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A grammar of Mian

Sebastian Fedden

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Abbreviations

1	First person
2	Second person
3	Third person
A	(Di-)Transitive subject
ADNOM	Adnominal
AN	Animate
AUX	Auxiliary
COLL	Collective
COND	Conditional
CP	Classificatory prefix
CQ	(Content) Question
DECL	Declarative
DEM	Demonstrative
DEONT	Deontic
DET	Determiner
DIST	Distal
DS	Different subject
EMPH	Emphatic
EP	Epenthetic vowel
EXCL	Exclusive
EXCLAM	Exclamative
EXPL	Expletive
F	Feminine
F_CL	F-class
GPST	General past
HAB	Habitual
HORT	Hortative
HPST	Hesternal past
IMMACT	Immediate action
INCH	Inchoative
INCL	Inclusive
INTERJ	Interjection
IPFV	Imperfective
IRR	Irrealis
ITER	Iterative
IU	Intonational unit
M	Masculine
M_CL	M-class

Med-Cl	Medial clause
MED	Medial
N1	Neuter 1
N2	Neuter 2
NANPL	Not animate plural
NRPST	Near past
NEG	Negation
NHODPST	Non-hodiernal past
O	Object
PST	Past
PFV	Perfective
PL	Plural
PN	Proper name
Q	Question
POSS	Possessor
PRD	Predicator
PROX	Proximal
QUOT	Quotative
REAL	Realis
RESID	Residue class
REFL	Reflexive
RECP	Reciprocal
RPST	Remote past
S	Intransitive subject
sb	somebody
SBJ	Subject
SC	Sentential complement
SG	Singular
SI	Short interval
SIM	Simultaneous
SEQ	Sequential
sp.	species
SS	Same subject
sth	something
SURP	Surprise
SVC	Serial verb construction
TOP	Topic
TP	Tok Pisin
V	Verb
VBLZ	Verbalizer
VN	Verbal noun
VOC	Vocative

ω	Phonological word
	Intonational break
()	Inherent feature

Chapter 1

The language and its speakers

1.0. Introduction

The term *Mian* is not a native Mian word. Nevertheless, it is nowadays used as an ethnonym and a logonym and as a toponym for the airstrip near the Mianmin settlements Timeilmin and Temsakmin. Traditionally, the Mianmin had no term for their people but used group or clan names which were compounded with the nominal stem *tēn* ‘people’, e.g. *Usalei-tēn* and *Kmeil-tēn*, denoting the Mian clans who today live in the settlements Gubil and Timeilmin, respectively.

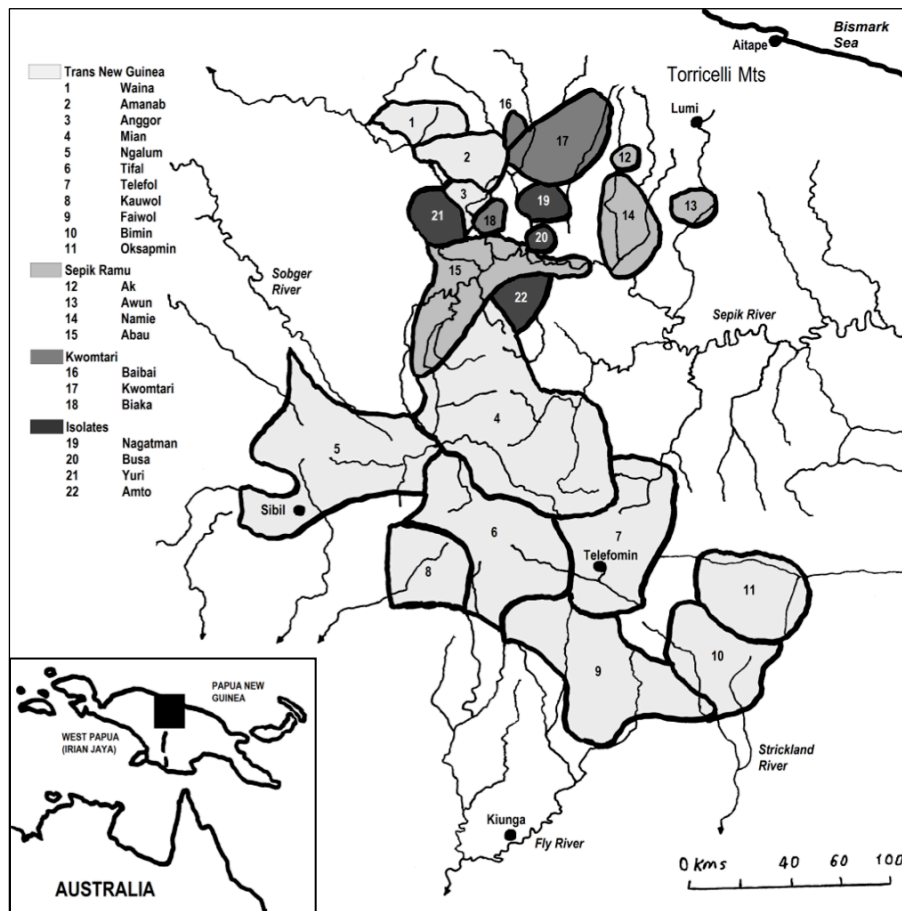
The noun *mian* means ‘dog’ in the related Ok languages Faiwol and Bimin (Healey 1964a: 85) and in the distantly related Oksapmin language (Lawrence 1972a, Lawrence 1972b, Loughnane 2009). The story goes that when a patrol came to Telefomin District in the mid 1930s and asked for information about the people living towards the north and west of the Telefomin area, who afterwards became known as the Mianmin, they learned the name ‘Mian’, possibly because the Mianmin had a reputation as fierce warriors. This name subsequently became the standard designation for the people under the colonial administration and later was adopted by the Mianmin people themselves. The Oksapmin know a mythical story of how the Mianmin got their name. Near Oksapmin station there is a rock face amidst the rain forest covering the steep wall of a mountain ridge. According to Oksapmin myth, that was the place where a bitch gave birth to the first Mianmin in days of yore. From there, they moved westward into lower altitude regions, into the traditional and contemporary Mianmin area.¹

Linguists of the Summer Institute of Linguistics generally used the terms ‘Mianmin’ or ‘Oksapmin’ both as ethnonyms and language names. This terminology gained wider currency through the classic literature on Papuan languages (Wurm 1982, Foley 1986). Originally, the Mianmin called their language *wéng*, which polysemously means ‘sound, voice, speech, language’. Nowadays, they use *Mian wéng* ‘Mian language’. Most names of inhabited places are compounds ending in *am* ‘house’, such as *Mian-am* ‘Mianmin’, *Temsel-am* ‘Temsakmin’, *Klefol-am* ‘Telefomin’, *Oksab-am* ‘Oksapmin’ or in *bib* ‘village, hamlet, place’, e.g. *Kondu-bib*, *Skio-bib*. I will use the term ‘Mian’ for the language (as an abbreviation of *Mian wéng*) and ‘Mianmin’ as the ethnonym and as the toponym signifying the area around Mianmin airstrip.

1.1. *Mian wéng*: The Mian language

Mian (also known as ‘Mianmin’ or ‘Miyamin’ in the literature, ISO *mpt*) is a Papuan language of the Ok family. The term ‘Papuan’ is not to be understood as a name for a well-defined language family but as a residue category for the non-Austronesian and non-Australian languages of the south-west Pacific (Foley 1986, 2000).

The Ok family of languages belongs to the larger Trans New Guinea (TNG) family, and is of roughly the same order of internal diversification as Germanic within Indo-European (Healey 1964a, Wurm 1982, Pawley 2005). The Ok languages are named after the widespread cognate *ok* ‘river, water’ in these languages.² Mian is spoken by fewer than two thousand people in the north-west of Telefomin District in Sandaun Province, Papua New Guinea.



Map 1.1. The Ok languages of Papua New Guinea

Geographically, the Mianmin area is delimited by the August and May Rivers in the west and east, respectively, and the Hindenburg Range in the south. This area is roughly located between the 141st and 142nd degrees of longitude and between the 4th and 5th parallels. Mianmin airstrip and the villages Timeilmin and Temsakmin, where the data used in this description of the language were obtained, is located at 4° 54' south and 141° 37' east.

Mian has about 1,750 speakers according to the 2000 census (Lewis 2009). Two dialect varieties can be distinguished: West Mian (also known as Wagarabai or Skonga)³ in and around Yapsiei, a government and Catholic mission station about 15 km east of the border to Papua (Irian Jaya) with approximately 350 speakers, and East Mian in the villages around Mianmin airstrip (Timeilmin, Temsakmin, and Sokamin), in Gubil, Fiak, and Hotmin with approximately 1,400 speakers. While the western dialect is contiguous to several other Ok languages to the west and to the non-related Abau language (Bailey 1975) upstream from Yapsiei, the eastern dialect is in contact with the closely related Ok languages Telefol to the east and south and Tifal to the southwest. Some men above 50 years of age speak or at least understand Telefol. The map shows geographical contiguity with the Lowland Ok language Ngalum as well but there are no traditional ties between Mian and Ngalum speakers.

Both Mian dialects are under strong influence from English and Tok Pisin, the local variety of Neo-Melanesian pidgin (Verhaar 1995). Although the former is clearly the most prestigious of the two and school education and official business is conducted in English, Tok Pisin serves as a lingua franca throughout the area. Only old speakers (above 75 years of age) have little or no Tok Pisin. Mian speakers are aware of the influence of these non-indigenous languages, especially their destructive influence, and some regularly identify words and grammatical constructions which are inspired by or calqued from either Tok Pisin or English. They describe these words and constructions as *wan wéng funin* or *tablasébwali wéng funin*, meaning ‘Tok Pisin thinking’ and ‘English thinking’, respectively.⁴ As is the case in many parts of the world, creoles and pidgins like Tok Pisin and the languages of the European colonizers in combination with the prestige associated with these idioms and the inferiority associated with the *tok ples*, i.e. the local, indigenous languages, endanger the future of both Mian dialects. One speaker (a local school teacher) estimated that Mian will have vanished in favour of Tok Pisin and English in 50 to 100 years. My impression is that the eastern dialect is even more susceptible to this development because the speakers are generally more educated, have better English and higher chances of finding work outside the speech community or going to college or university where Mian is no good as a means of communication so that they are forced to speak Tok Pisin or English.

1.2. The Ok languages

This section gives information on Ok as a language family and the previous research on this family.

1.2.1. The Ok languages as a family

Figure 1.1 below is a family tree of the Ok languages based on Healey (1964a) and Voorhoeve (2005). The basic division is between Mountain Ok consisting of Mian, Faiwol, Telefol, Tifal, and Bimin and Lowland Ok comprising Kati (also known as Muyu), Yonggom, Ninggerum, and Iwur⁵). The Ngalum language has been omitted from the figure because its position within the Ok family is unclear (see below).

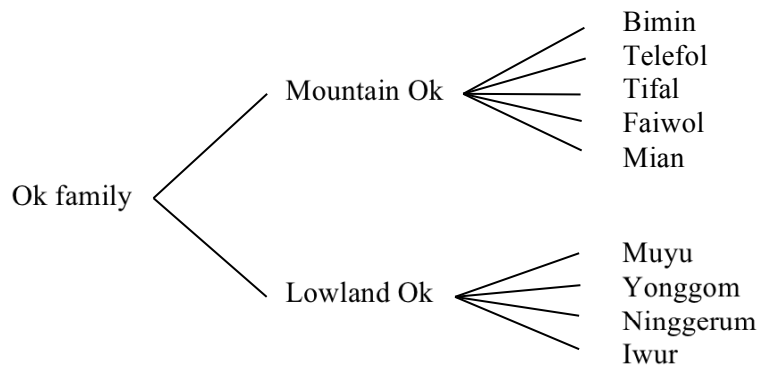


Figure 1.1. The Ok languages, based on Healey (1964a) and Voorhoeve (2005)

Healey (1964a: 38) further subdivides the Mountain Ok languages into a Division A consisting of Faiwol, Tifal, Telefol, and Bimin and a Division B comprising Mian and Wagarabai, i.e. the west Mian dialect (Wurm 1982: 137). This is plausible because both dialects of Mian show a lower number of cognates than the Mountain Ok languages of Division A. More importantly, however, Mian reflects a sound change which is characteristic of Lowland Ok, namely that word-initial /f/ becomes /h/ in some contexts. Compare the cognate words in table 1.1. Tone for all languages except Mian is only marked if indicated by Healey (1964a). Mian tones are based on my own analysis. Dashes indicate no known cognate form.

Table 1.1. Word-initial /f/ and /h/ in Lowland and Mountain Ok

	‘tongue’	‘elbow’
Mian	/ ^{LH} ha ^h ŋ/	/ ^L het/
Ninggerum	/hoŋ/	/het/
Telefol	/ ^{LH} foŋ/	/ ^L fɛt/
Bimin	/foŋ/	–
Faiwol	–	/fɛt/

Moreover, Mian has an exclusive/inclusive distinction in the first person plural pronouns, *nī* ‘we (EXCL)’ and *nībo* ‘we (INCL)’.⁶ Such a distinction is not found in any of the other Mountain Ok languages, which all have a single form *nu(u)-* or *no-*, but, for example, in the Lowland Ok language Ninggerum, which has *ni* ‘we (EXCL)’ and *nib* ‘we (INCL)’⁷ (Healey 1964a: 67).

I mentioned above that the position of Ngalum within Ok is unclear. Healey tentatively classifies Ngalum as belonging to a Division C within Mountain Ok but considers it possible that Ngalum constitutes a third sub-family besides Mountain and Lowland Ok. According to Voorhoeve (2005: 150-151) the classification of Ngalum as its own sub-family within Ok is supported by an unpublished Ngalum dictionary by Hylkema (1996).

It is possible that there is a Western Ok linguistic area located entirely within Indonesian Papua (Mark Donohue, pers. comm.). According to Donohue, the Western Ok area lies between the Mek, Dani, Asmat, and Korowai areas and potentially comprises from east to west Marub, Kobkaka, Kwel, Bayono, and Awbono. These languages show a moderate number of Ok cognates. However, apart from word lists, almost nothing is known about these languages and their exact genealogical affiliation and position within the Ok family remains uncertain.

1.2.2. Previous linguistic research on the Ok languages

Even today Ok remains a family of little known languages. Research on the Ok languages was mainly conducted in the 1960s and 1970s by both linguists and missionaries. Alan Healey’s dissertation (Healey 1964a) is a comparative study of the Ok language family. He explores the historical development of the Ok languages and reconstructs Proto Mountain Ok and Proto Lowland Ok as common ancestor languages. Healey also provides short sections on Proto Ok and Archaic Ok, in which he indicates the direction that a reconstruction of the proto language would have to take. Although Healey does not attempt to reconstruct tone for lack of reliable information, he highlights conspicuous tone parallels for Mian, Telefol, and Tifal (Healey 1964a: 128 and table 3).

Voorhoeve's (2005) genealogy is wider in scope. He examines the genetic relationship of the Asmat-Kamoro, Awyu-Dumut and Ok families based on regular sound correspondences in the daughter languages. A study of the genetic relatedness of Oksapmin, which to date has been classified as an isolate, and the Ok languages can be found in Loughnane and Fedden (2011).

Previous linguistic work on Mian was done by Jean Smith and Pamela Weston of the Summer Institute of Linguistics (SIL), two missionaries who lived in Sokamin for 15 months and in Telefomin for several years where they worked with visiting and live-in Mian speakers (my main consultant Kasening Milimab among them). Smith and Weston published a two-part sketch grammar, dealing with the phonology and the morphosyntax of the language, respectively (Smith and Weston 1974a, 1974b). Apart from this sketch, Smith (1977) published an article on sentence structure, and Weston (1977) one on interrogatives. Smith and Weston (n.d.-a) is a compilation of this material with some additional information on Mian discourse. Smith and Weston (n.d.-b) is a sizable wordlist, which comprises approximately 2,000 entries, each with a Mian headword and Tok Pisin and English glosses. Apart from indication of word class, the wordlist contains no further grammatical information.

Although Smith and Weston were not formally trained linguists and their linguistic work has always been directed to the end of translating the complete New Testament into Mian (Smith and Weston 1986), their grammar sketch, i.e. Smith and Weston (1974a, 1974b), was invaluable as a starting point for my own linguistic analysis of Mian.

The only other Ok language described in greater detail is Telefol. Phyllis and Alan Healey did research on Telefol phonology (Healey 1964b), noun phrase (Healey 1965a), clause structure (Healey 1965b), verb phrase (Healey 1965c), and clause chaining constructions (Healey 1966). In addition to that, the Healeys published an excellent dictionary (Healey and Healey 1977). Their findings have never been published in a single volume.

Materials on Tifal phonology can be found in Steinkraus (1963, 1969), materials on Tifal grammar in Healey and Steinkraus (1972) and in Boush (1975). For information on Faiwol, see Mecklenburg and Mecklenburg (1969, 1977) and Mecklenburg (1974).

1.3. Typological profile

Mian has a relatively small segmental phoneme inventory though of fairly typical shape and size by Papuan standards. An unusual feature of the segmental inventory is the presence of a contrast between a plain /a/ (spelled <a>) and a pharyngealized /a^h/ (spelled <aa>). The tonal phonology is complex. Mian is a word tone language, i.e. the domain for the assignment of

one of five tonal melodies (H, L, LH, LHL, and HL) is the phonological word, not the syllable. Lexemes are specified for one tonal melody and an accent which serves as the anchor point for the melody. Tonal melodies spread over the entire phonological word including all affixes and most clitics. Verbal and nominal compounds are treated as a single word phonologically, i.e. they have one tonal melody (i.e. a composite of both stem tones) and one accent. The tonal inventory of compounds is a proper subset of the tonal melodies found on monomorphemic words. While the function of tone is mainly to make lexical distinctions, there is one tense (the non-hodiernal past) which is marked tonally for some verbs in addition to a suffix.

There is hardly any nominal inflectional morphology. The only inflectional noun suffix is *-wal*, which signals plural and only attaches to a subset of the noun vocabulary to boot, namely kin nouns, dyads, and proper names, where it indicates an associative plural. If a noun is used referentially, it is followed by a cliticized article which is etymologically related to the third person free pronouns. There is a tendency to use inanimate nouns without this marker, even if they are used referentially. There are several derivational noun suffixes which derive adverbs from nouns and express meanings like instrumental, e.g. *sbun-dum* ‘with a spoon’. Furthermore, there is a derivational suffix *-an*, which attaches to either nouns or adjectives to form verbs. The meaning is inchoative, e.g. *ayam* ‘good’ and *ayam-an-* ‘become good’. These derived forms are further inflected as intransitive verbs.

Mian has four genders: Masculine, feminine, neuter 1 and neuter 2 which are defined by sets of agreement markers. Agreement targets are the adnominally used pronouns, the article and demonstratives, and the pronominal affixes on the verb.

The structure of the noun phrase is relatively simple and constituent order within the noun phrase is fixed. The leftmost position is the possessor slot. It can be filled by a possessive pronoun or a noun phrase expressing the possessor. Most adjectival modifiers and quantifiers follow the noun. The adjectives *sin* ‘old’ and *memâ* ‘new’ tend to precede the noun but they can also follow it. The rightmost position in the noun phrase is reserved for a determiner, e.g. a clitic pronominal article or an adnominally used emphatic pronoun. The clitic article can be distributed throughout the noun phrase and show up on the head noun, all adjectival modifiers, and on numerals. Mian has pronominal and head-internal relative clauses. The former are unmarked clauses embedded in the noun phrase before the head noun, the latter are essentially clausal noun phrases and end with a determiner, such as an article.

Mian only has postpositions many of which have a noun origin.

About half of the Mian verbs show an aspectual stem distinction with formally distinct perfective and imperfective stems. This is a typical feature of the Ok languages and also found in Telefol and Tifal. Outside of Ok, aspect

distinctions in the stem can be found in the Papuan languages Marind and Kiwai (Foley 1986: 146-148), in Korafe (Farr 1999: 22-23) and in Abui (Kratochvil 2007: 82-86). Some verb stems (approximately 50) are defective and lack either the perfective or the imperfective stem. The rest of the verb stems are trans-aspectual and do not have a formal perfective-imperfective distinction.

Verbal morphology is complex. Mian is mainly a nominative-accusative language though in a limited number of cases argument marking proceeds on an absolutive basis, mainly – but not exclusively – with classificatory prefixes, which index transitive objects and intransitive subjects. Alignment in ditransitives is indirective.

Mian is basically head-marking at the clause level and mildly polysynthetic. Core arguments are subject (S) in intransitive clauses, subject (A) and object (O) in monotransitive clauses, and subject (A), object (O) and recipient (R) in ditransitive clauses. There is no morphological case- or adpositional marking for these. Core arguments are cross-referenced on the verb by cross-referencing affixes. These index all subjects and recipients. The language is not fully head-marking at the clause level because many transitive verbs do not index their object. Object prefixation is only found in a small number of transitive verbs, including ‘see’, ‘kill’, ‘grab’, and ‘bite’.

In the perfective, recipient arguments are introduced through a compound construction with *-(û)b* ‘give’, or allomorphs thereof. In contemporary Mian, *-(û)b* ‘give’ and its allomorphs serve a quasi-applicative function. In the imperfective, recipient suffixes immediately follow the verb stem. The notion of ‘recipient’ is semantically relatively general and includes benefactives and malefactives, possessors, goals of ballistic motion, and experiencers.

In addition to the argument affixes, which work on a nominative-accusative basis, Mian has a set of classificatory verb prefixes which are obligatory for some verbs, most of which involve the handling or manipulation of objects, including predications such as ‘take’, ‘throw’, ‘give’, and ‘fall’. The classificatory prefixes classify a verbal argument according to semantic criteria, such as biological sex but also shape and function on an absolutive basis, i.e. classification extends to the subject of intransitive verbs and the object of transitive verbs. These prefixes are in many ways reminiscent of classificatory verbal elements in various North-American languages, e.g. Navajo and Diegueño.

Inflectional tense, aspect, and mood marking is moderately complex. The verb has two slots for TAM suffixes which are on either side of the subject suffix slot. The pre-subject slot is filled by various tense, aspect, and mood markers. The post-subject slot can only be filled by tense markers (which are formally and semantically distinct from those in the pre-subject slot). There

are some co-occurrence restrictions pertaining to the suffixes in these two slots.

Verbs are inflected directly for some TAM categories, but for others the verb must be serialized with an auxiliary before the respective TAM suffixes can attach.

Mian makes pervasive use of chaining constructions. Verbs can be serialized at the core or the nuclear level of the clause. Serialized verbs share the same subject which is marked on the last verb in the construction. An exception is the causative serial verb construction, in which subject marking indexes the causer on the first verb of the serialization and the causee on the second verb. The predications expressed by a core serial verb constructions are of relatively low semantic integration and serialized transitive verbs commonly have their own overt object noun phrases. Serializations on the nuclear level of the clause are possible. They are tighter-knit than core serializations and do not allow separate objects.

Clause chaining is very common in Mian. Verbs can be medial and function as the predicate of a medial clause or final and function as the predicate of an independent sentence or the last clause in a clause chain. Medial verbs show switch-reference morphology indicating whether the subject of the succeeding clause is co-referent or disjoint in reference, in addition to marking events as sequential or simultaneous. In languages that use clause chaining, medial verbs are often morphologically impoverished. Mian medial verbs, however, only have the morphological restriction that they cannot be marked for polarity, irrealis or deontic mood or be followed by one of the sentence-final illocutionary clitics. The Mian switch-reference system has a typologically unusual property in that ‘same subject’ marking by *-n* only forces the following subject to be co-referent in the first person singular. In all other person-number combinations the switch-reference meaning of *-n* is suspended and the suffix only indicates sequentiality of events.

Adverbial clauses with temporal, locative or conditional meaning – like head-internal relative clauses – are clausal noun phrases and function as referring expressions in Mian. They are followed by the default neuter article =*o*. Other embedded structures found in the language are embedded questions and quotatives.

Unmarked constituent orders in medial and final clauses and independent sentences are SV and AOV. Due to the head-marking characteristics of the language, constituent order is relatively flexible with the mandatory restriction that the verb be clause-final. The verb can only be followed by =*ba*, signalling negative polarity, and/or an illocutionary clitic particle, which marks independent sentences or whole clause chains as declarative, exclamative, interrogative, quotative, or hortative. Post-verbal locative adverbials following motion verbs are possible but rare and always constitute their own intonational

unit. Under no circumstances can the verb be followed by an overt core noun phrase argument.

1.4. Note on the revised version

The present volume is a heavily revised version of my dissertation (Fedden 2007a). I compiled the Mian corpus on which the analysis presented therein was based during a total of nine months of fieldwork in the Mian-speaking communities of Mianmin and Yapsiei in Telefomin District, Sandaun Province, Papua New Guinea.

The present volume is wider in scope and tries to get rid of some of the problems and rough edges of the dissertation. Since my days as a Ph.D. student I have been back to the field for two more months expanding the corpus and tying up loose ends in the analysis. This larger corpus, the critical and helpful comments of the external reviewers, as well as two years of turning over in my mind various issues of Mian grammar, helped me to develop a clearer view of many of these issues. The following paragraphs highlight the main differences between the dissertation and the description in this volume.

The phonological description, especially the analysis of tone, stands more or less as it was in the dissertation. The tone derivations have been tidied up and specifications of verb tone have been included in all examples and the sample texts.

The chapter on word classes is more fine-grained now and distinguishes a separate class of postpositions. I streamlined the pronoun section and included sections on ideophones and grammatical relations in the clause.

The chapters on gender and classificatory prefixes have been left largely unchanged, apart from cutting back the discussion of the respective merits of the two possible alternative analyses of the Mian gender system.

The noun phrase chapter is shorter now because some phenomena previously discussed under this heading have been moved into a new chapter on postpositional phrases.

The chapters on verb morphology and argument structure underwent substantial changes. I reanalysed three formatives, which were formerly treated as tense suffixes, as mood suffixes and abandoned the distinction between direct and indirect object. In the thesis, ‘give’ was analysed as a zero morpheme followed by the applicative suffix *-b*. In the present volume, the form *-ûb*’ is identified as ‘give’, thereby getting rid of the zero stem ‘give’.

Furthermore, the tables illustrating the inflectional possibilities for Mian verbs have been cleaned up to make them more accessible for the reader.

The section on chaining, operator scope, and embedding saw many changes which necessarily followed from the changes in the chapter on verb morphology. The discussion of the apparent inconsistencies of switch-reference marking in Mian has been curtailed.

Apart from these specific changes, a few general things are handled differently now. The examples in Fedden (2007) had four lines, the first being a text line which gave the phonetic representation of the utterance. This line specified surface tones rather than underlying ones and made all segmental phonological rules (e.g. assimilation) explicit. The other three lines were the usual ones: morpheme-by-morpheme segmentation, glosses, and free translation. Following standard linguistic practice, I removed the first line in the present description. Consequently, the line giving segmented morphemes now shows phonological representations, i.e. underlying tones and segments before they have undergone any conditioned phonological changes. However, to maintain the readability of the examples, vowels undergoing vowel harmony are still made explicit, rather than operating with unspecified underlying vowels, and [d] and [ʰd], which are syllable-initial allophones of the phoneme /l/, are both consistently spelled <d>.

1.5. Fieldwork and consultants

I compiled the corpus that forms the data basis of this grammar during three field trips to Papua New Guinea from January 8th to July 8th 2004, from September 9th to December 11th 2005, and from June 30th to August 28th 2008. The first two trips comprising nine months were fieldwork conducted for my Ph.D. research. Out of these nine months I spent a month and a half in Yapsiei station, where the western Mian dialect is spoken, and seven and a half months in Mianmin in the east Mian area. The third field trip of two months (exclusively to Mianmin) was conducted as part of my work as a postdoctoral fellow at the Max Planck Institute (MPI) for Psycholinguistics in Nijmegen. The description in this grammar is based on the eastern dialect.

I worked with two consultants more or less on a daily basis: Kasening Milimab, the councillor of Mianmin, a man who is now in his late fifties, and Asuneng Amit, a man in his late sixties. Neither of them have any formal education, both speak Mian and Telefol as well as Tok Pisin. Mr Milimab used to work closely with the SIL linguists Jean Smith and Pamela Weston and Mr Amit used to work equally closely with the anthropologist George Morren.

I worked occasionally with two local pupils: Liden Milimab, Mr Milimab's son, (now about 22 years old) and Raymond Davai (now about 20 years old). Both of them speak Mian and Tok Pisin as well as English.

I obtained historical accounts and descriptions of traditional initiation rituals from two men in their late eighties, Ibalim Soubgena, who passed away in 2006, and Beitap Fenobi, who passed away in 2007. Both Mr Soubgena and Mr Fenobi spoke Mian and Telefol only.

I mainly obtained spontaneous data in the form of recorded texts and speaker observation but also used structured elicitation to complement natural data. Genres represented in the spontaneous corpus are: myths and ancestor stories, historical account, accounts of initiation ritual, conversations, songs, and procedural texts. The recorded corpus comprises about four hours of spontaneous texts and about twenty hours of elicited material including work on the Mian dictionary. In addition to that, I used Dahl's (1985) questionnaire on tense and aspect categories and the video clips designed by the Max Planck Institute for Psycholinguistics in Nijmegen for the Reciprocals Project (Evans, Levinson, Enfield, Gaby, and Majid 2004), each with one speaker.

1.6. The *Miantén*: The Mianmin people

This section provides some topographic and ethnographic information on the Mianmin and the environment in which they live.

1.6.1. Landscape and climate

The Mianmin area belongs to the Highlands fringe. The Yapsiei and Hotmin airstrips are at about 200 metres above sea level, but elevation increases towards the east and south reaching 760 metres above sea level at Mianmin airstrip, which is located at 4°54' S and 141°37' E. There are peaks ranging from 1,000 to 2,800 metres throughout the area. The landscape is characterized by hills and mountains covered by primary and secondary rainforest and a tangle of rivers. These conditions make the terrain in parts almost impassable on the ground, so that 15-minute trips by plane can easily take a week on foot.

As the area is both rugged and remote, transport relies on a mixture of the most modern and the most ancient means of getting around: planes and human legs. Apart from airstrips, there is hardly any material infrastructure. The ruggedness of the landscape can probably only be appreciated if one tries to follow people on their way to their gardens on paths which sometimes are hardly twenty centimetres wide and adapt to the constant ups and downs of the country. The remoteness, on the other hand, never became more obvious to me than when the plane, which usually lands at Mianmin airstrip on a weekly or fortnightly basis and on which I depended for food and letters, stopped its

service because of an ongoing local land dispute over the location of the airstrip and subsequent legal proceedings.

Although Papua New Guinea lies entirely in the tropics, regional differences regarding temperature, rainfall, and humidity can be considerable. Telefomin District is renowned for heavy rainfall throughout the year with a nominal dry season between April and September, which is characterized by slightly cooler evenings, spectacular red sunsets (*bâantom*), and less rain, at least during the day, but generally people judge every day in its own right and label it *am ayam* ‘good day’ (Tok Pisin *gutpela taim*) or *am misiam* ‘bad day’ (Tok Pisin *taim nogut*) with a certain flexibility of classification in case the weather changes quickly. Temperature is relatively constant at about 30°C during the day and a pleasant 17°C at night. Humidity is high, especially in the morning, though nowhere near the extremes in lowland or coastal areas.

1.6.2. Mianmin settlements

Although Papua New Guinea is called a ‘failed state’ with increasing frequency and its cities are notorious for unemployment, crime, and inefficient law enforcement, life on the village level in Telefomin District is still functional and retains many features of the traditional way of life. Populations are small and basically self-sufficient. For ethnographic information on the east and west Mianmin, see Morren (1986) and Gardner (1980, 1981), respectively. Anthropological research on other Ok people, especially the Baktaman, was conducted by Barth (1975, 1987). For a more general treatment of the area, also see Sillitoe (1998, ch. 15).

The Mianmin practice slash-and-mulch agriculture, whereby virgin or secondary vegetation releases nutrients into the soil for the benefit of the planted crop. The staple is taro (*imen*), a perennial plant with a tuberous root which has a starch proportion of about 25% and a comparatively high protein content (1.5-3.0%). In more recent times, sweet potatoes (*wán*) were introduced as the result of recurrent crop failure due to taro blight (Morren 1986). The Mianmin also use sago, bananas, breadfruit, pawpaw, sugar cane, pumpkins, and squashes. The leaves of the latter two are cooked and eaten as vegetables. Amongst more recently introduced plants one finds pineapples, oranges, tomatoes, beans, peanuts, and coconuts.

In order to make a garden, a certain area in the bush is cleared by the men with the help of axes (*káawa*) and bush knives (*sēku*). Nowadays, these tools are made with steel heads and blades. Traditionally, stone adzes (*fābi* and *báangkli*) were used. Slash-and-burn agriculture is not common (Sillitoe 1998). Whereas the work of preparing food is mainly in the hands of the women, the work of procuring food is divided between the sexes. While the

women spend more time in the gardens, it is exclusively the men who hunt large animals, such as pigs and cassowaries. The women are responsible for supplementing the diet with small animals like reptiles and rodents. The boys practise their skill with bow and arrow or slingshots on birds and small reptiles which are usually prepared and eaten where they were killed.

Mianmin hunting is undergoing changes for the worse because of game depletion. During my first three months in the field only two wild pigs were killed and the people assured me that there were hardly any cassowaries in the forest anymore. This shortage of game creates pressure on Mianmin society. In former times it was able to dissolve this pressure by a semi-sedentary lifestyle which involved movement of a group which was more or less determined by the availability of meat in the vicinity and soil quality for gardening. If either of the two became dissatisfactory, the pressure to move increased (Morren 1986). Nowadays, however, immobile infrastructure such as the airstrip but also schools, hospitals, and aid posts keep the people where they are.

Domestic pigs and chickens are kept in small numbers in not particularly confined places. The number of domestic pigs and chickens used to be high, but it was decreased through a political decision to reduce hookworm infections which thrive in pig faeces and enter the host organism by penetrating the soft skin between the toes or an open wound on the foot. Occasionally, domestic pigs are slaughtered. They are led on a leash into the jungle where they are killed. Back in the village, the hair is singed off and the animals are taken apart with knives. Sometimes axes have to be used to open the ribcage of large pigs. Finally, the pieces of pork are sold at fixed prices.

Other animals hunted for their meat are birds, lizards, non-poisonous snakes, rodents, and fish (near large rivers, e.g. the August river near Yapsiei – the rivers Hak and Sek around Mianmin are too shallow for anything but casual fishing). There are two dry-goods stores in Mianmin which offer a small range of PNG-produced tinned meat and fish, but these are not readily available like taro or bananas, for it takes money to supplement one's diet with protein from the can.

In traditional Mianmin society, there was no need for money. Nowadays, however, there are both goods which must be bought, and services which have to be paid for, first and foremost the school fees, which are an enormous financial burden on the parents of school children. Furthermore, certain local jobs, such as teachers, aid post orderlies, and nurses, which were established after the arrival of educational and health support services, involve cash salaries or wages. For some families, financial pressure is very high and the possibilities of earning money on the village level are limited. The only chance for the men is to do contract labour for a company, for example as a

carpenter, builder or janitor, or to work on a tea or coffee plantation in the Highlands.

Other ways of earning money are to try one's luck as a gold panner (e.g. at the Frieda river) or – at least around Yapsiei – to look for agarwood (commonly known by its Indonesian/Malay name *gaharu*), a dark, resinous substance from which incense can be produced. Gaharu can develop in trees of the *Aquilaria* species, which are very sparsely distributed through the forest, and only as the result of an immune response to an infection. So while gaharu is a very valuable substance, it is exceedingly rare. Gaharu does not grow around Mianmin because the altitude is too great.

1.6.3. Food preparation

The inhabitants of the Highlands fringe are also called the 'taro people' and their menu is indeed centred around the tuberous rhizome of the taro plant. Taro is served either boiled, cooked in the fire, or cooked in a leaf oven (*fal*). Peeled taro can be boiled in hot water like potatoes. Alternatively, the tuber can be put in a small fire. After a quarter of an hour the skin is cut off and the tuber is buried in the hot ashes where it is cooked for another half hour. Before eating, the ashes are removed with a knife.

Preparation of food in a leaf oven is more involved. Stones (of the size of cobblestones) are thoroughly heated on a burning rack of wood. After the wood pile has turned to ashes, the hot stones are put to the side with the help of huge wooden tongs (*itó*) about 1.5 metres in length. Banana leaves are put on the hot ground⁸ and the food, usually taro or scraped taro, that is the pulpy interior of the taro corms scraped out of the skin with the help of a small bamboo scraper (*yaam*), vegetables, and sometimes the fruits of the pandanus palm, meat, or fish) is put on the leaves in layers. Each layer of food is covered by another layer of banana leaves. The stones are heaped on top of the uppermost leaf cover. A final layer of leaves goes on top and is weighed down by pieces of wood against gushes of wind and hungry dogs. Depending on the contents and size of the oven, the food has to be cooked between half an hour and half a day.

A speciality of the local cuisine is "Mianmin pizza" (*éim*). The umbel-shaped fruits of the pandanus palm (which come in bright red, orange, and yellow, with considerable difference in their appearance but only slight variation in taste, at least to my palate) are cut open lengthways and the hard interior is removed. The seeds are put in bowls and cooked together with peeled taro tubers in a leaf oven. To soften the cooked tubers, they are beaten with a small wooden club (*imensít blalin*) and kneaded into a big lump of dough which is spread out on pieces of bark in a circular shape. The pandanus

seeds are mixed with water. The men preparing the food take handfuls out of the bowls and squeeze a signal-red (-orange, -yellow) sauce-like substance onto the dough. The seeds remain in the hands and are discarded. When the dough is covered completely, people gather around the pizza and start eating using stick-like implements (*atit*) in order to cut the dough and transport the colourful food safely to their mouths. Traditionally, the pandanus pizza was only prepared and eaten by initiated men, even today the preparation lies almost exclusively in male hands. On special occasions, the men still eat separated from the women and children.

1.6.4. *Political organization*

On the political level, ancient and modern modes of organization exist next to each other. Traditional leaders (*komók*) still exist, but now there is also a councillor (*kaunsol*). Whereas being a bigman is not an office but rather a social distinction that involves authority and influence but no power to actually make decisions, the councillor is an office, albeit one that does not pay any money. From the early 1990s onwards, the councillor and local level government elections are combined with provincial and national elections. The people vote for somebody from their midst to become councillor for seven years.

This office is a mixture of mayor, local policeman, and judge. The councillor is the spokesman of the community and represents it at the district level in Telefomin and at the provincial level in Vanimo. He has to discuss and solve any problems with the district and provincial authorities. He also organizes community work. Furthermore, he is supposed to investigate minor offences like theft or public misdemeanour and conduct small courts where he can administer appropriate punishment, normally small fines which have to be paid in cash and are used for the benefit of the community. The councillor does not have the authority to deal with crimes.

1.7. **Notes on examples and the orthography**

1.7.1. *Examples*

The Mian examples I use to illustrate and support my analysis come from six different sources. The ranking below reflects the frequency with which the different types of examples are used in this grammar. The glossing conventions adhere to the Leipzig Glossing Rules (Comrie, Haspelmath and Bickel 2004).

- 1) Examples from the spontaneous corpus were recorded in the field and are identified by the title of the text they are taken from.
- 2) Elicited examples are unmarked.
- 3) Examples elicited with the help of Dahl's (1986) TMA tool are identified by the number they have in the questionnaire. For examples elicited with the MPI Reciprocals video clips (Evans, Levinson, Enfield, Gaby, Majid 2004), the clip number is given.
- 4) Observed examples are marked [Observed]. These came up in natural discourse during participant observation. As these examples were not recorded, I inferred the tones from my general knowledge about the tonal phonology of the language.
- 5) Examples from Smith and Weston's work are identified with reference and page number. Glosses have been changed to fit my interpretation of the Mian data.
- 6) Examples from the Bible (Smith and Weston 1986) are identified by author, chapter, and verse. Glosses have been changed to fit my interpretation of the Mian data.

1.7.2. Orthography in the examples

For the sake of consistency, I keep the practical orthography developed by Smith and Weston (1974a) in this grammar. For a justification of the few changes I made to the orthography, solely for academic purposes, see 2.9.

The orthography in the examples is to a large extent phonemic with some instances of morphophonemic spelling. Regular phonological processes, such as assimilation of /n/ to [m] before /b/ are not incorporated into the orthography. I will however use phonetic spelling for /l/ to improve readability. /l/ is spelled *d* word-initial and syllable-initial after consonant, and *l* elsewhere. The change of /b/ to [t] before [n] is incorporated into the orthography because this only affects a few items in the language, *-ûb-* 'give (PFV)' before the recipient suffix *-ne* '1SG.R', *-êb* 'take (PFV)' (and all compounds involving *-êb*) before *-n* 'SS.SEQ', *tab* before *-n* 'SS.SEQ' in directly inflected directionals, and *fâb* 'where, what' in the interrogative verb *fatnà* 'do what'.

Tone is rendered phonemically, i.e. tones are written over the stem to which they belong lexically, even though the tone might in certain cases be pronounced outside of the stem. The following example illustrates this:

- (1) *unáng=o* *wen-b-o=be* [unaŋō wemβoβe]
 woman=SG.F eat.IPFV-IPFV-3SG.F.SBJ=DECL
 'The woman is eating.'

In proper names that end in /b/ one finds both spellings, e.g.: <Milimab> or <Milimap>.

Phonologically conditioned allomorphy is incorporated into the orthography, e.g. the existential verb *bi* has an allomorphy *bl* before /i/, which is rendered <bl> orthographically.

Instances of vowel harmony are orthographically rendered as they are pronounced to enhance readability. For example, the underlying form of the deontic suffix in (2) is *-Vm*, but regressive vowel harmony applies.

- (2) \bar{i} *am=o* *ge-n-im-ibo=be*
 3PL.AN house=N2 build.PFV-AUX.PFV-DEONT-2/3PL.AN.SBJ=DECL
 ‘They should/ought to build a house.’

All proper names are spelled with a capital letter. As I found no consistent tone patterns for proper names, especially for people’s names, tone is not indicated. Proper names and loan words are spelled phonetically:

- (3) <Ostlelia> ‘Australia’
 <Jemeni> ‘Germany’
 <sak> ‘suck’
 <Pita> ‘Peter’
 <sekim> ‘check’
 <mun> ‘month’

Chapter 2

Phonology

2.0. Introduction

Table 2.1 sets out the consonant phoneme inventory. In cases where the orthographic conventions adopted in this grammar¹ deviate from the phonemic representation, the spelling is given in brackets.

Table 2.1. Mian consonant phonemes

	bi-labial	labio-dental	alveolar	palatal	velar	labialized velar	glottal
Stops	b		t		k	k ^w <kw>	
Nasals	m		n		ŋ <ng>	g ^w <gw>	
Fricatives		f	s				h
Lateral glide			l <d, l>				
Semi-vowels	w			j <y>			

There are six monophthongs² /i, ε <e>, a, a^s <aa>, o, u/ and six diphthongs /ei <ei>, ai, au, aⁱ <aai>, a^u <aa>, ou/. In terms of suprasegmental phonemes, Mian has five tonal melodies L, H, LH, LHL, HL and one accent.

Pharyngealized /a^s/ is spelled <aa> in opposition to single <a> for non-pharyngealized /a/. Phonemic tonal melodies consisting of sequences of simple low (L) and high (H) tones are assigned to the word as a whole.

The present analysis does not treat vowel duration as phonemic. On the issue of vowel length, see section 2.3. In phonemic representations, underlying tonal melodies composed of one or more L's or H's are indicated by superscript letters, e.g. rising in /^{LH}ta^sŋ/ 'flint, lighter'. Many stems are lexically specified for an inflection point, henceforth called accent, which serves as the 'anchor point' for a tonal melody. Accent is indicated by ']' in phonemic representations, if it does not fall on the final stem syllable. The reader will find examples below.

In phonetic representations, high pitch is marked by a bar over a vowel (e.g. ā). Contours are shown as rising (e.g. á) or falling (e.g. à). Low pitch is unmarked.

In the orthography, phonemic tone is indicated by diacritics. Any word which is unmarked in the orthography has low tone. By convention, tones over diphthongs and the pharyngealized <aa> are written over the first letter, e.g. *táang* ‘flint, lighter’ and *éil* ‘pig’.

Throughout this grammar, words given orthographically will be in italics, phonemic representations will be marked by slashes and phonetic representations by square brackets. For example, orthographic *táang* ‘flint, lighter’, phonemic /^{LH}ta^sŋ/, and phonetic [t^há^sŋ].

2.1. Consonants

Mian has 15 consonantal phonemes. There are six stops, three fricatives (including /h/), three nasals, one lateral glide, and two semivowels. The places of articulation according to which stops and nasals are distinguished are labial, alveolar, and velar. There is a labialized velar stop series. Fricatives are articulated at the labio-dental, alveolar, and glottal positions. Stops can be either voiceless or voiced, nasals are always voiced, fricatives are only voiceless. Word-initial voiced stops are slightly pre-nasalized indicated by a superscript homorganic nasal, e.g. /^{LH}ba^sb/ [m^bá^sp^h] ‘father’s younger sister’. Prenasalization is less prominent than in Oksapmin (Loughnane 2009). In some speakers, the pre-nasal can have a duration of more than 100ms in tokens spoken in isolation, in others prenasalization is much less obvious. Semivowels are either labial(-velar) or palatal.

The consonant inventory has some asymmetric gaps in the stop system. Although stops are overall distinguished at three different places of articulation, there are only two voice-differentiated pairs, namely /k/ vs. /g/ and /k^w/ vs. /g^w/. There is no voiceless bilabial stop */p/ and no voiced alveolar stop */d/. [p] is an allophone of /b/ in syllable-final devoicing environments and [n^d] is – at least synchronically – a word-initial allophone of /l/. For a more detailed treatment of the lateral glide, see 2.1.1.4 below. The practical orthography takes a more phonetically based approach and uses <d> for /l/ when it is pronounced [n^d] or [d], and <l> in all other cases.

2.1.1. Phonetic description and allophonic distribution of consonants

2.1.1.1. Stops

/b/ is a voiced bilabial stop. It occurs syllable-initially and finally. Word-initially, /b/ is prenasalized and realized as [m^b]. Syllable-finally, /b/ is devoiced and can either be aspirated [p^h] or be realized as an unreleased stop

[p̥]. It is always aspirated word-medially before vowels. In some older speakers, word-final [p^h] and [p̚] alternate freely with the labio-dental fricative [f] and with the bilabial fricative [ɸ]. Except in careful speech, /b/ is lenited to [β] between vowels. /b/ occurs as the first member of the syllable-initial consonant cluster /bl/ and as the second member of /sb/.

/t/ is a voiceless alveolar stop. It occurs syllable-initially and syllable-finally. It is always aspirated [t^h] before vowels and can be aspirated or be realized as an unreleased stop [t̚] syllable-finally. /t/ occurs as the first member of the syllable-initial consonant cluster /tl/.

/k/ is a voiceless velar stop. It occurs syllable-initially and syllable-finally. It is always aspirated [k^h] before vowels and can be aspirated syllable-finally or be realized as an unreleased stop [k̚]. /k/ occurs as the second member of the syllable-initial consonant cluster /sk/. Between vowels, /k/ is often lenited to [x] (or even [χ] in fast speech). Before pharyngealized /a^ʕ/, /k/ is realized as an aspirated, voiceless uvular stop [q^h]. /k/ occurs as the first member of the syllable-initial consonant cluster /kl/ and as the second member of /sk/.

/g/ is a voiced velar stop. It occurs at the beginning of words and word-medially, but is always in syllable-initial position. Because of this, final devoicing does not apply to /g/. Word-initially, /g/ is realized as a pre-nasalized stop [ŋg]. /g/ occurs as the first member of the syllable-initial consonant cluster /gl/.

/k^w/ is a voiceless labialized velar stop. It only occurs syllable-initially and is pronounced [k^w]. Orthographically, it is rendered <kw>.

/g^w/ is a voiced labialized velar stop. It only occurs syllable-initially and is pronounced [g^w]. The spelling is <gw>. Word-initially, /g^w/ is realized as a pre-nasalized stop [ŋg^w].

2.1.1.2. Nasals

/m/ is a bilabial nasal which occurs in syllable-initial and final positions and as the second member of the syllable-initial consonant cluster /sm/. It is always realized as [m].

/n/ is an alveolar nasal which occurs in syllable-initial and final positions and as the second member of the syllable-initial consonant cluster /sn/. It is always realized as [n].

/ŋ/ is a velar nasal which occurs in syllable-initial and final positions. It is always realized as [ŋ]. Orthographically, /ŋ/ is rendered as <ng>.

2.1.1.3. *Fricatives*

/f/ is a voiceless labio-dental fricative. Like /g/, it occurs at the beginning of words and word-medially, but is always in syllable-initial position. /f/ occurs as the first member of the syllable-initial consonant cluster /fl/.

/s/ is a voiceless, alveolar fricative. It occurs syllable-initially. /s/ does occur in syllable-final position, albeit rarely, e.g. in /^Las/ ‘tree’, /^Lusneβε/ ‘he went up’, and the Tok Pisin loan /^{HL}has/ ‘hat’. /s/ occurs as the first element in the consonant clusters /sb, sk, sm, sn, sl/.

/h/ is a glottal fricative. It only occurs syllable-initially.

2.1.1.4. *The lateral glide /l/*

The lateral glide /l/ is the most complex phoneme in terms of its allophonic variation. In native words, it is realized by all speakers as the voiced, prenasalized, alveolar stop [nd] word-initially. Phonetic [l] occurs word-initially only in a few Tok Pisin loans, e.g. *lotu* [lotu] ‘church’, *lais* [lais] ‘rice’, and *ledio* [ledio] ‘radio’.

As far as the question whether this phoneme should be analysed as /l/ or /d/ is concerned, I opt for /l/ because, given that /b/ is devoiced syllable-finally, we would expect that devoicing also applies to a syllable-final /d/-phoneme, but syllable-final /l/ is always realized as either [l] or [r], never as [t].

/l/ is only pronounced [d] word-internally if the preceding syllable ends in a consonant. Compare:

(1)	<i>áandal</i>	/ ^{LH} a ^s n-lal/	[a ^s ndāl]	‘river bank’
	<i>dingdang</i>	/ ^L liŋlaŋ/	[ⁿ diŋdaŋ]	‘thin’
	BUT <i>elàak</i>	/ ^{HL} ε-la ^s k/	[ēlā ^s k ^h]	‘down here’

That /l/ is not pronounced [d] or [nd] word-medially between vowels, even though in syllable-initial position, can be seen from the example /^{LH}til=ɔ=^Lβε/ [t^hi.lō.βε], *[t^hi.dō.βε] ‘it’s a dog’.

Apart from these fixed rules, pronunciation of /l/ varies considerably between speakers. Generally, /l/ can be realized as [l] in all other positions apart from word-initial and word-medial position following a consonant. Some speakers pronounce /l/ as [l] only syllable-finally, but as an alveolar trill [r] between /t/ and a vowel in the syllable-initial cluster /tl/, and as an alveolar flap [ɾ] in all other contexts, e.g. as second member of the syllable-initial consonant clusters /bl, kl, gl, sl, fl/ and between vowels.

Some speakers do not have [l] at all. They pronounce /l/ as [ɾ] in all positions with a certain tendency to have [r] in the syllable-initial cluster /tl/.

These speakers sometimes spell /t/ as <tr> when writing their language. Examples of the different pronunciations of the lateral glide /l/:

(2)	<i>dót</i>	/ ^{LH} lot/	[ⁿ dótʔ]			‘very’
	<i>dabáal</i>	/ ^{LH} laba ^s l/	[ⁿ dəβááʔl]	[ⁿ dəβááʔr]		‘ground’
	<i>klaa</i>	/ ^L kla ^s /	[kla ^s]	[kra ^s]		‘rot’
	<i>tle</i>	/ ^L tlɛ/	[tlɛ]	[trɛ]	[trɛ]	‘come’

There is one additional context – not covered by the rules given above – in which /l/ is pronounced [d], namely reduplication.³

(3)	<i>diadia</i>	/ ^L lialia/	[ⁿ djadja]	‘quickly’
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/l/ is the only phoneme in Mian which can form word-initial geminate clusters, namely /ll/:

(4)	<i>dli</i>	/ ^L lli/	[ⁿ dli]	[ⁿ dri]	‘dance (v.)’
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The phoneme /l/ also occurs as the second member of the syllable-initial consonant clusters /bl, tl, kl, gl, fl, sl/. None of the allophones of /l/ is pronounced as voiceless when preceded by a voiceless stop, e.g. /^Lkla^s/ [kla^s], but *[k^hla^s] ‘rot’.

2.1.1.5. Semivowels

/w/ is a voiced labial-velar glide. It is always pronounced as [w] and occurs in syllable-initial position.

(5)	<i>wan</i>	/ ^L wan/	[wan]	‘bird’
	<i>káawa</i>	/ ^{LH} ka ^s wa/	[q ^h a ^s wā]	‘steel axe’
	<i>faninwali</i>	/ ^L faninwali/	[faninwali]	‘(the) ancestors’

/j/ is a voiced palatal glide. It is always pronounced as [j] and appears syllable-initially. Orthographically, /j/ is rendered as <y>.

(6)	<i>yāi</i>	/ ^H jai/	[jāi]	‘wound’
	<i>yam</i>	/ ^L jam/	[jam]	‘ripe’
	<i>yeye</i>	/ ^L jɛjɛ/	[jɛjɛ]	‘no (interj.)’

Both semivowels have ambisyllabic status when they occur intervocally, provided that the preceding vowel is either /a/ or /o/:

- (7) *awém* /^{LH}awem/ [a-w-ém] ‘taboo’
ayam /^Lajam/ [a-j-am] ‘good’

2.1.2. Minimal pairs for consonants

The following minimal pairs illustrate phonemic contrasts between consonants. Note the importance for a minimal pair to have the same tone pattern on both words in order to be a genuine minimal pair. Pairs with words marked by different tone pattern are near-minimal pairs.

- (8) /m/-/b/ *máab* /^{LH}ma^sb/ [má^sp^h] ‘frog’
báab /^{LH}ba^sb/ [m^mbá^sp^h] ‘aunt’
máam /^{LH}ma^sm/ [má^sm] ‘mosquito’
máab /^{LH}ma^sb/ [má^sp^h] ‘frog’
máamobe /^{LH}ma^smobe/ [ma^smōβε] ‘it’s a mosquito’
máabobe /^{LH}ma^sbobe/ [ma^sβōβε] ‘it’s a frog’
- (9) /k/-/g/ *ki* /^Lki/ [k^hi] ‘align, read’
gi /^Lgi/ [g^oi] ‘laugh’
- (10) /g/-/g^w/ *gi* /^Lgi/ [g^oi] ‘laugh’
gwi /^Lg^wi/ [g^og^wi] ‘poison (v.)’
- (11) /k/-/k^w/ *keim* /^Lkeim/ [k^hεim] ‘open, obvious’
kweim /^Lk^wεim/ [k^wεim] ‘fever’
- (12) /m/-/h/ *máam* /^{LH}ma^sm/ [má^sm] ‘mosquito’
háam /^{LH}ha^sm/ [há^sm] ‘corpse’
- (13) /n/-/ŋ/ *neng* /^Lneŋ/ [neŋ] ‘younger sister’
ngen /^Lŋeŋ/ [ŋeŋ] ‘beg’
san /^Lsan/ [san] ‘seedling’
sāng /^Hsaŋ/ [sāŋ] ‘story’
- (14) /f/-/s/ *fanin* /^Lfanin/ [fanin] ‘ancestor’
sanin /^Lsanin/ [sanin] ‘(activity of) shooting’

		<i>mifim</i>	/ ^{LH} mifim/	[mifim]	‘sago palm’
		<i>misim</i>	/ ^L misim/	[misim]	‘for free’
(15)	/l/-t/-m/	<i>éil</i>	/ ^{LH} ɛil/	[éil]	‘pig’
		<i>éit</i>	/ ^{LH} ɛit/	[éit ^h]	‘penis’
		<i>éim</i>	/ ^{LH} ɛim/	[éim]	‘pandanus’
(16)	/l/-s/-m/	<i>al</i>	/ ^L al/	[al]	‘faeces’
		<i>as</i>	/ ^L as/	[as]	‘tree’
		<i>am</i>	/ ^L am/	[am]	‘house’
(17)	/w/-j/	<i>we</i>	/ ^L wɛ/	[wɛ]	‘sweep’
		<i>ye</i>	/ ^L jɛ/	[jɛ]	‘hit them’

2.1.3. Regular phonological processes for consonants

Subsets of oral stops are prone to processes of final devoicing, aspiration, and intervocalic lenition. The alveolar nasal /n/ is subject to homorganic nasal assimilation.

2.1.3.1. Final devoicing

Final devoicing applies exclusively to /b/ as it is the only voiced stop which occurs syllable-finally. Examples of syllable-final devoicing of /b/ are given below. Syllable boundaries are only marked by full stops where relevant:

(18)	<i>talib</i>	/ ^{LHL} talib/	[t ^h alîp ^h]	‘rafter’
	<i>haleb</i>	/ ^L halɛb/	[halɛp ^h]	‘wild boar’
	<i>hebmamsâb</i>	/ ^{LHL} hɛbmamsab/	[hɛp ^h .mamsâp ^h]	‘quickly’
	<i>fú^hb^hkenano</i>	/ ^{LHL} fubkɛnano/	[fup ^h .k ^h ɛnano]	‘I should cook for you’

2.1.3.2. Aspiration and withheld release

The voiceless stops /t/ and /k/ are always aspirated before vowels and diphthongs. /t/, /k/, and the voiceless allophone [p] of the bilabial stop /b/ are normally aspirated word-finally in connected speech. Release can be withheld, though this is typically a feature of word tokens uttered in isolation. Word-medially before consonant, release is generally withheld.

In the following examples of aspirated stops syllable boundaries are only indicated where relevant and alternative pronunciations are given where applicable:

(19)	<i>deib</i>	/ ^L leib/	[ⁿ dεip ^h]	[ⁿ dεip ^ˀ]	‘path’
	<i>funibta</i>	/ ^L funibta/	[funip ^ˀ .t ^h a]		‘they cooked and then ...’
	<i>dót</i>	/ ^{LH} lot/	[ⁿ dót ^h]	[ⁿ dót ^ˀ]	‘very’
	<i>tang</i>	/ ^L taŋ/	[t ^h aŋ]		‘smell’
	<i>hek</i>	/ ^L hεk/	[hεk ^h]	[hεk ^ˀ]	‘older brother’
	<i>káawa</i>	/ ^{LH} ka ^s wa/	[q ^h a ^s wā]		‘steel axe’
	<i>niniktól</i>	/ ^{LHL} niniktól/	[ninik ^ˀ .t ^h ól]		‘vine species’
	<i>skéim</i>	/ ^{LH} skeim/	[sk ^h éim]		‘far’

2.1.3.3. Word-final free variation of [p^h], [p^ˀ], [f], and [ϕ]

The phoneme /b/ has four allophones in free variation word-finally, a devoiced aspirated bilabial [p^h], a devoiced bilabial without release [p^ˀ], a voiceless labio-dental fricative [f], and a voiceless bilabial fricative [ϕ]. Choosing [f] or [ϕ] over [p^h] or [p^ˀ] is a speech feature of older speakers (aged 60+) and even with those speakers this does not occur consistently. Younger speakers consistently choose [p^h] or [p^ˀ].

(20)	<i>deib</i>	/ ^L leib/	[ⁿ dεip ^h]	[ⁿ dεip ^ˀ]	[ⁿ dεif]	[ⁿ dεiϕ]	‘path’
	<i>máab</i>	/ ^{LH} ma ^s b/	[má ^s p ^h]	[má ^s p ^ˀ]	[má ^s f]	[má ^s ϕ]	‘frog’
	<i>báab</i>	/ ^{LH} ba ^s b/	[^m bá ^s p ^h]	[^m bá ^s p ^ˀ]	[^m bá ^s f]	[^m bá ^s ϕ]	‘aunt’

A consequence of this analysis is that the allophone [f] is shared between the phonemes /b/ and /f/, albeit for some speakers only and in different environments.

2.1.3.4. Intervocalic lenition of /b/ and /k/

In fast speech, the velar stop /k/ is commonly lenited between vowels to a voiceless velar fricative [x] or even the voiced variant [ɣ]. Usually this phenomenon does not occur in careful speech. Similarly, /b/ is lenited to a voiced bilabial fricative [β] between vowels. /k/ is more resistant than /b/ to

intervocalic lenition, i.e. /k/ is lenited less often than /b/. Examples of intervocalic lenition of /k/ to [x] are:

(21)	<i>naka</i>	/ ^L naka/	[naxa]	‘man’
	<i>tekein</i>	/ ^L tɛkɛin/	[t ^h ɔxɛin]	‘knowledge’
	<i>mokók</i>	/ ^{LH} mokok/	[mɔxók ^h]	‘heel’
	<i>heke</i>	/ ^L hɛk=ɛ/	[hɛxɛ]	‘an/the older brother’
	<i>bukubsân</i>	/ ^{LHL} bukubsan/	[^m bɔxɔp ^h sân]	‘decorative beads’

Intervocalic lenition of /k/ never takes place before /i/, e.g. /^Libik=i/ ‘the Ibikmin (people)’ is always pronounced [iβik^hi], not *[iβixi]. Examples of intervocalic lenition of /b/ to [β] are:

(22)	<i>bubibe</i>	/ ^L bubibɛ/	[^m bʊβiβɛ]	‘I am planting’
	<i>ibâl</i>	/ ^{LHL} ibal/	[iβâl]	‘paper wasp’
	<i>maabu</i>	/ ^L ma ^a bu/	[ma ^a βu]	‘blowfly’
	<i>ifubobe</i>	/ ^L ifubobɛ/	[ifuβoβɛ]	‘she is serving food’

2.1.3.5. Homorganic nasal assimilation

Whenever the alveolar nasal /n/ precedes a stop with a different place of articulation, the nasal is assimilated to the stop in terms of the place of articulation. Examples of homorganic nasal assimilation are:

(23)	<i>gatanbobe</i>	/ ^L gatanbobɛ/	[ⁿ gat ^h amboβɛ]	‘it became dry’
	<i>genbibe</i>	/ ^L genbibɛ/	[ⁿ gembibɛ]	‘I am sick’
	<i>kinkan</i>	/ ^L kinkan/	[k ^h iŋk ^h an]	‘shaman’ ⁴

2.1.3.6. Optional schwa-insertion into consonant clusters

Optional schwa-insertion takes place in those consonant clusters which have /s/ as their first member and in the cluster /ll/. The following examples illustrate schwa-insertion:

(24)	<i>sbâl</i>	/ ^{LH} sbal/	[səbâl]	‘strong’
	<i>slub</i>	/ ^L slub/	[səlup ^h]	‘cockroach species’
	<i>smik</i>	/ ^{LH} smik/	[səmík ^h]	‘image’
	<i>skem</i>	/ ^L skɛm/	[sək ^h ɛm]	‘small knife’
	<i>snuk</i>	/ ^L snuk/	[sənuk ^h]	‘rat’
	<i>dli</i>	/ ^L dli/	[ⁿ dəli]	‘dance’

Schwa-insertion can trigger further phonological processes. When either /k/ or /b/ ends up in intervocalic position due to schwa-insertion, it is prone to intervocalic lenition (in fast speech):

- (25) [sk^hɛm] [sək^hɛm] [səxɛm] ‘knife’
 [sbál] [səbál] [səβál] ‘strong’

As intervocalic lenition of consonants only takes place in fast speech and schwa-insertion is non-obligatory, all three pronunciations are possible.

2.1.4. Assimilation with following alveolar nasal /n/

The bilabial stop /b/ undergoes place assimilation when followed by the alveolar nasal /n/. The practical orthography reflects this process. This only affects four items in the language, *-ûb-* ‘give (PFV)’ before the recipient suffix *-ne* ‘1SG.R’, *-êb* ‘take (PFV)’ (and all compounds involving *-êb*) before *-n* ‘SS.SEQ’, *tab* before *-n* ‘SS.SEQ’ in directly inflected directionals, and *fâb* ‘where, what’ in the interrogative verb *fatnà* ‘do what’.

In this process two rules apply: (i) final devoicing, i.e. /b/ > [p] and (ii) assimilation in terms of place of articulation, i.e. [p] > [t].

Examples of assimilation with a following alveolar nasal are:

- (26) *fu't`nenobe* /^{LHL}fubnɛnobɛ/ [fut`nɛnoβɛ] ‘she has cooked for me’
fatnàbebe /^{HL}fabnabɛbɛ/ [fāt`nāβɛβɛ] ‘What are you doing?’
tatnea /^Ltabnɛa/ [t^hat`nɛa] ‘he goes downriver and then he...’
debêtnoa /^{LHL}lɛbɛbnoa/ [ndəβēt`noa] ‘she took it with her and then she...’

2.2. Vowels

Mian has six vowel phonemes and six (rising) diphthongs, namely /i, ɛ, a, a^ɛ, o, u; ai, a^ɛi, a^ɛu, ɛi, au, ou/. The diphthongs are non-suspect because they all occur as nuclei in monosyllabic noun, adjective, and verb stems.

The present analysis assumes no length distinction (though see 2.3 below for further discussion of this point). Vowels and diphthongs behave identically as nuclei in syllables, which are the tone-bearing units in tone assignment. Both can function as a syllable nucleus and both can be assigned one tone. Diphthong identification is complicated by the fact that the rules of morpheme

concatenation often create vowel clusters whose status as single phonemes is doubtful. In this analysis, I accept as phonemic only diphthongs which occur (also) in lexical stems and do not only exist due to morpheme concatenation.

As a convention, tone is always marked on the first member of a diphthong in the examples, e.g. *éil* ‘pig’. In the rest of this grammar the term ‘vowel’ is always meant to include the diphthongs unless otherwise specified.

2.2.1. *Phonetic description and allophonic distribution of vowels*

/i/ is a high, front, unrounded vowel, which can form the nucleus of any syllable. It is pronounced [i].

/ɛ/ is a mid-low, front, unrounded vowel, which can form the nucleus of any syllable. It is pronounced as [ɛ]. In the practical orthography, /ɛ/ is rendered as <e>. In word-initial low-tone syllables, /ɛ/ is reduced to [ə].

(27) *tekein* /^Ltɛkein/ [t^həxɛin] ‘knowledge’

/a/ is a low, central vowel, which can form the nucleus of any syllable. It is pronounced as [a]. Some older speakers collapse the sequence /an/ into a nasalized [ã] when followed by /s/, as in /^Hans/ [ãs] ‘song’. In word-initial low-tone /Ca/ syllables, /a/ is reduced to [ə].

(28) *afál* /^{LH}afal/ [afál] ‘mucus’
taman /^Ltaman/ [təman] ‘valley’

/a^s/ is a low, central, pharyngealized vowel, which can form the nucleus of any syllable. It is generally longer than the non-pharyngealized /a/ and pronounced [a^s]. In the orthography, it is written <aa>. For a more detailed discussion of pharyngealization, see section 2.4.

/o/ is a mid-high, back, rounded vowel, which can form the nucleus of any syllable. It is pronounced as [o]. Some speakers collapse the sequence /on/ into a nasalized [õ] when followed by another consonant (so far only /s/ is attested), as in /^Lonsiobɛ/ [õsioβɛ] ‘they went’. In word-initial low-tone syllables and in any closed syllable with a voiceless stop or the velar nasal /ŋ/, /o/ is lowered to [ə].

(29) *omfâ* /^{LHL}omfa/ [ɔmfâ] ‘put’
mokók /^{LH}mokok/ [mɔxók^h] ‘heel’
dót /^{LH}lot/ [ndót^h] ‘very’
funoba /^Lfunoba/ [funoβa] ‘we cook and then...’
funobta /^Lfunobta/ [funɔp^ht^ha] ‘we cook and then...’

blong /^Lblɔŋ/ [blɔŋ] ‘pod, husk’

The phoneme /u/ is a high, back, rounded vowel, which can form the nucleus of any syllable. It is pronounced as [u]. In word-initial low-tone syllables, /u/ is lax to [ʊ].

(30) *kukub* /^Lkukub/ [k^hʊk^hup^h] ‘way, fashion’
bukubsân /^{LHL}bukubsan/ [m^hbʊxup^hsân] ‘decorative beads’

The rising diphthongs /ai, a^si, ei, ou, au, a^su/ are pronounced as [ai, a^si, ei, ou, au, a^su], respectively. The first four can appear as the nucleus of any syllable, while the last two are only found in syllables with an onset. There are no words which start in [au] or [a^su], whereas the other diphthongs all have word-initial exemplars: /^Hai/ ‘father’, /^La^si/ ‘water’, /^{LH}eim/ ‘pandanus’, and /^Houb/ ‘top of head’. The diphthong /ei/ is written <ei>.

2.2.2. Minimal and near-minimal pairs for Mian vowels

What was pointed out in the section on minimal and near-minimal pairs for consonants also applies to vowels: the importance for a pair to have the same tone pattern on both words in order to be a genuine minimal pair. Pairs with different tones are near-minimal pairs.

- (31) *ān* /^Han/ [ān] ‘arrow’
en /^Lɛn/ [ɛn] ‘older sister’
ōn /^Hon/ [ōn] ‘bone’
ūn /^Hun/ [ūn] ‘(bird) egg’
īn /^Hin/ [īn] ‘liver’
- (32) *tab* /^Ltab/ [t^hap^h] ‘downriver’
teb /^Ltɛb/ [t^hɛp^h] ‘need’
tobol /^Ltobol/ [t^hɔβol] ‘tree species’
tub /^Ltub/ [t^hup^h] ‘chest’
tib /^Ltib/ [t^hip^h] ‘shallow’
- (33) *yóum* /^{LH}joum/ [jóum] ‘clothing’
yam /^Ljam/ [jam] ‘ripe’
- (34) *eb* /^Lɛb/ [ɛp^h] ‘blowfly egg’
ōub /^Houb/ [ōup^h] ‘top centre of head’

- | | | | | |
|------|---------------|-------------------------------------|------------------------------------|---------------------|
| (35) | <i>klō</i> | / ^H klo/ | [klō] | ‘tinea’ |
| | <i>klōu</i> | / ^H klou/ | [klōu] | ‘fish species’ |
| (36) | <i>éim</i> | / ^{LH} εim/ | [éim] | ‘pandanus (taxon)’ |
| | <i>am</i> | / ^L am/ | [am] | ‘house’ |
| (37) | <i>deit</i> | / ^L lεit/ | [ⁿ deit ^h] | ‘nest’ |
| | <i>dót</i> | / ^{LH} lot/ | [ⁿ dót ^h] | ‘very’ |
| (38) | <i>daulam</i> | / ^L laulam/ | [ⁿ daulam] | ‘fly’ |
| | <i>dulam</i> | / ^L lulam/ | [ⁿ dulam] | ‘bird species’ |
| (39) | <i>ē</i> | / ^H ε/ | [ē] | ‘he’ |
| | <i>ō</i> | / ^H o/ | [ō] | ‘she’ |
| | <i>ī</i> | / ^H i/ | [ī] | ‘they’ |
| | <i>āi</i> | / ^H ai/ | [āi] | ‘father’ |
| | <i>aai</i> | / ^L a ^s i/ | [a ^s i] | ‘water’ |
| | <i>gáaum</i> | / ^{LH} ga ^s um/ | [gá ^s um] | ‘marsupial species’ |
| (40) | <i>al</i> | / ^L al/ | [al] | ‘faeces’ |
| | <i>aal</i> | / ^L a ^s l/ | [a ^s l] | ‘skin’ |

2.3. Vowel length

Although Mian vowels and diphthongs come in different lengths and there are some near-minimal pairs which suggest that length might indeed be contrastive, the question whether Mian has a phonemic length distinction in its vowels is not a straightforward one to answer. The problematic status of length in the vowel system is due to the fact that there are (so far) no minimal pairs which differ in length while bearing the same tone and having the same syllable structure and segmental context, whereas this is common in the neighbouring language Telefol (Healey 1964b: 8-12).

It is not entirely clear whether Smith and Weston (1974a) actually include a series of phonemically long vowels in their analysis. In their treatment of Mian phonemes, they do not explicitly posit a phonemic length distinction but speak of “lengthened” vowels instead, which carry two tones and are from 1½ to 2 times longer than “single” vowels (1974a: 6). All of these words show a rising pitch contour. “Lengthened” vowels are analysed as a sequence of two vowels which form two adjacent syllable nuclei (p. 14). This sounds as if there is no phonemic length contrast involved. However, they give two (near-) minimal pairs under the heading ‘Examples of Length Contrasts’ (p. 13).

Smith and Weston's analysis shifts the burden of explaining the differences in vowel length to syllabification. However, both auditory impression and the F_0 trace of words which they treat as having "lengthened", and thus heterosyllabic vowels clearly suggest a rising contour over one syllable, albeit one with a long vowel, instead of two level tones, each attached to one syllable. Furthermore, I find that syllables with contour tones are pronounced as a single syllable. There is no additional increase in intensity on the supposed second nucleus, which might point to an analysis of such words as disyllabic.

According to Smith and Weston (1974a: 14), the evidence for their analysis of "lengthened" vowels comes from the fact that Mian vowels and diphthongs have two varieties, one being about $1\frac{1}{2}$ to 2 times longer than the other one. This observation is – at least in a few instances – correct.⁵ Consider the difference in vowel length in the following two potential near-minimal length pairs. Vowel length value is the mean out of three tokens of each word uttered in isolation by a single speaker.

Table 2.2. Near-minimal length pairs

Phonemic representation	Phonetic representation	Vowel length (boldface) in ms	Gloss
/ ^{LH} k ^w εit/	[k ^w éit ^h]	190	'sugar cane'
/ ^{LH} εit/	[éit ^h]	260	'penis'
/ ^H mɛn/	[mɛ̃n]	185	'child'
/ ^{LH} mɛn/	[mɛ̃n]	250	'string bag'

These observable length differences can be explained – at least to a certain extent – by making reference to the interaction of vowel length with other suprasegmental phenomena, such as tone/pitch and syllable structure, and morphological processes, such as compounding and cliticization, which lead to polysyllabic shortening. This is what I have done in my thesis (Fedden 2007a). In the following, I sketch this account and its issues.

Smith and Weston's "lengthened" vowels become much shorter when additional material cliticizes to a (nominal) word, such as the articles =*e*, =*o*, and =*i* or the predicator =*o* (followed by the declarative clitic =*be*), or when a noun stem is compounded with another noun stem. In all of these cases the phonological word becomes at least disyllabic which leads to polysyllabic shortening (Lehiste 1972, Klatt 1976).

Table 2.3 gives some data for vowel length in bare noun stems and cliticized or compounded noun stems. The vowel length value is the middle out of two tokens of each word uttered in isolation by a single speaker.

Table 2.3. Syllable compression due to cliticization and compounding

Phonemic representation	Phonetic representation	Vowel length (boldface) in ms	Gloss	Process
$/^{LH}m\acute{e}n/$	[m \acute{e} n]	250	‘string bag’	
$/^{LH}m\acute{e}n=o=^Lb\acute{e}/$	[m \acute{e} .n \acute{o} . $\beta\acute{e}$]	155	‘it’s a string bag’	Cliticization
$/^Hm\acute{e}n/$	[m \acute{e} n]	185	‘child’	
$/^Hm\acute{e}n=o=^Lb\acute{e}/$	[m \acute{e} .n \acute{o} . $\beta\acute{e}$]	140	‘it’s a child’	Cliticization
$/^{LH}ba^s n/$	[m b \acute{a} s n]	270	‘jaw’	
$/^{LH}ba^s n-on/$	[m b \acute{a} s .n \acute{o} n]	165	‘jaw bone’	Compounding

The data in this table show that in certain contexts the vowels in $/^{LH}m\acute{e}n/$ ‘string bag’ and $/^Hm\acute{e}n/$ ‘child’ are very similar in length, namely 155 ms vs. 140 ms. The reason for this is that the tonal melody in $/^{LH}m\acute{e}n/$ ‘string bag’ does not show up as a contour when material cliticizes to the noun. In larger tonal domains the tonal melody is spread over the whole domain (see sections 2.8.3.1 and 2.8.3.2).

Therefore, Fedden (2007a) analyses the longer vowel in the uncliticized form $/^{LH}m\acute{e}n/$ ‘string bag’ to be a phonetic effect of the contour tone rather than to assume a length distinction or a syllabification into two syllables. Since contour tones, as opposed to level tones, take a certain time to be realized, the vowel under the tone is lengthened. Thus vowel length becomes a function of the tone (Weidert 1981: 66-68).

Compounding has a similar effect on tonal melodies and vowel length. The LH melody in $/^{LH}ba^s n/$ [m b \acute{a} s n] ‘jaw’ does not show up as a contour in the compound $/^{LH}ba^s n-on/$ [m b \acute{a} s .n \acute{o} n] ‘jaw bone’ due to the specific tone association rules involved here (see 2.8.2.3 and 2.8.3.3). Consequently, the vowel, i.e. the pharyngealized /a s /, is shortened.

The same holds for contexts in which tone is completely neutralized, i.e. when the tone pattern on two words becomes the same due to cliticization of the predicator or an article. In table 2.4, vowel length value is the middle out of two tokens of each word uttered in isolation by a single speaker.

Table 2.4 suggests that the (near-)minimal pairs $/^Lokok/$ vs. $/^{LH}mokok/$ and $/^Laf\acute{e}t/$ vs. $/^{LH}af\acute{e}t/$, at the phonemic level, do not contrast in length but in tone. This indicates that the difference in vowel length is functionally unimportant.

The phonetic lengthening of vowels is only conspicuous under rising contours, i.e. the LH melody. Monosyllabic words with a HL contour, on the other hand, do not show phonetic lengthening under the contour tone HL, e.g. $/^{HL}fab/$ ‘where’ (125ms) and $/^{HL}f\acute{e}/$ ‘carrion’ (155ms), each single tokens recorded in isolation.

Table 2.4. Vowel length and tone neutralization

Phonemic representation	Phonetic representation	Vowel length (boldface) in ms	Gloss
/ ^L okok/	[ɔ.xɔk ^h]	135	‘work’
/ ^L okok=o= ^L bε/	[ɔ.xɔ.xo.βε]	95	‘it’s work’
/ ^{LH} mokok/	[mɔ.xɔk ^h]	155	‘heel’
/ ^{LH} mokok=o= ^L bε/	[mɔ.xɔ.xō.βε]	100	‘it’s a heel’
/ ^L afet/	[a.fɛt ^h]	150	‘different’
/ ^L afet=o= ^L bε/	[a.fɛ.t ^h o.βε]	90	‘it’s different’
/ ^{LH} afet/	[a.fɛt ^h]	180	‘cleared of a taboo’
/ ^{LH} afet=o= ^L bε/	[a.fɛ.t ^h ō.βε]	90	‘it’s (been) cleared of a taboo’

Vowel length can be also systematically related to other phenomena apart from pitch. The role of pitch in vowel length does not explain why the vowel in /^Hmen/ ‘child’ is considerably longer (185 ms) than the vowel in the second syllable in /^Lajal/ ‘light’ (125 ms), as both have level tones, a high and a low one, respectively. Similarly, the length difference between /^{LH}εit/ ‘penis’ (260 ms) and /^{LH}k^wεit/ ‘sugar cane’ (185 ms) cannot be due to tone because both bear the same LH melody.

Some of these differences in length might be accounted for by relating them to straightforward differences in syllable configuration. Throughout the language, vowels in monosyllables are longer than vowels in syllables of disyllables. Similarly, vowels in onset-less or coda-less syllables are longer than vowels in syllables which have onsets or codas. It seems however less probable that the absence or the presence of an onset, as in the pair /^{LH}εit/ ‘penis’ (260 ms) vs. /^{LH}k^wεit/ ‘sugar cane’ (185 ms) can indeed account for a difference in duration of over 70ms.

The data and the discussion in this section might suggest there is evidence for a phonemic length distinction in Mian vowels. However, a systematic analysis of vowel length is impeded by the fact that there are no minimal length pairs and not many near-minimal length pairs. What’s worse, vowel length is generally subject to considerable variation between speakers (up to 60ms in some cases), and even between different tokens of the same word uttered by a single speaker (again up to 60 ms in some cases). This range of free length variation makes it hard to assign a given vowel to a discrete ‘long’ or ‘short’ phonemic category when genuine minimal pairs are absent, and near-minimal pairs are rare. Furthermore, at this stage, the data available for analysis are not sufficient to make any statistically valid generalizations about vowel length. For that, more tokens and especially more different speakers recording these tokens are needed.

Given these problems, the analysis presented in this grammar follows the one in Fedden (2007a) in not assuming a phonemic length contrast, leaving the question whether Mian has a phonemic length distinction in its vowels for future research on the language's phonetics and phonology.

2.4. Pharyngealization

Mian has a phonemic distinction between a pharyngealized /a^ʕ/ (spelled <aa>) and a plain /a/. I use a superscript pharyngeal 'ʕ' to indicate pharyngealization in phonemic and phonetic representations. Acoustically, pharyngealization is characterized by a lower frequency of the third and a higher frequency of the first formant (Ladefoged and Maddieson 1996: 307). The contrast of a low, long, glottalized or pharyngealized vowel against another /a/ is typical of Sepik languages and could be a diffused feature (William Foley, pers. comm.).

The pharyngealized /a^ʕ/ in Mian is considerably longer than the plain /a/, e.g. vowel length measurements for /^Lal/ [al] 'faeces' and /^La^ʕl/ [a^ʕl] 'skin' show a difference of 45 ms (average of two tokens each uttered in isolation by a single speaker).

As pharyngealization is only ever a feature of /a^ʕ/, but not of any of the other vowels, I assume that this feature belongs to this vowel and not to any of the surrounding consonants, which also occur with any of the other vowels without inducing pharyngealization of the vowel. Pharyngealized /a^ʕ/ is restricted to syllables that do not bear a level high tone (H).

2.4.1. Contrasts involving pharyngealization

Genuine minimal pairs involving a pharyngealized /a^ʕ/ are relatively rare, i.e. a pair of words in which the quality of the 'a' differs but the tone is the same. Examples are:

(41)	<i>al</i>	/ ^L al/	[al]	'faeces'
	<i>aal</i>	/ ^L a ^ʕ l/	[a ^ʕ l]	'skin'
	<i>atdab</i>	/ ^L atlab/	[atdap ^h]	'stick'
	<i>atdaab</i>	/ ^L atla ^ʕ b/	[atda ^ʕ p ^h]	'young branch'
	<i>ayal</i>	/ ^L ajal/	[a-j-al]	'light'
	<i>ayaal</i>	/ ^L aja ^ʕ l/	[a-j-a ^ʕ l]	'tree species'

There are more near-minimal pairs in which the pharyngealization contrast is accompanied by a contrast in tone or segmental environment. The following list gives a selection of near-minimal pairs involving pharyngealization:

(42)	<i>āi</i>	/ ^H ai/	[āi]	‘dad’
	<i>āai</i>	/ ^L a ^s i/	[a ^s i]	‘water’
	<i>āng</i>	/ ^H aŋ/	[āŋ]	‘batch, package’
	<i>áng</i>	/ ^{LH} a ^s ŋ/	[á ^s ŋ]	‘tree species’
	<i>mak</i>	/ ^L mak/	[mak ^h]	‘other’
	<i>daak</i>	/ ^L la ^s k/	[ⁿ da ^s k ^h]	‘down’

In several cases, pharyngealization is less conspicuous because in some speakers it is only discernible if the pitch of their voice is sufficiently low (e.g. lower than approximately 100 Hz for one speaker). Otherwise the vowel does not sound pharyngealized. Some examples are given in (43):

(43)	<i>am</i>	/ ^L am/	[am]	‘house’
	<i>ámam</i>	/ ^{LH} a ^s m/	[á ^s m]	‘pandanus species’
	<i>âam</i>	/ ^{LHL} a ^s m/	[a ^s m̃]	‘older sister’ ⁶
	<i>tang</i>	/ ^L taŋ/	[t ^h aŋ]	‘smell’
	<i>táang</i>	/ ^{LH} ta ^s ŋ/	[t ^h á ^s ŋ]	‘lighter’
	<i>dam</i>	/ ^L lam/	[ⁿ dam]	‘true’
	<i>dáam</i>	/ ^{LH} la ^s m/	[ⁿ dá ^s m]	‘fence’
	<i>dāng</i>	/ ^H laŋ/	[ⁿ dāŋ]	‘garden’
	<i>dáang</i>	/ ^{LH} la ^s ŋ/	[ⁿ dá ^s ŋ]	‘back’
	<i>ān</i>	/ ^H an/	[ān]	‘arrow’
	<i>áan</i>	/ ^{LH} a ^s n/	[á ^s n]	‘leaf, hair, feather’

Other words which fall into this category are: /^{LH}ba^sb/ ‘aunt’, /^{LH}ma^sb/ ‘frog’, /^{LH}ha^sm/ ‘corpse’, /^{LH}ga^sl/ ‘tree species’, and /^{LH}ta^sl/ ‘leash’.

Matters are complicated by the fact that in the majority of cases the use of pharyngealized /a^s/ is not consistent between speakers. There was one speaker who invariably pronounced an ‘a’ pharyngealized in the final syllable of disyllabic words with a falling melody. As none of the others did that, I will not consider the pharyngealization to be phonemic in this case, but to be a feature of this speaker’s idiolect. So this speaker would pronounce the following two words as indicated in the phonetic representations:

- (44) *ayàl* /^{HL}ajal/ [ā-j-à^sl] ‘paternal grandfather’
ibâl /^{LHL}ibal/ [iβà^sl] ‘paper wasp’

2.4.2. Creaky voice accompanying pharyngealized /a^s/

If pharyngealization and low tone come together in a syllable, the voice of some speakers becomes creaky, e.g. /^Lla^sk/ ‘down’ can be pronounced either [n^dda^sk^h] or [n^dɖa^sk^h]. As creaky voice – when it occurs – is always a result of pharyngealization, I will not treat it as a part of the phonological system of Mian but rather as an optional phonetic effect of pharyngealized /a^s/ under a low tone.

2.4.3. Pharyngealized /a^s/ and word accent

The pharyngealized /a^s/ makes itself felt in another crucial way, namely by attracting the accent in polysyllabic words. Regularly, disyllabic (and trisyllabic) nominals have the accent on the last stem syllable and the vowel of the initial syllable is reduced. However, in a few nouns (and one adjective) the accent, to which the tonal melody is assigned, is placed on the initial syllable. All of these have a pharyngealized /a^s/ as the nucleus of the initial syllable:

- (45) *káawa* /^{LH}ka^swa/ [q^ha^swā] ‘steel axe’
ngáamein /^{LH}ŋa^smēin/ [ŋa^smēin] ‘yellow’
áala /^{LH}a^sla/ [a^slā] ‘lie (plural subject)’

This also applies to transparent noun-noun compounds, e.g.:

- (46) *áandal* /^{LH}a^sn-lal/ [a^sndāl] ‘river bank’
báanon /^{LH}ba^sn-on/ [^mba^snōn] ‘jaw bone’

Apart from the contrastive function given in 2.4.1 above, the special role that pharyngealized /a^s/ plays in accent placement corroborates my assumption that pharyngealization is important in the phonological system of Mian (See 2.8.2.3).

2.5. Phonologically conditioned allomorphy

There are several morphemes, both stems and affixes, which show some phonologically conditioned allomorphy. The alternations of the classificatory prefixes and their interaction with the verb stems *-fā* ‘put’ and *-fāa* ‘lift’ are more involved and are treated in detail in chapter 5.

2.5.1. The existential verb *bi*

The imperfective stem of the existential verb *bi* is realized as *bl* when followed by /i/, e.g. *biebe* [*bi-Ø-e=be*; stay.IPFV-IPFV-3SG.M.SBJ=DECL] ‘he stays’, but *bliobe* [*bl-Ø-io=be*; stay.IPFV-IPFV-2/3PL.AN.SBJ=DECL] ‘you (PL)/they stay’.

2.5.2. The verb *-lò* ‘hit, kill’

This verb is realized as *-l* before any vowel. This specific context arises when the verb is compounded with a vowel-initial second stem (47) or when followed by a vowel initial subject suffix (48). The lexical tone HL on *-lò* is deleted in this context:

- (47) *no=i* *ya-l-ēb*
 marsupial=PL.AN PL.AN.O-kill.PFV-take.PFV

tl-Ø-e=i
 come.PFV-REAL-3SG.M.SBJ=PL.AN
 ‘the marsupials he has killed and brought’ [Crows]

- (48) *yē* *ya-l-Ø-io=be*
 there PL.AN.O-kill.PFV-REAL-2/3PL.AN.SBJ=DECL
 ‘there they killed them’ [Mianmin and Telefomin history]

2.5.3. The article =i ‘Animate plural’

The clitic article =i is realized as =ei after a word ending in a high vowel /i/ or /u/, e.g. *snābi* ‘crocodile’ and *snābi=ei* ‘(the) crocodiles’; *umasou* ‘umasou fish (species)’ and *umasou=ei* ‘(the) umasou fish (PL)’.

2.5.4. *The subject suffixes -i '1SG.SBJ' and -ib(o) '2/3PL.AN.SBJ'*

The subject suffixes which begin in /i/, -i 'first singular subject' and -ib(o) 'second/third person plural animate subject', are realized as -ei and -eib(o), respectively, whenever they attach to a stem ending in a high vowel /i/ or /u/, such as *ki* 'align, read' or *fu* 'cook'. Thus, the correct forms are *kieibiobe* (49) and *fueibbiobe* (50):

- (49) *ki-Ø-ei-bio=be*
 read-REAL-1SG.SBJ-GPST=DECL
 'I read (in the past).'
- (50) *fu-Ø-eib-bio=be*
 cook-REAL-2/3PL.AN.SBJ-GPST=DECL
 'You(PL)/they cooked.'

2.5.5. *The subject suffix -o '3SG.F.SBJ'*

The subject suffix -o '3SG.F.SBJ' is realized as -u when followed by /o/. An example is provided in (51):

- (51) *Afueiwok=o Dimobib=wāt daa-n-o=a*
 PN=SG.F PN=across dwell.PFV-SEQ-3SG.F.SBJ=MED
- te-s-u=o*
 come.PFV-RPST-3SG.F.SBJ=SG.F
 'Afueiwok, who dwelled across in Dimobib and came (a long time ago)' [Afueiwok]

2.5.6. *-bio 'General past'*

The general past suffix -bio is realized as -bu when followed by any vowel, which happens, for example, before the medial verb clitic particle /=a/:

- (52) *Yapsi ōlo=sa yoma-n-e-bu=a*
 PN DEM.PROX.N2=too beget.PFV-REAL-3SG.M.SBJ-GPST=MED
 'he had begotten (children) (in) this (place) Yapsiei too and then he...'
 [Dimosson]

2.5.7. -so 'Hesternal past'

The hesternal past suffix *-so* is realized as *-su* if followed by a vowel:

- (53) *Anafû=o om-fâ-Ø-e-su=o*
 Anafu=N2 3SG.F_CL.O-put.PFV-REAL-3SG.M.SBJ-HPST=N2
 'the Anafu arrow, which he had put down (there) yesterday'
 [Danenok]

2.5.8. =a 'Question' and =e '(Content) Question'

The illocutionary clitic =a 'Question' is realized as =*ya* after /a/ or /a^s/, for example:

- (54) *naka=ya?*
 man=Q
 'Is it a man?'

The illocutionary clitic =e '(Content) Question' is realized as =*ne* after vowel, for example:

- (55) *fâb bi-Ø-e=ne?*
 where be.IPFV-IPFV-3SG.M.SBJ=CQ
 'Where is he?'

2.6. Phonotactics

2.6.1. Syllable structure

Syllable structure can be represented as follows: (C₁)(C₂)V(C₃). This means that Mian allows the following six syllable types: V, CV, VC, CVC, CCV, and CCVC. Apart from these regular patterns, there is the structure VCC, which is attested in only one native word so far, /^Hans/ 'song'. The tendency of some speakers to nasalize the vowel and pronounce this word as [ã̃s] indicates that this syllable type is highly uncommon and therefore readily transformed into the regular VC pattern. CVCC syllable structure is attested in a limited number of Tok Pisin loans, e.g. /^{HL}boks/ 'box', though often pronounced [bõkis] with an epenthetic [i], and /^Ltons/ 'tongs', though sometimes pronounced [t^hõ̃s] with a nasalized vowel by older speakers.

In the following examples of attested syllable structures, syllable breaks are marked with a full stop. Examples of V-syllables are:

- (56) \bar{e} /^Hε/ [ε̄] ‘he’
 \bar{ai} /^Hai/ [āi] ‘dad’

The C₁ onset position can accommodate any consonant from the inventory when directly followed by a vowel.

- (57) $n\bar{e}$ /^Hnε/ [nε̄] ‘I’
 $y\bar{ai}$ /^Hjai/ [jāi] ‘wound’
 $biobe$ /^Lbiobe/ [ᵐbi.o.βε] ‘she is (there)’
 $yeye$ /^Ljεjε/ [jε.jε] ‘no (interj.)’
 $tof\hat{a}namabebe$ /^{LHL}tofanamabeβε/ [t^hɔ̄.fā.nə.ma.βε.βε] ‘he will put down a LONG object’

The C₂ onset position is only relevant in consonant clusters and is hence discussed in the next section. The C₃ coda position is slightly more restricted. Only /b, t, k, m, n, ŋ, s, l/ can occur in this position, but not /g, f, h/.

- (58) \bar{on} /^Hon/ [ōn] ‘bone’
 as /^Las/ [as] ‘tree’
 $aang$ /^La^sŋ/ [a^sŋ] ‘tree species’
 $bokbok$ /^Lbokbok/ [bɔk^ˀ.bɔk^h] ‘boil, bubble (ideophone)’
 fal /^Lfal/ [fal] ‘leaf oven’
 $\acute{e}il$ /^{LH}εil/ [éil] ‘pig’
 $tatnea$ /^Ltabnεa/ [tat^ˀ.nε.a] ‘he went downriver and then...’
 $m\acute{a}am$ /^{LH}ma^sm/ [má^sm] ‘mosquito’

The semivowels /w/ and /j/ have ambisyllabic status when they occur intervocalically, as long as the preceding vowel is either /a/ or /o/. Examples of ambisyllabic glides are:

- (59) $awém$ /^{LH}awεm/ [a-w-ém] ‘taboo’
 $owénsiba$ /^{LHL}owensiba/ [o-w-ēn.si.βa] ‘they give it to her’
 $ayam$ /^Lajam/ [a-j-am] ‘good’
 $oyénsiba$ /^{LHL}oyensiba/ [o-j-ēn.si.βa] ‘they give it to us/you/them’

2.6.2. Syllable-initial consonant clusters

Syllable-initial consonant clusters in syllables of the type C_1C_2V and $C_1C_2VC_3$ are more restricted with respect to which consonants can appear in the C_1 and C_2 positions, namely /b, t, k, g, l, s, f/ in C_1 position and /b, l, m, k, n/ in C_2 position.

Far from all logically possible combinations are attested. The rule is that /s/ in C_1 position can precede all consonants which are allowed in the C_2 position and /l/ in C_2 position can follow a proper subset of the consonants which appear in C_1 position. Table 2.5 lists all possible combinations. Illicit combinations are marked with an asterisk.

Table 2.5. Permissible syllable-initial consonant clusters

		C ₁						
		b	t	k	g	l	f	s
C ₂	b	*	*	*	*	*	*	sb
	k	*	*	*	*	*	*	sk
	m	*	*	*	*	*	*	sm
	n	*	*	*	*	*	*	sn
	l	bl	tl	kl	gl	ll	fl	sl

Examples of permissible syllable-initial consonant clusters:

(60)	<i>blibe</i>	/ ^L blibe/	[^m bli.βɛ]	‘I stay’
	<i>tlebe</i>	/ ^L tlebe/	[tle.βɛ]	‘he has come’
	<i>klâ</i>	/ ^{LHL} kla/	[klâ]	‘properly’
	<i>glaglâ</i>	/ ^{LH} glagla/	[^{ɔ̃} gla.glâ]	‘between’
	<i>dli</i>	/ ^L lli/	[ⁿ dli]	‘dance’
	<i>sbâl</i>	/ ^{LH} sbal/	[sbâl]	‘strong’
	<i>slub</i>	/ ^L slub/	[slup ^h]	‘cockroach species’
	<i>smík</i>	/ ^{LH} smik/	[smík ^h]	‘image’
	<i>skem</i>	/ ^L skem/	[sk ^h ɛm]	‘knife’
	<i>snuk</i>	/ ^L snuk/	[snuk ^h]	‘rat’
	<i>flɛlɛŋ</i>	/ ^L flɛlɛŋ/	[flɛlɛŋ]	‘light’

Mian disfavors consonant clusters. Some of the those that do exist are often – but not necessarily – broken up by an epenthetic schwa, e.g. *sbâl* /^{LH}sbal/ [səbâl] ‘strong’. Refer to section 2.1.3.6 for more examples.

In fast(er) speech, most vowel clusters (see 2.6.4 below) are dissolved, giving rise to additional syllable-initial consonant clusters with /b, t, k, g, l, s, f, m, n/ in C_1 position and a glide /j, w/ in C_2 position (table 2.6). Examples can be found in the section on vowel clusters below.

Table 2.6. Permissible additional syllable-initial consonant clusters in fast(er) speech

		C ₂									
		b	t	k	g	l	s	f	m	n	
C ₁	w	bw	tw	*	*	lw	sw	fw	mw	nw	
	j	bj	tj	kj	gj	lj	sj	fj	mj	nj	

2.6.3. Heterosyllabic consonant clusters

Heterosyllabic /b.b/-clusters are always pronounced [Vp'.bV]:

- (61) *ibbitin* /^{LHL}ibbitin/ [ip'.bi.tʰɪn] 'dust'
funibbabe /^Lfunibbabe/ [fu.nip'.ba.βɛ] 'they didn't cook'

Heterosyllabic /b.b/-clusters are restricted to non-last syllable boundaries (also see 8.5.2 on subject suffix allomorphs), thus **funebbe*, i.e. **fu-n-eb=be* [cook-REAL-2SG.SBJ=DECL], instead *fu-n-ebo=be* or *fu-n-eo=be*, both [cook-REAL-2SG.SBJ=DECL] 'you cooked'.

In all other cases, like-consonant clusters which might arise through morpheme concatenation are fused into a single consonant, e.g.: *om-meki-n-e=be* [3SG.F.CL.O-hang_up-REAL-3SG.M.SBJ=DECL] 'he hung an F-class object up' is pronounced [ɔ.mɛ.kʰi.nɛ.βɛ].

2.6.4. Vowel clusters

Mian has a plethora of different vowel clusters, most of which appear 'post-morphologically' due to morpheme concatenation. Like vowel clusters are not permitted. In some cases, like vowels are fused into a single vowel of normal length, sometimes allomorphy is triggered.

Unlike the diphthongs, which are only rising, vowel clusters can be centring. Vowel clusters which result from morpheme concatenation are always heterosyllabic in careful speech. Table 2.7 sets out all permissible heterosyllabic vowel clusters. Cells marked with an asterisk are not permissible. In two cases allomorphy is triggered (see below).

A few selected examples are given below. The vowel clusters appear in boldface:

- (62) ***biebe*** /^Lbiebe/ [ᵐbi.ɛ.βɛ] 'he is there'
Mian /^Lmian/ [mi.an] 'Mian'
daanea /^Lla^snea/ [ᵐda^s.nɛ.a] 'he put'

<i>nakaobe</i>	/ ^l nakaobe/	[na.xa.o.βε]	‘it’s a man’
<i>kesoa</i>	/ ^l kεsoa/	[k ^h ε.so.a]	‘because’
<i>fualin</i>	/ ^l fualin/	[fu.a.lin]	‘wash, bathe (IPFV VN)’
<i>daaota</i>	/ ^l la ^s ota/	[ⁿ da ^s .o.t ^h a]	‘she put and then someone else ...’

Table 2.7. Permissible vowel clusters

		V ₂					
		i	ε	a	o	u	a ^s
V ₁	i	allomorphy	yes	yes	yes	*	yes
	ε	yes	*	yes	yes	*	*
	a	yes	yes	*	yes	yes	*
	o	yes	yes	yes	*	yes	*
	u	allomorphy	yes	yes	yes	*	yes
	a ^s	yes	yes	*	yes	yes	*

In two cases, allomorphy is triggered to avoid heterosyllabic */i.i/ or */u.i/ sequences, e.g. the subject suffixes which begin in /i/, these are *-i* ‘first singular subject’ and *-ib(o)* ‘second/third person plural animate subject’, are realized as *-ei* and *-eib(o)*, respectively, if they attach to a stem ending in a high vowel, such as *ki* ‘align, read’ or *fu* ‘cook’. Thus, *kieibiobe* ‘I read’ and *fueibbiobe* ‘you(PL)/they cooked’. Similarly, the animate plural article =*i* is realized as =*ei* after /i/ or /u/, e.g. /^Hsnabi/ ‘crocodile’ and /^Hsnabi=*ei*/ ‘(the) crocodiles’; /^lumasou/ ‘fish species’ and /umasou=*ei*/ ‘(the) umasou fish’.

In fast(er) speech, high and mid vowels as first members of vowel clusters, that is all vowels except /a/ and /a^s/, lose their syllabicity and become glides.

(63)	<i>Mian</i>	/ ^l mian/	[mjən]	‘Mian’
	<i>daanea</i>	/ ^l la ^s nεa/	[ⁿ da ^s .nja]	‘he put’
	<i>kesoa</i>	/ ^l kεsoa/	[k ^h ε.swa]	‘because’
	<i>fualin</i>	/ ^l fualin/	[fwa.lin]	‘wash, bathe (IPFV VN)’

2.7. Vowel harmony

Mian has some limited occurrences of vowel harmony. Harmony in verbs is only regressive. Two cases can be distinguished: (a) harmonizing vowel in the classificatory prefixes /Vb/ and /tVb/, which classify a noun according to certain salient characteristics of its referent, and (b) harmonizing vowel in the modal suffix /Vm/ ‘deontic’. Vowel harmony in the bound pronouns of the ‘alone’-series is always progressive.

2.7.1. In classificatory prefixes

The vowel in the classificatory prefixes ‘singular M-class’ and ‘singular long’ harmonizes with the vowel in the following syllable. For morphological and semantic details on the classificatory prefixes, see chapter 5.

Within this type of vowel harmony, two subtypes can be distinguished depending on whether either classificatory prefix is followed by an overt verb stem or the zero root ‘transfer’, so that the classificatory prefix is directly followed by a suffix. In the first case only stem vowel /ε/ triggers vowel harmony and obligatorily does so. Compare (64) and (65):

- (64) *do-fâ-Ø-i-o=be*
 3SG.M_CL.O-give_birth.PFV-REAL-1SG.SBJ-EP=DECL
 ‘I have given birth to him.’
- (65) *deb-êb* *un-Ø-e=be*
 3SG.M_CL.O-take.PFV go.PFV-REAL-3SG.M.SBJ=DECL
 ‘He carried him away.’

In the case of the zero root ‘transfer’, the classificatory prefix is directly followed by a verbal suffix since the verb stem is phonologically null. In this case vowel harmony in classificatory prefixes is prompted by the next vowel in the suffix, for example, the subject marker (66) or the irrealis suffix (67). Vowel harmony is only triggered by the vowels /i/ and /a^h/. This type of vowel harmony is optional, depending on speech tempo and speaker preference:

- (66) *naka=e* *dob-Ø^h-Ø-i=be*
naka=e *dib-Ø^h-Ø-i=be*
 man=SG.M 3SG.M-CL.O-take.PFV-REAL-1.SG.SBJ=DECL
 ‘I have taken a husband.’
- (67) *geim=e* *tob-Ø^h-aamab-i-be*
geim=e *tab-Ø^h-aamab-i-be*
 arrow=SG.N1 3SG.LONG.O-take.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will take the arrow.’

2.7.2. In the modal suffix /Vm/ ‘Deontic’

The vowel in the deontic suffix /Vm/ has the same quality as the vowel in the subject marker, which always follows the deontic suffix, e.g.:

- (68) \bar{i} *imen=o*
 3PL.AN taro=PL.N1

nini-n-im-ibo=be
 scrape_taro-AUX.PFV-DEONT-2/3PL.AN.SBJ=DECL
 ‘They should/ought to scrape taro.’

Table 2.8 relates vowels in the subject suffixes to vowel harmony in the deontic suffix.

Table 2.8. Vowel harmony in forms of the deontic mood

V	Subject markers	Deontic mood	Gloss
/i/	-i ‘1SG’	<i>nininimibe</i>	‘I should scrape’
	-ib ‘2/3PL.AN’	<i>nininimibobe</i>	‘You(PL)/they should scrape’
/ɛ/	-e ‘3SG.M’/‘3SG.N1’	<i>nininemebe</i>	‘He should scrape’
	-eb ‘2SG’	<i>nininemebobe</i>	‘You should scrape’
/o/	-o ‘3SG.F’/‘3PL.N1’/‘N2’	<i>nininomobe</i>	‘She should scrape’
	-ob ‘1PL.AN’	<i>nininomobobe</i>	‘We should scrape’

2.7.3. In the bound pronouns of the ‘alone’-series

Vowel harmony in the pronouns of the ‘alone’-series is progressive. The ‘alone’ series of pronouns is derived from the ‘simple’ series with the help of /IV/, which is suffixed to the (C)V-forms, e.g. *nē-le-* ‘I alone’, *ē-le-* ‘he alone’, but infixes into the (C)Vb-forms, e.g. *kē<le>b* ‘you (M) alone’, *ō<lo>b* ‘you (F) alone’.

The forms and semantics of the ‘alone’-series of pronouns are described in 3.7.3.

2.8. Tone

Mian is a word tone language (Donohue 1997, Leben 1973), which means that the domain in which different tonal melodies operate is the prosodic word as a whole. In word tone languages, a limited number of tone patterns are assigned to words, resulting in a few tonal melodies which spread over their respective tonal domains, e.g. entire mono- or polysyllabic words including compounds, with their affixes and possibly any encliticized material. Both the set of tone melodies and their realization rules must be specified for individual languages. Word tone systems are opposed to syllable tone systems, in which each syllable can bear any of the tones specified in the language’s inventory of

tonal melodies. An example of such an extreme type is Sikaritai (Donohue 1997), but in fact syllable tone systems often have phonotactic restrictions in place which disallow certain tones on certain syllables.

Word tone is a common suprasegmental phenomenon in Papuan languages (mainly but not exclusively of the TNG family). Papuan languages with a word tone system are the TNG languages Kairi (Newman and Petterson 1990), Kewa (Franklin 1971), and Kuman (Hardie 2003), and the non-TNG Skou languages (Donohue 2003).

2.8.1. Introduction

As my analysis of the tonal system of Mian is decidedly different from Smith and Weston's (1974a: 12-13, 25-28) approach, a few words about their work are in order to orient the reader. Smith and Weston implicitly analyse Mian as a syllable tone language with the restriction that contour tones are only ever allowed on the final syllable of a word. Their treatment of the tonal phonology includes indication of tones in phonemic and phonetic representations for about 200 words (mainly nouns and adjectives). Further, there is a list of a few, mainly near-minimal, tone pairs which lead them to establish four phonemic tones, namely low, high, rising, and falling. The paper ends with a short text of nine lines in which tonal specifications are included. In their analysis, each vowel is a tone-bearing unit and is permitted to bear any one of the phonemic tones. Recall from the section on vowel length (2.3) that Smith and Weston treat long vowels as nuclei of two different adjacent syllables, so long vowels effectively bear two tones. Smith and Weston (1974a) only indicate tone in phonemic and phonetic representations, not in their orthography, so none of their other publications on the Mian language, their translation of the New Testament included, have tone specifications.

There are two major problems with Smith and Weston's analysis of Mian as a syllable tone language.

First, only a few of the logically possible tonal melodies occur on words with one to three syllables. If a language that distinguishes four melodies was a syllable tone language, the logically possible number of tone patterns would be 4 for monosyllables, 16 for disyllables, and 64 for trisyllables. Even with the restriction that contour tones can only appear on final syllables, the logically possible number of tonal melodies by far exceeds the number of actually attested patterns. We only need five melodies to account for the tonal patterns on mono-, di- and trisyllables, namely L, H, LH, LHL, and HL.

Second, the Smith and Weston analysis misses the important generalization that the same tonal melody is found in /^Lam/ [am] 'house' and /^Libal/ [iβal] 'dust', and likewise in /^{LH}men/ [mén] 'string bag' and /^{LH}ninin/ [ninín] 'name'.

The tonal melody in the first pair is low (L), in the second rising (LH), the only difference being that the domain over which the tone is spread in the second member of each pair is a disyllabic word instead of a monosyllabic one.

In the following, I present my own analysis of Mian tone which tries to address the two issues raised here, using the autosegmental approach to tone that has been developed in the last two decades (see Leben 1973, Hyman 1978, Goldsmith 1990, Donohue 1997, Donohue 2003, Gussenhoven 2004). In autosegmental phonology, suprasegmental features like tone, i.e. features which behave independently of single segments, are taken out of the traditional feature matrix characteristic of an SPE-type generative phonology approach and put on a separate tier which is autonomous from the segmental tier.

In nouns and adjectives the function of tones is exclusively to distinguish lexical meaning. In addition to this, verbs use tonal contrasts to mark many (but not all) forms of the non-hodiernal past, where the subject marker bears a high tone (see 2.8.5).

There is a total of five tonal melodies: L, H, LH, LHL, and HL. Words are lexically specified for one tonal melody. Stems can be unaccented or accented. The former are either all L or all H, the latter have an accent which indicates where a complex tonal melody, i.e. LH, LHL, or HL, is to be inserted. The accent is the ‘anchor point’ for the melody (Hyman 1978, Donohue 2003, Gussenhoven 2004).

The tonal melodies L, H, and LH are very common in nouns and adjectives, LHL and HL are quite rare. All tonal melodies occur on monosyllabic and disyllabic nominal words. HL is rare in monosyllabic native Mian nouns (and unattested in adjectives). An example is ^{/HL}fɛ/ [fɛː] ‘carrion’. In monosyllabic Tok Pisin loans HL is quite common, e.g. ^{/HL}su/ [sù] ‘shoe’ and ^{/HL}has/ [hàs] ‘hat’. HL occurs occasionally in disyllabic nouns, e.g. ^{/HL}usan/ [ūsàn] ‘tail’ and ^{/HL}mukuj/ [mūk^hùŋ] ‘nose’.

Verbs choose their tonal melody from a subset of the inventory available to all other word classes, namely L, LHL, and HL. While LHL and HL are rare in non-verb words, they are very common in verbs. H and LH, on the other hand, are common in non-verb words but unattested in verbs.

The tonal domain in verbs is generally larger as inflected verbs can easily be five and more syllables long, whereas non-verb words are mainly mono- or disyllabic.

Regular accent placement for all stems is on the last stem syllable. Both nominals and verbs show instances of accent placement which deviate from this rule. Disyllabic nominals with a pharyngealized /a^s/ as the nucleus of the first syllable, e.g. ^{/LH}|ka^swa/ ‘steel axe’, have the accent on the first syllable. Accented verbs fall into two classes: (i) stem accented, e.g. ^{/LHL}hala/ ‘break

(PFV)', and (ii) off-stem accented ones, e.g. /^{LHL}lowon/ 'eat (PFV)'. Stem accented verbs always have the accent on the last stem syllable, whereas in off-stem accented verbs the accent is shifted to the next syllable to the right of the stem, if (and only if) the verb stem occurs without any suffixal morphology, in which case the inflection point regularly falls on the final stem syllable. Deviant accent placement will be described in detail and illustrated with example derivations in sections 2.8.2.3 (for non-verb words) and 2.8.4.4. (for verbs).

2.8.2. Tonal phonology of nouns and adjectives

As Mian nouns and adjectives on average constitute smaller tonal domains, I will first describe tone in non-verb words and then move on to the suprasegmentals of the verb.

Minimal/near-minimal tone pairs for monosyllables and disyllables are given in tables 2.9 and 2.10. The monosyllable /^{LHL}a^sm/ [a^sm̩] 'older sister' behaves exceptionally with respect to tone assignment (see 2.8.2.1).

Table 2.9. Tonal minimal pairs in monosyllables

Tonal melody	Phonemic	Phonetic	Meaning
H	/ ^H an/	[ãn]	'arrow'
L	/ ^L am/	[am]	'house'
LH	/ ^{LH} a ^s m/	[á ^s m]	'pandanus species'
LHL	/ ^{LHL} a ^s m/	[a ^s m̩]	'older sister'
H	/ ^H men/	[mēn]	'child'
LH	/ ^{LH} men/	[mén]	'string bag'
HL	/ ^{HL} fɛ/	[fɛ̃]	'carrion'

Table 2.10. Tonal minimal pairs in disyllables

Tonal melody	Phonemic	Phonetic	Meaning
H	/ ^H seku/	[sē.k ^h ū]	'bush knife'
L	/ ^L afɛt/	[a.fɛt ^h]	'different'
LH	/ ^{LH} afɛt/	[a.fɛt ^h]	'cleared of a taboo'
L	/ ^L ibal/	[i.βal]	'dust'
LHL	/ ^{LHL} ibal/	[i.βàl]	'paper wasp'
LH	/ ^{LH} usa ^s n/	[u.sá ^s n]	'vomit (N)'
HL	/ ^{HL} usan/	[ū.sàn]	'tail'

To account for the tonal phonological processes in Mian, the tonal system is specified in the following way:

- 1) The inventory of tonal melodies consists of the melodies L, H, LH, LHL, and HL.
- 2) Stems can be either unaccented or accented. The former are either all-low or all-high, i.e. the tones L or H are simply spread over the whole word. The latter are lexically specified for (i) one tonal melody and (ii) an accent (marked * in the derivations below) to which the melody attaches. The accent regularly falls on the final stem syllable.
- 3) Tone-bearing units (TBUs): Syllables are tone-bearing units.
- 4) Maximum number of tones per syllable: Every TBU is entitled to bear exactly one tone out of a tonal melody (Goldsmith 1990: 167). However, a TBU in a word-final syllable is allowed to have two or in rare cases even three tones. This situation arises when leftover tones at the right edge of the word are dumped onto the final syllable (cf. tone ‘dumping’ under tone assignment rule 5b below) or when the LHL melody is associated with a monosyllabic word. Hence, under these circumstances, a word-final TBU may end up bearing more than one tone.
- 5) Rules for tone assignment
 - a) Tone association: The *last but one* tone in a tonal melody is associated with the TBU in the accented syllable. Having established this first association line, all remaining unassociated tones and vowels are automatically associated in a one-to-one fashion, radiating outward from the first association line (Goldsmith 1990: 14).
 - b) Tone dumping: Any unassociated tone at the right edge of the word is dumped onto the last syllable. Dumping makes sure that there are no leftover tones at the right edge of the prosodic word. Due to this rule, contour melodies are created.
 - c) Spreading rules: Once all tones are associated with TBUs in a one-to-one fashion, the leftmost and rightmost tones in a tonal melody are spread over to and associated with any leftover vowels. Spreading occurs in both directions. Spreading only applies to single tones at the edge of a melody not to the whole contour. Many tonal melodies are sequences of L and H tones rather than unitary tonemes.

The order of rule application is not arbitrary. The rules (a-c) specified under 5 must be applied in exactly that order to yield valid results, that is first all tones in the melody must be associated, then any leftover tones are dumped on the final syllable, finally any leftover TBUs are supplied with a tone through spreading.

2.8.2.1. *Tone association in monosyllables*

The following diagrams illustrate how the formalism works for monosyllabic nouns and adjectives. All of the following derivations are headed by the underlying phonemic representation, followed by the English gloss. The segmental tier gives phonemic representations. The pronunciation of the word is given last. For selected words waveforms and fundamental frequencies are given as well.

Note that /^Lam/ ‘house’, /^{LH}a^sm/ ‘pandanus species’, and /^{LHL}a^sm/ ‘older sister’ constitute a (near-)minimal tone triplet. In (69) and (70), association involves a straightforward linking of L or H, respectively, to the (only) TBU, namely /a/. After this, both the tone and the TBU are saturated, that is there are no unassociated tones or syllables left.

(69) /^Lam/ ‘house’

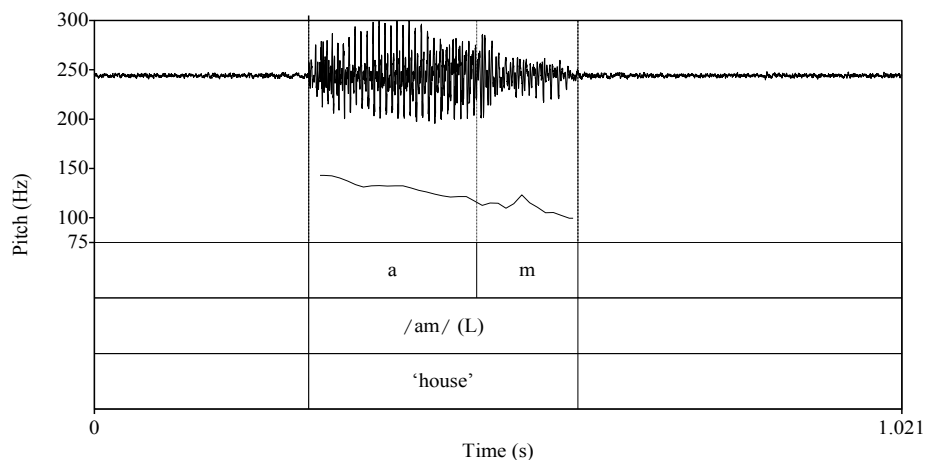
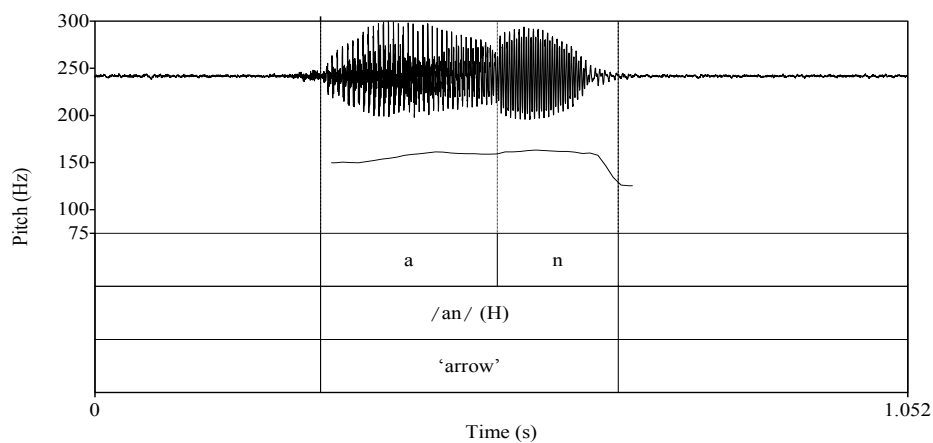
L		L
am	→	am

[am] ‘house’

(70) /^Han/ ‘arrow’

H		H
an	→	an

[ān] ‘arrow’

Figure 2.1. Waveform and fundamental frequency for /^Lam/ 'house'Figure 2.2. Waveform and fundamental frequency for /^Han/ 'arrow'

In the following derivation, L from the melody LH is associated with the syllable according to the association rules stated above, and H is then dumped, as illustrated in (71). Association of the melody HL is exactly parallel, as shown in (72).

(71) /^{LH}a^sm/ 'wild pandanus sp.'

LH	LH	LH
a ^s m →	a ^s m →	a ^s m
*	*	*

[á^sm] 'wild pandanus sp.'

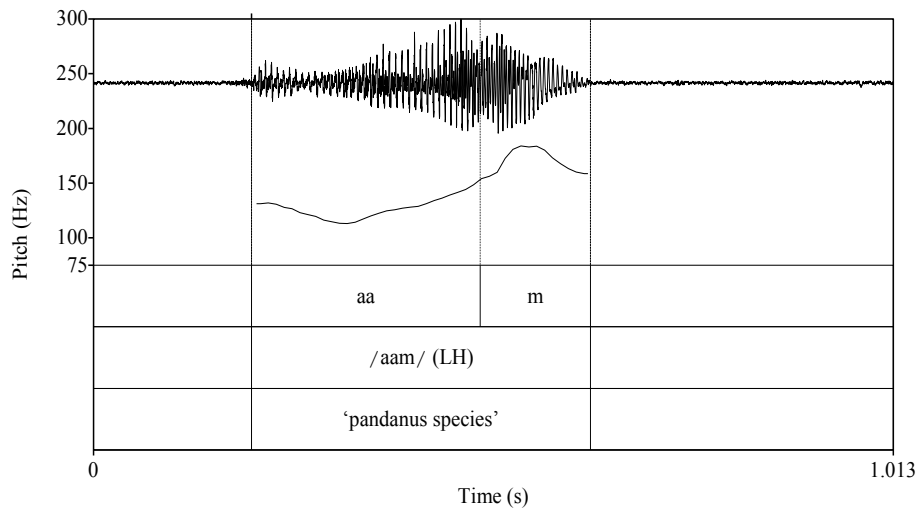


Figure 2.3. Waveform and fundamental frequency for $/^{LH}a^s m/$ ‘wild pandanus species’

(72) $/^{HL}f\epsilon/$ ‘carrion’

HL	→	HL	→	HL
fε				/
*		fε		fε
		*		*

[f̂] ‘carrion’

The final tonal melody found on monosyllables is LHL. Only two monosyllabic words in my corpus exhibit this tone pattern: $/^{LHL}a^s m/$ ‘older sister’, see (73) below, and $/^{LHL}kla/$ ‘very, properly’, see (74) below. In these two cases a TBU is allowed to bear three tones because all tones must be associated.

In $/^{LHL}a^s m/$ ‘older sister’, the last but one tone in the melody H is associated with the exceptional TBU /m/, the leftover tone L is afterwards associated with the TBU to the left, and the other leftover L is dumped on the exceptional TBU /m/. Although it might be possible to treat /m/ here as a syllabic nasal, i.e. as $/^{LHL}a^s m/$ ‘older sister’, the phonetic facts militate against this analysis. Nasal length measurements in $/^{LH}a^s m/$ ‘wild pandanus’ and $/^{LHL}a^s m/$ ‘older sister’ show both /m/ to be very similar in length.

(73) /^{LHL}a^sm/ ‘older sister’

LHL L HL L H L L HL
 | | | | |
 a^sm → a^sm → a^sm → a^sm
 * * * *
 [a^sm̂] ‘older sister’

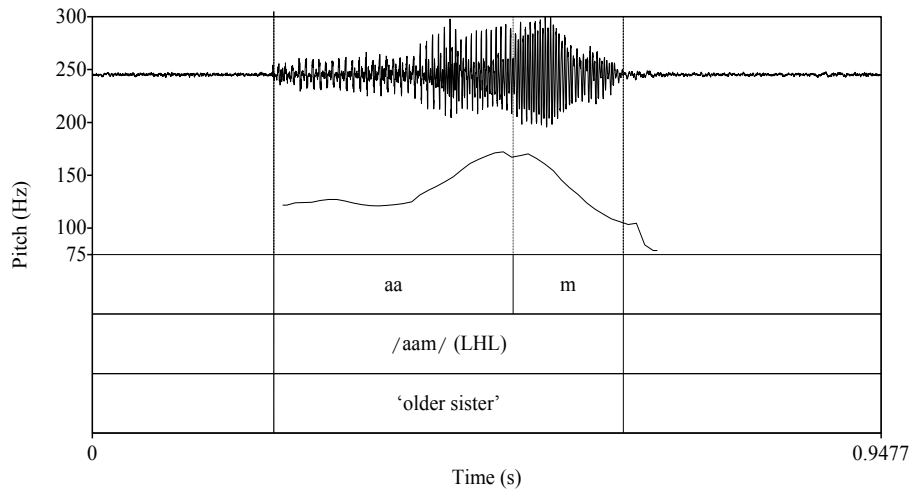


Figure 2.4. Waveform and fundamental frequency for /^{LHL}a^sm/ ‘older sister’

In the case of /^{LHL}kla/ ‘very, properly’ (74) the TBU is allowed to bear three tones because all tones must be associated.

(74) /^{LHL}kla/ ‘very, properly’

LHL LHL L H L LHL
 | \ | \|
 kla → kla → kla → kla
 * * * *
 [klâ] ‘very, properly’

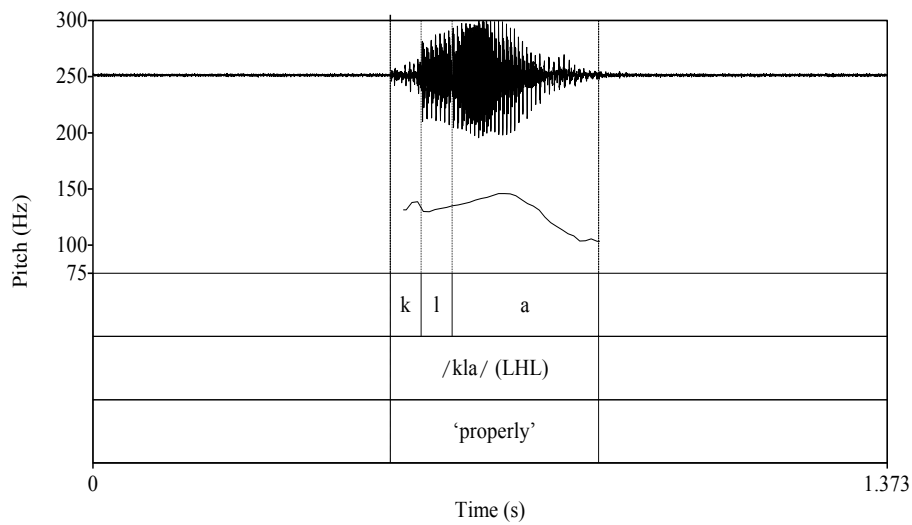


Figure 2.5. Waveform and fundamental frequency for $/^{LHL}kla/$ 'very, properly'

2.8.2.2. Tone association in disyllables

The following derivations illustrate how the formalism associates tones with vowels in disyllabic nouns and adjectives and how tones are spread to unassociated vowels. Note that $/^L:ibal/$ 'dust' and $/^{LHL}:ibal/$ 'paper wasp' are a minimal tone pair.

In (75), L is spread over the whole unaccented word.

(75) $/^L:ibal/$ 'dust'

L	L	L
		\
ibal	→ ibal	→ ibal

[iβal] 'dust'

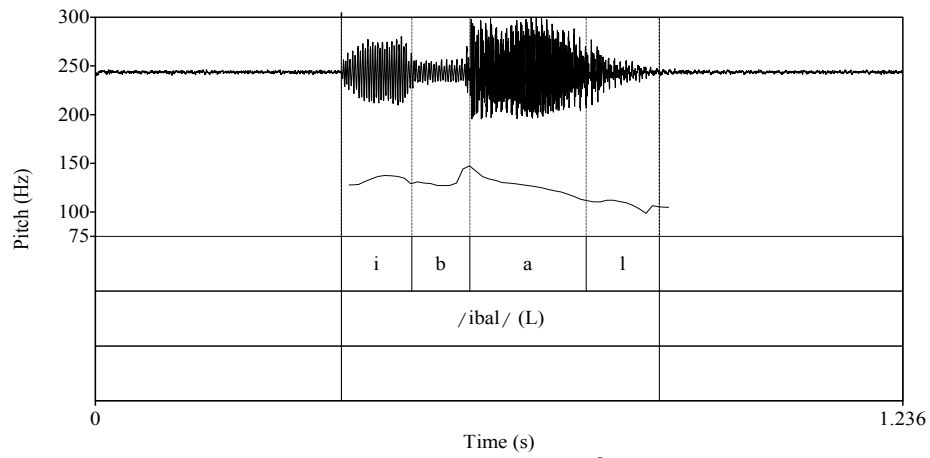
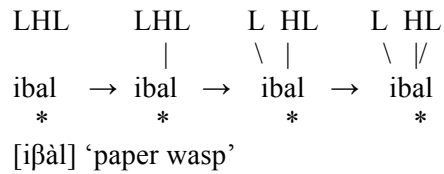


Figure 2.6. Waveform and fundamental frequency for /^Libal/ ‘dust’

In (76), H is associated with the accented syllable first, then the left L is associated with the remaining TBU to the left, and finally the right L is dumped on the final TBU.

(76) /^{LHL}ibal/ ‘paper wasp’



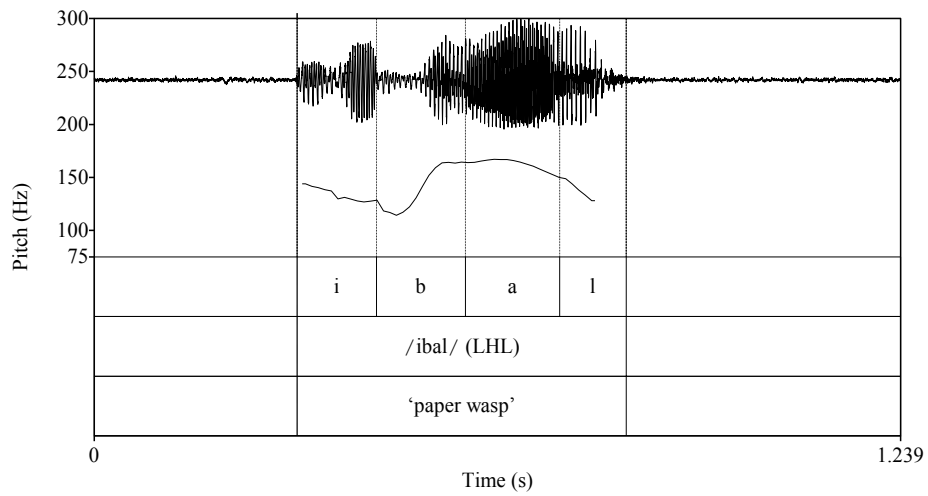


Figure 2.7. Waveform and fundamental frequency for ^{LHL}ibal/ 'paper wasp'

If a disyllabic word is lexically specified for H, association is exactly the same as in disyllables which are specified for L, i.e. the tone is spread over the word from left to right.

(77) ^Hsɛku/ 'bush knife'

H	H	H
		\
sɛku	→ sɛku	→ sɛku

[sɛk^hū] 'bush knife'

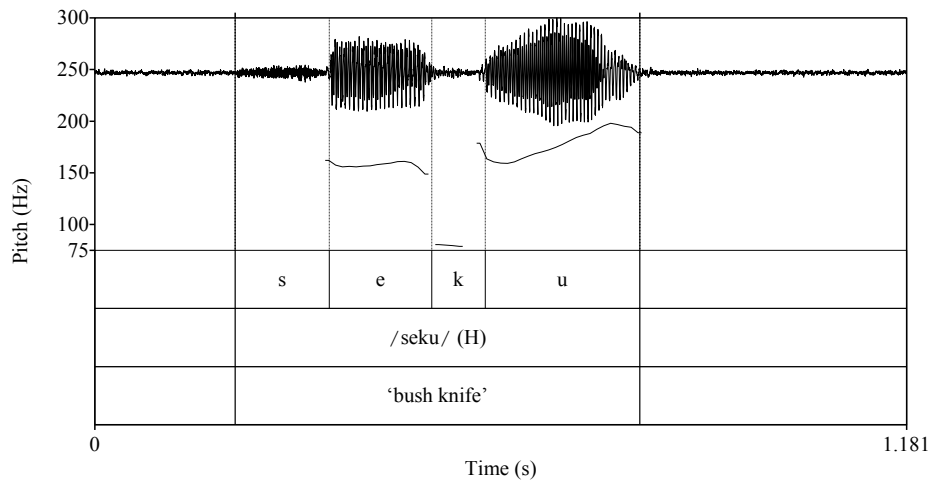


Figure 2.8. Waveform and fundamental frequency for /^Hseku/ ‘bush knife’

Assignment of the melody LH to the disyllabic nominal /^{LH}afal/ ‘mucus’ is illustrated by (78) below. L is linked first to the accented syllable, then H is dumped, finally L is spread to the remaining unassociated TBU to the left.

(78) /^{LH}afal/ ‘mucus’

LH	LH	LH	LH
		/	//
afal	→ afal	→ afal	→ afal
*	*	*	*

[afál] ‘mucus’

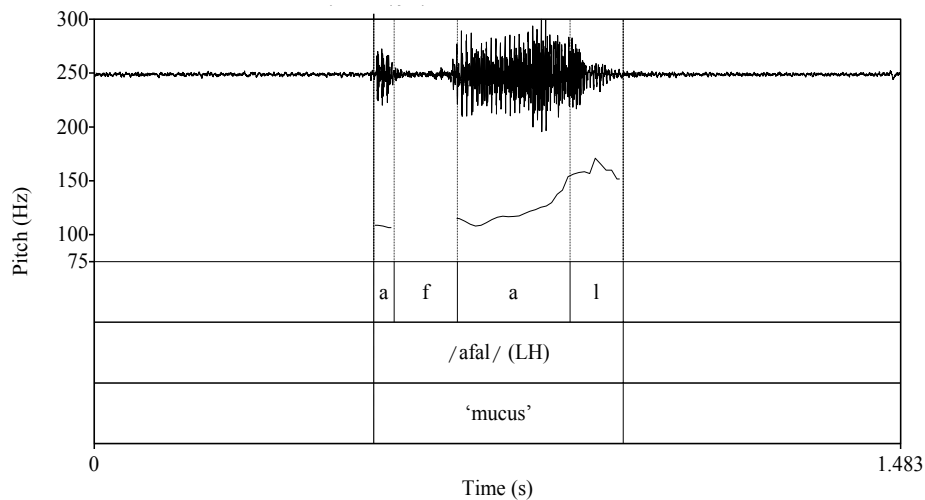


Figure 2.9. Waveform and fundamental frequency for $/^{LH}afal/$ ‘mucus’

Exactly the same happens in disyllabic words which are specified for the melody HL, as shown in (79):

(79) $/^{HL}usan/$ ‘tail’

HL	HL	HL	HL
		/	//
usan	→ usan	→ usan	→ usan
*	*	*	*

[ūsàn] ‘tail’

2.8.2.3. Nominals with the accent on the first syllable

All disyllabic words with a pharyngealized $/a^s/$ as the nucleus of the first syllable, such as $/^{LH}ka^swa/$ ‘steel axe’, $/^{LH}ma^sm̩in/$ ‘maternal uncle’, and $/^{LH}ŋa^sm̩in/$ ‘yellow’ have their accent on the first syllable and an LH melody. Thus, the tonal melody attaches to the first syllable rather than the last. The pronunciations are [q^ha^swā] ‘steel axe’, [ma^sm̩in] ‘maternal uncle’, and [ŋa^sm̩in] ‘yellow’, respectively.

In nominals with the accent on the first syllable, L is associated with the first syllable, and the leftover tone H is then associated with the remaining TBU.

(80) /^{LH}ka^swa/ ‘steel axe’

LH	LH	L H
ka ^s wa	→ ka ^s wa	→ ka ^s wa
*	*	*

[q^ha^swā] ‘steel axe’

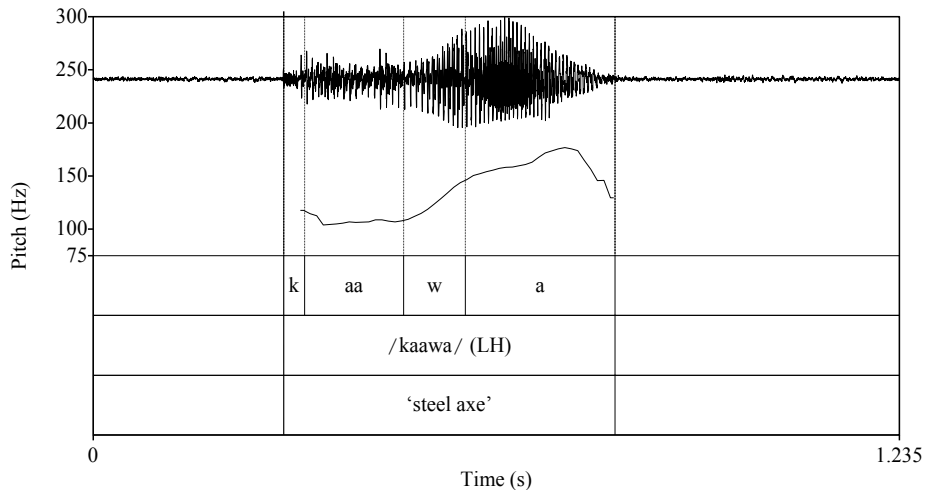


Figure 2.10. Waveform and fundamental frequency for /^{LH}ka^swa/ ‘steel axe’

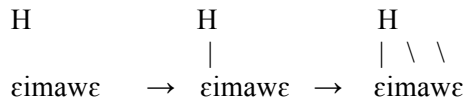
Accent behaviour in Mian is an example of the complex interplay between segmental and suprasegmental specification. A certain feature of a segment attracts the accent which in turn attracts tone. A related phenomenon can be found in Warembori (probably Papuan but with strong Austronesian influence, spoken on the north coast of West Papua). Warembori (Donohue 1999: 8-9) is not tonal but has two sets of nasal and voiced stops which Donohue describes as the “normal” and the “heavy” set. Both are pronounced the same but they have different effects on their segmental environment and on prosody, insofar as a syllable with a consonant from the heavy series attracts stress.

2.8.2.4. Tone association in trisyllables

Trisyllabic nominals are rare in the language and many of them are probably compounds historically. This is not problematic because in order to account for tone in compounds we do not need any additional rules apart from those already set up and all tonal melodies attested in compounds can also be found on monomorphemic words.

The tone assignment formalism is capable of dealing with trisyllables as well. Derivation (81) illustrates the assignment of H to a trisyllabic noun. The tone is spread over the word from left to right.

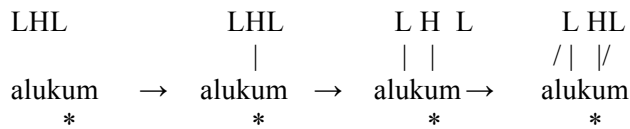
(81) /^Hεimawε/ ‘mist’



[ε̄imāw̄ε] ‘mist’

Derivation (82) shows the assignment of a LH to a trisyllabic noun. This derivation in collapses tone dumping and spreading in the last step.

