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Languages of the eastern Bird's Head

edited by Ger P. Reesink



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Table of contents

	Preface	V
	Abbreviations	vi
	Maps	viii
1	The eastern Bird's Head languages compared Ger P. Reesink	1
2	A sketch of Mpur Cecilia Odé	45
3	Morphosyntactic properties of Meyah word classes Gilles Gravelle	109
4	A grammar sketch of Sougb Ger P. Reesink	181
5	Mansim, a lost language of the Bird's Head Ger P. Reesink	277

Preface

A few years ago the Bird's Head area was virtually a white spot on the linguistic map, even though the languages had been classified in families and stocks, most of which were claimed to make up the West-Papuan Phylum. But all of the classifying work was based on rather limited data, basically some wordlists.

During the last decade much more detailed data on the languages of this area has become available, especially through the programme 'Irian Jaya Studies: a Programme for Interdisciplinary Research' (ISIR), financed by Netherlands Foundation for the Advancement of Tropical Research (WOTRO), a governmental institution within the Netherlands Organization for Scientific Research (NWO). Under the general sponsorship of the Indonesian Institute of Research, and more specifically as far as linguistic research was concerned, under the sponsorship of Dr Hasan Alwi, Director of the National Centre for Language Development in Jakarta, fieldwork on a number of languages could be carried out. In addition members of the Summer Institute of Linguistics have published their findings on a few languages.

For references to publications pertaining to the Bird's Head, see the bibliographic references to the articles in this volume.

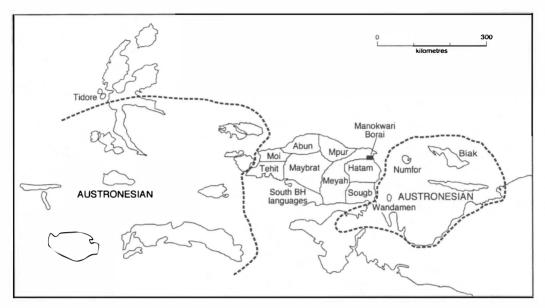
One of the languages presented here has virtually disappeared. In some of the linguistic and anthropological literature one can find references to an ethnolinguistic group Borai, also known by the name Mansim, as being related to Hatam, or being a dialect of it. Since a grammar of Hatam has appeared in a separate publication, data of this language figure mainly and importantly in the short sketch of Mansim.

The opening article of this volume attempts to sketch the relationships between the languages of the eastern Bird's Head with each other, as well as with languages surrounding the area. It is followed by brief descriptions of four languages, each illustrated with some text material. Each of the contributions is presented as an independent unit, with its own detailed table of contents.

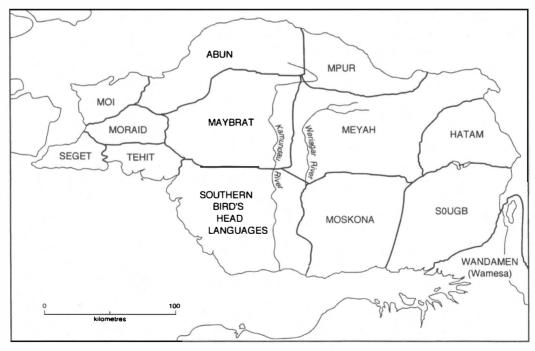
Ger P. Reesink

Abbreviations

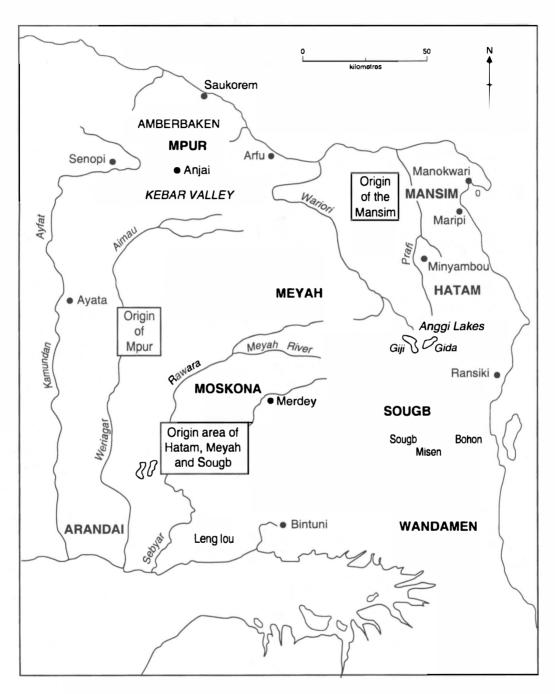
Α	adjective	LNK	linker
ADV	adverbaliser	LOC	locative
ANA	anaphoric	M	masculine
ANIM	animate	MEAS	measure noun
ART	article	MOD	modal
CAUS	causative	N	noun
CERT	certainty	NEG	negative
CIT	citation marker	NF	Numforese
CL	clitic	NOM	nominaliser
CLF	classifier	NP	noun phrase
COMP	completive	NUM	numeral
CONN	connective	PERF	perfective
CONT	continuative	PL	plural
DEM	demonstrative	POS	possessive
DET	determiner	PRO	protest
DIR	directional	PUR	purposive
DU	dual	Q	question marker
DUR	durative	QUOT	quote marker
EMP	emphatic	RC	relative clause
ENT	entreaty	RECIP	reciprocal
EXC	exclusive	RED	reduplication
EXCL	exclamation	REF	reflexive
F	feminine	REL	relative marker
FOC	focus	RES	resultative connective
FUT	future	SF	singular feminine
HES	hesitation	SG	singular
INC	inclusive	SM	singular masculine
INCEP	inceptive	SPEC	specific
IND	indicative	TOP	topical
INS	instrument	V	transitional vowel
INT	intensifier	VBL	verbaliser
INTER	interrogative	VOC	vocative
IRR	irrealis	ф	zero morpheme (3SG)
		1,2,3	first, second, third person



Map 1: Bird's Head languages in relation to surrounding Austronesian languages



Map 2: The Bird's Head languages



Map 3: Eastern Bird's Head languages, with the origin areas of the various languages marked

The eastern Bird's Head languages compared

GER P. REESINK

1	Intro	oduction	2
2	Link	s throughout the Bird's Head	3
	2.1	Pronouns	3
	2.2	Lexical comparison	5
3	The	genetic relationship between Meyah and Sougb	6
	3.1	Verbal morphology	6
	3.2	Nominal morphology	9
	3.3	Lexical correspondences	10
4	Evic	lence for eastern Bird's Head grouping and contact	12
	4.1	Meyah and Hatam: some inalienable nouns	13
	4.2	Sough and Hatam: connective clitic bi-	13
	4.3	Meyah, Sougb, Hatam: instrument marking	14
	4.4	Meyah, Sougb, Hatam: the nominaliser k	15
	4.5	Meyah, Sougb, Hatam, Mpur: the verbaliser (e)be	16
	4.6	Meyah, Sougb, Hatam, Mpur: locative/direction marker	17
	4.7	Meyah, Sougb, Hatam, Mpur: reciprocal	17
	4.8	Some lexical evidence for contact	18
	4.9	Meyah, Sougb, Hatam, Biak: verbal adjuncts	21
5	Hist	orical origins	22
6	Inte	r-ethnolinguistic marriages	24
7	The	nature of the eastern Bird's Head languages	25
	Appe	ndix: Comparative wordlists of four eastern Bird's Head languages	32
	Refer	rences	41

1 Introduction¹

The Bird's Head Peninsula of Irian Jaya is rather naturally divided into a western and eastern part by the Kamundan and Weriagar rivers, which both spring from the Tamrau Mountains and run parallel to the south flowing into the McCluer Gulf. From two accounts of the oral tradition it seems that, at least to some people, there is an awareness of three major ethnolinguistic groupings in this eastern area. A Hatam speaker told me (at Minyambou in 1994) that Mimpui (= a nominal marker plus the verb pui 'tell') had assigned the Kepala Burung 'Bird's Head' to the three groups Tinam (= Hatam), Tuig (= Sougb) and Sreu (= Meyah). A few years later (at Sururei in 1998) a Sougb speaker stated that Igba was the ancestor of the Sougb, the Ijom (= Hatam) and the Sana (= Meyah). These three groups originated, according to his story, in the area somewhere between Bintuni and Merdey. Neither speaker considered the languages Mpur and Mansim. Presumably, the former was located too far north considering the area they were focusing on, while the latter was no longer viable as a major linguistic community. Four of these eastern Bird's Head (EBH) languages, namely Sougb, Meyah, Mansim and Mpur, are sketched in this volume, while for the fifth, Hatam, a separate grammar has been published (Reesink 1999).

On the other hand, in spite of the natural barrier formed by the two major rivers, and the restricted concept of the Bird's Head by the one Hatam speaker, there are other ethnolinguistic groups on the peninsula that have some relationship with the languages of the eastern Bird's Head. These are all part of the grouping known as the West Papuan phylum, which includes the Non-Austronesian (NAN) languages of Halmahera.

The main purpose of this paper will be to signal the features that separate or link the five languages with each other. To establish genetic relationships between these languages, indeed for most of the languages of the Bird's Head, is not easy. The attempts to do so by Cowan (1953, 1957) are not very convincing. The vocabularies are so divergent that similarities are generally very few and regular sound correspondences seem to be absent. For example, Voorhoeve (1989:90–92) gives the following cognate percentages for the languages of the eastern Bird's Head: Mpur-Hatam 3%; Mpur-Meyah and Sougb 5%; Hatam-Meyah 5%; Hatam-Sougb 8%. Inspection of the comparative wordlists in the appendix to this chapter shows that even with more detailed data these figures cannot be improved. Only in the case of Meyah-Sougb, for which Voorhoeve gives a 28% cognacy, can a solid case for genetic relationship be made. This is presented in §3. Furthermore, now that some more data on the nearly extinct language Mansim (also known as Borai) have become available, we can without any hesitation state that it forms a closely related family with Hatam (see Chapter 5).

In §2 some evidence is presented which may suggest that the languages of the eastern Bird's Head are not totally unrelated to other languages of the peninsula and the NAN languages of North Halmahera. Claims for distant genetic relationships are a tricky business, as Campbell (1998:311–326), for example, warns. Similarities in lexical items do not prove

Fieldwork conducted for this paper, as well as a first draft, was undertaken in the framework of the Netherlands Organization for Scientific Research (NWO) priority programme 'Irian Jaya Studies: a Programme for Interdisciplinary Research' (ISIR), financed by the Netherlands Foundation for the Advancement of Tropical Research (WOTRO). The programme was carried out in co-operation with LIPI (Lembaga Ilmu Pengetahuan Indonesia, The Indonesian Institute of Sciences). Further research and revision was carried out as part of the Spinoza research programme 'Lexicon and Syntax', under the direction of Pieter Muysken at Leiden University, The Netherlands.

much. Either chance or borrowing, even in the basic vocabulary, can be responsible for correspondences that do not prove a genetic linkage. Grammatical evidence, such as 'shared aberrancy', 'morphological peculiarities' and 'submerged features' are generally considered better indicators for a distant genetic relationship.

After it has been shown, in §3, that Meyah and Sougb are bonafide members of a single small family, some peculiarities of the bound morphology that may point to a distant genetic relationship with Hatam and Mpur are presented in §4. In a few subsections some evidence for diffusion from and to Austronesian languages around the Bird's Head is given.

In §5 and §6 historical and anthropological data which can explain some of these linguistic similarities is presented.

In the conclusion, §7, a general characterisation of the languages of the eastern Bird's Head is given, with a number of areal features that are not necessarily confined to this part of the peninsula.

2 Links throughout the Bird' Head

2.1 Pronouns

The pronouns, both free and bound forms, of these languages show some clear correspondences within the eastern Bird's Head, as well as outside this particular area. Tables 1 and 2 (taken from Reesink (1998:606) with some corrections) show the free and bound forms for all the relevant languages.

	Tehit	Moi	Maybrat	Abun	Mpur	Meyah	Sougb	Hatam	Mansim
1SG	tet	tit	tuo	ji⁄ tat	in	didif	dan(i)*	dani*	danu
2SG	nen	nin	пио	nan	nan	bua	ban(i)	nani	nanu
3SGM	wow	ow	ait	an	yeta	ofa	en(i)	noni	nenu
3SGF	mom	om	аи	(mom)*	men	ofa	en(i)	noni	nenu
1DU.EXC	la-mam	aali-mam	_	-	wor	mamef	nanan	-	?
1DU.INC	la-faf	aali-paw	-		wor	nagif	aman	sani	?
2DU	la-nan	aali-nan	•	- 1	non	goga	yan(i)	-	?
3DU	la-yit	-			dor	goga	lan(i)	-	?
1PL.EXC	mam	mam	ати	men	yek	memef	emen	nyeni	ni(wap)
1PL.INC	faf	waw	ати	men	yek	mimif	maman	nyeni	ni(wap)
2PL	nan	nan	anu	nin	nen	iwa	yen(i)	jeni	syenu
3PL	yey	ey	ana	án	der	rua	len(i)	yoni	syenu

Table 1: Free pronouns

Many of the bound forms, given in Table 2, are transparantly related to the free forms. Interestingly enough, they sometimes differentiate more categories, as in Moi, where the

^{*}Keith Berry (1995:65) qualifies Abun *mom* as archaic. It is suspiciously similar to the Tehit 3SGF form. The free pronouns in Hatam and Sough are obviously bimorphemic. The variants without the near deictic -ni freely occur. In fact, the Sough forms are more often attested with a final nasal.

4 Ger P. Reesink

opposition Human versus Non-human is signalled for third person, or in Hatam where inclusive-exclusive is marked, while this same distinction in Moi is neutralised. The column for Abun is empty, since Berry and Berry (1999) claim that Abun lacks pronominal affixation on the verbs. Their data do indeed suggest that the free pronouns cliticise to the bare verb stem or a few adverbial particles which can occur between pronoun and verb.

	Tehit	Moi	Maybrat	Abun	Mpur	Meyah	Sougb	Hatam	Mansim
1SG	t-	t-	t-		(i)n-	di-	d-	d-	d-
2SG	n-	n-	n-		(a)n-	bi-	b-	a-	n-/mb-
3SGM	w-	w-/p-	у-		a-	Ø	Ø	Ø	Ø
3SGF	m-	m-	m-		n-	Ø	Ø	Ø	Ø
1DU.EXC	-	аат-			0-	та-	na-	_	?
1DU.INC	_	aaw-			0-	na-	am(a)-	s-	?
2DU	-	aan-			n-	go-	уа-		k-
3DU	-	aay-/aan			do-	go-	la-		k-
1PL.EXC	m-	p-	p-		e-	me-	ma-	n-	ng-
1PL.INC	p/f-	p-	p-		e-	mi-	em-	i-	ng-
2PL	n-	n-	n-		n-	yi-	у-	j.	S-
3PL	у-	y-/n-	m-		de-	ri-	l-	i-	s-

Table 2: Verbal prefixes

It is not really necessary to discuss extensively the possible origins and linkages of the personal pronouns in the Bird's Head languages. Voorhoeve (1987b) has already tried to link them to the pronoun sets postulated by Wurm for most of the Papuan languages. It is clear that the most widespread forms are $t \sim d$ for ISG, and n(V) for 2SG. When Voorhoeve tried to explain the anomolous ISG of Mpur by postulating $in < yin < yi \sim ji$, which is found in one of the dialects of Abun, he had to leave the accretion of the nasal unexplained (1987b:720). It seems clear that Mpur -n has at least the function of indicating feminine gender, as pointed out by Odé (see Chapter 2, this volume). A possible second function involves some givenness. Just as the final material on the free pronouns in the languages of the eastern Bird's Head, nu in Mansim, ni in Hatam and Sougb, and $-if \sim ef$ in Meyah, material such as final n and the suffixal -ta on Mpur 3SG free pronoun is derived from deictic material, as observed by Voorhoeve (1987b:720).

Rather aberrant is the bilabial for 2SG in Meyah and Sough free and bound pronouns. To explain this, Voorhoeve (1987b:725) made an excursion to the Torricelli phylum. But, as I remarked before (Reesink 1996:5), this form could equally well be traced to the Austronesian (AN) languages of the Cenderawasih Bay. Considering that it is precisely these languages with a clear opposition between inclusive and exclusive for 1PL, and that these two languages have a quite regularly formed dual, I would reiterate my conjecture even more firmly. More than adjacent languages Hatam and Mansim, Meyah and Sough appear to have adopted some definite Austronesian features, including the 2SG pronoun (see also §7).

The only other exception to the Bird's Head 2SG form n(V)- is the bound form a- in Hatam. It seems quite plausible to explain this as an apocope of the nasal, given the regular Bird's Head item of the free pronoun, na(ni).

Considering the forms for 2PL and 3PL, one could make a case for a genetic link between Hatam, Sough and Meyah (possibly Mpur) and the western languages Tehit and Moi. The palatal approximant may have undergone a switch in person category, or it may reflect an original form not differentiating between second and third person, which is not unusual in Papuan languages. At a later stage, when these languages acquired a differentiation, it was assigned third person in the west, and predominantly second person in the east of the Bird's Head.

Likewise, 1PL seems to be m(V)- in most languages of the peninsula, disregarding the inclusive-exclusive opposition, and if we allow palatalisation to have affected this pronoun in Hatam nye(ni), a process which is also attested in the etymon for 'water': Meyah mei, Hatam nyei.

One further point of evidence concerns the gender distinction between $w \sim f$ for masculine and m for feminine in the western languages Tehit and Moi. As I suggested in Reesink (1998:621), although the opposition has been lost in the eastern part of the peninsula (retained, albeit by other forms in Maybrat and Mpur), the 3SG possessive prefixes divided over Meyah ef- and Sough me- are likely reflexes of these original gender specific pronouns.

2.2 Lexical comparison

In Reesink (1998) I have given a few items, such as the terms for 'eat' and 'drink', which are indicative of a genetic relationship for all the languages of the Bird's Head (except the South Bird's Head group). They are repeated (with corrections) here, including variants of related languages such as Mansim and Moskona:

	Hatam	Mansim	Sougb	Meyah	Moskona	Mpur	Abun	Maybrat	Tehit	Moi
drink	dut	dot	ek	ej	et	kobet	da	ata	aaqo	0
eat	yem	dem	et	et	et	det	git	ait	at	ak

Since in many (Papuan) languages there are no separate lexical items for 'eating' and 'drinking', it is not unreasonable to assume a basic set for the Bird's Head languages. This might be something like *(d)eT. Some borrowing may have gone on, when we consider that the Hatam and Mansim terms for 'eat' are suspiciously similar to Mpur 'bite' yem. Perhaps the Bird's Head *(d)eT is related to the ubiquitous Trans New Guinea (TNG) form *nV-, but this is, of course, not more than speculation.

There are a few other items which might indicate that the languages of the Bird's Head are distant relatives of other Papuan languages. One of the more stable etyma in TNG languages, according to Pawley (1998:679), is 'louse', with the protoform being something like *niman. The forms found in the EBH languages could be more than chance similarities: Sough mem; Meyah mej; Hatam mem; Mpur im.

There are some other indications that the EBH languages have old connections with Papuan languages further to the east. For example, as already mentioned with regard to the pronominal form for 1PL, Meyah has mei for 'water', cognate with Hatam nyei. A totally different etymon appears in Sougb. In my description of Sougb I hypothesised that duhu 'water, river' consists of the root -uhu, since also a form me-uhu [mohu] occurs meaning 'liquid' in general. It may be more than accidental that both roots for 'water' have similar forms in the Mek and Ok languages, which are so called because of their diagnostic etyma for 'water'.

Another etymon widespread throughout the TNG family and beyond is the term for the indigenous species of taro ($Colocasia\ esculenta$), which is something like $ma \sim mo \sim me$ (see Hays 2000; Ballard 2000). As Hays points out, often it is not clear which species are meant when secondary sources give translation equivalents in English, Tok Pisin or Indonesian. Moreover, terms for food crops are easily transferred to other species, and/or borrowed from neighbouring languages. For example, whatever etymon was available for an indigenous tuber, this might have been adopted in some form or other to newly introduced sweet potatoes, yams, or other taro varieties. Thus, similarity of terms in this semantic field forms by no means strong evidence. Yet, when terms for taro or sweet potato do reflect the putative proto-term it could mean that languages in this area did share the proto-term for the indigenous species. Thus, Mansim mow for 'taro', Meyah mou for 'sweet potato', and mam for 'taro', Hatam minoi (with mi- being a (fossilised?) prefix), Sough mundo for 'taro' may reflect an old Papuan etymon (see comparative wordlists for these terms and those for other food crops).

In this area it is just the two languages Hatam and Mansim which agree in their word for 'sweet potato' sieP, which presents more evidence for contact, since it is a more recently introduced item. This term has equivalents in Central Highlands languages (Dani, Yali, etc.), according to Scaglion and Soto (1994:279) and further to the east in some languages of the western province of Papua New Guinea, such as siaP(u)ru in Bainapi, Kamula and Kasua (Reesink 1976:14). In fact, as Scaglion and Soto (1994:271) show, languages with terms for 'sweet potato' related to these terms are scattered throughout New Guinea, interspersed with a number of other sets. Whatever this might mean in terms of the migration of the sweet potato, as Scaglion and Soto are trying to argue from the distribution of the different etyma, it does suggest some (trading or otherwise) relationship between the EBH and the more eastern (TNGP) Papuan languages. In their finderlist of reconstructions in Austronesian languages, Wurm and Wilson (1975:211) list a form siavu', identified as Proto Ambonese by Stresemann. Whether this form is indeed of AN origin or a Papuan diffusion into the Moluccas is not decided. In either case it is a sign of (trading) contact between New Guinea, in particular the eastern Bird's Head and the Moluccas. In other words, clearly some lexical similarities are due to contact, but some others may be indicative of a distant genetic relationship, both within the Bird's Head and with Papuan languages outside this area, although much stronger evidence would be needed to make this a firm claim.

3 The genetic relationship between Meyah and Sougb

Since Meyah and Moskona could be considered as dialects, only data from Meyah is taken to compare with Sougb in order to illustrate the close relationship within this group of languages. Verbal and nominal morphology is considered in some detail, and some possible sound correspondences are illustrated.

3.1 Verbal morphology

Both languages have a five-vowel system: i, e, a, o, u. But verb stems in both Meyah and Sough can only begin with [-HIGH] vowels: e-, o-, a-. In both languages this restriction holds for (most) adjectival notions as well.

In contrast to other languages of the Bird's Head, for which subject prefixation is the norm, both Meyah and Sough have other categories of verbal morphology, which are partly parallel.

(i) Meyah has the verbal prefix er- to mark instrument, which corresponds to Sougb a-, as illustrated by:

Meyah:

(1) M-era medeb efeyi m-er-ei mod. 1EXC-use sago leaf 1EXC-INS-assemble house We use sago leaves to construct a house.

Sougb:

- (2) En eic inyomus a-(e)s berougb.

 3SG take bow INS-shoot chicken
 He took his bow and shot a chicken.
- (ii) Meyah has a prefix, en-, to mark a durative aspect, which Sough lacks.
- (iii) Both languages have a prefix em-, which is labelled 'intentional' for Meyah and 'irrealis' for Sough. There are some interesting similarities and differences between the two languages with respect to these prefixes. Meyah seems to require durative en- on clauses following a sequential conjunction, as in (3), and it is definitely obligatory to mark the verb with enwhen the clause is negated, as in (4). Exactly the same conditions apply to Sough em-, as illustrated in (5) and (6).

Meyah:

(3) Motu fogora ri-en-esaga gu mod. night then 3PL-DUR-arrive at house At night then they were arriving at the house.

Meyah:

(4) Ofa en-agob ef-en m-okosa guru.
3SG DUR-hit 3SG-POS 3SG-brother not
He did not kill his (younger) brother.

Sougb:

(5) Loba kaba l-em-agunya se tu.
night then 3PL-IRR-arrive at house
At night then he arrived at the house.

Sough:

(6) En em-ogod en m-agt(o) ero.

3SG IRR-hit 3SG 3SG-younger.brother not
He did not kill his (younger) brother.

Whereas Meyah seems to allow both durative *en*- and intentional *em*- on the verb of a consecutive clause, Sough only has irrealis *em*- with that function. Whereas Sough *em*- is required on a negated verb, Meyah *em*- is not allowed to co-occur with *guru* 'not'.

8 Ger P. Reesink

- (iv) Meyah has yet another verbal affix, which is absent in Sough. It marks a perfective aspect by the infix -N-, which yields contrasting constructions, as in:
 - (7) Memef m-en-et mar.

 1EXC 1EXC-DUR-eat thing
 We are eating.
 - (8) Memef m-e-n-t ma.r 1EXC 1EXC-PERF-eat thing We have eaten.
 - (9) Memef m-em-et mar.
 1EXC 1EXC-MOD-eat thing
 We intend to eat.

When the intentional (Meyah) or irrealis (Sougb) marking co-occurs with the instrument prefix, the basic order is the same for both languages. The instrument is closest to the stem. In fact, the vowel a replaces the stem vowel e in Sougb. (For further details on the morphological behaviour of these prefixes, see the descriptive chapters on the respective languages.) Compare Meyah (10) and Sougb (11).

- (10) Mi-otunggom bedeng fogora mi-em-er-efa metrem efej gij.

 1INC-make seed.bed then 1INC-MOD-INS-plant corn seed in

 We make a seed bed intending to plant corn seeds in (it).
- (11) En em-eic kepta em-a-(e)hi sogo ero.

 3SG IRR-take axe IRR-INS-fell tree not
 He did not use the axe to cut the tree.

Both Meyah and Sough allow pronominal object clitics to be attached to prepositions:

Meyah:

(12) Di-em-eita mat gu-ib.

1SG-MOD-give food to-2SG
I intend to give food to you.

Sougb:

(13) D-em-eic aret dou-b.

1SG-IRR-give food to-2SG
I'll give food to you.

Note that in both languages, the form translated 'to give' has the more general meaning 'to take' (Indonesian ambil) and receives the 'give' interpretation when it is followed by the preposition 'to', in Meyah gu, in Sough dou.

Gravelle (this volume, Chapter 3, §3.3.2) states that Meyah allows object clitics to all verbs, in contrast to its dialect Moskona. In Sough, there is at least the possibility to cliticise pronominal objects, other than 1PL and 1DU, to vowel-final verbs (Chapter 4, §3.2.2.5). Further evidence is lacking.

The reciprocal pronoun (or clitic) takes the place of object with action verbs with plural subject marking:

Sougb:

(14) Mamam m-arges-im-da.
we.INC 1INC-let.go-RECIP-go
We scattered. (lit. We let each other go.)

Meyah:

(15) Rua ri-em-agob-(u)ma. they 3PL-MOD-hit-RECIP They intend to strike each other.

3.2 Nominal morphology

Gravelle (1998:562; this volume, Chapter 3, §3.2) notes that all indigenous alienable nouns in Meyah begin with m-. The ten per cent or so of alienable words that do not, are clearly recent loans. Comparison with data from Sough suggests that this initial m- is an old possessive prefix. In Sough it is still productive as third person singular possessive marker, both on inalienably possessed nouns and the possessive pronouns. In both languages, terms for body parts, including notions such as 'name', 'reflection' and other less tangible parts of personhood, and kinship relations, as well as social relations such as 'friend', are obligatorily prefixed to indicate person-number of the possessor. The default is 3SG possessor. This has resulted in a fossilisation of the original Meyah 3SG possessive prefix, which now is still present in a number of inalienable nouns. The result is that in Meyah inalienables, the original form Vf- has become part of the noun stem, so that 3SG is zero marked and other person categories require their markers preceding the old 3SG. This form is still present and corresponds with Sough me, as can be seen in the paradigms of possessive pronouns in (16). This also shows that the possessive element is the same in both languages, albeit with some vowel alternations. It would be tempting to assume a verbal origin for Meyah $-in \sim en$ and Sough $-en \sim an$, as I have set them off by hyphens in (16), but that would leave unexplained the fact that verbs do not take most of the person markers as parsed in (16): see Table 2.

(16)		Meyah	Sougb
	1SG	ded-in	ind-an
	2SG	beb-in	ab-an
	3SG	ef-en	me-n
	IDU.EXC	mafm-an	am-an
	1DU.INC	nafn-an	nan-an
	2DU	geg-an	maj-an
	3DU	geg-an	mar-an
	1EXC	mefm-en	em-en
	1INC	mifm-in	mam-an
	2PL	yey-in	mej-en
	3PL	rer-in	mer-en

The third person ef is no longer separable in Meyah inalienable nouns, while for Sougb inalienable nouns the 3SG prefix is best analysed as me, rather than m, because it has consequences for the initial high vowels of the stem. The stem vowels /i/ and /u/, which are

present in all other person categories, are lowered in the 3SG form to e and o, respectively, while the stem vowel a remains unchanged. In contrast to these phenomena in Sough, the low stem vowels e and o in Meyah are raised when they coalesce with the high front vowel of some of the person prefixes. A further consequence of the petrification of Meyah ef-, is that Meyah has only initial e and o in inalienable nouns, while Sough allows all five vowels (see Chapter 4, §3.3.1). Compare the paradigms for Meyah ofos 'skin' (17) and efaga 'body' (18), and their Sough equivalents:

(17)	skin	Meyah ofos	Sougb us
	1SG	di-ofos = [dufos]	ind-us
	2SG	bi-ofos = [bufos]	ab-us
	3SG	-ofos	me- $us = [mos]$
(18)	body	Meyah efaga	Sougb aga
	1SG	di-efaga = [difaga]	ind-aga
	2SG	bi-efaga = [bifaga]	ab-aga
	3SG	-efaga	me- $aga = [maga]$

I will return to the topic of inalienable nouns, which in both languages seem to be immutable classes, when I consider possible links between Meyah, Sough and Hatam.

That the third singular possessive prefix is me- is evident from the vowel alternations in Sough. It receives confirmation from a few alienable nouns in Meyah. Consider the correspondences in (19). In both languages the vowel a remains largely immune to the effects of adjacent vowels, so that Meyah mar 'something' corresponds to Sough ara.

(19)		Meyah	Sougb	
	com	metrem	tram	
	banana	menei	neij	
	canoe	meg	ij	

Both languages allow plural marking with the suffix -ir. In Meyah this suffix may occur on all animate nouns, including mek 'pig' and mes 'dog', mek-ir 'pig-PL' and mes-ir 'dog-PL'. In Sough it is only allowed on human nouns, kinship terms and social relationships, subject to some vowel harmony with the stem vowel: ind-ihi-r '1SG-child-PL', me-us-ir '3SG-skin-PL' becomes [moser] for 'his/her relatives'.

3.3 Lexical correspondences

Meyah and Sough share at least about thirty per cent of cognates, clearly showing a common inheritance. Not all sound correspondences are clearly established yet. In some cases, the direction is reversed, suggesting that the languages have retained elements from their ancestral language in an unsystematic way. Alternatively, they may have borrowed elements from each other after the split had taken place. Consider the forms for 'child(ren)' in (20). As is the case for some other kinship terms as well, Meyah employs person prefixes which diverge from the present productive set. In this set, for example, the 3SG prefix *ef*-can be isolated from the stem. When Meyah -*ir* is attached to a final -*a* the resulting vowel is *e*.

(20)		Meyah	Sougb
	1SG-child-PL	ed-esa-ir [edeser]	ind-ihi-r
	2SG-child-PL	eb-esa-ir [ebeser]	ab-ihi-r
	3SG-child-PL	ef-esa-ir [efeser]	me-hi-r
	3PL-child-PL	er-sa-ir [erser]	mer-ihi-r

Thus, there are a a number of mainly, inalienable nouns that are (almost) identical if the Meyah fossilised *ef*- is taken as equivalent of the productive Sough 3SG prefix *me*-:

Meyah	Sougb
oforu	mor
eiteij ofou	maires mougb (= '3SG.eye blind')
efaga	maga
ofora	mohori
ofou	mougb
efeji	modi
efesi	mes
ofoka	moho
ofog	mog
ofos	mos
	oforu eiteij ofou efaga ofora ofou efeji efesi ofoka ofog

Some possible sound correspondences are:

	Meyah o	~	Sougb e
ascend	osok	~	eisaugb
bad	oska	~	ecgu
deaf	otuw	~	etugb
fell	of	~	ehi
neck	oruk	~	m-ergo

But, as mentioned, there are correspondences in reversed direction:

	Meyah e	~	Sougb o
dig	eji	~	ogo
hear ²	eg	~	ouman
divide	ekeba	~	ouhw
hair	efeji	~	modi
also	tein	~	tou
chase	ejer	~	ocir
	Meyah f	~	Sougb h
already	fob	~	hob
blow, sing	of	~	ohu
to fly	ofow	~	ohw
liquid	mofut	~	mohu

At first glance Meyah eg and Sough ouman do not look very similar. I suspect, however, that the Sough term is polymorphemic. Thus I'm comparing only the first syllable ou-.

```
Meyah k
                                       Sougb h
                                       oho (of string bag)
                  ok
carry
                  (of)oka
                                       oho
name
                  ekeni
                                       ahani
red
                  oke-ibi
                                       mohor-beda
knee
one<sup>3</sup>
                  e(r)-gen-s
                                       hom
                  akid
tie, build
                                       ohut
                  Meyah j
                                       Sougb d
throw
                  eij
                                       edi
                  eja
                                       eda
go
with
                  iera
                                       dara
friend
                  ohui
                                       sud (Sough = 'person'; friend = -si)
hair
                                       modi
                  efeji
                  Meyah K
                                       Sough palatal C or approximant y
                                       hwej
                  mek
pig
canoe
                                       ij
                  meg
                  ek
                                       eiya
to see
```

There are a few items which suggest that Meyah -k(u) or -f or -w correspond to Sough final gb:

ascend	osok	~	eisaugb
flee	oku	~	ougb
run	ofof	~	ougb
sweet potato	mow	~	augwu
for	nou	~	naugb

Finally, there are a number of basic vocabulary items which are (almost) identical:

eat	et	~	ed
come	en	~	en
cut off	etka	~	etkwa
cry	ebisa	~	eb
take, give	eita	~	eic
tear	ekris	~	ekris
know	ejginaga	~	ecinaga

4 Evidence for eastern Bird's Head grouping and contact

In the previous section evidence for the genetic relationship between Meyah (which includes its close relative Moskona) and Sough has been presented. In this section some morphological peculiarities that could serve as (meagre) evidence that all five languages of

Sough has gem in ser-gem in which ser is oviously from s(1)ra 'hand'. The Meyah material around gen is unaccounted for.

the eastern Bird's Head are (distantly) related are discussed. The topics are grouped in such a way that firstly evidence is supplied for inclusion of Hatam (and by extension Mansim) in a genetic relationship with the established family. And later some morphology shared by all languages of the area is presented. Although a few lexical correspondences could further strengthen the genetic hypothesis, in the absence of regular sound correspondences, they are interpreted as contact phenomena. In fact, various items reviewed in §4.8 are indicative of extensive contact far beyond this region. Finally, in §4.9, attention is drawn to a peculiar semantico-syntactic feature, found in Meyah, Sougb and Hatam, but with a striking parallel in Biak.

4.1 Meyah and Hatam: some inalienable nouns

When I discussed the nominal morphology of Meyah and Sough, I made the statement that Meyah ef-, clearly corresponding to Sough me-, is no longer separable in inalienable nouns, and that Meyah only has e and o as initial vowels in such items.⁴ That statement needs some qualification. There are a few body part items in Meyah that do not begin with ef- $\sim of$, but with ef $\sim ot$ -, as the words in (21) illustrate.

(21)		hand		stomach	
	1SG	di-etma	[ditma]	di-otkonu	[dutkonu]
	2SG	bi-etma	[bitma]	bi-otkonu	[butkonu]
	3SG	-etma	[etma]	-otkonu	[otkonu]

Possibly, Meyah di-et = [dit] on di-etma 'my hand' and di-ot = [dut] on di-otkonu 'my stomach' reflect an old possessive prefix, which is (non-productive) present in Hatam kinship terms: /t/ before non-bilabials, /p/ before bilabials, as in:

(22) Hatam
my wife di-t-nem
my grandfather di-t-ngyon
my mother di-p-mem

4.2 Sough and Hatam: connective clitic bi-

For Hatam I described a connective clitic *bi*- as marking a purposive or resultative relationship in a verb sequence (Reesink 1999:102), as in:

- (23) Ji-tau minyei hi bi=di-dut=i?
 2PL-draw water some PUR=1SG-drink=Q
 Draw some water for me to drink, please.
- (24) Di-bui napia bi=mai.

 1SG-hit wild.pig PUR=die
 I killed the wild pig.

An exception is the term for 'leg, foot' which is aki, and not something like *ofori/a, which would correspond to Sough m-ohora, as the terms for 'bone' correspond: Meyah ofora ~ Sough mohori.

14 Ger P. Reesink

This connective is homophonous with the Hatam instrument marker (see §4.5), but it has a different position and function. It always precedes the subject prefix, while the instrument marker is a derivational verbal prefix, thus occurring between subject prefix and stem. The Hatam connective is remarkably similar in form and function to a connective clitic in Sougb (see Chapter 4, §3.11.1), as in:

(25) En ougwan ar-et b=et.

3SG cook thing-eat RES=eat
S/he cooked food to eat.

In Sough this form is only allowed with 3SG subjects, which are, as in Hatam, zero-marked. Other person categories simply require the subject prefix on the second verb, and do not allow the connective in addition, as Hatam does in (23). Consider:

- (26) Dan d-eisa d-eihweda dau.

 I 1SG-get.up 1SG-go.away from
 I got up and went away (= I got up to leave).
- (27) En eisa b=eihweda dau.
 s/he get.up RES=go.away from
 S/he got up and went away (S/he got up to go away).

4.3 Meyah, Sougb, Hatam: instrument marking

In none of these three languages can an instrument be nominally expressed in one clause with the action verb and object affected. It needs to be introduced as an extra-clausal constituent or as object of a preceding manipulative verb. But all languages frequently⁵ mark the action verb with a prefix that signals an instrument, see Meyah (Chapter 3, §3.3.3), Sougb (Chapter 4, §3.2.2.3), and Hatam (Reesink 1999:101), even when an explicit instrument is not mentioned in the immediate preceding context. The actual morphemes used for this morphosyntactic configuration are not clearly reflexes of one protoform. Meyah *er*-and Sougb *a*- may be related, Hatam *bi*- looks quite different, making the case for genetic evidence weaker. Here are just a few examples:

Meyah:

(28) Ri-era mocongg ri-er-oduis rua.
3PL-use arrow 3PL-INS-pierce them
They pierced them with arrows.

Sougb:

(29) En eic kepta a-(e)tkwa hwej. s/he take machete INS-cut.up pig S/he cut up the pig with a machete.

My information is insufficient to make statements on the degree of optionality, such as under which conditions such marking might be obligatory.

Hatam:

(30) Nyeni ni-ba micim ni-bi-dat yoni. we 1EXC-use spear 1EXC-INS-pierce them We pierced them with spears.

4.4 Meyah, Sough, Hatam: the nominaliser k

For Sough I identified a morpheme /g-/ consisting of a velar stop which appears to have a nominalising function (Chapter 4, §3.1.4). But, as I point out in the phonology of Sough, the opposition voiced-voiceless is very dubious, if not absent altogether. In fact, there is quite a fluctuation in voicedness in the other EBH languages as well. In Hatam, for example, the opposition voiced-voiceless applies only in stressed syllables. Hence, I refer to it here as an unspecified velar plosive. It is prefixed to verbs (including adjectival notions). For example, the verb omom 'die' receives this prefix in the expression eic g-omom dou en 'give NOM-die to him'. And the word for 'work' is the compound g-eic-ara 'NOM-take-something'. It appears to be suffixed to the noun ara 'something' to form a relative pronoun, as in:

(31) Keita are-g dan d-a-(e)hi ind-an lo.
axe what-NOM I ISG-INS-fell ISG-POS garden
The axe I used to cut my garden.

For an argumentation supporting the identification of this prefix and suffix as the same morpheme, see Chapter 4, §4.3.4. This form allows contrasting a general attributive adjective, as in (32), with a construction which conveys a specific reference out of a possible set, as in (33).

- (32) Ban b-eic sogo agas.
 you 2SG-take tree tall
 Take a tall tree.
- (33) Ban b-eic sogo g-agas. you 2SG-take tree NOM-tall Take a/the tree which is tall.

In Meyah, a much more reduced role is played by the same morpheme. It seems to occur only on demonstratives. Meyah demonstratives are *if* 'near speaker', *uma* 'near addressee', and *unj* 'overthere'. When they are used as substantives, they are prefixed with *ke-: kef*, *koma* and *konj* (see Chapter 3, §6.2), as in:

(34) Ge-(e)n-odou os ke-(i)f. 2/3DU-DUR-liver rub NOM-this They are desiring this. (Gravelle 1998:563)

The nominalised form can also be used attributively, presumably with more of a specifying function than the bare demonstrative:

(35) Maat ke-uma bera mar mareij.
food NOM-that is thing taboo
That (particular) food is a taboo thing. (Gravelle 1998:570)

In Hatam a similar form *gi*-nominalises demonstratives, verbs and adjectives, and it marks complete clauses as conditionals or temporals (see Reesink 1999:46), as illustrated in (36)–(38).

- (36) Gi-ma mindei?

 NOM-that what

 What is that (thing)?
- (37) gi-preu ni-jep NOM-promise 3SG-new a new promise (= the New Testament)
- (38) Nipou gi di-pilei yo lene di-bit di-cig.
 before NOM 1SG-young still then 1SG-follow 1SG-father
 In the past when I was still young, I followed my father.

A common origin of this grammatical morpheme seems to be a more plausible explanation than diffusion.

4.5 Meyah, Sougb, Hatam, Mpur: the verbaliser (e)be

Meyah has a form *ebe*- which adapts Indonesian loan words as Meyah verbs, such as *ebe-pikir* 'to think' (see Chapter 3, §5). The form is identical in Sough, as in *ebe-mahal* 'to be expensive', and many others. In fact, both languages use the same form with what is most likely a loan from Hatam. Hatam *ruei* means 'to change' (for example, as a snake changes its skin). Both Meyah and Sough have *ebe-rwei* [eperwei] for 'to change, translate'.

Now, in Sough this verbaliser can be related to an existing verb with the generic meaning 'to do' eba (see Chapter 4, §3.2.4). Similar forms with a similar function, namely as verbaliser on loan words, occur not only in the EBH languages, but appear also in Mpur and Abun and in the adjacent AN language Biak-Numfor. Consider the form we- in Mansim, as in we-licin 'to be slippery'. In Hatam the form had been analysed as bV- since the exact quality of the vowel was hard to determine, while the adopted spelling is bi-, as in bi-mahal 'to be expensive'. In Hatam, the same form is used to mark the instrument on the verb, analogously to Meyah er- and Sough er- and I point out in my sketch of Mansim (see Chapter 5), Numfor has two similar forms, one clearly with a schwa, as in be-sam 'to be warm', the other with an open front vowel, as in be-sansun 'to dress'. The latter, I suggest, may be borrowed from the Bird's Head form ebe-, originating as a verb 'to do', as it is still productive in Sough.

Interestingly, both Mpur and its western neighbour Abun have the form bi- with a high front vowel, which incorporates loan words. Berry and Berry (1999:5) suggest that this form is most likely borrowed from Biak. It is only used with Biak and Indonesian loan words, as in bi-win 'to sail' and bi-mengerti 'to understand'. The same form is used in Mpur, basically on loans from Dutch, bi-skop 'to kick', from Indonesian, bi-lewat 'to cross', from Biak, bi-ankar 'to deceive', and possibly also with original Mpur items, as in bi-sik 'to be unable' (see Chapter 2). Given the clear high front vowel in these two languages, the Hatam form may have this vowel as basic quality as well, which is always reduced in the unstressed position of this prefix.

My tentative scenario at this point is that Sough, Meyah, Hatam (and Mansim) and Mpur share the form on genetic grounds, and that Biak-Numfor has adopted it through contact with Mansim. Later it may have found its way into Abun either from Biak or more directly from its NAN neighbour Mpur.

4.6 Meyah, Sough, Hatam, Mpur: locative/direction marker

When the near and far deictics in Meyah are used adverbially, they occur in locative phrases with the preposition *jah* 'at'. The deictics themselves are nominalised with the prefix s- before they can occur in the prepositional phrase, as s-uma 'there' in (39).

(39) Ri-eker gij mei jah s-uma.
3PL-sit in water at LOC-there
They stay in the water over there.

This Meyah form s- may be related to a similar element in Hatam, which has si following offglides, and an allomorph ti elsewhere, analysed as an 'areal nominaliser' in Reesink (1999:44, 92). Consider (40), which parallels the Meyah construction in that a preposition is required.

(40) Ni-gwam ei si-ma.

1PL-sit at NOM-that
We were sitting there.

It is at least remarkable that Sough and Mpur have a locative preposition with a similar form. Sough has se, conveying 'location or path and/or destination', as in (41), contrasting with a preposition dig indicating 'path' only. Mpur si 'towards', contrasts with prepositions ke and ku in that it implies that the movement will take place, as in (42); see Chapter 2.

- (41) Aman am-eigtou se ind-an tu.

 1DU.INC 1DU.INC-sit at 1SG-POS house
 We two are sitting in my house.
- (42) A-un si war.

 3SG-go to water

 He will go to the river.

I would suggest that this locative marker, which functions as a prefixal element to deictics in Meyah and Hatam and as a preposition in Sough and Mpur, is an argument for a genetic relation between these languages. But, at this stage, the possibility of diffusion cannot be ruled out.

4.7 Meyah, Sougb, Hatam, Mpur: reciprocal

The forms indicating reciprocal action are similar in all languages of the area. Compare Sough im and Meyah (u)ma in (14) and (15) above, here repeated as (43) and (44), with Mpur em in (45) and Hatam yam in (46).

Sougb:

(43) Mamam m-arges-im-da.
we.INC 1INC-let.go-RECIP-go
We scattered. (lit. We let each other go.)

Meyah:

(44) Rua ri-em-agob-(u)ma. they 3PL-MOD-hit-RECIP They intend to strike each other.

Mpur:

(45) De-bwar na-em.
3DU-say to-RECIP
They said to each other.

Hatam:

(46) Ji-kimut kep yam big.

2PL-strangle hold RECIP not
Don't murder each other.

The reciprocal element is not only morphologically similar in these languages, but also in all four of them it shows identical syntactic behaviour in that it takes the position of verbal or prepositional object.

4.8 Some lexical evidence for contact

There are a few lexical items which seem to link the languages of the eastern Bird's Head. It is not immediately clear whether they would count as evidence for a genetic relationship. In fact, I suspect these similarities to be the result of contact.

One such item which links Meyah and Sough with Hatam is the word for 'mountain', which in Meyah is *memaga*, clearly a compound consisting of *mem-(m)aga* 'mountain-(its)-body'. The phrase *mem-aga ofos* would then be 'mountain-(its)-body its-peak'. According to Gilles Gravelle (pers. comm.) *ofos* with a high tone means 'peak, point', contrasting with *ofos* with a low tone which means 'its skin'. Similarly, Sough *men* is 'mountain', but *men-mod* is 'mountain peak' or 'top'.

Where Meyah has mam 'rock', Hatam has mam 'interior' ('mountain' is nungugwa), Sough has igdahabi for 'rock' or 'stone'. It seems likely that Hatam mam 'interior', Meyah mam 'rock', mema 'mountain' and men 'mountain' in Sough represent different reflexes of one etymon.

The vocative forms for 'mother' and 'father' seem to be indicative of certain demographic facts. For all groups patrilocal settlement has been reported as the default case (see §6). It was mostly women who migrated to other ethnolinguistic groups. Perhaps these facts explain why both the vocative and the referential term for 'mother' is quite stable throughout the area and beyond, while the terms for 'father' show much more variability.

Mansim and Hatam have both *amei* as vocative for 'mother', which in Meyah and Sougb is *ameinya* (with palatalisation of the nasal due to the preceding glide). Note that adjacent AN Wandamen also has *amei* as vocative.

The referential term (m)-em 'mother' has reflexes in a number of other languages as well, as already shown in Reesink (1998:608). The various languages are listed here. Notice that Meyah employs a completely different term, with an interesting morphological structure:

Hatam -mem, Mansim -mem, Sough -im ~ -em, Mpur (n)yen, Abun im, Maybrat -me, Moi -mem, Tehit -eme. While Moskona has inei, the referential term in Meyah is for all possessors other than first person singular (which is identical to the vocative ameina) the form m-osu-. The second person singular possessor is marked by an object suffix, mosu-ib, 3SG possessor is zero, mosu, while the plural possessors make use of the regular possessive prefixes, replacing the petrified m-: mi-osu [musu] '1INC-mother', i-osu [yusu] '2PL-mother', ri-osu [rusu] '3PL-mother'.

While Meyah and Sougb both have *akeinya* as vocative for 'father', Hatam has *arig*, and Mansim seems to have *yai* both as vocative and referring term. The referring terms are the following. Again, Meyah employs the same aberrant structure for 2SG possessor:

Hatam -cig, Mansim -yai, Sough -ina ~ -ena, Mpur a(ya), Abun ai, Maybrat atia, Moi mum, Tehit -ono(u). While Moskona has ayok, the referential term in Meyah is for all possessors other than first person (which is identical to the vocative akeina) the form m-eka which behaves just as m-osu 'mother': 2SG is marked by an object suffix m-eka-ib 'he-fathers-you'; 3SG is either zero meka or the fossilised 3SG marker m-. The latter is replaced by the regular possessive prefixes for the other person-number categories: mi-eka [mika] '1INC-father', i-eka [ika] '2PL-father', ri-eka [rika] '3PL-father'.

The term for 'mother's brother' seems to agree in stability with the term for 'mother', although data on some languages is lacking:

Hatam mum, Mansim mum, Sougb -unyo ~ -onyo, Mpur mum, Abun ?, Maybrat -amu, Moi ?, Tehit ?, Meyah -eina.

Apart from the fact that etyma for parents often reflect 'nursery forms', as Campbell (1998:321) calls them, with almost universally attested bilabials, as indeed we can observe in the given terms for 'mother' and 'mother's brother', the distribution of the vocatives amei(nya) and akeinya could easily be due to borrowing rather than be inherited from a common ancestor.

There are some data that are evidence of contact between the EBH and Halmaheran languages. Given the (pre-)historical trading relationships between the AN Biak-Numfor people and their relatives on the Raja Empat islands, and further west and south (Halmahera and Seram), with the NAN Tidore and Ternate, it may not be accidental that the endonym Moi of the Mansim is equivalent to the endonyms of the ethnolinguistic groups around Sorong and the NAN group on Makian (Taba's neighbours). Another sign of contact between the NAN languages of Halmahera and the eastern Bird's Head is the word for 'canoe': Tidore has oti, Mansim has ot, and Hatam ud, while just about all the intervening AN and Papuan languages have some reflex of AN *wangka, for example, AN Biak and Taba have wa and Papuan Maybrat wiak or other forms, such as Abun kwem and Moi kama.

While I keep using the qualifying terms AN and NAN, the linguistic data betraying these trading and migrating patterns involve languages of both groups. For example, Taba causative prefix ha- clearly reflects Proto Austronesian (PAN) *pang-, parallel to Numfor-Biak fa- (correspondence Taba h/) and Biak h// also in 'four': Taba h0t, Numfor h1t, and 'seven': Taba h1t, Numfor h1th. Compare Taba (Bowden 1998:235–242) and Biak-Numfor (van Hasselt 1905:13): Taba: h1th h1th h1th h1th h2th h1th h2th h2th h3th h3th h3th h4th h4th h4th h4th h5th h4th h5th h5

whitened (something)'; Biak-Numfor: kak 'to be afraid' versus fa-kak 'to frighten'; sna 'light' features in fa-sna 'to show', thus 'cause to become light/clear'. This AN feature has been adopted by Mpur (see Chapter 2, §4.5): yep 'dry' versus fa-yep 'make (s.t.) dry'. Further it is remarkable that Hatam ha- 'be, do' operates rather similarly in some contexts to a homophonous form in Taba ha-, which Bowden labels a classifier for measuring things. Compare Hatam ya-ha-gom '3PL-do-one' = 'they all' and Taba ha-so-le 'CLASS-one-only' = 'all' (see Bowden 1998:298–300).

A comparison of the full paradigmata of spatial deictics (i.e. demonstratives and directionals or elevationals) would be necessary to understand how the different languages of the region are related or how they have adopted (parts of) each other's systems. But some remarkable facts may point to some connection between both AN and NAN languages of Makian and the eastern Bird's Head.

NAN West Makian (with its endonym Moi) shares si-ne 'here' with its AN neighbour Taba 'PL-PROX', thus meaning 'these' (as opposed to i-ne 'SG-PROX') (Voorhoeve 1982:18), which is also found in Numfor, while the distal deictic is si-d(i)a 'PL-DIST' = 'those' in Taba and soma 'there' in West Makian. The deictics ni 'PROX' and ma 'DIST' are also found in Hatam. In fact, ni or ne is 'proximate to Speaker' throughout the area, except in Abun, where ne is 'middle distance' contrasting to re 'near' and tu 'far' (Berry & Berry 1999:71), but distal deictics have a wide variation in phonological realisation. The form ma is found in Hatam ma 'that' and in Meyah (u)ma 'middle distance', but not in Sougb. It does feature in various functions in Mpur (see Chapter 2), but not in adjacent Abun. It also features profusely in Moi and North Halmaheran languages (see Reesink 1998).

In Numfor pronouns can be attached by ani reflecting an anaphoric sense (van Hasselt 1905:38). Steinhauer (1985:477) mentions that possessive pronouns in the Saui'as dialect of Biak can have -an, explicitly indicating that the entity possessed is known to the hearer. Interestingly, Bowden (1998:321) gives a-ne 'here' and a-dia 'there' for Taba, and remarks that the prefix a- does not occur anywhere else in the Taba morphology. Could this form reflect some borrowing from related Biak, or is it an older form of South Halmahera West New Guinea, still present in both languages, but still being productive in Biak and fossilised in Taba? The pronominal forms van Hasselt lists for Numfor are: 1SG: yani; 2SG: bani; 3SG: biani; 1PL: kobani; 2PL: mgobani; 3PL: sani. Some of these turn up in the languages Hatam and Sough: both have dani for first person singular; 2SG: Hatam nani; Sough bani. Given the aberrant 2SG form b- in Sough and Meyah, and the morphological endings of the free pronouns in Sough and Hatam, these facts suggest a borrowing from Biak-Numfor. And the only dual form in Hatam is sani for first person, strikingly identical to Biak-Numfor 3PL, while Sough has a fully developed dual system, in which the vowel a signals the number category. It seems likely that the Mpur determiner bani ~ wani, which signals some topical function, is a loan from Biak-Numfor.

There may be another AN feature present in Hatam. There are many lexical items with syllabic homorganic nasals preceding a CV(C) syllable. A number of them seem to be related to items without such nasals, as for example *ngkwei* 'return' and *kwei* 'come'.

In Reesink (1998) I noted the correspondence in contrastive forms between (AN) Biak-Numfor m-kak 'to be afraid' and fa-kak 'to frighten' and (NAN) West Makian ma-gey 'to die' and fa-gey 'to kill'. Bowden reports (from Jacqui Whisler n.d.) m(a)- as fossilised in Taba, but as still productive in Sawai. The diachronic explanation of Nasal + Consonant clusters in Taba is clear. Through the process of post-nasal syncope, the stative deriving prefix *ma- is reduced to m- in many South Halmaheran languages (Blust 1998), yielding

forms like *mnihis* 'be thin'. Numfor-Biak (van Hasselt 1905) seems to maintain the contrast *ma*- 'stative/process' versus *fa*- 'causative' as productive (reflecting PAN **pang*- and **mang*-, as given by Tryon 1995:22). Could the considerable number of prenasalised verbs and nouns in Hatam have a similar origin? Compare *kes* 'to drop, let go' and *ngges* 'to drop, let go', which some of my consultants accepted without a noticeable difference in meaning, while one claimed that *ngges* referred to an involuntary action and *kes* to an intentional one.

For many of such pairs, however, no semantic relation seemed to be plausible. Other instances of items with homorganic nasal-stop sequence lacked a nasal-less counterpart. If this feature could conceivably be taken as an argument for a basically AN nature of Hatam, it would at least be very strange that a highly diagnostic feature for AN languages in eastern Indonesia is totally absent in Hatam or other Bird's Head languages. This concerns the CaC-variant of the general AN Ca- reduplication pattern, which mainly forms instrumental nouns out of verbs, according to Blust (1998). Responding to Bowden's information on the CaC-reduplication in Taba and other AN languages in the Moluccas, Blust (1998:49) wonders if the facts in South Halmaheran languages are related to the general process he described for the AN Ca- template or that they are products of an independent history. Whatever the answer to that question, it is clear that the CaC- template connects Taba with Ma'ya, spoken on Salawati, and Biak-Numfor. The ubiquitous term for 'clothes' throughout the Bird's Head is sansun, clearly formed as a CaC- reduplication, as suggested by Lex van der Leeden (see Reesink 1998:611). Many such items can be found in van Hasselt and van Hasselt (1947), as for example, kun 'burn' and kankun 'fireplace'.

Now, other than the obvious loan sansun, no such pattern can be found in the Bird's Head languages. Some reduplication involving the vowel a replacing any stem vowel can be observed, but this involves a final -CaC template, not an initial one, and the semantic result is not an (instrumental) nominal, but an adjectival or verbal intensification, as in Hatam kinei 'bad' > kinei-kinai 'very bad' and Maybrat frit 'move' > frit-frat 'be busy' (Dol 1999:54).

4.9 Meyah, Sough, Hatam, Biak: verbal adjuncts

In addition to the morphological material in §4.1–§4.7, which can be considered to be evidence for a genetic relationship, and the lexical material in §4.8, which is given to illustrate contact within the eastern Bird's Head and outside, one interesting semanticosyntactic feature deserves some comment here, even though I have presented it before (Reesink 2000). Meyah (see Chapter 3, §3.4.2), Sougb (see Chapter 4, §3.9) and Hatam (Reesink 1999:73) all have two adverb-like elements which add a specific semantic value or valency, in the case of intransitives, to the main verb with which they occur. Simple glosses for these elements are not easy to give, but one communicates something like 'hold onto, with force', while the other is glossed in local Malay by the term *pele*, meaning 'block, shield off'. Such constructions are not found in Mpur, but Biak exhibits some striking parallels, even in the forms of the adjuncts. The forms operating in the various languages are:

	hold onto; press	block, shield off
Meyah	keingg	joug
Sougb	deb(-in)	dougwo
Hatam	kep	ser
Biak	epən	wark

In all these languages the verb 'stand' or 'sit' with 'hold on, press' means something like 'trample', or 'keep sitting on' as Meyah (see Chapter 3) ot keingg rua 's/he oppresses them', Biak aref epan kau 'step on shit' or adds some durative aspect, as in Hatam ya kep 'keep standing', and Sough esa deb 'keep standing'. The verb 'stand' or 'sit' with 'block off' means something like 'guard, watch', as Meyah ot joug efesa 's/he guards his/her child', Sougb esa dougwo mehi 's/he guards his/her child', Hatam ya ser hanjop 'guard the area', gwam ser 'hold a wake', Biak enef wark 'sleep guard' (Wilco van de Heuvel, pers. comm.). It is clear that Meyah joug and Sough dougwo are cognates. The other forms are not as clear. Sough deb and Hatam kep may be related, but so could Biak epan. Since both adjuncts appear entrenched in the three EBH languages, being very productive with a great variety of verbs, I consider it a mini-areal feature, which has spread into Biak-Numfor, presumably through the extinct Hatam relative Mansim, which has been the major language of contact between the EBH and Biak-Numfor (see Chapter 5). As pointed out in Reesink (2000) Abun has a similar semantic configuration of 'sit' with some element (in this case a form wa labelled Transitiviser (Berry & Berry 1999:26-28)) to convey 'guard' or 'holding a wake'. Since such a configuration is absent in Mpur or western Bird's Head languages, I would consider it a Biak calque in Abun, and considering the form, perhaps even a loan. These facts suggest a similar route for this feature as the one I suggested for the verbaliser ebe $\sim \beta e \sim bi$, given in §4.5: an inherent feature of the EBH languages was borrowed by AN Biak-Numfor, subsequently adopted by a loan calque in NAN Abun.

Thus, in the preceding sections I have offered some morphological peculiarities shared by the languages of the eastern Bird's Head. These data, together with the material presented in §2, concerning pronouns and a few lexical similarities, which transcend the eastern half of the peninsula, seem to allow the tentative conclusion that there is indeed a distant relationship between the EBH languages in particular and between the Papuan languages of Halmahera and the Bird's Head in general. That the eastern languages are quite different from those to the west of the Kamundan and Weriagar, is not surprising considering the natural barrier which these two rivers constitute. In both areas, however, the most northern languages, Abun in the west, Mpur in the east, seem to have the least in common with their relatives. Significantly, these two languages both have phonemic tone.

But I have also shown a number of lexical similarities which are suggestive of massive and longlasting contact between these languages. The next sections review some non-linguistic data that illustrate the degree of contact.

5 Historical origins

In the introduction I mentioned a few accounts of the oral history which suggest that Hatam, Sough and Meyah all originated in the area between Bintuni and Merdey. Various authors agree that the area of origin of these groups is somewhere near the upper reaches of the rivers Meyof (or *Duhu inyom*), Meyah (= Rawara) and Tetahu (= Wasian) (see Pouwer 1998:173; Pans 1960:40, 47; Miedema 1998:221, quoting the administrator Bergh). Miedema (1984:152) suggests that the Kebar (= one of the Mpur-speaking groups) originate from the mountains south of the Kebar plains and that the Mpur kinship system is closely related to those of the ethnolinguistic groups Hatam, Moiree (= Hatam dialect) and Manikion (= Sough).

It would appear reasonable to hypothesise that the limestone hills in the middle of the eastern Bird's Head were the original homeland of the Mpur, with the other groups as their immediate southern neighbours. The lower ranges of the Arfak mountains and the coastal areas around present-day Manokwari must have been inhabited by the Mansim (known by their endonym *Moi* and the Hatam exonym *Moi brai*) (see Chapter 5).

The earliest written historical sources are from European explorers who began to visit the area in the seventeenth century. They already found that the sultanates of Ternate and Tidore with their vassals of the Raja Empat islands had trading interests along the south coast of the Bird's Head, and claimed settlements along the north coast into the Cenderawasih Bay (see for example Kamma 1947–49; Swadling 1996:33; Huizinga 1998). Some sources suggest that the connections between Halmahera (in particular Tidore) and the coastal areas of the McCluer Gulf on the one hand, and the Biak-Numforese on the north side of the Bird's Head on the other are even older. Haenen (1991:8) quotes Kamma who claimed that Biak-Numfor migrations to the west dated from before the end of the fifteenth century.

Although the exact date of the migrations in the eastern Bird's Head is not known, Pans (1960:31) mentions that the first Hatam people arrived in the Mansim area north of the Doreh Bay around 1860. This does not imply that the Hatam had stayed at their origin ground near the Sebyar and Rawarra junction (Pans 1960:41). Presumably, they had already moved from there to the headwaters of the Prafi and the Wariori, while the Meyah had moved more directly to the north, and the Sougb to the east: near the Anggi lakes and the plains to the south. It could be that due to these migrations, the Mpur were driven ahead of the Meyah to the north, settling in and around the Kebar plains, with the Meyah continuing east of them to the north coast, until they too arrived in the original Mansim area.

If indeed the dominancy of the Raja Empat islands over the coastal areas of the McCluer Gulf, evidenced by trading relationships (Sollewijn Gelpke 1994), including slave raids (Haenen 1998:236), had been going on since the fifteenth or sixteenth century, the first migratory movements away from the south coast into the safer reaches of the central limestone hills and further into the mountains (north and east) could well have started a few centuries ago.

Not only were there extensive intergroup relations within the Bird's Head. Kamma (1947-49:545ff.) mentions that in the first part of the sixteenth century the sultans of Tidore, Ternate and Bacan formed an alliance with the Papuan kings (i.e. the rulers of the Raja Empat islands, who were AN speakers) to dispell the Portuguese from the Moluccas. Later that century, the Dutch found that old trading relations must have existed between the Moluccas and the territories of the 'Papuan islands' (see, for example, Goodman (1998) on the intermediary position of Seram in the trading between the Moluccas and western Irian Jaya). Various products from Papuan territories were found, one of them slaves from the land of the Papuans. As Bergh (1964:47) notes, when slavery was abolished at the end of the nineteenth century, a few thousand slaves were released at Ternate and Tidore. The relationship between Tidore and Ternate with the Raja Empat islands and the the rulers of Onin (across the McCluer Gulf) have been well documented. They procured birds of paradise and massoy bark, as well as slaves, from the south coast of the Bird's Head. Given the extensive and old contacts of the Biak-Numfor people with the Raja Empat islands, Seram and Halmahera (Kamma 1947-49:365-372), it is not implausible to assume that some of these products, including slaves, originated from the north-east coast of the peninsula, so that many people from around the coast of the Bird's Head had been moved as slaves to Halmahera and the smaller islands around it. Perhaps the fact that the name Moi is applied not only to the Mansim near Manokwari, but also to the ethnolinguistic group around Sorong as well as the NAN on Makian (Bowden 1998:5), is not an accident. In the final section I try to give a general description of the nature of the Bird's Head languages, related to the reported migrations and the centuries old influence of Austronesians.

6 Inter-ethnolinguistic marriages

Pouwer (1958:42–43) gives some statistics of mixed marriages among the Hatam (equivalent to the major Hatam dialect group Tinam), the Moiree (equivalent to the other large Hatam dialect, called Moile, or Miriei) and the Manikion (equivalent to the Sougb) near the Anggi lakes. Roughly thirty to forty per cent of the marriages involved a foreign partner. Pouwer does not specify which partner is foreign. The Moile and Tinam have the highest number of intergroup marriages. In linguistic terms, these would hardly qualify, since the two speech communities are mutually intelligible. But the frequency of intermarriges between the Hatam (= Tinam) and Sougb is considerable in both directions. Much less, but still significant, are the number of marriages among both the Hatam and Sougb involving a Meyah partner. Pouwer's conclusion (p.43) is that interethno-linguistic contact has been far more intensive than the asserted sense of in-group identity he observed from informants. Given the 2:1 ratio of patrilocal versus non-patrilocal (= either matrilocal or bilocal) settlement among the Sougb, Tinam and Moile (Pouwer 1958:26–29), one can assume that about two-thirds of the 'foreign' partners (foreign in relation to the territory in which the household was settled) were women.

In other words, it wasn't just the women who migrated in this area. For some adjacent groups, for example, Miedema (1984:124, 130) mentions that a man from the Kebar (an area mainly populated by Mpur speakers) clan Anari was able to trace his origins to eight generations back, to a woman who lived 'near upper-Bintuni'. A grandson of this ancestral woman belonged most likely to the Anason. These data indicate a migration about 200 years ago of people from the south (roughly the area believed to be the homeland of the Meyah, Sougb and Hatam), who by now had totally integrated in the Kebar (= Mpur-speaking) group. The linguistic data provided by Miedema (1984, Appendix 5) suggest that the Anason are a dialect group of the Meyah. Thus, these Meyah men had married Anari women, moved further north into the Kebar plains, until they had become full members of the Mpur kinship groups.

At other places, Miedema states (1984:119) that more Mpur women are married to the Meyah than vice versa, and that both Mpur and Meyah married more women from the area to the west than vice versa. This western area Miedema refers to by the names Karon and Ayfat, presumably referring to the Karon Dori (= a Maybrat dialect). However, although the Kebar claimed to have married Karon (female) slaves and not vice versa, Miedema reports (p.123) Karon informants telling about raids in which they killed Kebar men and took Kebar women, selling them as slaves to the north coast.

Another 'clan' of the Kebar plains, called the Miun (again the linguistic data suggest a Meyah dialect) kept intensive marriage contact with the southern Karon-Ayfat area (Miedema 1984:120). These data suggest that some of the Meyah had 'infiltrated' the Mpur, and that both original Mpur and these Meyah descendants acquired women from the Maybrat. Significant in this context is the information given in the story about the Maybrat culture hero Siwa (Dol 1999, Appendix III). Siwa had cut off the head of his mother and

brought it to his sister in Meyah country. At some place in between some old woman smelled something rotten, found it was a decaying head, got angry and caused a flood, which chased Siwa to the land of the Meyah and the Kebar (Mpur).

Other evidence for migrating Maybrat and Moskona (= Meyah dialect) is provided by Bergh (1964), as quoted by Miedema (1998:221). Various Sougb people came originally as foster-children from the Maybrat, corroborated by evidence in Jonathan Ahoren's account of adopted children among the Sougb (see Chapter 4, Appendix 2). Whereas Moskona men married Sougb women, the reversed direction did not occur. Moskona women were too expensive. No doubt, the main reason was that the payment was to be done in the form of kain timur (literally 'cloth east' which are pieces of cloth imported from the island of Timor into the Bird's Head and circulated there as valuable items used in all kinds of payments, especially brideprices). The Moskona were closer to the source, since kain timur came into the eastern Bird's Head from the south-west, as Miedema concludes (1998:222). But in relation to the Meyah, the Moskona were the poor in kain timur, so that Moskona girls were 'sold' to the Meyah in exchange for the cloths.

This short summary of inter-ethnolinguistic marriage relationships should suffice to appreciate the level of contact between the language groups of the eastern Bird's Head and further west (the Maybrat and, possibly, the Abun).

7 The nature of the eastern Bird's Head languages

As I have mentioned a few times before, even though the evidence is rather slim, it does not seem unreasonable to assume a distant genetic relationship between the five languages of the eastern Bird's Head as well as with the languages of the western part of the peninsula and North Halmahera. But this genetic relationship goes back over such a time-depth, during which various languages have moved so far apart that they can be seen as virtually isolated small families or individual languages. If we restrict ourselves to the eastern part, we see that there are three groups: (1) Mpur by itself, (2) Hatam and its close relative Mansim, and (3) Meyah, its dialect Moskona and Sougb.

From the historical and anthropological data it appears that the Mpur originate from the centrally located lower limestone hills from where they moved to the north until they reached the Kebar plains and further north to the coast, where the dialectal variant Amberbaken is spoken. The Mansim originally inhabited the coastal plains around present-day Manokwari, as far inland as the Kebar plains, and the foothills of the Arfak mountains (see Chapter 5). A few centuries ago, first the Hatam, and later the Meyah moved from the area where the Rawara and Sebyar rivers meet to the north-east and north, where they took over much of the Mansim area. Presumably, the Hatam made their first move to the headwaters of the Wariori, from where they moved further north and east, towards the coast. The Mansim had already been mingling with the Biak-Numforese who entered the Manokwari area from the sea. Now they also faced intrusion from their 'relatives', the Moile (or Miriei) and Tinam dialects of Hatam. The Sougb finally moved more eastwards and then turned to the south, occupying the area between the Anggi lakes and Bintuni.

In §6 I have shown that all these linguistic groups have known many interlinguistic marriages. In addition, for centuries they have had contacts with surrounding AN speakers, the Wandamen in the south-east, people from the Raja Empat islands and from across the McCluer Gulf in the south, and the Biak-Numforese in the north. These sociopolitical

conditions have had a considerable influence on the nature of the languages spoken in this area.

At the level of coffee-table talks about the languages of the Bird's Head and Halmahera, characterisations like 'these languages are rather creole-like' can be heard. But, of course, when it is difficult, if not impossible, to define criteria for creole languages, this lacks any theoretical value. For example, the attempts by Bickerton (1981:51-72), Romaine (1988:47-69) and more recently McWhorter (1998) to set up defining criteria for creole languages, are easily defied by similar features in non-creole languages, as for example by Collins (1980) with regard to Moluccan Malay, Holm (1988:147), Muysken (1988:300) and recently DeGraff (1999:11) in general. What are the features, though, one could ask, that trigger such pre-theoretical evaluation? Basically, I think, it is a reaction to the rather 'simple' structures one encounters in these languages, such as predominant CV(C) syllable structure, a five-vowel system, a dearth of morphological complexity, except for subject and possessor prefixation of verbs and inalienable nouns, lack of tense-mood-aspect marking, SVO word order and asyndetic conjunctions, suspiciously similar to what are known as serial verb constructions, and so on. But many of these features correspond to general characteristics of AN languages as opposed to Papuan (Foley 1998). Are we dealing then with a group of AN languages? Phrasing the question this way points towards a fruitless search for an essentialistic classification. It would seem more helpful to chart various features which are predominantly available in what are known to be Austronesian languages on the one hand and those which are typical for the Papuan languages on the other hand. The label 'Papuan' then refers mainly to the largest grouping for which increasing evidence has become available, the Trans New Guinea Phylum (see Pawley 1998). In other words, I will not try to state what the 'basic nature' of the EBH languages is in terms of whether they are 'originally' AN or Papuan. Instead, I will summarise a number of features from both stocks which to a greater or lesser extent are present in the languages of this area.

7.1 Phonology

All EBH languages have a five-vowel system: i, e, a, o, u. The close relatives Meyah and Sougb stipulate a remarkable constraint on the initial vowels of verbs, where only e, a and o are allowed. The predominant syllable structure is CV.CV(C). Voicing opposition for consonants is not very stable in any of the languages: in word-final position it is lacking altogether, and in other positions conditions of stress seem to determine whether or not the opposition is maintained. The languages have only one liquid, realised as either [r] or [1]. Fricatives are present, either as phonemes, $|\Phi|$, |S| and |D| or as allophones. Mpur clearly has phonemic tone, Meyah and Sougb a pitch-accent system. Hatam and Mansim do not have a tonal distinction, which they may well have had in the past (the number of homophones in Hatam is considerable), but Hatam does have a very pronounced iambic stress pattern over the utterance as a whole, defying attempts to determine a pattern of word stress.

None of these features can be pinpointed as clearly AN or Papuan, except perhaps the lack of phonemic distinction between the liquids as being Papuan.

7.2 Morphology

The clearly AN reduplication pattern of pre-stem template Ca(C)-, where the vowel a replaces any stem vowel, is definitely not available in EBH languages, nor, for that matter, in other languages of the peninsula. A reflex of PAN causative or transitive pang-, as opposed to intransitive mang-, is clearly productive in AN languages of the area around the Bird's Head, but as fa- only in just a few items in Mpur and possibly as ha- in some Hatam words.

Gender is definitely not an AN feature. Mpur distinguishes feminine and masculine for third person singular. None of the other languages exhibits gender the way western Bird's Head languages (except Abun) do, but, as I suggested earlier (Reesink 1998:621), the masculine bilabial stop and the feminine bilabial nasal of the western Bird's Head appear to be split between Meyah third person possessive *ef*- and Sough *me*-.

The AN inclusive-exclusive opposition for first person plural (or dual) is firmly entrenched in Meyah and Sough, but only partially in Hatam (no opposition in free pronoun) and altogether absent in Mpur.

Whereas both Papuan and AN languages typically express mental and emotional states by means of an (inalienable) body part term plus a qualifying adjective or verb, basically only Papuan languages have what I call 'experiential verbs' (= 'uncontrolled states' in Foley 1986:123).6 In such verbal constructions the experiencer is marked by the regular object affix while the subject is typically an inanimate entity. Of all the Bird's Head languages, only Sougb, and to a somewhat lesser extent Meyah, employ such constructions for just a few mental or physiological states. Significantly, some of the far western relatives on North Halmahera, also have 'experiential verbs', even though there are some clear differences. In North Hamaheran languages the position of the object affix is preverbal rather than postverbal, as in the EBH languages. Also, the North Halmaheran languages do not seem to employ a generic verb in addition to the element functioning as the syntactic subject. Compare Galela (47), from van Baarda (1908:81), and Sougb (48):

- (47) *I na sapi*.

 3SG 1INC hungry
 We are hungry.
- (48) Sr-eb-ema. hunger-do-1INC We are hungry.

If such constructions had been available to all the NAN languages of the Bird's Head and Halmahera, it is clear that most of them have lost them. For example, in Mpur and Hatam 'to be sick' or 'to be hungry' is expressed by regular intransitive verbs.

In AN languages, inflectional morphology is very weakly developed or completely lacking, and Tense-Mood-Aspect categories are generally expressed by preverbal particles. Generally, this holds for the NAN languages of Halmahera and the Bird's Head and is the main trigger for pre-theoretical notions as 'creole-like'. While all these languages have subject prefixation, there are only a few Bird's Head languages that have some aspectual or modal affixation (Meyah and Sougb). The modal category especially is firmly evidenced by

However, there are a few AN languages surrounding the Bird's Head, such as Central Maluku Asisulu and Bandanese (Collins & Kaartinen 1998), and Waropen (Held 1942) along the Cenderawasih Bay, that have similar constructions.

the requirement that verbs in negative sentences are marked by it. A rather peculiar feature is the instrument prefixation in Meyah, Sough and Hatam, albeit by forms which are not clearly genetically related. Again, there is some evidence that the NAN languages of Halmahera had a similar category which developed a more general causative meaning (Fortgens 1928:365), suggesting that this may be a feature linking all NAN languages of the area, which can not be related to either AN or Papuan (in the sense of TNGP languages).

7.3 Syntax

The most illustrative feature of the languages under consideration is the so-called 'reversed Genitive-Noun order', which has traditionally been invoked to determine the NAN status of the Halmaheran languages (van der Veen 1915:92–102). In the eastern Bird's Head, it is Mansim which seems to have adopted the AN Noun-Genitive construction from Biak-Numforese, while Hatam and Meyah have it available as an alternative to the canonical Papuan order (Reesink 1999:81). The other languages all stick to the Papuan order. It is this order which has found its way into the local varieties of Malay, as in *sa-pu-anak* 1SG-POSchild 'my child'.

The basic order of elements in the noun phrase is for all languages left-headed: N-A-NUM-DET. Only a number of North Halmaheran languages have some prenominal element functioning somewhat as noun marker or article. The determiners in the EBH languages are all spatial deictics, some of which have taken on more anaphoric or textual deictic functions.

The constituent order SVO is most likely due to AN influence, given the presence of SOV in the North Halmaheran languages. Unlike for example, the SOV order in some AN languages, which can be explained by neighbouring Papuan languages, there are no adjacent languages which could have lent this order to the Halmaheran relatives of the Bird's Head languages.

Only Meyah, Sough and Hatam pose a constraint on intraclausal expression of the instrument. These languages correspond in placing the instrument in some kind of preclausal position, which is then cross-referenced by a verbal prefix.

Apart from this special treatment of the instrument in these three languages, there are other syntactic phenomena for which a widespread calquing seems to be the most likely explanation. Although nominal objects (or subjects) can easily be left unexpressed in a discourse, when no referent is retrievable a generic object is required in these languages. Thus, the equivalents for something like 'Have you eaten already?' are very similar, not only because of the nominal compound meaning 'food' in three of the four languages, but also because of the sentence-final aspectual adverb and the cliticised question marker e, implicating a positive answer. Consider the following examples:

Mpur:

(49) An-det bar-et pa=e?

2SG-eat something-eat already=Q
Have you already eaten food?

Meyah:

(50) Bua b-et mar-et fob=e? you 2SG-eat something-eat already=Q Have you already eaten food?

Sougb:

(51) Ban b-et ar-et hob=e?
you 2SG-eat something-eat already=Q
Have you already eaten food?

Hatam:

(52) Nani a-yem njinta tu=e? you 2SG-eat food already=Q Have you already eaten food?

In all EBH languages, and in this they agree with their (distant) relatives in the western half, but not with those on Halmahera, no three-place verbs are available. Thus, double object constructions, which are claimed to be diagnostic for creoles (Bruyn, Muysken & Verrips 1999), are not allowed. In fact, it is invariably a verb with the basic meaning 'take', which together with a preposition conveys the notion of 'give', as illustrated by the following equivalents in the various languages:

Hatam:

(53) Dani di-yai wid gom bak noni.

I 1SG-take banana one to 3SG
I gave him/her a banana.

Mansim:

(54) Danu d-eri wat wom mai nenu. I 1SG-give banana one to 3SG

Sougb:

(55) Dan d-eic neij hom dou en.
I 1SG-take banana one to 3SG

Meyah:

(56) Didif d-eita menei egens gu ofa.

I 1SG-take banana one to 3SG

Mpur:

(57) In n-bot fa tu na yeta.

I 1SG-take banana one to him

It is no surprise then that the local Malay expression follows closely the same configuration, the only difference being the order of noun and numeral, as seen in:

Malay:

(58) Saya kasi satu pisang sama dia. I give one banana to him/her

The languages of the eastern Bird's Head share the strictly sentence-final position of the negator with the AN languages in the Cenderawasih Bay, as well as with the Halmaheran languages (Reesink 2000). In languages of the western Bird's Head the final position appears to be less strict, although there also the negative adverb is never found directly preceding the predicate. In AN languages, the negator generally precedes the predicate in a SVO clause. In Papuan languages it normally precedes the predicate in a SOV clause,

although there are Papuan languages in which a strictly sentence-final negative is present either as a non-verbal variant of the standard verbal negation, as in Sentani, or as the standard, as in Dani and Asmat. Thus, this typologically unusual feature seems to be of Papuan origin. It seems to be significant that the form $\beta a \sim wa$ in the AN languages Biak and Wandamen is the same as the one found in the Halmaheran languages, while AN Ambai of the Cenderawasih Bay has kaka. I conclude that both the position and the form originate in the NAN languages of the Bird's Head, as evidenced by Mansim $bar \sim$ Hatam big (see Chapter 5) and Halmahera, and that it found its way through diffusion into the AN languages.

Finally, the typical Papuan feature of clause chaining, with widespread switch reference mechanism, is totally absent in the languages of the Bird's Head and Halmahera. A rather 'flat' syntax of asyndetic coordination (or serial verb-like constructions) is typical for all the languages of this area.

7.4 Conclusion

It should be clear, that the languages of this area are characterised by a patchwork of lexical retentions and borrowings. Some morphosyntactic properties show a similar ragged picture. Although many of these languages exhibit structures that could be (near) calques of each other, their vocabularies are for the most part wildly different, as stated and illustrated in various publications (Voorhoeve 1987a, 1987b, 1989; Reesink 1996, 1998). In the light of what we know from the historical sources, quoted earlier, and the anthropological data on migrations and interlinguistic marriage patterns, it would not be unreasonable to assume that the area of the Bird's Head and Halmahera has been the scene of extensive intergroup contacts during many centuries. For example, it is quite plausible that a considerable number of the slaves (thousands were released on Ternate and Tidore in 1870, as mentioned earlier) originated from the eastern Bird's Head, presumably of the Mansim and/or Hatam, having been brought there by the Biak-Numfor trading partners of the sultanates of Ternate and Tidore.

Within the eastern Bird's Head we have seen migrations from the south side of the lower limestone hills into the Arfak mountains (Hatam), and skirting these mountains to the north, as far as the north coast (Mpur and Meyah), and towards the north-east (Sougb), bordering the Wandamen, who are AN relatives of the Biak-Numfor.

With Pouwer's observation that at least the people of the eastern Bird's Head are very conscious of their identity in terms of explicit statements about in-group and out-group belonging, we may conclude that the enormous differentiation in their vocabularies has been brought about by (conscious?) manipulation of lexical items, while the homogeneity of morphologically simple syntax is the result of personal contacts during many generations.

Although so far I lack specific information on the (eastern) Bird's Head languages, older sources on Numfor (van Hasselt 1905:54) and Galela on North Halmahera (Van Baarda 1908:11) mention a rather strong practice of word taboo. Words that closely resemble the sound of a deceased relative or an in-law are systematically avoided. Thus, doublets, loan words, and possibly other devices to circumvent the forbidden lexical items, must have abounded in these languages. I think it is safe to assume that this practice was also followed in the Bird's Head. Perhaps, the information from one of my Hatam consultants that the

original Hatam word for 'sun' was identical to the Mansim word *prow*, and that the present Hatam item *mpiab* means something like 'event' (see Chapter 5), can be explained this way.

I believe that my earlier scenario (Reesink 1998), which tried to account for the dearth of lexical correspondences and the close similarities in morphosyntactic configurations in the languages of the Bird's Head (and Halmahera), has gained some additional evidence. The information from historical and anthropological sources makes it quite plausible that the ethnolinguistic groups have always maintained a strong sense of group identity. As Dixon (1997:24) points out, people are more aware of the lexicon as an index of their group identity than of grammatical categories. At the same time they have had many friendly and hostile interactions, by which many individuals changed places and linguistic environments. Properties of morphosyntactic organisation are much more automatic in the speech process. Apparently, they are easily copied in situations where multilingualism is the rule rather than an exception.

This process has been termed 'metatypy' by Ross (1996), which he prefers to Thomason and Kaufman's 'borrowing'. The term 'borrowing' does not capture the extent to which the in-group (= 'emblematic' in Ross's terms) language survives with heavy restructuring due to contact with a neighbouring or intergroup language. Since the small languages on the island of New Guinea have had many opportunities, over long periods of time, to be in close contact with other languages, it is important to differentiate form/meaning correspondences signalling genetic relationships and metatypic correspondences due to contact. Ross says (1996:208): 'Whereas form/meaning correspondences peter out at the time-depth where lexical replacement becomes close to total ... metatypy often ensures that particular semantic and structural features continue in a particular area over seemingly immense periods of time'. And further (p.209): '... as semantic and structural features become more and more generalised across a region through metatypy, it is decreasingly feasible to sort out the detailed contact histories of the languages in which these features occur'. I cannot find a more apt wording to describe the situation found in the eastern Bird's Head and surrounding area.

The outcome of these processes, taking place during a time of equilibrium between languages of basically the same status (Dixon 1997:68-70), is a group of language communities which have to a large extent levelled their morphosyntactic complexities while In other words, a prolonged period of interincreasing their lexical divergence. ethnolinguistic contacts may affect languages in ways similar to the communicative pressures which give rise to 'canonical' pidgins or creoles. Children growing up in a context where adults speak different languages, will tend to employ the dominant vocabulary they hear around them according to the more automated, subconsciously processed structures they have acquired. Not only does this process lead to initial variation in acceptability, it also results in levelling of morphosyntactic difference, requiring some loss, such as the hypothesised loss of the gender distinction in EBH languages, as well as some gain, such as the inclusive-exclusive opposition. Perhaps, the general persistence of SOV order in the northern Halmaheran languages and the more complex verbal affixation in Meyah and Sough are signals of greater conservatism in languages which have had less contact with others, especially AN speakers, than the other languages of the area.

Appendix

Comparative wordlists of four eastern Birds' Head languages

The list for Meyah has been provided by Gilles Gravelle, Mpur by Cecilia Odé, and Sougb and Hatam are from my own fieldwork. Concerning the Sougb material, I am grateful to Dan and Barbara Lunow for filling in some holes in my data and suggesting some corrections. Since all languages have a base-five counting system, I have singled these terms out. Also, some food crops, presumed to show borrowing, are shown. When just items glossed with 'say' or 'ask' are given, it is not clear which specific meaning is conveyed. Thus, I have tried to differentiate a few speech verbs which these languages employ. These semantic fields are followed by the standard 200-word Swadesh list, interspersed with some related terms, which I hoped would show evidence for sound correspondences. At various points additional comments have been given in footnotes. Nevertheless, it remains a difficult matter to simply list an English gloss, such as 'cut', 'down', 'there' and many others, and expect to find exact equivalents in various languages. In spite of the incomplete data, these lists are given to illustrate the divergent vocabularies of the EBH languages. Since a Mansim list would leave a great many holes, and since Hatam and Mansim are closely related, I refer to the short dictionary in Chapter 5, Appendix 3.

English	Sougb	Meyah	Hatam	Mpur A = Amberbaken K = Kebar
numbers				
*one	hom	egens	gom	tu
*two	hwai	egeka	can	dokir
*three	homoi	juomu	ningai	denur
*four	hogu	tahkuru	bitai	bwat
*five	sergem	cinja	muhui	me
some crops				
banana	neij	menei	wid	fa
corn	tram	metrem	trem	sare(A),
				kasam(K)
sugarcane	iji	meresa	nghai	ир
tobacco	saboku	mosoku	sigu	sakum
sweet potato	augwu	mou	sieb	watiw
cassave	aiswai	monyana	sieb biei	wati ni
sago	at maga	medeb	kob	bi
taro (bete)	mundo	mom (small type)	ntigud	biw
taro (kongkong)	sunggebei	momos (large type)	minoi/mow ⁷	kotawe

⁷ The term mow is from Mansim.

some speech ver	DS			
speech/voice8	mer	oga	ni-hyet	kwap
say	en	agot	pai	bwar
speak/talk	en-ara	agot	mbrap	bwar
tell (a story)	ecic	efesij	pui	bertobar
order	arougb	oga efet/agot rot ⁹	cuk	bwa-fu
call	eija	ois	hara	bwan
to name	en dag	oh/ejeka	jem	don
shout	eyaga	aharir	hara	at/jer/inkep
ask (tanya)	eija dougwo	ejeka	hig	bwanup/unan
ask (minta)	acgeij	ois rot/erejgei rot	hara	kenin
		esinmouk 'cry out		
		for help'		
beseech	eiyagarij		weig	
answer	auni	oroun	birop/buhup	yewka
Swadesh list *				
about	an	rot	tut/sut	(ku)tut
accept/find	ma	esma	ma	soma
add	ecic adedim	ogun	kum	kat/beraw
again	deit	deika	bu	fer
agree	ousa	oitij rot	ce tut	fujar tut/
				onsra tut
*all	-augwan	nomnaga	-hagom	masek
also	tou	tein	cem	(y)o
already	hob	fob	su/tu	pa
*and	dara/kaba	noba/gonu	ba/lene	braw
*animal ¹⁰	aremeta	oiraga (tail)	mindhe	bran/kam
*arm (cf. hand)	mesira			
around	acec	erejrej	tai/ghai	kabwaka
*ashes	m-or	of-oru ¹¹	pimbang	subup
ascend	eisaugb	osok	kui	fo
*back (of body)	-idgo	ejmeg	nghim	danfet/tanip/
				tanifet
*bad	ecgu	oska	kinei	wandek

In Sough, Meyah and Hatam the term is also used for 'language'. Mpur has a Biak loan with that meaning was

Oga efet 'voice harsh' = bark out an order; oga ojga rot 'voice breaks concerning' = make a decision, implies ordering something to happen; oga eris rot 'voice splits concerning' close to oga ojga rot : deciding in an arbitration; agot rot 'speak out concerning, decide, order' = expresses opinion that s.o should do s.t.

Languages generally lack generic term for animal. Meyah has oiraga 'tail' as classifier for animals, but fading from use. Mar onnga ah gu merenrah 'things that live in the forest' could be used. Hatam mindhedhe is parsable as 'something which (is) only-RED'. Not a true generic either.

