you smoking?' The dog-spirit asked Menriri, 'What tobacco are you smoking?' They asked (each other) back and forth.

(66) *Naki kai rai nena taveke pe aka kana we.* (67) *Karua Cha Menriri.* (68) *Ka tutu ko, koja ki.* (69) *Menriri kai rai rua.* (70) *Ae taveke mema konevai ke.*

- (66) **nâkí k-â-irai nĕná taveke pê aka k-a-n-á bé**
dog RL-3SG.M-say 1SG.M tobacco leaf real RL-1SG.M-1SG.M-do DPROX
- (67) **k-a-r-o-a cha menriri**
RL-3SG.M-3SG.M-give-3SG.M AT PN
- (68) **k-a-tûtú-ko k-o-îte-a-kí**
RL-3SG.M-inhale-UP RL-3SG.F-burn-3SG.M-AWAY
- (79) **menriri k-â-irai-r-o-a**
PN RL-3SG.M-say-AG-GIVE-3SG.M
- (70) **ai taveke mĕma k-o-nĕwai-ke**
EXCL tobacco 2SG.M RL-3SG.F-good-INTS

The dog-spirit said, 'I'm smoking real tobacco here.' He gave it to Menriri He inhaled and it burned him. Menriri said, 'Hey, your tobacco is really good!'

(71) *Cha Menriri eru pe karua Naki.* (72) *Ka tutu ko.* (73) *Naki kairai rua Cha Menriri.* (74) *Ae taveke ve beya onevai bae.* (75) *Ae pe aka kama we.* (76) *Taveke aka baru be-e.*

- (71) **cha menriri eru pê k-a-r-o-a nâkí**
AT PN bush.tobacco leaf RL-3SG.M-3SG.M-give-3SG.M dog
- (72) **k-a-tûtú-ko**
RL-3SG.M-inhale-UP
- (73) **nâkí k-â-irai-r-o-a cha menriri**
dog RL-3SG.M-say-AG-GIVE-3SG.M AT PN
- (74) **ai taveke bé beya [k]-o-nĕwai bai**
EXCL tobacco DPROX NEG RL-3SG.F-good POL
- (75) **âi pê aka k-a-m-á be**
tree leaf real RL-2SG.M-2SG.M-do DPROX
- (76) **taveke aka báru be**
tobacco real return DPROX

Menriri gave the dog-spirit some bush tobacco. He inhaled it. The dog-spirit said to Menriri, 'Hey, this tobacco is no good. You're smoking tree leaves! This is the real tobacco!'

(77) *Naki kairairua Cha Menriri.* (78) *Uri ba ra namako nemena kom.* (79) *Nena uri taveke ura ra nako nanaro noma.*

- (77) **nâkí k-â-irai-r-o-a** **cha menriri**
dog RL-3SG.M-say-AG-GIVE-3SG.M AT PN
- (78) **úri bá ra n-ama-ko** **n-em-e-na-kô(m)e**
morning fish one IRR-2SG.M-get.SGO RL-2SG.M-BEN-1SG.M-⟨AG⟩go.up
- (79) **něná úri taveke ura ra [n-a]na-ko**
1SG.M morning tobacco black one IRR-1SG.M-get.SGO
n-a-n-aro-n-o-ma
IRR-1SG.M-1SG.M-go.down-AG-GIVE-2SG.M

The dog-spirit said to Menriri, ‘Tomorrow, bring me a fish. And me, tomorrow I will bring a stick of dried tobacco for you.’

(80) *Cha Menriri kairairua.* (81) *To-bo ya kobariri.* (82) *Yake mema nakome.*
(83) *Nena nanaro.* (84) *Uri ya kope nepi kape be erora.*

- (80) **cha menriri k-â-irai-r-o-a**
AT PN RL-3SG.M-say-AG-GIVE-3SG.M
- (81) **to bɔ ya k-o-bariri**
CQ place and RL-3SG.F-afternoon
- (82) **yake mēmá n-a-kô(m)e**
enough 2SG.M IRR-2SG.M-⟨2SG.M⟩go.up
- (83) **něná n-a-n-aro**
1SG.M IRR-1SG.M-1SG.M-go.down
- (84) **úri ya kope n-epi-ka(p)e** **bé erôra**
morning and then IRR-1DU-⟨1DU⟩come DPROX garden

Menriri said to him, ‘So, it’s afternoon. Alright, you go up. and me, I’ll go down. When it’s morning we’ll come back here to the garden.’

(85) *Uri Cha Menriri re Naki kere kape bo-po erora ya Naki.* (86) *Cha Menriri ba va karua Naki.* (87) *Naki taveke ura karua Cha Menriri ya kerekepi mutu taveke kere roro.* (88) *Bariri yake naki taveke tare, ura, iri kara rua ya bariri kararo oro.* (89) *Naki kakoe oro ya.*

- (85) **úri cha menriri rê nâkí k-ere-ka(p)e** **bɔ pɔ erôra yá nâkí**
morning AT PN and dog RL-3DU-⟨3DU⟩come place scar garden 3SG.M dog
- (86) **cha menriri bá=va k-a-r-o-a** **nâkí**
AT PN fish=PRM RL-3SG.M-3SG.M-give-3SG.M dog
- (87) **nâkí taveke ura k-a-r-o-a** **cha menriri ya**
dog tobacco black RL-3SG.M-3SG.M-give-3SG.M AT PN and
k-ere-ké(p)í mutu taveke k-ere-róró
RL-3DU-⟨3DU⟩sit betel.nut tobacco RL-3DU-roll

- (88) **bariri yake nâkí taveke târe ura îrí**
 afternoon enough dog tobacco raw black seed
k-a-r-á-r-o-a **ya bariri k-a-r-aro**
 RL-3SG.M-3SG.M-do-AG-GIVE-3SG.M and afternoon RL-3SG.M-3SG.M-go.down
ôro
 house
- (89) **nâkí kakôe ôro yá**
 dog RL-3SG.M-go.up house 3SG.M

In the morning Menriri and the dog-spirit came back to the marked out place in the dog's garden. Menriri gave the dog-spirit a fish. The dog-spirit gave Menriri some dried tobacco and they sat chewing betel nut and rolling tobacco. It was afternoon, alright, the dog-spirit made up some raw tobacco, some dried and some seeds for him and in the afternoon he went home. The dog-spirit went up to his house.

(90) *Cha menriri taveke iri kaporo ke, tare kati, kakoe oro ya. (91) Ura karoro karau. (92) Bio eva keko tetere pua. (93) Arape ama eva kuria-emo.*

- (90) **cha menriri taveke îrí k-a-poro-ke târe k-a-tí**
 AT PN tobacco seed RL-3SG.M-wrap-INTS new RL-3SG.M-tie.up
k-a-kôe oro yá
 RL-3SG.M-go.up house 3SG.M
- (91) **ura k-a-róró k-a-r-áu**
 black RL-3SG.M-roll RL-3SG.M-3SG.M-do
- (92) **bió ê=va k-e-ko [k]-e-tere-p-o-a**
 person smell=PRM RL-3PL.M-get.SGO RL-3PL.M-ask-AG-GIVE-3SG.M
- (93) **arâpe [k]-a-m-á ê=va k-u-iriá=emo**
 what RL-2SG.M-2SG.M-smoke smell=PRM RL-3SG.F-smell=DREF

Menriri wrapped the seeds up, tied up the raw tobacco and went up to his house. He rolled and smoked the dry tobacco. Some men smelled it and asked him, 'What are you smoking that smells?'

(94) *Menriri kairai roi ke kepi ya yamankoko Menriri kakoe ari, taveke ura kako na rina, kara rito ka vani roi.*

- (94) **menriri k-â-irai-r-o-i k-e-ké(p)[í]-î-a**
 PN RL-3SG.M-say-AG-GIVE-3PL.M RL-3PL.M-(3PL.M)sit-WITH-3SG.M
yamankóko menriri kakôe ărí taveke ura k-a-ko
 verandah PN RL-3SG.M-go.up inside tobacco black RL-3SG.M-get.SGO
na ríná k-a-rarito k-a-vani-r-o-i
 AND sago.bark RL-3SG.M-untie RL-1SG.M-deal.out-AG-GIVE-3PL.M

Menriri told them to sit with him on the verandah. Menriri went inside and got all the dried tobacco and some sago bark. He untied the parcel and dealt it out to them.

(95) *Bio kepa kirai pua.* (96) *Taveke amako rope?* (97) *Kanako iya naki-bio bere Toe-Yoro*

- (95) **bió k-e-p-á k-e-irai-p-o-a**
 person RL-3PL.M-3PL.M-do RL-3PL.M-say-AG-GIVE-1SG.M
- (96) **taveke [k]-ama-ko rôpe**
 tobacco RL-2SG.M-get.SGO where
- (97) **k-ana-ko-î-a nâkí bió bere toeyôro**
 RL-1SG.M-get.SGO-WITH-3SG.M dog person DDIST PLN

The men tried it and said to him, 'Where did you get the tobacco from?' 'I got it from a dog-man there at Toeyoro.'

(98) *Yake taveke iri karere kere kore ya ka vani roe Barupu bi-iy keora kuina ri-iy mare.* (99) *Taveke iri keore papi.* (100) *Kea-vo kupana.* (101) *Erru-pe ya ova koneparae.*

- (98) **yake taveke írí k-a-ríré k-ere-kô(r)e ya**
 enough tobacco seed RL-3SG.M-sow RL-3SG.F-(3SG.F)go.up and
k-a-vani-r-o-i barupu bí k-e-ora
 RL-3SG.M-deal.out-AG-GIVE-3PL.M PLN ancestor RL-3SG.M-guard
k-u-ín[i]á-r-î-i mâre
 RL-3SG.F-be.at-AG-WITH-3PL.M now
- (99) **taveke írí k-e-ore-p-a(p)í-ø**
 tobacco seed RL-3SG.M-look.out-AG-(AG)SRND-3SG.F
- (100) **K-ey-âvo kup[u]ana**
 RL-3PL.F-hold.SG.F strong
- (101) **eru pê ya í=va k-o-nepará-i**
 bush.tobacco leaf 3SG.M breath=PRM RL-3SG.F-forget-3PL.M

Alright, he planted tobacco seeds and when they grew he dealt them out to all the Barupu big men. They looked after them well so we they are still with them today. They guarded the seeds and they held strong tobacco. That bush tobacco, they've forgotten it.

(102) *Auirai wuo po kuinia.* (103) *Taveke erru re taveke pe.*

- (102) **au írai bó pô[n] k-u-íniá**
 thing say 3SG.F only RL-3SG.F-be.at
- (103) **taveke eru rê taveke pê**
 tobacco bush.tobacco and tobacco leaf

This is just the story. Bush tobacco and real tobacco.

(104) *Matthew Nakombo ka ne-e. 21-05-01*

- (104) **matthew nakombo k-a-n-ě**
 PN PN RL-1SG.M-1SG.M-write

Matthew Nakombo, I wrote it.

Appendix B

Barupu-English draft dictionary and English-Barupu finderlist

The Barupu — English Dictionary has been a collaborative effort. The project was started in 2000 by Lila San Roque and Mark Donohue. Mark and Lila ran dictionary workshops where they discussed how dictionaries and definitions are structured. At the workshop, participants chose an area of interest and were provided with exercise books in which to list words and write definitions with Tok Pisin and English translations. In 2001 Mark and I ran more dictionary workshops and collected the exercise books and typed in the definitions. The authors and the areas they were responsible for are:

Table B.1

Elizabeth Moskir	Animals
Philip Bakema	Plants
Cathleen Amunti	Verbs
Paula Akove	Adjectives
Matthew Moroka	Grammar words
Christopher Merecki	Natural world
Matilda Funil	Birds
Peter Wampai	Supernatural world
Joanne Karawa	Sea creatures

These definitions are the core of the dictionary, comprising around 150 words. Approximately 700 words have been added through elicitation and texts. The dictionary has been through two proof-reading committees, in late 2001 and in 2003, but it is still very much a work in progress. The layout of the draft included here is an automatic output of Shoebox's Multi-Dictionary Formatter. Later drafts will be more user friendly for speakers (see Corris et al. 2004). Drafts produced for the community are tri-lingual: Barupu-Tok Pisin-English.

A - a

- a** *n.* thing. *Variant:* au.
- a** *n.* rain.
- a kuai** it's raining. **A kuaikeni.** It's raining on me.
- a** *3s:* kora, kara. *v.* make, do, want, try. **Poro kana.** I'm making a canoe. **Kena pi nenton.** I want to drink water.
- a** *3s:* kora, kara. *v.* eat. **Akorom kemarairoki ro. Kemikimari ya kemirovo.** We take food into the mouth, chew it and swallow it. **Ma Pita, nameka ba va nama.** Mr Peter, come and eat fish.
- a a** *3s:* a kora, a koraka. *v.* feel sick. **Era a korama?** Are you sick?
- a'a** *n.* excreta.
- a'a kore'e** *v.* defecate.
- ai** *n.* wood, tree, stick.
- ai kera** *n.* fire.
- ai kumo** *n.* smoke.
- ai mo** *n.* ash.
- ai u** *n.* tree branch. *See:* u.
- aicho** *v.* sneeze.
- aimana** *n.* dog. *Syn:* rapa; naki.
- aimon** *n.* knife.
- aimon biyin** *n.* machete.
- aimon kamo** *n.* axe. *See:* keu.
- ainieke** *n.* kind of crab. *It has long colourful claws.*
- aipetare** *adj.* *v.* green, be green. **Ai pe'e keretare.** The colour of new leaves. **Am neni no aipetare kakoroni.** My husband bought a green laplap for me. *See:* ai; pe'e; tare.
- airo** *n.* breadfruit. **Airo iri kora kokoi, koka kopako ya aka kuave ya kemu kema.** They plant the breadfruit seed. It grows big and bears fruit. Then we harvest and eat it. **Chataita nena airo puru riyempin kapoi kakai oro.** Father carried two bundles of breadfruit home on his shoulder. *We eat the seeds of this one. See:* avo.
- aita** *n.* green vegetable. **Aita mi namarere erora. Nerekore, namuru, namaraivi nama.** Throw seeds in the garden. When they're grown, harvest, cook and eat. **Chakan aita karuru katititi, ai ya karai kanoi oro.** My father got some greens, bundled them on sticks and went home. *Variant:* yere; epanau.
- aitara** *v.* waste time. **Kaitara.** He's just wasting time.
- aitem** *n.* areca palm, wild.
- aiten** *n.* redwood, red cedar. **Poro aiten.** Tree with good wood for making canoes, and all sorts of other furniture. **Aiten ero chapo nena kaorarona.** My grandfather planted that aiten tree for me. *This tree is light, not heavy.*
- aivoro** *n.* wallaby.
- aiyanen.** mareo fruit. **Kuave rere korananare. Ovu kerebriri, opo, aipetare.** Carries fruit in bunches. The fruit can be red yellow or green. *Pometia pinnata.* **Chakan memi aiyanen va kataruromi ta kema.** Our father collected some taun fruits for us to eat.
- aiyono** *n.* kind of fish.
- aka** *n.* father.
- aka** *3s:* kuaka, kuakaka. *v.* feel pain. **Ch a kuakaka; kom kuakani.** He has a sore head; I have a sore leg.
- aka** *adv.* really.
— *adj.* real.
- aka** *3s:* koraka, karaka. *v.* pound sago.
- akairi** *n.* stone.
- akorom** *n.* food.
- akoron** *n.* cloud. *Variant:* akron.
- akron** *n.* cloud. *See main entry:* akoron.
- am** *n.* husband.
- amo** *n.* rubbish.
- amo kotutu** *v.* sweep rubbish into piles. *See:* tutu.
- amo koriri** *v.* sweep up.
- amori** *n.* namesake celebration.
- anai** *adj.* large (things only).
- anaiaaka** huge. *Syn:* kasora. *See:* aka.
- anemporu** *n.* kind of crab. *Its eyes are on top of its body.*
- anie** *3s:* aniema, aniemu. *int.* shame on you.
- aninkoi** *n.* fish, doctor fish. *It lives in freshwater.*
- anoku** *n.* legend.
- anrovo** *n.* kind of bird.
- anru** *n.* tree. **Ai anru bo poro pon nema.** A tree for making canoes. **Anru kopu kuorarona.** My grandmother planted an anru tree for me.
- antam** *n.* melon. **Antam a kereku toro. Antam iri va kererorokekere.** A large juicy fruit with red and yellow flesh. **Antam a amori korarua o bo.** She gave some melons to her namesake for a festival present.
- ao** *v.* wrap tightly, bandage, package. *3s:* kuao, kao.
- ao** *int.* yes.
- aoma** *n.* pitpit. **Rika kemora erora. I koti aka koraro. kemaro kemiki kema.** White spike-shaped flower bud - edible. We plant it in the garden, when it grows big we eat it. **Aoma**

apara

kereraroraro toro. Pitpit bears a lot of food.
Syn: o.