(82) /^{LHL}alukum/ ‘all’



[aluk^hum] ‘all’

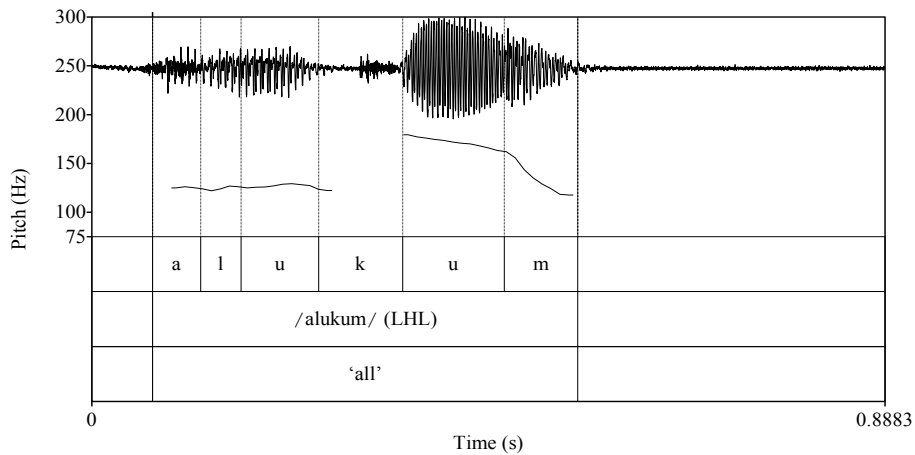


Figure 2.11. Waveform and fundamental frequency for /^{LHL}alukum/ ‘all’

2.8.3. Expanding the tonal domain

An interesting fact about word tone languages is that phonemic tonal melodies often spread not only over stems but extend over the entire phonological word. For Mian nouns and adjectives the tonal domain, i.e. the domain of segments over which tonal melodies operate, is not the stem but the stem plus any clitics (or the pluralizer *-wal*). Thus, the tonal domain can be expanded by cliticization of one of the articles *=e*, *=o*, or *=i* to the stem or by cliticization of the predicator *=o* in non-verbal predications, e.g. /^{LH}men=*o*=^Lbε/ [menōβε] ‘it’s a string bag’. While nominal clitics are not specified for tone, illocutionary clitics like *=be* /^Lbε/ ‘declarative’ are. They lie outside the tonal domain and the tonal melody is not extended to them.

2.8.3.1. Tone in non-verbal predications

When a noun or adjective functions as the predicate in a non-verbal predication, the nominal stem is followed by the toneless predicator *=o* before the (obligatory) illocutionary marker. The tone melody associated with the word is spread to include the predicator. The following derivations are headed by the underlying phonemic representation of the constituent parts of the word, followed by the English gloss.

The simple tonal melodies L (83) and H (84) are spread from the stem to the predicator:

(83) /^Lam=*o*=^Lbε/ ‘it’s a house’

L	L	L	L	→	L	L	→	L	L
								\	
am= <i>o</i>	= <i>b</i> ε	→	amobe	→	amobe	→	amobe	→	amobe

[amoβε] ‘it’s a house’

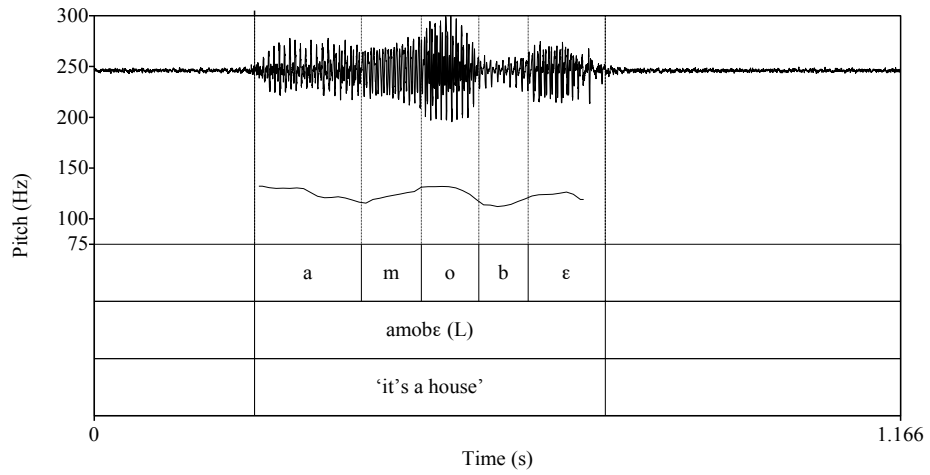
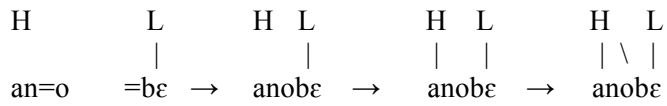


Figure 2.12. Waveform and fundamental frequency for /^Lam=obe/ ‘it’s a house’

(84) /^Han=obe/ ‘it’s an arrow’



[^ān^ōβε] ‘it’s an arrow’

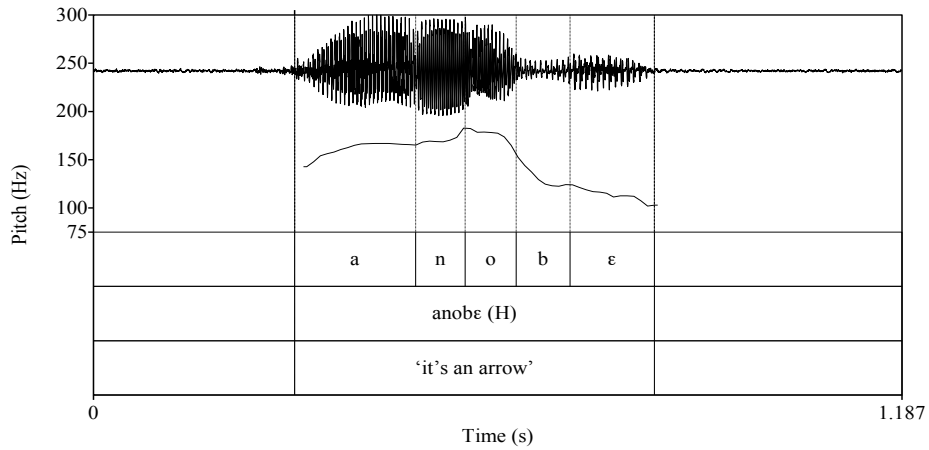


Figure 2.13. Waveform and fundamental frequency for /^Han=obe/ ‘it’s an arrow’

When complex melodies consisting of more than one tone (i.e. LH, HL, and LHL) attach to monosyllabic stems with a cliticized predictor, the penultimate tone in the melody attaches to the accented syllable. The leftover tones are then associated with any remaining TBUs within the tonal domain of the word. The last tone in the melody is not dumped as in stems without clitics but associates with the predictor. Derivation (85) illustrates this for LH and (86) for the HL melody.

(85) /^{LH}a^sm=o=^Lbε / ‘it’s wild pandanus’

LH L LH L L H L L H L
 | | | | | | |
 a^smo =bε → a^smobe → a^smobe → a^smobe
 * * * *

[a^smōβε] ‘it’s wild pandanus’

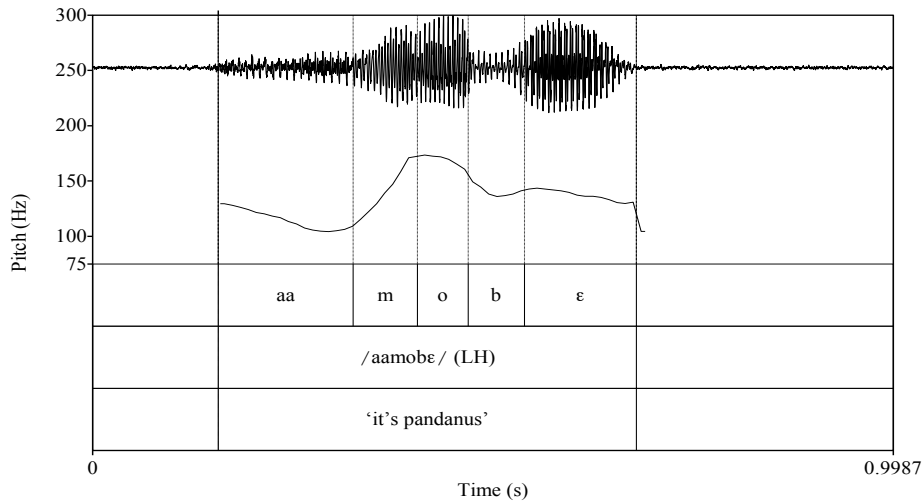


Figure 2.14. Waveform and fundamental frequency for /^{LH}a^sm=o=^Lbε/ ‘it’s wild pandanus’

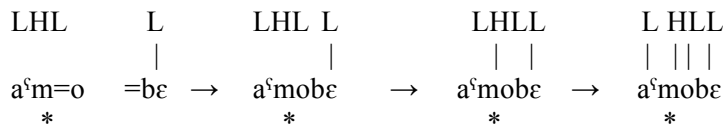
(86) /^{HL}fε=o=^Lbε / ‘it’s carrion’

HL L HL L HL L H LL
 | | | | | | |
 fε=o =bε → fεobe → fεobe → fεobe
 * * * *

[fēōβε] ‘it’s carrion’

The exceptional behaviour of the monosyllabic noun /^{LHL}a^sm/ ‘older sister’ has already been mentioned above. In order to make the tone assignment work the segment /m/ must be allowed to bear the accent to which the last but one tone in the melody attaches, and be a TBU on its own. The other monosyllable with a LHL melody, the adverb /^{LHL}kla/ ‘very, properly’, see (74) above, is only attested in contexts in which the tonal domain is co-extensive with the stem itself.

(87) /^{LHL}a^sm=o=^Lbε/ ‘it’s the older sister’



[a^sm̄oβε] ‘it’s the older sister’

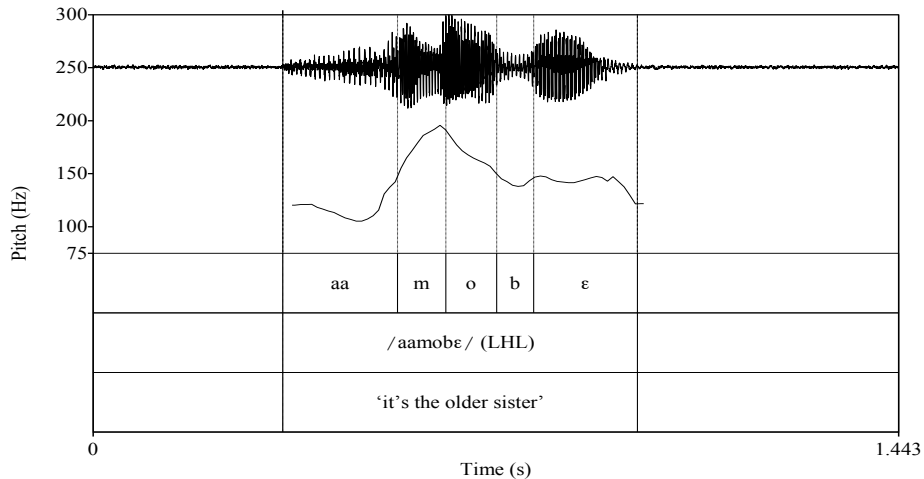


Figure 2.15. Waveform and fundamental frequency for /^{LHL}a^sm=o=^Lbε/ ‘it’s the older sister’

In disyllabic non-verb words, the tonal domain is likewise extended to include the predicator. Derivations (88) to (91) illustrate association for the melodies L, LHL, LH, and HL, respectively.

(88) /^Libal=o=^Lbε/ 'it's dust'

L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
ibal=o	=bε	→	ibalobε	→	ibalobε	→	ibalobε	→	ibalobε	→	ibalobε	→	ibalobε	→	ibalobε

[iβaloβε] 'it's dust'

(89) /^{LHL}ibal=o=^Lbε/ 'it's a paper wasp'

LHL	L	LHL	L	LHL	L	LHL	L	LHL	L	LHL	L	LHL	L	LHL	L
ibal=o	=bε	→	ibalobε	→	ibalobε	→	ibalobε	→	ibalobε	→	ibalobε	→	ibalobε	→	ibalobε
*			*		*		*		*		*		*		*

[iβāloβε] 'it's a paper wasp'

(90) /^{LH}afal=o=^Lbε/ 'it's mucus'

LH	L	LH	L	LH	L	LH	L	LH	L	LH	L	LH	L	LH	L
afal=o	=bε	→	afalobε	→	afalobε	→	afalobε	→	afalobε	→	afalobε	→	afalobε	→	afalobε
*			*		*		*		*		*		*		*

[afalōβε] 'it's mucus'

(91) /^{HL}usan=o=^Lbε/ 'it's a tail'

HL	L	HL	L	HL	L	HL	L	HL	L	HL	L	HL	L	HL	L
usan=o	=bε	→	usanobε	→	usanobε	→	usanobε	→	usanobε	→	usanobε	→	usanobε	→	usanobε
*			*		*		*		*		*		*		*

[ūsānoβε] 'it's a tail'

The last two derivations also show that the tones cannot simply be spread from left to right. If spread from left to right, the result would be incorrect, e.g. *[ūsanoβε].

2.8.3.2. Cliticization of the article

The pronominal articles =*e*, =*o*, and =*i*, which cliticize to nouns and adjectives (but also to numerals) to indicate number gender and referentiality are – like the predicator – not specified for tone and expand the tonal domain.

As tonal assignment is exactly parallel to when the predicator is cliticized in non-verbal predications, I will just list examples of tone assignment and refer the reader to the foregoing section for explanation of the derivational steps.

(92) /^Lam=o/ ‘the/a house’

L	L	L	L
			\
am=o	→ amo	→ amo	→ amo

[amo] ‘a/the house’

(93) /^Han=ε/ ‘a/the arrow’

H	H	H	H
			\
an=ε	→ anε	→ anε	→ anε

[ānē] ‘a/the arrow’

(94) /^{LH}a^sm=o/ ‘(the) wild pandanus (PL)’

LH	LH	LH	L H
a ^s m=o	→ a ^s mo	→ a ^s mo	→ a ^s mo
*	*	*	*

[a^smō] ‘(the) wild pandanus (PL)’

(95) /^{LHL}a^sm=o/ ‘a/the older sister’

LHL	LHL	LHL	L HL
a ^s m=o	→ a ^s mo	→ a ^s mo	→ a ^s mo
*	*	*	*

[a^smō] ‘a/the older sister’

(96) /^Libal=ε/ ‘some dust’

L	L	L	L
			\ \
ibal=ε	→ ibalε	→ ibalε	→ ibalε

[iβalε] ‘some dust’

(97) /^{LHL}ibal=ε/ ‘a/the paper wasp’

LHL	LHL	LHL	LHL
ibal=ε	→ ibalε	→ ibalε	→ ibalε
*	*	*	*

[iβālε] ‘a/the paper wasp’

(98) /^{LH}afal=ε/ ‘the mucus’

LH	LH	LH	LH
			/
afal=ε	→ afalε	→ afalε	→ afalε
*	*	*	*

[afalē] ‘the mucus’

(99) /^{LHL}usan=ε/ ‘a/the tail’

HL	HL	HL	H L
			/
usan=ε	→ usanε	→ usanε	→ usanε
*	*	*	*

[ūsānε] ‘a/the tail’

2.8.3.3. Tone in noun-noun compounds

Noun-noun compounds are treated like single phonological words by the tonal phonology of the language. This means that each compound is specified for one (composite) tonal melody and an accent which regularly falls on the final stem in the compounded word but which is placed on the first stem if its nucleus consists of a pharyngealized /a^ʕ/. Tone assignment then proceeds as in monomorphemic words. H is unattested in (synchronically transparent) compounds. Derivation (100) illustrates assignment of L in a compound:

- (100) /^Lwanam/ ‘bird blind’ (constituents being /^Lwan/ ‘bird’ and /^Lam/ ‘house’)

$$\begin{array}{ccccc} L & & L & & L \\ & & | & & | \backslash \\ \text{wanam} & \rightarrow & \text{wanam} & \rightarrow & \text{wanam} \end{array}$$

[wanam] ‘bird blind’

In compounds, tone spreading occurs to cover the predicator in non-verbal predications or a cliticized article, as it does in monomorphemic words:

- (101) *wanamobe* /^Lwanam=^Lo=^Lbe/ ‘it’s a bird blind’

$$\begin{array}{ccccccccc} L & & L & & L & L & L & L \\ & & | & & | & | & | \backslash \backslash | \\ \text{wanam=o} & =\text{be} & \rightarrow & \text{wanamobe} & \rightarrow & \text{wanamobe} \end{array}$$

[wanamoβε] ‘it’s a bird blind’

The following derivations (102) and (103) illustrate the assignment of an LH and LHL melody, respectively:

- (102) /^{LH}nomen/ ‘marsupial bag’ (constituents being /^Lno/ ‘marsupial’ and /^{LH}men/ ‘string bag’)

$$\begin{array}{ccccccc} LH & & LH & & LH & & LH \\ & & | & & / & & / \\ \text{nomen} & \rightarrow & \text{nomen} & \rightarrow & \text{nomen} & \rightarrow & \text{nomen} \\ * & & * & & * & & * \end{array}$$

[nomén] ‘marsupial bag’

- (103) /^{LHL}milbloŋ/ ‘bean pod’ (constituents being [^{LH}mil] ‘bean’ and /^Lbloŋ/ ‘pod’)

$$\begin{array}{ccccccc} LHL & & LHL & & LHL & & LHL \\ & & | & & / & & / \\ \text{milbloŋ} & \rightarrow & \text{milbloŋ} & \rightarrow & \text{milbloŋ} & \rightarrow & \text{milbloŋ} \\ * & & * & & * & & * \end{array}$$

[milblón] ‘bean pod’

In the expanded tonal domain, for instance when an article cliticizes to the compound stem, the melody spreads over the whole domain. This is shown in (104) for the LH melody and (105) for the LHL melody:

(104) $/^{LH}nom\epsilon n=\epsilon/$ ‘a/the marsupial bag’

LH	LH	LH	L H
			/
nom ϵ n= ϵ	→ nom ϵ n ϵ	→ nom ϵ n ϵ	→ nom ϵ n ϵ
*	*	*	*

[nom ϵ n $\bar{\epsilon}$] ‘a/the marsupial bag’

(105) $/^{LHL}milbl\eta\epsilon=\epsilon/$ ‘a/the bean pod’

LHL	LHL	L H L	L H L
milbl η ϵ = ϵ	→ milbl η ϵ	→ milbl η ϵ	→ milbl η ϵ
*	*	*	*

[milbl $\bar{\eta}$ ϵ] ‘a/the bean pod’

When the first stem in a noun-noun compound contains a pharyngealized /a^ʕ/ the accent falls on the first syllable of the compound. This is parallel to accent placement in monomorphemic words with a pharyngeal in the first syllable (see 2.8.2.3 above). Consider the derivations (106) and (107):

(106) $/^{LH}ba^{\text{ʕ}}n\text{-on}/$ ‘jaw bone’ (constituents being $/^{LH}ba^{\text{ʕ}}n/$ ‘jaw’ and $/^H\text{on}/$ ‘bone’)

LH	LH	L H	L H
ba ^ʕ n-on	→ ba ^ʕ n $\bar{\text{on}}$	→ ba ^ʕ n $\bar{\text{on}}$	→ ba ^ʕ n $\bar{\text{on}}$
*	*	*	*

[^mba^ʕn $\bar{\text{on}}$] ‘jaw bone’

(107) $b\acute{a}anone /^{LH}ba^{\text{ʕ}}n\text{-on}=\epsilon/$ ‘a/the jaw bone’

LH	LH	L H	L H
			\
ba ^ʕ n $\bar{\text{on}}$ = ϵ	→ ba ^ʕ n $\bar{\text{on}}$ ϵ	→ ba ^ʕ n $\bar{\text{on}}$ ϵ	→ ba ^ʕ n $\bar{\text{on}}$ ϵ
*	*	*	*

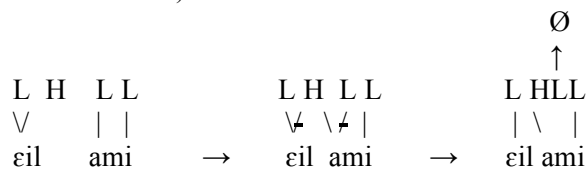
[^mba^ʕn $\bar{\text{on}}$ $\bar{\epsilon}$] ‘a/the jaw bone’

2.8.3.4. Contour delinking across word boundaries

Contour tones lead a precarious existence in Mian. In continuous discourse contour tones are dissolved even across word boundaries. In this process, the second member of the contour is delinked and then relinked to the next TBU to the right.

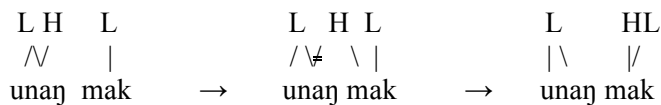
When a noun head with a contour tone on the last syllable is followed by a modifier, the contour tone is dissolved, and its second member relinks to the next TBU to the right. Two example derivations are given in (108) and (109):

- (108) /^{LH}ɛil/ /^Lami/ ‘domestic pig’ (constituents being /^{LH}ɛil/ ‘pig’ and /^Lami/ ‘domestic’)



[ɛil āmi] ‘domestic pig’

- (109) /^{LH}unaŋ/ /^Lmak/ ‘another woman’ (constituents being /^{LH}unaŋ/ ‘woman’ and /^Lmak/ ‘other’)



[unaŋ mâk^h] ‘another woman’

The same happens when a nominal adjunct with a contour tone on the last syllable precedes a verb. The contour tone is dissolved, and its second member relinks to the next TBU to the right, as shown in (110):

- (110) /^{LH}usa^sn/ /^Lfumin/ ‘(activity of) vomiting (VN)’ (constituents being /^{LH}usa^sn/ ‘vomit’ and /^Lfumin/ ‘(activity of) cooking, smoking’)



[usa^sn fūmin] ‘(activity of) vomiting (IPFV VN)’

2.8.4. Tonal phonology of the verb

While the last section dealt with tone in non-verb words (mainly nouns and adjectives, but the association rules work for all non-verb words), we now turn to tone in the verb. The main issue in this area of Mian phonology is the fact that the verbal word can reach considerable length (four or five syllables being nothing special), whereas nouns and adjectives – with some exceptions – are mono- or disyllabic.

The functional load of verb tone is even lower than for nominals in terms of marking lexical contrasts. Only a handful of minimal pairs exist so far, i.e. pairs of verbs which are segmentally identical and only differ in the tonal melody. Examples are given in (111):

- (111) $/^Lk\epsilon min/$ $[k^b\epsilon min]$ ‘(activity of) doing (IPFV VN)’
 $/^{HL}k\epsilon min/$ $[k^b\bar{\epsilon} min]$ ‘(activity of) cutting cooked scraped taro (IPFV VN)’
- $/^Lomib\epsilon/$ $[omib\epsilon]$ ‘I start talking’
 $/^{LHL}omib\epsilon/$ $[om\bar{i}\beta\epsilon]$ ‘I have taken an F-class object’
- $/^{LHL}ina|nota/$ $[inan\bar{o}ta]$ ‘she killed us/you(PL)/them and then ...’
 $/^{HL}ina|nota/$ $[\bar{i}n\bar{a}n\bar{o}ta]$ ‘she did thus and ...’

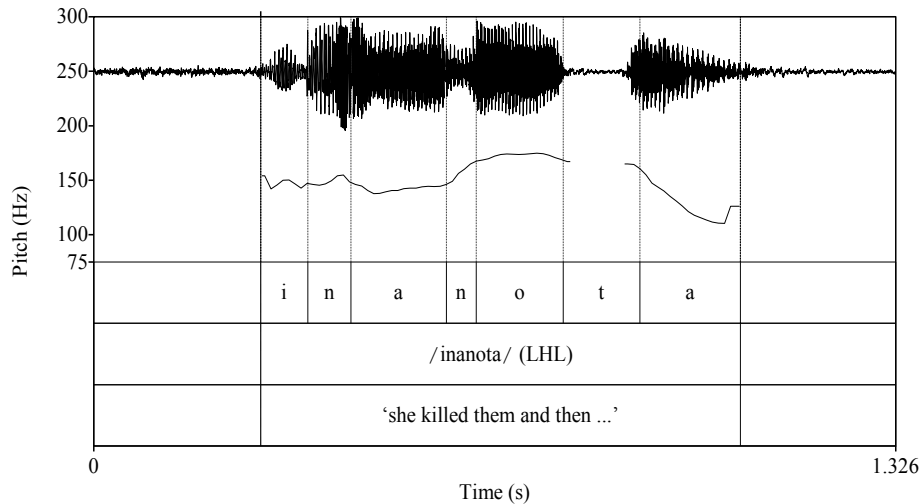


Figure 2.16. Waveform and fundamental frequency for $/^{LHL}ina|nota/$ ‘she killed us/you(PL)/them and then ...’

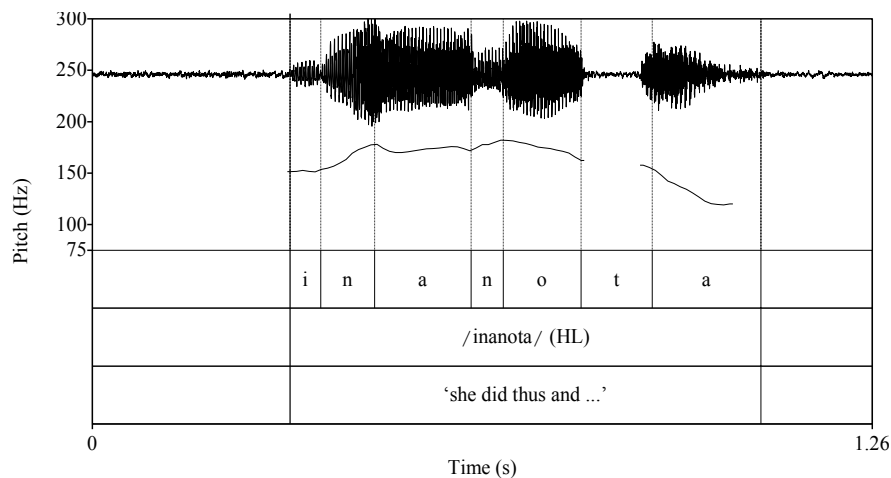


Figure 2.17. Waveform and fundamental frequency for /^{HL}:ina|nota/ ‘she did thus and then ...’

Tone in the Mian verb is grammatically relevant in the marking of certain forms of the non-hodiernal past in which the subject marker following the tense suffix receives a high tone (see section 2.8.5). Such grammatical functionality is not attested outside of verbs.

2.8.4.1. Accent and tonal melodies

Like non-verb words, Mian verb stems are either unaccented or accented. Unaccented verbs are not specified for an accent position. They are simply assigned a low tone to the stem which spreads over the whole word from left to right.

Like accented non-verb words, accented verb stems have an underlying, lexically specified accent which indicates where the complex tonal melody is to be inserted. Accented verbs are also specified for one of two possible tonal melodies, namely LHL or HL.

According to the formalism introduced in 2.8.2 above, the penultimate tone in these melodies is initially associated with the accented syllable. The domain of application of any given tonal melody is the entire phonological verbal word. In other words, a verb specified for LHL will have one prominent syllable which is higher in pitch, while a verb specified for HL will have consecutive high-pitched syllables up to the inflection point from which onward pitch drops to low for the rest of the word. The tone-segment association process will be illustrated with examples below.

Accented verbs are divided into two classes with respect to the position of this accent:

- Stem accented verbs, i.e. verbs in which the last stem syllable always bears the accent regardless of the number of syllables before or after the accent point.
- Off-stem accented verbs, i.e. verbs in which the accent is placed on the next syllable to the right of the stem, if (and only if) the verb stem is inflected with suffixes. If an off-stem accented verb occurs without any suffixal morphology the accent regularly falls on the final stem syllable.

2.8.4.2. Unaccented verbs

All unaccented verbs are low-toned. Thus, phonetically, unaccented verbs do not have a prominent syllable, as far as higher fundamental frequency is concerned. Examples of unaccented verbs are:

- (112) /^Lkɛ/ ‘do (verb stem)’
 /^Lfu/ ‘cook (verb stem)’
 /^Lbɛ/ ‘walk, keep doing (IPFV verb stem)’
 /^Lbik^ha/ ‘squeeze, pierce (IPFV verb stem)’
 /^Lt^haʰ/ ‘open (mouth) (verb stem)’
 /^Lwalo/ ‘buy (PFV verb stem)’
 /^Lwɛ/ ‘buy (IPFV verb stem)’
 /^Lwɛn/ ‘eat (IPFV verb stem)’

The lexical entry of unaccented verbs does not contain any information about accent. All unaccented verbs have low tone, which is spread over the whole word from left to right, as in the derivations (113) and (114). All derivations in the remainder of this chapter assume that morpheme concatenation has taken place, but a morpheme breakdown is given for each derivation.

- (113) /^Lkɛmin/ ‘(activity of) doing (IPFV VN)’

Morpheme breakdown:

ke-m-in
do-IPFV-VN

L L L
 | | | \
 kɛmin → kɛmin → kɛmin

[k^hɛmin] ‘(activity of) doing (IPFV VN)’

(114) /^Lfunamabibɛ/ ‘I will cook’

Morpheme breakdown:

fu-n-amab-i=be
 cook-AUX.PFV-IRR-1SG.SBJ=DECL

L L L L L L
 | | | | | \ \ \ |
 funamabibɛ → funamabibɛ → funamabibɛ

[funəmaβiβɛ] ‘I will cook’

2.8.4.3. Stem accented verbs

These invariably have the accent on the last syllable of the verb stem. The location of the accent is specified in the lexical entry for the stem accented verb stem.

In stem accented verbs, the inflection point for the tonal melody, which spreads over the whole domain of the phonological verbal word, is the TBU in the final stem syllable, e.g.:

- (115) /^{LHL}hala/ ‘break (PFV verb stem)’
 /^{LHL}-fa/ ‘put (PFV verb stem)’
 /^{LHL}-faʕ/ ‘lift (PFV verb stem)’
 /^{HL}kɛ/ ‘cut scraped taro (verb stem)’
 /^{HL}ulo/ ‘pull out (a taro corm) (PFV verb stem)’
 /^{HL}-kima/ ‘put into the fire (PFV verb stem)’

The following two derivations (116) and (117) illustrate the behaviour of the melody LHL. In (116) the H tone attaches to the accented syllable and the remaining tones are associated and spread to right to include the final syllable. The derivation in (117) similar. The only difference to (116) is that the melody also spreads to the left to include first syllable (the prefix *to-*):

(116) /^{LHL}halanamin/ ‘(instance of) breaking (PFV VN)’

Morpheme breakdown:

halâ-nam-in
break.PFV-PFV-VN

LHL	LHL	LH L	LH L
			\
halanamin	→ halanamin	→ halanamin	→ halanamin
*	*	*	*

[halānamin] ‘(instance of) breaking (PFV VN)’

(117) /^{LHL}tofanebobe/ ‘I will put down a LONG object’

Morpheme breakdown:

to-fâ-n-ebo=be
3SG.LONG.O-put_in_fire.PFV-REAL-2SG.SBJ=DECL

LHL	L	LHL	L	LH L L	LH L L
					\
tofanebobe	→ tofanebobe	→ tofanebobe	→ tofanebobe	→ tofanebobe	→ tofanebobe
*	*	*	*	*	*

[tofâneβoβe] ‘you put down a LONG object’

The final two example derivations show the association of the tone melody HL in verbs. In the second derivation the melody spreads to the left to include the prefix:

(118) /^{HL}kemin/ ‘(activity of) cutting cooked scraped taro (IPFV VN)’

Morpheme breakdown:

kè-m-in
cut_scraped_taro-IPFV-VN

HL	HL	H L
kemin	→ kemin	→ kemin
*	*	*

[k^hēmin] ‘(activity of) cutting cooked scraped taro (IPFV VN)’

(119) /^{HL}tobkimanamabibɛ/ ‘I will put a LONG object into the fire’

Morpheme breakdown:

tob-kimà-n-amab-i=be

3SG.LONG.O-put_in_fire.PFV-AUX.PFV-IRR-1SG.SBJ=DECL

HL	L	HL	L	HL	L
tobkimanamabibɛ	→	tobkimanamabibɛ	→	tobkimanamabibɛ	→
*		*		*	

H	L	L
/	/	
		\
\	\	
tobkimanamabibɛ		
*		

[tɔ̃pʰkīmānəmaβiβɛ] ‘I will put a LONG object into the fire’

2.8.4.4. Off-stem accented verbs

While stem accented verbs always have the accent on the last syllable of the stem, in off-stem accented verbs the accent normally falls on the syllable immediately after the stem. In phonemic representations, this is indicated by the accent symbol ‘|’ after the stem. Examples of off-stem accented verbs are:

- (120) /^{LHL}betɛla|/ ‘open (PFV verb stem)’
 /^{LHL}lowon|/ ‘eat (PFV verb stem)’
 /^{HL}hala|/ ‘abstain (PFV verb stem)’
 /^{LHL}tʰɛmɛ|/ ‘look (IPFV verb stem)’
 /^{LHL}tláʰ|/ ‘remove (PFV verb stem)’

The following two derivations illustrate the association process of the melody LHL in off-stem accented verbs:

(121) /^{LHL}betɛla|nibiobɛ/ ‘I opened’

Morpheme breakdown:

betelá'-n-i-bio=be

open.PFV-REAL-1SG.SBJ-GPST=DECL

LHL L LHL L LHL L L HL L
 | | | | | | | // | | | |
 betelanibiobe → betelanibiobe → betelanibiobe → betelanibiobe
 * * * *
 [ˈbetʰəranīβioβɛ] ‘I opened’

(122) /^{LHL}lowon|binisobe/ ‘Yesterday I ate and stayed’

Morpheme breakdown:

dowôn’-bi-n-i-so=be

eat.PFV-AUX.IPFV-REAL-1SG.SBJ-HPST=DECL

LHL L LHL L L HL L L HL L
 | | | | | | | / | | \ | |
 lowonbinisobe → lowonbinisobe → lowonbinisobe → lowonbinisobe
 * * * *
 [ˈdɔwombīnisoβɛ] ‘Yesterday, I ate and stayed’

That accent position and tonal melody are independent of each other can be seen from the next example, involving an HL melody. Compare (123) and (124):

(123) /^{HL}hala|namin/ ‘(instance of) abstaining (PFV verbal noun)’

Morpheme breakdown:

halà’-nam-in

abstain.PFV-PFV-VN

HL HL H L H L
 | | | / / | |
 halanamin → halanamin → halanamin → halanamin
 * * * *
 [hālānāmin] ‘(instance of) abstaining (PFV verbal noun)’

- (124) /^{HL}kɛmin/ ‘(activity of) cutting cooked scraped taro (IPFV verbal noun)’

Morpheme breakdown:

kè-m-in
cut_scraped_taro-IPFV-VN

HL		HL		H L
	→		→	
kɛmin		kɛmin		kɛmin
*		*		*

[k^hɛ̄min] ‘(activity of) cutting cooked scraped taro (IPFV VN)’

When off-stem accented verbs appear without any affixes, for example in a serial verb construction, the accent recedes to the final stem syllable. This is illustrated for the off-stem accented verb /^{LHL}lowon/ ‘eat (PFV)’ in (125):

- (125) /^{LHL}lowon/ ‘eat (PFV verb stem)’

LHL		L HL		L HL		L HL
	→		→		→	
lowon		lowon		lowon		lowon
*		*		*		*

[ⁿdɔ̀wòn] ‘eat (PFV verb stem)’

2.8.4.5. The inherently accented irrealis suffixes

The irrealis suffixes *-amab* /amab/ and *-aamab* /a^smab/ (both for subject that are not animate plural) and /omab/ (for animate plural subject) are inherently equipped with an accent which serves as the anchor point for tonal melodies in off-stem accented verbs. This means that in irrealis forms of an off-stem accented verb, the default accent on the syllable immediately after the stem is overridden by the accent inherent in the suffix. Consider the following derivation:

(126) /^{LHL}lowonaa|mabibε/ ‘I will eat’

Morpheme breakdown:

dowôn’-aamab-i=be
eat.PFV-IRR-1SG.SBJ=DECL

LHL	L	LHL L	LHL L	LHL L
				/ /
lowona ^s mabibε	→	lowona ^s mabibε	→	lowona ^s mabibε
*		*		*

[ⁿdɔwona^smāβiβε] ‘I will eat’

The plausibility of the claim that the irrealis marker is inherently accented cannot really be evaluated on the basis of the very limited data provided in this section. Morphemes with inherent prosodic information have however been assumed for example for the Austronesian language Lenakel described by Lynch (1978) in order to account for a deviant stress pattern in the language (Halle and Vergnaud 1990: 218). Irregular stress behaviour with some suffixes is also attested in Biniñ Gun-wok (Evans 2003b).

2.8.4.6. *Tone of -ûb’- ‘give’ and of compounds with -ûb’- ‘give’*

‘Give’ is off-stem accented and has an LHL melody. A sample derivation for a fully inflected form of ‘give’ is given in (127):

(127) /^{LHL}obub|kenibε/ ‘I gave a RESID object to you’

Morpheme breakdown:

ob-ûb’-ke-n-i=be
3SG.RESID.O-give.PFV-2SG.R-REAL-1SG.SBJ=DECL

LHL	L	LHL L	LHL L	LHL L
				/
obub ^k enibε	→	obub ^k enibε	→	obub ^k enibε
*		*		*

[ɔbup^kh^heniβε] ‘I gave RESID to you’

Compounding with *-ûb’- ‘give’* is required for the introduction of a recipient argument in the perfective. ‘Give’ retains its tonal specification in this quasi-

applicative construction and the resulting complex verb bears a LHL melody. Compare the tone association for the unaccented L verb *fu* ‘cook’ on its own (128) and compounded with *-ûb’-* ‘give’ (129). On the tonal interaction between LHL from *-ûb’-* ‘give’ and the preceding verb, see below.

(128) /^Lfunεβε/ ‘he cooked’

Morpheme breakdown:

fu-n-e=be
cook-REAL-3SG.M.SBJ=DECL

L	L		L	L		L	L
							\
funεβε	→		funεβε	→		funεβε	

[funεβε] ‘he cooked’

(129) /fup^hk^hεnεβε/ ‘he cooked for you’

Morpheme breakdown:

fu-(û)b’-ke-n-e=be
cook-give.PFV-2SG.R-REAL-3SG.M.SBJ=DECL

LHL	L		LHL	L		L	H	L	L
fubkεnεβε	→		fubkεnεβε	→		fubkεnεβε			
*			*			*			

[fup^hk^hεnεβε] ‘he cooked for you’

Such forms are single phonological words which receive a single tonal melody. This is always the LHL melody of *-ûb’-* ‘give’ and the resulting compound is always off-stem accented, like *-ûb’-* ‘give’. The tonal melody of the verb preceding *-ûb’-* ‘give’ is deleted. For example, *a-nâ’-ûb’-ke* [3SG.M.O-kill.PFV-give.PFV-2SG.R] ‘kill it for you’ surfaces as [anaup^hk^hε]. Thus, the LHL melody of *-nâ’* kill does not surface when compounded with *-ûb’-* ‘give’.

2.8.5. *High tone in forms of the non-hodiernal past*

In certain forms of the non-hodiernal past the subject marker bears a high tone. In many cases, this high tone helps disambiguate the non-hodiernal past from the imperfective, both of which are segmentally marked through the suffix *-b*. Two examples are given in (130):

(130)	Non-hodiernal past		Imperfective	
	<i>singabībe</i>	‘I poured’	<i>singabibe</i>	‘I’m pouring’
	<i>dolābībe</i>	‘I wrote’	<i>dolābibe</i>	‘I am writing’

Whether a verb has a H-tone subject marker in the non-hodiernal past is not entirely predictable, and there seems to be some free variation as well. This topic will be explored in more detail in 8.6.1.2 in the verb morphology chapter.

2.8.6. *High tone on the stem of the verb ge/gen ‘build, roll, fasten’*

Among the N-stems (see 8.4) there is one notable exception where tone is employed to disambiguate segmentally identical forms. For the verb *ge/gen* ‘build, roll, fasten’, realis and inchoative forms are segmentally identical. To mark a form as inchoative, the H-toned inchoative stem *gēn* is used. Compare (131) and (132):

(131)	<i>am=o</i>	<i>ge-n-e=be</i>
	house=N2	build.PFV-REAL-3SG.M.SBJ=DECL
	‘He built a house.’	

(132)	<i>am=o</i>	<i>gēn-e=be</i>
	house=N2	build.IPFV.INCH-3.SG..SBJ=DECL
	‘He starts building a house.’	

2.8.7. *The LH melody in lexical reduplications*

Many lexical reduplications have an LH melody so that the first syllable is low and the second is high. In the orthography the melody is indicated phonetically. Some examples are: *gwekgwēk* ‘Spot-winged Monarch (*sc.* *Monarcha guttula*)’, *gwalgwāl* ‘twins’, *kimkīm* ‘root’, *meimēi* ‘earthquake’, *glaglā* ‘between’.

2.8.8. *Tone and syllable prominence*

There are no consistent stress patterns in Mian. However, syllables which are assigned H or HL from any of the tonal melodies H, HL, or LHL are more prominent than syllables which are assigned L. The phonetic manifestations are that they are longer and have high or falling pitch, e.g.:

- (133) /^Hsɛku/ [sɛ̃k^hū] ‘bush knife’
 /^{LHL}walonamabibe/ [walōnəmaβiβɛ] ‘I will buy’
 /^{LHL}mi|nin/ [minin] ‘meet, gather’

Words with L tone are pronounced with no conspicuous change in pitch or vowel length, e.g.:

- (134) /^Libal/ [iβal] ‘dust’
 /^Lfubinibiobe/ [fuβiniβioβɛ] ‘I was cooking’

2.9. **Orthography**

Apart from a few exceptions, I adopt the practical orthography developed for Mian by Smith and Weston (1974a: 29-30). During my time in the field, I found the SIL orthography to be highly practical and therefore not be changed lightly. The following list, which outlines the spelling conventions adopted in this grammar, deviates only in the orthographic representation of /l/, for which I will use phonetic spelling, namely *d* word-initial and syllable-initial after consonant, and *l* elsewhere. This change seems to be in accord with the orthography used in the Mian dictionary compiled by Smith and Weston (n.d.-b), where word-initial /l/ in native Mian words is consistently spelled *d*.

- (135) /b/ *b*
 /t/ *t*
 /g/ *g*
 /k/ *k*
 /g^w/ *gw*
 /k^w/ *kw*
 /m/ *m*
 /n/ *n*
 /ŋ/ *ng*
 /f/ *f*
 /s/ *s*
 /h/ *h*

/l/	<i>l, d</i>
/w/	<i>w</i>
/j/	<i>y</i>
/i/	<i>i</i>
/ɛ/	<i>e</i>
/a/	<i>a</i>
/o/	<i>o</i>
/u/	<i>u</i>
/ai/	<i>ai</i>
/ei/	<i>ei</i>
/au/	<i>au</i>
/ou/	<i>ou</i>

My analysis of Mian phonology – both segmental and suprasegmental – makes a few changes of the practical orthography necessary, purely for academic purposes, that is. All adjustments will be justified below.

First, the pharyngealized /a^s/ is spelled <aa> in opposition to <a>. Since it is a distinct phoneme, I also indicate this in the spelling. Smith and Weston use orthographic <aa> in some of the words which have a pharyngealized /a^s/, others being non-pharyngealized instances of an ‘a’ which they analyse as long.

Second, as I do not analyse vowel length to be phonemic in Mian, geminate vowels are eliminated from the orthography, e.g. *mèén* ‘string bag’ in Smith and Weston’s orthography is spelled *mén* in this grammar.

Third, phonemic tone is incorporated into the orthography. Only H, LH, HL, and LHL are written. Example are given for mono- and a disyllabic words:

- (136) L *am* ‘house’, *ibal* ‘dust’
 H *ān* ‘arrow’, *sēku* ‘bush knife’
 LH *mín* ‘son’, *nínin* ‘name’
 HL *fê* ‘carrion’, *usàn* ‘tail’
 LHL *klâ* ‘properly’, *ibâl* ‘paper wasp’

The tonal melody for which a word is specified is marked over the accented syllable, e.g. *káawa* ‘steel axe’ or *-fâ* ‘put (PFV)’, or in the case of H on the first syllable of the word. Off-stem accented verbs are marked with an apostrophe following the stem to indicate that in inflected forms the tonal melody is associated with the syllable immediately to the right of the stem. If the stem occurs on its own, the tonal melody of off-stem accented verbs is realized on the final stem syllable in lieu of a suffixal syllable following the stem.

Chapter 3

Word classes and grammatical relations

3.0. Introduction

Nouns, adjectives, and verbs constitute open word classes. While the classes of nouns and adjectives readily accept loans from Tok Pisin or English, verbal loans from Tok Pisin or English cannot be inflected like native Mian verbs, but rather such loans have to be followed by the function verb *ke* 'do' in a function verb construction. Mian is typically Papuan in that it makes a very clear formal distinction between nouns and verbs (Himmelman 2005: 126-131).

All other word classes are closed, and with the exception of verbs rather small. The closed word classes comprise the following parts of speech:

- Articles
- Prenominal modifiers
- Adverbs
- Pronouns
- Directionals
- Postpositions
- Quantifiers
- Conjunctions
- Ideophones
- Particles

In order to determine the defining features of a given word class, a combination of morphosyntactic and distributional criteria will be employed.

3.1. Nouns

Nouns are by far the largest word class in Mian. Tok Pisin or English loans are readily accommodated into the noun vocabulary of the language. Nouns are used to refer to objects (persons, cultural or natural objects, substances), locations, and abstract notions which are important components of the world inhabited by the Mianmin.

Apart from common nouns, the class of nouns has the following subclasses: proper names and kin nouns (3.1.7), dyads (3.1.8), temporal nouns (3.1.9), and verbal nouns (3.1.10 and 8.7.2).

3.1.1. *Properties common to all nouns*

Suprasegmentally, all nouns are lexically specified for one out of five tonal melodies (i.e. L, H, LH, LHL, and HL), whose domain is the prosodic word as a whole. Nouns with a complex tonal melody (i.e. LH, LHL, and HL) also have one accent which is the association point for the tonal melody.

Nominal morphology is essentially non-existent, the only suffix being the pluralizer *-wal*, which is restricted to proper names and kin nouns (see 3.1.7), and dyads (see 3.1.8).

Nouns do not mark number. The only exceptions are two irregular plural stems: (i) *mēn* ‘child’ vs. *memé* ‘children’ and (ii) the bound noun stems *-sak* ‘resident of’ vs. *-sel* ‘residents of’, which only occur as second members in compounds. Number distinctions (singular vs. plural) in noun phrases are marked on the article (see 3.3 below), the demonstrative, on other adnominal determiners and also show up on pronominal affixes on the verb.

Most nouns are assigned to one of four genders: Masculine (M), feminine (F), neuter 1 (N1), and neuter 2 (N2). Some nouns undergo cross-classification and can appear with the agreement patterns of several genders (mostly either masculine or feminine), depending on salient semantic features of the referent. Gender is not marked overtly on the noun itself. Agreement targets for gender are all determiners and the verbal pronominal affixes (On gender, see chapter 4).

Case is not marked morphologically on nouns, nor by adpositions. Rather, verbal affixes indicate grammatical relations in a clause.

Most nouns do not reduplicate productively (but see dyads below). There are some lexicalized noun reduplications, such as *bokoubokou* ‘Stephanie’s astrapia (sc. *Astrapia stephaniae*)’, *sokousokôu* ‘insect sp.’, *dingding* ‘taro rhizome’, *afilāfil* ‘twins’, *kimkīm* ‘root’, *kubkub* ‘down (of a bird)’, or *skoskō* ‘knot in wood’. At least synchronically, all of these lack non-reduplicated counterparts (with the possible exception of *kim* ‘ground’). This is typical of Ok languages in general (Healey 1964a: 64).

Nouns function as heads of noun phrases. They can be preceded by a possessor or a pronominal (embedded) relative clause and followed by adjectival modifiers, or a numeral. The rightmost position in any noun phrase is occupied by a pronominal element from one of the pronoun series or a clitic pronominal article. These pronominal elements indicate number, gender, and referentiality of the noun. Cliticized article and noun form one phonological

word for the purpose of tone assignment. On the syntactic structure of the noun phrase, see chapter 6.

Within the clause, noun phrases function as overt core arguments and possessors. Apart from these core functions, nouns can be locative adjuncts of intransitive verbs of motion. Noun phrases can function as the predicate in non-verbal clauses (see 9.11).

3.1.2. Compound nouns

The overwhelming number of compound nouns are N-N compounds. A-N and N-V compounds are marginal in the corpus with only one or two examples each. Most compound nouns consist of two stems. Compounds consisting of three stems are possible but very rare. In the two attested examples all three stems are monosyllabic (see below).

The non-final members in a compound are always bare nominal stems, i.e. they are never followed by an adnominal determiner. This is to be expected because non-final noun stems in Mian compounds are never used referentially and nouns which are used non-referentially typically are not followed by articles.

All compound nouns have in common that they have a composite tonal melody. The set of composite tonal melodies is exactly the set of the tonal melodies found on monomorphemic nouns, namely L, H, LH, HL, and LHL (see 2.8.3.3). In each of the following examples I will give the tones of the individual stems and the resulting composite melody.

Proper names of various natural landmarks can be compounded with the nouns for the landmarks that they are the names of. The examples below illustrate this for the landmark nouns *taman* (L) ‘valley’, *tibín* (LH) ‘river head’, *fib* (L) ‘river confluence’, and *bil* (L) ‘flat ground’:

- | | | | |
|-----|--------------------------------|--------------------|-------------------------|
| (1) | <i>Hak-taman</i>
(L+L>L) | <i>Haktaman</i> | ‘river Hak valley’ |
| | <i>Sek-taman</i>
(L+L>L) | <i>Sektaman</i> | ‘river Sek valley’ |
| | <i>Fu-taman</i>
(L+L>L) | <i>Futaman</i> | ‘river Fu valley’ |
| | <i>Aki-taman</i>
(L+L>L) | <i>Akitaman</i> | ‘river August valley’ |
| | <i>Tekein-taman</i>
(L+L>L) | <i>Tekeintaman</i> | ‘river Sepik valley’ |
| | <i>Sek-tibín</i>
(L+LH>LH) | <i>Sektibín</i> | ‘head of the river Sek’ |

<i>Hak-tibín</i> (L+LH>LH)	<i>Haktibín</i>	‘head of the river Hak’
<i>Tobafa-fib</i> (L+L>L)	<i>Tobafafib</i>	‘Tobafafib’
<i>Ebolio-fib</i> (L+L>L)	<i>Eboliofib</i>	‘Eboliofib’
<i>Nene-bil</i> (L+L>L)	<i>Nenebil</i>	‘Nenebil’
<i>Gu-bil</i> (L+L>L)	<i>Gubil</i>	‘Gubil’

Proper names compounded with either *am* ‘house’ or *bib* ‘village’ refer to human habitations. The difference between these two is size. While compounds with *am* (L) ‘house’ refer to larger settlements, compounds with *bib* (L) ‘village’ refer to hamlets:

(2)	<i>Mian-am</i> (L+L>L)	<i>Mianam</i>	‘Mianmin’
	<i>Oksab-am</i> (L+L>L)	<i>Oksabam</i>	‘Oksapmin’
	<i>Klefol-am</i> (L+L>L)	<i>Klefolam</i>	‘Telefomin’
	<i>Skiobib</i> (L+L>L)	<i>Skiobib</i>	‘Skiobib’
	<i>Kondu-bib</i> (L+L>L)	<i>Kondubib</i>	‘Kondubib’

Proper names compounded with *tēn* (H) ‘people’ are used to refer to ethnic groups or clans:

(3)	<i>Soka-tēn</i> (L+H>LH)	<i>Sokatén</i>	‘the Sokamin people’
	<i>Mian-tēn</i> (L+H>LH)	<i>Miantén</i>	‘the Mianmin people’
	<i>Usalei-tēn</i> (L+H>LH)	<i>Usaleitén</i>	‘the Usaleimin people’

Compounds consisting of a body part and the noun *ōn* ‘bone’ are used to refer to the body part, as well as the bone inside the body part. It is very common to use the compound with *ōn* ‘bone’ even though the focus is not on the bone but rather on the body part as a whole.

(4)	<i>debel-ōn</i> (L+H> LH)	[forehead-bone]	<i>debelón</i>	‘forehead (bone)’
	<i>kwéil-ōn</i> (LH+H> LH)	[hand-bone]	<i>kweilón</i>	‘hand (bone)’
	<i>skil-ōn</i> (LH+H>LH)	[foot bone]	<i>skilón</i>	‘foot (bone)’
	<i>gabáam-ōn</i> (LH+H>LH)	[head-bone]	<i>gabáamon</i>	‘head (bone)’
	<i>báan-ōn</i> (LH+H>LH)	[jaw-bone]	<i>báanon</i>	‘jaw (bone)’
	<i>gīm-ōn</i> (H+H>H)	[spine-bone]	<i>gīmon</i>	‘spine (bone)’
	<i>bān-ōn</i> (H+H>H)	[arm-bone]	<i>bānon</i>	‘arm (bone)’

Another type of compound which is common is a body part compounded with *gong* ‘joint’, referring to the various joints of the human body, e.g. *kwéil-gong* [hand-joint] ‘wrist’. There are monomorphemic words for elbow (*het*) and knee (*dlong*).

Compounds consisting of a noun referring to the source of a particular smell and the noun *tang* ‘smell’ can be productively formed. Examples are:

(5)	<i>al-tang</i> (L+L>L)	[faeces-smell]	<i>altang</i>	‘smell of faeces’
	<i>onyan-tang</i> (L+L>L)	[onion-tang]	<i>onyantang</i>	‘onion smell’
	<i>fè-tang</i> (HL+L>HL)	[carrion-smell]	<i>fetàng</i>	‘stink, rotten smell’

Compounds with *am* ‘house’ as the second stem refer to various types of houses. The elements *it-*, *kwóis-*, *tim-*, and *ton-* are bound stems and only occur in these compounds. The compound *gilam* ‘house without kitchen’ is an A-N compound consisting of the adjective *gil* ‘cold’ and the noun *am* ‘house’.

(6)	<i>katab-am</i> (L+L>L)	[flying_fox-house]	<i>katabam</i>	‘cave’
	<i>wan-am</i> (L+L>L)	[bird-house]	<i>wanam</i>	‘bird blind’
	<i>gil-am</i> (L+L>L)	[cold-house]	<i>gilam</i>	‘house without kitchen’
	<i>it-am</i> (L+L>L)	[it-house]	<i>itam</i>	‘dance house’

<i>tim-am</i> (L+L>L)	[<i>tim</i> -house]	<i>timam</i>	‘house for the bachelors’
<i>ton-am</i> (L+L>L)	[<i>ton</i> -house]	<i>tonam</i>	‘mosquito net’
<i>kwóis-am</i> (LH+L>LHL)	[<i>kwóis</i> -house]	<i>kwoisâm</i>	‘spirit house’

The noun *teb* ‘hunger, want’ is compounded with a noun referring to some substance that is being craved. One commonly finds the following three:

(7) <i>imen-teb</i> (L+L>L)	[taro-hunger]	<i>imenteb</i>	‘hunger’
<i>aa-teb</i> (L+L>L)	[water-hunger]	<i>aateb</i>	‘thirst’
<i>fút-teb</i> (LH+L>LHL)	[tobacco-hunger]	<i>futêb</i>	‘nicotine deprivation’

In (8) below, I list further examples of compounds, some of which have a combination of stem melodies that has not been illustrated by any of the preceding examples.

Mifimkôu ‘sago hammer’ is an N-V compound consisting of *mifim* ‘sago’ and the verb stem *kou* ‘to pound’. In this case, the relation between the two stems is that of verb and object (to pound sago), but given that this is the only example of an N-V compound in my corpus, this is only an observation. If the stems in a compound each have LH tone the resulting melody is LHL.

(8) <i>as-aal</i> (L+L>L)	[tree-skin]	<i>asaal</i>	‘bark’
<i>sít-aal</i> (LH+L>LHL)	[tooth-skin]	<i>sitâal</i>	‘lip(s)’
<i>as-yam</i> (L+L>L)	[tree-fruit]	<i>asyam</i>	‘fruit’
<i>ãn-at</i> (H+L>HL)	[arrow-wood]	<i>anàt</i>	‘arrow type’
<i>míl-blong</i> (LH+L>LHL)	[bean-pod]	<i>milblông</i>	‘bean pod’
<i>amún-tem</i> (LH+L>LHL)	[belly-hole]	<i>amuntêm</i>	‘abdominal cavity’
<i>no-mén</i> (L+LH>LH)	[marsupial-bag]	<i>nomén</i>	‘marsupial bag’
<i>fút-áan</i> (LH+LH>LHL)	[tobacco-leaf]	<i>futâan</i>	‘cigarette paper, paper, letter’

<i>glól-wéng</i> (LH+LH>LHL)	[wind-speech]	<i>glólwéng</i>	‘rumour’
<i>kwel-wéng</i> (L+LH>LH)	[neck-speech]	<i>kwelwéng</i>	‘whisper’
<i>wéng-sāng</i> (LH+H>LHL)	[speech-story]	<i>wéngsāng</i>	‘story’
<i>mifim-kou</i> (LH+L>LHL)	[sago-pound]	<i>mifimkôu</i>	‘sago hammer’

Compounds consisting of three stems are very rare. There are two examples in the corpus. The stems in such compounds are monosyllabic:

- (9) *am-go-dim* [house-head-top] *amgolim* ‘roof’
(L+L+L>L)
al-úk-am [faeces-pit-house] *alukâm* ‘toilet’
(L+LH+L>LHL)

3.1.3. Additive co-compounds

In additive co-compounds the component parts refer to stereotypically conjoined entities (Wälchli 2005). Mian has a few such compounds, e.g. *alél-melel* (lit. wife-offspring) ‘(core) family’ and *awók-aalok* ‘adults, parents’, consisting of *awók* ‘mother’ and a cranberry morph *-aalok* without any synchronic meaning.

3.1.4. Noun-to-verb derivation

Mian has one derivational process which productively derives verbs from nouns. Nouns can take the verbalizing suffix *-an* to form an inchoative verb with the meaning ‘to become N’ to which regular verbal morphology can be suffixed. An example is provided below:

- (10) *konokmôn-an-n-amab-i=be*
old_woman-VBLZ-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
‘I will be an old woman.’ (Smith and Weston 1974b: 38)

3.1.5. Noun-to-adverb/adjective derivation

Mian expresses some adverbial meanings for which other languages use adpositional phrases by appending a derivational suffix to a noun and thus deriving an adverb from it. The elements that are appended to the noun are suffixes rather than postposition because they exclusively attach to nouns rather than noun phrases. The noun cannot be modified or quantified in any way, nor can it be followed by an article or other determiner. The syntactic position of the resulting adverb is before the verb. The inventory of these derivational suffixes comprises:

- (11) *-besa* ‘without’
-daa ‘at (locative)’
-deib ‘for (purposive, cf. *deib* ‘road’)
-dikin ‘like (in comparisons)’
-dofa ‘about, because of (causal)’
-dum ‘with (instrumental)’

In the following I provide some examples, which illustrates the use of denominal adverbs further:

- (12) *nē* *afoksmík=o* *asumâtna* *fút-besa*
 1SG hour=N2 three tobacco-without
 ‘I (have gone) three hours without a smoke.’ [Observed]
- (13) *ē* *éil-dikin* *ngaan-b-e=be*
 3SG.M pig-like call_out.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is calling out like a pig.’
- (14) *unáng* *ōlo* *anat-dum*
 woman DEM.PROX.SG.F arrow-with
- bina-b^(H)-io=be*
 shoot.PFV-NHODPST-2/3PL.AN.SBJ=DECL
 ‘They shot this woman with an arrow.’

Apart from *-dum*, which can be combined with any instrument involved in an action, there is also *-tub* ‘with (the hand)’, which is exclusively used in collocation with the noun *kwéil* ‘hand’, thus, *kwéil-tub* ‘with the hand, manually’:

- (15) \bar{e} *kwéil-tub* *klâ-n-e=be*
 3SG.M hand-with make-REAL-3SG.M.SBJ=DECL
 ‘He made it manually.’

There is one derivational noun suffix *-sa* with the meaning of having what the noun says as a property, and one suffix *-gam* ‘covered with (of substances or skin diseases)’. The resulting derivations are adjectives rather than adverbs. They are used to make predications about an argument but are not themselves modifiers of the predicate:

- (16) \bar{o} *amún-sa=be*
 3SG.F belly-with=DECL
 ‘She is pregnant.’ (lit. ‘with belly’) [Observed]
- (17) \bar{o} *afuei-gam* *biaan-o=ta=be*
 3SG.F skin_lesion-covered stay.IPFV.SS.SIM-3SG.F=MED=DECL
 ‘she was covered with weeping sores’ [Afueiwok]

The meaning of nouns undergoing derivation with *-sa* or *-gam* is attributive rather than adverbial. A noun inflected with *-sa* can fill the postnominal modifier slot in a noun phrase just like any other adjectival modifier. Compare:

- (18) *imen* *sūm=e*
 taro big=SG.N1
 ‘a/the big taro’
- (19) *imen* *kīb-sa=e* *fu-bi*
 taro ash-with=SG.N1 cook-AUX.IPFV
 ‘(she) was cooking a taro with ash (on its tuber)’ [Fitibkanib and Dimosson]

3.1.6. Adjective-to-noun derivation

There is marginal zero conversion of adjectives into nouns. This mainly applies to dimensional adjectives and some others that denote physical properties, such as *sūm* ‘big, size’, *teke* ‘long, length’, and *abil* ‘heavy, weight’.

3.1.7. Proper names and kin nouns

Proper names usually occur with a cliticized article reflecting the sex of the bearer of the name, i.e. =*e* for males and =*o* for females. Alternatively, proper names can be followed by any of the pronoun series except the two sets of demonstratives. Proper names cannot be possessed. Kin nouns, e.g. *awók* ‘mother’, do not show any of these restrictions.

Traditionally, a child would be given one first name and receive his or her father’s first name as a patronymic, e.g. Tabtekeb Skiniab, Milimab Tabtekeb, Kasening Milimab. These are three example names of grandfather, father, and son. Today, some families have settled on a male name from an earlier generation and use it as a family name. For example, most of Kasening’s children use ‘Milimab’ (Milimab having been their grandfather) as their family name, though in this particular case the oldest two children opted for ‘Kasening’ as their second name.

Traditional female names are: Kukdim, Seimabneng, Selem, Umsin, Wentak. Traditional male names are: Asuneng, Awaseb, Bongsab, Buseb, Dab, Kasening, Kub, Liden, Mutumab, Nontlin, Obrib, Obet, Yangsin, Yatemanab.

Nowadays, biblical names, such as Deniel, Ebel, Eron, Ismael, Jeremia, Raphael, and Simon, and modern western names, like Leoni, Gerome, Raymond, Albet, Max, Milsen, and Viola are common.

Group names are transparent compounds consisting of a proper name designating a certain group of people and either of the nouns *mín* ‘son’, *món* ‘daughter’ or in the plural *tēn* ‘people’, e.g. *Usalei-mín* ‘man from the Mianmin group living in Gubil’, *Usalei-món* ‘woman from the Mianmin group living in Gubil’, *Usalei-tēn*, ‘the Mianmin group living in Gubil’.

Dogs are the only animals which are given names. Domestic pigs or birds (e.g. hornbills or cassowaries) remain nameless.

Place names are usually transparent compounds consisting of a proper name and either of the nouns *am* ‘house’ (*Mian-am* ‘Mianmin village’, *Oksab-am* ‘Oksapmin station’), *bil* ‘hill’ (*Nene-bil* ‘Nenebil’), *fib* ‘river confluence’ (*Tobafafib* ‘Tobafafib’), *bib* ‘village, hamlet’ (*Skiobib* ‘Skiobib’), or *taman* ‘valley’ (*Boutlantema taman* ‘Boutlantema valley’).

The inventory of kin terms comprises the following: *aaleb* ‘father’, *awók* ‘mother’, *imak* ‘husband’, *alél* ‘wife’, *āi* ‘dad’, *biém* ‘mum’, and all of mother’s sisters and the wives of her brothers’, *ning* ‘younger brother’, *neng* ‘younger sister’, *hek* (*sūm*) ‘older (oldest) brother’, *āam* ‘older sister’, *en* (*sūm*) ‘older (oldest) sister’, *máamein* ‘mother’s brother’, *báab* ‘parent’s younger sister’, *akuláb* ‘parent’s older sister’, *nokái* ‘mother’s father, all of his brothers and husbands of his sisters, father-in-law of a man’, *ayàl* ‘father’s father, all of his brothers and husbands of his sisters, father-in-law of a

woman’, *afok* ‘grandmother, all sisters of grandparents and all wives of brothers of grandparents, any female ancestor’, *baliám* ‘male ancestor/descendent’, *mín* ‘son’, *món* ‘daughter’, *aaling* ‘father’s younger brother’, *ayàab* ‘father’s older brother’, *andaneK* ‘husband’s father-in-law’, *andlok* ‘husband’s mother-in-law’, *aneis* ‘in-law’.

It is uncommon among adults to use a person’s name in direct address. Rather, kin terms are used. Parents call their children by their first names more often. Both proper names and kin nouns are used with the vocative clitic particle =*o* when addressing someone, e.g. *Kasening=o* [PN=VOC] ‘Kasening!’, *biém=o* [mum=VOC] ‘Mum!’.

Both proper names and kin nouns can be suffixed with *-wal*. Affixation of *-wal* to proper names forms associative plurals (Moravcsik 2003) of the pattern ‘X and associates’, e.g. *Kasening-wal* ‘Kasening and his people/family’ (Tok Pisin ‘lain bilong Kasening’). With kin nouns, *-wal* can either signal plural or associative plural, e.g. *awók-wal* ‘the mothers’ or ‘the mother and her people/family’. The plural suffix *-wal* is also used with dyads but generally not with common nouns. However, most nouns denoting offices, such as *kiab* ‘patrol officer’ and *kaunsol* ‘councillor’ behave like kin nouns in that they take *-wal* in the plural, e.g. *kiab-wal* ‘patrol officers’ and *kaunsol-wal* ‘councillors’. *-Wal* is also used to mark the plural of *agkit* ‘female (animal)’ and *yolowók* ‘giant beetle species’. However, in these two cases the use of *-wal* to mark plural is optional. *-Wal* is possibly also present as a fossilized part of the noun *bebuali* ‘butterfly’.

Kin nouns tend to occur with the collective article =*o* (following the plural suffix *-wal*) instead of regular =*i* for animate plural.

3.1.8. Dyads

Dyadic terms (Evans 2003a, 2006) refer to a social or a kin relationship between two or more people and encode relational opposites. There is some marginal metaphorical extension to relations between inanimates. Mian has five dyadic lexemes, which are given in (20):

- (20) *dum* ‘father and child (of either sex)’
hat ‘mother and child (of either sex)’
mikim ‘siblings of opposite sex’
dab ‘siblings of same sex’
kam ‘(married) couple’

Formally, dyadic terms are closest to nouns. They can appear as arguments of a verb and they appear with an article, which is preferably the collective article =*o*, but =*i* ‘animate plural’ is also possible:

- (21) *ī* *hat=o*
3PL.AN.POSS mother_child(dyad)=COLL

un-Ø-ib-bio=be
go.PFV-REAL-2/3PL.AN.SBJ-GPST=DECL
‘They, mother and child, went away.’

However, dyads are distinct from common nouns in the following ways. Dyads cannot be turned into a verb using the verbalizer *-an*. Compare (22) and (23):

- (22) *gwán-an-Ø-e=be*
spider-VBLZ-REAL-3SG.M.SBJ=DECL
‘He became a spider.’

- (23) **dab-an-Ø-ibo=be*
same_sex_siblings(dyad)-VBLZ-REAL-3SG.M.SBJ=DECL
Intended: ‘they became brothers/sisters’

Furthermore, nouns generally do not occur with the collective article =*o*, with the notable exception of kin nouns. Finally, the semantics of dyads and nouns are different since dyads refer to relations rather than entities.

If the dyad refers to a relation between just two individuals, it can be inflected for plural with the plural suffix *-wal*:

- (24) *Danenok* *dab-wal=i*
PN same_sex_sibling(dyad)-PL=PL.AN
‘Danenok and his brother’ [Danenok]

The form *dab=i* [same_sex_sibling(dyad)=PL.AN] ‘the brothers/sisters’ is also possible and indeed attested in the same text from which (24) is taken. If more siblings (*mikim*, *dab*) are involved or more children (*dum*, *hat*), the dyad is obligatorily inflected for plural with *-wal*:

- (25) *nīb* *mikim-wal*
1PL.INCL.POSS opposite_sex_siblings(dyad)-PL
‘we, one brother and sisters’ OR ‘we, brothers and one sister’

Although dyadic terms can occur on their own, they can also be accompanied by either a pronoun or a proper name immediately preceding the dyadic term, i.e. in the possessor slot preceding the dyad head. Note that although the pronoun in (25) is in the possessive form, it receives an appositive interpretation. All dyadic terms except *kam* ‘married couple’ can occur with all (animate) plural possessive pronouns with appositive meaning, e.g. *nī* ‘our (EXCL)’, *nīb* ‘our (INCL)’, *īb* ‘your’, and *ī* ‘their’ in the possessor position. The dyad *kam* can only be preceded by those of the second and third person (animate) plural, hence **nī kam* and **nīb kam*. Why this should be the case is unclear. Dyads never appear in phonologically eroded form.

The following collocations of dyadic term and pronoun are attested:

(26)	<i>nī dum</i>	we (EXCL), father and child
	<i>nīb dum</i>	we (INCL), father and child
	<i>īb dum</i>	you, father and child
	<i>ī dum</i>	they, father and child
	<i>nī mikim</i>	we (EXCL), siblings of opposite sex
	<i>nīb mikim</i>	we (INCL), siblings of opposite sex
	<i>īb mikim</i>	you, siblings of opposite sex
	<i>ī mikim</i>	they, siblings of opposite sex
	<i>nī hat</i>	we (EXCL), mother and child
	<i>nīb hat</i>	we (INCL), mother and child
	<i>īb hat</i>	you, mother and child
	<i>ī hat</i>	they, mother and child
	<i>nī dab</i>	we (EXCL), siblings of same sex
	<i>nīb dab</i>	we (INCL), siblings of same sex
	<i>īb dab</i>	you, siblings of same sex
	<i>ī dab</i>	they, siblings of same sex
	<i>īb kam</i>	you, married couple
	<i>ī kam</i>	they, married couple

3.1.8.1. *dum* ‘father and child’ and *hat* ‘mother and child’

The basic relation expressed by *dum* and *hat* is between father and child and mother and child, respectively. The sex of the child is irrelevant.

(27)	<i>īb</i>	<i>dum=o</i>	<i>yē</i>
	2PL.POSS	father_child(dyad)=COLL	there

tl-Ø-io=be
 come.PFV-REAL-2/3PL.AN.SBJ=DECL
 ‘You, father and child, come.’

If the number of children involved is larger than two, the dyads *dum* and *hat* must be suffixed with the pluralizer *-wal*. The reduplication *dumwal dumwal* is used to indicate that more than one father is involved, each with at least one child. The reduplication *hatwal hatwal* is used to indicate that more than one mother is involved, each with at least one child.

The dyads *dum* and *hat* can occur with a proper name instead of a pronoun. In this case the name refers to the mother or the father, e.g.:

(28) *Beliab=e dum-wal*
 PN=SG.M father_child(dyad)-PL
 ‘Beliab and his children’ (Smith and Weston 1974b: 56)

3.1.8.2. *mikim* ‘siblings of opposite sex’ and *dab* ‘siblings of same sex’

The relationship denoted by *mikim* is one between siblings of opposite sex, while that denoted by *dab* is between siblings of same sex. The reduplications *mikimwal mikimwal* and *dabwal dabwal* are used for two or more disjoint groups of siblings of different sex and siblings of same sex, respectively.

The dyadic terms *mikim* and *dab* can occur with a proper name instead of a possessive pronoun in the possessor slot:

(29) *Danenok dab-wal=i*
 PN same_sex_sibling(dyad)-PL=PL.AN

ngaan-ha-biaan-ib=a
 call.IPFV-3SG.M.R-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘Danenok and his brother were calling out to him, while they...’
 [Danenok]

The dyads *dab* and *mikim* are also used to refer to the relation between grandparent and grandchild, of same and different sex, respectively.

3.1.8.3. *kam* ‘(married) couple’

The dyadic term *kam* behaves slightly differently from the others because it cannot be combined with first person pronouns, thus **nī(b) kam*. Use of *kam*

with pronouns of the second or third person (animate) plural, or with proper names is fine, e.g. *ib kamwal* ‘you, and your partner’, *Kaseninge kamwal* ‘Kasening and his wife, *Wentako kamwal* ‘Wentak and her husband’.

Of the five dyads only *kam* ‘(married) couple’ shows some metaphorical extension to cover a dyadic relation between inanimates. Consider the following excerpt from a description of the traditional technique of *keb*-weaving, where finely woven threads are tied around both tips of a bow to hold the bowstring in place:

- (30) *kam-wal* *ke haa-biaan-ib=a*
 couple(dyad)-PL do weave-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=DECL
 ‘they are weaving (i.e. the *keb*-thread) cross-wise’ (lit. ‘doing couples they are weaving (them)’ [Keb weaving])

3.1.9. Temporal nouns and noun phrases

Temporal nouns are used to locate an event in time. Temporal nouns usually occur with the article =*o* in temporal noun phrases and are of neuter 2 gender. The article can be left out without any change in meaning. Temporal nouns or noun phrases usually occur immediately after the subject, but are quite mobile within the clause.

Temporal noun phrases are:

- (31) *ōlo* ‘now’
sino ‘formerly, before’
memālo ‘today, now’
sintalo ‘yesterday’
sintalo ō sintao ‘the day before yesterday’ (lit. ‘yesterday’s yesterday’)
kutimibo ‘at night, in the early morning’
sinanggwāno ‘in days of yore’
abuko ‘later, afterwards’

An example is (32):

- (32) *nē memālo fūt=e*
 1SG now tobacco=SG.N1

tob-ò-n-i=a
 3SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I now take the tobacco, and then I ...’ [Rolling
 smokes]

The temporal expression *bomânomo* ‘tomorrow’ is a nominalised adverbial clause. Its exact analysis and glossing are:

- (33) *bomâ-(a)n-om-o=o*
 light-VBLZ-COND-EXPL.SBJ=N2
 ‘when it gets light’

However, *bomânomo* shows more positional variability than other nominalised adverbial clauses, in that it does not have to occur clause-initially. Syntactically, *bomânomo* behaves like other temporal noun phrases, all of which typically appear after an overt subject, or utterance initially, if the subject noun phrase or pronoun is elided e.g.:

- (34) *nē bomânomo Boutlantema taman*
 1SG tomorrow PN valley

un-aamab-i=be
 go.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘Tomorrow I will go to the Boutlantema valley.’

Hence, I will treat *bomânomo* – although technically a clause – as a lexicalized temporal noun phrase with the meaning ‘tomorrow’. The only items with the same morphological structure in the corpus is *sinangwanânomo* ‘in the far future’.

3.1.10. Verbal nouns

Verbal nouns can appear in subject and object position, in possessor position and as the predicate of a non-verbal predication. An example with a verbal noun in subject position is given in (35):

- (35) *kēb on-nam-in méb tl-Ø-o=be*
 2SG.M go.PFV-PFV-VN(N2) close come.PFV-REAL-N2.SBJ=DECL
 ‘Your going (away) has come close.’ [Observed, said to me a few days before my departure from Mianmin]

Although they resemble nouns proper in that they can function as subject or object, verbal nouns are more restricted as to which modifiers they allow. They allow possessive pronouns, as in *kēb onamin* ‘your going (away)’ in (35), but they cannot be counted, i.e. they cannot be modified by a numeral. Furthermore, verbal nouns followed by adjectival modifiers are unattested in

the corpus. Verbal nouns can appear with or without the pronominal article =*o*. They are of neuter 2 gender. On the morphology of verbal nouns, see 8.7.2.

3.2. Verbs

As verbs are morphologically by far the most complex word class in Mian, I will only be concerned with the defining features at this point and only give a few examples to illustrate the most fundamental points about verb inflection in Mian. For a detailed treatment of the morphology of the verb the reader is referred to chapter 8.

Loans from Tok Pisin or English cannot be inflected like native Mian verbs, but rather such loans have to be followed by the function verb *ke* ‘do’ in a function verb construction:

- (36) *ī* *futbol* *pilai* *ke-b-io=be*
 3PL.AN football(TP) play(TP) do-IPFV-2/3PL.AN.SBJ=DECL
 ‘They are playing football.’

Mian has intransitive, transitive, ditransitive, ambitransitive, and impersonal (atransitive) verbs. Transitives can be productively derived from intransitives and ditransitives from transitives. On basic argument structures and derived ones, see sections 9.1 to 9.7.

Semantically, verbs refer to actions, processes, and states. Verbs fulfil the function of the predicate of a clause.

Suprasegmentally, verbs are either unaccented, in which case they are all-low, or are lexically specified for an accent to which one of two complex tonal melodies (either HL or LHL) is assigned. Nouns, on the other hand, are associated with one of five tonal melodies.

Syntactically, verbs are easily identified. Mian is an SOV language. Although there is some pragmatically motivated variability with respect to the position of subject and object, the last word in a clause is almost always the verb and under no circumstances can the verb be followed by any of its arguments. Occasionally, however, one finds locative adjuncts postposed after the verb which are adverbial modifiers of the preceding verb syntactically, but which form their own intonational unit (see 11.2.10).

Morphologically, verbs can index their core arguments with pronominal affixes cross-referencing subject (37) and object (38):

(37) *ōlo yē fu-m-i=be*
 now there smoke.IPFV.INCH-1SG.SBJ=DECL
 ‘Now I start smoking.’ [Rolling smokes]

(38) *ya-temê'-b-e=a*
 PL.AN.O-look_at.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘while he was watching them, (they ...)’ [Danenok]

For more information on the indexation of arguments on the verb, see the sections 3.14 on grammatical relations, 8.5 on argument marking, and 9.2 on transitive verbs.

Final verbs, i.e. verbs in independent sentences or in final clauses of clause chains, can be inflected for various aspectual categories, e.g. *-b* ‘Imperfective’ (39), modal categories, e.g. *-n* ‘Realis’ (40), and temporal categories, e.g. *-s* ‘Remote past’ (41):

(39) *smā yē gen-b-i=be*
 still there roll.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am still rolling.’ [Rolling smokes]

(40) *as=e fa-n-e=be*
 fire=SG.N1 make_fire.PFV-REAL-3SG.M.SBJ=DECL
 ‘He (has) made a fire’

(41) *yōle éil=e a-nâ'-s-ib=e?*
 well pig=SG.M 3SG.M.O-kill.PFV-RPST-2/3PL.AN.SBJ=Q
 ‘Well, did they kill the pig?’ [Mianmin and Telefomin]

Medial verbs, i.e. verbs in non-final clauses in clause chains, can be inflected for co- or disjoint reference of the subject in the succeeding clause in combination with sequentiality or simultaneity of events. In (42), the suffix *-b* ‘DS.SIM’ indicates that the event described in the first clause is on-going when the event described by the second clause takes place and that this second clause has a different subject:

(42) *gwáab=i ī-maye dowôn'*
 small=PL.AN 3PL.AN-REFL eat.PFV

unê-b-ib=a
 go.IPFV-DS.SIM-2/3PL.AN.SBJ=MED

haleb *ē-ta* *te-s-e=a*
 wild_boar SG.M-EMPH come.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘the small (ones) themselves ate and (then) were going away, when
 a wild boar came’ [Afoksitgabáam]

A subset of verbs, almost all of which make predications of handling or movement, has an obligatory classificatory prefix which classifies one of the arguments according to semantic characteristics, namely sex, form, and function, on an absolutive basis. In (43), the object *fukêt* ‘smoking gourd’ is classified as belonging to the residue class.

(43) *ī* *dab=o*
 3PL.AN.POSS same_sex_siblings(dyad)=COLL

fukêt=e
 smoking_gourd=SG.N1

ob-ò-n-ib=a
 3SG.RESID.O-take.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘the brothers took a smoking gourd’ [Danenok]

About half of the verbs show an aspectual stem distinction with a perfective/imperfective contrast. The rest are trans-aspectual, i.e. they have only one stem which is vague with respect to aspect. A few verbs are defective and lack either a perfective or an imperfective stem. Formally distinct perfective and imperfective stems are subject to certain inflectional restrictions, e.g. a perfective stem cannot be directly inflected for imperfective aspect but has to enter an auxiliary construction. Trans-aspectual stems are not restricted in terms of their inflectional morphology.

For certain tense-aspect combinations, some verbs cannot be inflected directly, but have to be serialized with the existential verb functioning as an auxiliary before inflection can proceed:

(44) *fu* *unan-biaana-b-io=be*
 cook eat.IPFV-AUX.HAB.PST-IPFV-2/3PL.AN.SBJ=DECL
 ‘They used to cook and eat (some kind of fruit) until now.’

Two verb stems can be compounded into one phonological and grammatical verbal word which forms a single predication denoting a single event. Verbs also frequently appear in serial verb constructions in which only the last verb is fully inflected and all preceding verbs are either bare verb stems or stems with affixes indexing any object(s) but lack TAM inflection or marking for

subject, polarity or illocutionary force. Mian allows verb serialization at the core or the nuclear level. See 11.1 for a detailed description of verb serialization.

Directionals can be directly inflected to form intransitive verbs of motion, for example from *daak* ‘down’:

- (45) *daak-n-i=a*
 down-SS.SEQ-1SG.SBJ=MED
 ‘I go down and then I...’.

These directly inflected directionals are described in more detail in 9.1.2.

Finite verbs in Mian are marked for subject. All finite verbs have a pronominal suffix cross-referencing the subject.

There are two types of non-finite verb forms, M-forms and verbal nouns. Most verbs have a perfective and an imperfective M-form, which are formed by affixing *-nam* to the perfective stem (46) and *-m* to the imperfective stem (47):

- (46) *fuela-nam*
 bathe.PFV-PFV
 ‘bathe (PFV, M-form)’
- (47) *bu-m*
 hunt-IPFV
 ‘hunting (IPFV, M-form)’

These are discussed further in 8.7.1. M-forms are used in purposive serializations (see 11.1.6).

Verbal nouns are formed by suffixing *-in* to either of these to form the perfective and imperfective verbal noun, respectively:

- (48) *fuela-nam-in*
 bathe.PFV-PFV-VN
 ‘(instance of having a) bath’
- (49) *fua-m-in*
 bathe.IPfV-IPfV-VN
 ‘(activity of) bathing, of having a bath’

Verbal nouns are described further in section 8.7.2.

3.2.1. Notation conventions for verbs

Throughout this grammar, I will use the following conventions for indicating aspectual stem alternation. For biaspectual verbs, the perfective stem is given first, separated from the imperfective stem by a slash, e.g. *baa/o* ‘say’, where *baa* is the perfective and *o* the imperfective stem. For defective verbs, the absence of the perfective or the imperfective stem is indicated by ‘—’, e.g. *kaan/—* ‘die’ without an imperfective stem and *—/ei* ‘fly’ without a perfective stem. For trans-aspectual verbs, one stem is given which can be used for perfective and imperfective verb forms, e.g. *fu* ‘cook’.

When single aspectual verb stems are cited that are either perfective or imperfective, the aspect value is indicated in the gloss, e.g. *baa* ‘say (PFV)’, *o* ‘say (IPFV)’, *kaan* ‘die (PFV only)’, and *ei* ‘fly (IPFV only)’.

Argument-indexing affixes are indicated with dashes on verb stems as follows:

- V_{stem} : Verb does not index the object or does not have one, e.g. *fu* ‘cook (transitive)’, *—/un* ‘hum, drone (intransitive)’.
- $-V_{\text{stem}}$: Verb obligatorily indexes its object by a pronominal prefix, e.g. *-têm’/-temê* ‘see’, or a classificatory prefix, e.g. *-ò/—* ‘take’.
- $-V_{\text{stem}}^-$: Verb obligatorily indexes two objects, i.e. theme (with a prefix) and recipient (with a suffix), e.g. *-ûb’/-ka-* ‘give’.
- V_{stem}^- : Verb obligatorily occurs compounded with the verb ‘give’, which is followed by an object suffix in the perfective and requires an object suffix (from a somewhat different set) but no compounding with ‘give’ in the imperfective, e.g. *fote-* ‘chase away, rout’.
- A dash in brackets, e.g. *(-)ba* ‘put into (pfv)’, indicates that the affix is optional. Optional prefixes can be left out *without* changing the valency of the verb.

3.2.2. Verb compounds

Verb compounds consist of two (bare) verb stems. Table 3.1 lists examples of verb compounds. Stems which are only attested in compounds appear in brackets. In V-V compounds the aspect of the two compounded stems must not be at variance, though either can be trans-aspectual. V-V compounds in which one stem is perfective and the other imperfective are not possible.

Verb compounds are lexicalized items and are treated as single phonological verbal words. That means they have one accent, which specifies the inflection point for one tonal melody. The accent can lie outside the

compounded stem in a fully inflected verbal word. On accent in verbs, see section 2.8.4.1.

Table 3.1. Examples of V-V compounds

Compound	Component stems	Stem meaning	Gloss
<i>halò</i>	<i>hà'-lò</i>	break-hit	'break, split (alongside)'
<i>balò</i>	<i>bà'-lò</i>	break-hit	'break, split (across)'
<i>dalò</i>	<i>dà'-lò</i>	break_off-hit	'pick (seed)'
<i>walò</i>	<i>wà'-lò</i>	cut-hit	'cut off'
<i>habù</i>	<i>hà'-bù</i>	break-bury	'hide'
<i>batlâa'</i>	<i>bà'-tlâa'</i>	break-remove	'tear apart'
<i>yoma</i>	<i>yo-ma</i>	initiate-plant	'create'
<i>hakè</i>	<i>hà'-ke</i>	break-make	'break through'
<i>bafu</i>	<i>ba-fu</i>	fill-cook	'boil'
<i>detê</i>	<i>dê'-te</i>	desist-come	'return'
<i>denâ</i>	<i>dê'-na</i>	desist-make	'stop'
<i>kimâa'</i>	<i>ki-mâa'</i>	align-stand	'watch over, care for'
<i>-onki</i>	<i>-ò(n)-ki</i>	take-align	'become attached'
<i>biki</i>	<i>bi-ki</i>	squeeze-align	'close'
<i>bina</i>	<i>bi-na</i>	squeeze-hit	'shoot, pierce'
<i>bali</i>	<i>ba-(di)</i>	grow-(?)	'bear fruit'

Furthermore, verb compounds are single grammatical words, i.e. the whole compound is treated as a verb stem which can undergo inflection. The constituent parts of the compound cannot independently take argument affixes. Consider the verb compound *halò* 'break, split' which consists of the stems *hà* 'break (PFV)' and *-lò* 'hit, kill (PFV)':

- (50) *as=e sūm=e halò-s-e=a*
 tree=SG.N1 big=SG.N1 split.PFV-DS.SEQ-3SG.N1.SBJ=MED
 'a big tree split and then they...' [Flood]

Outside of compounds, the second stem in this verb compound *-lò* 'hit, kill (PFV)' always has to cross-reference its object, as in (51):

- (51) *Usaleitén awél=i yē*
 PN fathers_of=PL.AN there

ya-lò-s-ib=ta
 PL.AN.O-kill.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
 'they killed the fathers of the Usalei people there and then someone else...' [Mianmin and Telefomin]

In the compound *halò* [*hà* ‘break (PFV)’ and *-lò* ‘hit (PFV)’] ‘break, split’, on the other hand, the object cross-referencing prefix must not occur. Other V-V compounds in which the second member obligatorily cross-references its object when used on its own, but not as the second constituent stem in a V-V compound, are *balò* [*bà* ‘break (PFV)’ and *-lò* ‘hit (PFV)’] ‘break, split’ and *yoma* [*yo* ‘initiate’ and *-ma* ‘plant’ (PFV)] ‘create’. Unlike *-lò* ‘hit (PFV)’, which takes a pronominal prefix outside of compounds, *-ma* ‘plant (PFV)’ obligatorily has a verbal classificatory prefix when occurring outside of compounds, as in (52):

- (52) *Wamo taman=daak dol-ma-n-ib=ta*
 PN valley=down PL.AN.O-plant.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘they planted them (i.e. taro stalks) down in the Wamo valley and then ...’ [Mianmin and Telefomin]

The first element in a verb compound, on the other hand, retains its object prefix if it obligatorily has such a marker outside of compounds. Thus, the compound as a whole inherits obligatory object prefixation of the first stem in the compound, e.g. *-ò* ‘take (PFV)’ on its own always has a classificatory prefix and so does the compound *-onkì* ‘attach to (PFV)’ consisting of *-ò(n)* ‘take (PFV)’ and *ki* ‘align’:

- (53) *gīmon=o yē*
 spine=PL.N1 there

tob-onkì-˜b’-e-n-o
 3SG.LONG.O-attach.PFV-give.PFV-AN.PL.R-SEQ-3PL.N1.SBJ
 ‘their spines attached (to each other)’ [Danenok]

Most V-V compounds are composed of two transitive stems. The resulting compound is also transitive, e.g. *yo-ma* ‘create (PFV)’, whose component stems *yo* ‘initiate, beget’ and *-ma* ‘plant (PFV)’ are both transitive. A few V-V compounds are made up of two intransitive verbs. In that case the compound is likewise intransitive, e.g. *dê’-te* ‘return’ [desist-come].

Compounds like *kimâa* ‘watch over, guard (PFV)’ are interesting because here a transitive verb *ki* ‘align’ and an intransitive verb *mâa* ‘stand (PFV)’ are compounded. In that case, the whole compound inherits the argument structure of the transitive verb, as in (54):

- (54) *éil=o kimâa’-bi-Ø-e=be*
 pig=SG.F guard.PFV-AUX.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is guarding the sow.’

Verb compounds are often non-compositional or at least not fully compositional in their semantics, e.g. *habù* ‘hide’ consists of *hà* ‘break (PFV)’ and *-bù* ‘bury’ and *yoma* ‘create’ of *yo* ‘initiate, beget’ and *-ma* ‘plant (PFV)’. Also they may contain stems which are not attested outside of a particular compound, e.g. *-di* in *bali* ‘bear fruit’.

Mian has a limited number of compounds where an adjective or a directional are incorporated into the verb. The adjective or directional precede the verb stem and bear a classificatory prefix, which is obligatory in these formations, e.g. *-sbal-mâa* ‘strengthen’, composed of the adjective *sbál* ‘strong’ and *mâa* ‘stand (PFV)’, and *-tab-ba/-tab-bu* ‘fill up’, composed of the directional *tab* ‘down(river)’ and *(-)ba/(-)bu* ‘put into (PFV)’:

(55) *om-ò-n-e=a*
3SG.F_CL.O-take.PFV-SEQ-3SG.M.SBJ=MED

om-tabba-Ø-e-bio=be
3SG.F_CL.O-fill_up.PFV-REAL-3SG.M.SBJ-GPST=DECL
‘He took it (a string bag) and filled it up.’ [Selimin]

3.2.3. Denominal and deadjectival verbs derived with *-an*

Mian has one morphological process which productively derives intransitive verbs from nouns and adjectives with the suffix *-an*. Such denominal (56) and deadjectival (57) verb stems can then be regularly inflected.

(56) *Pita Paka gwán-an-Ø-e=be*
PN PN spider-VBLZ-REAL-3SG.M.SBJ=DECL
‘Peter Parker became a spider.’ [in an oral summary of the film
“Spiderman”]

(57) *háang-an-s-e=a*
dry-VBLZ-DS.SEQ-3SG.N1.SBJ=MED
‘it got dry, so I...’ [Rolling smokes]

It might be assumed from example (56) that the form of the verbalizer is simply *-a* followed by *-n* ‘Realis’. Especially because the /n/ in the suffix *-an* is sometimes left out, possibly on analogy with the alternation *-n ~ -Ø* ‘Realis’ in directly inflected verb forms (see 8.6.1.7). Thus, *gwánaebe* ‘he became a spider’ is also possible. Example (57), however, shows that the form of the verbalizer is indeed *-an* and not just *-a*: **háangasea*.

3.2.4. *Function verbs*

There are two function (or ‘light’) verbs: *ge/ga~gena* ‘say’ and *ke* ‘do’, which combine with a coverb in a complex predication. The coverbs of the former are ideophones (e.g. *fong* ‘whistle’), while the latter typically occurs with a noun (e.g. *tekein* ‘knowledge’), but serves a wider range of functions (see below). *Ge/ga~gena* ‘say’ is also used in quotatives and embedded questions (see 13.1). Complex predicates involving function verbs will be discussed in detail in section 8.9.

Two examples follow:

(58) *fong* *ge-s-e=a*
whistle say.PFV-DS.SEQ-3SG.M.SBJ=MED
‘he whistled and then someone else ...’ [Crows]

(59) *naka* *homòn* *unáng* *homòn=i*
man many woman many=PL.AN

tekein *ke-n-ib=ta*
knowledge do-SEQ-2/3PL.AN.SBJ=DECL
‘Many man and women knew (of it), and ...’ [Sofelok, 2]

The function verb *ke* ‘do’ has a range of other functions, which I only mention in passing here. A more detailed description can be found in 8.9.2. The function verb *ke* ‘do’:

- can follow an adverb, e.g. *heb ke* [fast do] ‘hurry’.
- productively takes Tok Pisin noun and verb loans as coverbs to form new (complex) verbs, e.g. *kot ke* [court do] ‘stand trial’, *sakim ke* [suck do] ‘suck’.
- can follow any of the basic numerals *asú* ‘two’, *asusúna* ‘two’, and *asumâtna* ‘three’ to express that a group consists of a certain number of individuals, e.g. *asumâtna ke* [three do] ‘be three of’.

3.3. **Articles**3.3.1. *The pronominal article and referentiality*

Mian noun phrases are followed by a pronominal article, if they are used referentially. I call the articles pronominal because they are segmentally identical to the third person forms of the free pronouns series (see 3.7.1).

Articles are enclitics which also indicates the number of the noun phrase and, in the singular, the gender of the noun. Articles are usually toneless (see below) and receive their tonal specification from the host they encliticize to. The forms of the article are given in table 3.2.

Table 3.2. The pronominal article

Gender	Agreement patterns		Example
	Singular	Plural	
Masculine	=e	=i	<i>naka</i> ‘man’
Feminine	=o		<i>unáng</i> ‘woman’
Neuter 1	=e	=o	<i>imen</i> ‘taro’
Neuter 2		=o	<i>am</i> ‘house’

The animate plural article =i is realized as =ei if it cliticizes to a word ending in a high vowel /i/ or /u/. The following examples may suffice: /^Hsnabi/ ‘crocodile’ and /^Hsnabi=eɪ/ ‘(the) crocodiles’; /^Lumasou/ ‘fish species’ and /umasou=eɪ/ ‘(the) umasou fish’, but /naka=i/ ‘(the) men’ not */naka=eɪ/.

Consider example (60) where three nouns – each with a pronominal article – appear as subject, object, and possessor:

- (60) *nakamîn=e* *imen=o* *éil=e*
 man=SG.M taro=PL.N1 pig=SG.M

wen-ha-b-e=a

eat.IPFV-3SG.M.R-DS.SIM-3SG.M.SBJ=MED

‘While a pig was eating a man’s taro, the man...’ [Pig story]

The formatives under discussion are articles rather than overt number/gender markers because they also indicate referentiality. The noun without the article occurs in contexts in which the noun is used non-referentially, that is in any of the following contexts:

- in the citation form, e.g. *nakamîn* ‘man, brother’, *éil* ‘pig’, *imen* ‘taro’, *sók* ‘rain’, *kukub* ‘way, custom’.
- in generic object arguments in the citation form of (some) transitive verbs, e.g. *as hakalin* [wood break.IPFV.VN] ‘(activity of) breaking wood’
- in first elements in N-N compounds, e.g. *wan-am* [bird-house] ‘bird blind’
- in generic terms used to classify animals and plants, e.g. *wan* ‘bird’ in *wan tolim* [bird eagle] ‘New Guinea eagle (sc. *Harpyopsis novaeguineae*)’

- in non-verbal predications about identity, e.g. *tíl=o=be* [dog=PRD=DECL] ‘it’s a dog’
- under negation, e.g. *imen bl-im* [taro exist-NEG] ‘there’s no taro’, *yāi=ba=be* [wound=NEG=DECL] ‘it’s not a wound’

This suggests that the article does not behave like overt gender or noun class markers in many Australian or Bantu languages, in which a noun either invariably has a certain marker or invariably lacks it, but rather functions as an article marking the noun as definite-referential or indefinite-referential but is left out if the noun is used non-referentially. However, there is a tendency to leave out the article if the noun is inanimate even if it is used referentially.

Mian does not mark its nouns overtly for gender but rather requires the article to agree in gender with its noun. There is evidence that the article is on the way of becoming a purely classificatory gender marker through the extension of the form with article to non-referential contexts. Although the form without article is the preferred choice under negation, as in *as bl-im* [wood exist-NEG] ‘there’s no wood’, one also finds *as=e bl-im* [wood=ARTICLE exist-NEG] with the same meaning. Greenberg (1978) shows that across languages the definite article often winds up as a gender marker on the noun after going through a grammaticalization process during which it is increasingly used both as a definite article, meaning ‘the N’, and an indefinite specific article, meaning ‘a specific N’ or ‘a certain N’. When the use of the article becomes a function of the syntactic construction in which the noun appears (e.g. negation), the original contrast between the form with article and the form without article is lost and the distinction becomes redundant. At this point the form with article usually starts to spread to all contexts. If this form becomes universal in the language, the former article has become a gender marker on the noun (Greenberg 1978: 63).

Articles can follow all nouns, i.e. common nouns, proper names, dyads, and temporal and verbal nouns (see section 3.1). Articles can also follow finite verbs in head-internal relative clauses and adverbial clauses. In head-internal relative clauses (61), the article agrees in number and gender with the noun. In adverbials (62), the article is invariably =*o*. Square brackets indicate clause boundaries:

- (61) *[no=i* *ya-l-ēb*
 marsupial=PL.AN PL.AN.O-kill.PFV-take.PFV

tl-Ø-e=i]
 come.PFV-REAL-3SG.M.SBJ=PL.AN
 ‘the marsupials he has killed and brought’ [Crows]

- (62) *[naka=i utl-Ø-ib=o]*
 man=PL.AN come_up.PFV-REAL-2/3PL.AN.SBJ=N2

ī ninín=o dl-â-n-ib=a
 3PL.AN name=N2 PL.F_CL.O-put.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘when the people grew up, they assumed names and then...’
 [Dimosson]

Adverbial clauses and head-internal relative clauses are discussed in 13.2 and 13.3 under embedding.

Articles can be distributed throughout the noun phrase and follow the noun and any adjectival modifiers. They can also follow numerals (see 6.3 for details on modified and quantified noun phrases):

- (63) *til=e milil=e sūm=e*
 dog=SG.M black=SG.M big=SG.M
 ‘a/the big, black dog’

In (63), referentiality, number and gender are marked per article =*e* on the noun and on each adjectival modifier. More common in natural discourse, however, is to have only one article for the whole noun phrase, namely following the rightmost modifier, for example:

- (64) *til milil sūm=e*
 dog black big=SG.M
 ‘a/the big, black dog’

I analyse the article as a clitic rather than a suffix for the following reasons: (a) Apart from nouns, articles can attach to adjectives and numerals and also to verbs in adverbial clauses and head-internal relative clauses. (b) The coordinating clitic =*a* (presumably a shortened form of *eka* ‘and’) usually intervenes between the noun and the article in the last constituent of a sequence of coordinate noun phrases:

- (65) *naka=i=a unáng=a=i*
 man=PL.AN=and woman=and=PL.AN
 ‘(the) men and women’ [Dimosson]

Articles are segmentally identical to the third person forms of the free pronouns series, from which they are probably derived. Synchronically, however, they differ from the pronouns in their suprasegmentals. While all free pronoun forms are lexically specified for a high tone, articles are subject

to suprasegmental phonological erosion, i.e. they are on the way to becoming toneless. As lexical tone spreads to any toneless affixes and clitics, the phonetic pitch value of the article depends on the lexical tone specification of the noun (see 2.8.3.2).

I assume three stages in this grammaticalization scenario. Contemporary Mian is moving from stage (b) to stage (c):

(66) (a) *naka ē* (lit. ‘man he’) > (b) *naka=ē* > (c) *naka-e* ‘a/the man’

In the first stage (a), nouns were followed by a free pronoun which was realized as a phonologically independent word. Synchronically, articles are generally not realized as independent phonological words anymore, although this still happens occasionally in very old speakers (over 80 years).

In the second stage (b), the article encliticizes to the noun. Concomitantly, suprasegmental attrition sets in.

At the final stage (c), the vocalic formative will have developed into a toneless nominal suffix.

As the article is part of the phonological nominal word (even in very careful speech), it is clear that the language has moved beyond the first stage. However, one finds the pronunciations [na.k^ha.ē] and [na.k^ha.ɛ] ‘a/the man’. In the former, the article has its own high tone, in the latter it is toneless and low tone is spread from the noun to the article. Articles which retain their own high tone (characteristic of the second stage) and ones which are toneless (characteristic of the third stage) occur in free variation.

3.3.2. The collective article =o

Although the article =i ‘animate plural’ is always possible for dyads and kin nouns, the collective article =o is predominantly used with dyads (67) and kin nouns (68):

(67) *ī* *hat=o*
3PL.AN.POSS mother_child(dyad)=COLL

un-Ø-ib-bio=be
go.PFV-REAL-2/3PL.AN.SBJ-GPST=DECL
‘they, mother and child, went away (lit. ‘the mother and child of them’)

(68) *wantok-wal=o* *ga-biaan-ib=a*
wantok(TP)-PL=COLL say.IPFV-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED

afin bi-n-ib-bio=be
ally stay.IPFV-REAL-2/3PL.AN.SBJ-GPST=DECL
‘They were saying “Wantok” (i.e. friend, person who speaks the same language) and were allies.’ [Mianmin and Telefomin]

3.4. Adjectives

Adjectives constitute an open class with at least 100 items. All Mian adjectives have in common that they can be used as an attributive modifier of a noun (69), as an (intransitive) predicate in non-verbal clauses (70), and as a headless adjective (71):

(69) *smik sismik=o wa-temê'-b-i=be*
picture blurred=N2 N2.O-look_at.IPFV-IPFV-1SG.SBJ=DECL
‘I’m looking at a blurred picture.’

(70) *kofi=e kok=o=be*
coffee=SG.N1 sour=PRD=DECL
‘The coffee is sour.’

(71) *gobôu=e hen-b-i=be*
round=SG.N1 look_for.IPFV-IPFV-1SG.SBJ=DECL
‘I’m looking for the round (one).’

Mian adjectives cover many of the semantic domains commonly established for adjectives in the world’s languages (Dixon 2004).

Age: *alu* ‘old (of objects)’, *memâ* ‘new (of objects)’, *mikik* ‘new, unused’, *sin* ‘old’.

Dimension/size: *ayai* ‘gigantic’, *beselib* ‘huge’, *eing/eintomông* ‘thick, spacious’, *gwáab* ‘small, soft (of volume)’, *kengkeng* ‘tiny’, *kwam(flak)* ‘wide’, *mebwêing* ‘short’, *mefakabmin* ‘small’, *sūm* ‘big, loud’, *teke(bmín)* ‘long’, *tetéb* ‘narrow (of two-dimensional objects, such as floor boards, cloth, etc.)’, *tibkal* ‘narrow (of three-dimensional objects)’, *tikan* ‘big’.

Value: *ayam* ‘good’, *meleng* ‘pleasant, nice’, *misiam* ‘bad’.

Colour: *geta* ‘dark yellow (taro corm colour)’, *gūm* ‘greyish white (taro corm colour)’, *ilem(ein)* ‘red’, *itanasít* ‘green’, *kīb* ‘brown (ash)’, *kosmale* ‘orange’, *kweima* ‘light yellow (taro corm colour)’, *māt* ‘dark(er) green’, *milil* ‘dark, black’, *mok(l)im* ‘blue’, *namâ* ‘bright, white’, *ngáamein* ‘yellow’, *sām* ‘dark red, purple (taro corm colour)’, *sele* ‘mottled red and white (taro corm colour)’.

Physical property: *abil* ‘heavy (of weight)’, *asít/isít* ‘raw’, *asítêm/isitêm* ‘new, fresh’, *beit(lok)* ‘soft, weak’, *bún* ‘unripe (of pumpkins)’, *dakal* ‘crooked’, *dangdang* ‘thin (of humans and animals)’, *difib* ‘warm’, *f̄oum* ‘barren (of females)’, *fleleng* ‘light (of weight)’, *fúm* ‘blunt’, *gāt* ‘dry’, *gil* ‘cold’, *glāl* ‘dry’, *gligli* ‘rough’, *gobôu/goboutâing* ‘round’, *háang* ‘dry’, *hānggo* ‘curved, twisted’, *hanggól* ‘bitter (of poor-quality tobacco)’, *heil* ‘tender (of shoots and plants)’, *hilil* ‘hairy’, *hon* ‘barren (of plants)’, *ilúm* ‘heavy (of weight)’, *kat* ‘flat’, *katbon* ‘thin (of objects)’, *ket* ‘unripe (of bananas)’, *kiblot* ‘straight, level’, *kining/kling* ‘smooth’, *kobóm* ‘mute’, *kobot* ‘very sharp’, *kok* ‘sour, bitter’, *kweifum* ‘unable to swim’, *meme* ‘mute’, *mimín* ‘hot’, *molot* ‘straight’, *ningning* ‘thorny’, *ninik* ‘dirty’, *sānab* ‘strong in taste (of ripe fruits)’, *sbál* ‘hard, strong’, *sismik* ‘blurred’, *slislí* ‘rough’, *takal* ‘rotten (of meat)’, *tol* ‘hot, spicy, strong taste; aggressive’, *yam* ‘ripe’, *yang* ‘sharp’, *yangyang* ‘thorny’.

Human propensity: *dleb* ‘sullen, irritable’, *gaang* ‘wise’ (but see below).

Similarity: *afet* ‘different’, *mak* ‘certain, (an)other’.

Difficulty: *bumlók* ‘difficult’, *kufiab* ‘easy’.

Qualification: *afan* ‘wrong, odd, strange’, *afét* ‘cleared of taboo’, *awém* ‘taboo’, *ayók* ‘secret’, *báin* ‘true’, *dam* ‘true’, *keim* ‘clear, obvious’, *kweital* ‘correct’, *moton* ‘true’.

Order: *mikiktêm* ‘first’, *mubiang* ‘last’.

The assignment of *dleb* ‘sullen, irritable’, *gaang* ‘wise’ to the class of adjectives is tentative because these two items are not well attested in the corpus. Collocations like *naka gaang* ‘wise man’ and *naka dleb* ‘sullen man’ have head-modifier order and suggest that these two items are indeed adjectives. Other concepts relating to human propensity, such as ‘hungry’, ‘angry’, ‘envious’, ‘happy’, ‘ashamed’ are expressed using (complex) verbs.

Mian does not conform to the typological tendency noted by Dixon (2004: 4) that speed terms are in the adjective class if terms relating to physical property are also in the adjective class. The two speed terms *hebmamsâb* ‘fast’ and *fiab* ‘slow’ are in the class of adverbs, whereas physical property terms are adjectives.

Suprasegmentally, adjectives – like nouns – are lexically specified for one accent and one out of four tonal melodies (i.e. L, H, LH, and LHL). The HL melody is unattested in adjectives. Adjectives function as modifiers of nouns in noun phrases but can also be used as the only constituent of a headless noun phrase and as the predicate in non-verbal clauses. As modifiers, adjectives always follow the noun they modify with the notable exception of *sin* ‘old’ and *memâ* ‘new’, which can (and tend to) occur before the noun.

If a noun and an adjective occur in a head-modifier relation in a noun phrase, both constituents can be followed by an article (or other adnominal determiner) reflecting number and gender:

- (72) *til=e* *sūm=e*
 dog=SG.M big=SG.M
 ‘the big dog’

Alternatively, – and this is more common in natural discourse – a single article follows the rightmost constituent. Semantically, the utterances in (72) and (73) are equivalent:

- (73) *til* *sūm=e*
 dog big=SG.M
 ‘the big dog’

A small subset of adjectives, e.g. *sūm* ‘big, loud, much’, *gwáab* ‘small, soft, little’, *ayam* ‘good’, and *misiam* ‘bad’, but not *ninik* ‘dirty’ or *teke(bmín)* ‘long’, nor any of the colour adjectives, can be used adverbially to modify a verb. Adjectives with adverbial function are not followed by an article and occur immediately before the verb they modify. Two examples are given below:

- (74) *mēn* *gwáab=o* *sūm* *me-b-o=be*
 child little=SG.F big cry.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘The little girl is crying loud.’ [Observed]

- (75) *āns=o* *ayam* *ngaan-b-o=be*
 song=N2 good sing.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She is singing a song/songs beautifully.’

Example (75) contrasts with (76) below in that in the former *ayam* ‘good’ is used as an adverb, whereas it is used as an attributive adjective in (76). As such it appears with an article to indicate that it modifies the head noun *āns* ‘song(s)’:

- (76) *āns=o* *ayam=o* *ngaan-b-o=be*
 song=N2 good=N2 sing.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She is singing (a) beautiful song(s).’

Adverbial use is attested for the following adjectives: *afan* ‘wrong’, *afet* ‘different’, *ayam* ‘good’, *ayók* ‘secretly’, *báin* ‘true’, *beselib* ‘huge, very

loud', *dam* 'true', *gaang* 'wise', *gwáab* 'small, soft', *kat* 'flat', *keim* 'in the open', *kweital* 'correct', *meleng* 'pleasant', *mikik* 'new, firstly', *misiam* 'bad', *moton* 'true', *mubiang* 'last', *sūm* 'big, loud'.

A sizable subset of adjectives can be used as a secondary predicate in a clause. Secondary predicates look like adjectives with adverbial function, i.e. they occur before the verb without a determiner, but their function is not to modify the event but to make a predication about an argument of the verb, as in (77):

- (77) *naka=e* *ān=e* *molot* *klâ-n-e=be*
 man=SG.M arrow=SG.N1 straight fix-REAL-3SG.M.SBJ=DECL
 'The man fashioned the arrow straight.'

Secondary predication is common with verbs of perception to express an inherent property of the source (78) or the attitude of the experiencer towards the source (79):

- (78) *ēle* *gligli*
 DEM.PROX.SG.N1 rough

mele-`b'-o-n-e=be
 touch.PFV-give.PFV-3SG.F.R-REAL-3SG.N1.SBJ=DECL
 'This (one) feels rough to her.'
- (79) *meleng* *kun-b-e=be*
 nice emanate_smell-IPFV-3SG.N1.SBJ=DECL
 'It smells nice.'

Secondary predication is possible for the following adjectives: *abil* 'heavy (of weight)', *asít/isít* 'raw', *asitêm/isitêm* 'new, fresh', *ayam* 'well', *ayók* 'hidden', *beit(lok)* 'soft, weak', *beselíb* 'huge', *bún* 'unripe (pumpkin)', *dakal* 'crooked', *eing/eintomông* 'thick, spacious', *fleleng* 'light (of weight)', *gil* 'cold', *gligli* 'rough', *gobôu/goboutâing* 'round', *gwáab* 'small, soft', *hanggô* 'curved, twisted', *hanggól* 'bitter (of poor-quality tobacco)', *heil* 'tender (of shoots and plants)', *hilil* 'hairy', *hon* 'barren (of plant)', *ilúm* 'heavy (of weight)', *kat* 'flat', *katbon* 'thin (of objects)', *ket* 'unripe (of banana)', *kiblot* 'straight, level', *kining/kling* 'smooth', *kobóm* 'mute', *kok* 'sour, bitter', *kwam* 'wide', *mebwêing* 'short', *meleng* 'pleasant, nice', *meme* 'mute', *mimín* 'hot', *misiam* 'bad', *molot* 'straight', *ningning* 'thorny', *sānab* 'strong in taste (of ripe fruits)', *sbál* 'hard, strong', *sismik* 'blurred', *slislí* 'rough', *sūm* 'big, loud', *takal* 'rotten (of meat)', *teke(bmín)* 'long', *tetéb* 'narrow (of two-

dimensional objects, such as floor boards, cloth, etc.)', *tibkal* 'narrow (of three-dimensional objects)', *tikan* 'big', *tol* 'hot, spicy', *yangyang* 'thorny'.

Common nouns and adjectives are formally very similar. Both categories are without any inflectional morphology. Like nouns, adjectives can function as the predicate in non-verbal clauses and can have verbs derived from them with the inchoative derivational suffix *-an*, expressing the inception of the state or property denoted by the adjective.

Most adjectives do not reduplicate productively. There are a few lexicalized adjective reduplications, such as *kengkeng* 'tiny', *ningning* 'thorny', *gligli* 'rough', and *dangdang* 'thin'. The adjectives *sūm*, in the sense of 'great' (not dimensional "bigness") and *afet* 'different' can be used in reduplicated form to emphasize plurality or variety (see 6.3.4).

Adjectives can appear on their own as headless adjectives in noun phrases without an overt nominal head. Compare (80) with an adjectival modifier and (81) with a headless adjective:

(80) *tíl=e* *sūm=e* *a-têm'-Ø-al=e!*
 dog=SG.M big=SG.M 3SG.M.O-see.PFV-REAL-2SG.HORT=HORT
 'Look at the big dog!'

(81) *sūm=e* *a-têm'-Ø-al=e!*
 big=SG.M 3SG.M.O-see.PFV-REAL-2SG.HORT=HORT
 'Look at the big (one)!'

Examples like (81) could be taken as evidence to claim that Mian lumps adjectives and nouns together in a single word class. However, we need to set up a class of adjectives distinct from nouns for two reasons.

First, there is a clear syntactic ordering principle between noun head and adjectival modifier within the noun phrase. Besides the exceptions *sin* and *memâ* noted above, all adjectival modifiers must follow the noun. Thus, one finds: *tíl=e sūm=e* and *tíl sūm=e* 'a/the big dog' but not **sūm=e tíl=e* or **sūm tíl=e*, neither with the same intended meaning nor any other meaning.

Second, and more importantly, nouns are lexically specified for one gender. The only exceptions are a few nouns which commonly undergo cross-classification, i.e. pick their gender according to the sex of the referent (see 4.3). Adjectives, on the other hand, are not specified for gender. Although adjectival modifiers do not have any inflectional markers which agree in gender with the noun, any article or other determiner following the adjective always does. In case of a headless adjective, as in (81) above, agreement patterns in the determiner follow the gender of the noun normally used to refer to a given referent.

There are no comparative degree forms for adjectives. It is however possible to express a superlative meaning with the intensifier *dót* ‘very’:

- (82) *ēle* *bib* *ōlo* *dót* *teke=be*
 DEM.PROX.M.SG village DEM.PROX.N2 very long=DECL
 ‘He is the tallest (man) in this village’ (lit. ‘This (one) is very tall in this village’)

Comparisons can be expressed with adjectival antonyms, as in (83), or, alternatively, in a two-clause structure involving the verb *gai-* ‘(by)pass, surpass, outdo’, as in (84):

- (83) *Mosbi* *ō=le* *sūm* *eka* *Banimo* *ō-ta*
 PN N2=TOP big and PN N2=EMPH

gwáab=o=be

small=PRD=DECL

‘Port Moresby is bigger than Vanimo.’ (lit. ‘Port Moresby is big and Vanimo is small’)

- (84) *ē* *nē* *gai-˘t’-ne-n-e=a*
 3SG.M 1SG surpass.PFV-give.PFV-1SG.R-SEQ-3SG.M.SBJ=MED

wekib *usn-Ø-e=be*

a_lot go_up.PFV-REAL-3SG.M.SBJ=DECL

‘He is taller than me.’ (lit. ‘He surpasses me, he goes up a lot’)

There is a bipartite modifier *ADJ1 tab ADJ2 tab* ‘in between ADJ1 and ADJ2’ (lit. ‘ADJ1 down ADJ2 down’), which is generally used with antonyms. It locates a property roughly in equal distance from the scalar poles established by the antonyms ADJ1 and ADJ2, e.g.:

- (85) *ayam tab misiam tab* ‘soso, between good and bad’
kining tab gliġlī tab ‘between smooth and rough’

Mian has a substantial colour vocabulary. Colour words show the same syntactic and morphological behaviour as adjectives. They follow the noun they modify, can take an article, which agrees in number and gender with the noun, and they appear as headless adjectives.

The colour word inventory is substantial and Tok Pisin loan colour words, such as *blekpela* ‘black’, *blupela* ‘blue’, and *retpela* ‘red’, are rarely used. The full inventory consists of:

- (86) *namâ* 'bright, white' (cf. *wan namâ* 'cockatoo')
milil 'dark, black' (cf. *mililanobe* 'it has become dark')
ilem 'red; blood'
ngáamein 'yellow'
kosmal(e) 'orange'
mokim 'blue' (cf. *as mokim* 'tree species with blue fruits')
itanasít 'green' (cf. *itán* 'plant leaf' plus *asít* 'raw, fresh')
māt 'dark(er) green; bile'
kīb 'brown (ash)'

Three colour words have variants: *ilemein* (analogous to *ngáamein* 'yellow') 'red', which – in contrast to *ilem* – can only be a colour adjective and not refer to 'blood', *mok* 'blue' and *moklim* 'blue', and *kosnal* 'orange'.

There are two colour modifiers which are only used with colour adjectives. They always follow the colour adjective:

- (87) *sibsib* 'off-COLOUR TERM', e.g. *namâ sibsib* 'off-white'
tlaal 'dark', e.g. *mokim tlaal* 'dark blue'

Two adjectives are also used to modify colour adjectives. They always follow the colour adjective:

- (88) *eing* 'thick, spacious; luscious'; e.g. *itanasít eing* 'luscious green'
moton 'true, real', e.g. *ilem moton* 'real red'

The adjectival modifier *ADJ1 tab ADJ2 tab* 'between ADJ1 and ADJ2' can be used with colour adjectives, e.g.:

- (89) *kosmale tab ilem tab*
orange down red down
 'between orange and red' [Language of Perception, (Majid and Levinson 2007)]

There are five colour terms exclusively reserved to describe the corm colour of different taro species. These were elicited with the help of the MPI colour stimuli (Language and Perception project) (Majid and Levinson 2007).

- (90) *gūm* 'greyish white'
geta 'dark yellow'
sele 'mottled (red and white)'
sām 'dark red, purple'
kweima 'light yellow'

3.5. Prenominal modifiers

Mian has two prenominal modifiers which appear directly in front of a noun. These are *omômom* ‘all kinds of’ and *inamìn* ‘such’. Nouns modified in such a way cannot be possessed. An example is given below:

- (91) *omômom wan=i baa-Ø-ib=a*
 all_kinds_of bird=PL.AN say.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘All kinds of birds talked and then someone else ...’ [Crows]

These might look similar to adjectives given the fact that the adjectives *sin* ‘old’ and *memâ* ‘new’ can actually appear prenominally but they need to be separated from adjectives because they can never follow the noun while the adjectives *sin* ‘old’ and *memâ* ‘new’ can also follow the noun like any other adjective. Furthermore, *omômom* ‘all kinds of’ and *inamìn* ‘such’ cannot be intensified while this is generally possible for adjectives.

3.6. Adverbs

Adverbs are a small class with about two dozen items. Adverbs are used to modify a verb, i.e. to specify certain aspects or properties of an event, as in (92):

- (92) *naka=e hebmamsâb wen-b-e=be*
 man=SG.M fast eat.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘The man is eating fast.’

Adverbs do not have an article and tend to (but do not have to) occur immediately before the verb they modify. On the position of adverbs in the clause, see section 9.10.4.

The class of adverbs consists of:

- (93) *aaleing* ‘without shame’
ambá(ve) ‘anyway, nonetheless’
amít(ve) ‘always’
asalût ‘high up’
besa ‘just’
beténg ‘carefully’
bli ‘quickly’
daait ‘collectively, commonly’
dilbí ‘loose’

<i>dim</i>	‘in vain, infelicitous’
<i>dót</i>	‘very’
<i>ēfamak</i>	‘somewhere around here’
<i>ēle</i>	‘here’
<i>fiab</i>	‘slowly’
<i>f(l)ifli</i>	‘across’
<i>fūt</i>	‘quickly’
<i>hanggâu</i>	‘again (repeating the action of the succeeding verb)’
<i>hebmamsâb</i>	‘fast, quickly’
<i>imblia</i>	‘heedlessly, unthoughtfully, inadvertently, through an oversight’
<i>kimin</i>	‘same’
<i>klâ</i>	‘really, properly’
<i>kweimiki</i>	‘deliberately’
<i>makob(ye)</i>	‘like, quasi’ (Tok Pisin <i>olsem</i>)
<i>méb</i>	‘close’
<i>mifin</i>	‘selfishly’
<i>mikil</i>	‘ready’
<i>misim</i>	‘for free, (as) a treat, gratis’
<i>imín</i>	‘again’ (older speakers use <i>eimín</i>)
<i>sanggwâu</i>	‘quickly, suddenly’
<i>sin</i>	‘already, first’
<i>skéim</i>	‘far’
<i>smā</i>	‘still’
<i>sún</i>	‘habitually’
<i>un</i>	‘temporarily’
<i>wekib</i>	‘very, a lot’
<i>yē, yō</i>	‘there, so’
<i>yēbbaka</i>	‘together, as well’
<i>yēfamak</i>	‘somewhere around there’

In addition, there are some denominal adverbs which consist of a noun inflected with the derivational suffix *-daa* ‘at’, e.g. *bib-daa* [village-at] ‘outside’, *bín-daa* [floor-at] ‘inside’.

Three adverbs can be used to modify or intensify adjectives. They always occur immediately before the adjective they modify:

- (94) *dót* ‘very’
wekib ‘very, a lot’
klâ ‘really, properly’

Intensification of an attributive adjective is illustrated in (95), intensification of an adjective as a predicate in a non-verbal clause is shown in (96):

- (95) *til milil wekib sūm=e*
 dog black very big=SG.M
 ‘a/the black, very big dog’

- (96) *ē wéng=o dót afet=o=be*
 3SG.M word(s)=N2 very different=PRD=DECL
 ‘His words are very different (i.e. from what somebody claimed).’

Like nouns and adjectives, some adverbs can function as the predicate in a non-verbal clause, e.g.:

- (97) *fút ēle misim=o=be*
 tobacco DEM.PROX.SG.N1 for_free=PRD=DECL
 ‘This tobacco is a treat.’

- (98) *ē buk ki-m-in=o fiab=o=be*
 3SG.M book read-IPFV-VN=N2 slow=PRD=DECL
 ‘He reads slowly.’ (lit. ‘His book reading is slow.’)

Adverbs can be distinguished from adjectives because they cannot be used as modifiers of nouns. Nor can they be followed by an article (or any other adnominal determiner):

- (99) **naka(=e) hebmamsâb=e*
 man(=SG.M) fast=SG.M
 Intended: ‘the fast man’

It is more difficult to tell adverbs from verbs or verb stems, which often occur before other verbs, for example in serial verb constructions. Especially *klâ* /^{LHL}klâ/ ‘really, properly’ seems to be closely related to the verb stem *klâ* /^{LHL}klâ/ ‘make, complete’. However, none of the members of the adverb class (with the possible exception of *klâ* ‘really, properly’) can be inflected as a verb.

Some expressions with clearly temporal adverbial meaning have the morphology of medial verbs with an expletive subject suffix *-o*, e.g. *bomâso(t)a* ‘in the morning’ (100), *kwino(t)a* ‘in the evening’ (101), and *sinano(t)a* ‘afterwards, later’ (102):

- (100) *bomâ-s-o=(t)a*
 bright-DS.SEQ-EXPL.SBJ=MED
 ‘in the morning’ (lit. ‘it “brighted” ’)
- (101) *kwin-Ø-o=(t)a*
 dark-DS.SEQ-EXPL.SBJ=MED
 ‘in the evening’ (lit. ‘it “darked” ’)
- (102) *sin-an-Ø-o=(t)a*
 old-VBLZ-DS.SEQ-EXPL.SBJ=MED
 ‘afterwards, later’ (lit. ‘it (i.e. what’s been previously mentioned) has become old’)

While *sinano(t)a* ‘afterwards, later’ is still always realized as a clause of its own, i.e. with intonation breaks before and after, the other two can be intonationally independent clauses but can also be integrated intonationally into a clause as a temporal adverbial.

3.7. Pronouns

Mian has a range of different pronoun series distinguished by suffixal pronominal morphology. There are one free and two bound pronoun series. The latter two are bound in the sense that they are obligatorily inflected with a suffix. Free and bound forms show an obvious formal relatedness. A free-bound distinction in the pronoun system is typical for the Mountain Ok languages (Healey 1964a). In Mian, the free series is used for the (free) personal pronoun and the two bound series for all complex, i.e. suffixed, pronouns. The possessive pronoun (see 3.7.2) is formally identical to the bound series but is realized as an independent, i.e. non-bound, phonological word.¹ Pronouns can be used referentially and anaphorically. Many pronoun series can also be used adnominally (Himmelman 1997: 215-218) and appear in the rightmost slot of the noun phrase.

3.7.1. *The free pronoun series*

Free personal pronouns, which are used to refer to animates vary according to person (first, second, or third), number (singular or plural), and in the second and third person singular, gender (masculine or feminine). In the first person plural there is an inclusive-exclusive distinction, which other Mountain Ok languages lack, but which can be found in the Lowland Ok language

Ninggerum. The first person plural inclusive form *nībo* ‘we (INCL)’ was probably formed by compounding *nī* ‘we (EXCL)’ and *ībo* ‘you (PL)’.

Table 3.3 shows the free personal pronouns for animates. As gender distinctions in third person pronouns referring to inanimates are slightly more involved, they will be dealt with in a separate table below. Grey areas indicate the absence of a gender contrast.

Table 3.3. Free pronouns for animates

Person	Number	Gender	Pronoun	Gloss
1			<i>nē</i>	‘I’
2	Singular	Masculine	<i>kēbo~kōbo</i>	‘you (M)’
		Feminine	<i>ōbo</i>	‘you (F)’
3		Masculine	<i>ē</i>	‘he’
		Feminine	<i>ō</i>	‘she’
1 EXCL	Plural		<i>nī</i>	‘we (EXCL)’
1 INCL			<i>nībo</i>	‘we (INCL)’
2			<i>ībo</i>	‘you (PL)’
3			<i>ī</i>	‘they’

Within the set of free pronouns, there are some obvious correspondences between segments and meanings: /n/ only occurs in the first person forms, /k/ only occurs in the second singular masculine form, /i/ appears in all plural forms, /ε/ and /o/ mark masculine and feminine gender, respectively, all third person pronouns just consist of a single vowel carrying a high tone, and /b/ refers to the second person. the pronouns have the typical TNG reflexes /n/ (first person), /k/ (second person) and /i/ (third person non-singular) (Foley 2000: 362, Ross 2005: 32).

For animate pronouns, there is a gender distinction in the second and third person singular depending on the sex of the referent. Gender distinctions for inanimates are more complicated because forms in different genders and numbers show considerable homophony (see 4.6).

Table 3.4 gives the particulars for the third person pronouns for inanimates. The grey area indicates the absence of a number contrast in neuter 2.

Table 3.4. Free pronouns for inanimates

Person	Number	Gender	Pronoun	Gloss
3	Singular	Neuter 1	<i>ē</i>	‘it’
	Plural		<i>ō</i>	‘they’
			Neuter 2	<i>ō</i>

Syntactically, free personal pronouns can occupy all core argument positions and function as subject and object, which can be indexed with a prefix as in (103), or a suffix, as in (104):

- (103) *nē kōbo ka-temê'-b-i=be*
 1SG 2SG.M 2SG.O-see.IPFV-IPFV-1SG.SBJ=DECL
 'I am looking at you.'

- (104) *nē kōbo*
 1SG 2SG.M

daa-˘b'-ke-n-amab-i=be
 help-give.PFV-2SG.R-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 'I will help you.'

As grammatical relations are marked on verbs, the pronouns functioning as overt subject and object arguments can be dropped without causing ambiguity:

- (105) *ka-temê'-b-i=be*
 2SG.O-see.IPFV-IPFV-1SG.SBJ=DECL
 'I am looking at you.'
- (106) *daa-˘b'-ke-n-amab-i=be*
 help-give.PFV-2SG.R-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 'I will help you.'

Some verbs (approximately 50) cross-reference one of their arguments with a classificatory prefix on an absolutive basis. Pronouns cross-referenced by such a prefix are commonly dropped as well:

- (107) (*ō*) *om-ûb'-ke-n-e=be*
 3SG.F 3SG.F_CL.O-give.PFV-2SG.R-REAL-3SG.M.SBJ=DECL
 'He gave her to you.'

Classificatory prefixes are discussed in detail in chapter 5, and in sections 9.1.5 and 9.2.1

3.7.2. Possessive pronoun series

There are two series of possessive pronouns, a simple and an 'alone' series. Although the possessive pronoun is not a bound form in Mian, its forms are identical those of the 'simple' bound and the 'alone' bound series, yet appear as free words. (On the bound pronoun series, see the following section 3.7.3.) The forms of the possessive pronoun are given in tables 3.5 and 3.6. Grey areas indicate the absence of a gender contrast.

Examples of the use of the possessive pronoun are (108), (109), and (110):

- (108) *īb sin fanin=e*
 2PL.POSS old grandfather=SG.M

gen-b-e=be
 be_sick.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘Your (PL) old grandfather is sick.’

Table 3.5. Possessive pronouns (animates)

Person	Number	Gender	Pronoun (simple)	Gloss	Pronoun (‘alone’)	Gloss
1			<i>nē</i>	‘my’	<i>nēle</i>	‘my alone’
2	Singular	Masc.	<i>kēb</i>	‘your (M)’	<i>kēleb</i>	‘your (M) alone’
		Fem.	<i>ōb</i>	‘your (F)’	<i>ōlob</i>	‘your (F) alone’
3		Masc.	<i>ē</i>	‘his’	<i>ēle</i>	‘his alone’
		Fem.	<i>ō</i>	‘her’	<i>ōlo</i>	‘her alone’
1 EXCL	Plural		<i>nī</i>	‘our (EXCL)’	<i>nīli</i>	‘our (EXCL) alone’
1 INCL			<i>nīb</i>	‘our (INCL)’	<i>nīlib</i>	‘our (INCL) alone’
2			<i>īb</i>	‘your (PL)’	<i>īlib</i>	‘your (PL) alone’
3			<i>ī</i>	‘their’	<i>īli</i>	‘their alone’

Table 3.6. Possessive pronouns (inanimates)

Person	Number	Gender	Pronoun (simple)	Gloss	Pronoun (‘alone’)	Gloss
3	Singular	Neuter 1	<i>ē</i>	‘its’	<i>ēle</i>	‘its alone’
	Plural		<i>ō</i>	‘their’	<i>ōlo</i>	‘their alone’
			Neuter 2	<i>ō</i>	‘its, their’	<i>ōlo</i>

- (109) *kēb biem=o unín=o*
 2SG.M.POSS mum=SG.F food=N2

fu-b-o=be
 cook-IPFV-3SG.F.SBJ=DECL
 ‘Your mum is cooking food.’

- (110) *nē káawa=o ayók*
 1SG.POSS steel_axe=N2 secretly

hena-n-e=be
 seek.PFV-REAL-3SG.M.SBJ=DECL
 ‘He’s stolen my steel axe.’

The forms of the ‘alone’-series are used as possessive pronouns, if one wants to emphasize exclusive possession:

(111) *nīlib* *am=o*
 1PL.EXCL.POSS.alone house=N2
 ‘our house alone’ (Smith and Weston 1974b: 47)

There are phonological and syntactic reasons for analyzing the possessive pronoun as a non-bound form in Mian, rather than a bound form.

First, in careful speech, possessive pronouns are uttered as separate words.

Second, possessive pronouns are suprasegmentally distinct from other bound affixal material, in that they all bear a high tone whereas bound affixal material is unspecified for tone in Mian. Third, if the possessive pronoun precedes a noun beginning in a voiced stop, this stop is prenasalized.

Finally, the possessive pronoun can be separated from the following noun by the adjectives *sin* ‘old’, as illustrated in (108) above, and *memâ* ‘new’ (112):

(112) *nē* *memâ* *am*
 1SG.POSS new house
 ‘my new house’

3.7.3. The bound pronoun series

Mian has two bound pronoun series, i.e. two series of pronouns that have to be further inflected to form complex pronouns. The possessive pronoun (see 3.7.2) is not a bound form in Mian but its forms are identical to the bound series. I call the bound series the ‘simple’ and the ‘alone’ bound series.

The bound pronouns never occur as independent words. They are used as the base to form the following five complex pronouns through suffixation:

- Emphatic pronouns with the suffix *-ta* (3.7.4)
- Possessive pronouns with nominal function with the suffix *-mi* (3.7.5)
- Negated pronouns with the suffix *-kob* (3.7.6)
- Free ‘alone’ pronouns with the suffix *-kiem* (3.7.7)
- Reflexive pronouns with the suffixes *-ma(ye)* or *-skil* (3.7.8)

The reader will find examples of each of these under the respective headings. The forms of the simple bound series are given in tables 3.7 and 3.8. Grey areas indicate the absence of a gender contrast.

Table 3.7. Simple bound pronoun series (animates)

Person	Number	Gender	Pronoun	Gloss
1			<i>nē-</i>	‘I’
2	Singular	Masculine	<i>kēb-</i>	‘you (M)’
		Feminine	<i>ōb-</i>	‘you (F)’
3		Masculine	<i>ē-</i>	‘he’
		Feminine	<i>ō-</i>	‘she’
1 EXCL	Plural		<i>nī-</i>	‘we (EXCL)’
1 INCL			<i>nīb-</i>	‘we (INCL)’
2			<i>īb-</i>	‘you (PL)’
3			<i>ī-</i>	‘they’

Table 3.8. Simple bound pronoun series (inanimates)

Person	Number	Gender	Pronoun	Gloss
3	Singular	Neuter 1	<i>ē-</i>	‘it’
	Plural		<i>ō-</i>	‘they’
			Neuter 2	<i>ō-</i>

To have a second bound pronoun series is typical for Mountain Ok languages (Healey 1964a: 66). The forms of the ‘alone’ bound series are given in tables 3.9 and 3.10. Grey areas indicate the absence of a gender contrast.

The ‘alone’ series is obviously derived from the ‘simple’ series with the help of the segment sequence /IV/ (where ‘V’ indicates progressive vowel harmony), which is suffixed to the (C)V-forms, e.g. *nē-le-* ‘I alone’, but infixed into the (C)Vb-forms, e.g. *kē<le>b* ‘you (M) alone’, *ō<lo>b* ‘you (F) alone’. For simplicity’s sake, I will not give the /IV/-element in the alone series as separate morphemes with the meaning ‘alone’ in glossed examples.

Table 3.9. ‘Alone’ bound series (animates)

Person	Number	Gender	Pronoun	Gloss
1			<i>nēle-</i>	‘I alone’
2	Singular	Masculine	<i>kēleb-</i>	‘you (M) alone’
		Feminine	<i>ōlob-</i>	‘you (F) alone’
3		Masculine	<i>ēle-</i>	‘he alone’
		Feminine	<i>ōlo-</i>	‘she alone’
1 EXCL	Plural		<i>nīli-</i>	‘we (EXCL) alone’
1 INCL			<i>nīlib-</i>	‘we (INCL) alone’
2			<i>īlib-</i>	‘you (PL) alone’
3			<i>īli-</i>	‘they alone’

Table 3.10. ‘Alone’ bound series (inanimates)

Person	Number	Gender	Pronoun	Gloss
3	Singular	Neuter 1	<i>ēle-</i>	‘it alone’
	Plural		<i>ōlo-</i>	‘they alone’
		Neuter 2	<i>ōlo-</i>	‘it alone, they alone’

3.7.4. Emphatic pronouns

The emphatic suffix *-ta* attaches to forms of either bound pronoun series to form emphatic pronouns. This suffix is used whenever one wants to express that something applies or refers to an entity as opposed to some other entity. The forms are given in table 3.11. Grey areas indicate the absence of a gender contrast.

Table 3.11. Emphatic pronouns (animates)

Person	Number	Gender	Simple series	Gloss	‘Alone’ series	Gloss
1			<i>nēta</i>	‘I (EMPH)’	<i>neletā</i>	‘I alone (EMPH)’
2	Singular	Masc.	<i>kēbta</i>	‘you (M,EMPH)’	<i>kelebtā</i>	‘you (M) alone (EMPH)’
		Fem.	<i>ōbta</i>	‘you (F,EMPH)’	<i>olobtā</i>	‘you (F) alone (EMPH)’
3		Masc.	<i>ēta</i>	‘he (EMPH)’	<i>eletā</i>	‘he alone (EMPH)’
		Fem.	<i>ōta</i>	‘she (EMPH)’	<i>olotā</i>	‘she alone (EMPH)’
1 EXCL	Plural		<i>nīta</i>	‘we (EXCL,EMPH)’	<i>nilitā</i>	‘we (EXCL) alone (EMPH)’
1 INCL			<i>nībta</i>	‘we (INCL,EMPH)’	<i>nilibtā</i>	‘we (INCL) alone (EMPH)’
2			<i>ībta</i>	‘you (PL,EMPH)’	<i>ilibtā</i>	‘you (PL) alone (EMPH)’
3			<i>īta</i>	‘they (EMPH)’	<i>ilitā</i>	‘they alone (EMPH)’

The emphatic pronouns for third person inanimates follow the same pattern as the non-emphatic pronouns (table 3.12).

Table 3.12. Emphatic pronouns (inanimates)

Person	Number	Gender	Simple series	Gloss	'Alone' series	Gloss
3	Singular		<i>ēta</i>	'it (EMPH)'	<i>eletâ</i>	'it alone (EMPH)'
	Plural	Neuter 1	<i>ōta</i>	'they (EMPH)'	<i>olotâ</i>	'they alone (EMPH)'
		Neuter 2	<i>ōta</i>	'it (EMPH), they (EMPH)'	<i>olotâ</i>	'it alone (EMPH), 'they alone (EMPH)'

Examples of the use of emphatic pronouns are:

- (113) *nēta* *okok* *ke-b-i=be*
 1SG.EMPH work do-IPFV-1SG.SBJ=DECL
 'I (as opposed to e.g. him) am working.'

- (114) *kēbta=be*
 2SG.M.EMPH=DECL
 'It's you.' (i.e. 'it's your turn') [Observed in card games]

- (115) *kelebtâ* *haleb=i*
 2SG.M.EMPH.alone wild_boar=PL.AN

y-e-b-eo=bo
 PL.AN.O-kill.IPFV-IPFV-2SG.SBJ=EMPH
 "'You alone are killing the wild boars'" (from Smith and Weston 1974b: 49)

No form of the emphatic pronoun series can go into the possessor slot of a noun phrase:

- (116) **kēbta* *som=o=be*
 2SG.M.EMPH banana=PRD=DECL
 Intended: 'It's your banana (as opposed to mine).'

Emphatic pronouns formed from the free pronoun series, such as *kōbo-ta* [you.SG.M-EMPH] 'you (M, EMPH)' or *ībo-ta* [you.PL-EMPH] 'you (PL, EMPH)' are unacceptable in the eastern dialect of Mian. However, such forms are commonly used by speakers of the western dialect.