Sough and Meyah terms mean 'powder', also used for Meyah 'dust': mebi oforu.

*bark (of tree)	sogo mos	mega ofos	ngkeg/hong	nifek
*because (from)	dau	jeska	leu	kutut
bent	agabi	ageb	koi	kijep
*berry/fruit	mera/m-eij	-efek	njeb/ngat	be
*big	goji∕ medam	eteb	ndig	(kam)pak/bapak
*bird	ba	mem	hab/sab	iw
*bite (v.)	аи	eska	ham	yem/wok
*black	ogor(gor)	ahta	rom	nem
blind	-aires m-ougb	eiteij ofou	tu	amkum
*blood	m-ogwihi	oguwu ¹²	nggrom	far
*blow (of wind)	ouhw(dedi)	okruc	hou	fok
body	m-aga	ef-aga	ngud/nghuig	(w)obem
*bone	m-ohori	of-ora	njum	ip
*breast	m-aric	engk	dob	sut
*breathe	mena (b)aic	ef-eni	muhun nei	fujaw
*brother (older)13	m-agona	mokora	kindig	nkowa/binon
younger	m-agto	mokosa	kinjoi	nkunon/binon
*burn (by fire)	asaih	mah et ¹⁴	ndig	kapet/kupet
carry	oho (on back)	ok	ttei	dukwa
on shoulder	odo (in hand)	usap		
*child	meh	efesa	munggwom/mot	nton
*claw	mohob mog	aki (foot)	ndungwag	
close (door)	oufo	of	nggam	fawop(K),
	•	•		famut(A)
*clothing	sansun	maini	sinsun	sansun
loincloth	un	maini	mai	mar
*cloud	umer	mocgoc	(bum)buhui	bum
*cold (adj.)	emtereta	meifina	hou	disi(K),
				tuwat(A)
*come	en	en	kwei	na
*cook	ougwan	oina ¹⁵	kwen	kwan
*count	ecic	ofosut	kwop	tinin
*cry	eb	ebisa	pim	ar
*cut ¹⁶	ogod	eris	tot	diti (small
				things)

¹² Also ogofī, ogofu.

Not really applicable: Sough terms are for male Ego. Female Ego: 'older brother' *ighegena*; 'younger brother' *jemeito*. Meyah 'older sibling same sex' = mokora; 'younger sibling same sex' = mokosa; 'older opposite sex' = meyera; 'younger opposite sex' = meyesa. Hatam terms are 'older and younger sibling same sex'. Female Ego refers to older or younger brother with kijam. Mpur binon refers to older or younger siblings of opposite sex; nkowa 'older sibling same sex', nkunon 'younger sibling same sex'.

Mah et 'fire eats', a similar phrase occurs in Hatam hum yem ig 'fire eat house'. Meyah 'to light a fire in' is es mah gij; Hatam has ndig miai 'burn a garden'.

¹⁵ Meyah has several terms: on a fire, next to a fire, over a fire, inside a fire, boil, etc. oina 'prepare food'.

cut meat etc.	etkwa		digo	ton
*dance	einyuhwera	ouka	biem/cot	sat
*dark (night)	beigbogo	motu	mmun	borim(K),
_				dim(A)
*day	lona	mona	njap	put
deaf	moms etugb	otub osuw	nnam	tut
descend	owada	ojuj	juk	buru
*die	omom	agos	mai	ut
*dig	ogo	eji	tig/kkin	sa
*dirty (cf. black)	ogor/gorgor	ahtaboku	digot/rom	met
*dog	mih(i)	mes	sien	per
*down/below	tainya/gaihi	degini	mu/jug/behei	tek
*drink	ek	ej	dut	kobet
*dry (adj.) ¹⁷	erouhw	ofora	ngga	fak
*dull/blunt	mecero/okta	ombiya	ngwam	mentin
*dust (noun)	?	mebi ofou	трир	bakup
*ear	-ums	osu	tingou	kwaip
*earth	cinogo	mebi	dihyeisi	nek
*eat	et	et	yem	det
*egg	mougb	ofou	dinggwei	bwa
*eight (five-three)	_	cin ja ogomu	muhuindaningai	mambrenur
enough	edeinyom	adaij	dem	menit
*eye	-airesi	eiteij	yai	am
faeces	m-oro	ebeyi	agoi	kan
*fall	obsara	esiri	cut	kwem
*far	gusi	yes	ting	janer/bwaner
*fat/grease	merij	efes	mmau	minyak
*father (3SG)	me-(i)na	me-eka	ni-cig	aya
*fear (afraid)	ahau	emesa	ttin	wanaw
*feather (hair)	m-odi	ef-eji	ntab	bur
fell (a tree)	ehi	of	wim	fer
fence (garden)	liga	mejga	ngugwa	tak
*few	gurereito	egekgeka	poi	ker(en)on/unon
*fight (v.)18	es-im	agob-ma	bui-yam	jik-em
*fire	smougb	mah	hum	yet
*fish	hosei	mos	wau	mwan
*float	eikbib	ah gu mei odog	biam	piar
*flow	eh	eya	nggram	dorow
*flower	meric	marfok	tou	uk

¹⁶ A generic term is hard to give. The items here are responses to generic Indonesian potong.

¹⁷ The listed terms are for 'dry' of clothes; 'dry' of wood is Hatam mui, Mpur yep.

In all the languages 'fight' is polymorphemic 'hit/hurl each other'. For example, Sough es-im 'fight with bow'; ec-im 'fight with gun'; ogot-im 'fight with fists'. Mpur jik-em 'kill-each other' is used for 'fighting'.

*fly (v.)	ohw	ofu	(di)mba	dek/bubwar
*fog	lohos moro	mockoj	munbuhui	bum
*foot (cf. leg)	-ohora	aki	mig	prek
forget	oc m-oc	odou ofoj joug	bbwe ser	fnander
*freeze	not relevant	7 7 7 0		·
from	dau	jeska	leu	bari
*full	atij	etiti	ut	bit(K), berem(A)
*give (= take)	eic	eita	yai	bot
go ¹⁹	eda	eja	ug	un
run away/flee	ougb	ojuj (low pitch)	nang	defriw
*good	eigouhw	oufa	kei	mafun
grab (cf. hold)	eigdoc	oskotu	kat	dak/inka
*grass ²⁰	arec	mofombra (weeds)	mintab	bafo
C		meskeing		
		(grass-like weeds)		
*green	augweda	ofraha	nimahai	bwawop
*guts ²¹	menuhwa	otkonu	inghop	funon
*hair (head)	modi	efeji	ntab	(bwam-)bur
*hand (cf. arm)	me-s(i)ra	etma	ndab	wom
*he	en	ofa	no(ni)	yeta
*head (3SG)	m-ougt	ebirfaga	bou(g)	bwam
*hear	ouman	eg	miap	minsem
*heart (3SG)	me-doc	efemebi	ni-ngon	dumwam
*heavy	ogom	okum	buhun	kot
*here	suggini	sif	eisini	(n)ki∕ku manki
*hit (pukul)	ogod	agob	bui	bat/dop
*hold (cf. grab)	os	agei	krau kep	deka
hole	mes	efesi	nsi	bwan
*horn	momboungmog	obukum	bou nggai/pun	kat
*house	tu	mod	ig	jan
*how	dag(i)ro	teinefa	no tou	arote
*hundred ²²	huntun	wutin	untin	untin
hungry	s(i)r-eb-a	mosona-id	-nggum	kwen
*hunt/chase	ocir	okuk	huk	minsa/bisa

¹⁹ There are other lexemes or phrases that can be translated as 'go', such as Sough ec mohora 'walk leg' and the items listed for 'walk'.

²⁰ A difficult generic term for Papuan languages. Some attempts are listed. For example, I had for Sough aremec which includes 'ferns, grass, reeds'. Lunow provided arec; Hatam mintab = 'something-hair'. A conflation 'hair' and 'grass' is quite common in Papuan languages.

²¹ No clear generic term for 'guts'; Sough menuhwa was given for Indonesian perut 'belly'; urmeic 'large intestine'; Meyah otkonu efesa 'small intestines'; otkonu mosu 'large intestine'; Hatam inghop mem 'large intestines'; inghop ngwoi 'small intestines'.

This is clearly an Austronesian loan. Biak and Taba have *utin*, which in Taba also has a verbal meaning 'to gather' (John Bowden, pers. comm.).

*husband (3SG)	mesuwa	mehina	niceb	пар
*I	dan	didif	dani	in
*ice	not relevant	J		
*if	sug		gi(no)	bwa
ill/sick	ar-eb-a	mar-en-	nggwen	wantek
*in	se	gij (into)	ei	kw/ma
inside	mes	efesi	nsi	beu
*kill (cf. hit)	ogod/es	agob	bui	jik
*knee	mohor-beda ²³	okeibi	mig-biau	pejaw
*know	ecinaga	ejginaga	kan	unot
*lake	mohw/ansi	meren	igpong	wop
*laugh	obohuba	otut	ра	kotot/ditot
*leaf	meh(i)	efeyi	mmeng	bwa
*left (side)	medgi ²⁴	egris	prak	kate
*leg (cf. foot)	ohora	aki	mig	pet/butur
*lie on side	atou meba			
lie down (sleep)	atouda	ah jah	bong	kon
*lip	-ups/m-ops	ofuj	hui ngkeg	met
*live/be alive	mena agau	efena ebah	niyaijo	fun
life ²⁵	maireseb		niyaijoti	fun
*liver	medoc mei ²⁶	odou	singau	nabwaur
*long (space)	agas	aksa	jei	serer
*louse	(mougt)mem	mej	(bou) mem	im
*man	giji	orna~ona	pinai	munip
*many	einyana	ofoukou	mang	fon/aur
*meat (flesh)	-ug/mog	ofogu	nghui g/mik waw	(ka)mop
*milk (cf. breast)	marij	m-engk	do ngei	sut
*moon	igda (loba) ²⁷	mesta	bed	man
*mother (3SG)	me-(i)m	me-osu	nip-mem	yen
*mountain	men(mod)	mem(aga)	nungugw	sor
*mouth	m-ers	awesi	huig	bwat
*name (3SG)	m-oho	of-oka	ni-nyeng	muk
*narrow	einyim	emeima	nggilup/kom	yer
*navel	mogoc mougt	enggen	kimba	dur
*near	deinyor	deiberi/doida	dideu	dumat/fanam
*neck (nape)	mergo mei	orukaga	nggibia	ansun
*new	menau	efeinah	jep/bun	bak
*night	loba	motu	mmun	dim

²³ Correction by Lunow is *mohobrida*.

²⁴ Correction is metigi.

²⁵ At least in Sough and Hatam the concept is expressed by 'X's-eye do/be'.

²⁶ Correction is medoc meh.

See also 'sun': Sough has one term, disambiguated by addition of *loba* 'night' and *lona* 'day'.

*=:== (five + feve)		ainia Aabbaan	muhuindabitai	mambibwat
*nine (five + four) *nose	m-ebes	cinja tahkuru		
· HOSE	m-ebes	osum	hwap	minsan(K)
*not	awa	G., W.	hia	wanken(A)
	ero	guru	big	jan
*old (not people)	mohon	ensis	timiei	sinu/sunu
*one (numeral)	hom	egens	gom	tu
open	ec	ohoda	kau	bas/soro
*other	gus	enjgineg	hi	(fī)ti
peel	agareh	oj	nggrei	yew
*person	sud	osnok	tungwa(tu)	man/mamir
*play (games)	ei mumc	ahaisomu	kek	dinbar
*pull	eic/esera	oku	brim	dubun
pull up (weeds)	ohoma		hom	(fa-)dubun
*push/press	oun/akebin	edei/esin	rok/om	tub(w)i/sekap
put down	ob(dep)	ahajah	yok	ter
*rain	los	moos	biged	ра
rat	ijouhw	mocuw	ncub	kumer(K)
				kaburwaw(A)
*red	ahani	ekeni	ngwoi	sum
*right/correct	misen/asesa	tenten	igbit/jit	kew/kaw
*right side	misen	ognoks	com	kaip
*ripe	ohoseri	ofom/efej	len/mwes	b(w)in
*river (cf. water)	duhu mem	mei	minyei	war
*road	ucina	semfag	puig	njan
trail/track		moroju	niran	bwak
*root	sogo mom	ofom	nigaw	sumut
*rope	aikdaga	mar efeb	bab	ibor
-	G	meyaga = jungle v	vine	
*rotten	eiyema	esemba	kroi/nggun	mup/piam
*round/circular	medrigo mogo	ofog	kimor	kokik (?)
*rub	ousousa	oroh	ok/prios	bakat
*salt	aremor	mar (o)foru mos	nsim	pat
*sand	dibo/geria	mebsta	igum	ninja
*say	en	agot	pai/mbrap	bwar
*scratch	ehigeis	aha	kam	sasek (ground)
*sea	dum mohu	mei mojumu efei	mug/suan	wot
*see	eiya	eyajga	ngat	wot
		ek = look	O	
*seed	meij	marsi	ngat	ja
*seven (five + two	-	cinja egeka	muhundacan	mambrokir
*sew `	ogon	eb	hu/nap	fet/tin/wom
*sharp (point)	mog	ofog	nggwen/dile	kwar/ner
sharpen	ecugwo	oha	heu	ik

*shoot (arrow)	es(i)	ef	pilei	tum
shoot (gun)	ec	okub	non	tum
*short	agarougb	estir	cun	dut
shrimp	атото	momesa	mow	mow
*sing	ohu mer	of medemer	pai doiya	dindoya
*sister (ego male)2	8	me-damowa	kwohop	binon
younger sister	me-damehito		kwohop	binon
*sit	eigtou	eker	gwam	jap
*six (five + one)	senggem	cinja efens	muhuindagom	mambitu
*skin	-us/m-os	ofos	ngkeg	fek
*sky	bogo	mebaga	gwamti	pe/okram
*sleep	atou	ah jah	bong	kon
*small	mogurei	of-okai	mien	nombak
*smell (verb)	ouma	eg	miap	umpam
smell (intentional)	ohu mebes		tinip	mesem
*smoke (noun)	moro	ef-eb	mub	kum
*smooth (surface)	eskraha	efeta.	mblus	senanfok(K)
slippery smooth	edeskwesi	orswos	dia	serama(A)
*snake	hinogo	magosu	wou(g)	kur
*snow	not relevant			
*some	aibibra ²⁹	eneya	bihi	fīti
something (cf.	ara	mar	mun	bar
what)				
*speak (cf. say)	en-ara	agot	mbrap/pai	bwar
*spear (n.)	keptemaga	meitefa	micim	bor
*spit (v.)	ococ/eigdores		trai	tu(b)wat
*split (wood)	aga	etka	pes/sra	ba
*squeeze	esugb	ebid	kimut/om/pot	dam
*stab	edesugb	oduis	dat/riu	kwar/wom
*stand	esa	ot	ya	i(bor)
*star	tebeic	motur	ham	ton
*stick (wood)	ijouhuga ³⁰	moskur	tom/liep/pien	sik
still/yet	aba	ros	yo	to
*stone	igdahabi	тати	tig/hag	bit
*straight	obosboro	orendesi	sren	tur
*suck	outut	efa	muhun	yemsrup(K)
*sun	igda lona	mowa	prow/mpiab	put

See footnote 13 'brother': Sough terms for 'sister' are used by Ego of either sex: 'older sister' = damowa; 'younger sister' = damehito. Meyah 'older sibling same sex' = mokora; 'younger sibling same sex' = mokosa; 'older opposite sex' = meyera; 'younger opposite sex' = meyesa. Hatam terms are kindig 'older sibling same sex'; kinjoi younger sibling same sex'. Male ego's sister is kwohop regardless of relative age. Mpur binon refers to sibling of opposite sex, regardless of age.

²⁹ Or for animates: mer-ugwa hosa 'their-flesh how.many'.

³⁰ Ijouhuga is 'walking stick'; sogo mesira 'tree arm' or sogo moc 'tree piece' are pieces of wood.

*swell	erisa	efifij	dwoi?	perem
*swim	ougb duhu	era mei	ha minyei	jat
*tail	me-sera	oiraga	ри	am (fish)/muk
*ten	sisa	setka	simnai	onkir
*that ³¹	ingga	koma	dima	ka
*there	sungga	suma	eisima	nka
*they	len	rua	yoni	der
*thick	oungmerema	ontumba	ndok	bwantit
thigh	mohot	okunu	ndumuhum	umip
*thin (person)	ekinei	reires	krin/tta cut	serek(ip)
*think	oudesa	osujohu	kankan	from
*this	gini	kef	dini	ki
thirsty	meric-ebe-	magon-en-	-nggobiau	jan
*thou	ban(i)	bua	nani	nan
*three	homoi	ogomu	ningai	denur
*throw (at)	ed(i)	eij	hwen	fa
throw (away)	erba	eij	com	frak
*tie (v.)	ohut	akid	ngot/kwot	ber/bekai
*tongue	me-temougb	arni	dweb	bitraw
*tree	sogo	mega	biei	ni
*turn (change				
direction)	eineg	oksef/esmef	kiek	fabrek
*twenty ³²	sud hom	isnok egens	nyatungwa gom	onkir kir
*two	hwai	egeka	can	dokir
*up/above	taiba/gada	skida	dib/gau	jw/jun
*vomit	ersa	aha meisohu	njim/nggrim	minyak
*walk	esebesa	ecira aki	mbut	un
*warm	esrougb	ofoufem	dut	tek
*wash (s.t)	eduh	ot	piap/tot	bup
*water	duhu/mohu .	mei	nyei	war
*we (EXC)	emen	memef	nyeni	yek
*wet	mohumohu	eyejyej	ndot	sok
*what	ara	meidu	mindei	ban
*when	ais(eb)a	mona juaho	pig	tote/unte
*where	dig(i)ro	gu-aidu	han-tou	(ku) mande
*white	ogoufu	ebsi	tiei	fubwe
*who	g-ara	idu	tou	man
*wide	ebehibera	efefi	nyan	bwarak

Actually, glosses for 'that' and 'there' in these languages depend on other factors, such as elevation, direction, visibility. To compare these would require a separate paper, but see the relevant sections in the descriptive chapters.

Alternative expressions are: Sough mos hwai 'skin two'; Meyah setka egeka 'ten two', which is similar to Mpur onkir kir 'ten two'.

*wife	me-sowa	me-ohona	nem	nyan
*wind (n.)	lougmen	mof	hou	ip
*wing	m-ebera	ef-embira	nihyei	dek
*wipe	ogun	osuna	cok	kusup
*with (accom)	dara	jera	kin	braw
*woman	gihida	ojaga	sop	musim
*woods	sogo meba	merenrah	bigbehei	niraw
*work (v.)	eb-ara	ef mar	yai midiyai	dak bar
*worm	haga	mofunfou	adihyeisi/miheb	nemat
*you (PL)	yen(i)	iwa	jeni	nen
*year	(all loans from	Malay: taun)		
*yellow	gohoser	orug	nipug	umfrum(K)

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2 A sketch of Mpur

CECILIA ODÉ

In loving memory of Margit Odé-van der Grinten

1	Intro	oduction	47
	1.1	Background of the Mpur language	47
	1.2	A personal note	48
2	Phor	nology	48
	2.1	Phonemes	48
	2.2	Syllable structure and phonotactics	49
	2.3	Tones	50
	2.4	Stress	51
	2.5	Intonation	51
3	Pror	nouns	51
	3.1	Free and bound pronouns	52
	3.2	Reflexivity	53
4	Verl	os	54
	4.1	Simple and compound verbs	54
	4.2	Transitive and intransitive verbs	54
	4.3	Verb sequences	55
	4.4	Verbaliser bi-	56
	4.5	Causative verbal prefix fa-	56
	4.6	Verbal complements	57
	4.7	Emotive verbs with wa-	57
	4.8	Reciprocal suffix -em	58
	4.9	Quote marker bwa	58
	4.10	Expression of imperative	59

46 Cecilia Odé

5	Adjectives				
6	Noun	s	60		
	6.1	Simple nouns	61		
	6.2	Compounds	61		
	6.3	Nominaliser bar	61		
	6.4	Alienable nouns	62		
	6.5	Inalienable nouns	62		
	6.6	Gender	63		
	6.7	Nouns with the same form as verbs	63		
	6.8	Nouns and word order	63		
7	Deict	tics	64		
8	Ques	tions	67		
	8.1	Question marker -e	67		
	8.2	Question words	68		
9	Prepo	ositions	69		
10	Spati	al orientation	72		
11	Adve	Adverbs			
	11.1	Adverbs of location	75		
	11.2	Adverbs of time	75		
	11.3	Adverbs of aspect	76		
	11.4	Adverbs of manner	78		
	11.5	Adverbs of mode	78		
	11.6	Intensifying adverbs	79		
	11.7	Adverb of negation	79		
	11.8	To be or be not: the presentative mu	79		
12	Conj	unctions	80		
13	Quar	ntifiers	82		
	13.1	Cardinal numbers	82		
	13.2	Ordinal numbers	83		
	13.3	Indefinite quantiiers	83		
14	Class	sifiers	83		
15	Relat	tivisation and the form ma	84		
	15.1	Relative clauses	85		
	15.2	Other uses of the form ma	86		
16	Clitic	es	86		
Α	ppend	ix: Kaman ja 'Squash seeds'	89		
	 eferen		107		

1 Introduction¹

1.1 Background of the Mpur language

Mpur is a Non-Austronesian language with three lexical tones and is spoken by approximately 5,000 speakers in the north east Bird's Head area, Irian Jaya, Indonesia. In the literature Mpur is sometimes referred to as Kebar or Amberbaken, which are geographic names for the two regions where it is spoken.

Mpur is a phylum-level isolate with dialectal differences in at least lexicon and prosody between speakers in the Kebar Valley, in the mountains (East Kebar) and on the coast (Amberbaken), respectively. The lexicon is of Papuan origin, but morphology and syntax show Austronesian features (Reesink 1998:603ff.), such as subject-verb-object word order and the absence of heavy verb morphology. Many loans entered Mpur from Numforese, Irianese Malay, Standard Indonesian, and also some from Dutch. Indonesian is taught in village schools by non-Mpur teachers, but they play truant as much as Mpur children do. In town Mpur children learn Indonesian more properly and only they are fairly able to distinguish between Indonesian and Mpur words. Only a few Mpur speakers are literate in Mpur, though much progress has been made in Kebar since G. and C. Kalmbacher (Irian Jaya Bethany Foundation and Summer Institute of Linguistics) began to give literacy courses with educational materials in the villages of that area; literacy in Indonesian is much better.

Speakers of Mpur do not know the origin of the name Mpur. Coastal Mpur speakers refer to Mpur speakers in the Kebar Valley as ma-ye 'who are outside' (lit. REL-outside), that is, at the other side of the eastern Tamrau mountains. Kebar people call Papuan people maksam, most likely from mam-kesam 'person from Irian' (lit. person-big.forest), in contrast to matem 'white people' from mam-war-tem 'person-mouth-river'. So far I have no explanation for the term Mpur which is only used to refer to the language.

The Mpur-speaking community has been extensively described by Miedema (1984) and many examples of their oral tradition have been published in Miedema (1997). The story *Kaman ja* 'Squash seeds', for the first time presented in this article, is an old story but a new item to Miedema's collection.

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I would like to thank the people of Kebar and Amberbaken for their friendship, confidence, teaching and help. Our long chats, gossips and discussions revealed some of their lifestyle and inspired my work. Through recordings on tape and video I still enjoy their beautiful voices full of suspense, humour, joy and sorrow. I feel especially grateful for what, in alphabetical order, Amanda Ajoi, Mince Jambuani, Mada Sapari and Seppy Wabia and their families have done for me to make my fieldwork such an impressive experience.

I am greatly indebted to Greg and Carol Kalmbachers who, apart from their help on the Mpur language, offered me their Tarzan house in Anjai, Kebar, for a couple of months in 1994 and 1995.

1.2 A personal note

The present article is a sketch of Mpur. The main aim of my research was an experimental phonetic study of prosody in Bird's Head languages, more specifically of Mpur and Abun. Because of the time-consuming character of such studies, morphology and syntactics did not get the attention it deserved. A description of Abun has recently been published (Berry & Berry 1999), but Mpur is still mostly a blank spot on the language map of the Bird's Head. A phonology (Kalmbacher 1996, MS), a limited wordlist and some other works have been written by G. and C. Kalmbacher. Though a full description of the Mpur language was never my intention, I nevertheless collected enough data to undertake the challenge of writing this article, largely encouraged to do so by my fellow researchers. Yet quite a few issues remain insufficiently described or explained, and in some cases that is even an understatement. However, since I do have quite a bit of data from the language and since it is unlikely that anyone else will study the language in detail soon, I have decided to present an analysis of what I have collected so that the language will not remain completely undocumented except for its phonetics.

Data for this article were collected during three periods of fieldwork in 1993–94, 1995 and 1998 in the Kebar valley and in Amberbaken. Apart from the work by G. and C. Kalmbacher mentioned above, which became accessible to me only later, no data on the Mpur language were available. I worked intensively with Amanda Ajoi and Seppy Wabia in Anjai, the Kebar Valley, and in Saukorem, Amberbaken, with Seppy Wabia, Markus Wabia, Moses Warijo and a few other people. Twice I met the Kalmbachers in Kebar and discussed many Mpur issues with them. For a study of the three dialects I visited Jenderau (East Kebar) and Nekori (over the mountains behind Jenderau) and along the Amberbaken coast the villages from Arfu to Wau. In all areas mentioned I worked with indigenous inhabitants of the villages and recorded their speech on tape.

This article reflects the limitations explained above and will mainly present word classes, morphological processes and, where this seems adequate, some syntactic information.

2 Phonology

Mpur is a language with lexical tone contrasts. To my knowledge it is, together with the neighbouring Abun language (Berry & Berry 1999), the only Non-Austronesian tone language in the Bird's Head area.

A detailed phonology of Mpur by G. Kalmbacher is in preparation, of which a draft (Kalmbacher 1996) was kindly offered to me by the author. The data presented here do not necessarily agree with all data in Kalmbacher's phonology. This is especially the case with respect to word stress and the tone system, but differences will not be discussed. Full responsibility for this short phonology is mine.

2.1 Phonemes

There are twelve consonant and five vowel phonemes. They are presented in Tables 1 and 2 below with the phonemes between slashes and their phonetic realisation and allophones between square brackets.

	Bilabial	Alveolar	Palatal	Velar
Plosive voiceless	/p/ [p, p ^h , p [¬]]	/t/[t, t ^h , t [¬]]		/k/ [k, k ^h , k ⁻ , g]
voiced	/b/ [b, β]	/d/ [d, r]		
Fricative	/f/ [ф]	/s/ [s]	/j/ [t∫, dʒ]	
Nasal	/m/ [m]	/n/[n, ŋ]		
Approximant	/w/ [w, β]		/y/ [y]	

Table 1: Mpur consonantal phonemes and their allophones

It is beyond the scope of this article to give rules for morphophonemics. But for a better understanding of the examples and text discussed here a few morphophonemic processes are presented.

Voiced stop /d/ is only pronounced as [d] in word-initial position and after nasal /n/, otherwise it is pronounced as a voiced alveolar flap [f]. In final position, voiceless stops are often not released or released with a delay of up to some hundreds of milliseconds.

Nasal /n/ is pronounced as [ŋ] before velar /k/ which is then voiced and pronounced as [g]: /manka/ [maŋga]. Before bilabials morpheme final nasal /n/ is pronounced as [m] (see also $\S 3.1$), and before morpheme initial nasal /n/ it is omitted. Note that nasals in Mpur can be syllabic in word-initial and in word-final position: the word *nton* 'yesterday' has three syllables, two of which are syllabic nasals.

On morpheme boundaries, the approximants /w/ and /y/ can be inserted between vowels. Consonant elision on morpheme boundaries is a very frequent phenomenon in Mpur.

	Front	Central	Back
High	/i/ [i]		/u/ [u]
Mid	/e/ [1, e, ε, ə]		/o/ [ʊ, o, ɔ]
Low		/a/ [a]	

Table 2: Mpur vocalic phonemes and their allophones

After final vowels a non-phonemic glottal stop may occur. Another non-phonemic phenomenon that is characteristic of at least other Papuan languages spoken in the Bird's Head area, is an utterance final voiceless velar with strong nasal aspiration, which is released only hundreds of milliseconds after a final vowel. It has been attested for Maybrat by Dol (1999:45).

The large scale of phonetic variations of vowels in different positions or under the influence of morphophonemic processes, vowel elision and vowel shortening or lengthening will not be described here.

2.2 Syllable structure and phonotactics

The syllable structure in monosyllabic words is as follows:

V	i	to stand
CV	ра	already
VC	am	eye
CVC	kur	snake

Consonant clusters do not occur in syllable-final position and are rare in syllable-initial position, except C + semivowel. One can even question whether initial consonant clusters are in fact the result of vowel elision, as, for example, in *from* 'think', and thus not monosyllables.

In polysyllabic words, consonant and vowel clusters occur over syllable boundaries:

V-V	a-i	he stands
CV-V	та-и	continually
V-VC	e-un	we go
CV-VC	ba-um	people
CCV-VC	kwa-ik	strong
CVC-CVC	ben-kan	papaya
V-VC-CVC	a-un-sek	wrong

Sequences of consonants and vowels, also over syllable or morpheme boundaries, are subject to complex rules of constraints. As stated earlier, I will not go into details.

2.3 Tones

On the basis of an experimental phonetic approach, described in, for example, Odé (1996), three tones have been attested in Mpur: high, mid and low. The issue still is whether a fourth midrising tone, existing on the perceptual level, is phonologically significant. The analysis in progress of the results of a last set of experiments is expected to answer this question.

Generally speaking, the range between high and low, expressed on a logarithmic scale, can be up to twelve semitones, which in musical terms is equivalent to one octave. But note that tones and intonation in speech are not perceived on the same logarithmic scale as music (Odé 1996: note 10). The range between high and low in absolute terms, that is, expressed in hertz, is of course speaker dependent. Tone sandhi, the influence of tones on the realisation of adjacent tones, is a normal phenomenon in Mpur that together with other tonal and intonational phenomena will be described in *Mpur tones and intonation: an experimental phonetic analysis with interlinearized texts* (Odé, in process). Downdrift (i.e. in a sequence of high-low-high tones, the latter high tone is lower than the former) and downstep (i.e. the phonological lowering of the second of two tones of the same type) are not observed in Mpur. In spontaneous speech there can be some declination (i.e. the fundamental frequency declines gradually in the course of an utterance). See also Odé (1996:86).

Table 3 presents the three lexical tones with phonetic specification, that is, the level of the tone in semitones (ST) measured above the lowest (zero semitones) level of a register of twelve semitones of a speaker, and examples. These are maximum values. The actual realisation of tones can be higher or lower than indicated in the table, depending on utterance position, melodic context, tone sandhi, intonation and the idiosyncrasy of the speaker. High and low tones are marked with 'and', respectively, on vowels; mid tone remains unmarked.

Туре	Name	Level in ST	Ex	amples
high	Н	12 ST	pér	dog
			ján	house
			bé	but
mid	M	7 ST	per	to dig
			bak	new
			be	in
low	L	0	bàk	axe
			jàn	not
			bè	fruit

Table 3: High, mid and low tone with their names, levels in semitones (ST) and examples

Apart from minimal tone pairs as given in Table 3, tonal homonyms also exist. For example, ip 'bone' and ip 'strong', ka 'to bark' and ka 'that'.

2.4 Stress

In polysyllabic words, a syllable can be more prominent than its surrounding syllables, especially if it has high tone or a relatively longer duration. Yet there is no evidence that lexical stress in Mpur is phonologically significant. In a pilot experiment conducted in the field, I observed that no regular pattern of realised prominence of syllables exists. In different contexts one and the same word may even show shifting prominence without expressing a contrast.

2.5 Intonation

Some intonation patterns have been dealt with in Odé (1996, 1997). A description of Mpur tones and intonation is still in progress and will be published separately. For the time being only some limited notes on intonation are presented.

A general tendency is observed to realise large pitch movements at prosodic boundaries (a pause, silence, hesitation, reset), for which the final syllable is then lengthened. At the end of declaratives pitch usually moves downwards. Interrogatives and continuations cannot be expressed by intonation alone: interrogatives take question markers (§8) which have their 'own' tones, and enclitics are used to express a continuation (§16). The importance of a word in an utterance, as a means of accent, is highlighted by focus marker ni (see §7), by enclitics or by repeating words (of most word classes), examples of which can be found in the text at the end of this article. Enclitics especially have salient falling or rising pitch movements. The expression of emotive emphasis has been described in Odé (1997, 1998).

3 Pronouns

3.1 Free and bound pronouns

Mpur has free and bound pronouns. Bound pronouns are subject markers prefixed on verbs and possessor markers prefixed on inalienable nouns. The free and bound forms are presented below with an example on a prefixed verb and on an inalienable noun:

Person	Free pronoun	Bound pronoun	Verb iap 'to stay'	Inalienable noun yen 'mother'
1SG	in	•	• •	n-yen
2SG	nan	an-	an-jap	an-yen
3SM	yeta	<i>a</i> -	a-jap	a-yen
3SF	men	n-	n-jap	n-yen
1DU	wor	(w)o-	o-jap	o-yen
2DU	non	no(n)-	non-jap	no-yen
3DU	dor	do-	do-jap	do-yen
1PL	yek	e-	e-jap	e-yen
2PL	nen	ne(n)-	nen-jap	ne-yen
3PL	der	de-	de-jap	de-yen
	1SG 2SG 3SM 3SF 1DU 2DU 3DU 1PL 2PL	pronoun 1SG in 2SG nan 3SM yeta 3SF men 1DU wor 2DU non 3DU dor 1PL yek 2PL nen	pronoun pronoun 1SG in (i)n- 2SG nan an- 3SM yeta a- 3SF men n- 1DU wor (w)o- 2DU non no(n)- 3DU dor do- 1PL yek e- 2PL nen ne(n)-	pronoun pronoun jap 'to stay' 1SG in (i)n- n-jap 2SG nan an- an-jap 3SM yeta a- a-jap 3SF men n- n-jap 1DU wor (w)o- o-jap 2DU non no(n)- non-jap 3DU dor do- do-jap 1PL yek e- e-jap 2PL nen ne(n)- nen-jap

The final nasal of a bound form assimilates to the point of articulation of the stem-initial consonant. Personal free pronouns preceding a verb with subject prefixation express emphasis. For example (in the translation, the emphatic pronoun is capitalised):

- (2) Yeta a-un si jan.
 3SM 3SM-go to house
 HE will go home.
- (3) Nton nan an-jap. child 2SG 2SG-stay Child YOU stay.

Personal free pronouns are used as verbal or prepositional object, without special emphasis, as in (4) and (5):

- (4) A-from nan. 3SM-love 2SG He loves you.
- (5) Am-bot jetenon na men. 2SG-give knife to 3SF You give the knife to her.

Examples of personal bound pronouns on verbs and on inalienable nouns are:

- (6) Im-bwana in-un si in-aya a-tar jan.

 1SG-want 1SG-go to 1SG-father 3SM-possess house
 I want to go to my father's house.
- (7) N-yen n-am pam.
 3SF-mother 3SF-eye pain
 Her mother's eye hurts.

Bound pronouns can occur in object position as verbal suffix:

- War-(d)okwa-y-a. (8) water-carry-Y-3SM The water carries him along.
- (9) A-unsra kutut na men-dot ma n-nap-a. 3SM-like because for 3SF-younger REL 3SF-husband-3SM He likes the younger girl to sleep with him.

Note that the voiced alveolar stop /d/ is pronounced as [d] in word-initial position and after nasal /n/; otherwise it is pronounced as a voiced alveolar flap [r]. In example (8) an elision of initial /d/ of the verb dokwa 'to carry' occurs after war 'river'; an epenthetic glide -y- occurs between verb-final -a and 3SM -a.

3.2 Reflexivity

Reflexivity is expressed by means of free pronouns. It can be emphasised by do 'self, alone', which has subject prefixation and often occurs in combination with numeral tu 'one' to express exclusivity. Examples of the two expressions of reflexivity are:

- In-tik-war (10)in. 1SG-bathe-water 1SG I wash myself.
- (11)An-unan nan da. 2SG-ask 2SG first Ask yourself first (think before you act).
- (12)A-iik a-ro. 3SM-kill 3SM-self He killed himself.
- (13)in-i In-do na n-tera. 1SG-self 1SG-stand to 1SG-see I stood (there) myself to see (it).
- (14)Yeta a-ro a-jap be-jun. 3SM 3SM-self 3SM-sit on-top He alone sits on top.
- (15)In-frur in-do-tu. 1SG-do 1SG-self-one I do it by myself.
- (16)an-do-tu n-ava an-mam an-mam ah 1SG-father 2SG-self-one 2SG-cut.down 2SG-cut.down garden bapak. ma REL big Well, father, you have to clear that big garden by yourself.

4 Verb

Subject prefixation for person and number on verbs (see §3) is obligatory only with human subjects, but note that (mi)nton 'child', mamir 'person', nkan 'old person', mampu 'youngster', maunbwat 'thief' etc. do not trigger subject prefixation if the speaker does not know the gender. The word order in verbal clauses is SVO.

4.1 Simple and compound verbs

Simple verbs are verbs consisting of one single stem, for instance bot 'to take, fetch' (also: 'to give' in conjunction with the preposition na 'to'). Compound verbs are verbs that consist of a combination of two verbs, for instance unot 'to know' which is made up of the two verbs un 'go' and wot 'see'; berto 'tell' from ber 'talk' and dito 'tell'; konot 'dream' from kon 'sleep' and wot 'see'.

Regular verb paradigms are the following:

(17)			bot 'to give'	aw 'to run'	unot 'to know'
	1SG	in	m-bot	in-aw	n-unot
	2SG	nan	am-bot	an-aw	an-unot
	3SM	yeta	a-bot	a-y-aw	a-unot
	3SF	men	m-bot	n-aw	n-unot
	1 D U	wor	o-bot	o-y-aw	o-unot
	2DU	non	nom-bot	non-aw	non-unot
	3DU	dor	do-bot	do-y-aw	do-unot
	1PL	yek	e-bot	e-y-aw	e-unot
	2PL	nen	nem-bot	nen-aw	nen-unot
	3PL	der	de-bot	de-y-aw	de-unot

Simple and compound verbs in context are illustrated in (18) and (19):

- (18) A-bot bak na in.

 3SM-give axe to 1SG

 He gives me an axe.
- (19) Ni ka muk-i in-unot jan. wood that name-CL 1SG-know not I don't know the name of that wood.

4.2 Transitive and intransitive verbs

Transitive verbs can, but need not always, have an object, whereas intransitive verbs cannot have a direct object, but can have an object with a preposition.

The verb det 'to eat' is an example of a transitive verb and requires at least the object bar 'thing':

(20) An-det bar-(d)et pa-e?
2SG-eat thing-eat already-Q
Have you already eaten?

Verbs like *minsa* 'to hunt', *nkwan* 'to cook', *din* 'to play' and *dokwa* 'to carry' are also transitive and cannot occur without an object, unless the latter is easily recovered from the context:

- (21) N-nkwan sukwan.3SF-cook sago.porridgeShe cooks sago porridge.
- (22) A-bwana a-rokwa in.
 3SM-want 3SM-carry 1SG
 He wants to carry me.

In example (21) subject prefix n- 'she' is a syllabic nasal which is only audible in careful speech.

Examples of intransitive verbs are tikwar 'to bathe' and kwem 'to fall':

- (23) Kutu(t)-ba(n?) an-tik-war jan-to? for-what 2SG-bathe-water not-yet Why haven't you bathed yet?
- (24) De-kwem bari baprek.
 3PL-fall from bridge
 They fall from the bridge.

Transitive verbs may occur without an object. Examples with and without objects are illustrated in (25) and (26):

- (25) Derek-a a-onsra nan. vs Derek-a a-onsra.

 Derek-3SM 3SM-like 2SG Derek-3SM 3SM-likes(it)

 Derek is happy.
- (26) An-pin jan! vs A-pin Derek-a.
 2SG-call.names not 3SM-call.names Derek-3SM
 Don't call names! He insults Derek.

4.3 Verb sequences

Sequences of verbs are a common phenomenon in Mpur. They occur without any conjunction and all verbs in such a sequence are finite and thus obligatorily inflected.

There are a few criteria according to which sequences of verbs in Mpur actually could be cases of verb serialisation: conjunctions do not occur between the verbs, a clause boundary occurs only after the last verb, the subject is the same for all verbs, verbs may also occur individually in a clause, verbs form together a prosodic group (no pauses between verbs, a single intonation contour). Three examples are:

- (27) Do-un do-mim do-fo subwe Ari-a a-tem.

 3D-go 3DU-arrive 3DU-ascend follow Ari 3SM-mouth
 They walk up along the River Ari till they reach its mouth.
- (28) (Minton) kenep-i bwan pundir.
 (child) look.around-CONT call search
 (The children) looked around, they called and searched.

(29) Bari nek a-na a-fo arwar a-ta.
from down 3SM-come 3SM-ascend stairs 3SM-ANA
From down he came up those stairs.

It remains unclear whether sequences of verbs in Mpur are serial verb constructions or coordinate constructions. I did not study the issue and a detailed discussion is also beyond the scope of the present article.

4.4 Verbaliser bi-

The prefix bi- can be used for loans or words of other word classes to change the item into a verb. For example:

(30)bi-rekam to record (from Indonesian rekam) bi-paksa to force (from Indonesian paksa) to appear (from Indonesian jadi) bi-jadi bi-jadi nton to give birth to (from Indonesian jadi) bi-han yat to float (from Indonesian hanyat) bi-lewat to cross (from Indonesian lewat) bi-undang to invite (from Indonesian undang) to kick, hit (from Dutch schoppen) bi-skop to lie, to deceive (from NF ankar 'to deceive') bi-ankar bi-sik to be unable (from Mpur adverb sik 'not.possible') hi-aka to make possible (from Mpur conjunction aka 'so') bi-osum to be funny, humorous (from Mpur sum 'spicy'?)

On Mpur words, the verbaliser bi- is not always obligatory. Compare the following two examples:

- (31) Aka men bani n-kon-e m-bi-sik pa. then 3SF that 3SF-sleep-CL 3SF-VBL-impossible already And then she was asleep, there was nothing more she could do.
- (32) A-non-o fi-rokir de-mika sik de-mika sik wa.

 3SM-child-CL CLF-two 3PL-wait impossible 3PL-wait impossible already
 His two children could not wait, they could not wait anymore.

As the following example shows, Mpur words from other word classes can be used as a verb without the verbaliser bi- simply by taking subject prefixation:

(33) kum smoke de-kum-a they smoke him

4. 5 Causative verbal prefix fa-

Mpur makes use of a verbal prefix, which is most likely of Numforese origin indicating a causative, for instance fa-ur 'to extinguish' consisting of the causative fa- and the adverb ur 'extinguished'. Fa- can be prefixed to words from different word classes making it a transitive verb. Some examples are:

(34)	yep	dry	fa-yep	to dry
	dubun	to pull	fa-rubun	to pull out
	bum	fog, cloud	fa-bum	to hide
	jik	to kill	fa-ji(k)-em	to argue (lit. CAUS-kill-RECIP)
	brek	to turn	fa-brek	to turn around, to capsize

In a number of cases I do not know the origin of the stem of the transitive verb, for instance fa-wop 'to close'. Note that Taba (South Halmahera) has ha-op CAUS-be covered 'to cover' (John Bowden, pers. comm.). Some verbs like farkor 'to learn' and f(a)nander 'to forget' are wholesale borrowings from Numforese (note that the vowel a of fa- is often omitted).

4.6 Verbal complements

There are a few verbs which require a verbal complement. For example the modal verbs bwana 'to want, to need' (bwa + na 'to say + to'), mom 'to want not', si 'to be able', as in:

- (35)Do-bwana do-bep 3DU-carry.in.cloth child 3DU-want They want to carry the child.
- (36)Im-bwana n-fa manik. 1SG-need 1SG-buy mineral.oil I need to buy mineral oil.
- (37)A-mom a-sasyar jan. 3SM-want.not 3SM-go.outside not He doesn't want to come outside.
- (38)Derek-a a-si a-unot a-minsa-bar. Derek-3SM 3SM-is.able 3SM-knows 3SM-hunt-thing Derek is very good at hunting.

Other verbs, such as bwar 'say' and from 'think' may have a verbal complement, but they do not require it like the modal verbs.

4.7 Emotive verbs with wa-

There are a number of verbs expressing mental or physiological states with the initial syllable wa-, mostly for negative feelings such as warmor 'to be angry', wanaw 'to be afraid', wafnem 'to be lazy', waka 'to be jealous', wamar 'to be tired', wandar 'to be shy', wantek 'to be ill'. The verb mom (see §4.6) also occurs with wa-: wamom 'to want not'. I have no explanation yet for the origin of wa-. According to my language consultants the form wa comes from wow 'body' or mwan 'face, appearance', for instance: wamar 'to be tired' consists of wow-mar 'body-tired', wantek 'to be ill' is claimed to be mwan-tek 'face-hot'.

Two examples are:

58 Cecilia Odé

- (39) A-waka in.
 3SM-jealous 1SG
 He envies me.
- (40) A-warmor in.

 3SM-angry 1SG

 He is angry with me.

Other states of emotion are expressed by inalienable nouns indicating body parts with a qualifying noun or adjective, as illustrated in the following examples:

- (41) A-bwam-bit.
 3SM-head-stone
 He is naughty (lit. he has a head like a stone).
- (42) A-bwa-ip.3SM-head-boneHe is naughty (lit. he has a head like a bone).
- (43) A-wanken bapak.3SM-nose-bigHe is angry (lit. he has a big nose, also used in this literal meaning).
- (44) A-unket pam.
 3SM-chest-painful
 He is furious, wild (lit. his chest hurts, also used in this literal meaning).

4.8 Reciprocal suffix -em

Reciprocal actions are expressed by means of -em 'each other' suffixed on the verb, as in wot-em 'to see each other', from-em 'to love each other' (lit. to think each other), job-em 'to make love (to each other)', sapat-em 'to force each other', meni-em 'to hear each other', unot-em 'to understand each other', as in:

(45) A-mim jan bapu Asit do-tem wom-em.

3SM-arrive house at Asiti 3DU-mouth.of.river sew-RECIP

He arrived at the house in Asiti where the two mouths of the rivers come together.

The reciprocal suffix -em 'each other' also occurs as prepositional object. For example:

(46) De-bwar na-em.
3PL-say to-RECIP
They say to each other.

4.9 Quote marker bwa

In running speech the verb bwar 'to say' can be used as quote marker. Final -r is often omitted, final -a can be (sometimes extremely) lengthened, and the verb keeps its subject prefixation. Examples are:

- (47) Kaman bwar na Sasua bwa ...
 pumpkin say to Sasua QUOT
 The pumpkin said to Sasua, he said ...
- (48) A-bwar a-bwa nan n-ka ma-bwak non nan.
 3SM-say 3SM-QUOT 2SG 3SF-that REL-magic.cannibal child 2SG
 He says: are you the child of a magical cannibal?

4.10 Expression of imperative

Verbs are not inflected for the marking of Tense-Mood-Aspect. The imperative is expressed by a verb inflected for the second person and can be strengthened by the clause-final demonstrative *ka*: *an-det ka* 'you-eat that' 'you must eat'. The prohibitive is expressed by *jan* 'not' or by *jan pa* 'not anymore' (lit. not already). For example:

- (49) Am-bop sansun ka. 2SG-wash clothes that You must wash clothes.
- (50) Anoka!
 an-wot-ka
 2SG-see-that
 Look out!
- (51) An-un jan pa!
 2SG-go not already
 Don't go!

5 Adjectives

There are reasons for positing a separate word class of adjectives distinct from either verbs or nouns, although Mpur adjectives do have some similarities with Mpur verbs. Both verbs and adjectives take subject prefixation in predicative position. In attributive position verbs require the relativiser ma following the noun and preceding the prefixed verb. Adjectives in attributive position occur with and without the relativiser ma.

Some examples of adjectives, including the five terms for colours, are:

(52)	bapak	big	nombak	small
	berep	light	dim	dark
	mafun	good	wandek	bad
	serer	long	kunon	short
	kot	heavy	sapja	light
	kwar	sour	minyar	sweet
	fam	salty	wot	bitter, spicy
	fibe	white	nim	black
	sum	red		
	ufrum	yellow		
	bwa-wop	green, blue (lit. leaf +?)		

Note that there are three more names for yellow: minam (in the mountains also used for white), dapraw and bwa-bin (lit. ripe-leaf). Colours can be further specified by using the adverbs dera or pit 'bright' which are only used for colours and by berep 'light' and dim 'dark', which all follow the name of the colour. The word for azure, for instance, is bwawop dera 'bright green' and the word for 'pink' is sum berep. To indicate the intensity of a colour, the adverbs ten 'just' and tati, kaku 'very' are used: sum ten 'reddish', sum tati 'very red'.

Adjectives follow the noun and can be specified with relative marker ma as shown in (53). The relative marker ma occurs on attributive adjectives as in (53), but also introduces relative clauses and occurs as relative marker in Headless RC. For a further discussion of ma see §15.

(53) jan mafun a beautiful house jan ma mafun the house which is beautiful kwap kot a heavy bag kwap ma kot the bag which is heavy uk fibe a white flower war tek hot water babwa minyar delicious vegetable bertobar serer a long story

A number of adjectives occur in predications as verbs with subject prefixation. Examples are:

- (54) In-tek.1SG-hotI am hot (to be translated as 'I feel cold', shivering from fever).
- (55) A-rot.
 3SM-younger
 He is younger.

Indefinite numerals (see §13.3) behave as adjectives as shown in:

(56) A-men per fon.
3SM-look.after dog many
He looked after many dogs.

6 Nouns

Nouns are of the following types: simple nouns, compounds, alienable and inalienable nouns. Nouns referring to human beings are marked for gender. Nouns have possessive inflection by means of bound pronouns prefixed to inalienable nouns and by means of the subject prefixed verb tar or bi 'to possess' preceding the alienable noun. Nouns as head of noun phrases can be modified by adjectives, numerals and demonstratives following the noun. Loans are predominantly from neighbouring languages: Numforese, Irianese Malay or Standard Indonesian, but also from Dutch. Since loans do not behave differently from original Mpur words, they will not be further discussed.

6.1 Simple nouns

Examples of simple nouns are:

(57) fa banana
iw bird
war river
yet fire
kwap rope.bag
wom hand
prei green onions (from Dutch prei)

6.2 Compounds

In compound nouns easy elisions of syllable final consonants or sometimes of whole syllables occur. Examples of compounds are:

- (58) am-fe(k)-bur eye-skin-body.hair eyebrow
- (59) ambon-kwe neck-swelling goitre
- (60) marwabur mamir-dwaw-bur person-pig-body.hair good hunter
- (61) kaparek kapal-dek ship-fly aeroplane

6.3 Nominaliser bar

A special case of compounding involves bar 'thing', which is frequently used in combination with other nouns or as nominaliser with members of other word classes. For example:

- (62) bain
 bar-in
 thing-grow
 garden
- (63) baret
 bar-det
 thing-eat
 food

62 Cecilia Odé

- (64) baprokir bar-prek-dokir thing-leg-two cassowary
- (65) bawantek
 bar-wantek
 thing-sick
 illness
- (66) mabakwar ma-bar-kwar REL-thing-sharp criminal

6.4 Alienable nouns

There are two possessive pronouns which are used with alienable nouns. Both -tar and -bi always precede the noun. The possessive morpheme bi is identical to the Abun form (see Berry & Berry 1999:78). Examples of alienable nouns in a context with possessive pronouns are presented below:

- (67) In-un si n-tar jan.

 1SG-go to 1SG-POS house
 I go to my house.
- (68) De-ter a-bi jetenon.
 3PL-put 3SM-POS knife
 They put down his knife.
- (69) E-rak-bar Lambert-a a-bi ba(r)-in.

 1PL-work-thing Lambert-3SM 3SM-POS thing-grow
 We work in Lambert's garden.

6.5 Inalienable nouns

Inalienable nouns include terms for body parts, kinship relations and a few other items, which require a prefix signalling for person and number of the possessor:

- (70) a-wom
 3SM-hand
 his hand
- (71) *e-yen*1PL-mother
 our mother
- (72) an-muk
 2SG-name
 your name

For a full list of kinship terms in Mpur the reader is referred to Miedema and Welling (1985).

6.6 Gender

Female personal names are suffixed with -n: Amandan, Mincen, Marian 'Amanda, Mince, Maria'. Male personal names are suffixed with -a: Seppia, Mosesa, Lamberta 'Seppy, Moses, Lambert'.

Other examples of nouns with gender indication are:

(73)mother yen а father girl, woman (of all ages); child nton boy, man (of all ages) ntoa girlfriend niman boyfriend nimata

Note that *nton* is the generic form for 'child', which suggests that female -n indicates the unmarked form.

6.7 Nouns with the same form as verbs

A number of nouns in Mpur have the same form as verbs with subject prefixation. For example sor 'mountain/cross' and tum 'arrow/shoot':

- (74)In-sor dok. 1SG-cross bridge I cross the bridge.
- (75)A-fankar ma-n-ka. sor 3SM-over mountain REL-3SF-that He goes over that mountain.
- (76)A-tum dwaw. 3SM-shoot pig He shoots a pig.
- N-ketet (77)n-fer 3SF-release 3SF-dig.up arrow She releases and digs up the arrow.

6.8 Nouns and word order

Word order in noun phrases is as follows: POS + N + A + NUM + DET, as in:

(78)A-onsra a-bi jan mafun fon. 3SM-like 3SM-possess house beautiful many He likes his many beautiful houses.

64 Cecilia Odé

A modifying relative clause (see $\S15$) is normally introduced by the relative marker ma, occupying the position of the postnominal modifiers. In the following example, a nominal predication is presented followed by a negation which obligatorily follows the nominal predicate:

(79) Iw ma-n-ka kokor jan. bird REL-3SF-that chicken NEG This bird is not a chicken.

7 Deictics

In Mpur a distinction exists between spatial and textual deictics, the forms of which occur in combinations as summarized in Table 4. As we will see, the deictic system is not a simple issue at all. As said in my introduction, research carried out for the present article was limited and does not answer many questions I still have, and the examples shown in this section leave us with a great deal of uncertainty. Table 4 presents the forms of deictics:

Spatial			Textual	
near	far	very far	anaphoric	focus/topic
ki	ka	mek	ta(w)	ni
n-ki	n-ka		(n)da(w)	(b)a-ni
ma-n-ki	ma-n-ka			
na-ki	na-ka	na-mek		
ta-ki	ta-ka			
(b)a-ta-ki	(b)a-ta-ka	ba-ta-mek	(b)a-ta	

Table 4: Forms of spatial and textual deictics

The form *mbano* (*mbana*) was only attested as an independent utterance and therefore it is not indicated in Table 4. Note that the form *ba-ni* is used in Amberbaken and, according to my Kebar consultant, equivalent to the Kebar form *ka-ni*.

Spatial deictics are expressed by the basic demonstrative pronouns ki 'here/this' and ka 'there/that' referring, respectively, to a distance near and a distance further away from the speaker. The demonstratives are illustrated in the following example:

(80) Ah n-bwar ka nan pa n-bwar ki an-bwar jan. ah 1SG-say that you already 1SG-say this 2SG-say not Ah, I already told you, I said don't you say anything.

The basic demonstratives ki and ka are frequently prefixed by what is likely the morpheme n '3SF'. They are shown in three nominal clauses:

(81) Baban n-ka? N-ka bak. Bak n-ki mafun jan. what 3SF-that 3SF-that axe axe 3SF-this good not What is that? That is an axe. This axe is not good.

If used attributively, the demonstrative pronouns ki 'this' and ka 'that' are mostly combined with the relative pronoun ma and the morpheme n '3SF':

- (82) Ibor ma-n-ki bar ma bi bwa kanik tu-ni.
 rope REL-3SF-this thing REL kind.of leaf like coconut-FOC
 This rope is like a leaf of the coconut. (lit. This rope is a thing that is of a kind of leaf like a coconut.)
- (83) M-fatot m-fatot a-bwam ma-n-ka ti-prik-i a-ut-i.
 3SF-cut 3SF-cut 3SM-head REL-3SF-that broken-cut-CL 3SM-dead-CL
 She cuts till his head is broken off and he is dead.

According to my informants the forms ma-n-ki and ma-n-ka rather than n-ki and n-ka are used to refer to something that has not been communicated yet. For example in the phrase ni ma-n-ki 'this tree', 'tree' is new information, whereas in ni n-ki 'this tree', the existence of the tree was already known to the listener. Informants are not consistent in their explanations; this has to be checked further. For a discussion about the many puzzling functions of ma the reader is referred to §15.

Next to (n-)ka 'there' a form mek 'there' exists. This demonstrative seems to be used for distances more remote than (n-)ka. Two examples are:

- (84) Do-tek ka ne(k)-mek arwar mek do-y-aw.
 3DU-down that down-there stairs there 3DU-Y-run
 They went down the stairs and ran.
- (85) N-kurem mamer a-ta bwan mum mek.

 3SF-enter k.o.tree 3SM-ANA hole deep there
 She went inside the deep hole of that mamer tree.

The forms (n-)ka and (n-)ki and mek can be specified further with elements from textual deictics and other forms. This is discussed below.

Textual deixis is indicated by anaphoric ta and focus/topic marking ni, the latter most likely of Numforese origin. Both can be prefixed with a- or ba-. For the time being, I interpret a as '3SM'; but note that the origin of ba- seems to be bar 'thing', where intitial b- is often omitted. The forms ba-ta, a-ta and ba-ni, as well as a number of more complex forms (see below), occur equally frequently in my materials. A focus-marking form a-ni is in a single case attested. Anaphoric ta can also be found in the free personal pronoun yeta '3SM'. Sometimes ta is followed by a semivowel /w: taw. The form nda 'that/there' does not occur without n in my materials; it can also be followed by a final semivowel /w!: ndaw. A form da is only attested with the meaning 'first, earlier', and as such is related to anaphoric ta. It seems likely that nda consists of n '3SF' and anaphoric ta, where the initial stop is voiced after n.

Examples of textual deictics are presented in the following examples:

- (86) Mamir ma ut a-ta biasa de-kum.

 person REL dead 3SM-ANA usually 3PL-smoke
 The people who are dead they usually smoked.
- (87) A-bot na a-non ba-ta det.

 3SM-give for 3SM-child ?-ANA eat
 He gave them to his child to eat.
- (88) A-na na a-mim minton ni.

 3SM-come for 3SM-arrive child FOC
 He came to reach the child.

- (89) O minton ba-ni umbrut-on min-taw jap. oh child ?-FOC baby-very.small like-ANA stay Oh, that child was still a baby, so it stayed behind.
- (90) Ah mamir n-da pa. ah person 3SF-ANA already Ah, somebody is there.

The deictic system in Mpur shows a large number of complex forms consisting of elements of spatial and textual deictics. The demonstratives ki, ka and mek can be further specified and be prefixed with anaphoric (b)a-ta, with what is likely the preposition na 'to, for', and they can be suffixed with topic/focus marker ni. All these forms can occur as object of a preposition. The combinations are shown in the examples below:

- (91) Seluruh yen ba-ta-mek n-ketet sik.

 all needle ?-ANA-there 3SF-release impossible

 She could not release (it) with any needle over there at all.
- (92) O bar na-mek musom pa-y-a. oh thing come-there abandoned already-Y-CL Oh, everything there was abandoned.
- (93) Ku ma-n-ki war ku jan. at REL-3SF-this water at not Here is no water.
- (94) Mamir kwar jap ku ma na-mek.

 person bad live at REL come-there
 Bad people live over there.
- (95) A-un ku na-ka.
 3SM-go at come-there
 He walks there.
- (96) An-na-re yek-o e-jatik nan ma ta-ki.

 2SG-come-just 1PL-CL 1PL-wait 2SG REL ANA-here
 Just come on in, we'll wait for you here.
- (97) Aka de-jap pu na-m(ek?). then 3PL-stay at.far.away come-there And then they stayed there (far away).
- (98) A-un si-te? In-un si na-mek.

 2SF-go to-where 1SG-go to come-there

 Where are you going? I am going there (far away).
- (99) A-jap ku fa-war ka-ni.
 3SM-sit at banana-tip that-FOC
 He sits on the tip of that banana(leaf).

In example (97) final -ek in pu na-m is probably lost. More such examples are found (e.g. ma-ta-m(ek) 'there'). The demonstrative mek is also used in combination with spatial nouns (e.g. ne(k)-mek 'down-there').

The conjunction aka '(and.)then' probably consists of a-ka '3SM-that' (a form *a-ki was not observed):

(100)Nari a-na aka a-ret wor. in.a.while 3SM-come then 3SM-eat 1DU He will come and eat us.

Another form for 'here' is na-k(i) 'to-here', where the final high front vowel -i is mostly lost, shown in the following example:

(101)An-dak bain ma-n-te? Na-k(i). 2SG-make garden at-3SF-where to-here Where are you making a garden? Right here.

There also exists a form for 'here' whose internal structure is not clear yet: mbano (sometimes *mbana*), used for something visible quite near the speaker and listener:

- (102)Tep ma-n-te? Mbano. plate at-3SF-where right.here Where is the plate? Right here (in front of you).
- I(n)-mbano. (103)Anma-n-te? 2SG at-3SF-where 1SG-right.here Where are you (I can hear you but I don't see you)? I am right here.

8 Questions

Questions are marked morphologically. Though questions are not expressed by means of intonation alone, question-marking clitic -e is realised with a salient, large rising or falling pitch movement.

8.1 Question marker -e

Question marker -e is an utterance-final clitic occurring in yes/no questions. For example:

- (104)An-bwana an-kon-e? 2SG-want 2SG-sleep-Q Do you want to sleep?
- (105)N-jap ku ma-n-ka-e? 3SF-live at REL-F-that-Q Does she live there?
- (106) In-korem ten-e? 1SG-enter just-Q May I come in?
- (107)A-un si bain ian-e? 3SM-go to garden not-Q Doesn't he go to the garden?

8.2 Question words

Content questions occur with specific question words some of which have the question marker -e. Question words usually occur in the same syntactic position as the element they are questioning would occur in. There is no utterance-final question marker -e in content questions. Question words are given in (108) together with their assumed morphological make-up:

(108)	baban, ban(o)	what, which	bar-ban	thing-what
	kutuba	why	kutut-ba(n?)	for-what
	ma, man	who	ma-n	who-3SF
	unte	how much/far/long	un-te	go-where
	mande/mante	where	ma-n-de/n-te	REL-3SF-where
	tote	when	to-te	still-where
	arote	how	aro-te	like-where

Note that the difference between nde and nte is dialectal, the former being common in Amberbaken, the latter in Kebar. Question word baban is often pronounced as $[ba\beta an]$ or [bawan]. Gender is expressed in the question word 'who': ma for masculine, man for feminine (see examples (112) and (113)).

The question words listed in (108) are illustrated in some examples:

- (109) An-kiti ir-o-bar na baban? 2SG-cut rope-V-thing for what What do you cut the rope for?
- (110) Baban ma jap ku fa? what REL sit on banana.tree What is sitting on the banana tree?
- (111) Kutu(t)-ba(n?) nton det bar-(d)et jan? for-what child eat thing-eat not Why doesn't the child eat?
- (112) An-muk ma? 2SG-name who What is your name?
- (113) Maria-n n-yen ma-n?
 Maria-3SF 3SF-mother who-3SF
 Who is Maria's mother?
- (114) Ba(r)-in un-te? thing-grow go-where How far is the garden?
- (115) Waras un-te? hour (NF, see §11.3) go-where What is the time?

- (116) An-tar bain ma-n-te/ma-nde?
 2SG-possess garden REL-3SF-where
 Where is your garden?
- (117) An-bwana an-tik-war to-te?
 2SG-want 2SG-bathe-river still-where
 When do you want to bathe in the river?
- (118) A-y-aw aro-te? N-dat-bur a-pem pa.

 3SM-Y-flee like-where 3SF-genitals-body.hair 3SM-around already
 How can he escape? Her pubic hair is completely wound around him.

The question word *aro-te* 'how' is also used in daily conversation to ask how things are going, next to the common questions *an-un si-te*? 'where are you going?' and *am-bari-te*? 'where do you come from?'.

9 Prepositions

Prepositions in Mpur have no subject prefixation. For the purpose of this exposition, prepositions are subdivided into three types: (1) referring to space, (2) referring to space with an aspectual meaning, and (3) non-spatial prepositions. Such a subdivision may not be tenable, since the preposition na 'for, to', mainly used with verbs like 'say' and 'give', also occurs with demonstratives. Some prepositions also occur as verbs (see below). The discussion of locative prepositions be and fe is delayed till §10.

The prepositions presented below in alphabetical order will be commented upon in this section:

```
(119)
        bari
                    from
                    LOC (see §10)
        be
                    LOC (see §10)
        fe
        fraru
                    between (lit. 'middle')
        ka
                    with (instrument)
                    to (in the process of going to)
        ke
                    along
        koso
                    to, at, in (completed action)
        ku
                    to, at, in (habitual, permanent or actual presence)
        ma
                    till
        mim
                    for, to
        na
                    to, at, in (far away)
        ри
                    to (future action)
        si
                    with (comitative)
        tut
```

Examples of the three types are, respectively:

```
(120) In-un koso war.

1SG-go along river
I walk along the river.
```

- (121) N-un ku Akmur. 3SF-go to Akmuri She has been to Akmuri.
- (122) Am-bot jetenon na in.

 2SG-give knife to 1SG
 You give the knife to me.

Spatial prepositions are ke 'to', ku 'to, at, in', ma 'to, at, in', pu 'to, at, in', si 'to', koso 'along (a combination of ku and si?)' and, in fixed combinations with words expressing spatial orientation, be and fe. The latter two will be discussed in §10. Prepositions ku and pu can take the prefix ba: ba-ku, ba-pu. As mentioned in §7, I have no explanation for ba-.

The meaning of preposition pu 'to, at, in' is said to have the meaning 'to/at far away', illustrated in the following examples:

- (123) *M-bi-jadi* nton sok are n-jap pu jan-i-kem.
 3SF-VBL-give.birth child new so 3SF-stay at.far.away house-CL-fall She'll give birth to a new child, so she stays at a far away birth-house.
- (124) De-un pu si a-jam-a.

 3PL-go to.far.away to 3SM-brother.in.law-3SM
 They go far away to his brother-in-law.
- (125) Tep fiti n-dir pu beruk n-jun.
 plate other 1SG-put on.far.away rack.over.fireplace 3SF-top
 The other plate I'll put high up on top of the rack over the fireplace.

With verbs of motion, the prepositions ke, ku, ma, si 'to' acquire an aspectual meaning: ke 'in the process of going to', ku 'completed action' (having arrived and come back), ma 'habitual, permanent presence', and si 'future action'. The four prepositions for 'to' are presented in the following examples:

- (126) A-un ke Bwatem.

 3SM-go to Saukorem

 He is on his way to Saukorem.
- (127) A-un ku niraw.

 3SM-go to forest

 He has been to the forest (and is back now).
- (128) A-un ma Manokwar.
 3SM-go to Manokwari
 He has gone to Manokwari (e.g. he has moved there and lives there now).
- (129) A-mim jan ba-pu Asit.

 3SM-arrive house ?-at.far.away Asiti
 He arrives at his house far away in Asiti.
- (130) A-un si war.

 3SM-go to river

 He will go to the river (he has not yet gone or he has not yet arrived there).

In combination with verbs that do not express motion, for example jap 'to sit, live', dakbar 'to work', the preposition ma indicates a more permanent physical presence, while ku conveys a more temporary meaning.

(131) N-jap ku Anja. VS N-jap ma Anja. 3SF-live in Anjai 3SF-live in Aniai She lives in Anjai. She has her living in Anjai.

The aspectual meaning of the prepositions ku and ma is also reflected when used in combination with question marker -te 'where' (see also §8):

- (132) An-jap ku-te? In-jap ku war. 2SG-stay to-where 1SG-stay at river Where have you been? I have been to the river.
- (133)N-iap ma-n-te? N-jap 3SF-stay where-3SF-where 3SF-stay at river Where is she? She is at the river.

The prepositions bari 'from', ku 'to, at, in' and mim 'till' are used for both spatial and temporal relations. Examples of both uses are as follows:

- (134)In-un bari Bwatem si Anja. 1SG-go from Saukorem to Anjai. I walk from Saukorem to Anjai.
- bari krimbor. (135)A-un 3SM-go since morning He walks since the morning.
- (136)**Bari** nan ten. from 2SG just It's up to you (as you like it).
- Ku tot (137)e-meni fobik kwap. night 1PL-hear lizard voice At night we hear lizards.
- (138)Do-rokwa bik mim jan. 3DU-take bamboo till house They took the bamboo as far as the house.

Non-spatial prepositions are, for instance, tut 'with (comitative)', ka 'with (instrument)', na 'to (recipient)' as shown in the following examples:

- (139) A-un tut per. 3SM-go with dog He goes with his dogs (he goes hunting).
- (140)Α in-mam ka in-wom. ah 1SG-cut that 1SG-hand Well, I will cut down (the garden) with my hand.

72 Cecilia Odé

- (141) Do-ton nton dur ka yaw nan.

 3DU-cut child navel with HES k.o.bamboo
 They cut the child's navel with, eh, poisonous bamboo.
- (142) An-det ka asyok.

 2SG-eat with spoon
 You eat with a spoon.
- (143) Im-bwar na nan. 1SG-say to 2SG I say to you.

Prepositions bari 'from' and mim 'till' occur also as verbs 'come.from' and 'arrive', respectively:

- (144) Amanda-n m-bari bain.

 Amanda-3SF 3SF-come.from garden

 Amanda comes back from the garden.
- (145) *N-aw m-mim m-binon der pa*.

 3SF-run 3SF-arrive 3SF-brother 3PL already
 She ran till she had arrived at her brothers'.

The preposition 'between' can be expressed as follows:

- (146) Wor o-jap be mamir fiti a-jap ku ka-wow.

 1DU 1DU-sit but person other 3SM-sit at that-body
 Somebody sits between us.
- (147) ni war-(d)okir fraru braw ni war-(d)okir tree CLF-two middle between tree CLF-two between two trees

Note that b(e)raw also means 'with', 'and':

- (148) Fawar a-kon beraw der-o. finally 3SM-sleep with 3PL-CL Finally he sleeps with them.
- (149) nton braw per child and dog the child and the dog

10 Spatial orientation

In addition to the rather general locative prepositions, discussed in §9, Mpur employs a number of spatial relator nouns to specify the spatial orientation of an object. Some of these are clearly nouns in their own right, such as bwan 'hole', others transparently refer to body parts, such as dir 'rib', again others can be classified as nouns, because they occur as object of the preposition be. This preposition has not been discussed in §7, since it is rather restricted to locative phrases with or without spatial nouns. Some spatial nouns are included in this category on the basis of analogy to the items mentioned. That is, if a noun referring to an object which serves as spatial anchoring point is present, the spatial nouns either follow

that noun directly, as in (150), or with an additional instance of the preposition be, as in (151).

- (150)N-un be. dok ирет. 3SF-go LOC bridge under She walks under the bridge.
- Wot be he-am. (151)sor sea LOC mountain LOC-side The sea is behind the mountains.

Items which follow a head noun of a locative phrase immediately, in other words, those which enter constructions, as in (150), are bwan 'hole' and fraru 'middle', as in the following examples:

- (152)A-jap bwan. ku jan 3SM-sit in house hole He sits inside the house.
- (153) N-kem ku war fraru. 3SF-fall in river middle She falls in the middle of the river.

In the case of body part terms dir 'rib' and dumom 'front', the spatial anchoring point can be a human, in which case the appropriate person prefix is attached, as in:

- (154) Tep kon be an-dir. plate lie LOC 2SG-side The plate lies beside you.
- domi Mince-n n-dumom. (155) In-i 1SG-stand before Mince-3SF 3SF-front.of.body I stand before Mince.

Note that in example (155) n-dumom '3SF-front.of.body' may be omitted.

When no anchoring noun is available, the locative phrase consists of just the preposition be plus the spatial noun, consider:

- bar-(d)et (156)An-ter be-u. 2SG-put eat-thing LOC-inside Put the food inside.
- (157)Maria-n n-jut tu be-ye. Maria-3SF 3SF-rasp coconut LOC-outside Maria rasps coconut outside.

There are a number of spatial nouns which can only follow the anchoring noun when they themselves are marked with the preposition be. The whole locative phrase may be governed by either be or by the locative prepositions ku 'to/at', ma 'in, at' and pu 'to/at.far.away' and si 'to'. Note that at the moment of speaking in such constructions instead of locative be, the locative preposition ku 'to/at' expresses absence, ma presence. For example, in (158) and (159), instead of be, ma would have the aspectual meaning 'still present', and ku 'not present anymore' (see also §9).

Spatial nouns are shown in the following examples:

- (158) Dwaw kon be jan be-nek.
 pig sleep LOC house LOC-earth
 The pig sleeps under the house.
- (159) Ba-ban ut be tep be-u? thing-what stay LOC plate LOC-inside What is inside the plate?
- (160) A-jap be war dir be-am.

 3SM-live LOC river side LOC-side
 He lives at the other side of the river.
- (161) De-kum-a de-rir baku beruk ku yet-am be-jun.

 3PL-smoke-3SM 3PL-put on rack at fire-eye LOC-top
 They smoked him and put him on the rack over the fireplace.
- (162) Tep fiti n-dir pu beruk n-jun.

 plate other 1SG-put on.far.away rack.over.fireplace 3SF-top

 The other plate I'll put high up on top of the rack over the fireplace.
- (163) N-fo si jan si-jun den-e.
 1SG-go.up to house to-top just-CL
 I'll just go up to the house.

Note that in examples (160) and (161) am 'side' and am 'eye' have mid and high tone, respectively.

Besides (161) and (163) it is also possible to inflect *jun* 'top' with '3SF' in case an anchoring noun is present, as in (162) and (164), or with '3SM' when this is not the case (165).

- (164) N-a a-se bari beruk a-ta n-jun-i.

 1SG-father 3SM-fall.to from rack 3SM-ANA 3SF-top-CL
 My father has fallen down from above the rack.
- (165) An-tra fe a-jun.
 2SG-look to 3SM-top
 You look upwards.

A similar contrast as between (164) and (165) seems to apply to postnominal be-nek in (166) and the adverbial a-nek in (167):

- (166) A-jap be jan be-nek.

 3SM-sit LOC house LOC-earth
 He sits under the house.
- (167) Am-bru a-nek na e-un.
 2SG-descend 3SM-earth to 1PL-go
 Please come down so that we can go.

The prepositional phrase 'from ... to ...' uses directional preposition fe, used with spatial nouns prefixed with a- '3SM': fe a-y-am 'to 3SM-Y-side' 'sidewards', fe a-wot 'to 3SM-sea' 'seawards', fe a-jun 'to 3SM-top' 'upwards'. The combination is as follows:

(168) A-kem bari beruk n-jun fe a-nek.
3SM-fall from rack 3SF-top to 3SM-earth
He fell down from the top of the rack.

11 Adverbs

On the basis of meaning and function, adverbs can be subdivided into types of location, time, aspect, mode and negation. Adverbs do not take prefixes or suffixes and occur in clause-initial and/or in clause-final position. Adjectives such as *mambom* 'lazy', *frenkak* 'wrongly', *mafun* 'beautifully' etc., can be used adverbially, as can NPs, like *put manki* 'day this' for 'today'. Examples are:

- (169) A-mambom a-tum dwaw.

 3SM-lazy 3SM-shoot pig

 He shoots badly at the pig (that is, he misses).
- (170) A-frur bar frenkak.

 3SM-do thing wrong
 He does things (cooking, writing etc.) wrongly.

11.1 Adverbs of location

Adverbs of location follow the predicate with(out) object and indicate where the action expressed by the verb takes place. For instance:

(171) A-jap bwaner. 3SM-live far He lives far away.

The adverb fanam also occurs as verb and takes subject prefixation:

(172) Do-un do-fanam mer-i do-bwanjar per.
3DU-walk 3DU-close uncleared.garden-CL 3DU-call dog
They walk till they are close to the garden and call the dogs.

11.2 Adverbs of time

Generally speaking, adverbs referring to time occur in clause-initial position:

- (173) Sobon-i n-jap ku Manokwar. before-CL 3SF-live in Manokwari Before she lived in Manokwari.
- (174) Bitu nen-suma biskwan braw mwan. in.a.while 2PL-receive sago.porridge with fish. In a while you'll get sagoporridge with fish.
- (175) Tokiri men musim fiti n-ut. day.before.yesterday 3SF woman certain 3SF-dead The day before yesterday a woman has died.

(177)

nunki

hitu

toren

suba

firoko

Note that 'today' and different parts of the day are expressed by combinations of those parts with the demonstrative manki 'this', such as put manki 'day this' for 'today', or tot manki 'evening this' for 'tonight', etc. Reduplications (of word combinations) like, for instance, put tu put tu 'day one day one' for 'always' or kiti kiti 'sometimes' are also used. However, with a few exceptions, hardly any reduplication is found in Mpur. Parts of the day of yesterday, tomorrow etc. follow the temporal adverb:

(176) Dosir tot in-bwana m-bwar na nan. tomorrow evening ISG-want 1SG-talk to 2SG Tomorrow evening I want to talk to you.

Some other temporal and morphologically complex adverbs are:

later today

earlier today nuni dosir tomorrow day after tomorrow nur vesterday nton day before yesterday tokiri a few days ago torwari three days ago torenur torbwati four days ago femuki now, nowadays kiti kiti sometimes tekeki a while ago

To the adverbs of time also belong some adverbial phrases, as in:

(178) A-rin fanam ka firoko.

3SM-dance close at.the.time.of daybreak
He dances till daybreak.

in a while

recently, just

a long time

daybreak

(179) Bat-ip enon jan-i bwansan bi-tutup sor.
beat-wind? little not-CL cloud VBL-close mountain
Not much later clouds cover the mountains.

There are no indigenous words for 'week', 'month' or 'year'. Mpur speakers use Indonesian words, but for 'year' the compound bra-n-ka-wa is sometimes used, from classifier bra for long things, demonstrative pronoun n-ka '3SF-that' and aspect adverb pa 'already'. For 'month' the form man is used from the Dutch loan maand.

11.3 Adverbs of aspect

A number of adverbs specify aspectual meanings of the clause and usually follow the predicate and object (if present). Some examples are:

- (180)Derek-a a-tum dwamir pa. Derek 3SM-shoot wild.boar already Derek has shot a wild boar.
- (181)Kaparek na to. aeroplane come still The plane is yet to come.
- Ma Kebar (182)ip donin. in Kebar wind always In Kebar there is always wind.
- (183)A-na kwaraw. 3SM-come immediately He must come immediately.
- (184)In-na kait. 1SG-come too.late I am late.
- (185)A-jik iw fer. 3SM-kill bird again He killed a bird again.
- (186)Ba(r)-ban fer? thing-what again Anything more?
- (187)An-tik-wot pasinem na ban? 2SG-bath-sea all.the.time for what Why are you bathing (in the sea) all the time?

Note that the complex question na ban 'why?' may occur in clause-final position after the adverb of time.

The adverb pa 'already' preceded by isi 'enough, finished, ready', and usually followed by be 'but', marks an action that has been completed insufficiently or unsatisfactorily. For example:

(188)In-det bar-(d)et isi be in-diwor jan-to. рa 1SG-eat thing-eat enough already but 1SG-full not-yet I have eaten but I am still not full.

Other adverbs of aspect are:

(189)donin always janpa not anymore janto not yet fawar finally continually mau finished maw menit

completely, sufficiently

usually, always sukem

78 Cecilia Odé

A sufficiently completed action is expressed by the adverbial phrase *menit pa* 'enough already' or *maw pa* 'finished already'.

11.4 Adverbs of manner

Adverbs of manner can refer to how the event expressed by the verb actually takes place. Such modifying aspectual adverbs also occur in clause-final position. For instance:

- (190) An-korem ten. 2SG-enter just Come on in.
- (191) O-fuk mpan bapak na nan ten.

 1DU-sew sleeping.mat big for 2SG just
 We are just sewing a sleeping mat for you.
- (192) A-kon borya.
 3SM-sleep intensely
 He is fast asleep.
- (193) Tot ma-n-ki in-kon wasren. evening REL-3SF-this 1SG-sleep quickly Tonight I'll go to sleep early.

11.5 Adverbs of mode

Adverbs of mode tend to occur clause-finally, at least post-predicate, following the object if that is expressed. Adverbs of mode refer to the (im)possibility, necessity etc. of the event expressed by the verb. Such adverbs are sik/tasik 'impossible, useless', fari 'possible/able.to', as in:

- (194) Bwan-o bwan-o sik. call-CL call-CL call-CL useless All the calling didn't help.
- (195) Yen ba-ta-mek n-ketet sik.
 needle ?-that-there 3SF-release impossible
 She could not loose that needle.
- (196) Do-bwana do-bep nton-i ta-sik do-y-a
 3DU-want 3DU-carry child-CL ANA-not.possible 3DU-Y-father
 a-wamom.
 3SM-want-not
 They wanted to carry the child but no way, their father didn't want them to.
- (197) Bar aw fari jan to de n-da-i. thing run able not yet till 3SF-ANA-CL Something ran and cannot have passed here yet.

11.6 Intensifying adverbs

Intensifying adverbs can modify a clause or occur as modifiers in a noun phrase. For example:

- (198) Men-dot nap-a-i a-kon tot fon jan.

 3SF-younger copulate-3SM-CL 3SM-sleep night much not
 The younger sister copulates with him continuously, he doesn't sleep much at night.
- (199) A-put a-put-e kwaik kaku.

 3SM-fill 3SM-fill-CL strong very(NF)

 He kept on filling (the hole) till it was tight enough.

Other intensifying adverbs are:

(200) famber very, too
fon famber very much
tati very
ten only

11.7 Adverb of negation

The adverb of negation *jan* always occurs clause-finally. For example:

(201) De-unot Seppi-a a-jap ku Bwatem jan.

3PL-know Seppi-3SM 3SM-live in Saukorem not
They don't know whether Seppy lives in Saukorem./They know that Seppy does not live in Saukorem.

This utterance can be disambiguated by positioning the negative element directly following the predicate of the main clause:

(202) De-unot jan Seppi-a a-jap ku Bwatem.

3PL-know not Seppy 3SM-live in Saukorem.
They don't know whether Seppy lives in Saukorem.

Other examples are (203) and (204), in which two clauses are coordinated by constrastive be 'but'. The negative adverb has to be in final position of the clause under its scope.

- (203) In-ton bajarek jan be bijam.

 1SG-cut bamboo not but ironwood.

 I don't cut bamboo but ironwood.
- (204) In-ton bajarek be bijam jan.
 1SG-cut bamboo but ironwood not
 I cut bamboo but not ironwood.

11.8 To be or be not: the presentative mu

The presence or existence of something is expressed by the presentative mu with verbs like ut 'to stay', i 'to stand', jap 'to sit' or kon 'to lie, sleep'. The word class it belongs to is not

clear to me, so for the time being the presentative is discussed in this final section on adverbs. The most frequent use is in combination with the verb ut 'to stay' forming the compound construction umu and with the demonstratives ka 'that.there' and ki 'that.here'. Mu is always preceded by a verb. Though its use is not yet clear to me, the presentative is shown in a few examples:

- (205) Fentor-a a-i mu-ki pa.
 Fentor-3SM 3SM-stand present-here already
 Fentori is here already.
- (206) Nek tapok ut ma Jam-bwan-a a-muk u(t)-mu. earth high stay at clock-call-3SM 3SM-tail stay-present A hill at the foot of the Jambuani mountain still exists.
- (207) Derek-a a-jap mu-ka.

 Derek-3SM 3SM-stay present-there
 There is Derek.
- (208) Mwan ut ma war mu-ki-e? fish stay in river present-this-Q Is here any fish in the river?
- (209) Watini kon mu-ka-e?
 cassava lie present-that-Q
 Are there cassava?
- (210) Amanda-n m-wamar-e? In-unot jan Amanda-n m-wamar(o)-mu.

 Amanda-3SF 3SF-tired-Q 1SG-know not Amanda-3SF 3SF-tired-present
 Is Amanda tired? I don't know whether she is tired.

In examples (208) and (209) in the form mu-ka-e and mu-ki-e, ka and ki may be omitted: mu-e 'present-Q'. The negation of mu is ku jan 'at not' or (n-)ka jan '(3SF-)there not', as in:

- (211) Be n-do n-kopaw bar doku be mamir ku jan-e. but ISG-self ISG-chop thing in.vain but person at not-CL But I myself chopped things for nothing, there is nobody.
- (212) Fentor-a n-ka jan
 Fentor-3SM 3SF-there not
 Fentori is not there.

12 Conjunctions

There are simple (aka 'and then', 'so') and complex (na toka 'in order to') conjunctions that link clauses. For example:

(213) An-un si bain-e aka an-det bar-(d)et!
2SG-go to garden-Q then 2SG-eat thing-eat
Are you going to the garden, then you must eat (first)!

(214)Minya non-fuk mpan bapak na toka non. for so.that 1SG-touch 2D tomorrow 2DU-make sleeping.mat big Tomorrow you'll make a big sleeping mat so that I can have sex with the two of you.

Other conjunctions are:

(215)aka and then, so and so, therefore are be but and, with braw bwa if ete or kanik like kutut about, because mintaki

like that, this being so, subsequently

for, (in order) to na therefore tetate

Conjunctions such as braw 'and', kanik 'like', na 'for, to' can also conjoin NPs, like Irinan braw Florian 'Irina and Flora'. The conjunctions aka indicating a sequence, are indicating a cause-result relationship, and mintaki occur very frequently in storytelling. A few examples are:

- aka (216)Do-si mer-i Babwafe-a a-bwana a-supur. 3DU-clear garden and then Babwafe-3SM 3SM-want 3SM-make-love They cleared a new garden, and then Babwafe wanted to make love to them.
- ... Nwandar aka abwa (217)anoka anwandar n-wandar a-bwar an-wot-ka an-wandar 1SG-shame then 3SM-say oh 2SG-see-that 2SG-shame not ... I am ashamed! Then he said: Oh, don't be ashamed!
- (218)Pa-pet are yek e-bi-rekam rain-fall so 1PL 1PL-VBL-record not It rains, so we won't make recordings.
- (219)A-wantek are a-un bain 3SM-ill SO 3SM-go to garden not He is ill, so he will not go to the garden.

The conjunction mintaki can occur either in initial or in final position of an utterance and is a general discourse-cohesive conjunction with the meaning 'having arrived at this point of the story, things were like that' and anticipating that things are yet to come. The form is illustrated in the following examples:

(220)Min-ta-ki nu-tu n-un na m-ba njep. like-ANA-this day-one 3SF-go for 3SF-split firewood And so one day she went to cut firewood.

(221) A-bat a-ro ku ter min-ta-ki.

3SM-bang 3SM-self on floor like-ANA-this
He banged himself on the floor, it was like this.

13 Quantifiers

13.1 Cardinal numbers

The numeral system is a base-five system. There are cardinals for one to five:

- 1 tu
- 2 dokir
- 3 denur
- 4 bwat
- 5 me

Cardinals six to nine are most likely combinations of mam-bi 'five-plus', with the numerals one to four; a possible explanation for the form mam is ma-me 'REL-five': ma-m(e)-bi-tu 'REL-five-plus-one'. These cardinals are as follows:

- 6 mambitu
- 7 mambrokir
- 8 mambrenur
- 9 mambibwat

In the term for cardinal ten at least the numeral (do)kir 'two' can be recognised:

10 onkir

The cardinals from eleven to ninety-nine follow this system regularly, using asen 'plus' for each higher number:

- 11 onkir tu asen
- 12 onkir dokir asen

etc.

- 20 onkir kir
- 21 onkir kir tu asen

etc.

30 onkir denur

etc.

The numeral for hundred is of Numforese origin. Its combinations are as follows:

100 untin tu

101 untin tu tu asen

etc.

There is no numeral for thousand, for which the Indonesian word *ribu* is used, also regularly following the numeral system:

1000 ribu tu

1001 ribu tu tu asen

13.2 Ordinal numbers

The ordinal numbers are compounds of saso 'time' and a cardinal number. For example:

sasotu time one, oncesasorokir time two, secondsasorenur time three, third

An exception is the ordinal saji 'first, once, first time':

(222) Saji n-jap ku Anja. once 1SG-live in Anjai. Once I lived in Anjai.

Note that in example (222) ku is the only possible preposition with the aspectual meaning 'not anymore' (see §9).

13.3 Indefinite quantifiers

Indefinite quantifiers like fon 'many', kerenon 'few, little' masek 'all', fari 'more' behave like adjectives or adverbs (see §5 and §11.5). For example:

- (223) Man maw in-suma kumpan fon.
 month finished 1SG-receive money much
 At the end of the month I'll get a lot of money.
- (224) In-wamar kerenon.

 1SG-tired little
 I am a little tired.
- (225) Benkan ma-n-ki bin fari ku benkan ma-n-ka. papaya REL-3SF-this ripe more at papaya REL-3SF-that This papaya is riper than that papaya.

Note that the final syllables of farí 'able' (see §11.5) and fari 'more' have high and mid tone, respectively.

14 Classifiers

Mpur has a large number of classifiers that are obligatory in combination with numerals which they precede. Though I don't know their exact number, I found over twenty different classifiers. For example, bik for counting houses and fi for counting persons and animals:

- (226) jan bik denur house CLF three three houses
- (227) nton firokir fi-dokir child CLF-two two children

Other examples of classifiers are:

(228) bo long objects, such as sticks, poles

bwan large-sized areabwat cutting tool

ja seed, stone, grain, small round object

sum for bananas (and other short-sized objects)

ur woven item

Examples are:

(229) mpan urkir
ur-dokir
sleeping.mat CLF.woven.item-two

two sleeping mats

(230) kaprur ja onkir denur mambrenur asen peanut CLF ten three eight plus thirty-eight peanuts

Measure nouns, such as *tap* 'bunch', seem to function much like classifiers, such as *sum* 'short-sized object', as compared in:

(231) fa tap mambrokir vs fa sum mambrokir banana MEAS seven banana CLF seven seven hands of bananas seven (separate) bananas

Some classifiers can also be found as a noun, for instance bik 'bamboo', or as a member of a compound, for instance ja in:

(232) bi-ja-be small.round.object-seed-fruit testicles

15 Relativisation and the form ma

The form ma is observed in various languages of the Bird's Head area. Reesink (1998:626ff.) discusses the different functions of ma. To supplement his article I present some other functions which ma has in Mpur, in addition to sections 7–10 where the form has also been discussed.