apara *n.* cuscus. **Ame vo koramoramo ai nake. Tu ririva koruinia. Pe'e va koropum. Bei vo bio kepa.** A tree animal, it has a long tail. It has thick fur on its skin and people eat the meat. **Chapo apara kati.** Grandfather shot the cuscus. *The fur is used for decorations in singsings. Variant: niamparate.*

apata *n.* left-hand side. *Ant:* awaka.

apomema *n.* kind of flying fox.

apon *n.* banana. **Meke vo po kema kemora erora. Pe'e vo kereperiperi aka vo kuoto.** We dig a hole for the shoots and plant them in the garden. The leaves are very big. They taste really good. **Apon ro ai ya kaneretau.** I tied the ripe bananas onto a stick to be carried. *We use fruits for special occasions. See: trore.*

apona *n.* vine. **Apona pe'e periperi kokoiro ai. Apona iri va koro ru'u va kepa.** A vine or climber that can climb into the highest tree. When the seeds are ripe birds eat them. **Apona pe'e peri pin a namaka ke kuan oi ya nuri.** Get some big leaves from the climbing vines for mother to put around the sago.

apopoi *n.* butterfly.

ara *3s:* a kuara, a kuaraka. *v.* not know how to do something. **Oi raivi kuaramu.** You don't know how to fry sago.

ara *n.* kind of crow.

ara uka bush crow. *See:* uka.

arai *3s:* korarai, kararai. *v.* throw.

arape *q.* what. *Variant:* ara.

arararia *adj.* pink. **A bririna.** The colour of something reddish. **Cha Pita aniare arararia kara.** Peter ate a pink aniare.

ari *loc.* inside.

ari *n.* bark apron worn at the front by women for singsings.

arikaka *v.* step over something.

ariku *n.* waist, hips.

aritu *n.* long bark apron worn at the back by men for singsings. *See:* ari; tu.

aro *3s:* koraro, kararo. *v.* go down towards the coast.

aro *n.* people. *See:* bio.

aro koro *v.* cry. **Am nen kakai Vanimo, aro kenronova.** My husband is in Vanimo, I cry for him.

aro pe'en. tulip. **Pe'e marau vo kemau. Kemiraivi. Kema.** Vegetable with two leaves. Some were planted by people some grow wild. *Ghetum gnemon.* **Aro pe'e ne mu kemitoike kemiraivi. Oi kema.** It is cooked with

coconut cream and eaten with sago. *See:* pe'e.

aro viri *n.* dead people. **Bio keviru kemeremere me'eri kuro. Bio viri prumo (maumau) kemirai aro viri. Bio kuro rare ye bio tare keviriviri ero, kemirai puru anai aka aroviri.** Dead people, who are no longer alive. **Kopu korivo kore bo korei konoi yake o kokinakina koreroi aro viri yake aro kororo.** Grandma hears the thunder and remembers her dead relatives and weeps for them. *See:* bio rai.

aroi *n.* crow. **Ru'u nau, pe yei keroro kekei.** Seashore birds, their feathers are black. **Aroi ya kepupupu kenopi kikom.** The crows flew to the mangroves.

atata *3s:* kuatata, kuatataka. *v.* be invincible.

atatai *n.* aibika. **Pe'e kuaipetare. Rika keora erora. I koti. Pe'e nomaumau. Nema nenraivi nema.** Green leafy vegetable. You plant them and cook them when they are very leafy. *Hibiscus manihot.* **Atatai pe'e va kororo.** Aibika leaves are dark green.

atavairo *n.* fern. **Yara kekepi atavairo ka. Atavairo kerevinaire yara. Atavairo mara kepu koraivi ta nianta.** Crabs live among the roots of the atavairo. They pick the new buds of the atavairo and she cooks them with prawns. **Biare yara kuore baru atavairo ka.** The woman often looks for crabs among the atavairo roots.

au *See main entry:* a.

au irai *n.* story. *See:* a; irai.

au po *n.* dry coconut frond.

auka *n.* armpit, hook.

auka *n.* sore.

auna *n.* wild fruit. **Auna kepu nioropau oro ya bia pako.** They picked wild fruits and decorated a big man's house with it. **Bio bo taipo nanom auna va namu.** I can touch, hold or pick auna because I was already initiated. *Syn:* pieko.

aura *n.* bamboo. *See main entry:* maura.

ave *v.* be, become. **Bo nenave rau mo'o...** If I were a mother pig...

ave *conj.* with. **Neni avei mevova kema.** Me and the children are eating.

ave *v.* hang.

ave00 *3s:* kuaveroro, kaveroro. *v.* describe.

avo *v.* hold. **Ba keyavo.** The ladies hold the fish. **Aro bom ba keyavo.** The ladies hold the fish.

avo *n.* breadfruit. *We eat the meat of this one. See:* airo.

avovo *adj.* *v.* white, be white. **A buso.** The colour of something white. **Kwa Rote noreka avovo korikoko.** Miss Rote wears a white blouse. *Syn:* buso.

avovo

awa

awa *n.* string games. **Mevova awa kepa.** The children are playing string games.

awaika *n.* cassava. **Aka kuinia ka.** A root vegetable. *Manihot esculenta.* **Avaika ku va biribiri.** That cassava is very big. *Sometimes crushed dried roots of cassava is served as food for feast days and parties.*

awaka *n.* right-hand side. *Ant:* apata. *See:* aka.

awariroi *n.* firefly.

awo *n.* name.

awoku *v.* cough. **Bio kauku.** The man coughed.

awoto *v.* spit, laughter.

awoto korauke *v.* spit on.

awoto korara *v.* laugh.

awoto kereviri *v.* laugh. *See:* viri.

awoto korara, awoto karara. laugh. **Mepi awoto kepipapare aro mememe.** We laughed at all the little children.

awoto korara, awoto karara

ba

bio venavena

B - b

ba *n.* fish.
ba aimon *n.* fish, knife fish. *It lives in freshwater.*
ba iman *n.* kind of saltwater fish.
ba imo *n.* kind of freshwater fish.
ba niompon *n.* kind of freshwater fish.
ba numpa *n.* kind of freshwater fish.
ba poi *n.* kind of freshwater fish.
ba rina *n.* kind of freshwater fish.
ba vara *n.* kind of saltwater fish.
baikona *n.* kind of flying fox.
bakakeya *v.* sit facing someone.
banono *n.* bean. **Banono iri va kemirerere bo e.** Kerekore keyave. Kemu kema. Bean seeds are planted in the garden. When grown big they bear beans and corn. Then they are harvested and eaten. **Banono kereyerero.** **Primo va kereiippo toro.** There are many beans. They are very very big.
bara *v.* spy.
baraimomon *n.* kind of mangrove shellfish.
barem *n.* sago thorn.
baremo *n.* kind of wild fowl.
bariko *v.* get up. **Nombariko nake.** Get up. *See: koe.*
bariri *adv.* yesterday, in the afternoon.
kobariri it's afternoon.
baru *adv.* return.
batiku *n.* fish guts. *See: tiku. Variant: butoku.*
batiron *n.* clearing.
baune *n.* kind of eagle.
bauni *int. no. Variant: baun.*
kobaun not be at.
baunke *part.* not yet.
bauveke *part.* who knows!
be *dem.* this.
— *adv.* here.
be'en *adv.* already. *Variant: be'eni.*
bei *n.* flesh.
bei vori *v.* lose weight. **3s: bei koruvori, bei keyarovi.**
beka *part.* similar to, like.
beken *n.* kind of tree.
beku *part.* self.
bemo *dem.* this, that (already mentioned).
— *adv.* here, there (already mentioned).
Variant: bewo; emo; ewo; evo.
ben *n.* fireplace ashes.
bene *v.* sweat.
bere *dem.* that.
— *adv.* there. *Variant: ere.*
bere *v.* pour.

bereren *adj, v.* fast, be fast.
— *adv.* quickly.
beve *pro.* you, your, yours (women).
bewo *See main entry: bemo.*
beya *part.* not.
bia *n.* man, woman. *See: biam; bio; bom.*
biaka *part.* should have.
biam *n.* man, woman. *See: bia; bio; bom.*
bioto *See main entry: biote.*
bima *adj, v.* tall and thin, be tall and thin.
bio *n.* man, person. *See: bia; biam.*
bio kuro *n.* dead body. **Bio rai, bia rai.** **Kemere me'eri kuro.** **Kemirai bo yei bio viri kuinia kuro.** A dead person, a dead body. **Monrai kepakeya bio kuro ma, nonoi bariri ya nepere.** They are singing traditional songs for a dead child until afternoon, then they will bury him. *Syn: bia kuro; rare. See: aro viri.*
bio kuro ai nake. ghost. **Bio rai/ bia rai, bio viriviri yei kemirai kekepi ai nake ai koka ipipo.** A dead human's spirit or any ghost, that lives at the tops of big trees of the forest. **Chapo katovanai rau konoi kobauni, bia kuro ai nake pon kaicha.** Grandpa went hunting for pigs but only shot a tree ghost.
bio uvo *n.* magician. **Emo ya minia pevara. Roro ra naute baka bio aka pika. Roro ra napupu baka ru'u. Roro ra nauterova bia kuro. Ne taipere karivo ai pe'e, ture, rainia, manini, moi taipere kayarare miniake. Bia ya nocha bio bei nara, no naton. Kuiniari naraka maintopa, ru'u pevara napupu nanoi bo ririva.** This is a superior magician, who has more special magic powers. He can walk as a normal person or fly as a bird or as a ghost, doing evil works. He possesses evil magical powers, knows different types of evil herbs, gingers, and plant leaves to use to take away other people's life and then make them live again for a short time before they die completely. He can change his character often, and can detect enemies or whenever there is danger. **Bariri roro Cha Toma bia uvo kayaraka kapururo oro ya Cha Vava Pai.** Last night Mr Toma saw a chief magician hiding beside Uncle Pai's house.
bio venavena *n.* witch. **Bio bom noma, ma kokei ro, konoi ura vo ma noaivia nobaun rari yake reka taipo noko. Auka rapi riyempin bo nereputuputu, roro nerebririki, baka avariroi ipipo tu noruraro oreva baka rau.**

biote

Raka noavo roma norana. Kuiniari bio noyeiya noraitaka reka tare. Bia taipia koroiyi cha katiro noroi noarara roro, umoi nai bo teve roro. Rai au eno veku nora, konoi a koturuwe bo taipo. A pregnant woman or mother who does not give birth on time. She may develop some signs such as swollen armpits that can give off or produce small lights at night like a firefly. She can have a tail like a pig, and carries a sharp husking stick as a deadly weapon. Can kill a man. An evil spirit possesses and guides or leads her to rooms around at night or during the day, alone. Sometimes when a pregnant woman used bits of her used clothes, especially underpants, in sacred places or evil places then the evil spirits of that place then possess her. **Cha vava bio venavena kayara kokeitau ainiau.** My uncle saw a witch sitting on a log by the water.

biote *n.* paddle. *Variant:* bietu.

birimo *n.* kind of shellfish.

birivarai *n.* kind of freshwater fish.

biro *n.* kind of crow.

biyo *n.* cassowary. **Ame uka. Opo koririva. Kom riyempin koruinia. Tu'u korobaun.** A bush animal. It has a long neck. It has two legs and no tail. **Nena biyo bei ya kana.** I ate the meat of the cassowary. *Its feathers are used during the singsing. Its bones are used as traditional needles and daggers.*

bo *part.* first.

bo *pro.* she, her, hers. **A nemiraimo bio bom ra, awo beya nemina vai, kemirai kanapo beka bo.** If you can't think of the name of a woman you are talking about you can call her 'her'. **Bo rukoko ru ovu korona.** She gave me some chicken eggs. *Variant:* buo.

bo *n.* work.

bo *n.* place. *Syn:* boko.

bo nainai *n.* environment. **Au be memi bio kekemi romorekewo au beka - ai, bio ame, pi, pu, me'eri akorom.** Everything around us trees, animals, water, wind, ground food. **Bo peri anainai.** We have to look after our environment. *See:* anai.

bo nopakan it's a bright day.

bo korei it's cloudy. *See:* rei.

bo kuim it's hot. *See:* im.

bo e *n.* garden. *Syn:* erora. *See:* bo.

bo umo kakoi *n.* east.

bo umo kararo *n.* west.

boi *n.* lime for chewing betel nut.

bointin *n.* sago processor post.

boki *n.* kind of flying fox.

boki *v.* open and close.

boko *n.* place. *Syn:* bo.

bom *n.* woman. *Syn:* bio bom. *See:* bia; biam; bio.

bona *n.* kind of turtle.

bora *conj.* so that.

boro *dem.* this.

botaipo *n.* spirit house. **Bo yei aro biam ine tare o ine tora chinianai. Ne rania, ture, manini, aipe'e vakavaka kepiritai, nepa neyarare, nerivo. Bo neropikina bo biy nepa baka netova roro, ba nepa o bio neipo bereren re'e nuatatai. Aro bom bea kuiniari nerenori ari vai. Ine konana voveke. Ravo vova, kemirai bo yei biakoru o rare yei taipapei kekepi. Ine konana, bea aro bom re'e aro biam voro bea botaipo chinia nenopi vai.** A place where only young men went for initiation ceremonies to manhood. They learned magic, herbs and leaves to do certain activities as fully grown men or as fathers. Young women were not allowed in. Sometimes this is used to refer to an evil spirits place. **Cha Vava kairai vaka, ura ve narei ya botaipo neinianami.** Uncle said that next month he will take us to the sacred place for initiation.

bovovo *v.* tell someone's secret.

briri *adj.* *v.* red, be red. **Iki iri kerebriri; no kobriri.** Iki seeds are red; blood is red. **Iki iri briri kenuru ruru.** I am rubbing red iki seeds on my forehead. *Syn:* iki.

bua *3s:* kobuau, kabuau. *v.* sew up a limbum bucket.

bui *n.* shark.

bumbu'um *adj.* *v.* blue, be blue. **Yara iriroson ta bumbu'um.** Mangrove crabs are blue. **Iriroson bumbu'um kairi kapopoi bo Kwa Torin.** A purple crab bit Torin's ankle.

buo *See main entry:* bo.

buri *n.* kind of turtle.

buso *adj.* *v.* white, be white. **Akoron buso. Kereturuke bo nokapan.** White clouds appear in the sky as a sign of a fine day. **Kopu manemane buso kocharo.** Grandmother wears a white necklace. *Syn:* avovo. *Variant:* buto.

buto *See main entry:* buso.

butoku *See main entry:* batiku.

bu'u *n.* border.

buvu *n.* crown pigeon. **Ru'u uka kema pe va kemoro, kapakoreya mampai.** Bush bird, we eat them and use the feathers for decoration, it's bigger than a pigeon. **Buvu va kacha bariri.** He shot a crown pigeon yesterday.

buvu *n.* get a lot of something.

buvu

Cha

chope

C - c

Cha *add.* title for men. **Cha Denis kaute.** Dennis ran.

cha *n.* head, front. *Variant:* ja.