3.7.5. The possessive pronouns with nominal function

Pronominal roots from either bound series can be suffixed with *-mi* to form the possessive pronoun with nominal function, e.g. *nē-mi* ‘mine’ (from the simple series), and the ‘alone’-possessive pronoun with nominal function, e.g. *kēleb-mi* ‘yours alone’ (from the ‘alone’-series). Table 3.13 lists all forms. Grey areas indicate the absence of a gender contrast.

The possessive pronoun with nominal function can appear in the predicate of a non-verbal clause to assert ownership, as in (117):

- (117) *ēle* *nēmi=be*
 DEM.PROX.SG.N1 mine=DECL
 ‘This (one) is mine.’

Table 3.13. The possessive pronoun with nominal function

Person	Number	Gender	Simple series	Gloss	‘Alone’ series	Gloss
1			<i>nēmi</i>	‘mine’	<i>nelemî</i>	‘mine alone’
2	Singular	Masc.	<i>kēbmi</i>	‘yours (M)’	<i>kelebmi</i>	‘yours (M) alone’
		Fem.	<i>ōbmi</i>	‘yours (F)’	<i>olobmi</i>	‘yours (F) alone’
3		Masc.	<i>ēmi</i>	‘his’	<i>elemî</i>	‘his alone’
		Fem.	<i>ōmi</i>	‘hers’	<i>olomî</i>	‘hers alone’
1 EXCL	Plural		<i>nīmi</i>	‘ours (EXCL)’	<i>nilimî</i>	‘ours (EXCL) alone’
1 INCL			<i>nībmi</i>	‘ours (INCL)’	<i>nilibmî</i>	‘ours (INCL) alone’
2			<i>ībmi</i>	‘yours (PL)’	<i>ilibmî</i>	‘yours (PL) alone’
3			<i>īmi</i>	‘theirs (PL)’	<i>ilimî</i>	‘theirs alone’

As in English, the possessive pronoun with nominal function cannot appear in possessor position. The acceptable alternative to ungrammatical (118) is (119):

- (118) **nēmi* *am=o=be*
 mine house=PRD=DECL
 Intended: ‘It’s my house.’

- (119) *am* *ōlo* *nēmi=be*
 house DEM.PROX.N2 mine=DECL
 ‘This house is mine.’

Possessive pronouns with nominal function can occur in noun phrases in subject position, as in (120), and in object position, as in (121), in a clause. As argument noun phrases, they occur either with an article (120) or with an adnominal emphatic pronoun (121):

- (120) *nilibmî=e* *sūm=e* *ēle*
 ours_alone.EXCL=SG.N1 big=SG.N1 here

bi-∅-e=be

stay.IPFV-IPFV-3SG.N1.SBJ=DECL

‘Ours, the big (one) is here’ (Smith and Weston 1974b: 48)

- (121) *Sbiamuk=e* *ēmi* *ōta* *yē* *sin*
 PN=SG.M his N2.EMPH there already

klâ-n-e=a

complete-SEQ-3SG.M.SBJ=MED

‘Sbiamuk had completed his (a house in this narrative) already and then he...’ [Sbiamuk and Nenemei]

3.7.6. The negative pronoun suffix -kob

The negative suffix *-kob* attaches to roots of the simple bound series. It always co-occurs with the negative enclitic *=ba*, which is used in negated verbal predications. Pronoun forms negated with *-kob* only occur in the predicate of non-verbal clauses:

- (122) *kēb-kob=ba=be*
 2SG.M-NEG=NEG=DECL
 ‘(It’s) Not you.’

- (123) *nē-kob=ba=bo*
 1SG-NEG=NEG=EMPH
 ‘(It was) Not me!’ [Danenok]

A pronoun negated by the suffix *-kob* plus the enclitic negation *=ba* and functioning as the predicate in a non-verbal clause can be preceded by an overt noun phrase as the topic, as in (124):

- (124) *wéng=o ò-kob=ba=be*
 talk=N2 N2-NEG=NEG=DECL
 ‘Talk, no!’ (lit. ‘Talk, it’s not it.’)

3.7.7. The free ‘alone’-series

All roots of the ‘alone’ bound series can be suffixed with *-kiem* ~ *-yem* to form a free ‘alone’-pronoun, e.g. *kelebkiêm* ‘only you alone, you on your own’. This free ‘alone’-pronoun series is only attested in subject position:

- (125) *kelebkiêm tl-Ø-eb kesoto*
 2SG.M.alone_only come.PFV-REAL-2SG.SBJ because
 ‘because only you alone came’ [Crows]

The third person singular forms of the free ‘alone’-series double as the numeral ‘one’ (see 6.3.5).

3.7.8. Reflexive pronouns

There are two reflexive pronoun series. One is formed by suffixing *-ma(ye)* to a root from the simple bound pronoun series, the other by suffixing *-skil* to a root from the ‘alone’-series. Although the distinct roots to which the reflexive markers *-ma(ye)* and *-skil* attach suggest a semantic difference along the lines, *nēma(ye)* ‘myself’ vs. *neleskil* ‘myself alone’, I was not able to establish such a difference in meaning.

Table 3.14 gives the forms for both reflexive series for animates. Use of reflexive pronouns with inanimate antecedents is unattested. Grey areas indicate the absence of a gender contrast.

Two examples (126) and (127) are given below:

- (126) *ē ēmaye gò'-n-e=be*
 3SG.M he.REFL cut_skin-REAL-1SG.SBJ=DECL
 ‘He cut himself.’

Table 3.14. The reflexive pronoun

Person	Number	Gender	Reflexive pronoun from simple series	Reflexive pronoun from 'alone'-series	Gloss
1			<i>nēma(ye)</i>	<i>neleskīl</i>	'myself'
2	Singular	Masc.	<i>kēbma(ye)</i>	<i>kelebskīl</i>	'yourself (M)'
		Fem.	<i>ōbma(ye)</i>	<i>olobskīl</i>	'yourself (F)'
3		Masc.	<i>ēma(ye)</i>	<i>eleskīl</i>	'himself'
		Fem.	<i>ōma(ye)</i>	<i>oloskīl</i>	'herself'
1 EXCL	Plural		<i>nīma(ye)</i>	<i>niliskīl</i>	'ourselves (EXCL)'
1 INCL			<i>nībma(ye)</i>	<i>nilibskīl</i>	'ourselves (INCL)'
2			<i>ībma(ye)</i>	<i>ilibskīl</i>	'yourselves'
3			<i>īma(ye)</i>	<i>iliskīl</i>	'themselves'

- (127) *ē* *eleskīl* *gò'-n-e=be*
 3SG.M he_alone.REFL cut_skin-REAL-1SG.SBJ=DECL
 'He cut himself (?alone).'

Reflexives are very rare in the spontaneous corpus and if they appear at all they do so with the function of an emphatic pronoun. Compare (128) and (129):

- (128) *ē* *tl-Ø-e=be*
 3SG.M come.PFV-REAL-3SG.M.SBJ=DECL
 'He came.'

- (129) *ē* *alél=o*
 3SG.M wife=SG.F

dei-˘b'-o-n-e=a
 leave.PFV-give.PFV-3SG.F.R-SEQ-3SG.M.SBJ=MED

ē-maye *tl-Ø-e=be*
 3SG.M-REFL come.PFV-REAL-3SG.M.SBJ=DECL
 'He left his wife and came himself.'

Only the reflexive pronoun in *-ma(ye)* is attested with the function of an emphatic pronoun.

3.7.9. Demonstratives

Demonstratives exist for the third person and come in a proximal and a distal variety. The forms of both demonstrative series are given in table 3.15 below. The form *īli* of the proximal demonstrative is only used adnominally, the form *ēli* has both adnominal and pronominal uses.

There are two series of proximal demonstratives, a simple one (130) and an emphatic one (131).

Table 3.15. Demonstratives

Gender	Proximal		Distal (adnominal)		Distal (pronominal)	
	Singular	Plural	Singular	Plural	Singular	Plural
Masc.	<i>ēle</i>	<i>ēli~īli</i>	<i>obba yē</i>	<i>obba yēi</i>	n/a	n/a
Fem.	<i>ōlo</i>		<i>obba yō</i>			
Neuter 1	<i>ēle</i>	<i>ōlo</i>	<i>obba yē</i>	<i>obba yō</i>	<i>yē</i>	<i>yō</i>
Neuter 2		<i>ōlo</i>		<i>obba yō</i>		<i>yō</i>

(130) *naka ēle*
man DEM.PROX.SG.M
'this man'

(131) *naka ēle-ta*
man DEM.PROX.SG.M-EMPH
'this man'

The proximal demonstrative agrees in number and gender with the noun it follows. It is employed when the object in question is close to the speaker. The form *ēle* is also used as a spatial adverb meaning 'here' and the form *ōlo* is also used as a temporal adverb meaning 'now'. The distal series is used when the object is remote from the speaker. The form *yē* (and *yō*) is also used as a spatial adverb meaning 'there'.

Apart from the adnominal use illustrated in (130) and (131), the proximal demonstrative can also be used pronominally using the same forms. In its pronominal use the demonstrative constitutes a noun phrase of its own, as in (132):

(132) *ēle mēn=e*
DEM.PROX.SG.M child=SG.M

dob-miki-n-e=a

3SG.M_CL.O-take_into_arms.PFV-SEQ-3SG.M.SBJ=MED

'this (one) took the boy into his arms and then he...' [Crows]

The pronunciation of the proximal demonstrative (133) differs from the article followed by the topic clitic (134):

(133) *mēn ēle*
 child DEM.PROX.SG.M
 ‘this boy’

(134) *mēn ē=le*
 child SG.M=TOP
 ‘as for the boy’

The form in (133) is pronounced [ēlē] because of high-tone spreading. The form in (134), however, is pronounced [ēle] because the topic clitic bears a low tone, which prevents tone spreading from the left. In all other cases this issue does not arise because the two forms in question are not segmentally identical (in addition to the tonal difference illustrated for (133) and (134) above):

(135) *unáng ōlo*
 woman DEM.PROX.SG.F
 ‘this woman’

(136) *unáng ō=le*
 woman SG.F=TOP
 ‘as for the woman’

The distal demonstrative series formally distinguishes between an adnominal and a pronominal series. The former always involves the clitic element =*obba*, followed by the distal demonstrative.

As in the proximal series, distal demonstratives always follow the noun and reflect number and gender:

(137) *ninín=obba yō*
 name=ADNOM DEM.DIST.N2

o-biaan-ib=a
 say.IPFV-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘while they were saying that name, they...’ [Sofelok, 2]

(138) *nakamîn=obba yēi*
 brother=ADNOM DEM.DIST.PL.AN
 ‘those brothers over there’

On the use of the adnominal distal series of demonstratives in head-internal relative clauses, see 13.3.5.

In its pronominal use the forms of the distal demonstrative is only attested with inanimates.

- (139) *yeye* *yō* *asyang=ba=bo*
 no DIST.N2 sharp_stick=NEG=QUOT
 ‘“No, that wasn’t a stick.”’ [Pig story]

The position of demonstratives within the noun phrase is discussed further in section 6.3.7.

There is an emphatic series of the distal demonstrative. These forms have a restrictive meaning and can be used pronominally (140) or adnominally (141):

- (140) *yō-ta*
 DIST.N2-EMPH
 ‘only that’ (used at the end of a conversation to indicate that one has no more to say)

- (141) *naka yē-ta*
 man DIST.M.SG-EMPH
 ‘only that man’

3.7.10. Synopsis of pronouns

This is a synopsis of all pronominal forms in Mian. All of these can be used pronominally and they can instantiate a noun phrase by themselves. Only the forms of the third person plural are given in the synopsis, but cross-references are provided in case the reader wants to look up the full pronominal paradigms.

In the third person, all emphatic pronouns, the proximal demonstratives and the emphatic distal demonstrative pronoun can also be used adnominally in the rightmost position in the noun phrase.

The forms *īli* and *īlita* of the proximal demonstrative are only used adnominally, the forms *ēli* and *ēlita* have both adnominal and pronominal uses. All distal demonstratives co-occur with the clitic =*obba*, which follows the noun, in their adnominal form.

Free:	<i>ī</i>	‘they’	(3.7.1)
Emphatic:	<i>īta</i>	‘they (EMPH)’	(3.7.4)
Emphatic ‘alone series’:	<i>ilitā</i>	‘they alone (EMPH)’	(3.7.4)

Free ‘alone’:	<i>ilikiêm</i>	‘only these alone’	(3.7.7)
Reflexive I:	<i>īma(ye)</i>	‘themselves’	(3.7.8)
Reflexive II:	<i>iliskil</i>	‘themselves’	(3.7.8)
Proximal demonstrative:	<i>ēli~īli</i>	‘these’	(3.7.9)
Emphatic demonstrative:	<i>ēlita~īlita</i>	‘these (EMPH)’	(3.7.9)
Distal demonstrative:	<i>(=obba) yēi</i>	‘those’	(3.7.9)
Emphatic distal demonstrative:	<i>yēita</i>	‘only those’	(3.7.9)

3.7.11. Interrogatives

Mian has two interrogative words: *wan* ‘who’ and *fāb* ‘where, what’. Semantically, the two interrogative words divide the world up into animates (*wan* ‘who’), on the one hand, and inanimates and adverbials (*fāb* ‘where, what’), on the other. Interrogative words do not encode the categories number and gender. They do not overlap with relative pronouns and they are semantically unambiguous, i.e. they do not have alternative interpretations as indefinites. Both *wan* and *fāb* can be used pronominally and adnominally. For details on the form and the use of *wan* and *fāb*, see section 10.2 on interrogative words and the formation of content question.

3.7.12. Note on indefinites

There is no separate set of indefinite pronouns. Instead the adjective *mak* ‘other, some’ is used as a nominal modifier to express indefinite notions, for example:

- (142) *naka mak*
 man some
 ‘some man, somebody (M)’
- (143) *unáng mak*
 woman some
 ‘some woman, somebody (F)’
- (144) *am mak dim=o*
 day some on=N2
 ‘on some day, sometimes, sometime’

3.8. Directionals

Directionals are an important and very variable category in Mian. They can be used as adverbs or postpositions and be directly inflected to form verbs of motion.

All directionals primarily have spatial meaning and denote locations or directions. They can never be combined. The inventory consists of six items:

- (145) *ut-wit* 'up(wards)'
daak 'down(wards)'
met 'upriver, up a little'
tab 'downriver, down a little'
wāt 'across (a river or valley)'
tām 'sideways, to the side (on same level)'

Mian directionals are intimately linked to the topographical environment in which the speakers of the language live. Figure 3.1 illustrates the basic meanings of the directionals in relation to the topographical environment.

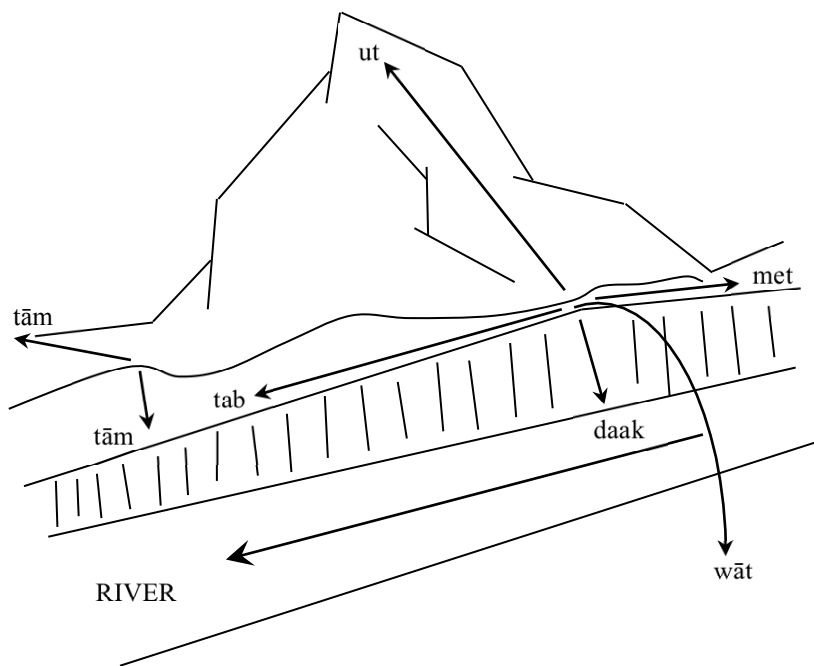


Figure 3.1. Mian directionals and the topographic environment

The two main axes of orientation are (a) ground elevation, i.e. *ut* ‘up’ vs. *daak* ‘down’ and (b) the rivers Hak and Sek, which run roughly parallel to each other near Mianmin, i.e. *met* ‘upriver’ vs. *tab* ‘downriver’.

Directionals are also employed in small(er)-scale environments, in which the directionals *met* ‘upriver’ and *tab* ‘downriver’ are not used with reference to a river as a landmark but rather mean ‘up (a little)’ and ‘down (a little)’, respectively.

Locations around the upper part of the human body are commonly referred to as *ut*, e.g. *kwel ut* [neck up] ‘up at the neck’, and locations around the lower part as *tab*, e.g. *kakam tab* [buttocks down] ‘down at the buttocks’. However, more systematic research in spatial deixis is needed for reliable generalizations about the use of directionals in small-scale reference frames.

Directionals are used for all locations inside and outside of the Mianmin area. Selected example are: *ut* - Sokamin; *daak* - Oksapmin, Tabubil, Fiak, Lae, and Germany; *met* - Tifalmin; *tab* - Gubil, Yapsiei, Hotmin, Green River; *tām* - Ogisai; *wāt* - Telefomin, Vanimo, Aitape, Port Moresby, and Australia. Farther away locations show inter-speaker variation, for instance, one only finds *tab* for Gubil, which is a six-hour walk downriver from Mianmin, whereas the location of Germany or Australia are referred to by either *daak* or *wāt*.

Directionals can be used as postpositions and adverbially. As postpositions they follow a noun phrase. See also 7.1. They typically cliticize to their noun host:

- (146) *Skiobib tab*
 PN downriver
 ‘downriver in Skiobib’ [Dimosson]

They can be marked with an article which agrees in number and gender with its nominal complement. In such a configuration, the postposition does not cliticize, e.g.:

- (147) *kwel ut=o*
 neck(F) up=SG.F
 ‘up at her neck’ [Selimin]

In their adverbial use, directionals indicate that a movement event specified by a verb of motion takes place in a certain direction. In this case, the directional comes immediately before the verb:

- (148) *Klefol=i daak te-n-ib=ta*
 PN=PL.AN down come.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘The Telefomin people came down and then ...’ [Mianmin and Telefomin]

Furthermore, all directionals can be inflected directly to form intransitive verbs of motion. For details on this special type of inflection, see 9.1.2 on motion verbs.

3.8.1. Demonstrative directionals

Directionals can be further specified with either of the bound elements *ē-* ‘here’ and *ī-* ‘there’, which seem to be contracted forms of the adverbs *ēle* ‘here’ and *yē* ‘there’, respectively, to form demonstrative directionals. The demonstrative element and the directional are fused into a lexicalized demonstrative directional. The bound forms *ē-* ‘here’ and *ī-* ‘there’ do not occur on their own nor do they form parts of other words besides demonstrative directionals.

Table 3.16 sets out the demonstrative directionals. Note that while the directionals *ut* and *wit* occur in free variation, in demonstrative directionals only *ewit* and *iwit* are attested.

Table 3.16. Demonstrative directionals

Proximal form	Gloss	Distal form	Gloss
<i>ewit</i>	‘up here’	<i>iwit</i>	‘up there’
<i>elàak</i>	‘down here’	<i>ilàak</i>	‘down there’
<i>emèt</i>	‘here upriver’	<i>imèt</i>	‘there upriver’
<i>etàb</i>	‘here downriver’	<i>itàb</i>	‘there downriver’
<i>ēwat</i>	‘over here’	<i>īwat</i>	‘over there’
<i>ētam</i>	‘in here’	<i>ītam</i>	‘in there’

An example is given in (149):

- (149) *ewit te-l=e!*
 here_up come.PFV-2SG.HORT=HORT
 ‘Come up here!’ (Smith and Weston 1974b: 55)

Bare directionals cannot adverbially modify the existential verb expressing that the subject is at a certain location. Instead demonstrative directionals have to be used:

- (150) *t̄am*/**t̄ām* *biaan-e=a*
 there_sideways stay.IPFV.SS.SIM-3SG.M.SBJ=MED

ngaan-b-e=a
 call_out.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘While being in there he was calling out, and the others...’ [Dafinau]

3.9. Postpositions

Mian has only postpositions. For a detailed description of complex postpositions, see 7.3 on postpositions, which consist of two or three simple postpositions.

There are three simple postpositions *baka* ‘with’, *yē* ‘at, to’, and *su* ‘near’. An example of each is given in (151), (152) and (153):

- (151) *Fu-taman* *m̄in=e* *su* *kaan-s-o=ta*
 PN-valley son=SG.M near die.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘it (a sow) died near the man from the Fu valley and then he...’
 [Danenok]

- (152) *sesá* *afet* *yē* *unaan-ob=a*
 rainforest different to go.PFV.SS.SEQ-1PL.SBJ=MED
 ‘we went to a different (part of the) rainforest’ [Ala ritual]

- (153) *naka* *wanggal* *t̄-ta* *baka*
 man woman PL.AN-EMPH with

haa-bl-Ø-i=ble
 roam.IPFV-AUX.IPFV-IPFV-1SG.SBJ=EXCLAM
 ‘I was roaming with men and women!’ [Crows]

The comitative postposition *baka* ‘with’ and the spatial postposition *yē* ‘at, to’ frequently occur with a noun phrase consisting of just a bare noun, in which case they encliticize, as in (154) and (155):

- (154) *sotgan=baka* *un-aamab-eb=a?*
 shotgun(TP)=with go.PFV-IRR.NANPL.SBJ-2SG.SBJ=Q
 ‘Are you taking a shotgun (with you)?’ (lit. ‘Are you going with a shotgun?’)

- (155) *ulam=yē om-fâ-s-o=to*
 corner=to 3SG.F.O-put.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘she put her into a corner and then someone else ...’
 [Afoksitgabáam]

3.10. Quantifiers

The class of quantifiers comprises *homòn* ‘many, much’, *alukûm* ‘all, every, each’, and *alik* ‘all, every, each’, plus all numerals. Numerals and *homòn* ‘many, much’ always follow the noun that is being counted and all its adjectival modifiers. The quantifiers *alukûm* and *alik* can occur before or after the noun phrase they quantify.

Mian does not have a set of formally distinct ordinal numbers nor does it allow the use of cardinal numbers as ordinals.

Basic numerals are:

- (156) *elekiêm~eleyêm* ‘one (M, N1)’
olokiêm~oloyêm ‘one (F, N2)’
asú/asusûna ‘two’
asumâtna ‘three’

The pronouns from the free ‘alone’-series *elekiêm* (also *eleyêm*) ‘only he/it alone’ and *olokiêm* (also *oloyêm*) ‘only she/it alone’ (see 3.7.7) double as the numeral ‘one’, depending on gender. The numeral obligatorily agrees in gender with the noun which is being counted:

- (157) *naka=e elekiêm*
 man=SG.M one.M
 ‘one man’ OR ‘only the man alone’

- (158) *unáng=o olokiêm*
 woman=SG.F one.F
 ‘one woman’ OR ‘only the woman alone’

The numerals *asú* ‘two’ and *asumâtna* ‘three’ can occur with an article reflecting the number and the gender of the counted noun but are often bare. *Asú* ‘two’ has a variant *asusûna*, which looks like a partial reduplication of the simple numeral *asú*. Nonetheless, *asusûna* also means ‘two’ rather than ‘four’:

- (159) *unáng=i* *asú(=ei)/asusûna(=i)*
 woman=PL.AN two
 ‘two women’

The numeral *asusûna* ‘two’ is (at least historically) segmentable into the (partially reduplicated) numeral *asusû* and *na*. The latter is possibly derived from the verb *na* ‘do’. Thus, *asusûna* ‘two’ would have been a verbal predicate meaning ‘are two (lit. ‘do two’)’. The same holds for *asumâtna* ‘three’, which consists of *asú* ‘two’, *mak* ‘(an)other’ and *na* ‘do’. Hence, *asumâtna* probably used to mean ‘be two and another’:

- (160) *unáng=i* *asumâtna(=i)*
 woman=PL.AN three(=PL.AN)
 ‘three women’ (lit. ‘two women and another’)

As the element *na* in numerals synchronically cannot be inflected as a verb, I do not see any plausible reason to analyse the Mian numerals *asusûna* ‘two’ and *asumâtna* ‘three’ as verbs. I assume that the erstwhile verb stem *na* ‘do’ is synchronically a part of the lexemes *asusûna* ‘two’ and *asumâtna* ‘three’.

The numerals *asú* ‘two’, *asusûna* ‘two’, and *asumâtna* ‘three’ can be collocated with the function verb *ke* ‘do’ to express that a group consists of a certain number of individuals:

- (161) *ī* *Klefolam* *asú* *ke-bl-Ø-io=be*
 3PL PN two do-AUX.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘The two of them are in Telefomin.’

- (162) *ī* *asumâtna* *ke-n-ib=a*
 3PL three do-SEQ-2/3PL.AN.SBJ=MED

tlanhaa-b-io=be
 play-IPFV-2/3PL.AN.SBJ=DECL
 ‘They are three of them playing.’ (lit. ‘They are three and they are playing.’)

The numerals for numbers larger than three are phrasal. The rationale for forming such phrasal numerals is stringing together instances of *asú=ke* ‘two and’ (i.e. the numeral *asú* ‘two’ plus the light verb *ke* ‘do’ serving as a coordinator in phrasal numerals) as many times as needed to count to an even number and rounding this off by *make* ‘(one) other’ for odd numbers. Examples are:

- (163) *asúke asúke* 'four' [two+two]
asúke asúke make 'five' [two+two+another]
asúke asúke asúke 'six' [two+two+two]

Phrasal numerals can occur with *na*, as in (164), or without *na*, as in (165), depending on whether they are followed by the article, which is always optional for numerals. Compare:

- (164) *memé(=i)* *asú=ke* *asú=ke* *make* *na=i*
 children(=PL.AN) two=and two=and another do=PL.AN
 'five children' (lit. 'two and two children and another')

- (165) *unáng=i* *asú=ke* *asú=ke*
 woman=PL.AN two=and two=and
 'four women' (lit. 'two and two women')

With regard to example (164), *memé(=i) asú=ke asú=ke make* 'five children' would also be possible, but not **memé(=i) asú=ke asú=ke mak=i* because phrasal numerals are fixed expressions. For odd numbers the form *make* '(an)other' is used regardless of the gender of the counted entity. The segment /ɛ/ in *make* is an article indicating gender but it has frozen in the form for the third person singular.

In *asumâtna* 'three' [< *asú mak na* 'two another do'] the final consonant in *mak* 'other' has assimilated in place of articulation to the following nasal. It seems that synchronically *asumâtna* is not analysed as *asú* 'two' and *mak* 'other' anymore. Especially younger speakers also use *asú=ke make* for 'three' (lit. 'two and another'), thus regularizing the rules for counting to include 'three'.

It is not difficult to see how this counting method can get quite cumbersome very quickly for the speakers, who nowadays operate with large exact numbers on a regular basis. Consequently, Tok Pisin numerals have replaced the traditional ones, roughly from six upwards, e.g.:

- (166) *memé=i* *fiftin* *yē*
 children(PL)=PL.AN fifteen(TP) there

tl-Ø-io=be
 come.PFV-REAL-2/3PL.AN.SBJ=DECL
 'Fifteen children came.'

Younger speakers also use a digit-based system in which numbers with more than one digit are broken down and each digit is rendered in the traditional

counting system with a short pause between the digits, e.g. *elekiêm blim* ‘ten’ (one nothing), *elekiêm asúke asúke make* ‘fifteen’ (one five), or *asúke asúke blim* ‘forty’ (four nothing).

Instead of a numeral denoting an exact figure, the quantifier slot in the noun phrase can be filled by *homòn* ‘many’, with which speakers do not commit to a certain number:

- (167) *tíl=i* *milil=i* *sūm=i* *homòn=i*
 dog=PL.AN black=PL.AN big=PL.AN many=PL.AN
 ‘many big black dogs’

Contrary to Healey’s (1964a) claim, Mian indeed has a body-tally system based on the number 27, as it is typical for the other Mountain Ok languages. Healey writes:

All of the Ok languages except Minamin [sic!] and Wagarabai [i.e. the west Mian dialect – SF] appear to use the round-the-body method of counting. When counting, a person points successively to various parts of the body, and the numerals mostly consist of some recognizable form of the body-part names. One circuit of the body is a counting unit. Large numbers are specified as so many units (circuits) plus such-and-such a number (body-part). (Healey 1964a: 65)

Counting in the Mian tally system commences with the left thumb, followed by the fingers of the left hand, then up the left side of the body (wrist, forearm, elbow, shoulder joint, shoulder, cheek, ear, eye, nose) each time adding one, so that one reaches 14 when touching the nose. From there, counting proceeds down the right side of the body (the pointing is done with the other hand now) till the whole procedure ends with the thumb of the right hand and the number 27. Smith and Weston (1974b: 50-52) report that speakers become increasingly vague while counting down the right-hand side of the body and 30 years later my own experience shows that speakers have trouble counting within this traditional system once they have done the left hand and started moving up the left arm.

The reason why the Mian system escaped Healey’s attention probably lies in the fact that body-part numerals cannot be used as numerals in noun phrases, which they can in Telefol. This might be because the Mian body-tally system was never used as a general counting device, as for example in Telefol (Healey 1964a, Healey 1965a), but rather was highly restricted to counting in connection with specific cultural practices, for example keeping track of the months that had to pass until a new taro garden would have to be cleared and planted. Nowadays, the body-part counting system is basically defunct. In table 3.17 I give all the forms I was able to record.

Table 3.17. Mian body tally system

Body counting numeral	Literal meaning	Meaning as numeral
<i>góng=dim</i> [joint=on]	‘on the joint’	‘six’
<i>ban=dim</i> [forearm=on]	‘on the forearm’	‘seven’
<i>hetón=dim</i> [elbow=on]	‘on the elbow’	‘eight’
<i>bānon=dim</i> [upper arm=on]	‘on the upper arm’	‘nine’
<i>kwīng=dim</i> [shoulder=on]	‘on the shoulder’	‘ten’
<i>mukón=dim</i> [neck vertebrae=on]	‘on the neck vertebrae’	‘eleven’
<i>klón=dim</i> [ear=on]	‘on the ear’	‘twelve’
<i>kin=dim</i> [eye=on]	‘on the eye’	‘thirteen’
<i>mukùng=dim</i> [nose=on]	‘on the nose’	‘fourteen’
<i>kin milim</i> [eye (other)side]	‘eye other side’	‘fifteen’
<i>klón milim</i> [ear (other)side]	‘ear other side’	‘sixteen’
<i>mukón milim</i> [side (other)side]	‘neck vertebrae other side’	‘seventeen’
<i>kwīng milim</i> [shoulder (other)side]	‘shoulder other side’	‘eighteen’
<i>bānon milim</i> [upper arm (other)side]	‘upper arm other side’	‘nineteen’
<i>hetón milim</i> [elbow (other)side]	‘elbow other side’	‘twenty’
<i>bān milim</i> [forearm (other)side]	‘forearm other side’	‘twenty-one’
<i>góng milim</i> [wrist (other)side]	‘wrist other side’	‘twenty-two’

For the sake of completeness, in table 3.18 I list those body tally terms found in Smith and Weston (1974b: 50-52), which deviate from the ones I recorded. Tone is not indicated in the source.

Table 3.18. Deviant and additional body tally terms found in Smith and Weston (1974b: 50-52)

Body counting numeral	Literal meaning	Meaning as numeral
<i>het dafab</i> [elbow summit]	‘elbow’	‘eight’
<i>tumin</i> [shoulder joint]	‘shoulder joint’	‘nine’
<i>tam=dim</i> [side=on]	‘side of face’	‘eleven’
<i>munung=dim</i> [nose=on]	‘on the nose’	‘fourteen’
<i>tam milim</i> [side other(side)]	‘side of face other side’	‘seventeen’
<i>tum milim</i> [shoulder joint (other)side]	‘shoulder joint other side’	‘nineteen’
<i>het dafab milim</i> [elbow summit (other)side]	‘elbow other side’	‘twenty’
<i>kweil awok milim</i> [hand mother (other)side]	‘thumb other side’	‘twenty-three’

3.11. Conjunctions and subordinators

The inventory of conjunctions and subordinators is rather small. Being a clause-chaining language with morphologically rich medial verbs, Mian mainly relies on the marking of sequentiality or simultaneity in medial verbs to indicate temporal semantic relations between clauses for which English uses conjunctions like *then*, *after*, *when*, *as*, *while*, etc. Adverbial clauses without overt subordinators can have a range of semantic relations (namely temporal, locative, or conditional) to their matrix clause. On adverbial clauses, see 13.2. On the use of the postpositions *temwât* ‘while’ and *dim* ‘at the time when’, as conjunctions in embedded adverbial clauses, see 13.2.6.

The word class of conjunctions and subordinators comprises:

(168)	<i>eka</i>	‘and’
	= <i>a</i>	‘and’ (< <i>eka</i>)
	<i>bleka</i>	‘or’
	<i>otâne</i>	‘but’
	<i>kesoa</i>	‘because, since’
	<i>bita</i>	‘until’
	<i>mole</i>	‘if’

Mian is a typical verb-final language since subordinators (*kesoa* ‘because’, *bita* ‘until’, *mole* ‘if’) occur in clause-final position (Dryer 2007: 100). Coordinating conjunctions (*eka* and =*a* ‘and’, *bleka* ‘or’, *otâne* ‘but’) are prosodically a part of the first conjunct.

3.11.1. *eka* ‘and’

The conjunction *eka* ‘and’ is strictly coordinating, i.e. it can only be used if two expressions are of the same syntactic order, e.g. both are noun phrases (169), adjectival modifiers (170), or clauses (171):

(169)	<i>Memín</i>	<i>āi=e</i>	<i>eka</i>	<i>Danín</i>	<i>āi=e</i>	<i>eka</i>
	PN	father=SG.M	and	PN	father=SG.M	and
	‘both Memín’s father and Danín’s father’ (Smith and Weston 1974b: 99)					

(170)	<i>sob=e</i>	<i>ngáamein</i>	<i>eka</i>	<i>beitlok=o=be</i>
	soap=SG.N1	yellow	and	soft=PRD=DECL
	‘The soap is yellow and soft.’			

- (171) *bi-n-o=a* *eka imín*
 stay.IPFV-SEQ-3SG.SBJ=MED and again

te-n-o=a
 come.PFV-SEQ-3SG.F.SBJ=MED
 ‘she stayed and then came back and then ...’ [Afoksitgabáam]

In (171), *eka* is redundant and *binóa imín tenóa* is also possible. I assume that the medial verb clitic =*a* is derived from the coordinating clitic =*a* ‘and’, which in turn is a shortened form of *eka* ‘and’. The coordinating clitic =*a* ‘and’ is used to coordinate noun phrases (see 6.7 for examples).

3.11.2. *bleka* ‘or’

The conjunction *bleka* ‘or’ is used to coordinate maximally two noun phrases, as in (172), or clauses (173). In the latter case, the verb of the first clause appears without an illocutionary clitic:

- (172) *kōbo* *éil* *ē-ta* *bleka* *aning* *ē-ta*
 2SG.M pig SG.N1-EMPH or fish SG.N1-EMPH

dowôn’-aamab-eb=a?
 eat.PFV-IRR.NANPL.SBJ-2SG.SBJ=Q
 ‘Do you want to eat pork or fish?’

- (173) *kōbo* *memálo* *bib* *bi-aamab-eb*
 2SG.M today village stay.IPFV-IRR.NANPL.SBJ-2SG.SBJ

bleka *damìb* *un-aamab-eb=a?*
 or garden go.PFV-IRR.NANPL.SBJ-2SG.SBJ=Q
 ‘Are you going to stay in the village or go to the garden today?’

Coordination of three or more alternatives is unattested. On *bleka* ‘or’ in polar questions, see section 10.1.2.

3.11.3. *otâne* ‘but’

The conjunction *otâne* ‘but’ coordinates two clauses. The verb in the first clause has final verb morphology, i.e. it can be inflected for irrealis and deontic mood but appears without an illocutionary marker (174):

- (174) *sinta* *imen=o* *fú-n-amab-i*
 yesterday taro=PL.N1 cook-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ
- otâne* *imen=o* *misiam-an-Ø-o=a*
 but taro=PL.N1 bad-VBLZ-DS.SEQ-1SG.SBJ=MED
- dei-˘b'-o-b^(H)-i=be*
 leave.PFV-give.PFV-3PL.N1.R-NHODPST-1SG.SBJ=DECL
 ‘Yesterday, I wanted to cook taro but they were bad and I left them.’
 (Smith and Weston 1974b: 131)

3.11.4. *kesoa* ‘because, since’

The causal conjunction *kesoa* ‘because, since’ invariably occurs after the verb and intonationally belongs to this clause, which gives the reason. The consequence is given in the succeeding clause, which forms its own intonational unit:

- (175) [*milimsîn=e* *háang-an-Ø-e* *kesoa*]_{IU}
 other_side=SG.N1 dry-VBLZ-REAL-3SG.N1.SBJ because
- [*tob-ski-n-amab-i=be*]_{IU}
 3SG.LONG.O-turn-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘Because the other side has dried, I’ll turn it (the tobacco leaf) around.’ [Rolling smokes]

The conjunction *kesoa* is probably derived from a verb that constituted its own medial clause in a clause chain. Verbal morphology including S/R marking with *-s* ‘DS.SEQ’, and medial verb marking with the clitic *=a* is still clearly discernible. The most likely candidate for the verb stem is the function verb *ke* ‘do’, thus *ke-s-o=a* [do-DS.SEQ-EXPL=MED]. Intonationally, however, *kesoa* does not constitute its own clause anymore and the verb preceding *kesoa* allows final verb morphology, i.e. inflection for polarity, mood, and inchoative aspect (176) are permitted:

- (176) *me-m-e* *kesoa*
 cry.IPFV-INCH-3SG.M.SBJ because
 ‘because he was crying’ [Crows]

On the other hand, *kesoa* retains some features of an erstwhile medial clause. Apart from the medial verb marker *=a*, *=ta* is also possible (*kesota*). As the

exact semantic difference between these two variants is unclear at this stage I gloss them both as ‘because’.

3.11.5. *bita* ‘until’

The temporal conjunction *bita* ‘until’ expresses that the event described in the preceding clause continues up to the onset of the event in the succeeding clause:

- (177) *deib=o on bl-Ø-ib bita*
 road=N2 go.PFV stay.IPFV-IPFV-2/3PL.AN.SBJ until

bita wàt-n-ib=ta
 until across-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they went and stayed (where they had gone to) until they went
 across (i.e. to Telefomin), and then they ...’ [Mianmin and
 Telefomin]

The conjunction *bita* ‘until’ very likely goes back to a shortened medial verb form consisting of the existential verb *bi* and the medial clitic =*ta*. On such shortened medial verb forms, see 11.2.13.

3.11.6. *mole* ‘if’

The conjunction *mole* ‘if’ is used in conditionals. An example is provided in (178). For details on conditionals, see section 13.2.1.

- (178) *yō went-Ø-ib mole*
 DEM.DIST.N2 hear.PFV-REAL-2/3PL.AN.SBJ if

yōle kenéng
 well cheek

sikà'-ye-biaan-o=a
 swell.IPFV-PL.AN.R-AUX.IPFV.SS.SIM-3PL.N1.SBJ=MED
 ‘If they (i.e. women and children) hear that, their cheeks were
 swelling up ...’ [Sofelok, 2]

3.12. Ideophones

Ideophones are sound-symbolic words that evoke certain perceptions and sensations in a direct and vivid way (Dingemanse 2009). Ideophones are very often phonologically peculiar. In Mian, they are phonologically marked in that they often involve full reduplication, e.g. *bangbang* ‘clap’, *bokbok* ‘bubble’ or partial reduplication, e.g. *blele* ‘fly’, *fluluk* ‘flutter (of a small bird)’. Reduplication with ablaut is also attested, e.g. *dingdung* ‘hollow, reverberating sound’, *nikitneket* ‘creak’, and *fliliflala* ‘blaze’. None of these phonological characteristics are typical of any other word class. Semantically, most ideophones refer to types of sound or types of movement. The corpus contains roughly 60 ideophones (not counting linguistic renderings of animal cries).

Ideophones always immediately precede the main verb. They are further subdivided into four classes depending on which type of verb they precede:

- (i) _____ function verb *ge/ga* ‘say’
- (ii) _____ function verb *ge/ga* ‘say’ or existential verb *n/bi-bl*
- (ii) _____ motion verb, e.g. *un-on/unê* ‘go’, *tl--te/tle* ‘come’
- (iv) _____ function verb *ge/ga* ‘say’ or motion verb

Ideophones that refer to types of motion are adverb-like because they express the manner of movement. In contrast to adverbs proper, ideophones are syntactically fixed in front of the verb associated with them. Compare:

- (179) *Milsen=e blublu un-Ø-e=be*
 PN=M.SG run go.PFV-REAL-3SG.M.SBJ=DECL
 ‘Milsen ran.’

- (180) **blublu Milsene unebe*

Many adverbs, on the other hand, are more mobile within the clause. Although they tend to immediately precede the verb, as in (181), other positions are possible, barring the position after the verb, as shown in (182):

- (181) *nē imen=e hebmamsâb wen-b-i=be*
 1SG taro=SG.N1 quickly eat.IPFV-IPFV-1SG.SBJ=DECL
 ‘I’m eating a taro quickly.’

- (182) *(hebmamsâb) nē (hebmamsâb) imen=e (hebmamsâb) wen-b-i=be*
*(*hebmamsâb)* ‘I’m eating a taro quickly.’

Ideophones form fixed expressions with their associated verbs and do not occur on their own, with the exception of bird cries. Thus, *bangbang* just represents a clapping sound. Verbal nouns have to be used to refer to instances of clapping or the activity of clapping:

(183) *bangbang* *ge-nam-in*
clap say.PFV-PFV-VN
'(an instance of) clapping'

(184) *bangbang* *ga-l-in*
clap say.IPFV-IPFV-VN
'(activity of) clapping'

3.12.1. With function verb *ge/ga* 'say'

The use of ideophones with the function verb *ge/ga* 'say' is illustrated in examples (185) and (186):

(185) *fong* *ge-s-ib=a*
whistle say.PFV-DS.SEQ-3SG.M.SBJ=MED

wentê-n-ib=a
hear-SEQ-2/3PL.AN.SBJ=MED
'he whistled and they heard it and then ...' [Crows]

(186) *kalkal* *ga-bi-n-e=a*
sizzle say.IPFV-AUX.IPFV-SEQ-3SG.N1.SBJ= MED
'it (some meat) was sizzling and then ...' [Crows]

Most of the ideophones in this class refer to sounds. The inventory consists of: *bangbang* 'clap', *bangklibbangklib* 'rotate, revolve', *beng* 'fart (quietly)', *biang* 'slap', *blala* 'flash of lightning', *blili* 'crackle (of aggressively blazing fire)', *bling* 'shine', *blout* 'sound of opening wings', *bluatbluat* 'spin', *bua/bui* 'eagle's cry', *buk* 'fart (loud)', *dlatdlat* 'fast movement of snake's tongue', *dungdung* 'drum', *duk* 'swallow', *dut* 'glow bright in the dark', *fitfit* 'shake (tree)', *fong* 'whistle', *fot* 'explode', *fu* 'blow (e.g. dust)', *getang* 'clear up (weather), brighten up', *glit* 'dawn', *golok* 'rumbling (stomach)', *gonggong* 'knock', *gotot(gotot)* 'nod', *gwaliang* 'very hot (of metal or stone)', *haityekhaityek* 'sneeze', *hěě* 'crow's cry',² *hekdoung* 'inhale air', *hek(hek)* 'gasp', *houhou* 'cough', *kalkal* 'sizzle', *kloutklout* '(sound of) chewing hard', *kulikkulik* 'jitter, shudder', *kusang* 'sneeze', *metek* 'smack lips', *muk* 'smack

lips’, *nikitneket* ‘creak’, *nginik* ‘snuffle (noisily)’, *nomotnomot* ‘suck’, *sitglotsitglot* ‘noise of grinding teeth’, *songoksongok* ‘gurgling liquid in a container’, *snuk* ‘blow nose’, *yakukyakuk* ‘cry like a bird’.

Ideophones preceding the function verb have the same distribution as full quotative sentential complements (see 12.1), here abbreviated as SC. Consider (187) and (188):

- (187) *flouflou* *ge-n-al=e!*
 flap say.PFV-REAL-2SG.HORT=HORT
 ‘“Flap your wings!”’

- (188) [[*flouflou* *ge-n-al=e!*]_{SC}
 flap say.PFV-REAL-2SG.HORT=HORT

ge-s-ib=a]_{Med-Cl}
 say.PFV-DS.SEQ-2/3PL.AN.SBJ=MED

flouflou *ge-n-e=a*
 flap say.PFV-SEQ-3SG.M.SBJ=MED
 ‘“Flap your wings!” they said and he flapped his wings and then ...’ [Crows]

3.12.2. With function verb *ge/ga* ‘say’ or existential verb *n/bl~bi*

The use of an ideophone of this class with the function verb *ge/ga* ‘say’ is illustrated in (189), with the existential verb *n/bl~bl* in (190):

- (189) *éil=e* *ngunukngunuk* *ga-b-e=be*
 pig=SG.M snort say.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘The pig is snorting.’

- (190) *éil=e* *ngunukngunuk* *bi-Ø-e=be*
 pig=SG.M snort exist.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘The pig is snorting.’

Most of the ideophones in this class refer to sounds. The inventory consists of: *bingblang* ‘blubber, crackle (of fire)’, *dingdung* ‘hollow, reverberating noise’, *ditdat* ‘rustle’, *militmelet* ‘rustle’, *milomalo* ‘rustle’, *ngaalangaala* ‘moan’, *ngikngukweng* ‘snore’, *ngunukngunuk* ‘snort (of pigs)’.

3.12.3. *With motion verbs*

The use of an ideophone with a motion verb, e.g. *un~on/unê* ‘go’ or *tl~te/tle* ‘come’, is illustrated in example (191):

- (191) *as=e* *glulu* *un-Ø-e=be*
 tree=SG.N1 slide go.PFV-REAL-3SG.N1.SBJ=DECL
 ‘The tree slid (down a slope).’

Most of the ideophones in this class refer to types of motion. The inventory consists of: *ablaabu* ‘jump up’, *babbat* ‘doused, defeated’, *blele* ‘fly’, *blublu* ‘run’, *diadia* ‘run’, *dubdub* ‘dive’, *gilan* ‘run scared’, *gluglu* ‘run’, *glulu* ‘slide’, *gwaliangwaliang* ‘spiral’, *nini* ‘sneak’.

3.12.4. *With function verb ge/ga ‘say’ or motion verb*

A few ideophones can either be followed by the function verb *ge/ga* ‘say’ or by a motion verb. Compare:

- (192) *aai=e* *bokbok* *ga-b-e=be*
 water=SG.N1 bubble say.IPFV-IPFV-3SG.N1.SBJ=DECL
 ‘The water is boiling.’

- (193) *aai=e* *bokbok* *tle-b-e=be*
 water=SG.N1 bubble come.IPFV-IPFV-3SG.N1.SBJ=DECL
 ‘The water is boiling.’ (lit. ‘is coming bubbling’)

The inventory is very small: *bokbok* ‘bubble (of boiling liquids)’, *flouflou* ‘flap (of large bird)’, and *fluluk* ‘flutter (of small birds)’.

3.12.5. *With a semantically more specific verb*

Occasionally, an ideophone combines with a more specific verb, which matches the ideophone semantically, as in (194):

- (194) *as=e* *fliliflala* *ein-b-e=be*
 fire=SG.M blaze burn-IPFV-3SG.N1.SBJ=DECL
 ‘The fire is blazing.’

3.13. Clitics and particles

3.13.1. Illocutionary force clitics

These are clitics which mark a non-verbal clause or a sentence (i.e. a single independent sentence or whole clause chain) for illocutionary force. The inventory comprises:

- (195) =*be* ‘Declarative’
 =*bo* ‘Emphatic, quotative’
 =*ble* ‘Exclamative’
 =*a* ‘Question’
 =*e* ‘(Content) Question’
 =*o* ‘Hortative (first person singular and plural, third person singular)’
 =*e* ‘Hortative (second person singular, second/third person plural)’

All illocutionary clitics are discussed in 12.1. The interrogative clitics =*e* and =*a* receive treatment under question formation in chapter 10. The hortative clitics are described in 8.6.8.

The illocutionary clitic =*bo* ‘Emphatic, quotative’ has three different functions in Mian. First, it is used to mark embedded quotatives (see 13.1). Second, while =*be* just signals that an utterance is declarative, =*bo* can be used to make a statement more emphatic, especially under negation, as in (196):

- (196) *nái=o* *fiamî=e* *fiamî=ba=bo*
 vagina=SG.F arrow_type=SG.N1 arrow_type=NEG=EMPH
- toli=e* *ē* *tem=e*
 arrow_type=SG.N1 SG.N1 in=SG.N1

biki-n-ib=a

pierce.PFV-SEQ-2/3PL.AN.SBJ=MED

‘they pierced her vagina on a Fiami arrow – not a Fiami arrow – a Toli arrow, and then ...’ [Initiation ritual]

Third, =*bo* is used in clause chains to indicate that the event described in the following clause comes as a surprise. In this function it only occurs following a medial verb form of the intransitive verb *têm/temê* ‘have a look’, for example:

- (197) *daak-n-o=a*
down-SS.SEQ-3SG.F.SBJ=MED

têm'-Ø-o=a=bo
look.PFV-DS.SEQ-3SG.F.SBJ=MED=SURP

aai=e *ba-Ø-e-bio* *kesoa*
water=SG.N1 dry_up-REAL-3SG.N1.SBJ-GPST because
'she went down and had a look and – oh no! – since the water had
dried up, ...' [Flood]

3.13.2. Medial verb clitics

The medial verb marker =*a* cliticizes to medial verbs in clause chains. It is probably derived from the coordinating conjunction *eka* 'and'. There is a second medial verb marker =*ta* which I assume is a clitic sequence of an unidentified element =*t* and the medial verb marker =*a*. The semantic difference between =*a* and =*ta* is unclear and hence both are glossed as MED 'medial'. Some speakers use =*to* instead of =*ta*.

3.13.3. The negative clitic =*ba*

To express negation in clauses which contain a finite verb the clitic =*ba* is employed. It follows the subject suffix (198). In verbs with a tense suffix in the post-subject slot =*ba* follows the tense suffix (199). =*Ba* mostly co-occurs with the negative clitic =*mo* (3.13.4):

- (198) *nē* *mén=o=mo* *ol-êb*
1SG string_bag=PL.N1=NEG PL.RESID.O-take.PFV

un-aamab-i=ba=be
go.PFV-IRR.NANPL-1SG.SBJ=DECL
'I will not carry the string bags.' [Dictionary]

- (199) *nē* *mén=o=mo* *ol-êb*
1SG string_bag=PL.N1=NEG PL.RESID.O-take.PFV

un-Ø-i-bio=ba=be
go.PFV-IRR.NANPL-1SG.SBJ=DECL
'I didn't carry the string bags.'

Medial verbs cannot be marked for negative polarity with *=ba*. *=Ba* always has scope over the whole sentence, which can consist of any number of chained clauses. On negation in clause chains, see 12.2.

To express negation in non-verbal predications *=ba* is also used. In this case it follows the predicate term. This is discussed in more detail in 9.11.4. An example is:

- (200) *yeye* *yō* *asyang=ba=bo*
 no DEM.DIST sharp_stick=NEG=QUOT
 ‘“No, that’s not a sharp stick.”’ [Pig story]

Usually the negative clitic *=ba* co-occurs with negative *=mo* elsewhere in the sentence. Within a single sentence or clause, *=mo* may only be expressed once, namely on the constituent immediately preceding the verb which is marked for negative polarity with *=ba*. *=Ba* is independent of stem aspect and TAM morphology. The use of *=ba* can have an influence on which subject marker alternant is selected (see section 8.5.2 on subject marking).

3.13.4. The negative clitic *=mo*

The negative clitic *=mo* is used in clauses that are negated with *=ba* ‘negation’ and prohibitives (see 8.6.7.6). It cannot be used in negated non-verbal predications. *=Mo* typically encliticizes to the final constituent before the verb. It can occur as a free word clause-initially. Examples of *=mo* in declaratives can be found in 3.13.3 above. An example of the prohibitive is given in (201):

- (201) *mo* *dob-ski*
 NEG 3SG.M_CL.O-turn

 dob-ski-n-em-eb=e!
 3SG.M_CL.O-turn-AUX.PFV-DEONT-2SG.SBJ=HORT
 ‘Do not keep turning him (a male child) around!’ [Crows]

If the negated verb consists of a coverb and a function verb in case of a function-verb construction, *=mo* attaches to the final constituent before the whole predicate, which includes the coverb accompanying a function verb. An example is:

- (202) *nē tekein ke-b-i=be*
 1SG knowledge do-IPFV-1SG.SBJ=DECL
 ‘I know.’
- (203) *nē=mo tekein ke-b-i=ba=be*
 I=NEG knowledge do-IPFV-1SG.SBJ=NEG=DECL
 ‘I don’t know.’

3.13.5. The interrogative clitic =*mō*

The interrogative clitic =*mō* is employed in polar questions (see 10.1.1). Like negative =*mo*, interrogative =*mō* typically encliticize to the final constituent before the verb (or the coverb in case of a function-verb construction) but can occur as a free word clause-initially. An example is (204):

- (204) *mō wentê-b-eb=ta o-b-i*
 Q hear.IPFV-DS.SIM-2SG.SBJ=MED say.IPFV-IPFV-1SG.SBJ

bleka?

or

‘Do you understand what I’m saying?’

(Lit: ‘Are you hearing as I’m saying, or?’) [Mianmin and Telefomin]

3.13.6. The topic clitic =*le*

The topic clitic =*le* attaches to preceding noun phrases and adverbial and medial clauses to indicate their topicality. The reader is referred to later sections for examples and more detailed information on topicalized noun phrases (6.9), topicalized medial clauses (11.3), and topicalized adverbial clauses (13.2.5). An example of a topicalized noun phrase is (205):

- (205) *memé ī=le || Sobining=e*
 children PL.AN=TOP PN=SG.M

dl-êt-n-e=a

PL.AN.O-take-SS.SEQ-3SG.M.SBJ=MED

‘As for the children, Sobining took them and ...’ [Sobining]

The use of =*le* in topic-only questions is discussed in 10.3.

3.13.7. The noun phrase modifier =sa ‘too’

The clitic =sa ‘too’ (with =sna ~ =sak ~ =snak in free variation) attaches to noun phrases to express the notion that something which is expressed in the same sentence or which is obvious from the context also applies to the referent of the noun phrase. This is illustrated for a first and second person singular pronoun in (206) and (207), respectively, and for a noun phrase in subject, (206) and (207), and object position (208) and (209):

(206) *nē=sa klayâm bl-Ø-i=be*
 1SG=too very_good stay.IPFV-IPFV-1SG.SBJ=DECL
 ‘I too am well.’

(207) *kēb=sa klayâm áan on=e!*
 2SG.M=too very_good lie go.PFV=HORT
 ‘You too sleep well!’

(208) *afonón ð=sa alukûm*
 shin_bone PL.N1=too all

kib-a-Ø-o=be
 ash-VBLZ-REAL-N1.PL.SBJ=DECL
 ‘The shinbones too became all ashes.’ (lit. ‘all “ashified”’) [Crows]

(209) *tīk ē=sa glaglā-tem-daak*
 leaf SG.N1=too between-into-down

gol-ba-na-n-ib=a
 3SG.BUNDLE.O-put_into.PFV-do-SEQ-2/3PL.AN.SBJ=MED
 ‘they put the leaf (bag) too down between (them) as well’ [Danenok]

Prima facie it might look that =sa ‘too’ is another suffix which derives complex pronouns from simple ones, like -ta derives emphatic pronouns (3.7.4). However, consider the following example which shows that if sa was a pronoun suffix, we would not expect it to follow the topic clitic, which marks noun phrases as topicalized not just noun:

(210) *yōle ēli=le=sa besa yē*
 well DEM.PROX.AN.PL=TOP=too just there

biaan-ib=a

stay.IPFV.SS.SIM-2/3PL.AN.SBJ=MED

‘Well, while these too were just living there (i.e. without trouble or altercations with their neighbours), they...’ [Mianmin and Telefomin]

3.13.8. Interjections and formulaic utterances

Interjections are particles which express assent or dissent, emotional states, and hesitation in speech. Due to the fact that interjections are usually uttered with a marked intonation, and the difficulty of teasing apart lexical tone and intonation, I will not mark tone on interjections. The inventory comprises:

(211) <i>ae, ai</i>	‘yes’
<i>ayasi</i>	‘expressing surprise or disbelief’
<i>ayo</i>	‘sorry (feeling regret or pity)’
<i>ba</i> (< <i>baa</i> ‘say’)	‘ehm (hesitation in speech)’
<i>dowe</i>	‘boah man’
<i>ekskyus</i> (from Tok Pisin)	‘excuse me’
<i>klâye</i>	‘well now’
<i>o</i>	‘oh’
<i>yait, yaiks</i> (from Tok Pisin)	‘yuck’
<i>yēle, yōle</i>	‘well (also hesitation)’
<i>yeye</i>	‘no’

The interjection *ayo* can only express regret and is not used for apologies.

I think it is plausible that *ba* ‘ehm’ indicating hesitation goes back to the verb stem *baa* ‘say (PFV)’. As bare verb stems are commonly used as imperatives, it is conceivable that speakers used the imperative form *baa* [ʰbâʰ] ‘Say (it)!’ to “order themselves” to continue speaking. Synchronically, however, the interjection *ba* is not pronounced with a pharyngealized /aʰ/.

In the eastern dialect, there are no interjections for the purpose of greeting people. Instead whole formulaic sentences are exchanged. The following patterns of question and answer are customary:

Arriving party says:

ībo yē bliba? — ‘Are you (PL) there?’

klayâm bieba? — ‘Are you well?’

Customary answer:

ae, nī yē biobobe — ‘Yes, we are there.’

ae, klayâm blibe — ‘Yes, I am well.’

Departing party says:

klayâm biehte! — ‘Stay well!’

Customary answer:

klayâm one! — ‘Go well!’

In the morning: (<i>klayâm</i>) <i>seba?</i> — ‘Did you sleep (well)?’	Customary answer: (<i>ae, klayâm</i>) <i>sibe</i> — ‘(Yes,) I have slept (well).’
Going to sleep: <i>klayâm áan one!</i> — ‘(Go to) Sleep well!’	Customary answer: <i>kēbsa klayâm áan one!</i> — ‘You too (go to) sleep well!’
Both parties meet (on a path): <i>kōbo yē tleba?</i> — ‘You have come to this place.’	Customary answer: (<i>ae, yē tlibe</i>) ‘(Yes,) I have come to this place.’

In the western dialect area, the form *klayâmo* ‘really good’ is commonly used to say hello or bid farewell to somebody. Speakers of the eastern dialect do not have this convention.

3.14. Grammatical relations

Mian does not mark any of its core grammatical relations with case or adpositions. Rather, grammatical relations are marked with affixes on the verb. These affixes show agreement with the noun phrase arguments which they cross-reference.

3.14.1. Subject

Morphologically, the grammatical relation of subject is indexed on the verb by a pronominal suffix in all finite verb forms:

- (212) *haleb* *ē-ta* *te-s-e=a*
 wild_boar 3SG.M-EMPH come.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘a wild boar came and then she ...’ [Afoksitgabáam]

Syntactically, the subject is the noun phrase which matches the person, number, and in the third person also the gender value of the subject index on the verb, in (212) *haleb ēta* ‘the wild boar’. The subject noun phrase is not overtly case-marked. The subject has special syntactic status in Mian because it is the pivot of the switch-reference system of the language. Semantically, subjects are typically topics and agents but subjects can also be experiencers or expletives (i.e. dummy subjects in impersonal verbs). Subject suffixes are discussed in 8.5.2.

3.14.2. Object

Mian has a single grammatical relation of object, which can be morphologically indexed in different ways, so that the indexing patterns on the verb do not correspond to the grammatical relations which can be established on syntactic grounds. All objects can be modified, quantified, topicalized and questioned. All objects can be relativized as well, but the relativization options are subject to some restrictions for verbs which do not index their object. This will be discussed in more detail below.

In all cases, the object is the noun phrase which matches the person, number, and in the third person also the gender value of the object index on the verb. Object noun phrases are never overtly case-marked. The way objects are indexed on the verb depends on lexical factors. There are four distinct patterns of object indexation.

First, the object can be marked by a pronominal prefix according to an accusative pattern, e.g.:

- (213) *no=i*
marsupial=PL.AN
- ya-l-êt-n-e=ta*
PL.AN.O-kill.PFV-carry.PFV-SS.SEQ-3SG.M.SBJ=MED
'he killed and brought/carried the marsupials and then ...' [Crows]

Semantically, objects indexed with a pronominal prefix mostly have the role of patient.

Second, the object can be marked by a classificatory prefix according to an absolutive pattern, i.e. the object of a transitive verb (214) or the subject of an intransitive verb (215) are indexed, e.g.:

- (214) *tāi=e* *bāangkli=e*
blade=SG.M stone_adze=SG.M
- deb-êt-n-o=a*
3SG.M_CL.O-carry.PFV-SS.SEQ-3SG.F.SBJ=MED
'she carried a *bāangkli* adze and then ...' [Afoksitgabáam]
- (215) *Dabein* *om-mēin* *tl-Ø-o=ta*
PN 3SG.F-CL.SBJ-fall.PFV come.PFV-DS.SEQ-3SG.F.SBJ=MED
'Dabein came falling down (i.e. from the sky) and ...' [Sofelok, 1]

Semantically, objects indexed with a classificatory prefix mostly have the role of theme or patient.

Third, the object can be marked by a pronominal suffix according to an indirective pattern. In the perfective, the suffix must be appended to *-ûb'* ‘give’, which is compounded with another verb. In the imperfective, suffixation is directly to the stem. For a detailed description, see 8.5.5.

- (216) *unáng=o* *baa-˘b'-o-n-e=o=le*
 woman=SG.F say.PFV-give.PFV-3SG.F.R-REAL-3SG.M.SBJ=N2=TOP
 ‘and when he said to the woman’ [Pig story]

Such objects most commonly have the role of recipient, benefactive, malefactive, possessor, or experiencer. Finally, there are verbs which never mark their object, e.g.:

- (217) *unín=o* *dowôn'-Ø-i=a*
 food=N2 eat.PFV-DS.SEQ-1SG.SBJ=MED
 ‘I eat food and then someone else ...’ [Newlyweds]

In this case, there is no indicator on the verb which makes the object relation explicit, so the object is the noun phrase which is *not* indexed on the verb. In most cases animacy differences (objects of verbs without object prefix are overwhelmingly inanimate) and the semantics and context of the whole utterance also help identify the object. Furthermore, many verbs without an object prefix only occur with a relatively small range of possible object noun phrases, as in the case of *halbū* ‘fold (IPFV)’, or even only with a single possible object noun phrase (as in the case of *êi* ‘accumulate, impound (water)’ or *kè* ‘cut (scraped taro) into slabs’, for which the objects can only ever be *aai* ‘water’ and *imen nini* ‘scraped taro’, respectively.

The absence of the prefix on these verbs has a syntactic consequence. When a verb does not index its object relativization with a pronominal relative clause is impossible and relativization with a head-internal relative clause is only possible if the head is not omitted. This is illustrated in the following examples. A pronominal relative clause is not allowed when the object is not indexed, as in (218), but is fine when it is indexed, as in (219):

- (218) **nē* *fu-n-i* *unín=o* *ayam=o=be*
 1SG cook-REAL-1SG.SBJ food=N2 good=PRD=DECL
 Intended: ‘The food I’ve cooked is good.’

- (219) *nē* *a-têm'-Ø-i* *naka=e*
 1SG 3SG.M.O-see.PFV-REAL-1SG.SBJ man=SG.M

teke=o=be
 long=PRD=DECL
 ‘The man I see is tall.’

In a head-internal relative clause the head must not be left out, if the verb does not index the object, as in (220):

(220) **nē fu-n-i=o ayam=o=be*
 1SG cook-REAL-1SG.SBJ=N2 good=PRD=DECL
 Intended: ‘What I’ve cooked is good.’

Examples (221) and (222) show that a head-internal relative clause is possible whether the overt object noun phrase is present or not, if the verb indexes its object.

(221) *nē naka=e a-tēm’-Ø-i=e*
 1SG man=SG.M 3SG.M.O-see.PFV-REAL-1SG.SBJ=SG.M

teke=o=be
 long=PRD=DECL
 ‘The man I see is tall.’

(222) *nē a-tēm’-Ø-i=e teke=o=be*
 1SG 3SG.M.O-see.PFV-REAL-1SG.SBJ=SG.M long=PRD=DECL
 ‘The one (M) I see is tall.’

If the head is present, a head-internal relative clause is possible, even if the verb does not index its object, as in (223):

(223) *nē unín=o fu-n-i=o ayam=o=be*
 1SG food=N2 cook-REAL-1SG.SBJ=N2 good=PRD=DECL
 ‘The food I’ve cooked is good.’

The evidence suggests that relativization is only allowed, if the relativized object is present in the clause in some way or other, either as a prefix or as an overt noun phrase. Thus, the syntactic effect correlates with a morphological effect, namely the presence or absence of the prefix. As this is more a morphological issue than a syntactic one I do not see a reason why the non-subject noun phrases of verbs like *fu* ‘cook’, which do not cross-reference this noun phrase with a prefix, should not be objects.

To sum up, Mian has one grammatical relation of object, which can be marked in three different ways. The object can also be not marked on the verb.

The forms of the object affixes are discussed in sections 8.5.3 to 8.5.5. Transitive verbs that index their object are described in sections 9.2.1 to 9.2.3. Unprefixed transitive verbs are further discussed in 9.2.4.

3.14.3. *Ditransitives*

Mian allows ditransitives to be derived from monotransitives in a highly productive way. The three arguments are the subject and two objects. In almost all cases, one of the objects is morphologically indexed by a prefix (following an accusative or absolutive pattern) and one object is indexed by a suffix (following an indirective pattern). For a detailed description of ditransitives, see section 9.5.

Chapter 4

Gender

4.0. Introduction

Mian, like the closely related Ok languages Telefol and Tifal, has a category ‘gender’, i.e. nouns are lexically specified for the gender they are assigned to and require the agreement patterns associated with their gender (Corbett 1991, Aikhenvald 2000). Mian has four genders: Masculine (M), feminine (F), neuter 1 (N1), and neuter 2 (N2).

Although gender is a nominal category, gender distinctions surface as formal variation on agreeing categories, the agreement targets, which are different from the noun. In Mian, agreeing categories within the noun phrase are articles and determiners. Outside the noun phrase, pronominal affixes on the verb, i.e. subject, object, and recipient markers, agree in gender with any overtly realized arguments. In anaphoric agreement, pronouns and pronominal affixes also agree in gender with a noun in a previously mentioned overt noun phrase argument.

Mian does not mark gender overtly on the noun, i.e. there is no nominal affix indicating the gender of a noun. I follow Corbett (1991: ch. 6), who treats genders as formally defined by sets of agreement markers and not by formal properties of the noun. In order to be able to say that a language has gender, some formal marker has to be present on at least one category different from the noun, which systematically covaries with the gender of the noun (Corbett 1991: 105).

4.1. Agreement on the article

For the description of the Mian gender system I will confine myself to one agreement target, namely the article (see 3.3). This is not problematic because the agreement markers on the other agreement targets besides the article show the same patterns. The agreement patterns for determiners and pronominal affixes on the verb are given in section 4.5 in this chapter.

In the course of this chapter the reader will notice that there is considerable homophony in the agreement markers. This suggests an alternative analysis which recognizes only two genders in Mian. This issue will be taken up below.

All instances of gender agreement in Mian are ‘mechanical’ in nature, i.e. gender is fixed for most nouns and the formatives on the agreement targets are predictable from the gender of the noun. The possibilities for agreement according to semantic gender are limited to nouns referring to human beings and higher animals (e.g. friend, orphan, pig, dog, etc.) for which differences in sex are either obvious or important. When the referent of such a double-gender noun changes, e.g. from a male to a female in a given context, the gender will change, and concomitantly the agreement patterns.

Nouns used referentially are followed by an article which is segmentally identical to the free pronouns and which cliticizes to the noun (see 3.4). Free pronoun forms all have high tone: \bar{e} ‘he’, \bar{o} ‘she’ and \bar{i} ‘they’. Articles are in the process of losing their tone. While most articles are toneless, one occasionally encounters articles with inherent high tone in Mian discourse. For ease of exposition, I assume in this grammar that articles are inherently unspecified for tone. Example (1) illustrates nouns in subject and object position. Example (2) shows the use of a noun as a possessive modifier. Possession in Mian is not marked morphologically but is syntactically determined. The possessor precedes the possessed.

- (1) *naka=e* *éil=o* *kan*
 man=SG.M pig=SG.F follow

háa'-bi-Ø-e=be
 roam.IPFV-AUX.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘The man is following the sow around.’

- (2) *naka=e* *éil=o*
 man=SG.M pig=SG.F
 ‘the man’s sow’

Mian has three formally distinct (usually) toneless clitic articles =*e*, =*o*, and =*i*, which pattern as follows:

- | | | | | |
|-----|----------------|---------------|----------------|----------------|
| (a) | <i>naka=e</i> | ‘a/the man’ | <i>naka=i</i> | ‘(the) men’ |
| (b) | <i>unáng=o</i> | ‘a/the woman’ | <i>unáng=i</i> | ‘(the) women’ |
| (c) | <i>imen=e</i> | ‘a/the taro’ | <i>imen=o</i> | ‘(the) taros’ |
| (d) | <i>am=o</i> | ‘a/the house’ | <i>am=o</i> | ‘(the) houses’ |

Following Corbett (1991), who defines genders as congruence classes of singular-plural pairs formally delineated by sets of agreement markers, I set up four (controller) genders. The sets of agreement markers defining these genders are given in brackets:

- Masculine (=e, =i) e.g. *naka* ‘man’
- Feminine (=o, =i) e.g. *unáng* ‘woman’
- Neuter 1 (=e, =o) e.g. *imen* ‘taro’
- Neuter 2 (=o, =o) e.g. *am* ‘house’

4.2. Gender assignment

The masculine and feminine genders are semantically homogeneous classes, in that they only include animates of male and female sex, respectively (with the exception of conventionalized gender where gender assignment can actually be at variance with biological sex).

Neuter 1 is semantically quite homogeneous as well and comprises count nouns with inanimate referents. For the masculine, feminine and neuter 1 genders, a contrast in number can be encoded. Neuter 2 is semantically more heterogeneous and there is no number contrast. Gender assignment criteria are summarized in table 4.1 below.

4.2.1. Nouns referring to animates

Nouns referring to humans are assigned to the masculine or the feminine gender on the basis of biological sex. The same applies to all mammals living in close contact with humans, mainly pigs and dogs, and to some birds where plumage is indicative of sex. In all other cases (i.e. birds without conspicuous sexual dimorphism, lesser mammals, amphibians, fish, etc., when sex is not immediately recognizable or relevant) the noun has a conventionalized gender. Nouns referring to such animals are assigned lexically to one of masculine or feminine gender. In cases in which the sex of the animal is somehow identified later, for example, by finding eggs inside a fish or a snake, conventionalized gender is usually over-ridden and the noun is assigned to masculine or feminine based on sex, resulting in either masculine or feminine agreement patterns. Table 4.2 gives examples of some animals for which gender assignment is conventionalized. The respective taxa (see section 6.5) appear in brackets in the leftmost column and they appear in the two other columns, if they can be used with a particular animal name. Taxa are never obligatory.

Table 4.1. Gender assignment criteria

Assignment criteria		Gender
Animate	Human	Masc. (e.g. <i>naka</i> 'man')
	Animal (Sex readily discernible or relevant)	Fem. (e.g. <i>unáng</i> 'woman')
Inanimate	Animal (Sex not readily discernible or irrelevant)	Masc. (e.g. <i>tolim</i> 'eagle') Fem. (e.g. <i>koból</i> 'cassowary')
	Count nouns (e.g. <i>mén</i> 'string bag', <i>imen</i> 'taro')	Neuter 1
Liquids, body fluids/wastes, substances (e.g. <i>aai</i> 'water', <i>ilem</i> 'blood', <i>as</i> 'wood')		
Inanimate	Places (e.g. <i>am</i> 'house', <i>mon</i> 'old garden', <i>dafáb</i> 'summit')	Neuter 2
	Masses (e.g. <i>afobèing</i> 'goods, property', <i>moní</i> (TP) 'money')	
	Body decoration (e.g. <i>eit</i> 'decoration', <i>baasi</i> 'pig's tusk')	
	Weather phenomena (e.g. <i>sók</i> 'rain', <i>ayung</i> 'mist')	
	Illnesses (e.g. <i>kweim</i> 'fever')	
	Intangibles/abstracts (e.g. <i>āns</i> 'song', <i>kukub</i> 'way, custom')	
	Temporal nouns (e.g. <i>kutimibo</i> 'in the middle of the night')	
	Verbal nouns (e.g. <i>fumin</i> 'activity of cooking (IPFV VN)')	
	Some tools and weapons (e.g. <i>káawa</i> 'steel axe', <i>mōk</i> 'stone adze', <i>skemdāng</i> 'knife')	

In the Papuan (Sepik hill) language Alamblak (Bruce 1984) lesser animals and inanimates are assigned to the feminine gender on the basis of roundness or squatness. It seems as if the squatness criterion also has some relevance for the assignment of some lesser animals in Mian.¹ Thus, turtles, tortoises, scorpions, spiders, short fish and small, roundish cockroaches, echidnas and the squat, flightless cassowary are invariably feminine. However, for some animals roundness/squatness does not seem to be relevant as an assignment criterion.

Animate nouns are well-behaved in terms of gender assignment. They are either masculine or feminine in the singular and there is a distinct agreement form for animate plurals in =*i*, where the gender contrast is neutralized.

Table 4.2. Conventionalized gender for animals

	Masculine	Feminine
Birds and bats (<i>wan</i>)	<i>wan taimâ</i> ‘heron’ <i>wan tiam</i> ‘crow’ <i>wan katab</i> ‘flying fox’	<i>wan gwingwî</i> ‘emerald dove’ <i>wan alifayum</i> ‘kingfisher’
Cassowary	n/a	<i>koból</i> ‘cassowary’
Rodents, marsupials, monotreme (<i>no</i>)	<i>no smuk</i> ‘rat’ <i>no kwiam</i> ‘tree kangaroo’	<i>no befakam</i> ‘flying philanger’ <i>no yakéil</i> ‘echidna’
Reptiles (<i>tim</i>)	<i>tím ali</i> ‘python’ <i>tím heye</i> ‘lizard sp.’	<i>tím biman</i> ‘snake sp.’ <i>máab tom</i> ‘small tortoise sp.’
Fish (<i>aning</i>)	all long fish, e.g. <i>aning finí</i> ‘eel’	all short fish
Spiders (<i>gwán</i>)	n/a (all spiders are female)	<i>hōndou</i> ‘spider sp.’
Insects, etc.	<i>tebéil</i> ‘ant’ <i>fobiâ</i> ‘leech’	<i>slub</i> ‘cockroach’ <i>takumein hok</i> ‘scorpion’

4.2.1.1. Nouns of masculine gender referring to humans

aab ‘brother’, *aaleb* ‘father’, *aaling* ‘father’s younger brother’, *afin* ‘friend, ally’, *āi* ‘dad’, *awokim* ‘father’s sister’s husband’, *ayàab* ‘father’s older brother’, *ayàal* ‘paternal grandfather’, *baliām* ‘male ancestor’, *fanin* ‘male ancestor’, *hangkalebmîn* ‘(very) old man’, *hek (sūm)* ‘older (oldest) brother’, *imak* ‘husband’, *kiab* (TP) ‘kiap, patrol officer’, *kimaanîn* ‘boss, minder’, *kingkan* ‘shaman’, *komók* ‘leader’, *máamein* ‘mother’s brother’, *makáa* ‘enemy’, *mín* ‘son’, *molim* ‘father-in-law’, *naka* ‘man’, *nek* ‘friend’, *ning* ‘younger brother’, *nokâi* ‘maternal grandfather’, *tembâl* ‘young man, bachelor’.

4.2.1.2. Nouns of feminine gender referring to humans

aâm ‘older sister’, *afók* ‘grandmother, female ancestor’, *akuláb* ‘parent’s older sister’, *alél* ‘wife’, *andlok* ‘mother-in-law’, *awók* ‘mother’, *báab* ‘parent’s younger sister’, *biém* ‘mum’, *en (sūm)* ‘older (oldest) sister’, *konokmôn* ‘(very) old woman’, *món* ‘daughter’, *neng* ‘younger sister’, *sou* ‘young, unmarried woman’, *unáng* ‘woman’.

4.2.2. Nouns referring to inanimates

The main difference between the two neuter genders in Mian is countability. Neuter 1 can be subdivided into two subsets.

First, count nouns for which there is a number contrast, e.g. *imen* ‘taro’. The form in =*e* refers to exactly one real world entity, while the form in =*o* refers to more than one distinct real world entities.

Second, liquids like *aai* ‘water’, or body fluids like *ilem* ‘blood’, and body wastes like *al* ‘faeces’, but also other substances such as *füt* ‘tobacco’ and *as* ‘wood’. Here, the distinction is between small and large quantities of a given substance. For this second set of neuter 1 nouns a number contrast can be encoded but counting using lexical numerals is not possible.

4.2.2.1. Nouns of neuter 1 gender

Semantically, the nouns of neuter 1 gender can be further subdivided into body parts, natural entities, cultural artefacts, and liquids and substances.

Body parts: *aal* ‘skin’ (and the compound *sitáal* ‘lip’ [lit. tooth-skin]), *abín* ‘navel’, *anang* ‘mouth’, *bān* ‘arm’, *báan* ‘jaw’, *bēl* ‘wing’, *dáang* ‘back, spine’, *debelón* ‘forehead’, *dlong* ‘knee’, *éit* ‘penis’, *fiaam* ‘tail fin’, *gabáam* ‘head’, *háang* ‘tongue’, *ikam* ‘leg’, *īn* ‘liver’, *kin* ‘eye’, *klón* ‘ear’, *kwéil* ‘hand’, *kwel* ‘neck’, *kwīng* ‘shoulder’, *mokók* ‘ankle’, *mukùng* ‘nose’, *mutum* ‘heel’, *nái* ‘vagina’, *ōn* ‘bone’, *sít* ‘tooth’, *skil* ‘foot’, *tub* ‘breast’.

In natural discourse, body part terms are often reassigned to the masculine or feminine gender to match the sex of their owner, for example in (3) where the article following the noun *nái* ‘vagina’ reflects feminine gender, and not plurality:

(3) *nai=o* *fiamî=e* *fiamî=ba=bo*
vagina=SG.F arrow_type=SG.N1 arrow_type=NEG=EMPH

toli=e *ē* *tem=e*
arrow_type=SG.N1 SG.N1 in=SG.N1

biki-n-ib=a

pierce.PFV-SS.SEQ-2/3PL.AN.SBJ=MED

‘they pierced her vagina on a Fiami arrow – not a Fiami arrow – a Toli arrow, and then they...’ [Initiation ritual]

Natural entities: *ám* ‘wild pandanus’, (*a*)*ket* ‘flower’, *amún* ‘lake’, *as* ‘tree’, *deit* ‘bird’s nest’, *dingding* ‘taro rhizome’, *éim* ‘pandanus’, *ibal* ‘dust’, *imen*

‘taro’, *kimit* ‘cucumber’, *kimkīm* ‘root’, *mifīm* ‘sago palm’, *níng* ‘thorn’, *som* ‘banana’, *tek* ‘vine’, *ūn* ‘egg’, *wán* ‘sweet potato’.

Cultural artefacts: (*a*)*fong* ‘walking stick’, *aful* ‘ball’, *ān* ‘arrow’, *anók* ‘bow’, *atit* ‘wooden stick used for eating’, *ayal* ‘light(source)’, *báangkli* ‘stone adze’, *fābi* ‘stone adze’, *fút* ‘cigar, cigarette’, *geim* ‘pronged arrow’, *mén* ‘string bag’, *tlúm* ‘brace, bridge’, *was* ‘drum’, *yóum* ‘piece of clothing’.

Liquids and substances: *aai* ‘water’, *al* ‘excreta, faeces’, *as* ‘wood’, *atol* ‘flame’, *dabangnak* ‘semen’, *déib* ‘moss’, *dēn* ‘tree sap’, *fút* ‘tobacco’, *gáam* ‘juice, grease’, *ifá* ‘sweat’, *ilem* ‘blood’, *imán* ‘urine’, *isá* ‘pus’, *māt* ‘bile’.

4.2.2.2. Nouns of neuter 2 gender

The neuter 2 gender is semantically more heterogeneous than neuter 1. It contains:

- Nouns denoting masses
- Nouns referring to locations and landmarks
- Body decoration
- Weather phenomena
- Illnesses
- Intangibles and abstract notions
- Temporal nouns
- Verbal nouns

Apart from these, neuter 2 also contains some nouns which refer to discrete (countable) real-world entities, such as houses and some tools and weapons. The agreement patterns for neuter 2 nouns do not show a number contrast. Therefore, (4) is ambiguous:

- (4) *am=o* *yē* *bi-Ø-o=be*
house=N2 there stay.IPFV-IPFV-N2.SBJ=DECL
‘There is a house.’ OR ‘There are houses.’ (depending on context)

Lexical numerals can be employed to count those N2 nouns which refer to discrete (countable) real-world entities, as in (5):

- (5) *am=o* *asú* *yē* *bi-Ø-o=be*
house=N2 two there stay.IPFV-IPFV-N2.SBJ=DECL
‘There are two houses.’

Counting neuter 2 nouns using lexical numerals is only possible if the noun refers to discrete real-world entities, such as houses, weapons and tools.

The nouns of neuter 2 gender can be divided into the following semantic groups: places and locations, masses, body decoration, weather phenomena, illnesses, intangibles and abstract notions, and some tools and weapons.

Places and landmarks (especially places with certain functions, e.g. an abode of humans or animals): *am* ‘house’ (and all its compounds, such as *gilam* ‘house without kitchen’ [lit. ‘cold-house’], *itam* ‘dance house’, *kwoisām* ‘spirit house’, *katabam* ‘cave’ [lit. ‘flying_fox-house’]), *basal* ‘veranda’, *betan* ‘area, place’, *bib* ‘village, place’, *damib* ‘garden’, *dāng* ‘garden’, *deib* ‘path’, *mon* ‘old garden, place where taro can be grown’, *sesá* ‘bush’, *smē* ‘cave’.

Masses: *afobèing* ‘goods’, *atum* ‘smoke’, *awitnîn* ‘star(s)’, *difib* ‘rubbish’ (e.g. torn paper, small bits of wood), *dím* ‘flesh’, *fub* ‘rubbish bits’, *kibi* ‘face’ (consisting of eyes, nose, mouth, etc.), *kutab* ‘white ash(es)’, *unin* ‘food’.

Body decoration: *amín* ‘hole in nosetip’, *baasi* ‘pig tusk (put through the septum)’, *eit* ‘decoration’, *mitakla* ‘hole through septum’, *klón maalu* ‘pig tusk (put through the ear)’.

Weather phenomena: *ayung* ‘mist’, *ēimawe* ‘haze’, *ib* ‘cloud(s)’, *sók* ‘rain’.

Intangibles/abstract notions: *am* ‘day’, *angkusil* ‘war magic’, *āns* ‘song’, *dam* ‘dream’, *hōb* ‘breath, spirit’, *wasî* ‘war(fare)’, *awá* ‘fight’, *wéng* ‘talk, language, voice’ [and all its compounds, such as *glolwêng* ‘rumour’ (lit. ‘wind-talk’), *kwelwêng* ‘whisper’ (lit. throat-talk)], *titi* ‘strength, power’, *tang* ‘smell’, *fotom* ‘shame’, *kél* ‘black magic’ (roughly equivalent to Tok Pisin ‘poison’), *usem* ‘sorcery’ (roughly equivalent to Tok Pisin ‘sanguma’), *kukub* ‘way, custom’, *ninín* ‘name’, *okok* (TP) ‘work’, *taan* ‘sunlight’, *tēing* ‘generosity’.

Illnesses: *klō* ‘ringworm’, *enin* ‘pain’, *genin* ‘illness (general state of being unwell)’, *kweim* ‘fever’.

Some tools and weapons: *káawa* ‘steel axe’, *mók* ‘stone adze’, *skemdâng* ‘knife’.

Apart from these, the neuter 2 gender includes temporal nouns (3.1.9) and verbal nouns (8.7.2).

4.3. Cross-classification

Cross-classification refers to a change in gender, where the same noun can be assigned to two or even more different categories and this formal change is accompanied by a predictable change in the semantics (Corbett 1991: 67, Evans 1997: 116-119).

A number of animate nouns allow cross-classification, i.e. they can be used with either masculine or feminine gender agreement depending on the sex of an appropriate referent in a given situation. This applies to nouns denoting sex differentials, such as *abán* ‘orphan’, *alá* ‘close friend (of the same sex)’, *bekeb* ‘companion’, *kulán* ‘game animal’, *mēn* ‘child’, *tamaan mēn* ‘illegitimate child’ (lit. fornication child), *til* ‘dog’, *éil* ‘pig’, *wan* ‘bird, bat’.

Cross-classification for inanimates extends to body parts, which are generally (but not obligatorily) assigned to a gender reflecting the sex of their owner, and *hōb* ‘breath, spirit’, *háam* ‘(human) corpse’, *dam* ‘body, corpse’, and *smík* ‘image, reflection, essence, shadow’.

The noun *hōb* means ‘breath’ with neuter 2 agreement but can take masculine and feminine agreement patterns to designate supernatural phenomena: *hōb=e* ‘a/the ghost of a male’, *hōb=o* ‘a/the ghost of a female’, and *hōb=i* ‘(the) ghosts (of humans)’.

The nouns *háam* ‘corpse’, which exclusively refers to dead humans not to animal carcasses, and *dam* ‘(living or dead) body’ always either take masculine or feminine agreement depending on the sex of the individual: *háam=e* ‘a/the corpse of a man’, *háam=o* ‘a/the corpse of a woman’, and *háam=i* ‘(the) corpses’, similarly *dam=e* ‘a/the body of a male, a/the male corpse’, *dam=o* ‘a/the body of a female, a/the female corpse’, and *dam=i* ‘(the) bodies, corpses (of humans)’.

The noun *smík* is the most variable one. It is of high cultural salience (Gardner 1987) and it designates one pole in the body-soul dichotomy (*dím* ‘flesh, body’ vs. *smík* ‘essence, soul’). *Smík* can occur with the agreement patterns of all four genders. With neuter 2 agreement, *smík* means ‘picture, image, copy’ and with neuter 1 agreement it means ‘shadow’. Finally, it can refer to reflections of people or their spirits or souls if it takes masculine or feminine agreement: *smík=e* ‘a/the reflection/soul of a male’, *smík=o* ‘a/the reflection/soul of a female’. The plural in both cases is *smík=i* ‘(the) reflections/souls (of humans)’.

4.4. Gender assignment of Tok Pisin loans

Loan words from Tok Pisin, most of which ultimately come from English, are assigned to the four genders largely on the basis of the semantic characteristics of their referents.

Animates are assigned on the basis of the (typical) sex of the referent. Therefore, *kiab* ‘kiap, patrol officer’ and *bolis* ‘policeman’ are assigned to the masculine gender.

Inanimates are usually assigned to neuter 1 as one would expect, e.g. *senso* ‘chainsaw’, *hàs* ‘hat’, *balu* ‘plane’, *tòs* ‘torch’, *siòt* ‘shirt’, *bèn* ‘pen’, *bòks* ‘box’, and *kàb* ‘cup’.

Nouns referring to locations and institutions are neuter 2, e.g. *klabus* ‘prison’, *kot* ‘court’, *skùl* ‘school’, and *lotu* ‘church’. Mass nouns like *moní* ‘money’ are also assigned to neuter 2. The loan *buk* ‘book’ is neuter 2 as well, possibly because it is classified as a mass of paper pages.

4.5. Summary of the agreement patterns

Table 4.3 summarizes the agreement patterns on the article, which formally define the four genders.

Table 4.3. Agreement patterns on the article

Gender	Agreement patterns		Example
	Singular	Plural	
Masculine	= <i>e</i>		<i>naka</i> ‘man’
Feminine	= <i>o</i>	= <i>i</i>	<i>unáng</i> ‘woman’
Neuter 1	= <i>e</i>	= <i>o</i>	<i>imen</i> ‘taro’
Neuter 2		= <i>o</i>	<i>am</i> ‘house’

Table 4.4 sets out the agreement patterns for the simple bound pronoun series and the proximal demonstratives. The bound pronoun series is used to form, for instance, emphatic pronouns which can be used adnominally. For details on determiners and their position in the noun phrase, see sections 6.2.2 and 6.2.3. For gender distinctions in all other pronouns, see section 3.7.

Table 4.4. Agreement patterns of the bound pronoun series and the proximal demonstrative

Gender	Bound pronouns		Demonstrative	
	Sg	Pl	Sg	Pl
Masculine	<i>ē-</i>	<i>ī-</i>	<i>ēle</i>	<i>ēli~īli</i>
Feminine	<i>ō-</i>		<i>ōlo</i>	
Neuter 1	<i>ē-</i>	<i>ō-</i>	<i>ēle</i>	<i>ōlo</i>
Neuter 2		<i>ō-</i>		<i>ōlo</i>

Table 4.5 lists the agreement patterns for pronominal affixes on the verb. One notices at a glance that the patterns are identical for all agreement targets. The table disregards allomorphy in the respective markers. For morphological details on pronominal affixes indexing the arguments of a verb, see 8.5 on argument marking.

Table 4.5. Agreement patterns for pronominal affixes on the verb

Gender	Subject		Object		Recipient (PFV)		Recipient (IPFV)	
	Sg	Pl	Sg	Pl	Sg	Pl	Sg	Pl
Masculine	<i>-e</i>	<i>-ib</i>	<i>a-</i>	<i>ya-</i>	<i>-a</i>	<i>-e</i>	<i>-ha</i>	<i>-ye</i>
Feminine	<i>-o</i>		<i>wa-</i>		<i>-o</i>		<i>-we</i>	
Neuter 1	<i>-e</i>	<i>-o</i>	<i>a-</i>	<i>wa-</i>	<i>-a</i>	<i>-o</i>	<i>-ha</i>	<i>-we</i>
Neuter 2		<i>-o</i>		<i>wa-</i>		<i>-o</i>		<i>-we</i>

4.6. Alternative analysis of the gender system

The homophony patterns of the agreement markers in tables 4.3 to 4.5 above suggest an alternative analysis, namely to treat all nouns which take =*e* as masculine, while all nouns which are followed by =*o* are feminine. Such a two-gender analysis and its ramifications will be sketched in this section. Eventually, I will reject this analysis (also see Fedden 2007b).

4.6.1. Two genders: Masculine and feminine only

Gender systems are not a particularly common phenomenon in Trans New Guinea languages and if they do occur they are usually analysed as two-class systems with a masculine and a feminine gender (Wurm 1982: 80). The closely related Ok language Telefol, for instance, is described by Healey (1965a: 31-32) as having two genders (masculine and feminine).² Furthermore, having a two-gender system is typical of the Ok languages in general (Healey 1964a: 116).

To claim that the Mian gender system has four genders is therefore contrary to the received opinion as to how Trans New Guinea languages, and especially the Ok languages, classify their nominal vocabulary.

An alternative analysis with only two genders and an animate-inanimate distinction was sketched by Foley (1986: 81). He captures the homophony in the Mian gender agreement patterns by assigning nouns that have the *e*-article to the 'masculine' and nouns that take the *o*-article to the 'feminine' gender. The *i*-article is restricted to plural animates and shows gender syncretism. Table 4.6 sets out the agreement patterns on the article for the two-gender analysis.

The consequences of this analysis are (a) a fundamental difference between animate and inanimate nouns in terms of behaviour of the categories gender and number and (b) an intricate connection or association between gender and number/quantity for inanimates. Animates have a gender contrast in the singular and the plural in =*i*, whereas for some inanimates (the neuter 1 nouns

in the four-gender analysis presented above) a contrast in number or quantity is expressed *by means of* a contrast in gender. For all other inanimates (neuter 2 in the four-gender analysis) gender markers give no indication of number.

Table 4.6. Agreement patterns on the article (Two-gender analysis)

Gender	Agreement patterns		Examples
	Animates		
	Singular	Plural	
Masculine	= <i>e</i>	= <i>i</i>	<i>naka</i> ‘man’
Feminine	= <i>o</i>		<i>unáng</i> ‘woman’
	Inanimates		
Masculine	= <i>e</i>		<i>imen</i> ‘taro’
Feminine	= <i>o</i>		<i>imen</i> ‘taro’, <i>am</i> ‘house’

The analysis suggested by Foley is of course based on the description of Mian gender found in Smith and Weston (1974b). As far as the formative /o/ is concerned, Smith and Weston only use the term ‘feminine’ for animate nouns. They go on to say that inanimates “are classified according to size or quantity” (Smith and Weston 1974b: 41-42), i.e. plural inanimates (or quantities) and nouns whose referents are considered to be of large size also take /o/, e.g. *kaawa-o* ‘steel axe’, *imen-o* ‘large taro, quantity of taro’³ (Smith and Weston 1974b: 42).

It is well-known that size can be an assignment criterion for gender (Foley 1986, Aikhenvald 2000). So it could indeed be the case that *káawa* ‘steel axe’ is assigned to the feminine gender because it is treated as referring to a large object. The noun *káawa* would then be subject to the rule that inanimates in Mian do not have a plural in /i/. However, contrary to Smith and Weston’s claims I cannot confirm that this assignment strategy has any relevance for large tokens of some types of objects that come in all shapes and sizes, like taro tubers or string bags. My data suggests that one taro can only ever be referred to with *imen=e* ‘a/the taro’ regardless of size. In order to express that a certain taro tuber is big, a modifying adjective, e.g. *sūm* ‘big’, has to be used, thus *imen=e sūm=e* ‘a/the big taro’. On the other hand, *imen=o* can only mean ‘(the) taros’. Therefore, size does not seem to be a predominant assignment criterion for inanimates in contemporary Mian.

According to Smith and Weston, the other assignment criterion for inanimates apart from size is quantity. The gender contrast is between =*e* for singular or small quantity/number and =*o* for plural or large quantity/number. Although the assignment criterion “quantity” is widespread in systems of mensural and sortal classifiers and is also attested for classificatory verbs (Aikhenvald 2000: 293, 300), it does not figure predominantly in gender systems. Yet, in Mian we have seen that for homogeneous substances, like

liquids, differences in the agreement pattern correlate with differences in quantity, e.g. *aai=e* ‘some water’ vs. *aai=o* ‘much water’.

A similar example comes from the Papuan language Manambu, where mass nouns are assigned to their gender (masculine or feminine) on the basis of quantity (Aikhenvald 1998). Hence, it seems plausible to assume that in Mian homogeneous substances are assigned to their gender on the basis of quantity as well. However, for most inanimates, namely those which refer to discrete objects, the contrast is clearly not between small and large quantities (as Smith and Weston claim), but rather a contrast between one object and more than one objects, in other words, a contrast in number. Thus, an inanimate noun with *=e* can only refer to a single entity, e.g. *imen=e* ‘a/the taro’ / *‘a small amount of taro’.⁴

A two-gender analysis for Mian entails that the feminine gender contains – apart from female animates – also plural inanimates, such as *imen=o* ‘(the) taros’, large quantities of substances, such as *aai=o* ‘much water’, and inanimates for which there is no singular-plural distinction, such as *am=o* ‘(the) house(s)’ and *káawa=o* ‘(the) steel axe(s)’.

4.6.2. Polarity

Syncretism of forms across features is called ‘polarity’. In the Mian case, we are dealing with (partial) gender polarity, i.e. for (countable) inanimates a change in number means a change to an agreement pattern associated with a different gender, e.g. *imen* ‘taro’ in the plural shows the same agreement patterns as singular feminine nouns. The term ‘polarity’ refers to situations in which in a “given system of two terms (grammatical features) and two exponents, values and exponents can be inverted.” (Lecarme 2002: 110).

For a (two-class) gender system this means that any given noun has a certain gender in the singular with concomitant agreement patterning whereas in the plural the same noun is used with the agreement patterns of the other gender (as used in the singular). Polarity systems have been reported for Cushitic languages, e.g. Somali (Serzisko 1982, Saeed 1999). The agreement pattern of the definite article in Somali are set out in table 4.7 (from Saeed 1999: 112).

Table 4.7. Definite article in Somali

	Singular	Plural
Masculine	<i>-ka</i>	<i>-ta</i>
Feminine	<i>-ta</i>	<i>-ka</i>

In the Somali polarity system, there are two categories, gender and number, and two markers, *-ka* and *-ta*. Changing the value of one of the categories causes the marker to change, whereas the marker remains the same if both values are changed (Corbett 1991: 196). Such systems of full or genuine polarity are comparatively scarce.

Systems of ‘partial polarity’ are less rare and can, for example, be found in Serbo-Croat. Table 4.8 illustrates agreement patterns of the predicate agreement marker (Corbett 1991: 197).

Table 4.8. Serbo-Croat predicate agreement markers

	Singular	Plural
Masculine	Ø	<i>i</i>
Feminine	<i>a</i>	<i>e</i>
Neuter	<i>o</i>	<i>a</i>

Feminine and neuter are in a relation of partial polarity in Serbo-Croat because the feminine singular form is identical to the neuter plural form (meaning that agreement is marked following the pattern for the feminine singular), whereas the neuter singular and feminine plural forms are not identical. This situation is similar to what we find in Mian.

The important point is that the four-gender and the two-gender analysis for Mian make profoundly different assumptions about what polarity actually is.

For the four-gender analysis, polarity is a descriptive term for a situation in which a noun in the plural follows the agreement pattern associated with another gender in the singular without assuming that the gender of the noun actually changes with a change in number, thus creating a special form of syncretism which cross-cuts features. Corbett (1991: 196) uses the term in this sense. For Mian, this means that we analyse four genders and state that feminine and neuter 1 are in a relation of partial polarity with each other (table 4.9).

Table 4.9. Agreement patterns on the article

Gender	Agreement patterns		Example
	Singular	Plural	
Masculine	= <i>e</i>	= <i>i</i>	<i>naka</i> ‘man’
Feminine	= <i>o</i>		<i>unáng</i> ‘woman’
Neuter 1	= <i>e</i>	= <i>o</i>	<i>imen</i> ‘taro’
Neuter 2		= <i>o</i>	<i>am</i> ‘house’

In Mian, as in Serbo-Croat, polarity is only partial because the feminine singular form is identical to the neuter 1 plural form, while the neuter 1 singular form is not identical to the feminine plural form.

The two-gender analysis has to understand polarity as a grammatical principle which allows nouns to change their gender as a means of changing their number. This, however, has consequences for linguistic theory, which usually assumes gender and number to be two distinct categories or features. An evaluation of a two-gender analysis for Mian taking into account its merits but also the theoretical issues arising when one treats polarity as a grammatical principle is given in the next section.

4.7. Evaluation

An analysis of the Mian gender system as a two-class system makes sense of the striking patterns of homophony in the agreement markers by treating =*e* and =*o* as exponents of the masculine and the feminine gender, respectively.

Above, we have seen that an analysis of Mian gender in terms of masculine and feminine gender entails that we have to accept that for animate referents gender operates independently of number, whereas (at least) for inanimates that allow a number opposition, a contrast in number or quantity is expressed by means of a contrast in gender. In such a system *a change in number results in a change in gender and vice versa*, conflating the categories number and gender for these inanimate nouns.

It is my view that such an analysis should be rejected in general and in Mian in particular because despite the patterns of homophony, gender and number are different phenomena and should therefore be kept separate in a synchronic description of a language. Gender is a lexical feature of a noun. Evidence for this assumption comes from the fact that assignment can be arbitrary and agreement is strict and consistent. Number, on the other hand, is generally not a feature a noun is inherently specified for though there are exceptions, for example suppletive or irregular plural stems and pluralia tantum, such as *scissors* or *oats* in English, which are indeed lexically plural, but rather a feature of the noun phrase as a whole in a certain context in which it is used to denote a plural referent. It might be possible to argue that in English most count nouns are inherently singular because the form of their lexical entry is identical to the singular form. In Mian, however, a lexical citation form, e.g. *naka* ‘man’, is unspecified for number. Only the addition of a determiners, e.g. the articles =*e* or =*i* clarifies whether one man or more than one is/are being referred to.

A two-gender analysis would have ramifications for the structure of the Mian lexicon. Each of the two genders would contain both animate and inanimate nouns and the entries for animates would differ considerably from those for inanimates. While animate nouns can be specified for either gender (mostly depending on sex) and then regularly have their plural marked with

=*i*, some inanimates, such as *imen* ‘taro’, would need a feature ‘polaric’, which indicates that the noun shows gender polarity when its number value is changed. We cannot assume a general rule that makes all inanimates polaric because some, such as *káawa* ‘steel axe’, do not show gender polarity and therefore would have to be specified as invariant. Consequently, even a two-gender analysis has to make a sub-classification within each gender, in other words, it has to make reference to both gender and animacy to account for the gender and number behaviour of any given noun.

In summary, the two-gender analysis is plagued by the fact that it has to assume polarity as a principle of Mian grammar. Furthermore, it is not more parsimonious than the four-gender analysis since it also has to acknowledge a four-way contrast. Hence, the solution I propose for Mian is to adopt the four-gender analysis because it permits us to keep number and gender separate. Rather than saying that a given inanimate noun, such as *imen* ‘taro’ is masculine in the singular and feminine in the plural, this noun is lexically specified as neuter 1, which forces the article to be =*e* in the singular and =*o* in the plural. In other words, the correct agreement patterns follow directly from the lexical gender specification of the noun.

Chapter 5

Classificatory verb prefixes

5.0. Introduction

A subset of the Mian verbal vocabulary (approximately 35 roots) requires a classificatory prefix whose function is (a) to index the object of transitive verbs and the subject of intransitive verbs and (b) to classify the object/subject according to certain salient characteristics of its referent, namely sex, shape, and function.

Semantically, these verbs (with a few exceptions) refer to various forms of manipulation, movement, and handling, for example ‘give’, ‘take’, ‘put’, ‘lift’, ‘turn’, ‘throw’, ‘bury’, and ‘fall’. As suggested by their semantics, most of these verbs are transitive and their verbal prefixes have a classificatory relation to the object, exceptions being the intransitive verb *-mêin* ‘fall’ and the ambitransitive verb *-bià* ‘throw, erupt’, which can be used intransitively to mean ‘erupt’. In these two cases the classification applies to the subject. Thus, classificatory prefixes in Mian operate on an absolutive basis (Keenan 1984), e.g.:

- (1) *báangkli=e* *dob-ò-n-o=a*
stone_adze=SG.N1 3SG.M_CL.O-take.PFV-SEQ-3SG.F.SBJ=MED
‘she took the *báangkli* adze and then ...’ [Afoksitgabáam]
- (2) *Dabein* *om-mêin* *tl-Ø-o=ta*
PN 3SG.F_CL.SBJ-fall.PFV come.PFV-DS.SEQ-3SG.F.SBJ=MED
‘Dabein came falling down (i.e. from the sky) and ...’ [Sofelok, 1]

Interestingly, it is precisely verbs of handling and object manipulation which contain classificatory elements in a number of North American languages which also operate on an absolutive basis, e.g. Navajo and Digueño (Hoiijer 1945, Langdon 1970, Barron 1982).

5.1. Classificatory prefixes

Sets of verbal classificatory prefixes create classes of nouns which are not co-extensive with the classes established by the gender system. In order to prevent terminological confusion, the term ‘gender’ will be used for the

categories established by agreement pattern of argument affixes and the term '(prefix) class' for the categories established by the system of verbal classificatory prefixes. Table 5.1 illustrates how singular-plural pairs of classificatory prefixes define the set of prefix classes.

Table 5.1. Classificatory prefixes

Person	Prefix classes	Classificatory prefixes	
		Singular	Plural
1		<i>nem-</i>	
2		<i>kem-</i>	
	M-class (M_CL)	<i>dob- ~ do-</i>	<i>dol- ~ dl- ~ do-</i>
	F-class (F_CL)	<i>om-</i>	
3	Long object (LONG)	<i>tob- ~ to-</i>	<i>tebel- ~ tebe-</i>
	Bundle-like object (BUNDLE)	<i>gol- ~ go-</i>	<i>gulel- ~ gule-</i>
	Covering object (COVER)	<i>gam-</i>	<i>gemel- ~ geme-</i>
	Residue class (RESID)	<i>ob- ~ o-</i>	<i>ol- ~ o-</i>

Most classificatory prefixes have phonologically conditioned allomorphs. The singular prefixes for the M-class, the long, and the residue classes have two allomorphs each. They are realized as *do-*, *to-*, and *o-* before /t/ and *dob-*, *tob*, *ob-* elsewhere.

The animate plural prefix has three allomorphs: *do-* before /s, k, h/, *dl-* before vowel and *dol-* elsewhere. The singular bundle and plural residue prefixes have two allomorphs each: *go-* and *o-* before /t, k, h/ and *gol-* and *ol-* elsewhere.

The plural prefixes for the long, bundle, and covering classes are realized as *tebel-*, *gulel-*, and *gamel-*, respectively, before vowel, and *tebe-*, *gule-*, *game-* elsewhere.

The only classificatory prefixes which have no allomorphs are the F-class singular prefix *om-* and the singular prefix for the covering class *gam-*. They are invariant in all phonological contexts.

Obligatory verb stem variation depending on the classificatory prefix is extremely rare. It occurs only with /^{LHL}fa/ 'put (PFV)' and /^{LHL}fa^s/ 'lift (PFV)'. Table 5.2 sets out which prefix allomorphs these two verbs take and how the stem changes when following certain classificatory prefixes:

The following two examples (3) and (4) illustrate stem allomorphy for the verb /^{LHL}fa/ 'put (PFV)'.

- (3) *bèn=e* *to-fâ-b^(H)-i=be*
 pen=SG.N1 3SG.LONG.O-put.PFV-NHODPST-1SG.SBJ=DECL
 'I put down the pen.'

Table 5.2. Obligatory stem changes in /^{LHL}fa/ ‘put (PFV)’ and /^{LHL}faʰ/ ‘lift (PFV)’

Class	Prefix	/ ^{LHL} fa/ ‘put’	/ ^{LHL} faʰ/ ‘lift’
M-class/ F-class	<i>nem-</i>	<i>nem-fâ</i>	<i>nem-fâa</i>
	<i>kem-</i>	<i>kem-fâ</i>	<i>kem-fâa</i>
	<i>dob-</i>	<i>do-fâ</i>	<i>do-fâa</i>
	<i>om-</i>	<i>om-fâ</i>	<i>om-fâa</i>
	<i>dol-</i>	<i>dl-â</i>	<i>dl-âa</i>
RESIDUE	<i>ob-</i>	<i>o-fâ</i>	<i>o-fâa</i>
	<i>ol-</i>	<i>ol-â</i>	<i>o-hâa</i>
BUNDLE	<i>gol-</i>	<i>go-fâ</i>	<i>go-hâa</i>
	<i>gulel-</i>	<i>gulel-â</i>	<i>gule-hâa</i>
LONG	<i>tob-</i>	<i>to-fâ</i>	unattested
	<i>tebel-</i>	<i>tebel-â</i>	unattested
COVERING	<i>gam-</i>	<i>gam-fâ</i>	unattested
	<i>gamel-</i>	<i>gamel-â</i>	unattested

- (4) *mén=e* *gol-â-Ø-i-o=be*
 string_bag=SG.N1 3SG.BUNDLE.O-put.PFV-REAL-1SG.SBJ-EP=DECL
 ‘I have put down the string bag.’

The verb *-ei-* ‘take from’ (which is the stem that the verb *-êb* ‘take’ uses when it is inflected for a recipient (see 8.5.5)) can undergo an optional stem change when preceded by *dol-*, *ol-*, or *gol-*, in which case the prefixes must appear as *do-*, *o-*, or *go-*, that is without the final /l/ (table 5.3).

Table 5.3. Optional stem changes in /^Lei/ ‘take from (PFV)’

Prefix	Without stem change	With stem change
<i>dol-</i>	<i>dol-ei-</i>	<i>do-i-</i>
<i>ol-</i>	<i>ol-ei-</i>	<i>o-i-</i>
<i>gol-</i>	<i>gol-ei-</i>	<i>go-i-</i>

An example is given in (5), where the classificatory prefix *ol-* and the verb *-ei-* come together to form the prefix-stem sequence *o-i-*:

- (5) *ī* *sosbên=o* *ayók*
 3PL.AN pot(TP)=PL.N1 secretly

o-i-î-t'-ne
 PL.RESID.O-take.PFV-give.PFV-1SG.R

un-Ø-io=be
 go.PFV-REAL-2/3PL.AN.SBJ=DECL
 ‘They have stolen my pots.’

Among the verbs which obligatorily take classificatory prefixes are several in which the prefix can or has to refer to animates, depending on the semantics of the verb, e.g. *-Ø(-)/-* ‘handle, transfer’, *-halila/-halin* ‘be concerned about’, *-suana/-suan* ‘hate’, or *-/hâa* ‘chase’.

The use of a classificatory prefix in the second person singular and the animate plural are given in (6) and (7), respectively:

- (6) *nēta* *kem-Ø^'-aamab-i=bo*
 1SG.EMPH 2SG.O-take.PFV-IRR.NANPL.SBJ-1SG.SBJ=QUOT
- ge* *baa-ˈb'-o-s-e=a*
 say.PFV say.PFV-give.PFV-3SG.F.R-DS.SEQ-3SG.M.SBJ=MED
 ‘‘I will marry you’’, he said to her and then she...’ [Afueiwok]
- (7) *nī=le* *naka=i* *asusûna=i*
 1PL.EXCL=TOP man=PL.AN two=PL.AN
- del-êt-n-ib=a*
 PL.AN.O-take.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘As for us, the two men took us and then ...’ [Ala ritual]

Figure 5.1 shows the overlap of the four genders and the six classes established by the classificatory prefixes in the third person. The formal and semantic differences between these two systems of nominal classification will be discussed in 5.9 below.

Prefix classes	M-class	F	B	L	Residue	F-class		
		a	u	o				
		t	n	n				
		d	g					
		l						
		e						
Genders	Masc.	Neuter 1				Fem.	Neuter 2	

Figure 5.1. Overlap between genders and prefix classes (in the third person)

A system of classificatory verbal prefixes has been described for the Papuan language Waris by Brown (1981). Seiler (1983) argues that first elements in former verb-verb compounds were reanalysed as classificatory prefixes. On a

similar phenomenon in the Papuan language Imonda, see Seiler (1985). The etymology of the Waris classificatory prefixes is still transparent in many cases because the verbal etymons of the classificatory prefixes continue to be used as independent verbs, as shown in table 5.4.

Table 5.4. Examples of classificatory prefixes and corresponding independent verbs in Waris

Classificatory prefix	Gloss	Independent verb	Gloss
<i>put-</i>	‘spherical objects, fruit’	<i>puetv-</i>	‘pick fruit’
<i>kov-</i>	‘lengths of vine’	<i>kovvav-</i>	‘cut off (as vine)’
<i>tuvv-</i>	‘pieces cut from longer lengths’	<i>tuvvav-</i>	‘chop into lengths’

In Mian the situation is much less clear and the origin of the classificatory prefixes is synchronically impossible to determine. With the exception of *gam-* ‘covering object singular’, none of the other classificatory prefixes can synchronically be traced back to any lexical category, verb or otherwise. The prefix *gam-* is possibly related to the noun suffix *-gam* ‘covered with’ (cf. 3.1.5):

- (8) *klō-gam*
ringworm-covered
‘covered with ringworm’

To sum up, the reanalysis scenario developed by Seiler probably does not apply to Mian or is an older phenomenon than in Waris or Imonda.

5.2. The M-class: *dob-/dol-*

This class is semantically mildly heterogeneous. It contains all animate nouns whose referents are of masculine gender, e.g. *mín* ‘son’, *kimaanîn* ‘minder, boss’, *komók* ‘leader’, *tablaséb* ‘European, authority figure’, *tíl* ‘dog’, and all body parts belonging to a male:

- (9) *tíl=e do-fâ-bi-Ø-e=be*
dog=SG.M 3SG.M_CL.O-put.PFV-AUX.IPFV-IPFV-3SG.M.SBJ=DECL
‘He is caring for the dog.’

- (10) *tíl=i* *dl-â-bi-Ø-ebo=be*
 dog=PL.AN PL.AN.O-put.PFV-AUX.IPFV-IPFV-2SG.SBJ=DECL
 ‘You are caring for the dogs.’

The M-class also contains some inanimate nouns of neuter 1 gender, e.g. *yóum* ‘piece of clothing’, *flèt* (TP) ‘plate’, *siòt* (TP) ‘shirt’, some species of *som* ‘banana’, *éim* ‘pandanus palm/fruit’, and *báangkli* ‘stone adze’.¹

This shows that the classification effected by sets of classificatory prefixes does not follow the gender distinctions but rather is a distinct categorization system. While most nouns of neuter 1 gender belong to the residue class, the few listed above belong to the M-class, for example:

- (11) *éim=o* *dl-éb*
 pandanus_fruit=PL.N1 PL.M_CL.O-take.PFV

tl-Ø-i=be
 come.PFV-REAL-1SG.SBJ=DECL
 ‘I brought (some) pandanus fruits.’

The M-class prefixes are only used for small quantities of inanimate objects. If the number of objects exceeds four or five, the plural prefix *ol-* of the residue class is used rather than *dol-* (see below on this phenomenon). It is impossible to give a hard and fast rule from which number onward the change in prefixes and hence in classification occurs, but it shows that classificatory prefixes are more sensitive semantically than the genders.

5.3. The F-class: *om-/dol-*

This class is semantically quite heterogeneous. It contains all animate nouns whose referents are of feminine gender, e.g. *món* ‘daughter’, *biém* ‘mum’, *afók* ‘grandmother’, etc. and all body parts belonging to a female:

- (12) *unáng=o* *om-Ø-Ø-e=be*
 woman=SG.F 3SG.F_CL.O-take.PFV-REAL-3SG.M.SBJ=DECL
 ‘He took a wife.’
- (13) *unáng=i* *dl-Ø-Ø-i=be*
 woman=PL.AN PL.F_CL.O-take.PFV-REAL-1SG.SBJ=DECL
 ‘I took wives.’

The F-class also contains some species of *som* ‘banana’ that are of neuter 1 gender, and all inanimate nouns of the neuter 2 gender, such as *káawa* ‘steel axe’, *am* ‘house’, *unín* ‘food’, *āns* ‘song’, *damìb* ‘garden (place)’, *eit* ‘decoration’, *sók* ‘rain’, *fotom* ‘shame’, and many more. For a comprehensive list of neuter 2 nouns in the corpus, see the section on gender (4.2.2.2).

Recall that the neuter 2 gender was set up mainly on formal grounds in order to distinguish inanimate nouns on the basis of whether there is a number distinction. Neuter 1 nouns have a number distinction, neuter 2 nouns do not. In the following example, context has to disambiguate whether one or more houses are being talked about:

- (14) *am=o* *yē* *bi-Ø-o=be*
house=N2 there stay.IPFV-IPFV-N2.SBJ=DECL
‘There is a house/there are houses.’

If *am* ‘house’ is the object of a verb with an obligatory classificatory prefix, F-class prefixes are used. Consequently, a number contrast can be expressed within the system of classificatory prefixes. Compare:

- (15) *am=o* *om-halin-b-i=be*
house=N2 3SG.F_CL.O-be_concerned.IPFV-IPFV-1SG.SBJ=DECL
‘I am concerned about the house (e.g. because it is dilapidated).’

- (16) *am=o* *dol-halin-b-i=be*
house=N2 PL.F_CL.O-be_concerned.IPFV-IPFV-1SG.SBJ=DECL
‘I am concerned about the houses (e.g. because they are dilapidated).’

The fact that all neuter 2 nouns belong to the F-class class, which also contains all nouns of feminine gender, points to a historical relatedness of feminine and neuter 2 genders. See chapter 4 (especially section 4.7) for a justification why neuter 2 nouns and nouns referring to female animates are analysed as belonging to distinct genders synchronically.

The F-class classificatory prefix *om-* can be used with inanimate nouns of neuter 1 gender to express that an object is broken. It is also often employed for halves of formerly whole objects (see section 5.10 on reclassification below).

5.4. The long class: *tob-/tebel-*

This class is semantically homogeneous. It only includes inanimate nouns whose referents are saliently extended in one dimension. Moreover, all nouns of the long class are also of neuter 1 gender.

Nouns which belong to the long class are: *ān* ‘arrow’, *anàt* ‘arrow type’, *atit* ‘bamboo tool for eating’, *ninggêim* ‘barbed arrow’, *fút* ‘tobacco’, *geim* ‘pronged arrow’, *gíng* ‘midrib of leaf’, *ōn* ‘bone’, *bèn* (TP) ‘pen’, *bensol* (TP) ‘pencil’, *itó* ‘wooden tongs’, *sēku* ‘bush knife’, *dekéng* ‘vine, belt’, *nil* (TP) ‘nail, spike’:

- (17) *geim=e* *tob-mêin*
pronged_arrow=SG.N1 3SG.LONG.SBJ-fall

daak *tl-Ø-e=be*
down come.PFV-REAL-3SG.N1.SBJ=DECL
‘The pronged arrow has fallen down.’

- (18) *geim=o* *tebe-mêin*
pronged_arrow=PL.N1 PL.LONG.SBJ-fall

daak *tl-Ø-o=be*
down come.PFV-REAL-3PL.N1.SBJ=DECL
‘The pronged arrows have fallen down.’

The long class is not semantically exhaustive. There are objects which are one-dimensionally extended in a salient way but do not (at least not by default) belong to this class, e.g. *as* ‘tree’ (residue), *éit* ‘penis’ (residue), and *éim* ‘pandanus fruit’ (M-class).

5.5. The bundle class: *gol-/gulel-*

The noun *mén* ‘string bag’ and all types of string bags, e.g. *kumén* ‘small string bag worn around the neck’ belong to the bundle class. However, a number of nouns can be used with the set of prefixes for the bundle class if the object or objects which they refer to is a bundle supplied with a string or rope for carrying it or hanging it up like a bag (see section 5.10 below on reclassification).

- (19) *mén=e* *gol-Ø˘-Ø-i =be*
 string_bag=SG.N1 3SG.BUNDLE.O-take.PFV-REAL-1SG.SBJ=DECL
 ‘I have taken the string bag.’
- (20) *mén=o* *gulel-Ø˘-Ø-i =be*
 string_bag=PL.N1 PL.BUNDLE.O-take.PFV-REAL-1SG.SBJ=DECL
 ‘I have taken the string bags.’

5.6. The covering class: *gam-/gemel-*

The covering class only contains a few items, which are extended in two dimensions in a salient way and which cover in one way or another: *aal* ‘skin’, *blaster* (TP) ‘band aid’, *blangket* (TP) ‘blanket’, *flim* ‘palm bark (for house floors)’. This is not a class of flat objects because many saliently two-dimensional objects, such as bank notes, leaves, etc. are not included.

- (21) *blangket=e*
 blanket=SG.N1
- gam-tlâa’-n-amab-i =be*
 3SG.COVER.O-remove.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will remove the blanket.’
- (22) *blangket=o*
 blanket=PL.N1
- geme-tlâa’-n-amab-i =be*
 PL.COVER.O-remove.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will remove the blankets.’

5.7. The residue class: *ob-/ol-*

Nouns which belong to the residue class are: *aai* ‘water’, *as* ‘tree, wood, fire’, *botol* (TP) ‘bottle’, *sosbên* (TP) ‘pot’, *anók* ‘bow’, *két* ‘container’ and interestingly two animates which are of conventional feminine gender and thus would be expected to take the F-class prefixes *om-/dol-*, namely *máab sei* ‘tortoise species’ and *máab tóm* ‘tortoise species’.²

- (23) *két=e* *ob-bià-n-e=be*
 container=SG.N1 3SG.RESID.O-throw.PFV-REAL-3SG.M.SBJ=DECL
 ‘He has thrown the container.’
- (24) *két=o* *ol-bià-n-e=be*
 container=PL.N1 PL.RESID.O-throw.PFV-REAL-3SG.M.SBJ=DECL
 ‘He has thrown the containers.’

The classificatory plural prefix *ol-* is often used as a general plural marker for all inanimates if quantities of more than a few are being talked about (see 5.10 on reclassification below).

5.8. Verbs with obligatory classificatory prefix

Below are listed the most frequent verbs which require a classificatory prefix. In a few cases, the classificatory prefix is frozen in the singular form of the residue class *ob-*, e.g. *ase ob-tanà/ase ob-tunu* ‘light with fire’ and *aaie ob-dí* ‘fetch water’. In the case of the perfective-only stem *-kilêb* ‘put handle of bag around forehead so that the bag hangs down the bag (in order to carry the bag)’ the prefix is frozen as *go-* from the bundle class.

- (25)
- | | |
|-----------------------|---|
| <i>-â’/—</i> | ‘leave, let’ |
| <i>-atdi/—</i> | ‘throw into fire’ |
| <i>-atou/—</i> | ‘put into fire’ |
| <i>-ba/-bu</i> | ‘put into a bag, cover’ |
| <i>-bià/—</i> | ‘push, throw’ |
| <i>-blangkè/—</i> | ‘push out of the way’ |
| <i>-bù</i> | ‘bury, plant’ |
| <i>-êb/—</i> | ‘take (in order to carry)’ |
| <i>-fâ/-ka</i> | ‘put’ |
| <i>-fâa/—</i> | ‘lift’ |
| <i>-halila/-halin</i> | ‘feel sorry for, be concerned about’ |
| <i>—/-hâa’</i> | ‘chase’ |
| <i>-kimà/-kimsan</i> | ‘put into fire’ |
| <i>-ma/-san</i> | ‘plant’ |
| <i>-mêin/—</i> | ‘fall’ |
| <i>-meki/—</i> | ‘hang up’ |
| <i>-miki/—</i> | ‘take (child) into arms to lull to sleep’ |
| <i>-ò/—</i> | ‘take’ |
| <i>-Ø(-)/—</i> | ‘handle, transfer’ |
| <i>-ski</i> | ‘turn’ |

<i>-suana/-suan</i>	‘hate’
<i>-tabba/-tabbu</i>	‘put on, fill up’
<i>-tamaa/—</i>	‘step on’
<i>-tangâ’</i>	‘hang up (clothes) to dry’
<i>-tlâa’/—</i>	‘remove’
<i>-tôu/—</i>	‘put above fireplace’
<i>-toulêb/—</i>	‘take into arms’
<i>-ûb’/-ka-</i>	‘give’
<i>-usâ’/-uka</i>	‘put on (clothes)’
<i>-waa</i>	‘hide’

Verbs with an obligatory classificatory prefix where the prefix has to index an animate object are listed in (26).

- (26) *-klafâ/—* ‘put on back (piggy-back style)’
-môu/— ‘put on shoulder’ (pig or child)
-silêb /— ‘follow’
-tamâ/— ‘pen in, imprison’

5.9. Gender system vs. classification by prefix

Nominal categorization in Mian is complex due to the fact that two different nominal classification systems, which show different formal and semantic properties, exist next to and interact with each other.

First, there is the category ‘gender’ with the masculine, feminine, neuter 1 and 2 subcategories. All pronominal affixes on the verb agree in person, number and gender with the arguments they cross-reference. If the verb occurs without overt noun phrase arguments, pronominal affixes agree anaphorically with a previously mentioned overt noun phrase argument.

These instances of agreement are predictable from the person, number and gender of the nominal argument. In other words, pronominal affixes never have any semantic impact on the noun or its noun phrase. Their function is to indicate grammatical relations in the clause and to enable construal of any overt arguments with their respective cross-referencing affix by showing agreement.

In addition, there are the categories (prefix classes) established by sets of classificatory prefixes. There are four reasons why I consider this system of classificatory prefixes to be different from the system of gender agreement.

First, only some verbs with similar semantics of object manipulation or handling participate in the system of classificatory prefixes, whereas pronominal affixes can be found on all finite verbs.

Second, nominal classification by classificatory prefixes operates on an absolute basis, whereas the gender system does not.

Third, formal means and semantic categorizations used by the two classificatory systems are quite different (see below).

Fourth, the system of classificatory prefixes has instances of ‘non-standard agreement’, i.e. in certain contexts, choice of the prefix is not necessarily predictable from formal features (e.g. gender) of a noun or semantic properties (sex, shape) of its referent. Examples of this will be provided in 5.10 below. Within the gender system, agreement patterns are always predictable from the gender specification of a noun.

Phonologically, classificatory prefixes are more complex than the pronominal affixes which define the genders. First, almost all prefixes have prefix variants conditioned by quite diverse phonological environments. Second, two classificatory prefixes show vowel harmony with a following vowel (see 2.7.1).

Note also the differences in semantic split-up. In the gender system, the main semantic distinctions are animacy and sex, establishing a masculine, a feminine, and two neuter genders. The distinction between the neuter genders is mainly a formal one between those nouns with a number contrast and those without a number contrast, though one should recall that this is not exclusively a formal distinction but also a semantic one since an overwhelming number of N2-nouns, such as masses, locations, and abstract or intangible entities are non-count nouns.

In the system of classificatory prefixes, animacy/sex is also an important categorization criterion but the M-class and the F-class contain many items from the inanimate world. Moreover, shape (long object) and function (bundle-like or covering object) are criteria for classification. The residue class mainly contains inanimate nouns which are also of neuter 1 gender, but not exclusively so (for example a few animates such as *máab tóm* ‘tortoise species’) and the residue class is not co-extensive with this gender since many neuter 1 nouns are classified as M-class, F-class, long, bundle, or covering by the prefix system.

To sum up, two nominal classification systems operate alongside each other in Mian: (a) the gender system and (b) the system of classification through classificatory verbal prefixes. The formal means employed by the respective systems are clearly distinct and the semantic criteria for classification yield two different ways of categorizing nouns.

5.10. Reclassification

Reclassification refers to a different categorization of a noun due to the choice of a different classificatory prefix in order, for example, to highlight a certain feature of the referent. Reclassification in Mian mainly applies to nouns whose referents are or can somehow be handled like bags, for instance bundles of firewood or substantial chunks of pork which have a string or rope attached to them. This characteristic of the referent is not expressed in the noun, but in the classificatory prefix. An example of reclassification by using a different classificatory prefix is given in (27) and (28):

- (27) *éil=o om-fâ-n-e=be*
 pork=N2 3SG.F_CL.O-put.PFV-REAL-3SG.M.SBJ=DECL
 ‘He put down the (piece of) pork.’

- (28) *éil=o gol-meki-n-e=be*
 pork=N2 3SG.BUNDLE.O-hang_up.PFV-REAL-3SG.M.SBJ=DECL
 ‘He hung up the (piece of) pork (on a string).’

In this case, the semantic impact of the classificatory prefixes of the bundle class is hard to miss. The information that the referent of the object, namely the meat, comes with a string or rope attached so that it can be carried around or hung up like a bag or bundle does not reside in the noun itself, nor is it included in the semantics of the verb stem. It might be argued that the verb *-meki* ‘hang up (PFV)’ necessarily takes *gol-/gulel-* as a prefix because its semantics suggest that in order to hang something up it must be bundle-like or at least have a handle. However, *sosbên*, a Tok Pisin loan which refers to metal pots of various sizes with handles, cannot occur with the bundle class prefixes, even though the action of hanging them up can be referred to by *-meki* ‘hang up (PFV)’:

- (29) *sosbên=e ob-meki-n-e=be / *gol-meki-n-e=be*
 pot=SG.N1 3SG.RESID.O-hang_up.PFV-REAL-3SG.M.SBJ=DECL
 ‘He hung up the pot.’

Thus, the “hang-upability” of referents of objects of the verb *-meki* ‘hang up (PFV)’ is more a selectional restriction of this verb rather than having anything to do with the presence of the bundle class prefixes *gol-/gulel-*.

In general the choice of a different prefix subtly changes the semantics of an utterance. Compare:

- (30) *som=e*
 banana_bunch=SG.N1

dob-meki-n-e=be
 3SG.M_CL.O-hang_up.PFV-REAL-3SG.M.SBJ=DECL
 ‘He hung up the banana bunch (e.g. the whole bunch on a nail).’

- (31) *som=e*
 banana_bunch=SG.N1

gol-meki-n-e=be
 3SG.BUNDLE.O-hang_up.PFV-REAL-3SG.M.SBJ=DECL
 ‘He hung up the banana bunch (to which a string or rope is attached).’

In (31), *som=e* ‘a/the banana bunch’ is reclassified as a bundle-like object. Although the object is the same in (30) and (31), namely *som=e* in both cases, the choice of prefixes indicates that in the former example the bunch of bananas itself is hung over a hook or nail whereas in the latter example the bunch has some string or rope attached to it, which is slipped over a hook or nail.

Example (31) can also have a different meaning, namely that the referent of the object is a bag full of bananas. Bundle class prefixes can indicate that the referent of the object is contained in a bag:

- (32) *tóm=e* *gol-meki-n-e=be*
 stone=SG.N1 3SG.BUNDLE.O-hang_up.PFV-REAL-3SG.M.SBJ=DECL
 ‘He hung up a bag full of stones.’

If several bags are involved, the difference in number is expressed on the article and on the verbal prefix, but the fact that the objects are in a bag is solely conveyed by the bundle class prefix:

- (33) *tóm=o* *gol-meki-n-e=be*
 stone=PL.N1 PL.BUNDLE.O-hang_up.PFV-REAL-3SG.M.SBJ=DECL
 ‘I hung up bags full of stones.’

The reclassification of a noun as bundle-like is not restricted to the verb *-meki* ‘hang up (PFV)’. This can be seen in the following example:

- (34) *mēn=e* *yē* *gol-ò-n-e=a*
 child=SG.M there 3SG.BUNLDE.O-take.PFV-SEQ-3SG.M.SBJ=MED
 ‘It (the wild boar) takes the boy (with the umbilical cord), and then...’
 [Afoksitgabáam]

This sentence is from a story in which a pregnant woman is savaged by a wild boar who tears her open, takes her unborn son, still attached to the umbilical cord (the handle, so to say), and throws him on the ground. (The whole story can be found in the text collection in appendix 1.)

Reclassification of *yóum* ‘piece of clothing’, which is by default M-class (35), to the covering class is exemplified in (36):

- (35) *yóum=e* *tek* *dim=e*
 piece_of_clothing=SG.N1 rope on=SG.N1

do-fâ-n-ebo=be
 3SG.M_CL.O-put.PFV-REAL-2SG.SBJ=DECL
 ‘You put the piece of clothing on the line.’

- (36) *yóum=o*
 piece_of_clothing=SG.N1

geme-tlâa'-n-ebo=be
 PL.COVER.O-remove.PFV-REAL-2SG.SBJ=DECL
 ‘You undressed (lit. ‘removed your clothes).’

What the reclassification of ‘clothes’ effects in this case is the highlighting of the fact that they had covered a person’s body before they were removed, as stated in the utterance in (36) above.

Another example of reclassification is provided in (37):

- (37) *ē* *tob-ò-n-e=a*
 3SG.M 3SG.LONG.O-take.PFV-SEQ-3SG.M.SBJ=MED
 ‘he took it (i.e. his long penis) and then ...’ [Selimin]

In this example, the classificatory prefix *tob-* refers anaphorically back to the previously mentioned *éit* ‘penis’, which is assigned to the residue class by default. However, in order to emphasize the enormous length of the protagonist’s member, the speaker uses the prefix of the long class.

All of these examples illustrate that reclassification can be used quite creatively in Mian.

5.10.1. Plurals of inanimate nouns of neuter 1 gender

The noun *éim* ‘pandanus fruit’ is classified by default as belonging to the M-class and occurs with the prefixes *dob-/dol-*. However, when one wants to refer to considerable numbers of these fruits, the residue plural prefix *ol-* is used. The same happens with long objects which are normally classified as long and occur with *tob-/tebel-*. If their numbers exceed a few, the plural prefix *ol-* of the residue class is employed:

- (38) *kōbo* *geim=o* *tebel-ubmà*
 2SG.M pronged_arrow=PL.N1 PL.LONG.O-turn_around

tebel-abmà *bi-Ø-ebo=be*
 REDUP exist.IPFV-IPFV-2SG.SBJ=DECL
 ‘You are turning around (a few) pronged arrows in your hands.’
- (39) *kōbo* *geim=o* *ol-ubmà*
 2SG.M pronged_arrow=PL.N1 PL.RESID.O-turn_around

olabmà *bi-Ø-ebo=be*
 REDUP exist.IPFV-IPFV-2SG.SBJ=DECL
 ‘You are turning around (quite a few) pronged arrows in your hands.’

5.10.2. Use of F-class singular *om-* for broken and half objects

For inanimate referents which are broken, the prefix *om-* is always possible as an alternative to the bundle, covering, long, and residue class prefixes:

- (40) *mén=o*
 string_bag=PL.N1

gulel-halin-b-i=be
 PL.BUNDLE.O-be_concerned.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am concerned about the string bags.’
- (41) *mén-o*
 string_bag=PL.N1

om-halin-b-i=be
 3SG.F_CL.O-be_concerned.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am concerned about the (heap of torn) string bags.’

In this case, the use of the F-class singular prefix *om-* focuses on the fact that the objects in question are indeed broken and thus not treated as individual items anymore but more like a heap or a mass.

The prefix *om-* is also employed for halves of formerly whole objects. Compare:

(42) *imen=e* *ob-Ø^-nen=e!*
 taro=SG.N1 3SG.RESID.O-give.PFV-1SG.R=HORT
 ‘Give me the taro!’

(43) *imen=e* *om-Ø^-nen=e!*
 taro=SG.N1 3SG.F_CL.O-give.PFV-1SG.R=HORT
 ‘Give me the half taro!’

Again, the examples (42) and (43) are instances of reclassification. The semantic features ‘broken mass’ or ‘half’ are not expressed in the noun but lie exclusively in the classificatory prefix.

Chapter 6

The noun phrase

6.0. Introduction

Mian noun phrase syntax is rigid. All noun phrases conform to the following structural template, which specifies the structure of maximally complex noun phrases:

Possessor	Prenominal adjective	Head noun	Postnominal adjective(s)	Quantifier	Determiner
Prenominal relative clause					
Prenominal modifier					

The head noun slot can only hold an item of the category N, which includes verbal nouns. A pronoun can instantiate a full noun phrase. Headless adjectives can constitute a noun phrase of their own. In that case the head noun slot is empty.

Any material filling the possessor slot must be either a possessive pronoun or a noun phrase. The prenominal adjective slot can accommodate one adjective of the two *sin* ‘old’ and *memâ* ‘new’. The head noun can be preceded by a prenominal relative clause or by one of two prenominal modifiers *omômom* ‘all kinds of’ and *inamin* ‘such’. In these cases there must not be a possessor. The postnominal adjective slot can be filled by one or more adjectives. Postnominal adjectives are followed by quantifiers. The determiner slot can be filled by the article or any of those pronouns which can be used adnominally (Himmelman 1997: 215-219).

Table 6.1 lists examples illustrating noun phrases of different complexity. All of these structures are discussed below. For a short overview of relative clauses, see 6.3.8. For a detailed description of relative clauses, see 13.3.

The normal situation in natural Mian discourse is that the clitic article occurs only once on the rightmost constituent of a noun phrase that is used referentially:

- (1) *tîl milil sūm=e*
 dog black big=SG.M
 ‘a/the big, black dog’

Table 6.1. Noun phrase examples

POSS	Prenominal adjective	Head noun	Postnominal adjective(s)	Quantifier	DET	Gloss
		<i>naka</i>			= <i>e</i>	'a/the man'
			<i>sūm</i>		= <i>e</i>	'a/the big (one)'
		<i>til</i>	<i>sūm milil</i>		= <i>e</i>	'a/the big black dog'
		<i>naka</i>	<i>sūm</i>		<i>ēle</i>	'this big man'
<i>fut ēle</i>		<i>ninín</i>			= <i>o</i>	'the name of this tobacco'
<i>buk=o</i>		<i>kimin</i>			= <i>o</i>	'the reading of books'
<i>nē</i>	<i>sin</i>	<i>fanin</i>			= <i>e</i>	'my old grandfather'
		<i>memé</i>	<i>gwáab</i>	<i>asumâtna</i>	<i>ēli</i>	'these three small children'

However, it is also possible to have the clitic article distributed over the whole noun phrase. It can show up on the noun itself, and on any adjectival modifiers:

- (2) *til=e milil=e sūm=e*
 dog=SG.M black=SG.M big=SG.M
 'a/the big, black dog'

6.1. Pronouns as noun phrases

The forms of all pronoun series (except the possessive pronoun) can be used pronominally, i.e. they can constitute noun phrases by themselves. For details on the form and the semantics of the respective pronoun series and for more examples, see 3.7.

All of these can occur in subject position. Free pronouns occasionally occur in object position whereas the other pronoun series are so far only attested in subject position.

Forms from either of the reflexive series appear as objects if their function is to indicate reflexivity:

- (3) *nē nēmaye/neleskîl gò'-Ø-i-obe*
 1SG 1SG.REFL cut_skin.PFV-REAL-1SG.SBJ=DECL
 'I cut myself.' [Observed]

If forms of the reflexive series have a contrastive function, very similar to English ‘I myself killed the pig’, the pronoun can appear in apposition to an overt subject noun phrase, as in (4) or on its own in lieu of an overt subject noun phrase, as in (5):

- (4) *naka* *ēle* *ē-maye* *éil=o*
 man DEM.PROX.SG.M 3SG.M-REFL pig=SG.F

wa-nâ'-n-e=be
 3SG.F.O-kill-REAL-3SG.M.SBJ=DECL
 ‘This man himself killed the sow.’

- (5) *ē-maye* *klâ-b-e=be*
 3SG.M-REFL fix-IPFV-3SG.M.SBJ=DECL
 ‘He himself is fixing (it).’ (Smith and Weston 1974b: 105)

6.2. Minimal noun phrases

Minimal noun phrases consist either of a bare noun, i.e. a noun without any determiner, or a noun followed by a determiner, e.g. a clitic article or an adnominal pronoun.

6.2.1. Bare nouns

A minimal noun phrase can consist of a bare noun. Bare nouns occur in non-referential contexts, e.g.:

- (6) *as* *blim*
 wood not_exist
 ‘There is no wood.’