My informants indicated that preposition ma 'at, to' and ma as relative marker have different tones: high tone and mid tone, respectively. I analysed many examples of ma and found that in both functions the tone realised in context fluctuates considerably; pronounced in isolation I did not find any difference in tone: both were realised with mid tone. The form is so frequently used, that a discrete difference in tone would have been noticed.

For the time being, the different ma, which, in spite of native speakers' judgements, are considered homophonous, to be distinguished are:

- (a) as relative marker, introducing relative clauses;
- (b) as relative marker in Headless RC, resembling a nominalising particle;
- (c) on attributive adjectives in RC;

- (d) as marking demonstratives;
- (e) in question words (examples (244)–(246));
- (f) as preposition (example (247)).

The different uses of ma indicated in (a) to (d) will be discussed in §15.1, (e) and (f) in §15.2.

15.1 Relative clauses

In example (233) ma introduces a restrictive relative clause, which is always in postnominal position (see §6.8):

(233) M-bot pek ma muk tak na kur.

3SF-give worm REL name k.o.wood to snake
She gave the snake worms called tak.

In examples (234)–(236) ma is a relative marker in a Headless RC, resembling a nominalising particle:

- (234) In ma m-bep nton.

 1SG REL 1SG-carry.in.cloth child
 I am the one who carries the child.
- (235) Kurito-n n-jap ku ma yep-i.

 Kurito-3SF 3SF-sit on REL dry-CL

 Kuriton sits on the dry one.
- (236) ma-ba(r)-kwar REL-thing-sharp criminal

Single adjectives may occur in a RC construction introduced by ma, as shown in (237), as opposed to a direct modifying function, as illustrated in (238):

- (237) Jan ma mafun im-frur jan. house REL beautiful 1SG-make not The house which is beautiful I did not build.
- (238) Im-frur jan mafun.

 1SG-make house beautiful
 I built a beautiful house.

As marking demonstratives ma is illustrated in (239)–(241):

- (239) Nton ma-n-ka a-muk Fentor-a. child REL-3SF-this 3SM-name Fentor-3SM This child's name is Fentori.
- (240) De-jap ku ma-n-ka ni Fentor-a-o a-jap beraw der.

 3PL-live at REL-3SF-there FOC Fentor-3SM-CL 3SM-live with 3PL

 They live there and Fentori lives there too with them.

(241) Bawan ma an-ter ma kon ma kwap ka? what REL 2SG-put REL lie in bag that What did you put in your bag?

The relative pronoun ma obligatorily precedes verbs that are used attributively:

- (242) Nton ma kon wantek. child REL sleep ill
 The sleeping child is ill.
- (243) Dwaw ma aw ut jan-to.
 pig REL run dead not-yet
 A running pig is not yet dead.

15.2 Other uses of the form ma

The form ma is also used in question words, as shown in (244)–(246):

- (244) Maria-n n-yen ma-n?
 Maria-3SF 3SF-mother who-3SF
 Who is Maria's mother?
- (245) Ma ma non ka? who REL child that Whose child is that?
- (246) Anike-n n-jap ma-n-te?
 Anike-3SF 3SF-live REL-3SF-where
 Where does Anike live?

The form ma is used as preposition (see also §9) in (247):

(247) Anike-n n-jap ma Anja. Anike-3SF 3SF-live in Anja Anike lives in Anjai.

16 Clitics

Clitics are monosyllabic morphemes attached to lexical words of different classes, but usually not on prepositions. Clitics are meaningful elements and in Mpur frequently have a salient intonation and syllable lengthening. All clitics are enclitics which modify a word, a clause or a whole utterance. The interrogative clitic -e is discussed separately in §7. The same form is used with an apparently different function. The other clitics -a, -i, -o function in discourse as, for instance, vocatives, continuation, focus and temporal markers, as expression of (emotive) emphasis. It is hard to tell the different meanings of the clitics apart, and I did not study the issue thoroughly enough to explain the differences. Working on the translations of texts, Mpur informants were often unable to indicate what a given clitic means. Despite this some examples are presented below.

Clitic -a occurs as a vocative for persons: nen-a! 'Mum-VOC!'. It is used to call someone who is not far away (otherwise -o is used, see below):

(248) Amanda-n-a!
Amanda-3SF-VOC
Amanda!

Another example of -a is illustrated in the following sentence:

(249) Men n-do n-aw bem nton-a nton-a are jap.

3SF 3SF-self 3SF-run from child-CL child-CL thus stay
She herself ran away from the child and so the child stayed behind.

Note that clitic -a must not be confused with object marker -a '3SM':

(250) De-kum-a de-rir baku beruk ku yet-am be-jun.
3PL-smoke-3SM 3PL-put on rack at fire-eye on-top
They smoked him and put him on the rack over the fireplace.

Clitic -e, mainly attached to verbs, indicates that the event went on for a long time, as in:

- (251) Yet sop-e.
 fire burn-CL
 The fire burned continually.
- (252) A-bot kaman ja na a-non det-e maw.

 3SM-give squash seed for 3SM-child eat-CL finished
 He gave the squash seeds to his child to eat them all up.
- (253) *M-bwar nton nan-o an-jap-e*. 3SF-say child 2SG-CL 2SG-stay-CL She said: Child, you stay here.
- (254) Aka a-jap-e na a-ret fa de-masek-i. then 3SM-sit-CL for 3SM-eat banana 3PL-all-CL Then he sat (on the banana tree) to eat all the bananas.

Clitic -i occurs very frequently. In general it emphasises the word it is attached to, as shown in:

- (255) N-a a-se bari beruk a-ta n-jun-i
 1SG-father 3SM-fall from rack 3SM-ANA 3SF-above-CL
 a-mim in n-daw.
 3SM-till 1SG 3SF-here
 My father has fallen down from the rack and reached me here.
- (256) Be non fanam ka mer-i aka non-bwanjar per. but 2DU close.by there garden-CL then 2DU-call dog But when you are close to the garden then you call the dogs.

Clitic -i occurs on all different word classes, as illustrated in the following examples:

(257) N-sapat ka men-dot-i m-bwa 3SF-force that 3SF-younger-CL 3SF-say She forces her younger sister saying: nan ba-ta-n-da an-bake-a.

2SG ?-ANA-3SF-ANA 2SG-along-3SM

'You are the one to go with him (to make love)'.

- (258) Aka per-i namena tow. then dog-CL come.back bark And then the dog came back and barked.
- (259) A-jow-i n-wandar m-bwa in-te n-wandar-i kutut
 3SM-have.sex-CL 3SF-shame 3SF-say 1SG-till 1SG-shame-CL because

 n-a-y-a nan-i e-jap fum bafujap tu are n-wandar.
 1SG-father-Y-3SM 2SG-CL 1PL-live together place one so 1SG-shame
 He has sex with her all the time. She is ashamed and says: 'As for me, I am so ashamed, because you are my very father and we live together at one place, so I am ashamed'.
- (260) N-duwon-a-i maw-i.

 3SF-pull-3SM-CL finished-CL
 She pulled it (the leaves) all out till nothing was left.

Clitic -o attached to the final word of an utterance or to a name as a vocative (see also example (248)) is used when speaker and listener are at some distance from one another and speaking becomes almost calling, as for example in:

(261) Nen wor mbano-y-o.
mama 1DU 1SG-here-Y-CL
'Mum and I are here.'

Furthermore, clitic -o is used in enumerations of objects or events which can all take -o, the first -o anticipating that there is more to come, as in the following example:

(262) E-tiw menap-o mwan-o kerer-o kotow-o.

1PL-taboo catfish-CL fish-CL couscous-CL rat-CL

Taboo for us is catfish and fish and couscous and rat.

Another use of clitic -o meaning 'also' is shown in:

- (263) N-ton pa n-kete-o pa be nen-kat.

 1SG-cut already 1SG-divide-CL already but 2PL-fill.bamboo
 I have cut (the pig) and I also divided it so now you fill the bamboo (with pork).
- (264) Min-ta-ki nton kenep-o sik-i.
 like-ANA-this child look.around-CL not.possible-CL
 And so the children also looked around (for their parents) but without result.
- (265) Bwa e-ret aka e-bwam-bur jurur-o.

 if 1PL-eat then 1PL-head-body.hair fall-CL

 If we (pregnant women) eat (cassowary) then our hair will fall out also.
- (266) A-un kajup a-bwanjar per-o jan a-kwap-o jan.
 3SM-go hidden 3SM-call dog-CL not 3SM-voice-CL not
 He goes hiding himself, he also does not call his dogs or use his voice.

Appendix

Kaman ja 'Squash seeds'

The story *Kaman ja* 'Squash seeds' performed by Markus Wabia (about 40 years old) was recorded on digital tape and on video in the village of Saukorem on the north-east coast of the Bird's Head, 16 March 1994.

Notational conventions are as follows. Underlined text is Saukorem dialect, bold text is Indonesian. Loans from Numforese are indicated with (NF), but not all entries have been checked against the Numforese vocabulary. Semivowel insertion between vowels is indicated with Y. First lines present the original text in italics, second lines the analysis in morphemes. third lines the free English translation. The speech rate changes in the course of the story. When in the original text syllables are swallowed and morphemes cannot be recognised anymore, an extra line is added in italics below the original text as if it were pronounced in careful speech. Vowels or consonants that are not pronounced are presented in parentheses. Stem-initial /d/ preceded by a prefix ending in a vowel is pronounced as [r]; this may also occur in connected speech if a preceding word ends in a vowel. In the text I followed the actual pronunciation of /d/ as [d] or as [r]. Likewise I followed the pronunciation of wordinitial /n/ before bilabials as [m] and of /b/ in the deictic elements (a)bata and bani where /b/ can be pronounced as [w]. Duration of pauses between utterances is indicated in seconds between square brackets on the first line. For the convenience of the author's administration, utterances are numbered according to the sound files as they were stored for analysis in the computer.

- (1) Nton fi-ti n-nap dor-i. [3.3] woman CLF-other 3SF-husband 3DU-CL (Once upon a time) there was a woman and her husband.
- (2) Do-jap ba-ku jan ba-ku sor mbwan. [4.6] 3DU-live ?-in house ?-in mountain hinterland They lived in a house deep in the mountains.
- (3) Do-jap min-ta-(a)re n-nap a-ut. [3.0]
 3DU-live like-ANA-so 3SF-husband 3SM-dead
 And so they lived till her husband died.
- (4) N-nap a-ut n-ta-ki. [0.6] 3SF-husband 3SM-dead 3SF-ANA-this Her husband died. Like this.
- (5) N-tar baum de-na na de-y-ar-o [1.5]
 3SF-possess relatives 3PL-come for 3PL-Y-cry-CL
 Her relatives came to cry and
- (6) de-snep-o. [1.2]
 3PL-feast.for.dead-CL
 to join the party for the dead.
- (7) De-top bit-o [0.6]
 3PL-fence.off stone-CL
 They fenced off the grave with stones

- (8) ma biasa ba-ku sor mbwam-i. [1.4] that usually ?-in mountain hinterland-CL that can usually be found deep in the mountains.
- (9) Ah. [2.0] Eh.
- (10) Mamir ma ut a-ta biasa de-kum. [2.0] person REL dead 3SM-ANA usually 3PL-smoke The people who are dead they usually smoked.
- (11) De-kum-e maw [0.0]
 3PL-smoke-CL finished
 They smoked them completely and
- (12) *e-rir ba-ku beruk*, [1.6] 3PL-put ?-on rack.over.fireplace put them on the rack over the fireplace,
- (13) beruk ku yet-am be-jun min-taw. [4.0] rack.over.fireplace at fire-eye LOC-top like-ANA on top of the rack right over the fireplace, like that.
- (14)**Jadi** mamir a-ta a-jap ba-ku yet-am be-jun, person 3SM-ANA 3SM-stay ?-at fire-eye LOC-top So that man stayed above the fire, a-kon ba-ku yet-am be-jun a-ta-ka, [0.0]3SM-sleep ?-at fire-eye LOC-top 3SM-ANA-there he was lying there right above the fire,
- (15) a-ja(p)-yep <u>pu-pa</u>. [1.0]
 3SM-sit-dry far.away-already
 he was dried up long since.
- (16) Men nton ba-ta n-nap-a, [2.1] 3SF child ?-ANA 3SF-husband-3SM She, that woman's husband,
- (17) *n-nap a-ta-ka a-wandek*. [0.0] 3SF-husband 3SM-ANA-there 3SM-ill her husband was ill.
- (18) De-kum-a de-rir ba-ku beruk ku yet-am be-jun. [3.0] 3PL-smoke-3SM 3PL-put ?-on rack at fire-eye LOC-top They smoked him and put him on the rack over the fireplace.
- (19) Dera deyana deyar ataka der-ma de-na-na de-y-ar a-ta-ka 3PL-who 3PL-come-for 3PL-Y-cry 3SM-ANA-there Those who had come to cry

91

deyaw mawema. [1.5] de-y-aw maw-bem-a 3PL-Y-return finished-from-3SM had all gone home.

- (20) O misim ba-ni, [0.0] oh woman ?-FOC Oh, that woman,
- (21) m-beraw minton non narono, [2.5]
 3SF-with child small very.small she with her very small child,
- (22) <u>demtaw</u>, [1.0] like.that like that,
- (23) nton-e n-non a-ta bak-e, [5.3] child-CL 3SF-child 3SM-that new-CL that newborn little girl of hers,
- (24) Ba-ni do-ro do-jap ku jan a-ta-ka. [1.5] ?-FOC 3DU-alone 3DU-stay in house 3SM-ANA-there those two stayed alone in that house.
- (25)N-kuri vet ka n-nap-a ma de-kum-a 3SF-light fire that 3SF-husband-3SM who 3PL-smoke-3SM She made fire for her husband whom they had smoked ku beruk be-jun a-ta-ka. [2.1]rack LOC-top 3SM-ANA-there on on the rack over the fireplace.
- (26) N-kuri yet ka terus [0.8]
 3SF-light fire that all.the.time
 She made fire all the time
- (27) *n-nap-a a-ta a-ja(p)-yep*, [1.7] 3SF-husband-3SM 3SM-ANA 3SM-sit-dry so that her husband dried up,
- (28) ainkranik. [3.0]
 a-inkran-?
 3SM-dry.flesh-really
 he was really dry.
- (29) Min-ta-ki put-i [3.1] like-ANA-this day-CL And so, one day
- (30) *n-un na m-ba njep.* [3.5] 3SF-go for 3SF-split firewood she went to cut firewood.

- (31) *M-bwar: 'Nton nan-o an-jap-e.* [5.9] 3SF-say child 2SG-CL 2SG-stay-CL She said: 'Child, you stay here.
- (32) Nton nan an-jap, [2.2] child 2SG 2SG-stay
 Child, you stay,
- (33) be n-un m-ba njep na wor'. [0.9] but 1SG-go 1SG-split firewood for 1DU but I go to cut firewood for us two'.
- (34) O minton ba-ni umbrut-on min-taw [1.0] oh child ?-FOC baby-very.small like-ANA Oh, that child was still a baby, so
- (35) jap. [0.7] stay it stayed behind.
- (36) E nen ba-ni n-tek arwar ne(k)-mek. [1.0] eh mother ?-FOC 3SF-go.down stairs down-there Eh, mother went down the stairs.
- (37) N-un na n-si njep, [2.1]
 3SF-go for 3SF-cut firewood
 She went to cut firewood,
- (38) *n-si njep maw-i*. [3.0] 3SF-cut firewood finished-CL she cut firewood till it was enough.
- (39) Mamir ma n-nap-a ma [0.0] person REL 3SF-husband-3SM REL
 The man whom, her husband whom
- (40) *n-nap-a de-kum a-ta-ka* [0.0] 3SF-husband-3SM 3PL-smoke 3SM-ANA-there her husband whom they had smoked
- (41) a-tek bari beruk-a n-jun na [1.1]
 3SM-go.down from rack-CL 3SF-top for he came down from the rack above to
- (42) a-na na a-mim minton ni, [4.0] 3SM-come for 3SM-arrive child FOC reach the child,
- (43) a-mim minton ba-ni [0.8]
 3SM-arrive child ?-FOC
 he reached that child and

- (44) a-tapret kaman ja. [2.3] 3SM-roast squash seed roasted the seeds of squash.
- (45) Kaman ja a-ta-ka a-bot na a-tapret ku yet. [1.7] squash seed 3SM-ANA-there 3SM-take for 3SM-roast in fire He took those squash seeds and roasted them in the fire.
- (46) A-tapret ku yet a-ta-k(a), [1.3] 3SM-roast in fire 3SM-ANA-there He roasted them in that fire.
- (47) a-ta-k(a) ku a-bwir a-ta-ki a-bot na minton ni [1.3] 3SM-ANA-there in 3SM-tooth 3SM-ANA-here 3SM-give for child FOC cracked them between his teeth and gave them to the child.
- (48) A-bot na a-non ba-ta det. [1.8] 3SM-give for 3SM-child ?-ANA eat He gave them to his child to eat.
- (49) A-bot kaman ja na a-non det-e maw. [1.2] 3SM-give squash seed for 3SM-child eat-CL finished He gave the squash seeds to his child to eat them all up.
- (50) A-robun a-bwir a-ta-ki [1.0]
 3SM-pull.out 3SM-tooth 3SM-ANA-this
 He pulled out his teeth
- (51) na a-kaw a-ku a-non a-ta kamtar. [1.7] for 3SM-plant 3SM-in 3SM-child 3SM-ANA skull in order to plant them into the jaw of his child.
- (52) O minton wa-ni yen-i m-berek fer pa. [1.8] oh child ?-FOC mother-CL 3SF-return again already Oh, the child's mother came already back again.
- (53) N-dokwa njep-a sonon. [1.1]
 3SF-bring firewood-CL plenty
 She brought plenty of firewood.
- (54) M-berek fer m-fo arwar-a-i [1.4]
 3SF-return again 3SF-go.up stairs-CL-CL
 She had come back again and went up the stairs
- (55) *n-dafrak njep-a ut.* [2.9] 3SF-throw firewood-CL stay and threw down the firewood.
- (56) Nton wa-ni bwar pan: [0.9] child ?-FOC say already
 The left behind child already said:

94 Cecilia Odé

- (57) *'Nen-a*, [2.4] mother-VOC 'Mum,
- (58) *n-a a-se bari beruk a-ta n-jun-i* [2.6] 1SG-father 3SM-go.to from rack 3SM-ANA 3SF-top-CL my father has fallen down from above the rack
- (59) a-mim in n-daw, [2.2] 3SM-arrive 1SG 3SF-here and reached me here,
- (60) a-tapret kaman ja na a-bot na n-det'. [3.0]
 3SM-roast squash seeds for 3SM-give for 1SG-eat
 he roasted squash seeds that he gave me to eat'.
- (61) Nton ba-ni yen yen m-bwar: [0.6] child ?-FOC mother mother 3SF-say
 The child's mother said:
- (62) 'Ah, [1.8] 'Ah,
- (63) anbwarewari n-ka. [2.8] an-bwar-bar-i
 2SG-say-thing-CL 3SF-that you're talking (nonsense).
- (64) An-a a-ta a-ut pa, [1.3] 2SG-father 3SM-ANA 3SM-dead already Your father is already dead,
- (65) e-kum a-ja(p)-yep pa. [0.0]
 1PL-smoke 3SM-sit-dry already
 we have smoked him and he is already dry.
- (66) An-bwar-bar n-ka'. [1.4] 2SG-say-thing 3SF-that You're talking (nonsense)'.
- (67) Nton bwar: 'Jan, [1.7] child say no
 The child said: 'No,
- (68) n-a a-kwen deke(k)-non na a-mim in, [1.3] 1SG-father 3SM-fall a.while.ago-little for 3SM-arrive 1SG a little while ago my father fell down in order to reach me,
- (69) a-tapret kaman ja na a-bot na n-det'. [5.4] 3SM-roast squash seed for 3SM-give for 1SG-eat he roasted squash seeds for me to eat'.

- (70)Nton ven n-faji n-faji. [0.0]child mother 3SF-contradict 3SF-contradict The mother contradicted the child.
- (71) Nton bwar: [0.5]child say The child said:
- 'Ma an-(w)ot jan-a (72)an-(w)ot ma ma an-(w)ot REL. 2SG-see not-CL REL. 2SG-see REL. 2SG-see 'That you don't you see, you don't see a-bwir-a ian-a'. [1.1]n-a 1SG-father 3SM-tooth-3SM not-CL my father's teeth'.
- (73)Ba-ni m-fo a-jun-a n-sukwen a-ku n-(d)eken-a. [1.3] ?-FOC 3SF-go.up 3SM-top-3SM 3SF-see 3SM-in 3SF-open-3SM She went up to him and looked inside, she opened him,
- ma de-kum-a (74)wa ku beruk a-ta, child-3SM who 3PL-smoke-3SM already who 3SM-dead on rack 3SM-ANA the man whom they had already smoked, who was dead on that rack, a-bwir min-ta-ki n-(d)eken-a kaman ba-ta ja ... [0.7]3SF-open-3SM 3SM-tooth like-ANA-this squash ?-ANA seed she opened his jaw, like that, that squash seeds ...
- (75)e ... [1.7]eh ...
- Kak (76)a-ku a-hwir. [2.0] pulp 3SM-in 3SM-tooth There is pulp between his teeth.
- (77)Ba-ni m-bwar: 'Seka, [1.5] ?-FOC 3SF-say ow She said: 'Oh.
- (78)are nto-a wa-ni a-kwem na a-bot [0.0] so child-3SM ?-FOC 3SM-fall for 3SM-give so the man fell down to give
- (79)kaman ja na a-non det <u>pu-pa</u>-i are o-bi-<u>min-te</u>?' [1.6] squash seed for 3SM-child eat far.away-already-CL so 1DU-VBL-like-Q squash seeds to his child to eat long since, so what are we to do?'
- [2.0] (80)M-forom ba(r) fon-o ian. much-CL not 3SF-think thing She didn't think long.
- (81)N-deka ren mar-(d)ukwa, [0.0]3SF-hold just cloth-carry She just held the carry-cloth,

- (82) mambruk-(d)ukwa, [2.0] bark.cloth-carry the bark carry-cloth,
- (83) *n-deka nton ba-ni m-bep* [1.9] 3SF-hold child ?-FOC 3SF-carry.in.cloth she held the child, carried it in the cloth
- (84) *m-bi-ankar pa:* [2.4 3SF-VBL-lie(NF) already and lied:
- (85) 'An-na na o-y-aw si-ye ra-e, [1.0] 2SG-come for 1DU-Y-run to-outside first-CL 'Come on, we first go outside (to pee),
- (86) nton an-na m-bep an na o-y-aw si-ye'. [3.6] child 2SG-come 1SG-carry.in.cloth 2SG for 1DU-Y-run to-outside come child, I carry you outside (to pee)'.
- (87) Do-tek ka ne(k)-mek arwar mek do-y-aw, [2.8] 3DU-down that down-there stairs there 3DU-Y-run They went down the stairs and ran,
- (88) do-y-aw si m-binon der. [4.4] 3DU-Y-run to 3SF-brother 3PL they ran to her brothers.
- (89) O bar-a n-jun a-jap. [0.9] oh thing-3SM 3SF-top 3SM-stay
 Oh, he up there stayed behind.
- (90) O bar na-mek musom pa-y-a, [1.6] oh thing come-there abandoned already-Y-CL Oh, everything there was abandoned,
- (91) *jan-o musom*. [1.7] house-CL abandoned the house was also abandoned.
- (92) De-kijaka ru-ru-ru-ru-ru a-bat a-ro a-ku
 3PL-hear ru-ru-ru-ru 3SM-bang 3SM-self 3SM-on

 ter-a pa. [2.7]
 floor-CL already
 They hear 'ru-ru-ru-ru-ru', he banged himself down onto the floor.
- (93) A-bat a-ro ku ter min-ta-ki. [0.9] 3SM-bang 3SM-self on floor like-ANA-this He banged himself on the floor, like this.
- (94) Ba-nek-mek arwar a-se. [2.0] ?-down-there stairs 3SM-go.to He went down the stairs.

- (95)subwe a-sit A-sit subwe a-sit subwe a-sit subwe 3SM-chase after 3SM-chase after 3SM-chase after 3SM-chase after subwe a-bwan: [0.0] 3SM-chase after 3SM-call He chased and chased and chased after them and called:
- (96)'U...u...u...!' [3.1] 'Uhuhu!' (3.75 seconds)
- Nton wa-ni bwar: [0.0](97)child ?-FOC say The child said:
- (98)'Nen wor mbano-y-o'. [3.0] mama 1DU here-Y-CL 'Mum and I are here'.
- (99) Arufriw arufriw arufriw arufriw. [2.0] a-dofriw a-dofriw a-dofriw a-dofriw 3SM-flee 3SM-flee 3SM-flee 3SM-flee He fled and fled and fled.
- (100)Nton yen ba-ni m-bwar: 'An-bwar ma-n-jir wor jan wa! [1.7] child mama ?-FOC 3SF-say 2SG-sav REL-3SF-clear 1DU not EXC The mother of the child said: 'Don't make clear where we are, eh!
- (101)An-ar sajar wor jan [0.0]wa! point.out 1DU not 2SG-cry **EXCL** Don't cry and show where we are, eh!
- (102)a-ret wor-a. [2.4] in.a.while 3SM-eat 1DU-CL He will eat us.
- (103)An-ar ian a-bwan-o an-ar jan'. [1.0] 2SG-cry not 3SM-call-CL 2SG-cry not Don't cry, if he calls don't cry'.
- (104)do-v-aw do-v-aw Do-v-aw do-y-aw do-y-aw a-bwan fer: [0.0] 3DU-Y-run 3DU-Y-run 3DU-Y-run 3DU-Y-run 3DU-Y-run 3SM-call again They ran and ran and again he called:
- 'Kuhuuu ...' (105)[2.5] 'Kuhuuu ...' (2.5 seconds)
- (106)Nton wa-ni bwar: [8.0]child ?-FOC say The child said:
- (107)'In-yen wor mbano'. [0.6] 1SG-mother 1DU here 'My mother and I are here'.

- (108) 'Ah n-bwar ka nan pa n-bwar ki an-bwar jan, [0.0] ah 1SG-say that you already 1SG-say this 2SG-say not 'Ah, I already told you, I said don't you say anything,
- (109) an-bwar ma-n-jir wor jan nari a-na
 2SG-say REL-3SF-clear 1DU not in.a.while 3SM-come
 don't make clear where we are, otherwise he will come

 aka a-ret wor. [3.5]
 then 3SM-eat 1DU
 and eat us.
- (110) An-bwar ma-n-jir wor den jan'. [2.3]
 2SG-say REL-3SF-clear 1DU just not
 Just don't make clear where we are'.
- Do-y-aw (111)fer do-y-aw fer do-y-aw fer do-y-aw 3DU-Y-run again 3DU-Y-run again 3DU-Y-run again 3DU-Y-run again doyaw fer doyaw fer. [1.7] 3DU-Y-run again 3DU-Y-run again They ran and ran and ran again.
- (112) A-bwan fer pa: [0.5]
 3SM-call again already
 Again he called:
- (113) *'Uhuuu'*. [2.2] 'Uhuuu'. (2 seconds)
- (114) Nton wa-ni bwar: [0.6] child ?-FOC say
 The child said:
- (115) 'Nen wor mbano'. [2.4] mama 1DU here 'Mum and I are here'.
- (116) O a-bwan fer aka a-fanam pa. [1.8] oh 3SM-call again and then as SM-near already Oh, he called again and then he was already nearby.
- (117) N-soro ren mar-(d)ukwa, [2.3]
 3SF-take.off just cloth-carry
 She just took off the carry-cloth,
- (118) n-soro mar ka n-da(k)-frak nton aka ut. [1.6] 3SF-take.off cloth that 3SF-take-throw child then dead she took off that cloth and threw the child away and it died.
- (119) Men n-do n-aw bem nton-a [0.0] 3SF 3SF-self 3SF-run from child-CL She herself ran away from the child

- (120) nton-a are jap. [1.6] child-CL thus stay and so the child stayed behind.
- (121) A-na na a-mim-i a-ret nton-a, [1.7] 3SM-come for 3SM-arrive-CL 3SM-eat child-CL He came and reached the child, he ate the child,
- (122) a-ret nton-a maw. [1.3]
 3SM-eat child-CL finished
 he ate the child up.
- (123) A-sit subwe-m, [1.8]
 3SM-run after-3SF
 He ran after her,
- (124)a-subwe-m n-aw n-aw n-aw n-aw n-aw n-aw 3SM-after-3SF 3SF-run 3SF-run 3SF-run 3SF-run 3SF-run 3SF-run n-aw n-aw n-aw. [1.6] 3SF-run 3SF-run 3SF-run he followed her, she ran ran ran away.
- (125) *Terus* [1.1] And then
- (126) *n-(w)ot aka ni bwan mamer*, [2.5] 3SF-see then tree hole k.o.tree she saw a hole in the *mamer* tree,
- (127) mamer a-ta bwan pa are n-kurem. [1.8] k.o.tree 3SM-ANA hole already so 3SF-enter that mamer tree had a hole so she went inside.
- (128) N-kurem mamer bwan a-ta mum mek. [3.0]
 3SF-enter k.o.tree hole 3SM-ANA deep there
 She went inside the deep hole of that mamer tree.
- (129) A-subwe be a-mesem ka n-wanem-i pan. [0.7] 3SM-follow but 3SM-smell that 3SF-stink-CL already He followed her, but as he smelled, she already stank.
- (130) 'Ah bar-ka-te ut te n-da-k(i)-e? [0.6] ah thing-that-Q stay where 3SF-ANA-here-Q 'Ah, where is that something, is it here?
- (131) Bar-ka-te de n-da-k(i) to? [2.0] thing-that-Q where 3SF-ANA-here still Where is that something, still here?
- (132) Bar aw fari jan to de n-da-i'. [1.6] thing run able not yet till 3SF-ANA-CL Something ran and cannot have passed here yet'.

- (133) Min-ta-ka-i. [3.2] like-ANA-that-CL Like that.
- (134) A-barko ren yaw bwap [0.5] 3SM-break.off just eh k.o.rope He just broke off, eh, a rope
- (135) nyer kat a-ta-ka. [0.9] sharp thorn 3SM-ANA-there with those sharp thorns.
- (136) A-kwafrem subwe mamer [0.0]
 3SM-put.into after k.o.tree
 He put it into the mamer tree
- (137) bwan a-ta mek. [0.5] hole 3SM-ANA there inside that hole there.
- (138) A-kwafrem aka deka pa mamir. [0.5] 3SM-put.into and.then hold already person He had put it inside and then it hooked onto someone.
- (139) Bwat kat a-ta [0.0] k.o.rotan thorn 3SM-ANA That rotan rope with thorns
- (140) dubun a-ku n-wow a-ta pa are. [2.8] pull 3SM-at 3SF-body 3SM-ANA already so pulled already at her body.
- (141) 'Ah mamir n-da pa. [0.5] ah person 3SF-ANA already 'Ah, somebody is there.
- (142) Oh men ma-taw mum-ka'. [3.1] oh 3SF REL-ANA deep-that Oh, deep in there is a woman'.
- (143) A-rubun ka fer [0.7] 3SM-pull that again Meanwhile he pulled again and
- (144) a-sambret ka m-far a-ta kek. [1.5] 3SM-lick that 3SF-blood 3SM-ANA all at the same time he licked all her blood.
- (145) A-sambret ka a-sambret ka a-sambret ka. 'Ah!' [1.6] 3SM-lick that 3SM-lick that 3SM-lick that ah Meanwhile he licked and licked. 'Ah!'

- (146) A-bwar: 'M-bi-min-te? Ka bisa n-deka
 3SM-say 1SG-VBL-like-Q that can 1SG-keep
 He said: 'What shall I do? Maybe I keep her

 ma-taw mum mek [1.7]
 REL-ANA deep there
 there deep inside and
- (147) bisa n-dokwa na n-aw a-ye'. [3.0] can 1SG-bring for 3SF-run 3SM-out bring (something) to get her out'.
- (148) A-put bar ka, [0.9]
 3SM-fill thing that
 He filled (the hole) with things,
- (149) a-rukwa ni bwa kin umu te-ka [0.0]
 3SM-bring wood leaf nest.dirt present what-that
 he brought wood and leaves and all kinds of nest dirt
- (150)te-ka te-ka te-ka te-ka a-put a-put a-put what-that what-that what-that 3SM-fill 3SM-fill 3SM-fill he brought there and he kept on filling (the hole) kwaik kaku. a-put a-put-e [4.6] 3SM-fill 3SM-fill-CL strong very(NF) till it was tight enough.
- (151) 'Do ut jatik-in be n-brek fer na m-bot bak da'. [2.5] alone stay wait-1SG but 1SG-return again to 1SG-take axe first 'Stay alone and wait for me, but I go back again to fetch an axe first'.
- (152) A-brek fer a-bot bak. [2.3] 3SM-return again 3SM-take axe He went back to fetch the axe.
- (153) A-brek fer a-bot bak a-ta-ka. [1.1]
 3SM-return again 3SM-take axe 3SM-ANA-there
 He went back again to fetch that axe.
- (154) Misim ba-ni, [0.0] woman ?-FOC That woman,
- (155) a-nyan ba-ni, [1.2] 3SM-wife ?-FOC his wife,
- (156) n-pisen ayaw [0.0] 3SF-kick eh she kicked, eh,

- (157) ma umu kin ma ni bwa kin
 REL present dirt REL wood leaf dirt
 all the dirt
 - ma a-put a-ta-ka n-pisen [0.7]
 REL 3SM-fill 3SM-ANA-there 3SF-kick
 with which he had filled (the hole) she kicked out
- (158) kutut kwaik, [0.8] with strong with strength,
- (159) ni bwa kin a-ta, [1.0] wood leaf nest 3SM-ANA that nest dirt of wood and leaves,
- (160) *n-duwon-a-i maw-i*. [1.2] 3SF-pull-CL-CL finished-CL she pulled it all out till nothing was left.
- (161) Men n-sasyar, [2.4] 3SF 3SF-come.out She came outside,
- (162) *n-duwon a-ye*, [0.0] 3SF-pull 3SM-out she pulled (herself) out,
- (163) *n-sasyar-i m-put fer*. [1.8] 3SF-come.out-CL 3SF-fill again she came outside and filled (the hole) again.
- (164) M-put mau m-put mau te
 3SF-fill continually 3SF-fill continually till
 She filled (the hole) continually till

 kwaik kanik ma a-put-a keki.

 strong like that 3SM-fill-CL earlier
 it was as strong as he had filled it before.
- (165) N-ta-ki n-se n-aw. [2.6]
 3SF-ANA-this 3SF-go.to 3SF-run
 And so she went to run away.
- (166) *N-aw n-aw n-aw n-aw n-aw n-aw n-aw.* [1.8] 3SF-run 3SF-run 3SF-run 3SF-run 3SF-run 3SF-run 3SF-run She ran and ran and ran.
- (167) Met wa-ni a-na a-rukwa bak aka [1.1] 3SM ?-FOC 3SM-come 3SM-bring axe then He, he came and brought that axe along, and then

- (168)a-kopaw ni. [1.0]3SM-split wood he split the wood.
- (169)A-kiti a-kiti a-sen mamer a-ta a-sen mau 3SM-cut 3SM-chop k.o.tree 3SM-ANA 3SM-chop continually He cut and cut and chopped the *mamer* tree, he chopped on and on a-sen a-sen a-sen ni min-ta-are [1.7] a-sen continually 3SM-chop 3SM-chop 3SM-chop wood like-ANA-so continually, he chopped and chopped the wood till
- (170)mamer a-ta bwan bapak min-ta-ki. [3.7] k.o.tree 3SM-ANA hole big like-ANA-this the hole in the mamer tree was big like that.
- (171)A-bwa(na) a-sukwen mamer bwan-a. [0.8]3SM-want 3SM-look k.o.tree hole-CL He wanted to look into the hole in the *mamer* tree.
- [2.6] (172)'Baaah? 'What?
- doku [2.6] (173)Be n-do n-kopaw bar be mamir ku jan-e'. but 1SG-self 1SG-chop thing in.vain but person at not-CL But I myself chopped things for nothing, there is nobody'.
- subwe fer a-subwe (174)ku m-wanem ba-ta [3.0] 3SM-rush after again 3SM-follow at 3SF-stink ?-ANA continually He rushed after her again, he followed her stinking smell continually.
- (175)mau [1.5] mau таи. 3SM-follow that continually continually continually He followed it on and on.
- (176)Tetate n-aw n-mim m-binon der [2.1] pa. 3SF-run 3SF-arrive 3SF-brother 3PL Meanwhile she ran till she had arrived at her brothers'.
- (177)N-na n-bwar ma-n-jir sabon n-bwar-o: [1.5] 3SF-come 3SF-say REL-3SF-clear first 3SF-say-CL She came and explained first, she said:
- (178)'Nto-a wa-ni, [0.8]child-3SM ?-FOC 'That man.
- (179)ba e-kum-a, [2.0] 1PL-smoke-3SM whom we have smoked,
- [4.9] (180)a-i-bijok ра are a-sit-in 3SM-?-rise.from.dead.as.cannibal already so 3SM-rush.after-1SG already he has risen from the dead as vampire-cannibal and he is already after me'.

- (181) N-do n-fo jan. [2.1]
 3SF-self 3SF-go.up house
 She herself went up to the house.
- (182) N-binon de-bwar: 'Ya [0.0]
 3SF-brother 3PL-say well
 Her brothers said: 'Well.
- (183) an-na-na an-fo wasren!' [3.3] 2SG-come-come 2SG-go.up quickly come, come on in quickly!'
- (184) *De-bi-mulai de-yew nan*. [1.7] 3PL-VBL-begin 3PL-sharpen bamboo They began to sharpen bamboos.
- (185) De-yew nan a-ta-ka wan-kanik yen, [0.6] 3PL-sharpen bamboo 3SM-ANA-there ?-like needle They sharpened those bamboos like spikes,
- (186) be de-kaw de-kaw de-kaw de-kaw de-kaw then 3PL-plant 3PL-plant 3PL-plant 3PL-plant 3PL-plant 3PL-plant then they planted and planted them

 ku arwar a-ta-ka. [1.5]

 in stairs 3SM-ANA-there
 in the stairs.
- (187) De-kaw yen a-ta-ka bari arwar-a nek-a terus [0.7]
 3PL-plant spike 3SM-ANA-there from stairs-CL down-CL completely
 They planted those spikes from down the stairs right
- (188) mim ma n-jun-a. [2.3] till at 3SF-top-CL up to the top.
- (189) De-kiti arwar a-ta ku fraru. [1.2]
 3PL-chop stairs 3SM-ANA at middle
 They chopped the stairs in the middle.
- (190) *De-kiti* na jat. [2.2] 3PL-chop for broken They chopped it so that it broke.
- (191) De-kiti jat ku fraru min-ta-ki. [0.7]
 3PL-chop broken at middle like-ANA-this
 They chopped it so that it broke in the middle. Like this.
- (192) De-bwana de-tera-i aka a-y-arok pa. [2.8] 3PL-want 3PL-frighten-CL then 3SM-Y-turn.up already They wanted to frighten him and then he already turned up.

- (193) 'Wa n-jam nen n-da-ka, [3.7] well 1SG-brother.in.law 2PL 3SF-ANA-that 'Well, you are my brothers-in-law,
- (194) *n-un* na nen den-e'. [1.1]

 1SG-go to 2PL just-CL
 I just came to see you'.
- (195) De-bwa: 'A an-na re(n), [3.8]
 3PL-say ah 2SG-come just
 They said: 'Well, just come on in,
- (196) an-na re(n) yek-o e-jatik nan ma-ta-ki'. [1.6] 2SG-come just 1PL-CL 1PL-wait you REL-ANA-here just come on in, we'll wait for you here'.
- (197) A-mim arwar nek-i a-bwa: [0.0]
 3SM-arrive stairs down-CL 3SM-say
 He came to the bottom of the stairs and thought:
- (198) 'N-fo si jan si-jun den-e'. [1.5] 1SG-go.up to house to-top just-CL 'I'll just go up to the house'.
- (199) 'A an-fo-fo, [1.0] ah 2SG-come.up-up 'Ah, come on up,
- (200) yek e-jatik an ma-ta-n-jun-ki'. [1.6 1PL 1PL-wait 2SG REL-ANA-3SF-top-here we wait for you up here'.
- (201) Wabwir a-ta-ka de-tum bor tek n-da-ki [0.0] hearth 3SM-ANA-there 3PL-burn lance hot 3SF-ANA-this In the fireplace they had heated a lance
- (202) jekeron tek n-da-ki [1.3] machete hot 3SF-ANA-this and a machete
- (203) tek maw. [1.8] hot finished till they were hot enough.
- (204) Met a-na a-fo pa, [0.4] 3SM 3SM-come 3SM-come.up already He came already up the stairs,
- (205) bari nek a-na a-fo arwar a-ta. [1.4] from down 3SM-come 3SM-come.up stairs 3SM-ANA from down he came up the stairs.

- (206) A-fo mberaka si-jun si-jun si-jun 3SM-go.up slow to-top to-top to-top He went slowly upwards and upwards

 min-ta-ki mim ku arwar fraru-i. [1.1] like-ANA-this till at stairs middle-CL like this he arrived at the middle of the stairs.
- (207) Arwar doko kutut a-nek. [3.1] stairs break therefore 3SM-down
 The stairs broke so that it came down.
- (208) Arwar doko min-ta-ki. [1.4] stairs break like-ANA-this So the stairs broke.
- (209) Met a-kwem, [0.0] 3SM 3SM-fall He fell.
- (210) yen ma de-kaw-a nek-i kwar, [0.0] spike that 3PL-plant-CL down-CL stab the spikes that they had put down there stabbed,
- (211) yen kwar-a, [0.0] spike stab-3SM the spikes stabbed him,
- (212) der-o de-wom tambah ku bor-a ma [0.0]
 3PL-CL 3PL-spear more at lance-CL REL
 they speared at (him) (with) the lance that
- (213) wor-o ma de-kep-a nuni, [0.0] glow-CL that 3PL-heat-CL earlier was glowing, that they had just heated,
- (214) ma de-rir ku yet-i, [0.0] that 3PL-put in fire-CL that they had put into the fire,
- (215) de-wom tambah a-nek-(m)ek [0.0]
 3PL-stab more 3SM-down-there they stabbed downwards
- (216) *jekron-o de-kwar tambah* a-nek-(m)ek [0.0] machete 3PL-stab more 3SM-down-there the machete they also stabbed downwards
- (217) i a-ut [1.1] EXCL 3SM-dead and he died

(218) fawar ku-ta-ka! last at-ANA-there at last, over there!

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3 Morphosyntactic properties of Meyab word classes

GILLES GRAVELLE

1	Intro	duction	1	111
	1.1	Gener	al overview	111
	1.2	The M	leyah language	111
2	Phonology		112	
	2.1	Phone	emes	112
		2.1.1	Consonants	113
			2.1.1.1 Consonant allophones	113
			2.1.1.2 Phonemic contrast between consonants	117
		2.1.2	Vowels	117
			2.1.2.1 Phonemic contrast between vowels	119
			2.1.2.2 Vowel sequences	119
	2.2	Syllable structure		120
	2.3	Pitch-	accent	121
3	Morphosyntax			123
	3.1	Pronouns		123
	3.2	3.2 Nouns		124
		3.2.1	Alienable–inalienable nouns	124
		3.2.2	Plural marking	125
		3.2.3	Kinship nouns	126
		3.2.4	Noun classes	128
		3.2.5	Numeral classifiers	129
	3.3	Verbs		130
		3.3.1	Prefixes and stems	130
		3.3.2	Pronominal object	132

		3.3.3	Instrument er-	134
		3.3.4	Perfective aspect -N-	134
		3.3.5	Durative aspect en-	135
		3.3.6	Inceptive aspect ej-	136
		3.3.7	Modal em-	137
		3.3.8	Obligation clitic -si	137
	3.4	Transi	itivity	138
		3.4.1	Intransitive verbs	139
		3.4.2	Verb adjuncts joug and keingg	141
	3.5	Exper	iential constructions	142
	3.6	Recip	rocity	143
	3.7	Redup	plication	144
		3.7.1	Iterative aspect	145
		3.7.2	Adjectival intensifier	145
		3.7.3	Emphatic demonstrative	146
		3.7.4	Adverb intensifier	146
4	Moo	d		146
	4.1	Interro	ogatives	146
	4.2	Emph	atic mood	147
	4.3	Imper	ratives mood	147
	4.4	Comp	laining	148
	4.5	Entrea	aty	148
5	Indo	nesian l	loan word prefix ebe-	149
6	Deix	is and s	spatial reference	149
	6.1	Demo	onstrative clitics	150
	6.2	Demo	onstrative pronouns	150
	6.3	Anapl	horic demonstrative insa	152
	6.4	Locat	ive adverbs	153
	6.5	Preser	ntative constructions	154
	6.6	Cardi	nal directions	155
	6.7	Spatia	al orientation	156
7	Prep	ositions	S	159
	7.1	Spatia	al prepositions	159
	7.2		spatial prepositions	161
8	Adv			162
	8.1	Temp	oral adverbials	162
		8.1.1		162
		8.1.2	Past time	163

	8.1.3	Present time	163
	8.1.4	Future time	164
8.2	Manner	adverbs	165
8.3	Direction	onal adverbs	165
8.4	Intensif	ying adverbials	167
8.5	Aspecti	ual adverbs	167
8.6	Negativ	ve adverbs	168
8.7	Ability	adverb nom	168
8.8	Focusin	g adverbs	168
App	endix 1:	Inggumei and Ingkekesa	169
App	endix 2:	The brothers Igomu and Insirina	172
App	endix 3:	Advice given to young people who want to marry	176

Morphosyntactic properties of Meyah word classes

111

180

1 Introduction

References

1.1 General overview

Croft (1991:43) asserts that, 'An emphasis on morphosyntactic features rather than the language as a whole also contributes to modern typology'. The primary purpose of this paper is to describe the morphosyntactic properties of Meyah word classes. The major word classes to be discussed are verbs and nouns. Adjectives will be treated as a subclass of verbs. Of the minor word classes, pronouns, adverbs, and prepositions will be discussed. Demonstratives will be covered in a section dealing with deixis and spatial reference.

Meyah morphological typology can be classified as agglutinative. Meyah affixes are easily segmented with a couple of exceptions such as possessive pronouns discussed in §3.1, and the noun class marker discussed in §3.2. Meyah is predominantly a head-marking language. It has no cases. It uses verbal-agreement and possessive inflections on inalienable nouns (Nichols 1986).

1.2 The Meyah language

The Meyah language is spoken by approximately 20,000¹ people who live in the Manokwari Regency of the Bird's Head region of Irian Jaya, Indonesia. Traditionally, Meyah population centres were evenly distributed between the mountains and the coastal lowlands. However, due to government trans-location programmes, a majority of Meyah people now live in the coastal regions of the north-eastern Bird's Head. The Meyah language is categorised as part of the East Bird's Head Phylum level stock (Voorhoeve 1975). Meyah is considered to be a Non-Austronesian language, yet some Meyah features such as subject-

This figure is just an approximation. Over the years I have steadily increased the figure based on my growing awareness of Meyah population centres, numbers of *Desa* 'district', and population shifts. Official census figures are based on Regencies and not linguistic communities.

verb-object word order, the inclusive/exclusive opposition in first person non-singular, and some use of spatial prepositions are features also indicative of Austronesian languages. Other spellings for the name Meyah are: Meah, Meax and Meakh. The Mansibaber name associated with the Meyah (Wurm 1982) is a derogatory name from the Biak-Numfor language. The spelling of the name Meyah² that I use in this paper is according to the accepted orthography.

Meyah lexical similarities with their closest neighbors, Hatam and Mpur (Kebar), are negligible with less than five per cent cognate. There is a closer relationship with Sougb (Manikion) as evidenced by the typological similarity and thirty per cent cognacy with Meyah (Reesink 1996). Moskona (Meninggo) was earlier said to be a separate language within the same family level stock with Meyah (Voorhoeve 1975). A closer examination has shown a high degree of lexical similarity (ninety per cent cognate), and a nearly identical grammar and phonology (Gravelle & Gravelle 1999). The greatest difference between Meyah and Moskona lies with the pronunciation of words which makes the two mutually unintelligible.

Data for the language description presented in this paper was collected under the auspices of a cooperative agreement between the Summer Institute of Linguistics (SIL) and the Indonesian Department of Education during the period April 1985–July 1994, and under the auspices of a cooperative agreement between SIL and the Indonesian Department of Social Affairs during the period August 1994–May 1997. Most of the data was collected in the villages of Nuni and Sembab in the Manokwari Regency. However, speakers from numerous other Meyah communities have also provided data and information. My main Meyah language consultants were Mesakh Tibiyai, Matias Makambak and Natan Mandacan. Most of the examples in this paper are from transcribed oral texts. Some examples were obtained through elicitation. Meyah was the primary language of communication between researcher and Meyah language consultants.

2 Phonology

A detailed study of Meyah phonology is beyond the scope of this paper. However, a general description of Meyah phonemes, syllable structure, pitch-accent and morphophonemics is provided so that the Meyah language examples given through out this paper are more understandable.

2.1 Phonemes

Meyah phonemes are shown between slashes '/'. Phonetic transcription is shown in brackets '[]'. I have sought to provide examples of phonemes in word-initial, word-medial and word-final positions, when possible. For examples found in this section, syllables that take a [+HIGH] pitch-accent will be indicated by the diacritic mark / '/ above the accented syllable as in $\acute{e}k$ 'see'. The absence of a pitch mark over a syllable indicates a [-HIGH] (or low) pitch as in $\acute{e}k$ 'inject'. Some examples in §2.3.1 only will also indicate a [-HIGH] pitch / '/ for the purpose of contrast.

It is possible that *Meyah* is actually a Mpur (Kebar) term *Maye* 'outsiders' (see Chapter 2). I have never found a reasonable definition of *Meyah* from within the *Meyah* language.

2.1.1 Consonants

The Meyah consonant phonemes are given in the following table:

	Bilabial	Alveolar	Palatal	Velar
Voiced stops	b	d		g
Voiceless stops		t		k
Nasal	m	n		
Voiced fricative			j	h
Voiceless fricative	f	s	с	
Trill		r		

Table 1: Consonant phonemes

2.1.1.1 Consonant allophones

All phonemes, except /h/ can occur in word-initial, word-medial and word-final positions, although /c/, /j/, /f/ and /n/ are infrequent word-initially. Phonemic examples and their allophonic variations are given below followed by evidence from contrasting pairs in §2.1.1.2. The phonemic examples are based on the Meyah established orthography.

/b/ Lenition of /b/ to fricative [β] is common intervocalically as a result of rapid speech. There is also a tendency to devoice word-finally to /p/. This is the only position where allophone /p/ may be found. Neighbouring languages Hatam, Kebar, Maybrat, and Abun all have a phoneme /p/.

[búa]	/búa/	you
[búrua]	/búrua/	crate
[bókor]	/bókor/	dish
[εbsί]	/ebsí/	white
[εbáx] ~ [έβáx]	/ébah/	raw
[εbísa] ~ [εβίsa]	/ebísa/	cry
[εφέb]	/eféb/	colour
[égib]	/égib/	pick
[mεitéb]	/meitéb/	machete

/t/ Voiceless alveolar stop /t/.

[tiná]	/tiná/	but
[tenten]	/tenten/	true
[tein]	/tein/	also
[ɛtéb]	/etéb/	large
[áxta]	/áhta/	black
[mésta]	/mésta/	moon

[εt]	/et/	eat
[agót]	/agót/	speak
[erebént] [ereßént]	/erebént/	custom

/d/ Voiced alveolar stop /d/ has a tendency to devoice following consonants or in word-final position, although /d/ is still distinct from voiceless stop /t/ in contrastive positions.

[dɛís]	/deís/	centre
[dídiф]	/dídif/	me
[dékték]	/dékték/	long time
[ɛdagá] [ɛdaɣá] [ɛdɛí] [mɛdɛ́b]	/edagá/ /edeí/ /medéb/	pay back push sago
[mod] [mot] [akíd] [akít]	/mod/ /akíd/	house tie
[opod]	/ofod/	extra

/k/ Word-initial occurrences of /k/ are limited to a small number of roots. In the Testega dialect of Meyah, /k/ has the rounded allophone /kw/ following rounded vowels such as okweibi 'knee' and orukwagá 'neck'. Foothill dialects tend to vary between rounded /kw/ and /k/ following rounded vowels. Coastal dialects lack the rounded allophone /kw/.

/kéf/	this
/konosá/	nearly
/kermóm/	iron
/ókum/	heavy
/ékris/	tear
/akí/	foot
/ok/	carry
/mok/	cup
/moinék/	walnut
	/konosá/ /kermóm/ /ókum/ /ékris/ /akí/ /ok/ /mok/

/g/ Velar stop/g/ is weakened to fricative [γ] in intervocalic position.

[gij]	/gij/	in
[gískiní]	/gískiní/	usual
[gú]	/gú/	at
[egéns] [eyéns]	/egéns/	one
[góga] [góya]	/góga/	2/3DU
[mágosú] [máyosú]	/mágosú/	snake
[Eg]	/eg/	hear
[aiúg]	/ayúg/	coconut
[ɛjmég]	/ejmég/	back

/c/ Word-initial /c/ is only found in a few examples.

/cinjá/	five
/ckog/	two days after tomorrow
/cengé/	clay
/écira/	travel
/déci/	slow
/ahtéc/	touch
/ebíc/	group
/ec/	scratch
	/ckog/ /cengé/ /écira/ /déci/ /ahtéc/ /ebíc/

/j/ Voiced palatal fricative /j/ occurs word-initially in only a small number of words, but more regularly occurs intervocalically and word-finally. Consonant /j/ is often devoiced as /c/ in word-final position.

[jɛska]	/jeska/	from
[jεφεdá]	/jefedá/	therefore
[júomú]	/júomú/	third
[ojóna]	/ojóna/	woman
[mɛjgá]	/mejgá/	fence
[ɛj̞éka]	/ejéka/	ask
[ádaii̯] [ádaiç]	/ádaij/	enough
[áφίϳ] [áφίς]	/áfij/	wade
[gij] [giç]	/gij/	into

/f/ Word-initial occurrences of /f/ are few. In mountain and foothill dialects consonant /f/ varies with /b/ and /w/ in word-medial positions such as *ebesá* ~ *efesá* ~ *ewesá* 'child'. Speakers of the coastal Sidei dialect use /w/ more consistently in all positions.

/fob/	already
/fífi/	money
/fanín/	bottle
/ofóg/	round
/efeyí/	leaf
/efér/	offspring
/móf/	wind
/éf/	shoot
/óugif/	bow
	/fífi/ /fanín/ /ofóg/ /efeyí/ /efér/ /móf/ /éf/

/s/ Consonant /s/ has the allophone [f] following /i/ as in [oifa] 'finish'.

[sɛtka]	/sétka/	ten	
[skída]	/skída/	above	
[sis]	/sis/	earlier	

[ískusk]	/ískusk/	diligent
[εφεsά]	/efesá/	child
[ɛbsí]	/ebsí/	white
[édis]	/édis/	stick into
[móos]	/móos/	rain
[axáis]	/aháis/	strong

/h/ In intervocalic and word-final positions velar fricative /x/ has lenition to /h/. Fricative /x/ is represented by /h/ in the Meyah orthography.

[áxtax] [áxtah]	/áhtah/	black
[áxa] [áha]	/áha/	put
[áxça]	/áhca/	sleep
[ax] [ah]	/ah/	lie down
[έx] [εh]	/éh/	snap
[esáx] [esáh]	/esáh/	put away

/m/ Bilabial nasal /m/.

[mɛs]	/mes/	dog
[mei]	/mei/	water
[mamú]	/mamú/	rock
[ɛgéma] [ɛkɛmɛjí] [mámas]	/egéma/ /ekemejí/ /mámas/	another chase away garbage
[osúm]	/osúm/	nose
[mtrém]	/metŕem/	corn
[oфom]	/ofom/	ripe

/n/ Word-initial occurrences of /n/ are small in number. Consonant /n/ has the allophone [ng] preceding velar stops /g, k/. It also has the allophone palatalised [n] when following /i/ as in améina 'mother' and moinék 'walnut'.

[néka]	/néka/	yesterday
[nómnagá]	/nómnagá/	all
[nágiφ]	/nágif/	1DU.INC
[óɾna]	/órna/	male
[εφεπά]	/efená/	spirit
[móná]	/móná/	day
[oфon]	/ofon/	tooth
[έφεη]	/éfen/	possess
[méren]	/méren/	lake
[tein]	/tein/	also

/r/ Flap /r/ varies freely with lateral /l/ intervocalically and word-finally. Only occasionally is /l/ heard word-initially. There are a few rare examples of /r/ occurring word-finally following another consonant, in which case the /r/ is devoiced as [r]. This occurs on non-accented word-final closed syllables that end in [r] such as eféber — efébr 'thin'.

[rúa]	/rúa/	they
[ráxax]	/ráhah/	morning
[rót]	/rót/	concerning
[mébéra]	/mebera/	platform
[marsí]	/marsí/	seed
[éçira]	/écira/	travel
[médémér]	/medemér/	song
[εφέbι]	/efébr/	smooth
[mar]	/mar/	thing

2.1.1.2 Phonemic contrast between consonants

Examples of minimal pairs for consonant phonemes are as follows:

/b/ vs /f/	éb	sew	ef	shoot
/f/ vs /b/	efeyí	leaf	ebeyí	defecate
/t/ vs /d/	efét	scorch	eféd	ingredient
/k/ vs /g/	ék	see	eg	hear
/t/ vs /c/	óhta	sip	óhca	search
/t/ vs /j/	tera	spanning	jerá	with
/d/ vs /j/	edí	collide	ejí	dig
/d/ vs /c/	ed	light up	ec	shake of f
/t/ vs /s/	étmá	hand	esmá	receive
/t/ vs /r/	efetá	fine	eféra	wound
/d/ vs /r/	bedá	next	berá	is
/c/ vs /j/	ec	shake off	ej	peel back
/k/ vs /g/	koma	that	gonú	with
/k/ vs /h/	okú	flee	ohú	sell
/g/ vs /h/	ogú	write	ohú	sell

2.1.2 *Vowels*

Meyah has five vowel phonemes as shown in the following table.

Table 2: Vowel phonemes

	Front	Central	Low
High	i		и
Mid	ε		o
Low		a	

All vowels occur word-medially, but only /e/, /o/ and /a/ occur word-initially. All vowels except /e/ occur word-finally. Examples are given below. Contrastive pairs are given in §2.1.2.1.

/i/ In most positions /i/ is a high close vowel [i], but in an unstressed syllable the quality can be a slightly lower [1].

[ɛdí]	/edí/	strike
[siφ]	/sif/	here
[а́фіј]	/áfij/	wade
[mɛbí]	/mebí/	ground

/e/ [ɛ] is a mid open front vowel in word-initial and word-medial positions. It does not occur word-finally.

[egéns]	/egéns/	one
[ɛtéb]	/etéb/	big
[έi]	/éi/	build
[mɛtɾɛ́m]	/metrém/	corn
[mɛk]	/mek/	pig
[oréndesí]	/oréndesí/	straight

/a/ [a] is an open central vowel in all positions.

[agós] [ayós]	/agós/	die
[áфij]	/áfij/	wade
[ékrara]	/ékrara/	loose
[ɛɾakíd]	/erakíd/	tie up
[mebera] [meßera]	/mebera/	platform
[mɛgá] [mɛɣá]	/megá/	tree

/o/ [o] is a mid open back vowel in all positions.

[ojagá] [ojayá]	/ojagá/	female
[otkonú]	/otkonú/	stomach
[oфod]	/ofod/	extra
[mosóm]	/mósom/	coral
[mós]	/mós/	fish
[rót]	/rót/	concerning

/u/ [u] is a high open back vowel in word-medial and word-final positions. It does not occur word-initially.

[gurú]	/gurú/	no
[motú]	/motú/	night
[ogugú] [oyu y ú]	/ogugú/	powder
[oφogú]	/ofogú/	blood
[otkonú]	/otkonú/	stomach

2.1.2.1 Phonemic contrast between vowels

/i/ vs /e/	ébis ébes	heap avoid
/u/ vs /o/	ókum okómfoj	heavy waist
/u/ vs /a/	oská oskúh	bad anus
/o/ vs /a/	og ága	voice weave
/a/ vs /e/	ah eh	lie down snap

2.1.2.2 Vowel sequences

Sequences of non-high vowels and high vowels can occur in all positions. The high vowel in the sequence is non-syllabic. The sequence forms the peak of the syllable. If the syllable is accented the [+HIGH] pitch always falls on the first element in the sequence. Consonants can follow these kinds of sequences. Hence, the sequences are analysed as diphthongs.

There are a small number of words in the lexicon that show a vowel following the non-high and high vowel sequence in word-medial and word-final positions as in $o.kou.\acute{u}$ 'base' and $e.fei.\acute{t}$ 'leaf'. In these situations the glide /u/ or /i/ of diphthongs are written as /w/ or /y/ in the accepted orthography. Examples of possible diphthongs are as follows:

/ei/	/éij/	[έij]	throw
	/kéingg/	[kéiŋg]	press
	/ágei/	[á.gei] [á.xei]	grab
/ai/	/áingkongka/	[áiŋ.koŋ.ka]	sound asleep
	/áhais/	[áxáis]	lasting
	/ofokái/	[o.фo.kái]	small
/ou/	/óufa/	[óu.фa]	good
	/ofoufém/	[o.фou.фém]	hot
	/mou/	[mou]	sweet potato

Contrast between vowels and diphthongs is given below.

[ε] vs [εi]	/éj/ /éij/	drink throw
[a] vs [ai]	/o.fo.ká/ /o.fo.kái/	name small
[o] vs [ou]	/ó.fa/ /óu.fa/	he, she good

Sequences of high vowels and non-high vowels predominantly occur in word-medial position. None occur in word-initial position, and there are only a few examples where they occur in word-final position. Vowels in this sequence occur across syllable boundaries with each vowel forming the peak of the syllable. A [+HIGH] pitch accent can fall on either vowel in the sequence as in $m \grave{o} m f \grave{i} \acute{e} d \grave{a}$ 'viper'.

[iε]	[ɛ.bi.ɛ.dí]	/ebiedí/	relate to
	[mom.фi.é. a]	/momfiéda/	viper
[ia]	[a.ri.á.wun]	/ariáwun/	medicine
	[ɛ.ri.a.gá] [ɛ.ri.a.ɣá]	/eriagá/	weak
	[ma.ɾi.ám]	/mariám/	machine gun
[ua]	[rú.a]	/rúa/	they
	[jú.a.xo]	/júaho/	when
	[mó.su.á]	/mósuá/	dry season
[ui]	[o.dú.is]	/odúis	pierce, stab
	[o.sú.i.ɾa]	/osúira/	first
	[mɛk.xú.is]	/mekhúis/	wild pig
[uo]	[jú.o.mú]	/júomú/	third time

2.2 Syllable structure

The shape of the Meyah syllable is (C)V(C) allowing for canonical syllable types CV, V, VC and CVC. Examples of possible syllable types are as follows:

1 Syllable	V	éi	build
	CV	mei	water
	VC	ék	see
	CVC	mok	cup
2 Syllable	V.VC	ei.áh	break
	V.CV	a.kí	leg
	V.CVC	é.fen	possess
	VC.CV	eb.gá	tear
	VC.CVC	ef.níf	glance
	CV.CV	ma.mú	stone
	CV.CVC	mo.jén	embarrass

	CVC.CV	mah.tá	lily
	CVC.CVC	már.fok	flower
3 Syllable	V.CV.V	efei.í	leaf
	V.CV.CV	ébe.ra	full
	V.CV.CVC	a.ru.gus	mosquito (small type)
	V.CVC.CV	o.kok.si	fold of leg
	V.CVC.CVC	o.roh.rús	escort
	VC.CV.CV	ok.ná.ma	various, some
	VC.CVC.CV	on.túm.ba	thick
	CV.CV.CV	mo.mé.sa	crayfish
	CV.CV.CVC	mo.so.dúm	elephant grass (type of)
	CV.CVC.CV	mo.rong.sú	room
	CVC.CV.CV	mong.ko.rú	ash
4 Syllable	V.CV.V.CV	e.ri.a.gá	weak
	V.CV.CV.CV	e.fe.me.bí	heart
	VC.CV.CV.CV	ot.kí.na.ja	pour, spill
	CV.CV.CV.CV	mo.rói.re.bí	wooden head rest

Meyah allows consonant clusters within a syllable, but examples are few. Those occurrences are probably a result of reduction or vowel elision within polymorphemic words or even phrases. Words containing consonant clusters such as $\acute{e}rabj$ 'pass' could be the result of phonological reduction, such as $\acute{e}rab$ gij 'pass at/in' $\rightarrow \acute{e}rabj$ 'pass'. The term ckog 'day after tomorrow', has apparently lost the initial vowel and a word-medial syllable, since the equivalent word in the closely related Moskona dialect is eckajog 'day after tomorrow'.

The bisyllabic word shape CVC.CVC is listed above as a possible root structure. All of the occurrences of this shape are actually reduced compound noun constructions such as $m\acute{a}r$ of $\acute{o}k$ 'thing bud' $\rightarrow m\acute{a}rf\acute{o}k$ 'flower'. The forms have become lexicalised. They are recognised by Meyah speakers as monomorphemic forms. These occurrences usually result from the loss of the initial vowel of the second member. It should also be noted that nearly all Meyah alienable nouns are marked by initial consonant /m/ such as m-ek 'pig', $m-am\acute{u}$ 'rock'. Perhaps this is the remnant of a noun class marker that has become fused.

2.3 Pitch-accent

Many of the non-Austronesian languages of western Irian Jaya are said to be pitch-accent languages (Donohue1997). Meyah also appears to be a pitch-accent language. It uses two phonemic pitch levels [+HIGH] and [-HIGH], as shown in (1) and (2).

Contrast between [+HIGH] and [-HIGH] syllables on monosyllabic roots is shown in (1).

(1)	éj	'drink'	èj	peel
	mós	fish	mòs	toad
	ót	wash	òt	stand
	óf	close	òf	sing

Contrast between accented syllables on polysyllabic roots.

(2)	éfès	young	èfés	fat
` /	ésmà	receive	èsmá	fallen
	éfèn	trim	èfén	possess
	érèrà	spicy	érèrá	hug
	òfóká	river mouth	òfòká	name

There are a small number of polysyllabic word roots with two, or in some cases, three accented syllables. Some of the accented syllables are adjacent to one another, others are not, as shown in (3).

(3)	érabirmá	scatter, spread
	érerá	hug
	ijúrwahí	butterfly
	eskeírá	bright, clear
	okówú	base, debt
	étídá	palm of hand

There is also a small number of polysyllabic roots that do not have a [+HIGH] accent at all, as shown in (4).

(4)	èfèn	odour
	èsèjàh	store up
	ègèg	audible

Syllable reduplication can produce polysyllabic roots with two accented syllables such as etéb.téb 'very large' and ogú.gúg 'cut up very fine'. Another reason why some polysyllabic roots have two or more [+HIGH] syllables, or no [+HIGH] syllables at all, is most likely due to phonological reduction and fusion of syllable or word boundaries where a [-HIGH] or [+HIGH] syllable has been dropped. The new forms have become lexicalised, as shown in (5).

(5)	okúm ofój	waist rim	\rightarrow	okómfój	waist
	már ofók	thing bud	\rightarrow	márfók	flower
	efagá etmá	body hand	\rightarrow	efétmá	branch
	mebí ekení	ground red	\rightarrow	mékení	garden
	èg èg	listen, listen	\rightarrow	ègèg	audible
	èsáh jàh	store in/at	\rightarrow	èsèjàh	prepare
	méi ébàh	water raw (uncooked)	\rightarrow	mèibàh	contaminated

Affixes and clitics do not bear accent, as shown below.

(6)	<i>ekér</i> 'he/she stays'	VS	<i>di-en-ekér</i> 1SG-DUR-stay	[dinekér] 'I am staying'
(7)	agób 'he/she strikes'	vs	agób-ib he/she.strikes-2SG	[agóbib] 'he/she strikes you'

Morphological inflections such as person-number of subject, instrument, aspect, and mode prefixes do not affect placement of pitch as show in (8–9).

- (8) Dídif di-en-éja jah Munúkwar gurú [dinéja]
 I 1SG-DUR-go to Manokwari NEG
 I do not intent to go to Manokwari.
- (9) Ri-em-er-agób-uma. [rimeragóbuma]
 3PL-RECIP-INS-strike-RECIP
 They (using something) strike one another.

3 Morphosyntax

Morphological complexity in Meyah concerns mainly verbs and inalienable nouns. Both require prefixes to indicate person and number categories of the subject or possessor. Verbs can be morphologically marked for a few other categories. In order to understand the various inflected verbal and nominal forms, the pronouns are presented first. This is followed by a section on nouns, before the morphological and syntactic properties of verbs are discussed.

3.1 Pronouns

The free pronouns and bound pronominal forms distinguish three number categories, singular, dual and plural. The first person in both dual and plural exhibits the opposition inclusive/exclusive. Second and third person dual share the same free and bound forms. The bound pronominal prefixes are clearly related to the free pronouns, since each bound form consists of the first syllable of the free form. 2SG and 3PL bound forms differ slightly from their free form counterparts in that the final vowel has become a fronted [+HIGH] vowel, as shown in column 3 of Table 3.

The bound forms attaching as object clitics to transitive verbs or prepositions also reflect their free form counterparts by using the initial syllable of the free form. However, 1SG, 2SG and 3PL forms are metathesised with i as the initial vowel. Another exception is 2/3DU. Instead of reflecting the initial syllable of the free form as other bound forms do, it uses an obligatory pluraliser-ir plus the last syllable of the free form goga(-ga) producing -irga.

Number	Free	Prefix	Clitic	Possessive	Reflexive	Realisation
1SG	didif	di-	-id	dedin	di-esinsa	disinsa
2SG	bua	bi-	-ib	bebin	bi-esinsa	bisinsa
3SG	ofa	ø-	-ø	efen	ø-esinsa	esinsa
1DU.EXC	magif	ma-	-ma	mafman	ma-esinsa	masinsa
1DU.INC	nagif	na-	-na	nafnan	na-esinsa	nasinsa
2/3DU	goga	ge-	-ir-ga	gegan	ge-esinsa	gesinsa
IPL.EXC	memef	me-	-me	mefmen	me-esinsa	mesinsa
1PL.INC	mimif	mi-	-mi	mifmin	mi-esinsa	misinsa
2PL	iwa	i-	-i	yeyin	i-esinsa	isinsa
3PL	rua	ri-	-ir	rerin	ri-esinsa	risinsa

Table 1: Free pronouns, subject prefixes, and object clitics

The initial syllables of possessive pronouns in column 5 of Table 3 are clearly related to the free forms followed by what perhaps used to be a possessive verb. However, determining morpheme boundaries of possessive pronouns would be difficult since some of the stem vowels are not easily explained.

Reflexive pronouns are obligatory as object when it is coreferential with the subject, as in (10a-b). Reflexive pronouns also function as emphatic pronouns when the subject and object are not coreferential, as in (10c-d). In (10d) the reflexive pronoun seems to function as subject in a relative clause.

- (10) a. Bi-eseda bi-esinsa jeska rua. 2SG-separate 2SG-REF from them. Separate yourself from them.
 - b. Ofa ocuwei mar gu esinsa.
 s/he deceive thing to REF
 S/he deceives him/herself.
 - c. Bua bi-esinsa bi-eita megej ke-uma. you 2SG-REF 2SG-take kindling NOM-that Get the firewood yourself.
 - d. Of a esinmok mof ongga esinsa efen. s/he call wind which self possess S/he calls his/her own wind.

3.2 Nouns

Nouns in Meyah can be divided into two categories on the basis of their morphosyntactic properties. Ninety per cent of the alienable nouns start with the consonant m-. The ten per cent of alienable nouns that are not marked with m- comprise recently borrowed words. Inalienable nouns, which include body part and kinship terms, resemble verbs in that in both cases stems can only begin with one of the three vowels e, o or a. A further similarity with verbs is that inalienable nouns may be inflected for aspect or mode when they function predicatively. Alienable nouns do not allow such inflection. Kinship terms form a special class of nouns. Whereas body part terms employ the same person prefixes as verbs, given in Table 4, some prefixes on a number of kinship terms do not agree with this regular set.

3.2.1 Alienable-inalienable nouns

Inalienable nouns include terms for body parts and kinship relations. They are obligatorily marked for possessor. Some body part terms also function as spatial nouns, to be discussed in §6.7. Kinship nouns are treated separately in §3.2.3. Possessor prefixes on body part nouns are not different from the person-number markers on verb stems. In some cases, body part terms can also receive the plural marker when the term is used figuratively as in *ebirfaga-ir* 'head-PL' (leaders/bosses). Table 4 shows possessive pronouns and corresponding prefixes on three inalienable nouns with their phonetic realisations. Inalienable nouns also function as spatial relaters. See §3.3.1 for an explanation of morphophonemic changes between prefix and stem vowels.

	Possessor	Prefix	+ 'hand'	Realisation	'stomach'	Realisation	'foot'	Realisation
1SG	dedin	di-	etma	ditma	otkonu	dutkonu	aki	daki
2SG	bebin	bi-	etma	bitma	otkonu	butkonu	aki	baki
3SG	efen	φ	etma	etma	otkonu	otkonu	aki	aki
1DU.EXC	mafman	та-	etma	matma	otkonu	matkonu	aki	maki
1DU.INC	nafnan	na-	etma	natma	otkonu	natkonu	aki	naki
2/3DU	gegan	ge-	etma	getma	otkonu	gotkonu	aki	gaki
1PL.EXC	mefmen	me-	etma	metma	otkonu	motkonu	aki	maki
1PL.INC	mifmin	mi-	etma	mitma	otkonu	mutkonu	aki	maki
2PL	yeyin	i-	etma	itma	otkonu	utkonu ³	aki	yaki
3PL	rerin	ri-	etma	ritma	otkonu	ritkonu	aki	raki

 Table 4: Possessor verbs and possessor prefixes

3.2.2 Plural marking

There is very little morphological complexity with alienable nouns. It appears that the plural marker -ir can be used only with humans, dogs and pigs. Other animate or inanimate alienable nouns cannot be pluralised by -ir, nor can they be reduplicated to indicate plurality as some Austronesian languages do. The plural marker -ir is differentiated from person-number markers on human animate nouns, hence the following example is possible: riojaga-ir '3PL-woman-PL [rujager] 'their women'. The final vowel of the noun stem coalesces with the initial vowel of pluraliser -ir. Plurality on inanimate nouns can be indicated by certain modifiers, such as mod ofokou 'house many' or mod efaga orgomu 'house CLF three', as shown in §3.2.4.

Inanima	te	Animate	Realisation	
mega	tree	mosona-ir	mosoner	foreigners
mok	cup	mosow-ir	mosowir	Sougb People
mowa	sun	mes-ir	mesir	dogs
mei	water	тоси	тоси	squirrel
mamu	rock	mof	mof	grasshopper

- (11) a. mes ongga gegan-ir dog which 2/3DU.possess-PL the dogs which they own
 - b. mek k-uma-ir pig NOM-that-PL those pigs

³ The basic realisation is /i/ + otkonu > utkonu. Other realisations with the 2PL prefix occur such as yutkonu and itkonu.

3.2.3 Kinship nouns

In general, kinship nouns take the same possessor prefixes as body part terms and verb stems, as shown in Tables 3 and 4. However, there are some notable differences operating in 1SG, 2SG, and 3SG possessor prefixes on kinship terms. These irregular prefixes are discussed in this section.

1SG, 2SG and 3SG possessor prefixes form a unique set for kinship terms. Instead of the (C)i- possessor prefix found on 1SG and 2SG inalienable noun stems, this set uses ed- '1SG' and eb- '2SG', as in ed-ohuj '1SG-friend' and eb-ohona '2SG-wife'. In the latter example, the vowel of the prefix eb- agrees with the initial stem vowel /o/ of -ohona. On verbs and inalienable nouns 3SG is normally unmarked (zero morpheme). On kinship terms 3SG uses the same possessive prefix as '1PLEXC' me-, as shown below.

- (12) a. ofa efen me-eka s/he possess 3SG-father his/her father
 - b. memef mefmen me-eka
 we 1PL.EXC.possess 1PL.EXC-father
 our father

In the case of -esa 'child' the 3SG form has ef-, clearly derived from the free possessive pronoun for third person singular efen. The full paradigm for esa 'child' is given in Table 5.

Possessor	Prefix	'child'	Realisation
1SG	ed-	ed-esa	edesa
2SG	eb-	eb-esa	ebesa
3SG	ef-	ef-esa	efesa
1DU.EXC	та-	ma-esa	masa
1DU.INC	na-	na-esa	nasa
2/3DU	ge-	ge-esa	gesa
1PL.EXC	me-	me-esa	mesa
1PL.INC	mi-	mi-esa	misa
2PL	i-	i-esa	isa
3PL	ri-	ri-esa	risa

Table 5: Inflection of *esa* 'child'

It is interesting to note that, apparently, terms for important kinship relations employ irregular morphology. For example, there is no 1SG possessor prefix for 'father' akeina and 'mother' ameina. These terms are also used to refer to mother's or father's brothers and sisters respectively. This is evidenced by the fact that ed-akeina 'mother's brother', does take the 1SG ed- which is normally used on other kinship terms. It is perhaps not strange that the term for 'mother's brother' is unique since his relationship to ego is considered special.

2SG does not use a normal possessor prefix on parent terms either. Instead, a more complex morphological construction is used. The construction includes a 3SG subject marker, predicate noun stem and 2SG object clitic forming a complete sentence, as in (13a-b), contrasted with 3SG possessor in (13c-d).

(13) a. *Me-eka-ib*. [mekeb] 3SG-fathers-2SG

He fathers you. = your father

b. Me-osu-ib. [mosib]

3SG-mothers-2SG

She mothers you. = your mother

c. efen me-eka [meka] possess 3SG-father his/her father

d. efen me-osu [mosu]
possess 3SG-mother
his/her mother

Table 6: Inflection of terms for 'father', 'mother' and 'mother's brother'

Possessor	'father'	'mother'	'mother's brother'
1SG	akeina	ameina	ed-akeina
2SG	me-eka-ib	me-osu-ib	eb-akeina
3SG	me-eka	me-osu	me-adeina
1DU.EXC	ma-eka	ma-osu	ma-adeina
1DU.INC	na-eka	na-osu	na-adeina
2/3DU	ge-eka	ge-osu	ge-adeina
1PL.EXC	me-eka	me-osu	me-adeina
1PL.INC	mi-eka	mi-osu	mi-adeina
2PL	i-eka	i-osu	i-adeina
3PL	ri-eka	ri-osu	ri-adeina

The 2SG possessor prefix on terms for 'spouse' and 'sibling' terms is irregular. On these terms the '2SG' prefix ob- differs from '2SG' eb- used on other kinship terms. The 1SG prefix on spouse and sibling terms is not different from the one used on other kinship terms. If the prefix vowel already agrees in [+HIGH] with the stem vowel, the prefix vowel is elided. Also, note that the initial /a/ on the noun stem is the dominant vowel and does not coalesce with the prefix vowel. The prefix vowel is elided. The term for 'sibling' -kora in Table 7 refers to 'older sibling same sex'.

3PL

ri-ohona

ruhona

	Table 7. Possessed prefixes for wire, husband and sibling								
Number	'wife'	Realisation	'husband'	Realisation	'sibling'	Realisation			
1SG	ed-ohona	edohona	ed-ahina	edahina	ed-kora	edkora			
2SG	ob-ohona	obohona	ob-ahina	obahina	ob-kora	obkora			
3SG	me-ohona	mohona	me-ahina	mahina	mo-kora	mokora			
1DU.EXC	ma-ohona	mahona	ma-ahina	mahina	ma-kora	makora			
1DU.INC	na-ohona	nahona	na-ahina	nahina	na-kora	nakora			
2/3DU	ge-ohona	gohona	ge-ahina	gahina	ge-kora	gokora			
1PL.EXC	me-ohona	mohona	me-ahina	mahina	mo-kora	mokora			
1PL.INC	mi-ohona	muhona	mi-ahina	mahina	mi-kora	mikora			
2PL	i-ohona	uhona	i-ahina	yahina	i-kora	ikora			

Table 7: Possessed prefixes for 'wife', 'husband' and 'sibling'

The reciprocal terms for sibling -in-law use the same 2SG ob- prefix as in ob-ocosa '2SG-sibling in-law same sex', and ob-oisa '2SG sibling in-law opposite sex'. Grandparent terms use a unique 1SG prefix ind- as in indi-mowa [indimowa] '1SG-grandfather', and ind-awa [indawa] '1SG-grandmother'. This possessor prefix seems to be a borrowing from the neighboring Sough language, which is the general possessor marker for 1SG (see Chapter 4, §3.3.1).

ri-ahina

rahina)

ri-kora

rikora

Kinship nouns can take the plural suffix -ir. Coalescence occurs between the final stem vowel and the initial suffix vowel as in ed-esa-ir '1SG-children-PL' [edeser] 'my children', and me-okora-ir '3SG-sibling-PL' [mokerer] 'his/her older brothers/sisters'.

(14)			Child		Older sibling s/sex
	1SG	ed-esa-ir	my children	ed-kora-ir	my brothers/sisters
	2SG	eb-esa-ir	your children	eb-kora-ir	your brothers/sisters
	3SG	ef-esa-ir4	his children	mo-kora-ir	his brothers/sisters

3.2.4 Noun classes

Nouns in Meyah can be divided into at least six classes on the basis of the classifier they take when modified by a numeral. Remember that only nouns referring to humans and the words for higher animals 'dog' and 'pig' can take the plural suffix -ir. The classifiers seem to have the fossilised possessive prefix ef-, and thus resemble the inalienable nouns discussed in §3.2.1.

Class 1 is a unique class used only for humans. The classifier *ebah* 'raw' is part of the phrase *efeni ebah* 'spirit/breath raw' [alive], a term that only refers to humans. With food items the class is determined by whether they grow underground or on trees or vines as in Classes 2 and 3. Food items can move from Classes 2 and 3 to Class 4 when removed from a tree or vine and are then classified according to the shape 'round' or 'flat' as in Class 4 and Class 5. Class 6 consists of terms for various kinds of animals and (strangely enough) 'house'.

Meyah speakers from the Mei Of area use eb- for both 2SG and 3SG possessor on child terms.

Class	Classifier	Term	Example
1	ebah	raw	humans
2	ef-ema	fruit/vegetable	potato, cassava, taro, peanuts
3	ef-ebi	fruit/vegetable	banana, papaya, coconut, lemon, tomato
4	of-og	round	banana, pandanas fruit, cabbage
5	ef-eyi	leaf	sago leaf, banana leaf, paper, tin roofing
6	ef-aga	body	tree, pig, dog, chicken, lizard, fish, house

Table 8: Noun classifiers

3.2.5 Numeral classifiers

Meyah has nine different forms of the numerals 'one', 'two' and 'three'. They are numeral modifiers of head nouns that classify the nouns in terms of their inherent properties such as shape or semantic grouping. They also generally differentiate between animacy and inanimacy. The numeral classifiers appear to correspond to the noun classes described in §3.4.2 and shown in Table 8 in terms of shape or substance. Yet, the animate nouns in Table 8 organise into only one noun class, whereas with the numeral classifiers, animate nouns organise into three classes. A numeral classifier consists of a prefix plus a stem. Some of the classes can be rather idiosyncratic mixing 'sweet potatoes' with 'snakes' in Class 4 and 'coins' with 'sea shells' and 'vegetables' in Class 6. The numerals 'four' to 'ten' have only one form, used with any noun.

Class 1 comprises terms referring to humans and to certain objects associated with humans, whether alienable or inalienable. Class 2 consists of nouns referring to animals that dwell on the ground. Class 3 generally consists of terms referring to birds and flying insects as well as tree-dwellers. Class 4 generally has terms for animals that dwell in the water and objects that resemble snakes. Classes 5 and 6 generally contain terms for fruits and vegetables. Class 7 involves inanimate stick-shaped objects. Class 8 concerns thick flat, objects, while thin, flat objects belong to Class 9.

Class	One	Two	Three	Noun
1	eg-ens	eg-eka	or-gomu	man, child, head, arm, fire, garden, chair, table
2	or-ins	or-ingka	or-umu	turtle, pig, dog, deer, chicken, cassowary, lizard
3	er-sins	er-iska	or-sumu	bird, rat, tree kangaroo, butterfly, mosquito
4	or-jins	or-ijka	or-jumu	fish, sugarcane, snake, rope, hose, belt, sweet potato
5	er-ens	er-eka	or-omu	squash, cucumber, corn, lemon, orange, papaya
6	er-tens	er-teka	or-tomu	egg, peanut, long bean, tomato, banana, coins, triton
7	er-fens	er-feka	or-fomu	stick, arrow, gun, bow, finger, bush knife, axe
8	er-bins	er-bika	or-bumu	plywood, tree bark, floorboards
9	or-kens	or-keka	or-komu	leaf, paper

Table 9: Numeral classifiers

Examples of head nouns modified by a noun classifier and a numeral classifier are given in (15).

- (15) a. mongkukar ef-aga or-ins chicken CLF CLF-one one chicken
 - b. manana ef-ebi er-eka papaya CLF CLF-two two papayas
 - c. mou ef-ema or-jumu
 potato CLF CLF-three
 three potatoes

Prefixes on the interrogative stem *gaho* 'how much' agree with the numeral classifier prefix in interrogative clauses, as shown in (16).

- (16) a. Mos ef-aga or-gaho? fish CLF CLF-how.much How much fish?
 - b. Metrem ef-ebi er-gaho?
 com CLF CLF-how.much
 How much corn?

3.3 Verbs

As noted in the introduction, Meyah verbs can be distinguished from nouns based on their morphological and syntactic properties. As we have seen in §3.2, inflectional possibilities for alienable nouns are limited to the fused alienable noun class marker /m/. And, humans as well as some domestic animals can take the pluraliser -ir. While inalienable nouns agree with verb stems in the constraint on initial vowel, which is either e, o or a and even take some other verbal inflections when functioning predicatively, they can be distinguished on the basis of their syntactic behaviour. Nouns, but not verbs can function as subject or object in the clause. Verbs, however, are not as easily distinguished from adjectives. Both have initial vowels that are restricted to e, a or o. Both verbal and adjectival stems take person-number, aspect and modal inflections when they function as predicates in the clause. However, verbal stems can not function as an attributive modifier in a noun phrase, whereas adjectival stems do. For these reasons adjectival stems are considered as a subclass of verbs.

In order to better understand interlinearised examples in this paper, explanations are given for some of the morphophonemic complexities that result when subject, aspect, modal and instrument prefixes are attached to verb and adjective stems. A detailed description of the verbal inflections follows.

3.3.1 Prefixes and stems

I have chosen to write Meyah examples in this paper as morphemic forms so that the various affixes and stems are clear to the reader. However, to better understand what the phonetic form would look like, the morphophonemic changes that affixes and stems undergo in this section are discussed.

As already mentioned, verbs (including adjectives) have only one of three possible steminitial vowels e, a, o. Subject prefixes have one of the possible syllable-final vowels i, e, a.

When a subject prefix is attached to a verb stem, its final vowel coalesces with a front or back vowel [-LOW] of the stem or intervening prefix. The resulting vowel then becomes [+HIGH] front or back, as in (17a-b).

The vowel a appears to be dominant and does not coalesce. Therefore, if the stem-initial vowel is a the prefix-final vowel is elided, as in (18a), and if the prefix-final vowel is a, then the stem-initial vowel is elided, as in (18b).

(18) a.	Bi-agot.	[bagot]	1	b.	Na-ofij.	[nafij]
	2SG-speak				1DU.INC-he	lp
You speak.					We two hel	p.

When durative prefix en-, inceptive prefix ej-, modal prefix em- or instrumental prefix erattach to a verb stem their initial vowel harmonises with the initial vowel of the stem. Following this, the subject prefix is attached. At that point only the harmonised prefix vowel coalesces with the subject prefix vowel. Thus, in these complex forms the stem vowel remains unchanged. In the case of the perfective infix -N- (nasal), it is the stem vowel which is heightened by coalescence with the prefix vowel. Table 10 shows all possible morphophonemic changes on e stems with the resultant forms in brackets.

Number	Stem	+ DUR en-	+ MODE em-	+ PERF -N-	+ INS er-
1SG	di-et [dit]	di-en-et [dinet]	di-em-et [dimet]	di-e-n-t [dint]	di-er-et [diret]
2SG	<i>bi-et</i> [bit]	bi-en-et [binet]	bi-em-et [bimet]	bi-e-n-t [bint]	bi-er-et [biret]
3SG	<i>0-et</i> [et]	0-en-et [enet]	0-em-et [emet]	0-e-n-t [ent]	<i>0-er-et</i> [eret]
1DU.EXC	ma-et [mat]	ma-en-et [manet]	ma-em-et [mamet]	ma-e-n-t [mant]	ma-er-et [maret]
1DU.INC	na-et [nat]	na-en-et [nanet]	na-em-et [namet]	na-e-n-t [nant]	na-er-et [naret]
2/3DU	ge-et [get]	ge-en-et [genet]	ge-em-et [gemet]	ge-e-n-t [gent]	ge-er-et [geret]
1PL.EXC	me-et [met]	me-en-et [menet]	me-em-et [memet]	me-e-n-t [ment]	me-er-et [meret]
1PL.INC	mi-et [mit]	mi-en-et [minet]	mi-em-et [mimet]	mi-e-n-t [mint]	mi-er-et [miret]
2PL	i-et [it]	i-en-et [inet]	i-em-et [imet]	<i>i-e-n-t</i> [int]	i-er-et [iret]
3PL	ri-et [rit]	ri-en-et [rinet]	ri-em-et [rimet]	ri-e-n-t	ri-er-et

Table 10: -et 'to eat'

Table 11 shows all possible morphophonemic changes when the stem-initial vowel is /o/. The resultant forms are in brackets.