— *adv.* before, in front, at the front.

cha pe'e *n.* hair. *See:* pe'e.

cha papa *n.* back of the head. *See:* pa.

cha koti ro *v.* guide. *See:* rope.

cha kotuwetaka *v.* have a headache.

cha kowoniwonini *v.* feel dizzy.

cha *n.* net for fishing.

chakan *n.* father. *Variant:* jakan.

chapo *n.* grandfather.

charo *v.* carry on head. *See:* cha.

chauku mu *n.* brain. *See:* cha; mu.

che'e *n.* penis.

choki *v.* douse fire, turn off kerosene lamp.

chomo *v.* imperfect.

chope *n.* kind of bird. **O roro bou 'kenko kenko'**

Her cry is 'kenko kenko' – 'I got it. I got it'.

Variant: jope.

e

ewo

E - e

- e** *n.* tooth. *Variant:* eu.
- e koruki** *v.* pain in the tooth caused by eating something very sweet or cold. *See:* ki.
- e** *3s:* kore'e, kare'e. *v.* write.
- e** *adv.* here, now. *See:* be.
- e** *n.* string bag. *Syn:* ekoko.
- e iria** *3s:* e kuiria. *v.* smell bad. **Auka e keremuiria toro.** Your armpit smells bad.
- e'e** *n.* mosquito.
- e'empin** *n.* sleeping herb.
- eyui** *n.* dolphin.
- ekoko** *n.* string bag. *Syn:* e.
- ekoku** *adj.* blunt. **Aimon kamo ai ya keniro ekoku.** The axe I cut the tree with is blunt.
- emo** *See main entry:* bewo.
- eno** *n.* hand, arm.
- eno aka** *n.* right hand. *See:* awaka; aka.
- eno mo'o** *n.* thumb. *See:* mo'o.
- eno korupompom** *v.* crack knuckles.
- eno korupomponko** *v.* slap someone.
- eno kepiave** *v.* hold hands (two or more people). *See:* ave.
- eno pe'e** *n.* finger. *See:* pe'e.
- eno pe'e korurira** *v.* poke with your finger. *See:* rira.
- eno pe'e korututa** *v.* poke with your finger. *See:* tuta.
- eno para moeke** *num.* five.
- epa** *n.* citrus fruit. **Epa oto va ku. Epa rawoko.** A round juicy fruit. Mandarins are also juicy, lemons are sour. **Epa ero chapo karererari bu.** Grandfather planted some epa trees around the house. *Leaves are used for body decoration.*
- epi** *n.* tropical shrub. **E'epi iri namarere nerecore yake namaparata namaora.** A tree with a sweet scent, usually people plant them, you strip the leaves and wear them. **E'epi ero bo kopu kuorarona nena.** That e'epi tree was planted for me by my grandmother.
- era** *part.* question word. **Era a kuai?** Is it raining? *See:* tara.
- era vai** *q.* is that so?
- eram** *n.* greens. **Aro yei Barupu kepa.** These greens are the favourite Barupu vegetable to eat. **Nena kanapako nou eram.** I am big from eating these greens.
- ere** *3s:* korere, karere. *v.* put. **Nomereta rina.** Put something on the limbum. **Kwa Mungsi ora korereta aikeke.** Miss Mungsi put the limbum on the ladder.
- ere** *See main entry:* bere.
- eri** *n.* tree. **Ai eri bo poro pon nemau.** A tree for making canoes. **Poro eri ari bo kokororo.** That canoe is very wide. *Transport.*
- eri** *3s:* koreri, kareri. *v.* hollow out a tree trunk. **Nena poro kanairo kaneri.** I cut down a tree and hollowed it out.
- ero** *dem.* this, that (not real).
— *adv.* here, there (not real).
- erora** *n.* garden. *Syn:* bo e.
- erore** *n.* kind of crab.
- esokori** *See main entry:* etokori.
- etokori** *n.* sleeping herb. *Variant:* esokori.
- evo** *See main entry:* bemo.
- ewo** *See main entry:* bemo.

I - i

- i** *n.* shoot of young plants.
- i** *See main entry: iu.*
- ichove** *n. fern.* Ichove pe'e mememe. Kerekore bo pikeke. Ferns have small leaves and grow in shaded damp land and swamps. Ichove va kanabuvu. Kana nanaraivita nau. I have got a lot of ferns and I'm going to cook them up with sago grubs.
- ii** *3s: kuiri, kairi.* *v.* call out to. Ne nopere yake kuipia nareropu roma nara. If you break open a dry coconut you are calling him to come and fight you.
- i i** *3s: kuiri, kairi.* *v.* cover. Rau kanatokonerino om nena oi ya nuiri. I found some big leaves for my wife to cover up the sago with.
- ii** *3s: kuiri, kairi.* *v.* bite. Mema kaimini. You bit me.
- i'i** *3s: kori'i, kari'i.* *v.* give. A keni'imu. I gave you something.
- i'im** *adj.* *v.* hot, be hot. *Ant:* mariri.
- iki** *n.* plant with red seeds used for making paint.
— *adj.* red. *See: briri.*
- iki koruriya** *v.* paint something.
- iki** *n.* chest.
- ikio** *3s: korikio, karikio.* *v.* put on. Umo kabriri, roi nomikiom. The sun is bright, put on a hat.
- ikiri** *v.* carry in mouth.
- ikoko** *3s: korikoko, karikoko.* *v.* put on clothes.
- im** *n.* owl. Ru'u uka ine ru va kopako, kororo. A bush bird, it has big eyes and calls. Cha Peri im ma karereke. Perry chased the baby owl.
- imime** *v.* patch up. Wa kotari kaimime. The canoe is broken so he's patching it up.
- imo** *n.* wild pandanus. Imo kure cha no rau. Bia maiki bea noporokinaka imo vai. Aua noraka. Imo kokanai ero ine beya koroinia ke. A wild pandanus which grows in the bush. Imo bio koroi bucha ro'o au kana kanapo korau ipu ke. Unake nanon ya koroporereana. That wild pandanus stood up on the border. I was tricked into thinking it was a devil.
- imo** *n.* armband.
- in** *3s: karin, korin.* *v.* let.
- ina** *3s: karina, korina.* *v.* call something a name. Memi kemina bo Rapi. We call it Serra.
- ine** *n.* eye.
- ine kuaka** *v.* feel tired. *See: aka.*
- ine korunewai** *v.* be good looking. *See: newai.*
- ine koruvovo** *v.* wink. *See: vovo.*
- ine konana** *v.* forbidden.
- ine pe'e** *n.* eyelash. *See: pe'e.*
- ine ta** *n.* eyelid. *See: ta.*
- ine torotoro** *n.* gecko.
- inei** *n.* cane.
- ineko** *See main entry: nieko.*
- inia** *v.* lie down, be somewhere. *See: kuiniarii.*
- iniana'a** *v.* initiate.
- intepen** *n.* kind of crab.
- inyaiki** *n.* kind of bird. Kerereri poi, yin, ramata yin. They live on the island, at the beach, white-sand beach.
- ipo** *n.* vein.
- ipori** *v.* wrap.
- irai** *v.* talk, say something, tell a story.
- irikin** *n.* garfish. *Freshwater.*
- iriroson** *n.* *See main entry: riroson.*
- irita** *3s: koririta, karirita.* *v.* teach, show.
- irita** *v.* peel with your teeth.
- iro** *v.* cut down a tree.
- iro** *v.* scratch.
- iti** *v.* carry on side.
- itio** *v.* toss and turn.
- ito** *n.* taro. Ito aka meke va chakan kaora erora. Ito aka beya poko korirove. Father plants the shoot in the garden and it grows. It's good for your throat. Bio maumau va ito va nia kekoina. Many people often buy taro from me.
- ito** *n.* eagles.
- itoro** *3s: koritoro, karitoro.* *v.* think.
- iu** *n.* spear for fishing. *Variant: i.*
- ivo** *v.* butcher.
- iya** *3s: kariya, koriya.* *v.* draw water.
- iyān** *n.* kind of freshwater fish.
- iye** *n.* basket for catching prawns.
- iyiya** *n.* spirit. Rare taipo yei kekepi ai nake, rewo ai koka ipipo rewo uka. Kepaka kapeiria. Emo ya kuiniari natororo nonoi napako, nabiriri vaka ai kera kuiniari bio nayeya nara. Bo unake, uka, beya ne nopere nake vai. Ne nopere, yake, kuipia nareropu, roma, nara. An evil spirit that lives in big tall trees in the forest. It is similar to a sugar glider, but this one gets bigger and lights up like a fire on a tree. It kills people and eats them up. When you are alone in the forest if you break open a dry cocnut, then you are calling him to chase you and kill you. Chapo re'e kopu iyiya karerekei uka. Grandfather

iyiya

iyiya

and grandmother were chased in the forest by
the evil sugar glider.

Ja

jope

J - j

Ja *See main entry: Cha.*

ja *See main entry: cha.*

jakan *See main entry: chakan.*

japo *See main entry: chapo.*

jope *See main entry: chope.*

ka'a

koka

K - k

ka'a *n.* root.**ka'an** *n.* kwila tree. **Ka'an-a kanakare oro para.** I'm shaping the kwila trunk to make houseposts. **Para oro ya ere oro para kan.** The posts of his house are made from kwila.**kae** *3s: kokae, kokae. v. come. Variant: koreka, koreka.***kai** *n.* string.**kaine** *n.* ankle, heel. *Syn: kapopoi.***kainienienieto** *n.* fingernails, toenails.**kaiyantón** *n.* tree. **Kaiyantón keretumotumoire atavairo avere paretoro.** A third type of mangrove tree. Grows with other mangrove trees. **Paula yara kuoreparaparare kaiyantón tare.** Paula looked for crabs under the kaiyantón trees.**kakuke** *adj, v.* near by, be near by. *Ant: rarapa; ririva.***kama'a** *part.* in the meantime. *Variant: kana'a.***kamo** *n.* hole, door. *Syn: mare.***kamo'o** *n.* star.**kana'a** *See main entry: kama'a.***kanininto** *n.* kind of crow.**kanro** *n.* sole of the foot.**kanroi** *n.* turtle. **Ame vo kokei nau kuro. Ta'a kokupuana; koriri oreva. Biote ta koruinia - cha re pa. Eva kuiya baka ba tare. Nokoi ramata nake, ru maumau koru.** Animal that lives in the deep sea. It has a hard shell covering its back. It has flippers both at the front and at the back. Its flesh smells like raw fish. It comes ashore and lays many eggs. **Bariri aka nen kanroi kaivo.** Yesterday my father butchered a turtle. *Its shell is used to make ornaments and other artifacts such as necklaces, earrings etc.***kaperian.** sugar glider. **Ame karaka ravitu. Kakei ai nake. Kapupu. Tu'u keyainia koririva. Kamentanaka.** Animal similar to a tree top wallaby. It can fly and it has a long tail. It is small. **Kaperia kapupu kanoi ai koka pako.** The sugar glider flew to a big tree.**kapo:** crocodile. **Ame ve kopako koma korouinia. Riyempin cha riyempin pa. Reka kokorekore. Ame ovu koyei kora. Ro kopako. E koipipo. Bo vo kokei bo bororo.** The biggest animal - has four legs, two at the front and two at the back. Rough skin, eats other animals. Huge mouth with big teeth. Lives in deep waters. **Kapo pako kuraromi.**The big crocodile swam after us. *The skin is very valuable, it has many uses.***kapon** *n.* kind of saltwater fish.**kapopoi** *n.* ankle, heel. *Syn: kaine.***karapa** *n.* ginger. **Kalapa oku namaoro namaora nokoi. Kalapa rau - bo ariri. Pe'e mememe - bo yun namo namaoro. Kalapa pe'e tare keora bu'u.** You cut the tops off and plant them. The big red-leaved ones are used for healing sick people. Small red-brown long leaves are for decorating people's bodies. Dark green leaves are used to indicate boundary on land. *Syn: more. Variant: kalapa.***kararati** *v.* scratch someone.**karopaiya** *n.* scorpion. *Variant: raropaiya.***kasora** *adj, v.* huge, be huge. *Ant: meme. See: pako. Variant: katora.***kavuropa** *n.* kind of eagle. **Ba kayei.** He kills fish.**ke** *See main entry: keu.***kei** *3s: kokei, kakei. v. sit. Ro pa kamereo pita, kemi ta aikeke.* Sit down to rest your buttocks, as you do when you are at a desk. **Momu nokemi boro.** You sit there.**-keke** *3s: koroikeke, karoikeke. v. wait for. Kekenikemake, beya kakam vai.* I waited for you but you didn't come.**kenkamo** *n.* kind of freshwater prawn.**kereto** *n.* kind of bird. **Roro bo 'plento, plento'. Oro bo kereto na.** In the morning. Her cry is 'plento plento'. That's her cry.**keu** *n.* oyster, traditional shell axe. *Variant: ke.***ki** *v.* cook straight over a fire.**kiari** *3s: kokirari, kakirari. v. chew up, bite down.***kikipa'a** *n.* elbow.**kikom.** mangrove. **Kikom keretumotumo kerenori ere. Kikom iri kereriririva kikom ka para kokukum.** Mangroves grow in estuaries. **Kikom para kanaoranua Chakan rua ma nataruronan** I've cut some mangrove roots so my father can make me a little hunting bow. *For firewood and making houses.***kikomiri** *n.* kind of freshwater fish.**kinakina** *v.* think.**ko** *v.* get one thing.**ko** *n.* sugar.**koe** *3s: kokoe, kakoe. v. go up away from the coast.***koinkoin** *n.* kind of crab. *This one will bite you.***koka** *n.* branch, stem, trunk.

kokukoku**kupwana**

kokukoku *See main entry: kuken.*

kom *n.* leg.

kom pe'e *n.* toe. *See: pe'e.*

kon *v.* fight.

konkui *n.* kind of freshwater fish. *Variant: konku.*

kope *conj.* then.

kopu *n.* grandmother. *Variant: kuopu.*

kora *n.* piece.

korainko *n.* kind of bird.

kori *n.* conch shell. **Kori:** aka korayuki. **Tau vo keputu bio keputupo pu'u.** When the animal has left the shell, they blow in it to call for the wind. **Kotururu kokei roko akairi. Tau vo, keperepua umo na che'e korove, ya tu'u kepuperi ya keputu.** Crawls and hides under stones. They put it in the sun to dry the shell and use it to blow for the wind. *Used to send messages. Sailors blow them to call the wind.*

koti *n.* lizards.

ku *n.* base, roots.