6.2.2. Articles as noun phrase determiners

A minimal noun phrase can consist of a noun, proper name, or nominal compound with a clitic article:

- (7) *unáng=o*
woman (N)
- Umsin=o*
Umsin (female PN)
- wan-am=o*
bird-house (N-N Compound)
- } *yē biobe*
there is
- ‘There is a woman/Umsin/a bird blind.’

All quantifiers (that is all numerals and *homòn* ‘many’) and all adjectival modifiers can constitute noun phrases on their own. In that case the noun head slot is empty.

- (8) Adjectives
- | | |
|------------------------|--------------------------|
| <i>namâ=e</i> | ‘a/the white (one)’ |
| <i>sūm=e</i> | ‘a/the big (one)’ |
| <i>sin=e</i> | ‘a/the old (one)’ |
| <i>mak=e</i> | ‘an-/the other (one)’ |
| <i>mak=i ... mak=i</i> | ‘the ones... the others’ |
| <i>awém=o</i> | ‘a/the tabooed (one)’ |
- (9) Quantifiers
- | | |
|-------------------|----------------------------|
| <i>elekiêm=e</i> | ‘the one (M)’ |
| <i>olokiêm=o</i> | ‘the one (F)’ |
| <i>asú=ei</i> | ‘the two (of them (AN))’ |
| <i>asú=o</i> | ‘the two (of them (INAN))’ |
| <i>asumâtna=i</i> | ‘the three (of them (AN))’ |
| <i>homòn=i</i> | ‘many’ |

Locative adverbials likewise can be used as noun phrases. A determiner is obligatory in this case:

- (10) Locative adverbials
- | | |
|------------------|---|
| <i>temdaak=e</i> | ‘the (one) underneath’ |
| <i>tibut=e</i> | ‘the (one) on top’ |
| <i>ēbla=i</i> | ‘the (ones) on this side, close to speaker’ |

Verbal nouns can appear in the head slot of a noun phrase. Verbal nouns are quite rare in discourse and occur in subject and object position. Verbal nouns freely occur with or without the article =*o*:

- (11) *kēb* *on-nam-in* *méb*
 2SG.M.POSS go.PFV-PFV-VN close

tI-Ø-o=be
 come.PFV-REAL-N2.SBJ=DECL
 ‘Your going (away) has come close.’ [Observed; said to me a few days before my departure from Mianmin]
- (12) *nē* *buk=o* *ki-m-in=o=mo*
 1SG book=N2 read-IPFV-VN=N2=NEG

tekein *ke-b-i=ba=be*
 knowledge do-IPFV-1SG.SBJ=NEG=DECL
 ‘I don’t know how to read’ (lit. ‘I don’t know the reading of books’)

6.2.3. Emphatic pronouns as noun phrase determiners

Apart from the pronominal clitic article, the function of the determiner can be served by an emphatic pronoun (see section 3.7.4), which is used adnominally. The following examples illustrate the use of emphatic pronouns in noun phrases which consist solely of an adjective (13) or a numeral (14):

- (13) *gwáab* *ē-ta* *deb-ēt-n-i=ta*
 small SG.M-EMPH 3SG.M_CL.O-take-SS.SEQ-1SG.SBJ=MED
 ‘the little (one of the children) I took with me [Crows]’
- (14) *elekiēm* *ē-ta*
 one.M SG.M-EMPH
 ‘the one (alone)’

The next examples illustrate the use of emphatic pronouns in simple noun phrases with a single noun and more complex noun phrases, i.e. noun phrases with a head noun and at least one modifier. On modified noun phrases, see section 6.4.

- (15) *aab* *ē-ta*
 brother SG.M-EMPH
 ‘the brother’
- (16) *skilón* *moton* *ē-ta*
 foot true SG.N1-EMPH

ob-bià *daak* *te* *blelá'*
 3SG.RESID.O-throw down come.PFV fall
 'the foot proper detached and came falling down' [Crows]

In natural Mian discourse, all adnominally used pronouns can optionally form one phonological unit with the preceding word. Thus, we find *aab ēta* 'the brother (EMPH)' pronounced [a^sp^h]_ω [ē.t^ha]_ω and *aab=ēta* [a^s.βē.t^ha]_ω also with the meaning 'the brother (EMPH)'. This behaviour is different from that of articles which (almost) always cliticize. Suprasegmentally, however, adnominally used emphatic pronouns and articles are very similar. If one of the former cliticizes to the noun, its high tone can disappear. Thus, we not only find *aab=ēta* [a^s.βē.t^ha] but also *aab=eta* [a^s.βε.t^ha] with no difference in meaning. This alternation is exactly parallel to the free variation between *naka=ē* [na.k^ha.ē] with a high-toned article and *naka=e* [na.k^ha.ε], where the article is unspecified for tone, both with the meaning 'a/the man'.

6.3. Modified noun phrases

Mian has two main classes of nominal modifiers: (a) adjectives, whose function is to specify colour, size/dimension, and quality, and (b) quantifiers, which comprise numerals and *homòn* 'many' and whose function is quantification. Mian has prenominal and head-internal relative clauses. While the former precede the noun, the latter are clauses marked as noun phrases with an article or an adnominally used pronoun. Relative clauses will be described in detail in section 13.3 under embedding.

6.3.1. Adjectival modifiers

All adjectives except *sin* 'old' and *memâ* 'new', which tend to (but do not have to) occur prenominally, go in the postnominal adjective slot. While postnominal modifiers are not typically associated with head-final languages, their presence is not unusual in such languages either (Dryer 1992).

Postnominal adjectives occur in the following preferred order:

- 1) Colour, e.g. *milil* 'black', *mokim* 'blue', *ngáamein* 'yellow'
- 2) Size/dimension, e.g. *sūm* 'big', *gwáab* 'small', *teke* 'long', *mebwéing* 'short'
- 3) Others, e.g. *ayam* 'good', *misiam* 'bad', *beit* 'weak', *sbál* 'strong', *afet* 'different'
- 4) *mak* 'certain, (an)other'

Deviation from this positional preference is possible, but uncommon. *Mak* ‘(an)other’ can only occur after all other modifiers. Adjectival modifiers are quite rare in natural Mian discourse and restricted to two per noun phrase in the spontaneous corpus. Speakers do allow three adjectival modifiers (not counting *mak* ‘certain, (an)other’) but consider this odd and influenced by Tok Pisin. Consider the following examples:

- (17) *tíl=e* *milil=e*
 dog=SG.M black=SG.M
 ‘a/the black dog’
- (18) *tíl=e* *milil=e* *sūm=e*
 dog=SG.M black=SG.M big=SG.M
 ‘a/the big, black dog’
- (19) [?]*tíl=e* *milil=e* *sūm=e* *sbál=e*
 dog=SG.M black=SG.M big=SG.M strong=SG.M
 ‘a/the strong, big, black dog’

In all of the examples (17) to (19) above the article is distributed throughout the noun phrase, i.e. referentiality, number and gender are marked per article =*e* on the head noun and on each adjectival modifier. It is more common in natural discourse to mark number and gender only once for the whole noun phrase, namely on the rightmost modifier, for example:

- (20) *tíl* *milil* *sūm=e*
 dog black big=SG.M
 ‘a/the big, black dog’

Adjectival modifiers are normally juxtaposed but can be coordinated overtly by means of the coordinator *eka* ‘and’:

- (21) *sob=e* *sūm* *eka* *tekebmín* *ēle*
 soap=SG.N1 big and long DEM.PROX.SG.N1
 ‘this big and long (bar of) soap’

The adjectives *sin* ‘old’ and *memâ* ‘new’ show a clear tendency to occur immediately before the head noun without an article:

- (22) *sin* *am=o*
 old house=N2
 ‘an/the old house’

The same construction is also possible with an article on the adjective: *sino amo*. Moreover, I observed that *sin* ‘old’ and *memâ* ‘new’ also occur in the post-nominal adjective slot, thus *am(o) sino* is acceptable. Smith and Weston (1974b: 52-53) point out that *sin* and *memâ* obligatorily occur before the head noun. It seems that some 30 years on speakers are in the process of regularizing the syntax of these two adjectives.

6.3.2. *mak* ‘certain, (an)other’

The adjective *mak* ‘certain, (an)other’ always follows all other adjectival modifiers:

- (23) *tîl=e* *mîlîl=e* *sûm=e* *mak=e*
 dog=SG.M black=SG.M big=SG.M another=SG.M
 ‘another big, black dog’

At first sight, *mak* ‘(an)other’ seems to be in complementary distribution with other quantifiers, at least semantically. A noun phrase with *mak* ‘certain, (an)other’ cannot be followed by an item from the quantifier class. However, *mak* behaves more like an adjective insofar as it appears with a determiner in referential contexts if it is the rightmost element in a noun phrase, whereas quantifiers in rightmost position most often do not have an article even in referential contexts.

6.3.3. *Prenominal modifiers*

There are two prenominal modifiers which appear directly in front of a noun. These are *omômom* ‘all kinds of’ and *inamîn* ‘such’. Nouns modified in such a way cannot be possessed. An example is given below:

- (24) *omômom* *wan=i* *baa-Ø-ib=a*
 all_kinds_of bird=PL.AN say.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘All kinds of birds talked and then someone else ...’ [Crows]
- (25) *yole* *inamîn* *stoli=o* *wente-biaana-b-uo=be*
 well such story=N2 hear-AUX.PST.HAB-IPFV-1PL.SBJ=DECL
 ‘Well, such a story we used to hear.’ [Flood]

6.3.4. Reduplicated adjectives

Very few adjectival modifiers can be used in reduplicated form to emphasize plurality or variety. In my corpus reduplication is confined to *sūm* in the sense of ‘great’ not dimensional ‘bigness’ in (26) and *afet* ‘different’ in (27):

(26) *naka sūm-sūm=i*
 man great-REDUP=PL.AN
 ‘(many) great men, leaders’

(27) *wéng=o fet-afet=o*
 language=N2 different-REDUP=N2
 ‘many different languages’

The reason why I see adjectival reduplication as highlighting plurality or variety and not as indicating intensification or augmentation is that it only occurs in the plural. If its function was to effect intensification, one would expect reduplicated adjectives to occur in singular noun phrases as well.

6.3.5. Quantifiers

The class of quantifiers comprises numerals and the quantifying expressions *homòn* ‘many’, *alukùm* ‘all, every, each’, and *alik* ‘all, every, each’. Numerals usually appear without an article. In Mian, pronouns from the ‘alone’-series *elekiêm* (also *eleyêm*) ‘he/it alone’ and *olokiêm* (also *oloyêm*) ‘she/it alone’ double as the numeral ‘one’:

(28) *naka=e elekiêm*
 man=SG.M one.M
 ‘one man’ OR ‘the man alone’

(29) *unáng=o olokiêm*
 woman=SG.F one.F
 ‘one woman’ OR ‘the woman alone’

The only two basic numerals Mian has are *asú* ‘two’ and *asumâtna* ‘three’. The former has a variant *asusûna*, which looks like a partial reduplication of the simple numeral *asú* ‘two’. Nonetheless, *asusûna* means ‘two’, not ‘four’:

- (30) *unáng=i* *asú(=ei)/asusûna(=i)*
 woman=PL.AN two(=PL.AN)
 ‘two women’

Numerals larger than three are phrasal and involve stringing together instances of *asú=ke* ‘two=and’ (i.e. the numeral *asú* ‘two’ and the function verb stem *ke* ‘do’ serving as a coordinator in phrasal numerals) as many times as needed to count to any even number and rounding this off by *make* ‘(one) other’ for odd numbers. Phrasal numerals occur with the verbal element *na* ‘do’, if they carry an article:

- (31) *unáng=i* *asú=ke* *asú=ke*
 woman=PL.AN two=do two=do
 ‘four women’ (lit. ‘two and two women’)
- (32) *memé* *asú=ke* *asú=ke* *make* *na=i*
 children two=do two=do other do=PL.AN
 ‘five children’ (lit. ‘two and two children and another’)

Numerals always occur after adjectival modifiers:

- (33) *memé* *gwáab=i* *asumâtna*
 children little=PL.AN three
 ‘three little children’

Instead of a numeral denoting an exact figure, the quantifier slot in the noun phrase can be filled by *homòn* ‘many’:

- (34) *tíl=i* *milil=i* *sūm=i* *homòn=i*
 dog=PL.AN black=PL.AN big=PL.AN many=PL.AN
 ‘many big black dogs’

The quantifier *alukûm* ‘all, every, each’ usually follows the whole noun phrase but can also precede it. The quantifier *alik* ‘all, every, each’ is only attested following the noun phrase. The exact semantic difference between the two is unclear.

Neither *alukûm* nor *alik* can take an article or any other determiner:

- (35) *Mianam=o* *naka=i* *alukûm/alik* *am-sa=be*
 PN=N2 man=PL.AN all/all house-with=DECL
 ‘The men of Mianmin all have a house.’

Alukûm and *alik* can be employed to express that some event affected an inanimate object in its entirety:

- (36) *afonón* *ō=sa* *alukûm*
 shin_bone PL.N1=too all

kib-a-Ø-o=be
 ash-VBLZ-REAL-3N1.PL.SBJ=DECL
 ‘The shinbones too became all ashes.’ (lit. ‘all “ashified” ’) [Crows]

The quantifier *alukûm* can precede the whole noun phrase:

- (37) *alukûm* *asyam=o* *klaan-Ø-o=be*
 all fruit=PL.N1 rot.PFV-REAL-3PL.N1.SBJ=DECL
 ‘All fruits have rotted.’

6.3.6. The intensifiers *dót* ‘very’, *wekîb* ‘very’, and *klâ* ‘really’

The intensifiers *dót* ‘very’, *wekîb* ‘very’, and *klâ* ‘really’ can be used to modify attributive adjectives or the quantifier *homòn* ‘many’. Intensifiers always precede the adjective or the quantifier:

- (38) *til* *milil* *dót* *sūm=e*
 dog black very big=SG.M
 ‘a very big, black dog’
- (39) *til* *klâ* *milil* *sūm=e*
 dog really black big=SG.M
 ‘a big, really black dog’
- (40) *dót* *homòn=o=be*
 very many=PRD=DECL
 ‘(There are) Very many.’

Only one modifier can be intensified per noun phrase, that is if there are two modifiers, either of them but not both may be modified by an intensifier. It is however possible to have two intensifiers in front of a modifier:

- (41) *kofi* *dót* *klâ* *kok=e*
 coffee(TP) very really sour=SG.N1
 ‘some really very sour coffee’

6.3.7. Demonstratives in the noun phrase

Demonstratives go in the determiner slot at the right edge of the noun phrase. This is illustrated for a simple demonstrative in (42) and (43), and for an emphatic demonstrative in (44):

- (42) *naka asumâtna ēli*
 man three DEM.PROX.PL.AN
 ‘these three men’

- (43) *sob=e sūm eka tekebmin ēle*
 soap=SG.N1 big and long DEM.PROX.SG.N1
 ‘this big and long (bar of) soap’

- (44) *Soka wanggeli asú=ke asú=ke make na*
 PN women.of two=and two=and other do

ēli-ta
 DEM.PL.AN-EMPH
 ‘these five women of Sokamin’

The distal demonstrative series formally distinguishes between an adnominal and a pronominal series. The former always involves the clitic element *obba*, which is followed by the distal demonstrative.

- (45) *ninin=obba yō*
 name(N2)=ADNOM DEM.DIST.N2

o-biaan-ib=a
 say.IPFV-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘while they were saying that name, they...’ [Sofelok, 2]

- (46) *nakamîn=obba yēi*
 brother=ADNOM DEM.DIST.PL.AN
 ‘those brothers over there’

On the use of the adnominal distal series of demonstratives in head-internal relative clauses, see 13.3.5.

6.3.8. Relative clauses

All Mian relative clauses are finite and can be either prenominal or head-internal. Both types of relative clause will be described in detail in section 13.3 under embedding.

Prenominal relative clauses precede their head noun. They do not receive any marking indicating subordination. An example of a prenominal relative clause is given in (47):

- (47) *balubib=yē* *mâa'-bl-Ø-ib*
 airstrip=at stand_up.PFV-AUX.IPFV-IPFV-2/3PL.AN.SBJ
- naka=i*
 man=PL.AN
 'the men who are standing at the airstrip.'

Head-internal relative clauses are obligatorily marked with a proper subset of determiners, all of which are also used to mark non-relativized noun phrases. They function as noun phrases occupying the argument position which the head noun has in the main clause, for example the object in (48):

- (48) *naka=i* *balubib* *yē*
 man=PL.AN airstrip at
- mâa'-bl-Ø-ib=i*
 stand_up.PFV-AUX.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN
- ya-temê'-b-i=be*
 PL.AN.O-see.IPFV-IPFV-1SG.SBJ=DECL
 'I am looking at the men who are standing at the airstrip.'

In head-internal relative clauses, the head noun can be omitted. The restrictions concerning omission of the head noun are examined in more detail in section 13.3.3. An example is:

- (49) *balubib* *yē* *mâa'-bl-Ø-ib=i*
 airstrip at stand_up.PFV-AUX.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN
 'the (ones) who are standing at the airstrip'

In each of the examples above, the subject is relativized. Objects, possessors and – at least in prenominal relative clauses – locatives can also be relativized.

Constituent order in relative clauses is no different from the order in independent clauses, with one noteworthy exception where the internal head of a relative clause shows some mobility unattested in simple declarative sentences (see 13.3.7). Verbs in relative clauses show all inflectional possibilities of a (sentence-final) verb in an independent sentence in terms of tense, aspect, mood, and argument marking. For example, they can be inflected for irrealis or deontic mood, which medial verbs cannot.

Head-internal relative clauses are much more frequent than pronominal ones in natural discourse. Nearly all examples of pronominal relative clauses are elicited. However, in most cases the pronominal variant of a head-internal relative clause was offered immediately by the speaker without any further question as to whether a pronominal relative construction was also possible.

6.4. Attributive possession

As we are dealing with noun phrase structure here, this section is confined to attributive possession. For a description of predicative possession, see section 9.11.3.

Mian has one construction for encoding attributive possession in which the possessor precedes the possessed. This is the typical order for verb-final languages (Dryer 2007: 62). The possessor slot can be filled either by a possessive pronoun or by a full noun phrase.

In the most common and least complex case the possessor slot is filled by a possessive pronoun. The forms are set out in the tables 6.2 and 6.3. The free pronoun forms have been included to illustrate the obvious formal relations between the two pronoun series. Distinct forms for the possessive and the free pronoun series are given in boldface. Grey areas indicate the neutralization of a gender contrast.

Table 6.2. Possessive pronouns (and free pronouns) for animates

Person	Number	Gender	Poss. pronoun	Gloss	Free pronouns	Gloss
1			<i>nē</i>	'my'	<i>nē</i>	'I'
2	Singular	Masc.	<i>kēb</i>	'your (M)'	<i>kōbo</i>	'you (M)'
		Fem.	<i>ōb</i>	'your (F)'	<i>ōbo</i>	'you (F)'
3		Masc.	<i>ē</i>	'his'	<i>ē</i>	'he'
		Fem.	<i>ō</i>	'her'	<i>ō</i>	'she'
1 EXCL	Plural		<i>nī</i>	'our (EXCL)'	<i>nī</i>	'we (EXCL)'
1 INCL			<i>nīb</i>	'our (INCL)'	<i>nībo</i>	'we (INCL)'
2			<i>īb</i>	'your (PL)'	<i>ībo</i>	'you (PL)'
3			<i>ī</i>	'their'	<i>ī</i>	'they'

Table 6.3. Possessive pronouns (and free pronouns) for inanimates

Person	Number	Gender	Possessive pronouns	Gloss	Free pronouns	Gloss
3	Singular	Neuter 1	<i>ē</i>	‘its’	<i>ē</i>	‘it’
	Plural		<i>ō</i>	‘their’	<i>ō</i>	‘they’
		Neuter 2	<i>ō</i>	‘its, their’	<i>ō</i>	‘it, they’

The following examples in (50) illustrate the use of possessive pronouns. The possessive relation is shown by distinct forms of the possessive pronouns, which are the boldface forms in table 6.2 above. For all others, possession is indicated by order only. The possessive relation is not marked on the possessed.

- (50) a. *kēb genin* ‘your (M) sickness’
 b. *ōb imak* ‘your (F) husband’
 c. *nē wengsâng* ‘my story’
 d. *ī āi* ‘their dad’

Instead of a possessive pronoun, the possessor slot can also accommodate a full noun phrase. The following examples illustrate possessors expressed by a noun plus article (51), a noun plus a demonstrative (52), and a proper name plus article (53).

- (51) *fút=e* *gíng=e*
 tobacco=SG.N1 midrib=SG.N1

tob-tlâa'-n-ang-gena-b-i=be

3SG.LONG.O-remove.PFV-AUX.PFV-IMMACT.SG.SBJ-say.IPFV-IPFV-1SG.SBJ=DECL

‘I am about to remove the midrib of the tobacco (leaf).’ [Rolling smokes]

- (52) *fút* *ēle* *ninín=o* *Sofelok=o=bo* *ge*
 tobacco DEM.PROX.SG.N1 name=N2 PN=PRD=QUOT say.PFV

o-ha-b-io=be

call.IPFV-3SG.N1.R-IPFV-2/3PL.AN.SBJ=DECL

‘they call the name of this tobacco Sofelok’ [Sofelok, 2]

- (53) *Sobining=e* *éit=e* *tekebmîn* *kesoa*
 PN=SG.M penis=SG.N1 long because
 ‘because Sobining’s penis was long, ...’ [Sobining]

Possession can be nested recursively. In such sequences, each noun phrase referent is possessed by the referent of the preceding noun phrase:

- (54) *nái=e ken=e milím=e*
 vagina=SG.N1 edge=SG.N1 half=SG.N1
 ‘half of the edge of the vagina’ [Fitibkanib and Dimosson]

Typically, there is no overt marker indicating a possessive relation. Rather, possessor and possessed are simply juxtaposed:

- (55) *éil=e gabáam=e*
 pig=SG.M head=SG.N1
 ‘a/the pig’s head’

There is a clear syntactic structure in Mian attributive possessives. Changing the order of possessor and possessed might at best considerably alter the meaning but will in most cases lead to non-sensical utterances.

An alternative, though much less common construction involves the use of an overt possessive pronoun between the possessor and the possessed, as in the following example:

- (56) *éil=e ē gabáam=e*
 pig=SG.M 3SG.M head=SG.N1
 ‘a/the pig’s head’ (lit. ‘a/the pig, its head’)

This construction is rare and it is my impression that it is predominantly found where the possessor is a proper name, as in (57). Note, however, that this could also be rendered as *Selimine kukub ōle* with the same meaning:

- (57) *Selimin=e ē kukub ō=le*
 PN=SG.M 3SG.M habit N2=TOP
 ‘as for Selimin’s habit’ (lit. ‘as for Selimin his habit’) [Selimin]

If the possessor is a coordinate noun phrase, the possessive construction with an overt possessive pronoun referring to the whole set of possessors is obligatory. This is illustrated for two different types of coordination, namely (a) coordination with the clitic =*sa* ‘too’ in (58) and (b) simple juxtaposition in (59).

- (58) *Fieia ē=sa Hentaboseb ē=sa*
 PN SG.M=too PN SG.M=too

\bar{i} *wengsâng=o*
 3PL.AN.POSS story=N2
 ‘the story of both Fieia and Hentaboseb’ (lit. ‘both Fieia and
 Hentaboseb their story’) [Fieia and Hentaboseb]

- (59) *Fitibkanib=o Dimoson* \bar{i} *wengsâng=o*
 PN=SG.F PN 3PL.AN.POSS story=N2
 ‘the story of Fitibkanib and Dimosson’ (lit. ‘Fitibkanib, Dimosson
 their story’) [Fitibkanib and Dimosson]

Two issues remain to be addressed in connection with possessive constructions in Mian. The first problem is how far possessive constructions can be straightforwardly distinguished from compounding. The second issue has to do with constituent order in the noun phrase, especially with the evidence for assuming both a possessor slot and a prenominal adjective slot.

In some cases the distinction between a possessive construction and a compound is fuzzy. Consider the example *al atosîn* [bowels bit(s)]. Would this be better glossed as ‘bit(s) of bowels’ or as ‘bowel bit(s)’? While both analyses seem possible, it is noticeable that in *al atosîn* the first noun appears without an article or any other adnominal pronoun, which make the whole construction look like two compounded stems. Hence, I opt for the compound analysis here. If the first element in a complex noun phrase appears without an article (and without any other pronominal element), the construction is a compound (i.e. *al atosîn* ‘bowel bit(s)'). If the first noun is followed by an article, the construction is possessive (i.e. *al=o atosîn* ‘bit of bowels’). See Healey (1965a: 10-11) for a description of a similar problem in Telefol. Tonal evidence supports this analysis. Compounds constitute a single tonal domain. The tone on the compound is a composite melody consisting of a sequence of the respective stem melodies and is assigned to the compound as a whole. In a possessive construction, possessor and possessed constitute two distinct tonal domains.

As far as the ordering of possessor and possessed is concerned, there is syntactic evidence that the position of the possessor must be to the left of the possessed noun with all its adjectival modifiers, rather than just to the left of the noun. Although the standard word order in modified noun phrases is noun head followed by one or more postnominal modifiers, the adjectival modifiers *sin* ‘old’ and *memâ* ‘new’, tend to occur before the head noun:

- (60) *nē* *sin fanin=e*
 1SG.POSS old grandfather=SG.M

gen-b-e=be
 be_sick.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘My old grandfather is sick.’

In example (60), *sin* ‘old’ can only be interpreted as a modifier. Hence, to say that the possessor slot immediately precedes the noun would be inaccurate. Rather, the possessor slot immediately precedes the noun with all its modifiers.

6.5. Taxonomic terms

Nouns referring to taxa, such as *wan* ‘bird/bat’, *aning* ‘fish’ or *til* ‘dog’ can be used as taxonomic or generic terms whose function is to classify mainly floral and faunal species but also a few items of material culture. The generic term acts as a noun classifier (see e.g. Aikhenvald 2000, Senft 2000), for example:

(61) *wan* *tolim*
 bird/bat eagle
 ‘New Guinea eagle’ (sc. *Harpyopsis novaeguineae*)

A sentence example is given in (62):

(62) *wan* *tolim=e* *te-n-e=a*
 bird/bat eagle=SG.M come.PFV-SEQ-3SG.M.SBJ=MED

bu-˘b'-a
 grab-give.PFV-3SG.M.R

ob-tlâa'-˘b'-a-Ø-ek=o!
 3SG.RESID.O-remove.PFV-give.PFV-3SG.M.R-REAL-
 3SG.M.SBJ.HORT=HORT
 ‘ “The eagle must come and grab (it) for him and remove it for him!” ’ [Crows]

Chappell and McGregor (1989) call this construction type *classification*. It is common in Papuan and also Australian languages, e.g. Amele (Roberts 1987: 180) and Kayardild (Evans 1995). On this construction type, see also Dixon (1986), Sands (1995), and Wilkins (2000).

In such a classification construction a dependent non-referential generic term is juxtaposed with a referential head noun, where “the dependent nominal indicates the type of entity that is being referred to by the head noun”

(Chappell and McGregor (1989: 28)). No material can intervene between the two nominal elements. Also note that in Mian the generic term has to occur in the bare form, i.e. without an article or other determiner, precisely because it is non-referential.

Further examples are:

(63)	<i>tin</i>	<i>ibâl</i>	‘paper wasp’
	bee/wasp	paper wasp	
	<i>as</i>	<i>boliam</i>	‘Tulip tree’ (sc. <i>Gnetum Gnemon</i>)
	tree	tulip	
	<i>tā</i>	<i>báangkli</i>	‘type of traditional stone adze’
	blade	stone_adze	

The generic term is not obligatory and in fact is often left out in natural discourse so that one frequently finds *tolim=e* ‘an/the eagle’, *boliam=e* ‘a/the Tulip tree’, or *báangkli=e* ‘a/the stone adze’. The taxonomic term is only obligatory in a very few cases, e.g. *máab sei* ‘large tortoise’ and *máab tóm* ‘small tortoise’.

The following nouns are used as generic terms. All of them are nouns which can be used as referential expressions as well.

Animals

<i>wan</i>	All flying animals. The taxonomic distinction in Mian is not whether an animal is a bird but whether it has wings and is capable of flight. Thus, all bats and flying foxes are <i>wan</i> , whereas the cassowary, a large flightless bird, is not. Note also that some Papuan languages allow the metaphorical extension of the bird taxon to planes (e.g. Amele <i>man wag</i> [bird canoe] ‘plane’ (Roberts 1987: 180)). Mian uses the loan <i>balu</i> ‘plane’ (from Tok Pisin <i>balus</i> ‘pigeon, plane’).
<i>no</i>	All marsupials and rodents (e.g. wallabies, rats) and one monotreme, the long-beaked echidna (<i>no yakéil</i>).
<i>tíl</i>	Basically meaning ‘dog’, but used as a generic term for some non-native animals. The referential nouns found with <i>tíl</i> are Tok Pisin loans, e.g. <i>tíl busi</i> ‘cat’, <i>tíl gout</i> ‘goat’, and <i>tíl hos</i> ‘horse’. This taxon is used for small or svelte non-native animals.

<i>éil</i>	Basically meaning ‘pig’, but used as a generic term for some non-native animals. The referential nouns which go with <i>éil</i> are Tok Pisin loans, e.g. <i>éil bulmakau</i> ‘cow’, and <i>éil sibsib</i> ‘sheep’. This taxon is used for stocky non-native animals.
<i>tím</i>	Lizards, geckos, snakes, and crocodiles.
<i>máab</i>	All amphibians and tortoises.
<i>tin</i>	Bees and wasps.
<i>máam</i>	Mosquitoes and flies.
<i>kweng</i>	Grasshoppers.
<i>hok</i>	Scorpions, crabs.
<i>gwán</i>	Spiders.
<i>aning</i>	Fish.

Plant life

<i>as</i>	Trees and palms.
<i>éim</i>	Pandanus.
<i>som</i>	Bananas.
<i>imen</i>	Taro.
<i>wán</i>	Sweet potatoes.
<i>tek</i>	Vines.

Implements

<i>tā</i>	Traditional adze-type cutting instruments (incompatible with <i>káawa</i> ‘(modern) steel axe’).
<i>mén</i>	String bags.

In the rest of this section on generic terms I discuss a few peculiarities of the classificatory construction.

First, generic term and referential noun obligatorily or preferably occur in reverse order in a few cases:

- (64) *taan wan* ‘Metallic starling’ (sc. *Alponis metallica*)
takumein hok ‘scorpion species’

In order to refer to a metallic starling, one says *taan wan*. To just say **taan* is out of the question. The generic term cannot be left out, which suggests that examples like *taan wan* form a very close compound-like structure.

- (69) *dab=i* *yē*
 same_sex_siblings(dyad)=PL.AN there

temdei-˘b'-o-Ø-eib-bu=a
 leave.PFV-give.PFV-N2.R-REAL-2/3PL.AN.SBJ-GPST=MED
 ‘after the brothers had left it (as it was), one of them...’ [Danenok]

Most frequently, dyads occur with a plural possessive pronoun which refers to the whole set of individuals described by the dyad. The possessive pronoun has appositive meaning:

- (70) *īb* *mikim*
 2PL.POSS opposite_sex_siblings(dyad)
 ‘you, brother and sister’

The reason why I analyse the dyad as the noun phrase head with a possessive pronoun in the possessor slot and not as a noun phrase apposed to a free pronoun (an analysis suggested by the English translation I have chosen for example (70) is because the pronoun forms are clearly from the possessive pronoun series:

- (71) **ībo* *mikim*

In (71) the free personal pronoun cannot be used, cf. also *nīb mikim* ‘we (INCL), brother and sister’ and unacceptable **nībo mikim*. I assume that the possessive analysis is extended to the cases where the possessive pronoun is homophonous with the free pronoun:

- (72) *ī* *mikim*
 3PL.AN.POSS opposite_sex_siblings(dyad)
 ‘they, brother and sister’ [MPI Reciprocals clip 1]

Dyads can be preceded by a proper name or kin noun, which is in an appositional relation with the dyad, forming an inclusory construction. Reference is to the dyad of individuals, only one of which is explicitly named. Examples are given below:

- (73) *Danenok* *dab-wal*
 PN same_sex_siblings(dyad)-PL
 ‘Danenok and his brother’ [Danenok]

(74) *alél hat-wal*
 wife mother_and_child(dyad)-PL
 ‘the wife and the children’ [Crows]

(75) *Oblib=e dum-wal*
 PN=SG.M father_child(dyad)-PL
 ‘Oblib and his children’

The possessive pronoun is also possible in the appositive inclusory construction, as in (76):

(76) *Milsen=e nī dab=o*
 PN=SG.M 1PL.EXCL.POSS same_sex_siblings(dyad)=COLL

wéng=o o-b-uo=be
 language=N2 say.IPFV-IPFV-1PL.SBJ=DECL
 ‘Milsen and I, we brothers, are talking’

6.7. Noun phrase coordination

Mian has four strategies for the coordination of noun phrases:

- juxtaposition
- coordination with *=sa* ‘too’
- coordination by *=a* ‘and’
- coordination by *eka* ‘and’

All of these strategies are available for animate and inanimate nouns alike. Coordination by juxtaposition shows a maximum of two coordinated noun phrases in the corpus whereas there is no upper limit of coordinated noun phrase for the other two strategies.

The simplest strategy of noun phrase coordination is juxtaposition. Coordination by juxtaposition is mainly used if the referents of the coordinate noun phrases are relatively low in individuation. Examples (77) and (78) illustrate this for animates and inanimates, respectively:

(77) *naka homòn unáng homòn=i*
 man many woman many=AN.PL
 ‘many men and many women’ [Sofelok, 2]

- (78) *dāb=o ket=o*
 seed=N1.PL blossom=N1.PL
 ‘seeds and blossoms’ [Sofelok, 1]

Coordination by juxtaposition is not available with noun phrases referring to individuals or singular entities in subject or object position. However, juxtaposition of proper names occurs in the possessor position:

- (79) *Fitibkanib=o Dimoson ī wengsāng=o*
 PN=SG.F PN 3PL.AN.POSS story=N2
 ‘the story of Fitibkanib and Dimosson’ [Fitibkanib and Dimosson]

Givón (1990: 497) notes that noun phrases which are conjoined by simple juxtaposition often yield unified group lexical items. Wälchli (2005) calls compounds whose component parts refer to stereotypically conjoined entities additive co-compounds. Mian has a few such lexical items, e.g. *alél-melel* (lit. wife-offspring) ‘(core) family’ and *awók-aalok* ‘adults, parents’, consisting of *awók* ‘mother’ and a cranberry morph *-aalok* without any synchronically establishable meaning. Although these were probably formed by juxtaposition and at least partially have become semantically opaque, noun phrase juxtaposition synchronically is a syntactic device forming coordinate noun phrases without any tendency for lexicalization.

The second coordination strategy involves the clitic noun phrase modifier *=sa* ‘too’, which attaches to each coordinate noun phrase. Coordinate noun phrases can refer to individuals (80) or to groups (81). The coordinated noun phrases are bracketed:

- (80) [*Kasening ē]=sa [Albet ē]=sa yē*
 PN 3SG.M=too PN 3SG.M=too there

tl-Ø-io=be
 come.PFV-REAL-2/3PL.AN.SBJ=DECL
 ‘Kasening and Albert have come.’

- (81) [*unāng=i]=sna [memé gwáab=i]=sna*
 woman=PL.AN=too children(PL) small=PL.AN=too

[*sūm=i]=sa [awokāalok ī]=sa*
 big=PL.AN=too adults PL.AN=too
 ‘the women and the small children and the big (children) and the adults’ [Building a Spirit House]

The third coordination strategy uses the clitic =*a* ‘and’ (presumably a shortened form of *eka* ‘and’), which cliticizes to each noun phrase in the coordinate structure, as in (82) and (83) or just appears once on the rightmost member of the coordination, as in (84). Note that the order of the article and the coordinator on the last coordinated member is reversed. Reversal does not take place if the last noun in the coordination ends in /a/, as in (83):

- (82) *naka=ya unáng=a=i*
 man=and woman=and=PL.AN
 ‘(the) men and women’ [Dimosson]
- (83) *tēn=a unáng=a naka=i=a*
 child=and woman=and man=PL.AN=and
 ‘children, women, and men’ [Leaf oven]
- (84) *nakamín-wal=i imak-wal=a=i*
 brother-PL=PL.AN husband-PL=and=PL.AN
 ‘brothers and husbands’ [Mianmin and Telefomin]

An example of an inanimate noun phrase coordinated with =*a* ‘and’ is provided in (85):

- (85) *īn=a kakab=a bobol=a=o*
 liver=and lungs=and heart=and=PL.N1
 ‘liver, lungs, and heart’ [Crows]

Instead of =*a* ‘and’ one also finds *eka* ‘and’ in noun phrase coordination. The coordinated noun phrases appear in square brackets:

- (86) [*Memin āi=e*] *eka* [*Daning āi=e*] *eka*
 PN father=SG.M and PN father=SG.M and
 ‘Memin’s father and Daning’s father’ (from Smith and Weston
 1974b: 99)
- (87) [*ē-maye*] *eka* [*Bokolfet=e ē*] *ning*
 3SG.M-REFL and PN=SG.M SG.M younger_brother

ē]=sak
 SG.M=too
 ‘he himself and Bokolfet’s younger brother too’ [Mianmin and
 Telefomin]

The conjunction *eka* ‘and’ is also used for the coordination of adjectival modifiers within a single noun phrase. The first adjective in such a coordination must not have a distributed article, as in example (88):

- (88) *sob=e* *sūm(*=e)* *eka tekebmin* *ēle*
 soap=SG.N1 big(*=SG.N1) and long DEM.PROX.SG.N1
 ‘this big and long (bar of) soap’

6.8. Noun phrase apposition

In my analysis of noun phrase apposition in Mian I follow Rijkhoff (2002), who defines appositional modifiers as “all those elements which semantically speaking serve the same purpose as their non-apposed [...] counterparts, but which from a syntactic point of view are not part of the [...] phrase containing the head noun. An obvious requirement of any apposed modifier phrase is co-reference: it must refer to the same entity as the other member(s) in the appositional construction” (p. 22).

Appositive noun phrases always follow the noun phrase to which they are apposed. Typical examples include apposition of a proper name, as in (89) and (90), specification of a profession (91), and a reflexive pronoun with contrastive function (92). In the following examples, the appositional modifiers are separated by a comma.

- (89) *nē* *imak=e,* *Nialiaaleb=e*
 1SG.POSS husband=SG.M PN=SG.M
 ‘my husband, Nialiaaleb’ [Klebein]
- (90) *bib=o,* *ninin=o* *Skiobib*
 place=N2 name=N2 PN
 ‘a place, Skiobib by (lit. of) name’ [Dimosson]
- (91) *Kasening=e,* *kaunsol=e*
 PN=SG.M councillor=SG.M
 ‘Kasening, the councillor’ [Mianmin and Telefomin]
- (92) *nī,* *nī-maye* *klā-biaan-ob=ta*
 1PL.EXCL 1PL.EXCL-REFL make-AUX.IPFV.SS.SIM-1PL.SBJ=MED
 ‘we, ourselves, are making (these arrows) while we...’ [Arrows]

Noun phrase apposition is commonly used to clearly identify the referent(s) of a pronoun, for example a demonstrative:

- (93) *ēli*, *hek-wal=a*
 DEM.PROX.PL.AN older_brother-PL=and

awél=a=i
 fathers.PL=and=PL.AN
 ‘these (ones), the older brothers and fathers’ [Mianmin and
 Telefomin]

6.9. Noun phrase topicalization

Topic-marking in Mian is done with the topic clitic *=le* which attaches to noun phrases, including free pronouns. I analyse *=le* as a clitic rather than an affix because it not only attaches to pronouns but can mark topical adverbial clauses and medial clauses in clause chains as well. Topical constituents with *=le* are intonationally detached from the following clause.

Topic marking with *=le* is incompatible with emphatic pronouns, which are used for focus (see 6.10), e.g. **ē-ta=le* [3SG.M-EMPH=TOP].

Topic-only question are a type of interrogative in which only a topic is mentioned. The speaker has a particular question in mind, and it must be obvious from the context what the implied question is, such as *I’m going. And you?* (Implied: *Are you going as well?*). Two examples are given below:

- (94) *kōbo=le?*
 2SG.M=TOP
 ‘What about you?’ (Possible implication: ‘What are you doing?’,
 ‘What do you want to eat?’)
- (95) *Mandat ē=le?*
 PN 3SG.M=TOP
 ‘What about Milsen?’ (Possible implication: ‘What’s Milsen doing?’
 ‘Where is Milsen?’)

Topic marking is commonly found in personal introductions (|| marks an intonational break in all examples in this section):

- (96) *nē=le* || *Dabein nē-ta=bo*
 1SG=TOP PN 1SG-EMPH=QUOT
 ‘“As for me, Dabein that’s me.”’ [Dimosson]

Subjects can be topicalized with *=le*, as in the following excerpts from an account of traditional initiation, where the topic is given:

- (97) [...] ‘Adults would line the side of the path. Others (also adults) would lead the boys who are to be initiated, and they (i.e. the boys) walked along the path ...’

ētam *ī=le* ||
 here_sideways PL.AN=TOP

was=o *ol-ò-n-ib=a*
 drums=N1.PL PL.RESID.O-take-SEQ-2/3PL.AN.SBJ=MED
 ‘as for the ones on the side (i.e. the adults), they take drums and ...’
 [Initiation rituals]

This bit of discourse contains two groups of adults, as opposed to the boys, one group lining the path, the other leading the boys. The topic pronoun is here used to establish the first group of adults as the topic of the new clause.

Topics are typically given information but this is not necessarily the case, as in the following example where an object is topicalized which has not been previously mentioned in the discourse:

- (98) *memé* *ī=le* || *Sobining=e*
 children PL.AN=TOP PN=SG.M

dl-êt-n-e=a
 PL.AN.O-take-SS.SEQ-3SG.M.SBJ=MED
 ‘As for the children, Sobining took them and ...’ [Sobining]

Multiple topicalized constituents can often be found as discourse openers (de Vries 2005). In the following example, the first topic *yomin=o=le* is a more general topic of the whole narrative, set up here as a discourse frame by the speaker:

- (99) *yomin=o=le* || *yangpela=i=le* ||
 initiation=N2=TOP young_ones(TP)=PL.AN=TOP

alukûm *dli* *tat-n-ib=a*
 all go downriver-SEQ-2/3PL.AN.SBJ=MED
 ‘As for the initiation, the young ones, they went downriver and then ...’ [Initiation rituals]

6.10. Focused noun phrases

“[F]ocus is the most important or salient piece of information in the utterance, as perceived by the speaker. [...] The focus [...] always presents new information, though new relative to the topic, not necessarily new in the discourse” (Siewierska 2004: 159).

Focus in Mian is marked by using an emphatic pronoun, etc., i.e. a bound pronominal form suffixed with the emphatic pronoun suffix *-ta* (see 3.7.4). Marking of focus is characteristic of Papuan languages in general, contrary to fixed positional encoding in European languages, where focus is associated with clause-final position (Foley 2000: 387-8).

Contrastive focus in Mian is generally expressed by using emphatic pronouns. Two examples are given below:

- (100) *ē* *Asuneb=e=mo* *a-tēm'-Ø-e=ba=be*
 3SG.M PN=SG.M=NEG 3SG.M.O-see-REAL-3SG.M.SBJ=NEG=DECL

ē *Beitab* *ē-ta*
 3SG.M PN 3SG.M-EMPH

a-tēm'-Ø-e=be
 3SG.M.O-see-REAL-3SG.M.SBJ=DECL
 ‘He didn’t seen Asuneng. He saw Beitab.’

- (101) [...] ‘she married him and they stayed there for some time and then...’

imak=e *éil* *asyam=e* *tou-ûb'-e-nam*
 husband=SG.M pig fruit=SG.M sit_down-give.PFV-PL.AN.R-PFV

on-s-e=ta
 go.PFV-DS.SEQ-3SG.M.SBJ=MED

alél *ō-ta* *awók=o*
 wife SG.F-EMPH mother=SG.F

om-êt-n-o=ta
 3SG.F_CL.O-take-SEQ-3SG.F.SBJ=MED
 ‘the husband went to sit down at pig fruits (to ambush pigs), the wife took the mother and ...’ [Afoksitgabáam]

Focus marking with the emphatic pronoun is obligatory in alternative questions (see 10.1.3). When there is a choice between two alternatives, each

expressed by a noun phrase, both are in contrastive focus and emphatic pronouns have to be used, as in the following example:

- (102) *kōbo* *éil* *ē-ta* *bleka* *aning* *ē-ta*
 2SG.M pig SG.M-EMPH or fish SG.M-EMPH

dowôn'-aamab-eb=a?
 eat-IRR.NANPL.SBJ-2SG.SBJ=Q
 'Do you want to eat pork or fish?'

On completive focus in content questions with *wan* 'who', see 10.2.7.

Focus marking is used in comparisons. I recorded example (103) as the Mian translation of the English sentence "Port Moresby is bigger than Vanimo" (|| indicates an intonational break):

- (103) *Mosbi* *ō=le* || *sūm* *eka* *Banimō* *ō-ta*
 PN SG.N2=TOP big and PN SG.N2-EMPH

gwáab=o=be
 small=PRD=DECL
 '(As for) Port Moresby (, it) is big, and Vanimo is small.'

This example consists of a topical noun phrase 'Port Moresby', set off intonationally from the rest of the utterance, and a comment which actually predicates something about this topic. The comparative element is focused with *-ta*, but the statement, which *prima facie* seems to be about Vanimo, is in effect a statement about the topic Port Moresby.

Chapter 7

The postpositional phrase

7.0. Introduction

Postpositional phrases are adverbial adjuncts which fulfil a variety of functions, such as situating an event spatially or temporally, or specifying an instrument involved in an action. Postpositional phrases in Mian are always syntactically optional. They provide additional adverbial information but their omission never renders a clause syntactically incomplete.

Postpositions can be simple or complex. An example of a simple postposition is (1). Simple postpositions typically encliticize if their complement is bare, as in (2):

- (1) *naka* *ī-ta* *baka*
 man PL.AN-EMPH with

hāa'-bi-Ø-ob=a

roam.IPFV-AUX.IPFV-DS.SIM-1PL.SBJ=MED

‘while we were roaming with the men, someone else ...’ [Crows]

- (2) *ayal=baka* *yē* *kubu-bi-Ø-o=a*
 torch=with there cure-AUX.IPFV-DS.SIM-3SG.F.SBJ=MED
 ‘while she was curing (them, i.e. frogs) with a torch there,
 someone else ...’ [Crows]

Complex postpositions either consist of two or three combined postpositions, e.g. *tabáab-tem-daak* [beneath-in(to)-down] ‘down underneath’, as in (3), or they are denominal derivations formed by suffixing *-daa* ‘at’ to a noun (see 3.1.5), as in (4):

- (3) *hās=e* *tabáab-tem-daak*
 hat(TP)=SG.N1 beneath-in(to)-down
 ‘down underneath the hat’

- (4) *as=e* *dáang-daa*
 tree=SG.N1 back-at
 ‘at the back of the tree (i.e. the side hitting the ground first when
 the tree is felled)’

7.1. Simple spatial postpositional phrases with a directional

These consist of one noun phrase without a determiner and one directional postposition. The inventory of directionals comprises:

- (5)
- | | |
|-------------|-------------------------------|
| <i>ut</i> | ‘up(wards)’ |
| <i>daak</i> | ‘down(wards)’ |
| <i>met</i> | ‘up(river)’ |
| <i>tab</i> | ‘down(river)’ |
| <i>tām</i> | ‘sideways, at the same level’ |
| <i>wāt</i> | ‘across’ |

For every postpositional phrase, there is an allative and a locative interpretation:

- (6)
- | | |
|--|--------------------------------------|
| <i>kim=daak</i> | <i>to-fâ-n-e=a</i> |
| ground=down | 3SG.LONG.O-put.PFV-SEQ-3SG.M.SBJ=MED |
| ‘he put it (i.e. a vine) down on(to) the ground, and then ...’ | |
| [Dafinau] | |

- (7)
- | | |
|---|--------------------------------|
| <i>Skiobib=tab</i> | <i>daa-n-e=o=le</i> |
| PN=downriver | abide.PFV-SEQ-3SG.M.SBJ=N2=TOP |
| ‘when he abode downriver at Skiobib’ [Dimosson] | |

- (8)
- | | | |
|---------------|------------------|-------|
| <i>alél=o</i> | <i>kwéil=wāt</i> | [...] |
| wife=SG.F | hand=across | [...] |

wa-fû'-n-e=a
 3SG.F.O-grab.PFV-SEQ-3SG.M.SBJ=MED
 ‘he grabbed (across) his wife’s hand’ [Flood]

There are some structures which show that directionals when used as postpositions do not follow nouns but noun phrases. In (9), the complement is a noun phrase consisting of a possessor and a noun head. In (10), the complement is a nominalisation *unin* ‘activity of ingesting’ with its object *aa* ‘water’:

- (9)
- | | | |
|------------|------------|-------------------------------|
| <i>hen</i> | <i>tab</i> | <i>tem-Ø-e=a</i> |
| seek.IPFV | downriver | look.PFV-DS.SEQ-3SG.M.SBJ=MED |

[*kwin=i* *bibam*]_{NP} *tab=o*
ghost=PL.AN village downriver=N2
‘he was seeking (for his wife), he looked downriver, downriver at the
ghost village’ [Ghost village]

- (10) [*aa* *un-in*] *daak=o*
water eat.IPFV-VN down=N2
- as=e* *sūm=e* *halò-s-e=a*
tree=SG.N1 big=SG.N1 break.PFV-DS.SEQ-3SG.M.SBJ=MED
‘down at the water drinking (place), a large tree broke down and then
they ...’ [Flood]

The noun phrase serving as a complement of a directional never has an article or any other adnominal determiner nor can it be followed by adjectival modifiers:

- (11) **Skiobib=o=tab*
PN=N2=downriver
Intended: ‘downriver at/to Skiobib’

The postpositional phrase can optionally be followed by an article. In this case the postposition does not cliticize. The article can agree in gender and number with the noun in the preceding complement. The following two examples show that the article following the postposition agrees in gender and number with *kakam* ‘buttocks, butt’ (gender: N1) and *tibin* ‘river head’ (gender: N2), respectively:

- (12) *kakam* *tab=e* [...] *ge-n-e=a*
buttocks(N1) down=SG.N1 [...] tie.PFV-SEQ-3SG.M.SBJ=MED
‘he tied (it) down at the buttocks’ [Selimin]
- (13) *ut-n-ib=a* *Sek* *tibin* *ut=o*
up-SS.SEQ-2/3PL.AN.SBJ=MED PN river_head(N2) up=N2
‘they ascended, up to the head of the river Sek’ [Flood]

Gender agreement of the article is mostly disregarded and =*o* is used regardless of the gender of the noun, thus instead of *kakam tab=e* ‘down at the buttocks’ in (12) one also finds *kakam tab=o*. The article =*o* also marks temporal nouns (see 3.1.9) and adverbial clauses (see 13.2) and is a default marker for all adverbial adjuncts.

The phrases *kakam tabe* and *Sek tibin uto* in (12) and (13) might look like noun phrases as far as their internal syntax is concerned because they end in an article. But in simple postpositional phrases with a directional only the article is allowed. Noun phrases allow the full range of adnominally used pronouns (see 6.2.3).

7.2. Simple spatial postpositional phrases with a nominal postposition

These consist of a noun phrase followed by a nominal postposition, which are derived from nouns. Some (but not all) of these are also used as nouns in contemporary Mian. The term nominal postposition is clarified further below.

Nominal postpositions are:

- | | | |
|------|---------------|-------------------------|
| (14) | <i>dim</i> | ‘on, onto’ |
| | <i>tem</i> | ‘in, into’ |
| | <i>tabáab</i> | ‘under, beneath’ |
| | <i>glaglā</i> | ‘between’ |
| | <i>tib</i> | ‘on(to) the surface of’ |

The postpositions *tem* ‘in(to)’ and *dim* ‘on(to)’ are derived from nouns. For *tem* ‘in(to)’, there is a homophonous nominal form with the meaning ‘hole, inside’, cf. *amún-tem* [belly-hole] ‘abdominal cavity’ rather than *‘in(to) the belly’. The noun *dim* ‘top’ is attested in the compound *amgolim* [*am-go-dim* house-head-top] ‘roof’, rather than *‘onto the roof’. The postposition *tib* is derived from the noun *tib* ‘outside (of hide or fur)’.

Therefore, I choose the term ‘nominal postpositions’ for the five words under discussion. Although neither *tabáab* ‘under, beneath’ nor *glaglā* ‘between’ can be shown to be related to a noun in the way that *tem* ‘in(to)’ and *dim* ‘on(to)’ are related to nouns, they behave the same syntactically and are therefore included in the class of nominal postpositions. On the issue of the nominal origin of postpositions in many languages, see Dryer (2007: 85-86).

Two examples of nominal postpositions are provided below:

- | | | |
|------|---------------------|---|
| (15) | <i>tek=dim</i> | |
| | rope=on(to) | |
| | | ‘on(to) the rope’ |
| (16) | <i>mikil=tabáab</i> | |
| | mountain=under | |
| | | ‘under the mountain (i.e. at the foot of the mountain)’ |

The postpositional phrase can be followed by an article. In this case the postposition does not cliticize. The article agrees in gender and number with the preceding noun. The following example shows that the article following the postposition agrees in gender and number with *tek* ‘rope’ (N1):

- (17) *yóum=e* *tek* *dim=e*
 piece_of_clothing=SG.N1 rope(N1) on(to)=SG.N1

do-fâ-n-ebo=be
 3SG.M_CL.O-put.PFV-REAL-2SG.SBJ=DECL
 ‘You put the piece of clothing on the line.’

In contrast to postpositional phrases with a directional postposition, in which the noun phrase always has to be bare, in postpositional phrases with a nominal postposition like *dim* ‘on(to)’ or *tem* ‘in(to)’ they can have an article, but not any of the other adnominal pronouns:

- (18) *tek=e* *dim(=e)*
 rope=SG.N1 on(to)(=SG.N1)
 ‘on(to) the rope’

Therefore, a structure like (19) above has probably originated in a noun phrase, in which *tek=e* ‘the rope’ was the possessor:

- (19) *tek=e* *dim(=e)*
 rope=SG.N1 top(=SG.N1)
 ‘top of the rope’

Further evidence for this etymology comes from the following construction involving *dim* (20) and *tem* (21), where we find an appositional structure, in which the possessor is cross-referenced by a possessive pronoun:

- (20) *itú=e* *ē* *dim=e*
 fence=SG.N1 SG.N1 top=SG.N1
 ‘on the fence’ (lit. ‘the fence, its top’) [Building a Spirit House]

- (21) *toli=e* *ē* *tem=e*
 arrow_type=SG.N1 SG.N1 inside=SG.N1
 ‘(pierced) on (the tip of) a toli arrow’ (lit. ‘the toli arrow, its inside’) [Initiation rites]

In these examples, an overt possessive pronoun cross-references the possessors *itú=e* ‘the fence’ and *toli=e* ‘the toli arrow’, respectively. (On attributive possession, see section 6.6). Note, however, that this construction is only found in a traditional initiation account by a speaker in his late eighties. It is not used by younger speakers.

Unlike directionals which can only occur with an agreeing article or the default article =*o*, nominal postpositions retain the nominal property of occurring with different determiners. Emphatic pronouns (22) and demonstratives (23) are attested:

- (22) *mikil* *tabáab* *ōta*
 mountain(N2) beneath N2.EMPH

bl-Ø-io=be

stay.IPFV-IPFV-2/3PL.AN.SBJ=DECL

‘They live at the foot of (lit. beneath) mountains.’

[Mammals and insects]

- (23) *flèt=tem* *ēle*
 plate=in DEM.PROX.SG.N1
 ‘on (lit. in) this plate’

Nominal postpositions retain an important feature of nouns, namely to have an article or other determiner, and therefore make the structures in which they occur look like noun phrases in some respect. On the other hand, phrases with nominal postpositions differ in their external syntax from noun phrases. They are restricted to occurring with certain adverbial functions. Under no circumstances can a phrase with a nominal postposition be in a core argument position (see Dryer 2007: 85).

Phonologically, the nominal postposition *dim* ‘on, onto’ fuses with nouns ending in /l/, as in (24), the postposition *tem* ‘in, into’ fuses with nouns ending in /t/, as in (25):

- (24) *dabáal=dim* [ˈdəβaˈlɪm]
 ground=on(to)
 ‘on(to) the ground’

- (25) *flèt=tem* [flɛtʰɛm]
 plate=in(to)
 ‘on(to) (lit. in(to)) the plate’

7.3. Postpositional phrases with complex postpositions

These consist of a noun phrase complement and a complex postposition, which can be segmented into sequences of two or three simple postpositions. In complex postpositions, there is maximally one directional (*ut* ‘up’, *daak* ‘down’, etc.) as the final member, but there can be one or two nominal postpositions (*tabáab* ‘under’, *dim* ‘on(to)’, *tem* ‘in(to)’, *tib* ‘on(to) the surface of’, or *glaglā* ‘between’) preceding the directional. Complex postpositions typically follow a noun phrase as in (26) and (27), but there are also examples in which they follow a bare noun, as in (28):

- (26) *két=e* *dim-ut*
 container=SG.N1 on(to)-up
 ‘up on(to) the container’ [Spatial reference]
- (27) *két=e* *tabáab-tem-daak*
 container=SG.N1 beneath-in(to)-down
 ‘down underneath the container’ [Spatial reference]
- (28) *kweilbán* *dim-daak*
 palm on(to)-down
 ‘down on(to) the palm’ [Spatial reference]

Table 7.1 gives an overview of all attested complex postpositions in my corpus. The constituent elements of complex postpositions are *dim* ‘on(to)’, *tem* ‘in(to)’, *glaglā* ‘between’, *tabáab* ‘under’, *tib* ‘outside of’, *daak* ‘down’, *ut* ‘up’, *tab* ‘down’, *tām* ‘sideways’, *wāt* ‘across’.

Table 7.1. Complex postpositions

Postposition	Gloss	1	2	3
<i>dim-ut</i>	‘up on(to)’		<i>ut</i>	
<i>dim-daak</i>	‘down on(to)’	<i>dim</i>	<i>daak</i>	
<i>dim-wāt</i>	‘across on(to)’		<i>wāt</i>	
<i>tem-daak</i>	‘down in(to)’		<i>daak</i>	
<i>tem-tab</i>	‘down in(to)’	<i>tem</i>	<i>tab</i>	
<i>tem-tām</i>	‘sideways in(to)’		<i>tām</i>	
<i>tem-wāt</i>	‘across in(to)’		<i>wāt</i>	
<i>glaglā-daak</i>	‘down between’	<i>glaglā</i>	<i>daak</i>	<i>daak</i>
<i>glaglā-tem-daak</i>	‘down (in) between’		<i>tem</i>	
<i>tabáab-tem-daak</i>	‘down underneath’	<i>tabáab</i>	<i>tem</i>	<i>daak</i>
<i>tib-ut</i>	‘on(to) the surface of’	<i>tib</i>	<i>ut</i>	

Examples (29) and (30) illustrate the use of a complex postposition in a clause:

- (29) *bòks=e* *két* *ē=sa* *sù* *ē=sa*
 box=SG.N1 container SG.N1=too shoe SG.N1=too

ō *glaglā-daak*
 N1.PL between-down

o-fâ-n-ebo=be

3SG.RESID.O-put.PFV-REAL-2SG.SBJ=DECL

‘You put the box down between the shoe and the container.’ (lit.

‘down between them, the shoe and the container’) [Spatial reference]

- (30) *futâan* *tem-daak=e* *yē*
 tobacco_leaf in-down=SG.N1 there

tôu-m-i=be

put.IPFV-INCH-1SG.SBJ=DECL

‘I start putting (the tobacco) into the tobacco leaf.’ [Rolling smokes]

7.4. Nouns in complex postpositions

For locating an object (i.e. the figure) with respect to some other object (i.e. the ground), Mian makes extensive use of nouns, e.g. *milim* ‘side’, *dâang* ‘back’, and *ablan* ‘underside’, which denote certain physical properties of the latter. Such nouns are suffixed with *-daa* ‘at’. Note that *-daa* only occurs in postpositions and in the derivation of some denominal adverbs, such as *bib-daa* [village-at] ‘outside’. It is not a general locative case marker. An example is (31):

- (31) *as=e* *dâang-daa*
 tree=SG.N1 back-at

mâa'-bi-Ø-ebo=be

stand_up.PFV-AUX.IPFV-IPFV-2SG.SBJ=DECL

‘You are standing at the back of the tree.’ [Spatial reference]

In this example, the hearer is the figure, which is located with respect to the backside of the tree (the ground).

A word on the etymology of the suffix *-daa*: Phonologically, the most likely candidate of origin is the homophonous verb stem *daa* ‘abide’. Semantically, it makes sense that a verb with such a meaning was reanalysed as a locative marker.

Most nouns in complex postpositions are body parts which have been metaphorically extended to refer to comparable parts of inanimate objects, e.g. *dáang* ‘back(side)’. On the widespread phenomenon of metaphorically extending human body parts for deictic spatial purposes, see Heine (1997b).

Table 7.2 sets out all nouns which figure in complex postpositions in the corpus.

Table 7.2. Nouns in complex postpositions

Noun	Gloss	Example	Gloss
<i>ablan</i>	‘underside’	<i>as=e ablan-daa</i>	‘at the underside of the tree’
<i>abuksin</i>	‘backside’	<i>abuksin-daa</i>	‘at the back of’
<i>afansin</i>	‘left hand side’	<i>afansin-daa</i>	‘on the left hand side of’
<i>aleng</i>	‘bottom’	<i>két=e aleng-daa</i>	‘at the bottom of the container’
<i>amît</i>	‘opening’	<i>két=e amît-daa</i>	‘at the opening of the container’
<i>beil</i>	‘peak, hill’	<i>bèn=e beil-daa</i>	‘at the tip of the pen’
<i>dáang</i>	‘back’	<i>as=e dáang-daa</i>	‘at the backside of the tree’
<i>debelón(sin)</i>	‘forehead’	<i>hàs=e debelón(sin)-daa</i>	‘at the frontside of the hat’
<i>getetón(sin)</i>	‘back of head’	<i>hàs=e getetón(sin)-daa</i>	‘at the backside of the hat’
<i>kibikibasin</i>	‘face’	<i>hàs=e kibikibasin-daa</i>	‘at the frontside of the hat’
<i>kweitalsin</i>	‘right hand side’	<i>kweitalsin-daa</i>	‘on the right hand side of’
<i>milim(sin)</i>	‘side’	<i>bòks=e milim(sin)-daa</i>	‘at the side of the box’
<i>mokók</i>	‘heel’	<i>sù=e mokók-daa</i>	‘at the heel of the shoe’
<i>mutum</i>	‘tip’	<i>bòks=e mutum-daa</i>	‘at the tip of the shoe’
<i>táal</i>	‘leash’	<i>bèn=e táal-daa</i>	‘at the clip of the (ball) pen’

Nouns plus *-daa* ‘at’ can be followed by an (optional) directional to indicate the position of the figure from the viewpoint of the speaker, e.g. *met* ‘up, close to speaker’ in (32) and *tām* ‘sideways, to the side’ in (33):

- (32) *bòks=e* *két=e* *amît-daa* *met*
 box(TP)=SG.N1 container=SG.N1 opening-at up

o-fâ-n-ebo=be

3SG.RESID.O-put.PFV-REAL-2SG.SBJ=DECL

‘You’ve put the box up (i.e. close to me) to the opening of the container.’ [Spatial reference]

- (33) *hàs=e* *bòks=e* *milim-daa* *tām*
 hat(TP)=SG.N1 box=SG.N1 side-at sideways

o-fâ-n-ebo=be

3SG.RESID.O-put.PFV-REAL-2SG.SBJ=DECL

‘You’ve put the hat next to the side of the box.’ [Spatial reference]

7.5. Temporal postpositional phrases

Temporal postpositional phrases are formed with the postposition *dim* ‘in, on’, which is metaphorically related to the spatial postposition *dim* ‘on(to)’. Two examples are given below:

- (34) *Febhuali=e* *dim* *ē-ta*
 PN= SG.N1 on SG.N1-EMPH
 ‘in February’

- (35) *am* *mak* *dim=o*
 day another on=N2
 ‘on another day, sometimes, sometime’

Temporal postpositional phrases typically appear immediately before the verb (see 9.10.5).

Chapter 8

Verb morphology

8.0. Introduction

The Mian verb is by far the most morphologically complex category in the language. Many verbs formally distinguish a perfective and an imperfective stem, which are used to express bounded and unbounded events, respectively. Aspectual stem distinctions are a typical feature of the Mountain Ok languages (Healey 1964a: 68). They can also be found in other Papuan languages, e.g. Korafe (Farr 1999: 22-23) and Abui (Kratochvíl 2007: 82-86).

Mian is mildly polysynthetic in that all finite verbs obligatorily index their subject and the recipient object, if a recipient is part of the verb's argument structure. A subset of verbs also marks their objects. All argument affixes are pronominal in nature, i.e. they are not pure agreement affixes. They cross-reference overt argument noun phrases, which can be freely elided. Argument affixes agree with overt argument noun phrases in person, number and gender. If the argument noun phrase is elided, argument affixes agree anaphorically.

The verb has two slots for tense, aspect, and mood suffixes, one on either side of the subject suffix slot. The pre-subject slot accommodates a range of tense, aspect, and mood suffixes, whereas the post-subject slot is filled only by tense suffixes. The fillers of the post-subject slot are probably more recent grammaticalizations from erstwhile auxiliary constructions, in which an inflected auxiliary has been reanalysed as a tense suffix.

Verbs are inflected directly for certain TAM combinations. Direct inflection here means that the TAM suffix is appended directly to the verb stem. A serialization of a lexical verb stem with a form of the existential verb is required for other TAM combinations. In this case the TAM suffix is appended to the existential verb.

It is typical for verbs in many Papuan languages to be marked for illocutionary force (Foley 1986: 164). Mian has several sentential clitic particles which attach to the verb to signal the illocutionary force of an utterance as declarative or quotative, as a question, or as hortative.

Mian verbs productively form serial verb constructions. Verb serialization is discussed in section 11.1 under chaining.

8.1. Classification of verbs

Verbs can be classified according to three criteria, namely position in the sentence, possibility of direct inflection, and finiteness. A further division in four conjugation classes will be made in 8.4.

First, finite verbs can either be directly inflected for various TAM categories or serialized with an auxiliary. See 8.6.1 on directly inflected verbs and 8.6.7 on auxiliary-serialized verbs.

Second, finite verbs are either final or medial. Mian is a clause-chaining language. Simple sentences contain one final verb, whereas complex sentences usually consist of clauses chained together, each of which contains a medial verb while the last clause in a given chain, which forms the end of the sentence, terminates with a final verb. All final verbs index their subjects and any of the object(s) that this verb has to index, and can be inflected for all TAM categories, while medial verbs are slightly more restricted in terms of their TAM morphology. Medial verbs cannot be inflected for irrealis or deontic mood. Furthermore, they are never marked for polarity or illocutionary force. Tense marking with *-bio* ‘General past’ and *-so* ‘Hesternal past’ on medial verbs is possible. Medial verbs partake in the switch-reference system of the language. They are inflected for same or different subject, i.e. they have suffixes which mark whether or not the subject of the following clause is the same. The same suffixes also indicate sequentiality or simultaneity of events.

Third, verbs are either finite or non-finite. Any verb (or serial verb construction) marked for subject is finite, any verb not marked for subject is non-finite.

As medial verbs and their morphology are intricately linked to the phenomenon of clause-chaining, their morphology is described in section 10.2 under clause-chaining constructions.

8.2. Notation conventions for verbs

For ease of reference, I repeat the notation conventions for verbs stated in section 3.2.1 above.

Throughout this grammar, I will use the following conventions for indicating aspectual stem alternation. For biaspectual verbs, the perfective stem is given first, separated from the imperfective stem by a slash, e.g. *baa/o* ‘say’, where *baa* is the perfective and *o* the imperfective stem. For defective verbs, the absence of the perfective or the imperfective stem is indicated by ‘—’, e.g. *kaan/—* ‘die’ without an imperfective stem and *—/ei* ‘fly’ without a

perfective stem. For trans-aspectual verbs, one stem is given which can be used for perfective and imperfective verb forms, e.g. *fu* ‘cook’.

When single aspectual verb stems are cited that are either perfective or imperfective, the aspect value is indicated in the gloss, e.g. *baa* ‘say (PFV)’, *o* ‘say (IPFV)’, *kaan* ‘die (PFV only)’, and *ei* ‘fly (IPFV only)’.

Argument-indexing affixes are indicated with dashes on verb stems as follows:

- V_{stem} : Verb does not index the object or does not have one, e.g. *fu* ‘cook (transitive)’, *—/un* ‘hum, drone (intransitive)’.
- $-V_{\text{stem}}$: Verb obligatorily indexes its object by a pronominal prefix, e.g. *-têm* ‘/-temê’ ‘see’, or a classificatory prefix, e.g. *-ò/—* ‘take’.
- $-V_{\text{stem}}^-$: Verb obligatorily indexes two objects, i.e. theme (with a prefix) and recipient (with a suffix), e.g. *-ûb* ‘/-ka-’ ‘give’.
- V_{stem}^- : Verb obligatorily occurs compounded with the verb ‘give’, which is followed by an object suffix in the perfective and requires an object suffix (from a somewhat different set) but no compounding with ‘give’ in the imperfective, e.g. *fote-* ‘chase away, rout’.
- A dash in brackets, e.g. *(-)ba* ‘put into (pfv)’, indicates that the affix is optional and can be left out *without* changing the valency of the verb.

8.3. Perfective and imperfective verb stems

For about half of the Mian verbs, stems in final and medial verbs appear in two different forms. The formal alternation reflects a difference in aspect. Mian distinguishes perfective and imperfective aspect. Dahl (1985: 78) defines perfective aspect as follows:

A PFV verb will typically denote a single event, seen as an unanalysable whole, with a well-defined result or end-state, located in the past. More often than not, the event will be punctual, or at least, it will be seen as a single transition from one state to its opposite, the duration of which can be disregarded.

Perfective stems in Mian are used for describing a situation as a complete whole without making the internal temporal structure or duration of the situation explicit. Smith and Weston (1974b: 60) call the perfective stem ‘punctiliar’, which is a misleading term because the use of this stem is not at all restricted to punctual situations, that is situations which last just for a short moment in time and can only occupy a longer time interval if performed iteratively, ‘cough’ being the classic example in point. The perfective stem in Mian can, in fact, be used to describe complex situations comprising several

phases, which can take some time, for example, making a fire, weaving a string bag, or building a house. The perfective stem has to be used for punctual, non-iterative situations. These have no internal structure and are thus incompatible with imperfectivity. While situations which are referred to by a perfective verb stem can be either punctual (like coughing) or durative (like building a house), in neither case does the perfective stem focus on the internal temporal structure of the situation. In Dahl's words, the duration of the situation is disregarded.

Mian shows the common correlation of perfective aspect and past time reference, which is stated in the definition above, but allows the perfective stem to also appear in irrealis forms with future time reference and even in some verb forms with present time reference, though this is restricted to performatives (see 8.6.1.7).

Use of the imperfective stem makes the internal temporal structure of a situation explicit. Imperfective aspect is used for non-bounded situations, that is for situations which hold habitually and for 'on-going' or continuous situations, whose duration is not disregarded but rather is the focus of attention. Smith and Weston (1974b: 60) call this stem 'continuative'. However, they never explicitly state that habitual meaning is also invariably expressed by means of this stem and never by means of the perfective stem, though their examples are in accordance with my own findings in this respect. Consequently, 'continuative' seems to be an inadequate term. As the fundamental aspectual distinction that Mian apparently makes is one between perfective and imperfective, I will stick to these traditional aspectual terms. Imperfective aspect can have habitual or continuous meanings, and it seems sensible to make a distinction here because Mian has a special habitual construction (involving the habitual form of the existential verb *bina*). This is never used for continuing, non-habitual situations. I use the terms 'continuous' rather than 'progressive' because stative verbs, such as the existential verb, can also occur in the imperfective. Figure 8.1 summarizes the Mian aspectual distinctions.

In terms of formal stem alternation, Mian verb lexemes fall into three main classes:

- 1) Biaspectual verbs, which have formally distinct perfective and imperfective stems.
- 2) Trans-aspectual (or aspect-neutral) verbs have only one stem which can be used in the perfective or the imperfective.
- 3) Defective verbs, which are further subdivided into perfective-only verbs and imperfective-only verbs, each lacking the respective aspectual counterpart.

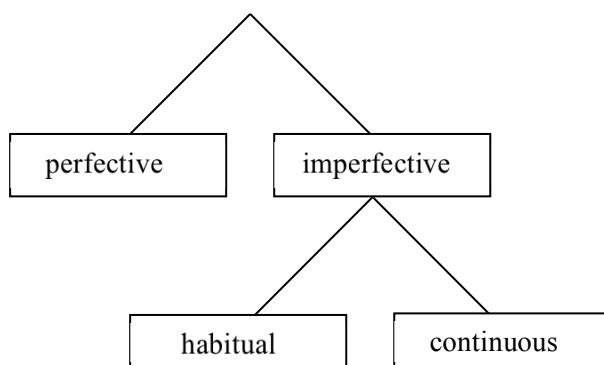


Figure 8.1. Mian aspectual oppositions (adapted from Comrie 1976)

8.3.1. Biaspectual verbs: Stem alternation

For biaspectual verbs, perfective and imperfective stems are formally distinct. Examples (1) and (2) illustrate this for *ifa/ifu* ‘serve (food)’:

- (1) \bar{o} *tatáan=o* *ifa-n-o=be*
 3SG.F vegetables=N2 serve_food.PFV-REAL-3SG.F.SBJ=DECL
 ‘She (has) served vegetables.’
- (2) \bar{o} *tatáan=o* *ifu-b-o=be*
 3SG.F vegetables=N2 serve_food.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She is serving vegetables.’

There are three morphological processes that relate perfective and imperfective stems, namely suffixation, apophony, and suppletion. In addition to this, there can be a difference in tone, though we do not find any cases where the perfective-imperfective opposition is marked by tone only. Aspectual stem alternation can also be irregular. The different types of aspectual stem alternation are summarized in table 8.1. Arrows indicate direction of derivation for suffixation.

8.3.1.1. Suffixation

When aspectual stem alternation is marked by suffixation, the base form can either be the imperfective or the perfective stem. First, the stem can be marked as imperfective by suffixing *-ka*, as in (3) and (4):

Table 8.1. Aspectual stem alternation

Process	Perfective stem(s)	Imperfective stem(s)	Gloss
Suffixation	<i>fa</i>	→ <i>faka</i>	‘make fire’
	<i>-têm’</i>	→ <i>-temê’</i>	‘see, look at’
	<i>têm’</i>	→ <i>temê’</i>	‘have a look’
	<i>deilâ’</i>	← <i>dei</i>	‘remove hair’
Suffixation to clipped stem	<i>ngela</i>	← <i>ngen</i>	‘beg’
Apophony	<i>ifa</i>	<i>ifu</i>	‘serve (food)’
	<i>ge</i>	<i>ga</i>	‘say’ (function verb)
Suppletion	<i>dowôn’</i>	<i>wen</i>	‘eat’
	<i>baa</i>	<i>o</i>	‘say, tell’
	<i>-ma</i>	<i>-san</i>	‘put, plant’
Irregular	<i>tl, te, tlaan</i>	<i>tle, te</i>	‘come’
	<i>un, on, unaan</i>	<i>unê</i>	‘go’
	<i>n, biaa^H</i>	<i>bi-bl, bina, biaana,</i>	‘stay, exist’
		<i>biaan</i>	

(3) \bar{e} *as=e* *fa-n-e=be*
 3SG.M fire=SG.N1 make_fire.PFV-REAL-3SG.M.SBJ=DECL
 ‘He (has) made a fire’

(4) \bar{e} *as=e* *faka-b-e=be*
 3SG.M fire=SG.N1 make_fire.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is making a fire’

Other verbs that follow this pattern are: *gò’/gokà* ‘cut (skin/meat)’ and *hâ’/haka* ‘break’. Verbs which optionally mark their imperfective stem with *-ka* are *fubâ/fubâ(ka)* ‘wash, rinse’, *dolâ/dolâ(ka)* ‘write’, *golâ/golâ(ka)* ‘sear skin’, and *klutâ/klutâ(ka)* ‘smash’.

The second suffixal stem alternation process adds *-e* to the perfective to form the imperfective stem. Transitive *-têm’/temê’* ‘see, look at’ and intransitive *têm’/temê’* ‘have a look’ follow this pattern. Compare:

(5) *éil=o* *kimâa’-bi-Ø-e=a*
 pig=SG.F guard.PFV-AUX.IPFV-SIM-3SG.M.SBJ=MED

temê’-b-e=to
 look.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘he was guarding the pig looking (around) and...’ [Danenok]

- (6) *memâ yomintén=i wa-têm'-n-ib=a*
 now initiant=PL.AN 3SG.F.O-see.PFV-SEQ-2/3PL.AN.SBJ=MED
 'now the initiants saw it (a sow) and then...' [Kasak]

Next, there are processes in which material is added to the imperfective stem in order to form the perfective stem, e.g. *-la* in (7) and (8). Note that there is also a difference in tone.

- (7) *nē mináan=o dei-b-i=be*
 1SG whisker=PL.N1 remove_hair.IPFV-IPFV-1SG.SBJ=DECL
 'I am shaving.'

- (8) *ē mináan=o deilâ'-n-e=be*
 3SG.M whisker=PL.N1 remove_hair.PFV-REAL-3SG.M.SBJ=DECL
 'He (has) shaved.'

Another verb that follows this pattern is: *gila/gi* 'laugh'.

In imperfective N-stems (see 8.4), i.e. those verbs whose imperfective stem ends in /n/, the suffix *-la* attaches to a clipped imperfective stem without *-n*, e.g. *(-)halila/(-)halin* 'worry, be concerned about', *ngela/ngen* 'beg', and *sein/seila* 'be happy, rejoice'.

On analogy with these, some N-stem verbs require the suffix *-na* to mark the perfective stem:

- (9) *nē naka ēle*
 1SG man DEM.PROX.SG.M

dob-suan-b-i=be
 3SG.M_CL.O-hate.IPFV-IPFV-1SG.SBJ=DECL
 '(Presently) I hate this man.'

- (10) *nē naka ēle*
 1SG man DEM.PROX.SG.M

dob-suana-Ø-i-bio=be
 3SG.M_CL.O-hate.PFV-REAL-1SG.SBJ-GPST=DECL
 '(In the past) I hated this man.'

Other verbs that follow this pattern are: *funa/fun* 'think', *tobtlina/tobtlin* 'be confused', *ngana/ngaan* 'sing, call out, shout', and *hena/hen* 'seek'.

8.3.1.2. Apophony

Aspectual stem alternation by apophony is rare. There are two types of apophony involved in aspectual stem alternation. In the first type, /u/ in the imperfective is related to /a/ in the perfective stem:

- (11) *biém=o* *unín=o* *ifa-n-o=be*
 mum=SG.F food=N2 serve.PFV-REAL-3SG.F.SBJ=DECL
 ‘Mum served food.’

- (12) *biém=o* *unín=o* *ifu-b-o=be*
 mum=SG.F food=N2 serve.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘Mum is serving food.’

Other verbs that follow the /a/-/u/-pattern are: *iba/ibu* ‘pour’, *-ba/-bu* ‘put into’, *-tanà/-tunu* ‘light (with fire)’, *tana/tunu* ‘comb’, *nantana/nantunu* ‘lick’, and *gibba/gibbu* ‘be wet’.

The second type of apophony is between /a/ in the imperfective and /ε/ in the perfective stem:

- (13) *Sobining=e* *he* *ge-s-e=be*
 PN=SG.M moaning_sound say.PFV-RPST-3SG.M.SBJ=DECL
 ‘Sobining moaned.’ [Sobining]

- (14) *nē* *funa-n-i=a* *ōlo*
 1SG think.PFV-SS.SEQ-1SG.SBJ=MED DEM.PROX.N2

klayâm=o=bo
 very_good=PRD=QUOT

ga-b-i=be
 say.IPFV-IPFV-1SG.SBJ=DECL
 ‘I think this is very good.’ (lit. ‘I am thinking think: “This is very good.” ’)

This type of apophony only applies to the function verb *ge/ga* ‘say’.

8.3.1.3. *Suppletion*

A few verbs have suppletive imperfective and perfective stems. These are *dowôn* 'eat', *-ma/-san* 'put, plant', *gububma/gububsan* 'collide', *-kimà/-kimsan* 'put into the fire', *walo/we* 'buy', *baa/o* 'say', *-ûb* 'give', and *-fâ/-ka* 'put':

- (15) *nē sintalo imen homòn=o*
1SG yesterday taro much=PL.N1

dowô 'Ø-i-so=be
eat.PFV-REAL-1SG.SBJ-HPST=DECL
'Yesterday, I ate much taro.'

- (16) *nē imen=e wen-b-i=be*
1SG taro=SG.N1 eat.IPFV-IPFV-1SG.SBJ=DECL
'I am eating a taro.'

8.3.2. *Irregular aspectual stem alternation*

Three verbs show irregular aspectual stem alternations. These are *tl~te/tle~te* 'come', *un~on/unê* 'go' and the existential verb *n/bi~bl*. The irregularity also extends to the fact that these three verbs have more than one stem in the perfective or the imperfective. In this section I only discuss 'come' and 'go'. The inflectional possibilities and peculiarities and all stem alternations of the existential verb are described in detail in section 8.6.5.

8.3.2.1. *tl~te/tle~te 'come'*

For final verbs, there are the perfective stems *tl* and *te*. The former is used for all irrealis forms and all tenses, e.g. the general past in (17), except the remote past (18) and the non-hodiernal past (19), for which *te* must be employed.

- (17) *tl-Ø-i-bio=be*
come.PFV-REAL-1SG.SBJ-GPST=DECL
'I came.'

- (18) *te-s-io=be*
come.PFV-RPST-2/3PL.AN.SBJ=DECL
'They came (in the remote past).'

- (19) *te-b^(H)-i=be*
 come.PFV-NHODPST-1SG.SBJ=DECL
 ‘I came (but not today).’

In serial verb constructions only the bare perfective stem *te* occurs. The form *tl* is a bound stem. In medial verbs, *tl* is used with $-\emptyset$ ‘DS.SEQ’. *Te* is used with $-s$ ‘DS.SEQ’ and $-n$ ‘(SS.)SEQ’. The stem *taan* is employed to indicate SS and sequentiality of events.

All hortative forms require *tl*, except in the first person singular where *te-n-an=o* [come.PFV-REAL-1SG.SBJ.HORT=HORT] ‘I should come!’ is also possible and the second person singular where only *te-l=e* [come.PFV-2SG.SBJ.HORT=HORT] is possible.

The imperfective stem *te* ‘come (IPFV)’ is used for all forms in both medial and final verbs, except those which are serialized with an auxiliary, for which the stem *tle* is used (see below). The perfective M-form is *te-nam* [come.PFV-PFV] ‘come (PFV, M-form). The perfective verbal noun is *te-nam-in* [come.PFV-PFV-VN] ‘(instance of) coming (PFV, verbal noun)’.

In addition to that, ‘come’ has a distinct imperfective stem, namely the iterative stem *tle*. Consider the following examples:

- (20) *balu=e* *tl- \emptyset -e=be*
 plane=SG.N1 come.PFV-REAL-3SG.N1.SBJ=DECL
 ‘The plane has come.’
- (21) *balu=e* *te-b-e=be*
 plane=SG.N1 come.IPFV-IPFV-3SG.N1.SBJ=DECL
 ‘The plane is coming.’
- (22) *balu=e* *tle-b-e=be*
 plane=SG.N1 come.ITER-IPFV-3SG.N1.SBJ=DECL
 ‘The plane is coming (again and again).’

With (20) the speaker indicates that the plane has arrived, i.e. that it has either landed on the airstrip or that its landing is imminent because the plane can be seen or heard. Example (21) expresses that the plane is on its way or that it is approaching the airstrip.¹ These two examples also show an important feature of the aspect category, namely that the choice between perfective and imperfective stem is not necessarily dependent on the actual situation but rather on the way a speaker wants to portray the situation, e.g. (20) and (21) can both be said if the plane is still in the air.

Finally, (22) indicates that the plane performs the action iteratively. It comes several times within a certain time interval. While the imperfective

stem *te* is used to express that the action of coming is on-going at the moment of speaking and that it is performed either by one individual or by one group of individuals, the iterative stem *tle* is used when one or more agents perform the action of coming iteratively. If more agents are involved, it is sufficient for each of them to perform the action of coming only once. Consider examples (23) and (24):

- (23) *ilem=e* *tle-b-e=be*
 blood=SG.N1 come.ITER-IPFV-3SG.N1.SBJ=DECL
 ‘Blood is dripping.’
- (24) *kōbo* *két=e* *betelâ’-n-eb* *mole*
 2SG.M container=SG.N1 open.PFV-REAL-2SG.SBJ if
- bebuali=ei* *tle-mab-io=be*
 butterfly=PL.AN come.ITER-IRR.NANPL.SBJ-2/3PL.AN.SBJ=DECL
 ‘If you open the container, the butterflies will be coming (out).’

The iterative stem *tle* is used in the imperfective M-form *tle-m* [come.ITER-IPFV] ‘come (IPFV, M-form)’, the imperfective verbal noun *tle-m-in* [come.IPFV-IPFV-VN] ‘(activity of) coming (IPFV, verbal noun)’ and in auxiliary-serialized verb forms, for example in the habitual:

- (25) *ē* *amitye* *tle-bina-b-e=be*
 3SG.M always come.ITER-AUX.HAB-IPFV-3SG.M.SBJ=DECL
 ‘He always comes.’

8.3.2.2. *un~on/unê* ‘go’

For final verbs, there are the perfective stems *un* and *on*. The former is used for all irrealis forms and all tenses, e.g. the general past in (26), except the remote past (27) and the non-hodiernal past (28), for which *on* must be employed.

- (26) *un-Ø-i-bio=be*
 go.PFV-REAL-1SG-GPST=DECL
 ‘I went.’
- (27) *on-s-io=be*
 go.PFV-RPST-2/3PL.AN.SBJ=DECL
 ‘They went (in the remote past).’

- (28) *on-b^(H)-i=be*
 go.PFV-NHODPST-1SG.SBJ=DECL
 ‘I went (but not today).’

In serial verb constructions only the bare perfective stem *on* occurs. The form *un* is a bound stem. In medial verbs, *un* is used with $-\emptyset$ ‘DS.SEQ’ and *on* with *-s* ‘DS.SEQ’. The stem *unaan* is employed to indicate SS and sequentiality of events.

All hortative forms require *un*, except in the second person singular: *on=e* [go.PFV=HORT] ‘You should go!’.

The imperfective stem *unê* ‘go (IPFV)’ is used for all forms in both medial and final verbs.

The perfective M-form is *on-nam* [go.PFV-PFV] ‘go (PFV, M-form)’ and the perfective verbal noun is *on-nam-in* [go.PFV-PFV-VN] ‘(instance of) going (PFV, verbal noun)’.

The imperfective M-form is *unê-m* [go.IPFV-IPFV] ‘go (IPFV, M-form)’ and the imperfective verbal noun is *unê-m-in* [go.IPFV-IPFV-VN] ‘(activity of) going (IPFV, verbal noun)’.

8.3.3. Trans-aspectual verbs

For trans-aspectual (or aspect-neutral) verbs, stems are formally identical, i.e. a contrast between imperfective and perfective aspect is not shown by the stem. Consider the following two examples:

- (29) \bar{o} *bín=o* *we-b-o=be*
 3SG.F floor=N2 sweep-IPFV-3SG.F.SBJ=DECL
 ‘She is sweeping the floor.’

- (30) \bar{o} *bín=o* *we-n-o=be*
 3SG.F floor=N2 sweep-REAL-3SG.F.SBJ=DECL
 ‘She swept the floor.’

In both examples the stem is *we* ‘sweep’. Trans-aspectual verb stems can be used in the imperfective and the perfective, e.g. they can be combined with imperfective aspect morphology, such as *-b* ‘Imperfective’ in (29), and also with the realis suffix *-n* in (30), which can be directly appended to a verb stem only in the perfective.

Common trans-aspectual verbs are:

(31)	<i>bafu</i>	‘boil’
	<i>bali</i>	‘bear (fruit)’
	<i>bu</i>	‘hunt’
	<i>di</i>	‘tighten bow string’
	<i>-dî</i>	‘fetch’
	<i>-li</i>	‘plant’
	<i>dli</i>	‘dance’
	<i>ga</i>	‘put/cook in leaf oven’
	<i>-gi</i>	‘lead on leash’
	<i>êi</i>	‘accumulate (water), impound (water)’
	<i>ein</i>	‘burn, be cooked’
	<i>fu</i>	‘cook, smoke’
	<i>fufu</i>	‘blow (into fire)’
	<i>gâala</i>	‘tear down, destroy (house)’
	<i>gibâ</i>	‘care for, feed, rear (animal)’
	<i>gwi</i>	‘use black magic’
	<i>haa</i>	‘weave (string bag)’
	<i>hebâ</i>	‘lean on’
	<i>heitda</i>	‘shake hands’
	<i>inà</i>	‘do thus’
	<i>ki</i>	‘align, measure, read’
	<i>klâ</i>	‘complete, fix’
	<i>kou</i>	‘have sex, copulate’
	<i>na</i>	‘make, do’
	<i>singa</i>	‘pour’
	<i>-ski</i>	‘turn’
	<i>tubu</i>	‘pour salt onto’
	<i>waa</i>	‘swim’
	<i>wi</i>	‘cut (wood)’
	<i>yo</i>	‘initiate, beget’

8.3.4. Defective verbs

Defective verbs either lack the imperfective or the perfective stem. This is an exhaustive list of perfective-only verbs:

(32)	<i>-â</i> /—	‘leave, let, allow’
	<i>beitalô</i> /—	‘become weak, become lazy’
	<i>-bià</i> /—	‘throw’
	<i>bina</i> /—	‘shoot’
	<i>dobô</i> /—	‘feel, taste’

<i>doko-/—</i>	‘forget’
<i>-êb/—</i>	‘pick up, take (in order to carry)’
<i>-silêb/—</i>	‘follow (directly)’
<i>-toulêb/—</i>	‘gather in arms (in order to carry)’
<i>-fâa/—</i>	‘lift’
<i>-fû’/—</i>	‘grab’
<i>-fu-/—</i>	‘send’
<i>gai-/—</i>	‘pass, surpass’
<i>go-/—</i>	‘like, appreciate’
<i>kaan/—</i>	‘die’
<i>kimâa’/—</i>	‘look out for, guard, protect’
<i>klafâ/—</i>	‘put on the back (in order to carry), climb tree’
<i>mâa’/—</i>	‘stand up’
<i>mâm hala/—</i>	‘gasp for air’
<i>mama/—</i>	‘walk around’
<i>meleklaa/—</i>	‘work hard’
<i>melek/—</i>	‘work hard’
<i>menga/—</i>	‘pull taut, force, compel’
<i>mî’/—</i>	‘meet, gather’
<i>-môu/—</i>	‘put on shoulder (in order to carry)’
<i>-ntamâ’/—</i>	‘bite’
<i>-ò/—</i>	‘take’
<i>omfle-/—</i>	‘miss, come close’
<i>-tamaa/—</i>	‘step on’
<i>tetena/—</i>	‘come together’
<i>tlâa’/—</i>	‘be sad’
<i>ulâa’/—</i>	‘open’
<i>-Ø^(-)</i>	‘transfer’

On the zero root with the meaning ‘transfer’ (which is given last in the preceding list), see 8.5.5.1.

In terms of their semantics, many of these verbs describe punctual events, which are incompatible with imperfective aspect. Compare, for example:

- (33) *maâ’-Ø-i-o=be*
stand_up.PFV-REAL-1SG.SBJ-EP=DECL
‘I stood up.’
- (34) *maâ’-bl-Ø-i=be*
stand_up.PFV-AUX.IPFV-IPFV-1SG.SBJ=DECL
‘I’m standing.’ (lit. ‘I stood up and am staying’)

In other cases, such as *-silêb* ‘follow (PFV)’ it is less clear why an imperfective stem should be lacking on semantic grounds. Thus, some gaps in the aspectual stem system seems to be accidental.

Perfective-only stems can generally be serialized with an auxiliary to express unbounded events, e.g.:

- (35) *nē* *geim=o*
1SG pronged_arrow=PL.N1

tebe-toulêb-bl-Ø-i=be

PL.LONG.O-gather_in_arms.PFV-AUX.IPFV-IPFV-1SG.SBJ=DECL

‘I’m holding pronged arrows in my arms.’ (lit. ‘I have gathered pronged arrows in my arms and stay.’)

A more detailed discussion of auxiliary serialization with perfective stems is found in section 8.6.7.3.

Imperfective-only verbs lack a perfective stem, for instance *be* ‘be walking, keep V-ing’ is always imperfective:

- (36) *ináb=e* *yē* *be-b-e=be*
snake=SG.M there walk.IPFV-IPFV-3SG.M.SBJ=DECL
‘A snake is moving along there.’ [Observed]

This is an exhaustive list of imperfective-only verbs.

- (37) —/*afen* ‘be alive’
—/*be* ‘be walking, keep V-ing’
—/*ei* ‘fly (of birds and bats)’
—/*hâa* ‘roam’
—/*-hâa* ‘chase’
—/*ikam holol* ‘tiptoe’
—/*mangglom* ‘cry (plural subject)’
—/*mokob* ‘like, love’
—/*sasan* ‘moan’
—/*un* ‘hum, drone’
—/*wâala* ‘fly (of insects and helicopters)’

In most of these cases it is not obvious why – given the meaning of the verb – it should lack a perfective stem. I take these gaps to be accidental. It is of course possible to say that for instance a flying action took place in the past. For that a serialization with an imperfective auxiliary must be used, as in (38):

- (38) *bebuali=e wâala-bi-n-e-bio=be*
 butterfly=SG.M fly.IPFV-AUX.IPFV-REAL-3SG.M.SBJ-GPST=DECL
 ‘A butterfly was flying (around).’ [Dictionary]

For more on serializations with an auxiliary, see section 8.6.7.

8.4. Conjugation classes

I distinguish four conjugation classes in Mian. These are necessary because the inflectional possibilities and restrictions of a verb stem are not predictable from the type of aspectual stem distinction in a given verb. The four conjugation classes are:

- Stems ending in a vowel (V-stems), e.g. *hena* ‘seek (PFV)’, *fu* ‘cook’
- Perfective stems ending in a consonant (C-stems), e.g. *dowôn* ‘eat (PFV)’, *têm* ‘see (PFV)’
- Imperfective stems ending in /n/ (N-stems), e.g. *hen* ‘seek (IPFV)’, *ngen* (IPFV) ‘beg’
- Obligatorily auxiliary-serialized verbs (X-stems), e.g. *hâa* ‘roam (IPFV only)’

Conjugation class is independent of stem aspect alternation, which means that the perfective and imperfective stems of a single verb can actually belong to two different conjugation classes, e.g. *hena/hen* ‘seek’, where *hena* (PFV) is a V-stem and *hen* (IPFV) is an N-stem.

The class of V-stems is by far the largest. It contains all verb stems that end in a vowel, e.g. *baa* ‘say (PFV)’ and *fu* ‘cook (trans-aspectual)’, *ei* ‘fly (defective, IPFV-only)’. All of these are inflected regularly.

The class of C-stems is small. It contains those perfective stems which end in a consonant, e.g. *s* ‘sleep (PFV)’, *dowôn* ‘eat (PFV)’ and *-têm* ‘see (PFV)’. C-stems select the *-aamab* ‘Irrealis’ and *-aa(m)* ‘Deontic’ allomorphs, which are directly affixed to the stem. Exceptions are *ein* ‘burn, be cooked (PFV)’, *kaan* ‘die (PFV)’, and the perfective stem of the existential verb *n*. Although all of these end in a consonant, they do not select the C-stem allomorphs but take the regular suffixes *-amab* ‘Irrealis’ and *-Vm* ‘Deontic’ instead.

The class of N-stems is also small. It contains only imperfective stems which end in /n/, e.g. *hen* ‘seek (IPFV)’ and *ngen* ‘beg (IPFV)’. All N-stems form their perfective stems by suffixing either *-na* or *-la* to the clipped imperfective stem (i.e. stem minus /n/), e.g. *hena* ‘seek (PFV)’ and *ngela* ‘beg (PFV)’. N-stems are directly inflected for irrealis mood, inchoative aspect, hortative, and verbal noun.

The class of X-stem comprises verbs that are obligatorily serialized with an auxiliary in the imperfective, if they are to be inflected at all. There are two subclasses of X-stems: imperfective-only and perfective-only ones. The first subclass comprises those imperfective-only verbs which always have to be serialized with an auxiliary in order to be inflected at all, e.g. *—/hâa* ‘roam’ and *—/afen* ‘be alive’. Note that this class of verbs is a subset of the imperfective-only verbs listed under 8.3.4 above. Compare a verb which requires inflection with an auxiliary, in (39), and a verb which must be directly inflected for imperfective aspect (40):

(39) *nē sesá hâa'-bl-Ø-i=be*
 1SG bush roam.IPFV-AUX.IPFV-IPFV-1SG.SBJ=DECL
 ‘I’m roaming the bush.’

(40) *balu=e un-b-e=be*
 plane=SG.N1 hum.IPFV-IPFV-3SG.N1.SBJ=DECL
 ‘The plane is humming.’

This is an exhaustive list of obligatorily auxiliary-serialized verbs, which belong to the imperfective-only subclass:

(41) *—/afen* ‘be alive’
—/hâa ‘roam’
—/hâa ‘chase’
—/dehâa ‘dodge work’
—/kan hâa ‘pursue, stalk’
—/ikam holol ‘tiptoe’
—/mangglom ‘cry (of many)’
—/mokob ‘like, love’

The second subclass of obligatorily auxiliary-serialized verbs consists of perfective-only verbs. These can be directly inflected to form perfective verb forms, e.g.:

(42) *ob-ò*
 3SG.RESID.O-take.PFV

ob-toulêt-n-o=ta
 3SG.RESID.O-take_into_arms.PFV-SS.SEQ-3SG.F.SBJ=MED
 ‘she picked it up (i.e. a severed foot) and took it into her arms
 and then she ...’ [Crows]

The imperfective can only be expressed with the help of the auxiliary:

- (43) *ob-toulêb-bi-Ø-o=be*
 3SG.RESID.O-take_into_arms.PFV-AUX.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She is holding it (i.e. an object belonging to the residue class) in her arms.’ (lit. ‘She took it into her arms and is staying.’)

Examples of the perfective-only subclass are: *mâa’/—* ‘stand up’, *-mou/—* ‘put on one’s shoulders’, *-êb/—* ‘take’, *-silêb/—* ‘follow’, and *-toulêb/—* ‘take into arms’. An exhaustive list is given in 8.3.4 above. The reader will find a more detailed discussion of auxiliary-serialization with perfective stems in section 8.6.7.3.

8.5. Argument marking

8.5.1. Pronominal affixes

The Mian verb distinguishes pronominal argument affixes from classificatory prefixes. Pronominal argument affixes index the subject with a suffix and for seven verb stems also the object with a prefix. These show accusative alignment. Recipients are marked by a pronominal suffix and show indirective alignment. Classificatory prefixes, on the other hand, classify the subject of intransitive verbs and the object of transitive verbs according to semantic criteria (see chapter 5). Classificatory prefixes show absolutive alignment. I analyse the argument affixes as pronominal affixes and not as pure, i.e. grammatical, agreement markers. The reasons for this decision are the following.

Overt argument noun phrases are always optional. A verb with its argument affixes constitutes a grammatically complete utterance. Compare (44) with overt arguments and (45) without overt subject and object arguments:

- (44) *nē kōbo ka-temê’-b-i=be*
 1SG 2SG.M 2SG.O-see.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am looking at you.’
- (45) *ka-temê’-b-i=be*
 2SG.O-see.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am looking at you.’

Regardless of the indexation patterns, overt argument noun phrases can be elided which can result in a semantically less specific but nonetheless grammatical utterance. This is illustrated for an object indexed by a prefix (46) and (47), and for an object indexed by a suffix (48) and (49):

(46) *nē naka=e a-temê'-b-i=be*
 1SG man=SG.M 3SG.M.O-see.IPFV-IPFV-1SG.SBJ=DECL
 'I am looking at the man.'

(47) *a-temê'-b-i=be*
 3SG.M.O-see.IPFV-IPFV-1SG.SBJ=DECL
 'I am looking at him.'

(48) *nē naka=e*
 1SG man=SG.M

da-˘b'-a-n-amab-i=be
 help-give.PFV-3SG.M.R-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 'I will help the man.'

(49) *da-˘b'-a-n-amab-i=be*
 help-give.PFV-3SG.M.R-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 'I will help him.'

Corbett (2006: 100-111) compares agreement markers and pronominal affixes. On this issue, also see Evans (2002), Mithun (2003), and Corbett (2003). Pronominal affixes typically index all (or most) core arguments and have some descriptive content whereas agreement markers usually only index one role (mostly the subject) and, with the exception of semantic agreement (Corbett 2006: 104), do not have lexical meaning.

Mian argument affixes index all core arguments (i.e. all subjects and recipients, and objects for seven verb stems) and they do have some degree of lexical meaning. Affixes cross-referencing an object are an obligatory part of the verbal noun, which is the verbal citation form. Thus:

(50) *y-e-m-in / *e-m-in*
 PL.AN.O-hit.IPFV-IPFV-VN
 '(activity of) hitting us/you (PL)/them (IPFV)'

(51) *da-˘b'-a-nam-in / *da-nam-in*
 help-give-PL.AN.R-PFV-VN
 '(instance of) helping him (PFV)'

This is not what one would expect if the Mian argument affixes were pure agreement markers. To treat them as pronominal affixes, however, does not mean that they fall outside of agreement. The morphosyntactic features encoded by pronominal affixes, namely person, number, and (in the third person) gender are essential to the construal of cross-referencing affixes with their overt co-referent noun phrases.

8.5.2. Subject suffix

All finite verbs obligatorily have a pronominal suffix which indexes the subject and signals person, number, and in the third person also gender of the subject. Having subject marking is the defining feature of finite verbs in Mian (see 3.2).

Subject marking in final verbs differs from subject marking in medial verbs in that there is some suffix allomorphy that subject suffixes in medial verbs lack.

Table 8.2 below gives the forms of the subject marker for final and medial verbs, including all allomorphs (which are only found in final verbs). Depending on the number of syllables following the subject suffix and its phonological context, there are three – or for first person plural four – alternants for those subject markers which end in /b/ in final verbs. Grey areas in the table indicate the neutralization of a gender contrast.²

In non-first person there is clear evidence for the diachronic identity of subject suffixes on the verb and the pronoun forms: *kēb* > *-eb*, *ē* > *-e*, *ō* > *-o*, and *īb* > *-ib*. Note the loss of tone in the bound pronominal forms.

The choice of subject suffix alternants is determined by the number of syllables following the suffix and its phonological environment, not by the category of the formative preceding or following the subject suffix.

Table 8.2. Subject suffixes

Person	Number	Gender	Subject suffix (final verbs)	Subject suffix (medial verbs)
1			<i>-i</i>	<i>-i</i>
2			<i>-eo ~ -ebo ~ -eb</i>	<i>-eb</i>
	Singular	Masc.	<i>-e</i>	<i>-e</i>
		Fem.	<i>-o</i>	<i>-o</i>
3		Neuter 1	<i>-e</i>	<i>-e</i>
		Neuter 1	<i>-o</i>	<i>-o</i>
		Neuter 2	<i>-o</i>	<i>-o</i>
1 EXCL/INCL	Plural		<i>-uo ~ -obo ~ -ob ~ -bio</i>	<i>-ob</i>
2/3			<i>-io ~ -ibo ~ -ib</i>	<i>-ib</i>

The first alternant (*-eo*, *-uo*, *-io*) is used if the subject marker is the last suffix in the verb form, followed by those cliticized illocutionary particles which start with /b/, namely *=be* ‘declarative’, *=bo* ‘emphatic/quotative’, and *=ble* ‘Exclamative’, to avoid two /b/’s in sequence at the last syllable boundary within the phonological word.

- (52) *ōbo unín=o ifu-b-eo=be/*ifubebbe*
 2SG.F food=N2 serve.IPFV-IPFV-2SG.F.SBJ=DECL
 ‘You (F) are serving food.’

The function of the subject suffix alternation is solely to avoid a clash of two /b/’s, if they constitute the coda of the penultimate and the onset of the last syllable of a phonological verbal word. The language does not mind heterosyllabic *b*-clash in any other position within a phonological word (cf. example (57) below).

In order to avoid *b*-clash, the second alternant (*-ebo*, *-obo*, *-ibo*) can be used but only in forms either inflected with *-n* ~ \emptyset ‘Realis’ or *-Vm* ‘Deontic’:

- (53) *kōbo unín=o ifa-n-ebo=be*
 2SG.M food=N2 serve.PFV-REAL-2SG.SBJ=DECL
 ‘You (M) served food.’

Instead of *ifanebobe*, one can use *ifaneobe* with the first subject suffix alternant. Subject suffix alternation is independent of semantics. Compare:

- (54) *ī ī-maye gò'-n-io=be/*gò'-n-ib=be*
 3PL.AN 3PL.AN-REFL cut_skin-REAL-2/3PL.AN.SBJ=DECL
 ‘They have cut themselves.’

- (55) *ī ī-maye gò'-n-ibo=be*
 3PL.AN 3PL.AN-REFL cut_skin-REAL-2/3PL.AN.SBJ=DECL
 ‘They have cut themselves.’

Whenever the subject suffix is followed by any other verbal suffix, e.g. a tense suffix in the post-subject slot, as in (56) or the negative clitic *=ba* (57), the third alternant must be used:

- (56) *kōbo unín=o ifa-n-eb-so=be*
 2SG.M food=N2 serve.PFV-REAL-2SG.SBJ-HPST=DECL
 ‘You (M) served food yesterday.’

- (57) *ōbo unín=o=mo ifu-b-eb=ba=be*
 2SG.F food=N2=NEG serve.IPFV-IPFV-2SG.SBJ=NEG=DECL
 ‘You (F) are not serving food.’

The same applies if the subject suffix is followed by any illocutionary clitic which does not start with /b/, for example the interrogative clitics =*a* and =*e*, for example in the formulaic greeting in (58):

- (58) *klayâm tl-Ø-eb=a?*
 very_good come.PFV-REAL-2SG.SBJ=Q
 ‘Did you arrive safe and sound?’ [Observed]

The third alternant also appears in all final verbs in which the subject suffix is the last morpheme, for example, before conjunctions or subordinators like *kesoa* ‘because’, *otâne* ‘but’, and *mole* ‘if’, as in (59):

- (59) *amît=e tala unê-b-ib kesoa*
 opening=SG.N1 enter go.IPFV-IPFV-2/3PL.AN.SBJ because
 ‘because they were entering the opening, ...’ [Dafinau]

The issue arises here as to whether /o/ in the second alternant, e.g. *-ebo* ‘2SG.SBJ’, is really part of the subject suffix. After all, it seems to occupy the same slot as the hesternal past suffix *-so* in the verb form *infanebso* ‘yesterday you served food’ in (56) above and might therefore be another tense suffix in the post-subject slot. Under negation, however, it is obvious that /o/ is not a tense suffix in the post-subject slot because it does not show up, whereas the tense suffix does. Compare:

- (60) *ifa-n-eb=ba=be/*ifanebobabe*
 serve_food.PFV-REAL-2SG.SBJ=NEG=DECL
 ‘You did not serve food.’
- (61) *ifa-n-eb-so=ba=be*
 serve_food.PFV-REAL-2SG.SBJ-HPST=NEG=DECL
 ‘Yesterday, you did not serve food.’

The subject suffix *-bio* in the first person plural is only chosen over *-uo* if the subject suffix follows the irrealis suffix:

- (62) *nī unín=o dowôn’-omab-bio=be*
 1PL.EXCL food=N2 eat.PFV-IRR.AN.PL.SBJ-1PL.SBJ=DECL
 ‘We (EXCL) want to eat food.’

It is never used when following any of the other TAM markers in the pre-subject slot. Although the first plural irrealis in *-bio* is the usual form in contemporary Mian, old speakers still use the first alternant for first person plural in *-uo*. The following example (63) is from an account of how spirit houses were built in former times. The speaker is well over 80 years old:

- (63) *tl-omab-uo=be*
 come.PFV-IRR.AN.PL.SBJ-1PL.SBJ=DECL
 ‘We would come.’ [Building a spirit house]

In medial verbs, only the first alternants of the subject suffix *-eb*, *-ob*, and *-ib*, are ever used. This can be explained phonologically. The second alternant comes into play to avoid *b*-clash at the syllable boundary between the penultimate and the last syllable of the verb. In medial verbs, the clitics *=a* and *=ta*, which mark the verb as medial and which form the last syllable of the phonological verbal word, never start with /b/. There can be no *b*-clash and consequently the alternation of the subject suffix is never triggered.

In two cases, there is solely phonologically conditioned allomorphy to avoid */ii/ or */ui/ sequences, e.g. the subject suffixes which begin in /i/, *-i* ‘first person singular subject’ and *-ib(o)* ‘second/third person plural animate subject’, are realized as *-ei* and *-eib(o)*, respectively, if they attach to a stem ending in a high vowel /i/ or /u/, such as *ki* ‘align, read’ or *fu* ‘cook’. Therefore, the correct forms are *kieibiobe* ‘I read’ and *fueibbiobe* ‘you(PL)/they cooked’.

8.5.3. Object prefix (accusative alignment)

Object marking on an accusative basis makes exclusive use of prefixes. While subject suffixes are obligatory in all finite verbs, this type of object marking is restricted to a very small subset of verbs. Furthermore, there are a few unpredictable irregularities in some prefix forms. Obligatory accusative object indexing is indicated by a dash before the verb stem.

Seven verb stems take an obligatory pronominal prefix which indexes the object and signals person, number, and (in the third person) gender of the object. These verb stems are:

- | | | |
|------|----------------|--------------------|
| (64) | <i>-e</i> | ‘hit, kill (IPFV)’ |
| | <i>-fũ’</i> | ‘grab (PFV)’ |
| | <i>-lò</i> | ‘hit, kill (PFV)’ |
| | <i>-nâ’</i> | ‘hit, kill (PFV)’ |
| | <i>-ntamâ’</i> | ‘bite (PFV)’ |

<i>-tém'</i>	'see (PFV)'
<i>-temê'</i>	'look at (IPFV)'

Although the obligatory object suffixes that these verbs take are subject to some irregularities (see below) and a lexical feature of these verb stems, it is conspicuous that the verbs of this class – with the exception of 'see' and 'look at' – are high in transitivity (Hopper and Thomson 1980).

The prefixes always index the person and number of the object. In the third person they also signal gender. The forms of the object cross-referencing prefixes are entirely distinct from the classificatory prefixes, with the exception of the first and second person singular forms where both classificatory prefixes and object prefixes have the typical TNG reflexes /n/ and /k/, respectively (Foley 2000: 362, Ross 2005: 32). Three sets of object prefixes can be distinguished. Table 8.3 gives the object prefix forms for all verbs under (64) above. Grey areas indicate the neutralization of a gender contrast.³

The object prefixes are somewhat irregular insofar as one verb has phonological variants for two of the prefixes. The verb *-e* 'hit, kill (IPFV)' only has prefixes of the form /C/ (i.e. without a vowel) and a form *(h)a-e* which contracts to *(h)a-* 'hit him (IPFV)'. Compare (65) where prefix and stem are fused and (66), which is prefixed regularly:

- (65) *(h)a-b-e=be*
 3SG.M.O.hit.IPFV-IPFV-3SG.M.SBJ=DECL
 'He's hitting him'

Table 8.3. Object prefixes (accusative alignment)

Object				Object prefix	
Person	Number	Gender	General	for <i>-nâ</i> 'hit, kill (PFV)'	for <i>-e</i> 'hit, kill (IPFV)'
1			<i>na-</i>	<i>na-</i>	<i>n-</i>
2			<i>ka-</i>	<i>ka-</i>	<i>k-</i>
	Singular	Masc.	<i>a-</i>	<i>a-</i>	<i>(h)a-</i> [<i>< (h)a-e</i>]
		Fem.	<i>wa-</i>	<i>wa- ~ u-</i>	<i>w-</i>
3		Neuter 1	<i>a-</i>	<i>a-</i>	<i>(h)a-</i> [<i>< (h)a-e</i>]
		Neuter 1	<i>wa-</i>	<i>wa- ~ u-</i>	<i>w-</i>
		Neuter 2	<i>wa-</i>	<i>wa- ~ u-</i>	<i>w-</i>
Animate plural	Plural		<i>ya-</i>	<i>ya- ~ i-</i>	<i>y-</i>

- (66) *k-e-b-e=be*
 2SG.O-hit.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He’s hitting you’.

In contrast to the subject markers, the object markers show a lesser degree of formal differentiation for the animate plural forms. Whereas the former collapses the second and the third person animate plural and obliterates the inclusive-exclusive distinction in the first person animate plural, all of which are formally distinct in the pronouns, the latter make no distinctions whatsoever in the animate plural. There is just one form for all persons (*ya- ~ y- ~ i-*).

Taking into account the fact that object marking on an accusative basis is restricted to seven verb stems and that, in this small class, markers show minor but unpredictable irregularities one would hardly want to call this type of object marking productive in Mian. Rather, it is a residual phenomenon.

8.5.4. Object (or subject) prefix (absolute alignment)

Mian has two mechanisms which mark arguments or properties of arguments on an absolute basis. These are classificatory prefixes, which classify one of the arguments of the verb on a semantic basis, and stem apophony in ‘cut and break’-verbs, which indicate only the number of the argument.

8.5.4.1. Classificatory prefixes

A sizeable subset of the verbal vocabulary requires a classificatory prefix, e.g. *dob-ò/—* ‘take (M-class object)’ or *ol-ò/—* ‘take (plural inanimate objects)’. These classificatory prefixes are formally fully distinct from the object prefixes used for the verbs, which indicate their object accusatively and the classification system relevant for these prefixes cross-cuts the gender system. Classificatory prefixes are dealt with in detail in chapter 5. Here, I confine myself to providing two examples illustrating the absolute nature of the classificatory prefixes, i.e. the object of a transitive verb (67) or the subject of an intransitive verb (68) are indexed:

- (67) *báangkli=e* *dob-ò-n-o=a*
 stone_adze=SG.N1 3SG.M_CL.O-take.PFV-SEQ-3SG.F.SBJ=MED
 ‘she took the *báankli* adze and then ...’ [Afoksitgabáam]

- (68) *Dabein om-mêin tl-Ø-o=ta*
 PN 3SG.F_CL.SBJ-fall.PFV come.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘Dabein came falling down (i.e. from the sky) and ...’ [Sofelok, 1]

8.5.4.2. Stem apophony in perfective ‘cut and break’-verbs

Five perfective-only ‘cut and break’-verbs indicate the number of the (inanimate) object through stem apophony on an absolutive basis. The alternation is always between /a/ for a singular object and /ε/ for a plural object. All of these verbs are compounds consisting of one of the five ‘cut and break’ verbs *wà* ‘cut’, *dà* ‘break off’, *bà* ‘cut across’, *hà* ‘cut alongside, break apart’, or *tà* ‘cut off’, and a semantically more general verb, e.g. *-lò* ‘hit’ or *-tlâa* ‘remove’, for example, *wa-lò* ‘cut (singular object)’ in (69) and *we-lò* ‘cut (plural object)’ in (70).

- (69) *dāb=e wà-lò-n-i=be*
 seed=SG.N1 cut.SG.O-hit.PFV-REAL-1SG.SBJ=DECL
 ‘I cut off a seed.’
- (70) *dāb=o wè-lò-n-i=be*
 seed=PL.N1 cut.PFV.PL.O-hit.PFV-REAL-1SG.SBJ=DECL
 ‘I cut off seeds.’

The number of verbs which obligatorily agree with their object in number only is quite small and semantically very homogeneous. Further examples are: *halò* ‘cut, break (singular wooden object)’ and *helò* ‘cut, break (plural wooden object)’, *batlâa* ‘break, tear apart (vine, leaf, tree bark)’ and *betlâa* ‘break, tear apart (plural vines, leaves, tree bark)’.

If a verb which indicates the number of its object by stem apophony is ambitransitive and the object of the transitively used verb becomes the subject of the intransitively used verb, as in (71). Stem apophony reflects the number of the subject.

- (71) *as=e hà-lò-s-e=a*
 tree=SG.N1 break.PFV.SG.SBJ-hit.PFV-DS.SEQ-3SG.N1.SBJ=MED
 ‘The tree broke (down) and then someone...’ [Flood]

In this case, both stem apophony in the verb and the subject suffix indicate properties of the subject. Number is expressed in the stem and person, number, and gender are expressed in the subject suffix.

8.5.5. Object suffix (indirective alignment)

Recipients are marked on the ditransitive verbs *-ûb*- ‘give (PFV)’ and *-ka*- ‘give (IPFV)’ with a suffix. Both belong to the class of verbs which obligatorily cross-reference and classify the theme object, i.e. the gift, with a classificatory prefix. In addition, they also take a suffix that cross-references the recipient (plus another suffix for the subject). While many Papuan languages display secundative alignment for the recipient in ditransitives, they treat the recipient like the object of a monotransitive verb, the alignment for the recipient argument in Mian is indirective, i.e. recipients are marked different from objects of monotransitive verbs.

Thus, *-ûb*- ‘give (PFV)’ and *-ka*- ‘give (IPFV)’ are examples of triple agreement, i.e. the indexing of subject and two objects by affixes on the verb. Triple agreement is a typologically rare phenomenon, both in Papuan languages and world-wide.

An example of *-ûb*- ‘give (PFV)’ is provided in (72):

- (72) *nē* *naka=e* *éil=o*
 1SG man=SG.M pig=SG.F

om-ûb-*a-Ø-i-bio=be*
 3SG.F_CL.O-give.PFV-3SG.M.R-REAL-1SG.SBJ-GPST=DECL
 ‘I gave the sow to the man.’

As in transitive clauses, none of the overt arguments *nē* ‘I’, *naka=e* ‘the man’, or *éil=o* ‘the sow’ in this example are marked for their syntactic role within the clause. Construal of grammatical roles proceeds by aligning the overt noun phrases with the agreeing pronominal affixes on the verb. In this case, *nē* ‘I’ is the subject because *-i* ‘first person singular subject’ is in the subject slot of the verb, and the noun phrases *naka=e* ‘the man’ and *éil=o* ‘the sow’ appear in a double object construction. Each object is indexed in a different way on the verb, *naka=e* ‘the man’ as the recipient object and *éil=o* ‘the sow’ as the theme object.

Like subject marking, recipient marking is suffixal and it is likewise obligatory. Unlike subject and object marking, however, recipient marking is sensitive to whether the marking suffix occurs in imperfective or perfective verb forms (see below). The set of recipient suffixes occurring with *-ûb*- ‘give (PFV)’ is summarized in table 8.4. Grey areas indicate the neutralization of a gender contrast. For ease of exposition, only the *ûb*-paradigm, i.e. the suffixes following *-ûb*- ‘give (PFV)’, is given here. Further below these forms are contrasted with the forms from the *ka*-paradigm, used in the imperfective. Recipient arguments of *-ûb*- ‘give (PFV)’ are always animate.

Table 8.4. Object suffixes for *-ûb*'- 'give (PFV)'

Person	Object		Object suffix
	Number	Gender	<i>ûb</i> -paradigm
1	Singular	[Grey area]	<i>-ne(n)</i>
2			<i>-ke(n)</i>
3			Masc. Fem.
1/2/3	Plural	[Grey area]	<i>-e(n)</i>

Note that there is one tense, namely *-b^(H)* 'Non-hodiernal past', in which the recipient suffixes can but do not have to be augmented with /n/:

- (73) *monî=o om-ûb'-an-b^(H)-i=be*
monî=o om-ûb'-a-b^(H)-i=be
 money=N2 3SG.F_CL.O-give.PFV-3SG.M.R-NHODPST-1SG.SBJ=DECL
 'I gave money to him (but not today).'

The verb 'give' shows aspect suppletion in the imperfective, where it is realized as *-ka-*. Consider the following habitual sentence:

- (74) *î blatik=o*
 3PL.AN plastic_bag=N2

do-ka-ye-bina-b-io=be
 PL.F_CL.O-give.IPFV-PL.AN.R-AUX.HAB-IPFV-2/3PL.AN.SBJ=DECL
 'They habitually give (a few) vomit bags to us (i.e. on the mission plane).'

The set of recipient cross-referencing suffixes for *-ka-* 'give (IPFV)' is summarized in table 8.5. For ease of comparison, I repeat the recipient forms in the perfective in this table. Both series have the typical TNG reflexes /n/ and /k/ the first and second singular forms (Foley 2000: 362, Ross 2005: 32). Grey areas indicate the neutralization of a gender contrast. Recipient arguments of *-ka-* 'give (IPFV)' and of *-ûb*'- 'give (PFV)' are always animate.

The imperfective root /ka/ might have some historical relation to the proto-Engan (TNG) verbal beneficiary suffix **-ka*. This form could be cognate with the third person recipient stem *kálaa* 'give to him/her/them' in Kewa (Franklin 1971: 66) and has possible reflexes in other TNG 'give' verbs (Reesink, in prep.).

Table 8.5. Object suffixes for *-ka-* ‘give (IPFV)’ and *-ûb-* ‘give (PFV)’

Person	Object		Object suffix	
	Number	Gender	<i>ka</i> -paradigm	<i>ûb</i> -paradigm
1	Singular	[REDACTED]	<i>-ne</i>	<i>-ne(n)</i>
2			<i>-ke</i>	<i>-ke(n)</i>
3			Masc.	<i>-ha</i>
		Fem.	<i>-we</i>	<i>-o(n)</i>
1/2/3	Plural	[REDACTED]	<i>-ye</i>	<i>-e(n)</i>

While perfective *-ûb-* ‘give (PFV)’ is an underived ditransitive verb in contemporary Mian and obligatorily index both theme and recipient, *-ka-* ‘give (IPFV)’ is apparently derived from the transitive verb *-ka* ‘put’, which only indexes the object with a classificatory prefix but does not have a recipient suffix:

- (75) *imen=e* *ob-ka-bina-b-i=be*
 taro=SG.N1 3SG.RESID.O-put-AUX.HAB-IPFV-1SG.SBJ=DECL
 ‘I (habitually) put down a taro.’

It is my conjecture that historically imperfective *-ka-* ‘give (IPFV)’ was derived from *-ka* ‘put (IPFV)’ in lieu of an imperfective stem for the defective verb *-ûb-* ‘give (PFV)’.

8.5.5.1. The zero root ‘transfer’

Mian has a perfective-only verb *-Øˆ(-)* with a very general meaning ‘transfer’, which is interpreted as ‘take’ when it only indexes the object (with a classificatory prefix) and as ‘give’ when both theme and recipient are indexed (with a classificatory prefix and an object suffix, respectively). This verb is interesting phonologically because it is segmentally zero, yet all word forms based on this root have a LHL tonal melody (indicated by the diacritic ‘ˆ’ after the zero stem). This suggests that there used to be a non-zero verb root ‘transfer’, which was elided, while the tone associated with it remained.

The following examples illustrate *-Øˆ* ‘take (PFV)’ without a recipient suffix (transitive), in (76), and *-Øˆ-* ‘give (PFV)’ with such a suffix (ditransitive), in (77). Note that these suffixes are formally different from the *ûb-* and *ka-* paradigms.

- (76) *unáng=o om-Ø̂-Ø̂-e=be*
 woman=N2 3SG.F_CL.O-take.PFV-REAL-3SG.M.SBJ=DECL
 ‘He took a wife.’
- (77) *moní=o om-Ø̂-wen-s-e=a*
 money=N2 3SG.F_CL.O-give.PFV-3SG.F.R-DS.SEQ-3SG.M.SBJ=MED
- yē dē'-n-o=be*
 there refuse.PFV-REAL-3SG.F.SBJ=DECL
 ‘He gave her (a coin/bill of) money, (but) there she refused (it).’

The set of recipient indexing suffixes for $-\text{Ø}^{\wedge}$ ‘give (PFV)’ is charted in table 8.6. Paradigms for $-ka-$ ‘give (IPFV)’ and $-ûb-$ ‘give (PFV)’ have been repeated here. Recipients for all three verbs are always animate.

The verb $-\text{Ø}^{\wedge}$ ‘give (PFV)’ has an alternative series of recipient suffixes which can be used with this verb only. These alternative recipient suffixes are given in table 8.7. Grey areas indicate person and number combinations where the gender contrast is neutralized.

Table 8.6. Object suffixes for all ditransitives

Object			Object suffix			
Person	Number	Gender	Zero paradigm	<i>ka</i> -paradigm	<i>ûb</i> -paradigm	
1	Singular	[Grey]	<i>-nen</i>	<i>-ne</i>	<i>-ne(n)</i>	
2			<i>-ken</i>	<i>-ke</i>	<i>-ke(n)</i>	
3			Masc.	<i>-an</i>	<i>-ha</i>	<i>-a(n)</i>
			Fem.	<i>-wen</i>	<i>-we</i>	<i>-o(n)</i>
1/2/3	Plural	[Grey]	<i>-yen</i>	<i>-ye</i>	<i>-e(n)</i>	

Two examples of the alternative series of recipient suffixes, which can only be used with the zero verb $-\text{Ø}^{\wedge}$ ‘give (PFV)’, are provided in (78) and (79) below. There does not seem to be a meaning difference between the recipient forms from the *-nen*, *-ken*, *-an*, *-wen*, *-yen* series (in the column ‘zero paradigm’ in table 8.6) and the alternative *-n*, *-kl*, *-al*, *-ul*, *-i* ~ *-y* series (in table 8.7).

Table 8.7. Alternative series of the object suffixes for $-\emptyset^{\wedge}$ - ‘give (PFV)’ in the perfective aspect

Person	Object		Alternative set of recipient suffixes for $-\emptyset^{\wedge}$ - ‘give (PFV)’
	Number	Gender	
1	Singular		<i>-n</i>
2			<i>-kl</i>
3		Masc. Fem.	<i>-al</i> <i>-ul</i>
1/2/3	Plural		<i>-i ~ -y</i>

- (78) *nē monî=o*
1SG money=N2

om-∅[∧]-kl-aamab-i=be

3SG.F_CL.O-give.PFV-2SG.R-IRR.NANPL.SBJ-1SG.SBJ=DECL

‘I will give you the money.’

- (79) *skemdâng=o om-∅[∧]-n=e!*
small_knife=N2 3SG.F_CL.O-give.PFV-1SG.R=HORT
‘Give me the small knife!’ [Observed]

8.5.5.2. Compounds with $-\hat{u}b$ - ‘give (PFV)’ in the perfective

The ditransitive verb $-\hat{u}b$ - ‘give (PFV)’ is productively used in a compound with another verb stem as a valency-increasing device with an applicative-like function. The use of ‘give’ as a valency-increasing device is attested in a number of TNG languages. It is a recurrent pattern in TNG languages that they use compounds or serializations with ‘give’ to express recipient or benefactive arguments (Foley 1986, Foley 2000, Reesink in prep.), for example Kewa (Franklin 1971), Menya (Whitehead 2004), and Tairora (Vincent 1973).⁴

In Mian, almost all intransitive and transitive verbs can be compounded with $-\hat{u}b$ - ‘give (PFV)’ in order to introduce another participant into the argument structure of the verb through the recipient suffix on the ‘give’-verb. This type of compounding is only used in the perfective. The spectrum of semantic roles that can be mapped onto this additional argument is quite wide and includes not only recipients but also benefactives, possessors, and goals of ballistic motion, depending on the semantics of the verb serialized with ‘give’.

The use of *-ûb'* 'give (PFV)' in a compound with an intransitive and a transitive verb is illustrated in examples (80) and (81), respectively.

- (80) *un-ûb'-ke-n-amab-i=be*
 go.PFV-give.PFV-2SG.R-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 'I will go for you.'

- (81) *naka=e*
 man=SG.M

dob-suana-˘b'-o-n-ebo=be
 3SG.M_CL.O-hate.PFV-give.PFV-3SG.F.R-REAL-2SG.SBJ=DECL
 'You hate the man for her (sake).'

The phonological shape of 'give' in a compound depends on the segmental context.

- (82) It is realized as /^{LHL}ub/ after consonants and /^{LHL}b/ after vowels:
un-ûb'-a [go.PFV-give.PFV-3SG.M.R] 'go for him (PFV)'
fu-˘b'-a [cook.PFV-give.PFV-3SG.M.R] 'cook for him (PFV)'

- (83) The forms are /^{LHL}ut/ (after consonants) and /^{LHL}t/ (after vowels) before /n/:
fu-˘b'-a [cook.PFV-give.PFV-3SG.M.R] 'cook for him (PFV)'
fu-˘t'-ne [cook.PFV-give.PFV-1SG.R] 'cook for me (PFV)'

However, allomorphy cannot be fully explained phonologically. For four perfective verb stems, all of which end in /a/, *klâ* 'fix, complete', *al tlia* 'be angry', *-nâ* 'hit, kill', and *hâ* 'break', /^{LHL}ub/ or /^{LHL}ut/ are consistently chosen even though the stem ends in a vowel, and we would expect /^{LHL}b/ or /^{LHL}t/, e.g.:

- (84) *ē* *no* *snuk=e*
 3SG.M rodent rat=SG.M

a-nâ'-ût'-ne-n-e=be
 3SG.M.O-kill.PFV-give.PFV-1SG.R-REAL-3SG.M.SBJ=DECL
 'He has killed the rat for me.'

This process is irregular. It does not apply to any other perfective stems ending in /a/. For example, *-â* 'leave, let', and *-biâ* 'throw' do select the expected 'give'-allomorphs /^{LHL}b/ or /^{LHL}t/ since they end in a vowel.

- (85) The form is /^{LHL}s/ when following the diphthongs /ai/ and /ei/ and preceding another vowel:

<i>wai-˘b'-ke</i>	[wait.PFV-give.PFV-2SG.R]	‘wait for you (PFV)’
<i>wai-˘s'-a</i>	[wait.PFV-give.PFV-3SG.M.R]	‘wait for him (PFV)’

Again, allomorphy cannot be fully explained phonologically. After the stem *dei* ‘leave (PFV)’ (of the verb *dê* ‘desist’), ‘give’ is always realized as /^{LHL}b/ never as /^{LHL}s/, although this verb conforms to the rule in (85) above.

The resulting compound verb complex constitutes one phonological word, e.g. regarding tone assignment and tonal contrast, and both verbs in the compound have to share the same subject and object argument. Concomitantly, any object cross-referencing prefix on the second verb in the serialization (in this case ‘give’) is gapped. This is a regular process in all V-V compounds in Mian and attested with other verbs apart from ‘give’. For instance, *-êb* ‘pick up, take along (PFV)’, which requires cross-referencing of its object with a classificatory prefix when appearing on its own, as in (86), appears without this prefix as the second element in a compounds, as in example (87):

- (86) *alél ò-to awók=o*
 wife SG.F-EMPH mother=SG.F
- om-ét-n-o=to*
 3SG.F_CL.O-take_with.PFV-SEQ-3SG.F.SBJ=MED
 ‘the wife took the mother, and then...’ [Afoksitgabáam]

- (87) *no=i ya-l-êb*
 marsupial=PL.AN PL.AN.O-kill.PFV-take.PFV
- tl-Ø-e=i*
 come.PFV-REAL-3SG.M.SBJ=PL.AN
 ‘the marsupials he has killed and brought’ [Crows]

In such compounds with for *-ûb* ‘give (PFV)’, the recipient argument will mostly be animate, but does not have to be. Table 8.8 list all recipient suffix form for *-ûb* ‘give (PFV)’ including the forms for the neuter genders.

In most cases, ‘give’ is compounded with a stem without causing any morphological change in the form of this stem. There are some exceptions to this general rule. Verbs which surface in a slightly different form when compounded with ‘give’ are listed in (88) below:

Table 8.8. Object suffixes for all ditransitives

Person	Object		Object suffix	
	Number	Gender	<i>ka</i> -paradigm	<i>ub</i> -paradigm
1			<i>-ne</i>	<i>-ne(n)</i>
2			<i>-ke</i>	<i>-ke(n)</i>
3	Singular	Masc.	<i>-ha</i>	<i>-a(n)</i>
		Fem.	<i>-we</i>	<i>-o(n)</i>
		Neuter 1	<i>-ha</i>	<i>-a(n)</i>
		Neuter 2	<i>-we</i>	<i>-o(n)</i>
Animate plural	Plural		<i>-ye</i>	<i>-e(n)</i>

- (88) *dê'—* 'stop, refrain (PFV)' *dei-* 'leave sb/sth (PFV)'
dobô'— 'feel, taste (PFV)' *dub-* 'feel to sb, taste to sb (PFV)'
-êb'— 'take, pick up (PFV)' *-ei-* 'pick up for sb (PFV)'
fa 'make fire (PFV)' *fe-* 'make fire for sb (PFV)'

Compare the following two examples:

- (89) *as=e* *fa-n-e=be*
fire=SG.N1 make_fire.PFV-REAL-3SG.M.SBJ=DECL
'He made a fire.'

- (90) *as=e*
fire=SG.N1

fe-˘b'-o-n-e=be
make_fire.PFV-give.PFV-3SG.F.R-REAL-3SG.M.SBJ=DECL
'He made a fire for her.'

As 'give' is very productively used in compounds with another verb to increase the valency of the whole verb complex by one, its function is essentially that of an applicative. Indeed there are two reasons to assume that the form *-(û)b'* is undergoing grammaticalization into an applicative morpheme.

First, there are two phonological processes that the compounded form undergoes which never apply to lexical *-ûb'* 'give (PFV)': (a) reduction to just /^{LHL}b/ after a vowel, and (b) realization as /^{LHL}s/ when preceded by the vowel sequences /*ei*/ or /*ai*/ and followed by another vowel.

Second, there is considerable semantic change from lexical *-ûb*- ‘give (PFV)’ to the semantically much more general meaning of the valency-increasing device, which can for instance introduce benefactives and possessors, which not necessarily have to be recipients (see 8.5.5.4).

For some verbs, compounding with *-(û)b*- ‘give’ is obligatory. These verbs only occur in a derived form with a recipient introduced as an argument of ‘give’, e.g. (91) for *-fu*- ‘send (PFV)’ and (92) for *ale*- ‘show (PFV)’. Note that the former also obligatorily indexes its object, whereas the latter does not:

- (91) *ō* *baa-n-o=a* *futâan=o*
3SG.F say.PFV-SEQ-3SG.F.SBJ=MED letter=N2

om-fu-˘b'-a-n-amab-i=bo
3SG.F_CL.O-send.PFV-give.PFV-2SG.R-AUX.PFV-IRR.NANPL.SBJ-
1SG.SBJ=QUOT

ge *baa-n-o=be*
say.PFV say.PFV-REAL-3SG.F.SBJ=DECL
‘She said she would send a letter to him.’ (lit. ‘She said: “I will send a letter to him.” ’)

- (92) *kasak=e*
kasak_ritual=SG.N1

ale-˘b'-e-Ø-ib-bio=ta
show-give.PFV-PL.AN.R-REAL-2/3PL.AN.SBJ-GPST=MED
‘they had shown us the Kasak (ritual), and then ...’
[Kasak ritual]

Although the recipient role in these examples is introduced by ‘give’, which suggests derivation from a simpler transitive base, such a base does not exist, thus **-fu* and **ale*.

8.5.5.3. Recipient marking in the imperfective

Verbs require compounding with *-ûb*- ‘give (PFV)’ in the perfective for a recipient argument to be expressed. They have to be inflected directly for the recipient in the imperfective (with a form from the *ka*-paradigm), rather than being compounded with *-ka*- ‘give (IPFV)’ followed by the recipient suffix. There are no morphological changes in the stem. Compare (93) without and (94) with a recipient suffix:

- (93) *unín=o ifu-b-o=be*
 food=N2 serve.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She is serving food.’
- (94) *unín=o ifu-ye-b-o=be*
 food=N2 serve.IPFV-PL.AN.R-IPFV-3SG.F.SBJ=DECL
 ‘She is serving food for us.’

Trans-aspectual stems, such as *fu* ‘cook’, can either be compounded with *-ûb’-* ‘give (PFV)’ followed by a recipient suffix from the *ûb*-paradigm in the perfective, as in (95), or be directly inflected with a recipient form from the *ka*-paradigm in the imperfective, as in (96):

- (95) *imen=o fu-‘b’-e-n-o=be*
 taro=PL.N1 cook-give.PFV-PL.AN.R-REAL-3SG.F.SBJ=DECL
 ‘She cooked taro for us.’
- (96) *biém=o imen=o fu-ye-b-o=be*
 mum=SG.F taro=PL.N1 cook-PL.AN.R-IPFV-3SG.F.SBJ=DECL
 ‘Mum is cooking taro for us.’

While both series of recipient suffixes are available for trans-aspectual verbs, the choice restricts the possibilities of subsequent TAM marking. For example, *fuyebobe* in (96) is marked as ‘Imperfective’ in the aspect slot. The realis marker *-n* in this position is impossible because it cannot be affixed directly in the imperfective, thus **fuyenobe*.

Some speakers extend the use of *-ûb’-* ‘give (PFV)’ to imperfective verbs in which the recipient is first or second person singular. One finds the expected forms *ase fakanebebe* ‘he is making a fire for me’ and *ase fakakebebe* ‘he is making a fire for you’ along with the serialized forms *ase fakat’nêbebe* and *ase fakab’kêbebe* with the same meanings, respectively. However in all other persons, ‘give’-serialization is impossible in the imperfective.

8.5.5.4. Semantic spectrum of the suffixed object

For the basic ditransitives *-ûb’-* ‘give (PFV)’, *-ka-* ‘give (IPFV)’, and *-Ø-* ‘give (PFV)’, the role mapped onto the object suffix is always an (animate) recipient. However, where ‘give’ is used in the perfective to derive an argument structure that includes a recipient and in directly inflected forms in the imperfective, the range of possible roles is much larger. Apart from recipients, e.g. in ‘send to’ or ‘show to’, one also finds:

- Benefactive/malefactive (e.g. ‘cook for’)
- Goal of verbs of ballistic motion (e.g. ‘throw to’)
- Malefactive source (e.g. ‘steal from’)
- Experiencer (e.g. ‘tastes sour to me’)
- Possessor (e.g. ‘hear my words’)

A very common semantic role for the object suffix is a benefactive, as in example (97) and (98):

- (97) *imen=o* *fu-ke-b-i=be*
 taro=PL.N1 cook-2SG.R-IPFV-1SG.SBJ=DECL
 ‘I’m cooking taro for you.’