+ PERF -N-+ INS er-Number Stem + DUR en-+ MODE emdi-o-ng-k di-er-ok di-en-ok di-em-ok di-ok 1SG [dumok] [dungk] [durok] [duk] [dunok] bi-er-ok bi-ok bi-en-ok bi-em-ok bi-o-ng-k 2SG bunokl [bumok] [bungk] [burok] [buk] 0-em-ok 0-o-ng-k 0-er-ok 0-ok 0-en-ok 3SG [onok] [omok] [ongk] [orok] [ok] ma-em-ok ma-er-ok ma-en-ok ma-o-ng-k ma-ok 1DU.EXC [mamok] [mangk] [marok] [mak] [manok] na-en-ok na-em-ok na-o-ng-k na-er-ok na-ok 1DU.INC [nak] [nanok] [namok] [nangk] [narok] ge-o-ng-k ge-ok ge-en-ok ge-em-ok ge-er-ok 2/3DU [gok] [gonok] [gomok] [gongk] [gorok] 1PL.EXC me-ok me-en-ok me-em-ok me-o-ng-k me-er-ok [mok] [monok] [momok] [mongk] [morok] mi-ok mi-en-ok mi-em-ok mi-o-ng-k mi-er-ok 1PL.INC [mumok] [muk] [munok] [mungk] [murok] i-ok i-en-ok i-em-ok i-o-ng-k i-er-ok 2PL [yumok] [yuk] [yunok] [ungk] [urok] ri-o-ng-k ri-ok ri-en-ok ri-em-ok ri-er-ok 3PL [ruk] [runok] [rumok] [rungk] [rurok]

Table 11: -ok 'to carry'

It has already been shown that the stem-initial vowel a is dominant and does not coalesce with prefix vowels. Instead the prefix vowel is elided. However, Table 12 shows one exception to this with 2PL i-. In this case prefix-final vowel i on a stems remains unchanged. That is, it does not coalesce or elide when joined to a stems. Also, due to the dominant vowel a some homophonous forms occur such as 1PL.INC mi-angha [mangha] 'we put' and 1PL.EXC me-angha [mangha] 'we put'. Table 12 shows all possible morphophonemic changes on a stems with the resultant forms in brackets.

3.3.2 Pronominal object

Meyah has a complete paradigm of pronominal object clitics that are clearly related to the free pronouns. Both forms are used interchangeably. The pronominal clitics are clearly reduced free pronouns that encliticise to transitive verbs or prepositions. The Moskona dialect lacks an object clitic altogether. Moskona only uses free pronouns in the object position. 3SG does not have an explicit pronominal clitic since 3SG subject is also (zero morpheme) unmarked, therefore the free pronoun is used in the object position. 1SG, 2SG and 3PL appear to be metathesised forms of the subject prefix. The 2/3DU pronominal object uses a structure which appears to be the combination of the 3PL object, or pluraliser *ir*-, and -ga from 2/3DU goga to form -*irga* 2/3DU object pronoun.

Table 12: -aha 'to put/place'

Number	Stem	+ DUR en-	+ MODE em-	+ PERF -N-	+ INS er-
1SG	di-aha	<i>di-en-aha</i>	di-em-aha	di-a-ng-ha	<i>di-er-aha</i>
	[daha]	[dinaha]	[dimaha]	[dangha]	[diraha]
2SG	bi-aha	<i>bi-en-aha</i>	<i>bi-em-aha</i>	bi-a-ng-ha	<i>bi-er-aha</i>
	[baha]	[binaha]	[bimaha]	[bangha]	[biraha]
3SG	0-aha [aha]	0-en-aha [enaha]	0-em-aha [emaha]	<i>0-a-ng-ha</i> [angha]	0-er-aha [eraha]
1DU.EXC	ma-aha	ma-en-aha	ma-em-aha	ma-a-ng-ha	ma-er-aha
	[maha]	[manaha]	[mamaha]	[mangha]	[maraha]
1DU.INC	na-aha	na-en-aha	na-em-aha	na-a-ng-ha	<i>na-er-aha</i>
	[naha]	[nanaha]	[namaha]	[nangha]	[naraha]
2/3DU	ge-aha	ge-en-aha	ge-em-aha	ge-a-ng-ha	<i>ge-er-aha</i>
	[gaha]	[genaha]	[gemaha]	[gangha]	[geraha]
1PL.EXC	me-aha	me-en-aha	me-em-aha	me-a-ng-ha	me-er-aha
	[maha]	[menaha]	[memaha]	[mangha]	[meraha]
1PL.INC	mi-aha	<i>mi-en-aha</i>	<i>mi-em-aha</i>	mi-a-ng-ha	<i>mi-er-aha</i>
	[maha]	[minaha]	[mimaha]	[mangha]	[miraha]
2PL	i-aha	<i>i-en-aha</i>	i-em-aha	i-a-ng-ha	<i>i-er-aha</i>
	[yaha]	[inaha]	[imaha]	[yangha]	[iraha]
3PL	ri-aha	ri-en-aha	ri-em-aha	ri-a-ng-ha	ri-er-aha
	[raha]	[rinaha]	[rimaha]	[rangha]	[riraha]

 Table 13: The verb agob 'strike' with the object pronoun clitic

Number of object	Clitic	agob 'strike'
1SG	-id	agob-id
2SG	-ib	agob-ib
3SG	Ø	agob ofa
1DU.INC	-na	agob-na
1DU.EXC	-ma	agob-ma
2/3DU	-irga	agob-irga
1.INC	-mi	agob-mi
1.EXC	-me	agob-me
2PL	-i	agob-i
3PL	-ir	agob-ir

3.3.3 Instrument er-

Instruments can be introduced in an initial clause with the verb era 'use' as its predicate. Whenever the instrument is introduced in the initial clause, then the verb in the main predicate is obligatorily marked with er- 'INS', which is probably a morphologised form of the lexical item era 'use'. It is not obligatory to use an initial clause to introduce an instrument. It is common for speakers to only use the instrument prefix on the verb in the main predicate. The instrument being used is either retrievable from the context or left implied. Some very common verbs such as agob 'strike' may occur without using an instrument prefix to indicate that an instrument is being used. Agob always involves an alienable instrument whereas obu 'strike' implies an inalienable instrument such as etma 'hand/arm'. Other verbs such as er-es 'INS-sprinkle' always have the instrument prefix present, but an instrument such as mei 'water', as in era mei er-es 'use water INS-sprinkle', is rarely mentioned since it is generally understood.

- (19) a. Ri-era mocongg ri-er-oduis rua. [Rira mocongg ruroduis rua.]
 3PL-use arrow 3PL-INS-pierce them
 They pierced them with arrows.
 - b. Ofa era Mosou oga er-agot mar erek s/he use Sougb talk INS-speak thing like ke-uma. [Ofa era mosou oga eragot mar erek koma.]

 NOM-that S/he says things like that in Sougb.

3.3.4 Perfective aspect -N-

Meyah uses a perfective/imperfective opposition to specify whether the action of a verb is completed or not. A verb inflected by the infix -N-, a nasal taking the place of articulation of the following consonant, refers to a completed event. The unmarked opposition of perfective indicates the imperfective form. Consider the contrast in (20).

	Perfective	Imperfective	
(20) a.	Ofa e-n-t mou. s/he PERF-eat sweet.potato S/he has eaten sweet potatoes.	Ofa et mou. s/he eat sweet.potato S/he eats sweet potatoes.	
b.	Didif di-a-ng-got mar rot. I 1SG-PERF-speak thing concerning I had talked about it.	Didif di-agot mar rot. I 1SG-talk thing concerning I talk about it.	
c.	Rua ri-o-m-fij didif. they 3PL-PERF-help me They had helped me.	Rua ri-ofij didif. they 3PL-help me They help me.	

3.3.5 Durative aspect en-

Meyah morphologically indicates duration or progressive action by marking the verb with the prefix *en*-. There are no limitations as to which kind of verb can be inflected for duration. Inalienable nouns and adjectival stems, when they function predicatively, can be marked by the durative morpheme, as illustrated by (21).

- (21) a. Ofa en-et mat. s/he DUR-eat food s/he is eating food.
 - b. Ri-en-esaga gu mod.
 3PL-DUR-arrive at house
 They are arriving at the house.
 - c. Bi-en-efeji ensesa. 2SG-DUR-hair fragrant Your hair is fragrant.

Verbs that are negated by the clause-final negative *guru* 'not, don't' or *enesi* 'not yet' are obligatorily marked as durative. The scope of negation covers the whole clause or sentence. In a multi-clausal negative construction each verb takes the durative prefix with only one sentence-final negative adverb. The durative, in this case, apparently indicates that the state of negation, and not the action, is ongoing.

- (22) a. Di-en-eja jah Manokwari enesi.

 1SG-DUR-go to Manokwari not.yet
 I am not going to Manokwari yet.
 - b. Di-en-et mar ke-uma guru.

 1SG-DUR-eat thing NOM-that NEG
 I don't eat that thing.
 - c. Bua bi-en-et mat guru-ei?
 you 2SG-DUR-eat food NEG-INT
 Are you not eating?

Although the durative prefix is obligatory in negated declarative clauses, it is not used in negated nominal predicate clauses involving alienable nouns. Human nouns such as orna 'man' are not part of the m- class of nouns. They function as verbs and adjectives in that they are part of the a, e, o class of stems, hence are marked by the durative prefix en- in negated clauses, as in (23c).

- (23) a. Ofa mosona guru. s/he foreigner NEG S/he is not a foreigner.
 - b. Ke-uma mek guru. NOM-that pig NEG That is not a pig.
 - c. En-orna enesi.

 DUR-man not.yet

 He is not a man yet.

3.3.6 Inceptive aspect ej-

It appears that the reduced form of auxiliary verb *eja* 'going' is becoming habitually used as inceptive aspect prefix *ej*- 'begin'. Both the lexical form and the inflectional form is used interchangeably by Meyah speakers. According to grammaticalisation theory, early stages involve prepositions and go/come verbs (Hopper & Traugott 1993).

In Meyah, the lexical verb eja 'go' also functions as an auxiliary verb denoting inceptive relations with the main verb, as shown in (24). Auxiliary verbs carry person-number, aspect and modal inflections and are negated by sentence-final guru 'not'. The main verbs are marked for person-number agreement and instrument. The realised form of the auxiliary verb eja in (24) is in brackets.

- (24) a. Didif di-eja di-edemi jah marfenen. [dija didemi]

 I 1SG-go 1SG-hide at elephant grass
 I go (and/to) hide in the elephant grass.
 - b. E-n-ja esma ef-esa. [enja]
 PERF-go receive child
 S/he had gone to get the child.

There are a number of examples from text that illustrate the change of *eja* 'go' from a lexical item to a grammatical morpheme. Firstly, when *ej*- attaches to a verb stem as an inceptive aspect prefix the initial vowel undergoes the same coalescence that other prefix vowels do, as in (25b). If *ej*- were only functioning as a reduced auxiliary verb in rapid speech then *ejorka*, from *eja orka* 'It goes (and) brings', would be the expected reduced form. Instead we find that *ojorka* is also possible. Similarly in (25a), a reduced auxiliary verb with 1SG prefix would produce *dijuk* from *dija duk* 'I go (and/to) carry' instead of the attested form *dujok* from *di-ej-ok*.

- (25) a. Di-ej-ok megej. [dujok]

 1SG-INCEP-carry firewood

 S/he begins carrying firewood.
 - b. Mes ej-orka mek eteb jah mejga ebic. [ojorka] dog INCEP-bring pig big to fence centre

 The dog begins to bring (chase) a large pig into the yard.

Example (26a) shows the verb stem ek 'see' inflected by both modal prefix em- and inceptive prefix -ej. If ej- only functions as a reduced auxiliary verb then the expected realisation would be in (26b).

- (26) a. Na-em-ej-ek. [namejek]

 1PL.INC-MOD-INCEP-look
 We intend to begin looking.
 - b. Na-em-eja na-ek. [nameja nak]
 1PL.INC-MOD-go 1PL.INC-look
 We intend to go (and/to) see.

There are examples in text of lexical verb eja 'go' being used in the same clause with verbs marked by inceptive aspect prefix ej- 'begin'.

- (27) a. Eja ej-eb meresa ekeni. [ejeb] go INCEP-pick sugarcane red S/he goes, and, begins picking red sugarcane.
 - b. Eja beda ej-ohca. [ojohca]
 go then INCEP-search
 S/he goes then begins searching.

3.3.7 Modal em-

The prefix *em*- functions as a modal that signifies intentionality or probability. The speaker is indicating that s/he is thinking about, or intending on, doing the action some time in the future. The likelihood of the event taking place is not certain. The modal *em*- and durative *en*- cannot co-occur on the same verb.

- (28) a. Di-em-eja jah Manokwari. 1SG-MOD-go to Manokwari I intend to go to Manokwari.
 - b. Mi-em-er-efa metrem efej gij bedeng.

 1PL.INC-MOD-INS-plant corn seed in seedbed
 We intend to use seeds to plant corn in the seedbed.
 - c. Mi-em-er-etka mega.

 1PL.INC-MOD-INS-split wood
 We intend to split wood with something.
 - d. Ri-em-era meifeti ongga ahta.

 3PL-MOD-wear cloth which black
 They intend to wear cloth which is black.

3.3.8 Obligation clitic -si

Clause-final clitic -si only occurs in combination with verbs marked by modal prefix em. It appears to strengthen the degree of certainty that verbs marked by em- will be carried out. This increase in certainty expresses obligation. The scope of -si covers all predicates in a complex sentence that are inflected by em-. The combination of em- and -si still expresses an irrealis mood in that there are still no guarantees that the event will be carried out.

Without -si			With -si			
(29) a.	Didif	di-em-en.		Didif	di-em-en-si.	
	I	1SG-MOD-come		I	1SG-MOD-come-MOD	
	I will come.			I must come.		
h	Pug :	ri am asma	ri ofons	Dua	ri am asma ri ofon	

b. Rua ri-em-esma ri-ofons. Rua they 3PL-MOD-receive 3PL-wages they They will receive their wages. They

Rua ri-em-esma ri-ofons-si. they 3PL-MOD-receive 3PL-wages-MOD They must receive their wages.

3.4 Transitivity

The main difference between transitive and intransitive verbs is that the former may occur without an explicit object, while the latter may not occur with one. New information always includes an explicit nominal object, as in (30a), or if reference to a specific item is not possible, the generic mar 'thing' is supplied, as in the first clause of (30b). The object can later be ellipsed if it is retrievable from the context, as the second clause of (30b) illustrates. Generic mar is also used with the anaphoric demonstrative insa 'aforementioned' when referencing a specific object that was explicitly stated earlier but does not need to be restated, as in (30c). A known (human) referent can be expressed by an object clitic, as in (30d).

- (30) a. Didif di-orka mou efej.

 I 1SG-carry potato seedling
 I carry (in hand) sweet potato seedlings.
 - b. Memef me-ef mar beda me-et.
 we 1PL.EXC-shoot thing then 1PL.EXC-eat
 We shoot things and eat (them).
 - c. Me-aha mar insa ke-uma gij mesina.

 1PL.EXC-place thing ANA NOM-that in string.bag
 We place those aforementioned things in a string bag.
 - d. Memef me-agob-ir.
 we 1PL.EXC-strike-3PL
 We strike them.

There are no ditransitive verbs in Meyah. The concept of 'giving something to someone' is expressed by the verb eita 'take/give', which requires the preposition gu to mark the recipient, as in:

(31) Eita efen mosom gu didif. give possess axe to me S/he gives his/her axe to me.

Frequently, explicit (pro-)nominal expression of verbal or prepositional objects is absent, if the referents are easily retrievable from the context, as in:

- (32) a. Eita gu fob.
 give to already
 S/he already gave (it) to (him/her).
 - b. Esiri gu.fall toS/he surrenders to (him/her).

The direct object may also be an adjectival notion, or a physiological state, expressing a mental or physical cause, as in (33b-c).

(33) a. Di-eita mat gu ofa.

1SG-give food to him/her
I give food to him/her.

- b. *Di-eita oska gu ofa*.

 1SG-give bad to him/her
 I give bad to him/her. (= I trouble him.)
- c. Di-eita efera okora gu ofa.

 1SG-give injure pain to him/her
 I give injure pain to him. (= I hurt him.)

Causative constructions involve the analytic causative *otunggom* 'make' and the causee always as the direct object. Note example (34a) which shows an animate instigator contrasted with a human one in example (34b).

- (34) a. Efena ofogog otunggom ofa eita efera okora. spirit evil cause him/her receive hurt pain The evil spirit causes him/her to suffer.
 - b. Bua bi-otunggom me-odou eineina rot.
 you 2SG-cause 1PL.EXC-liver shake concerning
 You are causing us to become confused.

When the instigator is inanimate the causative verb is obligatorily marked by instrument prefix *er*. If the instrument is not in focus or is understood, it is usually not mentioned, as in *er-ef mem* 'INS-shoot bird (with arrow)' = 'He shot a bird'.

- (35) a. Mofut efei er-otunggom ebirfaga erabibei. ferment liquid INS-make head dizzy

 The wine made him drunk.
 - b. Mar ongga ofa agot er-otunggom ri-osnok ri-odou thing which s/he speak INS-make 3PL-people 3PL-liver oska rot.
 bad concerning
 The things s/he says causes people to become angry about (that).

3.4.1 Intransitive verbss

Intransitive verbs only take one argument, the subject. There are three classes of intransitive verbs in Meyah. Those that only function predicatively, those that function both attributively and predicatively, and quantifiers that function predicatively.

Some intransitive verbs that can only function predicatively are shown in (36).

(36) otut laugh
agos die
esiri fall
ofc blow

As mentioned in $\S 3.3$, Meyah hardly allows a separate category of adjectives. Adjectival notions are expressed by items that are basically verbal. Their initial vowels are restricted to e, o or a, as is the case with other verbs and inalienable nouns. When they are used predicatively, they can take aspect or modal affixes. The only difference with other

intransitive verbs is that they can be used attributively, which is not possible for verbs like *ebisa* 'cry', *otot* 'laugh' and *ocunc* 'point'. Thus the subclass of adjectival intransitive verbs allows positions, as in (37).

	As attributive modifier	As intransitive predicate		
(37) a.	mod eteb	Di-eteb.		
	house big	1SG-big		
	big house	I am big.		
b.	menei ofom	Menei en-ofom enesi.		
	banana ripe	banana DUR-ripe not.yet		
	ripe banana	The banana is not ripe yet.		
c.	meisoufa ahta	Meisoufa en-ahta guru.		
	clothes black	clothes DUR-black NEG		
	black clothes	The clothes are not black.		

Intransitive verbs can co-occur with adverbial prepositional phrases such as *ebisa rot eteb* 'S/he cries concerning big' or 'S/he cries hard'. Some intransitive verbs take obligatory constituents in the form of prepositional phrases, as in (38a-b). With non-volitional verbs it is more common for oblique referents to be left implied. In this case, only the prepositional *rot* 'concerning', *jah* 'to' and *gij* 'on' follows the verb with the oblique referent left out, as in (38c-d).

- (38) a. Di-ororu rot-ib.

 1SG-follow concerning-2SG
 I follow you.
 - b. Didif di-eker rot ofa.
 I 1SG-sit concerning him/her
 I wait for him/her.
 - c. Di-esiri jah.
 1SG-fall to
 I fall down.
 - d. Ebisa rot.
 cry concerning
 S/he cried concerning (something).

Complex constructions involving a possessed body part noun plus verb, which express psychological states, appear to function as intransitive verbs. Normally there is personnumber agreement between a (pro-)nominal subject and the verb. In constructions expressing a mental state, however, the person-number of the possessed noun refers to the experiencer, and the verb is marked for 3SG, which is zero, as illustrated by the contrast between (39a-b) on the one hand and (39c-d) on the other. Either the possessed noun or the verb can be inflected for perfective aspect -N-, durative en- or modal em-, but never both. Only the verb can take the instrument marker er-.

(39) a. Odou efesis rot agasus meg. liver smart concerning carve canoe He is good at carving canoes.

- b. Odou okora rot bua. liver hurt concerning you S/he loves you.
- c. Di-en-odou er-agob rot mar ke-uma.

 1SG-DUR-liver INS-strike concerning thing NOM-that I am rejecting that.
- d. Me-odou en-os rot ke-if guru.

 1PL.EXC-liver DUR-rub concerning NOM-this NEG
 We don't want this.

3.4.2 Verbal adjuncts joug and keingg

Joug and keingg are free standing adjuncts that only occur following intransitive verbs and to a lesser degree some transitive verbs. Their original meaning may have been something like 'towards' and 'press' respectively.⁵ However, it appears that these items have lost their semantic content as well as their syntactic freedom, and have become grammatical morphemes. One clear grammatical function of joug and keingg within the clause is to increase the valency of the intransitive verb, allowing a direct object.

	Without joug	With joug		
(40) a.	Ot. stand S/he stands.	Ot joug efesa. stand ADV child S/he guards his/her child.		
b.	Osku mem. trail bird S/he trails a bird.	Osku joug mem. follow ADV bird S/he hunts a bird.		
c.	Of montoj. close door S/he closes the door.	Of joug montoj jeska rua. close ADV door from them S/he closes the door on them (lit. shuts them out).		
(41) a.	Without keingg Ot. stand S/he stands.	With keingg Ot keingg rua. stands ADV them S/he oppresses them.		
b.	Orogna. come.out S/he comes out.	Orogna keingg rua. come.out ADV them S/he appears to them (lit. surprises them).		
C.	Ebisa. cry S/he cries.	Ebisa keingg ofa. cry ADV s/he S/he mourns him/her.		

Items similar to *joug* and *keingg* have been reported in Hatam (Reesink 1999) and in Abun (Berry & Berry 1999) with similar definitions. See also Chapter 4, §3.9 for similar items in Sough, and Chapter 1, §4.9 for a comparison.

There are examples from text of *joug* and *keingg* occurring in other positions following the verb, as in (42). However, they still function as modifiers of the verb in those positions.

- (42) a. Ri-eker memaga ojgomu joug.

 3PL-stay mountain just ADV
 They just guarded (them) in the mountains.
 - b. *Ijbeni awesi keingg*.Ijbeni mouth ADVIjbeni eat him. (lit. Ijbeni closed his mouth over him).
 - c. Ri-ergi meisoufa joug ri-ofos.
 3PL-use clothing ADV 3PL-skin
 They covered their (naked) bodies with clothing

Besides nouns and pronouns, constructions with joug can also have clauses as their objects.

- (43) a. Ge-odou ofoj joug me-edaga egens.
 2/3DU-liver dull ADV 1PL.EXC-take.down one
 They forgot we took one down.
 - b. Mi-erefa joug mona mos em-oisa.

 1PL.INC-plant ADV time rain MOD-finish
 We plant (it) when the rains are going to end.

Joug and keingg function similarly in psychological state expressions that use body part nouns, mentioned in §3.4.1, having pronouns, nouns or clauses as the object.

- (44) a. Di-odou ah keingg ofa.

 1SG-liver lie.down ADV s/he
 I remember him/her.
 - b. Odou ofoj joug ofa.
 liver dull ADV him/her
 S/he forgets him/her.

3.5 Experiential constructions

A number of physiological states such as 'hungry', 'cold', 'thirsty', as well as a few emotional states such as 'embarrassment/shame', are expressed by 'experiential constructions'. These constructions have the verbal property of taking pronominal objects, referring to the experiencer. But their form and possible syntactic behaviour show nominal properties. In fact, the examples in (45) look very much like the 2SG forms of the kinship terms 'father' and 'mother' in §3.2.3. The experiencer object may also be expressed by a free pronoun, as shown in §3.1.

- (45) a. Maren-id. or Maren didif. sick-1SG sick I I am sick.
 - b. Meifirna-ib. or Meifirna bua. shiver-2SG shiver you You are cold.

c. *Mojen-ir*. or *Mojen rua*. embarrass-3PL embarrass they They are embarrassed.

d. Mosona-id. or Mosona didif. hungry-1SG hungry I I am hungry.

That 'experientials' are basically nouns is illustrated in (46) by causative constructions in which they function as object of the verb eita 'take/give'. Also, they are apparently marked by the fused noun class marker m- described in §3.2. Experiential nouns and the reciprocal noun in §3.6 are the only verbal notions that take the m- noun class marker.

- (46) a. Ofa eita maren gu-id. s/he give sickness to-1SG S/he causes me to be sick.
 - b. Rua ri-em-eita mojen gu mimif. they 3PL-MOD-give shame to us They will cause us to be ashamed.

Furthermore, experiential nouns can function as grammatical subject, as in (47a). When used attributively in a relative clause they cannot take the pronominal clitic, as in (47b), hence (47c) is ungrammatical.

- (47) a. Mosona o-ng-k ri-osnok. hunger PERF-carry 3PL-people The people had experienced a famine.
 - b. rua ongga mojen eteb
 they which embarrass/shame big/very
 those who are very embarrassed
 - c. * Rua ongga mojen-ir.
 they which embarrass/ashame-3PL
 Those who are embarrassed.

3.6 Reciprocity

Reciprocal relations can be expressed in two ways. The first possibility is using what looks like an alienable noun, with initial m-, moguma 'each other'. This noun appears to function as an adverbial to either transitive or intransitive predicates, as illustrated in (48).

- (48) a. Ri-agot mar moguma.

 3PL-speak thing RECIP
 They speak to each other.
 - b. Ri-ekeba fifi ke-uma moguma.

 3PL-divide money NOM-that RECIP
 They divide that money to one another.

- c. Ri-oitij moguma.

 3PL-agree RECIP
 They agree with each other.
- d. Ri-odou eskeira moguma.

 3PL-liver pure RECIP

 They are pleased with each other.

A second possibility concerns what looks like a circumfix. The verb, which may be either transitive or intransitive, is marked with a prefix em- and a suffix -uma. The suffix -uma is probably a reduced form of moguma grammaticalised as a suffix. When expressing reciprocity, the two affixes both need to be present, as in (49). Although em- seems to be homophonous with the modal prefix em- in §3.3.7, it is a different morpheme. Whereas modal em- cannot co-occur with durative en-, the reciprocal em- can. In fact, durative en- is required when the clause is negated, as in:

(49) Ri-en-em-oku-uma guru. [rinemokuma]
3PL-DUR-RECIP-dance-RECIP NEG
They are not dancing with one another.

A further difference is that reciprocal *em*-follows the instrument marker *er*-, when present, as in (50b). The circumfix also appears on kinship nouns to indicate reciprocal relations, such as in (50). The initial vowel of *-uma* is dropped following stem-final vowels, as in (50b).

(50) a. *Mi-em-otoij-uma*. [mumotoijuma]

1PL.INC-RECIP-follow-RECIP

We follow each other.

b. Ri-ofof ri-er-em-etei-uma. [riremeteima]
3PL-run 3PL-INS-RECIP-resist-RECIP
They race (resist/compete against) each other.

c. Ri-em-ofof-uma. [rumofofuma]
3PL-RECIP-run-RECIP
They collide with each other.

d. *Ri-en-em-oku-uma*. [runomokuma] 3PL-DUR-RECIP-dance-RECIP

They are dancing with each other.

e. *Ri-em-okosa-uma*. [rumokosama]
3PL-RECIP-sibling-RECIP
They are brothers/sisters of each other.

3.7 Reduplication

Reduplication in Meyah is found mainly on verbs, including the subclass of adjectival verbs. There are also some instances of reduplicated demonstratives and adverbs. The general semantic import of reduplication is some intensification of the event or quality. In the case of dynamic verbs this means an iterative or continuative aspect, as in (51).

Reduplication of adjectival notions involves simply a greater intensity, translated as 'very', as in (52).

Monosyllabic items undergo full reduplication of the stem, as in eg-eg 'listen continually/audible' in (51c). It is not easy to predict exactly which syllable or how many syllables are reduplicated in polysyllabic words. But a general rule seems to be that it is the last syllable(s) that is (are) reduplicated. Sometimes the final vowel of the base is lost as in ejeka 'ask' $\rightarrow ejek-jeka$ 'ask repeatedly' (51a). At other times the final vowel is not lost as in ecira-cira 'travel back and forth'.

3.7.1 Iterative aspect

Iterative aspect is morphologically indicated through reduplication such as *ofa otut* 'S/he laughs', *ofa otut-ut* 'S/he laughs repeatedly'. Iterative syllable reduplication is not a highly productive feature of aspect in Meyah. However, there are some examples of reduplicated transitive and intransitive verbs, as illustrated in (51).

- (51) a. Of a ejek-jeka didif rot mar ke-uma. s/he ask-RED me concerning thing NOM-that S/he repeatedly questioned me about that.
 - b. Rua ri-agob-gob ofa. they 3PL-strike-RED him/her They repeatedly struck him.
 - c. Ofa eg-eg rot efen oga. s/he listen-RED concerning possess voice S/he repeatedly listened for his/her voice.

3.7.2 Adjectival intensifier

On adjectival stems reduplication functions as an intensifier of the attribute, which can be translated as 'very' in English. Since most of these items are bisyllabic, a clear pattern of reduplication of the final syllable can be observed.

(52)	Without	t reduplication	With redupli	With reduplication		
	eteb	large	eteb-teb	very large		
	aksa	tall	aksa-sa	very tall		
	orug	yellow	orug-rug	bright yellow		
	okum	heavy	okum-kum	very heavy		

Another way an adjectival stem (and some verb stems) can be intensified is when one or two syllables are reduplicated adding a transitional labial consonant in between. Sometimes the reduplicated syllable is attached to other words of differing phonological form. All forms in (53) are 3SG unmarked. This kind of reduplication is not predictable.

(53) oufa-moufa very good
erah-maha mourning very strongly
aha-maha panting very strongly

oforga-magaflooded very stronglyahais-mesvery strong/enduringoufa-yahivery nice/wonderful

3.7.3 Emphatic demonstrative

After a demonstrative prefix has attached to a spatial deictic stem, the first syllable can be reduplicated to indicate emphasis, such as *ojowu ko-koma* 'that particular girl' in (54a).

- (54) a. Ojowu ko-koma efen me-osu. girl that-RED possess 3SG-mother She is the mother of that girl.
 - b. Samawa eker gij mei ke-kef.
 Samawa sit at water this-RED
 Samawa remained at this headwaters.

3.7.4 Adverb intensifier

There are some adverbs that utilise full reduplication as an intensifier, although not many instances of this have been observed. There are no observations of *dog-dog* 'one-by-one' in (55b) occurring as an unreduplicated form, whereas *deci* 'slow' in (55a) does occur unreduplicated.

- (55) a. *Bi-ecira deci-deci*. 2SG-travel slow-RED Go very slow.
 - b. Ofa ekeba mat ke-uma dog-dog gu efen ef-esa-ir.
 s/he divide food NOM-that piece-piece to possess 3SG-children-PL
 S/he divides up the food piece-by-piece to her children.

4 Mood

Meyah employs a number of utterance-final clitics to indicate speaker's attitude: question, emphasis, protest and entreaty. The imperative mood will also be discussed. These function pragmatically as speech acts in that the speaker uses them to bring about intended consequences from the hearer (Croft 1991:109). There is no special imperative mood in Meyah, but the emphatic particle is often used when commands are given. Other more polite ways of making requests are also discussed under 'emphatic mood'.

4.1 Interrogatives

The clitic -ei is utterance final and obligatory in yes/no interrogative clauses. It attaches to the last word of the utterance as in didif-ei 'me?'. If the final word ends in a vowel, the vowel is elided, then the clitic attaches, as in kef guru-ei [gurei] 'Not this?'.

- (56) a. Bua bi-em-eja monog-ei?
 you 2SG-MOD-go tomorrow-INTER
 Are you going tomorrow?
 - b. Bua bi-en-eja monog guru-ei?
 you 2SG-DUR-go tomorrow NEG-INTER
 Are you not going tomorrow?

4.2 Emphatic mood

Emphatic mood is expressed by the final clitic -a. It is meant to communicate to the hearer an increased sense of urgency or importance on the part of the speaker. Its scope covers the entire utterance. It appears that when the stem-final vowel differs from the emphatic mood clitic vowel it is elided, as in (57c). It is more difficult to detect the enclitic -a following word-final vowel a, as in bi-eita-a '2SG-give-EMP' = 'Give it!'. However, a lengthened vowel a can be heard.

- (57) a. Ke-uma bera tenten-a!

 NOM-that TOP true-EMP

 As for that, it is really true!
 - b. Tuan-a bi-eita egema gu didif-a! sir-EMP 2SG-give some to 1SG-EMP Sir! Give some to me!
 - c. Ameina eja kenefo-a! [kenefa]
 1SG-mother go which-EMP
 To which place did mother go!
 - d. Bua bi-eker-a! you 2SG-sit-EMP You stay here!

4.3 Imperative mood

The imperative mood in Meyah is not structurally different from an aspectually neutral declarative sentence. There are various degrees of force of commands or requests. Some forms are considered rather harsh or impolite. The harsh form of a command is the imperative with the emphatic marker -a, as in bi-eker-a '2SG-sit-EMP'. A vocative included in the imperative along with the emphatic -a increases the harshness, as in (58f). Partial reduplication of the verb stem can be used to increase the harshness even more, as in (58f).

Polite commands or requests can be formed by fronting a relative clause before the imperative clause, as in (58a). There are ways to strengthen the force of a polite imperative without use of the emphatic clitic -a. One way uses the adverbial ojgomu 'just'. Examples in (58) show degrees of polite and impolite commands from less harsh to more harsh.

Polite command

(58) a. Ongga oufa bera bi-eker.
which good TOP 2SG-sit
It would be good for you to stay.

Impolite command

d. Bi-eker-a! 2SG-sit-EMP Stay!

- b. Bi-eker ojgomu. 2SG-sit just Just stay.
- c. Bua bi-eker ojgomu. you 2SG-sit just You just stay.
- e. Bi-eker-a ojgomu! 2SG-sit-EMP just Just stay!
- f. Bua bi-eke-ker-a ojgomu. you 2SG-sit-RED-EMP just You just continuously stay.

4.4 Complaining

The utterance final clitic -i expresses the speaker's attitude of complaining or protesting. The speaker is communicating to the hearer a sense of injustice, loss or damage. The emphatic clitic and the complaining clitic cannot co-occur in the same utterance.

- (59) a. Bua bi-ohoturu mos tina didif di-ohoturu mar ofoses you 2SG-gather fish but I 1SG-gather thing trash bera ke-if-i.

 TOP NOM-this-PRO
 You caught fish, but as for this all I caught is trash.
 - b. Me-eka tein en-esaga rahah guru-i.
 3SG-father also DUR-arrive early NEG-PRO
 Besides that, his father didn't even arrive in the morning.
 - c. Didif tein di-en-ejginaga rot guru-i!

 I also 1SG-DUR-know concerning NEG-PRO
 Even I don't even know about (it)!

4.5 Entreaty

The last mood clitic to be discussed is -o. The speaker uses it to communicate a sense of urgency or pleading, trying to convince the hearer of something. It occurs utterance-finally and cannot co-occur with other mood markers. In example (60c) the clitic attaches to a content question. The speaker is pleading with someone to convince them to come. The clitic is added to an elevational deictic in (60d). In this example the speaker is trying to convince the hearer that something is very far away.

- (60) a. Abja-ir-o i-osok mega-o i-eifef mega efaga-o! girl-PL-ENT 2PL-climb tree-ENT 2PL-climb.on tree trunk-ENT Girls! Climb on the tree, climb on the tree trunk!
 - b. Bi-osok mega-o jeska mek em-eska-o!
 2SG-go.up tree-ENT because pig MOD-bite-ENT
 Climb on the tree, because the pig is going to bite (you)!
 - c. Gij mona juahu-o bua bi-em-en-o? at time which-ENT you 2SG-MOD-come-ENT When are you intending to come? (lit. Please come!)

- d. Ah jah kemba-o!
 lie.down at down below-ENT
 It is very far down there!
- e. Organisasi bera erek teinefa-o? organisation TOP like how-ENT As for the organisation, what is it like?

5 Indonesian loan word prefix ebe-

Meyah speakers can incorporate Indonesian verbs and adjectives into their language by adding the prefix *ebe*. As noted in §3.3 Meyah verb and adjective stems always begin with a vowel. However, many Indonesian verbs and adjectives start with consonants. By adding a prefix that fits the form needed to interact morphophonologically with Meyah verb stems, the speaker is able to mark Indonesian loan words with Meyah inflections person-number, aspect and modality, as well as negate the verb with sentence-final negative. Example (61) shows Indonesian stems inflected by the Meyah loan word prefix *-ebe*. The prefix is restricted to use on Indonesian loan words only.

(61)	Indonesian verb	Indonesian adjective		
	Ebe- pikir .	Ebe-susah.		
	LOAN-think	LOAN-difficult		
	S/he thinks.	It is difficult.		
	Di-ebe- belajar .	Ebe-tinggi.		
	1SG-LOAN-learn	LOAN-tall		
	I'm learning.	S/he is tall.		
	Ebe- berka t.	Ebe-besar.		
	LOAN-bless	LOAN-large		
	S/he blesses.	It is large.		

6 Deixis and spatial reference

The Meyah spatial deixis system involves demonstrative and adverbial elements. Meyah uses a rather complex system for marking spatial orientation in relation to the speaker as the deictic centre indicating distance, elevational orientation, and movement towards or away from the deictic centre. To provide a more complete coverage of the topic, general spatial orientation is also discussed. Demonstrative clitics and demonstrative pronouns are treated first in §6.1 and §6.2, followed by a look at anaphoric demonstratives in §6.3. The topic then shifts to locative adverbs and presentative constructions in §6.4 and §6.5. A general discussion of cardinal directions and spatial orientation in §6.6 and §6.7 completes the topic. Table 14 provides a summary of deixis morphology.

Demonstrative pronouns			Locative	Locative adverbs	
ke-if	[kef]	NOM-this	si-if	[sif]	ADV-here
ke-uma	[koma]	NOM-that	si-uma	[suma]	ADV-there
ke-unj	[konj]	NOM-that yonder	si-unj	[sunj]	ADV-there yonder
ke-imba	[kemba]	NOM-that below	si-imba	[simba]	ADV-there below
ke-inda	[kenda]	NOM-that above	si-inda	[sinda]	ADV-there above
ke-enefa	[kenefa]	NOM-which	si-enefa	[sinefa]	ADV-where

 Table 14: Demonstrative pronouns and locative adverbs

6.1 Demonstrative clitics

When clitics -if, -uma and -unj attach to nouns they function attributively as demonstratives, as in (63a-c). The clitics also attach to the last item in an attributive noun phrase, as in (62d-e).

- (62) a. Bi-agei meyc-if rot ahais.

 2SG-hold ladle-this concerning strong
 Hold this ladle strongly.
 - b. Osk aki tera mei-uma.
 extend foot above river-that
 She extends her foot above that river.
 - c. Abja-ir ri-osok mega-unj, ri-osok mega-if.
 girl-PL 3PL-climb tree-that climb tree-this
 The girls climb on those (yonder) trees, they climb on these trees.
 - d. Okub mem efer-if. shoot bird young-this S/he shoots this young bird.
 - e. Inska eja jah suma gu mei obsaha-uma. Inska go to there to river amazing-that Inska goes to that amazing river.

6.2 Demonstrative pronouns

The demonstrative clitics -if, -uma and -unj cannot be used independently. However, they can be nominalised by ke- and then function attributively as independent demonstrative pronouns, making the referent more prominent, as in (63). This nominaliser is attested in the neighbouring Sough and Hatam languages as well (see Chapter 1, §4.4).

(63) a. Mar ke-if bera mi-en-et guru.
thing NOM-this TOP 1PL.INC-DUR-eat NEG
As for these things we don't eat them.

- b. Ge-orka mar efej ke-uma nomnaga. 2/3DU-carry thing sprout NOM-that all They carry all those seedlings.
- c. Edi mah jera mega ke-unj. strike fire with tree NOM-that S/he lights that (yonder) tree on fire.

Nominaliser ke- also inflects interrogative stem -enefa as in ke-enefa 'which' when used attributively following nouns. A noun does not have to be present in the clause, as in (64b).

- (64) a. Of mekeni ke-enefa?
 fell garden NOM-which
 S/he fells (trees in) which garden?
 - b. Ke-enefa bera mi-en-et guru?

 NOM-which TOP 1PL.INC-DUR-eat NEG

 Which (one) do we not eat?

Meyah uses three lexical elements to narrow the scope of definiteness of nominal referents. The least specific nominal referent is one followed by the article egens 'one', as in (66a). Using demonstrative pronouns kef 'this', koma 'that' or konj 'that yonder' attributively makes the nominal referent more specific, as in (65b). If the article egens and a demonstrative pronoun are both used, then the referent is made even more specific, as in (65c).

- (65) a. Di-efesij mahteyi egens gu iwa.

 1SG-tell story one to you
 I will tell you a story.
 - b. Orka mat ke-uma jah sif. carry food NOM-that to here S/he brings that food here.
 - c. Mahteyi egens ke-uma bera efen ofoka Inggumei story one NOM-that TOP possess name Inggumei

ge-onu Ingkekesa. 2/3DU-with Ingkekesa

As for that particular story, it is called Inggumei and Ingkekesa.

Demonstrative pronouns can be further intensified through syllable reduplication, such as in (66a). They can also be intensified by the utterance final entreaty clitic -o, as in (66d), where the speaker is trying to convince the addressee about the distance of an object.

- (66) a. oforoka efes egens ke-kef child young one this-RED this very child
 - b. mamu ko-koma stone that-RED that particular stone

- c. Ri-ona ensis ko-koma ri-en-ejginaga rot
 3PL-person time.before that-RED 3PL-DUR-know concerning
 mosona-ir guru.
 foreigner-PL NEG
 Those particular people of an earlier time did not know about foreigners.
- d. Mesina en-ah jah mega ke-unj-o.
 string.bag DUR-lie.down to tree NOM-that-ENT
 The string bag is way over there at the tree.

6.3 Anaphoric demonstrative insa

When anaphoric demonstrative *insa* is not used, the temporal reference is irrespective of time, although it could be interpreted as 'present' as in *mod koma* 'house that' or *mod kef* 'house this'. When *insa* is used with a demonstrative pronoun it is no longer referencing objects in view (present), but objects already mentioned or out of view. If the demonstrative *kef* 'this' is used with *insa*, then the focus is more recent past as in *mod insa kef* 'house ANA this' (lit. 'house just now mentioned'). If the demonstrative *koma* is used with *insa*, then the focus is distant past as in *mod insa koma* 'house ANA that' (lit. 'house earlier mentioned'). If *konj* 'that yonder' is used then focus is on more distant past, as in *mod insa konj* 'house mentioned much earlier'.

- (67) a. Erek mok insa ke-if.
 like cup ANA NOM-this
 Like this cup just mentioned
 - b. *Mi-er-agob mekeni insa ke-uma*.

 1PL.INC-INST-strike garden ANA NOM-that
 We till that garden mentioned earlier.
 - c. En jeska Warikon osum en-oros Asra insa ke-unj.
 comes from Warikon nose DUR-until Asra ANAP NOM-that
 S/he comes from Warikon village point continuing until that Asra village
 mentioned much earlier.

Anaphoric demonstrative *insa* can be further intensified by attaching the clitic a-'emphatic'. As a mood marker the clitic appears utterance-finally, attached to verbs or nouns (see §4.2). However, there are some examples where a- procliticises to anaphoric demonstrative *insa*, as in:

- (68) a. mod a-insa ke-if house EMP-ANA NOM-this this house (just mentioned)
 - b. Me-eka eita mek ofon a-insa ke-uma gu ofa.

 3SG-father give pig tooth EMP-ANA NOM-that to him/her
 His/her father gave that pig tooth (just mentioned) to him/her.

6.4 Locative adverbs

Deictic clitics -if, -uma and -unj take adverbialiser si- and function as independent locative adverbs in locative prepositional phrases involving preposition jah 'to', although it is not uncommon for jah to be omitted as in eker suma 'S/he stays (at) there'. Example (69a) gives clitic -if used attributively on nouns, and adverbialised as si-if 'ADV-here' [sif] 'here'.

- (69) a. Bi-orka meyc jah si-if rot mei-if.

 2SG-carry ladle to ADV-here concerning water-this
 Bring the ladle here (to scoop) this water.
 - b. Ri-eja ri-eker jah si-uma.

 3PL-go 3PL-sit to ADV-there
 They go (and/to) stay there.
 - c. Ah gu finder jah si-unj. lie.down at Finder to ADV-there S/he stays at Finder (village) over yonder.

In locative phrase constructions existential verbs do not take the locative adverb clitic. Instead location is expressed through prepositional phrases involving the preposition *jah* 'to', as in (70).

- (70) a. Mei en-ah jah di-okom ofoj. water DUR-lie.down to 1SG-hip edge The water is at my waist.
 - b. Mar meidu bera en-eker jah suma? thing what TOP DUR-sit to there As for that thing over there, what is it?
 - c. Mesina oringka bera en-ah jah mer. string.bag three TOP DUR-lie.down at room. As for the three string bags, they are at the room.

Adverbialiser si- also inflects interrogative stem -enefa⁶ to produce locative interrogative sinefa 'where'. In interrogative clauses sinefa functions attributively following head nouns. Unlike adverbialised demonstratives sif 'here', suma 'there' and sunj 'yonder', sinefa does not occur in prepositional phrases involving jah 'to' and gij 'in'. It appears that sinefa focuses on the location not on direction. A noun does not have to be present in the clause, as shown in (71c-d).

(71) a. O-n-juj jeska me-osu gij monuh si-enefa?
PERF-descend from 3SG-mother in place ADV-where
Where is the village that s/he was born in?

Another interrogative word that uses the same stem is *teinefa* 'how'. It appears to be polymorphemic, but the morpheme boundaries are not as clear as *ke-enefa* 'which' and *si-enefa* 'where'. Also *tei-* of *tei-enefa* is not attested as a prefix in Meyah.

- b. Ri-em-okuk rua gij monuh si-enefa?

 3PL-MOD-hunt.down them at place ADV-where Where will they hunt them down?
- c. Mof ke-uma okurc jeska si-enefa?
 wind NOM-that blow from ADV-where
 That wind blows from where?
- d. Bebin me-eka eker si-enefa? you 3SG-father sit ADV-where Where is your father staying?

When movement towards a location is in focus then interrogative word *guaidu* 'where' is used in interrogative prepositional phrases involving *jah* 'to'. Therefore the use of *sinefa* in example (72c) is ungrammatical, whereas the use of *guaidu* in (72d) is grammatical.

- (72) a. Osnok egens ke-uma eja eker jah guaidu?

 person one NOM-that go sit at where

 Where is that particular person going to be?
 - b. *I-n-sah* efen efaga jah guaidu?

 2PL-PERF-store possess body to where
 Where have you buried his/her body?
 - c. *Bi-eja jah sinefa? 2SG-go to where Where are you going?
 - d. Bi-eja jah guaidu? 2SG-go to where Where are you going?

6.5 Presentative constructions

The same set of deictic bases in Table 14 encliticises existential verb bases and functions adverbially as 'here' or 'there'. Meyah existential verbs are presentative constructions used to introduce participants or objects. The use of -unj 'more distant from speaker' in these constructions is not attested. Presentatives are complex verbs involving one of four possible stems:

(73)	ah	lie down	inanimate objects that lie down
	ot	stand	animate and inanimate objects that stand
	ofogu	flesh	human
	eker	sit	can also be used generically with animate and
			inanimate nouns

In stative clauses the construction requires a person-number prefix, durative aspect prefix *en*- and a spatial clitic. Stem-final vowels coalesce with prefix-initial vowels.

(74) a. Mamu en-ah-uma. e. Mamu en-ah-if. rock DUR-lays-there
There is a rock. e. Mamu en-ah-if. rock DUR-lays-here
Here is a rock.

- b. Mek en-ot-uma.

 pig DUR-stands-there
 There is a pig.
- c. Ri-eka-ir ri-en-ofogu-uma.
 3PL-father-PL 3PL-DUR-flesh-there
 Their fathers are there.
- d. Meidu bera en-eker-if-o? what TOP DUR-sit-here-Q As for this, what is it?
- f. Mek en-ot-if.
 pig DUR-stands-here
 Here is a pig.
- g. Ri-eka-ir ri-en-ofogu-if.
 3PL-father-PL 3PL-DUR-flesh-here
 Their fathers are here.

Nouns in presentative constructions are determined by including a postnominal demonstrative pronoun, as in (75a-b), or a demonstrative clitic, as in (75c).

- (75) a. Akeina me-okosa insa ke-uma en-eker-uma.
 my.father 3SG-younger.sibling ANA NOM-that DUR-sit-there
 My father's younger brother (mentioned earlier) is there.
 - b. Oga ke-uma en-ofogu-uma.
 voice NOM-that DUR-flesh-there
 That human voice is there.
 - c. Meiteb-uma en-ah-if.
 machete-that DUR-lie.down-here
 That machete is here.

6.6 Cardinal directions

Meyah cardinal directions are based on a mountain/sea and sunrise/sunset axis. The Arfak mountains range roughly from east to west, sloping northward towards the Pacific Ocean and southward towards Bintuni Bay. The majority of Meyah people live on the north-facing slopes of the Arfak mountains, or along the northern coastal plains. Based on this geographical orientation, the four cardinal directions are:

(76) agosu towards the sea

emaga towards the mountains

mowa orogna sun comes out (east)

mowa ojuj sun descends (west)

It is difficult to determine the original meaning of agosu. However, emaga 'back/behind' seems to be related to memaga 'mountain'. Apparently the fused inanimate noun class initial m- has been lost and the meaning has shifted semantically to 'behind' or 'to the mountains', which corresponds to 'south'.

- (77) a. Mof eriaga ongga en jeska agosu. wind weak which come from north A weak wind that comes from the north.
 - b. En jeska monuh ongga mowa orogna.
 come from place which sun come.out
 S/he comes from the east.

c. Ecira jah emaga beda osok jah Meyekiba.
 travel to south then climb to Meyekiba
 S/he travelled southward (lit. to the mountains) then ascended towards Meyekiba.

6.7 Spatial orientation

Spatial relations in Meyah involve a small paradigm set of locatives that is derived from nominal sources such as body part nouns (see §3.2.1). The set, used metaphorically, is well attested in Oceanic languages (Bowden 1992). These spatial nouns occur following head nouns and are generally unmarked 3SG forms when expressing spatial notions: front, back, side and underneath, as illustrated in (78). However, the paradigm appears to be defective lacking a body part noun for 'top'. Instead, the spatial preposition *skida* 'top/above' is used. Skida can also be used postnominally when referencing relational parts of nouns. There is no difference in meaning when used in either position (see §7.1).

(78)	Body part		Relater	Shape
	odou	liver	front	flat objects
	osum	face/nose	front	pointed objects
	ejmeg	back	back	broad, flat
	okumfoj	waist	side	flat objects
	efembra	shoulder	side/edge	linear objects
	meskoh	buttocks	bottom	
	skida	N/A	above	
	degini	N/A	below	

As shown in example (79), the spatial body part noun for 'front' is shape-specific. The noun *osum* 'face/nose' expresses the spatial notion 'front' when referring to objects that are pointed, as in (79a). The term *odou* 'liver' expresses 'front' when referring to objects that are flat, as in (79b).

- (79) a. Mof en jeska meg osum.

 wind come from boat face

 The wind comes from the (direction of) the front of the boat.
 - b. Agot mar jah ofa odou. speak thing to him/her front S/he speaks in front of him/her.

Body part nouns that express the spatial notion 'side' are also shape-specific. The noun *okumfoj* 'waist' refers to the side of objects that are flat, as in (80a). The noun *efembra* 'shoulder' refers to the side of objects that are long and thin or linear, as in (80b).

- (80) a. Ot gu mod okumfoj. stand at house waist S/he stands at the side of the house.
 - b. Ri-oskuh joug mekeni efembra.
 3PL-buttock ADV garden edge
 They crouched (to ambush someone) at the side of the garden.

Meskoh appears to be an irregular spatial body part noun. It is derived from oskuh 'buttock'. However, it is the only item in the paradigm that appears to take an obligatory possessive prefix, in this case 3PL me-. The term also shows some change in pronunciation with the back vowel /u/ of oskuh being lowered to /o/ as in oskoh [meskoh]. It is possible that this change is the result of oskuh being a taboo word, as some informants have said. However, oskuh is still used in other spatial noun phrases, as in (81b).

- (81) a. Ri-edemi mar ke-uma gu debeji meskoh.
 3PL-hide thing NOM-that at clay.pot under They hide it under the clay pot.
 - b. Bi-ojuj jah mod meskoh.
 2SG-descend to house under
 Go underneath the house.

Spatial relater terms that are not body part nouns, but still occur following head nouns and specify spatial orientation of an object include *efesi* 'inside'. It is possible that *efesi* is a reduced compound referring to a body part *efaga awesi* 'body hole'. In Meyah the noun *awesi* 'hole' is not attested as a spatial noun. It only functions in nominal compounds with the derived meaning 'hole/entrance' when referring to body cavities or inanimate nouns, as illustrated in (82).

(82) oskuh awesi buttock hole or anus osum awesi face hole or mouth osu awesi ear hole mebi awesi ground hole moksu awesi grave hole montoj awesi door hole mansu awesi caye hole

Efesi 'inside' can also be used to refer to a hole in the ground, as in *mebi efesi* 'ground inside' or 'hole'. Still, *efesi* primarily functions as a spatial relater noun 'inside', as seen in (83).

- (83) a. Ri-oku jah rerin monuh efesi.

 3PL-flee to 3PL-possess village inside
 They flee into their village.
 - b. Odou efesi ongga efesis. liver inside which smart S/he is smart.

The opposite of *efesi* 'inside' is the spatial noun *mebah* 'outside'. This term appears to be irregular taking either the fused inanimate noun class marker m- or the 3PL prefix me-. However, it is difficult to determine morpheme boundaries on this apparently fused form.

- (84) a. Bi-ej mar ke-uma jah mod mebah.

 2SG-throw thing NOM-that to house outside
 Throw that outside the house.
 - b. Ri-ot jah mod mebah.
 3PL-stand to house outside
 They are standing outside.

The spatial relater *owohoh* refers to the space 'underneath' an object. It does not refer to the 'bottom' part of an object like *meskoh* does in (81), although there appears to be some morphological similarity between the words, as well as some overlap in their usage, as seen in example (85).

- (85) a. Mes ah gu mod owohoh.

 dog lie.down at house underneath
 The dog lies down under the house.
 - b. Edemi gij mamu owohoh.

 hide at rock underneath

 S/he hides underneath the rock.

The spatial relater deis 'middle' refers to the middle area of a noun.

- (86) a. Ecira gu moroju deis.
 travels at road middle
 S/he travels down the middle of the road.
 - b. Ri-ekeba mod ke-uma deis.
 3PL-divide house NOM-that middle
 They divided the house down the middle.

As mentioned at the beginning of §6.6, spatial relaters *skida* 'above' and *degini* 'below' are not inalienable nouns, but function the same as other inalienable noun spatial relaters.

- (87) a. Ri-eker jah gu memaga ofos ke-enda eja ongga 3PL-stay to at mountain peak NOM-downward go REL ri-ei rerin mod gij mega esta skida.

 3PL-build 3PL.POS house in tree branch above They lived up on the mountaintops in their houses which they built in above in the trees.
 - b. Of a eker gu mod degini fogora eneya osok jah skida. s/he stay at house below hence another climb to above S/he stayed below with the result that another (person) climbed above (the house).

The spatial notions of 'left' egris and 'right' ognosk are obligatorily possessed nouns like other body part terms, however they do not function syntactically like spatial body part nouns. They only occur within locative prepositional phrases involving jah 'to', as in (88a), although the preposition does not need to be present, as in (88b).

- (88) a. Ot desi mebera jah ognosk. stand next.to platform to right S/he stands on the left side of the platform.
 - b. Agob di-ognosk. [dugnosk] strike 1SG-right S/he strikes my right side.
 - c. Me-ek motowohu jah me-egris.

 1PL.EXC-see island to 1PL.EXC-left
 We see an island to our right.

7 Prepositions

Spatial prepositions will be presented first, followed by non-spatial prepositions and clause coordinators.

7.1 Spatial prepositions

Spatial relaters *skida* 'above' and *degini* 'below' can function as spatial prepositions or as spatial nouns following a head noun (see §6.7). As prepositions the term *degini* appears to refer to general locations, such as in (89b), instead of a part/whole location like other spatial nouns do, as seen in example (79) above.

- (89) a. Ri-aha rua ongga ri-agos skida mah.

 3PL-put them which 3PL-die above fire
 They place the dead people above a fire.
 - b. Mekeni ke-uma ah degini memaga. garden NOM-that lie.down below mountain The garden is below the mountain.

Other spatial notions such as *tera* 'over, above', *esij* 'on top', *tumu* 'on the side' and *doida* 'near' are only expressed by spatial prepositions. The syntactic behaviour of these prepositions are more typical of Austronesian languages (Bowden 1992).

- (90) a. Os aki tera mei. stick foot above water S/he sticks his/her foot above the water.
 - b. Eifef beda eker esij mega efaga.
 climb then sit on.top tree trunk
 S/he climbs up on top of the tree trunk and remains there.
 - c. Ge-aha mosom tum mega ke-uma. 2/3DU-put axe on tree NOM-that They put the axe on that tree.
 - d. Aha meg efej doida mod.
 put wood dry near house
 S/he places the firewood near the house.

Other kinds of spatial prepositions reflect directionality moving towards a goal or location or away from a goal or location. These prepositions are also monomorphemic. Prepositions jah 'to, towards' and skoita 'to, towards', used in locative adverb phrases, express the path of movement towards an object. The preposition jah is only used with inanimate objects, whereas skoita, possibly a borrowed term, is used with both animate and inanimate objects. In other words, jah and skoita are interchangeable in the case of inanimate objects, so that skoita could also be used in (91a) or (91c).

(91) a. Ojuj oksons jah Meikoka. descend return to Meikoka S/he descends back to Meikoka village.

- b. Oksons skoita efen me-eka.
 return to possess 3SG-father
 S/he returns to his/her father.
- c. Esejah mareibra jah mod efesi.
 prepare brideprice to house inside
 S/he (goes) to the house to prepare the brideprice'.

The preposition gij 'in(to)' expresses both the path into and the location of an object.

- (92) a. Ofra me-eka gij meg. lift 3SG-father into boat S/he lifts his/her father into the boat.
 - b. Eker gij mei ke-if. sit in river NOM-this S/he remains in this river.

The preposition *jeska* expresses a source relation, whether it is locational, temporal or logical. The term *jeska* is homophonous with *jeska* 'because' in coastal dialects. The locative noun is not stated if it is retrievable from the context, as in (93a).

- (93) a. Di-eita jeska fob.

 1SG-take from already
 I already took (it from the house).
 - b. Rua ongga jeska memaga. they which from mountain They who are from the mountains.
 - c. Ecira erek ke-uma jeska ensis fob. travel like NOM-that from old already It's been that way for a long time.

The preposition gu 'at, to' includes both path and goal, as in (94a). Preposition gu can be used in combination with jah 'towards' making both path and goal explicit, as in (94e). It appears that gu in (94b) is interchangeable with skoita 'to' when the goal is human, as illustrated in (94c).

- (94) a. Bi-aha gu mod efes.

 2SG-place at house inside
 Put it inside the house.
 - b. Bi-agot mar gu didif. 2SG-speak thing to me You speak to me.
 - c. Ejeka mar skoita ofa. ask thing to him/her S/he questions him/her.
 - d. Ah toumou gu mokusma. lie.down quiet at reeds S/he lies quietly in the reeds.

e. Mosona esaga jah gu monuh Munukwar. foreigner arrive to at area Manokwari. The foreigner arrives in Manokwari.

7.2 Non-spatial prepositions

Comitative jera 'with' expresses accompaniment and coordination, as in (95a-b). Even though jera is not used in instrument verb phrases, it is possible that instrument verb era 'use' is derived from jera having lost the initial consonant. Another term that can function as a comitative is morototuma 'same', as in (95c). Also, gonu 'with' is a coordinate preposition that appears to take an obligatory 2/3DU prefix ge-. It is only used to coordinate two human referents in a clause as in (95d).

- (95) a. Ofa eja jera mes er-ef mek. s/he go with dog INS-shoot pig S/he goes with a dog and shoots a pig.
 - b. Ef mem cucurwahi jera mowodu. shoot bird sparrow with tree.kangaroo They shot a sparrow and a tree kangaroo.
 - c. Oforoka eja morototuma efen me-eka. child go same possess 3SG-father The child goes with his/her father.
 - d. Ke-if rot Ekergud ge-onu me-ahina Iturwam.

 NOM-this concerning Ekergud 2/3DU-with 3SG-husband Iturwam.

 This is about Ekergud and her husband Iturwam.

The preposition *ini* 'with' also functions like coordinate *jera* 'with', however it only functions in coordinate phrases involving more than two nouns in a listing. If only two nouns are listed then *jera* is used, as in (95b). If more than two nouns are listed then *ini* is used, as in (96). The coordinate *ini* is only used with non-human objects.

(96) mek ini mohuj ini meifena ini radio pig and armband and cloth and radio

The preposition rot 'about, concerning, for' appears to have several functions. It indicates goal in (97a), expresses manner in (97b), and functions as a benefactive in (97d). It appears to be synonymous with nou and rou also used by Meyah speakers. The notion 'about, concerning' can also be expressed as phrasal osok gij 'climb in', as in (97e).

- (97) a. Ecira rot mei. travel for water S/he goes to get water.
 - b. Ofa efarur rot ebeirens.
 s/he work concerning fast
 S/he works quickly.

- c. Di-em-efesij rot mar ke-uma.

 1SG-MOD-speak about thing NOM-that
 I will talk about that.
- d. Di-okub mah rot bua.
 1SG-burn fire for you.
 I make a fire for you.
- e. Efesij mar osok gij Tuan Griffiths. tell thing climb in Mr Griffiths S/he tells (a story) about Mr Griffiths.

8 Adverbs

The category of adverb in Meyah functions to modify an event expressed by a predicate. They are generally monomorphemic items that can be divided into adverbs of time, manner, location, aspect, intensity, negation, ability and focus. However, Meyah also uses items from other parts of speech in phrasal constructions which also function adverbially. Those are also described in this section.

8.1 Temporal adverbials

The time of an event is expressed through the use of temporal adverbials. If a time frame for the whole clause is set, the temporal adverbial is in clause-initial position, otherwise it can appear in clause-final position. Temporal adverbials are either monomorphemic adverbs or phrasal constituents, which are sometimes contracted to one word, as indicated in (98).

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(98) a. mowa ot deis kef \rightarrow deis kef \rightarrow deisef sun stand middle here \rightarrow middle here \rightarrow today
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- b. mowa orug \rightarrow moworu sun orange \rightarrow afternoon
- c. mona ongga okag → monog
 time which ahead → tomorrow

Temporal adverbials can be divided into the following categories:

8.1.1 Diurnal and nocturnal time

(99) rahah tenten morning very (twilight)
rahah morning
mowa deis sun middle (midday)
mororu afternoon (sunset)
motu darkness (night-time)
motu deis darkness middle (midnight)

- (100) a. Motu beda rua ri-em-en jah mod. darkness then they 3PL-MOD-come to house They will come to the house tonight.
 - b. Insirina osowu gu rahah tenten-a. Insirina awaken at morning true-EMP Insirina awakens in the very early morning.

8.1.2 Past time

(101) sismeni first

ensis old, long ago

dektek long time (relative past or future)

ecka two days ago neeka yesterday iuens once

Meyah temporal adverbials, whether they are phrasal, as in (102a) and (102c), or just an adverb, as in (102b), are commonly introduced as clausal adjuncts with topical marker *bera* when topicalised.

(102) a. Gij mona ongga ensis bera ri-en-et mat erek at time which old TOP 3PL-DUR-eat food like

ke-uma guru. NOM-that NEG

As for a long time ago, they did not eat that kind of food.

b. Sismeni bera ri-ona ensis ri-en-ejginaga rot first TOP 3PL-person old 3PL-DUR-know concerning

moson-ir guru. foreigner-PL NEG

As for an earlier time, those people did not know about foreigners.

c. Mona juens mes ojorka mek eteb jah mejga. time once dog 3SG-INCEP-bring pig large to fence One day a dog chased a big pig into the yard.

8.1.3 Present time

(103) ebeibeyaif now deisef today

mona kef time this (this current time)

askesi at the same time (concurrent time)

(104) a. Deisef eja noba monog rahah beda ofa eja deika. today goes and tomorrow morning then s/he goes again S/he goes today and early tomorrow morning s/he goes again.

b. Mi-erefa gu mona mos e-n-s askesi.

3PL.INC-plant at time rain PERF-fall concurrent
We plant at the same time that it has been raining.

8.1.4 Future time

(105) monog tomorrow

ckogcmugday after tomorrowtwo days from now

okag ahead, first

dansusk later okahma afterward

nou ongga for that which (immediate future)

okag ahead

The stems okag 'ahead' and okahma 'afterward' can take person-number subject prefixes and function predicatively, as in di-okag '1SG-ahead' or 'I go earlier'. Used in a relative clause with mona 'time' as head noun they function as temporal adverbials, as in (106a). Okag expresses the temporal notion of 'first' or 'ahead'. Okahma also expresses the temporal notion of 'future', but at a later time than okag. The phrase nou ongga 'for which' used before event verbs expresses immediate future, as in (106c).

- (106) a. Mona ongga okahma bera Beranda tein osoka dokun.
 time which later TOP Dutch also jump addition
 As for a later time, the Dutch people also arrived (here).
 - b. Di-em-eja okag jah Masni.
 1SG-MOD-go ahead to Masni
 I will go earlier (than you) to Masni village.
 - c. Nou ongga mi-eja mi-ebij.
 for which 1PL.INC-go 1PL.INC-dig
 We are about to go and dig.

It appears that mona 'time' belongs to noun class 1 or 5. If it is modified by a numeral 'one' to 'three', the latter uses the same stem as shown in Table 9 (§3.2.5), but with a different prefix ju.

(107) *ju-ens* CLF-one or 'first'

ju-eka CLF-two or 'second'

ju-omu
CLF-three or 'third'

(108) a. Mona ju-ens mes ej-orka mek. time CLF-one dog INCEP-bring pig One day (or, once) a dog chased a pig (to here). b. Ri-eker mona ju-eka.
 3PL-stay time CLF-two
 They stayed two days (or, until the second day).

8.2 Manner adverbs

True manner adverbs in Meyah are few in number. They are *koisoisa* 'clear/correct', *jeni* 'exact', *tenten* 'correct/true, *toumou* 'still/quiet', *toutou* 'careful' and *rourou* 'aimless' or 'without purpose'. They are simple morphemes that occur immediately following a verb.

- (109) a. Ofa ecira rourou. s/he travel aimlessly S/he wanders around.
 - b. Ri-ek koisoisa.3PL-see clearThey see clearly/carefully.
 - c. Bi-agot jeni.2SG-speak exactSpeak specifically.
 - d. Ofa ejema toutou. s/he crawls carefully S/he sneaks up.

Manner notions are more productively expressed using adjectival stems as obliques in prepositional phrases involving *rot* 'concerning', as in (110).

- (110) a. Of a oina mat rot ouf a. s/he cooks food concerning good She cooks well.
 - b. Eja rot otkonu oska. go concerning stomach bad S/he goes angrily.
 - c. Of a oksons rot etma ongga ebskij. s/he return concerning hand which empty S/he returns empty-handed.

8.3 Directional adverbs

Meyah directional formatives includes locative adverbs denoting elevational orientation from the deictic centre. The term *imba* is used to indicate downward direction or location and *inda* to indicate upward direction or location. Locative adverbial phrases can include elevationals *imba* and *inda* plus directional adverb *eja* 'going' to indicate movement away from the deictic centre, as in (111a), or *en* 'coming' to indicate movement towards the deictic centre, as in (111b).

- (111) a. Ecira jah mebi Morum imba eja.
 go to ground Kebar downward go
 S/he travels downward to the Kebar area.
 - b. Oksons inda en beda esaga gu mei Meska Wam. return upward come then arrive at river Meska Wam S/he returns coming upward then arrives at Meska Wam River.
 - c. Eij jah mebi imba. throw at ground downward S/he throws it down below.
 - d. Ri-en jeska monuh mei Mas inda.

 3PL-come from place river Mas upward
 They came from Mas River above.

Locative adverbs *imba* and *inda* can be prefixed by nominaliser ke- (discussed in §6.2) and function attributively in noun phrases, as in (112a-b). They can also be prefixed by adverbialiser si- (discussed in §6.4) and function as object of a preposition in an adverbial phrase, as in (112c-d).

- (112) a. Singen osumfon ke-imba [kemba]
 Singen peninsula DEM-downward
 that down below Singen village peninsula
 - b. meg ke-inda [kenda]
 boat DEM-upward
 that upper boat
 - c. Ei mod jah si-imba. [simba] build house to ADV-downward S/he builds a house down there.
 - d. memaga jah si-inda [sinda]
 mountain to ADV-upward
 the mountain there up above

Elevational orientation can also be expressed through an attributive noun phrase to distinguish between upriver and downriver locations. The terms oforga 'sandy bank' is used to indicate if the locative noun⁷ is downriver, and efej 'headwater' to indicate if a locative noun is upriver. There can be more than one river settlement with the same name, hence using the locational nouns oforga and efej helps to distinguish elevational direction from the deictic centre. One can be 'descending' to an 'upriver' settlement, or ascending to a 'down river' settlement depending on the starting point, as in (113b).

(113) a. Me-eka ecira rot mes jah Mei Koka efej inda eja.

3SG-father travel concerning dog to Mei Koka upriver upward go
His/her father travels with dog (lit. travels/hunting) up to the upper Mei Koka
River area.

Always a river name since the Meyah only live along river banks.

b. Of a eja erek ke-uma ojoros Mei Of efej imba eja.
s/he goes like NOM-that until Mei Of upriver downward go
S/he went along like that until (reaching) the upper Mei Of River down below.

8.4 Intensifying adverbials

Some adjectives, like *eteb* 'big/large', *oufa* 'good/well', *tenten* 'true/correct' and *oska* 'ugly/bad' can be used adverbially expressing intensity such as *efarur eteb* 'work hard'. In general they need the preposition *rot* in this function, as in (114a-b). The quantifier *ekirsa* 'more' can be added to further strengthen the intensity, as in (114c).

- (114) a. Ge-eker gij Meyes rot oufa.

 2/3DU-sit in Meyes concerning well

 They live well in Meyes village.
 - b. Odou os rot tenten. liver rub concerning true S/he desires strongly.
 - c. Agot mar rot oga eteb ekirsa. speak thing concerning voice big more S/he speaks even louder.

8.5 Aspectual adverbs

As seen in §3.4 and §3.5, Meyah uses aspect markers on verb stems to indicate the internal temporal structure of events. However, there is a small set of adverbs, occurring sentence-finally, which expresses some aspectual notions, such as:

(115) fob already
ros still
ojgomuja continuously
deika again

Examples in (116a-b) show verb stems marked for aspect as well as sentence-final aspectual adverbs. Reduplicated adverb *deika* 'again' in (116d) expresses iterative aspect. This adverb is not restricted to the sentence-final position.

- (116) a. Mi-e-n-ja mi-ebij mekeni ongga mi-e-ng-k fob.

 1PL.INC-PERF-go 1PL.INC-till garden which 1PL.INC-PERF-buy already
 We have already gone to till the garden that we had purchased.
 - b. Beranda ofa e-ng-ker ros.
 Dutch s/he PERF-remain still
 The Dutch had still been living (here).
 - c. Ri-en-ejginaga rot mosona-ir guru ojgomuja.

 3PL-MOD-know concerning foreigner-PL NEG continuously
 They continuously did not know about foreigners.

d. Edemi deik-eika gij marfenen. hide again-RED in elephant.grass Hide repeatedly in the elephant grass.

8.6 Negative adverbs

Sentence-final adverbs include negators *guru* 'no, don't, not' and *enesi* 'not yet'. Verbs negated by sentence-final negatives are obligatorily marked by durative aspect *en*-. Sentence-final negatives can co-occur with sentence-final aspectual adverbs, in that order, as in (117c).

- (117) a. Me-en-et mat guru.

 1PL.EXC-DUR-eat food NEG

 We have not eaten food.
 - b. *Mi-en-er-efa metrem enesi*.

 1PL.INC-DUR-INS-plant corn not.yet
 We have not planted corn yet.
 - c. Ebeibeyaif en-erek ke-uma deika guru fob. now DUR-like NOM-that more NEG already Now it's already no longer like that.

8.7 Ability adverb nom

Modal adverb *nom* occurs clause- or sentence-finally. There is no evidence of *nom* occurring in clauses marked by modal intentional prefix *em*-. *Nom* appears to have the opposite effect of clitic *-si* in §3.3.8 which strengthens the intentionality assertion of *em*-marked predicates. Clitic *nom* makes no assertions. It only indicates that the speaker has the ability to carry out a particular action, but the likelihood of the event being carried out is left uncertain. There are not many examples in text of *nom*. It is more common to hear Meyah speakers use *nom* when responding to a request such as *di-eja nom* '1SG-go able' or 'I can go'. The assertion that the respondent *will* go is weaker than if intentional modal *em*- had been used. There are occasions when Meyah speakers combine the Indonesian *bisa* 'able' with *nom*, as in *bisa nom* 'able can' or 'of course I can'.

- (118) a. Oforoka en-agot mar gu didif nom-ei? child DUR-speak thing to I MOD-INT Is the child able to speak to me?
 - b. Didif di-otunggom mar ke-uma nom.
 I 1SG-make/do thing NOM-that able
 I am able to do that.

8.8 Focusing adverbs

Focusing adverbs *tein* 'also' and *fog* 'first', occur in phrase-, clause- or sentence-final positions. *Fog* can be differentiated from temporal adverb *sismeni* 'first' by its syntactic behaviour. Adverb *fog* only occurs clause- or sentence-finally. Temporal adverb *sismeni* occurs in the same position as other temporal adverbials, usually sentence-initially.

- (119) a. Ri-ojaga-ir tein ri-eita mar erek ke-uma.

 3PL-woman-PL too 3PL-do thing like NOM-that
 The women too do things like that.
 - b. Di-es mah jeskaseda di-ek fog. 1SG-light fire in.order.to 1SG-see first I light a fire first so that I can see.

Appendix 1

Inggumei and Ingkekesa Told by Dision Moktis

This is the first of three texts presented in order to illustrate the various kinds of morphological modifications and syntactic constructions discussed in this paper within the context of a complete discourse.

- (1) Mahteyi egens ke-uma bera efen ofoka Inggumei ancient story one NOM-that TOP possess name Inggumei and ge-onu Ingkekesa.

 2/3DU-and Ingkekesa.
 As for this ancient story, its name is Inggumei and Ingkekesa.
- (2) Ingkekesa eker tumu mega esta noba Inggumei ah
 Ingkekesa sit on tree branch and Inggumei lie.down
 aisomu gij mei.
 play in water
 Ingkekesa sits in the branches of a tree and Inggumei plays in the water.
- (3) Ah aisomu gij mei tina adaij beda meifina engk beda water but enough then wind dry lie.down play in eifef beda eker esij mega efaga. climb.on then sit on.top tree body He washes in the water until satisfied then the wind dries him then he climbs on top of a tree trunk.
- (4) Eker esij mega efaga nou mowa beda eker toumou. sit on.top tree body for sun then sit quiet He sits quietly on top of the tree trunk drying in the sun.
- Ingkekesa ofu jeska mega esta (5) Tina ke-inda ojgomu en but Ingkekesa fly from tree branch NOM-above come just beda es aki beda edi ebirfaga ohoru gu mei. foot then strike head then dip scalp at water Then Ingkekesa flies from the tree above, then comes extending his feet and strikes the top (of Inggumei's) head in the water.

- (6) Inggumei ebirfaga ohoru ofos obrin. Inggumei head scalp skin gouge Inggumei's head becomes gouged.
- (7) Beda osoka gij mei efen oksons beda eja. then jump in water deep return then go Then Inggumei jumps back into deeper water then (Ingkekesa) departs.
- (8) toumou eker toumou tina jijiji beda yei Ingkekesa Sit but then hey Ingkekesa quiet sit quiet ___ osoka oksons jeska mega esta ke-inda beda branch NOM-above coming then jump.down return from tree eker esij mega efaga deika. body again on.top tree Ingkekesa waits quietly, waits quietly then, hey (nothing happens so) he jumps down from the tree above then sits on the tree trunk.
- (9) Eker mega efaga deika tina Inggumei ejema toutou beda oma sit tree body again but Inggumei sneak careful then swallow mei oma mei ojgomu.

 water swallow water just
 He sits on the tree trunk, but Inggumei carefully sneaks up then just drinks some water.
- (10) Ingkekesa en-eker esij mega efaga insa. Ingkekesa DUR-sit on.top tree body ANA Ingkekesa is sitting on that tree trunk mentioned earlier.
- (11) Beda osof eja ojgomu beda oskotu Ingkekesa aki ojgomu.
 then cross go just then grab Ingkekesa foot just
 Then he crosses over just going (towards Ingkekesa) then just grabs Ingkekesa's foot.
- (12)Inggumei era mei rot noba oma mei rot Inggumei use water concerning and swallow water concerning jah moiroskuh ojgomu. under.water iust to Inggumei swims with (Ingkekesa) underwater and (Ingkekesa) just inhales water.
- (13) Ingkekesa efeni estir ojgomu beda mei oga.
 Ingkekesa breath short just then water mouth
 Ingkekesa runs out of breath then he inhales water.
- (14) Beda eiteij ofou ebsi beda mei oga beda agos fob. then eye ball white then water mouth then die already Then his eyes roll up, then he inhales water, then he is already dead.
- (15) Tina guru jefeda Inggumei era mei rot oksons-sons but no therefore Inggumei use water concerning return-RED

beda eja aha beda eja eker esij mega efaga insa then go put then go sit on.top tree body ANA

ke-uma oksons deika.

NOM-that return again

But no, (dead now) so Inggumei swims (with dead Ingkekesa) returning (to shore) then goes and places (Ingkekesa's dead body) there on that aforementioned tree trunk.

- (16) Tina Ingkekesa agos fob. but Ingkekesa die already But Ingkekesa was already dead.
- (17) Ingkekesa efena en-ebah deika guru. Ingkekesa spirit DUR-raw more NEG Ingkekesa is no longer alive.
- Ingkekesa ah (18)toumou esij mega efaga noba Inggumei Ingkekesa lie.down quiet on.top tree body and Inggumei eja jeska. go from Ingkekesa is lying silently on top of the tree trunk and Inggumei departs.
- (19) Inggumei eja jeska tina Ijbeni ofa orogna ke-uma en. Inggumei go from but Ijbeni s/he come.out NOM-that come Inggumei departs but Ijbeni suddenly appears.
- (20) En-en beda eifef mega efaga beda eyajga tina yei
 DUR-come then climb tree body then look but hey

 Ingkekesa agos en-ah jah sif.

 Ingkekesa die DUR-lie.down at here
 He comes and climbs up on the tree trunk then looks, but hey, Ingkekesa who was dead was sleeping (he thought) here.
- (21) Beda Ijbeni awesi keingg beda et Ingkekesa agos insa then Ijbeni mouth ADV then eat Ingkekesa die ANA ke-uma fob.

 NOM-that already
 Then Ijbeni grabs (Ingkekesa) by the mouth and eats him.
- (22) Beda eja gij odou noba osoka beda oma mei rot oksons. then go in liver and jump then lick water concerning return
 Then (Ijbeni) becomes satisfied and jumps down (from the tree trunk) then drinks some water (then) departs.
- (23) Tina yei Inggumei oksons beda en-ek Ingkekesa agos but hey Inggumei return then DUR-see Ingkekesa die

insa ke-uma oida en-ah-uma-ei?

ANA NOM-that that DUR-lie.down-DEM-INTER

But, hey, Inggumei returns looking to see if that aforementioned dead Ingkekesa is there or not?

- (24) Tina en-en beda en-ek tina Ingkekesa agos. but DUR-come then DUR-look but Ingkekesa die But he comes then he is looking but Ingkekesa is dead.
- (25) En-ah esij mega efaga guru-i!

 DUR-lie.down on.top tree body NEG-PRO
 He is not lying on the tree trunk!
- (26) Beda Inggumei osujohu oida oh ke-ke-if bera then Inggumei think that oh NOM-RED-this TOP

 Ijbeni et fob.
 Ijbeni eat already
 Then Inggumei thinks that, 'Hey, as for this Ijbeni he already ate (him)'.
- (27) Noba rot tenten Ijbeni et Ingkekesa ongga agos fob. and concerning true Ijbeni eat Ingkekesa REL die already And actually, Ijbeni ate Ingkekesa who already was dead.
- Ijbeni et Ingkekesa ongga agos insa ke-uma beda eja
 Ijbeni eat Ingkekesa REL dead ANA NOM-that then go

 rot jah fob.
 concerning to already
 Ijbeni ate that aforementioned Ingkekesa who was already dead then he had already gone away.
- (29) Ainsoma! That's all!

Appendix 2

The brothers Igomu and Insirina Told by Agustinus Moktis

(1) Igomu ge-onu Insirina bera me-okosa⁸ ge-onu me-okora⁹ Igomu 2/3DU-and Insirina TOP 3SG-sibling 2/3DU-and 3SG-sibling ongga ge-a-ng-h gij mei Yes efej.

REL 2/3DU-PERF-lie.down in river Far upper
As for Igomu and Insirina, they were younger and older brothers that lived at upper Far River.

⁸ Older sibling same sex.

⁹ Younger sibling same sex.

- (2) Goga ge-ah gij mei Yes efej rot oufa-moufa. they.two 2/3DU-lie.down in river Far upper concerning good-RED The lived very well at upper Far River.
- (3) Ge-en-em-otkonu en-oska guru. 2/3DU-DUR-RECIP-stomach DUR-bad NEG They were not angry at each other.
- (4) Igomu ge-onu Insirina ge-eita arja fob.
 Igomu 2/3DU-and Insirina 2/3DU-take bride already
 Igomu and Insirina were already married.
- (5) Mona juens beda goga ge-ecira rot mes. time once then they.two 2/3DU-travel concerning dog One day they went hunting with their dogs.
- (6) Goga ge-eja ge-esaga gij merenrah deis-is-mos. they.two 2/3DU-go 2/3DU-arrive in forest centre-RED-INT Going along they arrived in the very centre of the forest.
- (7) Tina ge-en-esma mar eneya guru. but 2/3DU-DUR-receive thing any NEG But they did not get anything.
- (8) Erek ke-if tina dektek guru bera ge-ek tina mes like NOM-this but while NEG TOP 2/3DU-see but dog

 gegan-ir ri-oga gij mar jah meg okowu.

 2/3DU.possess-PL 3PL-voice in thing at tree base

 Not long after that, to their surprise, their dogs were at the base of a tree barking at (something).
- (9) Mes gegan-ir ri-oga gij mowodu eteb. dog 2/3DU-possess-PL 3PL-voice in tree.kangaroo large Their dogs were barking at a large tree kangaroo.
- (10) Eker gij meg esta.
 sit in tree branch
 It remained in the branches of the tree.
- (11) Ge-esa mocongg rot juens-mes beda esiri gij mebi.
 2/3DU-send arrow concerning once-only then fall on ground.
 They shot an arrow only once then (the tree kangaroo) fell (dead) on the ground.
- (12) Goga ge-agot oida ge-ecira rot mes
 they.two 2/3DU-say that 2/3DU-travel concerning dog

 otoiru-ru tina mowa ot agob fob.
 continue-RED but sun stand strike already
 They said that they would continue travelling with the dogs (hunting) but the sun's rays were already low in the sky.

- (13) Beda ge-oksons jah mod. then 2/3DU-return to house Then they returned to their house.
- (14) Goga ge-eja ge-esaga gij mod beda ge-eker they.two 2/3DU-go 2/3DU-arrive in house then 2/3DU-sit keingg ge-ofons.

 ADV 2/3DU-tired
 After arriving at the house, then they rested.
- (15) Juens beda ge-aha mowodu efej gij mah. momentary then 2/3DU-put tree.kangaroo carcass on fire A little later they put the tree kangaroo carcass on the fire.
- (16)Erek ke-if tina ge-era mowodu oiraga okowu like NOM-this but 2/3DU-use tree.kangaroo tail base ge-em-er-ahah-uma beda ge-em-agob-uma. 2/3DU-RECIP-INS-argue-RECIP 2/3DU-RECIP-strike-RECIP then It was like that, but they argued with one another and hit one another concerning use of the tree kangaroo's tailbone.
- (17) Insirina era mowodu oiraga okowu er-obu Igomu ejmeg. Insirina use tree.kangaroo tail base INS-hit Igomu back Insirina using the tree kangaroo's tailbone struck Igomu on the back.
- Igomu otkonu oska me-okora Insirina beda agot gu
 Igomu stomach bad 3SG-sibling Insirina then speak to

 me-ohona ge-onu ef-esa.

 3SG-wife 2/3DU-and 3SG-child
 Igomu was angry with his older sibling Insirina, then he told his wife and child.
- (19) Rahah motu ros beda Igomu ois me-ohona ge-onu ef-esa morning dark still then Igomu call 3SG-wife 2/3DU-and 3SG-child beda ri-eja ri-oku jah mei oforga. then 3PL-go 3PL-flee to river lower

 The next morning, while it was still dark, Igomu called to his wife and child then they ran fleeing to the lower river.
- (20) Ri-ecira gij mei Yes efei dektek.

 3PL-travel in river Far wet long.time
 They travelled along the Far River a long time.
- (21) Ri-ecira gij motu jah suma.
 3PL-travel in dark to there
 They travelled in darkness there.
- (22) Beda mona efen en noba ri-ej-oira gij mei oforga. then day possess come and 3PL-INCEP-arrive at river lower Then, at sunrise, they started entering into the lower river (area).

- (23) Ri-e-n-ja ri-esaga gij mei oforga beda ri-esmef jah ri-egris.
 3PL-PERF-go 3PL-arrive at river lower then 3PL-turn to 3PL-left
 Having arrived at the lower river, then they turned to their left.
- Rua ri-ot gij mei oforga dektek beda ri-eja ri-esaga mei they 3PL-stand at river lower long then 3PL-go 3PL-arrive river otoij ofoksu.

 follow bay
 They stood at the lower river for a long time, then they went arriving at Otoij (following) River Bay.
- (25) Beda ri-agot oida ri-oira jah si-uma. then 3PL-say that 3PL-enter to there Then they said that they would enter there.
- (26) Tina mei Yes ofoka ah doida beda ri-ek jah mei but river Far delta lie.down near then 3PL-look to river Kairon ofoksu.

 Kairon bay
 But the Far River delta was close, then they looked at Kairon River Bay.
- (27)Ri-eyajga tina osum ofon mei otoii er-agob joug gij mei 3PL-look face nose river follow INS-strike ADV at river but Yes ofoka fob. Far delta already They looked but the Otoij River peninsula already blocked their view of the Far River delta.
- (28) Beda ri-ot ri-aha gij mei Kairon ofoksu. then 3PL-stand 3PL-put in river Kairon bay Then they stood and put (their possessions) in Kairon River delta (area).
- (29)Insirina osowu gu rahah tenten-a tina en-ek me-okosa Insirina wake.up at morning true-INT but DUR-see 3SG-sibling jera me-ohona ni ef-esa-ir guru fob. with 3SG-wife plus 3SG-child-PL NEG already Very early in the morning Insirina woke up but he did not see his younger sibling with his wife and children anymore.
- (30) Efeda ebisa tina mar eneya guru fob.
 sorry cry but thing other NEG already
 Sorrowful he cried but could no longer do anything about it.
- (31) Me-okosa eja ojgomu jeska fob.

 3SG-sibling go just from already
 His younger sibling had just already gone away.
- (32) Igomu en-erek moruj eteb. Igomu DUR-like coral.stone large Igomu is now like a large coral stone.

- (33) Beda eibibi gij mei Kairon ofoksu deis-is-mos. then anchor in river Kairon bay centre-RED-INT Then it is anchored (sits unmoving) in the very middle of Kairon River Bay.
- (34) Rua ri-agot oida sis bera ri-erefa mekeni rejrej
 they 3PL-say that before TOP 3PL-plant garden around
 moruj suma.
 coral.stone there
 As for what people said at an earlier time, they (Igomu and family) planted
 a garden around the rock there.
- (35) Tina ebeibeyaif bera en-erek ofoksu fob.
 but now TOP DUR-like bay already
 But as for now, it is already a bay.
- (36) Insirina tein en-erek moruj.
 Insirina also DUR-like coral.stone
 Insirina is also like a coral stone.
- (37) Osum erek Igomu.
 face like Igomu
 The face (of the rock) looks like Igomu.
- (38) Monuh ongga Igomu e-n-ja jeska en-erek mei place REL Igomu PERF-go from DUR-like river efendoks efesi doida mei Yes.

 valley inside near river Far
 The place that Igomu had gone from is a river valley near Far River.

Appendix 3

Advice given to young people who want to marry Told by Mesakh Tibiyay

- (1) Orna egens ongga e-n-sejah nou oskotu efen arja. man one REL PERF-ready for grab possess bride A man is already prepared to get married.
- (2) Sismeni en-oskotu arja enesi beda orna egens ke-uma first DUR-grab bride not.yet then male one NOM-that en noba agot mar gu didif.

 come and speak thing to me
 First, he hasn't married the bride yet, then that particular man comes and talks to me.
- (3) Agot efen odou os arja insa ke-uma gu didif. speak possess liver rub bride ANA NOM-that to me He tells me that he desires that aforementioned bride.

- (4) Beda didif di-ohoturu arja ke-uma efen me-eka then I 1SG-gather bride NOM-that possess 3SG-father jera me-osu.
 with 3SG-mother
 Then I gather together that bride's father and mother.
- Di-ejeka goga (5) oida goga ge-odou eskeira gij oforoka 1SG-ask they.two that they.two 2/3DU-liver clean in youth efes egens ke-ke-if efen oga ongga offspring one NOM-RED-this possess voice REL en-agot mar gu didif ke-if nom-ei. DUR-speak thing to me NOM-this ADV-INTER I ask them if they are able to agree to what that one young person is saying to me.
- (6) Ofa odou os oida gegan eg-esa ojowu ke-ke-if.
 he liver rub that 2/3DU.possess 2/3DU-child virgin NOM-RED-this
 He desires this particular virgin daughter of yours.
- (7) Beda ojowu ke-ke-uma efen me-osu ge-onu then virgin NOM-RED-that possess 3SG-mother 2/3DU-and me-eka ge-oitij rot oida skoidu ri-oforoka 3SG-father 2/3DU-agree concerning that okay 3PL-youth beda ah ri-odou em-os-uma erek ke-uma oigomu. 3PL-liver RECIP-rub-RECIP then lie.down like NOM-that just Then the virgin's mother and father agree that, 'Okay, youths desire one another, then just let it be like that'.
- (8) Beda didif di-agot gu ona ke-uma efen me-eka tein. then I 1SG-talk to man NOM-that possess 3SG-father also Then I talk to that man's father too.
- (9) Beda ona ke-uma efen me-eka esejah mareibra then man NOM-that possess 3SG-father prepare bride-price tein jah nou. also towards for Then that man's father also prepares the bride-price to (be given) for (the virgin).
- (10) Beda of a tein oitij rot oida skoidu ge-em-oskotu-uma. then he also agree concerning that okay 2/3DU-RECIP-grab-RECIP Then he also agrees over that (saying), 'Okay, they two can marry one another'.
- (11) Beda didif di-orohrus goga ke-uma jah mod ari efesi. then I 1SG-escort they.two NOM-that to house Sunday inside Then I escort them (bride and groom) to the church.