Kua title for women.

kuani *n.* mother. *Variant: kuan.*

kuau *3s: kakuaru, kokuaru.* *v.* vomit.

kuavepake *v.* skip over.

kuiniari'i *v.* can. *See: inia.*

kuken *adj.* *v.* short. **A kuken bea koririva vai.** Something short is not long. **Bia ere kokuken toratora.** That girl is really short. *Ant: ririva.*
Variant: kukon; kokukoku.

kukon *See main entry: kuken.*

kuku *v.* smash.

kumo, ai *See main entry: ai.*

kunyemo *n.* fish.

kuopu *See main entry: kopu.*

kuore *n.* heart.

kupwana *adj.* *v.* strong, be strong, hard, be hard.

ma

miminra

M - m

ma *n.* child. *See:* mevova.**ma kokeiro, ma kakeiro** *v.* pregnant. *See:* kei.**mai** *n.* groin.**maimbo** *n.* bush turkey. **Ru'u uka, pe rere kura, kema, ru rere kereipipo kerebibriri.** Bush birds, their feathers are black, we eat them. Their eggs are big and red. **Cha taita maimbo ru va kairiri.** Father collected the bush turkey's eggs.**maimboi** *n.* kind of cassowary.**maimen** *n.* kind of bird. **Kom a keremememe.** They have tiny legs.**maingarere** *n.* lizards.**maininyau** *n.* kind of bird.**mainkurum** *n.* kind of bird.**mainpipiru** *n.* kind of bird.**mainpuria** *n.* kind of bird. **Bom ba kerera.** Women use them to catch fish.**mainrivoi** *n.* mudskipper.**mainrosi** *See main entry:* mainroti.**mainroti** *n.* kind of crab. *Mangrove. Variant:* mainrosi.**maintaka** *n.* eagle. **Ru'u uka re pi, pe'e va kanetura, awei uka re pi va kara, kakaita ai ipipo.** Bush and water bird, it has brown feathers, it eats bush and water animals, it sits on big trees. **Maintaka ba va kayeya.** An eagle caught a fish.**maintipa** *n.* cockatoo.**maintoi** *n.* cassowary.**maintoka** *n.* ginger. **Pe'e va kereriririva ka namaora u ya noke nana.** An evergreen long-leaved ginger. It likes to grow in damp places. Used for healing sickness. **Maintoka bio kuro turei kora namo nanakike bo taipo bora bio kuro neturepi.** Can you give me a bit of the ginger to burn near the sacred place so that all the bad spirits go elsewhere.**maintopa** *n.* flying fox.**maintreru** *n.* kind of bird. **Ro kereririva.** They have long beaks.**maiyyui** *n.* kind of bird.**maka** *n.* paint.**makapore** *n.* hornbill. **Ru'u uka, ro va kapako, ru'u pako, pe va kaura, kema.** Bush bird, it has a big mouth, it's a big bird, it has black feathers and we eat it. **Makapore re om a kerepupu kerenopi ai.** The hornbill and his wife flew to the tree.**makarava** *n.* kind of bird.**makore** *n.* kind of fish.**mama** *3s:* komama, komamaka. *v.* look after. **Rau ya note kenimamai.** I'm looking after some pigs.**mampai** *n.* pigeon. **Ru'u uka, kema pe kemoro, bei ya kauto.** Bush bird, we eat it, feathers for decoration, its flesh is very delicious. **Cha Fred mampai ya kacha.** Fred shot a pigeon.**mara** *adj.* new (leaves), budding. *Variant:* marau.**mararacha** *n.* croton. **Mararacha kepepuru aro ine tare botaipo inianai bo neipo. Yei biam pon a ve nepa. Bom baun. Bio botaipo kanoi be'en mararacha naora. Naora ro oreva.** Crotons grow from branches in warm climates. Only men and initiated boys can hold, touch or carry it. You must plant it with your back to it. **Nena pon mararacha nanako.** I can carry the croton because I have been initiated. *Used during the initiation period so that boys can grow big and strong.***marau** *See main entry:* mara.**mare** *adv.* today, now.**mare** *n.* hole. *Syn:* kamo.**mareka** *n.* kind of freshwater fish.**mariri** *adj.* *v.* cold, be cold.**mariro** *adj.* *v.* slow, be slow, gentle, be gentle. — *adv.* slowly, gently.**maumau** *adj.* *v.* many, be many. *Syn:* prumo.**maura** *n.* bamboo. *Variant:* aura.**me'eri** *n.* ground.**me'eri kotutu** make dirtmounds, like anthills.**meke** *n.* runners, vines, suckers.**mema** *pro.* you, your, yours (man). **Biam ra auirai ya kamairaimua.** The man someone is speaking to. **Mema namaute bere.** You walk over there.**meme** *adj.* *v.* tiny, be tiny. *Ant:* kasora. *See:* mentan.**memi** *pro.* we, us, our, ours. **Memi minia. Memi aro prumo be keromi be.** All of us standing here. **Memi rau prumo kemitei.** We shot lots of pigs.**mentan** *adj.* *v.* small, be small. *Ant:* pako. *See:* meme.**mepi** *pro.* we, us, our, ours (two).**merera** *3s:* mereraka, merera. *int.* alas, sorry.**mevova** *n.* children. *See:* ma; vova.**mi** *n.* little seeds.**mi'i** *n.* louse.**miki** *n.* beads.**mimi** *n.* scabies, measles, rash.**miminra** *3s:* komiminra, komiminraka. *v.* be

mini

mu'unka

paralysed.

mini *n.* snake. **Ame ririva yei uka. Bio keriripoi.** A long bush animal, people are afraid of it. **Kwa Melisah mini kairi.** The snake bit Melisah. *Syn:* u'u.

minia *adv.* together.

mo *n.* roofing.

mo *n.* dust, powder.

mo *n.* namesake. *Syn:* o.

moeke *num, v.* one, be one.

moi *n.* herb.

mompe *n.* fish.

mompe *v.* claim.

momu *pro.* you, your, yours (woman). **Bom ra airai bo kamairaimo.** The woman you are talking to. **Momu ito nonraivimona.** You will cook taro for me.

mona *n.* kind of freshwater prawn.

monrai *n.* singsing.

monrai kora, monrai kara *v.* have a singsing.

monrai kotiti, monrai katiti *v.* dance.

mo'o *n.* leech.

mo'o *n.* mother. **Om ya biabiam.** A woman with children. **Cha Mak kairai 'Akaya aiya kaye mo.'** Mark said, 'Dad hit mum with a stick.'

mo'oria *n.* goanna. **Ame kokei ai nake. Kom pe'e koruinia - cha re pa. Koraka kape.** Animal that lives in treetops. It's got two legs at the front and two at the back. Looks similar to a crocodile. **Mo'oria ru koru ai kamo.** The goanna lays eggs in the hollowed tree trunk. *The skin is used for covering the outer part of the kundu drum.*

mopu *pro.* you, your, yours.

moro *n.* kind of bird. **Ro va kereviriviri. Roro bo kororo beka 'moro kaichako, moro kaichako'.** It has a loud mouth. Its cry, it cries like 'moro kaichako, moro kaichako'.

mu *n.* milk, pus, secretion.

munsi *n.* marlin.

munsi kikom *n.* mangrove marlin.

mutu *n.* betel nut. **Mutu iki, mutu tumo. Mutu koka turoro.** A tropical palm tree with a bunch of fruits bigger than palm oil fruits and smaller than eggs. It's chewed with mustard and lime but can't be swallowed. **Mutu briri kora, rarai koye.** She is out of control because she has chewed betelnut with mustard and lime. *Given to strangers or visitors as a sign of welcome.*

mu'unka *n.* cat. **Ame oro. Roinke koyere. Bio kemamare.** Household animals, they kill rats. Looked after by human beings. **Munka roinke koye.** The cat killed the rat. *They help people by killing rats in the house.*

na wo

note

N - n

na wo *n.* sea foam.**nai** *n.* aunt. *You call your father's sister and your mother's brother's wife 'nai'.***nai** *adj, v.* heavy, be heavy.**nake** *loc.* on top, up above. *Ant:* **paiya; pika.****naki** *n.* dog. **Ame oro. Kekepi oro memi. Keroro rau a kepyepomi. Roro, kekepipopomi.** Household animals, they live in our houses, they howl and kill pigs for us. At night they protect us. **Naki nena awo bo Kwa Rapome.** My dog's name is Rapome. *We use the teeth to make necklaces. Syn: aimana; rapa.***nam** *n.* grass wig. *They made a hat out of atetevai and then put grass in it to make a wig.***nape** *q.* who. *Variant:* **na.****nau** *n.* saltwater. **Pi raravo. Kemiya akorom kemiraivi. Kemura, kenim, korako, kemitau, koyemi.** Saltwater. We cook food, swim and wash. It can be rough We paddle on it. It destroyed us. **Ti cha, nau pako koyem.** Last time a very big sea destroyed us.**nau** *n.* sago grub.**ne** *n.* curse. **Ne'e kweikeni.** She put a curse on me.**ne** *n.* coconut. **Ne vita ku va ipipo. Ne va keretumotumo.** A tree with seeds that grows on palm trees. It has a sweet white food and water inside. **Ne mu ketoike ba tare.** They milked coconut onto the fresh fish.**neman** *adj, v.* good, be good. *Variant:* **nevai.****nemo** *n.* palm tree. **Nemo pe'e komememe iri va keremememe.** A tropical tree with large leaves and no branches. **Nemo iri kepunake keora.** Some men got some palm seeds and planted them.**nena** *pro.* I, me, my, mine (man). **Auirai nena beku bio biam kanairai.** first person singular pronoun; A word used by a man to talk about himself. **Nena kanaute kanaro yin.** I (man) walked to the beach.**neni** *pro.* I, me, my, mine (woman). **Auirai neni beku bio bom kenirai.** A word used by a woman to talk about herself. **Neni kenute kenaro yin.** I (woman) walked to the beach.**nentapo** *n.* knee.**nepai** *n.* puffer fish.**nevai** *adj, v.* good, be good. *Variant:* **neman.****ni** *n.* bee. **A mememe. Kereirim po kororom kotata.** A little insect, it bites us and it hurts, your skin swells up.**nia** *part.* still.**nia** *n.* facial sweat.**niai** *n.* kind of frog.**nianta** *n.* prawn.**niau** *n.* logs, driftwood.**niavatita** *n.* kind of freshwater prawn.**nieko** *n.* eyebrow. *See: ine. Variant: ineko.***nientekeri** *n.* earthquake.**niero** *n.* small black bird with red eyes.**nieroroi** *n.* grasshopper.**niveren** *n.* kind of freshwater prawn.**niye** *loc.* up above.**niye** *n.* flying insect, fly.**no** *n.* blood.**no** *n.* clothing.**no** *n.* hive, web.**no** *n.* neck.**no korurovi** *v.* thirsty, feel thirsty. *See: rovi.***noi** *3s:* **kanoi, kanoi.** *v.* go along not very far.**note** *quant.* all.

o

paiya

O - o

- o** 3s: koro, karo. v. give.
o n. pitpit. Eka kemora erora. I koti aka koraro. kemaro kemiki kema. White spike-shaped flower bud - edible. We plant it in the garden, when it grows big we eat it. Kwan o koraivi. Mother cooked a lot of pitpit in a pot. Syn: aoma.
o n. breath, feeling.
o koruroro feel angry.
o kakinakina remember. See: kina.
o koruiriri feeling of food going down the wrong way.
o korova, o koro v. feel happy.
o korunapeke feel breathless.
o konepara, o koneparaka forget. Variant: o koparane, o koparania.
o karaiko. v. breathe.
o kotaipo, o kotaipia v. feel sad.
o korunaki v. feel very sad.
o korutuworiko v. burp, hiccough.
o n. namesake. Syn: mo.
o n. sap.
o n. testicles. See: che'e.
oa 3s: kaora, kuora. v. fight. Eno re kom a kapururi. Kayeya bio ra. Swinging of fist and feet to hit someone. Cha Matthew kaoraro taveke re mutu. Matthew fights over tobacco and betel nut.
obarai. kind of bird. Keyaroro beka pi raiyoraiyo. Their cry sounds like 'pi raiyoraiyo' - 'shallow water'.
oi n. sago.
oi yaro n. fish.
okoro n. clay pot.
oku n. thigh, river mouth, tree top.
om n. wife.
omon n. ant.
omon ru n. rice. See: ru.
onava n. kind of freshwater prawn.
oni 3s: koni, konia. v. not want.
oo 3s: kuoro, kaoro. v. pile.
o'o n. pot.
ora v. plant.
ora v. stand upright.
ora n. limbum bucket.
ore v. search.
orenana v. search for.
oreva n. back.
ori v. sharpen. 3s: karori, korori.
orito n. spine.
oro v. cut.
oro v. decorate.
oro n. house.
oro v. form a circle.
oro n. mother- or father-in-law.
oro a n. toilet.
orope n. lungs.
ororaka n. blue-tongue lizard. Karaka mo'oria - reka katoto. Kompe'e keainia cha re kom pa ru koru beka mainga rere. It's like a lizard with smooth skin. It has two legs at the front and two at the back. It lays eggs like other lizards. Cha Yugin ororaka kairia revo kom. The lizard bit Eugene on the leg.
orove n. tortoise. Ame bo kokei pi mariri re bo me'eri nake. Ta'a kokupuana koriri oreva. Biote tau korouinia cha re pa. Komentan aka. E va bea kuiya revo vai. Bei bo kema. Fresh water animal. Hard shell on its back. It has four flippers - two at the front and two at the back. It's a medium size and it does not really smell. We eat its flesh. Chakan orove kavo. Father caught the tortoise. Its shell is used to make ornaments and spoons.
ote n. sago processor.
oti n. A large round tropical fruit (pawpaw). Large round fruit with hard skin and yellow flesh (pumpkin). Kopu oti koraivi o'o pako. Grandmother cooked a big pot of pawpaw and pumpkin.
otiro n. kind of bird.
oto n. pangal.
oto adj. v. delicious, be delicious.
oto koti v. happy.
owu part. some.
oyaro n. kind of saltwater fish.
oyo n. alas.