- (98) *éil=e* *mak=e*
 pig=SG.M other=SG.M

a-na-ûb'-e-Ø-ib=a
 3SG.M.O-kill.PFV-give.PFV-PL.AN.R-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘They₁ killed another pig for them_k, and then they_k ...’ [Mianmin and Telefomin history]

Depending on the semantic-pragmatic context, a malefactive interpretation may also be possible, so the sentence in (98) could also mean ‘They killed another one of their pigs (i.e. against their will)’. Examples of a malefactive whose interpretation as such is not dependent on context are given in (99) and (100):

- (99) *Miantén* *awél=i* *yē*
 Mian_people father=PL.AN there

fote-˘b'-e-Ø-ib=a
 rout-give.PFV-PL.AN.R-DS.SEQ-2/3PL.AN.SBJ=DECL
 ‘They (i.e. the Telefomin people) routed the Mianmin fathers there, and then the Mianmin...’ [Mianmin and Telefomin]

- (100) *naka=i*
 man=PL.AN

gwi-ye-biaana-b-io=be
 use_poison-PL.AN.R-AUX.PST.HAB-IPFV-2/3PL.AN.SBJ=DECL
 ‘They used to use poison on people.’ [Dafinau]

It is common for the roles of possessor and benefactive/malefactive to be mapped onto the same argument of the verb, as in the following example:

- (101) *ulêta* *kwéit*
 who.SG.M sugar_cane
- hal-ût'-ne-n-e-bu=e?*
 break_off.PFV.SG.O-give.PFV-1SG.R-REAL-3SG.M.SBJ-GPST=CQ
 'Who broke off (some of) my sugar cane?' [Unangkliten story]

A clearer example of a possessor marked with a suffix on the verb *-ûb'* 'give', which in turn is compounded with another verb, follows suit. Possession can be indicated with an object suffix and a optional possessive pronoun, as in (102):

- (102) *(nē)* *wéng=o*
 (1SG.POSS) talk=N2
- went-ût'-ne-n-al=e!*
 hear.PFV-give.PFV-1SG.R-2SG.SBJ.HORT=HORT
 '(You should) Mark my words!'

While recipients and benefactives/malefactives are obligatorily marked on the verb with a suffix, possessor raising is optional. It is also possible to just have a possessive pronoun (without the object suffix cross-referencing the possessor):

- (103) *nē* *wéng=o* *wentê-n-al=e!*
 1SG.POSS talk=N2 hear.PFV-REAL-2SG.SBJ.HORT=HORT
 '(You should) mark my words!'

The malefactive source is a role associated with verbs like 'take from, steal'. The predicate in the following example (104) is not strictly a mono-lexemic trivalent verb but a serial verb construction in which the subject is only marked on the final verb:

- (104) *ī* *ayók* *ol-ei-ī'-ne*
 3PL.AN secretly PL.RESID.O-take.PFV-give.PFV-1SG.R
- un-Ø-io=be*
 go.PFV-REAL-2/3PL.AN.SBJ=DECL
 'They have stolen things from me.'

For verbs of ballistic motion, the goal can be encoded with an object suffix. An example is provided for *-bià* ‘throw (PFV)’:

- (105) *memâlo naka=e aful=e*
 now man=SG.M ball=SG.N1
- ob-ò-n-e=a unáng=o*
 3SG.RESID.O-take.PFV-SEQ-3SG.M.SBJ=MED woman=SG.F
- ob-bià-ˆb'-o-n-e=a*
 3SG.RESID.O-throw.PFV-give.PFV-3SG.F.R-SEQ-3SG.M.SBJ=MED
 ‘Now the man takes the ball and throws it to the woman, and then...’ [Ö. Dahl’s questionnaire, B8 (Dahl 1985)]

The interpretation of an entity as a goal (in this example *unáng* ‘woman’) towards which an event is directed is only possible with verbs of ballistic motion, not with motion verbs in general, thus:

- (106) *un-ûb'-ke-n-amab-i=be*
 go.PFV-give.PFV-2SG.R-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will go for you.’
 BUT *‘I’ll go to you.’

Here, the suffix *-ke* can only be interpreted as a benefactive, or possibly malefactive (e.g. ‘go against your will’), but not as a goal.

The only other role that can be mapped on the suffix is that of the experiencer in verbs denoting physiological or psychological states, as in (107) and (108):

- (107) *al=o yē*
 intestines=N2 there
- tliá-ûb'-e-n-o=ta*
 chew.PFV-give.PFV-PL.AN.R-SEQ-N2.SBJ=MED
 ‘they were angry (there) and then...’ (lit. ‘their intestines were chewing on them’) [Mianmin and Telefomin history]
- (108) *kēb gabaamón=e en-ke-b-e=a?*
 2SG.M.POSS head=SG.N1 pain.IPFV-2SG.R-IPFV-3SG.N1.SBJ=Q
 ‘Does your head pain?’

8.5.5.5. *Verbs with obligatory object suffix*

The following verbs are all transitive and require their object to be expressed with a suffix:

(109)	<i>al tlia-</i>	‘be angry (PFV)’
	<i>ale-</i>	‘show to’
	<i>atli-</i>	‘be angry (IPFV)’
	<i>da-</i>	‘help’
	<i>doko-</i>	‘forget (PFV)’
	<i>en-</i>	‘pain (IPFV)’
	<i>fote-</i>	‘chase away, rout’
	<i>-fu-</i>	‘send (PFV)’
	<i>gai-</i>	‘pass, surpass (PFV)’
	<i>men-</i>	‘touch (IPFV)’
	<i>mele-</i>	‘touch (PFV)’
	<i>wai-</i>	‘wait for (PFV)’

8.5.5.6. *Verbs which never have an object suffix*

In Mian object suffixes are a highly productive means of introducing an additional participant into the argument structure of the verb. However, there are a few verbs which do not allow derivation in this manner, such as:

(110)	<i>be</i>	‘be walking, keep V-ing (IPFV)’
	<i>ei</i>	‘fly (IPFV)’
	<i>dama</i>	‘grow up (PFV)’
	<i>gen</i>	‘be sick (IPFV)’
	<i>klen</i>	‘crackle (IPFV)’
	<i>un</i>	‘hum, drone (IPFV)’
	<i>sasan</i>	‘moan (IPFV)’

To this list are added some (complex) verbs referring to bodily processes, e.g. *kusang ge/kusang ga* ‘sneeze’, *usáan fu* ‘vomit’.

8.6. TAM morphology of final verbs

Mian has a rich system of tense, aspect, and mood categories. All TAM markers are suffixal and can occur in either one of two different slots in the morphological structure of the verb. The first slot is immediately before the

subject marker (pre-subject slot). Its fillers are tense, aspect, and mood markers, e.g. *-s* ‘Remote past’, *-b* ‘Imperfective’, and *-n ~ -Ø* ‘Realis’. The second slot immediately follows the subject marker slot (post-subject slot). It is reserved for markers with exclusively temporal meaning, e.g. *-so* ‘Hesternal past’.

Verb stems are either directly inflected for various TAM categories or they enter a periphrasis-like construction in which they are serialized with an existential auxiliary that bears the inflectional suffixes. This section deals with directly inflected verbs, the inflectional possibilities of the existential verb *n/bi~bl* (see 8.6.5), and finally those verb forms which require inflection of the stem with an auxiliary (see 8.6.7).

In directly inflected verbs, TAM markers are suffixed directly to the lexical verb stem. Table 8.9 sets out all TAM formatives filling the pre-subject slot and their co-occurrence restrictions with various stem types.

Table 8.9. TAM categories in directly inflected verbs (pre-subject slot)

Stem	TAM
Pfv (all stems)	<i>-n ~ -Ø</i> ‘Realis’
	<i>-nab</i> ‘Near past’
	<i>-b^(H)</i> ‘Non-hodiernal past’ ⁵
	<i>-s</i> ‘Remote past’
Pfv (only C-stems)	<i>-aa(m)</i> ‘Deontic’
	<i>-aamab/-omab</i> ‘Irrealis’
Ipfv (all stems)	<i>-mab/-omab</i> ‘Irrealis’
	<i>-b</i> ‘Imperfective’
	<i>-l</i> ‘Imperfective’

8.6.1. TAM markers (pre-subject slot)

Eight elements can go into the pre-subject slot, namely the tense markers *-nab* ‘Near past’, *-b^(H)* ‘Non-hodiernal past’, and *-s* ‘Remote past’, the aspect markers *-b* and *-l*, both ‘Imperfective’ and *-m* ‘Inchoative imperfective’, and the mood markers *-n ~ -Ø* ‘Realis’, *-(a)mab/-omab* ‘Irrealis’, and *-aa(m)* ‘Deontic’. The choice of TAM suffixes is restricted by aspect. Some TAM suffixes only occur in the imperfective, e.g. *-b* ‘Imperfective’. Others can only be directly suffixed in the perfective, e.g. *-n ~ -Ø* ‘Realis’. These distributional restrictions are summarized in table 8.10.

Only perfective stems can be directly inflected for tense. Only imperfective stems can be directly inflected for aspect. Only perfective stems can be directly inflected for ‘Realis’. The irrealis suffix can be appended directly to

perfective C-stems only, whereas it is always affixed directly in the imperfective. The deontic suffix is affixed directly only to perfective C-stems.

Table 8.10. Distributional restrictions of TAM markers in the pre-subject suffix slot

	Only in the perfective without auxiliary	Only in the imperfective
Tense	- <i>nab</i> ‘Near past’	—
	- <i>b^(H)</i> ‘Non-hodiernal past’	
	- <i>s</i> ‘Remote past’	
Aspect	—	- <i>b</i> , - <i>l</i> ‘Imperfective’
		- <i>m</i> ‘Inchoative imperfective’
Mood	- <i>n</i> ~ - \emptyset ‘Realis’	- <i>mab</i> /- <i>omab</i> ‘Irrealis’
	- <i>aamab</i> /- <i>omab</i> ‘Irrealis’ (C-stems only)	
	- <i>aam</i> ‘Deontic’ (C-stems only)	

8.6.1.1. -*nab* ‘Near past’

This indicates that an action took place a short time before the moment of speaking, as in the head-internal relative clause in (111):

- (111) *éim* *ayàab=e*
 pandanus pandanus_species=SG.N1

ga- \emptyset -ib-bu=e
 cook_in_leafoven-REAL-2/3PL.AN.SBJ-GPST=SG.N1

[...] *ali* *o-fâ-nab-ib=e*
 [...] smear 3SG.RESID.O-put.PFV-NRPST-2/3PL.AN.SBJ=SG.N1
 ‘the ayaab pandanus, which they had cooked in a leaf oven and smeared (on taro dough) and put down (a short while ago)’ [Ala ritual]

I assume that -*nab* is itself a complex suffix consisting of -*n* ‘Realis’ and the suffix -*ab*, which also appears in the complex irrealis suffix -*amab*, itself possibly consisting of the deontic suffix -*Vm* plus -*ab*. As it is synchronically difficult to assign a constant meaning to the formative -*ab*, I will analyse -*nab* as a single tense suffix indicating near past.

8.6.1.2. -*b^(H)* ‘Non-hodiernal past’

The marker -*b^(H)* locates an event in the past excluding today. At this stage, the semantics of this tense category – mostly the temporal remoteness which it

indicates – are not entirely clear. Consultants gave translations in which the remoteness ranged from only yesterday to the day before yesterday to a few weeks or months (but not years). It is however well-established that reference to an event which took place on the day including the moment of speaking is not possible.

As the non-hodiernal past marker is segmentally identical to the imperfective marker *-b* and both appear in the same slot in the verb, there is potential confusion between these forms. This, however, rarely happens because of the aspectual stem distinction and the concomitant distributional restrictions for TAM suffixes. In order to make this tense suffix identifiable at a glance it is written *-b^(H)* in the glosses. The H in brackets indicates that some forms of the non-hodiernal past have a high tone on the subject suffix. I distinguish four cases, which are summarized in table 8.11 below.

Table 8.11. Forms of the non-hodiernal past vs. the imperfective

	Stems	Non-hodiernal past	Imperfective
Defective	<i>kaan/—</i>	<i>kaanbebe</i> ‘he died’	n/a
	<i>—/ei</i>	n/a	<i>eibebe</i> ‘he’s flying’
Biaspectual	<i>baa/o</i>	<i>baabebe</i> ‘he said	<i>obebe</i> ‘he’s saying’
	<i>dowôn’/wen</i>	<i>dowonbibe</i> ‘I ate’	<i>wenbibe</i> ‘I’m eating’
	<i>ge/ga</i>	<i>gebibe</i> ‘I said’	<i>gabibe</i> ‘I’m saying’
	<i>ifa/ifu</i>	<i>ifabibe</i> ‘he served’	<i>ifubibe</i> ‘I’m serving’
	<i>ale-’b’-e/ ale-ha</i>	<i>alebâbibe</i> ‘I showed to him’	<i>alehabibe</i> ‘I’m showing to him’
H on SBJ	<i>dolâ</i>	<i>dolâbêbe</i> ‘I wrote’	<i>dolâbebe</i> ‘I’m writing’
	<i>singa</i>	<i>singabîbe</i> ‘I poured’	<i>singabibe</i> ‘I’m pouring’
Homophony	<i>gwi</i>	<i>gwibibe</i> ‘I poisoned’	<i>gwibibe</i> ‘I’m poisoning’

First, a defective verb may be perfective-only, i.e. it simply lacks an imperfective stem. Consequently, there can be no imperfective form, e.g. *kaan/—* ‘die’ has *kaanbebe* ‘he died (before today)’. This form cannot mean *‘he is dying’. Conversely, *eibebe* ‘he’s flying’, a form from the defective imperfective-only verb *—/ei* ‘fly’ can only be imperfective, since *-b^(H)* ‘Non-hodiernal past’ cannot directly attach to imperfective stems.

Second, for biaspectual verbs, the perfective and imperfective stems are formally distinct. In this case, the perfective stem inflected with *-b^(H)* ‘Non-hodiernal past’ refers to an action in the past, while the imperfective stem inflected with *-b* refers to a continuous or habitual action, e.g. *dowôn’/wen* ‘eat’ with *dowôn’-b^(H)-i=be* [eat.PFV-NHODPST-1SG.SBJ=DECL] ‘I ate (before today)’ and *wen-b-i=be* [eat.IPFV-IPFV-1SG.SBJ=DECL] ‘I am eating’ and *ifa/ifu* ‘serve food’ with *ifa-b^(H)-i=be* [serve_food.PFV-NHODPST-1SG.SBJ=DECL] ‘I served food (before today)’ and *ifu-b-i=be* [eat.IPFV-IPFV-1SG.SBJ=DECL] ‘I am serving food’. There may be other cues as to whether we

are dealing with a perfective or an imperfective form, for instance compounding with ‘give’ in the perfective versus direct affixation of the recipient marker in the imperfective, e.g. *ale-ˈb-a-b^(H)-i=be* [show-give-3SG.M.R-NHODPST-1SG.SBJ=DECL] ‘I showed to him (before today)’ versus *ale-ha-b-i=be* [show-3SG.M.R-IPFV-1SG.SBJ=DECL] ‘I am showing to him’.

Third, in some trans-aspectual verbs, for which there is no formal perfective/imperfective stem alternation, the subject marker receives a high tone which serves to disambiguate imperfective from non-hodiernal past forms, e.g. *singa* ‘pour’ with *singa-b^(H)-i=be* [pour-NHODPST-1SG.SBJ=DECL] ‘I poured (before today)’ versus *singa-b-i=be* [pour-IPFV-1SG.SBJ=DECL] ‘I am pouring’ versus and *dolâ* ‘write’ with *dolâ-b^(H)-e=be* [write-NHODPST-1SG.SBJ=DECL] ‘he wrote (before today)’ and *dolâ-b-e=be* [write-IPFV-1SG.SBJ=DECL] ‘he is writing’. This distinctive tone pattern is not restricted to trans-aspectual stems. It also appears in non-hodiernal past forms which would otherwise be distinguishable from the imperfective because of aspectual stem alternation. Even some perfective-only stems for which an imperfective interpretation is never possible show the tone change on the subject suffix in the non-hodiernal past, e.g. *gai* ‘pass (PFV)’ with *gai-ˈs-e-b^(H)-i=be* [pass.PFV-give-PL.AN.R-NHODPST-1SG.SBJ=DECL] ‘I passed them (before today)’, not *‘I’m passing them’.

Fourth, in a minority of cases there is no apparent difference between the non-hodiernal past and the imperfective. The forms are homophonous, e.g. *gwibibe* ‘I am poisoning (i.e. using black magic)’ and ‘I poisoned (i.e. used black magic) (before today)’.

8.6.1.3. -s ‘Remote past’

The tense suffix *-s* is used to locate an event in the remote past, from at least several months to years and decades ago. Consequently, it is mainly found in myths and stories about the past or in actual historical accounts. The remote past marker can only be suffixed directly to verb stems in the perfective.

Consider the following example from a historical account about the development of the relations between the Mianmin and their neighbours, the Telefomin.⁶

- (112) *yōle* *éil=e* *a-nâ’-s-ib=e?*
 well pig=SG.M 3SG.M.O-kill.PFV-RPST-2/3PL.AN.SBJ=Q
 ‘Well, did they kill the pig?’ [Mianmin and Telefomin history]

The same historical account contains other past forms which are marked with the general past marker *-bio* (a post-subject slot suffix) and not with *-s*

‘Remote past’. There seems to be a certain interchangeability between these two tenses.

8.6.1.4. -b ‘Imperfective’

The imperfective marker *-b* is used to refer to on-going and habitual situations. It can only be suffixed directly in the imperfective. It does not carry any specification as far as the temporal location of the situation described is concerned. If there is no indication to the contrary through some temporal reference point established by the context, a verb form marked with *-b* is by default interpreted as referring to the present:

- (113) *nī* *wen-b-uo=be*
 1PL.EXCL eat.IPFV-IPFV-1PL.SBJ=DECL
 ‘We (EXCL) are eating.’

- (114) *nē* *am=o* *gen-b-i=be*
 1SG house=N2 build.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am building a house.’

The default interpretation of *-b* as referring to the moment of speaking is an implicature which can be cancelled by establishing a different temporal reference point. Forms inflected with *-b* can occur in narrative texts in which temporal reference is clearly made to the past. This non-present temporal reference point can either be established by a temporal adverbial, by a verb in the past tense, or by the conventions of certain genres, for example in narrative texts or accounts of rituals and customs now defunct, e.g.:

- (115) *yo-m-in* *am=o* *gen-b-io=be*
 initiate-IPFV-VN house=N2 build.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They were building an initiation house.’ [Initiation]

Besides marking continuousness, *-b* can express that an action is performed iteratively over some extended time interval (116), or that it is performed habitually (117):

- (116) *ē* *amítye* *houhou* *ga-b-e=be*
 3SG.M always cough say.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is coughing often.’ OR ‘He coughs all the time.’ [TMA
 Questionnaire, 94]

- (117) *fút* *ēle* *ninín=o* *Sofelok=o=bo*
 tobacco DEM.PROX.SG.N1 name=N2 PN=PRD=QUOT
- ge* *o-ha-b-io=be*
 say.PFV say.IPFV-3SG.N1.R-IPFV-2/3PL.AN.SBJ=DECL
 ‘They call this tobacco Sofelok.’ (lit. They are saying: “The name
 of this tobacco is S.”’) [Sofelok, 2]

I assume that at an earlier stage of the language imperfective aspect had to be expressed through a serialization with the existential auxiliary *n/bi-bl*, which was then inflected for aspect and subject. This way of marking imperfective aspect has survived in certain verbs (X-stems, see 8.4), e.g.:

- (118) *nē* *sesá=tem* *hâa'-bl-Ø-i=be*
 1SG bush=in roam.IPFV-AUX.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am roaming the bush.’

Most verbs, however, have their imperfective form in *-b*, which probably is a phonologically eroded form of the imperfective form of the existential verb *bi-bl*. In example (119), **wenblibe* would be ungrammatical.

- (119) *nē* *imen=e* *wen-b-i=be*
 1SG taro=SG.N1 eat.IPFV-IPFV-1SG.SBJ=DECL
 ‘I’m eating a taro.’

8.6.1.5. -l ‘Imperfective’

The semantics of the imperfective marker *-b* above also apply to *-l*. I have not found a meaning difference between imperfective verb forms in *-l* and in *-b*. The generalization is that any verb that has a verbal noun in *-l* plus *-in* also has an imperfective form in *-l* in addition to the one in *-b* (see 8.7.2 on verbal nouns). Some examples are provided in table 8.12 (all inflected verb forms are first person singular subject).

8.6.1.6. -m ‘Inchoative imperfective’

Inchoatives are usually formed with the suffix *-m*. Exceptions are inchoative forms of imperfective N-stems (see below). The suffix *-m* is a marker of imperfectivity, which appears in inchoatives, some imperfective irrealis form, and imperfective hortatives and non-finite verbs.

Table 8.12. Verbs with an imperfective form in *-l*

Stem	Stem meaning	Ipfv in <i>-l</i>	Ipfv in <i>-b</i>	Verbal noun in <i>-l-in</i>
<i>baka</i>	'break across'	<i>bakalibe</i>	<i>bakabibe</i>	<i>bakalin</i>
<i>daka</i>	'break off'	<i>dakalibe</i>	<i>dakabibe</i>	<i>dakalin</i>
<i>faka</i>	'make fire'	<i>fakalibe</i>	<i>fakabibe</i>	<i>fakalin</i>
<i>fua</i>	'bathe'	<i>fualibe</i>	<i>fuabibe</i>	<i>fualin</i>
<i>haa</i>	'weave'	<i>haalibe</i>	<i>haabibe</i>	<i>haalin</i>
<i>haka</i>	'break alongside'	<i>hakalibe</i>	<i>hakabibe</i>	<i>hakalin</i>
<i>singa</i>	'pour'	<i>singalibe</i>	<i>singabibe</i>	<i>singalin</i>
<i>taka</i>	'cut off'	<i>takalibe</i>	<i>takabibe</i>	<i>takalin</i>
<i>waka</i>	'cut, break'	<i>wakalibe</i>	<i>wakalibe</i>	<i>wakalin</i>
<i>wen~un</i>	'eat'	<i>unalibe/</i> <i>*wenlibe</i>	<i>wembibe</i>	<i>unalin</i>

An example of an inchoative form is given below:

- (120) *ōlo* *yē* *fu-m-i=be*
 now there smoke-INCH-1SG.SBJ=DECL
 'Now I start smoking.' [Rolling smokes]

Inchoative forms are used to indicate the inception of an ongoing action or process at a certain point in time. As with the imperfective forms marked with *-b* and *-l*, inchoative forms do not carry any tense specification. Whenever there is no indication to the contrary, i.e. if there is no temporal reference point established by the context, present time reference is the default interpretation.

When the verb expresses a more punctual event, inchoative marking is interpreted as 'to be about to do' something:

- (121) *ēle* *ob-ka-m-i=be*
 here 3SG.RESID.O-put.IPFV-INCH-1SG.SBJ=DECL
 'I'm putting/about to put it down here.'

Inchoative forms of imperfective N-stems, for example *hen* 'seek (IPFV)', *ngaan* 'sing, call out (IPFV)', *ngen* 'beg (IPFV)', *sein* 'be happy (IPFV)' are zero-marked:

- (122) *nē* *hen-i=be*
 1SG seek.IPFV-1SG.SBJ=DECL
 'I start seeking.'

(123) \bar{e} *ngaan-e=be*
 3SG.M sing.IPFV-3SG.M.SBJ=DECL
 ‘He starts singing.’

(124) \bar{o} *sein-o=be*
 3SG.F be_happy.IPFV-3SG.F.SBJ=DECL
 ‘She is getting happy.’

Among the N-stems there is one notable exception where tone is employed to disambiguate segmentally identical forms. For the verb *ge/gen* ‘build, roll, fasten’, realis and inchoative forms are segmentally identical. To mark a form as inchoative, the H-toned inchoative stem *gēn* is used. Compare (125) and (126):

(125) *am=o* *ge-n-e=be*
 house=N2 build.PFV-REAL-3SG.M.SBJ=DECL
 ‘He built a house.’

(126) *am=o* *gēn-e=be*
 house=N2 build.IPFV.INCH-3.SG.M.SBJ=DECL
 ‘He starts building a house.’

8.6.1.7. -n ~ -Ø ‘Realis’

Realis indicates that an event has actualized status at the moment of speaking. There is a strong correlation between realis marking and past time reference. In fact, the event may have occurred at more or less any point in the past. By default this marker receives a temporal interpretation as an immediate past, i.e. that the action denoted by the verb has taken place immediately before the present moment, e.g.:

(127) *as=e* *fa-n-e=be*
 fire=SG.N1 make_fire.PFV-REAL-3SG.M.SBJ=DECL
 ‘He (has) made a fire.’

Only perfective stems can be directly inflected for realis mood. There is a strong tendency for *-n* ‘Realis’ to be realized as *-Ø* before the subject suffixes beginning in /i/, e.g. *fa-Ø-ibo=be* [make_fire.PFV-REAL-2/3PL.AN.SBJ=DECL] ‘you(PL)/they made a fire’. Moreover, it can be realized as *-Ø* in all other contexts if this does not lead to like-vowel clash. Thus, one also finds *faebe*

with the same meaning as in (127) above, but not **geebe* ‘he has built’. Here the form *genebe* has to be used to avoid a like-vowel sequence.

If the realis marker is suffixed to C-stems, it is always realized as zero, e.g. *un-Ø-io=be* [go.PFV-REAL-2/3PL.AN.SBJ=DECL] ‘you (PL)/they went’ or *tl-Ø-e=be* [come.PFV-REAL-3SG.M.SBJ=DECL] ‘he came’.

Mian realis forms are customarily translated into Tok Pisin using the completive marker *pinis*. That the category indicated by *-n* is not a deictically anchored tense category is evident from its semantics. Verbs marked as realis (without any further tense specification as in example (127), that is) most frequently have past time reference with an implicature of an immediate past but they can have present time reference in performatives (128):

- (128) *klayâm=o=bo*
really_good=PRD=QUOT

ge *baa-ˈb'-ke-Ø-i-o=be*
say.PFV say.PFV-give.PFV-2SG.R-REAL-1SG.SBJ-EP=DECL
‘I thank you.’ (lit. ‘I say to you: “Really good.” ’)

Realis-marked forms occur interspersed in texts about the far and remote past. This is a typical feature of realis verb forms in many Papuan languages (Bromley 1981). The following example comes from a historical account of an event which took place approximately 100 years ago:

- (129) *Miantén* *awél=i* *yē*
Mian_people fathers=PL.AN there

fote-ˈb'-e-Ø-i-b=a
rout-give.PFV-PL.AN.R-DS.SEQ-2/3PL.AN.SBJ=MED

un-Ø-io=be
go.PFV-REAL-2/3PL.AN.SBJ=DECL
‘They (the Telefomin) routed the fathers of the Mianmin and they (i.e. the Mianmin) went.’ [Mianmin and Telefomin]

The realis marker *-n* ~ *-Ø* can be combined with the tense markers *-so* ‘Hesternal past’, or *-bio* ‘General past’, which go into the post-subject slot, to locate the situation at different times in the past:

- (130) *Anafû=o* *om-fâ-Ø-e-su=o*
Anafu_arrow=N2 3SG.F_CL.O-put.PFV-REAL-3SG.M.SBJ-HPST=N2
‘The anafu arrow, which he put down there yesterday ...’ [Danenok]

8.6.1.8. -(a)mab ~ -aamab and -omab 'Irrealis'

If the subject of a verb directly inflected for irrealis is not animate plural, there are three allomorphs: *-aamab* is used with perfective C-stems, *-amab* is used with imperfective N-stems, and *-mab* is used for all other verbs that can be inflected for irrealis directly. If the subject of an irrealis verb form is animate plural, *-omab* is used without exception.

I assume that the irrealis suffixes are (at least historically) complex forms consisting of *-Vm* 'deontic' and the suffix *-ab*, which also appears in the complex suffix *-nab*, consisting of *-n* 'realis' plus *-ab*. As it is synchronically difficult to assign a constant meaning to the formative *-ab*, I will not further segment the irrealis suffixes.

The irrealis form of a verb is used to express that an event has either non-actualized status at the moment of speaking, including future events, predictions and intentions, or that the event occurs habitually in the past, comparable to the habitual meaning of *would* in English, e.g. *That summer we would rise early every morning*. The different functions of the irrealis are described in more detail below.

The only perfective stems which are directly inflected for irrealis are C-stems, e.g. *tl* 'come (PFV)', *un* 'go (PFV)', and *dowôn* 'eat (PFV)', all of which are either biaspectual or irregular, i.e. their perfective and imperfective stems are not homophonous. These C-stems select *-aamab* 'Irrealis', if the subject is not animate plural (131). If it is, the regular *-omab* suffix is used (132):

- (131) *dowôn'-aamab-i=be*
eat.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
'I will eat.'

- (132) *dowôn'-omab-io=be*
eat.PFV-IRR.AN.PL.SBJ-2/3PL.AN.SBJ=DECL
'You (PL)/they will eat.'

Similarly: *tl-aamab-i=be* 'I will go' and *tl-omab-io=be* 'you(PL)/they will go' and *un-aamab-i=be* 'I will go' and *un-omab-io=be* 'you(PL)/they will go'.

All imperfective stems can be directly inflected for irrealis. The most straightforward case are imperfective N-stems, where *-amab* and *-omab* are used:

- (133) *hen-amab-i=be*
seek.IPFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
'I will be seeking.'

- (134) *hen-omab-io=be*
 seek.IPFV-IRR.AN.PL.SBJ-2/3PL.AN.SBJ=DECL
 ‘You (PL)/they will be seeking.’

All other imperfective stems can also be directly inflected for irrealis. If the subject is animate plural the form has to be further inflected with *-m* ‘Imperfective’. Compare examples (135) and (136):

- (135) *as=e faka-mab-i=be*
 fire=SG.N1 make.IPFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will be making a fire.’
- (136) *as=e faka-m-omab-io=be*
 fire=SG.N1 make.IPFV-IPFV-IRR.AN.PL.SBJ-2/3PL.AN.SBJ=DECL
 ‘You (PL)/they will be making a fire.’

In trans-aspectual verbs, like *fu* ‘cook’, when an imperfective reading is intended, the form has to be further inflected with *-m* ‘Imperfective’ (137), if the subject is animate plural. Otherwise there is no inflection with *-m* (138):

- (137) *fu-m-omab-io=be*
 cook-IPFV-IRR.AN.PL.SBJ-2/3PL.AN.SBJ=DECL
 ‘You (PL)/they will be cooking.’
- (138) *fu-mab-i=be*
 cook-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will be cooking.’

Semantically, irrealis is used for actions intended at the moment of speaking, as in (139) but also for ‘thwarted’ actions in the past, i.e. intended actions which for some reason did not come to pass, as in (140):

- (139) *Dimoson=o wengsâng ô-ta om-êb=wāt*
 PN=SG.F story N2-EMPH 3SG.F_CL.O-take.PFV=across
- daa-n-amab-i=be*
 put-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I want to/am going to record the story of Dimosson’ (lit. ‘take and put across) [Dimosson]
- (140) *nē sintalo am=o*
 1SG yesterday house=N2

ge-n-amab-i

build.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ

otâne

but

sók=o

rain=N2

tle-b-o=ta

come.ITER-DS.SIM-N2.SBJ=MED

dê'-Ø-i-so=be

desist.PFV-REAL-1SG.SBJ-HPST=DECL

'I wanted to build a house yesterday but it was raining, and I

didn't do it.'

In example (140), the temporal reference point is anchored in the past due to the presence of the temporal expression *sintalo* 'yesterday' and the hesternal past inflection *-so* on the final verb. Hence, the verb inflected for irrealis *genamabi* 'I want(ed) to build' is interpreted accordingly as far as its temporal location is concerned. The irrealis is also used for predictions:

- (141) *balu=e* *tl-aamab-e=be*
 plane=SG.N1 come.PFV-IRR.NANPL.SBJ-3SG.N1.SBJ=DECL
 'The plane will come.' [Observed]

This example is clearly a prediction about the future and not a statement about the desires or intentions of an aeroplane. Irrealis with future meaning is frequently collocated with temporal expressions, such as *bomânomo* 'tomorrow', or clauses, such as *bomâsota* 'in the morning'.

Irrealis is also used for habitual actions in the past, as in the following example from an account of a traditional Mianmin initiation ritual:

- (142) *dingding=e* *te-na-s-e=ta*
 taro_rhizome=SG.N1 come.PFV-do-DS.SEQ-3SG.N1.SBJ=MED
- yōta* *tām* *tl-omab-io*
 only_then sideways come.PFV-IRR.AN.PL.SBJ-2/3PL.AN.SBJ
 'The taro rhizome would come up too and only then they (the
 initiants) would come out.' [Taro planting ritual]

The temporal setting of this account is clearly in the past because the ritual described has now been defunct for at least four decades. The events are actualized in the sense that the initiants would always come at that point in the ritual. However, it has been suggested in the literature that languages differ as to which events are treated as actual and which as non-actual (Chung and Timberlake 1985, Roberts 1990). Habitual events can be treated as irrealis.

8.6.1.9. -aa(m) 'Deontic' in C-stems

Deontic mood is a form of speaker-oriented modality used to express that the situation denoted by the verb *should* or – if negated – *must not* take place.

For C-stems, such as *dowôn* 'eat (PFV)', *s* 'sleep (PFV)', or *went* 'hear (PFV)', deontic mood is formed by suffixing *-aa(m)* directly to the stem:

- (143) *dowôn*'-aa(m)=e!
eat.PFV-DEONT=HORT
'I should eat (it).'

This modal category also marks the protasis in conditionals (see 13.2):

- (144) *nē* *éim=e* *dowôn*'-aa(m)-i=o
1SG pandanus=SG.N1 eat.PFV-COND-1SG.SBJ=N2
- al* *belâ-n-amab-i=be*
faeces break.PFV-AUX.PFV-NANPL.SBJ-1SG.SBJ=DECL
'If I eat pandanus, I'll get diarrhoea' (lit. '...I'll break faeces)
[Observed]

In deontic forms with C-final perfective stems, the suffix *-aam* is used if the following subject marker consists of just one vowel, in all other cases *-aa* is used. Compare:

- (145) *ē=mo* *wênt*'-aa(m)-e=ba=be
3SG.M=NEG hear.PFV-DEONT-3SG.M.SBJ=NEG=DECL
'He must not hear (it).'

- (146) *tēn=i=sna* *unáng=i=sna* *ī=mo*
child=PL.AN=too woman=PL.AN=too 3PL.AN=NEG

wênt'-aa-ib=ba=be
hear.PFV-DEONT-2/3PL.AN.SBJ=NEG=DECL
'Children and women must not hear (the name of the Sofelok tobacco).' [Sofelok, 2]

8.6.2. Tense markers (post-subject slot)

The tense slot after the subject marker has two fillers: *-bio* 'General past' and *-so* 'Hesternal past', which both have to co-occur with *-n* ~ *-Ø* 'Realis' in final

verbs. As *-so* and *-bio* fill the slot after the subject marker in a verb form, I assume that they are a more recent development than the tense markers in the slot before the subject marker.

Table 8.13. Tense marking in the post-subject slot

Stem	TAM	SBJ	TNS
		<i>-i</i>	
		<i>-eb</i>	
Pfv (all stems)	<i>-n ~ -Ø</i> 'Realis'	<i>-e</i>	<i>-bio</i> 'General past'
		<i>-o</i>	<i>-so</i> 'Hesternal past'
		<i>-ob</i>	
		<i>-ib</i>	

None of these markers can appear in directly inflected imperfective stems. For on-going events in the past, imperfective stems have to be serialized with the imperfective stem of the existential verb *bi~bl*, functioning as an auxiliary which bears the inflectional morphology (see 8.6.7).

8.6.2.1. *-bio* 'General past'

The general past marker *-bio*, *-bu* before any vowel, is used for situations that took place a few hours ago on the same day that contains the moment of speaking and for situations that occurred the day before yesterday or earlier (way back into the remote past), but cannot be used to temporally locate a situation yesterday.

In directly inflected verbs, *-bio* can only occur in the perfective, e.g.:

- (147) *ē* *skilón=daak*
3SG.M foot=down

na-ntamá'-n-e-bio=be

1SG.O-bite.PFV-REAL-3SG.M.SBJ-GPST=DECL

'It (a snake) bit me down in my leg.' [TMA Questionnaire B2]

- (148) *Deniel=e* *sesá=tem* *un-Ø-e-bu=a?*
PN=SG.M bush=into go.PFV-REAL-3SG.M.SBJ-GPST=Q
'Did Daniel go into the bush?' (asked at noon during the same day
on the morning of which he left)

In final verbs, *-bio* always co-occurs with the realis marker *-n ~ -Ø*, which is often realized as *-Ø* before the subject suffixes beginning in /i/. Moreover, it

can be realized as $-\emptyset$ in all other contexts if this does not lead to like-vowel clash. Thus, one also finds *nantamâ'ebiobe* 'he bit me' with the same meaning as in (147), but not **geebiobe* 'he built'. Here the forms *genebiobe* has to be used to avoid like-vowel sequences.

The general past morpheme only expresses that a situation held at some point in the past, which is at least a few hours removed from the present moment and not yesterday. If one desires a more precise temporal location, one has to use temporal adverbs or adverbials.

Collocation of the general past with the temporal noun *sintalo* 'yesterday' yields ungrammatical results:

- (149) \bar{e} (**sintalo*) *Houtam un- \emptyset -e-bio=be*
 3SG.M (yesterday) PN go.PFV-REAL-3SG.M.SBJ-GPST=DECL
 '(*Yesterday) He went to Hotmin.'

The general past stands in some functional competition to the non-hodiernal past. Both locate an event at some point in the past. However, a few differences in meaning are obvious.

First, the extensions of the two tenses are different. The non-hodiernal past is used for events that took place in the past excluding today, whereas the general past can be used for events that took place today up to a few hours before the moment of speaking but not for events that occurred yesterday.

Second, the non-hodiernal past seems to be restricted to a few days or maybe weeks before the moment of speaking while the general past can locate an event even in the most remote past. That leaves us with a stretch of time from the day before yesterday back to a few days or weeks before the moment of speaking, for which the general past and the non-hodiernal past are used more or less interchangeably.

8.6.2.2. -so 'Hesternal past'

The marker *-so* 'Hesternal past', *-su* before any vowel, is used to indicate that an event took place yesterday. It is also possible for referring to events which occurred on the day before yesterday. In directly inflected verbs, *-so* can only occur in the perfective. The hesternal past marker always co-occurs with the realis suffix $-n \sim -\emptyset$, which is often realized as $-\emptyset$ before the subject suffixes beginning in /i/. Moreover, it can be realized as $-\emptyset$ in all other contexts if this does not lead to like-vowel clash. Thus, there is *genesobe* 'he built yesterday', but not **geesobe*.

The hesternal past marker is typically collocated with the temporal expressions *sintalo* 'yesterday' or *sintalo \bar{o} sintao* 'the day before yesterday'

(lit. ‘yesterday’s yesterday’). However, there is a certain interchangeability between the general past and the hesternal past for situations that held on the day before yesterday. Typically, the general past marker *-bio* is used, but *-so* is also possible, so both (150) and (151) are correct:

- (150) *sintao ō sintalo* *Houtam*
 day_before_yesterday PN

un-Ø-o-so=be
 go.PFV-REAL-3SG.F.SBJ-HPST=DECL
 ‘She went to Hotmin the day before yesterday.’

- (151) *sintao ō sintalo* *Houtam*
 day_before_yesterday PN

un-Ø-o-bio=be
 go.PFV-REAL-3SG.F.SBJ-GPST=DECL
 ‘She went to Hotmin the day before yesterday’

8.6.3. Perfective stems serialized with *na* ‘do’

Perfective stems can generally be serialized with *na* ‘do’ before any further TAM suffixation. The function of *na* ‘do’ is to indicate that the event described by the verb takes place as well, e.g.:

- (152) *máam=e* *a-nâ’-n-eb=a*
 mosquito=SG.M 3SG.M.O-kill.PFV-SEQ-2SG.SBJ=MED

mak=e *a-nâ’-na-n-ebo=be*
 another=SG.M 3SG.M.O-kill.PFV-do-REAL-2SG.SBJ=DECL
 ‘You killed the mosquito and killed another (one) too.’

An example in which *na* appears in a medial verb is:

- (153) *nē* *memâlo* *fút=e*
 1SG now tobacco=N1.SG

tob-ò-n-i=a
 3SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED

futâan=o om-ò-na-n-i=a
 tobacco_paper=N2 3SG.F_CL.O-take.PFV-do-SS.SEQ-1SG.SBJ=MED
 ‘Now I take the tobacco, I also take the cigarette paper, and then
 I...’ [Rolling smokes]

8.6.4. A note on the verb *-êb* ‘take’

The verb *-êb* ‘take’ cannot be inflected directly at all. It can only be serialized with a basic motion verb, i.e. either ‘come’ or ‘go’. The motion verb may be modified with a directional indicating the direction of the movement. Compare (154) and (155):

(154) **éil=e deb-êt-n-e=be*
 pig=SG.M 3SG.M_CL.O-take.PFV-REAL-3SG.M.SBJ=DECL
 Intended: ‘He takes the pig (in order to carry it).’

(155) *éil=e deb-êb (tab)*
 pig=SG.M 3SG.M_CL.O-take.PFV (downriver)

un-Ø-e=be
 go.PFV-REAL-3SG.M.SBJ=DECL
 ‘He took the pig (downriver).’

This also holds for all verbs which contain *-êb*, such as *-silêb* ‘follow’, *-toulêb* ‘take into one’s arms’. These probably originated in V-V compounds.

8.6.5. Inflection of the existential verb

The existential verb *n/bi~bl* occurs on its own as a main verb with the meaning ‘be (there), stay, exist, remain’. The perfective stem *n* is always a bound form, whereas there are a bound stem *bl* and a free stem *bi* in the imperfective. The latter form, *bi*, can be inflected but can also appear in its bare form in serial verb constructions. The imperfective stem is realized as *bl* when followed by */i/*.

The existential verb plays an important role in the paradigms of verbs that need to be serialized with one of the stems of the existential verb to express certain TAM categories (see 8.6.7).

The existential verb has a number of irregular stems apart from the basic perfective-imperfective distinction *n/bi~bl*, which will be discussed below.

Table 8.14 sets out stem contrasts and inflectional possibilities for the existential verb.

There are several noteworthy features about TAM inflection in the existential verb.

First, *-n* ‘Realis’ contrasts with *-Ø* ‘Imperfective’, while in all other directly inflected verbs *-n* and *-Ø* are allomorphs with the meaning ‘Realis’. Thus, there are both (156) and (157):

Table 8.14. Stem contrasts and inflection of the existential verb *n/bi~bl*

Stem	TAM
<i>bi~bl</i> (Imperfective stem)	<i>-Ø</i> ‘Imperfective’
	<i>-n</i> ‘Realis’
<i>bi</i> (Imperfective stem)	<i>-s</i> ‘Remote past’
	<i>-aamab/ -omab</i> ‘Irrealis’
<i>biaa^H</i> (Non-hodiernal past stem)	<i>-b^(H)</i> ‘Non-hodiernal past’ ¹
<i>n</i> (Perfective stem)	<i>-Vm</i> ‘Deontic’
	<i>-aamab/ -omab</i> ‘Irrealis’
<i>bina</i> (Habitual stem)	
<i>biaana</i> (Past habitual stem)	<i>-b</i> ‘Imperfective’

(156) *a-fû’-n-e=be*
3SG.N1.O-grab.PFV-REAL-3SG.M.SBJ=DECL
‘He has grabbed it.’

(157) *a-fû’-Ø-e=be*
3SG.N1.O-grab.PFV-REAL-3SG.M.SBJ=DECL
‘He has grabbed it.’

This allomorphy is not found in the existential verb. Elision of *-n* in forms of the existential verb creates a semantic contrast. Compare (158) and (159):

(158) *bi-n-e=be*
stay.IPFV-REAL-3SG.M.SBJ=DECL
‘He has been staying (up to now).’

(159) *bi-Ø-e=be*
stay.IPFV-IPFV-3SG.M.SBJ=DECL
‘He is staying.’

The second noteworthy feature about the existential verb is that it has three additional stems apart from the perfective stem *n-* and the imperfective stems

bi~bl-: *biaa^H* ‘stay (Non-hodiernal past)’, example (160), *bina* ‘stay (Habitual)’, example (161), and *biaana* ‘stay (Past habitual)’.

(160) *biaa^H-b^(H)-i=be*
 stay.NHODPST-NHODPST-1SG.SBJ=DECL
 ‘I was staying (but not today).’

(161) *bina-b-o=be*
 stay.HAB-IPFV-3SG.F.SBJ=DECL
 ‘She stays habitually.’

Third, irrealis mood in the imperfective is formed with *-aamab*, if the subject is not animate plural. If it is, *-omab* is used:

(162) *bi-aamab-i=be*
 stay.IPFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will be staying.’

(163) *bi-omab-io=be*
 stay.IPFV-IRR.PL.AN.SBJ-2/3PL.AN.SBJ=DECL
 ‘You (PL)/they will be staying.’

The existential verb shows two contracted forms. When either of the forms *bi-Ø-e* [stay.IPFV-IPFV-3SG.M.SBJ] ‘he stays’ or *bi-Ø-o* [stay.IPFV-IPFV-3SG.F.SBJ] ‘she stays’ are followed by =*a* ‘Question’ the disallowed vowel clusters *[^mbiæ] and *[^mbio] are simplified to [^mbia] and [^mbua], respectively.

Apart from these differences, TAM inflection of the existential verb proceeds in much the same way as in other directly inflected verbs. The perfective stem *n* is used in irrealis forms in the perfective (164) and (165) and in deontic forms (166):

(164) *n-amab-i=be*
 stay.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will stay.’

(165) *n-omab-io=be*
 stay.PFV-IRR.PL.AN.SBJ-2/3PL.AN.SBJ=DECL
 ‘You/they will stay.’

(166) *n-im-i=be*
 stay.PFV-DEONT-1SG.SBJ=DECL
 ‘I should stay.’

Forms which are only marked *-n* ‘Realis’ are by default interpreted as referring to events having taken place immediately before the moment of speaking and appear interspersed in texts about the far and remote past.

- (167) *bi-n-o=be*
 stay.IPFV-REAL-3SG.F.SBJ=DECL
 ‘She has been staying (up to now)/was staying.’

For realis forms, further temporal specification is possible by suffixing *-so* ‘Hesternal past’ or *-bio* ‘General past’:

- (168) *bi-n-i-so=be*
 stay.IPFV-REAL-1SG.SBJ-HPST=DECL
 ‘I was staying yesterday.’

- (169) *bi-n-i-bio=be*
 stay.IPFV-REAL-1SG.SBJ-GPST=DECL
 ‘I was staying.’

8.6.6. Negation (with the existential verb)

Negation is commonly expressed with the negative particle *mo* and the clitic *=ba*, which is always the last formative in the verb before the illocutionary particle (see 3.13.3). Mian has an alternative way of expressing negative polarity in the perfective only, involving an invariable form of the existential verb:

- (170) *Tesinab=e* *tl-im* *bl-im=o=be*
 PN=SG.M come.PFV-NEG exist-NEG=PRD=DECL
 ‘Tessinab hasn’t come.’ [Observed]

In this example the perfective verb stem *tl* is inflected with *-im* signalling negative polarity, followed by the existential verb *bl* inflected with the same suffix, effectively yielding a double negation construction.

The exact semantic difference between this type of negation and the negation with *=ba* and their respective usages are not fully clear at the moment. However, a few observations can be made which might inform further research. The negation with the existential verb is restricted to perfective aspect and can only be used to express negative polarity of events which could have happened (but did not happen) in the past. For instance, it is

not allowed with future time reference. In order to say that someone will not or does not want to come, only the *ba*-negation is possible:

- (171) *Tesinab=e=mo tl-aamab-e=ba=be*
 PN=SG.M=NEG come.PFV-IRR.NANPL.SBJ-3SG.M.SBJ=NEG=DECL
 ‘Tesinab won’t/doesn’t want to come.’

Likewise negation with the existential verb is disallowed in the imperfective. Again, the *ba*-negation needs to be used:

- (172) *Tesinab=e=mo wen-b-e=ba=be*
 PN=SG.M=NEG eat.IPFV-IPFV-3SG.M.SBJ=NEG=DECL
 ‘Tesinab isn’t eating.’

8.6.7. Auxiliary-serialized verbs

For some TAM combinations, e.g. realis or remote past marking in the imperfective, verbs have to be serialized with a range of auxiliary stems, which all belong to the existential verb. Also, verbs of some conjugation classes (see 8.4) require an auxiliary to be inflected for certain TAM categories, e.g. irrealis in V-stems, as opposed to N-stems which are directly inflected. The stems of the existential verb are used as auxiliaries in the sense that they are necessary in the verb form to bear the inflection. All stems used as auxiliaries also appear in independent forms of the existential verb.

The justification of this analysis as a serialization has to be postponed after the criteria for verb serializations have been discussed (see 11.1.4).

Table 8.15 below summarizes all possibilities for the serialization of perfective and imperfective stems with an auxiliary stem.

While directly inflected verbs have *-n* and *-Ø* as allomorphs with the meaning ‘Realis’, in the inflection of the existential verb *-n* ‘Realis’ contrasts with *-Ø* ‘Imperfective’ (see 8.6.5 above). We observe the same contrast in auxiliary-serialized verb forms. Compare (173) and (174):

- (173) *a-fü’-bi-n-e=be*
 3SG.N1.O-grab.PFV-AUX.IPFV-REAL-3SG.M.SBJ=DECL
 ‘He has been holding it (up to now).’

- (174) *a-fü’-bi-Ø-e=be*
 3SG.N1.O-grab.PFV-AUX.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is holding it.’

Table 8.15. Auxiliary-serialized verb forms

Verb stem	Auxiliary	TAM
	<i>-bi ~ -bl</i> ‘Imperfective Aux’	$-\emptyset$ ‘Imperfective’
Perfective	<i>-bi</i> ‘Imperfective Aux’	<i>-n</i> ‘Realis’
		<i>-s</i> ‘Remote past’
		<i>-aamab</i> ‘Irrealis’
	<i>-biaa^H</i> ‘Non-hodiernal past Aux’	<i>-b^(H)</i> ‘Non-hodiernal past’
	<i>-n</i> ‘Perfective Aux’	<i>-Vm</i> ‘Deontic’
		<i>-amab</i> ‘Irrealis’
Imperfective	<i>-bi</i> ‘Imperfective Aux’	<i>-n</i> ‘Realis’
		<i>-s</i> ‘Remote past’
	<i>-biaa^H</i> ‘Non-hodiernal past Aux’	<i>-b^(H)</i> ‘Non-hodiernal past’
	<i>-bina</i> ‘Habitual Aux’	<i>-b</i> ‘Imperfective’
	<i>-biaana</i> ‘Past habitual Aux’	

8.6.7.1. Auxiliary-serialization with imperfective stems

Imperfective stems need an auxiliary in order to be inflected for *-n ~ -∅* ‘Realis’, *-s* ‘Remote past’, or *-b^(H)* ‘Non-hodiernal past’, and for the (present) habitual and the past habitual.

Imperfective V-stems (i.e. verbs stems ending in an vowel) cannot be inflected directly for realis mood. Instead, they have to be serialized with the imperfective stem *bi* of the existential verb. Realis forms have immediate past as their default temporal interpretation, but they occur interspersed in texts about the far and remote past:

- (175) *wen-bi-n-e=be*
 eat.IPFV-AUX.IPFV-REAL-3SG.M.SBJ=DECL
 ‘He has been eating (until now).’ OR ‘He was eating (at any time in the past)’

Forms with the auxiliary *bi* inflected with *-n* ‘Realis’ can be further suffixed with *-so* ‘Hesternal past’ and *-bio* ‘General past’ to locate events at different levels of temporal remoteness:

- (176) *wen-bi-n-e-so=be*
 eat.IPFV-AUX.IPFV-REAL-3SG.M.SBJ-HPST=DECL
 ‘He was eating yesterday.’

- (177) *wen-bi-n-e-bio=be*
 eat.IPFV-AUX.IPFV-REAL-3SG.M.SBJ-GPST=DECL
 ‘He was eating.’

Suffixation of a *bi*-serialized verb stem with the remote past suffix *-s* indicates an unbounded event in the remote past:

- (178) \bar{e} *sinanggwáno* *sesá=tem*
 3SG.M long_time_ago bush=in

háa'-bi-s-e=be

roam.IPFV-AUX.IPFV-RPST-3SG.M.SBJ=DECL

'A long time ago, he was roaming the bush.' [TMA Questionnaire, B5]

Unbounded events in the past excluding the day containing the moment of speaking are formed with the non-hodiernal past auxiliary stem *biaa^H*. This auxiliary only co-occurs with *-b^(H)* 'Non-hodiernal past' in the TAM slot, as in (179). Non-hodiernal past forms of the existential verb always bear a high tone on the subject suffix.

- (179) \bar{e} *sesá=tem*
 3SG.M bush=in

háa'-biaa^H-b^(H)-e=be

roam.IPFV-AUX.NHODPST-NHODPST-3SG.M.SBJ=DECL

'He was roaming the bush (yesterday or before that)' [TMA Questionnaire, B4]

As in directly inflected verbs, the tense suffixes *-s* 'Remote past' and *-b^(H)* 'Non-hodiernal past' cannot co-occur with any of tense markers in the post-subject tense slot, e.g. *-bio* 'General past'.

8.6.7.2. Habitual forms

Verbs inflected with *-b* 'Imperfective' can have a (present) habitual interpretation apart from the more basic continuous meaning (see 8.6.1.4). However, there is also a dedicated habitual construction involving the auxiliary habitual stem of the existential verb *bina*. As one would expect, the habitual auxiliary cannot be collocated with perfective stems. Habitual verb forms are always further suffixed by *-b* 'Imperfective'.

- (180) *ae, nē amitye*
 yes, 1SG always

a-temê'-bina-b-i=be
 3SG.M.O-see.IPFV-AUX.HAB-IPFV-1SG.SBJ=DECL
 'Yes, I see him all the time.' [TMA Questionnaire, 40]

Habitual verb form with *bina* are often collocated with the adverbs *sún(ye)* 'habitually' and *amít(ye)* 'always'.

The past habitual is formed by serializing *biaana* with an imperfective stem. Again, there is obligatory further suffixation of the imperfective aspect suffix *-b*:

(181) *naka=i*
 man=PL.AN

gwi-ye-biaana-b-io=be
 use_poison-PL.AN.R-AUX.PST.HAB-IPFV-2/3PL.AN.SBJ=DECL
 'They used to use poison magic on people (but not anymore).'
 [Dafinau]

8.6.7.3. Auxiliary-serialization with perfective stems

Some perfective stems can be serialized with an imperfective auxiliary in order to express that the result of the action denoted by the perfective stem is continuing after the execution of the action. Consider the perfective-only verb stem *-fû'—* 'grab'. In (182), the result of a punctual action is described. In (183), the focus is on the continuation of the result of the action of grabbing, i.e. holding:

(182) *a-fû'-n-e=be*
 3SG.N1.O-grab.PFV-REAL-3SG.M.SBJ=DECL
 'He has grabbed it.'

(183) *a-fû-bi-n-e=be*
 3SG.N1.O-grab.PFV-AUX.IPFV-REAL-3SG.M.SBJ=DECL
 'He has been holding it.' (lit. 'He has grabbed it and has been staying up to now')

The core class of perfective stems which can be serialized with a stem of the existential verb in the function of an auxiliary are those which show this aspect alternation. Perfective stems which belong to the core class almost all lack an imperfective stem:

(184)	-â'—	'leave, let, allow'
	<i>beitalô</i> /—	'become weak, become lazy'
	-bià/—	'throw'
	<i>bina</i> /—	'shoot'
	<i>dobô</i> /—	'feel, taste'
	<i>doko</i> -/—	'forget'
	-êb/—	'pick up, take (in order to carry)'
	-toulêb/—	'gather in arms (in order to carry)'
	<i>êi</i>	'impound (water)'
	-fâa/—	'lift'
	-fû'/—	'grab'
	-fu-/—	'send'
	<i>gai</i> -/—	'pass, surpass'
	<i>go</i> /—	'grow to like'
	<i>goholo tete</i> /—	'curl up (to sleep)'
	<i>hebâ</i>	'lean'
	<i>kaan</i> /—	'die'
	<i>klafâ</i> /—	'put on the back (in order to carry)'
	<i>mâa</i> '/—	'stand up'
	<i>mâm hala</i> /—	'gasp for air'
	<i>menga</i> /—	'pull taut, force, compel'
	<i>mî</i> '/—	'meet, gather'
	-môu/—	'put on shoulder (in order to carry)'
	-ntamâ'/—	'bite'
	-ò/—	'take'
	<i>omfle</i> -/—	'miss, come close'
	-tamaa/—	'step on'
	<i>tetena</i> /—	'come together'
	<i>tlâa</i> '/—	'be sad'
	<i>toun</i> /—	'sit down'
	-usâ'	'put on (clothes), has an IPFV stem
		-uka 'wear')
	<i>ulâa</i> '/—	'open'
	-waa/—	'hide'

From this core group of perfective stems, the possibility of auxiliary-serialization extends to other perfective stems, for which the aspect alternation is less obvious because they refer to activities, which are extended in time, rather than to punctual events. Some of these have distinct imperfective stems, for example:

- (185) *dowôn'* 'eat (PFV)', has an IPFV stem *wen* 'eat (IPFV)'
fa 'make a fire (PFV)', has an IPFV stem *faka* 'make
a fire (IPFV)
kimâa'— 'look out for, guard, protect'
mama— 'walk around'
meleklaa— 'work hard'
melek— 'work hard'
-silêb— 'follow (directly)'

An example is provided in (186):

- (186) *nē dowôn'-bi-n-i-so=be*
1SG eat.PFV-AUX.IPFV-REAL-1SG.SBJ-HPST=DECL
'Yesterday, having eaten I was staying.'

As there is an obvious aspect mismatch in forms like *dowôn'binisobe* in (186), which consists of a perfective stem *dowôn'* 'eat' and an imperfective auxiliary *bi*, the two events cannot be interpreted as overlapping but rather as a bounded event plus the continuation of the result of this event, thus *dowôn'binisobe* 'yesterday, having eaten I stayed'.

In order to express that the result of a bounded event is continuing at the present moment, a perfective stem must be serialized with the imperfective auxiliary stem *bi* which is then suffixed by *-Ø* 'Imperfective', as in (187):

- (187) *két=e*
container=SG.N1

a-fû'-bi-Ø-e=be
3SG.N1.O-grab.PFV-AUX.IPFV-IPFV-3SG.M.SBJ=DECL
'He's holding the container' (lit. 'Having grabbed the container,
he's staying')

Imperfective stems generally do not have this possibility, but see 8.4 for obligatorily auxiliary-serialized verbs in the imperfective (X-stems), where an imperfective stem is followed by a form of the existential verb.

8.6.7.4. Auxiliary-serialized irrealis forms of perfective stems

All vowel-final perfective stems have to be serialized with the perfective auxiliary *n* in order to be inflected for irrealis. The irrealis suffixes are always

-*amab* for a subject not in the animate plural, and -*omab* for animate plural subjects. Compare:

(188) *fu-n-amab-i=be*
 cook-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will cook.’

(189) *fu-n-omab-io=be*
 cook-AUX.PFV-IRR.ANPL.SBJ-2/3PL.AN.SBJ=DECL
 ‘You (PL)/they will cook.’

Only perfective stems can appear with the imperfective auxiliary *bi* inflected for irrealis in order to express that an event will or would take place and the result of this event will continue after that, e.g.:

(190) *két=e*
 container=SG.N1

a-fû’-bi-aamab-i=be
 3SG.N1.O-grab.PFV-AUX.IPFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will be holding the container.’ (lit. ‘I grab the container and will be staying’)

(191) *fa-bi-omab-io=be*
 make_fire.PFV-AUX.IPFV-IRR.ANPL.SBJ-2/3PL.AN.SBJ=DECL
 ‘You (PL)/they will make a fire and stay (having made it).’

Imperfective stems have to be directly inflected for irrealis 8.6.1.8.

8.6.7.5. Auxiliary-serialized verb forms plus -Vm ‘Deontic’

Deontic mood is a form of speaker-oriented modality used to express that the situation denoted by the verb *should* or – if negated – *must not* take place.

All deontic forms of vowel-final perfective stems are serializations of a perfective lexical verb stem and the perfective auxiliary *n*, which is inflected for deontic mood with the suffix -Vm. The capital ‘V’ indicates regressive vowel harmony. The suffix vowel always has the same quality as the first vowel in the following subject marker (see 2.7.2 on vowel harmony in this suffix):

- (192) \bar{i} $am=o$
 3PL.AN house=N2

ge-n-im-io=be
 build.PFV-AUX.PFV-DEONT-2/3PL.AN.SBJ=DECL
 ‘They are should/must build a house.’

Verbs inflected with *-Vm* are often found in the protasis of conditionals (see 13.2 on adverbials). In that case the interpretation is ‘Conditional’ rather than ‘Deontic’, e.g.:

- (193) $n\bar{e}$ $f\acute{u}t=e$ $hal\grave{a}'-n-im-i=o$
 1SG tobacco abstain.PFV-AUX.PFV-COND-1SG.SBJ=N2
 ‘If I abstain from tobacco...’

Negation of deontic forms (i.e. with the clitic *=ba* and the negation particle *mo*) expresses that an action is impossible or forbidden:

- (194) $t\bar{e}n=i=sna$ $un\acute{a}ng=i=sna$ $\bar{i}=mo$
 child=PL.AN=too woman=PL.AN=too PL.AN=NEG

went-aa-ib=ba=be
 hear.PFV-DEONT-2/3PL.AN.SBJ=NEG=DECL
 ‘Children and women must not hear (the name of the Sofelok tobacco).’ [Sofelok, 2]

8.6.7.6. Prohibitive

For the prohibitive, deontic verb forms followed by a hortative illocutionary particle are used. Although the verb cannot be marked for negative polarity with *=ba* ‘negation’ in the prohibitive, negation is obligatorily expressed through the negation particle *mo*:

- (195) $f\acute{u}t=e=mo$ $fu-n-em-eb=e!$
 tobacco=SG.N1=NEG smoke-AUX.PFV-DEONT-2SG.SBJ=HORT
 ‘You must not smoke!’

Prohibitives always take the hortative illocutionary marker *=e* (*=ne* after vowels):

- (196) $\bar{o}=mo$ $tl-aam-o=ne!$
 3SG.F=NEG come.PFV-DEONT-3SG.F.SBJ=HORT
 ‘She must not come!’

8.6.8. Hortative

The hortative is a form of speaker-oriented modality used to express the speaker’s wish that an action (which can involve the speaker himself) take place immediately or as soon as possible. Hortatives can be formed in the perfective or the imperfective.

Mian hortatives are interesting because their formation involves a special set of subject suffixes which cannot be found in any other paradigm. Hortatives are additionally marked by an illocutionary particle $=o \sim =e$:

8.6.8.1. Perfective hortatives

These are inflected for realis mood with $-n \sim -\emptyset$ ‘Realis’ (table 8.16). Before /i/, realis mood is mostly realized as $-\emptyset$.

Table 8.16. Perfective hortatives

Stem	Mood	Hortative subject marker	Illocutionary particle
Perfective	$-n \sim -\emptyset$ ‘Realis’	$-an$ ‘1SG’	$=o$
		$-al$ ‘2SG’	$=e$
		$-ek$ ‘3SG.M’	$=o$
		$-ok$ ‘3SG.F’	$=o$
		$-om$ ‘1PL’	$=o$
		$-in$ ‘2/3PL’	$=e$

Some speakers realize the suffixes $-an$ ‘1SG.SBJ.HORT’ and $-al$ ‘2SG.SBJ.HORT’ as $-aan$ [a[̣]n] and $-aal$ [a[̣]l], i.e. with a pharyngealized /a[̣]/, respectively. A full paradigm of perfective hortative forms for *ase fa* [fire make.PFV] ‘make fire (PFV)’ follows:

- (197) *ase fa-n-an*=o ‘I should make a fire!’
ase fa-n-al=e ‘You should make a fire!’
ase fa-n-ek=o ‘He should make a fire!’
ase fa-n-ok=o ‘She should make a fire!’
ase fa-n-om=o ‘Let’s make a fire!’
ase fa(-n)-in=e ‘You (PL)/they should make a fire!’

As the realis suffix is mostly realized as $-\emptyset$ before /i/, both *ase fanine* and *ase faine* ‘You (PL)/they should make a fire!’ exist, the latter form being much more common. In fact, realis can always be realized as $-\emptyset$ as long as this does not lead to a like-vowel sequence. Thus, both *ase faneko* and *ase faeko* ‘He should make a fire!’ exist, but not **ase faale* ‘Intended: You should make a fire!’.

Prima facie, it might seem that second persons take the illocutionary particle $=e$ (while all others take $=o$) and thus could be termed proper imperatives, in which a direct command is issued to a second person, whereas $=o$ would only appear in hortatives, i.e. non-second person directives. Yet, the occurrence of $=e$ is not completely restricted to second persons but appears in the third person plural as well.

After perfective C-stems, such as *dowôn* ‘eat (PFV)’ or *têm* ‘have a look (PFV)’, the realis suffix is always realized as $-\emptyset$. (On stem change in the hortative paradigm for the irregular perfective C-stems *un~on* ‘go (PFV)’ and *tl~te* ‘come (PFV)’, see below.)

(198)	<i>dowôn</i> ’- \emptyset -(a) <i>an</i> = <i>o</i>	‘I should eat!’
	<i>dowôn</i> ’- \emptyset - <i>al</i> = <i>e</i>	‘You should eat!’
	<i>dowôn</i> ’- \emptyset - <i>ek</i> = <i>o</i>	‘He should eat!’
	<i>dowôn</i> ’- \emptyset - <i>ok</i> = <i>o</i>	‘She should eat!’
	<i>dowôn</i> ’- \emptyset - <i>om</i> = <i>o</i>	‘Let’s eat!’
	<i>dowôn</i> ’- \emptyset - <i>in</i> = <i>e</i>	‘You (PL)/they should eat!’

8.6.8.2. Imperfective hortatives

In hortatives of imperfective N-stems the hortative subject marker is directly suffixed to the stem, e.g. *hen* ‘seek (IPFV)’:

(199)	<i>hen</i> - <i>an</i> = <i>o</i>	‘I should be seeking!’
	<i>hen</i> - <i>al</i> = <i>e</i>	‘You should be seeking!’
	<i>hen</i> - <i>ek</i> = <i>o</i>	‘He should be seeking!’
	<i>hen</i> - <i>ok</i> = <i>o</i>	‘She should be seeking!’
	<i>hen</i> - <i>om</i> = <i>o</i>	‘Let’s be seeking!’
	<i>hen</i> - <i>in</i> = <i>e</i>	‘You (PL)/they should be seeking!’

All other imperfective stems have to be inflected with $-m$ ‘imperfective’ (table 8.17). A full paradigm of imperfective hortative forms for *ase faka* [fire make.IPFV] ‘make fire (IPFV)’ is given in (200).

Table 8.17. Imperfective hortatives

Stem	Aspect	Hortative subject marker	Illocutionary particle
		<i>-an</i> '1SG'	= <i>o</i>
		<i>-al</i> '2SG'	= <i>e</i>
Imperfective	<i>-m</i> 'Imperfective'	<i>-ek</i> '3SG.M'	= <i>o</i>
		<i>-ok</i> '3SG.F'	= <i>o</i>
		<i>-om</i> '1PL'	= <i>o</i>
		<i>-in</i> '2/3PL'	= <i>e</i>

- (200) *ase faka-m-an=o* 'I should be making a fire!'
ase faka-m-al=e 'You should be making a fire!'
ase faka-m-ek=o 'He should be making a fire!'
ase faka-m-ok=o 'She should be making a fire!'
ase faka-m-om=o 'Let's be making a fire!'
ase faka-m-in=e 'You (PL)/they should be making a fire!'

8.6.8.3. Stem change in hortative forms

The perfective stems *on~un* 'go (PFV)' and *tl~te* 'come (PFV)' are C-stems. Hence, realis mood in perfective hortative forms is always zero-marked. *Un~on* 'go (PFV)' shows a stem change to *on* and no subject suffix in the second person singular:

- (201) *un-Ø-(a)an=o* 'I should go!'
on-Ø=e 'You should go!' (**un-Ø-al=e*)
un-Ø-ek=o 'He should go!'
un-Ø-ok=o 'She should go!'
un-Ø-om=o 'Let's go!'
un-Ø-in=e 'You (PL)/they should go!'

Tl~te 'come (PFV)' has a stem change in the second person singular. In the latter form, the hortative subject marker is *-l* instead of *-al*. A form for the first person plural is unattested:

- (202) *tl-Ø(a)an=o* 'I should come!' (also *te-n-an=o*)
te-Ø -l=e 'You should come!' (**tl-al=e*, **te-n-al=e*)
tl-Ø-ek=o 'He should come!'
tl-Ø-ok=o 'She should come!'
tl-Ø-in=e 'You (PL)/they should come!'

The imperfective hortatives formed from the imperfective stems *unê* ‘go (IPFV)’ and *tle* ‘come (IPFV)’ are regular, i.e. are inflected with *-m* ‘imperfective’ and then suffixed with the hortative subject marker. On stem irregularities in ‘come’ and ‘go’, see 8.3.2.

8.6.9. Imperative

In order to issue a direct command to a second person singular a bare perfective verb stem with any obligatory classificatory prefixes and pronominal object affixes is used, for example:

- (203) *baa* ‘Say (it)!’
te ‘Come!’
obbià ‘Throw it!’⁸
deibâ ‘Leave him!’⁹

The exact semantic difference between these imperative forms and the hortative forms in the second person singular described in the previous section is hard to assess. It is my impression that a bare stem conveys a stronger directive force than the hortative form of the same verb. As bare stems can only refer to the second person singular and hortative forms are attested for all person-number combinations, I am inclined to set up an additional category ‘Imperative’.

A similar situation (i.e. where there is a full hortative inflectional paradigm and bare stems can be used for commands directed only at the second person singular) can be found in the Papuan language Korafe (Farr 1999: 20, 30).

In order to issue a direct command to a second person plural a perfective verb stem with any obligatory classificatory prefixes and pronominal object affixes inflected with *-i* is used, e.g.:

- (204) *tl-Ø-i* ‘(You PL) Come!’
un-Ø-i ‘(You) Go!’
obbià-Ø-i ‘(You) Throw it!’

These are obviously shortened forms from the hortative paradigm, namely *tline!* ‘You (PL)/they should come!’, *unine!* ‘You (PL)/they should go!’, and *obbiàine!* ‘You (PL)/they should throw!’.

8.7. Non-finite verb forms

8.7.1. M-forms

M-forms are non-finite verb forms which are only inflected for aspect, namely *-nam* in the perfective and *-m* in the imperfective, e.g. *fuela-nam* ‘bathe (PFV, M-form)’ and *bu-m* ‘hunt’ (IPFV, M-form). M-forms are used in purposive serializations (see 11.1.6) and to form the verbal noun (see 8.7.2).

8.7.1.1. Perfective M-forms

The perfective M-form is marked with the aspect suffix *-nam*. Perfective M-forms can be formed from perfective and trans-aspectual verb stems. If a verb indexes its object(s), whether these belong to the verbs basic argument structure or are derived, they are indexed in the perfective M-form as well.

Table 8.18. Perfective M-forms

Stem	Gloss	PFV M-form	Gloss
<i>tana</i>	‘comb (PFV)’	<i>tana-nam</i>	‘comb’
<i>kaan</i>	‘die (PFV)’	<i>kaan-nam</i>	‘die’
<i>-têm</i>	‘see (PFV)’	<i>a-têm-nam</i>	‘see him’
<i>-tanaa</i>	‘step on (PFV)’	<i>ob-tanaa-nam</i>	‘step on it’
<i>fote-</i>	‘rout’	<i>fote-`b`-e-nam</i>	‘rout us/you/them’
<i>-ûb-</i>	‘give (PFV)’	<i>ob-ûb`-a-nam</i>	‘give it to him’
<i>hena</i>	‘seek (PFV)’	<i>hena-nam</i>	‘seek’
<i>fu</i>	‘cook’	<i>fu-nam</i>	‘cook’
<i>fu-</i>	‘cook for’	<i>fu-`b`-a-nam</i>	‘cook for him’

The perfective M-form is used as a base for the perfective verbal noun, e.g. *kaan-nam-in* ‘(instance of) dying (PFV VN)’, *fu-nam-in* ‘(instance of) cooking (PFV VN)’ and in purposive serializations 11.1.6.

8.7.1.2. Imperfective M-forms

The imperfective M-form is marked with the aspect suffix *-m*. Imperfective M-forms can be formed from imperfective and trans-aspectual verb stems. If a verb indexes its object(s), whether these belong to the verbs basic argument structure or are derived, they are indexed in the imperfective M-form as well.

The imperfective M-form is used to form the imperfective verbal noun, e.g. *ei-m-in* ‘(activity of) flying (IPFV VN)’ or *fu-m-in* ‘(activity of) cooking (IPFV VN)’, and in purposive serializations 11.1.6.

Table 8.19. Imperfective M-forms

Stem	Gloss	Ipfv M-form	Gloss
<i>tunu</i>	‘comb (IPFV)’	<i>tunu-m</i>	‘combing’
<i>ei</i>	‘fly (IPFV)’	<i>ei-m</i>	‘flying’
<i>-temê</i> ’	‘look at (IPFV)’	<i>a-temê</i> ’- <i>m</i>	‘looking at him’
<i>-ka</i>	‘put (IPFV)’	<i>o-ka-m</i>	‘putting it’
<i>fote-</i>	‘rout’	<i>fote-ye-m</i>	‘routing us/you/them’
<i>-ka-</i>	‘give (IPFV)’	<i>o-ka-ha-m</i>	‘giving it to him’
<i>fu</i>	‘cook’	<i>fu-m</i>	‘cooking’
<i>fu-</i>	‘cook for’	<i>fu-ye-m</i>	‘cooking for us/you/them’

8.7.1.3. Imperfective M-forms of N-Stems

For N-stems, i.e. those verbs whose imperfective stem ends in /n/, e.g. *hen* ‘seek for (IPFV)’, *ngen* ‘beg for (IPFV)’, the M-form is homophonous with the imperfective stem. They cease to be N-stems when followed by a recipient suffix because the recipient suffixes all end in a vowel. In that case, M-forms are formed regularly by affixing *-m* to the verb theme.

Table 8.20. Imperfective M-forms of N-stems

Stem	Gloss	IPFV M-form	Gloss
<i>hen</i>	‘seek (IPFV)’	<i>hen</i>	‘be seeking’
<i>ngen</i>	‘beg (IPFV)’	<i>ngen</i>	‘be begging’
<i>hen-</i>	‘seek for (IPFV)’	<i>hen-ye-m</i>	‘be seeking for us/you/them’
<i>ngen-</i>	‘beg from (IPFV)’	<i>ngen-ye-m</i>	‘be begging from us/you/them’

N-stems are directly inflected with *-in* to form the imperfective verbal noun, e.g. *hen-in* ‘(activity of) seeking (IPFV VN)’.

8.7.2. Verbal nouns

Verbal nouns are formed by affixing *-in* to the perfective or the imperfective M-form, e.g. *fu-nam-in* ‘(instance of) cooking (PFV VN)’, *fu-m-in* ‘(activity of) cooking (IPFV VN)’. The verbal noun is the citation form for all verbs. Verbal nouns are inflected for aspect with *-nam* in the perfective and *-m* in the imperfective. Furthermore, they require any object(s) of the verb to be indexed by an affix on the stem, regardless of whether a given object is part of the basic or the derived argument structure of a verb. Hence, it is not possible to just say ‘kill’ in Mian, one has to include the object and say ‘kill him’, ‘kill them’, etc.:

- (205) *i-nâ'-nam-in / *nâ'-nam-in*
 PL.AN.O-kill.PFV-PFV-VN
 '(instance of) killing us/you/them (PFV VN)'

When there is no referent for the object provided by the context, for instance when a verb is cited, speakers by default use the third person singular masculine or the animate plural form of an object affix in the verbal noun. For example, if asked out of context what 'see' means, Mian speakers will answer either (206) or (207):

- (206) *a-têm'-nam-in*
 3SG.M.O-see.PFV-PFV-VN
 '(instance of) seeing him (PFV VN)'

- (207) *ya-têm'-nam-in*
 PL.AN.O-see.PFV-PFV-VN
 '(instance of) seeing them (PFV VN)'

Verbal nouns have the syntactic distribution of nouns and can occur as subjects and objects and as possessors of another noun phrase. As nouns, they are of neuter 2 gender and can take the article =*o* when used as arguments.

Semantically, the perfective and imperfective verbal nouns differ in the following way: The former denotes exactly one bounded event, e.g. *onamin* '(instance of) going (PFV VN)', whereas the latter denotes one or more unbounded events, e.g. *unêmin* '(activity of) going (IPFV VN)'. The following two examples illustrate this semantic difference in an elicited minimal sentence pair:

- (208) *on-nam-in=o* *fatnâ=ta*
 go.PFV-PFV-VN=N2 do_what=MED

dê'-bl-Ø-ib=e?
 desist.PFV-AUX.IPFV-IPFV-2/3PL.AN.SBJ=CQ
 'Why don't you go?'

- (209) *unê-m-in=o* *fatnâ=ta*
 go.IPFV-IPFV-VN=N2 do_what=MED

dê'-bl-Ø-ib=e?
 desist.PFV-AUX.IPFV-IPFV-2/3PL.AN.SBJ=CQ
 'Why aren't you moving along (i.e. in a queue)?'

Smith and Weston (1974b: 65-66) call all verb forms in *-in* ‘customary’. This meaning may be contained in the imperfective verbal noun, which can indeed be used for recurring and habitual actions and events. In more general terms, however, ‘customary’ is clearly a misnomer because imperfective verbal nouns do not necessarily denote habitual or customary actions, e.g. *unêmin* ‘(activity of) going (IPFV VN)’ in (209) is simply continuous, nor do perfective verbal nouns ever signify habitual actions.

8.7.2.1. Perfective verbal nouns

Perfective verbal nouns are formed by suffixing *-in* to the perfective M-form. Table 8.21 lists examples of perfective verbal nouns.

Table 8.21 The perfective verbal noun

Stem	Gloss	PFV verbal nouns	Gloss (instance of)
<i>tana</i>	‘comb (PFV)’	<i>tana-nam-in</i>	‘combing’
<i>kaan</i>	‘die (PFV)’	<i>kaan-nam-in</i>	‘dying’
<i>-têm</i>	‘see (PFV)’	<i>a-têm'-nam-in</i>	‘seeing him’
<i>-tanaa</i>	‘step on (PFV)’	<i>ob-tanaa-nam-in</i>	‘stepping on it’
<i>fote-</i>	‘rout’	<i>fote-˘b'-e-nam-in</i>	‘routing us/you/them’
<i>-ûb-</i>	‘give (PFV)’	<i>ob-ûb'-a-nam-in</i>	‘giving it to him’
<i>hena</i>	‘seek for’	<i>hena-nam-in</i>	‘seeking for’
<i>fu</i>	‘cook’	<i>fu-nam-in</i>	‘cooking’
<i>fu-</i>	‘cook for him’	<i>fu-˘b'-a-nam-in</i>	‘cooking for him’

8.7.2.2. Imperfective verbal nouns

Imperfective verbal nouns are regularly formed by suffixing *-in* to the imperfective M-form. Table 8.22 lists examples of imperfective verbal nouns.

Table 8.22. The imperfective verbal noun

Stem	Gloss	IPFV verbal noun	Gloss (activity of)
<i>tunu</i>	‘comb (IPFV)’	<i>tunu-m-in</i>	‘combing’
<i>ei</i>	‘fly (IPFV)’	<i>ei-m-in</i>	‘flying’
<i>-temê</i>	‘look at (IPFV)’	<i>a-temê'-m-in</i>	‘looking at him’
<i>-ka</i>	‘put (IPFV)’	<i>o-ka-m-in</i>	‘putting it’
<i>fote-</i>	‘rout’	<i>fote-ye-m-in</i>	‘routing us/you/them’
<i>-ka-</i>	‘give (IPFV)’	<i>o-ka-ha-m-in</i>	‘giving it to him’
<i>fu</i>	‘cook’	<i>fu-m-in</i>	‘cooking’
<i>fu-ye</i>	‘cook for them’	<i>fu-ye-m-in</i>	‘cooking for us/you/them’

Apart from the imperfective verbal noun in *-m* plus *-in*, there is a formal variant in *-l* plus *-in*, also formed from the imperfective stem, e.g. *fua* ‘bathe (IPFV)’ has two imperfective verbal nouns *fua-m-in* and *fua-l-in* ‘(activity of) bathing’. I found no meaning difference between these two.

All verbs which have a verbal noun in *-l-in* also have one in *-m-in* while the reverse does not hold. The only exception is the irregular verb *wen* ‘eat (IPFV)’, whose verbal noun is *unalin* or *unin* ‘(activity of) eating’. In finite forms of this verb, the imperfective stems *wen* and *unan* are used, but there is no regularly formed imperfective verbal noun **unan-m-in* or **wen-m-in*.

Verbs with imperfective verbal nouns in *-l-in* and *-m-in* have finite imperfective verb forms inflected with *-l* and *-b* both ‘Imperfective’, those which only have one in *-m-in* use only *-b* ‘Imperfective’ in finite imperfective verb forms. Table 8.23 lists all verbs in my corpus with a verbal noun in *-l*.

Table 8.23. Verbs with imperfective verbal nouns in *-m-in* and *-l-in*

IPFV stem	Gloss	Verbal noun <i>-m-in</i>	Verbal noun <i>-l-in</i>	Gloss (activity of)
<i>baka</i>	‘cut, break’	<i>bakamin</i>	<i>bakalin</i>	‘cutting’
<i>daba</i>	‘peel wood’	<i>dabamin</i>	<i>dabalin</i>	‘peeling wood’
<i>-ka</i>	‘put’	<i>dokamin</i>	<i>dokalin</i>	‘putting it’
<i>faka</i>	‘make fire’	<i>fakamin</i>	<i>fakalin</i>	‘making a fire’
<i>fua</i>	‘bathe’	<i>fuamin</i>	<i>fualin</i>	‘bathing’
<i>gâala(-ka)</i>	‘tear down’	<i>gâala(ka)min</i>	<i>gâala(ka)lin</i>	‘tearing down’
<i>glitâ(-ka)</i>	‘rub off’	<i>glitâ(ka)min</i>	<i>glitâ(ka)lin</i>	‘rubbing off’
<i>halâ’</i>	‘abstain’	<i>halâ’min</i>	<i>halâ’lin</i>	‘abstaining’
<i>haa</i>	‘weave’	<i>haamin</i>	<i>haaln</i>	‘weaving’
<i>haka</i>	‘cut, break’	<i>hakamin</i>	<i>hakalin</i>	‘cutting’
<i>klutâ(-ka)</i>	‘smash’	<i>klutâ(ka)min</i>	<i>klutâ(ka)lin</i>	‘smashing’
<i>singa</i>	‘pour’	<i>singamin</i>	<i>singalin</i>	‘pouring’
<i>ta</i>	‘sharpen’	<i>tamin</i>	<i>talin</i>	‘sharpening’
<i>teka</i>	‘split’	<i>tekamin</i>	<i>tekalin</i>	‘splitting’
<i>tilaka</i>	‘undo’	<i>tilakamin</i>	<i>tilakalin</i>	‘undoing’
<i>tungka</i>	‘mimic bird’	<i>tungkamin</i>	<i>tungkalin</i>	‘mimicing a bird’
<i>waka</i>	‘cut, break’	<i>wakamin</i>	<i>wakalin</i>	‘breaking’
<i>wen~unan</i>	‘eat’	—	<i>unalin, unin</i>	‘eating’

8.7.2.3. Imperfective verbal nouns of N-stems

The verbal noun of imperfective N-stems is formed by directly suffixing *-in* to the imperfective stem, e.g. *hen-in* ‘(activity of) seeking (IPFV VN)’. There is no verbal noun form in *-l* plus *-in*.

Table 8.24. Verbal nouns of imperfective N-stems

Stems	Gloss	IPFV verbal noun	Gloss (activity of)
<i>hen</i>	‘seek (IPFV)’	<i>hen-in</i>	‘seeking’
<i>ngen</i>	‘beg (IPFV)’	<i>ngen-in</i>	‘begging’
<i>sein</i>	‘rejoice (IPFV)’	<i>sein-in</i>	‘rejoicing’
<i>un</i>	‘hum (IPFV)’	<i>un-in</i>	‘humming’
<i>sasan</i>	‘moan (IPFV)’	<i>sanan-in</i>	‘moaning’
<i>-halin</i>	‘feel sorry for (IPFV)’	<i>om-halin-in</i>	‘feeling sorry for her’

N-stems to which an object suffix is appended form their verbal noun regularly. See table 8.25 below for examples.

Table 8.25. The verbal noun of N-stems with object suffix

Stem	Gloss	IPFV verbal noun	Gloss (activity of)
<i>hen</i>	‘seek (IPFV)’	<i>hen-ye-m-in</i>	‘seeking for us/you/them’
<i>ngen</i>	‘beg (IPFV)’	<i>ngen-ye-m-in</i>	‘begging from us/you/them’

Most imperfective N-stems have perfective counterparts (the only exceptions being *un* ‘hum’ and *sasan* ‘moan’, which are imperfective-only). These perfective stems form the verbal noun regularly, i.e. *hena* ‘seek for (PFV)’ has *hena-nam-in* ‘(instance of) seeking (PFV VN)’ and *ngela* ‘beg (IPFV)’ has *ngela-nam-in* ‘(instance of) begging (PFV VN)’.

8.7.2.4. The verbal noun of basic motion verbs

The basic motion verb *on~un/unê* ‘go’ has the perfective verbal noun *on-nam-in* ‘(instance of) going (PFV VN)’ and the imperfective verbal noun *unê-m-in* ‘(activity of) going (IPFV VN)’.

The basic motion verb *te~tl/te, tle* ‘come’ has the perfective verbal noun *te-nam-in* ‘(instance of) coming (PFV VN)’ and the imperfective verbal noun *tle-m-in* ‘(activity of) coming (IPFV VN)’.

8.7.2.5. The verbal noun of the function verbs

The form of the perfective verbal noun of the function verb *ge/ga* ‘say’ is *ge-nam-in*, e.g. *fong ge-nam-in* ‘(instance of) whistling (PFV VN)’. There are three variants of the verbal noun in the imperfective, namely *ga-m-in*, *ga-l-in*, and *gena-l-in*, e.g. *fong gamin/galin/genalin* all mean ‘(activity of) whistling (IPFV VN)’.

The verbal nouns of the function verb *ke* ‘do’ are fully regular, i.e. *ke-nam-in*, e.g. *okok ke-nam-in* ‘(instance of) working (PFV VN)’ and *ke-m-in*, e.g. *okok ke-m-in* ‘(activity of) working (IPFV VN)’.

8.7.2.6. The verbal noun of the existential verb

The verbal noun of the existential verb is *nin* ‘staying, existing, remaining’. Though *-in* is suffixed to the perfective stem *n*, the verbal noun *nin* is used exclusively with an imperfective meaning. There is no separate verbal noun formed from the imperfective stem of the existential verb *bi-bl*.

Nin is used in the imperfective verbal nouns of obligatorily auxiliary-serialized verbs, i.e. verbs in which the stem always has to be serialized with an auxiliary in order to be inflected at all. These are either perfective-only, e.g. *mâa’/—* ‘stand up’ or imperfective-only, e.g. *—/hâa’* ‘roam’.

Table 8.26. Imperfective verbal noun of obligatorily auxiliary-serialized verbs

Stems	Gloss	Verbal noun	Gloss (activity of)
<i>mâa’/—</i>	‘stand up (PFV-only)’	<i>mâa’-nin</i>	‘standing’
<i>—/hâa’</i>	‘roam (IPFV-only)’	<i>hâa’-nin</i>	‘roaming’

The difference between perfective-only and imperfective-only obligatorily auxiliary-serialized verbs (X-stems, see 8.4) is that the former also have a regular perfective verbal noun, e.g. *mâa’-nam-in* ‘stand up’, next to the imperfective one, e.g. *maâ’-nin* ‘be standing (lit. ‘stand up and stay)’’. Imperfective-only obligatorily auxiliary-serialized verbs cannot be used in the perfective and there is no corresponding perfective verbal noun, hence **hâa’-nam-in*.

8.8. Iteratives

Iterative events are commonly expressed by simply using a verb form inflected with *-b* ‘Imperfective’. Such forms can have a continuous or an iterative interpretation:

- (210) *Skot=e as=e wi-b-e=be*
 PN=SG.M wood=SG.N1 hack-IPFV-3SG.M.SBJ=DECL
 ‘Scott is hacking a piece of wood.’
 OR ‘Scott is hacking repeatedly at a piece of wood.’

In addition, there is a special iterative construction. Single subevents within a larger iterative event are focussed by using repeated perfective stems followed by a form of the existential verb:

- (211) *Skot=e* *aful=e* *wai-ʔs'-a*
 PN=SG.M ball=SG.N1 hack.PFV-give.PFV-3SG.N1.R
- wai-ʔs'-a* *bi-Ø-e=be*
 hack.PFV-give.PFV-3SG.N1.R stay.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘Scott is hacking repeatedly at the ball.’

This construction is non-committal as to whether the repeated actions are performed by a single individual, as in (211) above, or by several individuals (or groups) in a row, as in the following example:

- (212) *dowôn'* *dowôn'* *biaan-ib=a*
 eat.PFV eat.PFV stay.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘while they were eating one after the other, they...’
 OR ‘while they were eating (i.e. repeatedly taking mouthfuls of food), they...’

The repeated perfective forms always bear argument indexing affixes if mandated by the verb. This is illustrated for a transitive verb in (213) and a ditransitive verb in (214). The verbal noun always involves the verbal noun of the existential verb *nin*:

- (213) *om-bià* *om-bià* *n-in*
 3SG.F_CL.O-throw.PFV 3SG.F_C.O-throw.PFV stay.PFV-VN
 ‘(activity of repeatedly) pushing her (traditional method for abducting women)’
- (214) *dl-ûb'-e* *dl-ûb'-e* *n-in*
 PL.F_CL.O-give.PFV-PL.AN.R PL.F_CL.O-give-PL.AN.R stay.PFV-VN
 ‘(activity of repeatedly) giving PL F-class to them’

In a less integrated variant of the iterative construction, two medial-clause-like structures are conjoined with *eka* ‘and’ or simply juxtaposed:

- (215) *make* *mengg-e-s-e* (*eka*) *aai=e*
 other=SG.M pull.PFV-DS.SEQ-3SG.M.SBJ (and) water=SG.N1

mengge-s-e
pull.PFV-DS.SEQ-3SG.N1.SBJ

bi-n-ib=a
stay.IPFV-SEQ-2/3PL.AN.SBJ=DECL
'the man pulled repeatedly and the water pulled repeatedly (on the man's wife in a desperate battle to either save her life or to drown her)' [Flood]

Note in this construction that none of these clauses has the medial verb clitic =*a*, which normally marks medial verbs in clause chains. Nevertheless, the first two verbs, both *mengge* 'pull (PFV)' bear switch reference morphology, namely *-s* 'DS.SEQ' and index their subject, i.e. the man and the water, respectively. The third verb is always an inflected form of the existential verb, whose subject suffix cross-references the whole set of participants, hence *-ib* 'second/third plural animate subject'.

8.9. Function verb constructions

Mian has two function (or 'light') verbs: *ge/ga* 'say' and *ke* 'do', which combine with a coverb or 'host' (Schultze-Berndt 2006) to form a complex predicate. Complex predicates consisting of a coverb and one of the function verbs *ge/ga* 'say' or *ke* 'do' are intransitive.

8.9.1. With *ge/ga* 'say'

The function verb *ge/ga* 'say' takes ideophones as coverbs, e.g.:

(216) *fong* *ge-s-e=a*
whistle say.PFV-DS.SEQ-3SG.M.SBJ=MED

wentê-n-ib=a
hear-SEQ-2/3PL.AN.SBJ=MED
'he whistled and they heard it and then...' [Crows]

(217) *kalkal* *ga-bi-n-e=a*
sizzle say.IPFV-AUX.IPFV-SEQ-3SG.N1.SBJ= MED
'it (some meat) was sizzling and then...' [Crows]

Table 8.28. Function verb constructions with *ke* 'do'

Coverb	Function verb	Gloss
<i>tekein</i>		'know'
<i>tata</i>	<i>ke</i> 'do'	'be strong'
<i>mikik</i>		'prepare'
<i>dong</i>		'sit quietly'

Furthermore, the function verb *ke* 'do' productively takes Tok Pisin loans as coverbs to form new (complex) verbs, e.g.:

- (220) *máam=i* *ilem=e* *sakim*
 mosquito=PL.AN blood=SG.N1 suck

ke-bina-b-io=be
 do-AUX.HAB-IPFV-2/3PL.AN.SBJ=DECL
 'Mosquitoes (habitually) suck blood.'

Nearly every Tok Pisin loan verb and a few nouns and adjectives of Tok Pisin origin can be coverbs of the function verb *ke* 'do'. Selected examples are given in table 8.29.

Table 8.29. Tok Pisin loan verbs as coverbs of *ke* 'do'

Coverb	Function verb	Gloss
<i>flet</i> (flat)		'deplete'
<i>kis</i> (kiss)		'kiss'
<i>kot</i> (court)		'stand trial'
<i>lotu</i> (lotu 'church')		'attend mass'
<i>ledi</i> (ready)		'prepare'
<i>okok</i> (work)	<i>ke</i> 'do'	'work'
<i>sakim</i> (suck)		'suck'
<i>sekim</i> (check)		'check'
<i>skul</i> (school)		'attend school'
<i>soka pila</i> (play soccer)		'play soccer'
<i>spin</i> (spin)		'spin'

It is possible for *ke* 'do' to follow an adverb, e.g.:

- (221) *heb* *ke-n-al=e!*
 quickly do-REAL-2SG.HORT=HORT
 'Hurry!' [Danenok]

The numerals *asú* ‘two’, *asusûna* ‘two’, and *asumâtna* ‘three’ can be used with the function verb *ke* ‘do’ to express that a group consists of a certain number of individuals:

- (222) *ī* *asumâtna* *ke-n-ib=a*
 3PL.AN three do-SEQ-2/3PL.AN.SBJ=MED

tlanhaa-b-io=be
 play-IPFV-2/3PL.AN.SBJ=DECL
 ‘The three of them are playing.’ (lit. ‘They are three and they are playing.’)

Finally, *ke* ‘do’ is employed to express tense and mood distinctions in the negation with the existential verb (see 8.6.6). This use of *ke* is attested with further inflection for general past (*-bio*), hesternal past (*-so*), in (223), and conditional (*-Vm*), in (224):

- (223) *kōbo* *sintalo=mo*
 2SG.M yesterday=NEG

tl-im *bl-im* *ke-n-eb-so=be*
 come.PFV-NEG exist-NEG do-REAL-2SG.SBJ-HPST=DECL
 ‘Yesterday, you didn’t come.’

- (224) *nē* *hàs=e=mo* *ob-tabba-im*
 1SG hat(TP)=SG.N1=NEG 3SG.RESID.O-put_on.PFV-NEG

bl-im *ke-n-im-i=o*
 exist-NEG do-AUX.PFV-COND-1SG.SBJ=N2

afók=o *gabáam* *as=e*
 sun=SG.F head fire=SG.N1

ein-n-amab-o=be
 burn.PFV-AUX.PFV-IRR.NANPL.SBJ-3SG.F.SBJ=DECL
 ‘If I don’t put on a hat, the sun will burn my head.’

8.10. Noun-verb idioms

Mian has a range of lexicalized idiomatic expressions which can consist of a noun adjunct followed by a verb. The semantic relation can be opaque. Noun-verb idioms are for example:

(225)	<i>aaie fuela/aaie fua</i>	[water bathe]	‘bathe’
	<i>abén gi/ abén gila</i>	[laughter laugh]	‘laugh’
	<i>tamaan kou</i>	[fornication copulate]	‘fornicate, rape’
	<i>usáan fu</i>	[vomit cook]	‘vomit’
	<i>fètang kun</i>	[carrion_smell smell]	‘smell putrid’
	<i>tamamèin klá</i>	[shock fix]	‘be frightened’
	<i>mīma taa</i>	[spittle spit]	‘spit’

What all of these have in common is that the noun preceding the verb functions as an adjunct and not as an object. It does not have argument status. Nominal adjuncts are highly restricted in their syntax. They have to immediately precede the verb and cannot be modified with a relative clause. Objects on the other hand can be fronted and modified with a relative clause.

Within the noun-verb type of idiom, two cases have to be distinguished: (a) the nominal adjunct can be omitted without a difference in meaning and (b) omission of the adjunct results in a semantic change.

An example of the first type is *aaie fuela/aaie fua* ‘bathe’, which still means ‘bathe’ when *aaie* ‘the water’ is omitted:

(226)	<i>fua-biaan-ib=to</i>	
	bathe.IPFV-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED	
	‘while they were bathing, they...’ [Sobining]	

With the second type, the adjunct cannot be omitted without affecting the semantics. Compare:

(227)	<i>kou-we-b-e=a</i>	
	have_sex-3SG.F.R-DS.SIM-3SG.M.SBJ=MED	
	‘while he was having sex with her, she...’ [Newlyweds]	
(228)	<i>tamaan=o</i>	<i>kou-ye-b-ib=ta</i>
	fornication=N2	have_sex-PL.AN.R-DS.SIM-2/3PL.AN.SBJ=MED
	‘while they were raping them, ...’ [Mianmin and Telefomin]	

8.11. The ‘Immediate action’ construction

Mian has a special construction for immediate actions involving the function verb *ge/ga~gena* ‘say’. It is used to express that the speaker desires or intends to perform an action immediately after the moment of speaking or that an event is about happen. In contrast to the coverb-function verb construction with *ge/ga* ‘say’ (see 8.9 above), the imperfective stem *gena* is preferred over *ga* in the immediate action construction, e.g.:

- (229) *fút=e* *gíng=e*
tobacco=SG.N1 midrib=SG.N1

tob-tlâa'-n-ang-gena-b-i=be

3SG.LONG.O-remove.PFV-REAL-IMMACT.NANPL.SBJ-say.IPFV-IPFV-
1SG.SBJ=DECL

‘I’m about to remove the midrib of the tobacco leaf.’ [Rolling smokes]

Apart from the suffix *-ang* ‘Immediate action (not animate plural subject)’ for singular subjects, there is also *-om* ‘Immediate action (animate plural subject)’ for animate plural subjects. The latter suffix sometimes assimilates to the following velar /g/ and is realized as *-ong*:

- (230) *un-om-ge-n-ob=a*
go.PFV-IMMACT.AN.PL.SBJ-say.PFV-SEQ-1PL.SBJ=MED
‘we wanted to go and then...’ [Ala ritual]

Instead of the imperfective stem of the function verb *gena~ga* ‘say’ inflected with *-b* ‘Imperfective’ one also finds the inchoative verb form with *-m* in the same construction. There is no obvious difference in meaning, e.g.:

- (231) *eka* *imak=e* *yëbbaka*
and husband=SG.M as_well

dob-Ø'-ang-gena-m-e

3SG.M_CL.O-take.PFV-IMMACT.NANPL.SBJ-say.IPFV-INCH-3SG.N1.SBJ

kesoa

because

‘because it (the water) was about to take the husband as well, ...’

[Flood]

The 'Immediate action'-construction is very likely a reanalysis of an embedded quotative construction (see 13.1). The erstwhile hortative suffixes *-an* '1SG.HORT' and *-om* '1PL.HORT' are still discernible (see 8.6.8 on subject marking in hortative forms). Compare (229) above to the following example (232), which is also attested in synchronic Mian. The embedded hortative sentence is given in brackets:

- (232) *[füt=e* *gíng=e*
 tobacco=SG.N1 midrib=SG.N1

tob-tlâa'-n-an=o]
 3SG.LONG.O-remove.PFV-REAL-1SG.SBJ.HORT=HORT

gena-b-i=be
 say.IPFV-IPFV-1SG.SBJ=DECL
 'I think I should remove the midrib of the tobacco leaf.'

There are several reasons why I set up 'Immediate action' as a distinct construction. Speaker intuitions about word boundaries indicate that *tobtlâa'nanggenabibe* 'I am about to remove a long object' as one word, while *tobtlâa'nano genabibe* 'I think I should remove a long object' is judged to be two separate words. This speaker judgment is supported by the fact that the hortative subject suffix *-an* has assimilated to the following /g/ of *ge/ga~gena* 'say' and is always realized as *-ang* in the immediate action construction.

More important, however, is that the former behaves like a single phonological word (with one accent and one tonal melody), while the latter consists of two separate phonological words.

Morphologically, in embedded hortatives the subjects in the embedded and the matrix clause can vary independently of each other, whereas this is not possible in the 'Immediate action'-construction. The identity of the immediate action suffix is entirely predictable from the number and animacy of the subject of the matrix verb. If the subject is singular, *-ang* is used, if it is animate plural *-om* ~ *-ong*.

Finally, the construction for immediate actions allows inanimate subjects, e.g. the water in (229) above, while quotative constructions (whether declarative, interrogative, or hortative) are restricted to subjects which have a consciousness and are capable of intentional action.

Chapter 9

Argument structure and the syntax of the clause

9.0. Introduction

This chapter deals with the argument structure of the verb and with the order of constituents in the clause. The unmarked constituent orders in Mian are SV in intransitive clauses and AOV in transitive clauses. While the verb is almost always final in any clause (a marginal exception will be dealt with in 11.2.10), the order of core arguments and adverbial adjuncts is less rigidly fixed.

This chapter also contains sections on non-verbal clauses, reciprocals and a note on causatives.

Mian is head-marking at clause level (Nichols 1996). There is no morphological case or adpositional marking for core grammatical relations. Rather relevant syntactic relations are marked on the verb. Most arguments in the clause, i.e. subjects, recipients, and for some verbs also the object, are indexed on the verb by affixes.

Mian has intransitive, transitive, ditransitive, ambitransitive, and impersonal (or atransitive) verbs. Compounding with *-ûb* 'give (PFV)' with a quasi-applicative function is used as a valency-increasing device in the perfective to derive transitives from intransitives and ditransitives from transitives in a highly productive way. In the imperfective, recipient suffixes are directly appended to a verb to increase its valency.

The only clearly underived ditransitive verb in Mian is *-ûb* 'give (PFV)'. Underived ditransitives show triple agreement, i.e. they index the subject, the object (the gift) and the recipient with an affix (see section 9.5 on ditransitives).

Ambitransitive verbs (Dixon 1994, 2002) can be used intransitively or transitively without any derivational process.

There are also a few impersonal verbs with an expletive subject marker, which denote the arrival of morning and afternoon and the passage of time.

All finite verbs must contain a subject suffix indexing the subject of the verb, which in the rare case of impersonal verbs is an expletive (*-o*). This form is homophonous to the third person singular feminine subject marker.

I define the argument structures as follows:

- Intransitives have exactly one core argument (S).
- Transitives have exactly two core arguments (both A and O).
- Ditransitives have exactly three core arguments (A, O and R).

- Ambitransitives have either one (S) or two core arguments (both A and O).
- Atransitives (impersonal verbs) have no core arguments.

S and A are always indexed on finite verbs. Mian has one syntactic relation of object, which is indicated morphologically in different ways. The O of transitive verbs can be indexed with (i) a classificatory prefix, (ii) a pronominal object prefix, (iii) a pronominal object suffix, or (iv) not at all. The choice between these four marking patterns depends on the indexing properties of individual verbs. The four marking patterns define four subtypes of transitive verb, which I describe in detail below. Ditransitives appear in a double object construction, one of which being O (i.e. the gift) the other R (recipient). O is indexed with a prefix or not at all, R is indexed with a suffix.

On the issue of grammatical relations and morphological marking patterns on the verb, see 3.14.

Mian is strongly zero-anaphoric. Noun phrase arguments tend to be dropped if referent identity can easily be retrieved. Noun phrases are also commonly elided if referent identity is obvious from the context or from speaker knowledge, e.g. the verb *kè* ‘cut (scraped taro) into slabs’ can occur with the overt object noun phrase *imen nini* ‘scraped taro’ but most often it does not. Thus, clauses very often consist just of a verb whose argument indexing or classificatory affixes allow tracking of discourse participants.

9.1. Intransitives

Intransitive verbs have exactly one argument (S) with the grammatical relation of subject. Intransitives can be assigned to the following semantic classes:

- Verbs of motion, e.g. *tl~te/te*, *tle* ‘come’, *un~on/unê* ‘go’, *—/ei* ‘fly’, *—/be* ‘be walking, moving along’.
- Verbs of (change of) posture, e.g. *mâa’/—* ‘stand up’, *toun* ‘sit down’.
- Verbs denoting processes, e.g. *klaan* ‘rot’, *dama/—* ‘grow up’, *kun* ‘emanate smell’, *sikà* ‘swell’.
- Social activities, e.g. *dli* ‘dance’.
- Verbs denoting noises, e.g. *—/klen* ‘crack, rustle (of wood or leaves)’, *—/sasan* ‘moan’, *—/un* ‘hum, drone’.
- Bodily processes, e.g. *namtlaalâ* ‘clear one’s throat’, *—/gen* ‘be sick’, *kaan/—* ‘die’, *tungtaka* ‘yawn’, *kusang ge/kusang ga* ‘sneeze’, *usáan fu* ‘vomit’.

- Emotional states, e.g. *tobtlina/tobtlin* ‘be confused’, *tlâa* ‘be sad’, *seila/sein* ‘be happy’.
- Denominal and deadjectival inchoative verbs derived with the verbalizer *-an*, which predicate the inception of the state expressed by the noun or adjective from which the verb is derived (for this type of derivation, also see 3.2.3).
- The existential verb *n/bi~bl* ‘exist, stay, live, remain’ (for examples, see 8.6.5 and 11.2.4 on the inflection of the existential verb).

9.1.1. Motion verbs

The most frequent class of intransitive verbs are verbs of motion. Basic verbs of motion are: *tl~te/te*, *tle* ‘come’ and *un~on/unê* ‘go’. Their subject refers to the agent or experiencer of the motion event:

- (1) *unangmôn=o mak=o te-n-o=ta*
 woman=SG.F other=SG.F come.PFV-SEQ-3SG.F.SBJ=MED
 ‘Another woman arrived and then ...’ [Afoksitgabáam]

Basic motion verbs readily combine with and can even fuse with any of the directionals functioning as a directional adverb to indicate the direction of the movement.

The directionals are:

- (2) *daak* ‘down’
ut ‘up’
tab ‘downriver’
met ‘upriver’
wāt ‘across’
tām ‘to the side, sideways’

Consider example (3) in which *on* ‘go (PFV)’ appears collocated with the directional *daak* ‘down’:

- (3) *dei-˘b'-a-n-e=a*
 leave-give.PFV-3SG.N1.R-SEQ-3SG.M.SBJ=MED
- daak te-n-e=a*
 down come.PFV-SEQ-3SG.M.SBJ=MED
 ‘he left it (i.e. a bag) and went (back) down and then ...’ [Flood]

Example (4) illustrates this for a final motion verb:

- (4) *īli* *bibam awém=o* *yē wāt*
 3PL.POSS.alone place taboo=N2 to across

on-s-io=be

go.PFV-RPST-2/3PL.AN.SBJ=DECL

‘They went across to their own ghost place.’ [Ghost village]

Directional and verb are often fused, even in careful speech. Fused medial verb forms are distinct from fused final ones. Table 9.1 sets out all combinations of the motion verb *tl~te/te*, *tle* ‘come’ and directional (including all attested fused forms).

Table 9.1. Combinations of directional and *tl~te/te*, *tle* ‘come’ including fused forms (— means no form available)

Directional adverb	Motion verb stem	Fused medial verb form	Fused final verb form	Gloss
<i>daak</i> ‘down’		<i>daake</i>	<i>daake</i>	‘come down’
<i>ut</i> ‘up’		<i>utl, ute</i>	<i>utl, ute</i>	‘come up’
<i>tab</i> ‘downriver’	<i>tl~te/te,</i>	—	—	‘come downriver’
<i>met</i> ‘upriver’	<i>tle</i>	<i>mete</i>	—	‘come upriver’
<i>wāt</i> ‘across’		<i>watè</i>	—	‘come across’
<i>tām</i> ‘sideways’		—	—	‘come from the side’

An example of a medial verb in which directional and *tl~te/te*, *tle* ‘come’ are fused is:

- (5) *imen-deib daake-s-ib=ta*
 taro-for come_down.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘they (the Telefol women) came down for taro, and then they (i.e. the Mianmin men) ...’ [Mianmin and Telefomin]

An example of a final verb where directional and motion verb are fused is:

- (6) *om-mêin daake-bi-Ø-o*
 3SG.F_CL.SBJ-fall come_down.PFV-AUX.IPFV-IPFV-3SG.F.SBJ

kesoa

because

‘because she fell down and stayed, ...’ [Dimosson]

For the motion verb *un~on/unê* ‘go’ fused forms exist as well. Table 9.2 sets out all combinations of a directional and the motion verb *un~on/unê* ‘go’ (including all attested fused forms in final verbs).

Table 9.2. Combinations of directional and *un~on/unê* ‘go’ including fused forms (final verbs)

Directional adverb	Motion verb stem	Fused verb form	Gloss
<i>daak</i> ‘down’	<i>un~on/unê</i>	<i>daakn</i>	‘go down, descend’
<i>ut</i> ‘up’		<i>usn</i>	‘go up, ascend’
<i>tab</i> ‘downriver’		<i>tatn</i>	‘go downriver’
<i>met</i> ‘upriver’		<i>mesn</i>	‘go upriver’
<i>wāt</i> ‘across’		<i>wāsn</i>	‘go across, traverse’
<i>tām</i> ‘sideways’		<i>tāmn</i>	‘go to the side/inside/outside’

An example of a final verb in which directional and final motion verb are fused is:

- (7) \bar{e} *wekib* *usn-Ø-e=be*
 3SG.M a_lot go_up.PFV-REAL-3SG.M.SG=DECL
 ‘He is very tall’ (lit. ‘He has gone up a lot’)

In medial verbs, directionals can combine with motion verbs in exactly the same fashion. However, fused medial forms are only used with the special stem *unaan* ‘go.PFV.SS.SEQ’, which is employed to indicate same subject and sequentiality of events. Table 9.3 sets out all combinations of a directional and the motion verb *unaa* (including all attested fused forms in medial verbs).

An example of a medial verb in which directional and *unaan* ‘go.PFV.SS.SEQ’ are fused is:

- (8) *wasnāan-ib=a*
 go_across.PFV.SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they went across and then they ...’

Table 9.3. Combinations of directional and *un~on/unê* ‘go’ including fused forms (medial verbs)

Directional adverb	Motion verb stem	Fused verb form	Gloss
<i>daak</i> ‘down’		<i>daaknaan</i>	‘go down, descend’
<i>ut</i> ‘up’		<i>usnaan</i>	‘go up, ascend’
<i>tab</i> ‘downriver’	<i>un~on/unê</i>	<i>tatnaan</i>	‘go downriver’
<i>met</i> ‘upriver’		<i>mesnaan</i>	‘go upriver’
<i>wât</i> ‘across’		<i>wasnâan</i>	‘go across, traverse’
<i>tâm</i> ‘sideways’		<i>tamnâan</i>	‘go to the side/inside/outside’

9.1.2. Directly inflected directionals as intransitives verbs

Directionals themselves can be directly inflected, but only with *-n* ‘SS.SEQ’, to form medial verbs of motion. Such forms always have the meaning of going somewhere, not of coming from somewhere. The suffix *-n* in such directly inflected medial motion verbs always signals ‘same subject’ and ‘sequentiality’. This is in contrast to medial verbs in general where *-n* only unequivocally indicates ‘SS.SEQ’ in the first person singular. This issue is treated in detail in chapter 11.2. Table 9.4 summarizes direct inflection of directionals. The table gives *-i*, which is the subject suffix for the first person singular, as an example, but all subject suffixes are possible.

Table 9.4. Directly inflected directionals (illustrated for a first singular subject)

Directional	S/R marking	Subject suffix	Medial verb	Meaning
<i>daak</i>				‘I descend and then I...’
<i>ut</i>				‘I ascend and then I...’
<i>tab</i>	<i>-n</i>	<i>-i</i> ‘1SG’	= <i>a</i>	‘I go downriver and then I...’
<i>met</i>	‘SS.SEQ’		= <i>ta</i>	‘I go upriver and then I...’
<i>wât</i>				‘I go across (a river) and then I...’
<i>tâ</i>				‘I go sidew./enter/exit and then I...’

Note that *tâ* instead of *tâm* ‘sideways’ is used as the base for direct inflection. Thus, *tâ-n-i=a* ‘I go sideways/enter/exit and then I...’.

Direct inflection of directionals to form medial verbs is restricted to *-n* ‘SS.SEQ’:

- (9) *sin* *tl-Ø-e-bu=e*
 first come.PFV-REAL-3SG.M.SBJ-GPST=SG.M

daak-n-e=a
down-SS.SEQ-3SG.M.SBJ=MED

skilón=e *bu-˘b'-a-n-e=a*
foot=SG.N1 hold-give.PFV-3SG.M.R-SEQ-3SG.M.SBJ=MED
'The one (i.e. a crow) who came first went down and held his (the male protagonist's) foot and then ...' [Crows]

In order to indicate disjoint reference of the following subject one has to use the directional adverbially followed by *on~un* 'go (PFV)', e.g.:

- (10) *tab* *on-s-o=a*
downriver go.PFV-DS.SEQ-3SG.F.SBJ=MED
'she went downriver and then someone else...' [Crows]

9.1.3. Locative adjuncts

Verbs of motion can be modified by a locative postpositional phrase adjunct indicating the direction where the goal of the movement is located, as in (11) and (12):

- (11) *damib=tām* *unaan-ib=a*
garden=sideways go.PFV.SS.SEQ-2/3PL.AN.SBJ=MED
'they went sideways (i.e. into the bush) to the garden and there they...' [Pig story]
- (12) *kwéit=e* *tem-wāt* *on-s-e=a*
sugarcane=SG.N1 into-across go.PFV-DS.SEQ-3SG.M.SBJ=MED
'he went across into the sugar cane and then someone else...' [Pig story]

9.1.4. Noun phrases as locative adjuncts

The target of the movement encoded by motion verbs is often just realized as a noun phrase, in case of locations or places the noun appears without a determiner. Noun phrases as locative adjuncts are never obligatory. In (13), movement is towards a location, and in (14), it is towards a person:

- (13) *damib* *un-Ø-ib-bio=to*
garden go.PFV-REAL-2/3PL.AN.SBJ-GPST=MED

sók=o tle-b-o=ta
 rain=N2 come.IPFV-DS.SIM-N2.SBJ=MED
 ‘after they had gone to the garden it was raining and...’
 [Afoksitgabáam]

- (14) *imak=e te-n-o=a*
 husband=SG.M come.PFV-SEQ-3SG.F.SBJ=MED
 ‘she was coming to her husband and then ...’ [Flood]

These locative adjuncts look like object noun phrases. However, in terms of semantic roles these are always locatives. The main syntactic difference is that objects are relativizable while locative adjuncts are not. Also there is a strong tendency for all adjuncts to directly precede the verb, while objects of transitive verbs are more mobile within the clause. Hence, I analyse locative noun phrases as (locative) adjuncts of intransitive motion verbs rather than core arguments (i.e. the objects) of what then would be a transitive motion verb.

9.1.5. Classificatory prefixes in intransitive verbs

Classificatory prefixes operate on an absolutive basis, i.e. they classify objects of transitive and subjects of intransitive sentences. The latter case is rare. The only two verbs where the verbal prefix classifies its subject are the intransitive verb *-mêin* ‘fall’ and the ambitransitive verb *-bià* ‘throw’, which can be used intransitively to mean ‘erupt’. The following example illustrates *-mêin* ‘fall’:

- (15) *unáng mak=o abil*
 woman some=SG.F sky
- dim-ut daa-n-o=a om-mêin*
 on-up dwell.PFV-SEQ-3SG.F.SBJ=MED 3SG.F_CL.SBJ-fall
- daake-bi-Ø-o kesoa*
 come_down.PFV-AUX.IPFV-REAL-3SG.F.SBJ because
 ‘because some woman dwelled in the sky and then fell down and stayed, ...’ [Dimosson]

Note that in this case the subject is indexed twice, once with a subject suffix on the motion verb and once with a classificatory prefix on *-mêin* ‘fall’.

There is also one nuclear serial verb construction *-ò blelá'* 'fall down', where the classificatory prefix classifies the subject. This first verb in this serial verb construction is possibly *-ò* 'take', the second is *blelá'* 'fall'. An example is provided in (16). I gloss the whole serial verb construction as 'fall down'.

- (16) *as=e dob-ò blelá'-n-e=be*
 tree=SG.N1 3SG.M_CL.SBJ-fall_down.PFV-REAL-3SG.N1-SBJ=DECL
 'The tree has fallen over.'

9.1.6. Denominal and deadjectival inchoative verbs

These are derived from nouns or adjectives with the verbalizer *-an*, which predicate the inception of the state expressed by the noun (17) or adjective (18). Semantically, denominal and deadjectival verbs are one-place predicates. Verbs derived through *-an* are intransitive:

- (17) *konokmôn-an-n-amab-i=be*
 old_woman-VBLZ-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 'I will be an old woman.' (Smith and Weston 1974b: 38)

- (18) *klâ-ûb'-a-Ø-ib=ta*
 fix-give.PFV-3SG.M.R-DS.SEQ-2/3PL.AN.SBJ=MED

ayam-an-Ø-e-bio=be
 good-VBLZ-REAL-3SG.M.SBJ-GPST=DECL
 'They fixed him, and he became well.' [Pineapples]

9.1.7. Underivable intransitives

These are intransitive verbs which cannot be derived to become transitive. On the derivation of transitive verbs from intransitive verbs, see 9.4.

- A subset of the verbs of motion, e.g.: *—/ei* 'fly' and *—/be* 'be walking, be moving along', but not *tl~te/te*, *tle* 'come, arrive' and *un~on/unê* 'go', which can have a derived object.
- Verbs denoting processes, e.g.: *dama/—* 'grow up'.
- Verbs denoting noises, e.g.: *—/klen* 'crack, rustle', *—/un* 'hum, drone', *—/sasan* 'moan'.

- Bodily processes, e.g.: *namtlaalâ* ‘clear one’s throat’, *kusang ge/kusang ga* ‘sneeze’, *usáan fu* ‘vomit’, *—/gen* ‘be sick’, *tungtaka* ‘yawn’.

9.2. Transitives

Transitive verbs fall into four morphologically defined subgroups depending on whether the object is marked through a classificatory prefix, a pronominal prefix or suffix, or not at all:

- Subclass 1: Transitives which index the object with a classificatory prefix (absolute alignment), e.g. *-ò/—* ‘get, take’.
- Subclass 2: Transitives which index the object with an object prefix (accusative alignment), e.g. *-têm’/-temê’* ‘see, look at’.
- Subclass 3: Transitives which index the object with an object suffix (indirective alignment), e.g. *fote-* ‘rout’.
- Subclass 4: Transitives which never cross-reference the object, e.g. *dowôn’/wen* ‘eat’.

It is possible to make a further distinction within the class of transitive verbs and call the set comprising the first three transitive subclasses *affixed* transitives because these verbs invariably index their object morphologically with a pronominal prefix or suffix or a classificatory prefix. On the grammatical relation of object in Mian and how it is marked, see 3.14.2.

9.2.1. Transitives with classificatory prefix (absolute alignment)

Subclass 1 of transitive verbs comprises those verbs with classificatory prefixes, which classify the object according to semantic criteria (cf. chapter 5 for a thorough description of the classificatory prefixes), e.g.:

- (19) *nē* *memâlo* *fút=e*
 1SG now tobacco=SG.N1

tob-ò-n-i=a
 3SG.LONG.O-get.PFV-SS.SEQ-1SG.SBJ=MED
 ‘Now I get the tobacco leaf, and then I ...’ [Rolling smokes]

Object noun phrase elision is possible without affecting the grammaticality of the utterance. In isolation, such an utterance is semantically less specific:

- (20) *tob-ò-n-i=a*
 3SG.LONG.O-get.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I get the LONG OBJECT, and then I ...’

Other transitive verbs with obligatory classificatory prefix are: *-ma/-san* ‘plant’, *-êb/—* ‘take, pick up (in order to carry)’, *-ba* ‘cover (of liquids)’, *-bià/—* ‘throw’, *-bù* ‘bury’, *-fâ/-ka* ‘put’, *-kimà/-kimsan* ‘put in the fire’, *-ò/—* ‘get, take’, *-ski* ‘turn’, *-tanà/-tunu* ‘light’, *-tlâa/—* ‘remove’, and *-Ø/—* ‘take’. For a comprehensive list, see 5.8.

9.2.2. Transitives with object prefix (accusative alignment)

Subclass 2 of transitive verbs contains those with an obligatory object prefix which signals person, number, and (in the third person) the gender of the object. These verb stems are given in (21). The formal details of pronominal object prefixes are covered in section 8.5.5.

- (21) *-e* ‘hit, kill (IPFV)’
-fû ‘grab (PFV)’
-lò ‘hit, kill (PFV)’
-nâ ‘hit, kill (PFV)’
-ntamâ ‘bite (PFV)’
-têm ‘see (PFV)’
-temê ‘look at (IPFV)’

This type of argument marking shows accusative alignment. The subjects of intransitive verbs (S) and transitive verbs (A) are treated in the same way, different from the object of transitive verbs (O). The accusative alignment pattern is illustrated by comparing an intransitive verb (22) with a transitive verb (23):

- (22) *yòle on-s-io=be*
 well go.PFV-RPST-2/3PL.AN.SBJ=DECL
 ‘Well, they went.’ [Pig story]
- (23) *yòle éil=e a-nâ'-s-ib=e?*
 well pig=SG.M 3SG.M.O-kill.PFV-RPST-2/3PL.AN.SBJ=Q
 ‘Well, did they kill the pig?’ [Mianmin and Telefomin history]

In (23) above, the object is marked on the verb with the pronominal affix *a-* ‘third person singular masculine’. The overt object noun phrase can be elided without affecting the grammaticality of the utterance, as in (24):

- (24) *a-nâ'-s-ib=e?*
 3SG.M.O-kill.PFV-RPST-2/3PL.AN.SBJ=Q
 ‘Well, did they kill him?’

9.2.3. Transitives with object suffix (indirective alignment)

Subclass 3 of transitive verbs consists of verbs which index their object with a pronominal object suffix. In the perfective, such objects can only be introduced into the argument structure of a verb through a compound with *-ûb-* ‘give (PFV)’, to which the object suffix is appended. In the imperfective, object suffixes directly attach to the stem (see section 8.5.5). If a verb obligatorily has an object suffix, this is indicated by a dash following the stem, e.g. *fote-* ‘chase away, rout’ (25) or *dei-*— ‘leave’ (26).

- (25) *yē* *Klefol=i* *tata* *ke-n-ib=a*
 there PN=PL.AN strong do-SEQ-2/3PL.AN.SBJ=MED

yē *Miantén* *awél=i* *yē*
 there Mian_people father=PL.AN there

fote-˘b'-e-Ø-ib=a
 rout-give.PFV-PL.AN.R-DS.SEQ-2/3PL.AN.SBJ=MED

un-Ø-io=be
 go.PFV-REAL-2/3PL.AN.SBJ=DECL
 ‘The Telefomin were overpowering and routed the fathers of the Mianmin fathers and went.’ [Mianmin and Telefomin]

- (26) *smik=e* *yē* *dei-˘b-a*
 soul=SG.M there leave.PFV-give.PFV-3SG.M.R

un-Ø-e *kesoa*
 go.PFV-REAL-3SG.M.SBJ because
 ‘because he was utterly terrified, ...’ (lit. ‘his soul left him there and went’) [Crows]

As verbs of this type always need *-ûb-* ‘give (PFV)’ with an applicative function in the perfective, they look derived. However, they – at least synchronically – do not have an intransitive base from which they could be derived, i.e. there is no verb **fote*, cf. example (25).

All verb stems that belong to subclass 3 of transitive verbs are given in the list below:

- (27)
- | | |
|-----------------|--------------------------|
| <i>al tlia-</i> | ‘be angry (PFV)’ |
| <i>atli-</i> | ‘be angry (IPFV)’ |
| <i>da-</i> | ‘help’ |
| <i>dei-</i> | ‘leave (PFV)’ |
| <i>doko-</i> | ‘forget (PFV)’ |
| <i>en-</i> | ‘pain, hurt (IPFV)’ |
| <i>fote-</i> | ‘chase away, rout’ |
| <i>gai-</i> | ‘pass, surpass (PFV)’ |
| <i>go-</i> | ‘like, appreciate (PFV)’ |
| <i>mele-</i> | ‘touch, feel (PFV)’ |
| <i>men-</i> | ‘touch, feel (IPFV)’ |
| <i>wai-</i> | ‘wait for (PFV)’ |

The verbs *en-* ‘pain’ and *go-* ‘like, appreciate’ are exceptional in that they do not require object suffixes to be present in the verbal noun. For these two verbs two forms exist, one with and one without object suffix. Thus, *en-* has the verbal nouns (28) and (29):

- (28) *en-ye-m-in*
 pain.IPFV-PL.AN.R-IPFV-VN
 ‘(event of) hurting us/you/them’

- (29) *en-in*
 pain.IPFV-VN
 ‘(event of) hurting’

The verb *go-* ‘like, appreciate’ has the verbal nouns (30) and (31):

- (30) *go-ʔ-e-nam-in*
 like-give.PFV-PL.AN.R-PFV-VN
 ‘(instance of) liking us/you/them’

- (31) *go-n-in*
 like-AUX-VN
 ‘(event of) liking’.

For all other verbs in the list in (27) the object suffix is obligatorily part of the verbal noun:

- (32) *fote-ʔb'-e-nam-in* / **fote-nam-in*
 rout-give.PFV-PL.AN.R-PFV-VN
 '(instance of) routing us/you/them'

One perception verb and some verbs denoting physiological or psychological states belong to the subclass of transitive verbs which obligatorily index their object (i.e. the experiencer) with a suffix. Example (33) shows the use of the perception verb *mele-/men-* 'touch, feel'. Example (34) illustrates *—/en-* 'hurt, pain':

- (33) *mele-ʔb'-a-s-o=a*
 touch.PFV-give.PFV-3SG.M.R-DS.SEQ-3SG.F.SBJ=MED

me-m-s-e=a
 cry.IPFV-INCH-DS.SEQ-3SG.M.SBJ=MED
 'she touched him and then he started to cry, and then she ...'
 [Afoksitgabáam]

- (34) *gabáam=e en-ke-b-e=a?*
 head=SG.N1 hurt.IPFV-2SG.R-IPFV-3SG.N1.SBJ=Q
 'Is your head hurting?'

9.2.4. Transitives without object affix

Although the transitive verbs of subclass 4 never cross-reference their object they nonetheless have objects. For a more detailed treatment of this issue, see 3.14.2 on the grammatical relation of object in Mian.

Compare (35) with an overt object noun phrase and (36) without one:

- (35) *imen=o wen-b-i=be*
 taro=N1.PL eat.IPFV-IPFV-1SG.SBJ=DECL
 'I am eating taro.'

- (36) *wen-b-i=be*
 eat.IPFV-IPFV-1.SG.SBJ=DECL
 'I am eating (it).'

The existence of these verbs shows that Mian is not fully head-marking at the clause level. For these verbs, there is neither head-marking nor dependent-marking.

As with the other three types of transitive verb, the object noun phrase of transitive verbs in the fourth subclass tends to be elided if referent identity is recoverable from context or speech situation or if its identity is irrelevant. The normal situation for any transitive verb is to occur without overt object noun phrases in Mian discourse.

Hence, transitives without cross-referencing object affixes might seem difficult to separate from intransitive verbs in many instances. However, there is both a syntactic and a semantic criterion which can be used to distinguish the two from each other.

Syntactically, transitives without cross-referencing object affixes differ from intransitives in that they are always *capable of* having an overt object noun phrase, which is still understood in case it is dropped. Intransitives can under no circumstances have overt objects nor do they have elided but understood objects.

Semantically, the predications made by transitives without cross-referencing object affixes can be characterized as involving a participant – in addition to the participant encoded as subject – which undergoes or is affected by (or effected/produced by) the action described by the verb. Even though they might show up without an overt object noun phrase in discourse, semantically they invariably describe two-place relations.

An alternative analysis would be to treat transitives without cross-referencing object affixes as ambitransitives, i.e. verbs which can be used either transitively or intransitively without any overt derivation. Two types of ambitransitives are normally distinguished in the literature. The decisive question is “which of the transitive arguments corresponds to the intransitive argument (Dixon 1994: 18). In the first type, intransitive S becomes transitive A, as in ‘I am eating’ vs. ‘I am eating an apple’. In the second type, intransitive S becomes transitive O, as in ‘the door opened’ vs. ‘I opened the door’. Following Dixon (2002: 177), I will call these two types of ambitransitives the “S=A type” and the “S=O type”.

The alternation illustrated in (35) and (36) could thus be due to the fact that the verb *dowôn’wen* ‘eat’ is an S=A ambitransitive in Mian. However, I have no evidence whatsoever suggesting (36) illustrates a change in argument structure, in other words, that the verb becomes intransitive just because the overt object noun phrase is elided. Therefore, I will reject the S=A ambitransitive analysis here and recognize a fourth subclass of transitive verbs whose objects are never indexed but can be freely elided without a change in argument structure.

Most transitive verbs which do not index their object occur with inanimate objects only. Few can have animate objects, e.g. *bina*— ‘shoot, pierce’, or must have animate objects, e.g. *bu* ‘hunt’ and *yo* ‘initiate, beget’.

Other transitive verbs of subclass 4 are: *baa/o* ‘say’, *bafu* ‘boil’, *bali* ‘to bear (fruit)’, *bina*— ‘shoot, pierce’, *bu* ‘hunt’, *dabala/daba* ‘make (arrow)’, *fa/faka* ‘make (a fire)’, *fu* ‘cook, smoke’, *fubâ* ‘wash’, *ga* ‘cook in a leaf oven’, *ge/gen* ‘build, roll, fasten’, *gò’gokà* ‘cut (flesh, meat)’, *haa* ‘weave (string bag)’, *habù* ‘obscure, hide’, *hena/hen* ‘seek’, *kimâa’/—* ‘look out for, guard’, *klâ* ‘fix, complete’, *klutâ/klutâ(ka)* ‘smash’, *maanafa/—* ‘cut (cooked meat)’, *ngana/ngaan* ‘sing’, *nini* ‘scrape (taro)’, *ou* ‘put (arrow head) into shaft’, *sita* ‘care for’, *ta* ‘sharpen’, *taye* ‘crack open (nut)’, *tosiana/tosian* ‘fear’, *wa* ‘adorn with carvings’, *went/wentê* ‘hear, understand’, *yo* ‘initiate, beget’.

9.3. Ambitransitives

Ambitransitives can be used either transitively or intransitively without any overt derivation. Dixon (2002: 177) distinguishes two types of ambitransitive verb: the “S=A type” (e.g. English *eat*) and the “S=O type” (e.g. English *open*).

A small number of Mian verbs *prima facie* resemble S=O ambitransitives, i.e. verbs where intransitive S becomes transitive O, as in the English example ‘the door opened’ vs. ‘I opened the door’. Consider the examples (37) and (38):

(37) *as=e* *haka-b-i=be*
 tree=N1.SG break.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am splitting a tree (to produce firewood).’

(38) *as=e* *haka-b-e=ne?*
 tree=SG.N1 break.IPFV-IPFV-3SG.N1.SBJ=Q
 ‘Is a tree breaking (down)?’ [Flood]

This alternation looks like what one typically finds in S=O ambitransitives. The O argument of the transitive clause becomes the S argument of the intransitive clause. In both uses the semantic role of S/O, namely the patient, stays the same, but the syntactic relations change. S/O has the function of object in a transitive clause while it has the function of subject in an intransitive clause.

Furthermore, the transitive manifestation of the S=O ambitransitive verb includes a causative component (expressed through the agent) which the intransitive manifestation lacks. Compare:

- (39) *éim=e* *belâ-Ø-i-o=be*
 pandanus_fruit=SG.N1 break.PFV-REAL-1SG.SBJ-EP=DECL
 ‘I have cut across the pandanus fruit.’

- (40) *tóm=e* *belâ-s-e=ta*
 stone=SG.N1 break.PFV-DS.SEQ-3SG.N1.SBJ=MED
 ‘the stone (gate) opened and then someone else...’ [Danenok]

However, the intransitive reading in (40), and (38) above, is not the only one available. Each utterance can also be interpreted transitively. This is because the subject suffixes for neuter 1 singular and masculine singular subjects are homophonous. The following analysis is also possible:

- (41) *as=e* *haka-b-e=ne?*
 tree=SG.N1 break.IPFV-IPFV-3SG.M.SBJ=Q
 ‘Is he chopping a tree?’

- (42) *tóm=e* *belâ-s-e=ta*
 stone=SG.N1 break.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘he breaks open the stone (gate) and then someone else...’ [Danenok]

In S=A ambitransitives, such as English *eat*, the object can be elided freely, without affecting the semantic roles within the clause. However, leaving out the object of S=O ambitransitives leads necessarily to an intransitive interpretation of the clause. If the object of *break* in ‘I broke the vase’ is omitted, the subject changes semantic roles and the understanding would be that the speaker is undergoing the breaking (e.g. because of pressure, distress, etc.).

Mian ambitransitives do not follow this expected pattern. Rather, when an overt object is lacking, the subject can be interpreted as either the agent or the patient. Compare (43) and (44):

- (43) *dòu-n-o=be*
 close-REAL-3SG.F.SBJ=DECL
 ‘She closes (e.g. the door).’

- (44) *dòu-n-o=be*
 close-REAL-N2.SBJ=DECL
 ‘It (e.g. the door) closes.’

Ambitransitive verbs are listed in (45):

- (45) *bà’/baka* ‘split, cut’
balò/— ‘split, cut’
batlâa’/— ‘tear apart (vine, leaf, or bark)’
belâ/— ‘split alongside, open up, cut alongside, operate’
betelâ’/beta ‘open’
-biâ/— ‘fall off, erupt, throw’
biki/bika ‘close, squeeze, pierce (e.g. insect bites), explode’
blelâ’/— ‘fall, fell, push down, hit’
daa/— ‘break at joint’
dà’/daka ‘break off’
dilbî’ ‘scatter’
dòu ‘close’
êi ‘accumulate (water), impound (water)’
ein ‘be cooked, burn’
fibâ ‘tremble, shake’
hà’/haka ‘break, cut’
halâ ‘break’
halò ‘break, cut’
helâ ‘break, traverse’
goholo/— ‘coil up’
golâ/golâ(ka) ‘burn, sear skin’
tà’/taka ‘cut off’
wà’/waka ‘cut off’
watwatda/— ‘break, damage, destroy’

9.4. Derived transitives

Transitives can be derived from intransitives. This can be productive derivation with *-ûb’-* ‘give (PFV)’, which introduces another participant into the argument structure of the verb or idiosyncratic derivation, where for two verbs the transitive variant has a prefix indexing the object while the intransitive variant does not have a prefix.

9.4.1. Productive derivation of transitives

The verb *-ûb* ‘give (PFV)’ plays an important role in increasing the valency of a verb by one. It is productively used in a compound with another verb stem as a valency-increasing device with an applicative-like function. The use of ‘give’ as a valency-increasing device is attested in a number of TNG languages, for example Kewa (Franklin 1971), Menya (Whitehead 2004), and Tairora (Vincent 1973).

In Mian, most intransitive verbs can be compounded with *-ûb* ‘give (PFV)’ in order to introduce another participant into the argument structure of the verb through the object suffix (recipient) on the ‘give’-verb. This type of ‘give’-compounding is used in the perfective only. The spectrum of semantic roles that can be mapped onto this additional argument is quite wide and includes benefactives/malefactives, possessors, and experiencers, depending on the semantics of the verb compounded with ‘give’ (see 8.5.5.4).

The use of *-ûb* ‘give (PFV)’ in compounded with the intransitive motion verb *un~on* ‘go (PFV)’ is illustrated in example (46):

- (46) *fanà=ta* *un-ût'-ne-n-e=ne?*
do_what=MED go.PFV-give.PFV-1SG.R-REAL-3SG.M.SBJ=CQ
‘How has he escaped me?’ (lit. ‘What has he done, has he gone on me?’) [Klebein]

Compounding with ‘give’ is used to introduce an experiencer role into the argument structure of verbs of perception or verbs denoting physiological or psychological processes. The following examples show this for *kun-* ‘emanate smell on somebody’ and *dub-* ‘affect somebody, taste (in a certain way) to somebody’:

- (47) *Danenok* *dab-wal=i*
PN same_sex_siblings(dyad)-PL=PL.AN

kun-ûb'-e-s-o=to
emanate_smell-give.PFV-PL.AN.R-DS.SEQ-3PL.N1.SBJ=MED
‘Danenok and his brother smelled it’ (lit. ‘source emanates smell on them’) [Danenok]
- (48) *fút=e* *hanggôl*
tobacco=SG.N1 bitter

dub-ût'-ne-n-e=be
 taste.PFV-give.PFV-1SG.R-REAL-3SG.N1.SBJ=DECL
 'The tobacco tastes bitter to me.'

In the imperfective, the object suffix is simply appended to the verb without *-ûb-* 'give', e.g.:

(49) *yôle kenéng*
 well cheek

sikà'-ye-biaan-o=a
 swell.IPFV-PL.AN.R-AUX.IPFV.SS.SIM-3PL.N1.SBJ=MED
 'well, their cheeks were swelling up' [Sofelok 2]

Derivation of transitives from intransitives in the imperfective is as productive as compounding with *-ûb-* 'give (PFV)' in the perfective.