- (12) Beda di-ohoturu goga ge-odou efesi. then 1SG-gather they.two 2/3DU-liver inside Then I meet with them (lit. have a heart-to-heart talk).
- (13) Di-ejeka ona odou efesi bua bi-ororu mar efeyi ebsi
 1SG-ask man liver inside you 2SG-follow thing leaf pure
 rot tenten fob-ei.
 concerning true already-INTER
 I ask the man's liver (lit. in the depth of his heart), 'Have you truly followed the Scriptures?'
- (14) Bua bi-eseda bi-esinsa jeska me-osu-ib jera me-eka-ib. you 2SG-separate 2SG-self from 3SG-mother-2SG with 3SG-father-2SG You separate yourself from your mother and your father.
- (15)Noba bua jera bebin bi-osroj insa and with 2SG-possess 2SG-rib ANAP REL ke-ke-if ge-en-odou os erek ofog ge-eja 2/3DU-DUR-liver rub NOM-RED-this 2/3DU-go like group egens gij gegan mod ojgomu. 2/3DU.possess house just in You and that aforementioned girl friend you love, you two should become like one group in your-two house (lit. united).
- (16) En-adaij ongga bua bi-e-ng-ker jera me-osu-ib
 DUR-enough REL you 2SG-PERF-remain with 3SG-mother-2SG

 ge-onu me-eka-ib deika guru fob.
 2/3DU-and 3SG-father-2SG more NEG already
 You already do not need to be living with your mother and father any more'.
- (17) Didif di-ohoturu ona odou efesi erek ke-uma jeska
 I 1SG-gather man liver inside like NOM-that because

 em-oisa fob.

 MOD-complete already
 I gather the man's liver (lit. talk heart-to-heart) like that because (I'm) already about to finish (with him).
- (18) Beda di-ejeka skoita ojaga deika oida bi-ojaga tein bua bi-odou then 1SG-ask towards girl more that 2SG-girl also you 2SG-liver os rot ona ke-if rot tenten fob-ei.

 rub concerning man NOM-this concerning true already-INTER
 Then I ask the girl also that, '(You) girl also, you already truly desire this man?
- (19) Beda bi-odou os rot tenten fob ebeibeyaif bua then 2SG-liver rub concerning true already now you

tein bi-eseda bi-esinsa jeska me-osu-ib jera me-eka-ib also 2SG-split 2SG-self from 3SG-mother-2SG with 3SG-father-2SG noba bi-en skoita ona ke-if.
and 2SG-come towards man NOM-this
If you already truly desire (the man) now you separate yourself from your mother and your father and come towards this man.

- (20) Goga ge-erek ofog egens fob beda goga ge-erek you.two 2/3DU-like group one already then you.two 2/3DU-like ebirfaga mod gu ge-esinsa.

 head house to 2/3DU-self
 You two become like one group then you two become like the head of your own house.
- (21) Ge-odou ebriyi rot gegan ge-efarur mer efesi 2/3DU-liver split concerning 2/3DU.possess 2/3DU-work room inside teinefa oisouska goga fob.
 how according.to you.two already
 You two already understand about how it's up to you as to how you work in your room (lit. house).
- (22) En-adaij nou bua tein bi-oksons skoita me-osu-ib jera enough for you also 2SG-return towards 3SG-mother-2SG with me-eka-ib deika guru.

 3SG-father-2SG more NEG
 You shouldn't also return to your mother and your father.
- (23) Ob-ohuina tein en-adaij ongga o-ng-ksons skoita
 2SG-husband also DUR-enough REL PERF-return towards

 efenme-eka jera me-osu deika guru.
 possess 3SG-father with 3SG-mother more NEG
 Even your husband shall not have returned to his father and mother either.
- (24) Jeska goga ge-erek ebirfaga mod gu ge-esinsa fob. because you.two 2/3DU-like head house to 2/3DU-self already Because you two are already the head of your own house.
- (25)Jefeda insa ke-if didif di-ejeka goga oida ge-odou therefore ANA NOM-this I 1SG-ask you.two that 2/3DU-liver em-okora-uma ojgomu noba ge-em-ofij-uma RECIP-hurt-RECIP just and 2/3DU-RECIP-help-RECIP concerning ongkoska tein jeskaseda ob-ohuina a-ng-got also in.order.that 2SG-husband PERF-speak thing like beautiful

teinefa tein bi-oitij. how also 2SG-agree

Therefore, these aforementioned (things) I ask you two, that you must love one another and help one another beautifully, too, so that (if) your husband has spoken about something, you should also agree'.

Ainsoma! That's all!

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A grammar sketch of Sougb

GER P. REESINK

1	Intro	duction		183	
2	Phor	ology			186
	2.1	Conso	nants		186
	2.2	Vowe	ls		191
	2.3	Vowe	sequence	es	192
	2.4	The pr	oblem of	/gb/	192
	2.5	Tone			194
	2.6	Elision	of interv	vocalic /h/ and the high front vowel /i/	196
3	Mor	phology	and word	d classes	197
	3.1	Morphophonological processes		198	
		3.1.1	Connect	ing /e/	198
		3.1.2	Metathe	esis	198
		3.1.3	.3 Reduplication		198
		3.1.4	3.1.4 Nominalising <i>g</i> -		199
		3.1.5 Certainty -s		200	
		3.1.6 Pronouns		201	
	3.2	Verbs			202
		3.2.1	Transitiv	vity	202
			3.2.1.1	Hybrid verbs	202
			3.2.1.2	Intransitives and adjectival notions	202
			3.2.1.3	Transitives	203
		3.2.2	Verbal i	nflection	203
			3.2.2.1	Subject prefixation	203
			3.2.2.2	Irrealis	204
			3.2.2.3	Instrument	205
			3.2.2.4	Verb classes: e-, o- and a-stems	205

Ger P. Reesink, ed. Languages of the eastern Bird's Head, 181-275. Canberra: Pacific Linguistics, 2002.

182 Ger P. Reesink

		3.2.2.5 P	ronominal objects	207
		3.2.2.6 E	xperiential verbs	208
	3.2.3	Mental sta	tes	209
	3.2.4	The verb e	ba	212
	3.2.5	Some other	r morphological processes on verbs	213
		3.2.5.1 N	ominal marking -ingga	213
		3.2.5.2 V	owel substitution for emphasis	214
		3.2.5.3 V	erbs ending with -an	214
		3.2.5.4 V	erbs ending with -ro/lo	215
		3.2.5.5 V	erbs containing a nominalised form	216
		3.2.5.6 R	eciprocal	216
3.3	Nouns			217
	3.3.1	Alienable-	inalienable nouns	217
	3.3.2	Kinship ter	rms	219
		3.3.2.1 C	onsanguinal relations	219
		3.3.2.2 A	ffinal relations	220
	3.3.3	Plural mar	king	221
3.4	Counti	ng		223
3.5	Spatia	deixis		224
3.6	Spatia	orientation		226
3.7	Prepos	itions		230
3.8	Adverl	oials		234
	3.8.1	Temporal a	adverbials	234
	3.8.2	Locative a	dverbials	235
	3.8.3	Manner ad	verbials	235
	3.8.4	Focus adve	erbs	236
	3.8.5	Aspectual	adverbs	236
	3.8.6	Negative a	dverbs	237
	3.8.7	Intensifiers	8	237
3.9	Verbal	adjuncts		237
3.10	Questi	ons		239
	3.10.1	Polar que	stions	239
	3.10.2	Content q	uestions	239
		3.10.2.1	Inanimate object questions	239
		3.10.2.2	Animate object questions	240
		3.10.2.3	Locative questions	240
		3.10.2.4	Temporal questions	241
		3.10.2.5	Quantity questions	241
		3.10.2.6	Reason questions	242

	3.11	Conjun	nctions	242
		3.11.1	Cliticised conjunctions	242
		3.11.2	Lexical conjunctions	244
	3.12	The pa	article ai	245
4	Synta	ax		246
	4.1	Noun p	phrase	246
	4.2	Posses	sive noun phrase	246
	4.3	Clause	es	247
		4.3.1	Nominal predicate	247
		4.3.2	Verbal predicate	248
		4.3.3	Serial verbs	250
		4.3.4	Relative clauses	251
		4.3.5	Clausal objects	253
		4.3.6	Scope of negation	253
		4.3.7	Conditional sentences	254
	Appe	endix 1:	The use of kain timur	255
	Appe	endix 2:	Sogougb 'slave'	269
	Refe	rences		274

A grammar sketch of Sough

183

1 Introduction

In the eastern part of the Bird's Head Peninsula of Irian Jaya, Indonesia, there are three major languages spoken. Hatam, with approximately 16,000 speakers, covers the area in the Arfak mountains, north of the Anggi lakes to Manokwari. Sough, with approximately 12,000 speakers, is spoken in the area between the Anggi lakes and the Bintuni Bay. To the east of these two languages, one finds Meyah, spoken by approximately 12,000 speakers, and the smaller language group Moskona (about 6,000 speakers), which is closely related to Meyah. Moskona is spoken around Merdey. Meyah stretches from Merdey around Hatam to the area north of Manokwari (see Map 3).

Earlier data on these languages is found in Cowan (1953), who gives some lexical items, pronominal sets and a few small sentences of Mansibaber and Mantion-Manikion. These names are exonyms for Meyah and Sougb, respectively. Cowan recognises Manikion and Mantion as dialects of the same language, Mantion being the variant spoken around Bintuni, while Manikion is the more northern dialect. Voorhoeve (1975) first classified Mantion (Manikion) and Meyah (Meax in his spelling) as families of an East Bird's Head phylumlevel stock. Later (Voorhoeve 1987, 1989), he recognised Moskona as a dialect of Meyah, which formed the East Bird's Head Family together with Manikion, on the basis of 28% shared cognates. While Cowan (1953) did not have data on Hatam, Voorhoeve (1975) classified it with Borai as a stock-level family, and in his later publications, since he could not locate Borai, Hatam figures as a phylum-level isolate.

This confusing picture could be clarified considerably as a result of recent research.¹ Comparative data are published in Reesink (1996, 1998). Hatam is described in Reesink (1999). Data on Meyah can be found in Gravelle (1998) and this volume. This sketch will present data on the third major language, formerly known as Manikion (Mantion was considered to be a dialectal variant). The language is now known by the endonym Sougb.

The description presented here is based mainly on data collected during a stay of three and a half weeks (March 1998) in Sururei, a newly (since January 1998) established *Kecamatan* (sub-district) on the western shore of the western Anggi lake.² The western lake is called *Anggi giji* 'the male Anggi' and the eastern one is *Anggi gihida* 'the female Anggi'. Previously, I had collected a wordlist and two brief texts from a Sougb speaker from the village Catubou, who was resident in the Hatam village Minyambou. My main consultants in Sururei were Urias Ahoren and Petu Saiba. Both had been involved, with the missionary Dan Lunow (of The Evangelical Alliance Mission), in the translation of the New Testament into Sougb. The New Testament had been published in 1996 by the *Lembaga Alkitab Indonesia* (Indonesian Bible Society) with the title *Allah men Gos Dou Menau*.³ During a visit of ten days in November 1999, when I collected three more texts, various issues could be checked and clarified with the appreciated help of Petu Saiba, Yakonias Ahoren and Dan Lunow.

My fieldwork consisted in collecting wordlists and isolated sentences from various people. In addition I recorded a few texts: Jonathan Ahoren told me about the *kain timur*, the ceremonial cloths, widely traded throughout the Bird's Head, and how the Sougb people obtained *sogougb* (in Indonesian referred to by *budak* 'slave' or *hambah* 'servant'), while the headmaster of the primary school, Mesak Ahoren, told me an origin story. Both these texts were transcribed with the help of Urias Ahoren and Petu Saiba. The text of the New Testament being available, I tried to read and analyse what I found there and checked a number of constructions with Petu Saiba, which greatly helped my understanding of Sougb. Some further help I received from a Sougb–English wordlist of about 1,000 entries, compiled by Dan Lunow, which Gilles Gravelle had supplied me. This list suggests three contrastive tones: high, mid and low. It also suggests an opposition voiced-voiceless for the stops. A number of entries are clearly polymorphemic. The number of entries with initial consonants is considerably lower than vowel-initial items. These issues will be dealt with in the phonology and morphology sections.

Allah m-en g-os dou menau God 3SG-POS NOM-hold for new God's new promise

The verb os 'hold' together with the preposition dou 'to, for' denotes the verb 'to promise'.

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I would like to express my gratitude to the authorities in Jayapura, Manokwari, and the *Kecamatan* Sururei. There I enjoyed the hospitality of Pak Jandi and Pak Samallo, both teachers at the primary school. They not only shared their house with me during the three and half weeks of my stay in Sururei, but also cooked wonderful meals every day, which we enjoyed in the cosy kitchen.

The meaning of this phrase is:

The language is spoken in three dialects (see Map 3) between the Anggi Lakes and the Bintuni Gulf: (i) Sough misen 'the true Sough' is spoken in the sub-districts (Kecamatan) Anggi, Sururei, Merdey, Ransiki and Oransbari, and includes the leng hota, a dialect group mentioned by Haenen (1998:239), translated as 'those of the cold area'; (ii) Bohon, a name also mentioned by Voorhoeve (1989:92) and Haenen (1998:239) is slightly different from Sough misen, and is spoken along the coast, around Ransiki; (iii) Leng lou 'those of the warm area' refers to the southern dialect. This dialect is also mentioned by Voorhoeve and Haenen. The dialect Leng cicir, as mentioned by Haenen (1998:239), is a southern expression for what I recorded as Sre. It is a minor dialect group, in the far western corner of the Lou area, around Tembuni. It is quite distinct from the other dialects. Finally, the term Sougwir, as given by Voorhoeve (1989:92) presumably refers to all the Sough, since it it is made up of the noun sough and the plural suffix -ir. Even though these three main dialects are recognised, they cause no problem for mutual intelligibility. Perhaps, this would not hold for the small group of the Cicir or Sre.

Catubou is a major village where the three languages, Hatam, Meyah and Sough, meet. I found little or no differences between the data collected in 1995 from a speaker from Catubou and the material collected in Sururei.

Needless to say, a fieldwork period of just a few weeks in one village is not enough to be able to give a valid description of the various dialects. Nor does it provide enough exposure to a language to learn all the details of its phonology, morphological complexities or syntactic possibilities. The description I offer is meant as a preliminary account of but one of the dialects, with still a number of problems to be solved. I follow the practical orthography as used in the Sough New Testament.

One of the first things one learns in a fieldwork location is how people meet and greet each other. While in the Hatam area I could do with endlessly repeating the same item acemo (with the word cem 'also' clearly present) to whoever I met, in the Sough area I immediately had to start counting the number of people I met. The greeting consists of inflected forms of the inalienably possessed noun 'eye'. One is forced to choose between the three number categories the language distinguishes:

ab-aires2SG-eyemej-aires2PL-eyemaj-aires2DU-eye

The greetings have an additional (utterance-final) vowel -o, and the resulting penultimate syllable is shortened; /ai/ > /i/, or elided altogether: abaireso has the variants: abireso, abires, abres(o) with analogous changes for the dual and plural forms.

One day, a group of visitors from the neighbouring village Trikdaga, came by and supplied me with alternative pronunciations of *dougwo* 'block.off' as [tougwo] and [Drikdaga] for the name of their village, providing evidence that the voicing opposition does not exist. One of them was a Meyah speaker who gave me the Meyah equivalent for *abaireso*: *bitejo* 'your eye'.

Leave-taking was done with the following phrases:

Emen em-eda-nga kaba ab-ires-o. we.EXC 1EXC-go-that then 2SG-eye-IND We're going now, so goodbye. Yen y-eda-nga, mej-ires-o. you.PL 2PL-go-that 2PL-eye-IND You go, goodbye.

The forms of greeting are not the only similarities between Sough and Meyah. Their lexicons show at least 30% cognates, showing a rather close genetic relationship. A comparison of the languages of the eastern Bird's Head is provided in Chapter 1 of this volume. Here, it will suffice to state that comments in an origin story (given by Mesak Ahoren) suggest a close connection between the Sough, Meyah and Hatam. The origin of these three ethnolinguistic groups, according to this story, is found between Bintuni and Merdey. This location agrees with the area specified by Pouwer (1958:50), around the Sebyar river.

The names used by Sougb people to refer to their own language and those of other groups are:

Sougb mer	the Sougb language
Sana mer	the Meyah language
Ijom mer	the Hatam language
Morei mer	the Borai (Mansim) language
Bei mer	the Indonesian language
Bom jouh mer	the language of Timor

2 Phonology

Sough has at least ten phonemic consonants and five vowels. The orthography used for the published New Testament suggests that there is an opposition between voiced and voiceless stops. This impression seems to be confirmed when eliciting words in isolation. However, there are three reasons to doubt the validity of this opposition. Firstly, the responses given in isolation are not consistent. Secondly, items which in isolation are given with voiced stops, appear in connected speech frequently as voiceless. Thirdly, Sough speakers do not maintain the voiced-voiceless opposition when speaking the local variant of Indonesian.

2.1 Consonants

A provisional inventory of Sougb consonants is given in Table 1. Since the voicing distinction for the stops is questionable, voiced and voiceless variants have been listed. Similarly, no phonemic contrast between r and l could be established.

	bilabial	alveolar	palatal	velar	laryngeal
stops	<i>p</i> ∼ <i>b</i>	t ~ d	c ~ j	k ~ g	
fricatives	f	s			h
nasals	m	n			
liquids		r ~ l			
approximants	(w)		(y)		

Table 1: Consonants

Whether the two approximants /w/ and /y/ can be assigned consonantal status, will be discussed separately. Also, the status of gb will be discussed in a separate section, after the consonants and vowels are presented.

/b/ is realised as [b] word-initially and intervocalically:

[ba] bird
[ban] you (SG)
[bɔgɔ] sky, heaven
[bɛsa] bird of paradise
[tɛbej] star
[taiba] above

[p] word-finally:

[dɛp] on top [ɔp] to put [ɛp] to cry

/d/ is realised as [d] word-initially and intervocalically:

 [dan]
 I

 [dou]
 to, for

 [dερ]
 on top

 [dik]
 towards

 [ɔdɔ]
 to carry (in hand)

[ɛda] to go [gida] female

[t] word-finally:

[ot] to fold (cloth)
[ɛt] to eat
[deit] again

In isolation, a contrast seems to exist between [toua] 'also' and [dou] 'to, for', although the latter form in connected speech is sometimes [tou]. Another problem is that [atou] 'to sleep, lie down' is never realised as [adou]. And [ɔti] 'to demolish' is realised as [ɔt] in connected speech, but not as [ɔdi]. Word-finally, I have not encountered a voiced alveolar stop, in spite of the spelling *lusud* 'people', and other items.

/c/ Although in isolation a difference between [ɛica] 'hit' and [ɛija] 'to call' is suggested, or between [ɛcic] 'to tell, count' and [ɛcij] 'to return', I have not been able to ascertain a clear opposition for the palatal series either. For example, there are alternative realisations of [ouci] and [ouji] for 'to gather s.t.', or [cicir] and [jijir] for 'sleep(y)'.

initial:

[cum] in a while [cinogo] land, place [cabε] day after tomorrow

```
medial:
```

```
      [εica]
      hit

      [εica] ~ [εija]
      call

      [ouci] ~ [οuji]
      gather

      [ucina]
      road

      final:
      [εic]

      take
```

 $[ind \infty] \sim [ind \infty]$

Word-finally, the palatal stop may be released or checked: [εc] or [εc'] 'to sneeze; to shoot (with gun); walk; peel'. Following the first person possessive prefix, some opposition seems to occur, as suggested by:

```
[injɛmowa] for in-jemowa '1SG-grandfather' for in-cemaga '1SG-brains'
```

my front

But I have also recorded [inctemaga] for the latter item. Clearly, more data, with carefully monitored contexts is necessary before definite statements regarding the status of these sounds can be made.

/k/: word-initially and finally the voiceless variant is preferred:

[kaba]and then[εk]to drink[mok]sharp (point), thorn[arεk]which (relative clause marker)

Intervocalically the voiced velar stop occurs, freely alternating with the voiced fricative:

[maga] body [sɔgɔ]/[sɔɣɔ] tree [mɔɣut] empty

Words like [gida] 'female', [giji] 'male' are spelled with <g> and indeed are often pronounced with a voiced stop, but realisations such as [kita] and [kiji] are also attested.

The two nasals occur in all positions:

/m/ [maga] body we (EXC) [emen] [ouma] to buy [deiñom] enough to die [mcmc] /n/ [naugw] for, in order to [nanan] we two (INC) [men] mountain

189

The palatal and velar nasals are phonetically attested, but do not seem to have phonemic status. The palatal nasal $[\tilde{n}]$ occurs only following the vowel sequence [ei] or the high front vowel,⁴ as in:

[eiñana] many [iñɔmus] bow [iñɔmda] lightning

Since the bilabial nasal does occur in the same position [eimiman] 'to be amazed', and [aimo] 'to follow', I assume it is the alveolar nasal that is assimilated to the palatal position.

The velar nasal occurs before a velar stop:

[engesrougw] to make a feast [danga] thus [inga] this one which [angi] name of lake

In the section on morphology (see §3.1.4) evidence is given that the velar nasal can also be an assimilation of the alveolar variant with the nominaliser /g/.

Another instance of [ŋ] is found when words ending with /gb/ (see below) are followed by a nasal: se Sough mer 'with Sough language' = [sesounmer]. The only other instance of [ŋ] in the word aingmo 'get into (canoe, car, etc.)' could be explained by invoking a compounding of aigh and mo, whose meanings are not clear.

Of the fricatives in Sough, /s/ and /h/ occur in all positions, while /f/ does not occur word-initially:

/s/ word-initially:

[sougw]name of the language group[sε]at, (in)to[su]bee

medially:

[eisaugw'] to ascend [ousa] to help

[esic] to hit, to be near

finally:

[mos] skin [dous] only

[ES] to shoot, to plant

/h/ word-initially:

[haη] thus[hwεj] pig[hinogo] snakes

The only exception I have noted is [einesa] 'to enter'.

medially:

[aha] to look after, to raise (animals)

[shoma] to pull out weeds

[ɛhi] to fell

finally (sometimes alternating with [x]):

 $[ersh] \sim [ersx]$ dry $[sh] \sim [sx]$ to fly [mih] dog

/f/ is bilabial voiceless fricative $[\phi]$, which is not attested in word-intial position;

medially:

[ουφοτοhο] intelligent, wise [οφο] to buy a bride [ogouφu] white

finally:

[ou ϕ] to close (door, wall)

It is at least suspect that $[\phi]$ occurs only following [ou]. There are no instances in my data of this sound next to other vowels.

The liquid [1] and the trill [r] are freely interchangeable, with maybe a preference for [1] in word-initial position and [r] intervocalically and finally.

initial:

[len] they
[lo] garden
[lona] day

medial:

[ara] what [marij] breast [ɛhirɔn] to search

final:

[mer] voice, word, language

[eiktor] to lean against

Normally, the subject prefix for third person plural is pronounced as [l], as in [l-ɛsa] 'they stand', and the plural suffix on human nouns as [r], as in [ind-ihi-r] 'my-child-PL', but in connected speech one can hear unpredictable alternatives, as in Jonathan's account of the *kain timur*: [ka r-eija] 'and they call' and both [timur] and [timul] 'east'.

Given the lack of opposition between the two liquids (quite unremarkable for a Papuan language), the recording of [erleic] 'zest, industrious' poses a question with regard to its morphological constituents. In other contexts, final [r] and initial [l] are merged into one [r]. Why a form as [erleic] can surface is not clear.

Consider the elicited examples (1)–(3). The word for 'garden' is [lo], the negative is sentence-final [ero], with the initial vowel elided, when the preceding word ends on a vowel.

- (1) Ban b-ahan lo. you 2SG-cut garden Clear the garden.
- (2) Ban b-em-ahan ro. you 2SG-IRR-cut not Don't cut (grass, weeds).
- (3) Ban b-em-ahan lo ro. you 2SG-IRR-cut garden not Don't cut the garden.

This last utterance is rendered as [bemahanlolo] or [bemahanloro]. Presumably, it could also have been [bemahanroro].

2.2 Vowels

Sough has five vowels: $i\sqrt{y}$, i/e, i/e, i/e, i/e, i/e. A restriction on the distribution is that the high vowels i/e and i/e are not found in initial position of verb stems, see §3.2.

/i/ is in most positions realised as a high close vowel [i]. In unstressed syllables, the quality may be slightly more open, as [I].

```
    [ititogIni]
    now

    [ij]
    canoe

    [mih]
    dog

    [Indihi]
    my child

    [dik]
    towards

    [mIsen]
    right (hand), true
```

/e/ is a mid open front vowel [ε]:

[ɛp]to cry[ɛba]to plant[ɛn]to come, to say[ɛsInsɛn]to repair (fence, bridge, car)

/a/ is an open central vowel, which in closed syllables is realised as somewhat more

closed v:

[ahen] to cut (grass)

[dek] like

[mekto] younger brother

[maga] body

/o/ is a mid open back vowel [ɔ]:
[ɔp] to put

[sogo] to put [sogo] tree [okdoc] to stop

192 Ger P. Reesink

/u/ is a high back vowel:

[uφ] thatch

[lusut] people

[sul bee

2.3 Vowel sequences

The vowel sequences allowed in Sougb involve only the high vowels /i/ and /u/ as second elements to any of the three lower vowels, but the combination has to agree in front or backness. Thus, [eu] and [oi] are unattested. The lower vowels [ϵ] and [δ] may change their quality to somewhat higher [ϵ] and [δ] in these contexts.

```
/ei/
   [deyt] / [deit]
                     again
   [eya]
                     to see
   [eysa] / [eysa]
                     to get up
/ou/
   [owan]
                     to want
   [owma]
                     to buy
   [dow]
                     to, for
   [towa]
                     also
/ai/
                     visible
   [aynyes]
   [tayba]
                     above
   [ayser]
                     crocodile
/au/
   [awcir]
                     butterfly
   [ahaw]
                     to be afraid
   [daw]
                     from
```

At least in the case of some items, such as [deit] 'again' and [oun] 'to press', the high vowels may receive full pronunciation. This is also the case in the morphologically motivated sequence [ao] in forms like [d-a-os] '1SG-INS-hold' (see verb paradigm in §3.2.2.4).

In the virtual absence of word-initial approximants (I have no instances of words beginning with [w]; and the words with [y] involve exclusively the second person plural (or dual)), I am inclined to deny these approximants the status of consonant. The high vowels in the sequences as a matter of course tend to be non-syllabic (Ladefoged & Maddieson 1996:323).

2.4 The problem of /gb/

Just as the name of the language group, many other words are spelled with final gb. In isolation these words are pronounced with a checked bilabial-velar stop, which I transcribed

as [gw]. Characteristic for this sound is a clear rounding of the lips, while the back of the tongue has to touch the velum. Consider:

(4)	ougb	[ougw [¬]]	to run, flee
	esrougb	[esrougw]	warm, hot
	smougb	[smougw]	fire
	arougb	[arougw]	to push, to command
	naugb	[naugw ¹]	for, in order to
	eisaugb	[eisaugw]	to ascend

Speakers are not content with a pronunciation [ouw] or [auw], that is, without velar closure with the back of the tongue, for these items. There is indeed a contrast between [arouw] 'centipede' and [arougw'] 'to push, command', even though the velar is hardly noticeable. Moreover, some speakers explicitly commented that their language was hard to learn for outsiders because of the [gebe]. To what extent they are now influenced by the orthography for such items, is difficult to ascertain, but in some cases my suspicion is that gb is claimed to be present, when in fact it is not. I will present the facts as I have gathered them, and suggest a preliminary conclusion to what seems to be an interesting topic for further careful phonetic and phonological research.

Firstly, notice that gb only occurs word-finally and only following the high back vowel, mainly when it is an offglide to the lower back vowel /o/ or /a/. There are a few words, which are claimed to have the same final sound, following only the high back vowel, as in:

(5) ucugb return
etugb deaf
cugb connecting beam in house

But the phonetic realisations I have recorded for these items are clearly [up], with the final bilabial stop either checked or released. But a form such as ecicugwen, orthographically for 'he returns again' (ecij 'return' + ucugb 'return' + en 'come') suggests that ucugb 'return' does indeed end with a labiovelar stop, whose labial component is realised before a vowel. This would mean that gb is indeed (phonologically) present in forms with the single high back vowel.

Secondly, intervocalically there are instances of [gw], [gbw], or even of [yw], but not of [gb], as in [bougwena] 'fly (insect)' and [emaugbwan] or [emaugwan] or [emauywan] 'we (EXC) all', and when the items in (4) are followed by a vowel, they are realised with [gw], as in:

(6) [naugwara] for what (= why) [ougwIn] to run hither

Thirdly, when these forms are followed by a stop, I have obtained both a plosive and a fricative realisation:

(7) ougb [ouhda] to run away [oukdau] to move from

Fourthly, even for isolated forms there is considerable variation (as is the case for voiced and voiceless stops). For example, for *naugb* I recorded both [naugw] and [naukw]. Similarly, for 'fire' *smougb* [smougw] and [smoukw], while for *esrougb* 'warm', the same

two speakers agreed in their realisation of [ɛsloup'], with no trace of the velar, but with the bilabial stop either checked or released, just as in the case of words with single /u/.

Fifthly, when gb-items are followed by a (bilabial) nasal, the final consonant becomes a phonetic velar nasal, as in:

- (8) se Sough mer = [sesouŋmer]
 in Sough language
 in Sough
- (9) Naugh maman ma-t-a? = [nauŋmamɐnmata] for we.INC 1INC-eat-Q
 For us to eat?

Given (1) the variants of realisation in isolation, (2) the assimilation of gb preceding a vowel to [g(b)w] or $[\gamma w]$, (3) the assimilation to $[\eta]$ preceding a nasal, and (4) the restricted distribution, namely following a high back vowel, whether as only vowel or as second element in a vowel sequence, I interpret this sound as a phonetically conditioned allophone of the velar stop. This stop is labialised as a result of persevering rounding from the preceding high back vowel. As yet another example, consider the realisation of hugahani 'the name of an expensive type of $kain\ timur$ '. In the second line of Sogougb (see Appendix 2), the speaker labialises the velar stop, which in isolation is [hugahani]: $[d-oume\ se\ hukwahanəhəm]$ '1SG-buy with cloth one'.

That labialisation only occurs on the velar stop may be explained by the natural affinity between lip rounding and backness (see Ladefoged & Maddieson 1996:292, 356). What is peculiar about this phenomenon in Sough, is that this language, apparently, forms an exception to the generalisation that labialisation is more frequently conditioned by following vowels than by preceding ones. And that 'in many languages with labialised consonants the set of syllable-final consonants, if any, does not include labialised ones' (Ladefoged & Maddieson 1996:357). This is exactly the position, however, where the labialised velar stop is so characteristic for Sough. This language then, can be quoted as another example, besides Pohnpeian, for the rare occurrence of final labialisation.

2.5 Tone

Sough has most likely a pitch-accent system. There are a number of monosyllabic lexical items which contrast in tone. But even in the case of multiple homophones, I could only detect two tone levels, as illustrated in:

(10) mog meat, flesh (ind-ug '1SG-flesh'; me-ug '3SG-flesh' > [mɔk])
mog cup (loan from Dutch)
mog thorn, sharp

The first two items do not distinguish in pitch, but both contrast with the third item. Three speakers pronounced short test sentences, which unanimously were realised as [mók] 'thorn' with high pitch, and both other items with low pitch.

(11) Dàn d-eícà móg. [low-high-low-high]
I 1SG-hit thorn
I got stung by a thorn.

- (12) Dàn d-eìc móg. [low-low-high]
 I 1SG-take thorn
 - I take a thorn.
- (13) Dán d-èt mòg. [high-low-low]
 I 1SG-eat meat
 I eat meat.
- (14) Dàn d-éc mòg. [low-high-low]
 I 1SG-take cup
 I take the cup.

The consistent realisation of (15) and (16) by three speakers suggests that ou 'to wear' has low tone, and ou 'to greet' has lexically high.

- (15) Dan d-ou un. [dò-ún] = [low-high]
 I 1SG-wear loincloth
 I wear a loincloth.
- (16) Dan d-ou yen. [doú-yèn] = [high-low]
 I 1SG-greet you.PL
 I greet you.

Also, small test sentences for the great number of meanings obtained for the form -ec did not yield more than two pitch differences. The meanings of 'to pick' (17) and 'to walk' (18) were both realised with low pitch:

- (17) Dan d-èc tram.
 I 1SG-pick corn.
 I picked corn.
- (18) Dan d-èc. I 1SG-walk I am walking.

The meanings of 'to peel' (19), 'to open' (20), 'to sneeze' (21), 'to light' (22), and 'to shoot (with gun)' (23) all yielded high pitch:

- (19) Dan d-éc mos dau. I ISG-peel skin from I peel (a banana).
- (20) Dan d-éc misis.
 I 1SG-open door
 I open a door.
- (21) Dan d-éc.
 I 1SG-sneeze
 I sneezed.
- (22) Dan d-éc smough.

 I 1SG-light fire
 I light a fire.

(23) Dan d-éc ugwodi.

I 1SG-shoot cuscus
I shot a cuscus.

While my consultants suggested a difference in voicing for the palatal affricate/stops, I suspect the main difference may be in pitch-accent, as the test utterances of the three speakers indicate. As mentioned before, in isolation it is possible to record a contrast in voicing, but in natural speech the opposition is much less clear. I have instances of both voiced and voiceless realisations of stops of every articulatory position. Consider the contrasts between ecic 'to tell (a story)' and ecij 'to return' and eica 'to be hit by/touch something' and eija 'to call'. One speaker repeated the items in isolation, and gave both [decic] and [decij] for 'I return'. The contrast seems to be that ecic 'to tell, count' has a lower pitch on the first syllable than ecij 'to return' (as also suggested by Lunow's wordlist: 'to tell, count' has [mid-mid] and 'to return' is marked as [high-mid]). The following examples suggest that the pitch on the free pronoun and the final syllable of eic/ja is irrelevant, with the contrastive pitch located on the first syllable of the verb. The three speakers are consistent in the realisation of low pitch on both syllables of eija 'to call' and high pitch on the first syllable of eica 'hit', while there is variation between speakers with respect to the other syllables, indicated by low/high or low/low in (24) and (25).

- (24) Dan d-eica ... [dàn deí.ca] = [low-high-low/high] I 1SG-hit I am hit by ...⁵
- (25) Dan d-eija. [dán deì.ja] = [high-low-low/low]
 I 1SG-call
 I am calling.

It is obvious that much more detailed research would be needed to make a definitive statement on the relevance of tone in Sougb. At this moment, all that can be said is that Sougb has at least two contrastive tones, which operate as a pitch-accent system. On polysyllabic words, only one syllable is required to carry the contrastive pitch. This leaves the possibility that the language has in fact more than two contrastive pitch levels.

2.6 Elision of intervocalic /h/ and the high front vowel /i/

As a final comment on the phonology a ubiquitous process of elision needs to be mentioned. Quite frequently intervocalic /h/, which is present in items given in isolation, is elided in running speech. For example, *ohut* 'weave' (also by metonymy 'build a house') becomes [out], as in:

Sogo eica en me-sra.
wood hit 3SG 3SG-arm

A piece of wood hit his arm.

One of the bystanders said that in this sentence, one could also use the verb ogod 'hit', which is the more usual transitive 'hit', while eica seems to be used for accidentally being hit by something (in Indonesian translated as kena).

The verb eica 'hit' is used, for example, in the answer to my question as to how someone's arm got broken:

(26) Len l-ouwan l-out tu menau. they 3PL-want 3PL-build house new They want to build a new house.

The vowel following /h/ may also be elided, especially when it is identical to the preceding vowel (in the latter case it is, of course, indeterminate which one is elided). For example, I recorded [ɔbɔgougw] for 'to tear' or 'to be torn'; but in Appendix 1 ((62)) it is given as [ɔbɔhoukougw]. Other examples are:

(27)	[aŋgi mohu]	[aŋgimou]	Lake Anggi
	[lɔnɛhibi]	[lɔnɛbi]	tomorrow
	[tatehebi]	[tatɛbi]	shortly

Another example is m-ohora '3SG-leg' + beda '?' meaning 'knee'; it is pronounced as [mɔhɔrbɛda], [mɔrbɛda] or [mɔhɔbrɛda]. The latter variant shows some metathesis, which seems to have some wider application (see §3.1.2).

Not only /h/, but also the high front vowel /i/ is easily elided, yielding consonant clusters. Consider:

(28)	ecinaga	[ɛcnaga]	to know
	dagiro	[dagro]	how
	me-sira	[mɛsra]	3SG-hand
	eihiweda	[eihwɛda]	to go, leave
	sirebed	[srebet]	I am hungry (sir is used for 'famine'), see §3.2.2.6.

Elision may involve whole syllables, as in:

Especially, final /i/ is either rendered voiceless, or completely elided, with the result that some lexical items become virtual homophones: iji 'sugarcane' is often pronounced as [ij], which is the lexical form ij 'canoe'; likewise third person possessor for 'child' or 'offspring' is mehi, but it is often realised as [mɛhɪ] or [mɛh], especially in the sense of 'leaf'. It then forms a minimal contrast with mih(i) 'dog' (compare Meyah efeyi 'leaf' and mes 'dog', data from Gravelle pers. comm.; see also this volume)

3 Morphology and word classes

In this chapter I report the morphological phenomena which I observed, along with a classification of lexical categories. Firstly, some morphophonological processes are presented, including the forms of the free pronouns, which will be needed to appreciate the bound pronominal forms on verbs and inalienable nouns. For most categories it seems appropriate to include some syntactic information at the same time. For example, when discussing the question words that figure in content questions, the possible syntactic positions are illustrated right away. Since this sketch is a preliminary account of the Sough language, I have included some sections on some morphological patterns, whose validity is rather uncertain. Interpretations are, of necessity, speculative.

3.1 Morphophonological processes

There are a few observations regarding some morphophonological features which can be best presented before the various word classes with more specific morphological processes are discussed.

3.1.1 Connecting /e/

In isolation, many verbs and nouns are given with a final -a. When these forms figure in connected speech, that is, when they are not followed by a pause, this vowel changes to the open front vowel $[\varepsilon]$. Thus:

- (30) lona hom = [lonεhom] day one one day
- (31) L-ouma minc. = [loumeminc]
 3PL-buy cloth
 They are buying cloth.

Given that the preposition se 'at' is realised as sa when its nominal object is not expressed, the actual process could be reversed. That is, the vowel/e/ could be part of the lexical item, which is being replaced by /a/ indicating some phrase boundary (see also §3.7). The realisation of Indonesian piara babi 'look.after pig' as [biarɛbabi] would, however, argue for the first analysis (see also the vowel change in verbs with object clitics in §3.2.2.5).

3.1.2 Metathesis

Besides the form [mɔhɔbrɛda] for 'knee', given in §2.6, I have recorded a few more instances of what appears to involve metathesis. I will give a few instances.

- (a) Where some informants had given *ouci* for 'to gather, collect', one informant produced:
 - (32) Dan d-oic-odo sansun.

 I 1SG-gather-carry clothes
 I collect clothes.
- (b) A short answer to a question about the location of something is given as [skwada] 'it's overthere' from *suk-ada* 'at-up/west'. Similarly, a less polite form to refer to a 'woman' *gihida*, which phonetically is [gihida] or [gida], is [skwida], which I suspect is *suk g-ihida* 'at NOM-female'.

To what extent metathesis is a general feature of the language is difficult to say on the basis of the limited data, but see for another example $gaih \sim gahi$ 'down there, towards the east' in (149), §3.5.

3.1.3 Reduplication

There are a number of items which exhibit reduplication, conveying the sense of intensification. There are instances of full reduplication as in: mohumohu 'wet', clearly from

m-ohu '3SG-liquid'; and *mena mogmog* 'evil spirit' (from *mog* 'sharp, pointed'). Other items exhibit partial reduplication with some morphological adjustment in some cases. On the basis of the limited data, it is not possible to formulate a precise rule.

(33)	menau	new	menenau	very new
	ogoufu	white	ogou(f)goufu	very white
	eigo(uh)	good	degigo(uh)	very well ⁶
	mohon	old	mohonon	very old
	ogom	heavy	ogomgom	very heavy
	ogor	black	ogorgor	very black
	(no single t	form attested)	ebetbet	to explain

3.1.4 Nominalising g-

The prefix g-, regularly pronounced as [k], is labelled 'NOMinaliser'. It is used to mark adjectives or verbs which have a specifying function. For example:

- (34) gida omomtom woman wrinkled a wrinkled woman
- (35) gida g-omomtom
 woman NOM-wrinkled
 the woman who is wrinkled
- (36) Sijo eisaugb lohos # g-eigou / b-eic dou emen # thanks ascend warm.day NOM-good 2SG-take to 1EXC Thank you for the nice day. The good one you give to us. (from a prayer Urias offered at the beginning of one of our sessions)

Some nominalised forms function as elements in complex verbs, as discussed in §3.2.5.5. It also appears on forms such as g-iji 'male' and g-i(hi)da 'female' (see (124) in §3.3.2). It seems to be obligatory on demonstratives (see §3.5), and very likely it is present in the conjunction kaba 'then', as in (39), given the attested form aba 'still, yet', which occurs in (37) and (38).

- (37) Dan d-en-en aba.
 I 1SG-come-RED just
 I have just come.
- (38) Ind-ihida godeh m-aga ogom aba.

 1SG-daughter child 3SG-body heavy still
 My younger daughter is still pregnant.
- (39) Cum kaba en eic kepta a-(e)tkwa en m-en hwej. shortly then 3SG take machete INS-cut.up 3SG 3SG-POS pig In a little while he'll take the machete and cut up his pig.

The adjective *eigo* 'good' is variously realised as [eigouh] or [eigo]. It clearly forms the basis for the adverb *degigo* with the same alternative pronunciation of the final syllable.

Consider the differentiation of 'eyebrow' and 'eyelash'. The generic term is -icicip modi, in which modi or mot means 'hair', and -icicip is not clear ('eye' is -aires). Now, when eb taiba means 'being above', the expressions for 'eyebrow' and 'eyelash' can be interpreted as containing relative constructions:

- (40) a. me-cicip k-eb taiba 3SG-? NOM-do above eyebrow
 - b. *me-cicip k-eb tainya* 3SG-? NOM-do below eyelash

This nominaliser apparently does not just occur as a prefix to verbs, but it may also be suffixed to pronouns or the noun ara 'something' to mark relative pronouns (see also §4.3.4 on relative clauses). The relative pronoun based on ara is areg (note that the second vowel |a| is replaced by the front vowel $|\epsilon|$, according to the rule in §3.1.1). The alternative expressions of a relative clause (41a) and (41b) are given as equivalent in meaning. In case the relative pronoun is present, the possibility of g- prefixed to the verb is explicitly denied, suggesting that indeed the final element of the relative pronoun is the very same nominaliser as the verbal prefix. Attached to the third person plural pronoun len the result is a final velar nasal $[l\epsilon n]$, as in (42).

- (41) a. godeh hom g-ough-da dau m-ena child one NOM-run-go from 3SG-father a son who ran away from his father
 - b. godeh hom are-g ougb-da dau m-ena child one what-NOM run-go from 3SG-father a son who ran away from his father
- (42) Len-g timur l-en l-odo minc se Manukwar habi they-NOM Timor 3PL-come 3PL-carry cloth to Manokwari then len-g Sough l-em-ouma.
 they-NOM Sough 3PL-IRR-buy
 After the (people) of Timor brought the cloths to Manokwari, the Sough bought (them).

3.1.5 Certainty -s

There is some evidence for a clitic -s, which seems to convey a sense of certainty. It occurs on a few verbs, as well as sentence-finally, following whatever constituent. Whether we are dealing with an identical morpheme in these cases is not more than a conjecture. I suspect that -s on the verbs en 'say' (43) and edi 'throw' (44) adds an element of certainty, changing the meaning of the verbs into 'reveal' and 'transgress' respectively. In (45) the certainty -s is a sentence-final clitic, attached to the noun phrase hosei ingma 'some fish', yielding the spelling hosei ingmes, apparently due to the connecting /e/. My consultant's metalinguistic comment with regard to (45) was that -s made the event more certain. In the case of a sentence-final -s, the verb has to be marked with the irrealis prefix em-.

- (43) Dan d-en-s ind-ug ainyes.
 I 1SG-say-CERT 1SG-body visible
 I reveal myself.⁷
- (44) Ban b-edi-s dau Allah m-en gomomna. you 2SG-throw-CERT from God 3SG-POS law You transgress God's law.
- (45) Yen y-em-a-(e)ic hosei ingma-s.
 you 2PL-IRR-INS-take fish some-CERT
 You will definitely catch some fish with (it). (from John 21:6)

The same marker occurs also on topical demonstratives in non-verbal clauses (see §4.3.1).

3.1.6 Pronouns

The free pronouns (as well as the bound pronominal forms clearly related to them) distinguish three number categories and four persons, because for first person plural and dual the opposition inclusive-exclusive is observed. The dual forms clearly consist of the plural pronouns with the diagnostic vowel /a/ in stead of /e/. Some peculiarities of the inclusive first person pronouns cannot be explained as yet. In isolation all pronouns are given with a final i, which in natural speech hardly ever surfaces. The free pronouns can be suffixed with -(i)n, depending on whether the high vowel belongs to the pronoun stem or to the suffix. The meaning is either reflexive or, more generally, emphatic (translated by Indonesian sendiri 'self'):

(46)	1SG	dan(i)	danin
	2SG	ban(i)	banin
	3SG	en(i)	enin
	1DU.EXC	aman(i)	amanin
	1DU.INC	nanan(i)	nananin
	2DU	yan(i)	yanin
	3DU	lan(i)	lanin
	1PL.EXC	emen(i)	emenin
	1PL.INC	maman(i)	mamanin
	2PL	yen(i)	yenin
	3PL	len(i)	lenin

The related bound forms will be presented in the paradigms showing verbal and nominal inflection (see tables in §3.2.2.4 and §3.3.1).

⁷ The form ainyes means 'visible', as in:

Trikdaga em-eb ainyes ero. Trikdaga IRR-do visible not Trikdaga is not visible.

3.2 Verbs

Sough verbs form a distinct word class on the basis of some clearly morphological criteria, as well as syntactic properties. Verbs in Sough are restricted with regard to their initial phoneme. There are no verbs whose stem begins with a consonant, and of the five phonemic vowels only vowels specified for [-HIGH] are allowed, that is, /e/, /o/ and /a/ (see §2.2).

A second morphological criterion involves the person-number prefixes which have a different shape from those employed on inalienably possessed nouns and the possessive pronouns required for alienably possessed nouns (see §3.3.1).

Thirdly, verbs allow two other inflectional categories, expressed by prefixes: *em*-indicates irrealis, and *a*- signals that an instrument is used.

3.2.1 Transitivity

On the basis of syntactic valency a distinction needs to be made between transitive and intransitive verbs. While the former may feature in a clause without an explicitly identified object, the latter may not have a direct object. While all verbs may be marked with irrealis em-, it seems only transitive verbs can have the instrument prefix a-. But the exact range of applicability of this category is still an open question. There are just a few verbs which appear to be used both transitively and intransitively. Whether more verbs need to be included in the subclass of hybrid verbs would require further research.

3.2.1.1 Hybrid verbs

The three verbs given in (47) can be used both transitively, as in (48a), and intransitively, (48b):

- (47) ous break (stick, arm, etc.)
 obrugb break (glass, other brittle stuff)
 obogougb tear (cloth)
- (48) a. Dan d-obogough sansun.

 I 1SG-tear clothes
 I tore my clothes.
 - b. Minc obogough hob.
 cloth torn already
 The kain timur is already torn.

This does not hold for ekris 'tear (paper)', which is only transitive:

(49) *D-ekris surat.*1SG-tear paper
I tore the paper.

3.2.1.2 Intransitive verbs and adjectival notions

Some typical intransitive verbs are:

(50) obohuba to laugh
ekeka to groan
ebrera to fall (of leaves)

Most of the items expressing adjectival notions would be included in the class of intransitive verbs. The initial vowel is diagnostic. Most items obey the general rule for verbs, that is, only the vowels e, o and a are permitted, as in (51):

(51)	eigo	good	ecgu	bad
	agas	long, tall	agarougb	short
	oumerema	thick	ecincuwa	thin
	ogom	heavy	eijoh	light
	esrougb	warm	emtreta	cold
	ogor	black	ogoufu	white

Some 'adjectives' begin with m(e)-, suggesting that these forms are basically nominal with third person singular prefix (see §3.3.1). For example, while eroh 'dry (of clothes)' follows the verbal pattern, its antonym, 'wet', is mohumohu, which may well be formed on the basis of a stem uhu, as it occurs in duhu 'water', and in $mes\ mohu$ 'nose liquid' = 'snot'. Similarly, 'slippery' is edeskwesi, while its antonym 'rough (of surface)' is mosmos, which is probably a reduplication of '3SG-skin' (1SG-skin = ind-us, 2SG-skin = ab-us, etc., see §3.3.1). Some other adjectives beginning with m(e)- are:

(52)	medagam	big	mougrei	small
	meneisa	deep	metbo	shallow

Some verbal notions, those referring to physiological states and mental (or emotional) states, are not expressed by simple verbs. They require some complex constructions which involve both a noun and a verb. These are presented later (§3.2.2.6) to show how they relate morphologically and syntactically to simple verbs.

3.2.1.3 Transitive verbs

As mentioned above, transitive verbs may feature in a clause without an explicit object. But when they are given in isolation, or when an object is unspecified, they require an object. This object is then the generic noun *ara* 'something' (see also §3.2.2.5 on object clitics and §4.3.2). For example:

(53) L-egip l-em-en-ara dou-r buma.

3Pl-unmarried.male 3PL-IRR-say-thing to-3PL not.yet

(When) the unmarried men are not yet speaking to them (= women).

(Appendix 2, (26))

3.2.2 Verbal inflection

3.2.2.1 Subject prefixation

When a verb functions as predicate in a clause, it requires a prefix to indicate the personnumber category of the subject. These are different from the possessive prefixes, given in §3.3.1. As is the case for the free pronouns, the dual number has the diagnostic vowel a, which for some reason is also present on the first person plural inclusive. The column [stem] in Table 2 (see §3.2.2.4) shows that the stem vowel of e-verbs is elided under the dominance of this vowel.

3.2.2.2 Irrealis

The verbal prefix em- seems to be best glossed as 'IRRealis'. The exact meaning of this category is not easily determined. There are contexts in which the use of em- is obligatory, while in other contexts, having to do with some future reference, there is apparently a (pragmatic) choice, but the conditions are not quite clear. I present the evidence to hand.

The verb is obligatorily prefixed with irrealis *em*- when it is negated, compare:

- (54) Dan d-ecinaga hob.
 I 1SG-know already
 I already know (it).
- (55) Dan d-em-ecinag-ero.
 I 1SG-IRR-know-not
 I don't know it.
- (56) Dan d-em-ecinag-ebma.

 I 1SG-IRR-know-not.yet
 I don't know (it) yet.

In $\S4.3.6$ I discuss how the presence of em- can help to determine the scope of negation in complex sentences.

With respect to the use of em- in affirmative main clauses, the information is not very clear. A sentence like (57) was rejected, because, as my consultant explained, em- is only used to express nanti 'shortly', that is, when referring to the immediate future on the same day.

(57) Ari gac-in dan d-em-ecic (u)cugb se Manokwari. week that-COME I 1SG-IRR-return return to Manokwari Next week I will return to Manokwari.

But also when I tried (58), I was corrected. The use of em- is OK in a question (59), but not in a definite statement, I was told. However, this seems to contradict the facts in (45), where the clause-final clitic =s was actually explained as strengthening an expectation.

- (58) ?Cum kaba na-m-aulo deit. shortly then 1DU.INC-IRR-continue again Shortly we'll continue again.
- (59) Cum kaba na-m-aulo deid e? shortly then 1DU.INC-IRR-continue again Q Shortly we will continue, right?

In other words, the extent to which the irrealis can be marked on verbs in utterances with a future reference cannot be made explicit on the basis of my restricted data.

Secondly, in clauses that follow a sequential connective, the verb seems to be obligatorily marked with *em*-, as in:

- (60) Lone hom deit habi nanani na-m-ecic are deit. day one again then we.DU.INC 2DU.INC-IRR-tell thing again Another time we'll talk again.
- (61) Igde erba m-ohora esij dan in-sra m-os ogoufu habi sun throw 3SG-leg hit I 1SG-arm 3SG-skin white after em-eb gahani.

 IRR-do red
 After the sun has burned the white skin of my arms, it has turned red.

3.2.2.3 Instrument

Transitive verbs may be marked for instrument (I have no evidence of this marker on intransitive verbs). The instrument marker is a prefix a-, which is dominant vis-à-vis the stem vowel. Recall that verb stems can only begin with [-HIGH] vowels /e/, /o/ and /a/. The front vowel e elides when the verb is marked for instrument, but o remains. The coalescence of a/ + a/ assumes the elision of one. The result is not a long vowel. An instrument cannot be expressed as a clausal constituent (but see §3.7 for an example in which a/ with is used to mark an instrument).

(62) Ban b-eic argoufu hosa naugh b-a-(o)uma radio geni? you 2SG-take money how.much for 2SG-INS-buy radio this For how much money did you buy this radio?

A verb normally receives the instrument marker a-, when a previous predicate has introduced an instrument or an accompaniment, compare:

- (63) Dan d-eic kepta d-a-(e)hi sogo.

 I 1SG-take machete 1SG-INS-fell tree
 I cut the tree with a machete.
- (64) Dan d-et roti d-a-(e)k kopi.

 I 1SG-eat bread 1SG-INS-drink coffee
 I eat bread and drink coffee.

3.2.2.4 Verb classes: e-, o- and a- stems

From the paradigm of an e-verb in Table 2 it is clear what the order of these prefixes is. The instrument marker is closer to the verb stem than the irrealis, with the result that the stem vowel is elided, compare columns [+INS] and [+IRR+INS]. Since the /a/ of the dual category has the same effect, a number of homophonous forms are the result, compare columns [stem] and [+INS]. Strictly speaking, my morpheme breaks for the dual forms in the column showing the instrument prefix are somewhat arbitrary. The vowel a could represent the dual category as well as the instrument.

Table 2: -et 'to eat'

	Subject	Stem	+ IRR	+ INS	+ IRR + INS
1SG	dan	d-et	d-em-et	d-a-t	d-em-a-t
2SG	ban	b-et	b-em-et	b-a-t	b-em-a-t
3SG	en	0-et	0-em-et	0-a-t	0-em-a-t
1DU.EXC	aman	ama-t	ama-m-et	am-a-t	am-em-a-t
1DU.INC	nanan	na-t	na-m-et	n-a-t	na-m-a-t
2DU	yan	ya-t	ya-m-et	y-a-t	ya-m-a-t
3DU	lan	la-t	la-m-et	l-a-t	la-m-a-t
1PL.EXC	emen	em-et	em-em-et	em-a-t	em-em-a-t
1PL.INC	maman	ma-t	ma-m-et	mam-a-t	ma-m-a-t
2PL	yen	y-et	y-em-et	y-a-t	y-em-a-t
3PL	len	l-et	l-em-et	l-a-t	l-em-a-t

The same prefixes on o-verbs have some surprising outcomes, as illustrated in Table 3. The fifth column, which shows the forms with the instrument prefix, shows that there is no phonetic inhibition on the vowel sequence [ao], yet the dual category in column [stem] does not allow its diagnostic vowel to surface, so that for second and third person the distinction plural-dual is neutralised, when the verb is not inflected for irrealis or instrument. As the other columns show, there are no other homophonous forms in the paradigm of o-verbs.

Table 3: -os 'to hold'

	Subject	Stem	+ IRR	+ INS	+ IRR + INS
1SG	dan	d-os	d-em-os	d-a-os	d-em-a-os
2SG	ban	b-os	b-em-os	b-a-os	b-em-a-os
3SG	en	0-os	0-em-os	0-a-os	0-em-a-os
1DU.EXC	aman	am-os	ama-m-os	am-a-os	ama-m-a-os
1DU.INC	nanan	n-os	na-m-os	n-a-os	na-m-a-os
2DU	yan	y-os	ya-m-os	y-a-os	ya-m-a-os
3DU	lan	l-os	la-m-os	l-a-os	la-m-a-os
1PL.EXC	emen	em-os	em-em-os	em-a-os	em-em-a-os
1PL.INC	maman	m-os	ma-m-os	m-a-os	ma-m-a-os
2PL	yen	y-os	y-em-os	y-a-os	y-em-a-os
3PL	len	l-os	l-em-os	l-a-os	l-em-a-os

When the vowel /a/ signals both dual and instrument, it is not surprising that the paradigm of a-verbs, see Table 4, contains a number of homophonous forms. The column [stem], giving the person-number inflections on the stem, and the column [+INS], which presents the stem with instrument marker, are completely identical. Redundantly, I have indicated instrument by /0/. Comparison of the inflection for irrealis on the one hand and forms containing both irrealis and instrument on the other suggests that the order of these categories is reversed on a-verbs.

If the order were the same as for e- and o-verbs, one would expect the same homophonous forms in columns [+IRR] and [+INS+IRR] as are found between columns [stem] and [+INS]. However, when both irrealis and instrument are marked on the verb, the basic vowel of the irrealis morpheme is elided, giving way to the more dominant a of the instrument. Consider, as a further argument, the first person dual exclusive. The person prefix is clearly derived from the free pronoun aman. In the e- and o-verbs, its second vowel wipes out the irrealis e: ama-m-et and ama-m-os. But on a-verbs the irrealis em is allowed to remain intact, as also in the second and third person dual categories. But when an a-verb is inflected for all categories, these forms do exhibit instrument a, but now preceding the irrealis prefix.

	Subject	Stem	+ IRR	+ INS	+ INS + IRR
1SG	dan	d-ahan	d-em-ahan	d-0-ahan	d-a-m-ahan
2SG	ban	b-ahan	b-em-ahan	b-0-ahan	b-a-m-ahan
3SG	en	0-ahan	0-em-ahan	0-0-ahan	0-a-m-ahan
1DU.EXC	aman	am-ahan	am-em-ahan	am-0-ahan	am-a-m-ahan
1DU.INC	nanan	n-ahan	na-m-ahan	n-0-ahan	n-a-m-ahan
2DU	yan	y-ahan	y-em-ahan	y-0-ahan	y-a-m-ahan
3DU	lan	l-ahan	l-em-ahan	l-0-ahan	l-a-m-ahan
1PL.EXC	emen	em-ahan	em-em-ahan	em-0-ahan	em-a-m-ahan
1PL.INC	maman	m-ahan	ma-m-ahan	m-0-ahan	m-a-m-ahan
2PL	yen	y-ahan	y-em-ahan	y-0-ahan	y-a-m-ahan
3PL	len	l-ahan	l-em-ahan	l-0-ahan	l-a-m-ahan

Table 4: -ahan 'to cut (grass)'

3.2.2.5 Pronominal objects

It is possible for at least some verbs (and prepositions) to have cliticised pronominal objects. These forms are also clearly related to the free pronouns. In fact, the first person plural and dual categories have to be expressed by full pronouns. As a preliminary analysis of the morphological process affecting object clitics, I take the verb-final vowel -a as basic. This vowel is clearly present when the object has to be a full pronoun. Since the connecting vowel e substituting the word-final -a is attested in other contexts as well (see §3.1.1), the same process appears to be at work here. This leaves the pronominal object clitics without a vowel. Only the second person plural and dual categories syllabify the initial palatal approximant /y/, eliding the stem-final or connecting vowel. Consider the verb 'to call' with objects in Table 5. The last column gives a broad phonetic representation.

	•	J	
Person-number of object	ei ja 'to call'	Object	Phonetic realisation
1SG	eija-	d	eijet
2SG	eija-	b	ei jep
3SG	eija-	n	eijen
1DU.EXC	eija	aman	eija aman
1DU.INC	eija	nanan	ei ja nanan
2DU	eija-	iyan	eijiyan
3DU	eija-	ra	eijera
1PL.EXC	eija-	men	eijemen
1PL.INC	eija	maman	eija maman
2PL	eija-	iyen	eijiyen

eija-

eijer

Table 5: Pronominal objects of the verb eija 'to call'

3.2.2.6 Experiential verbs

3PL

Now that we have seen the pronominal objects on regular transitive verbs, it is clear that a number of verbs referring to some physiological states are built the same way. The experiencer of such a verb is expressed as object with some inanimate item functioning as third person subject, which has zero marking. In the case of experiential verbs all personnumber categories can be cliticised, including first person plural and dual. But also instances of the full verb, ending on -a, followed by a full pronoun have been attested. Consider the inflection of the verb 'to be sick' in Table 6. Again, the final column gives a broad phonetic representation.

Experiencer 'be sick' Phonetic realisation Object arebadan d arebet 1SG han arebah 2SG arebep areba (en) areben 3SG en arebaarebama 1DU.EXC aman am-a arebaarebena 1DU.INC nanan n-a 2DU arebayan j-a arebeja 3DU lan arebaarebera r-a 1PL.EXC emen arebam arebem arebaarebema 1PL.INC maman ma 2PL arebaarebei yen len arebaareber 3PL

Table 6: areba 'to be sick'

The verb *areba* itself is morphologically complex. The form *ara* occurs with the meaning 'what, something' and the form *eba* is the verb 'to do' (see also §3.2.4). So, the notion 'X is sick' is expressed by a construction of the type 'something-does/affects-X', in which the verb

functions as a transitive verb marked zero for 3SG subject and cliticised with a pronominal object (for coreference between experiencer and subject of following verb, see example (258) in §3.11.1). The inanimate subject and the verb are in fact separable, for when an experiential verb is inflected for irrealis, the prefix em- occurs on the verb eba. It cannot precede the inanimate subject. Thus:

(65) Dani ar-em-ebe-d-ero.
I thing-IRR-do-1SG-not
I am not sick.

Other experiential verbs are built on the same morphological template, even if it is not always clear whether the subject is an independently occurring lexical item. Consider the examples in (66), which includes at least one example without the verb eba 'do/affect'.

(66) dukurij-ebe-d I am cold

mus-ebe-d I have a cold (am coughing)

cicir-ebe-d I am sleepy

s(I)r-ebe-d I am hungry

meric-ebe-d I am thirsty

eice-d I am satisfied (with food)⁸

This list is not meant to be exhaustive. At least for two of these verbs I have evidence that the form functioning as grammatical subject can occur by itself in other contexts:

(67) Atou deb-in cicir. sleep keep-come sleep S/he is asleep.

And the noun *sir* 'hunger' appears in the expression for 'famine'. At least one more construction is similar, albeit that the object was given as a free pronoun:

(68) Ikdebes ebe dani. shame do me I am ashamed.

But this may be just a matter of preference, since an alternative to *eice-d* 'I am satisfied' was given as *eica dan hob* 'I already have (eaten) enough'.

3.2.3 Mental states

Mental and emotional states and processes in Sough are expressed by constructions which have as their subjects an inalienably possessed body part (see §3.3.1). The experiencer is indicated by the person-number prefix on the noun. Most of these expressions make use of -doc 'front', as it occurs in (complex) lexical items for 'heart' and 'liver' and the spatial orientation 'in front of' (see also (159) in §3.6):

(69) me-doc g-orough
3SG-front NOM-?
heart (Indonesian jantung)

Most likely, this is the verb eica that is explained by Sough speakers as Indonesian kena 'to hit, touch'.

- (70) me-doc mei 3SG-front under liver
- (71) in-doc mes

 1SG-front 3SG-hole

 my insides ((Indonesian hati) refers to the seat of emotions)
- (72) Ban b-eigtou se bormei me-doc. you 2SG-sit at table 3SG-front You sit in front of the table.

The complex of possessed body part and verb (or adjective) appears to function as a single verb. Some expressions are probably intransitive, some can have a direct object, other expressions require a preposition, either an 'with respect to' or sa 'at'.

(i) Intransitive:

- (73) Dan in-doc momogo.

 I 1SG-front ?
 I have sorrow.
- (74) In-doc eptou.

 1SG-front do-to
 I am satisfied. (I suspect the form eptou to be eb(a) 'do'+ dou 'to'.)
- (75) *Me-doc arjaga.*3SG-front weak
 S/he is humble, unassuming.

with an: me-doc arjaga an = 's/he is generous towards s.o.'

(ii) With direct object:

- (76) En me-doc g-orough en me-hi-r namcir. s/he 3SG-front NOM-? s/he 3SG-child-PL very S/he loves her/his children very much.
- (77) Dan in-doc ediseic en an aremough.

 I 1SG-front ? 3SG concerning goods
 I envy him/her his/her possessions.
- (iii) With the preposition an 'with respect to (w.r.t), concerning' (see also §3.7):
 - (78) Me-doc eigo an.
 3SG-front good concerning
 S/he is happy about s.t/s.o.
 - (79) In-doc erij an.

 1SG-front pain concerning
 I have pity on s.o.
 - (80) En me-doc ecgu an. s/he 3SG-front bad concerning S/he hates s.o.

- (81) Dan in-doc esrough an.

 I 1SG-front hot concerning
 I am angry about s.t./s.o.
- (82) Dan in-doc eb deb-in an.
 I 1SG-front do keep-come concerning
 I trust s.o.; I believe (in) s.o.
- (iv) With the preposition sa 'at, with' (see also §3.7):
 - (83) Dan in-doc eskraha sa bani.

 I 1SG-front clear at you
 I am very happy with you.
 - (84) En me-doc eije-sa. s/he 3SG-front call-at S/he is sad, worried.
- (v) With the verbal adjunct dougwo (see also §3.9):
 - (85) Dan in-doc moc dougwo.

 I 1SG-front? block
 I have forgotten (s.t.).

The structure of -doc as subject and following verb or adjective as its predicate is confirmed by the inflection for irrealis. The prefix em- is attached to the verb, not to the body part:

(86) En me-doc em-esrough deit-ero. s/he 3SG-front IRR-hot again-not S/he is no longer angry.

Some expressions have a rather different structure. A regularly inflected verb has -doc as its object:

- (87) En eije me-doc esa. s/he call 3SG-front stand S/he is confused, worried
- (88) Dan d-aha-da in-doc namcir.

 I 1SG-?-go 1SG-front very
 I regret very much.9

Some other 'body parts' figure in similar constructions, expressing mental states: *ind-u* '1SG-mind', *mo-u* '3SG-mind', etc. refer to 'thought'; *ind-ina*, *me-na*, '1SG-, 3SG-soul' refers to 'shadow, reflection' (forming a tonal minimal pair with *ind-ina*, etc. 'my father'). The exact meaning of these terms is way beyond the scope of this sketch. But it seems significant that both items are related to items with and without a final a, respectively. *Ind-ua mougb* expresses 'I am industrious', which cannot be expressed with *ind-u*, while *ind-in*, same tone as *ind-ina* 'reflection' but without the final a, refers to the space in front of me, which is not visible, nor can it be touched. All these items inflect as inalienable nouns (see §3.3.1). What

This verb is probably related to aha 'to look after, raise (animals)'.

exactly the role of this final a is on these terms is unclear, but in both cases the addition of it seems to give some more tangible or visible meaning: -u 'thought' > -ua 'behaviour'; -in 'front (aura?)' > -ina 'shadow, reflection'.

- (89) Mo-u oforoho.

 3SG-mind smart

 S/he is intelligent, smart.
- (90) Dan ind-ina eiseis an in-si.
 I 1SG-soul ? concerning 1SG-friend
 I remember my friend.

3.2.4 The verb eba

In §3.2.2.6 I showed how the verb eb(a) 'to do' is part of the experiential verbs. As a main verb it has a generic meaning of 'to do'. It could be homophonous with the verb eb 'to cry'. When eba is followed by a vowel, the final |a| is elided. When it is followed by a consonant, the final |a| becomes $[\varepsilon]$.

- (91) Len l-eb ara? they 3PL-do what What are they doing?
- (92) Len l-eb an ar-ed. they 3PL-cry w.r.t what-eat They are crying for food.
- (93) Y-eb ara ingga? [yeˈbarɛŋga]
 2PL-do what that
 What do you want?
- (94) Nosa pasar em-eb-ero.
 past market IRR-do-not
 In the past there was no market.

The verb *eba* 'do' is highly productive in adapting Indonesian loan words to function as verbs in Sougb. For some of the attested loans I have obtained true Sougb verbs as well. But in many cases the Sougb equivalent consists of a compound or phrase, whose meaning seems to be more specific. The following have been attested.

(95)	Indonesian	Gloss	Loan	Gloss	Sougb
	bantu	help	ebe-bantu	help	ousa
	bayar	pay	ebe-bayar	pay	ouma
	gunakan	to use	ebe-gunakan	use	eic + INS
	lebar	wide	ebe-lebar	be wide	ebehibera
	mahal	expensive	ebe-mahal	be expensive	mera eisaugb
	musuh	enemy	ebe-musu	be enemy with	ed-im
	pakai	use	ebe-pake	use	eic + INS
	piara	look after	ebe-piara	look after	(ouw)aha

pindah	move	ebe-pindar	move (home)	eihwe dig
tambah	add	ebe-tamba	increase	
tukar	exchange	ebe-tukar	trade	ouhw
tuntut	demand	ebe-tuntut	demand compensa	ation

The list in (95) requires a few comments. Firstly, I suspect the items ouma and ouhw to be related: ouhw is translated as bagi 'to divide, give out' and ouma is explained as membeli 'to buy'. But in Appendix 1, (38) and (39), for example, ouhw is explained as bayar 'to pay'. Concepts from a cash economy are not easily transferred into a lexicon designed for a bartering system. For example, the word oufo, glossed as tutup 'to close (a door)' is also glossed as tutup, when it denotes the exchange of a brideprice, consisting mainly of kain timur, and a woman. In other words, the concepts of 'giving', 'receiving', 'payback' or 'compensation', which used to be associated with specific actions have to be reinterpreted, and receive general glosses in the contact language when they are explained to a foreign linguist. Needless to say, I lack the data to give a clear account of these lexical items, whether they be Sougb originals or loan words.

Secondly, the term *ebehibera* itself seems to be a compound of *eba* + *hibera*.

Finally, the concept 'to use some instrument' is expressed in Sough by a serial verb construction: the instrument is introduced as an object of the verb eic 'to take' and referred to in a second clause by the instrument marker (see §3.2.2.3). The contexts in which ebegunakan and ebe-pake are used convey a less instrumental sense (see Appendix 1, (3) and (10)).

3.2.5 Some other morphological processes on verbs

There are a few morphological processes involving verbs, which need to be signalled, even though it is not quite clear as yet what their exact function is, or how extensive their applicability. I will briefly give examples and offer some possible explanation, which is of necessity rather speculative.

3.2.5.1 Nominal marking -ingga

Verbs may be encliticised with what is most likely the demonstrative *ingga* 'that', to signal an event which is about to happen. The initial vowel elides after a vowel or is replaced by a connecting e, following a consonant. I am not certain about the exact form or its internal structure. It may be *in-g-a* in which the directional en~in 'hither' functions together with the nominaliser /k/ (see §3.1.4), and the citation marker a, or it may constitute a monomorphemic form *ingga* 'that'. Compare yebarengga 'what do you want?' in (93). A similar form seems to occur as part of some conjunctions such as hang(ga) 'so', or its near synonym dangga 'so', given in §3.11.2.

(96) D-eihw-eda-ngga.
1SG-away-go-that
I'm leaving now.

3.2.5.2 Vowel substitution for emphasis

I have obtained a few instances of e-verbs, which change the stem vowel to i when an imperative mood is present. A similar vowel change is not possible on o- and a-verbs. The verb 'to close (door)' is $ec\ misis$, but an order to close a door is given as:

(97) B-ic misis!
2SG-close door
Close the door!

This does not mean that *b-ec misis* is unacceptable. Both forms are possible, but the *i*-form seems to suggest some stronger illocution. My consultant made the metalinguistic comment with regard to (98), that the forms *b-in* '2SG-come' and *b-id-eya* '2SG-go-see' are used for an order or for an invitation. The verb stems are *en* 'to come' and *eda* 'to go'.

(98) Ban b-in naugh b-id-eya se ab-ires habi. you 2SG-come for 2SG-go-see with 2SG-eye then You come to go see (him) with your own eyes first. (from John 1:46)

Since the vowel substitution is also possible in first person forms (see (99)) it probably signals something more general than just a command.

(99) Dan d-id-eya.
Dan d-ed-eya.
I 1SG-go-see
I went to see.

My data are not sufficient to indicate the difference, as both options are explained with the same gloss in Indonesian. However, when further checking such forms it was confirmed that the substitution of e by i is indeed only allowed with first and second person categories, regardless of number. In other words, only when the subject refers to one of the speech participants is it appropriate to indicate the heightened illocutionary force. The absence of this phenomenon on o- and a- stems seems to be due to phonetic constraints.

3.2.5.3 Verbs ending with -an

There are a number of verbs ending with an, which is homophonous with the preposition an, glossed as 'with repect to, concerning' (see §3.7). These verbs seem to be in fact bimorphemic, especially since in some cases the form without an also occurs. An attested difference can be found in eihweda 's/he went away' and eihwedan 's/he went away with something (mentioned earlier)'. Whether similar meaning differences exist for ogo 'cook' versus ougwan 'cook' and other suspected pairs, is not clear.

(100) eimiman to be amazed
ougwan to cook (ogo 'to cook')
ouman to hear
ouwan to want, desire

I suspect ou(w) to be a speech verb, as it is used in (101), which I obtained through elicitation in response to (102), found in Titus 3:15 in the Sough New Testament.

- (101) Dan d-ou yen yab-an mej-ires-o. I 1SG-say you.PL 2PL-POS 2PL-eye-CIT I greet you.¹⁰
- (102) Emen em-augwan em-ou ban.

 we.EXC 1EXC-all 1EXC-greet you.SG

 We all greet you.

Given the general affinity between verbs of speech and expressions of intention, especially in Papuan languages, my assumption is that ouwan 'want, desire' is in fact this verb ou(w) plus the preposition an 'concerning'. Possibly, it also figures in the gloss I obtained for 'to think, guess', oudesa. This could be composed of ou plus connective clitic d and the verb esa 'to stand' (see §3.11.1 for connective clitic d-).

3.2.5.4 Verbs ending with -ro/-lo

A number of verbs end with *ro* (no phonemic contrast between [r] and [l]). This morpheme most likely is the same as the word for 'garden'. The specific meaning 'garden' for *lo* seems to have developed from a more generic reference to the 'world', 'environment', since it also figures in *lonog* '(firm) ground' as opposed to 'water', and in temporal words like *lona* 'day', *loba* 'night'. In (103) it does not refer to 'garden' but to 'everything'.

(103) En eiya lo asesa ucugb.
3SG see ground true return
S/he sees everything clearly again.

When attached to a verb, it seems to convey some duration or intensity, as the glosses for these verbs suggest. Compare *atro* 'throw down forcefully' (Indonesian *banting*) in (104) and the verb *at* in (105).

- (104) Dan d-eic ikdebir d-atro obrugb.

 I 1SG-take plate 1SG-throw.down it.break
 I take the plate and throw it in pieces.
- (105) Ban ab-ir b-at in-doc mes. you 2SG-speech 2SG-hit 1SG-front hole Your words touch my heart.

Other candidates for possibly complex verbs with 'intensifying' suffix -ro are:

(106) ogmacro to spy (Indonesian memata-matai)
osloslo to feel, rub
amuhunlo to lie on one's belly
esulo(u) to give advice
aihiro to put s.t. to dry in the sun

I do not understand why this example contains yab-an; the possessive pronouns are mej-en 'your.PL' and maj-an 'your.DU' (see §3.3.1).

3.2.5.5 Verbs containing a nominalised form

There are a number of polysyllabic verbs with an internal consonant cluster of which the second consonant is the velar stop. I suspect these to be complex forms, consisting of two verbs of which the second is a nominalised form with the velar stop being the nominaliser, discussed in §3.1.4. Consider the verb *omom* meaning 'to die'. When a clearly complex form such as *eic gomom* is given for 'to kill', I suggest that its components are 'take/give NOM-die', that is 'to give death (to someone)'. Such a construction is even more transparent in the causative of 'to be courageous'. The mental state 'to be courageous' is expressed by the verb *eic* 'to take/give' and the inalienable noun *mos* 'skin', so that *en eic mos* means 'he is courageous' and *d-eic ind-us* 'I am courageous'. 'To encourage someone' is then expressed as in (107). The main verb *eic* 'take, give' has as its object a nominalised instance of the same verb plus its object.

(107) D-eic g-eic m-os dou en.

1SG-take NOM-take 3SG-skin to him
I encourage him. (lit. I take taking skin to him.)

Very likely, other verbs with an internal consonant cluster of which the second consonant is the velar stop, have a similar internal structure. Some instances apparently have the same lexical item twice, as eic g-eic in (107), others have a different verb nominalised, as eic g-omom 'give death'. Some examples are given in (108). Not all components have been identified, and the spelling partly reflects the established orthography, but at this stage, this is enough to signal a possible morphological derivation.

(108) acgecim to be wound up (Indonesian bergelung) [ackecim]
acgeic to request [ackeic]
atgeic strong (as in en me-doc atgeic an 'he is stingy towards s.o.')
eiya garij to ask for help (with the verb eiya 'to see')
ocgonei to hide s.t./s.o.
otkot to demolish
oto goto to refuse

3.2.5.6 Reciprocal

Verbs or their accompanying prepositions may be encliticised with -im 'RECIProcal', which takes the place of a pronominal object, as in (109).

(109) Len l-ogod-im debinbin. ['lɛn lɔgɔ'tim dɛ'bimbin] they 3PL-hit-RECIP all.the.time

They are fighting all the time.

Recall the arguments in §3.1.1 for connecting e. If the verb indeed ends on /-a/ and the clitic -im is attached, the resultant assimilation is $[\varepsilon]$, as in (110) and (111).

(110) Em-a(o)usa-im. [ɛˈmausɛm]

1EXC-INS-help-RECIP

We helped each other using it.

(111) Maman ma-eya-im ucugb. ['maman ma'yɛm u'cup]

IINC IINC-see-RECIP again

We will meet again.

The reciprocal clitic can also be attached to loan words, as in (112), and prepositions (113).

- (112) Tau la-(e)be-menghadap-im.
 or 2DU-do-oppose-RECIP
 Or the two of them were opposite each other.
- (113) Emen em-ebe moc dou-m.

 1EXC 1EXC-do ? to-RECIP

 We were hostile to each other. 11

3.3 Nouns

3.3.1 Alienable-inalienable nouns

Sough distinguishes alienable and inalienable nouns. Inalienable nouns are obligatorily prefixed to indicate person-number of the possessor, which are distinct from the verbal subject prefixes, except for 1PL (see Tables 2–4 in §3.2.2.4). The inalienably possessed nouns comprise the terms for body parts and kinship relations. Alienable nouns occur without such a prefix. When they are possessed, the possessor is expressed by a possessive pronoun. The possessor prefixes that are required on inalienably possessed nouns are the same as those on the possessive pronouns used for alienable nouns, as illustrated in Tables 7 and 8. In both cases a free pronoun may, and frequently does, precede the possessive marker, hence they are included in the exemplifying tables.

	Possessor	Prefix	Stem
1 SG	dan	ind-	ums
2SG	ban	ab-	ums
3SG	en	m(e)-	oms
1DU.EXC	aman	am-	ums
1 DU.INC	nanan	an-	ums
2DU	yan	maj-	ums
3DU	lan	mar-	ums
1 PL.EXC	emen	em-	ums
1 PL.INC	maman	mam-	ums
2PL	yen	mej-	ums
3PL	len	mer-	ums

Table 7: Possessing an inalienable noun: -ums 'ear'

The word *moc* clearly has to do with expressions of emotion, normally involving *-doc* 'front'; compare *-doc moc* 'to forget' (see §3.2.3). Possibly, it is the result of some elision affecting *em-doc* '1PL.EXC-front', so that the expression could be *emen em-ebe em-doc dou-m* 'we do our fronts to each other'.

218

	Possessor	Prefix	Verb	'house'
1SG	dan	ind-	an	tu
2SG	ban	ab-	an	tu
3SG	en	me-	en	tu
1DU.EXC	aman	am-	an	tu
1DU.INC	nanan	nan-	an	tu
2DU	yan	maj-	an	tu
3DU	lan	mar-	an	tu
1PL.EXC	emen	em-	en	tu
1PL.INC	maman	mam-	en	tu
2PL	yen	mej-	en	tu
3PL	len	mer-	en	tu

Table 8: Possessing an alienable noun: tu 'house'

Notice that the third person singular prefix is me-.

In contrast to verbs, which may have only [- HIGH] vowels as their initial segment (see §3.2.2.4), the stem of an inalienable noun may begin with any of the five phonemic vowels. A concomitant contrast is that verbs may appear with an initial vowel, due to the 3SG-prefix being zero, while inalienable nouns are always inflected for person-number of the possessor. The default form is marked for 3SG. When items with an initial high vowel are marked for a third person singular possessor, however, the vowels are lowered front or back. Thus, *i*-stems are given in (114) and *u*-stems in (115).

(114)	ind-ihi	my-child	ind-idgo	my-back	ind-ir	my-voice
	ab-ihi	your-child	ab-idgo	your-back	ab-ir	your-voice
	m-ehi	his/her-child	m-edgo	his/her-back	m-er	his/her-voice
(115)	ind-unyo	my-mother's.brother		ind-ug	my-fles	h
	ab-unyo	your-mother's.bi	other	ab-ug	your-fle	sh
	m-onyo	his/her-mother's	.brother	m-og	his/her-	flesh

The other vowels remain unchanged, with the prefix vowel elided, consider the a-stems in (116), o-stems in (117), and an e-stem in (118).

(116)	ind-aga	my-body	ind-agto	my-younger.brother
	ab-aga	your-body	ab-agto	your-younger.brother
	m-aga	his/her-body	m-agto	his-younger brother
(117)	ind-oho	my-name	ind-ohora	my-leg
	ab-oho	your-name	ab-ohora	your-leg
	m-oho	his/her-name	m-ohora	his/her-leg
(118)	ind-ebehito ab-ebehito m-ebehito	my-grandchild your-grandchild his/her-grandchild		

A number of kinship terms apparently have consonant-initial stems, in which case the final consonant of the possessive prefix either elides or coalesces with the stem consonant. I have no clear data to show what happens in each case. In the next section I list the kinship terms with the forms for both first and third person singular.

3.3.2 Kinship terms

In order to show the basic stems, I give the various forms for both first and third person possessors. For some consanguinal and affinal relations, sex of Ego is a determining factor. First the terms for consanguinal relations of various generations will be given.

3.3.2.1 Consanguinal relations

(119)	Ego is male		Ego is female	
a.	ind-agona	1SG-elder.brother	ind-igbegena	1SG-elder.brother
	m-agona	3SG-elder.brother	m-egbegena	3SG-elder.brother
b.	ind-agto	1SG-younger.brother	in-jemeito	1SG-younger.brother
	m-agto	3SG-younger.brother	me-jemeito	3SG-younger.brother

Terms for older and younger sister can be used by Ego of either sex:

- (120) a. *in-damowa* 1SG-elder.sister, whether male or female Ego *me-damowa* 3SG-elder.sister, whether male or female possessor
 - b. *in-damehito* 1SG-younger.sister (male or female possessor) *me-damehito* 3SG-younger.sister (male or female possessor)

The terms in (119) and (120) are not only used for 'father's brother's children' and 'mother's sister's children', but also for 'father's sister's children' and 'mother's brother's children', that is, for parallel and cross-cousins.

For terms referring to individuals of an older generation, sex of Ego is not relevant:

```
    (121) a. ind-ina m-ena 1SG-father (father's brother, etc.) 3SG-father
    b. ind-im 1SG-mother (mother's sister, father's sister, etc.) m-em 3SG-mother
    c. ind-unyo 1SG-mother's.brother m-onyo 3SG-mother's.brother
```

Again, sex of Ego is irrelevant, when grandparents are referred to:

```
(122) a. in-jemowa 1SG-grandfather me-jemowa 3SG-grandfather
b. ind-awa 1SG-grandmother m-awa 3SG-grandmother
```

Parents of either sex use the generic term in (123) to refer to their children:

(123) ind-ihi 1SG-child m-ehi 3SG-child

The generic term can be specified for sex with the forms giji 'male' and gihida 'female', both of which appear to be prefixed with the nominalising /g-/ (see §3.1.4). The compounds are often further contracted (see §2.6), as follows:

(124) a. ind-ihi g-iji [indisi]

1SG-child NOM-male

my son

me-ihi g-iji [meisi]

3SG-child NOM-male

her/his son

b. ind-ihi g-ihida [indihida]

3SG-child NOM-female

my daughter

me-ihi g-ihida [meihida] ~ [meida]

3SG-child NOM-female her/his daughter

The terms in (124) are also used for 'brother's children', whereas 'sister's child' is referred to by (125).

(125) *ind-ebehito* 1SG-sister's child [indebeito] *m-ebehito* 3SG-sister's child [mebeito]

The term *ebehito* is identical to the term used for consanguinal relations two generations down (i.e. 'grandchildren'), which is borne out by the equivalents in Indonesian. When Sougb people refer to 'sister's child' or 'grandchild' in Indonesian they use *cucu* 'grandchild', which is considered the appropriate translation for both senses of *-ebehito*.

3.3.2.2 Affinal relations

For terms referring to affinal relations, sex of Ego and related individual are both relevant factors. Sough does not have a generic term for 'spouse'

(126) a. *in-sowa* 1SG-wife *me-sowa* 3SG-wife b. *in-suwa* 1SG-husband *me-suwa* 3SG-husband

Terms for affinal relations of Ego's generation are determined by sameness or difference of sex. Women use (127) for their sisters-in-law, men use (128) for their brothers-in-law. The term in (129) is used by men to refer to their sisters-in-law and by women to their brothers-in-law.

(127) ind-uhuba 1SG-husband'.s ister; brother's.wife (female possessor = female

in-law of same sex, same generation)

m-ohoba 3SG-husband's.sister; brother's.wife

(128) *ind-usba* 1SG-sister's.husband; wife's.brother (male possessor = male

in-law of same sex, same generation)

m-osba 3SG-sister's.husband; wife's.brother

(129) ind-uma 1SG-husband's.brother; sister's.husband (female possessor)

1SG-brother's.wife; wife's.sister (male possessor)

m-oma 3SG-husband's.brother

3SG-wife's.sister

In other words, -uma means 'in-law of opposite sex of same generation'. But this same term can also be used by male Ego for one generation up, 'wife's father'. That is not possible for a female Ego. A woman would refer to her husband's father with the term given in (130), which is equivalent to what either a man or a woman use to refer to their daughter's husband.

(130) ind-aba 1SG-husband's.father; 1SG-daughter's.husband (Ego is either

male or female)

m-aba 3SG-husband's.father; 3SG-daughter's husband (Ego is either

male or female)

In reference to a female affinal relation one generation up, the same term is used regardless of sex of Ego:

(131) ind-imba 1SG-wife's.mother; 1SG-husband's.mother; in other words,

'mother-in-law' (regardless of sex of Ego)

me-mba 3SG-mother-in-law

A female affinal relation one generation down is referred to by a term (132) which is slightly different from (131) in the case of first person possessor. But for third person possessor I recorded *memba*, as in (131). Possibly a mistake was made, and the first person forms are interchangeable, making the same term applicable to 'female in-law of different generation'.

(132) ind-ebeba 1SG-son's.wife; in other words, 'daughter-in-law'

me-mba 3SG-son's.wife

3.3.3 Plural marking

Kinship terms and nouns referring to social relations may be inflected for plurality by the suffix -ir. Although in many instances the vowel of this suffix has another quality, the basic vowel seems to be the high front one, as suggested by the spelling of (133) and the phonetic realisation of this morpheme on a loan word in (134).

- (133) Yahudi mer-en mougt-ir.

 Jew 3PL-POS head-PL

 The leaders of the Jews. (John 7:45)
- (134) L-oho saboku l-ed-a-(o)uma dau timur-ir.

 3PL-carry tobacco 3PL-go-INS-buy from Timor-PL

 They brought tobacco and bought (cloth) with that from the Timorese.

Attested instances of plural social relation terms exhibit vowel elision following stem vowels other than /a/, as in (135). When the stem ends on -a, the two vowels coalesce to /e/, as in (136).

(135)	ind-ihi	1SG-child	ind-ihi-r	1SG-child-PL
	in-si	1SG-friend	in-si-r	1SG-friend-PL
	m-agto	3SG-younger.brother	m-agto-r	3SG-younger.brother-PL
(136)	me-sowa	3SG-wife	me-sowe-r	3SG-wife-PL
	ind-usba	1SG-male.in.law	ind-usb-er	3SG-male.in.law-PL
	ind-uma	1SG-female.in.law	ind-um-er	3SG-female.in.law-PL

There is one term, obviously taken from the body part term -us 'skin', which expresses 'relative', which assimilates the plural suffix vowel to the vowel of the stem. This fact, plus the substitution of connecting /e/ for stem-final -a, might be arguments for positing an unspecified vowel for this morpheme, -(V)r.

- (137) ind-us 1SG-skin ind-us-ur 1SG-skin-PL = 'my relatives'
- (138) Danga l-ouhwo danga hob / kaba dou gida mos-or-i. thus 3PL-buy thus already then to woman skin-PL-LNK Thus they traded like that, then to the woman's relatives. (see Appendix 2, (31))

Affinal relations, such as *usba* and *uma* in (136), are not included in the category of *ind-us-ur* 'my relatives'. 'One's skin' only includes consanguinal relations, except 'mother's brother'.

Another plural marker, the short form of the third person plural pronoun, can be procliticised to human nouns and quantifiers. Here again, it is not quite clear whether the vowel is unspecified, or basically i or e, since some vowel harmony appears to occur, as illustrated in (139). The forms in (140) appear to contain the nominaliser g (see §3.1.4). These items suggest that the basic morpheme is g. Through metathesis it could be related to the plural suffix on social relation terms.