P - p

- pa** n. bottom, back.
 — adv. behind, at the back, after.
pai n. smoking pipe.
paitotore n. bow string fastener.
paiya loc. down below, at the bottom. Syn: pika.
 Ant: nake.

pakan

pakan *n.* tree. *This tree can be used to make canoes but it is rarely used because it is soft and it breaks.*

pakaum *n.* kind of freshwater prawn.

pako *adj.* *v.* big, be big. **A kopako. Bea komentan.** Something is big, it is not small. **Rai pako neni ekoko pako kocharo.** My big sister carries a big bilum on her head. *See: anai; kokasora.*

pakuru *n.* rope securing tip to spear.

pam *v.* splat.

pande *n.* kind of mud shellfish.

papara *adj.* thin (things only).

para other side.

para house posts, tree roots.

parapara *n.* bedbug.

parara *v.* run.

parata *v.* pull out. **A nemuru.** To pull something out. **Chakan ito kaparata bo erora.** Papa harvested taro in the garden.

pareti *v.* strip skin from reeds.

paretoro *n.* mangrove tree. **Paretoro keretumo miniau ire kikom. Paretoro ta kobuto pe'e komeme.** This grows alongside the number 1 mangrove, it is white with little leaves. **Yara keikokoru ire paretoro tare.** Many crabs are found amongst these trees (paretoro). *For firewood.*

pariti *v.* slide along.

pauku *n.* sepik basket.

pe'e *n.* hair, fur, leaf. *See: cha pe'e; eno pe'e; kom pe'e; to pe'e.*

pe'e komariri *v.* feel cold.

pe'e koruriri *v.* feel fear.

pekemuta *n.* fish, saltwater.

pekenuta *n.* fish.

pegoro *n.* kind of saltwater fish.

penio *n.* kind of freshwater fish.

pepom *n.* kind of saltwater fish.

peravan *n.* fish.

pere *v.* clean, erase.

peri *v.* look at, stare.

periperi *v.* covet something. **Bio bom a koperiperirona akorom.** That woman wants my food. *See: peri.*

periperi *adj.* *v.* broad and flat, be broad and flat.

perireta *n.* kind of freshwater fish.

peta *n.* kind of saltwater fish.

petapon *n.* tree. **Petapon ti kobuto. Petapon pe'e nama pi nanim.** A tree about 20 feet tall, evergreen foliage leaves. Flowers white when blossom. Has strong scent as well as leaves and bark. **Petapon kenemanuru bora namaipo koka namapako.** The flowers of the petapon tree are very pleasant. You can use

them to wash and you'll grow big and strong.

petunoi *n.* red emperor.

petunokoi *n.* kind of freshwater fish.

pevara *n.* magician. **Bio yei ne taipetaipere kerivo, rainia, ture, manini, karapa, araracha, moi pe tometome re'e au memememe yei keyarare bo taipo ari. Ne re aipe'e bo kepa, bio nepiyeya narai, kope nepa nevarikore baru nararo oro, nakeiki mentanmentan ya narai. Bei re no, neko nepere botaipo ari, nepa no neton bora kopuana nekoi re'e noroi, bo awe kepake. Ra vo, bei re no nepere bo ine tare ninianai vova. Aro emo yei note bio bei a kepa.** Men who have magic powers with special herbs that they use in sacred places in which they kill and take other people's life. Then, they will make him alive again. After some days that person will die. Later they'll get some flesh and blood from the body back to the sacred places, adore and worship them and even eat the flesh, this is to strengthen them and give them more magic powers in their evil works. Apart from that they use the flesh to train and test the new initiates. They eat human flesh. **Kwa Doreen kuirai, 'Bariri Cha Paivi pevara kayarai kevereka Baro.'** Toren said, 'Yesterday Paive saw the magicians coming from Baro.'

peviran *n.* kind of freshwater fish.

pi *n.* water.

pi nili *3s:* **pi kaniri, pi koniri.** *v.* bathe, wash something.

pi u rivulet. *See: u.*

piarutu *n.* tongue.

pia korere, pia korereya *lie.*

piavo *n.* pancreas.

pieko *n.* wild fruit. **Pieko kepu nioropau oro ya bia pako.** A plant about 12 to 14 feet high. Not edible. **Pieko ro kechau ya mene kokasora.** They filled the basket with the fruit of the pieko tree.

pika *loc.* down below, at the bottom. *Syn: paiya. Ant: nake. Variant: pita.*

pikim *3s:* **kopikim, kapikim.** *v.* be silent. **Namapikim!** Shut up!

pimpan *n.* kind of freshwater fish.

pin *quant.* some.

piniemen *n.* kind of freshwater fish.

pintai *n.* kind of freshwater fish.

pipirim *n.* sago leaf basket.

pirem *n.* kind of saltwater fish.

pirimaka *n.* grass.

pirireta *n.* fish, poison fish.

piriretai *n.* fish. Brown with small scales. It pricks

piriretai

pita

your skin and leaves pain but it is not poisonous. They live in the lagoon near seaweed. They eat seaweed, they taste oily and they don't have many bones.

pita *See main entry: pika.*

pitata *adj.*, *v.* wet, be wet.

pivei *n.* lagoon.

pleplenki *v.* lightning.

po *n.* sweet-potato mound.

po *n.* scar, wound.

poi *n.* island.

poi *v.* whistle. **Ru'u a kapoiromi.** The bird is whistling to us.

poi *v.* stir

poi *v.* carry on shoulder.

poiya *v.* weave.

poko *n.* language, voice.

poma *n.* tree. **Al poma bo poro pon nemau.** A tree for making canoes. **Poma ero nena u kanapuere bora nanairo poro nana.** This is my tree, I'm cutting the branches off so that later I can cut it down and make a canoe. *Normally for transportation.*

pompom *n.* lizards.

pon *part.* only.

pon *n.* kind of freshwater fish.

popa *n.* kind of saltwater fish.

popo'o *adj.*, *v.* overripe, be overripe. **Aiyane popo'o.** Overripe fruit. **Chapo aiyane popo'o kataru.** Grandfather collected some really ripe ton fruit. *Syn: roroke; ura.*

poro *v.* hook a fishing line.

poro *n.* canoe without an outrigger.

pororom *n.* wild goose. **Ame kikom - kokei bo pivei - bo pikeikei. Ro koruperi - ba nianta koyei kora.** Animal that lives in the

ramo

mangroves and the lagoon. It has a broad, flat beak. It eats fish and prawns. **Pororom kokei bo pivei re'e kikom.** The wild goose lives in the mangrove swamp and the lagoon. *Feathers are used for decorations for singsings and festivals.*

potepote *n.* cheek. **Reka ta ika bo ro.** Skin near the mouth.

primo *n.* size, shape. **Primo va kereipipo toro.** It's really big.

prumo *adj.*, *v.* many, be many. *Syn: maumau.*

pui *v.* bubble up like boiling water.

puipuh. staghorn fern. **Puipui kokeita ai.** A tropical fern that dwells on trees. **Mini pako va kaororovo puipui.** There's a big snake coiled up in the fern.

puko *v.* jump.

pukopuko *v.* hop, skip.

pum *v.* make a loud noise.

puo *loc.* outside. *Variant: upo.*

pupu *v.* fly.

puru *v.* let fly, release.

puru *n.* bundle.

purumo *hide.*

purupuru *adj.*, *v.* fat, be fat.

purupuruti *n.* kind of bird. **Mentan.** Small.

purururi *v.* throw in all directions.

puruta *v.* cut into strips.

putu *v.* blow. **Pu'u va koputu.** The wind blows. **Rai anai nena aikera kaputu.** My big brother blew on the fire.

putuputu *v.* swell up. *See: putu.*

pu'u *n.* wind.

pu'u koputu *it's windy. See: putu.*

pu'u kopikim *there is no wind. See: pikim.*

pu'um *n.* medicinal herb.

R - r

ra *quant.* one, another.

ra *conj.* but.

rai *n.* same-sex sibling.

rai *3s: karai, korai. v.* die (one or two people or your in-laws only). *See: viri.*

raimpa *n.* kind of freshwater fish.

raingara *n.* small bandicoot with a tail, eats coconut.

rainira *n.* kind of crab. *Green.*

rainirin *n.* kind of saltwater fish.

raipa *n.* kind of freshwater fish.

rairai *adj.*, *v.* weak, be weak, soft, be soft.

raivetu *n.* vagina. *Variant: ra; rau.*

raivi *v.* cook. **Akorom kemiraivi o'o, kemorata ai kera ya koki marimariro.** Put uncooked food in the pot, place it on the fire and it boils

slowly. **Kwa Kasi ba va koraivi oro.** Miss Kasi cooks fish in the house.

raiyo *3s: koraiyo, koraiyowa. v.* hungry, be hungry.

raka *n.* river.

raka *n.* husking stick.

raka *n.* sago strainer.

raka *n.* sail.

ramata *n.* sand.

ramo *n.* tree. **Ramo iri norei nokoi nopako. Nemiro poro nemau.** The seeds from this tree fall on the ground and then they grow big. We cut them down for making canoes. **Ramo tare ma kanairo poro ma nanano kuan ke nianta va nura.** I'm cutting down this young tree to make a little canoe so mother can go

rampai

looking for prawns.

rampai *n.* flying insect.

rapa *n.* dog. *Syn:* aimana; naki.

rara *n.* road.

rara *v.* crawl like a crab.

rarapa *adj. v.* distant, be distant. *Syn:* ririva. *Ant:* kuken.

rarawo *v, adj.* salty.

rare *n.* dead person. **Bio rai / bia rai.** A dead person, a dead body. **Rare ra karai vere paiya.** A man has died down there.

rareninto *n.* radio bird.

rarerare *adj, v.* covetous, be covetous. **Cha Mak ine rarerare keyainia.** Mark is a covetous man.

rari *v.* tighten bow string.

rarito *v.* loosen.

raropaiya *See main entry:* karopaiya.

rati *n.* sago jelly. *Local buns.*

rato *n.* trees.

rau *n.* pig. **Ame uka. Uvo keperi. Mini rau kaui nanai ya kara. Koma keyainia. Riyempin cha, riyempin pa.** A bush animal, it has a flat nose. It digs up worms and eats them. It has four legs, two at the front and two at the back. **Rau aka pako bo kaui boi.** The big male pig digs up the garden. *Feast food.*

rau *n.* leaf. **Rau peperu.** A broad leaf used for wrapping things. **Rau kanatokonerino om nena oi ya noiri.** I found some big leaves for my wife to wrap the sago in.

rau *n.* vagina.

rauinia *n.* ginger. **Rauinia roma, rauinia reva, rauinia oi, rauinia touman.** Root plant gives strong hot taste. You can use it to make you work harder getting sago and hunting bandicoot. **Rauinia pe'e va namaukake yun naniamo.** Can you get me some leaves of the ginger so that I can use it for decoration.

raurau *v.* yawn.

ravitu *n.* tree wallaby. **Ame ya kakei ai nake, karaka ai voro. Tu'u ririva keainia, ka ramoramo ai nake bei ya bio kepa.** Tree top animal - looks similar to a wallaby. Has a long tail and jumps from tree to tree along the branches. People eat the meat. **Bio awa kati ravitu kacha.** The hunter shot the tree wallaby. *The meat is used for food in big celebrations.*

re'e *conj.* and. **Avo be korikorori minia auirai ovu.** Linking words and phrases. **Bariri tatare cha taita re'e kuani kenopi uka.** The day before yesterday father and mother went to the bush.

rei *n.* fence.

rei *3s:* karei, korei. *v.* fall.

reka *n.* body. *See:* reva.

reka koyowa, reka koyo *v.* feel embarrassed.

reka kopopo *v.* be weak.

reke *n.* soft outer skin.

rere *3s:* korurere, keyarere. *v.* feel pain. **Ko m kerenrere.** My leg is sore.

rere *v.* shiver.

rere *pro.* they, them, their, theirs (women).

reva *n.* bone.