Other examples of derived transitives are:

- (50) *tl-* 'come to somebody (PFV), only in the figurative sense of 'happen to somebody', from *tl-te* 'come (PFV)'
un- 'go for sb, escape from somebody (PFV)', from *un* 'go (PFV)'
klaa- 'rot on somebody (e.g. a body part)', from *klaa* 'rot'
okok ke- 'work for somebody, from *okok ke* 'work' (lit. 'work do')
kaan- 'die for somebody (PFV)', from *kaan* 'die (PFV)' (This is probably a Christian concept.)
kou- 'have sex with somebody, from *kou* 'have sex'
kun- 'smell (lit. 'emanate smell on sb')', from *kun* 'emanate smell'
dub- 'feel to somebody, taste to somebody, from *dobô* 'feel, taste'
tou- 'ambush (i.e. 'sit down for somebody, from *tou* 'sit down'
bi- 'exist for somebody, own', from the existential verb *bi-bl* 'exist, stay, remain (IPFV)'

9.4.2. Idiosyncratic derivation

For two verbs valency alternates between monovalent and bivalent depending on the presence of a pronominal object prefix or a classificatory prefix. One of

these is ‘see’, which has intransitive *têm’/temê’* ‘have a look’ and transitive *-têm’/-temê’* ‘see, look at’. This is illustrated by transitive (51) and intransitive (52):

(51) *memâ yomintén=i wa-têm’-n-ib=a*
 now initiant=PL.AN 3SG.F.O-see.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘now the initiants saw it (a sow) and then...’ [Kasak]

(52) *éil=o kimâa’-bi-Ø-e=a*
 pig=SG.F guard.PFV-AUX.IPFV-SIM-3SG.M.SBJ=MED

temê’-b-e=to
 look.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘he was guarding the pig looking (around) and...’ [Danenok]

For the verb *san* ‘grow (IPFV, intransitive)’ vs. *-san* ‘plant (IPFV, transitive)’ valency is determined by the absence or presence of a classificatory prefix. Compare the following two examples:

(53) *do-san-biaan-ib=a*
 PL.M CL.O-plant.IPFV-AUX.IPFV.SS.SIM-3PL.N1.SBJ=MED
 ‘while they were planting them (e.g. bananas), they...’ [Sofelok, 1]

(54) *aliam=o san-biaan-o=a*
 shoot=PL.N1 grow.IPFV-AUX.IPFV.SS.SIM-3PL.N1.SBJ=MED
 ‘while the shoots were growing, they...’ [Sofelok, 1]

These two verbs are intransitive when used without a prefix and transitive when supplied with a prefix.

9.5. Ditransitives

The verb *-ûb’* ‘give (PFV)’ is an underived ditransitive. It belongs to the class of verbs which obligatorily cross-reference and classify the theme object, i.e. the gift, with a classificatory prefix (see 9.2.1). In addition, it also takes an object suffix that cross-references the recipient argument (plus another suffix for the subject). Thus, *-ûb’* ‘give (PFV)’ is an examples of triple agreement, i.e. the indexing of subject and two objects (theme and recipient) by affixes on the verb (Fedden 2010). Triple agreement is a typologically rare phenomenon, both in Papuan languages and world-wide (Foley 2000). An example of *-ûb’* ‘give (PFV)’ is given in (55):

- (55) *nē naka=e éil=o*
 1SG man=SG.M pig=SG.F

om-ûb'-a-Ø-i-bio=be
 3SG.F_CL.O-give.PFV-3SG.M.R-REAL-1SG.SBJ-GPST=DECL
 'I gave the sow to the man.'

For details on the derived nature of the imperfective counterpart *-ka-* 'give (IPFV)', the reader is referred to 9.6.2.2.

The ditransitive verb *-fu-* 'send to (PFV-only)'¹ involves compounding with *-ûb'* 'give (PFV)' in order to introduce the recipient argument. It indexes the theme with a classificatory prefix. The recipient argument is marked by a suffix on the 'give'-morpheme compounded with the main verb. Consider example (56):

- (56) *ō baa-n-o=a futâan=o*
 3SG.F say.PFV-SEQ-3SG.F.SBJ=MED letter=N2

om-fu-'b'-a-n-amab-i=bo
 3SG.F_CL.O-send.PFV-give.PFV-2SG.R-AUX.PFV-IRR.NANPL.SBJ-
 1SG.SBJ=QUOT

ge baa-n-o=be
 say.PFV say.PFV-REAL-3SG.F.SBJ=DECL
 'She said she would send a letter to him.' (lit. 'She said: "I will send a letter to him."')

Although the recipient role of *-fu-* 'send to (PFV)' is obligatorily introduced through serialization with 'give', which suggests derivation from a simpler transitive base, such a transitive base does not exist: **-fu* 'send (PFV)'. Hence, an utterance like (57) is ungrammatical regardless of whether the recipient is expressed with a free noun phrase (in this case the pronoun *nē* 'me'):

- (57) **futaan=o (nē) om-fu-n-e=be*
 letter=N2 (1SG) 3SG.F_CL.O-send.PFV-REAL-3SG.M.SBJ=DECL
 Intended: 'He sent (me) a letter.'

The same applies to *ale-* 'show', which lacks a transitive base **ale*. As for *-fu-* 'send to (PFV)', the recipient argument, or in the case of 'show' the recipient-like argument, is introduced by 'give' in the perfective. The theme participant, i.e. the 'shown', is never cross-referenced on the verb by a pronominal affix but can be encoded as a free noun phrase, as in (58):

(58) *kasak=e*
kasak_ritual=SG.N1

ale-˘b'-e-Ø-ib-bio=ta
 show-give.PFV-PL.AN.R-REAL-2/3PL.AN.SBJ-GPST=MED
 ‘they had shown us the Kasak (ritual), and then someone else...’
 [Kasak ritual]

In natural Mian discourse overt noun phrase arguments are typically elided if their identity is retrievable from the context even if the argument is not indexed on the verb. Parallel to the case of elided object noun phrases in transitive verbs, which were discussed in section 9.2.4 above, I have no evidence suggesting that the verb *ale-* ‘show’ becomes monotransitive, i.e. only has a subject and a recipient object (indexed with a suffix), when the overt object noun phrase (referring to the entity shown) is elided. Therefore, I analyse *ale-* ‘show’ as an underived ditransitive verb whose object noun phrase can be freely elided without assuming a change in argument structure.

To sum up, the clearest example of an underived ditransitive verb in Mian is *-ûb’-* ‘give (PFV)’. It encodes the theme with a set of prefixes and the recipient and the subject with two different sets of suffixes. In the case of *-fu-* ‘send to (PFV)’, we are dealing with a lexicalization, which is underived (at least in contemporary Mian). A similar argument can be made for *ale-* ‘show to (PFV)’.

9.6. Derived ditransitives

9.6.1. Productive derivation of ditransitives

Mian has a plethora of ditransitives which are derived from transitive verbs. All transitive verbs can be compounded with *-ûb’-* ‘give (PFV)’ in order to introduce another participant into the argument structure of the verb through the object suffix on the ‘give’-verb, which is used in the perfective only. The spectrum of semantic roles that can be mapped onto this additional argument is quite wide and includes not only recipients but also benefactives/malefactive, the malefactive source, possessors, and goals of ballistic motion, depending on the semantics of the verb compounded with ‘give’ (see 8.5.5.4 for details).

The use of *-ûb’-* ‘give (PFV)’ in a compound with a transitive verb is illustrated in example (59):

- (59) *naka=e*
man=SG.M

dob-suana-ˈb'-o-n-ebo=be
3SG.M_CL.O-hate.PFV-give.PFV-3SG.F.R-REAL-2SG.SBJ=DECL
'You hate the man for her (sake).'

Verbs require compounding with *-ûb'* 'give (pfv)' in the perfective for a recipient argument to be expressed. In the imperfective they have to be inflected directly for the recipient (with a form from the *ka*-paradigm, see 8.5.5), rather than being compounded with *-ka-* 'give (IPFV)', followed by the object suffix. There are no morphological changes in the stem. Compare (60) without and (61) with an object suffix:

- (60) *unín=o ifu-b-o=be*
food=N2 serve.IPFV-IPFV-3SG.F.SBJ=DECL
'She is serving food.'

- (61) *unín=o ifu-ye-b-o=be*
food=N2 serve.IPFV-PL.AN.R-IPFV-3SG.F.SBJ=DECL
'She is serving us food.'

Most transitive verbs can become derived ditransitives. Table 9.5 gives examples of transitive verbs and their ditransitive counterparts. As derived ditransitives are legion in Mian, the examples have been selected to represent the whole range of semantic roles for the object suffix. Note that *dei-/—* 'leave somebody/something (PFV)' is a special case in that it is the only transitive verb which allows further derivation into *dei- -/—* 'leave something for somebody'. This issue will be taken up below in 9.6.2.3.

Table 9.5. Examples of derived ditransitives

	Transitives	Derived ditransitives
Subclass 1	<i>-nâ'/—</i> 'kill'	<i>-nâ' -/—</i> 'kill for sb/against sb's will'
	<i>-tlâa'/—</i> 'remove'	<i>-tlâa' -/—</i> 'remove for/from sb'
Subclass 2	<i>-suana/-suan</i> 'hate'	<i>-suana/-suan-</i> 'hate for sb's sake'
	<i>-biâ'/—</i> 'throw'	<i>-biâ' -/—</i> 'throw to sb'
	<i>-êb'/—</i> 'take (PFV)'	<i>-ei' -/—</i> 'take from sb (PFV)'
Subclass 3	<i>dei-/—</i> 'leave'	<i>dei- -/—</i> 'leave for sb'
	<i>baa/o</i> 'say'	<i>baa/o-</i> 'say to sb'
Subclass 4	<i>ngela/ngen</i> 'beg'	<i>ngela-/ ngen-</i> 'beg from sb'
	<i>fû</i> 'cook'	<i>fû-</i> 'cook for sb'
	<i>habû'/—</i> 'hide'	<i>habû' -/—</i> 'hide from sb'

9.6.2. *Idiosyncratic derivation of ditransitives*9.6.2.1. *-Ø̂- ‘give (PFV)’ from -Ø̂ ‘take (PFV)’*

The perfective-only zero root Ø̂ has a very general meaning ‘transfer’, which is interpreted as ‘take’ when it indexes the object (with a classificatory prefix) and as ‘give’ when both object and recipient are indexed (with classificatory prefix and object suffix, respectively). This verb is interesting phonologically because it is segmentally zero, yet all word forms based on this root have a LHL tonal melody (indicated with the diacritic ‘^’). This suggests that there used to be a non-zero verb root ‘transfer’, which was elided while the tone associated with it remained.²

The following examples illustrate -Ø̂ ‘take (PFV)’ without a recipient suffix (transitive), in (62), and -Ø̂- ‘give (PFV)’ with such a suffix (ditransitive), in (63):

- (62) *unáng=o om-Ø̂-Ø̂-e=be*
 woman=N2 3SG.F_CL.O-take.PFV-REAL-3SG.M.SBJ=DECL
 ‘He took a wife.’

- (63) *monî=o om-Ø̂-wen-s-e=a*
 money=N2 3SG.F_CL.O-give.PFV-3SG.F.R-DS.SEQ-3SG.M.SBJ=MED

yē dē'-n-o=be
 there desist.PFV-REAL-3SG.F.SBJ=DECL
 ‘He gave her (a coin/bill of) money, (but) there she refused (it).’

For the forms of the recipient suffix series used with -Ø̂- ‘give (PFV)’, see 8.5.5.1.

9.6.2.2. *-ka- ‘give (IPFV)’ from -ka ‘put (IPFV)’*

For unbounded ‘giving’-events, e.g. repeated (unsuccessful) or habitual giving, the imperfective stem *-ka-* ‘give (IPFV)’ is used. While perfective *-ûb-* ‘give (PFV)’ is clearly an underived ditransitive verb in contemporary Mian, which obligatorily indexes both theme and recipient, *-ka-* ‘give (IPFV)’ is apparently derived from the transitive verb *-ka* ‘put’,³ which indexes the object with a classificatory prefix. Compare (64) and (65):

- (64) *imen=e ob-ka-b-i=be*
 taro=SG.N1 3SG.RESID.O-put.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am putting down a taro.’

- (65) *ī blatik=o*
 3PL.AN plastic_bag(TP)=N2

do-ka-ye-bina-b-io=be
 PL.F_CL.O-give.IPFV-PL.AN.R.IPFV-AUX.HAB-IPFV-
 2/3PL.AN.SBJ=DECL
 ‘They habitually give vomit bags to us (i.e. on the mission plane).’

I assume that historically imperfective *-ka-* ‘give (IPFV)’ was derived from *-ka* ‘put (IPFV)’ in lieu of an imperfective stem for the (erstwhile) defective verb *-ûb-* ‘give (PFV)’.

9.6.2.3. *dei- /— ‘leave sth for sb’ (PFV) from dei- /— ‘leave sb/sth (PFV)’*

The verb *dei- /—* ‘leave (PFV)’ is a noteworthy case because it is the only transitive verb which allows further derivation into a ditransitive by being compounded with *-ûb-* ‘give (PFV)’ twice to form *dei- /—* ‘leave for somebody’. The double dashes after the stem (*dei- -*) are meant to indicate that the verb is followed by two instances of ‘give’. Compare the transitive verb in (66), and its ditransitive counterpart in (67):

- (66) *nī kōbo*
 1PL.EXCL 2SG.M

dei-˘b’-ke-Ø-ob=a
 leave.PFV-give.PFV-2SG.R-DS.SEQ-1PL.AN.SBJ=MED
 ‘we left you and then someone else...’ [Crows]

- (67) *unín=o*
 food=N2

dei-˘b’-o-˘b’-ke-Ø-i-o=be
 leave.PFV-give.PFV-N2.R-give.PFV-2SG.R-REAL-1SG.SBJ-EP=DECL
 ‘I left food for you.’ [Observed]

Such successive additions of ‘give’ are not possible with any other verb, whether derived (*kou-* ‘have sex with somebody’, **kou-* - ‘have sex with

somebody for somebody's sake', from *kou* 'have sex') or underived (*fote*- 'rout somebody', **fote*- - 'rout somebody for somebody', and **fote*).

9.7. Possessor raising

Possessor raising is a valency-increasing process through which a possessor is promoted to object status. In Mian, possessors can be expressed by recipient suffixes on *-ûb*'- 'give (PFV)' compounded with the main verb in the perfective. In the imperfective affixation is directly to the stem.

Possessor raising is commonly found with body parts, but not restricted to these (see below). If the verb is transitive (after possessor raising), the body part is indexed on the verb as the subject. Consider the following example of *sikà* 'swell (IPFV)', repeated from (49) above:

- (68) *yōle kenéng*
well, cheek

sikà'-ye-biaan-o=a
swell.IPFV-PL.AN.R-AUX.IPFV.SS.SIM-3PL.N1.SBJ=MED
'well, their cheeks were swelling up' [Sofelok 2]

Possessor raising is also attested with body wastes:

- (69) *al=o méb*
faeces=PL.N1 close

tî-ûb'-a-s-o=ta
come.PFV-give.PFV-3SG.M.R-DS.SEQ-3PL.N1.SBJ=MED
'he had to defecate and then he ...' (lit. his faeces came close) [Danenok]

If the verb is ditransitive (after possessor raising), the body part is the object, as in (70). Recall that not all transitive verbs mark their object with a pronominal or classificatory prefix:

- (70) *bānon=e*
arm_bone=SG.N1

hel-ût'-ne-n-e=be
break_across.PFV-give.PFV-1SG.R-REAL-3SG.M.SBJ=DECL
'He's broken my arm.'

There is a restriction that the pronominal affixes cross-referencing subject and any object must not co-referent. In reflexive situations, the object marker on the verb cannot reflexively refer to the endpoint of a reflexive action (see 9.9 on reflexivization). Likewise, raising of a possessor to object status is impossible if the subject is identical to the possessor of the body part. Hence, possessor raising is disallowed in (71):

- (71) *bānon=e helâ-Ø-i-o=be*
 arm_bone=SG.N1 break_across.PFV-REAL-1SG.SBJ-EP=DECL
 ‘I’ve broken my arm (intentionally or unintentionally).’

Mian has extended the possibility for possessor raising from body parts to all possessed items. Any animate possessor can be raised to argument status, as in (72) and (73):

- (72) *nakamîn=e imen=o éil=e*
 man=SG.M taro=PL.N1 pig=SG.M

wen-ha-b-e=a
 eat.IPFV-3SG.M.R-DS.SIM-3SG.M.SBJ=MED
 ‘While a pig was eating taro from a man (, the man...)’ [Pig story]

- (73) *ul-ēta kwéit*
 who-3SG.M.EMPH sugarcane

hal-ût’-ne-n-e-bu=e?
 break_off.PFV.SG.O-give.PFV-REAL-1SG.R-3SG.M.SBJ-GPST=CQ
 ‘Who broke off (some of) my sugarcane?’ [Unangkliten]

The next example illustrates possessor raising with a transitive verb, which obligatorily indexes its object with a pronominal prefix, e.g. *-nâ* ‘kill (PFV)’:

- (74) *nē tîl=o wa-nâ’-ût’-ne-n-e*
 1SG dog=SG.F 3SG.F.O-kill.PFV-give.PFV-1SG.R-REAL-3SG.M.SBJ

naka=e mo tekein ke-b-i=ba=be
 man=SG.M NEG knowledge do-IPFV-1SG.SBJ=NEG=DECL
 ‘I don’t know the man who killed my bitch.’

Apart from the object suffix, the possessor can be encoded with an optional possessive pronoun preceding the possessed, as in (75):

- (75) (*nē*) *wéng=o*
 (1SG.POSS) talk=N2

went-ût'-ne-n-al=e!
 hear.PFV-give.PFV-1SG.R-REAL-2SG.SBJ.HORT=HORT
 '(You should) Mark my words!'

9.8. Impersonal verbs

A few verbs which signify the arrival of the morning, the evening or the night, or express that some time has passed invariably have *-o* in the position of the subject suffix. However, they can never occur with an overt subject noun phrase which this *-o* would cross-reference. Therefore, I treat these verbs as impersonal and analyse *-o* as an expletive subject marker. Impersonal verbs have zero-valency. They cannot undergo derivation to increase their valency. Semantically, they are zero-place predications, similar to expletive constructions in Indo-European languages, such as English 'it's raining'. Two examples are given below:

- (76) *bomâ-s-o=to* *yole* *ē*
 light-DS.SEQ-EXPL.SBJ=MED well 3SG.M

am=o *memâ=o* *ge-n-e=to*
 house=N2 new=N2 build.PFV-SEQ-3SG.M.SBJ=MED
 'In the morning he built a new house and then...' (lit. 'when it lighted...') [Pig story]

- (77) *bl-Ø-ib=a* *kwin-Ø-o=a*
 stay-DS.SEQ-2/3PL.AN.SBJ=MED dark-DS.SEQ-EXPL.SBJ=MED

ám *on-s-io=be*
 lie go.PFV-RPST-2/3PL.AN.SBJ=DECL
 'They stayed and in the evening they went to sleep'
 (lit. '...when it darkened...') [Pig story]

9.9. Reflexivization

Reflexivization is an infrequent phenomenon in Mian discourse. Therefore, this section is more about what cannot be expressed reflexively than about what can.

The most common way of describing a reflexive situation is to replace the object of a transitive verb with a reflexive pronoun. Compare (78) and (79):

(78) *naka=e aal=e gò'-n-e=be*
 man=SG.M skin=SG.N1 cut_skin.PFV-REAL-3SG.M.SBJ=DECL
 'The man has cut the skin.'

(79) *naka=e ē-maye gò'-n-e=be*
 man=SG.M 3SG.M-REFL cut_skin.PFV-REAL-3SG.M.SBJ=DECL
 'The man has cut himself.'

Reflexivization works productively with some transitive verbs, namely only those which denote a physical action towards the self. The pronoun in (80) can only have an emphatic but not a reflexive reading:

(80) *naka=e ē-maye*
 man=SG.M 3SG.M-REFL

kimâa'-bi-Ø-e=be
 care_for.PFV-AUX.IPFV-IPFV-3SG.M.SBJ=DECL
 'The man himself is caring for (someone).'
 *'The man is caring for himself.'

Mian does not have any lexically reflexive verbs, for which the reflexive reading would be entailed. All grooming verbs are transitive and require an object which refers to the affected body part:

(81) *naka=e mináan=o*
 man=SG.M whisker=PL.N1

deilâ'-n-e=be
 remove_hair.PFV-REAL-3SG.M.SBJ=DECL
 'The man has removed his whiskers.' (i.e. 'the man has shaved')

The most frequent grooming verb (*aaie*) *fuela/(aaie) fua* 'bathe' is a noun-verb idiom (see 8.10). It is interpreted as reflexive in its intransitive form, as in (82):

(82) *naka=e aaie fua-b-e=be*
 man=SG.M water bathe.IPFV-IPFV-3SG.M.SBJ=DECL
 'The man is bathing (himself).'

A transitive verb (*aaie*) *fuela-*/*(aaie) fua-* ‘bathe somebody’ can be derived from the intransitive base. However, a reflexive reading is never possible for the derived form:

(83) *kōbo*
2SG.M

aaie fuela-ʔ'-ne-n-al=e!
water bathe.PFV-give.PFV-1SG.R-REAL-2SG.SBJ.HORT=HORT
'(You should) Bathe me!'

Although many transitive verbs that obligatorily index their objects with a pronominal or a classificatory prefix denote concrete physical actions, none can actually be used reflexively by having co-referent subject and object markers. This is simply not permitted by the grammar. For these verbs, e.g. *-tēm* ‘see (PFV)’, the object prefix must never be co-referent with the subject suffix. Hence, (84) is fine, (85) can only have a disjoint reading and (86) is ungrammatical and does not have any meaning:

(84) *a-tēm'-Ø-i=be*
3SG.M.O-see.PFV-REAL-1SG.SBJ=DECL
'I saw him.'

(85) *a-tēm'-Ø-e=be*
3SG.M.O-see.PFV-REAL-3SG.M.SBJ=DECL
'He_k saw him_l.'
BUT: *'He saw himself.'

(86) **na-tēm'-Ø-i=be*
1SG.O-see.PFV-REAL-3SG.M.SBJ=DECL
Intended: 'I saw myself.'

Apart from this systematic grammatical restriction, there are semantic and also cultural reasons which militate against reflexivization. Consider the transitive verbs *-fū* ‘grab’ and *-nā* ‘hit, kill’. While one can grab or hold other people, it is less clear how one would grab oneself and self-hitting and suicide are not part of Mianmin culture.

However, to “see oneself” is both semantically plausible and culturally appropriate. In former times the only surface which reflected properly was water. Hence one used to say and in fact still says today:

- (87) *naka=e aa-kikit=e doka-b-e=be*
 man=SG.M water-reflection=SG.N1 behold-IPFV-3SG.M.SBJ=DECL
 ‘The man is looking at his (water-)reflection.’

Although there are mirrors nowadays and the noun *aakikit* is actually used to refer to mirrors, one still cannot “see oneself” in Mian. An alternative to (87) is (88):

- (88) *ē kibi=o wa-temê'-b-e=be*
 3SG.M face=N2 N2.O-see-IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He’s looking at his face (implied: in the mirror).’

9.10. Constituent order

This section deals with the order of constituents in the clause. There are no differences in constituent order possibilities between medial clauses, on the one hand, and final clauses or independent sentences, on the other. The only clause type which can show an order of constituents not attested in any other clause type is the head-internal relative clause (see 13.3.7).

I will first describe the unmarked order of overtly realized argument noun phrases (which is S/A followed by O) and then discuss deviations from it.

Finally, the position of different types of adverbs and adverbial adjuncts in the clause will be discussed.

9.10.1. Argument order in transitive clauses

All overtly realized arguments are either free pronouns or full noun phrases. Rarely, both subject and object are overtly realized as free pronouns. In such cases, the subject always precedes the object. This is independent of whether the object is indexed on the verb with prefix (89) or a suffix (90):

- (89) *nē ī ya-têm'-Ø-i=bo*
 1SG 3PL.AN PL.AN.O-see.PFV-REAL-1SG.SBJ=QUOT
 ‘“I saw them.”’

- (90) *nī kōbo*
 1PL.EXCL 2SG.M

dei-ʔb'-ke-Ø-ob=a
 leave.PFV-give.PFV-2SG.R-DS.SEQ-1PL.AN.SBJ=MED
 'we left you and then someone else...' [Crows]

If the arguments are instantiated by full noun phrases instead of pronouns, the unmarked constituent order is AOV. Overt subject noun phrases usually precede object noun phrases. This order is very consistently observed in elicited examples, e.g.:

(91) *naka=e unáng=o wa-têm'-Ø-e=be*
 man=SG.M woman=SG.F 3SG.F.O-see.PFV-REAL-3SG.M.SBJ=DECL
 'The man saw the woman.'

In natural discourse, however, relative order of subject and object noun phrases is less consistently A followed by O. This usually does not create ambiguities due to the language's head-marking characteristics, which in most cases allow the identification of syntactic relations through information from the pronominal and classificatory affixes without having to take constituent order information into account. Deviation from the unmarked order in natural discourse will be discussed in 9.10.1 below.

Although unmarked constituent order in Mian is AOV, verb-final position is really all that is mandated. Hence, it is possible to invert subject and object if both grammatical relations are realized by overt noun phrases.

In many cases, argument indexing disambiguates as in example (92) where the pronominal affixes *-e* and *wa-* clearly indicate that the man is the 'seer' and the woman the 'seen':

(92) *unáng=o naka=e wa-têm'-Ø-e=be*
 woman=SG.F man=SG.M 3SG.F.O-see.PFV-REAL-3SG.M.SBJ=DECL
 'The man has seen the woman.'

A natural example is (93) where argument indexing on the verb indicates who leads whom. Preposed objects are typically topics and marked with the topic clitic *=le*:

(93) *memé ī=le Sobining=e*
 children PL.AN=TOP PN=SG.M

del-êt-n-e=a
 PL.AN.O-take.PFV-SS.SEQ-3SG.M.SBJ=MED
 'As for the children, Sobining took them and then ...' [Sobining]

I analyse examples like (93) as topicalizations rather than cleft structures because there are no cues that suggest the latter analysis, such as presence of a copula or an obvious bi-clausal structure.

Argument inversion is not possible with pronominal subjects without topic marking of the object. Compare (94) and (95):

(94) *imen ē=le nē wen-b-i=be*
 taro SG.N1=TOP 1SG eat.IPFV-IPFV-1SG.SBJ=DECL
 ‘As for the taro, I’m eating (it).’

(95) **imen=e nē wen-b-i=be*
 taro=SG.N1 1SG eat.IPFV-IPFV-1SG.SBJ=DECL
 Intended: ‘I’m eating the taro.’

This restriction is independent of whether the verb marks the object or not. Thus, (96) is bad as well.

(96) **naka=e nē a-tēm’-Ø-i=be*
 man=SG.M 1SG 3SG.M.O-see.PFV-REAL-1SG.SBJ=DECL
 Intended: ‘I’ve seen the man.’

I will mention here in passing that in (core-level) serial verb constructions, overt object noun phrases can appear inside the verb serialization, if they are exclusive to one of the verbs in the chain:

(97) *dabáal=e haka dam=o*
 ground=SG.N1 break.IPFV body=SG.F

om-bù-Ø-e-bio=ta
 3SG.F_CL.O-bury.PFV-REAL-3SG.M.SBJ-GPST=MED
 ‘after he had dug up the ground and buried her, (the Niniktol
 vine...)’ [Afoksitgabáam]

In this example, *damo* ‘(her) body’ is an argument of the verb *ombuebiota* ‘he buried her’ not of *haka* ‘break’. For details, see section 11.1.1.3 on serial verb constructions.

9.10.2. Argument order in ditransitive clauses

To distinguish the two objects in ditransitive clauses I use the following abbreviations: O - theme object and R - recipient object. In ditransitive

clauses, unmarked constituent order (i.e. most frequent in the corpus) is A R O V. There is a tendency to order overt object noun phrases according to animacy. R much more frequently refers to humans (or at least to animates) since it encodes recipients or benefactives. Hence, it tends to occur before O.

Ditransitive clauses in which all three core arguments are overtly realized as free pronouns are unattested in the spontaneous corpus and only occur in elicited material, e.g.:

- (98) *nē* *kōbo* *ē*
 1SG 2SG.M 3SG.N1
- tob-ûb'-ke-Ø-i-o=be*
 3SG.LONG.O-give.PFV-2SG.R-REAL-1SG.SBJ-EP=DECL
 'I've given it (i.e. LONG) to you.'

The same ordering principles can be observed when the objects are instantiated by overt noun phrases, as in the following two examples:

- (99) *alél=o* *al=o*
 wife=SG.F bowels=PL.N1
- gwel-ûb'-o-s-e=a*
 cut_out.PFV-give.PFV-3SG.F.R-DS.SEQ-3SG.M.SBJ=MED
 'he cut out the bowels (of an animal) for the wife and then she...'
 [Flood]

- (100) *Fu-taman* *min=e* *mak=o* *yē*
 PN-valley son=SG.M some=N2 there
- wa-l-Ø-al-Ø-ib=o=le*
 N2.O-hit.PFV-give.PFV-3SG.M.R-REAL-2/3PL.AN.SBJ=N2=TOP
 'when they cut off some and gave (it) to the man from the Fu valley ...' [Danenok]

Reverse order of objects, i.e. A O R V, is attested though much less frequent. An example of this alternative constituent order in a ditransitive clause is (101):

- (101) *ī* *ōlo* *mak=i*
 3PL.AN DEM.PROX.PL.N1 other=PL.AN

o-Øˆ-yen-s-ib=a

PL.RESID.O-give.PFV-PL.AN.R-DS.SEQ-2/3PL.AN.SBJ=DECL

‘they give these (things) to the others and then someone else ...’

[MPIP Reciprocals, 28 (Evans et al. 2004)]

The most important generalization with respect to the position of the subject noun phrase in ditransitive clauses is that it must not appear between the two object noun phrases, i.e. the subject noun phrase can precede (102) or follow the two objects together (103):

- (102) *nē* *kōbo* *monî=o*
1SG 2SG.M money=N2

om-ûb’-ke-n-amab-i=be

3SG.F_CL.O-give.PFV-2SG.R-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL

‘I will give you the (coin/bill of) money.’

- (103) *nakamîn=e* *imen=o* *éil=e*
man=SG.M taro=PL.N1 pig=SG.M

wen-ha-b-e=a

eat.IPFV-3SG.M.R-DS.SIM-3SG.M.SBJ=MED

‘While a pig was eating a man’s taro (, the man...)’ [Pig story]

9.10.3. Position of non-arguments

The most important non-arguments, whose syntactic behaviour will be described here, are:

- adverbs
- postpositional adjuncts
- nominal adjuncts
- temporal nouns
- adverbial clauses (which are formally marked as noun phrases)

None of these are ever obligatory, i.e. part of the argument structure of a verb. They provide additional information about time, place, direction, manner, or cause.

9.10.4. Position of adverbs

Items which can function as adverbs are either from a subset of adjectives or adverbs proper. The latter can never modify a noun attributively like adjectives and constitute a word class of their own.

Semantically, adjectives with adverbial function and most adverbs proper specify the manner of carrying out the action denoted by the verb. Some adverbs proper have a temporal meaning. On adjectives which can or cannot be used adverbially, see 3.4. On adverbs proper, see 3.6.

In addition, directionals can also be used adverbially indicating that a movement event specified by a verb of motion takes place in a certain direction. On directionals, see 3.8 (as word class), 9.1.1 (modifying intransitive verbs of motion) and 9.1.2 (as intransitive verbs of motion).

Generally, adverbs (104), adjectives with adverbial function (105), and directionals (106) occur immediately before the verbs they modify:

- (104) *heb ke-n-al=e!*
quickly do-REAL-2SG.HORT=HORT
'Hurry!' [Danenok]
- (105) *tēn gwáab=e sūm me-b-e=be*
child little=SG.M big cry.IPFV-IPFV-3SG.M.SBJ=DECL
'The small boy is crying loud.' [Observed]
- (106) *Klefol=i daak te-n-ib=ta*
PN=PL.AN down come.PFV-SEQ-2/3PL.AN.SBJ=MED
'The Telefomin people came down and then ...' [Mianmin and Telefomin]

While adverbial directionals, adverbial adjectives and some adverbs are restricted to the position immediately before the verb, some adverbs show some mobility within the clause. This is illustrated for *imín~eimín* 'again' in pre-verbal position (107) and in clause-initial position (108):

- (107) *imensan=o imin ol-êb*
taro_stalk=N1.PL again PL.RESID.O-take.PFV
- met-n-ib=a=le*
upriver-SS.SEQ-2/3PL.AN.SBJ=MED=TOP
'Again they took taro stalks and went upriver and there they...'
[Sofelok, 2]

- (108) *eimín imensan=o*
again taro_stalk=PL.N1

wel-êt-n-ib=ta

cut.PFV.PL.O-take.PFV-SEQ-2/3PL.AN.SBJ=MED

‘Again they cut and took taro stalks and then they...’ [Mianmin and Telefomin]

Other adverbs that display this kind of mobility within the clause are *amít(=ye)* ‘always’, *hebmamsâb* ‘quickly’, *makob(=ye)* ‘like, quasi’, *sin* ‘earlier, already’, *sún* ‘habitually’, and *un* ‘temporarily’.

9.10.5. Position of postpositional adjuncts

Postpositional adjuncts show a strong tendency to occur immediately before the verb.

- (109) *naka mak=e Goloka=wât*
man some=SG.M PN=across

biaan-e=a

stay.IPFV.SS.SIM-3SG.M.SBJ=MED

‘While some man lived across in Goroka, he...’ [Pineapples]

- (110) *dekéng=e kim=daak tob-â’*
belt=SG.N1 ground=down 3SG.LONG.O-leave.PFV

un-Ø-e=a

go.PFV-DS.SEQ-3SG.M.SBJ=MED

‘he left the belt on the ground and set out and then...’ [Dafinau]

Postpositional adjuncts sometimes occur preposed to the beginning of the clause. A natural example is:

- (111) *aa un-in daak=o as=e sūm=e*
water drink.IPFV-VN down=N2 tree=SG.N1 big=SG.N1

halô-s-e=a

break.PFV.SG.SBJ-DS.SEQ-3SG.N1.SBJ=MED

‘down at the water(-drinking) place a big tree broke down and then someone ...’ [Flood]

When a clause contains both a postpositional adjunct and an adverb, the former typically precedes the latter. It is rare to have more than one adverbial element in a single clause. An example is:

- (112) *nē* *Febhuali* *dim* *ē-ta* *imin*
 1SG February on SG-EMPH again

tl-aamab-i=be
 come.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I’ll come again in February.’

9.10.6. Position of nominal adjuncts

In most cases, nominal adjuncts occur immediately before the verb. An example of a nominal adjunct is provided in (113). Others can be found in section 8.10.

- (113) *ēle* *fetàng*
 DEM.PROX.SG.N1 carrion_smell

kun-b-e=be
 emanate_smell.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘This smells putrid.’

The element *fetàng* ‘carrion smell’ is a regular compound consisting of *fē* ‘carrion’ and *tang* ‘smell’, yet is not an object noun phrase in this case but rather a nominal adjunct to the verb. In Mian, objects can be followed by an article or other pronominal determiner, they can be modified by a relative clause and be topicalized. But a nominal adjunct like *fetàng* in (113) always has to occur before the verb *kun* smell cannot be followed by any determiner. Nor do they allow relativization or topicalization. Occasionally, nominal adjuncts occur modified by an adjective, e.g. *abén sūm* ‘big laughter’.

9.10.7. Position of temporal nouns

Temporal expressions are for example *sinanggwāno* ‘in days of yore’ or *memālo* ‘now, today’ (see 3.1.9). In contrast to adverbs and postpositional adjuncts, which generally precede the verb, temporal expressions occur clause-initially, as in (114), or after the first overt argument noun phrase, which is the subject in unmarked constituent order, as in (115). The pre-verbal

position, which is typical for adverbials in general, is unattested for temporal nouns:

- (114) *sinangwán=o unangmôn=o*
 days_of_yore=N2 woman=SG.F

tāi=e báangkli=e
 blade=SG.N1 stone_adze=SG.N1

deb-êt-n-o=a
 3SG.M_CL.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED
 ‘A long time ago, a woman took a báangkli adze, and then she...’ [Afoksitgabám]

- (115) *nē memâlo fút=e*
 1SG now tobacco=SG.N1

tob-ô-n-i=a
 3SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I now take the tobacco, and then I ...’ [Rolling smokes]

9.10.8. Position of adverbial clauses

Adverbial clauses are formally marked as noun phrases with the article =*o* and invariably occur clause-initially. The following two examples illustrate this for a temporal clause (116) and a conditional clause (117). Adverbial clauses are given in brackets:

- (116) [*naka=i utl-Ø-ib=o*]
 man=PL.AN come_up.PFV-REAL-2/3PL.AN.SBJ=N2

ī ninín=o dl-â-n-ib=a
 3PL name=N2 PL.F_CL.O-put.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘when the people grew up, they assumed names and then...’
 [Dimosson]

- (117) [*balubib=e aai=e*]
 airstrip=SG.N1 water=SG.N1

êi-n-em-e=o
 accumulate-AUX.PFV-COND-3SG.N1.SBJ=N2

balu=e=mo *tl-aamab-e=ba=be*
 plane=SG.N1=NEG come.PFV-IRR.NANPL.SBJ-3SG.N1.SBJ=NEG=DECL
 ‘If the airstrip accumulates water, the plane won’t come.’

For a more detailed description of the different types of adverbial clause, see section 13.2.

9.11. Non-verbal clauses

Non-verbal clauses are topic-comment constructions consisting of a non-finite predicate (the comment) and exactly one argument (the topic). The predicate is followed by the predicator =*o*. The topic is non-obligatory and thus can be left out if its identity is obvious or retrievable from the linguistic or extra-linguistic context. Non-verbal predicates always are one-place predicates and can consist of a pronoun or noun (including proper names and verbal nouns), an adjective, or an adverb.

Like clauses with finite verbs, non-verbal clauses are marked for illocutionary force. The range of illocutionary markers, however, is slightly more restricted since non-verbal predications cannot be hortatives. One finds =*be* ‘Declarative’, =*bo* ‘Emphatic/quotative’, =*ble* ‘Exclamative’, =*a* ‘Question’ and =*e* ‘(Content) Question’. For interrogatory non-verbal predications, see 10.1.1.

An example of a declarative non-verbal predication is:

(118) *Iliba=e* *til=o=be*
 PN=SG.M dog=PRD=DECL
 ‘Iliba is a dog.’

Any noun phrase is permitted as the topic argument. This noun phrase can consist of a free or inflected pronoun or a headless adjective. If the identity of the referent of the topic noun phrase is obvious it is commonly left out:

(119) *til=o=be*
 dog=PRD=DECL
 ‘It’s a dog.’

The reader should note that the pronoun ‘it’ in the free translation is not meant to be taken as referential. ‘It’ does not refer to any entity which happens to be a dog. Nothing in the Mian utterance *til=o=be* actually refers to the entity about which the predication is made.

There is no predicator in questions:

- (120) *tíl=a?*
 dog=Q
 ‘Is it a dog?’

If the predicate term ends in a vowel the predicator =*o* is usually left out, even in non-interrogatory contexts. However, occasionally =*o* is put in even under these circumstances. Compare more frequent (121) and less frequent (122) with the same meaning:

- (121) *naka=be*
 man=DECL
 ‘It is a man.’

- (122) *naka=o=be*
 man=PRD=DECL
 ‘It is a man.’

9.11.1. Identity

Non-verbal predications express more or less permanent states, as opposed to temporary ones. They are commonly used to state the identity of some referent:

- (123) *nē Bikene=i unáng=o=bo*
 1SG PN=PL.AN woman=PRD=QUOT

ge baa-s-o=a
 say.PFV say.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘“I am a woman of the Bikene (people)” she said, and then someone else...’ [Dimosson]

The following example (124) illustrates the reversed order of the topic and the comment, see ungrammatical (125), if the predicate term is a proper name, kin noun, or dyad (when the predication is about identity). In this case the topic has to be an emphatic pronoun, compare grammatical (124) with ungrammatical (126):

- (124) *Kasening nē-ta=be*
 PN 1SG-EMPH=DECL
 ‘I’m Kasening.’

(125) **nē Kasening=o=be*
 1SG PN=PRD=DECL
 Intended: ‘I’m Kasening.’

(126) **Kasening nē=be*
 PN 1SG=DECL
 Intended: ‘I’m Kasening.’

9.11.2. Property

Another common function of non-verbal predications is to predicate certain properties of a referent:

(127) *ngáamein=o=be*
 yellow=PRD=DECL
 ‘It is yellow.’

(128) *ninín Sofelok ōlo sino awém=o=be*
 name PN DEM.N2 before taboo=PRD=DECL
 ‘Before, this name Sofelok was taboo.’ [Sofelok, 2]

In non-verbal predications which designate properties one also finds a variant which involves =*na* ‘too’ which is possibly derived from the verb stem *na* ‘do’. The meaning is that the topic argument – apart from other potential properties – also has the property predicated about it by the predicate term. This construction can be used only with adjectives:

(129) *wan ēle ilem=na=be*
 bird DEM.PROX.SG.M red=too=DECL
 ‘This bird is also red (in addition to some other colour(s)).’

(130) *as=e milil eka teke=na=be*
 tree=SG.N1 black and long=too=DECL
 ‘The tree is black and also tall.’

Although =*na* might have originated in the verb *na*, it cannot be inflected in property predications. Therefore, I treat this construction as non-verbal.

9.11.3. Possession

Non-verbal predications can be used to indicate possession. In non-verbal possessive constructions, the predicate can be a possessive pronoun with nominal function, e.g. *nēmi* ‘mine’, *kēbmi* ‘yours’ and *nēlemi* ‘mine alone’, *kelebmi* ‘yours alone’, etc., as in (131) with a topic term and in (132) without one:

(131) *táang ēle nēmi=be*
 flint DEM.PROX.SG.N1 mine=DECL
 ‘This lighter is mine.’

(132) *nēmi=be*
 mine=DECL
 ‘It is mine.’

An alternative way of expressing possession with a non-verbal clause is to inflect a noun with *-sa* ‘with’ as the predicate term, as in (133) and (134):

(133) *unáng=o amún-sa=be*
 woman=SG.F belly-with=DECL
 ‘The woman is pregnant.’ (lit. ‘is with belly’)

(134) *nē am-sa=be*
 1SG house-with=DECL
 ‘I have a house.’ (lit. ‘am with house’)

On attributive possession, see section 6.5. On derivational suffixes on nouns, see 3.1.5.

9.11.4. Negation in non-verbal clauses

Non-verbal clauses are negated like clauses with a finite verb with the negation clitic *=ba*. This attaches directly to the predicate term. Unlike verbal predications, the negation clitic *=mo*, which attaches to the constituent immediately before the predicate, cannot be used in negated non-verbal clauses.

The following examples show negation of non-verbal predications expressing identity (135), a property (136), and possession (137).

- (135) *yeye* *yō* *yāi=ba=bo*
 no DEM.DIST.N2 wound=NEG=QUOT
 ‘“No, that is not a wound.”’ [Pig story]
- (136) *nē* *moní=o* *sūm=ba=be*
 1SG.POSS money=N2 big=NEG=DECL
 ‘I don’t have much money.’ (lit. ‘My money isn’t big’)
- (137) *táang* *ēle* *kēbmi=ba=be*
 flint DEM.PROX.SG.N1 yours.SG.M=NEG=DECL
- *nēmi=be*
 — mine=DECL
 ‘This lighter is not yours. — It is mine.’

Pronouns as predicate terms in negated non-verbal predications first have to be affixed by *-kob* followed by *=ba*. The negative suffix *-kob* attached to the bound pronoun series (see 3.7.6) and can only be found in non-verbal clauses:

- (138) *kēb-ta* *al=o* *faa-Ø-ebo=ba*
 2SG.M-EMPH faeces=PL.N1 excrete.PFV-REAL-2SG.SBJ=EMPH
- ge-s-e* *eka* *mak=e*
 say.PFV-DS.SEQ-3SG.M.SBJ and other=SG.M
- yeye* *nē-kob=ba=bo*
 no 1SG-NEG=NEG=QUOT
- ge-s-e* *monsa-n-ib=to*
 say.PFV-DS.SEQ-3.SG.M.SBJ go_on-SEQ-2/3PL.AN.SBJ=MED
 ‘“You shat!”, he said and the other said “No, not I!”, and so they went on like that, and then ...’ [Danenok]

9.12. Reciprocal constructions

Mian has two constructions for describing reciprocal events: (a) a bare reciprocal, in which verbs with a plural subject are most likely to be interpreted reciprocally and (b) a dedicated reciprocal construction which can only be used for reciprocal events.

9.12.1. *The bare reciprocal construction*

Like many languages, Mian has a bare reciprocal construction, in which verbs with a plural subject are most likely to be interpreted reciprocally. Such verbs have also been called ‘naturally’ reciprocal verbs in the literature (Kemmer 1993). An example is given in (139):

- (139) \bar{i} *wéng=o* *o-b-io=be*
 3PL.AN language=N2 say.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They are talking (lit. saying language).’ [MPI reciprocals, 1]

9.12.2. *The sese-construction*

The dedicated reciprocal construction involves the reciprocal suffix *-sese*. The only function of this construction is to encode reciprocal situations. It is very rare in the spontaneous corpus. Reciprocal semantics are entailed:

- (140) \bar{i} *i-ná'-sese-bl-Ø-io=be*
 3PL.AN PL.AN.O-hit.PFV-RECP-AUX.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They are hitting each other (i.e. are engaged in reciprocal hitting).’

Reciprocants have to be animate. Encoding of reciprocal events involving inanimate participants is unattested in Mian.

The participants in a reciprocal event occupy the same set of argument positions they would in a normal clause, i.e. they have to be (i) subjects and (ii) objects. The object can be indexed either by a prefix or a suffix depending on the argument structure of the verb.

In example (141) the reciprocants are subject and object (marked by a prefix):

- (141) \bar{i} *ya-têm'-sese-bl-Ø-io=be*
 3PL.AN PL.AN.O-see.PFV-RECP-AUX.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They are exchanging glances with each other.’

In the following examples, reciprocants are encoded as subject and object (marked with a suffix) with different semantic roles, namely goal (142), possessor/benefactive (143), and possessor/malefactive (144):

- (142) \bar{i}
3PL.AN

baa-˘b'-e-sese-bl-Ø-io=be
talk.PFV-give.PFV-PL.AN.R-RECP-AUX.IPFV-IPFV-2/3PL.AN.SBJ=DECL
'They are talking to each other.'
- (143) \bar{i} *mak=i* *memé=i* *klâ*
3PL.AN other=PL.AN children=PL.AN very

kimâa'-˘b'-e-sese-bl-Ø-io=be
care_for.PFV-give.PFV-PL.AN.R-RECP-AUX.IPFV-IPFV-
2/3PL.AN.SBJ=DECL
'They care for each other's children.'
- (144) \bar{i} *am* *as=o*
3PL.AN house fire=PL.N1

o-tanâ-˘b'-e-sese-bl-Ø-io=be
PL.RESID.O-set(fire).PFV-give.PFV-PL.AN.R-RECP-AUX.IPFV-IPFV-
2/3PL.AN.SBJ=DECL
'They burn (lit. set fires to) each other's houses.'

The existential auxiliary can be regularly inflected to locate the reciprocal event at different points in the past:

- (145) \bar{i}
3PL.AN

i-nâ'-sese-bi-n-io=be
PL.AN.O-hit.PFV-RECP-AUX.IPFV-REAL-2/3PL.AN.SBJ=DECL
'They have been hitting each other (i.e. the exchange of blows is completed).'
- (146) \bar{i}
3PL.AN

i-nâ'-sese-bi-n-ib-so=be
PL.AN.O-hit.PFV-RECP-AUX.IPFV-REAL-2/3PL.AN.SBJ-HPST=DECL
'Yesterday they were hitting each other.'

The dedicated reciprocal construction has several noteworthy features.

First, the existential auxiliary *bi-bl* ‘be there, stay, exist’ agrees with the whole set of reciprocants.

Second, the reciprocal suffix *-sese* occurs immediately after the verb stem and before the auxiliary. This is peculiar because in Mian verbs which appear with an auxiliary the auxiliary immediately follows the stem of the lexical verb without the possibility of any intervening suffixal TAM morphology. This suggests that the *sese*-construction is the result of a syntactically more complex construction in which constituent parts have been fused together.

Third, the whole set of reciprocants is cross-referenced on the verb with an object prefix or suffix, which are in the plural in examples (140) to (146).

It must however be pointed out that all of the above examples are strongly dispreferred for situations with just two participants. In a reciprocal situation with only two participants the non-subject reciprocant is cross-referenced by a suffix in the singular:

- (147) *unáng asú uláab=i te*
 woman two agemate=PL.AN come.PFV
- te-na-n-ib=a*
 come.PFV-do-SEQ-2/3PL.AN.SBJ=MED
- wéng=o o-biaan-ib=a*
 language=N2 say.IPFV-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
- mele-ʔb'-o-sese-bl-Ø-io=be*
 touch.PFV-give.PFV-3SG.F.R-RECP-AUX.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘Two women meet and while they are talking they are touching each other.’ [MPI reciprocals, 3]

In the case of just two participants, the non-subject cross-referencing suffix has to be singular. In this situation, Mian merges the agents through plural subject marking whereas it keeps the patients apart through singular object marking.

9.12.3. The morphological status of *-sese*

There is good evidence that contemporary *-sese* is best analysed as a suffix. A verb inflected with *-sese* is treated as a single verb by the morphology. It can take modal morphology, as in (148), or switch reference marking, as in (149):

- (148) *īb* *sinwal=o* *klâ*
 2PL.POSS brothers=COLL properly

go-˘b'-e-sese-n-in=e!

like.PFV-give.PFV-PL.AN.R-RECP-REAL-2/3PL.AN.SBJ.HORT=HORT
 ‘You must love each other.’ [John 15, 12]

- (149) *ī* *mak=i* *dim*
 3PL.AN others=PL.AN on

do-tamaa-sese-s-ib=a

PL.AN.O-step_on.PFV-RECP-DS.SEQ-2/3PL.AN.SBJ=MED

‘they trampled on one another and then someone else ...’
 [Luke 12, 1]

9.12.4. A variant of the *sese*-construction

The *sese*-construction has a constructional variant which is also a dedicated reciprocal but which is syntactically quite different, in that it looks more like a clause chain. Consider (150):

- (150) *ī* *a-têm'-s-e*
 3PL.AN 3SG.M.O-see.PFV-DS.SEQ-3SG.M.SBJ

wa-têm'-s-e

3SG.F.O-see.PFV-DS.SEQ-3SG.M.SBJ

bl-∅-io=be

stay.IPFV-IPFV-2/3PL.AN.SBJ=DECL

‘They (man and woman) are glancing each at the other.’

In the foregoing example, *-s* is a switch-reference marker indicating ‘different subject’ and ‘sequentiality of events’ and *-e* is a conventionalized subject marker frozen in the third person singular masculine form whatever the number or gender of the reciprocants might actually be. The final existential verb is in the (animate) plural summarizing the reciprocal action as a whole. The reason why I gloss *bl* as ‘stay’ here and not as an auxiliary is that it is always realized as an independent phonological word in the constructional variant whereas the auxiliary is in the same phonological domain with respect to tone as the verb with which it is serialized.

This constructional variant has to be used when there are two reciprocants of opposite sex, as in (151), but can also be used if the speaker wants to especially focus on the sequentiality of the reciprocal subevents:

- (151) \bar{i} *mele-ʔbʔo-s-e*
 3PL.AN touch.PFV-give.PFV-3SG.F.R-DS.SEQ-3SG.M.SBJ

mele-ʔbʔa-s-e
 touch.PFV-give.PFV-3SG.M.R-DS.SEQ-3SG.M.SBJ

bl-∅-io=be
 stay.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They (man and woman) are touching each other.’

Noteworthy features of the constructional variant are (a) that the verbs describing the subevents of throwing glances or touching have subject markers in the expected slot but these subject markers are frozen in the third person singular masculine form *-e*, regardless of the number or gender of the reciprocants, and (b) that the DS marker *-s* behaves in an unusual non-linear or circular way. In clause chaining constructions, *-s* is only anticipatory.

Both of these features can also be found in the Papuan language Amele (Gum family, Madang Province). Consider the following Amele example:⁴

- (152) *age* *qet-u-do-co-b* *qet-u-do-co-b*
 3PL cut-APPL-3SG.IO-DS-3SG cut-APPL-3SG.IO-DS-3SG

eig-a
 3PL-TODAY’S PAST
 ‘They cut each other.’ (from Roberts 1987: 132)

Roberts (1987) emphasizes that “[b]oth coordinate verbs are marked for third person singular subject and for different subject (DS) following. Therefore they cross reference each other even though they are in linear sequence” (p. 306).⁵ Evans (2008, 2010) coins the term “unified zigzag construction” for such constructions where “a complex form of verb chaining [is] zigzagging between subevents (successive transitive verbs, each marked with a different subject marker, and agreeing with one actor in person and number [albeit in fossilized form – SF]) followed by an intransitive summary auxiliary agreeing with the whole set.” (Evans 2010: 17).

9.12.5. Reciprocals in the imperfective

For the perfective, Mian has the *sese*-construction and the discontinuous variant for describing reciprocal events. In the imperfective, i.e. when the subevents are presented as temporally extended and (at least partially) simultaneous, we find a similar technique of using S/R markers in a cyclical fashion to indicate reciprocity. The relevant S/R suffix is *-b* 'DS.SIM', followed by a subject suffix *-e* which is frozen in the third person singular masculine form, as in (153):

- (153) *unáng=i* *asumâtna* *ke-n-ib=a*
 woman=PL.AN three do-SEQ-2/3PL.AN.SBJ=MED
- gokim=i* *hen-ye-b-e*
 head_louse=PL.AN seek.IPFV-PL.AN.R-DS.SIM-3SG.M.SBJ
- hen-ye-b-e*
 look_for.IPFV-PL.AN.R-DS.SIM-3SG.M.SBJ
- bl-Ø-io=be*
 stay.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 'The three women each are seeking lice on the other.' [MPI
 reciprocal, 56]

In contrast to the perfective, only the discontinuous reciprocal construction in which each zigzag verb is inflected with the suffix sequence *-b-e*. There is no *bebe*-construction, which would be parallel to the *sese*-construction in the perfective.

9.13. A note on causatives

Like many languages, Mian has lexical causatives where an intransitive verb and its causative counterpart are realized as distinct lexical verb stems:

- | | |
|-------------------------------|-------------------------|
| (154) Intransitive | Causative |
| <i>ein</i> 'cook' | <i>fú</i> 'cook' |
| <i>kaan</i> 'die (PFV)' | <i>-ná</i> 'kill (PFV)' |
| <i>bokbok ge</i> 'boil (PFV)' | <i>bafu</i> 'boil' |

In addition to this, ambitransitive verbs have a causative element as part of their meaning when used transitively, cf. *halò* 'break (intransitive) vs. *halò*

with *-mab* appear in their table summarizing the morphology of the medial verb nor do any of their examples have medial verbs inflected with *-mab*.

Second, the verb involved is not *ki* but rather is *kimâa* ‘watch over (PFV)’ (with a pharyngealized /a^ʕ/). This verb cannot be inflected directly in the imperfective but needs an auxiliary before it can be inflected (cf. the verbal noun *kimâa*’-*nin* ‘(activity of) watching over’, where *nin* is the verbal noun of the existential verb).

My analysis of (156) above is:

(157) *awók=o* *mēn=e*
 mother=SG.F child=SG.M

kimâa’-*bi-Ø-o=a*⁷
 watch_over.PFV-AUX.IPFV-DS.SIM-3SG.F.SBJ=MED

aaie *fuela-n-amab-e=bo*
 water bathe.PFV-AUX.PFV-IRR.NANPL.SBJ-3SG.M.SBJ=EMPH
 ‘While the mother is watching over the child, it will bathe.’

The second issue with Smith and Weston’s analysis is semantic in nature. Although it is true that the verbal noun *kimâa*’*nin* can be used as a noun with the meaning ‘boss, minder’, the verb stem *kimâa*’ essentially means ‘watch over, look out for (PFV)’ and not ‘command’. There is not a single instance in my corpus where *kimâa*’ could be felicitously translated as ‘command’. In my view, it is mainly the glossing of *kimâa*’ as ‘command’ that suggests that we are dealing with a causative construction.

Furthermore, even the assumption of a potential causative construction with *kimâa*’ ‘watch over (PFV)’ in a medial clause indicating causation, is not supported by my data. Nowhere does the clause following a medial clause with *kimâa*’ express an effect related to a causer, who would be the subject of *kimâa*’.

To conclude, I am very sceptical as to whether a causative analysis of the construction in (157) is valid. Such constructions may have a causative implicature at best but they are not dedicated causatives.

Chapter 10

Question formation

10.0. Introduction

This chapter deals with the formation of questions. Formally, there are five different types of question in Mian. Questions can employ:

- 1) only the interrogative illocutionary clitic =*a* at the end of the sentence
- 2) *bleka* ‘or’ at the end of the sentence, and no interrogative clitic =*a*
- 3) the interrogative illocutionary clitic =*a* at the end of the sentence and *bleka* ‘or’ inside the sentence (separating two alternatives)
- 4) the interrogative illocutionary clitic =*e* plus an interrogative phrase with either *fāb* ‘where’ or *wan* ‘who’
- 5) the topic clitic =*le*

Functionally, these can be assigned to the following types:

Types (1) and (2) are polar questions, i.e. questions for which the appropriate answer is ‘yes’ or ‘no’.

Type (3) are alternative questions, where the speaker wants a specification of the offered alternatives, e.g. *Do you want pork or fish for dinner?*

Type (4) are content questions, which are used to request information about the *who*, *what*, *when*, etc. of an event or action. Content questions consist of a proposition which is completely presupposed apart from one element, which is the one queried (Givón 1990: 714-715). In Mian, the maximum number of queried constituents is one. Thus, multiple constituent questions, such as English *Who did what?*, are not possible.

Type (5) are topic-only questions, in which only a topic is given, as in English *What about John?* or *And you?*. The speaker has a particular question in mind, and it must be obvious from the context what the implied question is.

10.1. Polar questions

The appropriate answer for a polar question is ‘yes’ or ‘no’, which are *ae* and *yeye* in Mian, respectively. They are formed with the interrogative illocutionary clitic =*a*. Very rarely, one finds polar questions with =*e* (which is usually used for content questions). Like all illocutionary particles (see

3.13.1), =a encliticizes to the immediately preceding word and forms a single prosodic word with it. A second type of polar question ends with *bleka* ‘or’.

Intonationally, polar questions are characterized by a short intonational peak and subsequent fall on the last syllable of the utterance, whose nucleus is formed by the illocutionary particle or the final syllable of *bleka* ‘or’.

10.1.1. Polar questions with the interrogative clitic =a

Polar questions can involve verbal and non-verbal predicates. In the former case, the illocutionary particle cliticizes to the verb, in the latter case, the particle cliticizes to the non-verbal predicate term.

The interrogative clitic =a is realized as =ya when following /a/, e.g. *naka=ya?* ‘A man?’. After emphatic and restrictive pronouns, which end in the emphatic suffix *-ta*, the interrogative clitic =a is also realized as =ya, but here the preceding /a/ is deleted, e.g. *kēb-ta* ‘you (M, EMPH)’ and *kēb-t=ya?* ‘Is it you?’, *yō-ta* ‘only this (restrictive)’ and *yō-t=ya?* ‘Is it only this?’

In polar questions involving verbal predications the interrogative particle cliticizes to the finite verb, as in the formulaic greeting in (1):

- (1) *klayâm* *bi-Ø-eb=a?*
 properly_good stay.IPFV-IPFV-2SG.SBJ=Q
 ‘Are you (staying) well?’ [Observed]

Constituent order does not change in questions. The declarative marker =be, the emphatic/quotative marker =bo, or the exclamative marker =ble are simply replaced by =a and the utterance receives a marked intonational contour as opposed to the corresponding declarative sentence. Compare the polar question in (2) and its declarative counterpart in (3):

- (2) *kēb* *mēn=e* *smā* *gwáab*
 2SG.M.POSS child=SG.M still small

bi-Ø-e=a?
 stay.IPFV-IPFV-3SG.M.SBJ=Q
 ‘Is your boy still small?’

- (3) *kēb* *mēn=e* *smā* *gwáab*
 2SG.M.POSS child=SG.M still small

bi-Ø-e=be
 stay.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘Your boy is still small.’

The verb in (2) is pronounced *bia*. On this unusual contracted form, see section 8.6.5, where irregularities in the inflection of the existential verb are described.

Optionally, polar questions can additionally contain the interrogative clitic *mō* (as opposed to negative *mo* with low tone). This typically encliticizes to the final constituent before the predicate, as in (4), but can appear as a free word if it occurs clause initially, as in example (15) below.

(4) *āns* *ōlo=mō*
 song DEM.N2=Q

go-ʔ-o-bi-Ø-eb=a?
 like.PFV-give.PFV-N2.R-AUX.IPFV-IPFV-2SG.SBJ=Q
 ‘Do you like this song?’

As with the negative clitic *mo*, interrogative *mō* may only occur once per *sentence*. Thus, it may only appear once in any given clause chain, which constitutes one sentence. Usually this would be the first clause to signal right from the start that a question is coming:

(5) *kōbo* *glol-amît=o=mō* *betelâ'-n-eb=a*
 2SG.M wind-opening=N2=Q open.PFV-SEQ-2SG.SBJ=MED

imín *dòu-n-eb-bu=a?*
 again close-REAL-2SG.SBJ-GPST=Q
 ‘Did you open and again close the window?’ [TMA Questionnaire, 61]

The interrogative marker *=a* can be combined with hortative verb forms in order to query whether the addressee wants the speaker or the group of which both speaker and addressee are members to perform a certain action:

(6) *ayal=e* *kemela-n-an=a?*
 light=SG.N1 extinguish.PFV-REAL-1SG.SBJ.HORT=Q
 ‘Shall I extinguish the light?’ [Observed]

- (7) *un-Ø-om=a?*
 go.PFV-REAL-1PL.SBJ.HORT=Q
 ‘Shall we go?’ [Observed]

In polar questions involving non-verbal predications the interrogative particle attaches to either a noun (8), an emphatic pronoun (9), a distal demonstrative (10), an adjective (11), or an adverb (12). The interrogative clitic *mō* may not be used. The range of possible hosts for the clitic is exactly co-extensive with the range of word classes that can appear in the predicate slot in declarative non-verbal clauses. Detailed information on non-verbal clauses can be found in section 9.11.

- (8) *tīl=a?*
 dog=Q
 ‘Is it a dog?’
- (9) *nē-t=ya?*
 1SG-EMPH=Q
 ‘Is it me?’ (for example: ‘Is it my turn?’)
- (10) *yō-t=ya?*
 that-EMPH=Q
 ‘Is that it? (lit. ‘Is it only that?’)
- (11) *ayam=a?*
 good=Q
 ‘Is it good?’
- (12) *fiab=a?*
 slowly=Q
 ‘Is it (done) slowly?’

Possible answers to these five non-verbal questions are given in (13):

- (13) a. *ae tīl=o=be* ‘Yes, it’s a dog.’
 b. *ae kēb-ta=be* ‘Yes, it’s you(r turn)!’
 c. *ae yō-ta=be* ‘Yes, that’s it!’
 d. *yeye ayam=ba=be – misiam=o=be* ‘No, it’s not good. It’s bad.’
 e. *ae fiab=o=be* ‘Yes, it’s slowly.’

10.1.2. Polar questions with *bleka* ‘or’ at the end of the sentence

Another way of forming a polar question is using *bleka* ‘or’ at the end of the sentence. In that case, there is no illocutionary clitic. This is illustrated for a non-verbal predication in (14), and a sentence whose predicate is a finite verb, in which case the interrogative clitic *mō* is commonly used (15):

- (14) *yāi=e* *yāi* *bleka?*
wound=SG.N1 wound or
‘A wound, is it a wound?’ (lit. ‘A wound, a wound, or?’) [Pig story]

- (15) *mō* *wentê-b-eb=ta* *o-b-i*
Q hear.IPFV-DS.SIM-2SG.SBJ=MED say.IPFV-IPFV-1SG.SBJ

bleka?

or

‘Do you understand what I’m saying?’

(Lit: ‘Are you hearing as I’m saying, or?’) [Mianmin and Telefomin]

Questions with *bleka* ‘or’ at the end are not leading but rather neutral polar questions that introduce the (implied) negation of the proposition as a second alternative, which is equally probable. Thus, the alternatives offered in (14) are that the referent either is a wound or is not a wound. This is a type of polar question because the appropriate responses are ‘yes’ or ‘no’.

10.1.3. Alternative questions with *bleka* ‘or’

When using an alternative question the speaker expects the addressee to specify one of two alternatives offered rather than just say ‘yes’ or ‘no’. They are formed with the interrogative clitic *=a* and do not involve a change of constituent order. The maximum number of alternatives is two. The conjunction *bleka* ‘or’ conjoins the elements denoting the alternative options in polar questions. These can be two noun phrases, as in (16), or two sentences, as in (17):

- (16) *kōbo* *aning* *ē-ta* *bleka*
2SG.M fish SG.M-EMPH or

éil *ē-ta* *dowôn’-aamab-eb=a?*

pig SG.M-EMPH eat.PFV-IRR.NANPL.SBJ-2SG.SBJ=Q

‘Do you want to eat fish or pork?’ [Observed]

- (17) *kōbo* *memâlo* *bib* *bi-aamab-eb*
 2SG.M today village stay.IPFV-IRR.NANPL.SBJ-2SG.SBJ
- bleka* *damìb* *un-aamab-eb=a?*
 or garden go.PFV-IRR.NANPL.SBJ-2SG.SBJ=Q
 ‘Are you staying in the village today or are you going to the garden?’

If the alternatives given are instantiated by noun phrases each needs an emphatic pronoun in adnominal position, as in (16) above, not just an article. The use of the interrogative clitic *mō* in alternative questions is unattested.

10.2. Content questions

In content questions, the speaker requests information about some participant, theme, location, time, manner, etc. of an event or action. The proposition of a content question is presupposed apart from the queried constituent.

Content questions are formed with the interrogative clitic =*e* (=ne after vowel). It encliticizes to the (clause-final) finite verb or the interrogative phrase. Content questions are never marked by the interrogative particle *mō*.

Apart from being flagged with the interrogative clitic =*e*, content questions also involve one of the two basic question words or interrogative words *fàb* ‘where’ (18) or *wan* ‘who’ (19), which have further semantic extensions into other epistemic domains (see below):

- (18) *fàb* *un-Ø-eb=e?*
 where go.PFV-REAL-2SG.SBJ=CQ
 ‘Where do you go?’
- (19) *wan-ēta* *kàb* *ēle*
 who-3SG.M.EMPH cup DEM.PROX.SG.N1
- klutâ-n-e=ne?*
 smash.PFV-REAL-3SG.M.SBJ=CQ
 ‘Who’s broken this cup?’ [TMA questionnaire, 127]

Semantically, the two interrogative words almost exactly divide the world up into animates (*wan* ‘who’), on the one hand, and inanimates and adverbials (*fàb* ‘where, what’), on the other. The only exception to this rule is that *wan* plus emphatic pronoun is employed to find out about people’s names, which are not strictly animate but nonetheless important properties of people.

The interrogative words *fàb* and *wan* neither encode number nor gender. Emphatic pronouns, which can be compounded with both *fàb* and *wan*, have to encode number and in the third person singular also gender. Mian interrogative words do not overlap with relative pronouns and they are semantically unambiguous, i.e. they do not have alternative interpretations as indefinites, as interrogatives do for example in Japanese (Nichigauchi 1990) or in the Australian languages Kayardild (Evans 1995: 365) and Kuuk Thaayorre (Gaby 2006: 243-244). Both *fàb* and *wan* can be used pronominally and adnominally.

Content questions in Mian usually have declarative (i.e. falling) intonation, but can be intonationally marked by a quick rise and subsequent fall of pitch on the last syllable of the utterance, whose nucleus is invariably formed by the illocutionary particle. This intonational pattern is very similar to the one found in polar questions.

The interrogative clitic =*e* can be combined with hortative verb forms in order to indicate that the speaker assumes that the addressee wants this action to be performed by the speaker (or by a group to which both speaker and addressee belong), e.g.:

- (20) *fàb* *o-fâ-n-an=e?*
 where 3SG.RESID.O-put.PFV-REAL-1SG.SBJ.HORT =CQ
 ‘Where shall I put it?’ [Observed]

Interrogative phrases, which contain the interrogative words *fàb* and *wan*, always appear in situ, i.e. they occur in the same position as non-interrogative phrases with the same grammatical function (Li and Thompson 1984: 51, Dryer 2005).

As in polar and alternative questions, constituent order is not changed with respect to the corresponding declarative sentence and the interrogative phrase occupies the position which the queried constituent would have in an appropriate answer sentence.

There are a few cases where the interrogative phrase seems to be not in situ but rather to be postposed after the verb. I will turn to this issue in more detail below.

10.2.1. *The interrogative word fàb*

The interrogative word *fàb* occurs in five different construction types. Depending on the construction, the semantics of *fàb* vary:

(1) Bare *fàb* means ‘where’.

(2) The interrogative verb *fatnà* has the meaning ‘do what, do why, do how’. It probably consists of the interrogative word *fàb* and a finite verb form of *na* ‘do’. Morphologically and syntactically, this compound be-hasves like a finite verb.

(3) The compound *fatnàmin* (< *fàb-namin*) on its own, i.e. *fàb* plus the imperfective verbal noun *na-m-in* [do-IPFV-VN] ‘(activity of) doing’, covers a semantic area which in English is divided up into ‘what, why, how, how much/many, which, what kind of’.

(4) *Fatnàmin* can be suffixed with either of three derivational suffixes, instrumental *-dum* ‘with’, causal *-dofa* ‘about’, or purposive *-deib* ‘for’, yielding the interrogative phrases *fatnàmin-dum* ‘with what’ asking for the instrument, *fatnàmin-dofa* ‘about what’, asking for the reason, or *fatnàmin-deib* ‘what for’, asking for the purpose of an action.

(5) *Fatnàmin* can function as the complement of the nominal postposition *dim* ‘on’. The resulting interrogative phrase *fatnàmin dim òta* ‘when’ is used for enquiring about a point in time.

Table 10.1 lists all interrogative expressions based on *fàb*, their basic meaning and their semantic extensions.

Table 10.1. Interrogative expressions based on *fàb*

Interrogative expression	Basic meaning	Semantic extensions
<i>fàb</i>	‘where’	‘where’
<i>fatnà</i>	‘do what’	‘do what’, ‘do how’, ‘do why’
<i>fatnàmin</i>	‘what’	‘what’, ‘how’, ‘why’, ‘how much/many’, ‘what kind’
<i>fatnàmin-dum</i>	‘with what’	‘with what’
<i>fatnàmin-dofa</i>	‘what about’	‘what about’
<i>fatnàmin-deib</i>	‘what for’	‘what for’
<i>fatnàmin dim òta</i>	‘when’	‘when’

10.2.2. *fàb* ‘where?’

In isolation, the interrogative word *fàb* is interpreted as ‘where’. A question with bare *fàb* is never marked with the interrogative clitic =*e*:

(21) Q: *fàb?* /**fab=e*
where

A: *īwat* *bi-Ø-e=be*
there_across stay.IPFV-IPFV-3SG.M.SBJ=DECL
'Where?' 'He's over there.'

The interrogative word *fàb* 'where' can occur with intransitive predicates of location or movement, such as the existential verb *n/bi-bl* in (22) or *un~on/uné* 'go' in (23):

(22) *fàb* *bi-Ø-o=ne?*
where stay.IPFV-IPFV-3SG.F.SBJ=CQ
'Where is she?'

(23) *fàb* *un-aamab-eb=e?*
where go.PFV-IRR.NANPL.SBJ-2SG.SBJ=CQ
'Where will you go?'

Fàb 'where' can occur with transitive verbs, such as *-fâ* 'put (PFV)' in (24) or *na* 'do' in (25):

(24) *fàb* *o-fâ-n-eb=e?*
where 3SG.RESID.O-put.PFV-REAL-2SG.SBJ=CQ
'Where did you put it?'

(25) *fàb* *na-n-eb-bu=e?*
where do-REAL-2SG.SBJ-GPST=CQ
'Where did you do (it)?'

Fàb can be used adnominally as an interrogative modifier as well. In its adnominal use, it follows the noun with which it forms the interrogative phrase and means 'which' rather than 'where', e.g.:

(26) *am=o* *fàb* *áa* *un-omab-bio=ne?*
house=N2 which lie go.PFV-IRR.PL.AN.SBJ-1PL.SBJ=CQ
'To which house will we sleep?' [Danenok]

10.2.3. *fatnà*- ‘do what?’

This is an interrogative pro-verb (Hagège 2008) consisting of the interrogative word *fàb* and the verb stem *na* ‘do’. *Fatnà* ‘do what?’ can be inflected as a verb and has the meaning ‘do what’:

- (27) *fatnà-b-eb=e?*
do_what-IPFV-2SG.SBJ=CQ
‘What are you doing?’ [Observed]

There is a case to be made that *fatnà* is best analysed as an interrogative pro-verb, i.e. as a single root which contains both a verbal and an interrogative meaning. Such interrogative pro-verbs can be found in Papuan languages, e.g. Kuot (Lindström 2002), Austronesian languages, e.g. Paamese (Crowley 1982) and Australian languages, e.g. Kayardild (Evans 1995: 371-372) and Dyirbal (Dixon 1972). Outside the Pacific area, interrogative verbs can for example be found in West Greenlandic (Kalaallisut) (Sadock 1984: 206).

In Paamese, there is an intransitive monomorphemic interrogative verb *kosaa* ‘do what’, which is not segmentable into an interrogative and a verbal element (Crowley 1982: 159).

For Kayardild, Evans (1995: 371) analyses the pro-verb *ngaakawatha* ‘do what’ as an inchoative form of the interrogative word *ngaaka* ‘what/who’. Here, the pro-verb is derived from an interrogative word with the suffix *-watha* which derives verbs from nominals (Evans 1995: 282).

The degree of fusion between the interrogative and the verbal element in *fatnà* is relatively low. The interrogative word *fàb* and the verb stem *na* ‘do’ can still clearly be discerned. /b/ goes to [t] before the alveolar nasal /n/. This form of place assimilation applies across the board in Mian and is thus not necessarily indicative of a beginning fusion between the interrogative and the verb stem.

On the other hand, there is a semantic shift of the interrogative word *fàb* from ‘where’ to ‘what’ in *fatnà*. Bare *fàb* cannot mean ‘what’, while *fatnà* cannot mean ‘do where’. It contrasts with *fàb na* ‘do where’. As the meaning of *fàb* is clearly construction-specific here, the meaning of *fatnà* cannot be said to be fully transparent anymore. Also, the [t] in the interrogative verb *fātna* is often elided in normal and fast speech to yield *fanà* ‘do what’. I therefore analyse *fatnà* as an interrogative pro-verb, albeit one with a low degree of fusion between the interrogative and the verbal part.

The core meaning of *fatnà* is ‘do what’:

- (28) *nē* *ul* *ōlo* *dowôn’-aam-i=o*
1SG fungus DEM.PROX.PL.N1 eat.PFV-COND-1SG.SBJ=N2

fatnà-n-amab-i=ne?

do_what-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=CQ

‘If I eat this fungus, what will happen to me?’ [TMA Questionnaire, 81] (lit. ‘If I eat this fungus, what will I do?’)

In other contexts the free English translation of a question with inflected *fatnà* is closer to ‘why’, as in (29) or ‘how’, as in (30):

- (29) *ō* *fanà-n-o=ta*
3SG.F do_what-SEQ-3SG.F.SBJ=MED

besao *me-b-o=ne?*
just cry.IPFV-IPFV-3SG.F.SBJ=CQ
‘Why is she crying without reason?’ [Newlyweds]
(lit. ‘What has she done, is she just crying?’)

- (30) *fanà=ta* *un-ût’-ne-n-e=ne?*
do_what=MED go.PFV-give.PFV-1SG.R-REAL-3SG.M.SBJ=CQ
‘How has he escaped me?’ [Klebein]
(lit. ‘What has he done, has he gone on me?’)

The last two examples also shed some light on the syntactic and morphological behaviour of *fatnà* in content questions.

First, these forms function as verbs and are heads of their own clauses as can be seen in (29), which consists of a medial clause *ō fatnànota* and a final clause *besao mebone*. This is captured in the literal translations above. Like medial verbs, inflected *fatnà* is subject to the usual inflectional restrictions for medial verbs, namely that they cannot be marked for polarity or for irrealis or deontic mood.

Second, the bare stem *fatnà* can appear in shortened medial clauses under subject identity as in (30). If the verb in the following clause has the same subject, Mian medial verbs can be shortened to just the stem which is marked as a medial verb by the clitic =*ta* (see 11.2.13).

Therefore, *fatnà* ‘do what’ is a morphologically and syntactically regular verb in many respects. It can also form hortative verb forms (31) and appear in purposive serializations (32):

- (31) *fatnà-n-an=e?*
do_what-REAL-1SG.SBJ.HORT=CQ
‘What shall I do?’

- (32) *fatnà-m un-Ø-eb=e?*
 do_what-IPFV go.PFV-REAL-2SG.SBJ=CQ
 ‘You go to do what?’

10.2.4. The verbal noun *fatnàmin* ‘what’

The interrogative word *fatnàmin* has the basic meaning ‘what’. As an isolated utterance, *fatnàmin* is interpreted as ‘what’, ‘why’, or ‘how’. Unlike a question with bare *fàb*, a question with *fatnàmin* can optionally be marked with the content question clitic =*e*:

- (33) *fatnàmin?/fatnàmin=e?* ‘What (is it)?’/‘Why (is it)?’/‘How (is it)?’

If *fatnàmin* appears in an argument position of a verb, as in (34), i.e. in the position the argument constituent will have in an appropriate answer sentence, as in (35), it means ‘what’:

- (34) Q: *kōbo fatnàmin dowôn’-aamab-eb=e?*
 2SG.M what eat.PFV-IRR.NANPL.SBJ-2SG.SBJ=CQ
 ‘What do you want to eat?’
- (35) A: *nē éil=e dowôn’-aamab-i=be*
 1SG pig=SG.M eat.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I want to eat pork.’

As no interrogative containing *fàb* can ever be used to inquire about animates, the argument position *fatnàmin* occupies is usually that of the object of the verb.

Inanimate subjects of the (intransitive) existential verb *n/bi-bl*, can be queried by using *fatnàmin*:

- (36) Q: *fatnàmin yē bi-Ø-e=ne?*
 what there stay.IPFV-IPFV-3SG.N1.SBJ=CQ
 ‘What is there?’
- (37) A: *imen=e yē bi-Ø-e=be*
 taro=SG.N1 there stay.IPFV-IPFV-3SG.N1.SBJ=DECL
 ‘There is a taro (tuber).’

In its adnominal use *fatnàmin* precedes the noun phrase and means either ‘what kind of’ or ‘how many’. Thus, the questions in (38) and (39) below are

ambiguous as to whether the speaker requests information about quality, i.e. ‘what kind of’, or quantity, i.e. ‘how many’. Generally, the context has to disambiguate:

- (38) *fatnàmin* *lais* *smā* *bi-Ø-e=ne?*
 what rice(TP) still stay.IPFV-IPFV-3SG.N1.SBJ=CQ
 ‘How much rice is still there?’ But also: ‘What kind of rice is still there?’
- (39) *ē* *fatnàmin* *am* *ge-n-e-bu=e?*
 3SG.M what house build.PFV-REAL-3SG.M.SBJ-GPST=CQ
 ‘What kind of house did he build?’ But also: ‘How many houses did he build?’

In order to unambiguously express that they are interested to learn about quantity and not quality or kind, younger speakers tend to use *fatnàmin-fela* for ‘how much/many’. This construction is calqued from Tok Pisin *hamaspela* ‘how much/many’:

- (40) *fatnàmin-fela* *tablaséb* *unáng=i* *īwat*
 how_many white_man woman=PL.AN there_across

bl-Ø-ib=e?
 stay.IPFV-IPFV-2/3PL.AN.SBJ=CQ
 ‘How many white women are over there?’ [Observed]

Inquiring about quantities was presumably not a common activity in a society which only had three basic numerals and by combining them counted to around six or seven. Larger quantities were designated as ‘many’. I assume that the meaning ‘how many’ for *fatnàmin* developed as a secondary sense from ‘what, what kind of’.

10.2.5. *Fatnàmin* with derivational suffixes

The interrogative word *fatnàmin* can be suffixed with either of three derivational suffixes, instrumental *-dum* ‘with’, causal *-dofa* ‘about’, or purposive *-deib* ‘for’, resulting in the interrogative phrases *fatnàmin-dum* ‘with what’, *fatnàmin-dofa* ‘about what, why’, and *fatnàmin-deib* ‘for what’.

This is illustrated for *-dum* ‘with’ (41) and *-dofa* ‘about’ (42):

- (41) *kōbo* *wan=e* *fatnàmin-dum*
 2SG.M bird=SG.M what-with

a-nâ'-n-eb=e?
 3SG.M.O-kill.PFV-REAL-2SG.SBJ=CQ
 'With what did you kill the bird?'

- (42) *fatnàmin-dofa* *me-b-eb=e?*
 what-about cry.IPFV-IPFV-2SG.SBJ=CQ
 'About what are you crying?' [Newlyweds]

10.2.6. *Fatnàmin plus the nominal postposition dim 'on'*

The interrogative word *fatnàmin* can function as the complement of the nominal postposition *dim* 'on', yielding *fatnàmin dim ōta* 'when', which is formally a postpositional phrase (see section 7.2 on nominal postpositions like *dim* 'on' and 7.5 on temporal postpositional phrases):

- (43) *fatnàmin* *dim* *ō-ta* *tl-Ø-eb-bu=e?*
 what on N2-EMPH come.PFV-REAL-2SG.SBJ-GPST=CQ
 'When did you come?'

10.2.7. *The interrogative word wan*

The interrogative word *wan* 'who' is used to inquire about the identity of animates including their names.

There are four variants *wan*, *un* and *wal*, *ul*. The variation between /wa/ and /u/ is free and can be found in other areas of Mian grammar, e.g. in the variation of the object agreement prefix *wa-* ~ *u-* (see 8.5.3). The variants *wal* and *ul* have the morphophonemic variants *wale* and *ule* if the following emphatic pronoun start in /i/, there is. Thus, the forms for the second and third person plural are *walēibta/ulēibta* 'who (you PL)' and *walēita/ulēita* 'who (they)', respectively.

Without an emphatic pronoun, *wan* only occurs in questions about possessors. Like possessors expressed by full noun phrases, the interrogative word *wan* precedes the possessed. Either the pronominal article =*e* in the singular masculine form (44) or =*i* in the animate plural form (45) is obligatory:

- (44) *ēle* *wan=e* *tīl=e?*
 DEM.PROX.SG.M who=SG.M dog=CQ
 ‘Whose (man’s) dog is this?’
- (45) *ēle* *wan=i* *tīl=e?*
 DEM.PROX.SG.M who=PL.AN dog=CQ
 ‘Whose (people’s) dog is this?’

In questions about the identity of a certain individual *wan* ‘who’ has to be compounded with an emphatic pronoun, such as *ēta* ‘he (EMPH)’ (see 3.7.4). The interrogative clitic *=e* is used to mark interrogative illocution. When *=e* follows the pronoun suffix *-ta*, this suffix is realized as *-t*, as in (46) and (47):

- (46) *ībo* *wan-ībt=e?*
 2PL who-2PL.AN.EMPH=CQ
 ‘Who are you (PL)?’
- (47) *unáng* *ōlo* *wan-ōt=e?*
 woman DEM.PROX.SG.F who-3SG.F.EMPH=CQ
 ‘Who is this woman?’

In questions about arguments in a clause, *wan* ‘who’ is compounded with an emphatic pronoun and occurs in situ. In (48) and (49) the subject is being queried:

- (48) *blaya* *ul-ēta* *kwéit*
 damn who-3SG.M.EMPH sugarcane
- hal-ūt’-ne-n-e-bu=e?*
 cut.PFV.SG.O-give.PFV-1SG.R-REAL-3SG.M.SBJ-GPST=CQ
 ‘Damn, who cut my sugar cane?’ [The Unangkliten village]
- (49) *wan-ēta* *am* *ōlo*
 who-3SG.M.EMPH house DEM.PROX.N2
- ge-n-e-bu=e?*
 build.PFV-REAL-3SG.M.SBJ-GPST=CQ
 ‘Who built this house?’ [TMA Questionnaire, 128]

So far, all instances of *wan* have been to inquire about the possessor or the subject. It is also possible to use *wan* to inquire about the object of a transitive verb:

- (50) *wan-ēta* *a-temê'-b-eb=e?*
 who-SG.M.EMPH 3SG.M.O-see.IPFV-IPFV-2SG.SBJ=CQ
 'Who are you looking at?'

In ditransitives, content questions about either the recipient (51) or the theme (52) are possible, but not both in the same clause. The maximal number of queried constituents is restricted to one:

- (51) *buk=o* *wan-ēta*
 book=N2 who-SG.M.EMPH

om-ûb'-a-n-eb=e?
 3SG.F_CL.O-give.PFV-3SG.M.R-REAL-2SG.SBJ=CQ
 'To whom did you give the book?'

- (52) *naka=e* *fatnâmin*
 man=SG.M what

dl-ûb'-a-n-eb=e?
 PL.AN.O-give.PFV-3SG.M.R-REAL-2SG.SBJ=CQ
 'What did you give to the man?'

The use of the classificatory prefix *dl-* 'plural animate object' in the last example does not entail that the referent of the object is animate and plural. Rather it is used as a default form in content questions about the object, i.e. when the identity of the object referent is unknown and queried. For inquiring about inanimate objects, see section 10.2.4 on *fatnâmin* 'what' above.

The combination *wan* 'who' plus emphatic pronoun is used in a non-verbal construction to inquire about proper names, which are important properties of humans and some animals. Example (53) is the idiomatic way of inquiring about a man's name. To ask about a woman's name *wanôbte* has to be used.

- (53) *kēb* *ninín=o=le* *wan-kēbt=e?*
 2SG.M.POSS name=N2=TOP who-2SG.M.EMPH=CQ
 'What is your (M) name?' (lit. 'As for your (M) name, who [are] you (M)?')

Like *fâb* 'where', the interrogative word *wan* plus an emphatic pronoun can also be used adnominally as an interrogative modifier. In adnominal position it means 'which':

- (54) *naka=i wan-īta*
 man=PL.AN who-3PL.AN.EMPH

tl-aa-ib=e?
 come.PFV-DEONT-2/3PL.AN.SBJ=CQ
 ‘Which men are about to come?’ [Danenok]

There is one case where the interrogative phrase seemingly does not appear in situ. Consider the two semantically more or less equivalent utterances. In both (55) and (56), the speaker wants to know who broke the cup (|| indicates an intonational break):

- (55) *wan-ēta kàb ēle*
 who-3SG.M.EMPH cup(TP) DEM.PROX.SG.N1

klutâ-n-e=ne?
 smash-REAL-3SG.M.SBJ=CQ
 ‘Who smashed this cup?’ [TMA questionnaire, alternative for 127]

- (56) *kàb=e klutâ-n-e ē=le* ||
 cup(TP)=SG.M smash-REAL-3SG.M.SBJ 3SG.M=TOP

wan-ēt=e?
 who-3SG.M.EMPH=CQ
 ‘(As for) He who broke the cup, who (is he)?’ [TMA questionnaire, 127]

Compare constituent order in these two examples and also consider the order in the possible declarative answer in (57), which is parallel in structure to example (55):

- (57) *Milsen=e kàb=e klutâ-n-e=be*
 PN=SG.M cup(TP)=SG.N1 smash.PFV-REAL-3SG.M.SBJ=CQ
 ‘Milsen has smashed the cup.’

Example (55) above consists of one clause showing the unmarked AOV order. The interrogative phrase is in subject position (i.e. in situ) and the verb is marked for interrogative illocution, whereas (56), on the other hand, does not consist of a finite clause but rather of a topic-comment construction with a head-internal relative clause in topic position, namely *kàb=e klutâ-n-e ē=le* ‘he who broke the cup’, which is marked as a topic with *=le*, followed by a juxtaposed comment consisting of the interrogative word and the illocutionary

clitic, set off from the relative clause in topic position by a short intonational break. On head-internal relative clauses, see 13.3.2.

10.2.8. *Is wan an interrogative verb?*

Could *wan* ‘who’ be analysed as an interrogative pro-verb? After all, forms like *wan-ēta* look suspiciously like medial verbs, possibly with an interrogative verbal stem *wan-* with the meaning ‘be who’, a subject marker *-e* ‘3SG.M.SBJ’ and a medial verb marker *=ta*.

But this does not seem likely because on such an analysis the expected form for the second person singular subject suffix would be *-eb* yielding **wan-ēbte* instead of the correct form *wan-kēbte* (cf. example (53) above).

What’s more, the subject marker for the second and third person animate plural is *-ib*. So, if we were dealing with an interrogative verb, we would expect the same syncretism to occur here, i.e. there should be only one form *wan-ībta* for both second and third person animate plural. However, the correct forms are *wan-ībte* for the second person plural, and *wan-īte* for the third person plural, which is exactly what we would expect if *ībta* and *īta* were emphatic pronouns compounded with an interrogative word *wan* ‘who’.

10.3. Topic-only questions

Topic-only questions are a type of interrogative in which only a topic is given, as in English *What about John?* or *And you?* The speaker has a particular question in mind, and it must be obvious from the context what the implied question is, normally something that would have been asked immediately before about a different discourse participant or something that was anticipated by a statement, such as *I’m going. What about you?* (Implied: *Are you going as well?*). In Mian topic-only questions are formed by using a free pronoun or noun phrase and the low-toned topic clitic *=le*. In the examples below, possible implied questions are given in brackets. If context is lacking the default interpretation of a topic-only question would be about the topic’s whereabouts:

- (58) *ōbo=le?*
 2SG.F=TOP
 ‘What about you?’ (Possible implication: ‘What are you doing?’,
 ‘What do you want to eat?’)

- (59) *Leoni* $\bar{o}=le?$
 PN 3SG.F=TOP
 ‘What about Leoni?’ (Possible implication: ‘What’s Leoni doing?’,
 ‘Where is Leoni?’)

Topic-only questions are a special case because they do not display any of the usual strategies to mark an utterance as a question in Mian. As can be seen from the two examples above, there are no interrogative words nor do any interrogative particles occur.

I assume that there are two reasons why (58) and (59) are readily interpreted as topic-only questions though they do not bear any of the markers typical of questions in Mian: (a) they have their own distinctive intonational contour, namely a level high pitch on the topic marker $=le$ which is almost as high as the H on the preceding vowel and (b) as a matter of convention, any utterance of the structure NP=TOP is interpreted as a topic-only question.

Chapter 11

Chaining constructions

11.0. Introduction

This chapter deals with two different types of chaining construction, both of which are highly frequent in Mian discourse. The first type is verb serialization where two or more verb stems are concatenated to form a sequence of predicates within a single clause. Within serial verb constructions, I distinguish between core and nuclear (or ‘tight’) serializations. The second type of chaining construction is clause chaining where two or more clauses are chained together to form a sentence.

These two construction types have in common that they are essentially coordinate (i.e. not subordinate or embedded) structures and that their last constituent carries grammatical information, such as illocutionary force and polarity, which has scope over the entire construction. This form of dependency relation in serial verb constructions and clause chains is also called co-subordination in the literature (Reesink 1983, Foley and Van Valin 1984). A succinct definition of co-subordination can be found in Reesink (1983: 224-226): “[Co-subordination] refers to a process whereby two items are coordinated into a new whole with operators applying to this new whole rather than to one of the conjuncts.” The scope rules of operators in clause chains will be taken up in detail in chapter 12.

11.1. Serial verb constructions

Mian serial verb constructions (SVCs) consist of several concatenated verb stems. There are no markers of coordination, subordination, or of any syntactic dependency. In a SVC, all verbs except the last one in the sequence are verb stems, i.e. they are not marked for subject nor do they carry information about tense or polarity. They can, however, index their own objects in the form of affixes.

Mian mostly has same-subject serializations (Crowley 1987: 38), i.e. all verbs in a SVC share the same subject, which is cross-referenced on the last verb in the sequence. The only notable exception are causative serializations, which are of the type ‘I drop the arrow, it falls’. In these the subjects have to be distinct.

The last verb in a SVC is a fully inflected verb according to the morphological patterns of either medial or final verbs depending on whether the SVC is the predicate of a medial or a non-medial clause (i.e. a final clause in a clause chain or an independent sentence). Any information on illocutionary force, polarity, or tense invariably has scope over the whole SVC.

An important structural distinction that is made for SVCs is at which ‘layer’ of the clause they occur. Foley and Olsen (1985) argue that verb serialization can occur at either the nucleus or the core of the clause. The different clause layers are distinguished by sets of operators pertaining to a particular layer. For example, aspect operates at nucleus level and nominal arguments at core level.

Core SVCs in Mian allow verbs to have their own objects, whereas aspect need not be shared. A nuclear SVC, on the other hand, has just a single object, if it is transitive. Furthermore, the aspect value of the component verbs must not be at variance. While it is possible for either stem to be trans-aspectual, it is impossible that one is perfective and the other imperfective. This is not a problem in core SVCs.

11.1.1. Core-level serial verb constructions

Core SVCs consist of several verb stems which are concatenated to form a temporally iconic sequence of predications, i.e. the events denoted by the verbs within a SVC take place in the order they are uttered. The attested maximum is a serialization of eight verbs, cf. example (14) below. In core SVCs, each verb is phonologically independent, i.e. it constitutes its own domain with respect to tone assignment.

SVCs at core level are of low semantic integration. Every verb stem constitutes a predicate and each predicate can have its own objects. In other words, each verb stem in a SVC takes its own argument structure into the SVC and they can either exist next to each other or be intertwined, i.e. verbs in a SVC can – and commonly do – share object arguments. The stem aspect of the verbs in a core SVC can vary freely. Core SVCs are semantically compositional and the degree of lexicalization is very low.

11.1.1.1. Serialization of intransitive verbs

The most common intransitive verbs in SVCs are basic motion verbs, such as *te~tl/tle~te* ‘come’, and the existential verb *n/bi~bl* ‘stay, exist, remain’. In the following examples, two intransitive verbs are combined in a SVC. As

intransitive verbs are monovalent, there is never an object involved in the construction. Two examples are given in (1) and (2):

- (1) *te* *têm'-Ø-e=ta*
 come.PFV look.PFV-DS.SEQ-3SG.M.SBJ=MED
 'he came and looked and then someone else...' [Crows]

- (2) *bi* *te-n-o=a=le*
 stay.IPFV come.PFV-SEQ-3SG.F.SBJ=MED=TOP
 'so she stayed and came and then she...' [Dimosson]

Example (2) also illustrates that the verbs in a core SVC can have different aspect values. The imperfective stem *bi* 'stay (IPFV)' is followed by the perfective stem *te* 'come (PFV)'. Aspect is a local category of individual verbs. It does not have scope over the whole SVC.

11.1.1.2. Serialization of a transitive and an intransitive verb

Transitive verbs freely enter core SVCs. If one of the verbs in the core SVC is transitive, it can have its own overt object which is of course not shared by the intransitive verb, for example in example (3) the noun phrase *éil asyam* 'pig fruit' is only the object of *dowôn'* 'eat (PFV)' and not of the intransitive motion verb *unê* 'go (IPFV)':

- (3) *gwáab=i* *dowôn'* *éil* *asyam=e*
 small=PL.AN eat.PFV pig fruit=SG.N1
- unê-b-ib=a*
 go.IPFV-DS.SIM-2/3PL.AN.SBJ=MED
 'the small ones ate and while they were leaving, someone else...'
 [Afoksitgabáam]

This example also shows that the verbs in a core SVC can have different aspect values. The perfective stem *dowôn'* 'eat (PFV)' is followed by the imperfective stem *unê* 'go (IPFV)'.

Affixed transitive verbs obligatorily cross-reference their object with a pronominal affix or a classificatory prefix. They also do this in a SVC:

- (4) *nē* *Yabsi=tab* *a-têm'*
 1SG PN =downriver 3SG.M.O-see.PFV

tl-Ø-i-bio=be
 come.PFV-REAL-1SG.SBJ-GPST=DECL
 'I saw him downriver in Yapsiei and came (here).'

There are hardly any examples of SVCs in which an intransitive verb precedes a transitive verb. There are however some examples in which a transitive verb is preceded by a bare directional, interpreted not as an adverb but as a motion verb:

- (5) *ē=sak* *ut*
 3SG.M=too up

om-ei-^hs'-e-n-e=to
 3SG.F_CL.O-take.PFV-give.PFV-PL.AN.R-SEQ-3SG.M.SBJ=MED
 'he too jumped up and took it (i.e. a wooden club) from them and then ...' [Danenok]

11.1.1.3. Serialization of transitive verbs and argument sharing

When two transitive verbs combine in a core SVC, the object is usually shared between the verbs in the SVC. The object can be realized as a full noun phrase, as in (6), or only appear as a prefix, as in (7):

- (6) *no=i* *alo* *fubâ* *ol-êb*
 marsupial=PL.AN bowels wash PL.RESID.O-take.PFV

tl-Ø-i-bio=bo
 come.PFV-REAL-1SG.SBJ-GPST=QUOT
 ' "I washed the marsupial bowels and brought them back." '

- (7) *u-nâ'* *dowôn'-Ø-e=a*
 3SG.F.O-kill.PFV eat.PFV-DS.SEQ-3SG.M.SBJ=MED
 'he killed and ate her up and then ...' [Afoksitgabáam]

This is regardless of the argument indexing pattern. Consider the following example in which the object is indexed by a suffix, rather than by a prefix:

- (8) [...] *sita-bi*
 [...] jiggle-AUX.PFV

dei-˘b'-a [...] [
 leave.PFV-give.PFV-3SG.N1.R [...] [
 ‘(many shamans) were jiggling it (i.e. a child’s foot stuck in the
 protagonist’s throat), left it and ...’ [Crows]

If none of the transitive verbs in a core SVC indexes the object, it can be realized as a full noun phrase regardless of the information status of the referent of the noun phrase. In (9) *éil* ‘pig’ is old information, whereas in (10) *dabáal* ‘ground’ is new information, respectively, within the texts that these examples are taken from:

- (9) *éil=o* *yē* *ga* *dowôn’-Ø-ob=ta*
 pig=SG.F there cook_in_leafoven eat.PFV-DS.SEQ-1PL.SBJ=MED
 ‘we cooked the sow in a leaf oven and ate it and then someone else ...’
 [Kasak ritual]

- (10) *aai=e* *dabáal=e* *isít*
 water=SG.N1 ground=SG.N1 raw

dowôn’ *hake-na-n-e=a*
 eat.PFV break_through.PFV-do-SEQ-3SG.N1.SBJ=MED
 ‘the water ate the ground raw and broke through it too and then ...’
 [Flood]

If the identity of the object is readily retrievable from the context, e.g. due to mention of the object in a preceding clause, elision of the object noun phrase is common, as in (11):

- (11) *mak=e* *yam-an-Ø-e=e*
 one=SG.N1 ripe-VBLZ-REAL-3SG.N1.SBJ=SG.N1

walò=ta *fu*
 cut.PFV.SG.O=MED cook

dowôn’ *tém’-Ø-e=a=bo*
 eat.PFV look.PFV-DS.SEQ-3SG.M.SBJ=MED=SURP
 ‘he cut one (i.e. a fruit) that got ripe and tried to cook and eat it (i.e. the one that got ripe), and wow!...’ (lit. ‘he cooked, ate, and saw’)
 [Afoksitgabáam]

If all verbs in a core SVC are transitive and index the object with an affix (whether pronominal or classificatory), these affixes typically refer to the same participant:

- (12) *éil* *ō-ta* *alukûm* *wa-nâ'*
 pig SG.F-EMPH all 3SG.F.O-kill.PFV
- om-êb* *te*
 3SG.F_CL.O-take.PFV come.PFV
- om-fâ-Ø-ib-bio=ta=ble!*
 3SG.F_CL.O-put.PFV-REAL-2/3PL.AN.SBJ-GPST=MED=EXCLAM
 ‘ “After they killed a whole pig, brought it, and put it down!” ’
 [Kasak ritual]

However, Mian allows each transitive verb in a core SVC to have its own object. This is not a typical feature in SVCs, which usually do not duplicate roles (Durie 1995: 340-341). Argument noun phrases can intervene between verb stems in a SVC. Intervening object noun phrases are interpreted as the object of the following verb in the sequence, as in (13):

- (13) *dabáal=e* *haka* *dam=o*
 ground=SG.N1 break.IPFV body=SG.F
- om-bù-Ø-e-bio=ta*
 3SG.F_CL.O-bury.PFV-REAL-3SG.M.SBJ-GPST=MED
 ‘after he had dug up the ground and buried her body, (the Niniktol vine...)’ [Afoksitgabáam]

In this example, each verb in the SVC has its own overtly realized object. *Dam=o* ‘(her) body’ is only the object of *om-bù* ‘bury a female’ and not of *haka* ‘break (IPFV)’, whose object is *dabáal* ‘ground’.

A similar phenomenon can be witnessed in (14), which is the most complex SVC in terms of intervening arguments in the corpus:

- (14) *as=e* *hâ'* *tòun* *dê'*
 wood=SG.N1 break.PFV set_down desist.PFV
- tóm* *dà* *ol-êb* *te*
 stone break_out.PFV PL.RES.O-take.PFV come.PFV

fal=e *imen=o* *mak=o*
 leafoven=SG.N1 taro=PL.N1 other=PL.N1

ba *ol-êt-n-ob=a*
 put_into PL.RES.O-take.PFV-SS.SEQ-1PL.SBJ=MED
 ‘we broke some firewood, dug out stones and brought them and
 stopped (doing that), and put other taro tubers for the leaf oven
 into (a bag) and brought them and then we...’ [Ala ritual]

The assignment of object to verb proceeds from left to right. If there is only one object which precedes the whole SVC, it is shared by all transitive verbs in a given SVC. Any intervening object is always interpreted as being part of the argument structure of the next and all following transitive verbs in the clause until a new object noun phrase intervenes, which in turn is interpreted as the object of next and all following transitive verbs in the same clause.

11.1.1.4. Auxiliary-serialized stems inside a core SVC

Apart from bare verb stems and verb stems with object affixes, one occasionally finds a verb stem followed by the auxiliary stem *bi* in core SVCs, yielding an auxiliary-serialized verb, indicating that an event is temporally extended within the sequence of events in the SVC. As aspect is a local phenomenon, event unboundedness applies to this verb only, for example the activity of hunting in (15):

- (15) *éil=i* *bu-bi*
 pig=PL.AN hunt-AUX.IPFV
- i-nâ'-n-im-ib=o*
 PL.AN.O-kill.PFV-AUX.PFV-COND-2/3PL.AN.SBJ=N2
 ‘if they were hunting and killed pigs’ [Taro ritual]

11.1.1.5. Directionals inside a core SVC

Directionals can intervene between verbs in a core SVC. Like nominal object arguments they are interpreted in relation to the next verb which can be either a transitive verb, like *-fâ* ‘put (PFV)’ in (16), or an intransitive motion verb, like *un* ‘go (PFV)’ in (17).

- (16) *om-êb=tab*
3SG.F_CL.O-take.PFV=down

om-fâ-n-e=a
3SG.F_CL.O-put.PFV-SEQ-3SG.M.SBJ=MED
'he (a wild boar) took her and threw her down, and then ...'
[Afoksitgabáam]

- (17) *walo=tab* *yē*
multiply.PFV=downriver there

un-Ø-ib=o=le
go.PFV-REAL-2/3PL.AN.SBJ=N2=TOP
'so when they multiplied and moved (there) downriver' [Dimosson]

Directional adverbs are always monosyllabic and tend to cliticize to the preceding constituent. Nonetheless, the modifying relation is to the following verb.

11.1.2. Nuclear serial verb constructions

Nuclear SVCs have a more tightly-knit structure than core SVCs. They consist of maximally two stems. No material can intervene between the two stems of a nuclear SVC but the component verbs are realized as phonologically independent words and each verb constitutes its own domain with respect to tone assignment.

While core SVCs allow the component verbs to have their own objects this is not permitted in nuclear SVCs. If the whole SVC is transitive it has a single object. The stem aspect value of the component verbs must not be at variance. While it is possible for either stem to be trans-aspectual, it is impossible that one is perfective and the other imperfective. In many cases the constituent stems of a nuclear SVC do not occur on their own and they are therefore difficult to gloss. I therefore gloss nuclear SVCs as a whole.

An example of a nuclear SVC is given in (18):

- (18) *Aalei awél=i ī=le*
PN fathers=PL.AN PL.AN=TOP

dl-à sâ'-na-Ø-ib=o=le
PL.AN.O-include.PFV-do-DS.SEQ-2/3PL.AN.SBJ=N2=TOP
'as for the Aalei fathers_k, they_l included them_k too' [Mian. and Tele.]

Typically, nuclear SVCs are not semantically compositional. A list of example nuclear SVCs is provided in table 11.1. Verbs which only occur in a nuclear SVC and whose meaning is therefore difficult to give, are glossed with a question mark. When the gloss of a component verb is doubtful it is preceded by a question mark.

Table 11.1. Example nuclear SVCs

Nuclear SVCs	Gloss for the whole SVC	Meaning of the serialized verb stems	
<i>-à bû</i>	'lower'		<i>bû</i> 'plant'
<i>-à sâ</i>	'involve, include'	<i>-à</i> '?'	<i>sâ</i> '?'
<i>-à kibilâ</i>	'hold down and squash'		<i>kibilâ</i> '?'
<i>baa klâ</i>	'settle (argument)' (with <i>wéng</i> 'talk' as the object)		<i>klâ</i> 'fix'
<i>baa om-fâ</i>	'settle (argument) (with <i>wéng</i> 'talk' as the object)'	<i>baa</i> 'say (PFV)'	<i>om-fâ</i> 'put it (PFV)'
<i>ge titi</i>	'cover with soil'	<i>ge</i> 'cover (PFV)'	<i>titi</i> '?'
<i>ge wai-</i>	'hide from sight'		<i>wai-</i> '?wait (PFV)'
<i>naa tl</i>	'come back, return'		<i>tl</i> 'come (PFV)'
<i>naa temê</i>	'try'	<i>naa</i> '?'	<i>temê</i> 'have a look (IPFV)'
<i>-ò blelâ</i>	'fall'	<i>-ò</i> 'take (PFV)'	<i>blelâ</i> 'fall (PFV)'
<i>-ò klâ</i>	'direct, instruct, rebuke'	<i>-ò</i> 'take (PFV)'	<i>klâ</i> 'fix'
<i>sing tubu</i>	'spill'	<i>sing</i> 'spill (IPFV)'	<i>tubu</i> 'pour'

Nuclear SVCs can either be transitive or intransitive. The former have exactly one object, the latter do not have an object. Most of the example nuclear SVCs in table 11.1 are transitive. Intransitive nuclear SVCs are *naa tl* 'come back, return', *naa temê* 'try', and *-ò blelâ* 'fall'.

In a nuclear SVC, the second verb does not gap its object prefix. In (19), *baa* 'say (PFV)' and *-fâ* 'put (PFV)' share the object, which can only be *wéng* 'talk', and the object is indexed by the classificatory prefix *om-* on the second member of the nuclear SVC because this is a lexical requirement of *-fâ* 'put (PFV)'. This distinguishes nuclear SVC from verb compounds, where any prefixes on the second member of the compound need to be gapped (see 3.2.2 on V-V compounds).

- (19) \bar{i} *wéng=o*
 3PL.AN talk=N2

baa om-fâ-Ø-ibo=be
 say.PFV 3SG.F_CL.O-put.PFV-REAL-2/3PL.AN.SBJ=DECL
 ‘They have settled the argument.’

11.1.3. Verb serialization versus compounding (synopsis)

In this section I outline the main differences between verb serialization and V-V compounds and give a synopsis of these differences. For more on V-V compounds, see 3.2.2. V-V compounds are similar to nuclear SVCs. They are restricted to two verb stems, they do not allow separate objects and they do not allow aspect to be at variance. However, a V-V compound is always realized as a single phonological word. It constitutes a single domain for tone assignment, whereas the verbs in nuclear SVCs are phonologically independent, constituting two separate tonal domains. Furthermore, the stems in V-V compounds can show some degree of fusion of the verb stems. So while nuclear SVCs are only grammatical but not phonological units, V-V compounds are both grammatical and phonological units. See Crowley (1987: 59-61) for a similar argument for the distinction of nuclear SVCs and compounds in Paamese.

An example of a Mian V-V compound is given in (20):

- (20) *no=i*
 marsupials=PL.AN
- ya-l-êt-n-e=ta*
 PL.AN.O-kill.PFV-take.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘he killed and took the marsupials and then he...’ [Crows]

The compound is *ya-l-êt* ‘kill and take them’. Semantically, these describe discrete events, a ‘killing’-event and a ‘taking’-event. The two serialized verb stems are *-lò* ‘kill (PFV)’ and *-êb ~ -êt* ‘take in order to carry (PFV)’, which share the same aspectual value ‘perfective’ and the same object, i.e. *no=i* ‘the marsupials’. The sequence of verbs is realized as a single phonological word and shows fusion due to the deletion of /o/ (*-lò* ‘kill’ > *l*). The HL tonal melody on *-lò* ‘kill’ is deleted before a verb with a LHL melody and the LHL melody of *-êb* ‘take in order to carry (PFV)’ applies to the entire verb in (20).

The first stem *-lò* ‘hit, kill (PFV)’ cross-references the object of the whole sequence *noi* ‘the marsupials’ with the object prefix *ya-*, while the second stem *-êb* drops its classificatory prefix under argument identity. Outside of nuclear serializations the verb *-êb* ‘take in order to carry (PFV)’ obligatorily occurs with a classificatory object prefix, as in (21):

- (21) *éil* *ō-ta* *alukûm* *wa-nâ'*
 pig SG.F-EMPH all 3SG.F.O-kill.PFV
- om-êb* *te*
 3SG.F_CL.O-take.PFV come.PFV
- om-fâ-Ø-ib-bio=ta=ble!*
 3SG.F_CL.O-put.PFV-REAL-2/3PL.AN.SBJ-GPST=MED=EXCL
 ‘ “They had killed a whole pig, brought it, and put it down!”
 ’[Kasak ritual]

A selection of V-V compounds is given in table 11.2. The reader will note that many of these have unpredictable meanings. More examples can be found in section 3.2.2.

Table 11.2. Examples of verb compounds

Compound	Component stems	Stem meaning	Gloss
<i>batlâa'</i>	<i>bâ'-tlâa'</i>	break-remove	‘tear apart’
<i>denâ</i>	<i>dê'-na</i>	desist-make	‘stop’
<i>habù</i>	<i>hâ'-bù</i>	break-bury	‘hide’
<i>halò</i>	<i>hâ'-lò</i>	break-hit	‘break, split’
<i>kimâa'</i>	<i>ki-mâa'</i>	align-stand	‘watch over, care for’
<i>yoma</i>	<i>yo-ma</i>	initiate-plant	‘create’

The verb *-ûb'*- ‘give (PFV)’ is used with a quasi-applicative function to introduce an additional argument (usually a recipient, benefactive, malefactive, goal of ballistic motion, or experiencer). An example is provided in (22):

- (22) *kasak=e*
 kasak=SG.N1
- ale-`b'-e-Ø-ib-bio=ta*
 show-give.PFV-PL.AN.R-REAL-2/3PL.AN.SBJ-GPST=MED
 ‘they had shown us the kasak (ritual), and then someone else...’
 [Kasak]

For a detailed description of this construction, see 8.5.5. Phonologically, sequences of verb plus *-ûb'*- ‘give (PFV)’ are most similar to V-V compounds. They are single phonological words. The stems even show fusion since *-ûb'*- ‘give (PFV)’ is generally realized as just *-`b'*- after any vowel (with a few exceptions all of which end in /a/). Furthermore, the classificatory prefix on

‘give (PFV)’ is gapped. This only happens in V-V compounds, never in core or nuclear SVCs.

Table 11.3 below is a synopsis of the distinguishing properties of core SVCs, nuclear SVCs, and V-V compounds. Properties are grouped as phonological, morphological, syntactic, and semantic.

Table 11.3. Synopsis of core and nuclear serializations and V-V compounds

	Phonological			Morphological	
	Separate tonal domains	Intervening material	Verb stem fusion	Prefix on the second member	Aspect can vary freely
Core SVCs	yes	yes	no	yes	yes
Nuclear SVCs	yes	no	no	yes	no
V-V Compounds	no	no	yes	no	no

	Syntactic		Semantic
	Limited number of stems	Separate object	Compositional
Core SVCs	No limit	yes	always
Nuclear SVCs	yes (2)	no	rarely
V-V Compounds	yes (2)	no	rarely

11.1.4. The morphological status of the auxiliary

The question about the morphological status of the auxiliary is less straightforward than it might appear in section 8.6.7, where I state that verb forms like those in (23) are auxiliary-serialized forms consisting of a lexical verb stem with any argument-indexing affixes followed by an auxiliary, e.g.:

(23) *két=e*
 container=SG.N1

a-fû'-bi-n-e-so=be
 3SG.N1.O-grab.PFV-AUX.IPFV-REAL-3SG.M.SBJ-HPST=DECL
 ‘I was holding the container yesterday.’

For a description of the forms of the existential verb with the function of an auxiliary, see section 8.6.7 for final verbs and section 11.2.5 for medial verbs. Such verb-auxiliary sequences have the following properties:

- They are realized as a single phonological word, but there is no fusion of the verbs and the auxiliary stem.
- Aspect of the main verb and the auxiliary can be at variance.

- They follow the inflection patterns of the existential verb, not the inflection patterns of directly inflected verbs (cf. 8.6.5).

The fact that verb-auxiliary sequences are single phonological words means that they cannot be analysed as either core or nuclear SVCs because in those constructions the verbs remain phonologically independent words. In this respect they are more similar to compounds, which also constitute single phonological words.

On the other hand, we would expect typical compounds not have inflectional material between the compounded stems; at least this is the case for V-V compounds in Mian in general. But auxiliaries can follow a suffixed verb, as in (24), where the habitual auxiliary *-bina* follows the recipient suffix *-ye* on the stem *-ka-* ‘give (IPFV)’.

- (24) *ī blatik=ɔ*
 3PL.AN plastic_bag(TP)=N2
- do-ka-ye-bina-b-io=be*
 PL.F_CL.O-give.IPFV-PL.AN.R-AUX.HAB-IPFV-2/3PL.AN.SBJ=DECL
 ‘They habitually give (a few) vomit bags to us (on the mission plane).’

Furthermore, a verb can have perfective aspect while the auxiliary has imperfective aspect, which is unattested in V-V compounds. Compare (25), in which both are imperfective, and (26), in which the verb is perfective and the auxiliary imperfective. In these respects verb-auxiliary sequences are not like typical V-V compounds.

- (25) *wen-bi-n-e-so=be*
 eat.IPFV-AUX.IPFV-REAL-3SG.M.SBJ-HPST=DECL
 ‘He was eating yesterday.’
- (26) *nē dowôn’-bi-n-i-so=be*
 1SG eat.PFV-AUX.IPFV-REAL-1SG.SBJ-HPST=DECL
 ‘Having eaten, I stayed yesterday.’

In forms like *wenbinesobe* ‘he was eating yesterday’, the auxiliary *bi* indicates imperfectivity. In *dowôn’binisobe* ‘Having eaten, I stayed yesterday’ the predicate denotes the ‘eating’-event followed by a predicate denoting the ‘staying’-event and that the former precedes the latter temporally. Suprasegmentally, there is no difference between a form like *dowôn’binisobe* and a form like *wenbinesobe*. Both are treated as a single verbal word as far as the domain of verb tone is concerned. In each case, there is one tonal melody

tob-à', which is marked for DS in anticipation of a different subject (the pronged arrow, which is falling in the second clause).

The reason why I have not analysed $-\emptyset$ 'DS.SEQ' to be part of the verb form *tobà'i* 'I let go of it (LONG)' in (27) is because there is no contrast between $-\emptyset$ 'DS.SEQ' and any of the other S/R suffixes, such as *-n* '(SS.)SEQ' or *-b* 'DS.SIM', anymore, as there is in a normal medial verb. In the causative serialization the subject marker is suffixed directly to the stem. On causatives in general, see section 9.13.

11.1.6. Purposive serialization

In core and causative serializations, verbs are always ordered in a temporally iconic way, i.e. that an event which chronologically precedes another one is mentioned first.

There is an exception to this general rule of temporal iconicity in SVCs. A verb of motion can follow another verb to express that the movement takes place for the purpose of an action. This reversal of temporal iconicity has to be morphologically marked by using the perfective or imperfective M-form of a verb, e.g. *fuela-nam* [bathe.PFV-PFV] 'bathe (PFV)' or *fua-m* [bathe.IPFV-IPFV] 'bathe (IPFV)' rather than the bare stem.

Compare the semantic difference between the purposive SVC in (29) and a temporally iconic core SVC in (30):

(29) *nē aaie fuela-nam*
1SG water bathe.PFV-PFV

un-aamab-i=be
go.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
'I will go bathing.' [Observed]

(30) *nē aaie fuela tl-∅-i=be*
1SG water bathe.PFV come.PFV-REAL-1SG.SBJ=DECL
'I have come from bathing.' (lit. 'I bathed and came') [Observed]

If the motion verb in a purposive SVC is perfective, the meaning is that a single bounded motion event has to be completed before the event which is the purpose of the movement, which is expressed by the M-form, can take place:

- (31) *no=i* *bu-m*
 marsupial=PL.AN hunt.IPFV-IPFV

un-Ø-e-bu=a
 go.PFV-REAL-3SG.M.SBJ-GPST=MED
 ‘after he had gone hunting marsupials, (it got dark) ...’ [Crows]

In order to express that the movement is necessary for the action to be performed but that both occur more or less simultaneous or that the action is performed iteratively or intermittently during the motion event, the imperfective M-form has to be used followed by an imperfective verb of motion:

- (32) *bu-m* *hâa'-bi-n-eb=a=le*
 hunt-IPFV roam.IPFV-AUX.IPFV-SEQ-2SG.SBJ=MED=TOP
 ‘so you were roaming (the bush) to hunt and then...’ [Crows]

A purposive SVC can be part of a larger, temporally iconic core SVC:

- (33) *a-m* *te*
 3SG.M.O.hit.IPFV-IPFV come.PFV

a-nâ'-s-ib=a
 3SG.M.O-hit.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘they came to hit him and they hit him and then he...’ [Ghost village]

The verb *be* ‘walk (IPFV only)’ can occur following an M-form in what looks like a purposive serialization and have the meaning ‘keep doing the action expressed by the M-form’:

- (34) *nē* *ge-nam* *be-b-i=be*
 1SG roll.PFV-PFV keep.IPFV-IPFV-1SG.SBJ=DECL
 ‘I keep rolling (it, i.e. a cigarette). [Rolling smokes]

I assume that this is an extension from a purposive serialization. A possible bridging context which prompted speakers to extend the meaning of *be* ‘walk’ to ‘keep’ in purposive serializations would be:

- (35) *éil=i* *bu-m* *be-b-e=to*
 pig=PL.AN hunt-IPFV walk/keep.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘while he was walking along to hunt pigs, someone else ...’ [Danenok]
 OR ‘while he kept hunting pigs, someone else ...’

11.2. Medial verb morphology and clause chaining

This section deals with medial verb morphology and clause chaining. It consists of a description of switch reference morphology in medial verbs and a discussion of some unexpected semantic and functional inconsistencies in switch reference marking, which have their origin in the fact that the Mian switch reference markers are derived from the homophonous TAM markers used in final verbs. The scope rules of operators, such as tense, polarity and illocutionary force, an important and often overlooked topic in clause-chaining languages, will be taken up in chapter 12.

11.2.1. Introduction and terminology

Switch reference (S/R) is a discourse tracking device, whose main function is to monitor the subject (S/R pivot), i.e. to indicate through verbal morphology whether the subject of an adjacent clause is identical to or different from the subject of the present clause.

Some have termed S/R systems ‘exotic’ mainly because the combination of formal and functional properties found in S/R systems suggests a violation of the *Principle of Categorical Iconicity* (Haiman 1985), which postulates that a distinction is normally marked on the category to which it applies semantically. However, as pointed out by Stirling (1993: 137), S/R systems commonly combine reference tracking with other functions, such as indicating more generally a continuity or discontinuity between clauses (also see Comrie (1983: 23)). Hence, S/R systems provide information about relations between whole clauses, not just about the pivot noun phrases. If conceived of as a multi-functional system of agreement with the clause as its semantic domain, it does not come as a surprise that S/R distinctions are marked on the head of the clause, namely the verb, especially since S/R languages tend to be head-marking. Apart from this difference in the locus of marking, there is no principled difference between S/R and other means of tracking the reference of participants in discourse, such as anaphoric pronouns, gender systems, and other systems of nominal classification. For a detailed discussion of these issues, see Stirling (1993: 135-147).

In Papuan languages, S/R marking usually occurs in clause chaining constructions (Longacre 1972, Foley and Van Valin 1984, Foley 1986, Foley 2000, Roberts 1997). Any two adjacent clauses in such chains form a pair consisting of a ‘marked’ clause and a ‘reference’ clause. In adopting this terminology I follow Farr (1999: 177-178). The marked clause is marked for co-/disjoint reference of the subject with respect to the reference clause. These terms hark back to a study of S/R systems by Munro (1980).

In clause chaining constructions each marked clause (i.e. each clause in the chain apart from the last) contains a medial verb which is marked for ‘same subject’ (SS) or ‘different subject’ (DS) in relation to the subject of the reference clause. This reference clause in turn is a marked clause with respect to the next clause in the chain, that is, the verb of this clause is again marked for same subject or switch reference in relation to the subject of its reference clause. As the final clause contains the independent verb which is not marked for switch reference, final clauses are only ever reference clauses and never marked clauses. Similarly, the first clause in a clause chain is never a reference clause but only ever a marked clause, even if this first clause is a so-called ‘recapitulation clause’ in tail-head linkage (De Vries 2005). On tail-head linkage in Mian, see section 11.4.

11.2.2. Medial versus final verbs

Many Papuan languages that have clause chaining and S/R systems display a difference in morphological complexity of medial verbs compared to sentence-final verbs, which appear as the predicate of the last clause in a clause chain. Compared to final verbs, medial verbs are commonly morphologically impoverished. See Roberts (1997) for a typological survey of S/R systems in New Guinea languages.

In the simplest case, medial verbs are only marked for co-reference of subject, not for tense or person/number of the subject. The following example from Usan (Numugenan family, Madang Province) (Reesink 1987) is found in Reesink (1983: 217 and pers. comm.):

- (36) *ye nam su-ab is-omei*
 I tree cut-SS go_down-1SG.FAR.PAST
 ‘I cut the tree and (I) went down.’

Often the marker has additional temporal meaning, ‘portmanteau-ed’ into the same formative, e.g. sequential or simultaneous. This is the case in Fasu (West Kutubuan family, Southern Highlands Province) (Loeweke and May 1980) and Kalam (Kalam family, Madang Province) (Pawley 1966, Pawley 1987, Pawley 1993). The following example is from Kalam (Pawley 1993: 101):

- (37) *kwt d-y nwp pk-p-yn*
 stick hold-SS.PRIOR him hit-PFV-2SG
 ‘You hit him with a stick.’ (lit. ‘You took a stick and hit him.’)

The DS-forms of medial verbs are usually more complex. They can carry a subject marker, which indicates DS while the SS form is zero, e.g. in Fore (Gorokan family, Eastern Highlands) (Scott 1978), or they can have an anticipatory subject marker which indicates person and number of the following subject, as in Hua (Gorokan family, Eastern Highlands) (Haiman 1980: 187-189).

In other languages, one finds portmanteaux DS markers, for example in Kobon (Davies 1981) and Usan, where the DS marker also contains information on subject person and number without this being segmentable as a distinct morpheme. The following Usan example is from Reesink (1983: 218 and pers. comm.):

- (38) *ye nam su-ine is-orei*
 I tree cut-1SG.DS go_down-3SG.FAR.PAST
 'I cut the tree (and it went) down.'

Medial verbs can have separate suffixes for disjoint reference and for subject person and number, as for example in Kalam (Pawley 1993: 94):

- (39) *an ag-e-k g-a-k?*
 who say-DS.PRIOR-3SG do-3SG-PST
 'Who told him to do it?' (lit. 'Who said and he did it?')

So in these typical examples of S/R in Papuan languages we find a situation where medial verbs are different from final verbs in that not all medial verbs are marked for subject person and/or subject number (e.g. SS medial verbs often occur without an affix cross-referencing the subject), they often cannot be marked for various categories, such as irrealis mood or absolute tense, i.e. a tense category which has the moment of speaking as its deictic centre (Comrie 1985), and the formatives that medial and final verbs allow are formally and functionally distinct.

In Mian we find a less grammaticalized S/R system, characteristic of languages of the West Papuan Highlands, e.g. Dani (Bromley 1981) and Kapauku (Ekagi) (William Foley, pers. comm.). Mian also makes frequent use of clause chaining in discourse, but here the situation is different in that medial verbs resemble final verbs much more than in the languages above. Mian medial verbs:

- convey aspectual information through the aspectual stem distinction unless the verb is trans-aspectual.
- are always marked for subject and any additional argument(s) in the same way as if the verb occurred in an independent sentence.

- take a range of markers in their pre-subject suffix slot which convey temporal and S/R information. These are homophonous with a subset of those found in the pre-subject slot in final verbs (see 8.6.1 and 11.2.6.2).
- can be marked for the tense categories ‘General past’ and ‘Hesternal past’ to locate an event in the (general) past or yesterday, respectively.
- are directly inflected or serialized with an auxiliary stem of the existential verb. Medial verbs can occur with a proper subset of the auxiliary stems found in final verbs.

Yet, despite the considerable degree of similarity between medial and final verbs, there are principled differences between the two. Medial verbs can neither be marked for irrealis or deontic mood nor for negative polarity. Nor can they be inflected for hortative mood. Furthermore, medial and final verbs do not co-occur with the same set of clitics. While the latter co-occur with clitics indicative of illocutionary force, such as =*be* ‘Declarative’ and =*e* ‘(Content) question’, the former usually only co-occur with the medial verb marker =*a*. This marker is presumably derived from the co-ordinator =*a* ‘and’ which is used to coordinate noun phrases, e.g. *tēn=a unáng=a=i* [child=and woman=and=PL.AN] ‘(the) children and women’, and which in turn is a shortened form of *eka* ‘and’.

As noted above, morphological markers indicating co- or disjoint subject reference are a common feature of medial verbs in clause chaining constructions. Medial verbs carry a marker (which may be zero), whose main function is to indicate whether the subject of the verb in the following clause has the same subject or a different one, but which also incorporates other meanings, mainly temporal and aspectual ones, such as sequentiality (SEQ) and simultaneity (SIM) of events described by the two consecutive clauses (Stirling 1993, Roberts 1997). The following sections deal with S/R morphology of medial verbs in Mian.

11.2.3. Switch reference morphology in directly inflected verbs

Like final verbs, medial verbs can either be directly inflected or serialized with an auxiliary. Table 11.4 gives an overview of the inflectional possibilities of directly inflected medial verbs. The gloss ‘SI’ indicates a short time interval between the event in the medial clause and the event in the reference clause.

Table 11.4. Directly inflected medial verbs

Stem	S/R slot
Perfective	<i>-n</i> 'SS.SEQ'
	\emptyset 'DS.SEQ'
	<i>-nab</i> 'DS.SEQ.SI'
	<i>-s</i> 'DS.SEQ'
Imperfective	<i>-b</i> 'DS.SIM'

The morphemes that can go into the S/R slot combine both a S/R meaning and a temporal meaning related to the temporal structure of events, e.g. *-s* indicates DS and sequentiality (SEQ) of events, and *-b* expresses DS and event simultaneity (SIM). Table 11.5 groups these formatives into whether they indicate SS or DS and whether they indicate sequentiality or simultaneity.

Table 11.5. Mian S/R morphemes

	SEQ	SIM
SS	<i>-n</i>	<i>-biaan</i>
DS	<i>-n</i>	
	\emptyset	
	<i>-nab</i>	<i>-b</i>
	<i>-s</i>	

A few comments regarding this table are necessary here to orient the reader. All suffixes will be dealt with in detail later in this section.

The suffix *-n* in medial verbs has two functions. If the subject of the marked clause is first person singular,¹ it unequivocally indicates SS and event sequentiality. In all other person-number combinations, *-n* functions as a more general marker of event sequentiality and semantic coherence between clauses and the subject of the subsequent clause can be the same or different.

There is a notable exception to this rule. If a medial verb can only ever be inflected with *-n*, this suffix invariably signals SS and SEQ in all person and number combinations. This holds true for the six directionals if inflected directly (see 9.1.2) and the verb *-ēb* 'take (in order to carry)' and all forms which contain *-ēb* as an element, such as *-silēb* 'follow' (also see 8.6.4).

For the sake of completeness, I included the auxiliary *-biaan* in table 11.5 above, which is used in auxiliary-serialized medial verbs to indicate SS and event simultaneity. As it does not fall under direct inflection, it will be discussed further below (11.2.5.3).

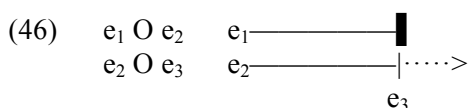
The suffix *-nab* always indicates DS and event sequentiality, but also signals that there is a short interval until the ensuing event commences.

The suffix *-s* always indicates DS and event sequentiality. Additionally, *-s* tends to be used when there is a tight temporal or even a causal relationship between the events described by two adjacent clauses within a clause chain.

sense, even a sequence of two medial clauses with simultaneous events is iconic. Events can be temporally co-extensive but they do not have to be.

In (45) above, there is a third event e_3 which is bounded (namely the opening of the stone gate in the third clause). This event e_3 terminates e_1 (i.e. the blowing on the stone) but nothing is said about whether e_2 is terminated as well. The ‘watching’-event may continue after the stone gate has opened.

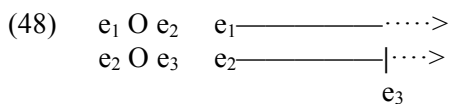
Thus, the temporal structure of the events in (45) can be represented as follows (I use the symbol ‘■’ to indicate the endpoint of an unbounded event as opposed to ‘|’ which indicates the occurrence of a bounded event):



In the spontaneous corpus, *-b* ‘DS.SIM’ in the marked clause is indeed very consistently followed by DS in the reference clause and speakers generally judged clause chaining constructions with *-b* ‘DS.SIM’ in the marked clause and a co-referent subject in the reference clause to be ungrammatical. Contrary to speaker judgments, however, such cases are attested in the spontaneous corpus (as long as the events described are simultaneous), for example:

- (47)
- | | | |
|-------|--|-------------|
| e_1 | <i>ke-ha-b-e=a</i> | |
| | do-3SG.N1.R-DS.SIM-3SG.M.SBJ=MED | |
| e_2 | <i>kimâa'-bi-Ø-e</i> | <i>bita</i> |
| | care_for.PFV-AUX.IPFV-IPFV-3SG.M.SBJ | until |
| e_3 | <i>bali-s-e=ta</i> | |
| | bear_fruit-DS.SEQ-3SG.N1.SBJ=MED | |
| | ‘While cleaning it (a plant) he was caring for it until it bore fruit and then he ...’ [Afoksitgabáam] | |

The temporal structure of the events in (48) can be represented as:



11.2.3.3. The DS sequential markers and $-\emptyset$ and $-s$

The DS markers $-\emptyset$ ‘DS.SEQ’ and $-s$ ‘DS.SEQ’ require the subject in the reference clause to have disjoint reference. The difference in their semantics is hard to grasp. While $-\emptyset$ ‘DS.SEQ’ only indicates DS and event sequentiality, $-s$ ‘DS.SEQ’ seems to specify that the event in the marked clause is a necessary condition for the event in the reference clause to take place. This contrast between $-\emptyset$ and $-s$ can be illustrated with example (49):

- (49) e_1 *gíng=e* *tob-tlâa'-n-i=a*
 midrib=SG.N1 3SG.LONG.O-remove.PFV-SS.SEQ-1SG.SBJ=MED
- e_2 *tob-kimà- \emptyset -i=a*
 3SG.LONG.O-put_in_fire.PFV-DS.SEQ-1SG.SBJ=MED
- e_3 *háang-an-s-e=a*
 dry-VBLZ-DS.SEQ-3SG.N1.SBJ=MED
- e_4 *hà'-n-i=a*
 break.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I remove the midrib (of the tobacco leaf), put it (the tobacco) in the fire, as it has dried, I break it (and then I ...)’ [Rolling smokes]

There are four events (e_1 to e_4), all of which occur sequentially. In the clauses describing e_1 , e_2 , and e_4 , the subject is the narrator (first person singular). The third clause (e_3) has a different subject from the rest of this text chunk, namely the tobacco, and it specifies a necessary condition for the event in the fourth clause to take place, i.e. the tobacco having dried (e_3) is a necessary prerequisite for the speaker in (49) to break it (e_4). In general, $-s$ is used instead of $-\emptyset$ if the event in the marked clause is necessary for the one in the reference clause to take place. Compare the following two examples (50) and (51):

- (50) *kōbo* *te-s-eb=ta*
 2SG.M come.PFV-DS.SEQ-2SG.SBJ=MED
- okok* *ke-n-omab-bio=be*
 work(TP) do-AUX.PFV-IRR.PL.AN.SBJ-1PL.SBJ=DECL
 ‘Only after you’ve come, will we work (i.e. the speaker cannot do the work alone).’

- (51) *kōbo* *tl-∅-eb=ta*
 2SG.M come.PFV-DS.SEQ-2SG.SBJ=MED

okok *ke-n-omab-bio=be*
 work(TP) do-AUX.PFV-IRR.PL.AN.SBJ-1PL.SBJ=DECL
 ‘When you come and we’ll work.’

The occurrence of the $-\emptyset$ DS marker is restricted by phonological context. In final verbs, zero is a variant of $-n$ ‘Realis’. Alternation is phonologically conditioned by the subject suffix which always follows the aspect suffix. If the subject suffix starts with /i/, as in the first person singular $-i$ and the second and third plural animate $-ib$, $-n$ is commonly replaced by zero. In all other cases, that is if the subject suffix starts with /ε/ as in the second singular $-eb$ or third singular masculine $-e$ or with /o/ as in third singular feminine $-o$ and first plural $-ob$, zero alternation is possible (but far less common), provided that omission of $-n$ does not lead to a clash of like vowels. If zero alternation leads to such a clash, $-n$ has to surface in the pre-subject slot, e.g. *baa-n-e=be* ~ *baa-∅-e=be* ‘he’s said’, *ge-n-e=be* ‘he’s built’, but **ge-∅-e=be*). Hence, there are certain verb forms which simply cannot have zero in the pre-subject slot by virtue of their phonological make-up. DS-zero in medial verbs is limited in the same way. Certain verb forms cannot have the zero DS marker for phonological reasons. Zero-marked medial verb forms like **ge-∅-e=ta* ‘he built’ do not exist because of like-vowel clash. The only possible DS medial form is *ge-s-e=ta*.

There is a further phonological restriction for DS-zero, which is not as obvious in final verbs as it is in medial verbs. Realization as zero is impossible if the result means that two vowel-only syllables follow. As most final verbs end in $=be$ ‘DECL’, this situation does not arise often, but it does in questions:

- (52) *mukùng=e* *goi-ʔsʔ-o-n-e=a?* (**mukùng=e goi-ʔsʔ-o-∅-e=a?*)
 nose=SG.N1 smash.PFV-give.PFV-3SG.F.R-REAL-3SG.M.SBJ=Q
 ‘Has he smashed her nose?’

This phonological restriction is much more relevant for medial verbs because the standard medial clitic $=a$ ‘and’ does not start with a consonant. Medial verb forms like **mukùng=e goi-ʔsʔ-o-∅-e=a* ‘he’s smashed her nose and then she ...’ are ruled out. If the medial clitic $=ta$ is used, which starts in a consonant, zero can alternate freely with $-s$ to indicate sequentiality and DS in medial verbs. The form *goi-ʔsʔ-o-∅-e=ta* is correct.

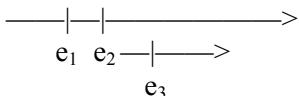
Three important and highly frequent verbs have alternative “zero-compatible” stems which all end in a consonant /l/ to avoid like-vowel clash, e.g. *te* ~ *tl* ‘come (PFV)’, *bi* ~ *bl* ‘exist, stay (IPFV)’, and *ge* ~ *gl* ‘say (PFV)’.

11.2.3.4. -m 'Inchoative imperfective' plus -s 'DS.SEQ'

In medial verbs, the S/R marker -s 'DS.SEQ' can be suffixed to an imperfective verb stems already inflected with -m 'Inchoative imperfective' (see 8.6.1.6). Such a form focuses on the inception of an action or event. In this case, -s indicates that a change of subjects will take place in the reference clause even though the situation described by the verb in the marked clause might still hold when the event of the reference clause comes into effect, as in (53):

- (53) e₁ *mele-˘b'-a-s-o=a*
touch.PFV-give.PFV-3SG.M.R-DS.SEQ-3SG.F.SBJ=MED
- e₂ *me-m-s-e=a*
cry.IPFV-INCH-DS.SEQ-3SG.M.SBJ=MED
- e₃ *gilan un-Ø-o-bu=a*
fast go.PFV-REAL-3SG.F.SBJ-GPST=MED
'as it (a wallaby) touched him (a baby), he started to cry,
so it ran away and then ...' [Afoksitgabáam]

The temporal structure of the events in this example can be represented as follows. Note that event e₂ refers to the inception of the 'crying', as expressed by the inchoative form *me-m*:

- (54) e₁ > e₂ > e₃ 

There are no medial verbs which only bear the inchoative aspect suffix -m. The sequence -m plus -s is possible in medial verbs only.

11.2.3.5. -nab 'DS.SEQ.SHORT INTERVAL'

The marker -nab in medial verbs indicates DS and sequentiality and also a short interval between events:

- (55) *aaleb=e abuko yē*
father=SG.M later there
- dei-˘b'-a-nab-ib=a*
leave.PFV-give.PFV-3SG.M.R-DS.SEQ.SI-2/3PL.AN.SBJ=MED

yē *ute-n-e=a*
 there come_up.PFV-SEQ-3SG.M.SBJ=MED
 ‘later they left the father there and after a short while he jumped
 up and then ...’ [Crows]

It is difficult to specify the exact length of the interval indicated by *-nab*. My corpus contains examples with intervals from a few minutes as in (55) to a few hours, for instance from dusk to about midnight.

11.2.4. The existential verb *n/bi-bl* as a medial verb

The inflectional possibilities of the existential verb as the predicate of a medial clause are summarized in table 11.6.

Table 11.6. The existential verb *n/bi-bl* as a medial verb

Stem	S/R slot
	<i>-n</i> ‘(SS.)SEQ’
<i>bi-bl</i> ‘stay.IPFV’	\emptyset ‘DS.SIM’
	<i>-s</i> ‘DS.SEQ’
<i>biaan</i> ‘stay.IPFV.SS.SIM’	

It is important to note about this table that *-n* in auxiliary-serialized medial verbs also shows the peculiarity of only indicating SS and sequentiality if the subject is first person singular.