(139)	sud	person	lu-sud	people
	godeh	child	lo-godeh	children (also [lokdεh])
	gi(hi)da	female	le-gida	women
	giji	male	li-gi ji	men
(140)	ima	other	l-ima	others (also [likma] or [ligma])
	lik-bum	(an)other person(s)	(this form i	s unmarked for number, y)
	1: 1.	dala		

li-k dohu-r
3PL-REL water-PL
the (people) who bathe

3.4 Counting

The word in Sough for 'to count' or 'to read' is *ecic* (also for 'to tell'). The number system is clearly quintenary, based on digits of hands and feet, although the numbers are not clearly etymologically related to body parts. One starts with *hom* 'one', while pushing the thumb of the left hand down, followed by the index finger, *hwai*, until the left hand is a fist for *sergem* 'five'.

The numbers 'six' to 'nine' are compounds of seng 'five' + g + forms for 'one' to 'four'. The linking velar /g/ may well be the same morpheme as the nominaliser.

The terms for 'five', 'ten' and 'fifteen' are unexplained, although it is quite possible that some morphological variant of 'hand' [SIr], as in *in-sra* '1SG-hand', *me-sra* '3SG-hand' (Lunow's spelling is <mesira>) is present in the numbers 'five' to 'nine'. The term *sorama* 'fifteen' may well be related to *ohora* 'leg', through an $s \sim h$ correspondence, which is present throughout the eastern Bird's Head.

Once the fingers of two hands are counted, the higher numbers apparently refer to toes: hop means 'already', but jer is unexplained. (Note, however, that neighbouring Meyah has a preposition jera 'with' (Gravelle 1998, and this volume, example (95), although this is not used in numbers.) For 'eleven' to 'fourteen' the numbers 1–4 are used again.

The reference to the human body is transparent in the numbers twenty, thirty, forty, etc., as now 'skins' are counted.

The term *untun* 'hundred' is most likely of Austronesian origin, specifically Numfor-Biak, which has *utin* (van Hasselt & van Hasselt 1947:268). It is found in many if not all languages of the Bird's Head and the Moluccas.

(141)	one	hom
	two	hwai
	three	homoi
	four	hogu
	five	sergem
	six	senggem
	seven	senggai
	eight	senggomoi
	nine	senggogu
	ten	sisa
	eleven	hop-jer-em (also sisen-hom)
	twelve	hop-jer-ai (also sisen-hwai)
	thirteen	hop-jer-omoi
	fourteen	hop-jer-ogu
	fifteen	sorama
	sixteen	sorama-hop-jer-em-nama
	seventeen	sorama-hop-jer-ai-nama
	eighteen	sorama-hop-jer-omoi-nama
	nineteen	sorama-hop-jer-ogu-nama
	twenty	sudə-hom (also mosə-hwai)
	thirty	mos-homoi
	forty	mos-hogu

fifty mos-sergem
sixty mos-senggem
seventy mos-senggai
eighty mos-senggomoi
ninety mos-senggogu
hundred untun hom
thousand untun sisa

Counting humans or higher animals requires the use of a classifier, which is the inalienably possessed noun -ug 'flesh, body':

- (142) aman am-ug hwai 1DU.EXC 1DU.EXC-flesh two the two of us
- (143) emen em-ug homoi
 1EXC 1EXC-flesh three
 the three of us
- (144) Ban b-eic hobu mer-ug hosa? you 2SG-take pig 3PL-flesh how.many How many pigs did you get?
- (145) Le-giji mer-ug hogu l-ousa Tuan Lunow.
 PL-male 3PL-flesh four 3PL-help Mister Lunow
 Four men helped Mister Lunow.

3.5 Spatial deixis

Sough appears to signal cardinal directions: north, south, east and west. The directions 'east' and 'west' are also glossed as 'down' and 'up', respectively, which could be the basic meaning of the forms gac and gaba. The basic forms appear in attributive demonstratives, which could be polymorphemic, with the velar consonant as 'NOMinaliser', in analogy to alternative realisations of attributive adjectives. However, forms without the initial consonants are not attested. Consider:

- (146) a. tu gaba (also [tu gwa]) house that.north that house to the north
 - b. tu gac
 house that.south
 that house to the south
 - c. tu gada
 house that.west
 that house to the west (or: that house up there)
 - d. tu gaih
 house that.east
 that house to the east (or: that house down there)

These far deictics are in opposition to the deictics *gini* 'this' and *ingga* 'that', which indicate distance in relation to speech participants. For example, when the question is 'which one' *monggro*, or 'where is so-and-so?' one can receive the following answers:

(147) monggəni this one; (it) is here
mongga that one; (it) is there
monggaih that one (down, to the east)
monggada that one (up, to the west)
monggaba that one (to the north)
monggac that one (to the south)12

The far deictics can also figure as prepositional objects. In response to questions about 'I carry something to ...', I obtained the items in (148). The adverbial deictics have a cliticised directional attached, with the connecting /e/ substituting final -a.

- (148) a. D-odo dig gabe-da.

 1SG-carry to north-go
 I carried (it) in a northern direction.
 - b. D-odo dig gac-da.

 1SG-carry to south-go
 I carried (it) in a southern direction.
 - c. D-odo dig gade-da.

 1SG-carry to west-go
 I carried (it) in a western direction/going up.
 - d. D-odo dig gahi-da.1SG-carry to east-goI carried (it) in an eastern direction/down.

Possibly, the directional [da] is in fact eda 'to go', as in the main verb d-eda '1SG-go', b-eda '2SG-go', etc. This low front vowel would then elide in [digaida] 'to the east' and the final /a/ of gada would elide in [digadeda] 'to the west'. The form gaih 'down there, towards the east' undergoes metathesis (see §3.1.2), when further suffixed for direction, and the high vowel i of dig 'towards' would be elided, according to the general process described in §2.6.

- (149) a. Eskwa dig gahi-da. [ɛskwatgahida] jump to down-go S/he jumps down.
 - b. Eskwa dig gada-da. [ɛskwatgadɛda] jump to up-go S/he jumps up.

That the final syllable -da in (148) and (149) is a directional, from the verb eda 'go', receives supporting evidence from contrasting constructions with -en (most likely from the verb 'come' en), as in (150). The same elements are attached to the object in (151).

Actually, when informants make metalinguistic comments, they agree with the spelling used in the published New Testament, by specifying that these forms should have a long vowel: [moonggro, moonggan, moongg

- (150) a. Dan d-en dau gab-en.
 I ISG-come from north-come
 I came from a location north.
 - b. Dan d-en dau gac-en.
 I 1SG-come from south-come
 I came from the south.
 - c. Dan d-en dau gah-in.

 I 1SG-come from east-come
 I came from the east, down there.
 - d. Dan d-en dau gad-en.

 I 1SG-come from west-come
 I came from the west, up there.

Thus, one can have either direction, depending on which side of the river the addressees are, as in:

- (151) a. Yen y-aiga duhu-da. you 2PL-cross water-go Cross the river.
 - b. Yen y-aiga duhu-in. [yaigaduhwin] you 2PL-cross water-come Cross the river (towards me).

Further evidence is provided by (152a), taken from the published New Testament, for which I elicited the hypothetical variant (152b) with Jesus as speaker. Thus, if the motion would be towards the speaker, it is not da which specifies the direction but in.

- (152) a. En esogw-esa se duhu aud en-da. he jump-stand at water to him-to He jumped into the water towards him. (John 21:7)
 - b. En esogw-esa se duhu aud dan-in. he jump-stand at water to me-come He jumped into the water towards me.

3.6 Spatial orientation

As many other languages (e.g. Hatam, Maybrat, Abun in the Bird's Head), Sough uses spatial nouns to specify the location of an object. The spatial nouns are found in postnominal position to the noun referring to the object. Most spatial nouns are prefixed with the third person possessive marker m(e)- (see §3.3.1). The construction is thus quite similar to a possessive phrase. This phrase is then governed by a preposition, in most cases se 'at'.

(i) 'inside' m-es '3SG-hole'

The word *mes* is generic for any 'hole'. Thus, we have *ind-is* '1SG-arse', *ab-is* '2SG-arse', *m-es* '3SG-arse' which is more polite than *ind-is m-es* 'my arsehole'. It can be combined with 'nose', 'ear', ground', 'clothes', etc., as in (153).

- (153) a. ind-ebes m-es 1SG-nose 3SG-hole my nostril
 - b. *ind-ums m-es*1SG-ear 3SG-hole
 the inside of my ear
 - c. cinogo m-es ground 3SG-hole a hole in the ground
 - d. sansun m-es clothes 3SG-hole a hole in clothes

The same form is used to specify a location 'inside' a house, for example:

- (154) En eigtou se tu m-es. s/he sit at house 3SG-hole S/he is sitting inside the house.
- (ii) 'under(neath)' m-eniha

The spatial noun *meniha* can be used to specify an area under some object, as in (155). I have not been able to obtain some literal meaning for *-eniha*.

(155) En atou se bormei m-eniha. s/he sleep at platform 3SG-under S/he is lying under the table.

If a tree has the form of an umbrella, m-eniha can be used. If the canopy is not wide, or not in focus, it is $meiyo^{13}$ (see also (171) below).

(156) Emen em-esa se sogo meiyo.
1EXC 1EXC-stand at tree under
We are standing under the tree.

The form mei is also used for 'under water, under the ground': se duhu mei 'under the water', se cinogo mei 'under the ground'. It also appears to function in the following items:

(157) ind-ir-go mei
1SG-voice-? under
my neck
m-er-go mei
3SG-voice-? under
his/her neck 14

¹³ I assume that the final vowel -o of meiyo is a phrase- or clause-final clitic.

Although I cannot as yet give an adequate gloss for -go, this element seems to carry some meaning of 'surface'. It is found in items such as ab-ir-go '2SG-face' (with -ir- referring to 'voice', 'sound', 'language'; possibly, the response to my elicitation prompt leher 'neck' triggered 'face' instead); mei-go 'vulva', med-go 'back'. And when ind-us eihino is given for 'my skin is peeling' (due to the sunburn of my white skin), the word hino-go for 'snake' I suspect to be polymorphemic, as also cino-go 'ground, place'.

ind-ir-s mei
1SG-voice-? under
my jaw (m-ers mei 'his/her jaw')
in-doc mei
1SG-front under
my liver (me-doc mei 'his/her liver')

(iii) 'at the back of' medgo, realised as [metko] or [medogo]

This word refers to the human or animal body part: *ind-idgo* 'my back', *ab-idgo* 'your-back', *m-edgo* 'his/her-back'.

- (158) En esa se tu m-edgo. s/he stand at house 3SG-back S/he is standing behind the house.
- (iv) 'in front of' me-doc '3SG-front'

Compare the items 'heart', 'liver' and the expressions for emotions, given in §3.2.3. This inalienable noun specifies the spatial relation of one object to another:

(159) se bormey me-doc at table 3SG-front in front of the table

It can be used in relation to humans as well, as shown by (160). Both (159) and (160) can also be expressed by what is apparently a verbal element *deseino* 'opposite' (see §3.11.1 below) preceding the object, as in (161).

- (160) Pak guru ese logodeh sekolah mer-doc. mister teacher stand children school 3PL-front The teacher is standing in front of the schoolchildren.
- (161) Pak guru ese deseino logodeh sekolah. mister teacher stand opposite children school The teacher is standing before the schoolchildren.

But, in relation to a house, *me-doc* may not be used. An expression which lacks the lexical reference *tu* 'house' is used:

- (162) En esa se iktia.

 3SG stand at front.of.house
 S/he is standing in front of the house.¹⁵
- (v) 'corner' of a space is m-ougwo:
 - (163) se tu m-ougwo at house 3SG-corner in the corner of a house

¹⁵ This expression is reminiscent of Hatam ig 'house'.

The space 'between' is expressed by -oufu, which behaves as an inalienable noun. That is, it is inflected for dual (164a) or plural (164b).

- (164) a. se sogo mar-aufu at tree 3DU-between between two trees
 - b. se lu-sud mer-oufu at PL-person 3PL-between in the midst of people

The orientations *medgi* 'left' (165) and *misen* 'right' (166) also contain the possessive prefix. The word *misen* also means 'right, correct, true' see §3.8.3).

- (165) tu g-ese dig me-sra m-edgi house NOM-stand to 3SG-hand 3SG-left the house which stands on the left
- (166) tu g-ese dig me-sra m-isen house NOM-stand to 3SG-hand 3SG-right the house which stands on the right

There are two (or three) spatial relations that do not use terms marked for third person singular possession. These forms, significantly, are found in prenominal position. 'Above' and 'on top of' are both expressed by a form which lacks the third person possessive marker, taiba. For taiba both pre- and post-nominal positions have been obtained:

(167) se meja taiba at table top

se taiba bormei at above table on top of the table

But, with the meaning 'above' taiba is only found prenominally:

- (168) Ba oh taiba sogo mon.
 bird fly above tree top
 The bird(s) fly above the tree top.
- (169) Lampu eb taiba bormei. lamp do above table
 The lamp is hanging above the table.

'Around' is expressed by prenominal acec:

(170) Len l-esa acec bormei. they 3PL-stand around table They are standing around the table.

In the next example it is accompanied by post-nominal meiyo (see also (156) above).

(171) L-esa acec sogo m-eiyo.

3PL-stand around tree 3SG-under
They are standing around the tree.

The expression for 'opposite each other' contains the reciprocal marker -im, given in §3.2.5.6, following an apparent reduplicated form:

- (172) Tu hwai esa irir-im.
 house two stand opposite-RECIP
 The two houses stand opposite each other.
- (173) Aman am-eigtou irir-im.

 1DU.EXC 1DU.EXC-sit opposite-RECIP

 The two of us are sitting opposite each other.

3.7 Prepositions

At various places we have already encountered a number of prepositions. I'll give a list here, with a brief characterisation of their meanings, illustrated by an example. First, some locative prepositions, of which sa seems to be the most generic, meaning 'at, in(to)'. Since, as we have already seen, word-final -a is replaced by connective /e/ (see §3.1.1), this preposition is often realised as [se], and spelled accordingly (also in the Sough New Testament). When followed by vowel-initial words, the vowel of the preposition is elided, as in (174).

(174) Ban b-eihw-eda s(a) ab-an tu e? you 2SG-go-go to 2SG-POS house Q You're going to your house, right?

As example (175) shows, se does not only govern locative phrases, but also temporals. That example also shows a related form sug, which is required with spatial deictics. Recall the metathesised form skwada in §3.1.3 above, as alternative for sug gada 'at up there, in a western direction'. By itself sug introduces conditional or temporal protases, as in (176) (see also §4.3.7).

- (175) Dan d-ouwan d-eigtou sug geni se ari hogu.

 I 1SG-want 1SG-sit at here at week four
 I want to stay here for four weeks.
- (176) Sug ab-an hwej einesa ind-an lo kaba ban at 2SG-POS pig enter 1SG-POS garden then you b-oh dou dan.

 2SG-pay to me
 If your pig goes into my garden you pay (a fine) to me. 16

There are two locative prepositions that differ with sa in the sense that sa implies a sense of 'being at a location', whereas dig and aud both convey only the motion 'towards', excluding the actual state of being there. Native speakers characterise the difference between dig and aud in terms of their object, the former is used for non-human objects, the latter means 'toward humans':

¹⁶ It seems likely that *einesa* 'enter' is actually polymorphemic, with at least the preposition sa as final element. It cannot have another instance of the preposition following it.

- (177) Ban b-ouwan b-aimo dani dig cinogo. you 2SG-want 2SG-follow me to land You want to accompany me to the ground/village.
- (178) En esogwesa se duhu aud en-da.
 he jump at water towards him-go
 He jumped in the water towards him.

The opposite direction, that is, indicating 'source', is expressed by the preposition dau 'from', regardless of whether its object is human or non-human.

- (179) Dan d-en dau ang-giji mebera I 1SG-come from Anggi-male coast I come from the coast of Lake Anggi giji.
- (180) meijouhuda dau Saiba dara Ahoren descendants from Saiba with Ahoren the descendants of Saiba and Ahoren
- (181) L-a(o)uma dau len-g timur-timur se Kokas.

 3PL-INS-buy from 3PL-NOM Timor-east at Kokas

 They bought (kain timur) with (tobacco and birds of paradise) from the people of East Timor at Kokas.

The preposition dau 'from' can also occur without an explicit object, as in:

(182) Cum kaba udara eihweda dau habi nanan shortly then plane go.away from first 1DU.INC

n-aulo deit.
1DU.INC-continue again
In a while, after the plane has left, we continue again (our session).

Although the locative prepositions can also be used for non-locative relations, there are a number of prepositions that can only be used for non-locative notions. These include dara 'comitative', dou 'to, for', naugh 'for', an 'concerning, with respect to', dag 'like'.

The preposition dara 'with, and' functions as a conjunction in noun phrases, as in (183), but it also expresses a manner adverbial with a nominalised adjective as its object, as in (184).

- (183) dan dara akeina
 I with father
 I and father
- (184) Ban b-atou dara g-eigo e? you 2SG-sleep with NOM-good Q Did you sleep well?

Just as the locative preposition sug 'at', dara can also function as a clausal conjunction (see §3.11.2). In one (elicited) instance, dara 'with' expresses an instrument relation, (185), but I suspect this to be a calque of Indonesian dengan 'with'. Given the way instrument is morphologically marked by a verbal prefix, it seems that the canonical expression of the

Actually, a similar calque on Indonesian or Malay may be at work in (184).

instrument relation in Sough is by means of a serial verb construction, as illustrated in §3.2.2.3.

(185) Dan d-etkwa hwej dara kepta.

I 1SG-cut pig with machete
I cut up the pig with a machete.

The preposition *dou* 'to' is used for recipient and beneficiary relations. As in other Bird's Head languages, the concept 'give to someone' is expressed with the verb which means 'take, get' and the preposition 'to', as in (186).

- (186) En eic ar-et dou hwej. s/he take what-eat to pig S/he gives food to the pig.
- (187) Tuhan b-eic m-ou g-ouforoho dou ab-an sogougb lord 2SG-take 3SG-mind NOM-smart to 2SG-POS servant Lord, give wisdom to your servant. 18
- (188) En erei-ara dou dani. s/he deceive-thing to me S/he deceived me.

With the verb -os 'hold' dou seems to form a compound with an idiomatic meaning 'to promise', as in (189). See also footnote 3, explaining the title of the Sough New Testament.

(189) Dan d-os dou ban dag lonebi kaba dan d-ecicugb deit.

I 1SG-hold to you like tomorrow then I 1SG-return again
I promise you that tomorrow I will return again.

The difference between dou 'to, for' and naugb 'for' may at times be rather subtle. But the latter expresses more a purpose relation than recipient. Whereas I have no instances of dou with a clausal object, naugb seems to prefer this, as in (190) and (191).

- (190) Ban b-arautut dan naugb d-ec Sougb m-er.
 you 2SG-teach I for 1SG-speak Sougb 3SG-sound
 You teach me to speak the Sougb language.
- (191) Dan d-ouwan naugh len l-en.
 I 1SG-want for they 3PL-come
 I want them to come.

But *naugb* can have a noun (phrase) as its object, as in (192), and even the reciprocal clitic (see §3.2.5.6), which is phonetically fused, eliding the final consonant of the preposition, as in (193).

(192) Len l-en lega naugw-ara? they 3PL-make fence for-thing Why are they making a fence?

This example is from a prayer said in church (8/3/98). Notice that the term *sogough* 'slave' is used here to refer to the preacher who is seen as God's servant. *Mou* is explained as *pikiran* 'thoughts' and the adjective is nominalised. The same expression, without the nominaliser /k/ is used to express that someone is intelligent.

(193) L-ebe-simpan aregwa nau-m.
3PL-do-put poison for-RECIP
They place poison for each other.

The preposition an is best translated with 'concerning, with respect to, about'. It occurs with a few expressions of emotion, consisting of inalienable noun plus adjective (see examples (78)–(82), as illustrated in (194)).

(194) In-doc eigo an ban.

1SG-front good about you
I am happy with you. (= I like you.)

More generally, we could say that *an* introduces the reason for an event expressed by an intransitive verb, as in (195), or by a transitive verb (consisting of inalienable noun plus verb or adjective) plus (pronominal) object, as in (196). Such a relationship accounts for 'having a good heart' concerning someone, as in (194).

- (195) Lo-godeh l-eb an ar-et.
 PL-child 3PL-cry for what-eat
 The children are crying for food.
- (196) Dan in-doc ediseic en an m-en tu.

 I 1SG-front envious he about 3SG-POS house
 I envy him his house. 19

It can also express that a certain action is done with someone or something previously mentioned, as referred to in §3.2.5.3, and illustrated in (197).

(197) En od(o) en b-ec an da hob.

3SG carry 3SG RES-walk with go already
S/he had already taken him and walked off with (him).

(See §3.11.1 for a discussion of the conjunction b-.)

The prepostion dag 'like' often introduces a quote, sometimes with the element ai (see §3.12). An example is:

(198) Siba arough me-sowe-r en dag-ai: ya-gigda ya-(e)ihw-eda Siba order 3SG-wife-PL say like-it 2DU-woman 2DU-go-go sa tu meniha.

at house under Siba ordered his wives: you two women, go under the house.

It is optional when introducing a name:

(199) Ind-oho (dag) Ger.

1SG-name (like) Ger

My name is Ger.

¹⁹ I have not been able to determine the morphological complexity of ediseic. The sentence was given as an example for the Sough equivalent of irihati 'being envious'.

Finally, I include two items which function like prepositions, but which are verbal, definitely in the case of *eisaugb* 'ascend', as in (200), possibly in the case of *ijira* 'about', as in (201).

- (200) Len l-en-ara eisaugb are-m-er. they 3PL-say-thing ascend thing-3SG-speech They discuss a problem.
- (201) Dan d-en-ara goji dou dan ind-ihi-r ijira
 I 1SG-say-thing large to I 1SG-child-PL about

mer-en g-eic-ara.3PL-POS NOM-take-thingI scold my children for their behaviour.

A number of prepositions, in particular the locative ones, figure in question words (see §3.10).

3.8 Adverbials

I will present the adverbials in seven subclasses. The first three classes comprise other word classes, like nouns (or noun phrases) and adjectives, functioning adverbially. The other four classes consist of true adverbs. This categorisation is preliminary, and mainly based on semantic grounds: (i) temporal adverbials, (ii) locative adverbials, (iii) manner adverbials, (iv) focus adverbs, (v) aspectual adverbs, (vi) negative adverbs, and (vii) intensifiers.

3.8.1 Temporal adverbials

The list given in (202) contains both adverbs and adverbials which are either nouns or noun phrases. I have not been able to determine all possible morphemes.

(202)(e)ititogini now(adays) lonemen morning (possibly from lona 'day' + m-en '3SG-POS') lonemen greb this morning losog afternoon loba night lonehibi tomorrow giya yesterday cabe day after tomorrow gibeca day before yesterday cimobi three days from now cugubi three days ago four days ago²⁰ lone hogu four days from now gamo nosa earlier, first mohon long ago

Temporal adverbials seem to prefer a clause-initial position, but they can also be expressed as a preposition phrase clause-finally, as illustrated in:

In Lunow's wordlist: gamo 'three days ago' and cugubi 'four days ago'.

(203)B-esa melaikat l-erbacec loba emen se greb 2SG-send angel 3PL-surround 1EXC at night recent dara lonemen gini kaba emen em-eisa hob. with morning this then 1EXC 1EXC-get.up already You have sent (your) angels to surround us last night, and this morning we have already got up.21

3.8.2 Locative adverbials

Some locative adverbials have already been given in §3.5, on spatial deixis.

3.8.3 Manner adverbials

(204) misen true, right (hand),²² (see also (166) in §3.6).

asesa true
indeic true

The difference between the items in (204) is not easily determined. At least asesa and misen are basically adjectives. One can say (205), in which indeic and misen are not possible.

(205) meijouhw asesa meaning true the true meaning

On the other hand, asesa cannot be used when asking the question if something is indeed true, as in (206), being the equivalents of Indonesian betul kah?. Thus, indeic is probably the only true adverb.

(206) Indeic e?

Misen e?

true Q

Is that true?

Some other manner adverbs seem to involve reduplication:

(207) dedemeda fast, quickly deciciji slowly debimbin all the time

This sentence comes from a prayer, said at the beginning of an elicitation session. The verb which is explained as *mengelilingi* 'surround' contains the spatial orientation *acec* 'around', possibly with the verb *erba* 'throw'. The adjectival *greb* is explained as *tadi* 'recent past'. The difference with a similar element *graga* 'the one just now' is not quite clear. Both forms appear to have the nominalising prefix k-.

I have recorded both [mesen] and [misen]; the official spelling is misen.

3.8.4 Focus adverbs

Provisionally I list three adverbs, (208), under this heading, since their syntactic positions seems to depend on the scope of their application. Whether all three are equally mobile in a sentence is not clear as yet.

(208) deit again dous only toua also

In many cases, these adverbs occur in clause-final position, as in (209), but they can also be placed immediately following the predicate, (210), or directly after a nominal constituent which is focussed on, (211).

- (209) Ban b-en-s kata-kata meijouhw asesa dou emen toua you 2SG-say-CERT word-word meaning true to 1EXC also Show us also the true meanings of words.²³
- (210) Dan d-ecicugb se ind-an tu naugh d-ouman deit
 I 1SG-return to 1SG-POS house for 1SG-hear again

 areg nanan na-(o)gu graga.

 REL 1DU.INC 1DU.INC-write just.now
 I go back to my house in order to listen again to what we have just written.
- (211) Dan d-en dau Branda ari hwai dous aba.
 I 1SG-come from Holland week two only still
 I came from Holland just two weeks ago.

Possibly, the suffix to some adjectives is from toua 'also', for example, mougrei-to 'small'; deinyor-to 'near', gurei-to 'a few', which would then represent an adverb, as in:

(212) Ind-an argouf gurei-to.

1SG-POS money little-also
I have but little money.

3.8.5 Aspectual adverbs

Two adverbs always occur sentence-finally: *hob* 'already' and (*g*)*ebma* or *buma* 'not yet' express a phasal aspect. They are mutually exclusive with the negative adverb *ero*. Consider:

(213) Sug dan in-sowa hob kaba...
at I 1SG-wife already then
When I already had a wife, then ...

Possibly, the form *hob* should be *ohob*, because this vowel or a more reduced, more central, schwa-like vowel is realised, whether this adverb follows a vowel or consonant.²⁴

The verb en 'say, speak' can be suffixed with -s to convey the sense of 'show, reveal'. I gloss it as 'CERTainty' because this morpheme seems to have a function of making actions or objects more certain (see §3.1.6).

In the New Testament hob is always spelled with a connecting vowel to whatever precedes it.

The meaning 'not yet' is expressed by either (g)ebma or buma, which may be alternative realisations of (g)ebuma, the morphological constituents of which are not quite clear. In either case, the verb needs to be marked with irrealis -em, as in:

(214) Dan d-em-ecinag(a) (g)ebma.
Dan d-em-ecinaga buma.
I 1SG-IRR-know not.yet
I don't know yet.

3.8.6 Negative adverbs

The negative adverb is (e)ro 'not', always occurring in sentence-final position. Its initial vowel is elided when following a word ending with a vowel. For its syntactic behaviour, see §4.3.6. When a negator is necessary as independent utterance, the form naro 'no' is used.

3.8.7 Intensifiers

There are at least two adverbs conveying the sense of 'very'. These are namcir 'very', as in (215), and meyah which I have only heard in conjunction with the adjective eigo(uh) 'good': eigo meyah 'very good'.

(215) En me-doc gorougb en m-ehi-r namcir. s/he 3SG-front heart s/he 3SG-child-PL very S/he loves her/his children very much.

3.9 Verbal adjuncts

Sough shares with its neighbouring languages Hatam and Meyah the phenomenon of two adverbial elements which deserve some special status. The items dougwo and deb(in) collocate with many different verbs yielding specific meanings, but a precise meaning for these words is not easily determined. Dougwo is glossed as 'block' or 'keep out', and deb(in) is provisionally glossed as 'hold onto'. These terms are equivalent to Hatam ser 'keep out' and kep 'hold onto' and Meyah joug and keing, respectively (Reesink 1999:73; Gravelle 1998:566, and this volume).

The basic meaning of dougwo 'blocking off, keeping out' is best illustrated by (216).

(216) Dan d-oho sudga dougwo los.

I ISG-carry raincape block rain
I wear a raincape against the rain.

When dougwo is used with the position verbs esa 'stand' and eigtou 'sit', the meaning of 'guard, protect' is realised, as in (217), with an extension to 'comfort', when relatives 'sit dougwo' a person who has lost a loved one, as in (218).

(217) En esa dougwo en m-eh. s/he stand keep.out 3SG 3SG-child S/he protects her/his child. (218) Len l-eigtou dougwo en me-doc m-es. they 3PL-sit keep.out 3SG 3SG-front 3SG-hole They are comforting him/her.

The latter example could be a calque of Hatam (219), or vice versa, of course.

(219) Yoni i-gwam ser ni-ngon-ti. they 3PL-sit keep.out 3SG-heart-NOM They are comforting him/her.

With a perception verb, like eya 'see', the adjunct dougwo expresses a sense of 'checking', as in (220), which again runs parallel to Hatam (221).

- (220) Dan d-eya dougwo ind-an surat. I 1SG-see block 1SG-POS letter I check my letters.
- (221) Dani di-ngat ser dit-de surat.

 I 1SG-see block 1SG-POS letter
 I check my letters.

The adjunct *deb* has a more aspectual sense, when it collocates with position verbs, as illustrated in (222).

(222) Dan d-eigtou deb.
I 1SG-sit keep
I'm sitting. (translated as saya tinggal saja 'I'm just staying')

It occurs in the phrase expressing 'to expect' or 'to hope':

(223) Len l-od mer-na deb sa. they 3PL-fold 3PL-soul keep at They are (strongly) hoping for (something).

There are a few instances where *deb* is suffixed with -*in*, which I suspect to be the directional 'towards speaker', as in (224). The form *debin* is explained as 'solid, firm' in the phrase translating 'to believe, to have faith':

(224) Dan in-doc eb deb-in an en.
I 1SG-front do keep-DIR concerning 3SG
I believe him/her.

A more intensifying meaning, rather than a continuative aspect, seems to be present in the following examples:

- (225) Dan d-ouci buku-buku deb-in-im.
 I 1SG-gather books keep-DIR-RECIP
 I stacked the books.
- (226) Dan d-ed-erba diara deb-in hosei.
 I 1SG-go-throw net keep-DIR fish
 I am going fishing.

As a conjecture I would suggest that both dougwo and deb(in) contain a connective d-, which is discussed in §3.11.1.

3.10 Questions

3.10.1 Polar questions

Polar questions marked with e, as in (227), seem to convey some presupposition on the part of the speaker, expecting a positive answer.

(227) Akeinya ban b-en mohon hob e?
daddy you 2SG-come long already Q
Sir, you came a long time ago, right?²⁵

I have no evidence for polar questions with the marker a, which occurs on (many) content questions.

3.10.2 Content questions

3.10.2.1 Inanimate object questions

The question word for 'what' is identical to the word for 'something': ara, as (228) and (229) show.

- (228) D-ouwan d-et ara.

 1SG-want 1SG-eat something
 I want to eat something.
- (229) Len l-en lega naugb ara? they 3PL-make fence for what What do they make the fence for?

How statements such as 'we are doing something' and questions such as 'what are we doing?' are distinguished is not totally clear. On the basis of my limited data, it seems that a question is formed with more accent (i.e. higher pitch on the final syllable), while a statement has the main accent on the main predicate, as illustrated by:

- (230) Em-e'cic ara.
 1EXC-talk what
 We are talking.
- (231) Y-ecic a'ra?

 2PL-talk what

 What are you talking (about)?

But in general, the difference between a statement with an indefinite object and a content question seems to be resolved by pragmatic factors.

When the question is specifically about one possible item out of a known set, the head noun is followed by *grong*, as in: ²⁶

Akeinya is the vocative for 'father'; the sentence is explained by Malay Bapak, su lama kesini kah?.

The question word *grong* could contain the element (i)ro, which also occurs on the locative question words (see §3.10.2.3) with some nominalising. A precise account of its morphology is not possible on the basis of my data.

(232) Hwej grong ban b-eic naugb maman ma-t a?
pig which you 2SG-take for IINC IINC-eat Q
Which pig do you get for us to eat?

An answer to the question in (232) would be as in (233), which shows a suffix -es indicating some certainty or definiteness on the first deictic (see §3.1.6).

(233) *G-in-es naro doba ingga dous.*NOM-this-one not but that.one only
Not this one but only that one.²⁷

3.10.2.2 Animate object questions

When the referent is human the form ara is prefixed with the nominaliser /g/: gara, as in:

(234) Gara m-en ij gada? who 3SG-POS canoe that.West Whose canoe is that one? (pointing to the west)

Asking for someone's name can be done with gara 'who' or dag(i)ro 'how':

- (235) Ab-oho gara?
 2SG-name who
 What's your name?
- (236) Ab-oho dag(i)ro?
 2SG-name how
 What's your name?

The form dagiro in (236) obviously contains the preposition dag 'like', with some question word iro, which figures in a few other questions words, asking for locations. The initial vowel i is hardly ever heard in these items (see §2.6 for elision of high front vowel).

3.10.2.3 Locative questions

Question words referring to location or direction are based on the form (i)ro. This is attached to a locative presposition, almost always without the initial vowel realised (in spite of the spelling used in the New Testament). Thus, we have: dauro 'from where', sug(i)ro 'at where', dig(i)ro 'towards where'. These items always take the position of the locative constituent, as in:

(237) Ban b-eic saboku dau-ro? you 2SG-take tobacco from-where From where did you get the tobacco?

What exactly goes on in various deictic forms, when they are used in relative, attributive or substantive function, is not quite clear as yet. Invariably they are either prefixed or suffixed with a velar stop, which I have identified as 'nominaliser' (see §3.1.5).

3.10.2.4 Temporal questions

Time question words differentiate between past and future: aiseba 'when (referring to the future)' and aisa 'when (referring to the past)' (see §3.12 for a tentative morphological analysis). Both question words may occupy various positions in the clause, apparently without great differences in meaning.

(i) Clause-initial:

- (238) Aiseba ban b-eihwe-de dau? when you 2SG-go-go from When are you going away?
- (239) Aisa ban b-en dau Nenei a? when you 2SG-come from Nenei Q When did you come from Nenei?
- (ii) Pre-predicate (i.e. between subject and predicate):
 - (240) Ban aiseba b-eihwe-de dau? you when 2SG-go-away from When are you leaving?
 - (241) Ban aisa b-en dau Nenei a? you when 2SG-come from Nenei Q When did you come from Nenei?

(iii) Clause-final:

- (242) Ban b-eihwe-de dau sug-(g)ena aiseba? you 2SG-go-away from at-here when When are you leaving from here?
- (243) Ban b-en dau Nenei aisa? you 2SG-come from Nenei when When did you come from Nenei?
- (iv) Post-predicate (I lack explicit evidence for aiseba in this position):
 - (244) Ban b-en aisa dau Nenei a? you 2SG-come when from Nenei Q When did you come from Nenei?

3.10.2.5 Quantity questions

Questions about quantity use the question word *hosa*. A preliminary analysis would suggest that *hosa* 'how many' can be part of a noun phrase, preceded by a classifier, as in (245). Or that it may be positioned clause-finally, as in (246), where the quantity of the items of the object is questioned, and not that of the person of the beneficiary preposition phrase.

- (245) Ban b-eiya ba mer-ug hosa ya? you 2SG-see bird 3PL-body how.many Q How many birds did you see?
- (246) Ban b-ouhw hwej dara limogo dara minj dou ab-sowa hosa? you 2SG-pay pig with beads with cloth to 2SG-wife how.many How many pigs, beads and kain timur did you pay for your wife?

3.10.2.6 Reason questions

Reason is questioned with the generic noun ara 'what, something' attached to either the preposition naugb 'for' (247) or the preposition an 'concerning, with respect to', as in (248). The phonetic realisation of naugb-ara is always [naugwara].

(247) Len l-en naugw-ara? they 3PL-come for-thing What do they come for? = Why are they coming?

More causal is the composition an-ara 'with respect to what'. This appears the interrogative parallel to the treason conjunction an-ai 'because'. ²⁸

(248) An-ara hang len l-em-en iro-gen ero? concerning-what then they 3PL-IRR-come day-this not Why didn't they come today?

3.11 Conjunctions

3.11.1 Cliticised conjunctions

There is some evidence for two connective clitics in Sough, which at first glance look like pronominal prefixes: b-, homophonous with '2SG' and d-, homophonous with '1SG'. But when different person categories are used, it appears that these forms are independent of person. They are restricted to verbs which follow a main verb.

Firstly, I present some examples in which d- seems to function. In (249) it seems that both verbs are marked for first person singular.²⁹

(249) D-arges d-oc an dan g-eic-ara
1SG-leave CONN-? concerning I NOM-take-thing
I stopped with my work.

The Indonesian equivalents of the two ways Sough has for asking 'why' show a similar distinction: naughara is translated as untuk apa 'for what', and an-ai is explained as kenapa 'why'. In other words, the former question may also refer to a purpose, whereas the latter wonders what has preceded that could have caused the event being questioned.

²⁹ If indeed oc is a verb. Possibly, it is what Lunow's unpublished wordlist gives as oc 'wear sarong, tie thatch', which also seems to surface in oc moms 'put ears' for 'to listen'. Of course, It could be that doc is just a monomorphemic form. It appears in og-doc, translated as 'according' (Indonesian melalui), and in g-ouwe-doc 'the last one'. The verb ouw(e), whose final vowel is uncertain, figures in ouwe hob 'it's finished'.

But when the subject is third person, the second verb maintains its 'prefix':

(250) En arges d-oc an m-en g-eic-ara. s/he leave CONN-? concerning 3SG-POS NOM-take-thing S/he stopped his/her work.

The form esij means 'to be near'. It receives the clitic d- in:

(251) En eigtou d-esij. s/he sit CONN-near S/he is sitting nearby.

And in the expression for 'to agree', the clitic d- on the second verb, eisa 'get up', is metalinguistically explained as a connecting device to emphasise the linkage

- (252) Maman ma-(o)usa d-eisa hob.

 1INC 1INC-help CONN-stand.up already
 We have already agreed.
- (253) Sug ban b-ousa d-eisa ... at you 2SG-help CONN-stand.up If you agree ...

Possibly, the same clitic figures in *deseino* 'opposite', which could be further broken up into *d-es(a)-eino* 'CONN-stand-before', since *eino* by itself can figure as a main verb meaning 'going in front of someone, going ahead':

(254) Ban b-eigtou d-eseino dan. you 2SG-sit CONN-opposite I You are sitting opposite me.

As a final comment on the possibly connecting function of d-, consider the word duhu 'water'. I suspect this is formed with this connective, since the form mohu exist for 'liquid' as in (255), which is given for 'snot', while the reduplicated form mohu-mohu is given as equivalent for 'wet'.

(255) are m-es m-ohu thing 3SG-hole 3SG-liquid nasal mucus

The existence of forms *duhu* and *mohu*, both referring to 'liquid, water', suggests that there is a basic form *uhu*, whose initial vowel is lower due to the vowel of the 3SG possessive prefix, as is usual for inalienably possessed nouns, ³⁰ (see §3.3.1). These comments are rather speculative, of course, and they should not be taken to imply that the cliticised connective is still productive.

The second cliticised connective can be presented with some more certainty. The clitic bis independent of a second person singular. It appears on the second verb in a series. It
seems similar to Hatam bV- 'purposive or resultative' (Reesink 1999:102). Hence, I have
glossed it as such. Consider:

Possibly, Sough *uhu* and Meyah *mei* for 'water' are arguments to suggest an ancient link to languages far towards the east: Ok and Mek languages, both named after their predominant word for 'water'.

(256) En od(o) en b-ec an da hob. s/he carry s/he RES-walk concerning go already S/he had already carried her/him of f.

This sentence, taken from a recorded story, can be opposed to (257), when the direction is not away from, but towards the deictic point of reference:

(257) En od(o) en b-ec an in hob. s/he carry s/he RES-walk concerning come already S/he had already carried her/him hither.

The resultative connector b- can only occur on verbs marked for third person singular, which lacks an explicit subject marker. The Indonesian glosses given for the instances in my data all indicate some resultative or purposive meaning. In conjunction with experiential verbs the behaviour of b- clearly shows the person categories and the restriction on its occurrence. Consider (258) in which the first predicate is formed by an experiential verb and the second does not allow b-. It requires co-reference with the experiencer object of the first. In contrast, (259) has an experiential verb as second predicate, on which b- does occur linking the inanimate object or the full predication to the second predicate.

- (258) Sir-eb-ed d-ahauwa namcir.
 hunger-do-me 1SG-fear extremely
 I am dying of hunger.
 *Sir-eb-ed b-ahauwa namcir.
- (259) D-et-ara b-eice-d dau.

 1SG-eat-what RES-satisfy-1SG from I ate until I was satisfied.
 - *D-et-ara d-eice-d dau.

Finally, the verb ouw(e) 'be finished' (Indonesian habis), which allows only a third person subject, is prefixed with b-, when it figures as a second predicate in a series, as in:

(260) En es lo b-ouwa hob. s/he plant garden RES-finish already S/he has finished planting the garden.

3.11.2 Lexical conjunctions

A few prepositions, given in §3.7, can also function as conjunctions, such as dara 'with' and sug 'at'. Some conjunctions seem to contain the nominaliser /g/. As mentioned in §3.1.4, kaba 'then' seems related to an adverb aba 'still, yet', but the morphemic structure of hang 'so' and dangga (also realised as danga) is not clear. Then there are a few other conjunctions which do not seem to have elements from other word classes. I will simply give a list here. Most of them are illustrated in examples throughout this description or in the texts in the appendices.

(261) dara with, and kaba then sug if, when

dobabuteraorhangsodangaso thatdauntobain order thatdobnarobut not

3.12 The particle ai

Various phrases contain a form ai, which is not easily translated by itself. The closest equivalent, which I think captures the meaning reasonably well, is anaphoric or cataphoric 'it' or 'that'.

It figures in the formulaic quote introducer:

(262) L-eija m-oho en dag-ai.

3PL-call 3SG-name say like-this

They call it like this. (Appendix 1, (12))

It is also found in the time question words (see §3.10.2.4), for which I propose the following morphemic structure:

- (263) ai-sa that-at when, referring to past events
- (264) ai-s(a)-eb-a that-at-do-Q when, referring to future events

I suspect that the conjunction *anai* 'because' is in fact a compound of the preposition *an* 'with respect to' and this same particle *ai*: 'with respect to that' is 'because of this', as in:

(265) En em-eic kepta gin ero anai okta hob.

3SG IRR-take machete this not because blunt already
S/he doesn't take this machete for it is blunt.

Apparently it may function as a verb. The expression I obtained for 'stupid' while eliciting a wordlist is clearly polymorphemic:

(266) Mou em-ai-ero. thoughts IRR-it-not S/he has no thoughts.

In a few recorded texts, ai is used as an anaphoric or cataphoric filler. When establishing the correct wording and meaning of such texts, reference by the consultant to ai is absent, as if it had no meaning. Given the occurrences illustrated so far, I suggest that it has some rather generic anaphoric function in (267) as well.

(267) Doba / indan-ai / atug g-edag ingga gia ingga ro. but my-it comb NOM-like that yesterday that not But, mine, the comb is not like the one of yesterday.

4 Syntax

4.1 Noun phrase

Like all other languages of the Bird's Head, Sough has the basic word order: Noun + Adjective + Numeral + Determiner in the noun phrase, as in:

(268) ketmei mougrei hwai gac knife small two those those two small knives

When the head noun is animate, the inalienable noun 'flesh' may be used as a classifier with numerals other than 'one' and the number question word *hosa* 'how many'. But this is not obligatory.

- (269) Ban b-eya ba mer-ug hosa ya? you 2SG-see bird 3PL-flesh how.many Q How many birds do you see?
- (270) Dan d-eya ba (mer-ug) hogu.

 I 1SG-see bird 3PL-flesh four
 I see four birds.

Coordination of (pro)nominal elements in a noun phrase is expressed by the conjunction dara 'and, with', as in:

Dan d-ouhw minc homoi dara hwej hwai limogo (271)dara 1SG-pay cloth three and pig two bead.string and sud hom dou in-sowa m-ena. person one to 1SG-wife 3SG-father I paid three ceremonial cloths and two pigs and twenty bead strings to my wife's father (as brideprice).

4.2 Possessive noun phrase

The possessor always precedes the possessee in a possessive phrase. Consider the possessive pronoun with an alienably possessed noun and the free pronoun preceding the inalienable noun *oho* 'name' in (272). The free pronoun is likely to be present in the case of inalienably possessed nouns, as shown in both (272) and (273), although this does not seem to be strictly obligatory, as *in-sowa m-ena* 'my-wife her-father' in (271) illustrates.

- (272) D-ouwan d-acgeic ab-an cinogo m-oho dara ban ab-oho.

 1SG-want 1SG-ask 2SG-POS ground 3SG-name with you 2SG-name I want to ask your address and your name.
- (273) Igde erba m-ohora esij dan in-sra m-os ogoufu. sun throw 3SG-leg hit I 1SG-arm 3SG-skin white The sunrays hit the white skin of my arm.

4.3 Clause

The limited data from just over three weeks of fieldwork do not allow an extensive discussion of the syntax. I will simply give a few examples of clauses with a nominal predicate, followed by the basic structure of verbal clauses. Sough, like other languages of the Bird's Head, allows some tight sequences of verbs, which I illustrate under the heading of 'serial verbs' without any theoretical discussion of this phenomenon. The chapter on the clause will be closed by a brief exposition of complex clause constructions: clausal objects, relative clauses, and a first attempt to determine the scope of negation. This last topic was triggered by the apparent obligation to mark the verb with the irrealis prefix in a negative sentence.

4.3.1 Nominal predicate

In non-verbal clauses the predicate can be either a noun (phrase), or items such as numerals, question words, and so on. In examples (274) and (275), the 'topic' is the question word with the possessive pronoun, 31 and the comment, that is the nominal predicate, is formed by the second noun phrase. The answer to the latter question, (276), illustrates the use of 'certainty' -(e)s on the topical demonstrative: gin(i) becomes gin-es. The nominal predicate is the noun phrase 'Koni's canoe'. There is no evidence in my data for an order in which the nominal predicate is in initial position.

- (274) [Gare m-en] [tu gac?] [who 3SG-POS]_{Topic} [house that]_{Comment} Whose house is that?
- (275) [Gare m-en] [ij gin-a?] [who 3SG-POS]_{Topic} [canoe this-Q]_{Comment} Whose canoe is this?
- (276) [Gin-es] [Koni m-en ij.] [this-CERT]_{Topic} [Koni 3SG-POS canoe]_{Comment} This is Koni's canoe.

The following examples show a question word (277), a numeral (278) or an inalienably possessed noun, functioning as classifier (279), as nominal predicate.

- (277) [Ban ab-ih] [hosa?] [you 2SG-child] [how.many] How many children do you have?
- (278) [Ind-ebehito] [homoi.] [1SG-grandchildren] [three] I have three grandchildren.
- (279) [Lusud gus] [mer-ug ero] kaba lotna namcir. [people other] [3PL-body not] then quiet very There are no people so it is really quiet.

In both cases the final a of gara 'who' is substituted by the connecting e (see §3.1.1).

The structure as indicated for (278) is only a guess, suggested in analogy to (275). It could well be that predicative possessive structures are actually single noun phrases functioning as a comment on an unexpressed topic. For example, (213), here repeated as (280), suggests that a possessive noun phrase by itself is a well-formed clause, with a final aspect adverb.

(280) Sug dan in-sowa hob kaba ...
at I 1SG-wife already then
When I already (had) a wife, then ... (Appendix 1, (9))

Whereas predicative possession apparently can be expressed by non-verbal predication, as in (281), both personal relations and possessions appear to be preferably expressed by some verbal predicate, as illustrated in (282) and (283).

- (281) Ind-ihida sud me-isi hom.

 1SG-daughter oldest 3SG-son one
 My oldest daughter has one son.
- (282) Me-isi hom em-eic me-sowa ebma.

 3SG-son one IRR-take 3SG-wife not.yet
 One of her sons has not taken a wife yet (is not married yet).
- (283) Ind-an aregoufu ingm(a) em-eb(a) ero. 1SG-POS money some IRR-do not I don't have any money. (Acts 3:6)

4.3.2 Verbal predicate

Minimal clauses consist of just a verbal predicate, that is an inflected verb, as in:

(284) D-ekinei.
1 SG-thin
I am thin.

But more frequently (at least during the few weeks I tried to communicate using Sougb) a free pronoun is used, as in:

(285) Ban b-einesa! you 2SG-enter Come in!

In simple clauses with a transitive verb, an object is expressed, as in (286) and (287).

(286) L-et ara l-et ara ...

3PL-eat what 3PL-eat what
They ate and they ate ...

Sentence (286) is from a story telling about many groups of people coming to a big feast. The speaker repeats this small clause many times. The object of 'eating' is not specified. There are other verbs which require this generic noun ara when no specific object is available. In such cases a transitive verb cannot be used without an object. When the referent of an object is retrievable from the context, however, objects do not need explicit mentioning, as illustrated in the texts in the appendices.

(287) Dan d-eisaugb men-mod.
I 1SG-ascend mountain-top
I climb a mountain.

While the verb *eisaugb* 'ascend' apparently can have a direct object, its antonym *owada* 'descend' requires a preposition:

(288) Dan d-owada dau men-mod.
I 1SG-descend from mountain-top
I descend from the mountain.

Oblique objects (i.e. prepositional phrases) follow direct objects, as in the exchange in (289) and (290). See also lines (40) and (41) of the text in Appendix 1.

- (289) Ban b-ouhw hwej dara limogo dara minc dou ab-sowa hosa? you 2SG-pay pig and necklace and cloth to 2SG-wife how.many How many pigs, necklaces and ceremonial cloths did you pay for your wife?
- (290) Dan d-ouhw minc homoi dara hwej hwai dara limogo sud
 I 1SG-pay cloth three and pig two and necklace man
 hom dou in-sowa me-na.
 one to 1SG-wife 3SG-father
 I paid three ceremonial cloths, and two pigs and twenty necklaces to my wife's father.

In the section on content question words I have already illustrated that time question words may be placed at different positions in the clause: initially, between subject and predicate or finally (see §3.10.2.4). Preferably, temporal adverbs or adverbial phrases are positioned clause-initially, as in (291) and (292). That position is then easily separated from the clause by a conjunction *habi* 'after, first' or *kaba* 'then', illustrated in (293) and (294).

- (291) Nosa giji dau branda l-en l-eigtou se Disihu. before man from Holland 3PL-come 3PL-sit at Irai In the past people from Holland came and lived at Irai.
- (292) Lonebi dan d-ehi sogo. tomorrow I 1SG-fell tree Tomorrow I am going to cut down a tree (trees).
- (293) Lone hom deit habi nanani na-m-ecic are deit. day one again after we.DU.INC 1DU.INC-IRR-tell thing again Some other time we'll talk again.
- (294) Cum kaba n-aulo deit. shortly then 1DU.INC-continue again In a little while we'll continue again.

While clause-initial temporals provide a time frame for the event expressed by the predication, temporals in clause-final position are adverbial modifiers of the predicate itself. The latter then specify the duration of the event, as illustrated by the exchange I was taught the first day of my stay at Sururei:

- (295) Ban b-eigtou sug gini se ari hosa? you 2SG-sit at here at week how.many How many weeks will you stay here?
- (296) Dan d-ouwan d-eigtou sug gini se ari hogu.
 I 1SG-want 1SG-sit at here at week four
 I want to stay here for four weeks.

4.3.3 Serial verbs

As already suggested by (296), simple clauses can contain a sequence of inflected verbs. Although such sequences have not been researched in any detail, it seems that they would qualify as serial verb constructions. Provisionally, it seems safe to stipulate the following restrictions: the verbs in such sequences fall within the intonation contour of one clause, they share their subject, obligatorily marked on each verb, and no conjunction or pause may intervene.

- (297) Dan d-ouwan d-ec d-eiya cinogo.

 I 1SG-want 1SG-walk 1SG-see land
 I want to walk around to see the place.
- (298) Ban b-ouwan b-aimo dani dig cinogo. you 2SG-want 2SG-follow me to land You want to follow me to the place.
- (299) Len l-eic-ara l-arses eni. they 3PL-take-thing 3PL-disturb him They are disturbing him.

Although I cannot give a good gloss for the verb at, 32 consider the variants in (300) and (301), suggesting that here again the verbs are closely linked.

- (300) Dan d-en-ara d-at me-doc m-es.

 I 1SG-say-thing 1SG-hit 3SG-front 3SG-hole
 I comfort him. (lit. I say something I hit the inside of his front.)
- (301) En en-ara at enin me-doc m-es. s/he say-thing hit 3SG-self 3SG-front 3SG-hole S/he comforts her/himself.

There is at least one verb which is attached to the bare stem of the following verb, contradicting the general rule that all verbs in a series require their own subject prefix. The verb eda 'to go' forms a compound with (any?) other verb. It still seems to convey the sense of movement and not just an inchoative aspect:

(302) Dan d-ec d-ed-eiya camat.

I 1SG-walk 1SG-go-see administrator
I am going to visit the administrator.

The Malay gloss obtained is *kena* 'hit, impinge'; recall the verb *atro* glossed as 'forcefully thow down' in §3.2.5.4. Hence, some meaning in the area of 'hit' would seem appropriate for *at*.

(303) Len l-ed-eigtou. they 3PL-go-sit They went to stay.

Since the sense of motion is still present in compounds consisting of inflected *eda* and bare stem of the following verb, one would expect that its antonym *en* 'to come' is also possible. But this is not the case, (304) is not acceptable.

(304) * Ban b-en-eiya you 2SG-come-see

Not only are verbs in a tight sequence inflected for subject person-number, if irrealis marking is called for, as is the case in negative sentences (see further §4.3.6), both verbs require the *em*-prefix:

- (305) Dan d-em-en d-em-atou se Sururei terimd-ero.
 I 1SG-IRR-come 1SG-IRR-sleep at Sururei long-not
 I haven't come to stay at Sururei long.
- (306) Dan d-em-eic kepta d-em-a-(e)hi sogo mougrei gi-n
 I 1SG-IRR-take machete 1SG-IRR-INS-fell tree small NOM-this
 ero anai ogta hob.
 not because blunt already
 I do not use this machete to fell this small tree, because it is blunt.

Similarly, the expression obtained for 'to be impatient' (307) is a negated series. The second verb is obviously a reduplicated form of a verb whose meaning I don't know:

(307) En em-eigtou em-atei-teij-ero. s/he IRR-sit IRR-?-RED-not He is not being patient.

4.3.4 Relative clauses

The construction of a (restrictive) relative clause makes use of the nominaliser /g/, which often is realised as a voiceless [k] (see §3.1.4). When subjects are relativised, the nominaliser g- is either a proclitic to the verb of the relative clause, or an enclitic to the head noun or pronoun. For example, when discussing the alternative realisations of a relative clause (308), it was explicitly stated that the proclitic on the verb is not present when it is already expressed on either of the relative pronouns, in (308b) and (308c). The relative pronoun gedig is found in the New Testament, and therefore included in the discussion. While I do have instances of the (a) and (b) variants in text and other elicited material, I have not encountered gedig. This may be a dialectal variant.

- (308) a. godeh hom g-ough-de-dau m-ena child one NOM-run-go-from 3SG-father a son who ran away from his father
 - b. godeh hom are-g ougb-de-dau m-ena child one what-NOM run-go-from 3SG-father

c. godeh hom gedig ough-de-dau m-ena child one that run-go-from 3SG-father

The final alveolar nasal of the free pronoun coalesces with the velar stop to a velar nasal, as in (309). The stem-final -a of the noun gi(g)da 'woman' in (310) is substituted by connecting /e/. The relative clause seems to be obligatorily linked to the main clause by the conjunction kaba 'then'.

- (309) Len-g l-auwoho dan kaba dan d-eic g-omom dou they-NOM 3PL-accuse I then I 1SG-take NOM-die to len namcir.

 they very
 Those who accuse me falsely I will certainly kill them.³³
- (310) Gide-g ougw-an-ara dou dan gini kaba dan woman-NOM cook-concerning-thing for I this then I in-sowa me-si.

 1SG-wife 3SG-friend
 The woman who cooks for me is my wife's friend.

When the head noun has an object function in the relative clause, it is preposed and linked to the main clause with a relative pronoun, consisting of the noun ara 'what, something' suffixed with the nominaliser /g/. This means that the final vowel of ara is substituted by connecting /e/: areg.

(311) Hwej m-eh areg dan d-ouma gibeca kaba
pig 3SG-child which I 1SG-buy day.before.yesterday then

en omom se lonemen greb hob.
it die at morning recent already
The piglet I bought the day before yesterday, has already died this morning.

When the head noun has the function of instrument in the relative clause, the structure is the same as for object relativisation, with the proviso that the verb is marked for instrument by the prefix a-:

(312) Keita areg dan d-a-(e)hi lo kaba dan d-acgeic axe which I 1SG-INS-fell garden then I 1SG-ask dau ind-agona.

from 1SG-older.brother

The axe with which I cut the garden, I borrowed from my older brother.

When a beneficiary is relativised, a pronoun copy appears to be obligatory as object of the preposition, as in:

len-g l-en-s dan se misen kaba they-NOM 3PL-say-CERT I at true then those who accuse me rightly

The verb *auwoho* means 'to accuse falsely'. To accuse someone of a true fact is expressed by the verb *en* 'say' suffixed with the certainty marker -s. Thus, when the accusation is true, the relative clause of (309) would be as follows:

(313) Giji areg dan d-esinsin ij dou en gin kaba male which I 18G-construct canoe for him this then dan ind-ebehito.

I 18G-sister's child
The man I built a canoe for is my sister's son.

4.3.5 Clausal objects

A number of verbs allow or require clausal objects. Perception verbs such as eya 'to see', ouman 'to hear', and speech verbs, such as arough 'to order' can have a full clause as their object.

- (314) Dan d-eiya hwej einesa ab-an lo.

 I 1SG-see pig enter 2SG-POS garden
 I saw the pig enter your garden.
- (315) Len l-ouman maman ma-(e)n-ara. they 3PL-hear 1EXC 1EXC-say-thing They heard us talking.
- (316) Dan d-arough Urias es tuhan hom.

 I 1SG-order Urias shoot mister one
 I order Urias to shoot a foreigner.

4.3.6 Scope of negation

The verbal prefix em- has been labelled 'irrealis'. It can be used optionally when the speaker refers to a future event (see §3.2.2.2). The precise import is not quite clear. Informants use the Indonesian term akan 'will, about to' to explain its meaning, but when many future references happily do without the prefix, its meaning must be more generic, more attitudinal. As stated in §3.2.2.2, it conveys a sense of uncertainty when a future event is referred to. There is at least one condition which makes inflection with em- obligatory. Any verb under the scope of a sentence-final negative ero requires it. This fact allows for some clear delimitation of the scope of negation. Let us consider a few examples of verbs with clausal objects. In (317), the main verb lacks the irrealis inflection, because it is not the 'ordering' which is denied. Only the content of the order is a negated clause.

(317) Dan d-arough ban dauntoba ban b-em-d-es ab-an
I 1SG-order you in.order you 2SG-IRR-go-plant 2SG-POS
lo (e)ro.
garden not
I ordered you that you do not go and plant your garden.

Even though the negative adverb has a strictly sentence-final position, it is possible to include the main predicate under its scope, by inflecting it with em-. In (318), both the preposition naugb 'for' and the irrealis marker em- in the second clause are optional.

(318) Dan d-em-arough (naugh) b-(em)-ehi sogo gac ero.

I 1SG-IRR-order for 2SG-IRR-fell tree that not
I did not order you to fell that tree.

The optionality of irrealis marking on the second clause seems to allow differentiation as to whether the event took place or not. In the case of *b-em-ehi* the addressee did in fact not fell the tree, whereas if the verb form *b-ehi* is chosen, the meaning seems to be that although the speaker did not order it, the addressee did cut the tree down. This seems to be borne out by the next examples:

- (319) Dan d-em-eiya hwej einesa ab-an lo (e)ro.

 I 1SG-IRR-see pig enter 2SG-POS garden not
 I did not see that the pig went into your garden.
- (320) Dan d-eiya doba hwej em-einesa ab-an lo (e)ro.

 I 1SG-see but pig IRR-enter 2SG-POS garden not
 I saw that the pig did not enter your garden.

In (320), the scope of the negative is limited by the connective *doba*, and the irrealis is marked only on the negated verb. Presumably, when the negative is explicitly applied to the main predicate (i.e. when it is inflected with *em*-), the speaker has a choice with regard to the subordinate predicate. A final example has to suffice for this preliminary account of the scope of negation in Sougb. For (321) I have no evidence for the semantic difference between presence or absence of *em*- on the verb *aimo* 'follow', but I suspect that absence of this marker may imply that the scope of negation is exclusively on the first verb.

(321) Ban b-em-ouwan naugh b-(em)-aimo dan ero e? you 2SG-IRR-want for 2SG-IRR-follow me not Q You don't want to come with me, do you?

4.3.7 Conditional sentences

Finally, I present a few examples of conditional sentences. The protasis is invariably introduced by the preposition *sug* 'at', and the apodosis by the conjunction *kaba* 'then', as is the case with the relative clause constructions I obtained. Negation is obviously possible on either conjunct, as illustrated in (322) and (323). Counterfactuals, as in (324) clearly allow negation of both conjuncts.

- (322) Sug los medam kaba dan d-em-en ero. at rain big then I 1SG-IRR-come not If it rains hard, I won't come.
- (323)dan ar-em-eba dan ero kaba dan toua d-aimo at I thing-IRR-do I not then also 1SG-follow dan in-si naugb aman am-iheron hwei. 1SG-friend for 1DU.EXC 1DU.EXC-look.for If I am not sick I also go with my friend to hunt pigs. If I had not been sick, I would also have gone with my friend to hunt pigs.

(324)Sug ban b-em-en-s minc meijouhw dou dan ero you 2SG-IRR-say-CERT cloth meaning to not eisaugb minc gin kaba dan d-em-ecinaga 1SG-IRR-know ascend cloth this also not I If you had not shown me the meaning of kain timur, I would not have known about these cloths.

But, because Jonathan Ahoren told me the text on the *kain timur* reproduced in the appendices, we do know a little about its function in Sough society. Moreover, because he and others were willing to teach me how to understand the recorded texts and how to say things, we do know a little about this language.

Appendix 1

The use of *kain timur*Told by Jonathan Ahoren, Sururei, 11 March 1998

After Jonathan had told this text I transcribed it from the tape and then checked my attempt with Urias Ahoren. I tried to read it back from my (broad) phonetic transcription, which Urias then provided with slow, careful pronunciation and the meaning in Indonesian. Occasionally he needed to listen to the tape himself when I had not been able to hear what was said, due to the fast speed of deliverance. The text is given here, as much as possible in the established orthography. Loan words from Indonesian are printed in **bold**. At various places I indicate Jonathan's pronunciation, illustrating the variation between voiced and voiceless stops and between the two liquids [l] and [r], and transitional [e] instead of final /a/ which is heard in isolation and before pauses. There are other transitional vowels, which I gloss as linkage (LNK). Items in parentheses reflect their presence in isolated speech and their absence in connected flow of speech. Where I feel it is appropriate I give a broad phonetic transcription of a phrase, to show which phonemes or sequences are elided in connected speech. Slashes indicate a non-final pause, which is signalled by a brief silence and concomitant absence of a falling intonation on the final syllable.

- (1) [sukdanin jomower / loumeminc] dan in-jemow-er / l-ouma minc / kain timur / about I 1SG-grandfather-PL 3PL-buy cloth cloth eastern saboku / l-oho ka(ba) l-oho besa. 3PL-carry bird.of.paradise 3PL-carry tobacco then When our ancestors bought kain timur (= expensive cloth, mainly used for brideprice), then they brought tobacco and birds of paradise.
- (2) [laumedaurenga]

 L-a-(o)uma dau len-g / timur-timur / se Kokas.

 3PL-INS-buy from 3PL-NOM Timor-east at Kokas

 With that they bought (kain timur) from the East Timorese people, at Kokas.

(3) [ackunoks'ckinjomower]

Acgunog se in-jemow-er / dangaba / happen at 1SG-grandfather-PL so.then

[injomow 'erohminckIni]

in-jemow-er l-oho minc gi-ni / 1SG-grandfather-PL 3PL-carry cloth NOM-this

[kalterImdenaugwa / lebegunakan / naunmersower]

ka terimda naugb-a / l-ebe-gunakan naugb mer-sow-er / then continue for-LNK 3PL-do-use for 3PL-wife-PL

[naunmerihirmersower] / [naugwəlengesrougw]

naugb mer-ihi-r mer-sow-er /
for 3PL-son-PL 3PL-wife-PL

naugh len-g g-esrough.

for 3PL-NOM NOM-wedding.feast

It happened to my ancestors, then, my ancestors brought these *kain timur* and continued using them for their wives, for their sons' wives, for those who would have a wedding feast.

- (4) Kaba / l-eic l-a-be-tukar-im. l-a-(o)um-em.
 then 3PL-take 3PL-INS-do-exchange-RECIP 3PL-INS-buy-RECIP
 Then they took and used (kain timur) to trade with each other, they traded with each other,
- (5) dauntoba l-a-(o)um-em be-deinyom o-hob.
 in.order 3PL-INS-buy-RECIP RES-enough LNK-already
 in order that they had traded until it was enough (i.e. to everyone's satisfaction).
- (6) [kaba / indani / dandeictowindusur]

 Kaba / ind-an-i / dan d-eic dou ind-us-ur.

 then 1SG-POS-LNK I 1SG-take to 1SG-skin-PL

 Then, mine, I gave them to my relatives.
- (7) Ind-us-ur len l-eihw-an-da / dan ind-us-ur mer-en-i /
 1SG-skin-PL they 3PL-go-w.r.t-away and 1SG-skin-PL 3PL-POS

 [karenlarkestoudandep]

 ka(ba) len l-arges dou dan deb.
 then they 3PL-leave for I HOLD

 My relatives they went away with them and those (kain timur) of my relatives, they would leave for me to keep.
- (8) [naukdandauhwo / daninsowa]

 Naugb dan d-a-(o)uhwo / dan in-sowa.

 for I ISG-INS-pay I ISG-wife
 So that I could use them to pay for my wife.

- (9)dan eh / ouw Sug dan in-sow(a) o-hob / o-hob kaba / 1SG-wife LNK-already I eh finish LNK-already then [dandebegunakandeyit / kadeptododane / indakto.indaktomesowa] dan d-ebe-gunakan deit / kaba deb-dodo dan-e / ind-agto. 1SG-do-use again then HOLD-? I-LNK 1SG-younger.brother ind-agto me-sowa. 1SG-younger.brother 3SG-wife When I already had a wife, after I, eh was finished then, I used (those kain timur) again and I put them to my younger brother, for my younger brother's wife.34
- (10) Kaba len l-eic mer-en-e / minc ucina-hon / g-ebe-rogor. then they 3PL-take 3PL-POS-LNK cloth road-old NOM-do-black Then they gave theirs, the old kain timut, the black ones.
- (11) [keberorkaba / leijemohondaga / sIrbouhweij]

 G-ebe-rogor kaba / l-eija m-oho en dag sirbougbeij.

 NOM-do-black then 3PL-call 3SG-name say like name.mountain
 The black ones are called sirbougbeij.
- (12) [kahani / kareijemohondagai / ikdouwoho]

 G-ahani / ka l-eija m-oho en dag-ai / igdouho.

 NOM-red then 3PL-call 3SG-name say like-it ikdouho

 The red ones are called ikdouho.
- (13)[keberogorkaba / leijemohondagai / anebemhironmohop] G-ebe-rogor kaba / l-eija m-oho dag-ai / NOM-do-black then 3PL-call 3SG-name say like-it bemehirongmohob. an-e REL-LNK bemehirongmohob The black ones are called bemehirongmohop (explained as bemehi 'hawk' and mohop 'claw'; the form rong is not explained. Presumably it is a possessive form.).
- (14) [kahani /kaleijemohondaga /anowæ / marouŋmena]

 G-ahani / ka l-eija m-oho en dag-ai /

 NOM-red then 3Pl-call 3SG-name say like-it

The expression deb dodo is explained as 'a kind of inheritance, something that one can keep, or that stays'. Informants would claim it is one word. At any rate, it seems to contain the verbal adjunct deb, which I translate as 'HOLD' (see §3.9), and perhaps a form related to the verb odo 'to carry'. Neither form contains a subject prefix, as is clear from (i) and (ii). See also line (20) below.

⁽i) Dan d-ohw dou ban deb dodo.

I 1SG-give to you 'keep'
I gave (it) to you to keep.

⁽ii) Ban b-ohw dou dan deb dodo. you 2SG-give to me 'keep' You gave (it) to me to keep.

ara-noba / maroungmena.
what-and maroungmena
The red ones are called maroungmena (explained as magarougb 'look for' and mena '3SG-father').

- (15) [hakeni / kareicabetukarIm]

 Hang gi-ni / ka l-eic l-a-be-tukar-im.

 REL NOM-this then 3PL-take 3PL-INS-do-exchange-RECIP

 Those are the ones they took and used to exchange with each other.
- (16) L-a-(o)ume-m / l-eic g-ahani / l-a-(o)uma / k-ebe-rogor.

 3PL-INS-buy-RECIP 3PL-take NOM-red 3PL-INS-buy NOM-do-black
 They paid each other with them. They took the red ones, they used (them) to buy black ones.
- (17) G-ebe-rogor / l-a-(o)um-em.

 NOM-do-black 3PL-INS-buy-RECIP

 The black ones, they used to pay each other.
- (18) G-ahani / l-a-oum-em.

 NOM-red 3PL-INS-buy-RECIP

 The red ones they used to pay each other.
- (19) Dauntoba / ind-an-i / dou-a / dan ind-us-ur / l-eihw-an-da.
 in.order 1SG-POS-LNK to-LNK I 1SG-skin-PL 3PL-go-w.r.t.-away
 In order that mine were for my relatives, and they went away with them.
- ['daramere'nilohu'dout dep'todo / 'dauфwan'dakto'mesowa]

 Dara mer-en-i l-ouhw dou-d deb-dodo /
 and 3PL-POS-LNK 3PL-give to-1SG HOLD-?

 d-a-oufo ind-agto me-sowa.

 1SG-INS-buy 1SG-younger.brother 3SG-wife
 And theirs, they gave to me to keep, with which I would buy my younger brother's wife.
- at I 1SG-wife die-LNK already

 ka(ba) dan d-eic minc gi-ni /
 then I 1SG-take cloth NOM-this

 [kabadaumarukwa]

 kaba d-a-(o)um(a) aregwa.
 then 1SG-INS-buy poison

 After my wife had died, I took this kain timur and I bought poison with it.
- (22) Dan d-eic minc gi-ni ka d-a-ouma aregwa / I 1SG-take cloth NOM-this then 1SG-INS-buy poison [dauntobarokwa / katahuda / sutəhomdeyit]
 dauntoba aregwa / ka d-a-ogod sud hom deit / in.order poison then 1SG-INS-hit man one again

debin dan in-sowa.

payback I 1SG-wife
I took these kain timur and bought poison with them in order that the poison ...
then I killed someone in exchange for my wife.

- (23) Kaba / len l-eic minc-e / hwai / len l-a-eic dou dan. then they 3PL-take cloth-LNK two they 3PL-INS-take to I Then they gave kain timur, two (of them), they gave to me.
- (24) Dauntoba dan (in)d-oc eigouh an minc gi-ni.
 in.order I 1SG-heart good w.r.t cloth NOM-this
 In order that I would be happy on account of this kain timur.
- (25) Kaba / dan d-eic minc gi-n deit /
 then I 1SG-take cloth NOM-this again

 kaba d-a-(e)hi men-i deit.
 then 1SG-INS-fell mountain-LNK again
 Then I took this kain timur again and then I felled a mountain again.35
- (26) [kaba / lenlohuda / limedaredeyt]

 Kaba len l-ogod-a / lima dara deit.

 then they 3PL-hit-LNK five with again

 Then they killed five more (people).
- (27) Kaba / len l-eic hugahani. then they 3PL-take kain.toba Then they got kain toba.³⁶
- (28) [hugwaginggaba / mogreyto / dobmenhargisaugwu]

 Hugahani gi-n kaba / mougrei-to /
 kain.toba NOM-this then little-?

 doba m-en harga eisaugwu.
 but 3SG-POS price ascend
 The kain toba is smaller, but its price is higher.
- (29) Do kain timur / kaba ebe-lebar ebe-hibera.
 but kain timur then do-wide do-wide
 But the kain timur is wide, large.

 Ebe-hibera dan agas gugwa.
 do-wide and long very
 It is wide and very long.
- (30) Doba / ke-hugahani / ka(ba) mera / eb-a / eb / eh / mougrei-to. but NOM-kain.toba then price do-LNK do eh little-? But as for the kain toba, its price is, eh, eh, it is little (i.e. not the price, but its size).

^{35 &#}x27;To fell a mountain' is explained as an idiom meaning 'to bribe some strong men to do some killing on one's behalf'.

³⁶ Hugahani is possibly (du)hu 'water' + k-ahani 'NOM-red'. It is the name for a more precious trading cloth than kain timur, in local Malay kain toba.

- (31) Ya / hugahan(i) gi-n mera / sorama. yes kain.toba NOM-this price fifteen Yes, the price of a kain toba is fifteen (kain timur).
- (32) [eh / dandeiceŋəhop / kacuŋgaba]

 Eh / dan d-eic ing hob / ka cum kaba /
 eh I 1SG-take this.NOM already then later then

 After I had got these, then later,
- (33) [tohukwahangeni / lecimera / sorama]

 d-ouhw hugahani gi-ni / l-edi mera / sorama /
 1SG-sell kain.toba NOM-this 3PL-throw price fifteen
 I sold this kain toba, they threw the price, fifteen (kain timur).

 (= They paid me fifteen kain timur for one kain toba.)
- (34) Ka d-eic sergem / deb-dodo ka /
 then 1SG-take five HOLD-? Q

 dan d-a-(e)hi men-ə deit.

 I 1SG-INS-fell mountain-LNK again
 Then I took five, it was my property, right, (and) I used them to fell a mountain (= pay for henchmen) again.
- (35) Dan-eh / sisa / ka naugb d-a-(o)uf(o) in-sowa menau deit. and-eh ten then for 1SG-INS-buy 1SG-wife new again And eh, ten, (were) for me to buy a new wife with.
- (36) Ya / minc gi-ni / ucinohon gi-ni m-en meijouhwa dangga. yes cloth NOM-this old.cloth NOM-this 3SG-POS meaning thus Yes, the kain timur, the old cloth's function is like that.
- (37) Minc ucinohon-ə m-en meijouhwa dangga. cloth old.cloth-LNK 3SG-POS meaning thus
 Thus is the function of the old kain timur.
- (38)Dang-aba / l-ouhw minc ucinohon gi-ni terimda / thus-then 3PL-buy cloth old.cloth NOM-this continue [teremdeyaba / səmouhwecwedebin] terimda kaba smougb ait debin. continue then fire burn house-LNK altogether Like that then they would trade with kain timur in the past until fires had burned houses and everything in them (i.e. including *kain timur*).
- [lesara / kareiclahuyayau / lesaradaya]

 L-es-ara / ka l-eic l-a-ouhw g-agau /

 3PL-shoot-thing then 3PL-take 3PL-INS-buy NOM-unripe

 l-es-ara dag-ai /

 3PL-shoot-thing like-it

 (When) they fight, then they take and they buy people to be killed, they fight like this:

- d-arough / urias / es tuhan (40)Dan hom gi-ni I 1SG-order Urias shoot mister one NOM-this Branda / dou dani / dau from Holland to I dan d-eic ucinohon gi-ni / ka minc then 1SG-take cloth old.cloth NOM-this sisa dou Urias. ten to Urias I order Urias to shoot this man from Holland for me, then I would give this ucinohon cloth, ten pieces to Urias.
- (41) Dang Urias en eica / sisa / ucugb dou dani. thus Urias he take ten in.return to I So Urias, he would give ten in return to me.
- (42) Ne daunto(ba) dan (in)d-oc eigouh an / tuhan hom gi-ni.
 ? in.order I 1SG-heart good w.r.t mister one NOM-this
 This in order that I would be happy with respect to this man.
- (43) En en dau Branda / doba /
 he come from Holland but

 [enemebararimuskinero]
 en em-eb-ara ara ima sug gi-n ero.
 he IRR-do-thing thing other at NOM-this not
 He has come from Holland but he hasn't done anything for me.³⁷
- (44) Dang dan d-es en augwo dan d-eic minc ucinohon thus I 1SG-shoot he freely I 1SG-take cloth old.cloth dan d-a-(e)ic en.
 I 1SG-INS-take he Thus I can kill him with impunity, I give ucinohon cloth to him.
- (45)Eh / danga minc ucinohon gi-ni mer(a) eisaugb eh thus cloth old.cloth NOM-this price ascend meijouhwa m-en dangga. 3SG-POS meaning thus Eh, thus the price of the *ucinohon* cloth is high, its meaning is like that.
- (46) Minc ucinohon gi-ni m-en meijouhwa dangga. cloth old.cloth NOM-this 3SG-POS meaning thus
 Thus is the function of the ucinohon cloth.
- (47) Ititogini / eh / minc ucinohon / kaba / now eh cloth old.cloth then

Lines (43) and (44) are delivered in very fast tempo, without any pause.

m-en meijouhwa g-aimo kaba / bomjougb m-er.

3SG-POS function NOM-follow then Timor.people 3SG-speech

Nowadays, eh, the ucinohon cloth, then, its function which follows the language of the people from Timor.

- [bomjounmerkinikabenmera /] (48)Bomiougb m-er gi-ni kab(a) en mera / Timor.people 3SG-speech NOM-this then say price dag-a(i) / seratus libu. like-it hundred thousand In the language of the people from Timor its price is like one hundred thousand.
- (49) Eh / minc ucinohon en mera eh / anam latus. eh cloth old.cloth he price eh six hundred Eh, (some) ucinohon cloths are six hundred (thousand rupiah).
- (50) En-g mera hom-e deit-i / ka sadu juda.

 3SG-NOM price one-LNK again-LNK then one million
 There is one whose price is (different) again, then it is one million.
- Ya / danga eititogini kaba em-ebe-pake / (51) menau / 1EXC-do-use yes thus now then new deit-i / dau-ə / timul-timul l-ogo(n) mene-nau gi-n from Timor-east 3PL-sew new-RED NOM-this again-LNK kaba em-ebe-pake gi-n deit okeni / then 1EXC-do-use NOM-this again but len mer(a) em-eisaugb ero. they price IRR-ascend not Yes, thus now, then we use new (cloths) from the East Timorese people they sew new cloths again, and we use these also but their price is not high.
- (52) [kenimeremeisaugwejero]

 Gi-ni mer(a) em-eisaugb ero.

 NOM-this price IRR-ascend not
 These are not expensive.
- (53) Danga hangga l-ebe-pake mohon mer(a) eisaugw-e dous thus that 3PL-do-use old price ascend-LNK only That's because it's only the old ones that are expensive.
- (54) Ya / dara / meijouhw-e hom deit-i / ka minc g-ahani. yes with meaning-LNK one again-LNK cloth east NOM-red Yes, and, there's one feature more, the red kain timur.
- (55) Minc g-ahan(i) gi-n tou-a seratus ribu. cloth NOM-red NOM-this also-LNK hundred thousand These red cloths also are one hundred thousand (rupiah).

- (56) Bogometko / bogometko / kaba anam pulu. k.o.cloth k.o.cloth then six ten The bogometko, it costs sixty (thousand).³⁸
- (57) L-ouma s(e) argoufu / kaba mos-e senggem / ya / 3PL-buy with money then skin-LNK six yes They buy (them) with money, then it is sixty (thousand), yes.
- (58)Se sougb m-er. m-os-e senggem. with Sougb 3SG-speech 3SG-skin six atau se bahasa meravu / kab(a) anam pulu. with language Malay then six In the Sough language it is mos senggem 'six skins', or in Malay then it is enampuluh 'sixty'.
- (59) Eh / minc ucinohon / mera / anam latus / mougrei.
 eh cloth old.cloth price six ten little
 The old cloth costs six hundred, not much.
- (60) Se bahasa merayu / kaba / yang setan / anam ratus. with language Malay then REL middle six hundred In Malay, the middle-sized, are six hundred.³⁹
- (61) Doba / en-g harka / dua / kaba / sadu juda.
 but 3SG-NOM price two then one million
 But there are with the price (of) two, then they cost one million.
- (62) Dob(a) (i)titogini kaba / en obohoukougb-wo hob.
 but now then 3SG torn-LNK already
 But nowadays they are all torn.⁴⁰
- (63) Doba / l-ebe-pake mene-nau / yang baru / harka turun.
 but 3PL-do-use new-RED REL new price descend
 But they use the new ones, the new ones are cheap.
- (64) [danyanlama / kabamereisaunmedam]

 Dan yang lama / kaba mera eisaugb medam.
 and REL old then price ascend big

 And the old ones are very expensive.
- (65) En-g mohon ka mera eisaugh medam / ya.

 3SG-NOM old then price ascend big yes
 The old ones are very expensive, yes.⁴¹

³⁸ Both instances of bogometko are pronounced as [wo:metko]. The word is explained as kain cita, that is, a more expensive type of kain timur, which in Sough is called minc duhu 'cloth water'.

³⁹ Malay sedang 'middle size' is pronounced as [setan].

⁴⁰ Obohoukougb is also pronounced as [obowgougw] (see §3.1.2).

The phonetic realisation of mera eisaugh medam is as in line (64).

- (66) Danga l-ebe-pake / minc gi-n kaba / nosa kaba / thus 3PL-do-use cloth NOM-this then past then
 Thus they used the cloth (kain timur), then, in the past,
- (67) d-ebe-tambe k-raga deit / em-jemowe-r (l)-oho saboku. 1SG-do-add NOM-just again 1EXC-grandfather-PL 3PL-carry tobacco I'll add to what I just (told) again, our grandfathers they brought tobacco.
- (68) L-oho saboku len l-a-(o)uma dau timur-ir.

 3PL-carry tobacco they 3PL-INS-buy from Timor-PL

 They brought tobacco with which they bought (kain timur) from the Timorese.
- (69)saboku m-os-i / dag gi-ni / L-agacin m-os-e 3PL-wrap tobacco 3SG-skin-LNK 3SG-skin-LNK like NOM-this hwai / kaba / menau ucinohon-ə hom. two then new old.cloth-LNK one They wrapped tobacco, tobacco leaves like this, two, then, one new old cloth (i.e. they would trade two wrappings of tobacco for one kain timur).
- (70)deit-i menau (u)cinohon-ə Hwai danga hom jadi saboku two thus again new old.cloth-LNK tobacco one so l-a-ouma minc m-os hogu / ka ucinohon hwai. then 3PL-INS-buy 3SG-skin four cloth old.cloth (For) two (wrappings) again one old cloth, so that for four wrappings they would buy two old cloths.
- Minc ucinohon / saboku danga deit-i / (71)m-os hogu cloth old.cloth tobacco 3SG-skin four thus again-LNK ka l-a-(o)ume minc ucinohon hwai deit. then 3PL-INS-buy cloth old.cloth two again yes The old cloth, with four wrappings of tobacco they'd buy two old cloths in return.
- (72)Dang hangga / lu-sut len l-ot mer-na dep thus that PL-person they 3PL-fold 3PL-soul HOLD at minc ucinohon gi-n namcir. old.cloth NOM-this cloth very Because of that, the people craved/desired kain timur a lot.⁴²
- (73) Ititogini lu-sut l-omom dau / em-ne-r (l)en l-ouhw.
 now PL-person 3PL-die from 1EXC-father-PL they 3PL-buy
 At the time that people had died, our fathers they traded (kain timur).
- (74) Em-ne-r (1)-omom dau / emen gi-ni em-ouhw deit.

 1EXC-father-PL 3PL-die from we.EXC NOM-this 1EXC-buy again
 After our fathers had died, we in turn traded them.

The expression -ot -ena dep sa is explained as 'hope for', but the meaning seems quite a bit stronger than just 'hoping'.

- (75) Doba ititogini kaba kurang namcir hob. Gurereito dous. but now then less very already little only But nowadays there are already much less. (There are) just a few.
- (76)kaba etataha / kaba obogougb / other then ruined then torn smougb ait-i / ka g-augwan hob. burn-LNK then NOM-all already fire Some are ruined, (others) are torn, or burned, and so they are all finished.
- (77)Doba / g-eb gi-ni kaba ito gurereito / NOM-do NOM-this then but iust little doba len-g mer-soho(mougb) dous / en-g le l-ouhw. they-NOM 3PL-rich 3SG-NOM they only 3PL-buy But, the ones that are still here are just a few, but it is only the rich people who trade.
- (78) Len-g mer-sohomough l-op mer-ei hom-hom deb /
 they-NOM 3PL-rich 3PL-put 3PL-POS one-one HOLD
 iren l-ouhw. Ya.
 they 3PL-buy yes
 It is the rich people who have stored a few, they trade. Yes.
- (79) Dang hangga / minc ucinohon gi-n kaba l-a-ouma aregwa. thus that cloth old.cloth NOM-this then 3PL-INS-buy poison. So then, those old cloths they used to buy poison.
- (80)Minc ucinohon gi-n kaba l-a-(o)uma aregwa / cloth old.cloth NOM-this then 3PL-INS-buy poison ititogini kaba / emen Kristen / thus we.EXC Christian now then em-eineg dau aregwa hob. emen we.EXC 1EXC-turn from poison already Those old cloths they used to buy poison, but nowadays, we have become Christians, we have already turned away from poison.
- (81) [dangaba / emenemohukamaumugwey]

 Danga kaba / emen em-ouhw em-a-ouma hwej.

 thus then we.EXC 1EXC-buy 1EXC-INS-buy pig

 Thus then we trade (kain timur) to buy pigs.
- (82) Em-a-ouhwo / em-ehi-r mer-sowa(-r) / gi-n dous, 1EXC-INS-trade 1EXC-son-PL 3PL-wife-PL NOM-this only ya g-in dous.

 yes NOM-this only
 We only use them to buy wives for our sons, yes, that only.
- (83) En-g-a han emen em-(ebe-)pake.
 3SG-NOM-LNK w.r.t we.EXC 1EXC-do-use
 That's what we use them for.

Dara / eh / bogometko / kaba / se (84)bein m-er kain.cita eh then with foreign 3SG-speech dag anam pulu doba / en say like six ten Sough m-er kaba / m-os-o hogu / 3SG-speech then 3SG-skin-LNK four Sougb m-os-o hwai / m-os-o homoi / ya. 3SG-skin-LNK two 3SG-skin-LNK three yes And eh, the kain cita then in Indonesian it is sixty but in Sough then it is forty, twenty, thirty, yes.

- (85) Aimo dau g-agas-i / g-agarougb. follow from NOM-long-LNK NOM-short Depending on its length, its shortness.
- (86) Ya / g-in engga emen-g Sougw-e eme-pake danga. yes NOM-this this.NOM we.EXC-NOM Sougb-LNK 1EXC-use thus Yes, that's how we who are Sougb use them.
- Dara / sug l-es-im / l-omom-i / (87)3PL-shoot-RECIP and at 3PL-die-LNK kab(a) em-ebe-gunakan minc gi-ni / 1PL.EXC-do-use then cloth NOM-this naugw-a em-a-ouhw len-g l-omom. then for-LNK 1EXC-INS-trade 3PL-NOM 3PL-die And if they fight with each other and they die, then they use these kain timur in order to pay for those who have died.
- (88) Dag-a / Urias en-e / en-ara dou dan /
 like-LNK Urias 3SG-LNK say-thing to I

 kaba / dan d-es-ai /
 then I 1SG-shoot-it

 dan d-es tuhan hom dau Branda gi-n do

dan d-es tuhan hom dau Branda gi-n dou Urias. I 1SG-shoot mister one from Holland NOM-this for Urias Like if Urias would tell me, then I would kill, I'd kill this man from Holland for Urias.

(89) Kaba / ya / Urias en eic-a minc-e sergem /
then yes Urias he take-LNK cloth-LNK five

ucinohon sergem dou dan /
old.cloth five to I

kaba dan d-eic sisa dou en-i.
then I ISG-take ten to he-LNK
Then yes, Urias he would give five cloths, five kain timur to me and I'd

give him ten.

- (90) Danga kaba / sug dan ind-ihi(-r) l-omom /
 thus then at I 1SG-son-PL 3PL-die

 ka(ba) dan d-ebe-tuntut deit.
 then I 1SG-do-demand again
 So then, if my sons would die, then I would demand (compensation) again.
- (91) Dan d-ebe-tuntut dou Urias / dang (k)aba Urias en-e / 1SG-do-demand to Urias thus then Urias he-LNK g-omom deit / ebe-bayar-e / in-sowa (e)ra ind-ihi 1SG-wife or do-pay-LNK 1SG-son NOM-die again g-omom deit. ind-agto 1SG-younger.brother NOM-die again I would demand (compensation) from Urias, so that Urias he then would pay for my wife, or my son who would have died, or my younger brother who would have died in return.
- (92) Kaba en edrek kaba / eic-a-m sud sergem. then he surpass then take-LNK-? person five Then he would give more, he'd give fifty.
- (93)Sud sergem gi-ni / Sougb m-er / se person five NOM-this with Sougb 3SG-speech doba se bei m-er / bahasa merayu / kaba / lima ratus. but foreign 3SG-speech language Malay then five hundred This fifty, that's using Sough, but in the Malay language it is five hundred.
- (94) Atau se Sough m-er / kaba sud sergem. Ya.
 or with Sough 3SG-speech then person five Yes
 Or in Sough (we'd say) five persons (= fifty). yes.
- (95)Hangga emen em-ebe-pake dangga / kaba / len lu-gus-(g)us / we.EXC 1EXC-do-use thus then they PL-other-RED SO lu-gus-(g)us toua / len l-eya dangga / kaba / they PL-other-RED also they 3PL-see thus then mer-nuhw(a) ecgu an dani-ngga. they 3PL-stomach bad w.r.t I-this.NOM So, we used them like this, then other people, other people also, they see like this, if they'd be angry with me.
- Len mer-uhwa (96)dani / kaba / len ecgu an then they 3PL-stomach bad w.r.t I they also len l-es-a minc naugh dan toua dangga deit. they 3PL-shoot-LNK cloth for I also thus If they'd be angry with me, then they too, they'd shoot cloth for me again (i.e. they'd use kain timur in order to pay others to kill me).