— *adj.* strong/muscular. *See:* reka.

reva kopo *3s:* reva kokopoka, reva kokopo. *v.* be weak.

reva *n.* pal tree. **Reva iri bo komememe. Iri bo bio kerera. Reva koroporerei bio a va korai.** A tree with large leaves and no branches. Has nuts but not good for eating. **Bia maiki beya nonominaka i reva vai. Bia mentan a va noraka.** Do not take a baby near or under this palm tree. The baby will get sick. *It is believed that the spirit of the palm tree will make people sick.*

reva kokopo *v.* be weak.

rewo *adv.* very.

ri *n.* kalip nut.

ri'i *n.* stomach.

ri kora *v.* feel sick in the stomach. *See:* a a; a kora.

rikeren *n.* grill.

rin *v.* pull.

rina *n.* black palm. **Rina ero kanabororeya.** Black palm, has no branches and has very small seeds. **Rina turoro ero oroikoke kana naniro nanapuruta nanike oro tare nena.** He made strips of the palm tree to be used as floor of the house. *Used for flooring.*

rina *n.* decorative leaf. **Rina eya kuiru. Pe'e periperi pe'e tometome. Bio keora.** Big and small leaves, has nice scent. For body decoration. **Rina kanaora nape kairo?** Who cut down the rina I planted?

rinrin *v.* crawl.

rira *v.* plant.

rire *v.* sow seeds.

riri *v.* fear.

riri *v.* skin.

ririva *adj, v.* long, be long. **A koririva.** Something long. **Ai ririva kenoro kokukoku.** I cut a long piece of wood into short pieces. *Syn:* rarapa. *Ant:* kuken.

riro *n.* kind of freshwater fish.

rirokon *n.* kind of freshwater fish.

riroson *n.* kind of crab. *Variant:* riroton; iriroson; iriroton.

risii *3s:* karisiri, korisiri. *v.* smell.

risii

rivo

- rivo** *v.* hear.
- riyempin** *num.* *v.* two, be two.
- ro** *question.* where.
- ro** *n.* opposite-sex sibling.
- ro** *n.* mouth.
- ro ka'a** *n.* jaw. *See:* ka'a.
- ro ta'a** *n.* lips. *See:* ta'a.
- ro komo, ro komua** *v.* feel full.
- ro kare, ro kore** *v.* fill.
- ro** *n.* stomach.
- ro mo'o** *n.* offal. *See:* mo'o.
- ro** *n.* anus.
- ro ka'a** *n.* tailbone. *See:* ka'a.
- ro pa** *n.* buttocks. *See:* pa.
- ro mo** *3s:* ro komo, ro komua. *v.* feel full. **Ro komon!** I'm full!
- roi** *n.* mushroom, hat.
- roi** *3s:* karoi, koroi. *n.* stand.
- roi** *n.* shellfish.
- roinie roinie** *n.* kind of shellfish.
- roinkø.** rat. **Ame oro, uka, kamo kerera kerekere me'eri kuro.** Kerememerei tomuan. Household animal, also bush animal. Digs holes and lives in them. Much smaller than the bandicoot. **Munka roinke køye.** The cat killed the rat.
- roinroin** *n.* frog. **Ame kerekere bo ururu, pi mare, poko bei kerereinia.** Animal that lives in the swamp and well water, it makes a loud noise. **Roinroin, mini va kati.** The frog was bitten by the snake.
- roiveten** *n.* jellyfish. **Roiveten: koruare bio kora veka roi pi, moi pi.** When the sting of a jellyfish rubs on somebody, their skin gets itchy. It is like a mushroom of the sea, like a nettle of the oceans. **Roiveten kovekeveke ka pi kuro.** The jellyfish flows under water.
- rom** *v.* put in mouth.
- roma** *n.* fight. **Eno re kom a kapururi. Kayeya bio ra.** Swinging of fist and feet to hit someone. **Cha Peter roma karariya Cha Methew.** Peter fights with Matthew.
- romeromø.** **Romerome opo briri, iri va kerebori kerenori ere.** green vegetables; Annual flowers grow here and there from seeds in the garden. **Romerome pin a namona yun a nano.** Give me some aopa for my decorations.
- romonrari** *n.* kind of saltwater fish.
- romoromøn.** spider. **Ame mentan kom prumo keyainia oro no kara.** Small insect with eight legs that builds a web. **Romoromo no kara oro ari.** The spider builds its web inside the house.
- rope** *q.* where. *Variant:* ro.

ru'u koko

- ropitururu** *n.* snail. *Sometimes people eat this one.*
- ropoe** *3s:* koropore, karopore. *v.* trick. **Bia ere keroporeni** Those men tricked me
- roro** *3s:* kororo, kororoka. *v.* sting. **Kereirim po kororom.** They bite us and the mark stings.
- roro** *v.* cock crow, bark, howl, miaow.
- roro** *temp.* night, day.
- *greeting.* goodnight.
- roro nai** *greeting.* good morning.
- roroke** *adj.* *v.* black, be black. **Maka roroke va kemia.** We paint our faces with black paint. **Aroi roroke kakeita ai upa ura.** A black crow is sitting on a dry branch. *Syn:* ura; **popo'o.**
- rorona** *n.* bush rat, ground rat.
- rorope** *adj.* *v.* light, be light.
- rorororoki** *v.* zigzag.
- rovi** *adj.* *v.* dry, be dry.
- rovo** *v.* swallow.
- rovorovo** *adj.* *v.* brave, be brave.
- rovoru** *n.* rat. **Ame koraka roinke, avo ra va.** Animal similar to the rat, it's just another name for it. **Rovoru naki karereke.** The rat was chased by the dog. *See:* roinke.
- ru** *n.* egg.
- rua** *n.* bow.
- rum** *n.* testicles.
- rumairo** *n.* bird of paradise. **Ru'u uka, pe kemoro, bio kepapo.** Bush bird, feathers for decoration, people love it. **Rumairo kenyara kokeita ai pako.** I saw a bird of paradise sitting on a big tree.
- ruri** *v.* open.
- ruru** *n.* forehead.
- ruru koropupari** *v.* headbutt.
- rurui** *n.* hibiscus. **U namaoro namaora nokoi. Ti bo nopururei kobriri.** You cut off a shoot and plant it, it grows big. When the flowers open they are red. **Biam maumau kepau ta rurui ya kueru.** That woman has many male friends so she puts many hibiscus flowers in her hair.
- rutu** *n.* antenna, sting.
- ru'u** *n.* bird. **Ru'u uka, kororo, kema, pe'e kemoro.** Bush bird, it calls, we eat them, we use their feathers for decoration. **Ch a Puraima ru'u va kacha.** Puraima shot a bird. *We use its feathers for singsings and other decorations.*
- ru'u koko** *n.* chicken. **Ru'u oro, keroro, bei ya kema, pe'e kemoro.** Household bird, it crows and we eat its meat and use the good feathers for decoration. **Cha Joseph ru'u koko kaicha.** Joseph shot a chicken. *Feathers are*

sirare

sirare

used for decoration.

S - s

sirare *See main entry: tirare.*

ta

to

T - t

- ta** v. paddle.
ta conj. so.
ta pora n. fish.
ta'a n.
tai n. water snake.
tainko n. rope used in outriggers.
taipe 3s: kataipia, kotaipo. v. bad, be bad. Syn: totopo. Ant: neman; nevai.
taire n. sun. Syn: umo.
taiu 3s: katairu, kotairu. v. pull out (weeds).
taikutai v, adj. weak, slack.
takemoku n. rope. Takemoku koruru eram kotiti. Takemoku koraveka ti. A type of rope that grows with the mangrove trees. Rau aka karuoro rewo takemoku kuro. The pig sleeps in the middle of the rope. Creeper.
tam n. tree with white sap.
tam v. eat with your mouth open.
tamamai n. shrub. Tamamai koraka rurui. A tropical shrub. Its flowers are like hibiscus. Tamamai tau ne va kovai ya kocharo konoi oro. Tamamai koka namakoka nemrira oro para. Cathy took the skin of the shrub to put onto her bag. Get some tamamai and we'll build a house.
tankurere n. kind of freshwater fish.
tapapara n. kind of shellfish.
tara part. question word. Tara a nuai? Will it rain? See: era.
taravai n. tree. Taravai koka kototo. These type of trees grow amongst the mangrove trees and nipa palm trees. Big straight trunks. The fruits are medium sized like cake. Mini pako kainiata taravai tarema kobiakare naka rewo raka. There is a big snake on the taravai sapling which is bent right over the water from its weight.
tare adj. v. new, be new, young, be young, raw, be raw, alive, be alive.
tarepin n. ginger. Pe'e va kereriririva ka namaora u ya noke nana. An evergreen long-leaved ginger. It likes to grow in cool damp places. Used for healing sickness. Tarepin bio kuro turei kora namo nanakike bo taipo bora bio kuro neturepi. Can you give me a bit of the ginger to burn near the sacred place so that all the bad spirits go elsewhere.
tari v. break.
tarove n. drum.
tarove ma voicebox. See: ma.
- taru** v. carve.
taruv collect. Chakan memi aiyane va kataruromi. Our father collected some ton fruit for us.
tata n. carrying basket.
tata v. swell up.
tatairi n. ribs.
tatara n. kind of freshwater prawn.
tautau nau n. fish.
tavutavu n. grasshopper, cicada.
tekeron n. kind of freshwater fish.
temon mangrove tree. Temo koka kotopara. Grow amongst the mangrove trees and nipa plants. Big straight trunk with round fruits like medium size cake. Temo topatopau kereruwena Uroora. Tall, straight temo trees grow at Uroora.
tere v. barb, put a barb on a hook.
tere v. ask.
teru n. sago iron.
tete n. exclaim in fright.
teve n. ear.
ti v. tie up, sew up.
ti v. shoot.
ti n. umbilical cord.
ti n. flower.
tie 3s: kotire, katire. v. close.
ti'i n. rope.
tiki v. erect.
tikove n. Kekepi poi. sea tern; They live on the island.
tiku n. belly button.
tim n. sago shoots.
timetime v. rain lightly. A kotimetimekeni. It's raining lightly on me.
tiniko n. kind of bird.
tintin adv. each, one at a time. Syn: moekemoeke.
tirare n. kind of freshwater fish. Variant: sirare.
tiririm n. tattoo.
tiririn adj, v. different, be different.
 — adv. differently, separately.
tiritiri n. cuscus, mangrove cuscus.
tiro n. bodily fluid.
tiro tiro 3s: tiro kotiro, tiro katiro. v. urinate.
titiki v. rain heavily. A kotitikitani pako. It's raining heavily on me.
tivitivin n. bird, small lagoon bird.
to q. question word.
to n. breast.
to mu n. breastmilk. See: mu.
to pe'e n. nipple. See: pe'e.

to

- to** *n.* mountain.
to meme *n.* fish, doctor fish.
to yirin *n.* shark.
toi *v.* rinse.
toi *v.* blow a conch shell.
toiyirin *n.* kind of saltwater fish.
tom *n.* shoulder.
tometome *adj.*, *v.* narrow, be narrow. *Ant:* periperi.
ton *v.* drink. **Apon kena pi kentontau.** I wash down the banana with water.
ton *n.* fruit.
tona *n.* taro ginger. **Pe'e namaka yun na niamona.** Looks like taro but smaller but not to be eaten. Use for body decoration. It has a strong smell. **Tona pe briri kanauka ke yu eka ma nanoke nanaoro.** I needed some leaves of the tona ginger to mix with other flowers to decorate myself.
topan *adj.*, *v.* straight and tall, be straight and tall.
tora *adv.* long ago.
torira *n.* kind of flying fox.
toro *n.* kind of saltwater fish.
tororoari 3s: **kotorororari, katorororari.** *v.* tie together.
torotoraman *n.* kind of saltwater fish.
toto'om *n.* liver.
totopo *adj.*, *v.* bad, be bad. *Syn:* taipe. *Ant:* neman; nevai.
touman *n.* bandicoot. **Ame uka. Kakei bo ai pe'e - bo pirimaka koka - bo rati pe'e.** Uvo kaririva. **Karaka roinke.** Bush animal, lives in the bush, in thick bushes and among the sago palms. Long nose, a bit like a rat. **To'omuan karaka roinke ya uvo kaririva.** The bandicoot is like a rat with a long nose.
tova *v.* walk around.
tove *v.* scold.
trivo *n.* tree. **Ai trivo bo poro pon nema.** A tree for making canoes. **Trivo ero nena kana poro nanano mo'o nena.** This is my tree I'm making an ocean-going canoe from it for my mother. *Transport.*

unakau

- tropoiyaka** *n.* heron. **Ru'u rere pi, awei kepa, pe kemoro, opo ke ririva, kepupu.** Water birds, they eat animal flesh, we use the feathers for decoration, they have long necks and can fly. **Kwa Elizabeth tropoyaka koyarai.** Elizabeth saw the herons. *We use their feathers for singsing.*
trore *n.* kind of banana.
tu *n.* tail.
tum *n.* crab, beach crab.
tumore *n.* kind of freshwater fish.
tumotumo *v.* grow around.
tupai *n.* sweet potato. *Syn:* untakau.
tura *v.* kick.
ture *v.* shine.
ture *n.* ginger. **Ture monrai, ture beken, ture bo kana, ture bia kuro.** Root plant, doesn't give strong hot taste when chewed. For healing sick people. **Ture bia kuro kerenaruru ta bia kuro va nia kekopena.** The old woman rubbed the devil ginger all over me and often I see or meet devils. *Used for healing sick people and other sacred things.*
turei 1d: **kepiturepi.** *v.* disperse.
turo *v.* join up to.
turu *v.* plan.
turuke *v.* punt.
turuve *v.* poke something through a hole.
a koturuve *v.* make sick with magic.
tuta *v.* poke.
tutu *v.* make into piles or mounds. *See:* me'eri; amo.
tutu *v.* inhale cigarette smoke.
tutu *v.* fish with a net, strain. **Cha kotutu pi kuro** She uses her net in the water
tutumō *v.* nudge someone. **Kamatutumoni. Katuturoni.** You are nudging me. He is nudging me.
tutuvi *n.* kind of bird; It has a short tail.
tuveve *v.* squat.
tuwo *v.* bend.
tuwoi 3s: **kotuwori, katuwori.** *v.* take out in lumps.

U - u

- u** *lair.*
u *v.* get (fruit). 3s: **koru, karu.**
u *n.* offshoot. *See:* pi; ai.
ua 3s: **kura, kaura.** *v.* catch fish with a net.
ui 3s: **koui, kauri.** *v.* dig.
uka *n.* bush.
uke *v.* string a bow.
uku *v.* cough.
ukukui *n.* centipede.

- um** *n.* decorative plant. *Variant:* un.
umo *n.* sun.
umo nai *n.* good day.
umoi *n.* cockroach.
un *See main entry:* um.
una *v.* get many things. 3s: **karuna, koruna.**
unakau *n.* ginger. **Unakau monrai. Unakau ba, unakau rau, unakau reva. Unakau bo pe korevu me'eri.** A white-rooted ginger.

unake

Doesn't taste bitter when bitten. Has broad leaves and stays on the ground. **Unakau ka kora kanako ariri nanau biaire.** I got some ginger to heal the sick girl. *Used for healing sick people, you rub it on the body to grow big and strong.*

unake *adv.* alone.

unkuriau *n.* kind of saltwater fish.

untakau. sweet potato. **Untakau oku namatoto. Namaora po. Aka nekepi namoru nenraivi nema.** Get some sweet potato cuttings. Plant them in the mound. Harvest and I'll cook them and we'll eat them. **Kwa nai untakau pin a kuaveroni.** My auntie gave me some sweet potato. *Syn:* tupai.

upo *See main entry: puo.*

ura *v.* swim.

ura *adj, v.* black, be black. **Maka ura.** Black paint. **Maka ura kenianiya Cha Malana.** I paint Malana with black paint. *Syn:* roroke; popo'o. *Ant:* avovo; buso. *Variant:* urura; uraura.

ura *n.* moon.

urai *n.* plate.

uram *n.* fruit tree.

urara *n.* kind of tree.

urau *n.* spirit house.

urave *n.* millipede.

ure *v.* twist. **Ti'i kure.** Twisting rope. **Kwani ti'i va kure.** My mother rolls the rope. *We twist ropes to make prawn traps.*

uri *n.* morning.