The form *biaan* ‘stay.IPFV.SS.SIM’ is here analysed as a single stem that is synchronically not segmentable anymore though it is possible that /n/ originally belonged to the class of fillers of the S/R slot in the verb template. The analysis of *biaan* as a bare, non-affixed stem is not just a trick to dodge the obligation to account for the rather peculiar behaviour of *-n*, which – if analysed as an affix – here would indicate SS and simultaneity and not sequentiality, which is its meaning when suffixed to the stem *bi* of the existential verb. Independent evidence which supports the analysis of *biaan* as a single stem comes from shortened medial clauses. In such clauses the medial verb clitic =*ta* directly follows the verb stem. There is no S/R, subject, or tense marking. In such a construction *biaan* is used, not **biaa*:

- (56) *ēle* *fūt* *biaan=ta*
 DEM.PROX.SG.N1 tobacco stay.IPFV.SS.SIM=MED

belâ-s-e=ta
 break.PFV-DS.SEQ-3SG.N1.SBJ=MED
 ‘This is tobacco and it blossomed, so we ...’ (lit. ‘it broke’)
 [Sofelok, 1]

More examples of such shortened medial clauses, always involving marking with =*ta*, can be found in section 11.2.13.

All forms of the existential verb can occur as the predicate of a medial clause. As the behaviour of the existential verb in medial clauses is amply illustrated by examples in the next section on auxiliary-serialized medial verbs, I will confine the illustration here to *biaan* ‘stay.IPFV.SS.SIM’ in (57):

(57) *yē* *biaan-o=ta*
 there stay.IPFV.SS.SIM-3SG.F.SBJ=MED

Miantén=i *yē* *yoma-n-o=ta*
 Mian_people=PL.AN there create-SEQ-3SG.F.SBJ=MED
 ‘While staying there, she created the Mian people there and then...’
 [Dimosson]

The existential verb shows two contracted forms in medial clauses. When either of the forms *bi-Ø-e* [stay.IPFV-DS.SEQ-3SG.M.SBJ] ‘he stays and then someone else ...’ or *bi-Ø-o* [stay.IPFV-DS.SEQ-3SG.F.SBJ] ‘she stays and then someone else ...’ are followed =*a* ‘Medial verb’, the disallowed vowel clusters *[^mbiæ] and *[^mbio] are simplified to [^mbia] and [^mbua], respectively.

11.2.5. Auxiliary-serialization in medial verbs

Medial verbs are serialized with a fully inflected form of the existential verb *n/bi~bl* in order to express certain contrasts in the temporal structure of events in a clause chain and also to mark certain S/R-related contrasts, e.g. for sequential unbounded events and simultaneous events performed by the same individual.

Table 11.7 below lists the combinatorial possibilities for perfective and imperfective stems to be serialized with an auxiliary stem.

11.2.5.1. -bi ‘Imperfective auxiliary’

Medial verbs that consist of an imperfective stem serialized with the auxiliary *-bi* denote unbounded events. The S/R marker *-n* unequivocally indicates

coreferentiality of subject and sequentiality only if the subject is first person singular. In all other person-number combinations *-n* is a more general marker of event sequentiality.

Table 11.7. Auxiliary-serialization in medial verbs

Verb stem	Auxiliary slot	S/R slot
Perfective	<i>-bi</i> ~ <i>-bl</i> ‘Aux imperfective’	<i>-Ø</i> ‘DS.SIM’
		<i>-n</i> ‘(SS.)SEQ’
		<i>-s</i> ‘DS.SEQ’
	<i>-biaan</i> ‘IPFV.SS.SIM’	
Imperfective	<i>-bi</i> ‘Aux imperfective’	<i>-n</i> ‘(SS.)SEQ’
		<i>-s</i> ‘DS.SEQ’
		<i>-biaan</i> ‘IPFV.SS.SIM’
Imperfective (X-stems* only)	<i>-bi</i> ~ <i>-bl</i> ‘Aux imperfective’	<i>-Ø</i> ‘DS.SIM’

*The term ‘X-stems’ in the table above refers to obligatorily auxiliary-serialized verbs, such as *—/háa* ‘roam (IPFV)’.

Consider examples (58) and (59):

- (58) *me-we-bi-n-e=to*
cry.IPFV-3SG.F.R-AUX.IPFV-SEQ-3SG.M.SBJ=MED

om-éb *tà-n-e=ta*
3SG.F_C.O-take.PFV sideways-SS.SEQ-3SG.M.SBJ=MED
‘he was crying for her and then took her and went into the
bush and then...’ [Afoksitgabáam]

- (59) *kimâa’-bi-n-o=ta*
care_for.PFV-AUX.IPFV-SEQ-3SG.F.SBJ=MED

dei-˘b’-o-n-e-bio=be
leave.PFV-give.PFV-3SG.F.R-REAL-3SG.M.SBJ-GSPT=DECL
‘She was caring (for him) and then he left her.’

The S/R marker *-s* ‘DS.SEQ’ in auxiliary-serialized medial verbs indicates disjoint subject reference and event sequentiality:

- (60) *halaa-ye-bi-s-ib=ta*
fornicate-PL.AN.R-AUX.IPFV-DS.SEQ-2/3PL.AN.SBJ=MED

wàt-n-ib=ta

across-SS.SEQ-2/3PL.AN.SBJ=MED

‘they (the Mianmin men) were raping them (the Telefomin women) and then they (the Telefomin women) went across (to Telefomin) and then they ...’ [Mianmin and Telefomin]

11.2.5.2. *-bi* ‘Imperfective auxiliary’ plus \emptyset ‘DS.SIM’

The only imperfective stems which can be serialized with *-bi* ‘Imperfective auxiliary’ plus \emptyset ‘DS.SIM’ in medial verb forms are X-stems, i.e. those which always require an auxiliary to be inflected (see 8.4). These verbs cannot be inflected directly by *-b* ‘DS.SIM’. There is no form **hâa’-b-i=a* [roam.IPFV-DS.SIM-1SG.SBJ=MED]. In order to express DS and event simultaneity the auxiliary construction has to be used:

- (61) *hâa’-bi- \emptyset -o=ta* *ēle*
 roam.IPFV-AUX.IPFV-DS.SIM-3SG.F.SBJ=MED DEM.PROX.SG.M

mēn=e

child=SG.M

dob-miki-n-e=a

3SG.M_CL.O-take_into_arms.PFV-SEQ-3SG.M.SBJ=MED

‘while she was roaming (the bush), this (one) took the child in his arms, and then...’ [Crows]

It seems that some speakers treat \emptyset ‘DS.SIM’ in an auxiliary serialization as a more general marker of event simultaneity and allow the subject of the reference clause to be either the same or different.

Note that in this respect medial X-stems are similar to final X-stems. The former cannot be directly inflected for *-b* ‘DS.SIM’ whereas the latter cannot be directly inflected for *-b* ‘Imperfective’.

11.2.5.3. *-biaan* ‘Imperfective SS.SIM auxiliary’

The only way to express simultaneity of events without a switch in subject reference is to employ the auxiliary *-biaan* ‘IPFV.SS.SIM’ in the marked clause. This auxiliary can only be used in the imperfective. The closest English translation of such a verb would be ‘while V-ing’:

- (62) *no=i* *al=e*
rodent=PL.AN bowels=SG.N1

gokà-biaan-o=a=le
cut_skin.IPFV-AUX.IPFV.SS.SIM-3SG.F.SBJ=MED=TOP

al *atosîn=o* *wà*
bowels half=N2 cut

wen-biaan-o=a
eat.IPFV-AUX.IPFV.SS.SIM-3SG.F.SBJ=MED
'While cutting out the bowels of the rodents, she was cutting and eating bits of the intestines and while doing that she ...' [Crows]

The event in a reference clause following a marked clause with (-)*biaan* (whether it occurs as a main verb or as an auxiliary) can be unbounded itself or it can be bounded. In the former case, it must commence while the marked clause event is on-going but can continue after the end of the marked clause event. In the latter case, it must occur at some point in time while the marked clause event is on-going, possibly terminating it. As with *-b* 'DS.SIM', the only restriction on what temporal relation the events can have to each other is that the reference clause event must not commence before the marked clause event did.

Medial verbs with the auxiliary *-biaan* followed by a subject suffix sometimes appear in the shortened form *biaam* without a subject suffix following. The form *biaam* also indicates imperfective, same subject and simultaneity but does not express the subject. Two examples are provided below:

- (63) *inà'-biaam* *têm'-Ø-e=a*
do_thus-AUX.IPFV.SS.SIM see.PFV-DS.SEQ-3SG.M.SBJ=MED
'doing thus, he saw that ...' [Flood]

- (64) *alél=o* *toun-biaam*
wife=SG.F sit.IPFV-AUX.IPFV.SS.SIM

bi-n-o=a
stay.IPFV-SEQ-3SG.F.SBJ=MED

me-m-s-o=a
 cry.IPFV-INCH-DS.SEQ-3SG.F.SBJ=MED
 ‘The wife was there sitting and she started to cry, and then he ...’
 [Newlyweds]

In both examples it is possible to use the full forms *inà-biaan-e=a* and *toun-biaan-o=a*, respectively.

11.2.5.4. Imperfective auxiliaries and perfective stems

Like final verbs, medial verbs can consist of a perfective verb stem plus an imperfective auxiliary to express that the result of a bounded event is on-going after the completion of this event. In my corpus, the only attested types of examples are a perfective stem and *-bi ~ -bl* plus *-Ø* ‘DS.SEQ’, as in (65), and a perfective stem plus *-biaan*, as in (66):

(65) *dei-˘b-o-bi-Ø-e=a*
 leave.PFV-give.PFV-3SG.F.R-AUX.IPFV-DS.SIM-3SG.M.SBJ=MED

un-om *daak-n-o=a*
 go.PFV-? down-SS.SEQ-N2.SBJ=MED
 ‘While he stayed having left her, it (the time) went down (i.e. it got later) (and then...) [Newlyweds]

(66) *mâa'-biaan-e=a*
 stand_up.PFV-AUX.IPFV.SS.SIM-3SG.M.SBJ=MED

éil=o *kimâa'-bi-Ø-e=a*
 pig=SG.F care_for.PFV-AUX.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘while standing there, he was guarding the sow and ...’ (lit. ‘having stood up and staying (i.e. standing), ...’) [Danenok]

It seems that some speakers treat *-Ø* ‘DS.SIM’ in an auxiliary serialization as a more general marker of event simultaneity and allow the subject of the reference clause to be either the same or different.

On auxiliary-serialized perfective stems in final verbs, which show a wider range of auxiliaries, see 8.6.7.3.

11.2.6. Complications in the Mian S/R system

This section draws heavily on Fedden (forthcoming).

11.2.6.1. Inconsistencies in S/R marking

The Mian S/R system has a peculiar property that I have not been able to track down elsewhere in the literature. While DS marking indeed indicates that the subject of the reference clause must be different, SS marking effects unequivocal subject co-reference only if the subject of the marked clause is first person singular. It seems as if indication of SS and DS (albeit to a much lesser degree, as we will see) is not fully entrenched in the language as an entailed meaning of the respective S/R formatives. Rather, the system seems in parts to be based on implicatures. In the following section I argue that this is most likely the case because the markers *-n*, *-b*, *-s*, and *-Ø*, which occur in the pre-subject slot in medial verbs are derived from the homophonous TAM markers which go into the same slot in final verbs. Before this can be discussed in greater detail, an overview of this peculiar S/R behaviour is necessary.

To recapitulate, if the subject of the marked clause is first person singular, DS and SS marking unequivocally indicate that the subject of the reference clause must be different or the same, respectively. Consider (67):

- (67) a. *gíng=e* *tob-tlâa'-n-i=a*
 midrib=SG.N1 3SG.LONG.O-remove.PFV-SS.SEQ-1SG.SBJ=MED
- b. *tob-kimà-Ø-i=a*
 3SG.LONG.O-put_in_fire.PFV-DS.SEQ-1SG.SBJ=MED
- c. *háang-an-s-e=a*
 dry-VBLZ-DS.SEQ-3SG.N1.SBJ=MED
- d. *hà-n-i=a*
 break.PFV-SS.SEQ-1SG.SBJ=MED
 'I remove the midrib (of the tobacco leaf), put it (the tobacco) in
 the fire, as it has dried, I break it (and then I ...)' [Rolling
 smokes]

Exchanging *tob-tlâa'-n-i=a* for *tob-tlâa'-Ø-i=a* in line (a) or *tob-kimà-Ø-i=a* for *tob-kimà-n-i=a* in line (b) in this example would result in an ungrammatical sentence. While DS marking unequivocally indicates a switch

in reference regardless of person and number values of the subject, *-n* does not unequivocally indicate co-reference. If a medial verb is marked *-n* in any person and number other than first person singular, it does not matter whether the subject in the reference clause has co- or disjoint reference, and *-n* simply indicates event sequentiality. The behaviour of S/R markers is summarized in table 11.8.

Table 11.8. Functions of S/R markers

S/R marker	Subject person/number	Indicates
<i>-n</i> 'SS.SEQ'	First person singular subject	SS and sequentiality
<i>-n</i> 'SEQ'	Non-first person singular subject	Sequentiality regardless of subject reference
<i>-s</i> 'DS.SEQ'	Any subject	DS and sequentiality
\emptyset 'DS.SEQ'		
<i>-b</i> 'DS.SIM'	Any subject	DS and simultaneity

The following elicited examples illustrate this point further. If the subject of the marked clause is anything but first person singular and the verb is marked *-s* 'DS.SEQ', or \emptyset 'DS.SEQ' for that matter, the next subject must have disjoint reference. Compare the two following sentence pairs. Example (68) is grammatical whereas (69) is bad:

- (68) *mēn=e do-fâ-s-o=a*
 child=SG.M 3SG.M_CL.O-put.PFV-DS.SEQ-3SG.F.SBJ=MED

me-b-e=be
 cry.IPFV-IPFV-3SG.M.SBJ=DECL
 'She gave birth to a boy and he is crying.'

- (69) **mēn=e do-fâ-s-o=a*
 child=SG.M 3SG.M_CL.O-put.PFV-DS.SEQ-3SG.F.SBJ=MED

me-b-o=be
 cry.IPFV-IPFV-3SG.F.SBJ=DECL
 'She gave birth to a boy and so she is crying.'

However, if the subject of the marked clause is anything but first person singular and the verb is marked *-n*, the subject in the reference clause can either have co- or disjoint reference. For example in (70) the subject of the marked clause is co-referent with the subject of the reference clause, namely the mother of the child that she has given birth to:

logical states. Reesink (1983: 240) points out that S/R marking proceeds with respect to topicality hierarchies. In other words, the topic-hoods of certain subjects may override the system, thus resulting in seemingly inconsistent SS marking. Consequently, a clause or even clauses with less topical subjects can be skipped and SS marking is calculated with respect to the clause in which the topic re-occurs (see also Farr 1999: 228). Mian, however, allows SS marking before clauses providing background information, even if the topic of the first clause is never mentioned again in the rest of the text, as in (74). The embedded adverbial clause is bracketed:

- (74) a. *yoma-n-e=ta*
beget-SEQ-3SG.M.SBJ=MED
- b. [*naka=i* *utl-Ø-ib=o*]
man=PL.AN come_up.PFV-REAL-2/3PL.AN.SBJ=N2
- c. *ī* *ninín=o* *dl-â-n-ib=a*
3PL.AN name=N2 PL.F_CL.O-put-SEQ-2/3PL.AN.SBJ=MED
'he begot (children), [when the people grew up,] they assumed
names and then...' [Dimosson]

In the first marked clause (line a) of this text excerpt, the subject is the male protagonist and it would be plausible to assume that the bracketed adverbial clause (line b) was skipped and SS marking was interpreted with respect to the clause following the adverbial, if the man re-occurred as topic. But he drops out of the discourse as a topic and is never mentioned again. That marking with *-n* is nonetheless possible corroborates the fact that *-n* in medial verbs is a more general marker of sequentiality except where the subject of the marked clause is first person singular. In this case, *-n* unequivocally indicates event sequentiality and SS.

If we assume that a central function of an S/R system is to help with reference resolution in potentially ambiguous situations, the restrictions of the Mian S/R system are peculiar because – from a functional perspective – such restrictions do not seem to make much sense. After all, S/R morphology is redundant when either of the subjects is first or second person because in these cases, disjoint reference is obvious to the speaker.

Haiman and Munro write:

[Switch reference] is redundant where either subject [i.e. in the marked or the reference clause – SF] is first or second person, and necessary where both subjects are third person. We may therefore expect to find languages in which switch-reference is limited to the third person (Haiman and Munro 1983: xi).

Examples of languages in which S/R is only obligatory in the third person or even restricted to third person, are Gokana (Comrie 1983), Kaingáng (Wiesemann 1982) and Yup'ik (Woodbury 1983). Whether these are uncontroversial examples of S/R languages³ is not important here, but clearly, if S/R is fully functional only for certain person-number combinations, one would not expect this to be the case in the first person singular, where it is functionally unnecessary for reference resolution.

On the other hand, Mian can afford to renounce some of the disambiguation work in reference tracking normally done by a S/R system for two reasons:

(a) all medial verbs are obligatorily marked for person and number of the subject, and

(b) Mian uses gender as a reference-tracking device, and the cross-referencing subject markers index the gender of the subject.

For example, in (75) the gender difference reflected in the subject suffixes forces a disjoint-reference interpretation of subjects:

(75) *mēn=e* *do-fâ-n-o=a*
 child=SG.M 3SG.M.O-put.PFV-SEQ-3SG.F.SBJ=MED

me-b-e=be
 cry.IPFV-IPFV-3SG.M.SBJ=DECL
 'She gave birth to a boy and he is crying.'

The only two cases which cannot be disambiguated by the subject suffix and the gender value expressed in it are those where:

(a) both subjects have the same gender (or subject markers are homophonous)⁴, or

(b) both subjects are marked with *-ib* 'second/third person animate plural' on the verb (In the plural all gender contrasts are neutralized).

In situations in which person, number, or gender marking does not disambiguate speakers consistently employ DS marking, e.g.:

(76) *fote-˘b'-e-Ø-ib=a*
 rout-give.PFV-PL.AN.R-DS.SEQ-2/3PL.AN.SBJ=MED

dala-n-ib=a=le
 go_away-SEQ-2/3PL.AN.SBJ=MED=TOP
 ‘They (the Telefomin men) routed them (the Mianmin men) and they
 (the Mianmin) went away and then...’ [Mianmin and Telefomin]

Out of context, each of the subject markers (*-ib*) in (76) could also be second person plural but in the historical account from which the example was taken the meaning is unequivocally third person plural.

If speakers use SS-marking with a series of subjects of the same gender, they (re-)introduce an overt noun phrase in order to disambiguate subject reference, as in (77):

(77) *dekéng=e* *dama-n-e=to*
 vine_species=SG.N1 grow_up.PFV-SEQ-3SG.N1.SBJ=MED

dafinau=e *tām*
 vine_species=SG.N1 sideways

tl-Ø-e-bio=to
 come.PFV-REAL-3SG.N1.SBJ-GPST=MED
 ‘The dekeng vine grew up and after the dafinau vine branched off it,
 (the ancestors...)’ [Dafinau]

This means that a sentence like (78) is not ambiguous, since the gender of the subject forces a conjoint reading:

(78) *mēn=e* *do-fâ-n-o=a*
 child=SG.M 3SG.M_CL.O-put.PFV-SEQ-3SG.F.SBJ=MED

me-b-o=be
 cry.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She_k gave birth to a boy and she_k is crying.’

Although it is possible to have *-n* on the verb in the marked clause (unless the subject is first person singular), here *dofânoa*, followed by a different subject in the reference clause, an overt noun phrase (e.g. *unáng mak=o* [woman other=SG.F] ‘another woman’) would have to be used in the reference clause to make an interpretation of the subjects as disjoint in reference available. Without such an overt noun phrase, subjects in (78) must be interpreted as co-referential.

If the verb in the marked clause is inflected with *-n* and the subject with disjoint reference in the reference clause is not readily identifiable, a full noun phrase is used:

- (79) *imen=o* *nini-n-ib=a*
 taro=PL.N1 peel_taro-SEQ-2/3PL.AN.SBJ=MED
- ē* *as=o* *hà-n-e=o=le*
 3SG.M wood=PL.N1 break.PFV-REAL-3SG.M.SBJ=N2=TOP
 ‘when they peeled taro tubers and he broke firewood, ...’ [Danenok]

In this example, the marked clause provides enough context to identify the boy as the ‘crier’. In fact, the suggested reintroduction of a full subject noun phrase or a pronoun was rejected as unacceptable, thus **mēne dofānoa mēne mebebe* ‘She gave birth to a boy and the boy is crying’ and **mēne dofānoa ē mebebe* ‘She gave birth to a boy and he is crying’.

Occasionally, speakers let a medial verb inflected with *-n* be followed by a medial verb inflected for DS in anticipation of a different subject, as in the clauses (a) and (b) in example (80):

- (80) a. *eka* *Klefol* *wangel=i*
 and PN woman_of=PL.AN
- te-n-ib=ta*
 come.PFV-SEQ-2/3PL.AN.SBJ=MED
- b. *daak* *te-s-ib=ta*
 down come.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
- c. *imen-deib* *daak* *te-s-ib=ta*
 taro-for down come.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
- d. *imen=o*
 taro=PL.N1
- ulel-ûb'-e-s-ib=ta*
 pull_out.PFV-give.PFV-PL.AN.R-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘And the Telefol women came, they came down, they came down for taro, so they (the Mianmin men) pulled out taros for them and then the Telefol women...’ [Mianmin and Telefomin]

As subject marking is *-ib* ‘second or third person animate plural subject’ in all medial clauses in this example and there are no overt subject noun phrases apart from the first clause (a.), S/R would have to take over and help with reference disambiguation. In the first clause, the speaker uses the medial verb *tenibta* ‘they came and then...’, in which *-n* indicates event sequentiality and then uses the same verb stem *te* ‘come (PFV)’ but inflected with *-s* ‘DS.SEQ’ in the second clause in anticipation of a different subject.

In the recording of the story the example (80) was taken out of, there is a pause after *tenibta*. Whether this actually is a self-correcting pause, is hard to tell because of the characteristic pauses Mian speakers make after each medial clause. However, the ensuing clause *daak tesibta* ‘they came down and then someone else...’ is uttered with considerable emphasis which might suggest that the speaker indeed made a repair here.

11.2.6.2. Accounting for the inconsistencies in S/R marking

The previous section presented an overview of the peculiar inconsistencies of S/R marking in Mian medial verbs. It seems as if indication of SS or DS is not fully entrenched in the language.

Mian S/R suffixes in medial verbs are homophonous with various TAM suffixes used in final verbs. Table 11.9 juxtaposes TAM and S/R markers. Both sets occur in the same slot in the verb, namely immediately before the subject suffix slot.

Table 11.9. TAM suffixes in final verbs and S/R suffixes in medial verbs

Final verb		Medial verb	
TAM markers	Meaning	S/R markers	Meaning
<i>-n ~ -∅</i>	Realis	<i>-n</i>	SS sequential OR just sequential (iff subject is first person singular)
<i>-s</i>	Remote past	<i>-s</i>	DS sequential
<i>-b</i>	Imperfective	<i>-b</i>	DS simultaneous
		<i>-∅</i>	DS sequential

The S/R marker and aspect markers are homophonous (on the apparent disalignment of *-∅* as aspect and S/R markers, see below) and they are subject to the same co-occurrence restrictions with respect to verb stem aspect.

The function of the TAM markers in final verbs is illustrated with one example each. For details on TAM categories in final verbs, see 8.6.

The suffix *-n ~ -Ø* ‘Realis’ has a default temporal interpretation of ‘Immediate past’, but one finds verb forms marked in this way interspersed in discourse about various stages of the past:

- (81) *ilem=e* *te=ta*
 blood=SG.N1 come.PFV=MED
- na-˘t'-ne-n-e=be*
 make-give.PFV-1SG.R-REAL-3SG.N1.SBJ=DECL
 ‘(Some) blood comes and does (this) to me.’ [Afoksitgabáam]

The suffix *-s* ‘Remote past’ locates events in the remote past. It is mainly found in myths and stories about the past or in actual historical accounts.

- (82) *yōle* *éil=e* *a-nâ'-s-ib=e?*
 well pig=SG.M 3SG.M.O-kill.PFV-RPST-2/3PL.AN.SBJ=Q
 ‘Well, did they kill the pig?’ [History of Mianmin and Telefomin]

The suffix *-b* ‘Imperfective’ has a default temporal interpretation of ‘present’ but can also be used for events in the past, as in (83):

- (83) *met* *te* *yomin* *am=o*
 upriver come.PFV initiation house=N2
- gen-b-io=be*
 build.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They came upriver and were building the initiation house.’
 [Initiation rituals]

S/R markers having their origin in the TAM morphology of the language does not seem to be a common development in New Guinea languages. Existing theories of the origin of S/R markers in Papuan languages trace them back either to gapping under identity, which gives rise to zero marking for SS (Haiman 1983), or to a pronominal or deictic origin. For a condensed summary of these theories of origin and an evaluation of their plausibility, see Roberts (1997: 190-192). In general, homophony between aspect and S/R markers does not seem to be well attested typologically, but see Jacobsen (1983: 174-177) on some formal similarities of S/R and aspectual morphology in North American languages.

Yet, the formal parallels between the Mian TAM markers in final verbs and S/R markers in medial verbs are too striking to be coincidence and the

semantics of the former make them very likely candidates for the forms from which the latter have been derived.

The S/R marker *-n* originates in the homophonous realis mood marker. So what it does is simply marking the ‘real’ status (Foley and Van Valin 1984) of an event. As a marker in medial verbs, *-n* remains noncommittal with respect to conjoint or disjoint subject reference in the verb of the reference clause with the added complication that *-n* does function as a fully developed S/R marker if the subject is first person singular.

In medial verbs, the suffix *-b* means ‘DS.SIM’ and in final verbs *-b* means ‘Imperfective’. Apart from the homophony there is also a semantic connection. In final verbs, marking for imperfective aspect by *-b* indicates that the action is on-going at the moment of speaking. In medial verbs, *-b* indicates that an action is on-going when the next takes place, in other words, that the two actions are overlapping and at least partially simultaneous. Looking at it from the other end, an action or event which is marked as simultaneous with the one described in the following clause is very likely to be temporally extended (barring the case where two punctual actions occur simultaneously, as in “(Right) as the clock struck one, the bullet hit him”).⁵ Hence, there is a strong association between imperfective aspect and simultaneity of events.

Longacre (1983) argues for a two-fold ‘naturalness assumption’ in S/R languages. By this he means an association between SS marking and sequentiality, on the one hand, and DS marking and simultaneity, on the other. It is the case that “[...] we can normally expect that actions in succession are performed by the same person, while actions that overlap are performed by different people” (p. 183).

If we follow Longacre and assume that actions which occur simultaneously are expected to be performed by different individuals, it is not surprising that the marker *-b* acquired DS as an additional meaning in medial verbs.

The suffix *-n*, on the other hand, which goes back to the homophonous realis marker, generally only signals sequentiality of events but *if* it indicates a S/R-related meaning, namely with first person singular subjects, it will always be SS. Hence, even *-n* goes the way predicted by the naturalness assumption.

The marker *-s* ‘DS.SEQ’ is derived from a deictic tense category, namely ‘Remote past’, the temporal meaning would of course be sequential. Two points are noteworthy here.

First, *-s* has acquired a further meaning apart from DS. It is used to express sequentiality, DS, *and* a close temporal or causal relation between events. This is in contrast to \emptyset ‘DS.SEQ’, which does not have this additional meaning.

Second, it might seem counterintuitive that a S/R marker meaning ‘DS.SEQ’ should be derived from the remote past tense suffix. After all, ‘Remote past’ is not part of the meaning *-s* has in medial verbs. However, only TAM suffix occurring in final verbs that is not also used in medial verbs is

-b^(H) ‘Non-Hodiernal past’, which is (at least segmentally) homophonous with *-b* ‘Imperfective’ in final verbs and ‘DS.SIM’ in medial verbs. Hence, if one assumes that the language filled out its S/R paradigm by deriving forms from the TAM suffixes used in final verbs, it seems that choosing *-s* was a reasonable option for the language.

Finally, we have to account for the most problematic case, namely *-Ø* ‘DS.SEQ’. Like *-n* ‘(SS.)SEQ’, it always indicates event sequentiality, which is not surprising given their common origin is the realis marker *-n* ~ *-Ø*. Unlike *-n* ‘(SS.)SEQ’, however, it forces the reference clause subject to be disjoint in reference. The semantic dissociation between the S/R markers *-n* and *-Ø* needs an explanation because as mood markers in final verbs they are allomorphs, both with the meaning ‘Realis’. However, the semantic dissociation in the S/R forms is only partial. A substantial, and I would argue crucial, portion of the meaning remains constant. Both *-n* and *-Ø* still signal sequentiality which is associated with the ‘Realis meaning’ of the original mood marker. The dissociation only began when the additional meaning of SS or DS filtered into the aspect system of medial verbs. It seems quite natural that the language would have chosen one of these two to also indicate SS and the other to also indicate DS apart from their basic temporal meaning of sequentiality, once a SS/DS contrast had developed elsewhere in the system.

11.2.7. Tense marking in medial verbs

Medial verbs including the existential verb can be inflected with either *-bio* ‘General past’ or *-so* ‘Hesternal past’ (plus the special suffix *-nom*). I describe these two types of medial verb in detail in the two following sections. Before that, however, it is necessary to alert the reader to an important difference between such verbs and medial verbs without either *-bio* or *-so-nom*.

As I discussed above, medial verbs have their pre-subject slot filled by a suffix which signals information relevant to the S/R system of the language (SS vs. DS) and to the temporal structure of the event (SEQ vs. SIM). Tense marked medial verbs are different in that the range of suffixes in their pre-subject slot is highly restricted. Non-habitual medial verbs inflected with *-so* always have *-n* ~ *-Ø* ‘Realis’ in their pre-subject slot, never *-s* or *-b*. Non-habitual medial verbs inflected with *-bio* either have *-n* ~ *-Ø* ‘Realis’ or *-b* ‘Imperfective’ in their pre-subject slot, never *-s*. Habitual medial verbs inflected with *-bio* always have *-b* ‘Imperfective’ in their pre-subject slot, never *-s* or *-n* ~ *-Ø*. It seems that the suffixes *-n* ~ *-Ø* and *-b* are interpreted as in final verbs, namely as ‘Realis’ and ‘Imperfective’, respectively, and that S/R-related meaning does not come into play. This analysis can be supported by the following examples.

- (84) *nē* *unín=o* *fu-n-i-bio=ta*
 1SG food=N2 cook-REAL-1SG.SBJ-GPST=MED

tl-∅-i=be
 come.PFV-REAL-1SG.SBJ=DECL
 ‘After I had cooked food, I came.’

- (85) *nē* *unín=o* *fu-∅-i-bio=ta*
 1SG food=N2 cook-REAL-1SG.SBJ-GPST=MED

tl-∅-i=be
 come.PFV-REAL-1SG.SBJ=DECL
 ‘After I had cooked food, I came.’

Both (84) and (85) are grammatical and mean – as far as I can tell – the same. If the suffixes *-n* and *-∅* in these two sentences were really concerned with indicating S/R, example (85) should not be possible. As the subject in the reference clause is the same as the one in the marked clause, *-∅* cannot be interpreted as ‘DS.SEQ’.

Furthermore, we find examples like:

- (86) *nē* *fút=e* *fu-n-i-bio=ta*
 1SG tobacco=SG.N1 smoke-REAL-1SG.SBJ-GPST=MED

kēbmi=e *abuk* *ge-n-ebo=be*
 yours=SG.N1 later roll.PFV-REAL-2SG.SBJ=DECL
 ‘I had smoked and later you rolled yours.’

If *-n* in (86) behaved like a normal S/R suffix it would have to indicate same subject and event sequentiality in the first person singular. Although a different subject is following, inflection of the verb in the marked clause with *-n* is allowed.

Having established the behaviour of the suffixes in the pre-subject slot in tense-inflected medial verbs, I would like to point out that I still analyse these forms as medial and not as final verbs. The reasons for that are that they are still overtly marked as medial with either *=a* or *=ta* and do not take illocutionary particles, and that they obey the scope rules for medial verbs (see chapter 12). Furthermore, medial verbs inflected with *-so-nom* differ from final verbs inflected with *-so* in that the former need the special suffix *-nom*, which does not appear in the latter. Medial verbs inflected with *-bio* differ from final verbs inflected with *-bio* in that the former also allow *-b*

‘Imperfective’ in the pre-subject slot, while in the latter the pre-subject slot can only be filled by *-n ~ -Ø* ‘Realis’.

11.2.8. Tense marking with *-bio* ‘General past’ in medial verbs

Mian allows medial verbs to be marked with the tense suffix *-bio* ‘General past’. I assume that the general past suffix *-bio* has an incorporated form of the existential verb *bi* as its etymological source.

An event denoted by a medial verb marked in this way can receive two different interpretations in terms of its temporal location:

- (a) as non-contiguous with respect to the event in the subsequent clause but sequentially following the event in the previous clause, or
- (b) as having taken place at a point in the past which is not further specified. This point in the past can (but need not) be located well before all events described in the present clause chain.

The reason for the existence of these two possible interpretations is probably the fact that – unlike the hesternal past marker *-so* – the general past suffix *-bio* is non-specific about actual temporal location.

The first interpretation, given under (a), is by far the most frequent one. With perfective verbs, tense marking with *-bio* simply indicates non-contiguity of events:

- (87) *dab-wal=i* *yē*
 same_sex_sibl(dyad)-PL=PL.AN there

ga-Ø-ib-bio=to
 put_in_leafoven-REAL-2/3PL.AN.SBJ-GPST=MED

ein-s-o=ta *maanafa-n-ib=a*
 cook-DS.SEQ-N2.SBJ=MED cut_meat-SEQ-2/3PL.AN.SBJ=MED
 ‘The brothers put (the meat) in a leaf oven, after a while it cooked and they cut it and then...’ [Danenok]

In (87), there is an interval of unspecified length between the beginning of the cooking process and the moment at which the food is cooked.

It is often the perfective verb *un* ‘go’ which is marked for tense with *-bio* to indicate that there is an interval of some time between setting out and the next event, which can be performed by the same (88) or by a different actor (89):

- (88) *Danenok dab-wal ī=le*
 PN same_sex_sibling(dyad)-PL PL.AN=TOP
- un-Ø-ib-bu=a*
 go.PFV-REAL-2/3PL.AN.SBJ-GPST=MED
- imen=o ulelò-n-ib=a*
 taro=N1.PL pull_out-SEQ-2/3PL.AN.SBJ=MED
 ‘Danenok and his brother went and (later, i.e. at their destination)
 pulled out taros and then they...’ [Danenok]
- (89) *haleb=e mēn=e yē*
 wild_pig=SG.M child=SG.M there
- gol-ò-n-e=a*
 3SG.LONG.O-take.PFV-SEQ-3SG.M.SBJ=MED
- dabáal=dim yē ob-â'-b'-e*
 ground=on there 3SG.RESID.O-leave.PFV-give.PFV-PL.AN.R
- un-Ø-e-bu=a*
 go.PFV-REAL-3SG.M.SBJ-GPST=MED
- skoyabu=o unan te-n-o=a*
 wallaby=SG.F eat.IPFV come.PFV-SEQ-3SG.F.SBJ=MED
 ‘The wild boar took the child, left it on the ground for them and went
 and later a wallaby came to eat and then...’ [Afoksitgabáam]

If a medial verb inflected for tense with *-bio* is also marked with *-b* ‘Imperfective’, the action denoted by the verb is always interpreted as on-going during the time interval expressed by *-bio*. In (90) the crucial verb form is *wenbobioto*:

- (90) *kulán=i ya-l-éb te*
 game_animal=PL.AN PL.AN.O-kill.PFV-take.PFV come.PFV
- ga-we-b-e=to*
 cook_in_leafoven-3SG.F.R-DS.SIM-3SG.M.SBJ=MED
- wen-b-o-bio=to*
 eat.IPFV-IPFV-3SG.F.SBJ-GPST=MED

unangmôn=o mak=o te-n-o=ta
 woman=SG.F another=SG.F come.PFV-SEQ-3SG.F.SBJ=MED
 ‘he killed and brought game and he was cooking (it) in a leaf oven
 and she was eating (it) and during that time another woman turned up
 and then she...’ [Afoksitgabáam]

In the text presented in (90), the son and his mother habitually repeat the same sequence of cooking and eating till another woman comes, whom the son marries, after which things change.

Medial verbs marked with *-bio* can also refer to events that have taken place at some point in the past not further specified, for example, to locate an event well before all events described in the present clause chain. In this respect *-bio*-inflected medial verbs have a similar function as the pluperfect in English. Consider the following example:

- (91) *unáng mak=o ninín=o Dimoson=o*
 woman certain=SG.F name=N2 PN=SG.F
- un-om wât-n-o=a*
 go.PFV-? across.PFV-SS.SEQ-3SG.F.SBJ=MED
- Dimobib=wât bina-b-o-bu=a*
 PN=across stay.HAB-IPFV-3SG.F.SBJ-GPST=MED
 ‘A certain woman name of Dimosson went across, she had previously
 been staying over at Dimobib, ...’ [Dimosson]

In (91), the mythical ancestor Dimosson leaves her home Dimobib in order to come across the Highlands to the Mianmin area where – according to Mianmin myth – she created the first human couple. The verb *binabobua* ‘she used to stay’ refers to a time during which Dimosson still lived at Dimobib and had not yet set out on her journey.

Auxiliary-serialized medial verbs can be further inflected for general past tense with *-bio*:

- (92) *nē āns=o ngaan-bi-n-i-bio=ta*
 1SG song=N2 sing.IPFV-AUX.IPFV-REAL-1SG.SBJ-GPST=MED
- tl-Ø-i=be*
 come.PFV-REAL-1SG.SBJ=DECL
 ‘After having sung a song I arrived.’

Habitual verb forms in medial position must always have their pre-subject slot filled by *-b* ‘Imperfective’ and their post-subject slot filled by *-bio* ‘General past’:

- (93) *inà'-bina-b-ib-bio=to*
do_thus-AUX.HAB-IPFV-2/3PL.AN.SBJ-GPST=MED
- Fu-taman* *mín=e*
PN-valley son=SG.M
- éil=i* *bu-m* *be-b-e=to*
pig=PL.AN hunt.IPFV-IPFV walk.IPFV-DS.SIM-3SG.M.SBJ=MED
‘they used to do thus and during that time a man from the Fu valley
was going pig hunting, and someone else...’ [Danenok]

11.2.9. Tense marking with *-so* ‘Hesternal past’ in medial verbs

Medial verbs inflected with *-so* ‘Hesternal past’ indicate that the event denoted by the verb occurred one day before the event in the succeeding clause. The hesternal past suffix *-so* is etymologically related to the bound verb stem *s* ‘sleep (PFV)’. This verb is used to refer to a sleeping-event which took place the night before. However, medial verb forms of this verb stem are different from medial verbs formed from other verbs, employing a special suffix *-nom*. This is probably further segmentable but its internal make-up is unclear. It could be an inflected form of the perfective stem *n-* of the existential verb. There is no formal change in *-nom* regardless of person, number, or gender of the subject.

- (94) *nakamîn=e* *mak=e* *unangmôn=o*
man=SG.M some=SG.M woman=SG.F
- memâ* *om-Ø'-al-Ø-ib-bu=a*
newly 3SG.F_CL.O-give-3SG.M.R-REAL-2/3PL.AN.SBJ-GPST=MED
- s-Ø-ib-nom=a* *bomâ-s-o=a*
sleep.PFV-REAL-2/3PL.AN.SBJ-?=MED light-DS.SEQ-N2.SBJ=MED
‘A woman was newly given to a man and later they slept and in the
morning ...’ [Newlyweds]

I assume that the hesternal past suffix *-so* has an incorporated form of *s* ‘sleep (PFV)’ as its etymological source. Henceforth, I will gloss *s* as ‘sleep (PFV)’

when it is a free verb stem but ‘HPST’ when it is a bound form. An example of a medial inflected with *-so* ‘Hesternal past’ is:

- (95) *unáng=o* *mēn=e*
 woman=SG.F child=SG.M
- do-fâ-Ø-o-so-nom=a*
 3SG.M_CL.O-put.PFV-REAL-3SG.F.SBJ-HPST-?=MED
- me-b-o=be*
 cry.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘Yesterday, the woman gave birth to a boy and now she’s crying.’

The marked clause is commonly but not obligatorily modified by the temporal adverbial *sintalo* ‘yesterday’:

- (96) *nī* (*sintalo*) *tl-Ø-ob-so-nom=a*
 1PL.EXCL yesterday come.PFV-REAL-1PL.SBJ-HPST-?=MED
- memâlo* *okok* *ke-n-omab-bio=be*
 today work(TP) do-AUX.PFV-IRR.PL.AN.SBJ-1PL.SBJ=DECL
 ‘We came yesterday and today we’ll work.’

The medial verb in (96) forces the interpretation that the coming-event happened a day before the day which contains the moment of speaking.

Medial verbs inflected with *-so* ‘Hesternal past’ always mark tense relatively, i.e. events are not located with respect to the moment of speaking but with respect to the tense of the verb in the reference clause (which might not be specified for tense but rely on the final verb for temporal information). Consider the following example:

- (97) *ī* *un-Ø-ib-so-nom=a*
 3PL.AN go.PFV-REAL-2/3PL.AN.SBJ-HPST-?-MED
- imín* *tl-Ø-ib-so=be*
 again come.PFV-REAL-2/3PL.AN.SBJ-HPST=DECL
 ‘The day before yesterday they went and yesterday they came back again.’
 *‘Yesterday, they went and came back again.’

Example (97) shows that the event denoted by the medial verb is interpreted relatively to the tense of the final verb in terms of temporal location and not

absolutely with respect to the moment of speaking. Hence, the marked clause cannot be modified by the temporal adverbial *sintalo* ‘yesterday’:

- (98) **ī sintalo unibsonoma imín tlibsobe*
Intended: ‘Yesterday, they went and came back again.’

This example is contradictory because the medial verb is interpreted with respect to the final verb as far as temporal location is concerned and the final verb is marked for hesternal past. The action denoted by the medial verb must have taken place two days before the moment of speaking, which is not compatible with *sintalo* ‘yesterday’.

With the appropriate adverbial *sintalo ō sintao* ‘the day before yesterday’ the sentence is grammatical (99):

- (99) *ī sintalo ō sintao*
3PL.AN day_before_yesterday
- un-Ø-ib-so-nom=a*
go.PFV-REAL-2/3PL.AN.SBJ-HPST-?-MED
- (sintalo) imín tl-Ø-ib-so=be*
yesterday again come.PFV-REAL-2/3PL.AN.SBJ-HPST=DECL
‘The day before yesterday they went and yesterday they came back again.’

For expressing that an event took place yesterday with respect to all events in the present clause chain, Mian requires an embedded, head-internal relative clause, as in (100), or an adverbial clause, as in (101). Both embedded clauses are bracketed:

- (100) *temdei-˘b˘-e-n-e=a*
leave.PFV-give.PFV-PL.AN.R-SEQ-3SG.M.SBJ=MED
- mo-n-e=a*
go.PFV-SEQ-3SG.M.SBJ=MED
- [Anafû=o om-fâ-Ø-e-su=o]*
Anafu_arrow=N2 3SG.F_CL.O-put.PFV-REAL-3SG.M.SBJ-HPST=N2
- tām=ta om-êt-n-e-a*
inside=MED 3N2.O-take.PFV-SS.SEQ-3SG.M.SBJ=MED

te-n-e=ta

come.PFV-SEQ-3SG.M.SBJ=MED

‘He left them and went, went inside (the bush) and picked up the Anafu arrow, which he put there yesterday, and brought it back, and then ...’ [Danenok]

- (101) *ī* *unín=o*
3PL.AN food=N2

wen-bi-n-ib-su=o=le

eat.IPFV-AUX.IPFV-REAL-2/3PL.AN.SBJ-HPST=N2=TOP

damìb *un-Ø-io=be*

garden go.PFV-REAL-2/3PL.AN.SBJ=DECL

‘After having eaten yesterday, they (today) go to the garden.’

11.2.10. Postposed locative adjuncts

In medial clauses, locative adjuncts of motion verbs occasionally follow the verb of motion (preferably one consisting of a directly inflected directional). Postposed locative adjuncts in final clauses in clause chains and independent clauses are unattested. The function of postposed locatives is to specify the direction of the movement denoted by the verb. The directional in the medial clause is always repeated in the locative adjunct:

- (102) *sino* *unáng* *asú* *kam-wal=i*
before woman two married_couple(dyad)-PL=PL.AN

ut-n-ib=a

up-SS.SEQ-2/3PL.AN.SBJ=MED

Sek-tibín

PN-river_head

ut=o

up=N2

‘Before a woman and her husband went up, up to the head of the Sek river, ...’ [Flood]

- (103) *del-ét-n-ib=a*
PL.AN.O-take.PFV-SS.SEQ-2/3PL.SBJ=MED

wàt-n-ib=a

across-SS.SEQ-2/3PL.AN.SBJ=MED

Klefolib *wāt=o*
 PN across=N2
 ‘they took them and went over, over to Telefolip (i.e. the spirit
 house in Telefomin), ...’ [Mianmin and Telefomin]

Intonationally, the locative adverbial can immediately follow the verb or there can be a pause. Even some discourse particles, such as *yōle* ‘well’, can be inserted before the locative.

11.2.11. Referential overlap

In cases of referential overlap, subjects encoding “a set of participants and a partition of that set” (Longacre 1972: 14) can be treated as either coreferential or disjoint in reference. Languages which employ S/R morphology as a reference tracking device in discourse differ in what they treat as same or disjoint reference if the relation between sets denoted by two subjects in a marked and a reference clause is one of inclusion. There are mainly two situations of referential overlap (Stirling 1993: 35):

- (i) the set of referents of the subject in the marked clause properly includes the set of referents of the subject in the reference clause (i.e. Pl>Sg)
- (ii) the set of referents of the subject in the marked clause is properly included in the set of referents of the subject in the reference clause (i.e. Sg>Pl)

Situations in which sets of referents are in a relation of proper inclusion most commonly arise when the subject in one of the clauses is singular and that in the other is plural. (It is of course possible for both subjects to be plural and for one to be properly included in the other, as in ‘The men and the women went to the river and then the women got water’, but such situations do not occur in my corpus.) Table 11.10 sets out how Mian deals with S/R marking in situations of referential overlap.

Unlike other Papuan languages such as Usan (Reesink 1987: 201-202) and Korafe (Farr 1999: 219) which have more involved rules for what they treat as SS or DS under referential overlap, the situation in Mian is quite simple.

All instances of inclusion as described under (i) are treated as SS, i.e. inflection with *-n* is always possible. The switch can be in number only, as in (104) to (106), or in number and person, as in (107) to (109):

Table 11.10. S/R and referential overlap

	Switch in	Marked clause	Reference clause	S/R marking
(i) Pl>Sg	Number	1Pl	1Sg	SS
		2Pl	2Sg	
		3Pl	3Sg	
	Number and person	1Pl	2Sg	
		1Pl	3Sg	
		2Pl	3Sg	
(ii) Sg>Pl	Number	3Sg	3Pl	EITHER
		2Sg	2Pl	
		1Sg	1Pl	
	Number and person	3Sg	2Pl	
		3Sg	1Pl	
		2Sg	1Pl	

- (104) *dê'-n-ob=to* *hek-wal=a*
 desist.PFV-SEQ-1PL.SBJ=MED brother-PL=and
- en-wal=a=i* *itàb*
 sister-PL=and=PL.AN there_downriver
- dei-'b'-e-n-i=ta*
 leave.PFV-give.PFV-PL.AN.R-SS-SEQ-1SG.SBJ=MED
 'We waited and I left the older brothers and sisters downriver and then I...' [Crows]
- (105) *Milsen=e* *īb* *dum=o*
 PN=SG.M 2PL.POSS father/child(dyad)=COLL
- daak-n-ib=a*
 down-SS-SEQ-2/3PL.AN.SBJ=MED
- kōbo* *aaie*
 2SG.M water
- fuēla-n-amab-eo=be*
 bathe.PFV-AUX.PFV-IRR.NANPL.SBJ-2SG.SBJ=DECL
 'Milsen and you (son and father) will go down and you will bathe'
 (said to Milsen's father).'

In cases of inclusive reference as described under (ii) speakers seem to have a pragmatically based choice of whether to use SS or DS marking in the marked clause depending on how prominent they consider the singular participant to figure in the reference clause event (Reesink 1983: 229).

Examples in the corpus are confined to third person with a switch in number. SS marking seems to be the default choice for 3Sg>3Pl:

- (110) *alél=o* *awók=o*
 wife=SG.F mother=SG.F

om-ét-n-o=to
 3SG.F_CL.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED

damìb *un-Ø-ib-bu=o*
 garden go.PFV-REAL-2/3PL.AN.SBJ-GPST=N2
 ‘After the wife had taken the mother and they had gone to the garden’ [Afoksitgabáam]

This holds for all other forms of Sg>Pl inclusion. The following examples are elicited:

- (111) *nē* *éil=e* *a-nâ’-n-i=a*
 1SG pig=SG.M 3SG.M.O-kill.PFV-SS.SEQ-1SG.SBJ=MED

nī *dowôn’-omab-bio=be*
 1PL.EXCL eat.PFV-IRR.PL.AN.SBJ-1PL.SBJ=DECL
 ‘I’ll kill a pig and we’ll eat (it).’

- (112) *kōbo* *éil=e* *a-nâ’-n-eb=a*
 2SG.M pig=SG.M 3SG.M.O-kill.PFV-SEQ-2SG.SBJ=MED

nībo *dowôn’-omab-bio=be*
 1PL.INCL eat.PFV-IRR.PL.AN.SBJ-1PL.SBJ=DECL
 ‘You’ll kill a pig and we (INCL) will eat (it).’

However, explicit DS marking can be used if speakers want to indicate that the singular participant is not treated as playing a prominent part in the action performed by the plural subject. In example (113), from a fable-like story, in which a man meets a talking pig, the man suggests to the pig that they both go to his village. After assenting, the pig moves towards the man and they both leave.

- (113) *éil=e daak te daak*
 pig=SG.M down come.PFV down

tém'-Ø-e=a
 look.PFV-DS.SEQ-3SG.M.SBJ=MED

on-s-io=be
 go.PFV-RPST-2/3PL.AN.SBJ=DECL
 'The pig came down, came down (lit. and looked) and they went (away).'

Although both the pig and the man go together in this example, DS marking indicates that it was the man who suggested going.

A clearer example of this use of DS marking in situations of referential overlap can be found in a story about two brothers who one day find their spines attached to each other. (This text is in the text collection in appendix 1.) In order for the pair to move, one of them always has to pull his hands and feet towards his body so that the other can carry him on his back:

- (114) *mak=e skil=a kwéil=a=o*
 one=SG.M foot=and hand=and=PL.N1

gobtôu-s-e=a
 pull_towards_body.PFV-DS.SEQ-3SG.M.SBJ=MED

tà-n-ib=a
 sideways-SS.SEQ-2/3PL.AN.SBJ=MED
 'One of them huddled up and they went sideways (i.e. into the bush), and then they...' [Danenok]

DS marking is used here to express that the one who assumes the huddled position is not the one who does the walking. Examples (113) and (114) show that DS marking can be employed to background the singular subject as a participant in the joint action.

11.2.12. Repetition, repair and elaboration in clause chains

Above I discussed in detail how SS marking in Mian shows some unexpected behaviour. I showed that DS marking usually does not display this behaviour. However, DS marking can also be anomalous in cases of repetition, repair and elaboration.

In order to depict an event as on-going for some time or as repeated until a goal is achieved or a destination reached, speakers occasionally repeat a clause with a verb marked by *-b* 'DS.SIM', which creates an apparent anomaly in the S/R system because the repeated verbs actually all have the same subject, as in (115):

- (115) *kan* *te-b-o=ta*
follow come.IPFV-DS.SIM-3SG.F.SBJ=MED

te-b-o=ta
come.IPFV-DS.SIM-3SG.F.SBJ=MED

ēle *yē* *no* *mén=e*
DEM.SG.M there marsupial string_bag=SG.N1

go-kilêt-n-e=o=le
3SG.BUNDLE.O-hang_back_from_forehead.PFV-REAL-
3SG.M.SBJ=N2=TOP

'While she was following him, following him, this (man) carried
the bag with the marsupials hanging back from his forehead there
...'
[Crows]

Reesink (1987: 200-201), using examples from Usan and Kosena, notes that such examples suggest that S/R systems are not interpreted in a mechanistic way, which would not allow the repetition of DS forms, but rather that the identification of a new subject is suspended until the repetition of the present clause has been completed (see also Reesink 1983).

The second case of apparently anomalous behaviour of DS marking occurs if speakers make repairs once they realize that the form they have chosen was incorrect or inconsistent with what they want to say next:

- (116) *fút=e* *abuko* *kan* *daak*
tobacco=SG.N1 afterwards follow down

tl-Ø-e=ta
come.PFV-DS.SEQ-3SG.N1.SBJ=MED

daak *te-n-e=ta*
down come.PFV-SEQ-3SG.N1.SBJ=MED

belâ-s-e=ta

break.PFV-DS.SEQ-3SG.N1.SBJ=MED

‘Afterwards the tobacco followed and came down (from the sky) it came down and blossomed, and then (they) ...’ [Sofelok, 1]

In (116), the speaker changes the DS-marked verb *tl-Ø-e=ta* to *te-n-e=ta* because he intends to continue with *fút=e* ‘the tobacco’ as the subject. There is no self-correcting pause between *tl-Ø-e=ta* and the second *daak* but the clause *daak t-e-n-e=ta* is uttered with particular emphasis.

When speakers have the feeling that they should give more detailed information which might prove beneficial to the hearer, S/R marking can be anomalous due to the speaker’s elaboration of a certain point. For example in (117), which is a description of an operation, a slightly more detailed account of this procedure is fitted in, emphasizing its duration. The material I consider to be the elaboration appears in square brackets.

(117) *belâ-n-ib=a*

break.PFV-SEQ-2/3PL.AN.SBJ=MED

têm'-Ø-ib=ta

look.PFV-DS.SEQ-2/3PL.AN.SBJ=MED

[*dob-ò*

3SG.M_CL.O-take.PFV

sekim

check(TP)

ke-bi

do-AUX.IPFV

têm'-Ø-ib=ta]

look.PFV-DS.SEQ-2/3PL.AN.SBJ=MED

‘They cut him open and looked, they took him and having been checking him, they looked, and then something else...’ [Pineapples]

In (118) below, DS marking in clause (a.) is anomalous because information which is essential for the understanding of events occurring later in the story is provided in clauses (b.) to (d.). This elaboration is bracketed:

(118) a. *tām* *têm'-s-e=a*

sideways look.PFV-DS.SEQ-3SG.M.SBJ=MED

b. [*dekéng=e*

vine_species=SG.N1

tob-ò-n-e=a

3SG.LONG.O-take.PFV-SEQ-3SG.M.SBJ=MED

wen-biaan-o=a

eat.IPFV-AUX.IPFV.SS.SIM-3SG.F.SBJ=MED

‘while she was cutting out the bowels, he was watching her, so while cutting out the bowels of the rodents, she was cutting and eating bits of the intestines and ...’ [Crows]

11.4. Tail-head linkage

Tail-head linkage (de Vries 2005) is a very common discourse strategy in many Papuan languages, whose function is to maintain thematic continuity across clause chains, together with other reference tracking devices such as gender and switch reference.

Tail-head linkage typically occurs at the beginning of a new clause chain. Speakers use a ‘recapitulation’ clause, in which they repeat the predicate of the final clause of the preceding clause chain, as in (122):

- (122) *éil=o* *yō* *om-fâ-Ø-ib-bio=be*
 pig=SG.F there 3SG.F_CL.O-put.PFV-REAL-2/3PL.AN.SBJ=DECL

om-fâ-n-ib=a

3SG.F_CL.O-put.PFV-SEQ-2/3PL.AN.SBJ=MED

ngaana-n-ib=a

sing.PFV-SEQ-2/3PL.AN.SBJ=MED

‘They put a sow down there. They put it down and then they sang ...’ [Kasak]

In this example, the first clause of the new clause chain repeats the verb *-fâ* ‘put (PFV)’. The speaker signals thematic continuity by carrying the monitoring of the subject over across a clause chain boundary into a new clause chain.

There are examples where the last two clauses of the preceding chain are repeated, but fused into a single (core-level) serial verb construction:

- (123) a. *yōle* *as=e* *biki-n-e=a*
 well tree=SG.N1 squeeze-SEQ-3.SG.N1.SBJ=MED
- b. *wai-ʔs'-a-s-e=be*
 close-give.PFV-3SG.M.R-RPST-3SG.N1.SBJ=DECL

- c. *biki* *wai-îs'-a-s-e=a*
squeeze close-give.PFV-3SG.M.R-DS.SEQ-3SG.N1.SBJ=MED
- d. *îtam* *biaan-e=a*
inside_there exist.IPFV.SS.SIM-3SG.M.SBJ=MED
- e. *ngaan-b-e=a*
call_out.IPFV-DS.SIM-3SG.M.SBJ=MED
'Well, the tree squeezed shut on him. It squeezed shut on him
and being in there he was crying out, and...'
[Dafinau]

Here, the last two clauses *biki-n-e=a* 'it squeezed' and *wai-îs'-a-s-e=be* 'it shut on him' in lines (a) and (b) are not recapitulated as such, but rather fused into the serial verb construction *biki wai-îs'-a-s-e=a* with essentially the same meaning in line (c).

11.5. Medial verbs in utterance-final position

It is quite a common phenomenon for Mian medial verbs to appear utterance-finally in natural discourse. However, such utterances are usually not taken to be grammatically complete sentences (Reesink 1987: 87). Their verbs are clearly medial and not final because they are not interpreted with respect to the moment of speaking (as final verbs are) but rather with respect to some subsequent event which is not mentioned but implied or understood, since it is obvious to the addressee from the context established by the situation in which the utterance was made (Reesink 1983: 225).

Although clause chains do not involve subordination (in the sense of embedding) but rather co-subordination, the phenomenon under discussion here is comparable to the widespread use of subordinate constructions as main clauses in the world's languages with particular semantic or discourse effects (Evans 2007).

Note that medial verbs in utterance-final position always take the medial verb marker =*ta* rather than =*a*. An example is provided in (124):

- (124) *nē* *sít=o* *fubâ-n-i=ta*
1SG tooth=PL.N1 wash-SS.SEQ-1SG.SBJ=MED
'I'll brush my teeth first and then I'll ...'
[Observed]

Medial clauses as independent utterances are invariably understood as desiderative statements about the future. Examples like (124) are abbreviated

versions of a full clause chain ending in a final verb inflected for irrealis. A possible example is (125):

- (125) *nē* *sít=o* *fubâ-n-i=ta*
 1SG tooth=PL.N1 wash-SS.SEQ-1SG.SBJ=MED
- áam* *un-aamab-i=be*
 lie.SG.SBJ go.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I’ll brush my teeth and then go to bed.’

A clause with a medial verb in final position, such as *nē sít=o fubâ-n-i=ta* in (124) above cannot be construed to mean: *‘I have brushed my teeth’, for which an independent sentence has to be employed, as in (126):

- (126) *nē* *sít=o* *fubâ-Ø-i-o=be*
 1SG tooth=PL.N1 wash-REAL-1SG.SBJ-EP=DECL
 ‘I’ve brushed my teeth.’

In (126), the final verb *fubâio* ‘I’ve washed (it)’ is zero-marked for realis mood. As there is no alternative temporal reference point indicated, the default interpretation is that the action took place immediately before the moment of speaking.

Another reason why utterance-final verbs in examples such as (124) above should be treated as medial and not as final verbs is that the markers in the pre-subject slot are interpreted as S/R markers. The S/R system limits the set of available subjects for the implied event. For instance, the medial verb in (124) *fubâni* is inflected with *-n* ‘SS.SEQ’. As the subject is first person singular, the subject of the implied event must be coreferential. In all other person-number combinations, *-n* only indicates sequentiality of events (127):

- (127) *funa-n-eb=ta*
 think.PFV-SEQ-2SG.SBJ=MED
 ‘You think first and then (anybody)...’

In the next example the medial verb is marked for DS. Consequently, the subject of the implied event must be disjoint (regardless of person and number specification of the subject):

- (128) *aai=e* *dowôn’-s-eb=ta*
 water=SG.N1 eat.PFV-DS.SEQ-2SG.SBJ=MED
 ‘You’ll drink water first and then someone else will...’

It is possible for utterance-final medial verbs to also take one of the illocutionary particles =*be* ‘Declarative’, =*bo* ‘Emphatic/quotative’, =*ble* ‘Exclamative’, =*a* ‘Question’, or =*e* ‘(Content) Question’ (which normally only occur on final verbs) in addition to the medial verb clitic =*ta*. Again, such structures are not grammatically complete utterances but imply an event which must be readily retrievable from the linguistic or extra-linguistic context. Examples (129) and (130) illustrate this for a declarative and an interrogative sentence, respectively:

- (129) *fanin-wal=i* *wengsâng*
 ancestor-PL=PL.AN story

baa-n-ang-ge-n-i=ta=be

say.PFV-REAL-IMMACC.SG.SBJ-say.PFV-SS.SEQ-1SG.SBJ=MED=DECL
 ‘I am about to tell an ancestor story.’ (Implied: ‘and I will tell it now’)

- (130) *sít=o* *fubâ-n-eb=t=ya?*
 tooth=PL.N1 wash-SEQ-2SG.SBJ=MED=Q
 ‘Will you brush your teeth first?’ (Implied, e.g. ‘and then go to bed’)

11.6. Non-verbal clauses in clause chains

Most often the predicate of a non-verbal clause is followed by an illocutionary particle which marks the end of independent and grammatically complete utterance. However, non-verbal clauses also occur in clause chaining constructions without an illocutionary clitic. Two examples are provided in (131) and (132):

- (131) *Kasening Milimab* *nē-ta* *wengsâng* *ōlo*
 PN 1SG-EMPH story DEM.PROX.N2

om-êb=wāt

3SG.F_CL.O-take.PFV=across

daa-n-ama-b-i=be

put.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL

‘I’m Kasening Milimab and I want to record this story (lit. ‘take this story and put it across’) [Dimosson]

- (132) *ĩn=a kakab=a bobol=a=o keim=yē*
 liver=and lung=and heart=and=PL.N1 open=there

hekhēk ga-b-e kesoa
 panting_sound say.IPFV-IPFV-3SG.M.SBJ because
 ‘because (his, i.e. a child’s) liver, lungs, and heart were open and he
 was panting, ...’ [Crows]

Quite commonly, non-verbal clauses in clause chains are followed by the conjunction *kesoa* ‘because’:

- (133) *nái ē-ta kesoa*
 vagina SG.N1-EMPH because

ĩ=le yē kou-biaan-ib=to
 3PL.AN=TOP there have_sex-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED

memé=i yo-bina-b-io=bo
 children(PL)=PL.AN beget-AUX.HAB-IPFV-2/3PL.AN.SBJ=QUOT
 ‘ “It is a vagina so while copulating (in) there, they beget children.”
 [Pig story]

Chapter 12

Operator scope in clause chaining constructions

12.0. Introduction

Grammatically marked categories such as tense, mood, polarity, illocutionary force and the like, called operators by Foley and Van Valin (1984) and Foley and Olsen (1985), differ in the scope they have in clause chaining structures. The final verb is usually marked for such categories whereas the medial verbs in the same clause chain depend on some of this information. While medial verbs encode sequentiality or simultaneity of events and switches in subject reference, they rely on final verbs for information on temporal location, mood, and illocutionary force of the events denoted by the medial verbs. This is typical for co-subordinated structures, such as clause chains (Reesink 1983, Foley and Van Valin 1984).

In this chapter, all operators that occur in final verbs in clause chaining constructions and the scope they have over the clause chain will be examined in some detail. The operators are ordered according to categories:

Illocutionary force	<i>=be</i>	‘Declarative’
	<i>=ble</i>	‘Exclamative’
	<i>=bo</i>	‘Quotative, emphatic’
	<i>=a</i>	‘Question’
	<i>=e</i>	‘(Content) Question’
	<i>=o ~ =e</i>	‘Hortative’
	<i>=ba</i>	‘Negation’
Polarity	<i>=ba</i>	‘Negation’
Tense ¹	<i>-bio</i>	‘General past’
	<i>-so</i>	‘Hesternal past’
	<i>-b^(H)</i>	‘Non-hodiernal past’
	<i>-s</i>	‘Remote past’
Mood	<i>-n</i>	‘Realis’
	<i>-(a)mab/-omab</i>	‘Irrealis’
	<i>-(V)m</i>	‘Deontic’
Aspect	<i>-b, -l</i>	‘Imperfective’
	<i>-m</i>	‘Inchoative imperfective’
Habituality	<i>bina</i>	‘Habitual’

Of these, illocutionary force, polarity, and tense always have full scope, mood and habituality can have full scope but do not have to, and aspect finally is a local phenomenon that never has scope.

12.1. Illocutionary force

Only final verbs can be marked for illocutionary force. The set of illocutionary markers consists of the clitics =*be* ‘Declarative’, =*ble* ‘Exclamative’, =*bo* ‘Quotative, emphatic’, =*a* ‘Question’, =*e* ‘(Content) Question’, and =*o* ~ =*e* ‘Hortative’. All of these have scope over the whole clause chain, e.g.:

- (1) \bar{e} *bín=o* *we-n-e=a*
 3SG.M floor=N2 sweep-SEQ-3SG.M.SBJ=MED

unín=o *fu-n-e=be*
 food=N2 cook-REAL-3SG.M.SBJ=DECL
 ‘He swept the floor and then cooked food.’

In (1) the illocutionary particle =*be* marks the whole clause chain as declarative. The first clause cannot be interpreted as having a different illocutionary value, for instance, to construe it as a question: *‘Did he sweep the floor?’ is impossible. Note though that the first clause on its own could indeed be a question,² provided it has the appropriate interrogative intonation:

- (2) \bar{e} *bín=o* *we-n-e=a?*
 3SG.M floor=N2 sweep-REAL-3SG.M.SBJ=Q
 ‘Has he swept the floor?’

Nonetheless, in (1) above an interrogative reading of the first clause is impossible due to the scope of the marker of declarative illocutionary force on the final verb.

The same holds for the illocutionary markers =*ble* ‘Exclamative’ in (3), and =*bo* ‘Quotative, emphatic’ in (4):

- (3) *wan* *tiam=i* *sangwân* *te-n-ib=a*
 bird crow=PL.AN suddenly come.PFV-SEQ-2/3PL.AN.SBJ=MED

āi=e *dob-Ø-ûb'-e*
 dad=SG.M 3SG.M_CL.O-take.PFV-give.PFV-PL.AN.R

un-Ø-io=ble!

go.PFV-REAL-2/3PL.AN.SBJ=EXCLAM

‘“Crows came suddenly and took our Dad away!”’ [Crows]

- (4) *mukùng=e* *goi-ʔs'-o-s-i=a*
 nose=SG.N1 smash.PFV-give.PFV-3SG.F.R-DS.SEQ-1SG.SBJ=MED

kaan-s-o=a

die.PFV-DS.SEQ-3SG.F.SBJ=MED

ēle *om-fâ-Ø-i-bio=bo*

here 3SG.F_CL.O-put.PFV-REAL-1SG.SBJ-GPST=QUOT

ge *baa-s-o=a*

say.PFV say.PFV-DS.SEQ-3SG.F.SBJ=MED

‘“I smashed her nose, so she died, so I put her down here”, she said
 and then someone else...’ [Afoksitgabáam]

The illocutionary clitic =*ble* indicates that the whole of (3) is an exclamation and =*bo* in (4) likewise expresses that all preceding medial clauses are quotative, i.e. they represent what the woman said at that point in the story. On quotatives as embedded structures, see 13.1.

Markers of interrogative and hortative illocutionary force obey the same scope rules. In order to turn the whole of (1) above into a question, one can replace =*be* ‘Declarative’ with =*a* to indicate a polar question:

- (5) *ē* *bín=o* *we-n-e=a*
 3SG.M floor=N2 sweep-SEQ-3SG.M.SBJ=MED

unín=o *fu-n-e=a?*

food=N2 cook-REAL-3SG.M.SBJ=Q

‘Has he swept the floor and cooked food?’

*‘He has swept the floor, and has he cooked food?’

The verb in the medial clauses which precedes the final verb *funea?* ‘Has he cooked (it)?’ is not marked as a question itself, but the scope rules for the interrogative illocutionary clitic =*a* force an interpretation of the entire clause chain as interrogative.

In clause chains in which the final verb is marked as hortative by =*e* ~ =*o*, scope is over the whole chain as well, e.g.:

- (6) *deb-êt-n-i=a*
3SG.M_CL.O-take.PFV-SS.SEQ-1SG.SBJ=MED
- mo-n-i=a*
go.PFV-SS.SEQ-1SG.SBJ=MED
- sita-n-an=o!*
care_for-REAL-1SG.SBJ.HORT=HORT
‘I should take him and go and care for (him)!’
*‘I took him and went and should care for him!’ [Afoksitgabáam]

Although the verbs in the medial clauses which precede the final verb *sitanano* ‘I should care for’ are not marked as hortatives themselves, the scope rules force an interpretation of all these verbs as hortative.

The illocutionary markers still have scope over the whole chain if the subject reference changes. This is illustrated for hortative illocution in (7):

- (7) *alél hat-wal=i*
wife mother_child(dyad)-PL=PL.AN
- te-s-ib=a*
come.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
- ya-têm'-s-eb=ta*
PL.AN.O-see.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
- dei-˘b'-e=ta*
leave.PFV-give.PFV-PL.AN.R=MED
- un-Ø-om=o!*
go.PFV-REAL-1PL.SBJ.HORT=HORT
‘Your wife and children must come first and you must see them then let’s leave them and go!’ [Crows]

The domain of all markers of illocutionary force is invariably the whole sentence, which can either be a simple sentence or a clause chain. Illocutionary markers never have scope over other sentences apart from the one in which they occur. Sentence boundaries are indicated by brackets in (8):

- (8) *[ī=le yē kou-biaan-ib=ta*
3PL.AN=TOP there have_sex-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED

If the medial clause in clause (a) occurred in a clause chain whose final verb was not marked with =*ba* to indicate negative polarity, its meaning would be ‘he was well’. Due to the scope of negation over whole clause chains, however, this interpretation is impossible for (9).

As the polarity specification must not change within a clause chain, two independent sentences have to be used in order to say something like ‘He didn’t see Asuneb, he saw Beitab’, for example:

- (10) \bar{e} *Asuneb=e=mo*
 3SG.M PN=SG.M=NEG
- a-têm’-Ø-e=ba=be*
 3SG.M.O-see.PFV-REAL-3SG.M.SBJ=NEG=DECL
- \bar{e} *Beitab* \bar{e} -*ta*
 3SG.M PN 3SG.M-EMPH
- a-têm’-Ø-e=be*
 3SG.M.O-see.PFV-REAL-3SG.M.SBJ=DECL
 ‘He hasn’t seen Asuneb. He saw Beitab.’

Medial verbs can never be marked for negative polarity with =*ba*. A clause chain in which a medial verb is marked as negative is ungrammatical:

- (11) * \bar{e} *Asuneb=e=mo*
 3SG.M PN=SG.M=NEG
- a-têm’-n-e=ba=ta*
 3SG.M.O-see.PFV-SEQ-3SG.M.SBJ=NEG=MED
- Beitab* \bar{e} -*ta* *a-têm’-Ø-e=be*
 PN 3SG.M-EMPH 3SG.M.O-see.PFV-REAL-3SG.M.SBJ=DECL
 Intended: ‘He didn’t see Asuneb, he saw Beitab.’

12.3. Tense

Tense is marked by either pre-subject slot suffixes (*-b^(H)* ‘Non-hodiernal past’ and *-s* ‘Remote past’) or post-subject slot suffixes (*-bio* ‘General past’ and *-so* ‘Hesternal past’). All of these are absolute tense markers, i.e. they locate an event with respect to the moment of speaking. In final verbs, the tense suffixes

in the post-subject slot, *-bio* ‘General past’ and *-so* ‘Hesternal past’, only co-occur with *-n* ~ *-Ø* ‘Realis’ in the pre-subject slot.

12.3.1. Pre-subject slot tense suffixes

The tense markers *-b^(H)* ‘Non-hodiernal past’ and *-s* ‘Remote past’ in a final verb in a clause chaining construction have scope over the whole clause chain. The events in all medial clauses in a clause chain are located temporally with respect to the tense of the final verb. S/R marking in the medial verbs only structures the events of the clause chain in terms of their sequentiality and simultaneity. See example (12) for *-b^(H)* ‘Non-hodiernal past’ and (13) for *-s* ‘Remote past’:

- (12) *Milsen=e nī dab=o*
 PN=SG.M 1PL.EXCL.POSS same_sex_siblings(dyad)=COLL
- sintalo wéng o-biaan-ob=a*
 yesterday language say-AUX.IPFV.SS.SIM-1PL.SBJ=MED
- ē buk wéng=o*
 3SG.M book(TP) language=N2
- baa-ʔ-ne-b^(H)-e=be*
 say.PFV-give.PFV-1SG.R-NHODPST-3SG.M.SBJ=DECL
 ‘While Milsen and I, we brothers, were talking yesterday, he asked me for a book.’

- (13) *daak tēm'-Ø-e=a*
 down look.PFV-DS.SEQ-3SG.M.SBJ=MED
- on-s-io=be*
 go.PFV-RPST-2/3PL.AN.SBJ=DECL
 ‘he went down to him (lit. and looked) and they went (together).’ [Pig story]

12.3.2. Post-subject slot tense suffixes

The suffixes *-bio* ‘General past’ and *-so* ‘Hesternal past’ of the post-subject slot in the template of final verbs have scope over the whole clause chain. In final verbs, they only co-occur with *-n* ~ *-Ø* ‘Realis’ in the pre-subject slot. On

the use of the general past and the hesternal past in medial verbs, see sections 11.2.8 and 11.2.9, respectively.

The tense suffix *-bio* indicates ‘General past’. Its function is to locate an event on the same day (but at least a few hours before the moment of speaking), on the day before yesterday or (at any time) prior.

If the final verb in a clause chain bears this suffix, all events denoted by medial verbs in the same clause chain are interpreted to also have taken place in the (general) past, while S/R marking in the medial verbs structures the events of the clause chain in terms of their sequentiality and simultaneity, as in (14):

- (14) *nil=e*
spike=SG.N1

tob-tlâa’-’b’-a-n-ib=ta
3SG.LONG.O-remove.PFV-give.PFV-3SG.M.R-SEQ-2/3PL.AN.SBJ=MED

klâ-ûb’-a-Ø-ib=ta
fix-give.PFV-3SG.M.R-DS-SEQ-2/3PL.AN.SBJ=MED

ayam-an-Ø-e-bio=be
good-VBLZ-REAL-3SG.M.SBJ-GPST=DECL
‘They removed the (pineapple) spike from him and fixed him and he became well.’ [Pineapple]

The tense marker *-so* ‘Hesternal past’ in final verbs indicates that an event took place yesterday or the day before yesterday, calculated with respect to the moment of speaking. Like *-bio* ‘General past’, *-so* on a final verb has scope over the whole clause chain indicating that all events denoted by the medial verbs in this chain occurred yesterday as well (or on the day before yesterday, if and only if the event denoted by the final verb took place on the day before yesterday).

- (15) *ī* *damib=tām* *unaan-ib=a*
3PL.AN garden=sideways go.PFV.SS-SEQ-2/3PL.AN.SBJ=MED

imen=baka *tatáan=baka=o*
taro=with bush_greens=with=PL.N1

ol-êb *tl-Ø-ib-so=be*
 PL.RESID.O-take.PFV come.PFV-REAL-2/3PL.AN.SBJ-HPST=DECL
 ‘Yesterday/the day before yesterday, they went (sideways) to the
 garden and brought back both taro and bush greens.’

Note that here both events either have to have happened yesterday or on the day before yesterday. It is not possible to construe (15) to mean *‘They went to the garden the day before yesterday, and yesterday they brought back taro and bush greens’.

12.4. Mood

The three mood suffixes, whose scope rules are under discussion here, are *-n ~ -Ø* ‘Realis’, *-(a)mab/-omab* ‘Irrealis’, and *-(V)m* ‘Deontic’. While verbs in clause chaining constructions must agree in tense they may vary with respect to mood.

12.4.1. *-n ~ -Ø* ‘Realis’

The mood marker *-n ~ -Ø* ‘Realis’ has scope over the whole clause chain, indicating that a whole sentence has real status, as for example in (16) and (17):

(16) *ē* *bín=o* *we-n-e=a* *unín=o*
 3SG.M floor=N2 sweep-SEQ-3SG.M.SBJ=MED food=N2

fu-n-e=be
 cook-REAL-3SG.M.SBJ=DECL
 ‘He swept the floor and then cooked food.’

(17) *naka=i* *áala-biaan-ib=a*
 man=PL.AN lie.PL.SBJ-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED

elekiêm *hana-n-e=be*
 one.M wake_up-REAL-3SG.M.SBJ=DECL
 ‘While the men are sleeping one wakes up.’

As medial verbs must not be inflected for irrealis or deontic mood, there are no cases where the mood value of a medial clause is at variance with the realis

specification of the final clause. Thus, *-n* ~ *-Ø* ‘Realis’ always has scope over the whole clause chain.

12.4.2. *-(a)mab/-omab* ‘Irrealis’

On the default interpretation (especially with subject coreference throughout the clause chain) irrealis marking with *-(a)mab/-omab* on a final verb has scope over the whole clause chain.

- (18) *nē* *aai=e* *obdī-n-i=a*
 1SG water=SG.N1 fetch-SS.SEQ-1SG.SBJ=MED
- két* *tem-daak* *iba-n-i=a*
 container into-down pour.PFV-SS.SEQ-1SG.SBJ=MED
- bafu-n-amab-i=be*
 boil-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will fetch some water, pour (it) down into the container and boil (it).’

However, in natural discourse one finds clause chains which look identical to (18) in terms of their structure but in which irrealis marking does not have (or does not need to have) scope over the whole chain. Such variable scope behaviour of irrealis marking is what we would expect given that irrealis is a mood and not a tense category. Consider (19) and (20):

- (19) *tob-ò-n-i=a*
 3SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED
- yē* *hà’* *ge-n-amab-i=be*
 there break.PFV roll.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘I’ve taken it (tobacco leaf) and will break and roll (it).’ [Rolling
 smokes]
- (20) *yē* *as=e*
 there fire=SG.N1
- ob-tanà-n-amab-i=be*
 3SG.RESID.O-set_fire.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL

hâa'-biaan-e=ta
 roam-AUX.IPFV.SS.SIM-3SG.M.SBJ=MED

- c. *ya-têm'-aam-e=ba* *kesoa*
 PL.AN.O-see.PFV-DEONT-3SG.M.SBJ=NEG because
 'Because he wasn't well and he couldn't walk around this
 place and see them, ...'
 OR '(Given his affliction, i.e. a severed child's foot stuck in
 his gullet) because he couldn't be well, walk around and see
 them, ...' [Crows]

On the full scope of the negative clitic =*ba*, see 12.2.

To sum up the discussion on mood category scope, irrealis marking with *-(a)mab/-omab* and deontic marking with *-(V)m* differ from 'full-scope'-operators like tense and all operators indicating illocutionary force or polarity in that they can also be interpreted locally. Realis marking with *-n ~ -Ø* always have scope over the whole chain because medial verbs cannot be inflected for irrealis or deontic mood.

12.5. Aspect

The aspect markers *-b* and *-l* both with the meaning 'Imperfective' never have scope over whole clause chains when they occur in final verbs. Aspect is a feature restricted to any given verb. Consider (23) and (24):

- (23) *nē* *bín=o* *we-n-i=a* *unín=o*
 1SG floor=N2 sweep-SS.SEQ-1SG.SBJ=MED food=N2

fu-b-i=be
 cook-IPFV-1SG.SBJ=DECL
 'I swept the floor and am cooking food (now).'
 *'I'm sweeping the floor and cooking food.'

- (24) *ōlo* *yē* *tob-ò-n-i=a*
 now there 3SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED

haka-l-i=be
 break-IPFV-IPFV-1SG.SBJ=DECL
 'Now I've taken it and I am breaking (it).' [Rolling smokes]
 *'I'm taking it and breaking (it).'

The same applies to inchoative verb forms inflected with *-m* ‘Inchoative imperfective’, as in example (25):

- (25) *nē* *bín=o* *we-n-i=a* *unín=o*
 1SG floor=N2 sweep-SS.SEQ-1SG.SBJ=MED food=N2

fu-m-i=be

cook-INCH-1SG.SBJ=DECL

‘I swept the floor and start cooking (now).’

*‘I start sweeping the floor and cooking food.’

In the last three examples, the final verbs contain aspectual rather than temporal information. As aspect is a local phenomenon or operator, the aspectual information contained in these suffixes does not have scope over the entire clause chain. The aspectual information contained in the final verbs does not force all medial verbs in the clause chain to be imperfective or inchoative.

A similar restriction of aspect can be found in core serial verb constructions where tense marking applies to the whole construction whereas each serialized verb is entitled to its own aspect value expressed by stem aspect (see section 11.1).

12.5.1. Scope of habitual marking

If a final verb is marked for habituality by *-bina* or if the final verb is the habitual form of the existential verb *bina* ‘stay habitually’ all events in the same clause chain are interpreted as being habitual if the same subject is shared throughout the chain, as in (26):

- (26) *ī=le* *yē* *kou-biaan-ib=ta*
 3PL.AN=TOP there have_sex-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED

memé=i

children=PL.AN

yo-bina-b-io=bo

beget-AUX.HAB-IPFV-2/3PL.AN.SBJ=QUOT

‘“Copulating (in) there, they beget children.”’ [Pig story]

A switch in subject reference or an intervening time interval indicated by *-bio* ‘General past’ blocks scope of the habitual, as in (27). Scope of the habitual is indicated by brackets:

- (27) *dei-ʔb'-a-Ø-e-bio=ta*
leave.PFV-give.PFV-3SG.N1.R-REAL-3SG.M.SBJ-GPST=MED

[wà-n-ib=ta
cut.PFV-SEQ-2/3PL.AN.SBJ=MED

fu unan-biaana-b-io=be]
cook eat.IPFV-AUX.PST.HAB-IPFV-2/3PL.AN.SBJ=DECL
'after he had left it (the plant), they habitually cut off (fruits),
cooked and ate them' [Afoksitgabáam]

The first clause in this example *dei-ʔb'-a-Ø-e-bio=ta* 'after he had left it ...' is clearly outside of any habituality scope because it describes a unique action of the man who cared for the plant which later produced a certain fruit. These restrictions on habituality scope are plausible because habitual actions are normally ascribed to one individual or group during a certain time period.

Table 12.1 lists as a synoptic summary all TAM suffixes which appear in final verbs and their scope rules.

Table 12.1. Synopsis: Scope rules for TAM categories

Category	TAM	Gloss	Full scope
Tense	<i>-b^(H)</i>	'Non-hodiernal past'	yes
	<i>-s</i>	'Remote past'	yes
	<i>-bio</i>	'General past'	yes
	<i>-so</i>	'Hesternal past'	yes
Mood	<i>-n ~ -Ø</i>	'Realis'	yes
	<i>-(a)mab/-omab</i>	'Irrealis'	possible
	<i>-(V)m</i>	'Deontic'	possible
Aspect	<i>-b/-l</i>	'Imperfective'	no
	<i>-m</i>	'Inchoative imperfective'	no
	<i>-bina</i>	'Habitual'	possible

Chapter 13

Embedding

13.0. Introduction

Mian has four types of embedded structure. These are:

- quotative sentences
- adverbial clauses
- head-internal relative clauses
- prenominal relative clauses

These four structures can be distinguished with respect to their syntactic category and the structures into which they are embedded.

Quotatives are full sentences, i.e. they receive marking for illocutionary force, e.g. =*bo* for quotatives, =*a* for embedded polar questions, =*e* for embedded content questions, or =*e* ~ =*o* 'hortative'. These are always embedded as sentential complements of the function verb *ge/ga* 'say'.

Adverbial clauses and head-internal relative clauses display clausal syntax but are formally marked as noun phrases, i.e. they occur with a proper subset of the determiners which fill the determiner slot in ordinary noun phrases. It is quite typical for Papuan languages to treat adverbials and relatives formally the same, the functional reason for this being that both types of clause provide background information (Foley 1986: 202).

Prenominal relative clauses are embedded within noun phrases. They do not receive any overt marking. There is no subordinator, determiner and no illocutionary marking.

Embedded structures are on a different syntactic level with respect to their matrix clauses because in complex sentences, embedded clauses are skipped by the switch reference (S/R) morphology operating in the main clause, i.e. S/R is calculated with respect to the next clause after the embedded structure.

Verbs in simple embedded clauses are morphologically very similar to independent sentence-final verbs, e.g. both the former and the latter can be inflected for irrealis mood whereas medial verbs cannot. All embedded structures can be complex themselves. They can consist of a clause chain themselves. In such cases, the last clause has a final verb and all clauses in the embedded chain have medial verbs with S/R morphology pertaining only to subject tracking and to the temporal structure of the events in the embedded clause chain. In other words, S/R morphology only tracks subjects across

clauses on the same syntactic level. Subject-tracking never reaches into embedded clauses or out of embedded clauses into the matrix clause.

Verbs in embedded quotatives are always fully independent of any information marked on the final verb in the matrix clause. Verbs in embedded adverbials and relative clauses are only minimally dependent on the matrix verb in that it always has to have the same illocutionary force value. This dependency is familiar from clause chains. Unlike medial clauses, however, verbs in embedded adverbial and relative clauses have their own TAM value and are independent of any negation on the matrix verb, as shown in (1). Adverbial clauses are “impervious to denial from such following clauses” (Haiman 1980: 142), e.g.:

- (1) *bomânomo balubib=e aai=e*
 tomorrow airstrip=SG.N1 water=SG.N1
- êi-n-em-e=o*
 accumulate-AUX.PFV-COND-3SG.N1.SBJ=N2
- balu=e=mo tl-aamab-e=ba=be*
 plane=SG.N1=NEG come.PFV-IRR.NANPL.SBJ=NEG=DECL
 ‘If tomorrow the airstrip accumulates water, the plane won’t come.’

Habitual marking likewise never extends to an adverbial clause. The hitting of cats cannot be interpreted as habitual in (2):

- (2) *kōbo busi i-nâ'-n-em-eb=o*
 2SG.M cat PL.AN.O-hit.PFV-AUX.PFV-COND-2SG.SBJ=N2
- ī meou ga-bina-b-io=be*
 3PL.AN meow say.IPFV-AUX.HAB-IPFV-2/3PL.AN.SBJ=DECL
 ‘If you hit a cat, it (habitually) meows’ [TMA questionnaire, 75]

13.1. Embedded quotatives

13.1.1. Quotatives as sentential complements

Quotative sentences are used to represent discourse. They are always embedded as sentential complements of the function verb *ge/ga* ‘say’. Verbs in simple embedded quotative sentences display final verb morphology and either take a clitic =*bo* ‘Quotative’, as in (3), or have a hortative verb form

(see section 8.6.8), as in (4). The embedded material is enclosed in brackets in both examples:

- (3) \bar{e} *baa-n-e=a*
 3SG.M say.PFV-SEQ-3SG.M.SBJ=MED
- [*Boutlantema taman un-aamab-i=bo*]
 PN valley go.PFV-IRR.NANPL.SBJ-1SG.SBJ=QUOT
- ge* *baa-˘t'-ne-n-e=be*
 say.PFV say.PFV-give.PFV-1SG.R-REAL-3SG.M.SBJ=DECL
 'He_k told me_i that he_k wants to go to the Boutlantema valley.' (lit. 'He_k said: "I_k want to go to the Boutlantema valley", he_k said to me_i.')
- (4) \bar{e} *baa-n-e=a*
 3SG.M say-SEQ-3SG.M.SBJ=MED
- [*Milsen=e Gubil un-Ø-ek=o*]
 PN=SG.M PN go.PFV-REAL-3SG.M.SBJ.HORT=HORT
- ge* *baa-˘t'-ne-n-e=be*
 say.PFV say.PFV-give.PFV-1SG.R-3SG.M.SBJ=DECL
 'He told me that Milsen should go to Gubil.' (lit. 'He says: "Milsen should go to Gubil.", he said to me.')

The function verb which takes the quotative as a complement is usually serialized with another verb specifying the mode of expression, e.g. *baa* 'say (PFV)' in the examples above or *fun* 'think (IPFV)' in (5):

- (5) $n\bar{e}$ *fun-a-n-i=a*
 1SG think.PFV-SS.SEQ-1SG.SBJ=MED
- [$n\bar{e}$ *Gubil* *un-Ø-aan=o*]
 1SG PN go.PFV-REAL-1SG.SBJ.HORT=HORT
- ge* *fun-b-i=be*
 say.PFV think.IPFV-IPFV-1SG.SBJ=DECL
 'I think I should go to Gubil.'

If the function verb is serialized it has to appear as the bare perfective stem *ge*, which can be followed by the medial verb clitic =*ta*. If not serialized in such a

Pronominal and temporal deixis in Mian quotatives is relative to the point of view of the external speaker (see for example Munro 1982). An illustration is (11):

- (11) \bar{e} *sintalo* *baa-n-e=a*
 3SG.M yesterday say.PFV-SEQ-3SG.M.SBJ=MED
- [*Boutlantema taman un-aamab-i=bo*]
 PN valley go.PFV-IRR.NANPL.SBJ-1SG.SBJ=QUOT
- ge* *baa- \hat{t} '-ne-n-e-so=be*
 say.PFV say.PFV-give.PFV-1.SG.R-REAL-3SG.M.SBJ-HPST=DECL
 'Yesterday, he told me that he wanted to go to the Boutlantema valley.' (lit. 'Yesterday, he_k told me_l: "I_k want to go to the Boutlantema valley."')

The original utterance, which is being reported in (11), was: *Boutlantema taman unaamabibe* 'I want to go to the Boutlantema valley'.

An example with a transitive verb in the embedded quotative is given in (12). I use the index 'k' to track the source (of the original utterance) and the index 'l' for the external speaker:

- (12) \bar{e} *sintalo* *baa-n-e=a*
 3SG.M yesterday say.PFV-SEQ-3SG.M.SBJ=MED
- [*n \bar{e} k \bar{o} bo ka-t \hat{e} m'- \emptyset -i=bo*]
 1SG 2SG.M 2SG.O-see.PFV-REAL-1SG.SBJ=QUOT
- ge* *baa- \hat{t} '-ne-n-e-so=be*
 say.PFV say.PFV-give.PFV-1SG.R-REAL-3SG.M.SBJ-HPST=DECL
 'Yesterday, he_k told me_l that he_k saw me_l' (lit. 'Yesterday, he_k told me_l: "I_k saw you_l."')

Pronominal deixis is relative. The external speaker (indexed 'l') represents the utterance of the source speaker (indexed 'k'). The original utterance would have been *n \bar{e} k \bar{o} bo kat \hat{e} m'ibe* 'I saw you'.

13.1.2. Embedded questions

Questions can be sentential complements of the function verb *ge/ga~gena* ‘say’, which can be either inflected itself or a bare verb stem in serialization with an inflected speech act verb, such as *baa* ‘say (PFV)’.

Embedded polar questions are marked with two illocutionary clitics, namely *=a* ‘Question’ and *=bo* (or *=ba*) to mark the question as quotative, as in (13). Embedded content questions, as in (14), are only marked with *=e*:

- (13) *[kwéit=e hei-ʔ-ne*
sugar_cane=SG.N1 cut.PFV-give.PFV-1SG.R

dowôn'-nab-e=a=ba?]
eat.PFV-NRPST-3SG.M.SBJ=Q=QUOT

ge baa-n-o=ta
say.PFV say.PFV-SEQ-3SG.F.SBJ=MED
“‘Did he cut and eat my sugar cane a short while ago?’” she asked
and then...’ [Unangkliten village]

- (14) *[naka=i un-īta*
man=PL.AN who-PL.AN.EMPH

tl-aa-ib=e?]
come.PFV-DEONT-2/3PL.AN.SBJ=CQ

ga-b-e=ta
say.IPFV-DS.SIM-3SG.M.SBJ=MED
While he was saying/thinking/etc. “‘Who’s about to come?’” (lit.
‘Which men are about to come?’), they...’ [Danenok]

On question formation, see chapter 10.

13.2. Adverbial clauses

Structurally, there are two types of adverbial clause in Mian. The first type has normal clausal syntax and has one of the adverbial subordinators *mole* ‘if’, *kesoa* ‘because’, or *bita* ‘until’ at the end. These subordinators are used for conditional, causal, and temporal adverbial clauses, respectively.

The second type of adverbial clause also displays clausal syntax, yet these are formally treated as noun phrases. They either bear the article *=o* reflecting

the neuter 2 gender or have either of the postpositions *dim* ‘at the time when’ or *temwât* ‘while’ after the verb. The two postpositions can co-occur with the article =*o*.

13.2.1. Conditional adverbial clauses with *mole* ‘if’

The subordinator *mole* ‘if’ is used to mark conditional adverbial clauses. It belongs prosodically to the protasis. There are three types of conditional. In type 1 the protasis verb must be inflected for realis and the apodosis verb appears in the irrealis. The protasis always precedes the apodosis:

- (15) *[bomânomo balubib=e aai=e*
tomorrow airstrip=SG.N1 water=SG.N1

êi-n-e
accumulate.PFV-REAL-3SG.N1.SBJ

mole balu=e=mo
if plane=SG.N1=NEG

tl-aamab-e=ba=be
come.PFV-IRR.NANPL.SBJ-3SG.N1.SBJ=NEG=DECL
‘If tomorrow the airstrip accumulates any water, the plane won’t come.’

- (16) *[sók=o tl-Ø-o mole]*
rain=N2 come.PFV-REAL-N2.SBJ if

Hak=e tl-aamab-e=be
PN=SG.N1 come.PFV-IRR.NANPL.SBJ-3SG.N1.SBJ=DECL
‘If it rains (lit. rain comes), the river Hak will swell up.’

Conditional type 2 is used to express a conditional relation between two clauses which formulates a law-like certainty. The verbs in both clauses have to be in the imperfective. The apodosis-verb must be inflected for irrealis. An example of the type-2 conditional is:

- (17) *[sók=o tle-m-o mole]*
rain=N2 come.IPFV-IPFV-N2.SBJ if

Hak=e tle-mab-e=be
 PN=SG.N1 come.IPFV-IRR.NANPL.SBJ-3SG.N1.SBJ=DECL
 ‘If/Every time it rains, the river Hak swells up.’

Conditionals of type 3 are counterfactuals. The verb of the apodosis is simultaneously inflected for irrealis and general past. Both the protasis verb and the apodosis verb need to be inflected with a high-toned suffix *-tā*, whose meaning and function is unclear at the moment. An example of a counterfactual conditional is (18):

(18) *kōbo Mosbi bi-Ø-eb-tā mole Somale*
 2SG.M PN stay.IPFV-IPFV-2SG.SBJ-? if PN

a-tēm'-aamab-eb-bio-tā=be
 3SG.M.O-see.PFV-IRR.NANPL.SBJ-2SG.SBJ-GPST-?=DECL
 ‘If you had stayed in Port Moresby, you would have seen Somare.’

Counterfactuals are unattested in the spontaneous corpus. They only occur in the elicited material.

13.2.2. Causal adverbial clauses with *kesoa* ‘because’

The causal subordinator *kesoa* ‘because, since’ invariably occurs after the verb and intonationally belongs to this clause, which gives the reason. The consequence is given in the succeeding clause, which forms its own intonational unit:

(19) *[milim-sin=e háang-an-Ø-e kesoa]_{IU}*
 half-side=SG.N1 dry-VBLZ-REAL-3SG.N1.SBJ because

[tob-ski-n-amab-i=be]_{IU}
 3SG.LONG.O-turn-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘Because the other side has dried, I’ll turn it (the tobacco leaf) around.’ [Rolling smokes]

The verb preceding *kesoa* is a final verb and allows final verb morphology, i.e. inflection for polarity, mood, or inchoative aspect, illustrated in (20), are permitted:

- (20) *me-m-e* *kesoa*
 cry.IPFV-INCH-3SG.M.SBJ because
 ‘because he began to cry’ [Crows]

Quite commonly, non-verbal predications in clause chains are followed by the subordinator *kesoa* ‘because’ and a finite consequence clause:

- (21) *nái* *ē-ta* *kesoa*
 vagina SG.N1-EMPH because
- ī=le* *yē*
 3PL.AN=TOP there
- kou-biaan-ib=to*
 have_sex-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
- memé=i* *yo-bina-b-io=bo*
 children(PL)=PL.AN beget-AUX.HAB-IPFV-2/3PL.AN.SBJ=QUOT
 ‘“because it is a vagina they are copulating (in) there and they beget children.”’
 [Pig story]

13.2.3. Temporal adverbial clauses with *bita* ‘until’

The temporal subordinator *bita* ‘until’ can form an intonational unit with the preceding clause. It expresses that the event described in the preceding clause continues up to the onset of the event in the succeeding clause:

- (22) [*dei-ˈb-a* *be-b-ob*
 leave.PFV-give.PFV-3SG.N1.R walk_around.IPFV-IPFV-1PL.SBJ
- bita*]_U *tat-n-ob=a*
 until downriver-SS.SEQ-1PL.SBJ=MED
 ‘we left it (i.e. the pandanus) and were walking around until we went downriver and there we...’ [Ala ritual]

Bita ‘until’ can also form an intonational domain by itself, in which case a medial marker on the preceding verb is obligatory. In this case, the preceding verb is treated as medial and only medial verb morphology is permitted:

- (23) *[tamaan=o kou-ye-b-ib=ta]*_{IU}
 fornication=N2 copulate-PL.AN.R-DS.SIM-2/3PL.AN.SBJ=MED
- [bita]*_{IU} *[bomâ-s-o=ta]*_{IU}
 until light-DS.SEQ-EXPL.SBJ=MED
 ‘they were raping them until morning (lit. it light-ed), and then they...’ [Mianmin and Telefomin history]

The subordinator *bita* ‘until’ very likely goes back to a shortened medial verb form consisting of the existential verb *bi* and the medial clitic *=ta*. On such shortened medial verb forms, see 11.2.13.

13.2.4. Adverbial clauses with the article =o

These display clausal syntax, yet they are formally treated as noun phrases because they always bear the article *=o* reflecting neuter 2 gender. Like medial clauses, adverbial clauses can be topic-marked with *=le* as well. In the following examples the adverbial clause appears enclosed in square brackets.

The verbs in adverbial clauses are final verbs, i.e. they have their own polarity value and can be inflected for irrealis. A temporal interpretation (24) or a locative interpretation (25) is possible:

- (24) *[naka=i utl-Ø-ib=o]*
 man=PL.AN come_up.PFV-REAL-2/3PL.AN.SBJ=N2
- ī ninin=o dl-â-n-ib=a*
 3PL.AN name=N2 PL.F_CL.O-put-SEQ-2/3PL.AN.SBJ=MED
 ‘when the people grew up, they assumed names and then...’
 [Dimosson]
- (25) *êi=wāt êi=wāt met*
 fill_up.PFV=across fill_up.PFV=across upriver
- tâ-n-e=ta*
 enter-SEQ-3SG.N1.SBJ=MED
- [mîn=e éil asyam=e]*
 son=SG.M pig fruit=SG.N1
- toun-bi-Ø-e=o]*
 sit_down.PFV-AUX.IPFV-IPFV-3SG.M.SBJ=N2

êi *dob-ba-s-e=ta*
 fill_up.PFV 3SG.M_CL.O-cover.PFV-DS.SEQ-3SG.N1.SBJ=MED
 ‘it went across forming puddles and upriver and entered (i.e. the bush), and where the son was sitting at the pig fruit tree, it (the blood) rose and covered him’ [Afoksitgabáam]

Adverbial clauses whose verb is inflected with *-Vm* ‘Conditional’ have a conditional interpretation, for example:

- (26) [*nē* *alél-sa* *n-im-i=o*]
 1SG wife-with stay.PFV-COND-1SG.SBJ=N2

sein-amab-i=be
 be_happy.IPFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘If I have a wife, I’ll be happy.’

- (27) [*nē* *éim=e* *dowôn’-aam-i=o*]
 1SG pandanus=SG.N1 eat.PFV-COND-1SG.SBJ=N2

al *belâ-n-amab-i=be*
 faeces break.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
 ‘If I eat pandanus, I’ll get diarrhoea.’

13.2.5. Topicalized adverbial clauses

Adverbial clauses with the article *=o* can be marked as topical with the topic clitic *=le* to indicate that a whole event is relevant to what follows:

- (28) [*ī* *utlaan* *dama-Ø-ib=o=le*]
 3PL.AN come_up.PFV grow_up-REAL-2/3PL.AN.SBJ=N2=TOP

ī *yō* *walo-n-ib=ta*
 3PL.AN there multiply-SEQ-2/3PL.AN.SBJ=MED
 ‘so when they grew up, they multiplied and then ...’ [Dimosson]

In example (28), the topicality of the clause marked as the topic lies in the fact that it is a necessary prerequisite for the event of the succeeding clause to take place. Before humans can procreate they need to grow up.

13.2.6. Adverbial clauses with the postpositions *temwât* 'while' and *dim* 'at the time when'

Temwât 'while', which itself consists of the nominal postposition *tem* 'in(to)' (from the noun *tem* 'inside') and the directional *wât* 'across', can follow the verb of an adverbial clause to specify that the event described by the preceding clause is on-going at a certain point in time, at which another event takes place so that both situations temporally overlap, at least partially. The whole construction has to be marked as adverbial with the article =*o*. Intonationally, *temwât* belongs to the adverbial clause. The characteristic pause indicating the beginning of a new clause comes after, never before *temwât*.

- (29) *[kôbo fût=e gen-b-eb temwât=o]*
 2SG.M tobacco=SG.N1 roll.IPFV-IPFV-2SG.SBJ while=N2
- blebu=e al=e*
 gecko=SG.M faeces=SG.N1
- mi-˘b'-ke-n-e=be*
 cover-give.PFV-2SG.R-REAL-3SG.M.SBJ=DECL
 'While you are rolling a smoke, a gecko shat on it for you.'

One also finds two alternative constructions to this. In (30) the article =*o* appears both on the verb in the adverbial clause and *temwât*:

- (30) *[walo te-b-ib=o temwât=o]*
 multiply come.IPFV-IPFV-2/3PL.AN.SBJ=N2 while=N2
- nakamîn=e mak=e alél=o*
 man=SG.M certain=SG.M wife=SG.F
- om-êt-n-e=a=le*
 3SG.F_CL.O-take.PFV-SS.SEQ-3SG.M.SBJ=MED=TOP
 'while they were begetting many generations, a certain man took a wife, and then he...' [Dimosson]

In (31) there is a high-toned free pronoun between the verb in the adverbial clause and *temwât*:

- (31) *[walo te-b-ib ò temwât=o]*
 multiply come.IPFV-IPFV-2/3PL.AN.SBJ N2 while=N2

nakamîn=e *mak=e* *alél=o*
 man=SG.M certain=SG.M wife=SG.F

om-êt-n-e=a=le
 3SG.F_CL.O-take.PFV-SS.SEQ-3SG.M.SBJ=MED=TOP
 ‘while they were begetting many generations, a certain man took a wife,
 and then he...’ [Elicited as a contrast to (30)]

This seems to be the original construction in which the free pronoun functioning as a resumptive pronoun anaphorically refers to the proposition of the whole preceding clause. It is plausible that (29) and (30) represent successive stages of phonological erosion of this pronoun. While it is realized as a toneless clitic in (30), it has completely disappeared in (29).

Dim ‘at the time when’, which is basically a nominal postposition meaning ‘on(to)’ (from the noun *dim* ‘top’), can follow the verb of an adverbial clause to specify that at a certain time while one situation holds true (e.g. a state), a new situation comes in. Like adverbials with *temwât* ‘while’, the whole construction has to be marked as an adverbial by =*o*. Intonationally, *dim* belongs to the adverbial clause. The characteristic pause indicating the beginning of a new clause comes after, never before *dim*.

Dim shows those same three constructional variants, described above for *temwât*. In (32), the variant with the free pronoun is illustrated here:

(32) [*sinanggwâno* *naka=i=a* *unáng=a=i*
 days_of_yore man=PL.AN=and woman=and=PL.AN

Mianam *ōlo=mo* *wal-im* *bl-im*
 PN DEM.PROX.N2=NEG multiply-NEG exist-NEG

bl-Ø-ib *ō* *dim=o]*
 stay.IPFV-IPFV-2/3PL.AN N2 at_the_time=N2

unáng *mak=o* *ninín=o* *Dimoson=o*
 woman certain=SG.F name=N2 PN=SG.F

un-om *wât-n-o=a*
 go.PFV-? across-SS.SEQ-3SG.F.SBJ=MED
 ‘In days of yore at the time when the men and women of Mianmin
 had not multiplied, a certain woman, name of Dimosson, went
 across (sc. the Highlands), and then she ...’ [Dimosson]

In this example the on-going state is the non-existence of people at Mianmin whereupon Dimosson set out from her mythical home of Dimobib in the New Guinea Highlands towards Mianmin where she created the first man and woman.

Example (33) illustrates the constructional alternative, in which there is neither a pronoun nor a clitic article:

- (33) *[nē áa un-aamab-i dim=o]*
 1SG sleep go.PFV-IRR.NANPL.SBJ-1SG.SBJ at_the_time=N2
- fút=e fu-Ø-i-o=be*
 tobacco=SG.N1 smoke-REAL-1SG.SBJ-EP=DECL
 ‘At the time when I wanted to go to bed, I’ve smoked a cigarette.’

13.2.7. The semantic difference between *temwât* ‘while’ and *dim* ‘at the time when’

The semantic difference between adverbial clauses with *temwât* and *dim* is subtle. While both indicate that two events overlap, the former is preferred, if one wants to express that one event occurs inside another one and that there is some interaction between participants or interference between the events. The latter only indicates a temporal overlap. Compare the following two examples:

- (34) *[ī miting ke-b-ib=o temwât=o]*
 3PL.AN meeting(TP) do-IPFV-2/3PL.AN.SBJ=N2 while=N2
- nē fút=e fu-b-i=be*
 1SG tobacco=SG.N1 cook-IPFV-1SG.SBJ=DECL
 ‘While they are having a meeting, I’m smoking.’ (i.e. inside that meeting, possibly annoying participants and disrupting proceedings)
- (35) *[ī miting ke-b-ib=o dim=o]*
 3PL.AN meeting(TP) do-IPFV-2/3PL.AN.SBJ=N2 at_the_time=N2
- nē fút=e fu-b-i=be*
 1SG tobacco=SG.N1 cook-IPFV-1SG.SBJ=DECL
 ‘At the same time as they are having a meeting, I’m smoking.’ (i.e. outside the building, in my own house, etc.).’

13.3. Relative clauses

Relative clauses in Mian serve the function that many scholars have identified for relative clauses in all languages, namely to delimit the potential reference of a noun (e.g. Comrie 1981: 136). More specifically, a relative relation involves two events (or states of affairs), a main and a dependent one, which share exactly one participant. “[A] participant of the main SoA [State of Affairs – SF] is identified within a set of possible referents by mentioning some other SoA in which he or she takes part” (Cristofaro 2003: 195).

Mian relative clauses are finite and can be either prenominal or head-internal. There is no formal distinction between restrictive and non-restrictive relative clauses. As the function of the latter ones is not to delimit potential reference of a noun but rather to give additional information pertaining to the referent in question, they are not covered by Comrie’s (1981) definition. Nevertheless, this section also includes some examples of relative clauses which are clearly of the non-restrictive type in English. In Mian the restrictive vs. non-restrictive distinction is not formally expressed.

13.3.1. Prenominal relative clauses

Prenominal relative clauses are clausal modifiers embedded into the noun phrase. They always precede their head noun, e.g. in (36), where the subject is relativized:

- (36) *balubib=yē* *mâa’-bl-Ø-ib*
 airstrip=at stand_up.PFV-AUX.IPFV-IPFV-2/3PL.AN.SBJ
- naka=i*
 man=PL.AN
 ‘the men who are standing at the airstrip’

Here, a clause *balubib=yē mâa’blib* ‘they are standing at the airstrip’ precedes its head noun *naka=i* ‘the men’. Postcedent identification is made possible by both the morphology and the syntax. While the syntax dictates that the noun following the relative clause is the head noun, there is additional information from agreement in the pronominal marking on the verb. In (36) above, for example, the verb *mâa’blib* ‘they are standing’ is marked *-ib* agreeing with the postcedent in the (animate) plural.

With prenominal relative clauses, the head noun must not be left out. Hence, example (37) is ungrammatical:

- (37) **balubib=yē* *mâa'-bi-Ø-ib*
 airstrip=at stand_up.PFV-AUX.IPFV-IPFV-2/3PL.AN.SBJ

ya-temê'-b-i=be

PL.AN.O-see.IPFV-IPFV-1SG.SBJ=DECL

Intended: 'I'm looking at them who are standing at the airstrip.'

The verb in the relative clause is a final verb. It is not subject to any limits in terms of its morphology. It can, for instance, be inflected for tense, as in (38) or mood in (39):

- (38) *balubib* *klâ-Ø-ib-bio* *naka=i*
 airstrip build-REAL-2/3PL.AN.SBJ-GPST man=PL.AN
 'the men who built the airstrip' [Observed]

- (39) *yo-n-omab-ib* *am=o*
 initiate-AUX.PFV-IRR.PL.AN.SBJ-2/3PL.AN.SBJ house=N2
 'the house in which they will initiate' [Initiation rites]

The head noun is only allowed to appear in a reduced form in the relative clause itself, namely as a cross-referencing affix on the verb. Under no circumstances can a prenominal relative clause have an overt noun phrase, either a full noun phrase (40) or a free pronoun (41), co-referent with, and with the same grammatical function as the head noun. This restriction is cross-linguistically common (Comrie 1981: 140):

- (40) **naka=e* *balubib=yē* *mâa'-bi-Ø-e*
 man=SG.M airstrip=at stand_up.PFV-AUX.IPFV-IPFV-3SG.M.SBJ

naka=e

man=SG.M

Intended: 'the man who is standing at the airstrip'

- (41) **ē* *balubib=yē* *mâa'-bi-Ø-e*
 3SG.M airstrip=at stand_up.PFV-AUX.IPFV-IPFV-3SG.M.SBJ

naka=e

man=SG.M

Intended: 'he who is standing at the airstrip'

There is one example in the corpus where a location is relativized. This is given in (46):

- (46) *yo-n-omab-ib* *am=o*
 initiate-AUX.PFV-IRR.PL.AN.SBJ-2/3PL.AN.SBJ house=N2
 ‘the house in which they will initiate’ [Initiation rites]

The interpretation of *am=o* ‘the house’ as a locative is not overtly indicated in (46) but it is the only plausible one given the semantics of the verb and the head noun. Houses are not likely to be initiated nor are they commonly beneficiaries of initiation procedures.

A noun phrase containing a prenominal relative clause can have all the roles also available to a noun phrase which is not modified by a relative clause, i.e. appear in subject, object, and possessor position, and as the only argument in a non-verbal clause (47):

- (47) *balubib=yē* *mâa'-bi-Ø-e*
 airstrip=at stand_up.PFV-AUX.IPFV-IPFV-3SG.M.SBJ

naka=e *teke=o=be*
 man=SG.M tall=PRD=DECL
 ‘The man who is standing at the airstrip is tall.’

Finally, we want to determine what structure an utterance consisting of a prenominal relative clause and its head noun has. Consider example (48):

- (48) *balubib=yē* *mâa'-bi-Ø-e* *naka=e*
 airstrip=at stand_up.PFV-AUX.IPFV-IPFV-3SG.M.SBJ man=SG.M
 ‘the man who is standing at the airstrip’

The clause *balubib yē mâa'bie* ‘he was standing at the airstrip’ used as a prenominal relative clause in (48) does not have a relative pronoun. There is no overt marking of the clause as subordinate. Nor is there any marking which indicates that prenominal relative clauses in Mian function as noun phrases themselves. In Yimas (Foley 1991), relative clauses, which can precede or follow their head noun or appear without it, usually bear the ‘near distal’ marker *m-*, which marks the whole relative clause as a definite referring expression. In addition to that, Yimas relative clauses obligatorily take a class and number suffix which marks them as noun phrases and indicates the head noun modified by the relative clause (from Foley 1991: 413).¹

- (49) *krayŋ* *m-ka-tu-r-ŋ*
 frog.VI.SG NR.DIST-1SG.A-kill-PFV-VI.SG
 ‘the frog which I killed’

The absence of any marking on the Mian prenominal relative clause suggests that we are not dealing with a noun phrase in apposition with the head noun here but rather with a clause embedded into the noun phrase as a modifier. Neither do we have a clause which is clearly marked as subordinate to a matrix clause.

Furthermore, it is not possible for a noun phrase to contain either *sin* ‘old’ or *memâ* ‘new’ in prenominal position plus a prenominal relative clause. Consider the ungrammatical example (50):

- (50) **balubib=yē* *mâa'-bi-Ø-e*
 airstrip=at stand_up.PFV-AUX.IPFV-IPFV-3SG.M.SBJ
- sin* *naka=e*
 old man=SG.M
 Intended: ‘the old man who is standing at the airstrip’

13.3.2. Head-internal relative clauses

Unlike prenominal relative clauses, in which the head noun is only referred to by pronominal marking on the verb but occurs outside the clause (as its head), in head-internal relative clauses the head noun is usually expressed overtly within the clause but no mention of it must be made outside the clause.

Head-internal relative clauses are obligatorily marked with a range of pronominal determiners, among them the article, all of which are also used to mark non-relativized noun phrases. Thus, they essentially function as noun phrases occupying the argument position the head noun of the relative clause has in the matrix clause. A head-internal relative clause can function within the matrix clause as the subject, the object, the possessor, or the only argument in a non-verbal clause. Consider example (51), in which a head-internal relative clause functions as the object of the main clause:

- (51) *naka=i* *balubib=yē*
 man=PL.AN airstrip=at
- mâa'-bl-Ø-ib=i*
 stand_up.PFV-AUX.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN

ya-temê'-b-i=be
 PL.AN.O-see.IPFV-IPFV-1SG.SBJ=DECL
 'I am looking at the men who are standing at the airstrip'

In this example sentence, the whole head-internal relative clause *nakai balubib yē mâa'blibi* bears the article =*i* 'plural animate' identical to the one which marks the subject noun phrase *nakai* 'the men'.

It is common for relative clauses (and subordinate clauses in general) in Papuan languages to behave morphologically like definite noun phrases (Foley 1986: 202-204). This similarity in form is parallel to their similarity in function as definite referring expressions: "Definite noun phrases presuppose the prior identification of their referent [...]. Subordinate clauses presuppose the prior identification of the events they describe" (p. 202).

Head-internal relative clauses are marked with those pronominal elements that are also used to mark nouns. In normal non-relativized noun phrases, an article or some other determiner has to occur if the noun phrase is definite (or indefinite) referential and is left out if the noun phrase is indefinite non-referential. Likewise, head-internal relative clauses always have to have a determiner, e.g. an article, precisely because they are definite referring expressions.

Sometimes the article at the right edge of the head-internal relative clause does not show on the surface. This is the case when the verb of the relative clause ends in a vowel identical to the article, as in (52):

(52) *naka=e* *balubib=yē*
 man=SG.M airstrip=at

mâa'-bi-Ø-e=e
 stand_up.PFV-AUX.IPFV-IPFV-3SG.M.SBJ=SG.M
 'the man who is standing at the airstrip'

In this example, the article =*e* coalesces with the subject suffix *-e* because they are identical consecutive vowels. The result is a single vowel. Thus, the verb is pronounced [ma^h.βī.ɛ]. I assume that the article in example (52) is present underlyingly, rather than claim that some head-internal relative clauses do not have articles and thereby obscuring the important syntactic distinction of head-internal relatives from pronominal relative clauses (see 13.3.1), which never have a determiner.

In head-internal relative clauses the following positions can be relativized: subject (51) above, prefixed object of a transitive clause (53), non-indexed object (54), prefixed object (theme) of a ditransitive clause (55), and suffixed object (recipient) of a ditransitive clause (56).

- (53) *no=i* *ya-l-êb*
 marsupial=PL.AN PL.AN.O-kill.PFV-carry
- tl-Ø-e=i*
 come.PFV-REAL-3SG.M.SBJ=PL.AN
 ‘the marsupials he has killed and brought’ [Crows]
- (54) *nī* *senso=e* *Jemeni* *daak=o*
 1PL.EXCL chainsaw(TP)=SG.N1 PN down=N2
- walo-Ø-ob=e* *ayam=o=be*
 buy.PFV-REAL-1PL.SBJ=N1.SG good=PRD=DECL
 ‘The chainsaw we’ve bought down in Germany is good’
- (55) *Ala=o*
 Ala_ritual=N2
- om-ûb’-e-Ø-ib-bu=o*
 3SG.F_CL.O-give.PFV-PL.AN.R-REAL-2/3PL.AN.SBJ-GPST=N2
 ‘the Ala ritual which they (i.e. the ancestors) gave us’ [Ala ritual]
- (56) *naka=e* *buk=o*
 man=SG.M book(TP)=N2
- om-ûb’-a-n-amab-i*
 3SG.F_CL.O-give.PFV-3SG.M.R-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ
- ēle*
 DEM.PROX.SG.M
 ‘this man to whom I will give the book’

13.3.3. Omission of the internal head in head-internal relative clauses

So far, in all examples of head-internal relative clauses, the head noun features as a full noun phrase. However, this need not be the case, and in textual example omission of the internal head of a head-internal relative clause is frequent.

The internal head can be freely omitted, if the subject is relativized, as in (57) or (58), yielding a headless head-internal relative clause.

- (57) *sin tl-Ø-e-bu=e*
 first come.PFV-REAL-3SG.M.SBJ-GPST=SG.M
 ‘the (one) who came first’ [Crows]
- (58) *bib=le bl-Ø-ib=i*
 village=TOP stay.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN
 ‘the (ones) who stayed at the village’ [Klebein]

If the object is relativized omission of the internal head is possible, but only if the verb indexes the object. Compare example (59), where the object is indexed with a prefix, to the ungrammatical example (60), where the object is not indexed:

- (59) *nē a-tēm'-Ø-i=e*
 1SG 3SG.M.O-see.PFV-REAL-1SG.SBJ=SG.M
 ‘the (one) I’ve seen, ...’
- (60) **nē fu-b-i=o*
 1SG cook-IPFV-1SG.SBJ=N2
 Intended: ‘What I’m cooking, ...’

On the restrictions of relativization of objects of verbs which do not cross-reference their objects with a prefix, see 3.14.2.

13.3.4. Use of resumptive pronouns after head-internal relative clauses

Head-internal relative clauses in Mian can be followed by a resumptive pronoun whose function is to recall the head noun. Contrary to the toneless articles on the relative clause, the resumptive pronoun is a free pronoun with a high tone:

- (61) *kwoisâm=o gengkan-bina-b-ob=o*
 spirit_house=N2 build.IPFV-AUX.HAB-IPFV-1PL.SBJ=N2
- ō wéng ō-ta*
 N2 story N2-EMPH
 ‘this (is) the story of the spirit house which we used to build’
 [Building a spirit house]

Although in principle all head-internal relative clauses can be used with a resumptive pronoun, it is most commonly possessors, as in (61), that have

them. As possessors (or genitives in general) are cross-linguistically less accessible to relativization than subjects and objects, cf. the Accessibility Hierarchy (Comrie and Keenan 1977, Comrie 1981: 149), it is quite straightforward why they would be more likely to be used with resumptive pronouns, which recall the relativized item.

13.3.5. Other markers of head-internal relative clauses

So far the discussion has been confined to articles as markers of head-internal relative clauses. But like non-relativized noun phrases, head-internal relative clauses can take a whole range of pronominal elements, such as:

- Distal demonstrative: *yē/yō/yēi*
- Proximal demonstrative: *ēle/ōlo/ēli*
- Emphatic pronoun: *ēta/ōta/īta*
- Emphatic proximal demonstrative: *ēleta/ōlota/ēlita*
- Emphatic distal demonstrative: *yēta/yōta/yēita*

On emphatic pronouns, see 3.7.4. On demonstratives, see 3.7.9.

Instead of an article, the distal demonstratives *yē/yō/yēi* can be used to mark a head-internal relative clause:

- (62) *tubáan=a* *bēlon* *áan=o* *bubbub=a*
chest_feather=and wing_bone feather=PL.N1 down=and
- yē* *bi-Ø-o=yō*
there stay.IPFV-IPFV-3PL.N1.SBJ=DEM.DIST.N1.PL
‘(both) the chest feathers and the downs of the wing feathers which were there’ [Crows]

An example of the animate plural form of the distal demonstrative *yēi* is given in (63):

- (63) *naka=obba* *yē* *aaie*
man=ADNOM there water
- fua-b-ib=yēi*
bathe.IPFV-IPFV-2/3PL.AN.SBJ=DIST.PL.AN
‘those men who are bathing there’

of medial clauses, complex head-internal relatives maximally consist of one medial and one final clause in my corpus. The rarity of chained relative clauses in general and of long ones (those which have more than one medial clause) in particular is probably attributable to processing constraints. Likewise, it is no wonder that complex prenominal relative clauses are not attested at all. Processing issues due to the length of relative clauses are more pronounced here because the hearer has to process the whole relative clause before being able to identify the head noun, which follows the prenominal relative clause.

In complex chained head-internal relative clauses, the medial clause has a medial verb and the verb in the last clause is final. In this respect, chained relative clauses are no different from clause-chaining constructions in general. However, unlike independent sentences which consist of a clause chain, the final verb in a chained relative clause does not take an illocutionary clitic but rather a determiner which marks the whole relative clause as a noun phrase:

- (68) *Afueiwok=o Dimobib=wāt daa-n-o=a*
 PN=SG.F PN=across dwell.PFV-SEQ-3SG.F.SBJ=MED

te-s-u=o

come.PFV-RPST-3SG.F.SBJ=SG.F

‘Afueiwok, who dwelled across in Dimobib and came (a long time ago)’ [Afueiwok]

In terms of marking S/R and event sequentiality or simultaneity, medial verbs in chained relative clauses behave exactly like medial verbs in non-embedded clause chains. S/R morphology provides a nifty mechanism to anticipate a change of the grammatical relation the head noun has with respect to the verb in the succeeding clause. Consider example (69):

- (69) *nakamín=e tosiana*
 man=SG.M be_afraid.PFV

wetouléb un-Ø-e=a

flee_in_panic.PFV-DS.SEQ-3SG.M.SBJ=MED

dei-˘b'-a

leave.PFV-give.PFV-3SG.M.R

un-Ø-ib-bu=ēle
 go.PFV-REAL-2/3PL.AN.SBJ-GPST=DEM.SG.M
 ‘this man who got afraid and ran away and whom they left and went
 away (from)’ [Fieia and Hentaboseb]

13.3.7. An analytical issue in head-internal relative clauses

So far I have been assuming without justification that head-internal relatives are clauses. It is now time to justify this assumption. Consider (70):

- (70) *naka=i* *balubib=yē*
 man=PL.AN airstrip=at
- mâa'-bl-Ø-ib*
 stand_up.PFV-AUX.IPFV-IPFV-2/3PL.AN.SBJ
- ēli*
 DEM.PROX.PL.AN
 ‘these men who are standing at the airstrip’

Now, it is not necessarily straightforward that an expression, such as in (70), should be analysed as one clause with an overt subject noun phrase *naka=i* as opposed to another theoretically possible analysis which breaks this expression down into a nominal head *nakai* and an embedded postnominal relative clause *balubib yē mâa'blib ēli*.

There is prosodic and syntactic evidence that (70) is indeed a full clause and not a head noun followed by a postnominal relative clause. Prosodically, the whole string is one intonational unit, set off from the rest of the matrix clause by a short pause. Hence, phonological evidence points towards an analysis of head-internal relatives as single clauses.

Syntactic evidence comes from the simple fact that any head-internal relative clause can have the constituent order which one would expect if they were independent declarative sentences. Consider the following two head-internal relative clauses in (71) and (72):

- (71) [*naka=i*]_{SBJ} *yē*
 man=PL.AN there
- mâa'-bl-Ø-ib=i*
 stand_up.PFV-AUX.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN
 ‘the men who are standing there’

- (72) *[nakamîn=e]*_{SBJ} *[no=i* *asusûna]*_{OBJ}
 man=SG.M marsupial=PL.AN two

do-toulêb-bi-Ø-e

PL.AN.O-put_over_arm.PFV-AUX.IPFV-IPFV-3SG.M.SBJ

ēli

DEM.PROX.PL.AN

‘these two marsupials which the man is carrying on his arm’

[Mammals and insects]

Not only do head-internal relative clauses display regular clausal syntax, i.e. SV in intransitive clauses (71) and AOV in transitive ones (72), but the latter example shows especially well that the head noun, here being the object, occurs in its normal position within the clause and that it is not the case that the head noun is followed by a postnominal relative clause.

Further evidence against an analysis which assumes postnominal relative clauses comes from chained relative clauses with different overt subject noun phrases. Consider (73):

- (73) *imak-wal* *bl-Ø-ib=a* *nakamîn-wal*
 husband-PL stay.IPFV-DS.SIM-2/3PL.AN.SBJ=MED man-PL

bl-Ø-ib=i

stay.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN

baa-s-ib=ta

say.PFV-DS.SEQ-2/3PL.AN.SBJ=MED

‘they (the Telefol women) told the(ir) husbands and brothers who were there (at home) and then the brothers and husbands...’

[Mianmin and Telefomin]

In the face of this example, it would be very difficult to argue that the utterance *imak-wal bliba nakamîn-wal blibi* is anything but a chain of two clauses each with its own overt subject noun phrase, where the first clause has a medial verb (*bliba*) and the second a final verb (*blib*) with the article *=i*. Although chained clauses with medial verbs are dependent on the final verb in the last clause of the chain regarding certain morphosyntactic information, clause chains are essentially coordinate and not subordinate or embedded structures.

There are, however, cases which *prima facie* conflict with the analysis that head-internal relative clauses are single clauses rather than a head noun

followed by a postnominal relative clause. If the object is relativized and the subject is overtly realized as a pronoun, the only attested word order is:

- (74) *naka=e nē a-têm'-Ø-i=e*
 man=SG.M 1SG 3SG.M.O-see.PFV-REAL-1SG.SBJ=SG.M
 'the man whom I saw'

This case provides problematic evidence because the constituent order OAV, which we find in (74) is not possible in independent sentences, if the subject is a free (non-emphatic) pronoun. Compare (75) and (76):

- (75) *naka=e nē-ta a-têm'-Ø-i=be*
 man=SG.M 1SG-EMPH 3SG.M.O-see.PFV-REAL-1SG.SBJ=DECL
 'I (i.e. not you) saw the man.'

- (76) **nakae nē atêm'ibe*
 Intended: 'I saw the man.'

So we have to conclude that should we want to analyse (74) as a head-internal relative clause, it would not conform to normal clausal syntax. There are two ways out of this situation.

First, one could assume embedding for this special case and say that in (74) a nominal antecedent *naka=e* is followed by an embedded postnominal relative clause *nē a-têm'-Ø-i=e*. Clearly this is unsatisfactory because (a) under such an analysis only examples like (74) would involve embedding whereas for all other cases there is no evidence for a postnominal embedded relative clause at all. Such a solution makes the analysis of head-internal relatives unnecessarily complicated. After all, head-internal relative clauses, whether they conform to basic constituent order in declarative sentences or whether they are deviant in that respect, are formally marked in the same way.

The second option is to assume that head-internal relative clauses are single clauses, the corollary being that they can differ from simple declarative sentences in that they are allowed to display a constituent order unattested in simple declarative sentences.

This is clearly the way to go in the analysis of Mian. In discussing head-internal relatives (which he calls "zirkumnominal", i.e. circum-nominal), Lehmann (1984) proposes a distinction between a variant with a *stationary nucleus* (i.e. unbewegter Nucleus) as opposed to a variant with a *preposed nucleus* (i.e. vorangestellter Nucleus). On the issue of the head position in head-internal relative clauses also see Basilico (1996). Languages which have head-internal relative clauses can show both variants. Diegueño, for example, usually has stationary nuclei but allows preposed ones as a secondary strategy

(Gorbet 1973). We find a similar situation in Mian. Stationary nuclei are the norm but under special circumstances when an overt pronoun is involved and the object is relativized, as in example (74) above, the preposed-nucleus strategy is consistently chosen.

Appendix I Texts

This is a collection of three texts. The first two are traditional narratives which are about the origin of a certain fruit and a certain type of arrow, respectively. The third text is procedural. In this text the narrator tells about how he is rolling a smoke. All three texts follow that orthographic conventions established in chapter 2.9. Each sentence or clause in a clause chain has a separate number.

1. The origin of the *Afoksitgabáam* fruit

(Author: Asuneng Amit, recorded Juny 3, 2004)

- (1) *wengsâng* *ōlo* *fanin-wal=i* *wengsâng*
story DEM.PROX.N2 ancestor-PL=PL.AN story

baa-n-ang-ge-n-i=ta=be

say.PFV-REAL-IMMAC.SG.SBJ-say.PFV-SS.SEQ-1SG.SBJ=MED=DECL

‘I am about to tell this story, a story of the ancestors’

- (2) *sinangwán=o* *unangmôn=o* *tāi=e* *báangkli=e*
days_of_yore=N2 woman=SG.F cutting_tool=SG.N1 stone_adze=SG.N1

deb-êt-n-o=a

3SG.M_CL.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED

‘In days of yore a woman took a stone axe’

- (3) *tà-n-o=a*
sideways-SEQ-3SG.F.SBJ=MED
‘she went sideways (into the bush)’

- (4) *éil* *asyam=e*
pig tree_fruit=SG.N1

tou-˘b'-e-bi-Ø-o=a

sit_down.PFV-give.PFV-PL.AN.R-AUX.IPFV-DS.SIM-3SG.F.SBJ=MED

‘while she was sitting at a pig fruit (tree) (i.e. in order to ambush pigs)’

- (5) *gwáab=i* *ī-maye* *dowôn'*
small=PL.AN 3PL.AN-REFL eat.PFV

unê-b-ib=a

go.IPFV-DS.SIM-2/3PL.AN.SBJ=MED

‘the small (ones) themselves ate and (then) were going away’

- (6) *haleb ē-ta te-s-e=a*
 wild_boar SG.M-EMPH come.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘when a wild boar came’

- (7) *báangkli=e dob-ò-n-o=a*
 stone_adze=SG.N1 3SG.M_CL.O-take.PFV-SEQ-3SG.F.SBJ=MED
 ‘she took the stone adze’

- (8) *bina mal-Ø-a-s-o=a*
 hurl.PFV shoot.PFV-give.PFV-3SG.M.R-DS.SEQ-3SG.F.SBJ=MED
 ‘she hurled (the axe) and shot it’

- (9) *yē om-ēb=tab*
 there 3SG.F_CL.O-take.PFV=down

om-fâ-n-e=a

3SG.F_CL.O-put.PFV-SEQ-3SG.M.SBJ=MED

u-nâ’

3SG.F.O-kill.PFV

dowô’-n-e=a

eat.PFV-SEQ-3SG.M.SBJ=MED

‘it took her, put her down, killed her and ate her up’

- (10) *mēn=e yē gol-ò-n-e=a*
 child=SG.M there 3SG.BUNDLE.O-take.PFV-SEQ-3SG.M.SBJ=MED
 ‘it takes her child (with the umbilical)’

- (11) *dabáal=dim yē ob-à’-’b’-e*
 ground=on there 3SG.RESID.O-leave.PFV-give.PFV-PL.AN.R

un-Ø-e-bu=a

go.PFV-REAL-3SG.M.SBJ-GPST=MED

‘it left it (the child) for them (other pigs) on the ground and went away’

- (12) *skoyabu=o unan te-n-o=a*
 wallaby=SG.F eat.IPFV come.PFV-SEQ-3SG.F.SBJ=MED
 ‘after a while a wallaby came to eat’

- (13) *asyam=e unan te*
 tree_fruit=SG.N1 eat.IPFV come.PFV

mele-˘b'-a-s-o=a

touch.PFV-give.PFV-3SG.M.R-DS.SEQ-3SG.F.SBJ=MED
 ‘it came to eat tree fruit and touched him (the child)’

(14) *me-m-s-e=a*

cry.IPFV-INCH-DS.SEQ-3SG.M.SBJ=MED
 ‘he started crying’

(15) *gilan un-Ø-o-bu=a*

quickly go.PFV-REAL-3SG.F.SBJ-GPST=MED
 ‘after it had run away’

(16) *bi-n-o=a*

stay.IPFV-SEQ-3SG.F.SBJ=MED
 ‘it stayed’

(17) *eka imín te-n-o=a*

and again come.PFV-SEQ-3SG.F.SBJ=MED
 ‘then it came again’

(18) *mele-˘b'-a-s-o=a*

touch.PFV-give.PFV-3SG.M.R-DS.SEQ-3SG.F.SBJ=MED
 ‘it touched him’

(19) *gilan un-Ø-o-bu=a*

quickly go.PFV-REAL-3SG.F.SBJ-GPST=MED

bi-n-o=a

stay.IPFV-SEQ-3SG.F.SBJ=MED

(20) *eka imín te-n-o=a*

and again come.PFV-SEQ-3SG.F.SBJ=MED
 ‘after it had run away, it stayed (there), and it came again’

(21) *têm'-Ø-o=a=bo*

look.PFV-DS.SEQ-3SG.F.SBJ=MED=SURP
 ‘it looked and—hey!’

(22) *mēn eletā biaan-e=ta*

child 3SG.M.alone.EMPH stay.IPFV.SS.SIM-3SG.M.SBJ=MED

me-b-e=a=ba

ge-n-o=a

cry.IPFV-IPFV-3SG.M.SBJ=MED=EMPH say.PFV-SEQ-3SG.F.SBJ=MED
 ‘it thought “A child is there alone and he is crying?”’

- (29) *dob-ò-s-o=ta*
 3SG.M_CL.O-take.PFV-DS.SEQ-3SG.F.SBJ=MED

bl-Ø-ib-bio=ta
 stay.IPFV-IPFV-2/3PL.AN.SBJ-GPST=MED
 ‘she married him and they lived there’
- (30) *imak=e éil asyam=e tou-˘b’-e-nam*
 husband=SG.M pig tree_fruit=SG.N1 sit.PFV-give.PFV-PL.AN.R-PFV

on-s-e=to
 go.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘and the husband went away to sit down at a pig fruit tree (i.e. in order to ambush pigs)’
- (31) *alél ò-to awók=o*
 wife SG.F-EMPH mother=SG.F

om-ét-n-o=to
 3SG.F_CL.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED
 ‘the wife for her part took the mother’
- (32) *damib un-Ø-ib-bio=to*
 garden go.PFV-REAL-2/3PL.AN.SBJ-GPST=MED
 ‘they went to the garden’
- (33) *sók=o tle-b-o=ta*
 rain=N2 come.IPFV-DS.SIM-N2.SBJ=MED
 ‘after a while the rain was falling’
- (34) *te-n-ib=ta*
 come.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘they came’
- (35) *am yē tlaan-ib=ta*
 house to come.PFV.SS-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they arrived at home’
- (36) *ō heb yē daak=ta*
 3SG.F quickly there down=MED

eka úk tem-daak
 and fireplace into-down

áan *on-nab-o=to*
 lie.SG.SBJ go.PFV-DS.SEQ.SI-3SG.F.SBJ=MED
 ‘it (the wallaby) went down quickly and went to sleep down inside the
 fireplace and after a short time’

- (37) *o* *denâ-s-eb=to* *as=e*
 oh clear_off.PFV-DS.SEQ-2SG.SBJ=MED fire=SG.N1

fa-s-i=t=e
 make_fire-DS.SEQ-1SG.SBJ=MED=HORT

ge *baa=ta*
 say.PFV say.PFV=MED
 ‘she said, “Oh, you clear off, I want to make a fire first (and then
 you can...)”

- (38) *dli-`b'-o*
 push.PFV-give.PFV-3SG.F.R

om-biâ-n-ang-ge=ta
 3SG.F_CL.O-throw.PFV-REAL-IMMACC.SG.SBJ-say.PFV=MED
 ‘she was about to push it and throw it (out of the fireplace)’

- (39) *mukûng=e* *goi-`s'-o-s-o=ta*
 nose=SG.N1 smash.PFV-give.PFV-3SG.F.R-DS.SEQ-3SG.F.SBJ=MED
 ‘she smashed its nose’

- (40) *kaan-s-o=ta*
 die.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘it died’

- (41) *yóum=o* *om-ò-n-o=ta* *ge=ta*
 bark=N2 3SG.F_CL.O-take.PFV-SEQ-3SG.F.SBJ=MED roll.PFV=MED
 ‘she took a piece of bark and she rolled it up’

- (42) *ulam=yē* *om-fâ-s-o=to*
 corner=to 3SG.F_CL.O-put.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘put it into a corner’

- (43) *ilem=e* *dala-n-e=ta*
 blood=SG.N1 go_down-SEQ-3SG.N1.SBJ=MED
 ‘the blood ran off’

(44) *êi=wāt* *êi=wāt* *meta-n-e=ta*
 fill_up.PFV=across fill_up.PFV=across ascend-SS.SEQ-3SG.N1.SBJ=MED
 ‘it went across forming puddles and ascended (up into the bush)’

(45) *mín=e* *éil* *asyam=e* *toun-bi-Ø-e=o*
 son=SG.M pig fruit=SG.N1 sit.PFV-AUX.IPFV-3SG.M.SBJ=N2
 ‘where the son was sitting at the pig fruit tree’

(46) *êi* *dob-ba-s-e=ta*
 fill_up.PFV 3SG.M_CL.O-cover.PFV-DS.SEQ-3SG.N1.SBJ=MED
 ‘it (the blood) rose and covered him’

(47) *ae* *ōlo=le* *biém=o*
 yes DEM.PROX.N2=TOP mum=SG.F

u-nâ'-ût'-ne-s-ib=to
 3SG.F.O-kill.PFV-give.PFV-1SG.R-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘“Yes, this means (lit. as for this) they killed my mum’

(48) *ilem=e* *te=ta*
 blood=SG.N1 come.PFV=MED

na-˘t'-ne-n-e=be
 make-give.PFV-1SG.R-REAL-3SG.N1.SBJ=DECL

ge *baa-n-e=ta*
 say.PFV say.PFV-SEQ-3SG.M.SBJ=MED
 ‘her blood came and did (this) to me,’ he said’

(49) *te* *têm'-Ø-e=ta*
 come.PFV look.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘he came and looked’

(50) *báin* *u-nâ'-n-o=a*
 true 3SG.F.O-kill.PFV-SEQ-3SG.F.SBJ=MED

om-fuba-Ø-o-bio *kesoa*
 3SG.F_CL.O-put.PFV-REAL-3SG.F.SBJ-GPST because
 ‘true, because she killed it and put it (there), ...