- (97) Da(u)ntoba l-es dan deit. Ya.
 in.order 3PL-shoot I again yes
 In order that they would shoot (kill) me. Yes.
- (98) Minc ucinohon g-in m-en meijouhwa dangga. cloth old.cloth NOM-this 3SG-POS meaning thus Such is the function of the old kain timur.
- (99)L-a-(o)uma b(r)imogo / b(r)imogo /se / sougb m-er 3PL-INS-buy gun gun with Sougb 3SG-speech da(k) b(r)imo(go) g-agas. en sav like gun NOM-long They'd use them to buy guns, that's what we call them in Sough, 'long guns'.
- (100) Toba / bahasa merayu / kaba / senapan aer pambu.
 but language Malay then weapon water bamboo
 But in the Malay language they're called senapan air bambu.
- (101) Ya / danga l-eic-a / kain timur ki-n sisa / yes thus 3PL-take-LNK cloth east NOM-this ten l-a-(o)uma / brimogo hom.
 3PL-INS-buy gun one
 Thus with ten kain timur they'd buy one gun.
- (102)Danga len l-eic brimogo gi-ni / thus they 3PL-take gun NOM-this ka l-a-(o)ufo dan ind-ihida hom / then 3PL-INS-trade 1SG-daughter one kaba l-eic kain timur gi-n / minc ucinohon 3PL-take cloth east then NOM-this cloth old.cloth hom / kaba / brimogo / brimogo hom dara. Ya. sud one with person one then gun gun ves Thus they gave (me) this gun, then they traded one of my daughters, they gave (me) this kain timur, twenty old cloths, and then, with one gun. Yes.
- (103) Gi-ni d-ec(ic)-ar(a) (e)isaugh minc-a / m-en meijouhw ingga / NOM-this 1SG-tell-thing ascend cloth-LNK 3SG-POS meaning this.NOM dang-e ebeij su-nggwa / su-ng-e habi thus-LNK until at-NOM-there at-NOM-LNK first
 This is what I tell about the function of the kain timur. This is it for the moment.

Appendix 2

Sogougb 'slave'43

Told by Jonathan Ahoren, Sururei, 11 March 1998

- Sogougb kaba / emen-g Sough / em-ouma / sogough (1) slave then we.EXC-NOM Sough 1EXC-buy slave hom dau sud hom / me-sowa / kaba la-(e)ic-im 3DU-take-RECIP one from man 2SG-wife then one mar-ihi hwai / 2DU-child two As for slaves, we who are Sough, we buy one sogough from someone, his wife, (that is if) the two are married and they have two children.
- (2) Kaba dan d-ouwan / dan d-ed-ouma hom kaba / then I 1SG-go-buy one then 1SG-want I gida la-eic dou-d ka(ba) dan d-ouma 3DU-take female to-1SG then I 1SG-buy hugahan hom. with kain.toba one Then (if) I want to, I (can) go and buy one, and they give me a girl I'll pay with a kain toba (= an expensive type of ceremonial cloth = kain timur).
- (3) D-ouma se hugahani hom / hugahan gi-ni /
 1SG-buy with kain.toba one kain.toba NOM-this

 harga limabelas. Atau mera sorama. Ya.

 price fifteen or price fifteen yes
 I (would) pay with one kain toba, the price of this kain toba is fifteen (kain timur).

 Or (now repeated in Sough) the price is fifteen. Yes.
- (4) Dan d-ouma / gida hom /
 I 1SG-buy female one

 ka lan la-(o)uhw dou dan d-ebe-piara.
 then they.DU 2DU-trade to I 1SG-do-look.after
 I would buy one girl and they'd trade her to me and I would look after her.⁴⁴
- (5) Dan d-ebia- / d-ouwaha. D-ouwaha terimda / I 1SG-do 1SG-look.after 1SG-look.after continue

At first I had glossed sogougb with 'adopted child', thinking that 'slave' would have too many connotations not fitting the concept of the Sougb, or indeed in general of the Bird's Head. Since I learned, however, that a true adoption requires marking a child with a drop of one's own blood, and calling such a child induhwihi mogo 'my blood's drop' (Dan Lunow, pers. comm.) I think 'slave' will do as general gloss, provided this English term is allowed to have different definitions depending on which culture and which time it is referring to.

The original recording of the last clause is not quite clear: I cannot identify the final compound of Sough elements with the Indonesian loan *piara* 'look.after:

[[]ka-ra-lauh-dou-dan-deneribiara] 'then-3DU-3DU-trade-to-me- ...'.

kaba / d-eihwe-de se moskona / then 1SG-go-go to Moskona

kaba dan ind-u eigo ihi g-iji hom dara deit. then I ISG-thought good child NOM-male one with again I would look after her. I looked after her for a long time and then I'd go to Moskona, if I wanted a boy as well. 45

- (6) D-ed-ouma g-iji hom dara deit-i / kaya d-ouma se /
 1SG-go-buy NOM-male one with also-LNK? 1SG-buy with

 hugahani hom deit-i / kaba sorama danga deit.

 kain.toba one again-LNK then fifteen thus again
 I'd go buy a boy as well, I'd buy with a kain toba again, that's fifteen (kain timur)
 again.46
- (7) Atau limabelas / harga.
 or fifteen price
 Or fifteen (kain timur), (that was the) price.
- (8) dan tou dan d-oho lani d-em-ouwaha / also I 1SG-carry they.two 1SG-IRR-look.after ves Ι kaba / dan d-ouhw g-ida dou me-suwa / then I 1SG-give NOM-female to 3SG-husband dau ind-an le(n-g)Sougb. Sougb from 1SG-POS 3PL-NOM Yes, I also I carry them, I look after them and then, I'd buy a girl for her husband, from my Sougb people.
- (9) Dara d-ouhwo g-ida hom dau len-g Sough dou g-iji.
 with 1SG-buy NOM-female one from 3PL-NOM Sough to NOM-male
 I'd buy a girl from the Sough people for the boy.
- (10)Dauntoba len l-eic mer-ihi-r / kaba / in.order they 3PL-take 3PL-child-PL then l-eij(a) en da(g) sogough me-h(i). 3PL-call say like slave 3SG-child In order that (when) they get children, then, they will call (them) child of a slave (sogougb mehi is explained as hambah = servant).
- (11) Sohough me-h(i) / arti / eh / bukan anak / anak-e betul / slave 3SG-child meaning eh not child child-LNK true

In line (5) the speaker starts off with a mistake: he begins with an Indonesian loan, prefixed with Sough eba 'do', but then repairs with the Sough equivalent d-ouwaha '1SG-look after' which contrasts with aha 'look after (animals)'.

After the first pause, the speakers utters kaya which is left untranslated during the transcription. I suspect it is an instance of ka(ba) 'then', rather than Indonesian kaya 'rich'. This line is followed by an explanation in Indonesian: the price for a boy was one kain toba, the equivalent of fifteen kain timur.

tapi / anak yang pinjam atau beli / sohougb me-hi. but child REL borrow or bought slave 3SG-child (The expression) sogougb mehi means, eh, it is not a child, a true child, but a child which has been borowed or bought, a servant.⁴⁷

- (12) G-ihida sohough me-h(i) / g-iji sohough me-hi. Ya.

 NOM-female adopt.child 3SH-child NOM-male slave 3SG-child yes

 Whether a woman or a man, they're both called sogough mehi (= servant). Yes/48
- (13) Dauntoba / len-g sogougb gi-ni kaba mer-uwa mougb / in.order 3PL-NOM slave NOM-this then 3PL-behaviour shine

 mer-uwa mougb terimda.

 3PL-behaviour shine continue
 In order that the slaves will be industrious, industrious all the time.⁴⁹
- (14) Mer-uwa mough l-es-ara d-eig-eigou / l-ahan lo /
 3PL-behaviour shine 3PL-do-s.t. CONN-good-RED 3PL-cut garden
 l-ehi lo.
 3PL-fell garden
 They will be hard working, they will work well, weed the gardens, fell the gardens.
- (15) L-ahan lo gi-ni / bikin bikin bersih rumput
 3PL-cut garden NOM-this make make clean weeds

 dan l-ehi lo gi-ni tebang kayu.
 and 3PL-fell garden NOM-this fell tree

 This (expression) they weed the gardens (means in Indonesian) make (REPAIR) make clean the grass (i.e. weeding, but cutting the long grass and brush), and (the expression) they fell the gardens (is in Indonesian) fell the treesy
- (16) Ya / l-ehi lo d-eig-eigou. Dauntoba l-aha hwej. yes 3PL-fell garden CONN-good-RED in.order 3PL-look.after pig Yes, they fell gardens really well. In order that they raise pigs.
- (17) L-aha hwej gi-ni / se bei m-er
 3PL-look.after pig NOM-this with foreign 3SG-speech
 en dag biare babi.
 say like look.after pig
 They raise pigs; that's called in Indonesian piara babi. 50

The expression sogough mehi is explained by my consultant as hambah 'servant'. The phrase is given in the established orthography, agreeing with the pronunciation during slow speech. In this text, the speaker quite consistently pronounces it as [sohounmeh] or [sounmeh], occasionally ended with a voiceless high front vowel.

Note: Sougb /g-ihida/ 'NOM-female' is pronounced as [kita].

See §3.2.3 for mer-u 'their thoughts' versus mer-uwa 'their behaviour'. Compare also footnote 56.

Note that the pronunciation of the Indonesian phrase *piara babi* 'raise pigs' is affected by the speaker's Sougb phonology: /p/becomes [b], and the final /a/is assimilated to the transitional Sougb [e]: [biarebabi].

- (18) Ah / l-es lo d-eig-eigou / la / l-ouwaha lu-sud. eh 3PL-plant garden CONN-good-RED ? 3PL-look.after PL-person Eh, they work in the garden well and look after people.
- (19) L-agau-esa lu-sud / eh / ini /
 3PL-look.after PL-person eh this
 They take care of people, eh, this:⁵¹
- (20) Kaba orang lajin masa / untuk / eh damu-damu yang latan. then people industrious time for eh guest-guest REL come Then they are industrious when, for, eh, visitors who come.
- (21) Se bei m-er dangga. with foreign 3SG-speech thus That's how it is in Indonesian.
- (22)Doba se Soung m-er / but with Sougb 3SG-speech ka(ba) mer-uwa mough l-a-(o)uwaha se / mer-us-ur. then 3PL-behaviour shine 3PL-INS-look.after with 3PL-skin-PL But in Sough it is: they will be hard working looking after their relatives.
- (23) Ya / jadi / len-g Sougb / mer-en meijouhw. yes so they-NOM Sougb 3PL-POS behaviour Yes, so, this is the behaviour (custom) of the Sougb people.
- (24) Kaba l-eic minj ucinohon gi-ni l-a-(o)ufo l-einyana. then 3PL-take cloth old.cloth NOM-this 3PL-INS-buy 3PL-many Then they used these kain timur to pay for marriage a lot.⁵²
- (25) L-a-(o)ufo mer-sow-er-i / ka mer-sow-er ki-n 3PL-INS-buy 3PL-wife-PL-LNK then 3PL-wife-PL NOM-this

The words used in (19) and (22) have been recorded as [lahauesudusut] and [lahauese], repectively. During the transcription (19) was dictated as *l-agauwesa* and glossed with *jaga-jaga* 'look after, protect', while (22) became *l-a-(o)uwaha* and glossed as 'mereka piara' = 'they look after'. Lunow's wordlist has an entry agauwisa 'to oversee; to protect; to take care of, by feeding'. Thus, the general meaning of the items in (19) and (22) is clear, but the actual morphemic structure eludes me.

The verb oufo is explained by my consultants as 'Itu pakai barang tutup dengan isterinya, atau ganti' = 'that means one takes some goods and holds these close to the wife, or to exchange'. The verb refers to the (old) marriage custom where a young man's father and/or mother's brother takes the brideprice, mainly consisting of the old cloths (kain timur), and presses these goods against the bride (= tutup 'to close' in local Malay) to signify the exchange of goods and a woman. I suspect the verb being identical to the verb 'to close a door' which has the same lexical form in both Sough and local Malay: ouf(o) misis = tutup pintu. Lunow's wordlist distinguishes oufò 'to shut, close door, or gate' with a low tone on the final syllable, from oufo 'to bring prospective bride to groom's house to live, to marry, to whistle, to sing', with mid tones on both syllables. I have not been able to ascertain a pitch difference. Moreover, I listed oufo 'to whistle' just as oufo 'to close' with high-low over the two syllables.

l-ehisai l-igdob. L-igdob namcir.
 3PL-'live' 3PL-unmarried 3PL-unmarried very
 They'd use (kain timur) to buy their wives, that is when the wives are still really unmarried (virgin). They were really virgins.⁵³

- (26) L-egib gus l-em-en / l-em-en-ara dou-r buma.
 3PL-unmarried other 3PL-IRR-say 3PL-IRR-say-thing to-3PL not.yet
 When the young men have not spoken with them yet.
- (27) Ah / se bei m-er / kab en dag / le-gida gi-ni eh with foreign 3SG-speech then say like PL-female NOM-this masih utuh.

 still intact
 Eh, in Indonesian it would be called, these women are still virgin.
- (28) Do(ba) se Sough m-er / ka le-gida gi-ni /
 but with Sough 3SG-speech then PL-female NOM-this

 l-eitou (de)si(j) mer-n-er mer-im / namcir.

 3PL-sit close.to 3PL-father-PL 3PL-mother very
 But in Sough it is: when the women are still exclusively living with their parents.
- (29) L-em-en-a(ra) dou le-giji gus-gus ero.
 3PL-IRR-say-thing to PL-male other-RED not
 When they are not communicating with men.
- (30) Dang (k)aba / me-suwa / m-ohwei g-ehi / eic arouler medam. so then 3SG-husband 3SG-desire NOM-fell take brideprice big If that is the case, then the husband, if he desires her, gives a large brideprice.⁵⁴
- (31) Eic arouler einyana / a-(o)ufo. Ya. take brideprice many INS-buy yes He takes (= gives) many goods to buy her. Yes.
- (32) Danga / l-oufo danga hob / kaba / dou gida m-os-er-i.
 so 3PL-close so already then to female 3SG-skin-PL-LNK
 So they closed (= traded) like that, then, to the woman's relatives.
- (33) Sug eh / gida m-os-er len l-eiya doba /
 at eh woman 3SG-skin-PL they 3PL-see but

 la-(e)ic mara-isi hom hob / ka gid(a) acgeij m-onyo.

 2DU-take 2DU-child one already then woman request 3SG-mother's.brother
 If eh, the women's relatives, they see that they already have a child, then the
 woman asks (help) from her mother's brother.

A few comments on this line: I have not been able to find a specific meaning for *ehisai*. The phrase *lehisai l-igdob* was translated as *mereka masih bujang* 'they are still unmarried'. The word *-igdob* is itself inflected as a verb and denotes 'unmarried female'. Its male counterpart is *-egib*, as in the next line. It would seem, from the next lines, that these expressions, ideally, mean not just unmarried, but virgin.

The glosses for *mohweigehi* are rather speculative; the whole phrase was rendered as *ingin* 'want, desire'. The term *arouler* is most likely polymorphemic as well, it denotes 'goods especially used for a bride price'.

- (34) Kit / godeh gi-n m-onyo / gida me-igbegena. female child NOM-this 3SG-mother's.brother female 3SG-older.brother The woman, the child's mother's brother, the woman's older brother.
- (35) Yaitu arti / eh / sa pen isteri / dia punya kaka laki-laki. that is meaning eh I POS wife she POS older.sibling male That is, my wife, her older brother.
- (36) Dauntoba / ebe-bantu me-ikbegena ebe-bantu / me-damowa in.order do-help 3SG-older.brother do-help 3SG-older.sister naugb oufo swgida dou me-debehito deit. for buy woman to 3SG-sister's.child again In order that he would help, (that) her older brother would help, his older sister to buy a woman for his sister's son in turn.
- Eh / arti-nya eh / de-punya kaka laki-laki bantu (37) meaning-its eh 3SG-POS older.sibling male help dia punya sudara itu / dengan dia punya ana / relative that with 3SG POS supaya / eh / antar dia punya isteri. eh mediate 3SG POS wife Eh, that means, her older brother helps his relative (presumably his sister), with her child, in order that, eh, he brings along (mediates) his (sister's son's) wife.
- (38) Dia kase maskawin lagi. he give brideprice again He gives a brideprice in return.
- (39) Eh / en eic aremough deit. Ya. eh he take goods again yes Eh, he will give goods again. Yes. 55
- (40) Emen Sougb / emen meijouhw dangga. we.EXC Sougb we.EXC custom like.that We Sougb, that's our custom.

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The word aremough is glossed by barang 'cargo, goods'; it is polymorphemic, a compound of ara 'something', whose final vowel changes to /e/, and mough 'shine'. I suspect it is the same form which occurs in the expression for 'industrious' -uwa mough (see line (13) with footnote 49 above), and which has been explained by consultants as menyala 'burning with a flame'; compare also 'fire' = smough. Thus, 'goods' or 'cargo' is shining or powerful stuff. It is pronounced here as [aremougwe-deit], another argument for the analysis of final labiovelar (see §2.4).

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Mansim, a lost language of the Bird's Head

GER P. REESINK

1	Introduction	278
	1.1 History	278
	1.2 Fieldwork and presentation of data	279
2	Phonology	280
	2.1 Stress	282
3	Word order in clause and noun phrase	283
4	Pronouns and verb affixation	283
5	Verbaliser we-	285
6	Possessive phrases	287
7	Demonstratives and spatial orientation	288
	7.1 Demonstratives	288
	7.2 Spatial orientation	290
8	Prepositions	291
9	Content questions	293
10	Verb sequences	294
11	Correspondences between Mansim and Hatam	295
12	Resemblances between Numfor and Mansim	300
13	Conclusion	304
	Appendix 1: Some songs	305
	Appendix 2: Origin story of Mansim	306
	Appendix 3: Mansim-English-Indonesian dictionary	322
	References	339

1 Introduction

In this chapter I give a sketch of the nearly-extinct language Mansim or Borai. This language used to be spoken in the coastal area around Manokwari, on the Bird's Head Peninsula of Irian Jaya.¹ Earlier information on this language can be found in Voorhoeve (1975:49, 119), where a language called Borai with its alternative name Mansim is mentioned. On the basis of a short wordlist, Borai could be classified as belonging to a family with Hatam as the only other member of the larger language group. In later publications, for example Voorhoeve (1987, 1989), Borai is no longer mentioned, presumably because no speakers could be located. In Silzer and Heikkinen Clouse's index of Irian Jaya languages (1991), the names Borai and Mansim are given with a few Hatam dialects as alternative names for Hatam.

The Mansim data presented here are, of course, suspect for a variety of reasons, the main one being that the language is no longer used as a medium for communication. Just a few people still know some of the language and have to search their memory even to find the words for certain concepts. It is, nevertheless, worthwhile to record what could be recovered of the language, even though many aspects of the language cannot be described with any degree of certainty.

1.1 History

The process leading to the extinction of Borai is broadly sketched by Pans (1960) in his thesis *De Arfakkers: een volk in beweging*. With reference to many reports from explorers, administrators and missionaries, Pans gives an account of the movements of various ethnolinguistic groups in the eastern Bird's Head.

At least since the beginning of the eighteenth century, the Doreh Bay was one of the areas along the Bird's Head coast and the Cenderawasih Bay, where the sultans of Tidore exercised their authority through the Raja of Salawati. Pans (1960:6) surmises that a visit from the Raja of Salawati in 1705 concerned the *Arfakkers*, if at that time the Numforese had not yet settled along the Doreh Bay.

The village Ossy, mentioned by Forrest in 1775, is identified by Pans (p.7) as Andai, mentioned by d'Urville in 1823. It was situated at the mouth of the River Saowi. Forrest had reported that the coastal people living there had no gardens of their own. They provided the mountain dwellers with iron tools in return for all the food they needed.

Later in the nineteenth century the mission arrived in the area. Ottow and Geisler established a station on the island of Mansinam in 1855 and in 1863 a second station was opened at Andai. Around that time, in 1858, members of the Etna expedition visited Ajambori (just north of present-day Manokwari) and Manzéman, in the foothills of the Arfak mountains, along the River Maruni. Their report stated that the Arfakkers obtained their iron tools from the McCluer Gulf in the south. It also mentioned that the Arfakkers of Ajambori showed more Numforese influences (tools, clothing, housing) than the 'less

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developed' Arfakkers of Manzéman. Pans assumes that the southern trade route must have become less significant by that time due to the dominant presence of the Numforese, at least since the beginning of the nineteenth century, probably even much earlier.

In 1870, just after the establishment of the mission station in Andai, the government administrator Von Rosenberg wrote a report on the area, which Pans considered very important, because comparison of Von Rosenberg's wordlist with his own data allowed him the conclusion that the *Arfakkers* must have been 'identical to the now virtually extinct tribe known as Borai' (p.13). They formed the population of a number of villages along the coast, around present-day Manokwari: Ajambori, Andai, Manzéman, Faandoe and Mabo (pp.13, 19, 20).

In Andai, the Borai had at first been quite affluent, due to the lucrative bird trade and friendly relationship with the Numforese (p.20), but the population suffered a certain lethargy, according to reports from the missionary Woelders. Because the bird trade took all their energy, gardens were neglected which caused a food shortage, there was an intentionally very low birth rate, and sickness, such as the smallpox epidemic along the Geelvink Bay, took many casualties (pp.22, 23). Although the information Pans gathered from the various reports is not very systematic, it is clear that in Ajambori as well as in Andai (and nearby Wosi) the Arfakkers (read Borai) lived in good harmony with the Numforese.

In the late 1870s groups of Meyah and Hatam moved down from the Arfak mountains to the lower coastal areas (p.19). Some of them settled at Pokembo, near Ajambori. At first, apparently, the original coastal people (read Borai and Numforese) lived in reasonably good harmony with the newcomers (p.33). But a mysterious death of a Hatam woman triggered a major fight, in which the Meyah and Hatam killed a number of Borai men, and chased the rest away from Ajambori (pp.33, 34). More Hatam and Meyah people came down from the mountains, so that by the end of the last century, 'the whole area north of the Andai river had been vacated by the Borai and Moiree and taken over by the Hatam and Meyah' (p.35).

Pans mentions that in the 1920s there was still a strong Borai presence in Manzéman, but after they had moved to the coast, some epidemic decimated the population (p.44). The survivors moved in a northern direction to Mansim villages, such as Anggressi on the River Mupi, where in the 1950s the population of Borai counted no more than about 100 people (p.13). A few more lived in Maripi and Andai.

The coastal areas where the Borai and a related group, the Waraan (or Uran) lived, had been taken over by the Hatam and their relatives, the Moiree (pp.44, 45), who intermarried with the few remaining Borai and Uran people.

Thus, the main factors leading to the decline of the Borai seem to have been: intermarriage with dominant Numforese since the end of the eighteenth century, encroachment of Meyah and Hatam groups who both killed many Borai and intermarried with survivors, and various epidemics.

1.2 Fieldwork and presentation of data

At the end of one of my fieldwork periods in the eastern Bird's Head, I asked a few Hatam speakers if they had ever heard of a language called Borai. They wondered if I meant the *Moibrai*, which would be a Hatam dialect mixed with Biak. A few people in Arfai and Maripi, villages along the coast, south of Manokwari, would still know this language. In an earlier paper (Reesink 1996) I reported the findings of just two hours of fieldwork with two women, Marice Mansim and her aunt Eva in the village Arfai II.

In 1998 I had a better opportunity to meet with them. They also directed me to Jonathan Mansim at Maripi who would be able to tell me an origin story of the Borai. They said there were two other men, one in Mupi, one at Jembatan Acemo, who still knew the language. A few younger people in Arfai II still knew some words, and short phrases. It became clear that of the hundred or so Borai speakers Pans claimed to be alive in 1960, just a handful was left.

While Pans (1960:44) seems to distinguish Borai and Mansim, his statement (p.13) that Mansim was another name for the same group seems to be correct. When Jonathan or Marice spoke Indonesian (read local Malay) they referred to their language as bahasa Mansim. In their own language they called it mor Moi. The term mor means 'language', as in expressions like mor Pin 'Numforese language', mor Atam 'Hatam language', mor Brer 'Indonesian language'. The term Mansim seems to be related to the ancestral parents in Jonathan Mansim's account of Borai history, the man Insum and the woman Insim. The term Borai, I assume, is a rendering of the second part of the Hatam term moi-brai, with an epenthetic vowel. Although the term Borai has already been in use to refer to this ethnolinguistic group, I have decided to adopt the endonym Mansim for the rest of this paper.

The actual time I spent with the few people who still know Mansim was rather limited due to transportation problems, their availability and the strain the elicitations apparently put on the memory of my main consultant, Marice from Arfai II. During the few sessions I was able to have in February and April 1998, I collected some 360 lexical items plus some short phrases and sentences. Obviously, on the basis of some 360 words no serious attempt at a phonological analysis can be made. Some observations on the morphology and syntax are presented. These data are presented in rather rough form, since I obtained conflicting evidence on possessive phrases and the inflection of verbs and nouns. Also, certain items I noted with different vowels, or one time with prenasalised consonants, the next day without a nasal. Following the presentation of some morphological features and syntactic data, clear evidence of a genetic relationship between Mansim and Hatam is given in §11, followed by evidence for mutual influence between the three languages, Mansim, Hatam and Numfor in §12.

Marice and Eva were eager to sing a few traditional songs, which I recorded. A transcription is given in Appendix 1.

Jonathan Mansim graciously received me in his home, where he showed me some beautiful wall paintings depicting the origin story of the Mansim. They had been painted by a young Biak artist at his directions. His account of the Mansim origin took the form of a commentary on the paintings. A transcription of his comments, alternating in Mansim and local Malay is given in Appendix 2.

Since the evaluation of my Hatam consultants, namely that Mansim was a mix of Hatam and Biak, proved not unsubstantiated, I present the list of words I obtained in the form of a small dictionary with Hatam and Numfor equivalents in Appendix 3. The Numfor equivalents are taken from van Hasselt and van Hasselt (1947), the Hatam items are from my own fieldwork.

2 Phonology

Mansim seems to have sixteen consonants: p, b, t, d, c, j, k, g, m, n, ng, r, s, h, w, y; and five vowels: i, e, a, o, u. The status of the palatal consonants /c/ and /y/ and the larryngeal fricative /h/ is doubtful, given the single instances in this corpus.

There appears to be a contrast between the voiced and voiceless stops, word-initially, as in:

(1) /p/ versus /b/:

[bar] [par] from carry; not [baw] [payi] shoot string

(2)/t/ versus /d/:

> [tan] afraid [danu] I [tar] four [dar] go

(3) /k/ versus /g/:

> [kar] three to tear [gas] skin [get] [kek] chest

But I recorded both [prot] and [brot] for 'to fall', and [dugwot] for 'I tie' as well as [kwot] for 's/he ties'. In word-final position there are no instances found of voiced stops.

Mansim appears to have three nasals:

(4) /m/ versus /n/ versus /ng/:

[min]	die	[nenu]	s/he	[nang]	girl
[num]	smell	[mun]	smoke	[nguwo]	crushed

Possibly a phonemic distinction has to be recognised between alveolar and palatal grooved fricatives /s/ and /sy/:

light a fire (5) [syam] [sam] bite [sem] 2/3PL.eat [sye(nu)] 2/3PL (free pronoun)

Mansim resembles Hatam and Sougb (and most other Papuan languages) in lacking a phonemic distinction between the two liquids [r] and [1]. Various items I recorded with either liquid, although [r] was the more frequent one.

Further questions which remain are the status of the high vowels /i/ and /u/ vis-à-vis the consonantal approximants /y/ and /w/. In the word list I have listed items beginning with approximants, such as war 'water, river' and yai 'father', but also with initial high vowels, such as uwam 'sit' and iyari 'run, flee', which I spelt with a following approximant. The spelling reflects a rather broad phonetic transcription, trying to do justice to pronunciations like [wapu] 'nose (third person possessor)' which has the citation marker -u attached, [duwap] 'my nose' and [buwapu] 'your nose'.

Clearly, it may well be the case that Mansim should be analysed as having high vowels adjacent to other vowels, which may be realised as consonantal approximants under certain conditions. At the moment, I am not clear whether Mansim would maintain a contrast between, say, yan 'two' and iyari 'run', or uwam 'sit' and wamap 'sky'.

The five vowels are contrasted in the following items:

(6) min die door mer language mor suck mun girl nang

I will not venture any statements regarding consonant or vowel clusters on the basis of this limited data.

When verbs with initial consonants are inflected with a subject prefix, either a schwa or a reduced copy of the stem vowel is realised, as in [dəkraw] 'I hold' and [dənwok] 'I see'. A number of other words contain a schwa, such as [mənding] 'knife', [mənar] 'string bag', but whether these are epenthetic to break up consonant clusters or represent reduced phonemic vowels in unstressed syllables is not clear. In the word list I have left the consonant clusters.

During elicitation both verbs and nouns often receive a final vowel, which I have labelled CIT for 'citation marker'. Verbs invariably end on -o, and when an utterance is repeated, the vowel may be dropped. The same holds for the vowel -u, attached to nouns. These vowels seem to convey some emphatic speech, used to present the data to a foreigner. For example:

- (7) Də-temi-o timur-u.

 1 SG-sell-CIT cassava-CIT
 I sell cassava.
- (8) Də-temi mu brer.

 1SG-sell taro foreign
 I sell taros.

In a few cases I have also indicated what seems to be an epenthetic schwa between words to break up CC clusters, or to accommodate a metrical stress pattern. This schwa I glossed as LNK for 'linkage'.

2.1 Stress

If the segmental units leave many questions, this is even more the case with regard to suprasegmental features. It is possible that Mansim has a tonal difference between what I recorded as homophones. For example, the various instances of bar 'something; carry; not' and tan 'inside; far; afraid' could require different pitch, but on the basis of my restricted data, this could not be ascertained.

Stress seems to be distributed according to an iambic pattern over the clause, pretty much like in Hatam. That is, person prefixes do not receive stress, nor do other first syllables in polysyllabic words, with the exception of full personal pronouns. What I identified as citation markers can be stressed, as can possessive pronouns, while major categories like nouns or verbs do not necessarily attract main stress. Consider the stress on the verb kew 'know' in (9) and its absence in (10), where it has shifted to bar 'not', and the main stress on the modifier in the noun phrase, rather than on the head noun in (11).

- (9) 'Danu də-'kɛ-wo.
 I 1SG-know-already
 I know (it) already.
- (10) Danu də-kə-bar.

 I 1SG-know-not
 I don't know (it).
- (11) 'Nanu nu-'nwok kwa 'dun a?
 You 2SG-see dog 1SG-POS Q
 Have you seen my dog?

3 Word order in clause and noun phrase

Before the various word classes are illustrated with their morphological and syntactic features, I would like to give a general idea of the structure of the Mansim clause and noun phrase. As can be seen in (11), Mansim has SVO as the basic word order of the clause, while the possessive pronoun in the NP is in post-nominal position. Similarly, the attributive adjective follows the modified noun, as illustrated in (12). In this example, the temporal adverbial is positioned between the pronominal subject and the verbal predicate.

(12) Danu momin du-nwok kaw boi bənas.
I yesterday 1SG-see pig big very
Yesterday I saw a very big pig.

Later on we will see examples with extensions of these basic structures, such as oblique constituents and verb sequences.

4 Pronouns and verb affixation

The free pronouns I have been able to elicit do not distinguish second and third person plural. The bound pronominal forms distinguish a dual form as opposed to plural for second and third person, but not for first person.

(13)		Free pronoun	Subject prefix
	1SG	danu	dV-
	2SG	nanu	nV-/mb-
	3SG	nenu	-
	1PL	niwap	nV-/ngV-
	2/3PL	syenu	sV-
	2/3DU	syenu	kV

The alternative bound forms seem to be phonologically conditioned:

(i) second person singular is n(V)- before consonants, while mb- is found before a (back) vowel, as in (13).

```
(14) nə-kwot n-dar mb-ung mb-un
2SG-tie 2SG-go 2SG-sleep 2SG-possess
you tie you go you sleep your
```

(ii) first person plural is n(V)- before alveolar stop, and ng- elsewhere:

```
(15) ng-kwot n-dar ng-ung ng-un

1PL-tie 1PL-go 1PL-sleep 1PL-possess

we tie we go we sleep our
```

The status of the subject prefixes and verb stems is not clear, however. I suspect some interferences are present from Numfor (or general Austronesian (AN) features from the Cenderawasih Bay). The main difficulty was that both speakers with whom I could work had problems with shifters, when I tried to elicit a paradigm for verbs or possessed nouns (whether alienable or inalienable). For example, the data in (16) and (17) suggest that the verb stem for 'to go, walk' is kar. But when forms like dar for 'I go' and 'she goes' are also

obtained, next to *ndar* for 'you go' and *niwap ndar* for 'we all go', it would seem the verb stem is *dar*.

(16) Danu də-kar-ə den.
I ISG-walk-LNK now
I am just walking around. (In response to Saya berjalan saja.)

When I tried to get this phrase again, now through the medium of Hatam, which Marice claimed to speak as well (in fact a lot of people in Arfai II do speak Hatam), the response was:

(17) Danu də-kar sak.
I 1SG-walk just
I'm just walking (with no purpose). (In response to Dani dəmbunbun nyen.)

Similar observations hold for responses to phrases with 'come': dir, kir, ndir, etc. Thus, in analogy to niwap n-dar 'we all go', I recorded niwap ng-kir for 'we all come', not *n-dir. I have instances of n-ir for '2SG-come' instead of n-dir.

The data I obtained for body parts is even more confusing. For 'leg' I recorded (18), which suggests inalienable possession, marked by the same prefixes as those operating on verbs.

(18) də-kiru my-leg
nanu nə-kiru you your-leg
nenu də-kiru he his-leg

The responses to my elicitation of 'eye' were a general term duwowu 'eye', followed (19) or preceded (20) by person specifications, but not *mbuduwo or *mbuwo (which I had expected, and I still suspect one of them may be the correct form):

- (19) danu duwow d-un
 I eye 1SG-POS
 my eye
- (20) nanu b-un duwow you 2SG-POS eye your eye (Could this mean 'you have eyes'?)

In short, the exact stems of inalienable nouns (and some verbs) cannot be established on the basis of the restricted data.

The most reliable forms seem to be found in the following paradigms:

(21)		Pronoun	'sleep'	'tie'	'come'	ʻgoʻ	Possessive pronoun
	1SG	danu	d-ung	du-kwot	dir	dar	d-un
	2SG	nanu	mb-ung	nu-kwot	n-dir	n-dar	mb-un
	3SG	nenu	ung	kwot	dir	dar	d-en
	2/3DU	? syenu	k-ung	ng-(k)wot	ng-kir	ng-kar	k-un
	1PL	niwap	ng-ung	ng-kwot	ng-kir	ng-kar	ng-un
	2/3PL	syenu	s-ung	su-kwot	s-ir	s-ar	s-un

But notice that there are forms like m-wam for '2SG-sit' or '1PL-sit', apparently assimilating the nasal to the bilabial approximant of the verb stem (as in (m)b-ung 'you sleep'), and n-ir '2SG-come', instead of n-dir.

In combination with numeral 'one' the pronouns express exclusivity, much like Hatam dangkom 'I alone', nangkom 'you alone', etc. The forms kə-da-wom and kə-na-wom in (22) and (23) appear to be prefixed with a velar stop, which I label as a NOMinaliser, biased by my experience with Hatam.

(22)Nan dirap monen kə-na-wom. you go garden NOM-2SG-one You go to the garden by yourself.

When checking this sentence, Jonathan supplied as evidence:

Dan kə-da-wom dirap monen. (23)I NOM-1SG-one go garden I go to the garden by myself.

I don't have similar data for other person categories, but I suspect kə-ne-wom would be '3SG by her/himself', and similar ones for other persons.

5 Verbaliser we-

Mansim employs the prefix we- ~ wo- ~ wa- to incorporate loan words, such as Indonesian ajar 'to learn', which becomes w-ajar and tutup 'close', as in:

(24)Wo-tutup war de. VBL-close water 3SG-POS She covers the glass of water.

It also verbalises nouns, as in:

awo? (25)Nanu wo-guru VBL-teacher where Where are you teacher?

There are many more instances of we-prefixed to Indonesian items, which are given when my consultant could not think of a true Mansim equivalent for the item I tried to elicit. A few examples are given in (26).

we-kupas do-peel (26)we-tutup do-close we-ricin do-slippery we-doron do-push we-kesasar do-be.lost we-bage do-divide

The last item of (26) is illustrated in one of the few full sentences I elicited:

(27)Danu du-we-bage mai sve watu 1SG-VBL-divide banana to 2/3PL 2/3PL.also 2/3PL-eat I divide the bananas among you that you also can eat.

A similar form can be attached to indigenous verbs, conveying a sense of command, as in:

- (28) Atai b-wo-dir bar-o sabon-u danu d-iyumwar. boy 2SG-VBL-come carry-CIT soap-CIT I 1SG-bathe Boy, come bring me the soap, I want to bathe.
- (29) Nanu b-wo-dir mb-ung. you 2SG-VBL-go 2SG-sleep Come and sleep.

While in the examples above wo- seems to be positioned between the subject prefix and the verb stem, in case of a plural subject, the main verb carries its own subject prefix:

(30) Sye s-wo s-ung. 2/3PL 2/3PL-VBL 2/3PL-sleep Come on, you go to sleep.

This form could be confused with *suwo* (also realised as [swo]), meaning 'also', when for example, in a paradigmatic elicitation the form (31) occurs:

(31) Ne-swo kwot-o baw.
3SG-also tie-CIT rope
He also ties the rope.

But this confusion is solved in the light of other person forms of suwo, as in:

- (32) Danu də-suwo du-wasi nan. I 1SG-also 1SG-follow you I also go with you.
- (33) Nanu na-suwo ni-miyan a? you 2SG-also 2SG-dislike Q You also don't want to, right?

In other words, the imperative sense is conveyed by the prefix wo, while the inclusive sense is expressed by the verb suwo. And it could well be that the form s-wo in (30) is ambiguous, representing homophones, one meaning 'you.PL-also', the other one 'you.PL-should'. For second person singular, there seems to be a clear distinction. The imperative mode has the prefix b- in (33), while the verb suwo requires nV-, as in (34).

- (34) *B-wo-dir!*2SG-VBL-come
 Come!
- (35) Na-suwo n-dirapo Mənukwar. 2SG-also 2SG-go.to Manokwari You also go to Manokwari.

Yet another prefix, kwa-, occurs. This seems to express a completive aspect. Since I don't have evidence for other persons, the form is not certain. It could be a third person variant of wo- which is found on second person singular and plural, but that would suggest another third person prefix k-. Another hypothesis would identify k- as some nominal marker, which operates in Hatam, and which seems to occur on the exclusive personal pronouns, see ka-na-wom 'you by yourself' in (22). In that case (36) and (37) could be analysed as nominalised clauses, with some sense of 'It is a fact that he has gone'. Yet another possible source is Numfor kwar 'already', although that normally occurs in clause-final position. Obviously, these options are not more than speculations.

- (36) Kwa-bar-o kwet-u dar wim ow.

 COMP-carry machete go fell tree

 He has already taken his machete and gone to fell a tree (= cut wood).
- (37) Kwa-dar den.

 COMP-go now

 S/he has already gone.

6 Possessive phrases

Although I have not been able to obtain full paradigms for terms for body parts and kinship relations, Mansim seems to distinguish between inalienably possessed nouns and alienable nouns. On inalienable nouns possession is marked by prefixes. These are identical to subject prefixes, as illustrated in (38):

(38)	du-pwoda	1SG-head	du-wapu	1SG-nose
	nu-pwoda	2SG-head	bu-wapu	2SG-nose
	0-pwoda	3SG-head	0-жари	3SG-nose

Alienable nouns are possessed by the forms given in (21). They are repeated here:

(39)	1SG	d-un
	2SG	mb-un
	3SG	d-en
	2/3DU	k-un
	1PL	ng-un
	2/3PL	s-un

Although functioning much like pronouns, these forms actually seem to be verbs, which can be used as main predicates, the clause having the order SVO, as in (40).²

(40) Ni-wap ng-un munggwem.1PL-all 1PL-POS childWe all have children.

These possessive pronouns can also be used with inalienable nouns, in addition to the possessive prefix. It then follows the possessed item. A free pronoun may precede the head noun, as (41) and (42) illustrate:

(41) danu d-urwep d-un
I 1SG-husband 1SG-POS
my husband

Nanu mb-un duwow. you 2SG-POS eye You have eyes.

The construction below, already given in (20), may be an artifact of elicitation, when I tried to obtain a paradigm for inalienable nouns. The elicitation of personal pronouns caused problems, as shifters often do in an initial elicitation session. Instead of a phrase with the meaning 'our eye' I probably obtained 'you have eyes':

(42) danu dunim d-un
I 1SG.wife 1SG-POS
my wife

The free pronoun preceding the head noun clearly is not required, as the following examples illustrate:

- (43) Munggwem k-un k-irop pukor-en. child 3DU-POS 3DU-go school-inside Their two children go to school.
- (44) Danu də-srew mənar d-un də-bar.

 I 1SG-hang bag 1SG-POS 1SG-carry
 I carry my string bag from the shoulder. (lit. 'I hang my bag (and) I carry', given as verbalisation of the action 'carrying a bag from the shoulder'.)

These examples seem to reflect the canonical order of head noun and possessive pronoun in Mansim, agreeing with the order found in Biak and Numfor (see Steinhauer 1985 and van Hasselt 1905), and which is available as an alternative order in Hatam (Reesink 1999).

The third person possessive pronoun *den* (or a homophonous form) is used in a clause-final position to convey a kind of aspectual meaning, 'right now', as illustrated in:

(45) Danu də-bar mənar-u dar-ə den. I 1SG-take string.bag-CIT go-LNK now I take the string bag and go now.

7 Demonstratives and spatial orientation

7.1 Demonstratives

The exact forms of the demonstratives cannot be ascertained, due to the uncertainty of the presence of nasals, schwas and possibly reduced vowels. The basic forms seem to be ni 'near the speaker' and nu 'away from the speaker', as in:

- (46) Kwa ni kənai.
 dog this bad
 This dog is bad.
- (47) Kwa nu mom en.
 dog that uncle his
 That dog belongs to uncle.

When the same forms occur in adverbial function, we find an initial vowel and final nasal:

- (48) Nanu m-wam anun. You 2SG-sit there You are sitting there.
- (49) Danu du-wam anin.
 I 1SG-sit here
 I am sitting here.

The vowel /a/ in the examples above seems to be reduced to schwa in the following nonverbal predicates, which I assume is made up of the personal pronoun nen '3SG' and the deictic elements anun and anin.

- (50)Mundong nenanun. stone there is There's a stone.
- (51)Brung nenonin. ground here.is Here is the ground.

But when I held up a knife and asked 'What is this?', I was instructed to say (52), which I recorded both with and without the final nasal on the deictic.

(52)Inu(n)ame? this what What is this?

To which the answer was given:

(53)Mənding nenəni. knife it.is That's a knife.

The answer could be: nen(u) ini, or nenu ni '3SG this', but in the following examples the schwas could also be reduced instances of i (Numfor has ine or orne 'this' and orya 'that', see van Hasselt 1905:39)

- (54)Rar ane asmen ai den? house this who REL 3SG-POS This house, whose is it?
- (55)Asmen ai d-en anu? rar who REL 3SG-POS house that Whose house is that?

Another element in such presentative constructions is na. And it is not clear how this interacts with ni and nu. It appears to have some copula-like function, compare (56) and (57).

- (56)Mbu-yai na-nun-a? 2SG-father ?-there-Q Is your father there?
- (57)Ne-na-w meja ir. 3SG-?-CIT table under It is under the table.

Finally, there are indications that also forms without a nasal exist:

290 Ger P. Reesink

- (58) *Ne-na-w wondi yu*.

 3SG-?-CIT behind there
 It is behind the house.³
- (59) Kwa yari utu.
 dog run there
 The dog is running there.

The form [yariyutu] in (59) may consist of (i)u + tu (from Indonesian itu 'that'). In short, the various forms of the spatial deictics in attributive, predicative and adverbial positions are not clear, but the basic distinction between 'near' and 'far' (from deictic centre) is indicated by ni versus nu, with ne being a neutral third person reference.

7.2 Spatial orientation

Spatial orientation is marked by items in post-nominal position. Rather than analysing such locative markers as postpositions, I interpret them as spatial nouns (in analogy to similar items in many Papuan and Austronesian languages), even though there is no evidence of original possessive constructions (as, say, in Hatam, Sougb, Maybrat). Admittedly, with the available evidence both analyses are possible. But since there are other prepositions, some of them in combination with the post-nominal elements, I favour the analogy with spatial nouns in related Hatam. Consider:

(60) Syenu su-wam meja ap. 2/3PL 2/3PL-sit table on.top They are sitting on the table.

A related meaning seems to be expressed by -am (but see also 'in front of', below):

(61) New ton par-o wow-am den.
3SG descend from-CIT mountain-up now
She is coming down from the mountain.

'Under' the table, or a tree is expressed by ir:

- (62) Ne-na-w meja ir.

 3SG-is-CIT table under
 It is under the table.
- (63) Ni-wap m-wam-o ow ir.

 1PL-all 1PL-sit-CIT tree under
 We are all sitting under the tree.

'Under' the ground or water (i.e. inside the water) is expressed by tan, illustrated by (64) and (65). This spatial term collocates also with a string bag, as in (66). In all three utterances a schwa serves as transition between the noun and the spatial element. What this vowel signifies is not clear.

The free translation expresses what 1 asked for. The response makes use of the term wondi, which is Numfor, given by van Hasselt (1905) as 'outside'.

- (64) Danu du-nwok-o mwaw wara tan.

 I 1SG-see-CIT fish water inside
 I see the fish in the water.
- (65) Hantaw gwem ne-na-w brunga tan. snake small 3SG-is-CIT ground under The worms are under the ground.
- (66) Danu də-ken siep timur-u mənarə tan.

 I 1SG-fill potato east-CIT bag inside
 I put the cassava in the string bag.

'Inside' a house is en:

(67) Syenu su-wam rar en. 2/3PL 2/3PL-sit house inside They are sitting in the house.

The element *en* is also found on various nouns, signalling a sense of 'inside', or more generally, 'pertaining to the head noun':

(68)sick wound wot wot-en krong-en deaf krong ear the ground brung ground brung-en place the place mwon mon-en

And possibly it is present in the items of (69) with the same semantic function:

(69) *iyuten* mouth *kwoboren* fly (i.e. the insect)

'In front' and 'behind' are expressed by post-nominal elements as well:

- (70) rar-ə por-am
 house front-up
 in front of the house (compare porop 'mouth')
- (71) rar-ə biyai
 house behind
 behind the house (also given for 'beside the house')

8 Prepositions

So far a few prepositions have been recorded. No clear instance of a locative or directional 'to(wards)' has been found. Perhaps what I recorded as a verb dirap 'go to' is in fact a preposition or contains it in the form of ap (homophonous then with the spatial noun ap), when dir proves to be a generic motion verb. The sentence in (72) was given as equivalent of Hatam Di-kui nungugw 'I go up the mountain', which does not need a preposition. The same form, dirap(o), is used for 'going to Manokwari, the garden, etc.'.

(72) Danu də-tai dirap-o wow-am.
I 1SG-ascend go-CIT mountain-up
I go up the mountain.

The antonym is dir 'come', which does require the preposition par 'from', as in (72). It would be quite possible, therefore, that Mansim has one motion verb dir, with directions specified by ap 'up' or 'away from deictic centre' or par 'towards deictic centre'. The verb dar 'go, walk', which I discussed earlier, could be a verb denoting less purposeful motion than is referred to by dir.

(73) Danu dir par-o Mnukwar-ə den.
I ISG.come from-CIT Manokwari now
I've come from Manokwari.

Some other verbs which collocate with par 'from' are ton 'descend' in (61), and uruwo 'originate' in (74). 4

(74) Danu pupianu d-uruwo par-o Mnukwar.

I day-before-yesterday 1SG-come.from from-CIT Manokwari
The day before yesterday I came from Manokwari.

While in the following example *sei* appears to be a preposition, it could also be a form of the verb *iyei* 'enter'.⁵

(75) S-as-o sə-bar ow sei rar en. 2/3PL-stand-CIT 2/3PL-carry wood to house in They carry the wood to the village.

Whatever the final verdict on *sei* is, it does provide a possible correspondence with Hatam *ei* 'to(wards)', which does function as a true preposition, in conjunction with post-nominal spatial nouns. The Hatam verb corresponding to *iyei* 'enter' is *coi*. Compare the invitation to enter someone's house in both languages, Mansim (75) and Hatam (76).

- (76) N-iyei-ə n-ir. 2SG-enter 2SG-come Come in.
- (77) A-coi kwei. 2SG-enter come Come in.

One other preposition is mai 'to', only recorded with the verb eri 'take' to express the concept of 'giving':

(78) D-eri-o kaw mai-o mkoras ni.

1SG-take-CIT pig to-CIT child this
I gave some pork to this child.

K-urow par Upwet. 2/3DU-originate from Maruni

The two (i.e. my parents) are from Maruni..

The verb uruwo ~ urwo ~ urow expresses 'originate'. Its exact form is not certain, since I have recorded various pronunciations.

This is the only instance in my data. If the form *sei* should be analysed as an inflected verb, it would imply an elision of the stem-initial palatal vowel/approximant.

9 Content questions

The question words that have been attested in my data are simply listed in (79), before I discuss their form and position.

(79)ame(n)what who asme(n)awo where dəpwi how, why how many, much paru paparow when bwotpinai why (= what cause) turame why (= what reason)

The question words ame 'what' and asme 'who' are used in object position, as in (80) and (81). When they occur in 'subject position' they both receive a suffix -n, and are followed by what I have labelled as a relative marker (REL), as illustrated in (82) and (83).

- (80)Nanu nə-temi ame? vou 2SG-sell what What are you selling?
- mai asme? (81)Nanu n-wo-iiin 2SG-VBL-permission to who you Who did you ask for permission?
- (82)Amen ai pwei nu? what REL smell this What is this smell?
- Asmen ai den ninu? (83)rar who REL 3SG.POS house this Who built this house?6

Given the position of the possessive (verbal) pronoun, the structure of (83) might be something like 'Who is it that owns this house?'.

Location is questioned by awo 'where', as in:

- (84)Nan nə-sup waai awo? you 2SG-buy betelnut where Where do you buy betelnut?
- (85)Svenu s-ir awo? 2/3PL 2/3PL-go where Where are you/they going?

Other question words are dopwi 'how, why', paru 'how many' and paparow 'when', as in:

I have no satisfying explanation yet for what looks like a combination of near and far deictics, which itself is not so strange, but in some questions, see (86) below, a particle (n)u seems to function as a question marker.

294 Ger P. Reesink

- (86) Nu-kwot rar ni dəpwi?
 2SG-tie house this how
 How did you build this house?
- (87) Dəpwi nə-wot a: how 2SG-sick Q Why are you sick?
- (88) Munggwem mb-un paru? child 2SG-POS how.many How many children do you have?
- (89) Paparow tuan we-berangkat nu? when mister VBL-leave that When do you leave? (see footnote 6)

Finally, I obtained two forms expressing 'why', which seem to be polymorphemic. The form *bwotpinai* in (90) could begin with *b-wo-* '2SG-VBL' plus some verb and other material. The question word *ame* 'what' is clearly present in *tur-ame* (91), and its first member points to the Hatam preposition *tut* 'along with, for', as in the Hatam 'why' form *tut mindei* 'for what'. Both questions, of course, ask more for a reason or purpose, whereas *dapwi* 'how, why' in (87) questions a cause.

- (90) Nanu bwotpinai nə-bur-o kwa nu? you why 2SG-hit-CIT dog that Why do you hit that dog?
- (91) Nanu nə-temi siep-u tur-ame? you 2SG-sell potato-CIT for-what Why are you selling sweet potatoes?

Apparently *dapwi* 'how' may occur in final or initial position in the clause. I have no evidence whether this option holds for the other question words as well.

10 Verb sequences

Since I have not been able to obtain a full Mansim narrative, not much can be said about sentence structure. The account Jonathan Mansim gave of the Mansim history was more in the form of some staccato comments on his wall paintings. And my other consultants, Marice and her aunt Eva, could give me some isolated short sentences. More complex sentences could not be elicited. There are a few examples, however, which suggest that Mansim, just as its relative Hatam, allows rather tight verb sequences, which are reminiscent of serial verb constructions. A few have already been given to illustrate other points, and some example sentences in the lexicon provide other instances. Here follow just a few:

(92) Nenu bar-o kwet-u dar wim ow. he carry-CIT machete-CIT go fell tree He takes his machete to go cut wood.⁷

- (93)Danu d-uweng mənar-u dirap-o wow ap. 1SG-carry string.bag-CIT go.to-CIT mountain I carry my stringbag going up the mountain.
- (94)D-iyani nan nə-prot wayi monen. 1SG-push you 2SG-fall hit ground I push you to the ground.

The clitic e, sometimes together with the preposition par 'from' seems to indicate an anterior event, translated by Malay dulu 'first':

- (95)Pədasin dir du-nwok sye par ntungwang niyo day.after.tomorrow today 1SG.come 1SG-see you from first then dir si. 1SG.come again Today I've come to see you, so the day after tomorrow I'll come again.
- Sə-tum (96)danu də-prap wit-o tungwotow nini 2/3PL-wait first I 1SG-speak with-CIT man this par from first You wait, I'll talk with this man first.

11 Correspondences between Mansim and Hatam

As I presented some morphological features and syntactic structures of Mansim, I have already illustrated some similarities with neighbouring Hatam and Numfor. In this section I show that Mansim and Hatam are rather closely related languages. Even on the basis of a few hundred words, some clear sound correspondences can be established. Some of the adduced evidence, in particular the correspondence between Mansim a and Hatam i, will actually strengthen some analyses I proposed for Hatam in Reesink (1999).

(i) Items which show labialisation in Mansim, which is lost in Hatam:

(97)	lift up	kwon	kon
	roast	nuong	non
	heart	ngwon	ngon
	tie	kwot	ngot
	pull (fish)	pwos	pos
	see	nwok	ngat
	hide	kworan	ku

(ii) Mansim has final /-Vr/, where Hatam has /-Vi/:

(98)	ascend	kur	kui
	string bag	mənar	mənai
	foreign	brer	mbrei
	hit	bur	bui
	four	tar	bətai
	give	eri	yai

There is also one item where the $r \sim i$ alternation occurs in a different position:

(99) knee braw biaw

(iii) Other items show Mansim /r/ corresponding to its elision in Hatam:

(100) laugh pra pa
fly prar mba
sing prim pim (Hatam meaning is 'cry')

But Numfor bor 'much' seems to correspond to Hatam babor 'very' and boi 'big' in Mansim. This would suggest the same correspondence in reversed direction. As we will see below, this phenomenon applies to some other correspondences as well.

(iv) A few items in my data suggest that Mansim /s/ or /0/ corresponds to Hatam /h/, similar to the corresponding /s/ and /h/ in Hatam dialects Miriei (Moile) and Tinam (Reesink 1999:2).

(101)hara ask sar bite ham sam hak8 sak just, only pull out hom suom ham star am fire hum om

Note that medial and final /s/ and /0/ show reverse directions:

(102) nettle leaf bos bu
tail pos pu
carry on back uwep usap

(v) As already shown by some items above, Mansim o corresponds to Hatam u, corroborated by the following:

(103) drink dot dut
heavy bon buhun
canoe ot ud
pound tow tug

(vi) Mansim bilabial approximant /w/ corresponds to Hatam velar stop /g/, with or without labialisation:

(104) one wom gom
sit uwam gwam
sky wamap gwamti

(vii) Mansim palatal approximant /y/ corresponds to Hatam palatal stops /c/ or /j/:

(105) call yem jem two yan can 2/3PL syenu jeni/yoni enter iyei coi

⁸ Hatam also has he and nyen with similar meanings.

Possibly, a bilabial approximant in Mansim has a similar correspondence:

(106) long wai jei

(viii) A few miscellaneous parallels are:

(107)	rope	baw	bab
	name	bwem	nyeng
	head	pwoda	bou
	sleep	ung	bong
	eat	dem	yem
	bird	waw	hab
	fich	mwaw	waw

(ix) A number of items are exactly identical in Mansim and Hatam (i.e. the Tinam dialect). What this evidence signifies is not clear, however. Since the few people who could give me Mansim data are in no position to use this language in daily communication, they do communicate in local Malay, some Biak variety or in Hatam. Thus, the Hatam equivalents may well be just that, unconscious loans from Hatam (other than the conscious loans from Indonesian which are Mansim-ised with the verbaliser $we-\sim wo-\sim wa$). Just some examples are given here:

(108)	draw water	taw
	fell	wim
	hang	srew
	hold	kraw
	hornbill	undow
	scrape	srip

But, of course, these items may well be both canonical Mansim and Tinam, as could also be said of prow 'sun'. Present-day Hatam would use mpiab for 'sun', but when I told my main consultant for Hatam, Hans Iwou, that the expression for 'the sun sets' is prow rok in Mansim, with rok meaning 'to push' in Hatam, he remarked that indeed prow was the original lexeme for 'sun' in Hatam also. Mpiab, he said, means something like keadaan 'a happening'. In other words, the two languages are clearly closely related, as evidenced by identical lexical items and a number of regular sound changes.

(x) Other items suggest a vowel correspondence: Mansim $/a/\sim$ Hatam /i/. These can be divided into two classes, a set of straightforward $a \sim i$ alternation, given in (109), and a second set which shows in addition an alternation $r \sim g$, as shown in (110).

(109)	cry	pam	pim
	jump	prapi	pri
	on top	ар	dip
	banana	wat	wiT
	fear	tan	ttin
	far	tan	ting

But notice that Mansim i shows a similar correspondence with Numfor a, as in 'enough': Mansim $manas \sim Numfor manis$.

not9 (110)bar big how many pig paru house ig rar headwaters nibrig brar hig (in addition to $s \sim h$, given in (101)) ask sar

These items not only present evidence for the $a \sim i$ correspondence, they also suggest that Mansim final /r/, at least when following /a/, corresponds to Hatam velar plosive (which is often realised as a palatal fricative or subject to apocope).

It seems plausible to analyse the words for 'finished' (Malay habis), in (111), as a nasal prefixed to the words for 'not': Mansim bar and Hatam big, in which the bilabial stop is lenitioned to an approximant.

(111) finished mwar ngwig

The nasal then probably signifies something like 'it is', which looks suspiciously like the AN *mang- as opposed to *pang-, reflected in Biak-Numfor as m(a)- versus f(ar)-. The former expresses a process or involuntary action, the latter a causative or voluntary action, as illustrated by mkak 'to be afraid' versus fkak 'to frighten'.

The $a \sim i$ alternation between Mansim and Hatam is seen in other instances as well, with some consequences for the analysis of Hatam's morphophonology. For example, given the regular correspondence between Mansim /a and Hatam /i, and given the few instances of what seems to qualify as some relator, namely da in (112)–(114), then what is written in Hatam as di, which I felt I had to analyse as /dV/ with the vowel often schwa-like (Reesink 1999:47), could well be just another reflex of an ancient relator in Proto Hatam-Mansim. In analogy to the other $a \sim i$ correspondences, the Hatam element could indeed be argued to be di, with its vowel reduced, since it almost always occurs in unstressed position.

- (112) Danu də-kraw rukem da wom kwai.

 I 1SG-hold langsat.fruit REL one only
 I am holding only one langsat fruit. (Saya pegang langsat yang satu saja.)
- (113) Danu də-ran da wot.

 I 1SG-tooth REL sick
 I have toothache. (Saya punya gigit yang sakit.)
- (114) Danu du-ngwon da wot.

 I 1SG-heart REL sick
 I feel for him. (Saya sayang anak.)

This last example would be literally 'I (have) a heart that aches'. Obviously, I don't have enough Mansim data to make this hard, but da seems to hold a similar function as the Hatam relator di when adjectives are marked by it, in contrast with a bare adjective in attributive position. Compare the Mansim examples (112)–(114), with the following Hatam contrasts.

(115) sop kei pima
woman good that
that good (pretty) woman (perempuan cantik itu)

⁹ The standard orthography as used in the Hatam New Testament differs somewhat from the items given here. In Reesink (1999:7) I argued that bi 'not' has a similar phonological structure as the other items with final (weakened) velar plosive. The question word pig is phonetically either [φi] or [φiyi], the latter presumably with an additional question marker.

But when the relator appears, the meaning seems to change slightly:

(116) sop di kei pima
woman REL good that
that woman which is good (pretty) (as singled out from others)
(perempuan yang cantik itu)

To clinch this argument we would need to find similar contrastive pairs for Mansim, which I do not have available. In the light of the well-established $a \sim i$ correspondence, it does seem to be a plausible hypothesis, especially since there are other indications for the $a \sim i$ correspondence.

Besides the correspondences Mansim tan 'to fear' ~ Hatam ttin and tan 'far' ~ Hatam ting, there is a third form tan 'inside', which corresponds to Hatam ti. The three instances of tan in Mansim may not be homophonous. There may be other differences. But on the basis of the restricted data I cannot determine whether, for example, Mansim has word-initial geminates, as Hatam does.

In Reesink (1999:44, 91) I indicated a form of 'areal nominalisation', with allomorphs $ti \sim si$, the latter following high vowels. This form nominalises adjectives and verbs, while adding a sense of location, as in -bong-ti 'sleep-NOM', which can be prefixed to indicate possessor for 'X's sleeping place', or in the prepositional phrase ei minyei-si 'at water-NOM' with generic ei 'at, to, in' for 'being in the area near the water'. However, there is a context in which the 'areal nominalisation' does not conform to the fricativisation rule. A schwa appears to be required between words like minyei 'water' or minai 'string bag' and the 'areal nominaliser' ti, when not just an area is referred to, but the concept 'inside' is expressed, as in:

- (117) Noni bong ei minyei-ə ti. 3SG sleep in water-CIT NOM He is lying in the water.
- (118) Dani di-puoi sieb ei minai-ə ti.
 I 1SG-put.in potato in string.bag-CIT NOM
 I put the sweet potatoes in the string bag.

When we compare the Mansim equivalents in (119) and (120), we can see that Hatam ti is not just an 'areal nominaliser', but in fact functions just like other spatial nouns in postnominal position. It seems significant that the Hatam examples (117) and (118) require a preposition, which is absent in Mansim.

- (119) Danu du-nwok-o mwaw war-a tan.

 I 1SG-see-CIT fish water-LNK inside
 I see the fish in the water.
- (120) Danu də-ken siep-u mənar-ə tan.
 I 1SG-put.in potato-CIT string.bag-LNK inside
 I put the sweet potatoes in the string bag.

Yet another instance of the Mansim \sim Hatam correspondence $a \sim i$ is found in the general question marker. For Hatam I identified i as a general question marker, as opposed to e, which seemed to presuppose a positive answer (Reesink 1999:68), as in:

(121) A-yai bi-dani mem di-ngat i?
2SG-give to-me for 1SG-see Q
Would you give it to me so I (can) see it?

The Mansim general question marker seems to be a, as in:

(122) Nanu nu-nwok kwa d-un a? you 2SG-see dog 1SG-POS Q Have you seen my dog?

Thus, the Mansim \sim Hatam correspondence $a \sim i$ is well established, and could even help to determine the phonemic vowel qualities in Hatam forms which at first seemed to be questionable. Whether this would also work for the form of the pronominal prefixes in both languages is not clear at the moment.

I would expect a great number of other correspondences if more data became available, for example, in the light of the $-ar \sim -ig$ correspondence, the following items may well be cognates as well, where Mansim br- seems to correspond to Hatam palatal j-:

(123) hole bror juig crown pigeon ubrot bijut

12 Resemblances between Numfor and Mansim

In spite of the limited data I have on Mansim, and the mixed data on Numfor (various dialects of Biak seem to be represented in van Hasselt and van Hasselt's dictionary, which also does not give adequate information on the shape of some phonemes), a sizeable number of resemblances between Numfor and Mansim can be identified. In the list of lexical items which show how these languages are linked, I also include Hatam items. In some cases Mansim and Numfor items are clearly the same, or similar, as opposed to Hatam (124). In other cases Hatam is closer to Numfor than Mansim (125). In yet other instances all three languages share an item (126).

(124)		Numfor	Mansim	Hatam
	rain	porem	brem	biged
	angry	msor	mwor	gga
	good	pum	pom	kei
	carry	bar	bar	ttei (Hatam has ba for 'to take, use')
	not	ba	bar	big
	outside	wondi	wondi	(ni-)sai
	coconut	sra	sraw	duig
	cassowary	manswar	muswar	handingad
(125)		Numfor	Mansim	Hatam
	don't	awer	pe	au
	wet	dok; sior	tor	ndot
	die	mar	min	mai (Numfor min means 'to hit, affect')
	shy, embarrassed	ma	ames	mmai
	sick; pain(ful)	duf	wot	dut

(126)		Numfor	Mansim	Hatam
	human	snunkaku	tungwotow	tungwatu
	tail	purari	pos	ри
	wash (clothes)	рар	tep	tot/piap
	cut	suf	sut	sut
	break	msof	kok	dahat
	all	kam	igom	hagom
	hornbill	wando	undow	undou
	grab	krau	kraw	krau
	island	meos	mios	mios

Numfor krau is glossed as 'to steal'. In Mansim and Hatam krau is given for 'to grab' and 'to hold'. 'To steal' in Mansim is kworan, also given for 'to hide', and in Hatam nggimang.

Besides this list of lexical items there are other features that illustrate the contact between Numfor and Mansim: (i) pronominal forms, (ii) position of possessive pronouns, (iii) clause-final aspect marker, and (iv) the verbaliser.

(i) When we compare the free pronominal forms of the three languages (127), it seems obvious that Mansim and Hatam are related and quite separate from Numfor.

(127)		Numfor	Mansim	Hatam
	1SG	(a)ya	danu	da(ni)
	2SG	au ~ w a~ awe	nanu	na(ni)
	3SG	i	new ~ nenu	no(ni)
	1PL	ko ~ inko	ni(wap)	nye(ni)
	2PL	mgo ~ imgo	sye(nu)	je(ni)
	3PL	si	sye(nu)	yo(ni)

Whereas Numfor has a set of free pronouns for dual number, in which the first person has the opposition inclusive-exclusive: 1DU.INC ku, 1DU.EXC nu, 2DU mu, 3DU su, I have no evidence for free dual pronouns in Mansim, and only for first person (inclusive) dual in Hatam, which is sa(ni). Presumably, the ending -nu on Mansim pronouns is a deictic form, just as Hatam ni, which is not obligatory.

When we consider the verbal prefixes on consonant-initial stems (128), Mansim basically agrees with Hatam, opposed to Numfor. Numfor ker is 'to plant' (taken from van Hasselt 1905:23), Mansim kwot 'tie, weave', Hatam kon 'to lift up':

(128)		Numfor	Mansim	Hatam
	1 SG	ya-ker	du-kwot	də-kon
	2SG	wa-ker	nu-kwot	a-kon
	3SG	i-ker	0-kwot	0-kon
	1DU.EXC	nu-ker		
	1DU.INC	ku-ker	ng-kwot	sə-kon
	2DU	mu-ker		
	3DU	su-ker		
	1PL.EXC	ko-ker	ng-kwot	nə-kon

1PL.INC ¹⁰	nko-ker	ng-kwot	i-kon
2PL	mgo-ker	su-kwot	ji-kon
3PL	si-ker	su-kwot	i-kon

In the case of vowel-initial verbs, Numfor has just w- for '2SG', which agrees with b- mb- in Mansim, while Hatam retains the a-, even on vowel-initial verbs like a-ug 'you-go': 'you are lying down, sleeping' is then Numfor w-enef, Mansim (m)b-ung and Hatam a-bong. But the few instances in my Mansim data wa-srew 'hang' and wa-dar 'go' may well contain the Numfor second person prefixes, which I at first took to be instances of the verbaliser $wo \sim we$. Third person singular in Numfor may be zero too, given that the free pronoun is i. A few forms in Jonathan Mansim's comments (see Appendix 2) have a prefix k-, apparently meaning both 'first person dual' and 'third person plural': k-irap monen '1DU.INC-go garden' = 'the two of us go to the garden' and tungwatow wap k-nwep mor brer 'people all 3PL-hear language foreign' = 'All the people understand Indonesian'. This form may be adopted from Mansim $ko \sim ku$ figuring in first person plural and dual and second person plural. Both Mansim and Hatam may have adopted Numfor si/su '3PL/DU', for su '2/3PL' and $sa \sim sa$ '1DU.INC', respectively.

(ii) The possessive pronoun in Mansim employs the same subject prefixes, as mentioned above. Whereas the form of possessive pronouns in Numfor is more complicated (it indicates gender and number of the possessed noun, yielding four different forms for each person-number category of the possessor), the position is what has been claimed the diagnostic one for Austronesian, namely postnominal. This agrees with the structure found in the Mansim data, whereas Hatam has the prenominal position as the more frequent one in natural text, allowing the postnominal position as well. This data suggests that Mansim has adopted the Numfor feature more definitely than Hatam. Compare:

Numfor:

(129) Rumgun ye-di i duf. child 1SG-SG.ANIM 3SG sick My son is sick.

Mansim:

(130) Munggwem d-un wot. child 1SG-POS sick My child is sick.

Hatam:

(131) Dit-de munggwom nggwen.

1SG-POS child sick

My child is sick.

(iii) Van Hasselt (1905:16) states that Numfor kwar signals not only past tense, but also perfect past, as in (132) and (133), which I gloss in both instances as 'already'.

Van Hasselt (1905) does not distinguish inclusive-exclusive for plural, only for dual. I assume that Numfor had the distinction just as present-day dialects of Biak, which would be *nko*, which I have used here.

- (132) *I mar kwar*.

 3SG die already
 He is dead.
- (133) Ya su wa kwar i rama.

 1SG pull canoe already 3SG come

 I had already pulled up the canoe when he came.

Numfor kwar may well have Mansim kwai as its equivalent, glossed as saja 'just, only', as in:

(134) Də-kraw rukem da wom kwai.

1SG-hold langsat.fruit REL one only
I have just one langsat fruit.

Or would it be the unidentified preverbal completive aspect kwa-, as noted above in (38) and repeated here:

(135) Kwa-dar den.

COMP-go now
S/he has already gone.

But if Mansim kwai is related to Numfor kwar, it has another item uo (also wa), glossed with 'already', corresponding to $tu \sim su$ in Hatam. These items are invariably glossed by their speakers as sudah 'already'.

Mansim:

(136) Nenu min uo.

3SG die already
He has already died. (= He is dead.)

Hatam:

- (137) Noni mai su.

 3SG die already
 He has already died. (= He is dead.)
- (iv) Finally, the Mansim verbaliser $we \sim wo$ as used on loan words is clearly related to Hatam bV-, and both resemble Numfor we-, which most likely has a voiced bilabial fricative as its initial element. Van Hasselt (1905:11) quotes Kern who had suggested that Numfor ba is a reflex of Malay ber, in its function on adjectives and numerals, ba-sam 'being warm', ba-rim 'being the fifth', ba-war 'being watery'. Van Hasselt then continues to state that be (apparently with front open vowel in contrast to the schwa) in be-sansun 'to dress' probably has another origin, namely $be \sim buk$ 'give' in related dialects. It is this latter form, then, which has probably been borrowed from Bird's Head languages, such as Hatam and Mansim, because it is the Numforese from the Doreh Bay who still use be as 'to give', while other Numforese use buk (van Hasselt 1905:11). Hatam has the verbal prefix bV- to mark instruments, but it is also used to incorporate loanwords. A similar morpheme ebe is found in Meyah (Gravelle, pers. comm.) and in Sougb. Only in this last language can it be related to an indigenous verb eba with the generic meaning 'to do', as in ar-ebe-d 'thing-do-me' = 'I am sick'.

It is quite possible that Numfor has two (similar) forms, one of which is of AN origin, as in $b\partial$ -pirpir 'having knots (said of wood)', while the other one, presumably $\beta\varepsilon$, is adopted from the Bird's Head languages immediately from Mansim we, ultimately going back to

what can still be observed in Sough as a verb eb(a) 'to do' (see also Chapter 1, §4.4.5). Thus, there may have been some borrowing in the reverse direction.

13 Conclusion

What really is the position and/or name of this lost language? The name Mansim has been used in the title and throughout this paper, except for the introduction where I related the historical references to the Borai as collected by Pans (1960). At one point Pans equates the Mansim with Borai, at other places the Mansim appear to be a different group. But as stated in the introduction, Jonathan Mansim and the two women in Arfai II refer to bahasa Mansim, when they speak Malay, which they equate with Mor ~ Mon Moi. The Hatam people refer to this ethnolinguistic group as Moibrai, while the Sougb people, whom I met at Sururei on the western Anggi lake in 1998, call the language morei mer (Sougb mer '3SG-voice, speech), which sounds suspiciously like Moile or moiree, which is the term in various sources for the Hatam dialect Miriei. The term moi, then, appears a true endonymic element. As we have seen, there is a regular sound correspondence Mansim -Vr ~ Hatam -Vi, which suggests that mor might be related to moi.

As stated in the introduction, the name mansim is obviously derived from the names of the two ancestors in Jonathan's account: Insim 'the woman' and Insum 'the man'. In the comments to the pictures in his house he mentions that the island of Mansinam (the name is a corruption according to him of Mansim) had broken off from the highest top of the Arfak mountains, Umsini (in Hatam called Umcena). He claims that his ancestors inhabited a wide area, from near Ransiki, via the River Prafi, inland as far as the Kebar plains.

Pans (1960:45) equates this group with the original Arfak people. The name arfak is claimed by Pouwer (1958:49) to be of Biak origin, meaning 'inlander'. Van Hasselt and van Hasselt (1947) have ar 'shout, cry' and fak 'inlander of Biak', which they equate with Arfak.

I would like to offer a further conjecture. It may not be accidental that kak as root in Numfor means 'fear': fa-kak 'to frighten', mkak 'to be afraid'. And the form ar may well have another etymology than the verb 'to shout' in Numfor. In my restricted Mansim data (see Appendix 3), there are a few items with ar:

(138) ar-pon male ar-maran female

These forms suggest that ar means something like 'person, people', which is also found in Jonathan's account, when he refers to ar moi 'the Mansim people'. If the final r of ar is subject to apocope, the item a-boi-kwai given for 'parents' could have the composite meaning 'person-big-just', which is a near calque of Hatam a-ndig-poi, in which are found the same a plus ndig 'big' and poi 'a little'. Such an analysis would make sense of the name of another Hatam dialect group, referred to as adihup, who live more inland from the Tinam and Moire. Now that we can identify di as a Hatam relator, corresponding to Mansim da, and we have seen that Hatam hup corresponds to Mansim (and Numfor) sup 'high (mountainous) land', a-di-hup can be explained as 'people who (are) from the high land'. And whatever the direction of $sup \sim hup$ (borrowed by the mainland groups Mansim and Hatam from Numfor, or vice versa), the name Ar-fak may well have the etymology of ar-f-(k)ak 'people that cause

I noted one other alternation $n \sim r$ in Jonathan's speech: where Marice and Eva had brungen for 'ground' he had brunger.

fear', when various sources mention that the mountain dwellers instilled fear in the encroaching island dwellers.

What has become clear from these limited data, is that the evaluation given by some Hatam speakers seems to be correct. Mansim is indeed a mix of Hatam and the Biak dialect Numfor. I will not enter the debate whether mixed languages exist or not (see for example Dixon 1997:67–73). If one wants to assign a basic type to Mansim, it would be a language related to Hatam. Yet there are a number of lexical items and structural properties that link it to Biak-Numfor.

Whatever the verdict on some of my guesses in this short sketch will be, the linguistic evidence (even if restricted) adduced in this sketch of Mansim suggests that it is closely related to Hatam, and that both of these mainland languages have absorbed a great number of features from the Numfor (Biak) language, due to the centuries-old contacts, already mentioned in the historical sources, summarised by Pans (1960) and corroborated by the terse comments I recorded from my contacts in Arfai II and Maripi, the women Marice and Eva, and the recognised leader Jonathan Mansim.

Appendix 1

Some songs

Marice and her aunt Eva, and Marice's daughter Albertina sang five traditional songs, which were recorded in Arfai II, 26 February 1998.

The precise meaning of many morphemes eludes me. The women who told me what they had sung would give general meanings. I had to guess the words, and their boundaries. The result, of course, is a rather crude approximation of forms and their meanings.

- Mien mien (1) mee / yai vai e / s-eri-o mother mother father father LNK 2PL-come 2PL-give-CIT də-payi-o ampwop d-un-i d-iar usi gwem 1SG-shoot-CIT ART kangaroo arrow small 1SG-POS-LNK 1SG-run sirumbui usi gwem. na follow.slope ART kangaroo small (4x) Mother(s) and father(s), come and give (me) my arrow, I'll go (and) shoot the small kangaroo, which follows the mountain slope.
- Ee / yaiyaiy-e s-ung pe / sə-pras-o sə-nwok ram-o (2) LNK fathers-LNK 2PL-sleep don't 2PL-get.up-CIT 2PL-see there-CIT kukwor / Munggewa nganap kurere amen ai ung name.of.place cape REL 3SG.sleep block over.there what kapar-o / ungkukwor na Umsin-o. ART ship-CIT 3SG.block ART Umsin-CIT (4x) Mother(s) and) father(s), don't sleep, get up, look back to Cape Munggewa over there, that which blocks it is a ship, it is blocked by the Umsini. (Ungkukwor is explained as melintang 'lie across, block off'; it clearly contains the verb ung 'to lie down, sleep'. Umsin is explained as the name of a ship, which apparently is named after the highest mountain of the Arfak range.)

- (3) Mee / vai-vai-e / s-ung pe / sə-pras-o# s-eri-o 2/3PL-sleep don't 2/3PL-get.up-CIT 2/3PL-give-CIT mother father-RED-LNK inasman inasman / ampwop d-un-i ria də-payi-o na 1SG-POS-LNK run 1SG-shoot-CIT ART k.o.fish k.o.fish arrow nas Udai na inasman. Andai ART k.o.fish (4x) Mother(s) and father(s), don't sleep, get up, (and) give me my arrows, that I may run and shoot the *inasman* fish (probably *ikan bulan* 'kind of herring'), at Andai.
- **(4)** Mvem myem e / avai-e sa-pras-o / s-ung pe / mother mother-LNK father-LNK 2/3PL-sleep don't 2/3PL-get.up-CIT ngwok-o Momor nganap-e s-uper s-ir sve 2/3PL-turn 2/3PL 2/3PL-come see-CIT Momor cape-LNK like tep ot-e yar purnir. canoe-LNK like canoe-LNK run to.here Mother(s) and father(s), don't sleep, get up, turn around and look at Cape Momor over there, where something like a canoe is moving in (with repetition of last line three times).
- (5)yai-yai-e / Myee su-pras-o# su-nwok s-ung pe mother father-RED-LNK 2/3PL-sleep don't 2/3PL-get.up-CIT 2/3PL-see Munggewa nganap kurire amen ai ram-o dorei / there-CIT Munggewa cape over.there what REL ascend prow rok # Uyim nir na prow dor / lewat prow Uyim come that sun come.up go.beyond sun sun Uyimnir # rok name.village set

Mothers and fathers, don't sleep, get up and look at Cape Munggewa over there. That which is coming up there, the sun is setting behind the Uyim mountain, the sun comes up (at Cape Munggewa) goes on and sets behind the Uyim mountain (repetition as a canon of the last two lines).

Appendix 2

Origin story of Mansim

This story is told by Jonathan Mansim, 28 March 1998, at Maripi. It is told as a commentary on the wall paintings in Jonathan's house. Most of it is told in local Malay, with some words and phrases in Mansim. The Malay is given in **bold** type. Minor pauses, which are accompanied with a rising pitch are indicated by a slash, corresponding with a comma in the free translation. Major pauses, following a descending pitch are indicated by #, which corresponds to a full stop in the free translation.

(1) Jadi in nama-nya / ini / tanah sejarah # dəgup # dəgup # thus this name-its this ground history ancestor ancestor So then, the name is, the history of the land. (Our) ancestors.

- nenemoyang # nenemoyang dədəgup # (2) Itu that ancestors ancestors ancestor That is our ancestors. Ancestors (are called) didigup.
- (3) in nama ini / Insum # Mansim # Insum-o # Mansim # Trus paitua old.man this name this Insum Mansim So this old man's name was Insum, Mansim (repeated).
- Batas / ini tanah sejarah # (4) border this ground history The border, this is original land.
- (5) Sejarah Mansim# dəbubat dagup # brung # history REL-clear ancestor ground Mansim The origin of Mansim. It was cleared by (our) ancestors, the land.
- (6) Ya, ini burung / uyaki # uyaki # va # ves this bird black.cockatoo yes Yes, this bird is the *Uyaki* (Indonesian burung kakatua raja = black cockatoo), yes.
- (7) wep-o mundong-ap # wep mundong-ap # black.cockatoo sit-CIT stone-on.top stone-on.top sit The black cockatoo was sitting on stones. He was sitting on stones (wep means 'sitting on egg').
- (8) Nuong yan / tu teror dua# two that egg two Two eggs, that means two eggs.
- (9) Dampat pica # nuong / yaikwar / break burst happen egg It happened that (the eggs) broke. The eggs broke.
- (10)Wa gwem wom / tungwatow bird small one human one (Out came) one small bird and one human.
- (11)Itu / anak bayi dengan / burung child baby with bird small that That is, one baby and a young bird.
- (12)Sekarang / tungwatow nengow / mbriw kwon# now human that old.man lift.up Now, the human, that, the old man took it.
- (13)Anak kecil ini / bayi ini / paitua # Insum # child small this baby this old, man Insum This little child, this baby, the old man, Insum.
- Wam kep pes (14)dot / near juice drink He was sitting at the sugar palm and drinking. (Pes seems to refer to both the palm and the wine tapped from it.)

- (15) Pes / ini rumah # muep #
 sugar.palm this house hear
 The sugar palm, this is the house. [Jonathan points to the house in the painting.]
 He heard (something).
- (16) Ada suara # anak bayi / tungwato #
 be voice child baby human
 There was a voice. (It was) the baby, the human.
- (17) Bung mundong-ap sinai-en #
 sleep stone-on.top sword.grass-inside
 He was lying on the rock in the field of sword grass.
- (18) Ini sinai / sinai-en #
 this sword.grass sword.grass-inside
 This is sword grass, a field of sword grass.
- (19) Wa-dar midi / di d-as inin e / nwok wa min # uyaki #

 VBL-go ? REL stand here LNK see bird fly black.cockatoo

 He went, and when he stood here, he saw a bird flying. (It was) the black cockatoo.
- (20) Wa di kraw ninew e / dar nir dir / wa nu mwerdi # bird REL hold here LNK go come come bird that ?

 The bird he took there, he went and came, the bird showed him.
- (21) Somanta ini / n-wa-dar nir #
 girl this 2SG-VBL-go come
 This girl, he brought back.¹²
- (22) Dar-o / we-sini / nip / dinimu / dinimu tu maitua / isteri # go-CIT VBL-here ? wife wife that old.woman wife He went, was there, (?), his wife, his wife was that old woman, his wife. (I think nip is a mistake, the beginning of nipmem 'his mother' in Hatam.)
- (23) Dia tanya / munggwem-a? arman-a? she ask child-Q female-Q She asked: That child? Is it a girl?
- (24) Munggwem to / itu anak perempuan? child that that child female
 That child, is it a girl?
- (25) Munggwem # Tapi / dia punya paitua bilang tidak # child but she POS old.man say no A boy. But, her old man said: no.
- (26) **Perempuan #** arman # female female No, a girl, a girl.

¹² Instead of being a verbaliser, the item wa could also be a realisation of bar 'carry'.

- (27)Eh arman / du-pun da dup də-də bwemə ma# ?-? eh girl 1SG-POS I name her Eh, the girl, I named her. 13
- (28)Saya kasi nama sama dia# give name to her I gave her a name.
- (29)Ah / trus dia kasi nama # dubwem # Insim # Mansim # ah SO he give name name Insim Mansim So he gave her the name Insim. Insim (means) Mansim.
- Mansim tri ... # sudah # (30)Yadi / trungan descendant Mansim? already So the descendants of Mansim are ... [voice is inaudible because of a hard knock by his pointing stick on the wall.] That's it.
- (31)Sekarang / nəmaf# sekarang ini / jambu# now now this rose.apple Now, (nəmaf is not clear) now there is the rose-apple tree.
- (32)Jambu ini satu pohon # ngwow wom # tapi braw rose.apple this one tree but tree one branch two This rose-apple tree is one tree. It is one tree, but it has two branches. 14
- (33)Ngwow wom tu satu pohon# tree one that one tree One tree that means one tree.
- (34)Mos# mos# mosu# dia punya nama itu iambu 3SG POS name that iambu iambu Jambu. Its name is jambu. Jambu.
- (35)Braw da-map war-en # sebelah timur# branch go-to water-inside side The branch that goes towards the coast. To the east. 15
- (36)Dia punya buah merah # 3SG POS fruit red It has red fruits.
- Mos bəbayu da-map (37)wow war-en # syen # mus syen# jambu fruit go-to water-inside red rose.apple red The fruit of the jambu towards the coast is red. The red rose-apple. 16

¹³ The morphemes in this line are not clear. The speaker appears to stutter before he finally says in Manism 'I gave her a name' and then explains the meaning in the next line (28). While bwem has been obtained as 'name' in other sessions, it is not clear what the material preceding bwem represents.

¹⁴ In elicitation ow was given for 'tree' or 'wood'. Jonathan explains ngwow as buah; I take it that ngwow means 'trunk'.

¹⁵ The stretch ['dama'puwa'ren] could also consist of a relator da plus other material; waren is explained as

¹⁶ There is variation between mus ~ mos for 'rose-apple tree'.

- (38) Yang sebelah barat / mus pow #

 REL side west rose-apple white

 The one towards the west is the white rose-apple.
- (39) Ini sebelah barat / ini sebelah timur #
 this side west this side east
 This one is the one in the west, the other one in the east.
- (40) Satu pohon tapi / cabang-nya / kesana merah / sebelah barat putih # one tree but branch-its over.there red side west white There is one tree, but its branch over there is red, the one in the west is white.
- (41) Mus syen mus pow #
 rose.apple red rose.apple white
 A red rose-apple and a white rose-apple (branch).
- (42) Trus / mwowu # sukun # mwow # sukun #
 then breadfruit breadfruit
 Then, the breadfruit tree. (2x in Mansim and Indonesian)
- (43) Sukun ini / mwow ini # wouk wow / itu buah # wow-a # breadfruit this breadfruit this fruit fruit that fruit fruit-CIT The breadfruit tree, the breadfruit. Its fruit, wow (means) fruit.¹⁷
- (44) Sekarang / s-o s-in k-an ng-or #
 now 2/3PL-VBL 2/3PL-come 1PL.INC-go 1PL-ascend
 Now(adays), you come and we go climb. 18
- (45) Ng-or itu naik # ng-or #

 1PL-ascend that ascend 1PL-ascend
 Ngor means 'to ascend'. We ascend.
- (46) Ng-kwot-o mandingu # srowi broto brung-er pung #

 1PL-tie-LNK knife stab fall ground-on POS

 We tie a knife (to a stick) and cut (the fruit) (so) it falls down to the ground.
- (47) Brot brung-en / mə-syam om # api # fall ground-on FUT-light fire fire (When) it falls down, we light a fire. A fire. 19
- (48) Syam om # mə-nuong kep om # bakar di api # light fire FUT-bake hold fire bake in fire We light a fire and then we roast them in the fire. Bake (them) in the fire.

^{17 &#}x27;Fruit' is realised as both [wouk] and [wow].

¹⁸ As Jonathan commented on my transcription he gave in slow speech:

S-uo s-ir ng-kar nwok. 2/3PL-also 2/3PL-come 1PL-go see

with kemari keton lihat as translation, which is 'come, let's go (and) see'.

Notice that Jonathan pronounces [brot] where Marice has [prot]; he also seems to alternate final [n] and [r]: brungen as well as brung-er. I suspect the verb syam 'light a fire' is prefixed with an element mo-that indicates sequence, similar to Hatam mV- 'posterior'.

- (49)Nuong kep om / ni-srip bar # hold fire bake 1PL-scrape not We roast them in the fire, we don't scrape them.
- Bakar di api / tidak boleh (50)ku pas # bake in fire not allowed peel We bake them in the fire, it's not allowed to peel them.
- bikin bersiku# (51)Tidak boleh not allowed make clean It is not allowed to clean them.
- (52)Tidak ini # makan inen arang itu# vem-em toro# this charcoal that this eat eat-eat whole That's not allowed. When you eat them, (you eat) the charred bits, (we) eat them whole (i.e. the fruit with its charred parts).
- (53)Onomu # mm makan dengan arang # charcoal mm eat with charcoal Charcoal, mm. (we) eat them with charred bits.
- Tidak bisa bikin bersih# (54)mwow # nuong keh om# can make clean breadfruit bake in fire (You) cannot make them clean. The breadfruit. (We) bake them in the fire.²⁰
- (55)Gwon / yem / eh dem tram / tram itu makan antero # eh eat corn cook eat corn that eat whole Cooking and eating, eh, as for eating corn, the corn, we eat it completely.²¹
- (56)Tidak berkikis # ini # not scrape this We don't scrape it, that's it.
- (57)Trus / bapa-bapa yang ikot-e# kətoran / mandow # father-RED REL follow-LNK descendants mosquito Next, the ancestors that come later, his descendants, are the mosquitoes.
- itu / nyamuk # (58)Məndow mosquito this mosquito The *məndow* means mosquito.
- (59)Sam nggin / tidak boleh ba-pak ... [hitting sound] bagini # bite if allowed do not thus When they bite, (you)'re not allowed to hit (the voice is covered by a hitting sound) like this.²²

Na-nuong kep 1PL-bake keep fire We bake (them) in the fire.

21

²⁰ In slow speech, as comment on the transcription the final clause was given as:

The first instance of 'eat' has the Hatam form yem.

²² The form obliterated by the hitting sound looks like a Hatam construction with Indonesian loan word ba-pakai 'do-use'.