— *adv.* in the morning, tomorrow.

uroro *n.* kind of bird. **Ru kokei Tointonu.** This bird lives at Tointonu.

uru *v.* put a sling around a coconut tree to climb.

uru *v.* rub.

uru *v.* pull out. **A boi nemuru.** Pull something out of the ground.

uru *n.* roots.

ururu *n.* sago swamp.

ute *v.* walk. **Kom a kaniaraniara.** Move along on his feet at his own speed. **Cha Jon kaute kanoi uka.** Jon walks to the bush.

u'u *n.* snake. *Syn:* mini.

uvo *n.* nose.

vaivai

VOVO

V - v

vaivai *n.* nipa palm. **Oi ya keyave rewo beka vaivai.** Nipa palm grows well in swampy areas. **Yara e ipipo kekepi baru vaivai ka.** He picked some ripe palm seeds to make some oil.

vava *v.* remove leaves.

veke *v.* float along under water.

vevete *v.* take clothes off over your head.

viriri *v.* die (two or more). *See:* rai.

koruviriviri, keyaviriviri *v.* feel numb.

viti *v.* blame.

vito *v.* peel.

vivi *v.* push aside.

VORO *See main entry:* boro.

VOVA *adv.* again.

VOVO *v.* sleep.

wa

wo kono, wo kono

W - w

wa *n.* canoe with outrigger.

wo *n.* spittle, phlegm.

wo kono, wo kono *v.* spit.

ya

yun

Y - y

y a *pro.* he, him, his. **Bio biam ra namairaimova, awo beya neminaka vai, kemirai kanapo beka ya.** If you can't think of the name of a man you are talking about you can call him 'him'. **Ya ru koko ru ovu karona.** He gave me some hen's eggs.

yake *int.* enough.

yam *n.* basket.

yamankoko *n.* veranda.

yamene *n.* basket of coconut leaves.

yara *n.* crab.

yara *v.* see. **Ine a kenyara.** I look at something with my eye. **Neni biyo kenyara uka.** I saw a cassowary in the bush.

yara reke *n.* mangrove crab with soft skin.

yariri *n.* mustard.

yauma *v.* wrap.

ye *v.* fight, hit, kill.

yei *pro.* they, them, their, theirs (men).

yere *n.* green vegetables. **Yere mi'i karere.**

Karuru karaivi kara. Throw seeds in the garden and then they'll grow. When they're ready, harvest, cook and eat. **Kwan yere koraivi o'o ro kore.** Mother cooked a lot of green vegetables in a pot. *See: aopa.*

yero *n.* kind of freshwater fish.

yi *n.* wild taro.

yilimen *n.* kind of mud shellfish.

yin *n.* beach.

yoyo *v.* dream.

yumpe *n.* kind of freshwater fish.

yun *n.* decorative leaves.

above, up above

break

A - a

above, up above	nake.	ant	omon.
after	pa.	antenna	rutu.
again	vova.	anus	ro.
aibika	atatai.	areca palm, wild	aitem.
alas	merera; oyo.	arm	eno.
alive, be alive	tare.	armband	imo.
all	note.	armpit	auka.
alone	unake.	ash	ai mo, <i>see: ai.</i>
already	be'en.	ask	tere.
and	re'e.	at the back	pa.
angry, feel angry	o koruroro, <i>see: o.</i>	at the front	cha.
ankle	kaine; kapopoi.	aunt	nai.
another	ra.	axe	aimon kamo, <i>see: aimon.</i>

B - b

back	oreva; pa.	bird	ru'u.
back of the head	cha papa, <i>see: cha.</i>	bird of paradise	rumairo.
bad, be bad	taipe; totopo.	bird, pigeon	mampai.
bamboo	aura; maura.	bird, small lagoon bird	tivitivin.
banana	apon; trore.	birds	anrovo; chope; inyaiki; kereto; korainko; maimen; maininyau; mainkurum; mainpipiru; mainpuria; maintreru; maiyui; makarava; moro; niero; obarai; otiro; purupuruti; rareninto; tiniko; tutuvi; uroro.
bandicoot	raingara; touman.	bite	ii.
barb, put a barb on a hook	tere.	bite down	kiari.
bark	roro.	black, be black	popo'o; roroke; ura.
bark apron, men's	aritu.	blame	viti.
bark apron, women's	ari.	blood	no.
bark container	rina.	blow	putu.
base	ku.	blow a conch shell	toi.
basket	yam.	blue, be blue	bumbu'um.
basket for carrying	tata.	blunt	ekoku.
basket for catching prawns	iyē.	bodily fluid	tiro.
basket of coconut leaves	yamene.	body	reka.
bathe	pi nii, <i>see: pi.</i>	bone	reva.
be	ave.	border	bu'u.
be invincible	atata.	bottom	pa.
be somewhere	inia.	bottom, at the bottom	paiya; pika.
beach	yin.	bow	rua.
beads	miki.	bow-string fastener	paitotore.
bean	banono.	brain	chauku mu.
become	ave.	branch	koka.
bedbug	parapara.	brave, be brave	rovorovo.
bee	ni.	breadfruit	airo; avo.
before	cha.	break	tari.
behind	pa.		
belly button	tiku.		
below, down below	paiya; pika.		
bend	tuwo.		
betel nut	mutu.		
big, be big	pako.		

breast

defecate

breast	to.	budding	mara.
breastmilk	to mu, <i>see: to.</i>	bundle	puru.
breath	o.	bush	uka.
breathe	o konepara, o koneparaka, <i>see: o.</i>	bush crow	ara uka, <i>see: ara.</i>
breathe out	o korutuworiko, <i>see: o.</i>	bush turkey	maimbo.
breathless, feel breathless	o korunapeke, <i>see: o.</i>	but	ra.
broad and flat, be broad and flat	periperi.	butcher	ivo.
bubble up	pui.	butterfly	apopoi.
		buttocks	ro pa, <i>see: ro.</i>

C - c

call out to	ii.	coconut	ne.
call something a name	ina.	cold, be cold	mariri.
can	kuiniari'i.	cold, feel cold	pe'e komariri, <i>see: pe'e.</i>
cane	inei.	collect	taru.
canoe with outrigger	wa.	come	kae.
canoe without an outrigger	poro.	conch shell	kori.
carry in mouth	ikiri.	cook straight over a fire	ki.
carry on head	charo.	corpse	bio kuro; rare.
carry on shoulder	poi.	corpses, strangers	aro viri.
carry on side	iti.	cough	awoku; uku.
carve	taru.	cover	ii.
cassava	awaika.	covet something	periperi.
cassowary	biyo; maimboi; maintoi.	covetous, be covetous	rarerare.
cat	mu'unka.	crab	yara.
catch fish with a net	ua.	crab, beach	crab tum.
centipede	ukukui.	crabs	ainieke; anemporu; erore; intepen; koinkoin; mainroti; rainira.
cheek	potepote.	crabs, mangrove	riroson; yara reke.
chest	iki.	crack knuckles	eno korupompom, <i>see: eno.</i>
chew up	kiari.	crawl	rinrin.
chicken	ru'u koko.	crawl like a crab	rara.
chief magician	bio uvo.	crocodile	kapo.
child	ma.	croton	mararacha.
children	mevova.	crow	aroi.
cicada	tavutavu.	crown pigeon	buvu.
citrus fruit	epa.	crows	ara; biro; kanininto.
claim	mompe.	cry	aro koro.
clay pot	okoro.	curse	ne.
clean	pere.	cuscus	apara.
clearing	batiron.	cuscus, mangrove cuscus	tiritiri.
close	tie.	cut	oro.
clothing	no.	cut down a tree	iro.
cloud	akoron; akron.	cut into strips	puruta.
cock crow	roro.		
cockatoo	maintipa.		
cockroach	umoi.		

D - d

dance	monrai kotiti, monrai katiti, <i>see: monrai.</i>	decorative leaves	rina; yun.
decorate	oro.	decorative plant	um.
		defecate	a'a kore'e, <i>see: a'a.</i>

delicious, be delicious

fish, saltwater

delicious, be delicious	oto.	do	a.
describe	aveoo.	dog	aimana; naki; rapa.
die (one or two people or your in-laws only)	rai.	dolphin	eyui.
die (two or more)	viru.	door	kamo.
different, be different	tiririn.	douse fire	choki.
differently	tiririn.	draw water	iya.
dig	ui.	dream	yoyo.
disperse	turei.	drink	ton.
distant, be distant	rarapa; ririva.	drum	tarove.
dizzy, feel dizzy	cha kowoniwonini, see: cha.	dry, be dry	rovi.
		dry coconut frond	au po.
		dust	mo.

E - e

each	tintin.	enough	yake.
eagle	maintaka.	environment	bo nainai, see: bo.
eagles	baune; ito; kavuropa.	erase	pere.
ear	teve.	erect	tiki.
earthquake	nientekeri.	evil sugar glider	iyiya.
east	bo umo kakoi.	exclaim in fright	tete.
eat	a.	excreta	a'a.
eat with your mouth open	tam.	eye	ine.
egg	ru.	eyebrow	nieko.
elbow	kikipa'a.	eyelash	ine pe'e, see: ine.
embarrassed, feel embarrassed	reka	eyelid	ine ta, see: ine.
	koyowa, reka koyo, see: reka.		

F - f

facial sweat	nia.	fish	ba; kunyemo; makore; mompe; oi yaro; pekenuta; peravan; piriretai; ta pora; tautau nau.
fall	rei.	fish, doctor fish	aninkoi; to meme.
fast, be fast	bereren.	fish, freshwater	ba niompon; ba numpa; ba rina; ba imo; ba poi; birivarai; iyan; kikomiri; konkui; mareka; penio; perireta; petunokoi; peviran; pimpan; piniemen; pintai; pon; raimpa; raipa; riro; rirokon; tankurere; tekeron; tirare; tumore; yero; yumpe.
fat, be fat	purupuru.	fish guts	batiku.
father	aka; chakan.	fish, knife fish	ba aimon.
fear	riri.	fish, mangrove marlin	munsi kikom.
fear, feel fear	pe'e koruriri, see: pe'e.	fish, marlin	munsi.
feeling	o.	fish, mudskipper	mainrivoi.
feeling of food going down the wrong way	o koruuiriri, see: o.	fish, poison fish	pirireta.
fence	rei.	fish, puffer fish	nepai.
fern	ichove.	fish, red emperor	petunoi.
fern, water plant	atavairo.	fish, saltwater	aiyono; ba iman; ba vara; kapon; oyaro; pekemuta; pekoro; pepom; peta; pirem; popa;
fight	kon; oa; roma; ye.		
fill	ro kare, ro kore, see: ro.		
finger	eno pe'e, see: eno.		
fingernails	kainienienieto.		
fire	ai kera, see: ai.		
firefly	awariroi.		
fireplace ashes	ben.		
first	bo.		

fish with a net

hive

	rainirin; romonrari; toro; torotoraman; toiyirin; unkuriau.	food	akorom.
fish with a net	tutu.	forbidden	ine konana, <i>see: ine.</i>
five	eno para moeke.	forehead	ruru.
flesh	bei.	forget	o konepara, o koneparaka, <i>see: o.</i>
float along under water	veke.	form a circle	oro.
flower	ti.	frog	roinroin.
fly	pupu.	frogs	niai.
flying fox	maintopa.	front	cha.
flying foxes	apomema; baikona; boki; torira.	fruit	ton.
flying insect	rampai.	full, feel full	ro mo; ro komo, ro komua, <i>see: ro.</i>
flying insect, fly	niye.	fur	pe'e.

G - g

garden	bo e; erora.	good looking, be good looking	ine korunewai, <i>see: ine.</i>
garfish	irikin.	good morning	roro nai, <i>see: roro.</i>
gecko	ine torotoro.	goodnight	roro.
gentle, be gentle	mariro.	grandfather	chapo.
gently	mariro.	grandmother	kopu.
get a lot of something	buvu.	grass	pirimaka.
get (fruit)	u.	grass wig	nam.
get (pl)	una.	grasshopper	nieroroi; tavutavu.
get (sg)	ko.	green, be green	aipetare.
get up	bariko.	green vegetable	aita.
ginger	maintoka; rauinia; tarepin; ture; unakau.	green vegetables	yere.
give	i'i; o.	green vegetables (number three)	romerome.
go along not very far	noi.	greens	eram.
go down towards the coast	aro.	grill	rikeren.
go up away from the coast	koe.	groin	mai.
goanna	mo'oria.	ground	me'eri.
good, be good	neman; nevai.	grow around	tumotumo.
good day	umo nai, <i>see: umo.</i>	guide	cha koti ro, <i>see: cha.</i>

H - h

hair	cha pe'e, <i>see: cha; pe'e.</i>	heel	kaine; kapopoi.
hand	eno.	her	bo.
hang	ave.	herb	moi.
happy	oto koti.	here	be; e.
happy, feel happy	o korova, o koro, <i>see: o.</i>	here, there (already mentioned)	bemo.
hard, be hard	kupwana.	here, there (not real)	ero.
hat	roi.	heron	tropoiyaka.
he	ya.	hers	bo.
head	cha.	hibiscus	rurui.
headache, have a headache	cha kotuwetaka, <i>see: cha.</i>	hide	purumo.
headbutt	ruru koropupari, <i>see: ruru.</i>	him	ya.
hear	rivo.	hips	ariku.
heart	kuore.	his	ya.
heavy, be heavy	nai.	hit	ye.
		hive	no.

hold**long, be long**

hold	avo.	hot, be hot	i'im.
hold hands (two or more people)	eno	house	oro.
	kepiave, <i>see: eno.</i>	house posts, tree roots	para.
hole	kamo; mare.	howl	roro.
hollow out a tree trunk	eri.	huge	anaiaka, <i>see: anai.</i>
hook	auka.	huge, be huge	kasora.
hook a fishing line	poro.	hungry, be hungry	raiyo.
hop	pukopuko, <i>see: puko.</i>	husband	am.
hornbill	makapore.	husking stick	raka.

I - i

I (man)	nenā.	inside	ari.
I (woman)	neni.	is that so?	era vai.
imperfect	chomo.	island	poi.
in front	cha.	it's a bright day	bo nopakan, <i>see: bo.</i>
in the afternoon	bariri.	it's afternoon	kobariri, <i>see: bariri.</i>
in the meantime	kama'a.	it's cloudy	bo korei, <i>see: bo.</i>
in the morning	uri.	it's hot	bo kuim, <i>see: bo.</i>
inhale cigarette smoke	tutu.	it's raining	a kuai, <i>see: a.</i>
initiate	iniana'a.	it's windy	pu'u koputu, <i>see: pu'u.</i>

J - j

jaw	ro ka'a, <i>see: ro.</i>	join up to	turo.
jellyfish	roiveten.	jump	puko.

K - k

kalip nut	ri.	knee	nentapo.
kick	tura.	knife	aimon.
kill	ye.		