- (60) Tra boleh #
 not allowed
 That's not allowed.
- (61) Kalau pukul begitu / saya baru potong koh # cara masing # if hit like.that I just cut older.brother manner reciprocal If we hit it like that, it is as if I am just cutting my older brother. As a retribution.
- (62) Jadi / məndow sam s-or / gosong dia saja / pros [yanitaputi] dia so mosquitobite 2/3PL-ascend rub it just rub (?) it So, when mosquitoes bite you, you just rub it, rub [not clear] it.
- (63) Jadi nyamuk tidak boleh / pukul # harus [strokes his leg] so mosquito not allowed hit must

 So, a mosquito you're not allowed to hit. You must (non-verbal expression of 'softly rubbing his leg').
- (64) Sela / orang tua bila itu obat # supaya / bosu #
 ? person old say that medicine in.order.to nettle.leaf
 Our parents called it a medicine, in order that, nettle leaf.²³
- (65) Macam daun gatal # bos # itu isap dara kotor # ya / itu # kind.of leaf itch nettle.leaf that suck blood dirty yes that It is a kind of nettle leaf, bos (this time the final /s/ is drawn out). It sucks out the dirty blood. Well, that's that.
- (66) Sekarang / sukun dengan nyamuk / sudah #
 now breadfruit with mosquito already
 Now, enough about the breadfruit and the mosquito.
- (67) Sekarang / itu raw-raw / niwan # niwanu # now that swamp swamp

 Now, here [Jonathan points to another scene of the wall painting.] is a swamp, a niwan.
- (68) Nir rar-en / tikus / tikus rumah #
 rat house-in rat rat house
 That's the habitat of the rat(s). Nir raren means rat's nest. [Jonathan repeats this sentence.]
- (69) Ubrot # mambruk # burung mambruk / ubrot # crown.pigeon crown.pigeon bird crown.pigeon crown.pigeon [While pointing to the picture of a bird] Ubrot means crown pigeon (repeated).
- (70) Trus / məswar-u # kasuari # kaw # kaw #
 then cassowary-CIT cassowary pig pig
 Next [while pointing to the picture], there is the cassowary. (And there is) the pig.
- (71) Ini sukun kayu # sukun #
 this breadfruit tree breadfruit
 Here is the breadfruit.

The pronunciation of bos is drawn out: [booosu].

- (72)Ini / beringin ini / urow # urow # raintree this raintree this raintree This, the raintree here (we call) *urow*.
- məsuwong / kayu / dulu Belanda bilang kayu dar. (73)tree dar this k.o.tree tree before Dutch sav This masuwong tree, this tree, the Dutch used to call it kayu dar.²⁴
- (74)Ya / jadi muswong # dar # ves from k.o.tree k.o.tree Yes, so that's the muswong tree.
- (75)Ini kavu cedana/ di gunung situ# upar-o# this tree sandalwood at mountain over.there k.o.tree This is the sandalwood tree, on the mountain over there. (We call it) upar (explained as *kayu pemari* = a taboo tree).
- (76)Pes# pes # minuman # pes # jadi minuman inaw # sugar.palm palm drink palm drink palm.wine SO ini mənarbur this sugar.palm The palm, the pes, so what they drink is this round (species).²⁵
- Karna mənarbur itu / dia punya buah yang bulat # (77)that it possess fruit REL round because palm Because this *manarbur*, it is the one which has round fruits.
- Kalau buah yang panjang itu / yang dong pakai / minum# (78)fruit REL long that REL they use As for the species with long fruits, that's the one they use for drinking.
- rumah # Ini rar-u# rar# lar-u# kwaw# (79)this house-CIT house house house-CIT dog This [Jonathan points out other sections of the wall painting] is the house. Rar (means) house. (And that's the) dog.²⁶
- (80)Undow / burung tahun # hombill bird year The undow (that's) the hombill.
- (81)Ini / kakatua raja / apa kakatua biru# unyir# unyir# this cockatoo king what cockatoo blue k.o.bird k.o.bird This is the King cockatoo, that's the blue cockatoo, (we call it) unyir.

²⁴ The name was explained to me as a kind of tree which is good for building. Dr W. Vink of the Rijksherbarium of Leiden gave me the scientific name as Dracontomelum dao.

In all three instances the final /s/ of pes is drawn out. Jonathan's comments here explain that from the nipah palm the people obtain their palm wine, which in Irianese Malay is inaw. But the following lines suggest that the species with long fruits yields the palm wine, while mənarbur is identified as the species with the round fruit.

²⁶ In this line two realisations of 'house' are given: [rar] and [lar].

- (82) Trus burung kecil nama (mwawarnyen) langit itu mənimar # then bird small name (?) sky that k.o.bird

 Then, the small birds are called (meaning of mwawarnyen is not clear), in the sky they are called mənimar.
- (83) Karaw ini / uyaki # burung kakatua raja # uyaki # if this black.cockatoo bird cockatoo king black.cockatoo As for this one, this is the King cockatoo, (we call it) uyaki.
- (84) Utubwow # burung kuning #
 bird.of.paradise bird yellow
 The utubwow is the Lesser bird of paradise (= cenderawasih).
- (85) Burung kuning ini / mwa / bird yellow this (?)
 The Lesser bird of paradise ...
- (86) Jadi daerah Irian Jaya hanya / binatang kuas tidak ada#
 so area Irian Jaya only animal strong not are
 So these are the only (important ones) in the area of Irian Jaya. Large animals are not found here.
- (87) Hanya / ini yang tinggal dalam Irian # only this REL live in Irian It's only these (birds) that live in Irian.
- (88) Ap harimau tidak ada / kera tidak ada / monyet tidak ada # what tiger not be ape not be monkey not be Tigers, apes, monkeys (and so on) are not found here.
- (89) Trus / mənas uo # tetap masin # ya ini # then enough already exact ? yes this Then, that's enough now.
- (90) Intonya dini alang-alang / sinai / sinai-u #
 ? this sword.grass sword.grass
 This [Jonathan points at another section of the paintings] here is the area of sword grass, (we call it) sinai.
- (91) Sinai-u Arbok# ini Arbok# di Maruni di-atas#
 sword.grass Arbok this Arbok at Maruni at-above
 The sword grass area on Arbok (= name of mountain), there above Maruni.
- (92) Maruni / Warbederi situ / ada girihan batu itu #
 Maruni Warbederi there be mill stone that
 Maruni, near Warbederi there, where a stone mill is.²⁷
- (93) Ini wow# Arbok# batan dua# Arbok#
 this mountain Arbok bridge two Arbok
 This is the mountain. Arbok. There are two bridges. (Near) Arbok.

- (94) Gunung Umsini # Umsini ni bahasa Mansim # Umsini # mountain Umsini Umsini this language Mansim Umsini That's Mount Umsini, in the Mansim language it is Umsini.
- (95) Umsin # kalau bahasa Hatam woideito Umcena # Umsin if language Hatam ? Umcena Umsin, in the Hatam language they say Umcena.
- (96) Umcena # tapi bahasa Mansim Umsini #
 Umcena but language Mansim Umsini
 Umcena, but in the Mansim language it is Umsini.
- (97) Umsini / das-o Mar-en du-nwok Umsini # tu berarti / Umsini stand-CIT Warmare-in 1SG-see Umsini that mean Umsini, if I stand at Warmare, I can see Umsini, that means,
- (98) kau berdiri d-uarmare tunjuk Umsini begini # you stand at-Warmare point Umsini like.this if you are in Warmare, you can see Umsini.
- (99) Warmare dua atau Warmare satu / tunjuk Umsini # ya # Warmare two or Warmare one point Umsini yes At Warmare two or Warmare one, you can see Umsini. Yes.
- (100) Trus ini / kali Maruni # Urpwep # waru # war # Urpwep # then this river Maruni Urpwep water water Urpwep Next this, is the River Maruni, (called) Urpwep, (in Mansim it is) water, river, Urpwep.
- (101) War bem-Urpwep / bomo Urpwep tan # Ungmanu # water ?-Urpwep meet Urpwep inside Ungman The river that joins with the Urpwep, that's the Ungman.²⁸
- (102) Kari kecil yang tembus di Maruni ini # Ungman # river small REL emerge at Maruni this Ungman The small river that branches off the Maruni, this is the Ungman.
- (103) Ah / ini / Urpwep brar den-i# dya pu kepala # Maruni # ah this Urpwep headwater 3SG.POS-LNK it POS head Maruni Ah, this is the headwaters of the Maruni, its headwaters. (Of the) Maruni.
- (104) Trus / ogu # usi / usi ir dor-o # war yapap # then cuscus k.o.tree k.o.tree come ascend water bank

 Next, the cuscus (?), the usi tree, it comes up along the river bank.²⁹
- (105) Itu pinggir kali # war yapap # mwaw # mut # mut # that side river water bank fish mut mut

 That means river bank, (in Mansim) war yapap, there is a fish, the mut (repeated).

I am not sure what the material preceding *Urpwep* signifies; it could be a realisation of *gwem* 'small'.

It is not quite clear what ogu and usi in this line refer to. From one of the songs in Appendix 1 it is clear that usi means '(a kind of) kangaroo'; but in his comments on the transcription Jonathan simply told about a tree that was growing at the river bank. So, I took it that usi referred to some tree. The next lines, however, suggest that it was a fish mut that climbed the tree, confused with (or changed into) a cuscus usi. Ogu remains unexplained.

- (106) Sor par Urpwep-e di dur ow # ascend from Urpwep-LNK come ascend tree

 It flies up from the River Urpwep and then climbs the tree.
- (107) Usi ni rem wow #
 tree this eat fruit
 The usi tree, and it eats its fruit.30
- (108) Briw-u dir / duapak war-en / paitua dari lau /
 old.man-CIT come ? water-in old.man from sea

 pantai ke gunung #
 coast towards mountain

The old man (= ancestor) comes from the water, the old man comes from the sea, [repairs his mistake] from the coast towards the mountains.

- (109) Dia jalan ke / bulan terang # dia pikir / kuskus #
 he travel to moon bright he think cuscus
 He travels to, [repairs his mistakes] it is full moon. He thinks that there is a cuscus.
- (110) Dia pegang senjata bambu turu senjata bambu #
 he hold weapon bamboo descends weapon bamboo
 He is holding a rifle, he takes down a rifle.
- (111) Dia pakai hagir # dia tembak jatu ke bawah # he use shot he shoot fall towards down He uses shot, and he shoots it down.
- (112) Bukan-ni kuskus / ikan # mwaw # mut # not-this cuscus fish fish k.o.fish
 But it is not a cuscus, it is a fish, a mut.
- (113) Ah / dia isi / bawa ke rumah #
 ah he fill carry towards house
 Ah, he puts it in his bag and takes it home.
- (114) Dia tanya ipar / mbrofa / mwaw lik-em-a?
 he ask brother.in.law brother.in.law fish 3PL-eat-Q
 He asks his brother-in-law: Brother-in-law, do you want to eat fish?³¹
- (115) Trus dia pu-ipar bilang / ah / mwaw mu-k-em then he POS-brother.in.law say ah fish for-DU-eat Then his brother-in-law said: Ah, when fish want to eat,³²

³⁰ Rather confusing, cf. footnote 29. But the story seems to be that the fish mut flew up out of the water and climbed the tree as a cuscus to eat from its fruit.

I have no explanation for the form *lik-em*. The verb 'to eat' is given as *dem*, Hatam form is *yem*, but it is not clear what *lik* is. Commenting on the transcription, Jonathan gave *mwaw kwem-a?* explained as 'fish, eating, right?', which did not help me to sort out the person morpheme.

Here again, as in line (116), the Malay translations were not such that I could determine what the prefix *mu*-signifies. The glosses indicate what was given as equivalents: *mukem* 'untuk makan' = 'for eating'; *mupwep* in (116) was explained as *di kali* = 'in the river'.

- (116)mu-pwep biasa # biasa mwaw / kep # normal normal fish hold (they live) normally in the river, usually fish stay there.
- (117)Selap munyam ənunya dulu s-ar tangaw ow rek# wow when hungry ? first 3PL-go search tree fruit eat When they are hungry, then they go and search the trees for food.³³
- (118)Dia lapar# itu yang dia keluar / hungry that REL he he go.out He was hungry, that's why he comes out (of the water),
- buah # kayu buah (119)cari dia makan # search fruit tree fruit he ... and looks for fruit. The tree fruits he eats.
- Jadi / ikan punya nama / mwaw # mwaw bwem ini / bwem / mut# (120)fish possess name fish fish name this name k o fish so So, the name of the fish, (in Mansim it is) mwaw, the name of the fish is mut.
- əni / bwem nia / Sərupwet# (121)old man this name this Sərupwet The old man's name is Sarupwet.
- (122)ini nama Sərupwet# ikan punya nama mut# Paitua old.man this name Sərupwet fish posess name k.o.fish The old man (ancestor) is called *Sarupwet*, the fish is called *mut*.
- (123)Ya / jadi / yang / apa / ini / mor uo # diwo# yes so REL what this night already moon Yes, so, this, [Jonathan points to the same painting which depicts a night scene, in black and grey tones], what, this is, it is already night, (there's the) moon.³⁴
- (124)Itu bulan terang jadi gelap-gelap begini / satu bulan yang terang ini# that moon bright so dark-dark like.this one moon REL bright That's when there is full moon, so it is darkish like this, and there's a full moon.
- Sepuntuk ikan yang cari buah yang makan# tu (125)so.that fish REL search fruit REL eat that already So that's the fish that is searching for fruit that he eats. That's it.

Jonathan Mansim on the language

Following the comments on the wall paintings, Jonathan provided some more language material. Many elements present problems for a thorough morphological analysis at this stage. Jonathan's pronunciation seems to diverge somewhat from what I recorded in slow

³³ While the original recording gave rek as final element, in slow speech commenting on it, Jonathan supplied for this line:

^{...} munyam tangau ow wow rem. hungry search tree fruit eat When he is hungry, he searches tree fruits to eat.

Diws is probably diyu 'moon' + uo 'already'.

speech from Marice. He also seems to fluctuate with respect to the person marking of verbs. In response to my questions, meant to check if, for example, my pronunciation of a word or phrase was correct, he would give some general comment or give a fast delivered new sentence, whose components are not always transparent. In spite of these limitations, I believe it is worthwhile to include some of this material since it does provide some evidence of Mansim's relation to Hatam and Numfor.

- (126) Macam saya tanya / maitua mau kemana?
 manner I ask old.woman want to.where
 For example, when I ask: Mother, where are you going?
- (127) Nanu n-dirapo we? you 2SG-go where Where are you going?
- (128) An-dirap monen ka-na-wom?
 2SG-go garden SPEC-2SG-one
 You are going to the garden by yourself?

The person marker in (128) could be the prefix n- as in (127) augmented with a vowel. None of the other material I obtained exhibits a vowel in this case. Following (128), Jonathan explains the form $k \ge na$ -wom with the material of line (129).

- (129) Kə-na-wom itu pu-sendiri # tra bisa # harus dua orang #
 SPEC-2SG-one that POS-self not can must two person
 Alone, means by oneself. That's not possible, one has to go with someone else.
- (130) Nok / kə-non war # do-wasi-ma # saya iko ko # like SPEC-you not 1SG-follow-you I follow you Like, you don't go by yourself, I'll go with you.

It looks like $k \partial - non$ is a contraction of $k \partial - na - wom$. Lines (131) and (132) provide evidence for a dual marker, which is k- in one instance, kang- in another. Possibly is should be parsed as Malay ka 'if' and 1PL ng-.

- (131) Ka na kə-na-wom na da-wit nan # k-irap monen # if you SPEC-2SG-one you 1SG-follow you 1DU-go garden If you go by yourself, I'll go with you. We two go to the garden.
- (132) Kang-ar-i mon / d-ar-i mon-o / nə-bar-u kwon ta-uo #

 1DU-go-LNK garden 1SG-go-LNK garden-CIT 1PL-carry-CIT lift ?-already
 We will go to the garden, I'll go to the garden and we will carry stuff.

It is possible that the unidentified element ta is in fact a verb, since Hatam has the verb ta 'to plant', because this line is directly followed by (8) which lists a number of plants.

(133) Siep-poto timur-(p)oto makeso ma məkeso wat sweet.potato-seedling cassava-seedling k.o.taro that k.o.taro banana kəmawonone kag-ərow monen # all.that 1DU-plant garden
Sweet potato seedlings, cassava seedlings, taros, bananas, we plant in the garden.

Line (133) was explained as saya tanam di kebun 'I plant in the garden'. I suspect that kəmawonone is a form equivalent to Hatam gi-ma-yok 'NOM-that-they' expressing

something like 'and all such things', rather similar to 'and so on'. The person marker on the verb kag- occurs also in line (134). It remains unexplained.

Kag-ərow monen# monen awi? Kram # 1DU-plant garden garden which Kram We plant the garden. Which garden? At the Kram mountain.

At first, kram was simply explained as 'above, on the mountain', later it became clear that it is the name of a limestone mountain near Maripi.

Macam ko / mkoras ni (135)kə-sar / amev n-dirapo wo? like vou child this 3PL-ask mother 2SG-go where For example when you, the children ask: Mother, where are you going?

The person marker k-, which I labelled as 'first person dual', above, appears to be used for third person plural (or dual) in (135). In other words, its exact reference is not at all clear.

- Sekarang / də-prap-ə nina mungkun / turow # (136)now 1SG-speak this true true Now, I speak truly.
- (137)Dəgubat ni / dəgubat ni turow brung ini# ancestor this ancestor this come.from ground this My ancestors are from this land.

The form dəgubat ni clearly contains dəgup, given earlier for 'parent, ancestor'. The composite looks very similar to what Hatam has as digup-bat-nya 'grandfathers' in which bat is a morpheme analysed as 'collective' and nya as plural marker, only applicable to human nouns.

When commenting on (136), the form tur was explained as betul 'true'. I suspect Jonathan's comment in fact pertains to the whole utterance, including line (137), namely that it is true that his ancestors originated from this area. In that case turow is a form of the verb urow 'originate, come from' in both (136) and (137).

- (138)Brung ini supaya ng-w-atur mukun# muswar ini# ground this in.order 1PL-VBL-order well this cassowary This ground in order that we arrange it well. The cassowary.
- (139)Kamar e fa-ambos b-un-ivu# ambos d-un eni# begitu# LNK CAUS-room 2SG-POS-that room like.that room 1SG-POS this That room is your room, (another) room is mine. That's how it is.

The terse comments of (139) seem to express that the division of land is like the division of rooms in a house, as explained in line (140). The word ambos is Numfor 'room', prefixed with Numfor causative fa-. In (139) two deictics can be isolated, iyu 'that, there' and eni 'this, here'.

- Jadi / macam / rumah ini kamar sana / sa pi (140)ko pi kamar e # this you POS room there house I POS room this So, it is for example, with this house, your room is there, my room is here.
- (141)Da-bo-campura d-u(n)pe# 1SG-VBL-mix 1SG-POS don't We shouldn't mix.

The general meaning of (141) is clear from the Malay explanation *jangan campur saya* 'Don't mix with me', or 'I shouldn't mix (with others)'. This allows the identification of the Indonesian loan *campur* 'mix' and possibly the Mansim prefix *wo*-, but now with a plosive, which turns it into a Mansim verb and the prohibitive adverb *pe* 'don't'. The other material is less certain.

(142) Jadi / kə-ton k-urwa k-a Mansim tənun so 3DU-descend 3DU-originate 3DU-go Mansim continuing mancatəruma / tapi som bahasa # ?? but one language So, they originated and became Mansim and for a long time (?they divided into various groups?) but they (spoke) one language.

It is not certain whether k- on the verbs in (142) should be analysed as 'dual' or 'plural'. The form *som* seems to mean 'one' but the numeral one is in fact *wom*. See also (157) below.

- (143) Du-mwot tənun #
 1SG-child continuing
 My children continue.
- (144) Ini da-mwe-sup Ungmop # batasir # mesur Mop # this 1SG-do-border Mupi border border Mupi
 This we have our border as far as Mupi.

Ungmop is explained as the small River Mupi; why it is batasir and not batas is not clear, neither is the form mesur.

- (145) Nə-mwe-sup Urur # ini da-mwe-sun Mar en # 1PL-do-border name.of.river this REL-do-border Warmare in Our border is the Urur Creek, our border is Warmare.
- (146) Brung eni # land this
 This (is our) land.
- (147) Nane də-gubat ni # deduran / apa /
 those 1SG-ancestor this in.the.past what
 Those were my ancestors, in the past, how was it again ...
- (148) depo tong bar uo #
 gospel descend not already
 Before the gospel came down.

Line (148) is explained by the Malay (149), which is repeated, before the sentence is continued by the Mansim material of (149)–(151).

- (149) Itu injil belum turun / that gospel not.yet descend Before the Gospel came down,
- (150) aboikwai d-un-i #
 parents 1SG-POS-LNK
 my parents.

- (151) Aboikwai d-un-i (kro) k-ruwo par urpwet-o parent 1SG-POS-LNK (stutter) 3DU-originate from Maruni-CIT My parents came originally from Maruni. (There is no pause between this and the following line.)
- (152) noni-e k-irapo Udaya / k-wo-pake ubasa / ubasaikwotop # he-LNK 3DU-go.to Andai 3DU-VBL-use language ?? and when they went to Andai, they used the language. (Ubasaikwotop is not explained.)
- (153) Kalau sita / saya tidak pakai baasa / susa # if there I not use language difficult While there, I don't use the language, it's too difficult.
- (154) D-urwo par Urpwet dirapo Udaya #
 1SG-from from Maruni go.to Andai
 I came originally from Maruni and went to Andai.
- (155) Esijara itu begitu # history this like.that That's our history.

Following this closure, there followed more material, most of it in isolated Malay phrases with some Mansim, which in most cases presents so many uncertainties that its presentation would be fruitless. There are just a few utterances, however, that allow some parsing. These actually show that the person prefix k- is indeed also used to indicate third person plural.

(156)kes / sudah # wom-wom / tungwotow -o-Prang mwep mor war left already people language one-one one hear brer wa foreign already When the war was over, it was already (developed). A few people knew Indonesian.

The verb kes in (156) occurs also in Hatam with the meaning 'let go', here obviously meaning 'finished'. The Mansim noun pran (here with a velar nasal preceding the initial velar of the following word) is a loan word from Malay perang either directly, or through Numfor. The transitional vowel between tungwotow and mwep is perhaps the remnant of the numeral wom, whose consonants have fused with those of the adjacent words. That would also explain the lack of a person marker on mwep.

In (157), the person marker is clearly k-, but it could not possibly indicate a dual number, given the quantifier wap on the subject noun phrase. Notice that Jonathan pronounces 'now(adays)' pədasin (as taken from Eva and Marice) with lenition of both stops, and apocope of the final nasal.

(157) Bərasi / sudah # tungwatow wap kə-mwep mor brer # now already people all 3PL-hear language foreign Now it is already, all the people know Indonesian.

Appendix 3

Mansim-English-Indonesian dictionary

This short dictionary was formatted by Shoebox software. It gives English and Indonesian (i.e. the Irianese or Papuan variant of it) equivalents, both for the lemmas and the illustrative sentences. As much as possible, I have also tried to find the equivalents in van Hasselt and van Hasselt's Numfor dictionary (1947), even though it appears to contain various dialectal variants of the language Biak-Numfor, without consistent orthographical indications of phonemic contrasts in that language. Hatam equivalents are from my own fieldnotes. The spelling I used represents a broad phonetic description. Word-initial consonant clusters in general are broken up by a schwa, which I did not use in the dictionary.

A

- a Q-word. Q; Tanya. Ref: I:19: Ameiu, bung uo a? Mother, are you already sleeping? Bu, sudah tidur kah? Hatam: i. Numfor: o.
- aboikwai n. parents; orangtua. Ref: I:54: Aboikwai dun ni kruwo par Upwet. My parents came from Maruni. Saya punya orangtua berasal dari Maruni. Hatam: andigpoi. Numfor: sinan; bebarara.
- ai rel. REL; yang. Ref: I:18: Amen ai pwei nu What's that smell? Apa yang busuk? Ref: I:18: Ai bar! No! Itu tidak! Ref: I:23: Asmen ai den rar enu? Whose house is that? Rumah itu siapa punya? Note: cf. Sougb ai and Meyah.
- ame Q-word. what; apa. Ref: III:5: Nanu nkinding ame? What are you making? Kau bikin apa? Hatam: mindei. Numfor: ro mundi; rosei.
- amei n. mother; mama; ibu. Hatam: amei. See mem 'mother'. Note: Used as vocative.
- amen [alternative: ame] Q-word. what; apa. Ref: I:18: Amen ai pwei nu? What is that smell? Apa yang busuk? Ref: I:18: Inu(n) ame What's this? Itu apa? Hatam: mindei. Numfor: rosei; romundi.
- ames v. embarrassed; malu. Ref: I:79: Nan names pe. Don't be shy. Jangan malu. Hatam: mmai. Numfor: ma.

- ampwop n. bow, arrow; busur, anak panah. Ref: I:67, 79. Hatam: hampiab. Numfor: marya. Note: Ampwop is also translated as anak panah and kalaway. (kalaway is local Malay for 'barbed arrow').
- amu n. star; bintang. Ref: I:5. Hatam: ham. Numfor: mak.
- ani [alternative: ni] dem. here; disini. Ref: I:14: Niwap muam ani. We are all sitting here. Kita semua duduk disini. Hatam: sini. Numfor: ine. See anu 'there'.
- anu [alternative: nu] dem. there; disana. Ref: I:14: Syenu suwam anun. They are sitting there. Mereka duduk disana. Hatam: sima. Numfor: orya. See ani 'here'.
- ap spat.n. on top; diatas. Ref: I:20: Syewap suwamo meja ap. They all are sitting on top of the table. Mereka semua duduk diatas meja. Hatam: dip. Numfor: bo(ri).
- ar [alternative: dar; kar] v. go, walk; berjalan. Ref: I:18: Nanu bwodir ngkar den. Come, we're going now. Mari, kita jalan. Ref: I:22: Danu pdasin dar. I'm going now. Saya pergi sekarang. Hatam: mbut, ug. Numfor: bran. [Etym: panaw > pana; ba; fa; ha; lakaw > la(k)o.]
- arap v. pull; tarik. Ref: I:28: Nan narap da pe. Don't pull me. Jangan tarik saya. Ref: I:28: Dan darap nan baro monen nprod en. I pull you lest you fall to the

- ground. Saya tarik kau supaya tidak jatuh. Hatam: brim. Numfor: sarap.
- armaran v. woman; orang perempuan.. Ref: I:30; III:3: Danu munggwem dun armaran. My daughter. Saya punya anak perempuan. Hatam: sop. Numfor: bin. See arpon 'man'.
- arpon n. man; orang lakilaki. Ref: I:30. Hatam: pinai. Numfor: man; baroi. See armaran 'woman'.
- aru n. sugar; tebu. Ref: I:7. Hatam: nghai. Numfor: kob.
- as v. stand; berdiri. Ref: II:3: Syenu saso rar poram. They are standing in front of the house. Mereka berdiri dimuka rumah. Hatam: ya. Numfor: ores. See pras 'get up'.
- asar¹ n. brideprice; maskawin. Ref: I:64. Hatam: mimbron. Numfor: ararem.
- asar² n. banyan; beringin. Ref: I:7. Hatam: asar. Numfor: asar. See urow 'banyan'.
- asme Q-word. who; siapa. Ref: II:5: Mwoijin mai asme? Who did you ask for permission? Kamu minta ijin sama siapa? Hatam: tou. Numfor: mundi(ri)si.
- asmen Q-word. who; siapa. Ref: III:7: Asmen ai kwoto rar ninu? Who built this house? Siapa yang ikat rumah ini? Hatam: tou. Numfor: mundi(ri)si.
- asran n. patience; sabar. Ref: I:28: Asran asran. Wait a moment. Sabar sabar. Hatam: arimman.
- atai n. boy; anak lakilaki. Hatam: pinai. Numfor: rom. See nang 'girl'.
- aw v. cut; potong. Ref: I:10, 21: Danu dkraw mnding da daw ow kaw. I take a knife and cut the leaf. Saya pakai pisau potong daun pohon. Hatam: tot. Numfor: papk; suf.
- awi Q-word. which; mana. Ref: I:52: Monen awi? Which garden? Kebun mana? Hatam: tou. Numfor: ro sei.

awo Q-word. where; dimana. Ref: III:7: Syenu sir awo? Where are they going? Mereka pergi kemana? Hatam: hantou. Numfor: mob-o. Note: Numfor mob 'place' + o 'question marker'.

B

- bar v. carry, bring; bawa, ambil. Ref: I:2, 21: Danu dbar ow. I carry the wood. Saya bawa kayu. Ref: I:27: Danu dbar mnar dar den. I carry the bag and go now. Saya bawa noken mau pigi. Hatam: ttei. Numfor: bar.
- bar¹ adv. not; tidak. Ref: I:18: Nanu mbung bar a? You're not sleeping? Kau tra tidur kah? Hatam: big. Numfor: ba. See baro 'lest'.
- bar² n. something; apa. Ref: II:7. Hatam: mun. Numfor: ino; ker.
- baro³ conj. lest; supaya tidak. Ref: I:27: Nkraw kiem, baro prot. Hold it tight, lest it falls. Pegang kuat supaya tidak jatuh. Ref: I:28: Dan darap nan baro monen nprod en. I pull you lest you fall to the ground. Saya tarik kau supaya tidak jatuh. See bar 'not'.
- **Nenu wadir barwo.** She has not come yet. *Dia belum datang.* **Hatam**: *bigyo.* **Numfor**: *ba-im.* See **bar** 'not'. [*Etym*: bar + uo.]
- baw n. string; tali. Ref: I:7; III:1: Danu dukwoto baw ininu. I roll up this cord. Saya bergelung tali ini. Hatam: bab. Numfor: kabray.
- bawro v. carry from head; bawa di kepala. Ref: I:76: Danu dbawro mnar dun. I carry my string bag from my head. Saya bawa noken di kepala.
- biyai spat.n. behind; dibelakang. Ref: II:3: Syenu saso rar biyai. They are standing behind the house. Mereka berdiri dibelakang rumah. Hatam: ninghim. Numfor: warpur. See poram 'in front of'.

- boi [alternative: umboi] adj. much; banyak. Ref: I:17: Dprap boi. I talk a lot. Saya bicara banyak. Ref: I:24: Om boi bnas. A very big fire. Api besar sekali. Hatam: mang. Numfor: bor. Note: cf. Hatam bibor 'very'.
- bom v. join; ketemu. Ref: I:47: War bomo Urpwep tan. River that joins the Maruni. Kali yang tembus di Maruni. Hatam: bam. Numfor: uk; dor.
- bon adj. heavy; berat. Ref: III:4: Ow ni bon. This tree is heavy. Kayu ini berat. Hatam: buhun. Numfor: merbak. See ngwak 'light'.
- bos n. nettle leaf; daun gatal. Ref: I:42. Hatam: bu. Numfor: saraken.
- brar n. headwater; kepala air. Ref: I:47: Urpwep brar deni. The headwaters of the Maruni River. Maruni dia punya kepala. Hatam: nibrig.
- braw n. knee; lutut. Ref: I:17, 38: Ngwow wom, braw yan. One tree with two branches. Satu pohon, tapi dua cabang. Hatam: biau. Numfor: we-pur.
- brem n. rain; hujan. Ref: I:5: Bremu ton uo. It's already raining. Sudah hujan. Hatam: biged. Numfor: porem.
- brer n. foreign; asing. Ref: I:9: Mor
 brer. Indonesian. Bahasa Indonesia.
 Hatam: mbrei. Numfor: amber. See
 pumbrer 'foreigner'.
- bror n. hole; kolam. Ref: I:23: Bror tan. Inside the hole. Didalam lobang. Hatam: juig. Numfor: dore.
- brung n. ground; tanah. Ref: I:5. Hatam: dihei. Numfor: saprop. See brungen.
- **brungen** *n*. inside the ground; *tanah*. Ref: I:23: **Ndeiyo brungen.** It goes into the ground. *Masuk tanah*. See **brung**.
- bur [alternative: bor] v. hit; pukul. Ref: I:10: Mbor pe. Don't hit (me). Jangan pukul. Hatam: bui. Numfor: waprer; mun.
- **bwem** n. name; nama. Ref: II:5,7: Ot mbun bwem enu uo? What was the name of the ship? Proa itu nama apa?

- Ref: I:30: **Nubwem ame?** What's your name? *Namamu siapa?* **Hatam**: *nyeng*. **Numfor**: *snon*.
- **bwer** n. cooking pot; belanga. Ref: I:77. **Hatam**: yeng. **Numfor**: bako; uren.
- bwotpinai Q-word. why; kenapa. Ref: I:19: Nanu bwotpinai nburo kwa nu? Why do you hit that dog? Kenapa engkau pukul anjing itu? Hatam: nggon rino.

C

cagwemu n. grandchild; cucu. Ref: I:31. Hatam: digai; digup. Numfor: kepu. See iyutu 'grandmother'.

D

- danu pron. I; saya. Hatam: dani. Numfor: (a)ya.
- dem v. eat; makan. Ref: I:3: Nanu ndem mwaw. You eat fish. Engkau makan ikan. Hatam: yem. Numfor: an.
- den¹ adv. now; sekarang. Ref: I:20: Dem rukem den. I am eating a langsat now. Sekarang saya makan langsat. Ref: I:27: Danu dbar mnar dar den. I carry the bag and go now. Saya bawa noken mau pigi.
- den² poss. POS; punya. Ref: I:23: Rar ne asmen ai den? Whose house is this? Rumah ini siapa punya? Hatam: -de. Numfor: -di; -si; -da; -na. See dun 'my'.
- dgup n. ancestor; nenemoyang. Ref: I:33, 35. Hatam: pung. Numfor: apuy. Note: It is explained as equivalent to Hatam pung, which means fam 'family'; cf. Hatam digup 'great-grandfather'; Numfor apuy is 'grandfather'.
- dir v. come; datang. Ref: I:19: Kwa ne nanu nir. Dog, you come. Anjing datang kesini. Ref: I:19: Nanu bwodir! Come in! Silahkan masuk! Hatam: kwei.

- Numfor: rama. See iyei 'enter'; dirap 'go'. [Etym: ma(R)i > mari > mai > ma.]
- dirap [alternative: direpo] v. go; pergi. Ref: I:18, 22, 31; III:6: Dirap Mnukwar den. I am going to Manokwari now. Saya pergi ke Manokwari. Ref: I:19: Danu direpo Mnukwar. I go to Manokwari. Saya pergi ke Manokwari. Ref: I:19: New dirapo wow uo. She has gone to the mountain. Dia sudah naik gunung. Hatam: ug ei. Note: The relation to dir 'come' is not clear.
- dit v. unintentionally hit or touch; kena. Ref: I:27: Nmow dit dan dkwai dprot. Your arm hit me and I almost fell. Kau punya tangan kena saya, saya hampir jatuh. Hatam: ndei. Numfor: jiur; min. See tug 'touch'. Note: Exact meanings are uncertain.
- diyu¹ n. moon; bulan. Hatam: beda. Numfor: paik.
- Diyu² n. bamboo; bambu. Ref: I:7. Hatam: hambuig. Numfor: amen.
- dor v. ascend; naik. Ref: I:5,16: Prow dor. The sun comes up. Matahari naik. Hatam: pri. Numfor: daber. See rok 'descend'; kur 'climb'. Note: Hatam dor means 'to run'; Numfor dor means 'to meet', 'to find'.
- dot [alternative: dut] v. drink; minum. Ref: I:44: Ndut boi pes menan. When you drink a lot of palm wine you get drunk. Kalau minum banyak, jadi mabuk. Hatam: dut. Numfor: inem.
- dpwi Q-word. how; bagaimana. Ref: III:8: Nanu nukwot rar ni dpwi? How did you build this house? Bagaimana kau ikat rumah ini? Ref: III:8: Dpwi na wot a? Why are you sick? Bagaimana kau sakit? Hatam: notou. Numfor: rariso.
- dun poss. my; saya punya. Ref: I:23: Kungwoto rar dun. We build my house. Kita bangun saya punya rumah. See den '3SG.POS'.

- dunim n. wife; ibu. Ref: I:23, 30: Danu dunim dun. My wife. Saya punya isteri. Hatam: ditnem. Numfor: swa(ri). See urwep 'husband'. Note: 1SG dunim, 2SG mbunim.
- duwew n. tongue; lidah. Ref: I:9: Dudwew. My tongue. Saya punya lidah. Ref: I:9: Budwew. Your tongue. Kau punya lidah. Hatam: dweba. Numfor: kaprer; ramar.
- duwow n. eye; mata. Ref: I:16: Nanu bun duwow. Your eye(s). Engkau punya mata. Ref: I:16: Danu duwow dun. My eye(s). Saya punya mata. Hatam: yai. Numfor: mga.

\mathbf{E}

- en spat.n. inside; didalam. Ref: II:3: Niwap mwamo rar en. We are all sitting in the house. Kita semua duduk didalam rumah. Hatam: bei. See tan 'inside'; ir 'under'.
- ena v. speak; bilang. Ref: II:6, 7: Kena baro? What are they saying? Mereka bilang apa? Hatam: pai. Numfor: faya.
- eri v. give; kasih. Ref: I:21: Danu derio mai ataiu. I give it to the boy. Saya kasih kepada anak lakilaki. Hatam: yai. Numfor: be: buk.

G

- ga adj. dry; kering. Ref: III:5: Sansun dun ga uo. My clothes are already dry. Pakaian sudah kering. Hatam: ngga. Numfor: sior. See tor 'wet'. Note: Numfor sior is tor in Mansim; a switch?
- gas v. tear; robek. Ref: I:28: Danu dgaso kertaso. I tear the paper. Saya robek kertas. Hatam: rik. Numfor: (m)sap.
- get n. chest; dada. Hatam: ngged. Numfor: ander.

gwem adj. small; kecil. Ref: I:4: Raru gwem. A small house. Rumah kecil. Ref: III:4: Kwa gwem. Young dog. Anak anjing. Hatam: mien. Numfor: mgun. See munggwem 'child'. Note: Also given for 'narrow'.

H

hantaw n. snake. Ref: II:3: Hantaw gwem. Worm. Ular. Hatam: wou. Numfor: ikak.

I

igom all; semua. Ref: I:73: Igom kprim. Many (children) are singing. Banyak menyanyi. Ref: I:73: Igom kpam. They're all crying. Semua menangis. Hatam: yahagom. Numfor: kam; kaim.

ir spat.n. under; dibawah. Ref: I:20, II:3: Ow ir. Under the tree. Dibawah pohon. Hatam: behei. Numfor: wabni; bab. See tan 'inside'.

iyani v. push; dorong. Ref: I:28: Diyani na nprot wayi monen. I push you to the ground. Saya dorong kau jatuh kena tanah. Hatam: rok. Numfor: ponsar.

iyari v. run; lari. Ref: I:19: Kwa nen iyari utu. The dog is running there. Anjing lari kesana. Hatam: dor. Numfor: frar; sror.

iyei v. enter; masuk. Ref: I:19, 24: Niyei nir! Come in! Silahkan masuk! Hatam: coi. Numfor: rafrun. See dir 'come'.

iyumwar v. bathe; mandi. Ref: I:78: Atai, bwodir, baro sabonu, diyumwar. Boy, come, bring the soap, I want to bathe. Anak, mari bawa sabon, saya mau mandi. Hatam: kek minyei. Numfor: ban.

iyuten n. mouth; mulut. Ref: I:21: Rukem prot paro diyuten si. The langsat fruit is falling from my mouth. Langsat jatuh geser saya punya mulut lagi. Hatam: huig. Numfor: sba. Note: Probably final **en** means 'inside', leaving **iyut** as 'mouth'.

iyutu n. grandmother; nenek. Ref: I:31:
Diyutu wakraw cagwemu. His grandmother is holding her grandchild. Dia punya nenek pegang dia punya cucu. Hatam: drot. Numfor: apuy; kepu. See nyenu 'grandfather'.

J

jep adj. new; baru. Ref: I:73. **Hatam**: njep. **Numfor**: abo.

K

kak [alternative: ukak] n. sibling; saudara. Ref: III:3: Dukak mboi. My older sibling. Saya punya kakak. Ref: III:3: Dukak igwem. My younger sibling. Saya punya adik. Hatam: kindig, kinjoi. Numfor: srar. Note: It is not clear whether the vowel u belongs to the stem.

kamas n. food; makanan. Ref: I:77: Dan derio kamas mai syeni sem. I give them food to eat. Saya kasi makanan untuk kamu makan. Hatam: njinta. Numfor: anan.

kar num. three; tiga. Ref: I:20: New kraw rukem da kar kwai. He's got only three langsat fruits. Dia pegang tiga langsat saja. Hatam: ningai. Numfor: kior. [Etym: toru.]

kat v. close; tutup. Ref: I:75: Nkato meru! Close the door! Tutup pintu! Hatam: nggam. Numfor: bekop; parium.

kaw¹ n. pig; babi. Ref: I:24. Hatam: nab. Numfor: ro man.

kaw² n. leaf; daun. Ref: I:21: Ow kaw. Tree leaf. Daun pohon. Hatam: mmeng. Numfor: ai-ke.

- kek n. skin; kulit. Ref: I:7, 21: Ow kek. Tree bark. Kulit kayu. Hatam: ngkeg. Numfor: rib.
- ken v. put in; mengisi. Ref: II:3: Danu dken siepu timoro mnar tan. I put the cassavas in the string bag. Saya mengisi ubi didalam noken. Ref: I:49: Danu duwaken mwaw mnar en. I put the fish in the string bag. Saya isi ikan dalam noken. Hatam: puoi. Numfor: ew.
- kew v. know; tahu. Ref: I:18: Danu dkew uo. I already know. Saya sudah tahu. Ref: II:6: Danu dkew bar. I don't know. Saya tidak tahu. Ref: I:20: Danu dkewo demo rukem bar. I have never eaten langsat yet. Saya belum pernah makan langsat. Hatam: kan. Numfor: fawi.
- kiem adj. strong; kuat. Ref: I:27: Nkraw kiem. You hold it tight. Pegang kuat. Hatam: ngkiem. Numfor: pok; sambrab.
- kiew n. shoulder; bahu. Ref: I:27: Wasrew mnar nkiew. Hang the bag on your shoulder. Gantung noken dari bahu. Hatam: nghad; nyihei. Numfor: erdai. See uweikap 'shoulder'.
- kinding v. make; bikin. Ref: III:5: Nkinding ame? What are you making? Kau bikin apa? Hatam: kinding. Numfor: frur.
- kir n. foot; kaki. Ref: I:9: Dikir. My leg. Kaki saya. Hatam: mig. Numfor: we(si). See dir 'come'.
- knai adj. bad; tidak baik. Ref: I:30. Hatam: kinei. Numfor: barbor; bieba.
- kok [alternative: kuk] v. break; patah. Ref: I:28: Danu dukuk ow na kuk uo. I have broken the wood. Saya patah kayu sudah patah. Ref: I:28: Wakapu kok. (My) back is broken. Punggung patah. Hatam: dahat. Numfor: kar; wef; msof. Note: This verb apparently can be used both transitively and intransitively.
- kow n. faeces; tahi. Ref: I:27: Nanu daso kow pe. Don't step in the shit. Jangan meninjak tahi. Hatam: agoi. Numfor: kapu.

- Kram n. name of mountain; nama gunung. Ref: I:58, 68: Kram ton e dar uo, war soren iyu. The mountain (near Maripi) has broken off and is now in the sea. Gunung ini dia putus tinggal di laut.
- kraw v. hold; pegang. Ref: I:20: Dkraw rukem dawom kwai. I hold just one langsat fruit. Saya pegang satu langsat saja. Hatam: krau. Numfor: kin; wufi.
- krong n. ear; telinga. Hatam: tingou. Numfor: kna.
- krongen adj. deaf; tuli Ref: I:17: Nenu krongen. She is deaf. Dia tuli. Hatam: tingou nnam. Numfor: knasi pro. See krong 'ear'.
- krow n. thunder; guntur. Ref: I:5. Hatam:krow. Numfor: kadadu. Note: c f.Wandamen kruya.
- **kuber** v. pour; menuang. Ref: I:75. **Hatam**: siber. **Numfor**: wek.
- kun poss. their; dong punya. Ref: II:8: Mansim kun. It belongs to the Mansim. Mansim punya. See den²; dun.
- kur v. climb; panjat. Ref: I:74: Dkur owu niyo dprapi. I climb the tree and then I jump down. Saya panjat pohon baru loncat. Hatam: kui. Numfor: aber. See dor 'ascend'; tai 'ascend'.
- kwai! adv. only; saja. Ref: I:20 Dkraw rukem da wom kwai. I have just one langsat fruit. Saya pegang satu langsat saja. Hatam: he. Numfor: yer; wauerik. See kwai 'almost'.
- kwai² v. almost; hampir. Ref: I:27: Nmow dit dan dkwai dprot. Your arm hit me and I almost fell. Kau punya tangan kena saya, saya hampir jatuh. See kwai 'only'.
- kwaw [alternative: kwa] n. dog; anjing. Ref: I:30: Kwa inu knai. That dog is bad. Anjing itu tidak baik. Hatam: nsien. Numfor: rofan.
- kwet¹ v. unroll; membuka, lepaskan. Ref: III:1: Danu dukwet baw. I unwind the string. Saya membuka tali. Hatam: kwek; pas. Numfor: riwer.

- kwet² n. machete; parang. Ref: I:24, 76. Hatam: hamboi. Numfor: sumber.
- **kwoboren** [alternative: mkwoboren] *n*. fly; *lalat*. Ref: I:66. **Hatam**: *kros*; *awab*. **Numfor**: *kwaw*.
- kwon v. lift up; angkat. Ref: I:36: Mbriw kwon. The old man lifted it up. Paitua angkat (dia). Hatam: kon. Numfor: ban; ow.
- kwondei v. throw; buang. Ref: I:21: Danu dukwondei rukem kek. I throw the langsat skin away. Saya buang langsat kulit. Hatam: com. Numfor: so.
- **kwop** *n.* sago; *sagu.* Ref: I:7. **Hatam**: *kob.* **Numfor**: *bariam*.
- kworan v. hide; steal; bersembunyi; mencuri. Ref: I:76: Danu dukworan dan. I hide. Saya bersembunyi. Ref: I:76: Dukworano mumpow. I hide the money. Saya menyembunyikan uang. Hatam: ku. Numfor: afof; yafyof.
- kwot [alternative: gwot] v. tie, weave;
 ikat. Ref: III:1: Danu dugwot baw
 ininu. I wind up this string. Saya
 bergelung tali ini. Hatam: ngot.
 Numfor: amar; sas; nek. See kwet
 'unwind'.

M

- mai prep. to; kepada. Ref: I:21: Danu derio rukem maio atai. I give a langsat fruit to the boy. Saya kasi langsat kpd anak lakilaki. Hatam: bak. Numfor: be.
- makes [alternative: mngkes] n. k.o.taro; keladi, kiya. Ref: I:52; III:1. Hatam: minoi.
- mangkruwep n. son-in-law; menantu. Ref: I:32: Mangkruwep dun. My sonin-law. Saya punya menantu. Hatam: mang. Numfor: manbukbin; nyo.
- **mbriw** n. old man; paitua. Ref: I:36. **Hatam**: andigpoi. **Numfor**: mansar. Note: Hatam mbrei 'foreigner'.

- mem [alternative: miyem] n. mother; ibu. Ref: III:3: Dmem. My mother. Saya pu mama. Ref: I:32: Miyem boi dun. My aunt. Saya punya mama tua. Hatam: mem. Numfor: awini. See amei 'mother'.
- menan v. drunk; mabuk. Ref: I:44. Numfor: mser.
- mer n. door; pintu. Ref: I:27. Hatam: dimbou. Numfor: kerwa. See toki 'knock'.
- min v. die; mati. Ref: III:8: Syenu smin uo. They are dead. Mereka sudah meninggal. Hatam: mai. Numfor: mar. Note: cf. Numfor min 'affect'. [Etym: matay > mati > mta.]
- mios n. island; pulau. Ref: I:58. Hatam: mios. Numfor: meos.
- Misyeren n. Lord; Tuhan. Ref: I:58. Numfor: Mansren.
- miyan v. dislike; refuse; menolak. Ref: I:78: Nanu nimiyan a? You don't want to? Kau tidak mau kah? Hatam: kou.
- mkoras n. child; anak. Ref: I:17: Mkoras ni krongat. The children are playing. Ananak bermain. Hatam: munggwom. Numfor: rumgun. See munggwem 'child'; atai 'boy'; nang 'girl'.
- mnar n. string bag; noken. Ref: I:27: Mnar tow. Small bag. Noken kecil. Wasrew mnar tow. Hang the small bag. Gantung noken kecil. Hatam: minai. Numfor: manguwab.
- mnas adv. enough; cukup. Ref: I:22: Mnas uo. That's enough. Cukup sudah. Hatam: dem; co bi. Numfor: mnis.
- mnding n. knife; pisau. Ref: I:40: Ngwoto mndingu, srowi broto brunger pung. We tie the knife (to a stick) and then stab (the breadfruit) to the ground. Kami ikat pisau ke kayu, potong dia jatuh kebawah. Hatam: singau. Numfor: ino.
- mndow n. mosquito; nyamuk. Ref: I:41: Mndow sam ngin. If the mosquito bite. Kalau nyamuk gigit. Hatam: amihiba. Numfor: mumes; afnof.

- mngkrei adv. moment; sebentar. Ref: I:28: Mwam e mngkrei si. Let's rest a little. Kita duduk dulu, sebentar lagi. Ref: I:32: Mngkrei ngkar Urmap. In a while we go to Maripi. Sebentar kita pergi ke Maripi. Ref: III:2: Danu dumwor syenu mngkrei dpayi sye den. When I'm angry with them, then I'll shoot them. Kalau saya marah dengan mereka lalu saya panah mereka. Numfor: kuro. Note: cf. Sougb mougrei 'little'.
- mnjayu n. mango; mangga. Ref: I:74. Hatam: kwei ngat. Numfor: awa.
- mntar n. ashes; abu. Ref: I:5. Hatam: atriem. Numfor: pafen.
- mobe conj. but; tapi. Ref: I:74: Danu dkar mobe duwepake sandar bar. I walk but don't use sandals. Saya jalan kaki kosong. Hatam: noro. Numfor: bape.
- mom n. uncle; om. Ref: I:24. Hatam: mum. Note: Probably 'mother's brother', as the Hatam equivalent.
- momin adv. yesterday; kemarin. Ref: I:23. Hatam: annani. Numfor: ras o winda.
- monen n. ground; tempat. Ref: I:28: Nprot wayi monen. You fall on the ground. Kau jatuh kena tanah. Hatam: diheisi; minu. Numfor: mob; menu. See brungen 'ground'; mwon 'place'.
- mor¹ [alternative: mon] n. language; bahasa. Ref: I:23: Danu duwajar mon moi. I want to learn the Mansim language. Saya mau belajar bahasa Mansim. Hatam: nihyet. Numfor: wos.
- mor² adj. black; hitam. Ref: III:4. Hatam: rom. Numfor: pasem. See pow 'white'.
- mos¹ v. die, said of cigarette, fire; mati. Ref: III:2: Sabaku mos uo. My cigarette has died. Rokok saya su mati. Hatam: umu.
- mos² n. rose-apple tree; jambu. Ref: I:39. Hatam: bitugwa. See ruwoyu 'rose-apple tree'.

- mow¹ n. hand; tangan. Ref: I:20: New kraw rukem par tuan mow en. He got a langsat out of mister's hand. Dia pegang langsat geser tuan punya tangan. Hatam: ndab. Numfor: rwa; bra.
- mow² n. taro; bete. Ref: I:7; II:1: Mow brer. Taro. Keladi. Hatam: ntigud.
- moyut n. afternoon; sore. Ref: I:6, 73. Hatam: mmunti. Numfor: mandira nufer.
- msekaswom num. six; enam. Ref: I:32. Hatam: muhwindagom. Numfor: onem.
- mseksiyan num. seven; tujuh. Ref: I:32. Hatam: muhwindacan. Numfor: fik.
- mseskar num. eight; delapan. Ref: I:32. Hatam: muhwindaningai. Numfor: war.
- msestar num. nine; sembilan. Ref: I:32. Hatam: muhwindatai. Numfor: siw.
- mumpow n. money; uang. Ref: I:24:
 Mumpow bar. I don't have money.
 Tidak ada uang. Hatam: mitiei.
 Numfor: kupang; pipi. Note: Both
 Mansim and Hatam items mean
 'something white'. [Etym: mun + pow.]
- mun¹ v. suck; smoke; isap. Ref: I:28: Numuno sabaku. We smoke a cigarette. Kita merokok. Hatam: muhun. Numfor: as.
- mun² n. grass; rumput. Ref: I:77. Hatam: mintab. Numfor: abris.
- mundong n. stone; batu. Ref: I:35: Uyaki wepo mundong ap. The black cockatoo was sitting on a stone. Burung kakatua raja bertelur diatas batu. Hatam: tig. Numfor: kar.
- munggom n. sorcery; suangi. Ref: I:60, III:2. Hatam: nunga.
- munggwom. Numfor: rumgun. See mkoras 'child'; gwem 'small'.
- mungkokow n. chicken; ayam. Ref: I:8. Hatam: guri. Numfor: makoko. Note: Same as Numfor and Meyah.

- munyam v. hungry; lapar. Ref: I:19: Nanu nmunyam uwa? Are you already hungry? Kamu sudah lapar kah? Hatam: nggum. Numfor: yabiser.
- muswai num. five; lima. Ref: I:13, 32. Hatam: muhui. Numfor: rim. Note: Also given for 'ten'.
- muswar n. cassowary; kasuari. Ref: I:43. Hatam: handigad. Numfor: manswar.
- mut n. k.o. fish; sj.ikan. Ref: I:48.
- mwar v. finished; habis. Ref: I:60: Ar moi wap mwar. The Moi language is finished. Bahasa Mansim semua habis. Hatam: ngwig. Numfor: war.
- mwaw n. fish; ikan. Ref: I:2, 3, 8. Hatam: wau. Numfor: in.
- mwep v. hear; dengar. Ref: II:1, 3, 34: Danu dumwep bar. I cannot hear. Saya tidak dengar. Hatam: miap. Numfor: mnaf. See krongen 'deaf'.
- mwon n. place; tempat. Ref: III:4: Mwon tan. A far away place. Tampat jauh. Hatam: minu. Numfor: menu; mob. See monen 'ground'.
- mwor v. angry; marah. Ref: III:2: Danu dumwor syenu mngkrei dpayi sye den. When I'm angry with them, then I'll shoot them. Kalau saya marah dengan mereka lalu saya panah mereka. Hatam: gga. Numfor: msor.
- mwow n. breadfruit; sukun. Ref: I:39. Hatam: mbo; kinaga. Numfor: ur.

N

- naat adv. true; betul. Ref: I:4; II:7: Nena ninu nmnaat. You spoke truly. Engkau bilang itu betul. Hatam: ngat. Numfor: naps; kaku.
- namai n. hello; selamat. Ref: I:22. Hatam: acemo.
- namwon v. cough; batuk. Ref: I:17: Dnamwon. I cough. Saya batuk. Hatam: nggin. Numfor: ses.

- nang n. daughter, girl; anak perempuan. Ref: II:7: Nang, nmekera. Daughter, tell us. Nona, ceritera. See atai.
- nanu pron. you; engkau. Hatam: nani. Numfor: au; wa.
- nanun dem. be there; ada. Ref: I:11: Mbu yai nanun a? Is your father there? Kau punya bapak ada kah? See nengow 'that'.
- nap adj. dry; kering. Ref: I:4: Sansun nap uwo. The clothes are already dry. Pakaian sudah kering. Hatam: ngga. Numfor: angen; mias; pnas. See ga 'dry'.
- nengow dem. that; itu. Ref: I:36: Sekarang tungwatow nengow, mbriw kwon. Now, there was a human (baby), the old man took it. Sekarang ada bayi manusia, paitua angkat. See nanun 'there'.
- new [alternative: nenu] pron. 3 SG; dia. Ref: I:16. Hatam: noni. Numfor: i.
- ngarmaw n. wind; angin. Ref: I:5. Hatam: hou. Numfor: wam.
- ngknam v. chew; mengunyah. Ref: I:16: Nanu nengknam bar a? You are chewing something? Kau gigit apa? Hatam: ham. Numfor: warek. Note: cf. kimam 'front of neck' in Hatam.
- nguwo [alternative: ngwo] v. crushed; hancur. Ref: III:7: Dtow trem ngwo uo. I crush the corn. Saya menghancurkan jagung. Ref: III:7: Watu nu nguwo. That banana is crushed. Pisang itu hancur. Hatam: nem. Numfor: pef. See tow 'pound'.
- ngwa n. hair; rambut. Ref: I:16: Dupwongao. My hair. Rambut saya. Hatam: ntab. Numfor: snonburiam.
- ngwak adj. light; ringan. Ref: III:4. Hatam: nggan. Numfor: manan. See bon 'heavy'. Note: cf. Hatam ngwag 'empty'.
- **ngwon** [alternative: ngon] *n*. heart; *hati*. Ref: I:78: **Danu dungwon da wot.** I feel (sorry) for him. Saya sayang anak.

- Hatam: ngon. Numfor: sne(ri). Note: Notice the use of da with ran da wot.
- ngwot v. build; ikat. Ref: I:23: Swo sir kungwoto rar dun. You come, let's build my house. Kamu juga datang, kita bangun rumah saya. Hatam: ngot. Numfor: yabek. See kwot 'tie'.
- **ngwow** *n*. tree trunk; *pohon*. Ref: I:39. See **ow** 'tree'.
- nikwar adj. tall; tinggi. Ref: III:4. Hatam: njan. Numfor: kaki. See wai 'long'.
- nir n. rat; tikus. Ref: I:8: Nir gwem. Cuscus. Kuskus. Hatam: ncub. Numfor: kapa; wangar.
- niwan n. swamp; lawalawa. Ref: I:43. Hatam: igkrob. Numfor: dufri.
- **niwap** pron. we (all); kami (semua). **Hatam**: nyeni. **Numfor**: ko; inko. [Etym: ni + wap.]
- niyo conj. then; baru. Ref: I:74: Dkur ow niyo dprapi. I climb the tree and then I jump down. Saya panjat pohon baru loncat. Hatam: lene. Numfor: reseri.
- nom [alternative: onomu] n. charcoal;arang. Ref: I:41. Hatam: ngum.Numfor: aduref.
- ntungwang adv. day after tomorrow; lusa. Ref: I:22: Danu pdasin dir dunwok sye par e, amio ntungwang dir si. Today I've come to see you, then the day after tomorrow I'll come again. Sekarang saya datang lihat kamu dulu, hari lusa saya kembali lagi. Hatam: cane. Numfor: meser wendi.
- num v. smell; mencium. Ref: I:18: Danu dunum: amen ai pwei nu? I smell: what's that smell? Saya mencium: apa yang bau itu? Hatam: tinip. Numfor: nasem.
- nuong v. roast; bakar. Ref: I:40: Syam om mnuong kep om. We light a fire and roast (the breadfruit) in the fire. Bikin api dan bakar di api. Hatam: non. Numfor: apen. Note: same phrase as in Hatam non kep.

- nwok v. see; lihat. Ref: I:18: New nwoko mone bar. He cannot see. Dia tidak bisa lihat. Ref: I:79: Danu dunwok nanu pom. I smile at you. Saya tersenyum. Hatam: ngat. Numfor: mam. See uwow row 'blind'.
- **nyenu** *n*. grandfather; *tetek*. Ref: I:31. **Hatam**: *ngyon*. See **iyutu** 'grandmother'.

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- ogu n. cuscus; kuskus. Ref: I:48. Hatam: miei. See usi 'cuscus'. Note: cf. Sough ugwodi.
- om n. fire; api. Ref: I:24: Danu monin dunwoko om boi bnas. Yesterday I saw a very big fire. Kemarin saya lihat api besar sekali. Hatam: hum. Numfor: for.
- osu n. nipple; susu. Hatam: do mpiam. Numfor: sus.
- ot n. canoe; proa. Ref: II:5. Hatam: ud. Numfor: wa.
- ow n. tree; wood; kayu. Hatam: biei.
 Numfor: ai(knam). See ngwow 'tree trunk'

P

- pam v. cry; menangis. Ref: I:22: Ataiu pam. The boy is crying. Anak menangis. Hatam: pim. Numfor: kanes.
- pan v. shoot with bow; panah. Ref: I:24: Pdasin new pan kaw den. Today he shoots his pig. Sekarang dia panah dia punya babi. Hatam: pilei; prindei. Numfor: kfo. See payi 'shoot'. Note: Pan is probably a (recent) loanword from Malay panah.
- paparow Q-word. when; kapan. Ref: III:8: Paparow tuan weberangkat nu? When are you leaving? Kapan mister mau berangkat? Hatam: pig. Numfor: ras mundi. See paru 'how many'. Note: Numfor ras mundi is 'what day?'.

- par prep. from; dari. Ref: I:21: Rukem prot paro diyuten si. The langsat falls from my mouth again. Langsat jatuh geser saya punya mulut lagi. Ref: III:1: Kurow par Upwet. They come from Maruni. Dong berasal dari Maruni. Hatam: leu. Numfor: ro.
- paru Q-word. how many; berapa. Ref: III:8: Nanu ntemi watu paru? How many bananas have you sold? Kau jual berapa pisang? Ref: III:8: Amei, munggwem mbun paru? Mother, how many children do you have? Mama, kau punya anak berapa? Hatam: pig. Numfor: beso. See paparow 'when'.
- pas adj. warm; panas. Ref: III:4: War ini pas. This water is hot. Air ini panas. Hatam: dut. Numfor: sam. See tas 'cold'.
- payi v. shoot arrow; panah. Ref: I:79. Hatam: pilei; prindei. Numfor: kfo.
- pdasin adv. today; sekarang. Ref: I:22: Danu pdasin dar si. I am leaving now. Sekarang saya pulang. Hatam: nogindini. Numfor: ras ine.
- pe adv. don't; jangan. Ref: I:28: Nan narap da pe. Don't pull me. Jangan tarik saya. Hatam: au. Numfor: awer.
- pes n. nipah palm; nipah. Ref: I:36. Hatam: awig. Numfor: pupu; sanenem. Note: Also used for the palm wine, which is swan in Numfor.
- pis adj. sweet; manis. Ref: I:20: Rukem ni pis uo. This langsat is sweet. Langsat ini sudah manis. Hatam: nyop. Numfor: pre.
- pom adj. good; baik. Ref: I:4: Pom bnas. Very good. Baik sekali. Ref: I:79: Danu dunwok nanu pom. I smile at you. Saya tersenyum. Hatam: kei. Numfor: pum; be.
- por n. lid; pantutup. Ref: I:77: Bwer poru. The lid of the pot. Belanga pu pantutup. Hatam: beng; tugwa. Numfor: bori.
- poram spat.n. in front of; dimuka. Ref: II:3: Syenu saso rar poram. They are

- standing in front of the house. Mereka berdiri dimuka rumah. Hatam: noho. Numfor: aundi. See biyai 'behind'.
- porop n. lip; bibir. Hatam: hungkeg. Numfor: sba(r)dip; sbaru pey.
- pos n. tail; ekor. Ref: I:8: Kwa pos. Dog's tail. Ekor anjing. Hatam: pu. Numfor: purari. Note: Also given as osu; pos agrees with list in Voorhoeve (1975).
- potu n. seedling; bibit. Ref: II:1: Siep potu. Sweet potato seedling. Bibit batatas. Ref: II:1: Wat potu. Banana seedling. Bibit pisang. Hatam: ngad. Numfor: biw.
- pow adj. white; putih. Ref: III:4: Nanu mungkek pow. You have a white skin. Kau punya kulit putih. Hatam: tiei. Numfor: oper. See mor 'black'.
- pra v. laugh; tertawa. Ref: I:28: Npra tnun e wakapu kok. We laughed until our back broke. Tertawa sampe belakang patah. Hatam: pa. Numfor: mbrif.
- pran adj. left; kiri. Hatam: prak.
 Numfor: sar. See tow 'right'. Note:
 Although pran was given in response to kanan 'right' and tow for 'left', it is probably the other way round.
- prap v. speak; bicara. Ref: I:3: Nanu nprap mor brer. You speak a foreign language. Kau bicara bahasa Indonesia. Hatam: mbrap. Numfor: awes; faya.
- prapi v. jump; loncat. Ref: I:74. Hatam: pri, kinyon. Numfor: oper.
- prar¹ v. fly; terbang. Ref: II:3: Waw prar isyunu uo. The bird is flying above the tree. Burung terbang diatas pohon. Hatam: mba. Numfor: rob. See syu 'high'.
- prar² v. pull; tarik. Ref: I:75: Nprar baw. Pull the string. Tarik tali. Hatam: brim. Numfor: sarap. See arap 'pull'.
- pras v. get up; berdiri. Ref: III:3: Npras uwa? Are you up already? Sudah bangun kah? Hatam: ya. Numfor: ko; kain. See as 'stand'. Note: Although pras had been given as equivalent for

- berdiri it is more likely to mean bangun 'get up'. [Etym: keDeng > kere-k > kele; ma-diRi > ri(h)i; tuqud > tuu(r).]
- prim v. sing; menyanyi. Ref: I:67: Nprim tor mon moi. We'll sing in Mansim. Kami menyanyi bahasa Mansim. Hatam: biwim. Numfor: disen; (wa)wor. Note: Hatam pim 'cry'.
- pros v. rub; gosok. Ref: I:42. Hatam: prios. Numfor: pau; is.
- prot¹ [alternative: brot] v. fall; jatuh. Ref: I:2: Nenu prot wai monen. He falls. Dia jatuh kena tanah. Hatam: cut. Numfor: kbas; mbrur. [Etym: taktak > data-k.]
- prot² v. sweat; keringat. Ref: I:74: Duprot bnas. I'm sweating a lot. Saya keringat sekali. Hatam: hanggwab. Numfor: domes.
- **prow** n. sun; matahari. **Hatam**: mpiab. **Numfor**: ori. Note: According to Hans Iwou prow is the original word in Hatam also.
- pruon [alternative: pron] v. forget; lupa. Ref: I:10, 18: Danu dungwon pruon. I forget. Saya lupa. Hatam: bbwe ser. Numfor: fanander; brin. See ngwon 'heart'.
- puknaw v. thirsty; haus. Ref: I:19. Hatam: nggobiau. Numfor: mbro.
- pukor n. school; sekolah. Ref: I:31: Munggowm den wom kwai direpo pukor en. One child only goes to school. Satu anak saja pigi sekolah. Hatam: pikor. Numfor: farkor.
- pumbrer n. mister; mister. Ref: I:23.Hatam: mbrei. Numfor: amber. See brer 'foreign'.
- pupianu adv. day before yesterday; kemarin dulu. Ref: I:23. Hatam: acan. Numfor: ras ponda.
- putap n. neck; leher. Ref: I:17. Hatam: kimam. Numfor: sasu(kor).
- pwei n. smell; bau. Ref: II:2: Amen ai pwei nu? What's that smell? Apa yang

- busuk itu? Hatam: mpiei. Numfor: yoren.
- pwoda n. head; kepala. Ref: I:16: Nanu nupwoda wot. You have a headache. Kamu kepala sakit. Hatam: bou. Numfor: b(r)ukor.
- pwos v. pull, fish; memancing, timba air. Ref: I:79: Dupwos mwaw. I am fishing. Saya memancing. Ref: I:79: Dupwos war. I draw water. Saya timba air. Hatam: pos minyei. Numfor: sarfer.

R

- ran [alternative: randaw] n. tooth; gigi.
 Ref: I:16: Dran da wot. My teeth are hurting. Saya gigi sakit. Hatam: kwai.
 Numfor: nakor. See ngknam 'chew'.
 Note: cf. ngwon da wot.
- rar n. house; rumah. Ref: I:20, 23: Raren. In the house. Didalam rumah. Hatam: ig. Numfor: rum; ker.
- ritap n. forehead; testa. Hatam: boungwag. Numfor: andar.
- rok v. descend; turun. Ref: I:5: Prow rok. The sun sets. Matahari turun. Hatam: cut. Numfor: kanden; sun. See dor 'ascend'; ton 'descend'. Note: cf. Hatam rok 'push'.
- rongat [alternative: krongat] v. play; bermain. Ref: I:17, 26; II:2: Mkoras ni krongat. The children are playing. Anak masih main. Hatam: kek. Numfor: fnak. Note: I assume that the initial k is a person marker, and the verb is rongat.
- rop n. in-law; ipar. Ref: I:32, 49: Mbrofa, mwaw likem a? Brother-in-law, do the fish eat? Ipar, ikan makan kah?
- row adj. blind; buta. Ref: I:18: New duwow row. He is blind. Dia mata buta. Hatam: tu. Numfor: praf. See nwok 'see'.
- **ruwoyu** *n* . rose-apple tree; *jambu*. Ref: I:74. See **mos** 'rose-apple tree'.

S

- sabaku n. tobacco; tembakau. Ref: I:77: Nenu webunggus sabakao den. He wraps his toacco. Dia bungkus dia punya tembakau. Hatam: sigu. Numfor: sambaku.
- sai v. dig; gali. Ref: I:23: Nanu bwodir wasi dan nsaio broru. You come with me, we're going to dig a hole. Mari, ikut saya, kita gali lobang. Hatam: tig. Numfor: ba.
- sak adv. just; saja. Ref: I:74: Danu dkar sak. I'm just walking around. Saya berjalan-jalan. Hatam: hak; nyen. Numfor: yer.
- sam v. bite; menggigit. Ref: I:41: Mndow sam ngin. If the mosquito bite. Kalau nyamuk gigit. Ref: III:3: Kwa samo munggwem dun, niyo dumwor. If the dog bites my child then I'll be angry. Anjing gigit saya punya anak, lalu saya marah. Hatam: ham. Numfor: ark.
- sar v. ask; tanya. Ref: I:52: Mkoras ni ksar. The (two) children asked. Anak dong tanya. Hatam: hig; hara. Numfor: or. Note: Windesi saw.
- satem adj. short; pendek. Ref: III:4.
 Hatam: cun. Numfor: kwaim ba. See
 wai 'long'. Note: Numfor means 'not long'.
- sei prep. to; ke. Ref: I:23: Sasu sbar ow sei raren. They bring the wood to the village. Mereka bawa pohon ke kampung. Hatam: ei. Numfor: faro; be.
- sepron v. spit; ludah. Ref: III:5: Danu dumwor nan, desepron nanu. I'm angry at you, I spit at you. Saya marah. ludah kau. Hatam: ndug; trai. Numfor: aninef.
- si adv. again; lagi. Ref: I:21, 28: Danu dem rukem wom si. I eat another langsat fruit. Saya makan langsat lagi. Hatam: hanyen; bu. Numfor: wer.
- siep [alternative: siepu] n. generic for tubers. Siep timor. Cassava. Kasbi. Ref: I:7; II:3. Hatam: sieb. Numfor: farkia.

- sinai n. sword grass; alang-alang. Ref: I:37: Sinai-en. Field of sword grass. Alang-alang. Hatam: sinai. Numfor: ampu. Note: Numfor ampu is serai 'lemongrass'.
- sor v. fly, skirt; melayap. Ref: I:48: Sor par Urpwep dir dor ow. He flew up from the Maruni River and climbed a tree. Dia melayap kali Maruni naik pohon.
- soren n. ocean; lauhutan. Ref: III:2. Hatam: mug, soren. Numfor: soren. Note: Hatam gloss for soren is 'effluent from river into larger body of water' (Griffiths 1994:70).
- sraw n. coconut; kelapa. Ref: I:7. Hatam:
 duig. Numfor: sra.
- srew v. hang; gantung. Ref: I:27: Wasrew mnar tow. Hang the small bag. Gantung noken. Hatam: sreu. Numfor: sawer; sas; aryor.
- srip v. scrape; kikis. Ref: I:21, 40: Danu disripo ambap enu. I'm scraping the board. Saya kikis papan ini. Hatam: srip. Numfor: is.
- srow v. stab; potong. Ref: I:40: Nukwoto mndingu srowi broto brunger pung. We tie a knife (to a stick) and stab (the breadfruit) so that it falls to the ground. Kami ikat pisau (ke kayu) potong akang dibawah tanah. Hatam: srop. Note: Hatam srop glossed as 'detach, as corn from stalk' in Griffiths (1994:71) is likely the equivalent.
- suan v. go outside; keluar. Ref: I:16, 24: Diu suan uo. The moon has come out. Bulan baru sudah keluar. Hatam: tau. Numfor: sasiar.
- suk v. order; suruh. Ref: I:32: Dsuk nan mai asme? I order you (to wait) for someone. Saya suruh kau untuk siapa. Hatam: cuk.
- suom v. pull out; cabut. Ref: I:77: Danu dusuom munu. I pull out the weeds. Saya cabut rumput. Hatam: hom. Numfor: pas. Note: cf. Sougb ohoma.

- sup¹ v. buy; beli. Ref: I:29: Nerio mumpow ai mdar dsup waai. Give me money so I can buy betelnut. Kasih uang sama saya untuk saya pergi membeli pinang. Hatam: pek. Numfor: kobes.
- sup² n. border; batas. Ref: I:54. Hatam: hup. Numfor: sup. Note: Numfor sup is 'land', 'forest', referring to the mainland; similarly Hatam hup him means the higher hinterland.
- sus n. abandoned garden; bekas kebun. Ref: III:1: Susu sup uo. The garden is already growing. Kebun yang sudah babat. Hatam: susti. Note: Not quite clear whether sus refers to a new garden which is starting to yield or an abandoned garden, which is the meaning of bekas and the Hatam equivalent.
- sut v. cut; peel; potong; kupas. Ref: I:21,
 22: Danu dsuto rukem kek. I cut the langsat skin. Saya potong kulit langsat.
 Hatam: sut. Numfor: suf. Note: Peel a fruit or potato.
- suwo v. also; juga. Ref: III:6: Nasuwo ndir. You also come. Kamu juga datang. Ref: III:6: Sye suwo sgwoto baw. You also tie the rope. Kamu juga ikat tali. Hatam: cem. Numfor: kako.
- swom v. rub; gosok. Ref: I:78: Danu dswomo dmow. I wash my hands. Saya gosok saya pu tangan. Hatam: dip; prios. Numfor: sfu.
- syam v. light a fire; bikin api. Ref: I:40: Brot brung-en msyam om. After it has fallen to the ground, we make fire. Setelah jatuh dibawah, kami menyala api. Ref: I:40: Dsyam om umpi uo. I light a fire. Saya bikin api menyala sudah. Hatam: tin; ndig. Numfor: pam.
- syen¹ adj. red; merah. Ref: III:4: Danu mrandau syen. I have red teeth. Saya punya gigit merah. Hatam: ngwoi. Numfor: rik.
- syen² v. sharpen; gosok. Ref: I:76: Danu disyeno mnding dun. I sharpen my knife. Saya gosok saya punya pisau. Hatam: sien. Numfor: yas.

- syenu pron. they, you; mereka, kamu Ref: II:6. Hatam: yoni, jeni. Numfor: si.
- syeri v. wait; tunggu. Ref: III:4: Dpras syeri nan. I'm standing waitng for you. Saya berdiri tunggu kau. Ref: I:73: Danu duam syeri nan. I'll wait for you. Saya tunggu engkau. Hatam: ser. Note: Equivalent to Hatam diya ser nani.
- syu v. high above; diatas. Ref: II:3: Waw prar siyun uo. The bird is flying above the tree. Burung ternabg diatas pohon. Hatam: gau. Numfor: ?. See prar 'fly'. Note: Meaning is not certain.

T

- tai v. ascend; naik. Ref: I:2: Danu dtai dirapo wow am. I'm climbing the mountain. Saya naik gunung. Hatam: kui. Numfor: wek; wasrab. See dor 'ascend'; kur 'climb'.
- tan¹ spat.n. inside; didalam. Ref: I:23: Bror tan. In the hole. Didalam lobang. Ref: II:3: Hantaw gwem nenaw brung tan. Worms are under the ground. Cacing ada didalam tanah. Hatam: ti. Numfor: ndi. See en 'inside'.
- tan² spat.n. far; jauh. Ref: III:4: Pdasin ma dir mwon tan. Today I go far away. Sekarang saya pergi tempat jauh. Hatam: ting. Numfor: bingwan; kwaim. See tan 'inside'.
- tan³ v. afraid; takut. Ref: I:79: Ntan pe. Don't be afraid. Jangan takut. Hatam: ttin. Numfor: kak.
- tanga [alternative: tangaw] v. hunt; cari. Ref: I:3: Danu dtanga kaw. I hunt pig. Saya cari babi. Ref: I:49: Munyam tangaw ow wow rem. He's hungry (so) looks for fruit to eat. Dia lapar, cari kayu buah untuk makan. Hatam: nggok. Numfor: sam. Note: Numfor sam is 'hunt with dogs'.
- tar num. four; empat. Ref: I:13. Hatam: bitai. Numfor: fiak.

- tas adj. cold; dingin. Ref: III:4: Danu mon tas. I am cold. Saya merasa dingin. Hatam: hem. Numfor: prim; syuf. See pas 'warm'.
- taw v. draw water; timba. Ref: I:75: Dtaw waru. I draw water. Saya timba air. Hatam: tau. Numfor: pos.
- temi v. sell; jual. Ref: III:7: Nanu ntemi ame? What do you sell? Kau jual apa? Hatam: tri. Numfor: bab; farbean. See sup 'buy'.
- tep v. wash; cuci. Ref: I:78: Danu detep sansun. I wash the clothes. Saya cuci pakaian. Hatam: tot, piap. Numfor: pap.
- tibwow n. bird of paradise; cenderawasih. Ref: I:8. Hatam: habouhim. Numfor: manbesak.
- tnun [alternative: tunun] adv. continuing; terus. Ref: II:6: Suwam tnun tnun tnun. They stayed for a long a time. Mereka tinggal terus. Hatam: kikau. Numfor: apepen; berawer.
- toki v. knock; ketuk. Ref: I:27: Bwotoki meru. Knock on the door. Ketuk pintu. Hatam: tug. Numfor: nuk. See mer 'door'; tow 'pound'.
- ton v. descend; turun. Ref: II:3: Nanu ton paro wow ap syerin. You descend from the mountain. Engkau turun dari gunung kebawah. Hatam: juk. Numfor: adu; kanden; sabu. See rok 'descend (of sun)'. Note: Meaning of syerin is not clear. [Etym: tuRun > toho > tulu.]
- tone [alternative: tonen] n. descendant; keturunan. Ref: II:2, 5, 7: Syewap tnun Mansinam tonen nu, prap bwem nu. They all are still like that, descendants of Mansinam, mention their names. Mereka semua begitu, Mansinam putus, sebut mereka punya nama. Note: Translated as putus 'broken', probably referring to the fact that Mansinam was broken off from the mainland.
- tor adj. wet; basah. Ref: III:5: Sansun dun tor. My clothes are wet. Pakaian saya basah. Hatam: ndot. Numfor: dok. See ga 'dry'.

- toro adv. completely; anteru. Ref: I:40: Yem-em toro. (We) eat it completely. Makan antero.
- tow¹ adj. right; kanan. Hatam: com. Numfor: kaku. See pran 'left'. Note: Although tow was actually given as 'left' it is probably reversed: pran 'left'; tow 'right'.
- tow² v. pound; menghancurkan. Ref: I:27: Ntow trem ngwow uo. Crush the corn completely. Hancurkan jagung. Hatam: tug. Numfor: pef. See nguwo 'crushed'. Note: Notice that ngwow translates Hatam binem 'crushed'.
- trem n. corn; jagung. Ref: I:27. Hatam: trem. Numfor: ka(s)tera.
- tug v. touch; sentuh. Ref: I:27: Nmow tug danu. Your hand touches me. Kau punya tangan kena saya. Hatam: tug. Numfor: bior; kiur. See dit 'hit'; wayi 'hit'.
- tum v. wait; tunggu. Ref: I:19: Stum e dprap wit tungoto nini par e. You wait, I talk to this man first. Kamu tunggu, saya bicara dengan orang ini dulu. Hatam: tum; mem ser. Numfor: fakwo; kur.
- tungwatow n. human; manusia. Ref: I:36: Tungwatow nengow mbriw kwon. The human (child) the old man took. Anak manusia paitua angkat. Hatam: tungwatu. Numfor: snun(kaku).
- tur prep. for; dengan apa. Ref: III:8: Nanu ntemi siepu tur ame? Why do you sell sweet potatoes? Kau jual ubi dengan apa? Hatam: tut mindei. Numfor: kuker.

\mathbf{U}

- **ubrot** n. crown pigeon; mambruk. Ref: I:43. **Hatam**: bijut. **Numfor**: mambruk.
- ukak n. sibling; kakak. Ref: I:31: Dukak. My (younger) sibling. Saya punya adik. Ref: I:13: Dukak boi arpon. My older

- brother. Saya punya kakak lakilaki. Hatam: kinjoi, kindig. See kak 'sibling'.
- umpi v. burn; menyala. Ref: I:40. Hatam: mpiang. Numfor: nanem. See syam 'light'.
- undow n. hornbill; burung tahun. Ref: I:45. Hatam: undou. Numfor: wando.
- ung v. sleep; tidur. Ref: I:1: Danu dung mor wap. I was sleeping. Saya tidur (sudah malam). Hatam: bong. Numfor: enef; barek. [Etym: tiduR > tiru > toro > tiura; qinep > enef.]
- unggor n. crocodile; buaya. Ref: I:8. Hatam: wonggor. Numfor: wonggor.
- Ungmop n. name of river; Kali besar Mupi. Ref: I:54.
- unyir n. k.o. bird; burung. Ref: I:45.
- uo adv. already; sudah. Ref: I:3: Danu dunwok uo. I already see it. Saya sudah lihat. Hatam: su. Numfor: rape.
- **uper** v. turn around; balik. Ref: I:69: Danu duper dan dunwoko otu. I turn around to see the canoe. Saya balik untuk lihat proa. Hatam: kiek. Numfor: kaber; kiwer.
- **Urmap** *n.* name of place; **Maripi**. Ref: I:32.
- urow n. banyan; beringin. Ref: I:43. Hatam: asar. Numfor: asar.
- **Urpwep** [alternative: urpwet] *n*. name of river; *Kali Maruni*. Ref: I:47.
- urwep n. husband; suami. Ref: I:30. Hatam: ceb. Numfor: swa. See dunim 'wife'.
- urwo [alternative: uruwo; urow] v. originate; dari. Ref: I:23: Danu pupianu durwo paro Mnukwar. The day before yesterday I came from Manokwari. Kemarin dulu saya datang dari Manokwari. Ref: III:1: Duruwo man moi Mansim. I am originally Moibrai. Saya berasal dari Moibrai. Hatam: ntun; mbut leu. Numfor: bur.
- urwok [alternative: urwot] v. alive; hidup. Ref: I:18: Danu durwo tnun. I am still

- alive. Saya masih hidup. Hatam: yai jo. Numfor: (kan)kenem. See duwow 'eye'.
- urwow v. plant; tanam. Ref: I:52, 79: Ka gurwo monen. We go to plant the garden. Kita pergi tanam kebun. Hatam: hu; ndim; ta. Numfor: (kar)ker; mom; swan. Note: Used for sweet potatoes, bananas, corn.
- usi n. cuscus; kuskus. Ref: I:48, 67: Dpayio na usi gwem. I will shoot the cuscus. Saya panah kuskus. Hatam: miei. Numfor: kapa; sma; wan. See ogu 'cuscus'. Note: Or is usi also a kind of tree?
- uwam [alternative: wam] v. sit; duduk. Ref: II:3: Niwap mwamo rar en. We are all sitting in the house. Kami semua duduk didalam rumah. Hatam: gwam. Numfor: kein. See wamap 'sky'. [Etym: tudan; ma-toran.]
- uwap n. nose; hidung. Ref: I:9. Hatam: hwab. Numfor: sno. Note: 1SG duwapu, 2SG buwapu, 3SG wapu.
- uweikap n. shoulder; bahu. Ref: I:76:
 Nanu buweikap. Your shoulder. Kau punya bahu. Hatam: nghad; nyehei.
 Numfor: radar. See kiew 'shoulder'.
 Note: Final syllable is ap 'on top'.
- uweng v. carry a string bag; pikul. Ref: I:27: Danu duwengo mnaru dirapo wow ap. I carry the bag going up the mountain. Saya bawa noken naik gunung. Hatam: -ndei; -nghad. Numfor: wer; bowek. See uwep 'carry'.
- uwep v. carry on back; menggendong; mendukung. Ref: I:27: Danu duwep atai. I carry the boy. Saya menggendong anak lakilaki. Ref: I:27: Nanu buwep nang. You carry the girl. Menggendong anak perempuan. Hatam: usap. Numfor: pok.
- uyaki [alternative: woyaki] n. cockatoo; Kakatua raja. Ref: I:33, 35: Uyaki wepo mundong ap. The cockatoo was brooding on a stone. Kakatua raja bertelur diatas batu.

W

- waai n. betelnut; pinang. Ref: I:24. Hatam: nap. Numfor: nan.
- wadei v. fish with net; taruh jaring. Ref: I:79: Nenu wadeio yarinu wetangkap mwaw. He throws the net to catch fish. Dia taruh jaring untuk tangkap ikan. See kwondei 'throw'. Note: Perhaps this is a compound of verbaliser and dei.
- wai adj. long; panjang. Ref: III:4.

 Hatam: jei. Numfor: kwaim. See
 nikwar 'tall'.
- wakap n. back; punggung. Ref: I:28: Npra npra tnun e wakapu kok. We laughed and laughed until our back broke. Kita tertawa sampe belakang patah. Hatam: nghim. Numfor: dokor; kru(ri). [Etym: likuD.]
- wamap n. sky; langit. Ref: I:5. Hatam: gwamti. Numfor: nangi. See ap 'on top'; uwam 'sit'.
- wap¹ v. all; semua. Ref: I:20: Syewap sosir, mwam brung en ini. You all come, let's sit here. Kamu semua kemari, kita duduk disini. Hatam: hagom. Numfor: kam; kaim.
- wap² n. road; jalan. Ref: III:1: Wape umboi. Main road. Jalan raya. Ref: III:1: Wap gwem. Path. Jalan tikus. Hatam: puig. Numfor: nyan.
- war n. water; air. Hatam: minyei. Numfor: war. [Etym: waSiR > wahiR > wai > war; TNGP III *wai/e.]
- waren n. shore; pantai. Ref: III:3: Waren pra. Low tide. Meti. Hatam: muk ngeisi. Numfor: siser; sye. See war 'water'. Note: Hatam muk sri 'low tide'.
- wasi v. accompany; ikut. Ref: I:30: Nesuwo wasi da. You also follow me. Kau juga ikut saya. Hatam: bit; kak. Numfor: asr; usr.
- wat n. banana; pisang. Ref: III:7: Watu nu nguwo. That banana is crushed. Pisang itu hancur. Hatam: wid. Numfor: byef.

- waw n. bird; burung. Ref: II:3: Waw nenio prar isut. The bird is flying above the tree. Burung terbang diatas. Hatam: hab. Numfor: man. See syu 'fly'. Note: The meaning of the example sentence is not clear.
- wayi prep. hit; kena. Ref: I:28: Diyani na nprot wayi monen. I push you to the ground. Saya dorong kau jatuh kena tanah. Hatam: ndei. Numfor: min. See dit 'hit'.
- we- vbl. verbaliser. See wo-.
- wep v. sit on egg; bertelur. Ref: I:35: Uyaki wepo mundong ap. The cockatoo was brooding on a stone. Kakatua raja bertelur diatas batu. Hatam: bas. Numfor: barekepen.
- wim v. fell; tebang. Ref: I:23: New wim ow par e. He fells a tree first. Dia tebang pohon dulu. Hatam: wim. Numfor: kar.
- wit prep. with; dengan. Ref: I:23: Dprap wito dunim. I am talking with my wife. Saya berbicara dengan ibu. Hatam: bit. Numfor: kuker.
- wo- vbl. verbaliser. Ref: I:21: Wo-tutup war den. He closes off the glass. Dia tutup gelas air. Ref: I:23: D-w-ajar-o mor moi. I'm learning Moi. Saya belajar bahasa Mansim. Ref: II:5: D-wo-ijin maio. I asked permission from (someone). Saya minta ijin sama (siapa). Ref: I:49: Danu du-wa-ken mwaw mnar en. I put the fish in the string bag. Saya isi ikan dalam noken. Hatam: bV-. Numfor: we-.
- wom num. one; satu. Ref: I:20: Danu dkraw rukem da wom kwai. I have only one langsat. Saya pegang satu langsat saja. Hatam: gom. Numfor: sai; oser.
- wondi spat.n. behind; dibelakang. Ref: I:20: Nenaw wondi yu. It's behind the house. Ada dibelakang rumah. Hatam: nghim. Numfor: wondi. Note: Clearly a glottal between wondi and yu; wondi is Numfor 'outside'.

- wot adj. sick; sakit. Ref: I:16: Dupwoda wot. I have a headache. Saya kepala sakit. Hatam: dut. Numfor: duf. See woten 'wound'.
- woten n. wound; luka. Ref: I:18. Hatam: bog. Numfor: par; apek. See wot 'sick'. Note: Woten seems to have another tone, or glottal onset.
- wow¹ n. mountain; gunung. Ref: I:5; II:3: Wow ap. On top of the mountain. Diatas gunung. Hatam: nungugw. Numfor: bon; urek.
- wow² n. fruit; buah. Ref: I:39. Hatam: ngad. Numfor: bon.

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- yai n. father; bapak. Ref: I:11; III:3: Yai dun. My father. Bapak saya. Hatam: cig. Numfor: ban; yai.
- yan num. two; dua. Ref: I:13. Hatam: can. Numfor: dui; suru.

- yap¹ adv. tomorrow; besok. Ref: I:22. Hatam: njab. Numfor: miser. See yap 'light'.
- yap² adj. light; terang. Ref: I:4: Mon yap uo. It is already light. Tempat sudah terang. Hatam: njab; piga. Numfor: sna. See yap 'tomorrow'.
- yapam n. morning; pagi. Ref: I:6. Hatam: njabigyoti. Numfor: arwo. See yap 'light'.
- yapap n. riverbank; pinggir kali. Ref: I:48: Usi ir doro war yapap. The usi tree grows on the riverbank. Kayu usi tumbuh di pinggir kali. Hatam: minyei nyai. Numfor: yendi sare. Note: Or does the example sentence mean: 'the cuscus went up the riverbank'?
- yem v. call; panggil. Ref: I:29: Danu diyem na. I call you. Saya panggil kau. Hatam: jem. Numfor: krin; or.

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340 Ger P. Reesink

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