L - l

lagoon	pivei.	let fly	puru.
lair	u.	lie	pia korere, pia korereya, <i>see: piarutu.</i>
language	poko.	lie down	inia.
large (things only)	anai.	light, be light	rorope.
laugh	awoto korara, awoto karara; awoto korara, <i>see: awoto; awoto</i> kereviri, <i>see: awoto.</i>	lightning	pleplenki.
laughter	awoto.	like	beka.
leaf	pe'e.	limbum bucket	ora.
leaf to cover things with	rau.	lime for chewing betel nut	boi.
leaves	karapa.	lips	ro ta'a, <i>see: ro.</i>
leech	mo'o.	liver	toto'om.
left-hand side	apata.	lizard, blue-tongued lizard	ororaka.
leg	kom.	lizards	koti; maingarere; pompom.
legend	anoku.	logs, driftwood	niau.
let	in.	long ago	tora.
		long, be long	ririva.

look after

oyster

look after	mama.	lose weight	bei vori, <i>see: bei.</i>
look at	peri.	louse	mi'i.
loosen	rarito.	lungs	oro-pe.

M - m

machete	aimon biyin, <i>see: aimon.</i>	miaow	roro.
magician	pevara.	milk	mu.
make	a.	millipede	urave.
make a loud noise	pum.	mine (man)	nena.
make dirt mounds, like anthills	me'eri kotutu, <i>see: me'eri.</i>	mine (woman)	neni.
make into piles or mounds	tutu.	moon	ura.
man	bia; biam; bio.	morning	uri.
mangrove	kikom.	mosquito	e'e.
many, be many	maumau; prumo.	mother	kuani; mo'o.
mareo fruit	aiyane.	mother or father in law	oro.
me (man)	nena.	mountain	to.
me (woman)	neni.	mouth	ro.
measles	mimi.	mushroom	roi.
medicinal herb	pu'um.	mustard	yariri.
melon	antam.	my (man)	nena.
		my (woman)	neni.

N - n

name	awo.	no	bauni.
namesake	mo; o.	nose	uvo.
namesake celebration	amori.	not	beya.
narrow, be narrow	tometome.	not be at	kobaun, <i>see: bauni.</i>
nearby, be nearby	kakuke.	not know how to do something	ara.
neck	no.	not want	oni.
net for fishing	cha.	not yet	baunke, <i>see: bauni.</i>
new, be new	tare.	now	e; mare.
new (leaves)	mara.	nudge someone	tutumo.
night	roro.	numb, feel numb	koruviriviri, keyaviriviri, <i>see: viri.</i>
nipple	to pe'e, <i>see: to.</i>		

O - o

o kaparu	o korutuworiko, <i>see: o.</i>	other side	para.
offal	ro mo'o, <i>see: ro.</i>	our (many)	memi.
offshoot	u.	our (two)	mepi.
one	moeke; ra.	ours (many)	memi.
one at a time	tintin.	ours (two)	mepi.
only	pon.	outside	puo.
open	ruri.	overripe, be overripe	popo'o.
open and close	boki.	owl	im.
opposite-sex sibling	ro.	oyster	keu.

P - p

paddle

runners

paddle biote; ta.
 pain, feel pain aka; rere.
 paint maka.
 paint something iki koruriya, *see: iki*.
 palm rina.
 pancreas piavo.
 pandanus imo.
 pangal oto.
 paralysed, be paralysed miminra.
 patch up imime.
 pawpaw, pumpkin oti.
 peel vito.
 peel with your teeth irita.
 penis che'e.
 people aro.
 person bio.
 piece kora.
 pig rau.
 pile oo.
 pink arararia.
 pitpit aoma; o.
 place bo; boko.
 plan turu.
 plant ora; rira.
 plant with red seeds used for making paint iki.
 plate urai.
 poke tuta.

poke something through a hole turuve.
 poke with your finger eno pe'e korurira,
see: eno; eno pe'e koututa, see: eno.
 pot o'o.
 pound sago aka.
 pour bere.
 powder mo.
 prawn nianta.
 prawns, freshwater kenkamo; mona;
 niavatita; niveren; onava;
 pakaum; tatara.
 pregnant, be pregnant ma kokeiro, ma
 kakeiro, *see: ma*.
 pull rin.
 pull out parata; uru.
 pull out (weeds) taiu.
 punt turuke.
 purple, be purple bumbu'um.
 pus mu.
 push aside vivi.
 put ere.
 put a sling around a coconut tree to climb uru.
 put in mouth rom.
 put on ikio.
 put on clothes ikoko.

Q - q

question word era; tara; to. quickly bereren.

R - r

rain a.
 rain heavily titiki.
 rain lightly timetime.
 rash mimi.
 rat roinke; rorona; rovoru.
 raw, be raw tare.
 real aka.
 really aka.
 red iki.
 red, be red briri.
 release puru.
 remember o kakinakina, *see: o*.
 remove leaves vava.
 return baru.
 ribs tatairi.
 rice omon ru, *see: omon*.

right hand eno aka, *see: eno*.
 right-hand side awaka.
 rinse toi.
 river raka.
 river mouth oku.
 rivulet pi u, *see: pi*.
 road rara.
 roofing mo.
 root ka'a.
 roots ku; uru.
 rope pakuru; tainko; takemoku; ti'i.
 rub uru.
 rubbish amo.
 run parara.
 runners meke.

sad, feel sad

spirit house

S - s

- sad, feel sad o kotaipo, o kotaipia, *see: o*.
 sad, feel very sad o korunaki, *see: o*.
 sago oi.
 sago grub nau.
 sago iron teru.
 sago jelly rati.
 sago-leaf basket pipirim.
 sago palm, wild vaivai.
 sago processor ote.
 sago processor post bointin.
 sago shoots tim.
 sago strainer raka.
 sago swamp ururu.
 sago thorn barem.
 sail raka.
 salty rarawo.
 same-sex sibling rai.
 sand ramata.
 sap o.
 say something irai.
 scabies mimi.
 scar po.
 scold tove.
 scorpion karopaiya.
 scratch iro.
 scratch someone kararati.
 sea nau.
 sea foam na wo.
 sea tern tikove.
 search ore.
 search for orenana, *see: ore*.
 secretion mu.
 see yara.
 seeds mi.
 self beku.
 separately tiririn.
 sepik basket pauku.
 sew up ti.
 sew up a limbum bucket bua.
 shame on you anie.
 shape primo.
 shark bui; to yirin.
 sharpen ori.
 she bo.
 shellfish birimo; roi; roinie roinie;
 tapapara.
 shellfish, mangrove baraimomon; pande;
 yilimen.
 shine ture.
 shiver rere.
 shoot ti.
 shoot of young plants i.
 short, be short kuken.
 should have biaka.
 shoulder tom.
 show irita.
 shrubs epi; tamamai.
 sick, feel sick a a.
 sick, feel sick in the stomach ri kora, *see: ri'i*.
 sick, make sick with magic a koturuve,
see: turuve.
 silent, be silent pikim.
 similar to beka.
 singsing monrai.
 singsing, have a singsing monrai kora,
 monrai kara, *see: monrai*.
 sit kei.
 sit facing someone bakakeya.
 size primo.
 skin riri.
 skin, sheddable skin reke.
 skip pukopuko, *see: puko*.
 skip over kuavepake.
 slack taiutaiu.
 slap someone eno korupomponko, *see: eno*.
 sleep vovo.
 sleeping herb e'empin; etokori.
 slide along pariti.
 slow, be slow mariro.
 slowly mariro.
 small, be small mentan.
 smash kuku.
 smell risii.
 smell bad e iria.
 smoke ai kumo, *see: ai*.
 smoking pipe pai.
 snail ropitururu.
 snake mini; u'u.
 sneeze aicho.
 so ta.
 so that bora.
 soft, be soft rairai.
 sole of the foot kanro.
 some owu; pin.
 sore auka.
 sorry merera.
 sow seeds rire.
 spear for fishing iu.
 spider romoromo.
 spine orito.
 spirit house botaipo; urau.

spit			
spit on	awoto; wo kpono, wo kpono.	string	kai.
spittle, phlegm	awoto korauke, <i>see</i> : awoto.	string a bow	uke.
splat	wo.	string bag	e; ekoko.
spy	pam.	string games	awa.
squat	bara.	strip skin from reeds	pareti.
staghorn fern	tuveve.	strong, be strong	kupwana.
stand	puipui.	strong/muscular	reva.
stand upright	roi.	suckers	meke.
star	ora.	sugar	ko.
stare	kamo'o.	sugar glider	kaperia.
stem	peri.	sun	taire; umo.
step over something	koka.	swallow	rovo.
stick	arikaka.	sweat	bene.
still	ai.	sweep rubbish into piles	amo kotutu, <i>see</i> :
sting	nia.		amo.
stomach	roro; rutu.	sweep up	amo koriri, <i>see</i> : amo.
stone	ri'i; ro.	sweet potato	tupai; untakau.
story	akairi.	sweet potato mound	po.
straight and tall, be straight and tall	au irai.	swell up	putuputu; tata.
strain	topan.	swim	ura.
	tutu.		

T - t

tail	tu.	this	be; boro.
tailbone	ro ka'a, <i>see</i> : ro.	this, that (already mentioned)	bemo.
take clothes off over your head	vevete.	this, that (not real)	ero.
take out in lumps	tuwoi.	throw	arai.
talk	irai.	throw in all directions	purururi.
tall and thin, be tall and thin	bima.	thumb	eno mo'o, <i>see</i> : eno.
taro	ito.	tie together	tororoari.
taro ginger	tona.	tie up	ti.
tattoo	tiririm.	tighten bow string	rari.
teach	irita.	tiny, be tiny	meme.
tell a story	irai.	tired, feel tired	ine kuaka, <i>see</i> : ine.
tell someone's secret	bovovo.	title for men	Cha.
testicles	o; rum.	title for women	Kua.
that	bere.	today	mare.
their (men)	yei.	toe	kom pe'e, <i>see</i> : kom.
their (women)	rere.	toenails	kainienienieto.
theirs (men)	yei.	together	minia.
theirs (women)	rere.	toilet	oro a.
them (men)	yei.	tomorrow	uri.
them (women)	rere.	tongue	piarutu.
then	kope.	tooth	e.
there	bere.	toothache	e koruki, <i>see</i> : e.
there is no wind	pu'u kopikim, <i>see</i> : pu'u.	top, on top	nake.
they (men)	yei.	tortoise	orove.
they (women)	rere.	toss and turn	itio.
thigh	oku.	traditional shell axe	keu.
thin (things only)	papara.	tree	ai.
thing	a.	tree branch	ai u, <i>see</i> : ai.
think	itoro; kinakina.	tree, canoe	anru; eri; pakan; poma; ramo;
thirsty, feel thirsty	no korurovi, <i>see</i> : no.		trivo.

tree, fruit

write

tree, fruit	uram.	trick	ropoe.
tree ghost	bio kuro ai nake.	trunk	koka.
tree kangaroo	ravitu.	try	a.
tree, kwila tree	ka'an.	tulip	aro pe'e.
tree, mangrove tree	kaiyantón.	turn off kerosene lamp	choki.
tree, palm tree	nemo; reva.	turtle	kanroi.
tree, redwood, red cedar	aiten.	turtles	bona; buri.
tree top	oku.	twist	ure.
trees	beken; paretoro; petapon; rato; tam; taravai; temo; urara.	two, be two	riyempin.

U - u

umbilical cord	ti.	us (many)	memi.
up above	niye.	us (two)	mepi.
urinate	tiro tiro, <i>see: tiro.</i>		

V - v

vagina	raivetu; rau.	vines	meke.
vein	ipo.	voice	poko.
veranda	yamankoko.	voicebox	tarove ma, <i>see: tarove.</i>
very	rewo.	vomit	kuau.
vine, climbing plant	apona.		

W - w

waist	ariku.	whistle	poi.
wait for	-keke.	white	buso.
walk	ute.	white, be white	avovo.
walk around	tova.	who	nape.
wallaby	aivoro.	who knows!	bauveke, <i>see: bauni.</i>
want	a.	wife	om.
wash something	pi nii, <i>see: pi.</i>	wild fowl	baremo.
waste time	aitara.	wild fruit	auna; pieko.
water	pi.	wild goose	pororom.
water snake	tai.	wild taro	yi.
we (many)	memi.	wind	pu'u.
we (two)	mepi.	wink	ine koruvovo, <i>see: ine.</i>
weak	taiutaiu.	witch	bio venavena.
weak, be weak	reva kokopo; rairai; reka kopopo, <i>see: reka; reva kopo, see:</i> reva.	with	ave.
weave	poiya.	woman	bia; biam; bom.
web	no.	wood	ai.
west	bo umo kararo.	work	bo.
wet, be wet	pitata.	wound	po.
what	arape.	wrap	ipori; yauma.
where	ro; rope.	wrap tightly, bandage, package	ao.
		write	e.

yawn

zigzag

Y - y

yawn raurau.
yes ao.
yesterday bariri.
you (man) mema.
you (men) mopu.
you (woman) momu.
you (women) beve.
young, be young tare.

your (man) mema.
your (men) mopu.
your (woman) momu.
your (women) beve.
yours (man) mema.
yours (men) mopu.
yours (woman) momu.
yours (women) beve.

Z - z

zigzag rorororoki.

Appendix C

Sources

[ANR-EM:05]	<i>Anranae</i>	2005
[ANR-MN:01]	<i>Anranae</i>	2003
[C-EM:03]	<i>Who made the canoe capsize?</i>	2001
[C-MW:03]	<i>How we catch crabs</i>	2003
[CB-JT:01]	<i>How we make canoes</i>	2001
[CF-MN:01]	<i>How we catch fish</i>	2001
[DC-CA:03]	<i>Death customs 1</i>	2003
[DC-MM:03]	<i>Death customs 2</i>	2003
[FF1-MN:01]	<i>Devil flying fox part 1</i>	2001
[FF2-CA:03]	<i>Devil flying fox part 2</i>	2003
[I-MW:03]	<i>How we make armbands</i>	2003
[MP-EM:01]	<i>If I were a mother pig...</i>	2001
[NS-MM:03]	<i>New skin</i>	2003
[NSC1-CA:03]	<i>Namesake celebrations part 1</i>	2003
[NSC2-MM:03]	<i>Namesake celebrations part 2</i>	2003
[P-MB:03]	<i>How we catch prawns</i>	2003
[P-MG:03]	<i>How our ancestors made paint</i>	2003
[S-MN:03]	<i>How our ancestors got sago</i>	2003
[TP-MN:01]	<i>Where tobacco came from</i>	2001
[U-EM:01]	<i>How the uram tree got red sap</i>	2001
[U-GX:01]	<i>How we catch fish with a basket</i>	2001
[WH-RX:03]	<i>Women's customs</i>	2003
[WM-MN:05]	<i>The first white men</i>	2005
[DICT-CA:01]	Dictionary entry	2001
[DICT-CM:01]	Dictionary entry	2001
[DICT-EM:01]	Dictionary entry	2001
[DICT-MF:01]	Dictionary entry	2001
[DICT-MM:01]	Dictionary entry	2001
[DICT-PA:01]	Dictionary entry	2001
[DICT-PB:01]	Dictionary entry	2001
[DICT-PW:01]	Dictionary entry	2001
[DCL-D1]	Donald Laycock field notes	nd

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