(51) *te-n-e=a* *tà-n-e=a*
 come.PFV-SEQ-3SG.M.SBJ=MED sideways-SEQ-3SG.M.SBJ=MED

têm'-s-e=a
 look.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘he came, he went inside (the house), he looked’

- (52) *baa-n-o=o=le* *damib* *un-Ø-ob-bu=o*
 say.PFV-SEQ-3SG.F.SBJ=N2=TOP garden go.PFV-REAL-1PL.SBJ-GPST=N2
 ‘and she said, “After we had gone into the garden’

- (53) *sók* *y-e-b-o=o* *bi-n-ob=o*
 rain.N2 PL.AN.O-hit.IPFV-IPFV-N2.SBJ=N2 stay.IPFV-REAL-1PL.SBJ=N2

te-n-ob=o

come.PFV-REAL-1PL.SBJ=ADV

‘it was raining on us (lit. the rain was hitting us), we stayed and came (back)’

- (54) *úk* *tem-daak* *áan-bi-Ø-o=a*
 fireplace inside-down lie.SG.SBJ-AUX.IPFV-DS.SIM-3SG.F.SBJ=MED
 ‘it was sleeping down inside the fireplace’

- (55) *denâ-s-eb=ta* *as=o*
 clear_off.PFV-DS.SEQ-2SG.SBJ=MED fire=N2

fa-n-ang-ge

make_fire.PFV-REAL-IMMACC.SG.SBJ-say.PFV

baa-n-ang-ge-n-i=o

say.PFV-REAL-IMMACC.SG.SBJ-say.PFV-REAL-1SG.SBJ=N2

‘when I was about to say, “You clear off, I am about to make fire”

- (56) *mukùng=e* *goi-ʼsʼ-o-s-i=a*
 nose=SG.N1 smash.PFV-give.PFV-3SG.F.R-DS.SEQ-1SG.SBJ=MED
 ‘I smashed her nose’

- (57) *kaan-s-o=a*
 die.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘it died’

- (58) *ēle* *om-fâ-Ø-i-bio=bo* *ge*
 here 3SG.F_CL.O-put.PFV-REAL-1SG.SBJ-GPST=QUOT say.PFV

baa-s-o=a

say.PFV-DS.SEQ-3SG.F.SBJ=MED

‘and I put it here’, she said’

- (59) *me-we-bi-n-e=to*
 cry.IPFV-3SG.F.R-AUX.IPFV-SEQ-3SG.M.SBJ=MED
 ‘he was crying for her’

- (60) *om-êb* *tà-n-e=ta* *dabáal=e*
 3SG.F_CL.O-take.PFV inside-SS.SEQ-3SG.M.SBJ=MED ground=SG.N1

haka *dam* *om-bù-Ø-e-bio=ta*
 break.IPFV body 3SG.F_CL.O-bury-REAL-3SG.M.SBJ-GPST=MED
 ‘he carried her into the bush, dug a hole (lit. broke the ground) and buried her body’
- (61) *niniktól=e* *ba-biaan-e=ta*
 vine_species=SG.N1 grow-AUX.IPFV.SS.SIM-3SG.N1.SBJ=MED
 ‘later a Niniktol vine was growing’
- (62) *gabaamón* *tem* *te* *ba-biaan-e-ta*
 skull in come.PFV grow-AUX.IPFV.SS.SIM-3SG.N1.SBJ=MED

ute-s-e=ta
 come_up-DS.SEQ-3SG.N1.SBJ=MED
 ‘it was growing inside the skull and came up’
- (63) *ke-ha-b-e=a*
 clean-3SG.N1.R-DS.SIM-3SG.M.SBJ=MED

kimâa’-bi-Ø-e *bita*
 care_for.PFV-AUX.IPFV-IPFV-3SG.M.SBJ until
 ‘he was cleaning (it) and looking after it until’
- (64) *bali-s-e=to*
 bear_fruit-DS.SEQ-3SG.M.SBJ=MED
 ‘it bore fruit’
- (65) *mak=e* *yam-an-e=e* *walò=ta*
 one=SG.N1 ripe-VBLZ-3SG.N1.SBJ=SG.N1 cut_off.PFV.SG.O=MED
 ‘he cut one off, which got ripe’
- (66) *fu* *dowôn’* *têm’-Ø-e=a=bo*
 cook eat.PFV look.PFV-REAL-3SG.M.SBJ=MED=SURP

klayâm-an-Ø-e *kesoa*
 very_good-VBLZ-DS.SEQ-3SG.N1.SBJ because
 ‘he cooked and eat it and checked it out, wow!, because it was very good’
- (67) *dei-`b’-a-Ø-e-bio=ta*
 leave.PFV-give.PFV-3SG.N1.R-DS.SEQ-3SG.M.SBJ-GPST=MED

wà-n-ib=ta
 cut.PFV.SG.O-SEQ-2/3PL.AN.SBJ=MED
 ‘he left it [the vine], and later they picked (fruits)’

- (68) *fú unan-biaana-b-io=be*
 cook eat.IPFV-AUX.HAB.PST-IPFV-2/3PL.AN.SBJ=DECL
 ‘they used to cook and eat (them) until now (i.e. they still cook and eat them).’

- (69) *nē wengsâng=o baa yō-ta=be*
 my story=N2 say.PFV that-EMPH=DECL
 ‘That is my story.’

2. Danenok and his brother

(Author: Asuneng Amit, recorded June 10, 2004)

- (1) *fanin-wal=i wengsâng*
 ancestor-PL-PL.AN story

baa-n-ang-ge-n-i=ta=be
 tell.PFV-REAL-IMMAC.SG.SBJ-say.PFV-SS.SEQ-1SG.SBJ=MED=DECL
 ‘I am about to tell an ancestor story.’

- (2) *Danenok dab-wal=i wengsâng=o=be*
 PN same_sex_siblings(dyad)-PL=PL.AN story=PRD=DECL
 ‘The story of Danenok and his brother.’

baa-n-ang-ge-n-i=ta=be
 tell.PFV-REAL-IMMAC.SG.SBJ-say.PFV-SS.SEQ-1SG.SBJ=MED=DECL
 ‘I want to tell (it).’

- (3) *Danenok dab-wal=i gīmon=o*
 PN same_sex_siblings(dyad)-PL=PL.AN spine=PL.N1

om-êb
 3SG.F_CL.O-take.PFV

te te-na-biaan-ib-a
 come.PFV come.PFV-do-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘While Danenok and his brother were sitting with their spines touching

- (4) *geim=e daba monsa-n-ib=a*
 pronged_arrow=SG.N1 make_arrow go_on.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘they were making arrow(s)’

- (5) *gīmon=o* *yē*
 spine=PL.N1 there
- tob-onki-`b'-e-n-o*
 3SG.LONG.O-attach.PFV-give.PFV-PL.AN.R-REAL-3PL.N1.SBJ
- bina-b-o-bio=ta=be*
 stay.HAB-IPFV-EXPL.SBJ-GPST=MED=DECL
 ‘their spines attached (to each other) and stayed like that for a long time’
- (6) *delâ-Ø-om-ge-n-ib=a*
 break_apart.PFV-IMMAC.PL.SBJ-say.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘they wanted to break apart’
- (7) *sita-bi-n-ib=a*
 jiggle-AUX.IPFV-SEQ-2/3PL.AN.SBJ=MED
 ‘they were jiggling’
- (8) *dab* *yē*
 same_sex_siblings(dyad) there
- temdei-`b'-o-Ø-ib-bu=a*
 leave.PFV-give.PFV-N2.R-2/3PL.AN.SBJ-GPST=MED
 ‘after the brothers had left it (as it was)’
- (9) *mak=e* *alukâm*
 one=SG.M toilet
- un-Ø-ang-ga-m-e=o*
 go.PFV-REAL-IMMAC.SG.SBJ-say.IPfV-INCH-3SG.M.SBJ=N2
 ‘when one (of them) wanted to go to the toilet’
- (10) *mak=e* *skil=a* *kwéil=a=o*
 other=SG.M foot=and hand=and=PL.N1
- gobtôu-s-e=a*
 pull_together.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘the other pulled together feet and hands’
- (11) *tâ-n-ib=a*
 sideways-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they went sideways (i.e. inside the toilet)’
- (12) *faa-n-e=a* *tām*
 excrete-SEQ-3SG.M.SBJ=MED sideways

tl-aa-ib=o=le

come.PFV-COND-2/3PL.AN.SBJ=N2=TOP
‘he shat and they came back outside’

- (13) *mak ē=sna alukâm un-Ø-i=bo*
other SG.M=too toilet go.PFV-REAL-1SG.SBJ=QUOT

ge ge-n-ang-ga-m-e=o
say.PFV say.PFV-AUX.PFV-IMMAC.SG.SBJ-say.IPFV-INCH-3SG.M.SBJ=N2
‘and when the other one wanted to go to the toilet’

- (14) *mak=e skil=a kwéil=a=o*
other=SG.M foot=and hand=and=PL.N1

gobtôu-s-e=a
pull_together.PFV-DS.SEQ-3SG.M.SBJ=MED
‘the other (i.e. the first one) pulled together feet and hands’

- (15) *tà-n-ib=a*
sideways-SS.SEQ-2/3PL.AN.SBJ=MED
‘they went sideways (i.e. inside the toilet)’

- (16) *faa tām tà-n-e=o=le*
defecate sideways sideways-SS.SEQ-3SG.M.SBJ=N2=TOP

faa-n-e-a
defecate-SEQ-3SG.M.SBJ=MED

tām tl-aa-ib=o=le
sideways come.PFV-COND-2/3PL.AN.SBJ=MED=TOP
‘he shat and he came outside, he shat and they came outside’

- (17) *inà’-bina-b-ib-bio=to*
make_thus-AUX.HAB-IPFV-2/3PL.AN.SBJ-GPST=MED
‘they used to do thus’

- (18) *mak=e damib un-aamab-i=bo*
one=SG.M garden go.PFV-IRR.NANPL.SBJ-1SG.SBJ=QUOT

ge-n-em-e=o
say.PFV-AUX.PFV-COND-3SG.M.SBJ=N2
‘and if one said “I want to go to the garden” ’

- (19) *mak=e skil=a kwéil=a=o*
other=SG.M foot=and hand=and=PL.N1

gobtôu-s-e=a
 pull_together.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘the other pulled together feet and hands’

- (20) *un-Ø-ib-bu=a* *okok* *ke-m*
 go.pfv-REAL-2/3PL.AN.SBJ-GPST=MED work(TP) make-IPFV

hâa'-bi
 roam.IPFV-AUX.IPFV
 ‘after they had gone they were roaming (the bush) to do work’

- (21) [*inaudible...*] *dikin* *hâa'-bi*
 do_garden_work roam.IPFV-AUX.IPFV

tl-aa-ib=o=le
 come.PFV-COND-2/3PL.AN.SBJ=N2=TOP
 ‘[...] and when they were roaming (the bush) to do garden work and came back’

- (22) *eka* *mak* *ē=sa*
 and other SG.M=too
 ‘and the other too’

- (23) *eka* *nē=sa* *un-aamab-i=bo*
 and 1SG=too go.PFV-IRR.NANPL.SBJ-1SG.SBJ=QUOT

ge-n-em-e=o
 say.PFV-AUX.PFV-COND-3SG.M.SBJ=N2
 ‘and if the other wanted to go to the garden’

- (24) *mak=e* *skil=a* *kwéil=a=o*
 other=SG.M foot=and hand=and=PL.N1

gobtôu-s-e=a
 pull_together.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘the other pulled together feet and hands’

- (25) *un-Ø-ib-bu=a* *dikin*
 go.PFV-REAL-2/3PL.AN.SBJ-GPST=MED do_garden_work

hâa'-bi *tl-aa-ib=o=le*
 roam.IPFV-AUX.IPFV come.PFV-COND-2/3PL.AN.SBJ=N2=TOP
 ‘after they had gone, they were roaming (the bush) to do garden work and came back’

- (26) *inà'-bina-b-ib-bio=to*
 make_thus-AUX.HAB-IPFV-2/3PL.AN.SBJ-GPST=MED
 'they used to do thus'
- (27) *Fu-taman mín=e éil=i bu-m*
 PN-valley son=SG.M pig=PL.AN hunt-IPFV

be-b-e=to
 walk-IPFV-DS.SIM-3SG.M.SBJ=MED
 'a man from the Fu valley went pig hunting'
- (28) *Danenok dab-wal ĩ-ta mak=o*
 PN same_sex_siblings(dyad)-PL PL.AN-EMPH one-SG.F

bina-Ø-ib=ta
 shoot.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
 'Danenok and his brother shot one (pig)'
- (29) *te-n-o=ta*
 come.PFV-SEQ-3SG.F.SBJ=MED
 'it came'
- (30) *Futaman mín=e su yē kaan-s-o=ta*
 PN_valley son=SG.M near there die.PFV-DS.SEQ-3SG.F.SBJ=MED
 'it died near the man from the Fu valley'
- (31) *tēm'-e=a=bo*
 look.PFV-DS.SEQ-3SG.M.SBJ=MED=QUOT
 'he looked and wow!'
- (32) *Anafū=o ambat kímkim fu ō-ta*
 Anafu_arrow=N2 tree_sp root arrow_type N2-EMPH

kesoa
 because
 'since it was an Anafu arrow, an arrow from the root of the ambat tree'
- (33) *met-n-e=a*
 upriver-SS.SEQ-3SG.M.SBJ=MED

om-ei-ŝ'-e-n-e=a
 N2.O-take.PFV-give.PFV-PL.AN.R-3SG.M.SBJ=MED

ayók=o *om-fâ-n-e=a*
 secretly=N2 N2.O-put.PFV-SEQ-3SG.M.SBJ=MED
 ‘he went upriver (i.e. towards the dead pig), took the arrow from them
 (Danenok dabwal), hid it’

- (34) *mâa'-biaan-e=a*
 stand.PFV-AUX.IPFV.SS.SIM-3SG.M.SBJ=MED
 ‘he was standing (there)’

- (35) *éil=o* *kimâa'-bi-Ø-e=a*
 pig=SG.F look_after.PFV-AUX.IPFV-DS.SIM-3SG.M.SBJ=MED

temê'-b-e=to
 look.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘he was guarding the pig and looked’

- (36) *naka=i* *wan-tā* *tl-aa-ib=e*
 man-PL.AN who-PL.AN.EMPH come.PFV-DEONT-2/3PL.AN.SBJ=CQ

ga-b-e=ta
 say.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘and was thinking who should come’

- (37) *têm'-Ø-e=ta*
 look.PFV-DS.SIM-3SG.M.SBJ=MED
 ‘he looked’

- (38) *Danenok* *dab-wal* *t̄-ta*
 PN same_sex_siblings(dyad) PL.AN-EMPH
 ‘Danenok and his brother, they’

- (39) *mak=e* *dáangon* *tām=e*
 other=SG.M spine sideways=SG.N1

klafâ-Ø-e-bu=a
 carry_on_back-REAL-3SG.M.SBJ-GPST=MED
 ‘one carried (the other) on his back’

- (40) *mak* *ē-ta* *te-biaan-e=a*
 one SG.M-EMPH come.IPFV-AUX.IPFV.SS.SIM-3SG.M.SBJ=MED

éil=o *kan* *te-b-e* *kesoa*
 pig=SG.F follow come.IPFV-IPFV-3SG.M.SBJ because
 ‘the other was coming following the pig so’

om-êb=ta
3SG.F_CL.O-take.PFV=MED

un-Ø-om-ge-n-ob=ta=bo
go.PFV-REAL-IMMAC.AN.PL.SBJ-say.PFV-SEQ-1PL.SBJ-MED=QUOT
‘“we have followed it and as it had died, we want to take it and go”’

- (50) *ge* *baa-s-ib=ta*
say.PFV say.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
‘they said’
- (51) *kōbo* *tl-Ø-eb=o*
2SG.M come.PFV-REAL-2SG.SBJ=HORT
‘“You, come!”’
- (52) *éil=o* *om-êb* *tâ-n-ob=o*
pig=SG.F 3SG.F_CL.O-take.PFV inside-REAL-1PL.SBJ=HORT
‘We must take the pig and go into the bush’
- (53) *ga* *dowôn’-Ø-ob=te*
cook_in_leafoven eat.PFV-DS.SEQ-1PL.SBJ=MED=HORT
‘cook it in a leaf oven and eat (it)’
- (54) *ge* *baa-˘b’-a-s-ib=a*
say.PFV say.PFV-give.PFV-3SG.M.R-DS.SEQ-2/3PL.AN.SBJ=MED
‘they said to him’
- (55) *ae* *ge-n-e=a*
yes say.PFV-SEQ-3SG.M.SBJ=MED
- tām* *te-n-e=to*
sideways come.PFV-SEQ-3SG.M.SBJ=MED
‘he said “Yes” and approached them’
- (56) *dab-wal* *om-êt-n-ib=ta*
same_sex_sibl(dyad)-PL 3SG.F_CL.O-take.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
- un-om* *tâ-n-ib=ta*
go.PFV-? sideways-SS.SEQ-2/3PL.AN.SBJ=MED
‘Danenok and his brother took it and went’
- (57) *smē=tām* *om-fâ-n-ib=to*
cave=sideways 3SG.F_CL.O-put.PFV-SEQ-2/3PL.AN.SBJ=MED
‘near a hole in a stone they put it down’

(58) *baa-ʼbʼ-a-n-ib=a*

say.PFV-give.PFV-3SG.M.R-SEQ-2/3PL.AN.SBJ=MED

kōbo *as=o* *wel-éb*
 2SG.M firewood=N2 cut_off.PFV.PL.O-take.PFV

te *haka-b-eb=t=e*
 come.PFV break.IPFV-DS.SIM-2SG.SBJ=MED=HORT

ge *baa-ʼbʼ-a-n-ib=a*
 say.PFV say.PFV-give.PFV-3SG.M.R-SEQ-2/3PL.AN.SBJ=MED
 ‘they said to him, “You cut firewood bring it (here) and chop it (while we ...)!”, they said to him’

(59) *Danenok*

PN

dab-wal

same_sex_siblings(dyad)

ī=le

PL.AN=TOP

un-Ø-ib-bu=a

go.PFV-REAL-2/3PL.AN.SBJ-GPST=MED

‘Danenok and his brother, for their part, they went’

(60) *imen=o*

taro=PL.N1

ulelò-n-ib=a

pull_out.PFV-SEQ-2/3PL.AN.SBJ=MED

‘they pulled out taro tubers’

(61) *īk=o*

leaf=N1.PL

dei

pluck

ba-na-n-ib=a

put_into.PFV-do-SEQ-2/3PL.AN.SBJ=MED

‘they plucked leaves and put (them) into bags too’

(62) *ol-ét-n-ib=a*

3PL.RESID.O-take.PFV-SS-SEQ-2/3PL.AN.SBJ=MED

‘they took everything’

(63) *glaglā-tem-daak*

between-into-down

‘down between’

(64) *imen=e*

taro=SG.N1

mén=e

string_bag=SG.N1

yē

there

daak

down

gol-ba-na-n-ib=a

3SG.BUNDLE.O-put_into.PFV-do-SEQ-2/3PL.AN.SBJ=MED

īk

leaf

ē=sa

SG.N1=too

glaglā-tem-daak

between-into-down

- (73) *ol-éb* *ut=o* *besal=dim* *yē*
 PL.RESID.O-take.PFV up=N2 hook=on there
- ol-â-n-ib=to*
 3PL.RESID.O-put.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘they take everything and put it up on a hook’
- (74) *Futaman* *mín=e* *am=o* *fâb*
 PN_valley son=SG.M house=N2 which
- âa* *un-omab-bio=ne*
 lie.SG.SBJ go.PFV-IRR.AN.PL.SBJ-1PL.SBJ=CQ
- ga-b-e=to*
 say.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘the man from the Fu valley thought, “In which house are we going to sleep?”’
- (75) *î* *dab=o* *fukêt=e*
 3PL.AN.POSS same_sex_siblings(dyad)=COLL smoking_gourd=SG.N1
- ob-ò-n-ib=a*
 3SG.RESID.O-take.PFV-SEQ-2/3PL.AN.SBJ=MED
 ‘the brothers took a smoking gourd’
- (76) *tóm=e* *fuó* *fuó* *ga-b-ib=a*
 stone=SG.N1 blow blow say.IPFV-DS.SIM-2/3PL.AN.SBJ=MED
- ya-temê’-b-e=a*
 PL.AN.O-look_at.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘he watched them blowing (at) the stone’
- (77) *tóm=e* *belâ-s-e=a*
 stone=SG.N1 break.PFV-DS.SEQ-3SG.N1.SBJ=MED
 ‘the stone opened’
- (78) *dab-wal* *tâ-n-ib=ta*
 same_sex_siblings(dyad)-PL sideways-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘the brothers went inside’
- (79) *bín=tām* *yē*
 floor=inside there
- Futaman* *mín=e* *têm’-Ø-e=ta*
 PN_valley son=SG.M see.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘inside the man from the Fu valley saw’

- (80) *koból dīm=a éil dīm ō-ta bin=tām=o*
 cassowary feather=and pig fur PL.N1-EMPH floor=inside=N2

ngana-Ø-ib-bio kesoa
 spread_out-REAL-2/3PL.AN.SBJ-GPST because
 ‘(that) they had spread out cassowary feathers and pig fur on the floor, so’

- (81) *yē áan-biaan-ib=to*
 there lie.SG.SBJ-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘while they were sleeping there’

- (82) *Futaman mín=e*
 PN_valley son=SG.M
 ‘the man from the Fu valley’

- (83) *al=o méb tl-ûb'-a-s-o=to*
 faeces=N2 close come.PFV-give.PFV-3SG.M.R-DS.SEQ-N2.SBJ=MED
 ‘his faeces were close to come’

- (84) *koból dīm=o slelêb=met slelêb=tab*
 cassowary feather=N2 push=up push=down

ke-n-e=to
 do-SEQ-3SG.M.SBJ=MED
 ‘he pushed the cassowary feathers aside’

- (85) *daak-n-e=ta yē idàak*
 down-SS.SEQ-3SG.M.SBJ=MED there down_there

faa-`b'-e-n-e=to
 defecate-give.PFV-PL.AN.R-SEQ-3SG.M.SBJ=MED
 ‘he descended and shat down there on them (i.e. in their cave)’

- (86) *imín ge tibo-n-e=ta*
 again fasten.PFV hide-SEQ-3SG.M.SBJ=MED

áan-bi-Ø-e=to
 lie.SG.SBJ-AUX.IPFV-DS.SEQ-3SG.M.SBJ=MED
 ‘he hid the shit by closing the feathers again and he slept’

- (87) *Danenok dab-wal-i*
 PN same_sex_siblings(dyad)-PL=PL.AN

kun-ûb'-e-s-o=to
 smell-give.PFV-PL.AN.R-DS.SEQ-N2.SBJ=MED
 ‘Danenok and his brother smelled it (lit. it smelled on them)’

- (93) *heb* *ke-n-al=e*
quickly do-REAL-2SG.HORT.SBJ=HORT

i-nâ'-n-amab-e-ble
PL.AN.O-kill.PFV-AUX.PFV-IRR.NANPL.SBJ-3SG.M.SBJ=EXCLAM

heb *ke-n-al=e*
quickly do-REAL-2SG.HORT.SBJ=HORT
' "Hurry up, he's going to kill us, hurry up" '

- (94) *heb* *yē* *fukêt=e*
quickly there smoking_gourd=SG.N1

ob-ò-n-eb=o
3SG.RESID.O-take.PFV-REAL-2SG.SBJ=HORT

tóm=e *tóm=e* *fu* *walâa'-m-al=e*
stone-SG.N1 stone=SG.N1 blow open.IPFV-2SG.HORT.SBJ=HORT
'take the smoking gourd quickly and begin blowing (on) the stone, open (it)'

- (95) *heb* *ke-n-al=e*
quickly do-REAL-2SG.HORT.SBJ=HORT

heb *ke-n-al=e*
quickly do-REAL-2SG.HORT.SBJ=HORT

ge=ta *ngaan-b-e=to*
say.PFV=MED call_out.IPFV-DS.SIM-3SG.M.SBJ=MED
' "Hurry up, hurry up" he was shouting '

- (96) *mak=e* *fukêt=e*
other=SG.M smoking_gourd=SG.N1

ob-ò-n-e=ta
3SG.RESID.O-take.PFV-SEQ-3SG.M.SBJ=MED
'the other took the smoking gourd'

- (97) *fuo* *fuo* *ga* *[inaudible...]*
blow blow say.IPFV

tóm=e *belâ-s-e=ta*
stone=SG.N1 open.PFV-DS.SEQ-3SG.N1.SBJ=MED
'he blew [...] and the stone opened'

(98) *mín* *yē* *fiou* *fiou* *ga-b-e=to*
 son there thwack thwack say.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘while the man was going thwack, thwack’

(99) *tà-n-ib=ta* *bib=tām* *yē*
 outside-SEQ-2/3PL.AN.SBJ=MED village=outside there

delâ-na-n-ib=ta
 break_apart.PFV-do-SEQ-2/3PL.AN.SBJ=MED
 ‘they went outside, outside they broke apart’

(100) *mak=e* *yē* *un-Ø-e*
 other=SG.M there go.PFV-REAL-3SG.M.SBJ

mak=e *yē* *on-na-n-ib=ta*
 other=SG.M there go.PFV-do-SEQ-2/3PL.AN.SBJ=MED
 ‘one went here, the other there’

(101) *eka* *Futaman* *mín=e*
 and PN_valley son=SG.M

gigi *a-b-o=ta*
 run 3SG.M.O.hit.IPFV-DS.SIM-EXPL.SBJ=MED
 ‘the man from the Fu river valley ran was running away’

(102) [*inaudible...*] *sesá=wāt* *be-b-e=to*
 bush=across walk.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘he was running across to the bush’

(103) *Danenok* *dab-wal=i*
 PN same_sex_siblings(dyad)-PL=PL.AN

ngaan-ha-biaan-ib=a
 call_out.IPFV-3SG.M.R-AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED

klayâm-an-Ø-o=bo
 very_good-VBLZ-REAL-N2.SBJ=EMPH
 ‘Danenok and his brother were shouting to him, “It’s all good!”’

(104) *tl-Ø-eb-bu=o*
 come.PFV-REAL-2SG.SBJ-GPST=N2
 ‘when you had come’

(105) *te-n-ob-a* *áan* *monsa-n-ob=o*
 come.PFV-SEQ-1PL.SBJ=MED lie.SG.SBJ go_on.PFV-SEQ-1PL.SBJ=N2
 ‘when we came and were sleeping’

- (106) *yōle inà'-n-ob=o*
 well do_thus-SEQ-1PL.SBJ=N2
ke-nâ'-Ø-om-gena-m-s-ob=o
 2SG.O-kill.PFV-REAL-IMMACT.PL.AN.say.IPFV-INCH-DS.SEQ-1PL.SBJ=MED
 'when we did this, we were about to kill you'
- (107) *yōle y-e-m te-biaan-eb=a*
 well PL.AN.O-hit.IPFV-IPFV come.IPFV-AUX.IPFV.SS.SIM-2SG.SBJ=MED
delâ-ûb-e-n-ebo=ble
 break_apart.PFV-give.PFV-PL.AN.R-REAL-2SG.SBJ=EXCLAM
 'you were coming to hit us hitting us and you broke us apart!'
- (108) *glaglâ-daak=o bina-biaam bi*
 between-down=N2 shoot.PFV-AUX.IPFV.SS.SIM stay.IPFV
delâ-ûb-e-Ø-ebo=ble
 break_apart.PFV-give.PFV-PL.AN.R-REAL-2SG.SBJ=EXCLAM
dê' te-l=e
 stop.PFV come.PFV-2SG.HORT.SBJ=HORT
 'hitting between (us) you separated us! Come back!'
- (109) *klayâm=o*
 very_good=PRD
 'it's very good'
- (110) *dê' te-l=e*
 stop.PFV come.PFV-2SG.HORT.SBJ=HORT
ngaana-b-ib=a
 call_out-DS.SIM-2/3PL.AN.SBJ=MED
 'come back!'", they shouted'
- (111) *Futaman min=e al*
 PN_valley son=SG.M faeces
tliâ-ûb'-a-n-o kesoa
 chew.PFV-give.PFV-3SG.M.R-REAL-N2.SBJ because
 '(but) as the man from the Fu valley was very angry'
- (112) *temdei-`b'-e-n-e=a*
 leave.PFV-give.PFV-PL.AN.R-SEQ-3SG.M.SBJ=MED

mo-n-e=a
go.PFV-SEQ-3SG.M.SBJ=MED

[*Anafû=o om-fâ-Ø-e-su=o*]
Anafu_arrow=N2 3SG.F_CL.O-put.PFV-REAL-3SG.M.SBJ-HPST=N2

tām=ta om-êt-n-e-a
inside=MED 3SG.F_CL.O-take.PFV-SS-SEQ-3SG.M.SBJ=MED

te-n-e=ta
come.PFV-SEQ-3SG.M.SBJ=MED
'he left them and went, went inside (the bush) and picked up the Anafu arrow, which he put there yesterday, and brought it back, and then ...'

- (113) *bib=le tl-Ø-e-bio=ta*
village=TOP come.PFV-REAL-3SG.M.SBJ-GPST=MED
'after he had come back to his village'

- (114) *Anafû=o ambat kîmkim fu=o*
Anafu_arrow=N2 tree_sp root arrow_type=N2

deba-biaan=ta
produce-AUX.IPFV.SS.SIM=MED

wa-bina-b-ib-bio=ta
make_carvings-AUX.HAB-IPFV-2/3PL.AN.SBJ-GPST=MED
'they used to produce Anafu arrows, arrows from the root of the ambat tree and adorn them with carvings'

- (115) *yōle nī=sna mak=o*
well 1PL.EXCL=too some=N2

ou-˘b'-e-Ø-ib-bio=ta
make_arrow-give.PFV-PL.AN.R-REAL-2/3PL.AN.SBJ-GPST=MED

tebel-êb hâa'-bi-n-ob-o=be
PL.LONG.O-take.PFV roam-AUX.IPFV-REAL-1PL.SBJ=DECL
'well they made some for us too and we have been them when roaming the bush.'

3. Rolling smokes

(Author: Kasening Milimab, recorded March 2, 2004)

- (1) *nē* *memâlo* *fût=e*
1SG now tobacco=SG.N1
- tob-ò-n-i=a*
3SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED
'Now I take the tobacco'
- (2) *futâan=o* *om-ò-na-n-i=a*
tobacco_leaf=N2 3SG.F_CL.O-take.PFV-DO-SS.SEQ-1SG.SBJ=MED
'I also take the cigarette leaf'
- (3) *gíng=e* *tob-tlâa'-n-i=a*
midrib=SG.N1 3SG.LONG.O-remove.PFV-SS.SEQ-1SG.SBJ=MED
'I remove the midrib (of the tobacco leaf)'
- (4) *tob-kimà-Ø-i=a*
3SG.LONG.O-put_in_fire.PFV-DS.SEQ-1SG.SBJ=MED
- háang-an-s-e=a*
dry-VBLZ-DS.SEQ-3SG.M.SBJ=MED
'I put it in the fire until it gets dry'
- (5) *hà-n-i=a*
break.PFV-SS.SEQ-1SG.SBJ=MED
'I break (it)'
- (6) *fût=e* *ge-n-an=o*
cigarette=SG.N1 roll.PFV-REAL-1SG.HORT=HORT
- ge-n-i=a*
say.PFV-SS.SEQ-1SG.SBJ=MED
'I think I should roll a cigarette'
- (7) *fût=e* *gíng=e*
tobacco=SG.N1 midrib=SG.N1
- tob-tlâa'-n-ang-gena-b-i=be*
3SG.LONG.O-remove.PFV-AUX.PFV-IMMACT.SG.SBJ-say.IPFV-IPFV-
1SG.SBJ=DECL
'I am about to remove the midrib of the tobacco leaf.'

- (8) *ōlo* *yē*
now there

tob-kimà-n-amab-i=be

3SG.LONG.O-put_in_fire.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
'Now I will put it in the fire.'

- (9) *tob-kimà-Ø-i-o=be*
3SG.LONG.O-put_in_fire.PFV-1SG.SBJ-EP=DECL
'I have put it in the fire.'

- (10) *ōlo* *yē* *tob-kimà-Ø-i-bu=a*
now there 3SG.LONG.O-put_in_fire.PFV-REAL-1SG.SBJ-GPST=MED

milimsîn=e *háang-an-Ø-e* *kesoa*
other_side=SG.N1 dry-VBLZ-REAL-3SG.M.SBJ because
'Now, after I put it in the fire, because the other side got dry'

- (11) *tob-ski-n-amab-i=be*
3SG.LONG.O-turn-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
'I will turn it.'

- (12) *ē* *háang-an-Ø-e* *kesoa*
3SG.N1 dry-VBLZ-REAL-3SG.M.SBJ because
'As it got dry'

- (13) *tob-ò-n-i=a* *yē* *hà'*
3SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED there break.PFV

ge-n-amab-i=be
roll.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL
'I will take it and break and roll (it).'

- (14) *ōlo* *yē* *tob-ò-n-i=a*
now there 3SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED
'Now I take it'

- (15) *haka-l-i=be*
break.IPFV-IPFV-1SG.SBJ=DECL
'I am breaking (it)'

- (16) *hà-n-i=a*
break.PFV-SS.SEQ-1SG.SBJ=MED
'I have broken (it)'

- (17) *futaân* *tem-daak=e* *yē*
cigarette_leaf in-down=SG.N1 there

tòu-m-i=be
set_down.IPFV-INCH-1SG.SBJ=DECL
'I start to put (it) down into the cigarette leaf.'
- (18) *yē* *hà-n-i=a*
there break.PFV-SS.SEQ-1SG.SBJ=MED
'I have broken (it)'
- (19) *yē* *ge-n-ang-gena-m-i=be*
there say.PFV-REAL-IMMACT.SG.SBJ-say.IPFV-INCH-1SG.SBJ=DECL
'I am about to start rolling.'
- (20) *yē* *gena-l-i=be*
there roll.IPFV-IPFV-1SG.SBJ=DECL
'I am rolling.'
- (21) *ōlo* *yē* *hà-n-i=a*
now there break.PFV-SS.SEQ-1SG.SBJ=MED
'Now I have broken (it)'
- (22) *yē* *gen-b-i=be*
there roll.IPFV-IPFV-1SG.SBJ=DECL
'I am rolling.'
- (23) *yē* *gena-m* *be-b-i=be*
there roll.IPFV-IPFV keep.IPFV-IPFV-1SG.SBJ=DECL
'I keep rolling.'
- (24) *yē* *gena-m* *be-b-i=be*
there roll.IPFV-IPFV keep.IPFV-IPFV-1SG.SBJ=DECL
'I keep rolling.'
- (25) *yē* *gena-m* *be-b-i=be*
there roll.IPFV-IPFV keep.IPFV-IPFV-1SG.SBJ=DECL
'I keep rolling.'
- (26) *smā* *yē* *gen-b-i=be*
still there roll.IPFV-IPFV-1SG.SBJ=DECL
'I am still rolling.'
- (27) *smā* *yē* *gen-b-i=be*
still there roll.IPFV-IPFV-1SG.SBJ=DECL
'I am still rolling.'

Appendix II

Mian-English wordlist

This Mian-English wordlist comprises approximately 1950 entries. It is based on my own fieldwork and has been complemented with Smith and Weston (n.d.-b), which is their dictionary of the Mian language. I have carefully checked the material from Smith and Weston with one speaker and added tonal and grammatical information.

An entry consists of underlying tone specification, word class, meaning, and gender for nouns or stem aspect for verbs. Clitics and derivational suffixes are also listed.

If the lexical entry consists of two words the tonal specifications are given for each one, separated by “/”. The tonal specification ‘LH(redup)’ means that the first part of the word has low tone and that the reduplicant has high tone. ‘Toneless’ means that an item is not lexically specified for tone.

A noun marked as (PL) has plural as an inherent meaning. Any specification that is doubtful at this stage is preceded by a question mark. Any specification that is unknown has a question mark in its place.

The following abbreviations are used:

<i>adj.</i>	Adjective
<i>adv.</i>	Adverb
<i>art.</i>	Article
<i>cl.</i>	Clitic
<i>conj.</i>	Conjunction
<i>dir.</i>	Directional
EMPH	Emphatic
F	Feminine
<i>fig.</i>	figurative
<i>id.</i>	Ideophone
<i>interj.</i>	Interjection
IPFV	Imperfective
<i>joc.</i>	jocular
M	Masculine
<i>mod.</i>	Prenominal modifier
<i>n.</i>	Noun
N1	Neuter 1
N2	Neuter 2
<i>num.</i>	Numeral
PFV	Perfective
PL	Plural
<i>pn.</i>	Proper name
<i>pron.</i>	Pronoun

<i>quant.</i>	Quantifier
SG	Singular
<i>suf.</i>	Suffix
<i>svc/intr.</i>	Intransitive SVC
<i>svc/tr.</i>	Transitive SVC
(TP)	Tok Pisin loan
TRANS-ASP	Trans-apectual
<i>v/ambitr.</i>	Ambitransitive verb
<i>v/ditr.</i>	Ditransitive verb
<i>v/func.</i>	Functional verb
<i>v/intr.</i>	Intransitive verb
<i>v/tr.</i>	Transitive verb

ZERO root

- Ø˘ LHL. *v/tr.* take (PFV).
 -Ø˘- LHL. *v/ditr.* give (PFV).

A

- =*a* Toneless. *cl.* and.
 =*a* Toneless. *cl.* both ... and.
 =*a* Toneless. *cl.* Medial verb marker (in clause chaining constructions).
 =*a* Toneless. *cl.* Question.
 -*a* L. *v/tr.* hurt (PFV).
 -*à bú'* HL/LHL. *svc/tr.* lower (PFV).
 -*à sâ'* HL/LHL. *svc/tr.* involve, include (PFV).
 -*à kibilâ* HL/LHL. *svc/tr.* hold down and squash by sitting upon (PFV).
 -*à'* HL. *v/tr.* let go, leave, lose, send (PFV).
 -*aa* L. *v/tr.* rouse (e.g. prey), set off (PFV).
âab LH. *n.* dark yellow taro species (N1).
aableble L. *n.* Monarch. *Monarcha* (F).
aagit L. *n.* drop (N2).
aaï L. *n.* water, river (N1).
aaikit L. *n.* water reflection, mirror (N1).
aal L. *n.* skin, bark (N1).

- aal gamakâa'* L/LHL. *v/intr.* not to feel guilty, be unashamed, be unafraid.
aal ge L/L. *v/intr.* be ashamed.
âala LH. *v/intr.* lie, sleep (PL subject).
aaleb L. *n.* father (M).
Aalei L. *pn.* Aalei (clan name).
aaleing L. *adv.* without shame.
aalidim LHL. *n.* waterfall (N1).
aalob olaketou L. *v/intr.* be uncowed (PFV).
âam LH. *n.* band near the opening of a string bag (N1).
âam LH. *n.* wild pandanus tree, wild pandanus fruit. ?*Pandanus brosimos* (N1).
âam LHL. *n.* older sister (F).
aamen L. *n.* fishing net (N2).
aamuk L. *n.* puddle, pond (N1).
âamun LH. *adj.* deep.
âamun LH. *n.* lake (N1).
âan LH. *n.* hair, feather (N1).
âan LH. *n.* leaf (N2).
âan LH. *v/intr.* lie, sleep (SG subject).

- aanamâl* LHL. *n.* white man (M).
aandokomsêl LHL. *n.* water spirits (PL).
aang ?L. *n.* tree species (N1).
aangkét LH. *n.* water container (N1).
âansiksik LH. *n.* flotsam (N1).
aanteb L. *n.* thirst (N2).
âatda LH. *n.* mountain slope (N2).
âatibin LH. *n.* headwaters (N2).
aban L. *n.* orphan (M/F).
abén LH. *n.* laughter (N1).
abén gi LH L. *v/intr.* laugh (IPFV).
abén gila LH L. *v/intr.* laugh (PFV).
abil L. *adj.* heavy (of weight).
abil LH. *n.* sky (N2).
abín LH. *n.* navel; knob (of pot lid) (N1).
abinggóng LHL. *n.* umbilical cord (N1).
ablaabu *id.* jump up.
ablam L. *n.* nut species (?Galip nut).
Canarium indicum (N1).
ablan L. *n.* underside (N1).
abó LH. *n.* testicles (N2).
aboià HL. *n.* Hooded Butcherbird.
Cracticus cassicus (F).
abuk L. *tn.* later, after.
abuksîn LHL. *n.* backside (N1).
abwâl LH. *n.* bush species (N1).
ae *interj.* yes (interjection of assent).
afâl LH. *n.* fish species (?M).
afâl LH. *n.* sinal mucus (N1).
afan L. *adj.* wrong strange, weird.
afan L. *n.* left hand (N1).
afan L. *n.* second-born of twins (M/F).
afangâfang LH(redup) *n.* forked object (N2).
afen L. *v/intr.* be awake, be alive (IPFV).
afet L. *adj.* (an) other, different.
afêt LH. *adj.* cleared of a taboo.
afetâ LHL. *v/tr.* divide.
- afilâfil* LH(redup) *n.* twins (M/F).
afîn LH. *n.* friend, ally (M).
afobèing HL. *n.* property, belongings (N2).
afók LH. *n.* grandmother (maternal or paternal), (any) female ancestor (F).
afók LH. *n.* sun (F).
afokdâb LHL. *n.* coconut (N1).
afoksmík LHL. *n.* hour, watch (N2).
afong L. *n.* walking stick (N1).
afuei L. *n.* skin lesion (N2).
afuél LH. *n.* Superb Fruit-dove.
Ptilinopus superbus (M/F).
afuet L. *n.* Buff-tailed sicklebill.
Drepanornis albertisi (M).
aful L. *n.* ball (N1).
afún LH. *n.* shin (N1).
afunón LH. *n.* shin bone, shin (N1).
aglól dobó L LHL. *v/intr.* fear of falling.
āi H. *n.* dad (M).
ai *interj.* yes (Interjection of assent).
aiglas (TP) L. *n.* glasses (N2).
aiyai L. *adj.* huge.
akeb L. *n.* buttock (N1).
akebmít LH. *n.* anus (N1).
aket L. *n.* flower; blossom (N1).
akgit L. *n.* female (of animals) (F).
akgo LH. *n.* base of tree (N1).
akgugúm LH. *n.* colon (N1).
akgumgum L. *n.* large piece of fuel (N1).
akgwaal L. *n.* ember, smoldering piece of wood (N1).
Aki ?L. *pn.* Aki river (August river).
akib L. *n.* ash (N1).
akil LH. *n.* hot ash (N1).
akim L. *n.* buttock (N1).
akimkīm LH. *n.* tree roots (N2).
akuk L. *n.* sprout (N1).
akuláb LH. *n.* aunt (fathers and mother's older sister) (F).

- akulábîm* LHL. *n.* aunt's (*akuláb*)
husband, nephew (M).
- akweil* L. *n.* Wattled Brush-turkey.
Aepyodius afkavianus (M/F).
- al* L. *n.* faeces; colon (N1).
- al tlia-* L/L. *v/tr.* be angry (PFV).
- alá* LH. *n.* close friend (of the same
sex) (M/F).
- aláng* LH. *n.* traces of something that
has been removed (N2).
- ale-* L. *v/tr.* show, teach (TRANS-
ASP).
- alél* LH. *n.* wife (F).
- alelmélél* LHL. *n.* family (*alél* 'wife'
and *melel* 'children') (PL).
- aléng* LH. *n.* bottom of a container
(N1).
- ali* L. *n.* python (M).
- ali* L. *v/tr.* squeeze pandanus sauce
(onto taro dough) (TRANS-ASP).
- aliam* L. *n.* shoot, grass (N1).
- alib* LH. *n.* ?Pinon Imperial-pigeon
(M).
- alifayum* L. *n.* Kingfisher. *Halcyon*
(F).
- alifêb* LHL. *n.* White-faced Robin.
Tregellasia leucops (F).
- alík* L. *quant.* all, everyone.
everything; each.
- alím* LH. *n.* moon; month (N1).
- alisi* L. *adj.* partly rotten, weak of
stomach.
- alób* LH. *n.* tail feather (N1).
- alobáan* LH. *n.* tail feather (N1).
- alom* L. *n.* water lizard species (M).
- alu* L. *adj.* old, decayed, rotten.
- alukâm* LHL. *n.* toilet (N2).
- alukûm* LHL. *quant.* all, every(one);
each; whole, round.
- am* L. *n.* day, time (N2).
- am* L. *n.* house; place (N2).
- am mak dim tn.* sometime,
sometimes.
- am ôlo dimo tn.* that day, that time.
- amáan* LH. *n.* roof leaves (N2).
- amaflûl* LHL. *n.* rotten wood (N1).
- amayabu* L. *n.* Chestnut-breasted
Cuckoo. *Cacomantis*
castaneiventris (M).
- ambabmîn* LHL. *n.* ne'er-do-well
(M).
- ambat* L. *n.* tree species (N1).
- ambáye* LH. *adv.* anyway,
nonetheless.
- amdaa* L. *adv.* inside (house=at).
- ameibâm* LHL. *n.* rainy day (N2).
- améng* LH. *n.* interval without rain
(N2).
- amgegén* LH. *n.* side of house (N2).
- amgolîm* LHL. *n.* mountain, roof
(N1).
- ami* L. *n.* domestic animal (M/F).
- amib* L. *n.* lid (of pot) (N1).
- amisâal* HL. *n.* door (N2).
- amisâk* LHL. *n.* native to a place
(M).
- amît* LH. *adv.* always.
- amît* LHL. *n.* opening, hole,
entrance (N1).
- amîtye* LH. *adv.* always.
- amiulák* LHL. *n.* woman native to a
place (M).
- amól* LH. *n.* Abelmoschus.
Abelmoschus manihot L (N1).
- amtib* L. *pred. adj.* ailing (of
children).
- amún* LH. *n.* belly (N1).
- amún* LH. *n.* house stilt, house post
(N1).
- amún* LH. *n.* rhinoceros beetle, horn
of rhinoceros beetle; slit in tip of
nose (N1).
- amundó* LHL. *n.* esophagus (N1).
- amuntêm* LHL. *n.* intestines; belly
(N2).
- an* *suf.* Verbalizer (derives
inchoative verbs form nouns or
adjectives).

- ān* H. *n.* arrow; bow and arrows (N1).
anafū LHL. *n.* traditional arrow type (N2).
anáng LH. *n.* mouth, throat (N1).
anàt HL. *n.* arrow type (N1).
andaakbū LHL. *v/tr.* squash, weigh down.
andlók LH. *n.* mother-in-law (of the husband) (F).
aneis L. *n.* in-law (from another clan) (M/F).
anenin L. *n.* Zoe Imperial-pigeon. *Ducula zoeae* (M).
anggum L. *adj.* not fully grown.
angkal L. *n.* digging stick (e.g. for garden work) (N1).
angkikī LHL. *v/intr.* be alert, be forearmed (PFV).
angkotāin LHL. *n.* light-skinned person (M/F).
angkusil HL. *n.* war magic (N2).
aniani L. *adv.* not clear, indefinite, non-committal.
aning L. *n.* fish (M/F).
aninin L. *n.* lowlander, coastal dweller (M/F).
anòk HL. *n.* bow (N1).
āns H. *n.* song (N2).
antàl HL. *n.* end of arrow shaft (where one grips it for shooting) (N1).
anunganung L. *n.* person from outside the Ok cultural sphere, especially from the coast (M/F).
anwàl HL. *n.* bowstring (N1).
as L. *n.* tree; wood; fire; firewood (N1).
asaal L. *n.* tree bark (N1).
asál LH. *adv.* up in a tree, high above.
asalām LHL. *n.* house on high stilts (N2).
asalēib hāa' LHL/LHL. *v/intr.* fly high (IPFV).
asalūt LHL. *adv.* up in a tree, high up.
asek L. *n.* namesake (M/F).
asel L. *n.* speaker of the same language, wantok (PL).
asít LH. *adj.* raw.
asitēm LHL. *adj.* new, fresh.
asú LH. *num.* two.
asua (TP) L. *n.* fault, mistake.
asúb LH. *n.* small tree (N1).
asul L. *adj.* black.
asumātna LHL. *num.* three (Lit. two and another).
asusūna LHL. *num.* two.
asyam L. *n.* fruit, rice (N1).
asyang L. *n.* sharp or pointed stick (N1).
atāl LHL. *n.* forefather (M).
atamdāa LHL. *n.* ghost place (N2).
atbēl LHL. *n.* long piece of wood, ?splinter (N1).
atbumin L. *n.* fallen tree (N1).
atdaab L. *n.* young branch, twig (N1).
atdab L. *n.* stick (N1).
atdī LHL. *v/tr.* throw into fire (PFV).
atfub L. *n.* wood chips for (re)kindling fire (N1).
atgabāam LH. *n.* base of a tree (N1).
atgwaal L. *n.* wood burning with small flame (N1).
atí LH. *n.* cyclone (N2).
atík LH. *n.* ginger (N1).
atil L. *n.* mountain (N2).
atit L. *n.* wooden spatula for eating pandanus (N1).
atli- L. *v/tr.* be angry (IPFV).
atlia- L. *v/tr.* be angry (contracted form of *al tlia-*) (PFV).
ató LH. *n.* half (N1).
atol L. *n.* flame (N1).
atol L. *n.* year (N1).
atomāa' LHL. *v/tr.* join (PFV).
atong L. *n.* insect tail (N1).

atosaan L. *v/tr.* join (IPFV).
atosîn LHL. *n.* half, piece (N1).
atotób LH. *n.* small ember, spark (N1).
atum L. *n.* smoke (N1).
atúm LH. *n.* branch (N1).
atwéi LH. *n.* people from the same clan who live in a different place (PL).
awá LH. *n.* fighting (N2).
awán LH. *n.* plant species (N2).
awéim LH. *n.* Magnificent Riflebird. *Ptiloris magnificentus* (M/F).
awél LH. *n.* father, elder (M).
awém LH. *adj.* taboo; prohibited.
awitnîn LHL. *n.* star(s) (N2).
awók LH. *n.* mother (F).
awók LH. *n.* thumb (N1).
awokâalok LHL. *n.* parents, adults (*awók* ‘mother’ plus an

B

=*ba* L. *cl.* Negation.
 -*ba* ?L. *v/tr.* put inside (PFV).
ba L. *interj.* er (interjection indicating hesitation, possible source *baa* ‘say (PFV).’).
ba L. *v/intr.* dry up (bodies of water, i.e. rivers, lakes, puddles) (TRANS-ASP).
ba L. *v/intr.* grow (of plants).
 -*ba* L. *v/tr.* fill; cover (of liquids) (PFV).
baa L. *v/tr.* say; tell (PFV).
baa klâ L/LHL. *svc/tr.* settle argument (TRANS-ASP).
baa omfâ L/LHL. *svc/tr.* decide (with *wéng* ‘speech’ as object) (PFV).
báab LH. *n.* aunt (mother’s and father’s younger sister) (F).
báan LH. *n.* ground, place, land (property) (N1).
báan LH. *n.* jaw (N1).

unidentified second element -*aalok*) (PL).
awokîm LHL. *n.* aunt’s (*báab*) husband, nephew (M).
ayàab HL. *n.* father’s older brother (M).
ayaab L. *n.* edible pandanus species (M).
ayaksàk HL. *n.* taro species (N1).
ayal L. *n.* light, light source, burning piece of wood (N1).
ayál LH. *n.* tree species (N1).
ayâl LHL. *n.* paternal grandfather (M).
ayam L. *adj.* good.
ayèk HL. *n.* white taro species (N1).
ayo *interj.* oh, sorry (interjection indicating compassion or regret).
ayók LH. *adj.* secretly.
ayung L. *n.* mist (N2).

báangkli LH. *n.* stone adze (N1).
báanon LH. *n.* jaw(bone) (N1).
báantom LH. *n.* red sunset (N2).
báanyang LH. *n.* chin (Lit. ‘sharp jaw’) (N1).
baasi L. *n.* boar’s tusk used for traditional nose decoration (N2).
babbat *id.* doused (with rain), defeated.
bafu L. *v/tr.* boil (TRANS-ASP).
bai- L. *v/tr.* cut out (SG object) (PFV).
báin LH. *adj.* true.
bainabu (TP) L. *n.* pineapple (N1).
bak L. *n.* long beam in rack for heating stones for a leaf oven (N1).
baka L. *postp.* (together) with.
baka L. *v/tr.* accompany (PFV).
baka L. *v/tr.* split (IPFV).
balì HL. *v/intr.* come up (of plants), bear fruit (TRANS-ASP).
báIAM L. *n.* male ancestor, male

- descendant (M).
balíoum LH. *n.* tree species (N1).
balò HL. *v/ambitr.* cut, split (SG object) (PFV).
balu (TP) L. *n.* plane (N1).
balubib L. *n.* airstrip (lit. plane place) (N2).
balubibsak L. *n.* white taro species (N1).
bām tabā H/LHL. *v/tr.* unfold.
bām tou H/?L. *v/intr.* unfold, open up like a flower.
bamyang L. *n.* wart (N1).
bān H. *n.* arm, upper arm, forearm (N1).
ban L. *n.* palm, sole (N1).
bangbang L. *id.* clap hands.
bangklibbangklib L. *id.* revolve (e.g. unscrew a lid, turning propellers, winding up a watch).
Banimo L. *pn.* Vanimo.
bānon H. *n.* arm bone, upper arm bone, forearm bone (N1).
basal L. *n.* veranda (N2).
bateli (TP) L. *n.* battery (N1).
batlāa' LHL. *v/ambitr.* tear apart (vine, leaf, or bark) (PFV).
be L. *\sa trans-asp/ v/tr.* pull back; masturbate.
be L. *v/intr.* walk, keep V-ing.
 =*be* L. *cl.* Declarative.
bebuali L. *n.* butterfly (M).
bei- L. *v/tr.* cut out (PL objects) (PFV).
beilò' HL. *v/tr.* prepare, pack (PFV).
bēisini H. *n.* river bank with vegetation (N1).
beismal L. *n.* in-law (M/F).
beisóng LHL. *n.* Fairy Wren.
Malurus (F).
beit L. *adj.* weak.
beitaaló LHL. *v/intr.* be weak, be lazy (PFV).
beitlok L. *adj.* weak.
beka L. *v/tr.* cut off banana bunch (IPFV).
beke LHL. *v/tr.* accompany (TRANS-ASP).
bekeb L. *n.* companion (M/F).
bekel L. *n.* ghost (M/F).
bekelā LHL. *v/tr.* almost cut off cut, cut so that the 'cut-off' bit is still attached (e.g. lid of can, bit of wood) (PFV).
bēl H. *n.* wing (of bird) (N1).
bel L. *n.* piece of wood (N1).
belā LHL. *v/ambitr.* cut alongside, operate, open up (PFV).
belò HL. *v/ambitr.* cut, split (PL object) (PFV).
bēlok H. *n.* insect species (F).
bēlon H. *n.* wing(bone) (N1).
bém LH. *n.* noodles (N2).
bém LH. *n.* worm (M).
bemâmin LHL. *n.* caterpillar (N1).
bèn (TP) HL. *n.* pen (N1).
beng *id.* fart (quietly).
besa L. *adv.* or *postp.* nothing; just, only, without.
besaa L. *v/ambitr.* open (IPFV).
besal L. *n.* hook, stick in knot of string bag (N1).
beselib LHL. *adj.* big, enormous.
betaa L. *v/ambitr.* open (IPFV).
betaa L. *v/tr.* cut grass (IPFV).
betan L. *n.* native area, homeland (N2).
betelā' LHL. *v/ambitr.* open (PFV).
beten (TP) L. *n.* prayer (N2).
beténg LH. *adv.* carefully.
betlāa' LHL. *v/tr.* tear apart vine, leaf, or bark (PL object) (PFV).
bi L. *v/intr.* exist, stay, remain, imperfective auxiliary (IPFV).
bí' L. *v/tr.* close, shut (eyes) (?TRANS-ASP).
-bià HL. *v/ambitr.* throw, erupt (PFV).

- biaa* L. *v/intr.* exist, stay, remain; auxiliary (existential verb).
- biaa^H* LH. *v/intr.* stay, exist, remain (Non-hodiernal past), auxiliary (Non-hodiernal past) (PFV).
- biaan* L. *v/intr.* exists, stay, exist remain (SS IPFV), auxiliary (SS IPFV) (IPFV).
- biaana* L. *v/intr.* exist, stay, remain (PAST HAB), auxiliary (PAST HAB) (IPFV).
- biang* L. *id.* shine bright.
- biang* L. *id.* slap.
- biang* L. *n.* wooden corner post (of fireplace) (N1).
- bib* L. *n.* village, hamlet; place (N2).
- bibam* L. *n.* village (N2).
- bibdaa* L. *adv.* outside.
- bibil* L. *n.* hill (N1).
- bibila* L. *v/intr.* swell (PFV).
- bibilib* L. *adj.* ignorant.
- biblin* L. *n.* pandanus species (N1).
- bibtám* L. *adv.* outside.
- biém* LH. *n.* mum (F).
- bifol* L. *n.* year (Telefol loan) (N1).
- bika* L. *v/ambitr.* close, squeeze; pierce (e.g. insect bites), nail; explode (IPFV).
- Bikene* L. *pn.* Bikne (clan name).
- biki* L. *v/ambitr.* close, squeeze; pierce (e.g. insect bites), nail; explode (PFV).
- bikí'* LHL. *v/ambitr.* sew; be blocked (by vegetation) (PFV).
- bikilá* LHL. *v/tr.* wring out (TRANS-ASP).
- bil* L. *n.* banana species (N1).
- bil* L. *n.* flat area or ground (N2).
- bila* L. *v/intr.* be burnt (PFV).
- bilá(ka)* LHL. *v/tr.* cut to pieces (IPFV).
- bím* LH. *n.* butt cheek (N1).
- bimal* L. *n.* Lesser bird of paradise.
- Paradisaea minor* (F).
- bimal eit* L/L. *n.* Lesser bird of paradise (male bird). *Paradisaea minor* (F).
- bīman* H. *n.* python species (M).
- bimbiāng* LHL. *n.* butt cheek, arse (N1).
- bín* LH. *n.* floor; bed, room (N2).
- bín toulalin* LH/LHL. *n.* bench (N1).
- bina* L. *v/intr.* stay, exist, remain (HAB), auxiliary (HAB) (IPFV).
- bina* L. *v/tr.* shoot, penetrate (PFV).
- bindāa* LHL. *adv.* inside.
- bindlám* LH. *n.* tree species (N1).
- bing* L. *n.* copal gum (N1).
- bingblang* L. *id.* blubber (of fire).
- binggong* L. *n.* Black Butcherbird. *Cracticus quoyi* (F).
- bita* L. *conj.* until.
- bukubsân* LHL. *n.* head band decorated with beads (N2).
- bl* L. *v/intr.* be (there), exist, stay, remain; imperfective auxiliary (IPFV).
- blál* LH. *n.* tree (palm/fern) species (N1).
- blala* *id.* flash of lightning.
- blangket* (TP) L. *n.* blanket (also *flangget*) (N1).
- blastel* (TP) L. *n.* band aid (also *flastel*) (N1).
- blatik* (TP) L. *n.* plastic bag (N2).
- blaya* ?L. *interj.* Damn!
- =*ble* Toneless. *cl.* Exclamative.
- blebu* L. *n.* gecko (N1).
- bleka* L. *conj.* or.
- blelá'* LHL. *v/ambitr.* fell, push down, hit; fall (PFV).
- blele* *id.* fly.
- blem* L. *n.* tree species (N1).
- bli* L. *adv.* quickly.
- blí* LH. *n.* White-bibbed Fruit-dove. *Ptilinopus rivoli* (M/F).
- blib* L. *n.* tree species (N1).

blili *id.* crackle of aggressively blazing fire.
blim L. *v/intr.* finished, not exist.
bling *id.* shine.
blinggwéin LH. *n.* Cinnamon Ground-dove. *Gallicolumba rufigula* (F).
blit L. *n.* Yellow-bellied Longbill. *Toxorhamphus novaeguineae* (M).
blomwéng LH. *n.* baby talk, babbling of the language learner (N2).
blong L. *n.* shell; pod (bean), husk (grain), wrapper (cookie) (N1).
blout *id.* sound of opening wings.
bluatbluat *id.* spin,
blublu L. *id.* quickly.
bo L. *v/tr.* search for tracks (TRANS-ASP).
 =*bo* Toneless. *cl.* Quotative, emphatic.
Boblik L. *pn.* Boblik (clan name).
bobol L. *n.* heart (N1).
bobola L. *v/intr.* come together forming a crowd (PFV).
boilis (TP) L. *n.* policeman (M).
bokâ LHL. *v/tr.* marry many (women) (IPFV).
bokbok *id.* boil, bubble.
bokol L. *n.* tree species (N1).
bòks (TP) HL. *n.* box, chest (N1).
boliait L. *n.* thread for weaving string bags from *Gnetum gnemon* (N1).
boliam L. *n.* Tulip tree. *Gnetum Gnemon* (N1).
bomânomo LHL. *tn.* tomorrow.
bomat L. *adj.* bright.
bón LH. *n.* tree species (N1).

D

da- L. *v/tr.* help (TRANS-ASP).
daa ?L. *v/intr.* dwell, abide.

bonsaat L. *n.* traditional decoration consisting of a bunch of eagle feathers attached to the chin (N1).
botok L. *n.* Scrub Wren. *Sericornis* (F).
bou L. *v/tr.* beat (with palm); strum (guitar) (TRANS-ASP).
boubou L. *n.* crumb (N1).
bouwâ' LHL. *v/tr.* wait in vain, search in vain (PFV).
bōuwamo H. *n.* tree species (N1).
 -*bù* HL. *v/tr.* bury (PFV).
bu L. *v/tr.* hunt (TRANS-ASP).
 -*bu* L. *v/tr.* plant (tobacco, sugar cane) (PFV).
 -*bu* L. *v/tr.* put inside (IPFV).
bû LHL. *v/tr.* hook, grip, catch (PFV).
buk L. *n.* traditional nose decoration (N2).
buk (TP) L. *n.* book (N2).
buk *id.* fart (loud).
bukowâ' LHL. *v/intr.* swell to the point of bursting (PFV).
bukù' HL. *v/tr.* spread widely, take over (PFV).
bukub L. *n.* grass (N1).
bukum L. *n.* black ash (N1).
bukuyók LH. *n.* rifle (N1).
búm LH. *n.* swing (N1).
bumlók LH. *adj.* difficult, hard.
bún LH. *adj.* bland (of fruit and vegetables).
bunêl LHL. *n.* Cuckoo-shrike. *Coracina (caeruleogrisea or boyeri)* (M).
bung *id.* pull taut, tighten.
bungaak L. *n.* Rail. *Rallina* (M).
busi L. *n.* cat. *Cattus* (M/F).
 -*daa* L. *suf.* near, at (locative).
daa L. *v/tr.* put/leave somewhere.
dâa' HL. *v/ambitr.* break at joint (PFV).

- dáait* LH. *adv.* collectively, commonly.
- daak* L. *dir.* down, downward, downhill.
- daal* L. *n.* large bamboo species (N1).
- dáala* LH. *adv.* down.
- dáam* LH. *n.* fence type (N1).
- dáang* LH. *n.* back, backside, mountain ridge (N1).
- dáangon* LH. *n.* backbone, spine (N1).
- dāb* H. *n.* seed, fruit (N1).
- dab* L. *dyad.* siblings of same sex; grandparent-grandchild relation of same sex.
- daba* L. *v/tr.* peel wood or palm bark (TRANS-ASP).
- dabáal* LH. *n.* ground, dirt (N1).
- dabiâ* LHL. *v/tr.* throw out (embers or ashes) (PFV).
- dafa* L. *n.* vine species (?N1).
- dafáb* LH. *n.* summit, river head (N2).
- dafama* L. *v/intr.* be bumpy (PFV).
- dafinau* L. *n.* vine species (N1).
- dai-* L. *v/tr.* take down (e.g. from a hook); play (e.g. recorded music or video) (PFV).
- daiglo* L. *n.* Myna. *Mino* (F).
- daka* L. *v/tr.* break off.
- dakdek* L. *n.* pig's wallow (N2).
- dakiám* LH. *n.* tree species (N1).
- dāl* H. *n.* river bank (N1).
- dalbi* L. *v/intr.* molder (of fruit) (TRANS-ASP).
- dalò* HL. *v/intr.* stop breathing, die (PFV).
- dalò* HL. *v/tr.* break off (SG object, e.g. a banana) (PFV).
- dam* L. *adj.* true.
- dam* L. *n.* body, corpse (M/F).
- dam* L. *n.* dream (N2).
- dam* L. *n.* man's first wife (F).
- dam* (TP) L. *n.* lamp (N1).
- dama* L. *v/intr.* grow up (of people), grow big (of plants), thrive (PFV).
- damáan* LH. *n.* body feather (N1).
- damib* HL. *n.* garden (N2).
- damìng* HL. *n.* fallow garden (N2).
- Danenok* L. *pn.* Danenok.
- dāng* H. *n.* new garden (N2).
- dáng* LH. *n.* river bank (N1).
- dangdang* L. *adj.* thin (of animals and humans).
- dataná'* LHL. *v/tr.* close a hole (e.g. in the ground, a fence, tree bark, etc.) (PFV).
- datláa'* LHL. *v/tr.* remove by pulling out (PFV).
- datôu* LHL. *v/intr.* sit down (PFV).
- datunû* LHL. *v/tr.* close a hole (e.g. in the ground, a fence, tree bark, etc.) (IPFV).
- daulam* L. *n.* fly (M).
- dê'* LHL. *v/?tr* not want, not like, desist, stop (PFV).
- dê' hâa'* LHL/LHL. *svc/intr.* walk idly around (IPFV).
- debelôn* LHL. *n.* forehead (N1).
- debmôt* LHL. *n.* Anopheles mosquito (M).
- defâ'* LHL. *v/intr.* wait a while (PFV).
- defenum* L. *n.* Bar-tailed Cuckoo-dove. *Macropygia nigrirostris* (F).
- dei* L. *v/tr.* leave, avoid, deny (PFV).
- dei* L. *v/tr.* pick (leaves); pluck, remove (hair) (IPFV).
- dei-* L. *v/tr.* untie (pl object) (PFV).
- deib* L. *n.* road, path; way (N2).
- deib* L. *suf.* for (purposive).
- déib* LH. *n.* withered leaves, etc. covering the forest floor (N1).
- deilâ'* LHL. *v/tr.* pick (leaves); pluck, remove (hair) (PFV).
- deit* L. *n.* bird's nest (N1).
- dek* L. *n.* dirt or moss covering taro

- or sago (N1).
- dekdēk* LH(redup). *n.* ?Pacific swallow. *Hirundo tahitica* (M).
- dekéng* LH. *n.* vine species, belt-like piece of clothing (slung around the waist) made of this vine (N1).
- delâ* LHL. *v/ambitr.* break apart, separate (PFV).
- delaakma* L. *v/tr.* pour out (PFV).
- delaakaan* L. *v/tr.* pour out (IPFV).
- delò* HL. *v/tr.* break off (PL object, e.g. bananas) (PFV).
- deme* L. *n.* face ribbon with small shells (N1).
- dēn* H. *n.* tree sap; rubber (N1).
- den* L. *n.* tree species (N1).
- dena* L. *v/intr.* clear off (PFV).
- deskí'* LHL. *v/intr.* turn.
- di* L. *v/tr.* give (breast), serve.
- di* L. *v/tr.* tie (rafters).
- dì'* HL. *v/tr.* tighten (bowstring) (TRANS-ASP).
- diab* L. *n.* dust, dirt (N1).
- diabmait* L. *n.* Pale-billed Scrub Wren. *Sericornis spilodera* (M).
- diadia id.* quickly.
- dibi* HL. *v/?tr.* throw away (IPFV).
- dibiâ'* LHL. *v/tr.* throw away (PFV).
- difib* L. *adj.* warm.
- difib* LH. *n.* rubbish (N1).
- difibma* L. *v/intr.* warm up (PFV).
- difibsaan* L. *v/intr.* warm up (IPFV).
- difidifi* L. *n.* species of small red ant (M).
- difing* L. *n.* seed which has fallen on the ground and started germinating (N1).
- dik'* HL. *v/tr.* do garden work (IPFV).
- dík'* LHL. *v/tr.* make a hole (IPFV).
- dika* L. *v/tr.* dig.
- dikibâ'* LHL. *v/intr.* diffuse, spread (of liquid) (PFV).
- dikila* ?L. *v/tr.* do garden work (PFV).
- dikin* HL. *v/intr.* do garden work.
- dikin* L. *suf.* like.
- dilbí'* LHL. *v/ambitr.* scatter (TRANS-ASP).
- dīm* H. *n.* feather, fur (N1).
- dim* L. *adv.* in vain, lie.
- dim* L. *n.* top (N1).
- dim* L. *postp.* on(tp).
- dīm* LH. *n.* meat, flesh; muscle (of animals and humans) (N1).
- dimila* L. *v/intr.* become numb (of limb), become cold (of fire) (PFV).
- Dimobib* L. *pn.* Dimobib.
- Dimoson* L. *pn.* Dimosson (female ancestor of the Mianmin people).
- din* HL. *n.* support stick for banana and sugarcane plants (N1).
- dingding* L. *n.* fine rhizomes/root of taro plant (N1).
- dingdung id.* make hollow noise.
- dis* (TP) L. *n.* bowl (N1).
- dit* L. *n.* waterfall (N1).
- ditdat id.* move and make a noise (so that e.g. a pig runs away).
- diwatdí* LHL. *v/tr.* sweep into the fire (TRANS-ASP).
- dlan* L. *v/intr.* last (of money or supplies, not temporal) (IPFV).
- dlang* L. *n.* tree species (N1).
- dlatdlat id.* fast movement of snake tongue.
- dleb* L. *adj or v/intr.* sour, sullen; angry.
- dlebweng* L. *n.* cockroach species (?F).
- dli* L. *n.* tree species (N1).
- dli* L. *v/intr.* dance (TP *singsing*) (IPFV).
- dli-* L. *v/tr.* push. (trans-asp).
- dlibkim* ?L. *n.* Lalage leucomela (F).
- dlibma* ?L. *v/intr.* dance (TP *singsing*) (PFV).

- dling* L. n. Fig Parrot.
Psittaculirostris (?or *Cyclopsitta*) (M).
- dlong* L. n. knee (N1).
- dlong* LH. n. tree species (N1).
- dlongkib* LH. n. patella (N1).
- dlou* id. shake, quiver (of people).
- dlou* L. n. tree species (N1).
- dō* H. n. stem (e.g. of a banana fruit) (N1).
- dò* HL. v/tr. sew (IPFV).
- dob* L. n. tree species (N1).
- dobô* LHL. v/intr. topple, fall down (PFV).
- dobô* LHL. v/tr. feel, taste, affect (PFV).
- dofa* L. suf. because of.
- dogi* L. v/tr. lead pig or child on a leash (TRANS-ASP).
- dogunù* HL. v/tr. spread out (a flat object) (?TRANS-ASP).
- doi-* L. v/tr. untie (SG object) (PFV).
- dokaa* L. v/tr. behold.
- doketòu* HL. v/tr. remove (IPFV).
- doko-* L. v/tr. forget (PFV).
- dokô'* LHL. v/intr. change (place) (PFV).
- dokomaa* L. v/tr. dance in the spirit house, *joc.* rock the house (PFV).
- dokomsaan* L. v/tr. dance in the spirit house, *joc.* rock the house (IPFV).
- dol* L. n. fork (N1).
- dol* L. n. wild pandanus species that grows in the mountains (N1).
- dolâ* LHL. v/tr. carve (e.g. a picture or symbol), write (TRANS-ASP).
- dolab* L. n. Black Berrypecker.
Melanocharis nigra (F).
- doli* L. v/tr. plant (e.g. pineapples, sago) (TRANS-ASP).
- dong* L. n. pupa (of butterfly or moth) (N1).
- dosin* HL. n. side where the stem (of a fruit is) (N1).
- dót* LH. adv. very.
- dotdôt* LH(redup). n. Frilled monarch.
Arses telescopthalmus (M/F).
- dòu* HL. v/ambitr. close (door or pot) (TRANS-ASP).
- doulam* ?L. n. sweat bee (M).
- dōungo wâ'* H LHL. v/intr. erratic movement under cover or leaves, movement of child in womb (PFV).
- dowâ'* LHL. v/tr. pull out a handful of objects (e.g. the prongs of a *geim*-arrow) (PFV).
- dowán* LH. n. message, news, information, announcement (N2).
- dowê* LHL. interj. Oh man!
- dowôn'* LHL. v/tr. eat, drink (PFV).
- dub* L. n. wild cane species (N1).
- dubdub* id. dive.
- duk* id. swallow.
- dukdim* HL. n. spur (N2).
- dulam* L. n. Honeyeater. *Xanthotis*, *Lichenostomos*, *Meliphaga* (F).
- Dulanam* L. pn. Duranmin (Place 30km east of Mianmin in Telefol area).
- dūm* H. n. tough inner skin of egg (N1).
- dum* L. *dyad.* father and child.
- dum* L. suf. with (instrumental).
- dúm* LH. n. tip of a taro tuber (N1).
- dumun* L. v/intr. nod off, doze (IPFV).
- dun* L. n. festering sore (N1).
- dūng* H. n. wild pandanus species (N1).
- dungdung* id. drum.
- dut* id. glow bright in the dark.
- duwám* LH. n. parasite plant growing on trees (?mistletoe) (N1).

E

- =e Toneless. *art.* article (SG M), article (SG N1).
 =e Toneless. *cl.* Content question.
 =e Toneless. *cl.* Hortative.
 ē H. *pron.* he, his (M), it, its (N1).
 eb L. *n.* egg (of fly or snake) (M).
 -ēb LHL. *v/tr.* take (in order to carry) (PFV).
 ēfamak H. *adv.* somewhere around here.
 eh L. *interj.* interjection of hesitation.
 ei L. *v/intr.* fly (IPFV).
 ēi LHL. *v/ambitr.* accumulate (water); impound (water) (TRANS-ASP).
 ēil LH. *n.* pig. *Sus scrofa* (M/F).
 ēilawe H. *n.* Brown Booby. *Sula leucogaster* (M).
 ēim LH. *n.* pandanus. *Pandanus conoideus*. (N1 or N2 depending on species).
 ēimawe H. *n.* haze, vapour (N2).
 eimín LH. *adv.* again.
 ēimok LH. *n.* kind of ringworm (N2).
 ein L. *v/ambitr.* be cooked, burn (TRANS-ASP).
 eing L. *adj.* spacious; thick (of objects), luscious (of colours).
 eingtomóng LHL. *adj.* spacious, thick.
 eintunu L. *v/tr.* heat up stones for leaf oven (IPFV).
 eit L. *n.* body decoration (N2).
 ēit LH. *n.* penis (N1).
 eitana L. *v/tr.* heat up stones for leaf

F

- fa L. *v/tr.* lay (egg) (TRANS-ASP).
 fa L. *v/tr.* make fire (PFV).
 -fā LHL. *v/tr.* put, put asleep, look after, give birth (PFV).
 faa L. *v/tr.* dispose of body wastes (with *imán* 'urine' or *al* 'faeces')

- oven (PFV).
 eitií LHL. *n.* Orange-bellied Fruit-dove. *Ptilinopus iozonus* (F).
 eka L. *conj.* and.
 ēlaak HL. *dir.* down here.
 ēle H. *adv.* here.
 ēle H. *pron.* this (M, N1, proximal).
 elekiêm LHL. *num.* one (M).
 elekiêm LHL. *num.* one (N1).
 elekiêm LHL. *pron.* only he (M) alone, only it (N1). alone.
 elemí LHL. *pron.* his (M) alone, its (N1) alone.
 eleskil LHL. *pron.* himself.
 eletâ LHL. *pron.* he alone (M, EMPH), it alone (N1, EMPH).
 ēli H. *pron.* these (proximal, adnominal and pronominal).
 ēmaye H. *pron.* himself.
 ēmet HL. *dir.* upriver here.
 ēmi H. *pron.* his (M), its (N1).
 en L. *n.* older sister (F).
 en- L. *v/tr.* hurt, pain (IPFV).
 enâ' HL. *v/intr.* do thus (as shown) (TRANS-ASP).
 éng LH. *n.* dry place (e.g. near the trunk of a tree) (N2).
 enin L. *n.* pain (N2).
 et L. *n.* tree species (N1).
 ēta H. *pron.* he (M, EMPH), it (N1, EMPH).
 ētab HL. *dir.* downriver here.
 etâm HL. *dir.* inside here.
 ewât HL. *dir.* across here.
 ēwit HL. *dir.* up here.
 (PFV).
 faa L. *v/tr.* make body paint (TRANS-ASP).
 -fâa LHL. *v/tr.* lift, raise (PFV).
 faai L. *n.* kind of sorcery used to bring about the death of another (N2).

- fàb* HL. *interrog.* where.
fābi H. *n.* traditional stone adze (N1).
faka L. *v/tr.* dispose of body wastes (with *imán* ‘urine’ or *al* ‘faeces’) (IPFV).
faka L. *v/tr.* make fire (IPFV).
fakanseb L. *n.* Honeyeater. *Melidectes* (M).
fal L. *n.* leaf oven (?N1).
fanin L. *n.* male ancestor (M).
fatál LH. *n.* stranger (to a place) (M/F).
fatnà HL. *v/interrog.* do what.
fatnàmin HL. *interrog.* why, how, how much.
fatnàmin dimota HL L. *interrog.* when.
fawein ?L. *n.* Hooded Pitohui. *Pitohui dichrous* (F).
fè HL. *n.* carrion (N2).
fetàng HL. *n.* smell of carrion, rotten smell (N2).
fiaam L. *n.* tail fin (of fish) (N1).
fiab L. *adv.* slowly.
Fiak ?L. *pn.* Fiak (Name of Mianmin settlement).
fiam L. *n.* wooden stick-like implement (N1).
fiamí LHL. *n.* barbed spear (N1).
fib L. *n.* river confluence (N2).
fibâ LHL. *v/ambitr.* tremble, shake (TRANS-ASP).
fifil L. *n.* falcon. *falco* (M).
fifli L. *adv.* across.
fikalo H. *n.* thick vines entangling and covering a tree (N2).
finí LH. *n.* eel (M).
foum H. *adj.* sterile, barren (of females).
fitfit *id.* shake (tree).
fiwéi LH. *n.* Painted Quail-thrush. *Cinclosoma ajax* (F).
flál LH. *n.* dog louse (M).
- flalôu* LHL. *n.* dog louse (M).
flek (TP) L. *n.* flag (N1).
fleleng L. *adj.* light (of weight).
flèt (TP) HL. *n.* plate (N1).
fliliflala *id.* blaze and spread (of fire).
flīm H. *n.* black palm. *Borassus flabellifer* (N1).
flouflou *id.* flap (of large birds’ wings and other flat object, e.g. a piece of tree bark).
flul L. *n.* rotten wood (N1).
fluluk *id.* flutter (of small birds).
fobiâ LHL. *n.* leech (M).
fofo (TP) L. *n.* pawpaw (N1).
fofola L. *v/intr.* wither, become parched (by the sun) (PFV).
fofou L. *v/tr.* paint the body (IPFV).
fofoula L. *v/tr.* paint the body (PFV).
fokek L. *n.* Rusty Pitohui. *Pitohui ferrugineus* (M).
fom L. *n.* stool (N1).
fong *id.* sound of whistling.
fong L. *n.* walking stick (N1).
fongfong L. *n.* Huntsman spider (F).
fot *id.* explode.
fote- LHL. *v/tr.* expel, rout (TRANS-ASP).
fotóm LHL. *n.* shame (N2).
fu *id.* blow (dust).
Fu L. *pn.* Fu river.
fu L. *v/tr.* smoke; cook (TRANS-ASP).
-fu- LHL. *v/ditr.* send (PFV).
-fû’ L. *v/tr.* grab, grip (PFV).
fua L. *v/intr.* wash body (IPFV).
fub L. *n.* tinder (N2).
fubâ LHL. *v/tr.* wash (hands, body, clothes) (TRANS-ASP).
fubafâ’ LHL. *v/tr.* wash (hands, body, clothes) (PFV).
fubia L. *n.* small white ant (which eats wood) (M).

fuela L. *v/intr.* wash body (PFV).
fufu L. *v/tr.* wake up.
fufun L. *v/intr.* blow into the fire (IPFV).
fukêt LHL. *n.* smoking gourd (N1).
fúm LH. *adj.* blunt.
fumentlaa L. *v/intr.* ponder, brood (PFV).

G

ga L. *v/func.* say (function verb) (IPFV).
ga L. *v/tr.* cook in a leaf oven (TRANS-ASP).
gaa L. *n.* caterpillar species who spin webs with a rust-brown thread (M).
gaal L. *n.* tough skin of pig (N1).
gaal dobô L/LHL. *v/intr.* be tired, be lazy (PFV).
gâala LHL. *v/tr.* tear down, destroy (house or fence) (TRANS-ASP).
gâam LH. *n.* juice, fig. taste (N1).
gaang L. *adj.* good, wise.
gâang LH. *n.* top part of pot or string bag (N1).
gabâam LH. *n.* head (N1).
gabâam walon LH/L. *n.* widow, widower (M/F).
gabaamâan LHL. *n.* hair (N1).
gabaamôn LHL. *n.* head, skull (N1).
gabaamsâk LHL. *n.* owner (M).
gabaamtôl LHL. *n.* brain (N2).
gai- L. *v/tr.* pass, surpass, bypass (PFV).
gâgat L. *n.* palate (N1).
gâm H. *n.* dark blue clay (N1).
-gam L. *suf.* covered with.
gang L. *adj.* itchy.
ganmeit L. *n.* snake species (M).
gât H. *adj.* dry.
gât H. *n.* mole (on skin) (N1).
gawaak L. *n.* Hawk. *Accipiter* (F).

fun L. *v/intr.* think (IPFV).
funa L. *v/intr.* think (PFV).
funin L. *n.* thinking, rationale (N2).
fút LH. *adv.* fast.
fút LH. *n.* tobacco; cigar(ette) (N1).
futâan LH. *n.* cigarette leaf; paper, letter (N2).
futêb LHL. *n.* tobacco craving (N2).

ge L. *v/func.* say (function verb) (PFV).
ge L. *v/tr.* build, fasten, roll; fight (PFV).
ge titi' L/LHL. *svc/tr.* cover with soil (of an object that is put into the ground, e.g. a house post) (PFV).
ge wai- L/L. *svc/tr.* hide from sight (PFV).
geblabim L. *n.* Papuan Flowerpecker. *Dicaeum pectorale* (M).
geil L. *n.* kidney (N1).
geilam L. *n.* place where the kidneys are (Lit. kidney house) (N1).
geim L. *n.* multi-pronged arrow; head of such an arrow (N1).
gêim LH. *n.* tree species (N1).
gekâ LHL. *v/intr.* line up (PFV).
gelâ' HL. *v/tr.* build a ladder to reach a house on stilts (PFV).
gêm LH. *n.* horn (N1).
gen L. *v/intr.* be sick (IPFV).
gen L. *v/tr.* build, fasten, roll; fight (IPFV).
gengâ LHL. *v/tr.* scratch.
gengkâ HL. *v/tr.* tie iteratively, fasten iteratively (IPFV).
genin L. *n.* sickness (N2).
geta L. *n.* taro species (N1).
getang *id.* clear up (weather), brighten up.
getei- LHL. *v/tr.* lack, miss (PFV).
getetôn LHL. *n.* occipital bone

- (N1).
gi L. *v/intr.* laugh.
gí LHL. *v/tr.* tie, hang up (TRANS-ASP).
gibâ LHL. *v/tr.* bring up, rear (TRANS-ASP).
gibba L. *v/intr.* get wet (PFV).
gibbu ?L. *v/intr.* get wet (IPFV).
gigi *id.* quickly.
gil L. *adj.* cold.
gilam L. *n.* house without fireplace (N2).
gilan *id.* quickly.
gīmon H. *n.* lower spine (N1).
gíng LH. *n.* midrib of leaf; vein of leaf; stem (N1).
glaglā LH(redup). *postp.* between.
glāl H. *adj.* dry.
gleglè HL. *n.* crack, loop in string bag (N1).
gliglí LHL. *adj.* rough (surface).
glīm HL. *n.* mark, character (N1).
glítid. dawn.
glitâ LHL. *v/tr.* wipe off (TRANS-ASP).
glól LH. *n.* wind (N1).
glólwéng LHL. *n.* rumour (N2).
glom L. *n.* vine species (N1).
glóut LH. *n.* litter for sick or dead person (N2).
gloutêm LHL. *n.* grave, cemetery (N2).
gluglu *id.* quickly.
glukowâa' LHL. *v/intr.* slacken, come loose (PFV).
glulu *id.* slide.
gō H. *n.* ridge pole (N1).
go L. *n.* Specifies a bird of paradise as a female without the spectacular plumage of the male bird (F).
go-L. *v/tr.* like (PFV).
gò' HL. *v/tr.* cut skin or flesh (PFV).
gobôu LHL. *adj.* round (and small).
- goboutâing* LHL. *adj.* small and short.
gobtou L. *v/?tr* pull together (i.e. pull hands and feet towards the body); do chin-ups; huddle up for sleep (PFV).
gogola L. *v/intr.* shrivel up (PFV).
goholo L. *v/ambitr.* coil up (PFV).
goi- L. *v/tr.* smash (PFV).
goki L. *v/tr.* put handle of string bag around forehead so that the bag hangs down the back (PFV).
gokilêb LHL. *v/tr.* put on head (in order to carry) (PFV).
gokīm LHL. *n.* head louse (F).
golâ LHL. *v/ambitr.* sear skin (IPFV).
golâ LHL. *v/intr.* burn (like ginger) (PFV).
golâ LHL. *v/tr.* cut and clear (TRANS-ASP).
golīm LHL. *n.* mountain, roof (N1).
golok *id.* rumbling (stomach).
Goloka L. *pn.* Goroka (Provincial Capital of Eastern Highlands Province).
gōmei H. *n.* bamboo species (N1).
gomob L. *n.* glans (N1).
góng LH. *n.* joint (any joint on hands and feet) (N1).
gongam L. *n.* birth house (N2).
gongambīb LHL. *n.* birth place (N2).
gonggong *id.* knock.
gosāk LHL. *n.* owner (M).
Got (TP) L. *n.* God (M).
gotot(gotot) *id.* nod.
gowéin LH. *n.* Brown Cuckoo-dove. *Macropygia amboinensis* (F).
Gubil L. *pn.* Gubil (settlement about 30km west and downstream of Mianmin).
gububma ?L. *v/intr.* collide (PFV).

gububsaan ?L. *v/intr.* collide (IPFV).
gūguma H. *n.* fish species (F).
gúl LH. *n.* scar (N1).
guláal LH. *n.* tree species (N1).
gulwêng LHL. *n.* old tale (talk about some past problem, lit. scar talk) (N2).
gumúb LHL. *n.* wood chipping, wood shaving, splinter (N1).
gungglù' HL. *v/tr.* knot together, tie together (TRANS-ASP).
gwa- LHL. *v/?tr* bend knee, kneel (PFV).
gwáab LH. *adj.* small, little.
gwalgwāl LH(redup). *n.* twins. (PL)
gwaliang id. very hot (of stone or

H

hà' HL. *v/ambitr.* break, dig (PFV).
hàa HL. *v/tr.* catch (fish) (TRANS-ASP).
haa L. *v/tr.* weave (TRANS-ASP).
hâa' LHL. *v/intr.* walk around, wander, roam (IPFV).
hâa' LHL. *v/tr.* chase (IPFV).
háam LH. *n.* corpse (M/F).
háang LH. *adj.* dry (of food, tobacco).
háang LH. *n.* tongue (N1).
hai- L. *v/tr.* cut off (a long protruding object) (PFV).
Hailans (TP) L. *pn.* Highlands.
haiyekhaityek id. sneeze.
Hak L. *pn.* Hak river.
haka L. *v/ambitr.* break, dig (IPFV).
hake L. *v/tr.* break through (PFV).
haketòu ?HL. *v/tr.* break through.
halâ LHL. *v/ambitr.* break (PFV).
halâ' HL. *v/tr.* abstain, prohibit (TRANS-ASP).
halaal L. *n.* thick vines (N2).
halbì HL. *v/tr.* weed.
halbû' LHL. *v/tr.* fold (IPFV).
halbua ?L. *v/tr.* fold (PFV).

metal).
gwalianggwaliang id. spiral.
gwalibo L. *n.* Superb Bird of Paradise. *Lophorina superba*. (?F)
gwamúm LH. *n.* spider web (N1).
gwán LH. *n.* Pheasant pigeon.
Otidiphaps nobilis (F).
gwán LH. *n.* spider (F).
gwegkwēk LH(redup). *n.* Spot-winged Monarch. *Monarcha guttula* (F).
gwelô' LHL. *v/tr.* cut out bowels (PFV).
gwi L. *v/tr.* use black magic (TRANS-ASP).
gwinggwí LHL. *n.* Emerald Dove. *Chalcophaps indica* (F).

haleb L. *n.* wild boar (M).
(-)halin L. *v/intr.* worry (IPFV).
halò LHL. *v/ambitr.* cut, break, help a friend in a fight (PFV).
hamila L. *v/intr.* become old (of things).
hana L. *v/intr.* get up, rise.
hanggâu LHL. *adv.* again (repeating the action of the succeeding verb).
hānggo H. *adj.* curved, twisted.
hānggo toufâ' H/HL. *v/intr.* curve, twist.
hangkalebmîn LHL. *n.* old man (M).
hàs (TP) HL. *n.* hat (N1).
hat L. *dyad.* mother and child.
hat L. *n.* tree species (N1).
hatelâ' LHL. *v/tr.* pull towards oneself (PFV).
hausik (TP) L. *n.* hospital (N1).
hebâ LHL. *v/intr.* lean.
hebmamsâb LHL. *adv.* quickly; fast (also *heb*).
hei- L. *v/tr.* cut off (long, protruding objects) (PFV).
heitda L. *v/intr.* shake hands

(TRANS-ASP).
hek L. *n.* older brother (M).
hek(hek) *id.* gasp.
hekdoung *id.* inhale air.
hekmêl LHL. *n.* ancestor (only a descriptor, not a kin noun) (M).
hekmelwêng LHL. *n.* rule(s), law(s) (N2).
helâ LHL. *v/ambitr.* break, traverse (PFV).
helò HL. *v/ambitr.* break (PL subject/object) (PFV).
hen L. *v/tr.* seek (IPFV).
hena L. *v/tr.* seek (PFV).
het L. *n.* elbow (N1).
hetaná LHL. *v/tr.* meet (PFV).
hetunû LHL. *v/tr.* meet (IPFV).
hilil L. *adj.* hairy.

I

=i Toneless. *art.* article (PL).
ī H. *pron.* they, their.
īb H. *pron.* your (pl).
iba L. *v/tr.* pour (PFV).
ibal L. *n.* dust (N1).
ibâl LHL. *n.* paper wasp (M).
ibalisá LH. *n.* taro species (N1).
ibbitîn LHL. *n.* dust, dirt (N1).
ibik L. *pn.* Ibik (clan name).
ībmeye H. *pron.* yourselves.
ībmi H. *pron.* yours (PL).
ībo H. *pron.* you (PL).
ībta H. *pron.* you (PL, EMPH).
ibu L. *v/tr.* pour (IPFV).
ibuantem L. *n.* barren or remote place (N2).
ibwabman L. *n.* third-born or fourth-born in a family (actually any child who is not born first or second or last-but-one or last) (M/F).
ifâ L. *v/tr.* scrape ash off baked taro (IPFV).
ifá LH. *n.* sweat (N1).

hōb H. *n.* breath (N2).
hōb H. *n.* ghost (M/F).
hok L. *n.* crab, scorpion (F).
hol L. *n.* last-born in a family (M/F).
holwabman L. *n.* last-but-one-born in a family (M/F).
hōmle H. *n.* Peaceful Dove. *Geopelia placida* (M).
homòn HL. *quant.* many, much, a lot of.
hon L. *adj.* barren (of plants).
hōndou H. *n.* spider species (F).
honyang L. *n.* clitoris (N1).
hota L. *v/intr.* feel bad, suffer (PFV).
houhou *id.* cough.

ifa L. *v/tr.* serve food (PFV).
ifela L. *v/tr.* scrape ash off baked taro (PFV).
ifet L. *n.* cane species (N1).
ifu L. *v/tr.* serve food (IPFV).
ikam L. *n.* (whole). leg (N1).
ikamfá LH. *n.* footprint (N1).
ikimái LH. *n.* Pheasant Coucal. *Centropus phasianinus* (F).
īlaak HL. *dir.* down here.
ilám LH. *n.* top plate of wall (N1).
ilem L. *adj.* red (also *ilemein*).
ilem L. *n.* blood (N1).
ilem koból L/LH. *n.* Dwarf Cassowary. *Casuarius bennetti* (F).
īli H. *pron.* their (alone).
īli H. *pron.* these (proximal, only adnominal).
ilí LH. *n.* bamboo species (N1).
īlib H. *pron.* your (PL) alone.
ilibkiêm LHL. *pron.* only you (PL) alone.
ilibmî LHL. *pron.* yours (PL) alone.
ilibskil LHL. *pron.* yourselves.

ilibtá LHL. *pron.* you alone (PL, EMPH).
ilikiêm LHL. *pron.* only they alone.
ilimí LHL. *pron.* theirs alone.
iliskíl LHL. *pron.* themselves.
ilitá LHL. *pron.* they alone (EMPH).
ilób LH. *n.* child with one parent from another clan (M/F).
ilúm LH. *adj.* heavy (of weight).
ím LH. *n.* bee species (M).
imak L. *n.* husband (M).
imán LH. *n.* urine (N1).
ímaye H. *pron.* themselves.
imblia L. *adv.* heedlessly, unthoughtfully, inadvertently, through an oversight.
imeil L. *n.* Goldie's Lorrikeet.
Psitteuteles goldiei (M).
imen L. *n.* taro. *Colocasia esculenta* (N1).
imenteb L. *n.* hunger (N2).
ímet HL. *dir.* upriver there.
ími H. *pron.* theirs.
imik LH. *n.* trap (N1).
imín LH. *adv.* again.
ín H. *n.* liver (N1).

K

-ka- L. *v/ditr.* give (IPFV).
-ka L. *v/tr.* put (IPFV).
kaan L. *v/intr.* die (PFV).
káawa LH. *n.* steel axe (N2).
kàb (TP) HL. *n.* cup (N1).
kabáng LHL. *n.* flea (on dogs, pigs, rodents, marsupials) (F).
kabmuk L. *n.* heel (N1).
kakab L. *n.* lungs (N2).
kakam L. *n.* bottom, butt (N1).
kaket L. *n.* bachelor (M).
kaket L. *n.* little finger, little toe (N1).
kakibi L. *v/tr.* join together.
kāl H. *n.* tree species (N1).

inà' HL. *v/intr.* do thus (TRANS-ASP).
ináb LH. *n.* snake (M/F).
inamin HL. *mod.* such.
inamin HL. *n.* the following.
isa L. *v/tr.* string bow (PFV).
isaka L. *v/tr.* string bow (IPFV).
isít LH. *adj.* raw.
isitêm LHL. *adj.* new, fresh.
isóub LH. *n.* tree species (N1).
isóum LH. *n.* clothes (N1).
īta H. *pron.* they (EMPH).
itáan LH. *n.* leaf (N1).
ītab HL. *dir.* downriver there.
itám HL. *dir.* inside there.
itam L. *n.* traditional dance house (N2).
itanasít LH. *adj.* (light) green.
itó LH. *n.* tongs (cooking tool) (N2).
itú LH. *n.* fence type (N1).
iwàt HL. *dir.* across there.
iwát LH. *n.* breadfruit tree; breadfruit. *Artocarpus altilis* (N1).
iwau L. *n.* Salvadori's Teal (duck sp.). *Anas waigiuenensis* (M/F).
iwén LH. *n.* tree species (N1).
īwit HL. *dir.* up there

kal L. *n.* landslide (N1).
kalkal *id.* sizzling sound (of meat).
kam L. *dyad.* married couple.
kamaa L. *v/tr.* remove fire before making a leaf oven.
kan hâa' L/LHL. *svc/intr.* follow (IPFV).
kasak L. *n.* plant species (N1).
Kasening L. *pn.* Male name.
katab L. *n.* flying fox (M).
katabam L. *n.* cave in which flying foxes live (lit. flying fox house) (N2).
katbon L. *adj.* thin (of objects).
kaunsol (TP) L. *n.* councillor (M).
ke L. *v/func.* do (function verb)

- (TRANS-ASP).
kè HL. *v/tr.* cut taro dough (TRANS-ASP).
ke- L. *v/tr.* clean ground around plant roots.
kēb H. *pron.* your (M).
kēbmāye H. *pron.* yourself (M).
kēbmi H. *pron.* yours (SG, M).
kēbta H. *pron.* you (SG, M, EMPH).
keim L. *adj.* clear, open, visible, obvious, not taboo.
keké LH. *n.* stinging nettle species (N1).
keke namâ L/LHL. *n.* Black-sided Robin. *Poeciladryas hypoleuca* (F).
kekewân LHL. *n.* stinging nettle species (N1).
kél LH. *n.* black magic (TP *poisin*) (N2).
kela L. *v/tr.* go towards midday (of the sun) (PFV).
kēleb H. *pron.* your (SG, M) alone.
kelebkiêm LHL. *pron.* only you (SG M) alone.
kelebmî LHL. *pron.* yours (SG M) alone.
kelebskîl LHL. *pron.* yourself (M).
kelebtâ LHL. *pron.* you alone (SG M, EMPH).
Kemeil ?L. *pn.* Kemeil (clan name).
Kemeitén LH. *pn.* Kemei (clan name).
kemela ?L. *v/tr.* extinguish (PFV).
kemén LH. *n.* penis gourd (N1).
ken L. *n.* edge, side (N1).
kenéng LH. *n.* cheek (N1).
kesau L. *n.* wild and evil person (M/F).
kesoa L. *conj.* because, since.
kesota L. *conj.* because, since.
ket L. *adj.* unripe (banana).
ket L. *n.* flower; blossom (N1).
két LH. *n.* container (N1).
két LH. *n.* sharp bamboo tool (N1).
ki L. *v/tr.* align, read, measure, point (TRANS-ASP).
ki klâ L/LHL. *svc/tr.* make a pattern.
kiab (TP) L. *n.* patrol officer, kiap (M).
kib L. *n.* ash (N1).
kibi L. *n.* face (N2).
kibikabasin L. *n.* front side (cp. *kibi* ‘face’) (N1).
kiblot L. *adj.* straight, level.
kika L. *v/intr.* stir up trouble.
kikan L. *adj.* big.
kikekâ’ LHL. *v/tr.* rub.
kiki L. *v/tr.* share (TRANS-ASP).
kikib L. *n.* share; measure (N1).
kil baa L. *svc/tr.* ask (PFV).
kil o L L. *svc/tr.* ask (IPFV).
kilo L. *v/intr.* begin (PFV).
kilók LH. *n.* tree species (N1).
kilok (TP) L. *n.* clock, watch (N1).
kilwám LH. *n.* Wompoo Fruit-dove. *Ptilinopus magnificus* (M).
kim L. *n.* ground (N1).
kim L. *n.* tree species (N1).
kím LH. *n.* ridge where loose end of string bag ends (N1).
-kimà HL. *v/tr.* put in the fire (PFV).
kimâa’ LHL. *v/tr.* care for, watch out for (PFV).
kimaanîn LHL. *n.* boss, caretaker (M).
kimi L. *v/intr.* go out (of lamp, tobacco) (PFV).
kimik ?L. *n.* mouth (N1).
kimin L. *adv.* same.
kimit L. *n.* cucumber (N1).
kimkîm LH(redup). *n.* root (?N1).
-kimsan L. *v/tr.* put in the fire (IPFV).
kin L. *n.* eye, eyesight (N1).
kina L. *n.* Kina (N2).
kinaamuk L. *n.* tear (N1).
kináan LH. *n.* eyelashes (N1).
kinggungáan LH. *n.* eyebrow (N1).

- kingkan* L. *n.* shaman (M).
kining L. *adj.* smooth (also *kling*).
kinum L. *n.* eyelid (N1).
klâ LHL. *adv.* really, properly.
klâ LHL. *v/tr.* make, work, build;
 fix complete (TRANS-ASP).
klaa L. *v/intr.* rot, decay (PFV).
klaab L. *n.* tree species (N1).
klaan L. *v/intr.* rot, decay (IPFV).
klafâ LHL. *v/tr.* put on back (in order
 to carry); climb (PFV).
klam L. *n.* short beam in rack for
 heating stones for a leaf oven (N1).
klang L. *n.* ear; inner ear, hearing
 (N1).
klangal L. *n.* ear wax (N1).
klayâm LHL. *adj.* very good; thank
 you.
Klefol ?L. *pn.* Telefol.
Klefolib ?L. *pn.* Telefolib (name of
 the spirit house (haus tambaran) in
 Telefomin).
klém LH. *n.* shield (N1).
klen L. *v/intr.* rustle (of leaves, etc.)
 (IPFV).
klô H. *n.* ringworm; tinea (N2).
klòk ?HL. *n.* Rufous-bellied
 Kookaburra. *Dacelo gaudichaud*
 (F).
kloklô LH(redup). *n.* Owllet Nightjar.
Aegotheles (F).
klolâ' LHL. *v/tr.* bare, expose, lay
 open (by removing skin or bark)
 (PFV).
klón LH. *n.* ear (N1).
klón malu LH/L. *n.* boar's tusk used
 for ear decoration (N2)
klosól LHL. *n.* Wahne's Parotia.
Parotia wahnesi (M/F).
kloutklout id. (sound of) chewing
 hard.
klutâ L. *v/tr.* break, shatter (PFV)
kôbo H. *pron.* you (SG M).
koból LH. *n.* cassowary; Northern
 Cassowary; Dwarf Cassowary.
Casuarius; *Casuarius casuarius*;
Casuarius bennetti (F).
koból wanegi LH/L. *n.* Northern
 Cassowary. *Casuarius casuarius*
 (F).
kobóm LH. *adj.* dumb, mute.
kobot L. *adj.* very sharp.
kok L. *adj.* sour, bitter.
komók LH. *n.* political leader (M).
komón LH. *n.* lime (crushed and
 heated coral) (N1).
komonsân LHL. *n.* Magnificent
 Bird of Paradise. *Cicinnurus*
magnificus (F).
komonsân eit LHL. *n.* Magnificent
 Bird of Paradise. *Cicinnurus*
magnificus (F).
komôu LHL. *v/intr.* sit on shoulder.
Kondubib ?L. *pn.* Kondufib (place
 name).
kongkong (TP) L. *n.* Hong Kong
 taro (N1).
konokmôn LH. *n.* old woman (F).
kontub L. *n.* conch (N1).
kosmale L. *adj.* orange (also *kosnal*).
kou L. *v/tr.* have sexual intercourse,
 copulate (TRANS-ASP).
kubiamei L. *n.* Pinon Imperial-
 pigeon. *Ducula pinon* (M).
kubkub L. *n.* down (N1).
kubu ?L. *v/tr.* smoke (food), cure
 (food) (TRANS-ASP).
kufiab L. *adj.* easy.
kukmak ?L. *n.* tree species (N1).
kuksin L. *n.* treetop end (of a tree)
 (N1).
kukub L. *n.* custom, way, behaviour,
 habit (N2).
kuláan LH. *n.* animal, game, meat
 (M).
kulikkulik id. jitter, shudder.
kulila L. *v/intr.* die, perish.
kumanin L. *n.* firefly (M).

kumén LH. *n.* man's small string bag (N1).
kumuk L. *n.* ginger (N1).
kumunón LH. *n.* thigh(bone) (N1).
kun L. *v/intr.* emanate smell.
kusang *id.* sneeze.
kutab L. *n.* white ash (N2).
kutimibo L. *tn.* in the early morning.
kwáam LH. *n.* arrow type (N2).
kwablum L. *n.* grasshopper species (F).
kwabu L. *n.* tadpole (M).
kwaisò HL. *n.* Western Black-capped Lory. *Lorius lory* (M).
kwal L. *n.* shell type, exchange item (N1).
kwamflak L. *adj.* full (of moon).
kwanim L. *n.* Long-billed Cuckoo. *Rhamphomantis megarhynchus* (M).
kwéil LH. *n.* hand (N1).
kweilbân LHL. *n.* palm (N1).
kweilblóng LHL. *n.* finger nail (N1).
kweilgóng LHL. *n.* wrist and finger joint (N1).
kweilón LHL. *n.* hand(bone) (N1).
kweiltúb LHL. *adv.* with the hand,

L

lais L. *n.* rice (N1).
ledie (TP) L. *n.* radio (N1).
-lò HL. *v/tr.* hit, kill (PFV).

M

-ma L. *v/tr.* plant, grow (bananas, taro, sugarcane) (PFV).
maa L. *v/tr.* cut (meat).
máa LH. *n.* hip (N1).
mâa' LHL. *v/intr.* stand up (PFV).
máab LH. *n.* frog (M).
maabu L. *n.* blowfly (N1).
máam LH. *n.* mosquito (M).
máaman LH. *n.* piece of wood (N1).

manually.
kweim L. *n.* fever, malaria, headache (N2).
kweimá LH. *n.* light yellow taro species (N1).
kweimiki L. *adv.* deliberately.
kweimoni L. *n.* Helmeted Friarbird. *Philemon buceroides* (F).
kwéit LH. *n.* sugar cane; sugar (N1).
kweital L. *adj.* right, correct.
kweital L. *n.* first born of twins (M/F).
kweital L. *n.* right hand (N1).
kweitlum L. *n.* man-made object (N1).
kweko ?L. *v/tr.* mix.
kwel L. *n.* neck (N1).
kwél LH. *n.* hornbill (M/F).
kwelgong L. *n.* Adam's apple (N1).
kwelón LH. *n.* Adam's apple (N1).
kweng L. *n.* grasshopper (F).
kwese L. *n.* rainbow (N1).
kwiam L. *n.* tree kangaroo species (M/F).
kwín L. *adj.* dark.
kwīng H. *n.* shoulder (N1).
kwīngbòl HL. *n.* collar bone (N1).
kwóisâm LHL. *n.* spirit house (N2).

lok (TP) L. *n.* lock (N1).
lotu (TP) L. *n.* church (service) (N1).
lotuam (TP) L. *n.* church (building) (N2).

máamein LH. *n.* mother's brother (M).
maanafa L. *v/tr.* cut (meat) (PFV).
maanafu- L. *v/tr.* lacerate (PFV).
mak L. *adj.* one, other, some, a certain.
mak ... mak L. *adj.* the one .. the other.
makáa LH. *n.* enemy (M).
makaal wan L/L. *n.* Manikin.

- Lonchura (F).
makein L. n. female in-laws of a woman (F).
makob L. adv. almost, same.
makón LH. n. shoulder blade (N1).
malasin (TP) L. n. medicine; medication (N1).
malo L. adv. unclear, doubtful.
mām H. n. respiratory disease, asthma (N2).
mama L. v/intr. swagger (PFV).
māmel H. n. vein, artery (N1).
mamléya LHL. v/intr. turn around on the spot (while hopping/dancing) (PFV).
mamtab L. n. Kookaburra. Dacelo tyro, Dacelo leachii (M).
manam L. n. betel nut palm; betel nut. Areca catechu (N1).
manggék LHL. n. honey (N1).
manggék LHL. n. honey bee (M).
mangglom L. v/intr. wail, cry (only PL subject) (PFV).
mangmaang L. n. Blue-collared Parrot. Geoffroyus simplex (M).
māt H. adj. (dark) green.
māt H. n. gall (N1).
mát LH. n. belly (N1).
mat (TP) L. n. mat (N1).
matak L. n. fat (N1).
mayamayam L. v/intr. swagger (PFV).
me L. v/intr. cry (IPFV).
méb LH. adv. close.
mebwéing LHL. adj. short.
mefakabmin L. adj. small.
meimēi LH(redup). n. earthquake (N1).
-mēin LHL. v/intr. fall, drop out (PFV).
-meki L. v/tr. hang up (PFV).
mela L. v/intr. cry (PFV).
mele- L. v/tr. touch (PFV).
melekala L. v/intr. work hard, drudge (PFV).
melel L. n. children (of someone) (PL).
memâ LHL. adj. new.
memâlo LHL. tn. now, today.
meme L. adj. mute.
memé LH. n. children (PL).
men- L. v/tr. touch (IPFV).
mēn H. n. child (M/F).
mén LH. n. string bag (N1).
Mendeng L. pn. Madang (capital of Madang province).
mengâ LHL. v/tr. pull taut, force (PFV).
met L. dir. upriver, up a little.
metek id. smack lips.
meyún LH. n. Great Cuckoo-dove. Reinwardtoena reinwardtii (F).
mí' LHL. v/intr. meet, gather (PFV).
mí' LHL. v/tr. meet, gather (PFV).
Mian L. pn. Mian.
mib L. n. lid (of pot) (N1).
miba ?L. v/tr. close by putting down lid (TRANS-ASP).
mífim LH. n. sago palm; sago. Metroxylon sagu (N1).
mífimkôu LHL. n. sago hammer (N1).
mífimwâl LHL. n. sago grub (M).
mífin L. adj. selfish.
-miki HL. v/tr. hold child in arm, brood, give birth (TRANS-ASP).
miki L. v/tr. put in mouth (TRANS-ASP).
mikik LH. adj. new, unused.
mikiktēm LHL. tn. first(ly), at first.
mikil L. adv. ready.
mikil L. n. mountain (N2).
mikim L. dyad. siblings of opposite sex; grandparent-grandchild relation of same sex.
mikokol ?L. n. pandanus grease (N1).
míl LH. n. bean (N1).

- milblóng* LHL. *n.* bean pod (N1).
milib ?L. *n.* forefinger (N1).
milifanim L. *n.* Manucode.
Manucodia (M).
milil L. *adj.* dark, black.
milim LH. *n.* side, half (N1).
milimból LHL. *n.* rib (N1).
milimsîn LHL. *n.* other side (N1).
mitmelet *id.* move and make a noise
(so that e.g. a pig runs away).
milomalo ?L. *id.* move and make a
noise (so that e.g. a pig runs away).
mim LH. *n.* dirt in water (N2).
mīma H. *n.* spittle (N1).
mimín LH. *adj.* hot.
mín LH. *n.* son (M).
misiam L. *adj.* bad.
misim L. *adv.* for free, as a treat.
mít LH. *n.* stem, pile; kind; cause,
origin, reason (N2).
mitakla ?L. *n.* hole in septum for
traditional facial decoration (N2).
mitdáta LHL. *adv.* later.
mitêm LHL. *n.* origin, source (N2).
mitmákam LHL. *n.* origin, reason
(N2).
mitsîn LHL. *n.* trunk end (of a tree)
(N1).
mo L. *v/intr.* come and go, pass by
(PFV).
mò' HL. *v/tr.* break banana (off
stalk) (IPFV).
mobín LH. *n.* banana species (N1).
moí LH. *n.* milk (N1).
mōk H. *n.* stone adze (N2).
mokim L. *adj.* blue (also *moklim*).
mōko H. *n.* fish species (M).
mokób' HL. *v/tr.* like (to be with a
person) (PFV).
mokók LH. *n.* ankle (N1).
mokonga L. *v/intr.* become emaciated
(PFV).
mokúk LHL. *n.* nipple (N1).
(=) *mō* H. *cl.* Interrogative.
- =mo* L. *cl.* Negation.
mol L. *n.* object of exchange (in
repayment) (N2).
molà HL. *v/intr.* become ripe (of
banana) (PFV).
molá' LHL. *v/intr.* become full (of
moon) (PFV).
mole L. *conj.* if, when.
molim LHL. *n.* father-in-law (M).
molò' HL. *v/tr.* break banana (off
stalk) (PFV).
molobfêit LHL. *n.* descendant,
grandchild (M/F).
molóng LH. *n.* house frame (N1).
molosél LHL. *n.* descendents (PL).
molot L. *adj.* straight, true.
mon L. *n.* area where taro can be
grown (N2).
món LH. *n.* daughter (F).
monam L. *n.* garden house (N2).
mone L. *v/intr.* come and go, pass by
(IPFV).
moní (TP) LHL. *n.* money (N2).
moniôm LHL. *n.* sibling's daughter
(F).
mōnogo H. *n.* Pitta. *Pitta*
(*versicolor, sordida,*
erythrogaster) (F).
monsa L. *v/intr.* keep going.
Mosbi L. *pn.* Port Moresby.
motomâa LHL. *v/tr.* ascertain,
confirm (PFV).
moton L. *adj.* true.
-môu LHL. *v/tr.* put child or pig over
shoulders (in order to carry)
(PFV).
moukowâ' LHL. *v/intr.* noise a pig
makes when running away (PFV).
moumōu LH(redup). *n.* shark, ?whale
(M).
mousi L. *n.* wave (N1).
mubiang L. *adj.* last.
muk *id.* smack lips.
mukôn LHL. *n.* neck vertebra (N1).

mukùng HL. *n.* nose (N1).
mukungsin HL. *n.* front, bow (N1).
mulub L. *n.* clan, descendants of one ancestor (M/F).
mulul L. *n.* traditional male hairstyle (N1).
muniai L. *n.* frogmouth; nightjar.

N

n L. *v/intr.* exist, stay, remain, auxiliary (PFV).
na L. *v/tr.* do, make (IPFV).
-nâ' LHL. *v/tr.* hit, kill (PFV).
naa tê' L/LHL. *svc/intr.* come back, return (PFV).
naa temê' L/LHL. *svc/tr.* try (IPFV).
naa tl L/L. *svc/intr.* come back, return (PFV).
naam L. *n.* upper body (N1).
nafinam L. *n.* little winged insects which are attracted by light (N1).
nâi LH. *n.* vagina (N1).
naka L. *n.* man, person (M).
nakamîn LHL. *n.* brother; some man (M).
nakatén LH. *n.* boy (M).
nama L. *v/tr.* peel (taro, sweet potato) (IPFV).
namâ LHL. *adj.* white.
namâ LHL. *n.* Sulphur-crested cockatoo. *Cacatua galerita* (M).
namâ' HL. *v/intr.* die out, perish (PFV).
namantîb LHL. *n.* Rusty Mouse-warbler. *Crateroscelis murina* (M).
nantana L. *v/tr.* lick (PFV).
nantunu L. *v/tr.* lick (IPFV).
nē H. *pron.* I, my.
nék LH. *n.* friend (M).
nekél LH. *n.* younger siblings (PL).
nēle H. *pron.* I alone, my alone.
nelekiêm LHL. *pron.* only me alone.
nelemî LHL. *pron.* mine alone.
neleskîl LHL. *pron.* myself.

Podargus/Eurostopodus.Caprimulgus (M).

munùng HL. *n.* nose (N1).
munungsin HL. *n.* front, bow (N1).
mutum L. *n.* point, tip, end, edge (N1).

neletâ LHL. *pron.* I alone (EMPH).
nēmaye H. *pron.* myself.
nemelâ' LHL. *v/tr.* peel (taro, sweet potato) (PFV).
nēmi H. *pron.* mine.
Nenebil ?L. *pn.* Nenebil (Mian name for the area where Mianmin airstrip and the villages Timeilmin and Temsakmin are located).
neng L. *n.* younger sister (F).
nēta H. *pron.* I (EMPH).
ngaalangaala *id.* moan.
ngáamein LH. *adj.* yellow.
ngaan L. *v/tr.* sing, call out (IPFV).
ngaana L. *v/tr.* sing, call out (PFV).
ngaanin L. *n.* windpipe (N1).
ngaawâl LHL. *n.* rust (N1).
ngana ?L. *v/tr.* spread (PFV).
nganâ HL. *v/tr.* spread out (leaves, feathers, blanket, tree bark) (PFV).
ngela L. *v/tr.* beg, ask for persistently (PFV).
ngen L. *v/tr.* beg, ask for persistently (IPFV).
ngesim L. *n.* Papuan King-parrot (M).
ngikngukweng *id.* snore.
nginik *id.* snuffle (noisily).
ngoun L. *v/tr.* bark, howl (of dogs) (TRANS-ASP).
ngunù HL. *v/tr.* spread out (leaves, feathers, blanket, tree bark) (IPFV).
ngunukngunuk *id.* grunting sound (of pig).
nī H. *pron.* we (EXCL), our (EXCL).

nīb H. *pron.* our (INCL).
nībmaye H. *pron.* ourselves (INCL).
nībmi H. *pron.* ours (INCL).
nībo H. *pron.* we (INCL).
nībta H. *pron.* we (INCL, EMPH).
nikitneket *id.* creak.
nil (TP) L. *n.* nail (N1).
nīli H. *pron.* we (EXCL) alone, our (EXCL) alone.
nīlib H. *pron.* our (INCL) alone.
nilibkiēm LHL. *pron.* only we (INCL) alone.
nilibmī LHL. *pron.* ours (INCL) alone.
nilibskīl LHL. *pron.* ourselves (INCL).
nilibtā LHL. *pron.* we alone (INCL, EMPH).
nilikiēm LHL. *pron.* only we (EXCL) alone.
nilimī LHL. *pron.* ours (EXCL) alone.
niliskīl LHL. *pron.* ourselves (EXCL).
nilitā LHL. *pron.* we alone (EXCL, EMPH).
nīmāye H. *pron.* ourselves (EXCL).
nīmi H. *pron.* ours (EXCL).

O

=*o* Toneless. *art.* article (SG F), article (PL N1), article (N2).
 =*o* Toneless. *cl.* Hortative.
ō H. *pron.* she (F), her (F); they, their (N1); it, its, they, their (N2).
 -*ō* HL. *v/tr.* take, pick up (PFV).
o L. *v/tr.* say, talk, tell, call (IPFV).
 =*obba* Toneless. *cl.* Clitic used in conjunction with adnominal distal demonstratives.
 -*ō blelā'* H / LHL. *svc/intr.* fall over, topple, tumble (PFV).
 -*ō klā* HL LHL. *svc/tr.* direct, instruct, rebuke.
ōb H. *pron.* your (SG F).

niminbaba ?L. *conj.* for.
ning L. *n.* younger brother (M).
ning LH. *n.* spike (of certain fruits and animals, e.g. pineapples and spiders) (N1).
nini *id.* sneak.
nini L. *v/tr.* scrape taro (TRANS-ASP).
ninik L. *adj.* dirty.
niniktōl LHL. *n.* vine spieces (N1).
ninin L. *n.* shingle (bordering a river) (N2).
ninin LH. *n.* name (N2).
nīta H. *pron.* we (EXCL, EMPH).
nitnēt LHL. *n.* Red-collared Honeyeater. *Myzomela rosenbergii* (M).
no L. *n.* marsupial, rodent (M/F).
nokāi L. *n.* maternal grandfather (M).
nomonsei L. *n.* female ghost (F).
nomotnomot *id.* suck.
nono L. *n.* King Bird of Paradise.
Ciccinnurus regius (F).
nono eit L/L. *n.* King Bird of Paradise. *Ciccinnurus regius* (F).
 -*ntamā'* LHL. *v/tr.* bite (PFV).

obā LHL. *v/tr.* play (ball) (TRANS-ASP).
obdī LHL. *v/tr.* fetch water (TRANS-ASP).
ōbmāye H. *pron.* yourself (SG F).
ōbmi H. *pron.* yours (SG F).
obmila L. *v/intr.* choke.
ōbo H. *pron.* you (SG F).
ōbta H. *pron.* you (SG F, EMPH).
obtanā HL. *v/tr.* put fire to, light (PFV).
obtunu L. *v/tr.* put fire to, light (IPFV).
okok (TP) L. *n.* work (N2).
Oksabam L. *pn.* Oksapmin (station about 75km south-east of

Mianmin).

- ol* L. *n.* butt (of rifle) (N1).
oli L. *v/intr.* almost stop (of rain only).
olibâ LHL. *v/tr.* watch for, be on the lookout for.
ōlo H. *pron.* this (F, PROX); these (PL N1, PROX); this, these (N2, proximal).
ōlo H. *tn.* now.
ōlob H. *pron.* you (F) alone; 2Sg Feminine ('alone' series).
olobkiêm LHL. *pron.* only you (SG F) alone.
olobmî LHL. *pron.* yours (SG F) alone.
olobskîl LHL. *pron.* yourself (SG F).
olobtâ LHL. *pron.* you alone (SG F, EMPH).
olokiêm LHL. *num.* one (F).
olokiêm LHL. *num.* one (N2).
olokiêm LHL. *pron.* only she (M) alone, only it (N1, N2) alone, only

S

- s* L. *v/intr.* sleep (PFV).
 =*sa* Toneless. *cl.* too (also =*sak*, =*sna*, =*snak*).
 -*sa* Toneless. *suf.* with (possessive).
saan L. *v/tr.* shoot (PFV).
sâi H. *n.* rope, electric cord (N1).
saiman L. *n.* owl. *Ninox*, *Uroglaux*, *Tyto* (M).
sak L. *n.* owner, dweller (M).
salia L. *n.* Beautiful Fruit-dove.
Ptilinopus pulchellus (M).
salum L. *n.* dew (N2).
samdaan L. *n.* Palm cockatoo.
Probosciber aterrimus (M).
san L. *n.* seedling (N1).
 (-)*san* L. *v/tr.* plant, grow (bananas, taro, sugarcane, Hong Kong taro)

they (N1, N2) alone.

- olomî* LHL. *pron.* hers (F) alone, its (N2) alone.
oloskîl LHL. *pron.* herself.
olotâ LHL. *pron.* she alone (F, EMPH); they alone (PL N1, EMPH); it alone, they alone (N2).
ōmaye H. *pron.* herself.
omflebâ LHL. *v/tr.* miss (with missile), come close (PFV).
ōmî H. *pron.* hers (F), its (N2).
omômom LHL. *mod.* all kinds of.
ōn H. *n.* bone (N1).
on L. *v/intr.* set out, go (PFV).
ōta H. *pron.* she (F, EMPH); they (PL N1, EMPH); it/they (N2, EMPH).
otâne LHL. *conj.* but.
ou L. *n.* pond (N1).
ou L. *v/tr.* assemble arrow by putting the head into the shaft (TRANS-ASP).
ōub H. *n.* top (of the head) (N1).
 (IPFV).
sānab H. *adj.* strong in taste.
sāng H. *n.* story (N2).
sang L. *n.* grass species (N1).
sanggwâu LHL. *adv.* quickly.
sasan L. *v/intr.* moan (IPFV).
satlit ?L. *n.* Wooden tool for scraping cassava (N1).
sawân LHL. *n.* Long-tailed Buzzard.
Henicopernis longicauda (M).
sawéng LH. *n.* lie, decoy story (N2).
sayón LH. *n.* Blyth's Hornbill. *Aceros plicatus* (M/F).
sbâl LH. *adj.* strong.
sbalmâ LHL. *v/tr.* strengthen, support (PFV).
sbun (TP) L. *n.* spoon (N1).
seiblong ?L. *n.* dish, plate (N1).

- seila* ?L. *v/intr.* be happy, rejoice (PFV).
sein L. *v/intr.* be happy, rejoice (IPFV).
Sek L. *pn.* Sek river.
sēku H. *n.* bush knife (N1).
sel L. *n.* inhabitants (PL).
selé LH. *n.* red taro species (N1).
sengá LH. *n.* Red-legged Brush-Turkey. *Talegalla jobiensis* (?F).
sengela ?L. *v/tr.* pour (PL object) (TRANS-ASP).
senso (TP) L. *n.* chainsaw (N1).
sesá LH. *n.* bush, rainforest (N2).
seselô LHL. *v/tr.* remove the bark of Gnetum gnemon (to make thread for string bags) (PFV).
sibbe L. *v/intr.* fill up (PFV).
sibeil L. *n.* small taro stalk (N1).
sibil L. *n.* man's second wife (F).
sibsib L. *adv.* off-colour.
sīfefe H. *n.* Swinhoe's Snipe.
Gallinago megala (*Chinese Snipe*) (F).
sikà' HL. *v/intr.* swell up. (IPFV).
sīl H. *n.* needle (N1).
silâ LHL. *v/tr.* scrape dirt or taro corm, rub the skin with stinging nettle.
-silêb LHL. *v/tr.* set out after, follow directly (PFV).
silîm LHL. *n.* snake species (M).
simaan L. *v/intr.* be upset, be ashamed (IPFV).
simaana L. *v/intr.* be upset, be ashamed (PFV).
sin L. *adj.* old.
sin L. *adv.* already; first.
sin L. *n.* side (N1).
sina L. *v/intr.* rest from work (PFV).
sinanggwân LH. *tn.* a long time ago, in days of yore.
sinangwanânomo LHL. *tn.* a long time in the future.
- sinanoa* L. *adv.* after that, later.
sinanomo L. *tn.* a little later.
sing tubu L/L. *svc/tr.* spill.
singa L. *v/tr.* pour (SG object) (TRANS-ASP).
singgila ?L. *v/tr.* shake (liquid) (TRANS-ASP).
singgwâl L. *n.* dragon fly (M).
singka L. *v/tr.* tear (IPFV).
singkaa L. *v/intr.* rest from work (IPFV).
singkikan L. *tn.* for the first time.
sino L. *tn.* before.
sinta L. *tn.* yesterday.
sintalo L. *tn.* yesterday.
sio L. *n.* Grey-streaked Hoeneyeater.
Ptiloprora perstriata (M).
siôt (TP) HL. *n.* shirt (N1).
sisím LH. *n.* Pesquet's parrot.
Psittrichas fulgidus (M).
sít LH. *n.* tooth (N1).
sità HL. *v/tr.* insist, keep asking (with wéng 'talk' as object).
sita L. *v/tr.* watch over; guard (TRANS-ASP).
sitâ LHL. *v/intr.* swell.
sitâ' LHL. *v/tr.* try to loosen, jiggle (unsuccessfully), keep asking (TRANS-ASP).
sitâal LHL. *n.* lips (N2).
sitglotsitglot *id.* noise of grinding teeth.
sitnîm L. *n.* gum (of teeth) (N1).
sitôn LHL. *n.* tooth(bone) (N1).
situbû' LHL. *v/tr.* knead (taro dough) (?TRANS-ASP).
skaal L. *n.* leg (N1).
skeb L. *n.* side of house (N1).
skéim LH. *adv.* far.
skemdâng LH. *n.* (small) knife (N2).
-ski ?L. *v/tr.* turn (TRANS-ASP).
skil LH. *n.* foot (N1).
skilâ' LHL. *v/intr.* run.
skilbân LHL. *n.* sole (N1).

skilblông LHL. *n.* toenail (N1).
skilskîl saa LH(redup)/L. *v/intr.*
 kick one's legs (IPFV).
Skiobib L. *pn.* Skiobib.
skodab L. *n.* mustard (N1).
skomiâ LHL. *n.* hole at the base of
 skull (foramen magnum) (N1).
skoskō LH(redup). *n.* knot in wood
 (N1).
skoyabu L. *n.* wallaby (M/F).
skul (TP) L. *n.* school (N2).
slal L. *n.* chute (for water) (N1).
slelēb LHL. *v/tr.* push (PFV).
slisli LHL. *adj.* rough.
sloyabuning L. *n.* Papuan Harrier.
Circus spilothorax (M).
slub L. *n.* cockroach species (F).
smā H. *adv.* still.
smē H. *n.* cave, overhanging rock
 (N2).
smîk LH. *n.* picture; representation;
 copy (N2).
smîk LH. *n.* reflection (of human or
 animal) (M/F).
smîk LH. *n.* shadow (N1).
smou L. *n.* pandanus species (N1).
smûl LH. *n.* wallaby (M/F).
snābi H. *n.* crocodile (M).
snuk *id.* blow nose.
snuk L. *n.* house rat. *Rattus ruber*
 (M).
sō LH. *n.* cane used to make arrow

T

=*ta* Toneless. *cl.* Medial verb
 marker (in clause chains).
ta L. *v/tr.* deny.
ta L. *v/tr.* sharpen.
tā(i) H. *n.* cutting tool (N1).
tā' HL. *v/ambitr.* cut between, tear.
taa L. *v/intr.* spit.
taa L. *v/tr.* open (the mouth)
 (TRANS-ASP).
tāa LH. *n.* lizard species (M).

shafts (N1).
sob (TP) L. *n.* soap (N1).
Sobining L. *pn.* Sobining.
sobwain LH. *n.* Little Red Lorikeet
 (or maybe Josephine's Lorikeet).
Charmosyna pulchella (or
iosefinae) (M).
Sofelok L. *n.* Sofelok (tobacco)
 (N1).
sók LH. *n.* rain (N2).
Soka L. *pn.* Soka river.
som L. *n.* banana (N1/N2)
 (depending on species).
somáan LH. *n.* banana leaf (N1).
songoksongok *id.* gurgling liquid in a
 container.
sosbên (TP) LHL. *n.* pot, saucepan
 (N1).
sóu LH. *n.* young unmarried
 woman (F).
stoa (TP) L. *n.* store (N2).
stoli (TP) L. *n.* story (N2).
su L. *n.* Papuan Lorikeet.
Charmosyna papou (M/F).
su L. *postp.* near.
sù (TP) HL. *n.* shoe (N1).
-suan L. *v/tr.* be angry with, hate
 (IPFV).
-suana L. *v/tr.* be angry with, hate
 (PFV).
sūm H. *adj.* big, large, tall; much.
sún LH. *adv.* habitually.

taab L. *n.* daytime (N2).
taak ngaa L/L. *v/intr.* boast, talk big
 (IPFV).
taak ngaana L/L. *v/intr.* boast, talk
 big (PFV).
tāal LH. *n.* cooking banana (N1).
tāal LH. *n.* leash (N1).
taala L. *adv.* downriver.
taalwaa L. *v/intr.* worry (IPFV).
taan L. *n.* light and warmth of the
 sun (N2).

- táang* LH. *n.* flint, cigarette lighter (N1).
taanwan L. *n.* ?Metallic Starling. *Alponis metallica* (F).
tab L. *dir.* downriver, down a little.
tabáab LH. *postp.* underneath.
tablak L. *n.* Mottled Whistler. *Rhagoligus leucostigma* (M).
tablaséb LH. *n.* white man, expert, authority figure (M).
tafeit HL. *n.* axe handle (N1).
tai- L. *v/tr.* cut off (SG object) (PFV).
taimâ LHL. *n.* Heron. *Egretta* (M).
taka- L. *v/tr.* avoid (PFV).
taka L. *v/tr.* cut off (IPFV).
takaal L. *n.* decorative bands (N1).
takakâ LHL. *v/tr.* make a snare, set a trap.
takal L. *n.* rotten meat (N1).
takam L. *n.* catfish, braggart (M).
takan L. *n.* armpit (N1).
takanam L. *n.* armpit (N1).
takum L. *n.* centipede, scorpion (F).
tal L. *n.* handle (N1).
talâ HL. *adv.* inside, outside, to the side.
talîb LHL. *n.* rafter (N1).
talò HL. *v/tr.* cut off (SG object) (PFV).
tâm L. *dir.* inside, sideways.
-tamâ HL. *v/tr.* lock up, pen in, imprison (PFV).
-tamâa' LHL. *v/tr.* step on (PFV).
tamaalâa' LHL. *v/intr.* stop on the way.
tamaan L. *n.* fornication (N2).
tamamèin HL. *n.* shock (N2).
taman L. *n.* river valley (N2).
tana L. *v/tr.* comb (PFV).
tanaam L. *n.* cockroach species (F).
-tanâ HL. *v/tr.* light (of fires only) (PFV).
tang L. *n.* smell (N2).
-tangâa' LHL. *v/tr.* hang up piece of clothing (to dry).
tantalibô LHL. *n.* ?Common Koel. *Eudynamys scolopacea* (M).
tata L. with the function verb *ke* 'be strong, be overpowering.
tataán LH. *n.* greens, vegetables (N2).
tauwal L. *n.* plant species (N1).
te L. *v/intr.* come (IPFV).
te L. *v/intr.* come (PFV).
teb L. *n.* craving, need (N2).
tebél LH. *n.* ant (M).
tebol (TP) L. *n.* table (N1).
tefû' HL. *v/?intr.* warm oneself by the fire. (?TRANS-ASP).
tei- L. *v/tr.* cut off (PL object) (PFV).
tēing H. *n.* generosity (N2).
teing L. *n.* shoulder (N1).
tek L. *n.* vine; rope (N1).
teke L. *adj.* long, tall.
tekebmîn LH. *adj.* long, tall.
tekêi' LHL. *v/tr.* stretch (the body) (PFV).
tekéib LH. *n.* marsupial species (M/F).
tekein L. *n.* knowledge (N2).
Tekein L. *pn.* Sepik river.
telâ LHL. *v/tr.* cut between (PFV).
telò HL. *v/tr.* cut off (PL object) (PFV).
tem L. *n.* inside, hole (N1).
tem L. *post.* in(to).
têm' LHL. *v/intr.* have a look (PFV).
-têm' LHL. *v/tr.* see (IPFV).
tembâl LHL. *n.* bachelor, young unmarried man (M).
temdei- L. *v/tr.* leave (PFV).
temê' LHL. *v/intr.* look (IPFV).
-temê' LHL. *v/tr.* look at (IPFV).
Temsel L. *pn.* Temsel (inhabitants of Temsakmin).
Temsetén LH. *pn.* Temse people.
temwât LHL. *conj.* while.

- tēn* H. n. child, people of (in the PL) (M/F).
-tēn' LHL. v/tr. see (PFV).
tēna L. n. arrow shaft (N1).
tēnà' HL. v/tr. make string bag.
tēng L. n. laziness, tiredness (N2).
tēng L. n. tree species (N1).
tetabumin L. n. toe (N1).
tetéb LH. adj. narrow (of two-dimensional objects).
tetníng LH. n. thorn on a vine (N1).
tēya L. v/tr. crack (nuts), knead (dough) (TRANS-ASP).
tī ?L. v/tr. hide (?TRANS-ASP).
tiam L. n. Bare-eyed Crow. *Corvus tristis* (M).
tib L. n. surface (N1).
tibila ?L. v/tr. cover (TRANS-ASP).
tibín LH. n. head of river (N2).
tibkal L. adj. thin; narrow (of objects).
tibtà' HL. v/tr. stack.
tifēng L. n. tree species (N1).
tík H. n. leaf (N1).
tikà' HL. v/intr. wriggle.
tikan L. adj. big.
tikinâl LHL. n. area without trees only grass (N2).
tiktikâm HL. n. house made of bush materials only (N2).
tíl LH. n. dog (M/F).
tila L. v/intr. flash (of lightning).
tila L. v/tr. remove, loosen, undo (TRANS-ASP).
tilen L. v/intr. be in one's final throes (IPFV).
tilusaamfub L. n. elephant grass (N1).
tím LH. n. lizard (M/F).
tímam L. n. men's house (N2).
timin L. n. lightning (N1).
timtīm LH(redup). n. sand fly (M).
tín LH. n. bee, wasp (M).
tiná LH. n. Long-billed Honeyeater.
Meliestes megarhynchus (M).
tini L. n. stone club (with a wooden handle) (N1).
tiong L. n. pandanus species (N1).
titil L. n. strength, power (N2).
tl L. v/intr. come (PFV).
tlaa L. v/intr. come.
tlâa' LHL. v/intr. be(come) sad (PFV).
-tlâa' LHL. v/tr. remove (PFV).
tlamàn' HL. v/intr. become silent (PFV).
tlanhaa L. v/intr. play.
tle L. v/intr. come (iterative) (IPFV).
tli L. v/tr. chew (TRANS-ASP).
tlinggwêi LHL. n. Red-cheeked Parrot. *Geoffroyus geoffroyi* (M).
tlít LH. n. cane species (N1).
tlúm LH. n. bridge, bracer, scaffolding (N1).
Tobafafib ?L. pn. Tobafafib.
tobol L. n. tree species (N1).
tobtilin L. v/intr. be confused (IPFV).
toea L. n. Toea (N2).
tol L. n. power; aggression (N2).
tolâ LHL. v/tr. peel off skin (of banana).
tolamib L. n. taro blight (N2).
toli L. n. arrow type (N1).
tolim L. n. New Guinea eagle.
Harpyopsis novaeguineae (M).
tóm LH. n. stone (N1).
tonam L. n. mosquito net (N1).
tonôn LHL. n. upper arm (bone) (N1).
tons (TP) L. n. thongs (N1).
tos (TP) L. n. torch (N1).
tosian L. v/tr. be afraid of (IPFV).
tosiana L. v/tr. be afraid of (PFV).
-tôu HL. v/tr. put over fireplace (PFV).
tòu HL. v/tr. set down (TRANS-ASP).

tou L. *v/intr.* sit down (PFV).
toufa ?L. *v/tr.* put food on leaves
 (?TRANS-ASP)..
toula L. *v/intr.* sit.
toulalin L. *n.* bench (N2).
-touléb LHL. *v/tr.* put on arm (in
 order to carry) (PFV).
toun L. *v/intr.* sit down (PFV).
tub L. *n.* chest (N1).
tubáan LH. *n.* breast feather (N1).
tubón LH. *n.* breast bone (N1).
tubu L. *v/tr.* pour, sprinkle.

U

u L. *v/tr.* cut (wood).
ubil L. *n.* island (N2).
-ubmà -abmà HL/HL. *v/tr.* turn
 around in one's hand (PFV).
úk LH. *n.* pit, fireplace. (?N1)
uka L. *v/tr.* pull out (taro) (IPFV).
-uka L. *v/tr.* put on (clothes) (IPFV)
ukáli LHL. *n.* pumpkin (N1).
ul L. *interrog.* who (also wan or un).
ul L. *n.* fungus (N1).
ul L. *n.* tree species (N1).
ula L. *adv.* up.
ulà' HL. *v/intr.* stop, cease (PFV).
ulâ' LHL. *v/tr.* burn (PFV).
ulâa' LHL. *v/tr.* open (PFV).
ulaab L. *n.* age mate (M/F).
ulaak L. *n.* female inhabitant of a
 place (F).
ulale L. *n.* hardwood tree species.
Pometia pinnata (N1).
ulam L. *n.* corner (N1).
ūlan H. *n.* grass species (N1).
ulelò HL. *v/tr.* pull out (taro corms,
 PL) (PFV).
uli L. *v/tr.* make a thread or rope by
 rubbing fibre (IPFV).
ulilò HL. *v/tr.* make a thread or rope
 by rubbing fibre (IPFV).
ulò HL. *v/tr.* pull out (a taro corm,
 SG) (PFV).

tubú' L. *v/tr.* shine (of the sun).
tubunâ' LHL. *v/tr.* grab (a person)
 (PFV).
tulâ LHL. *v/tr.* tap blossom for
 nectar (of birds and insects), poke
 a stick in a hole in order to bring
 forth an animal (TRANS-ASP).
tūng H. *n.* branch (N1).
tunu L. *v/tr.* comb (IPFV).
tutú LH. *n.* Cuckoo-shrike.
Coracina (F).

ulóm LH. *n.* tree species (N1).
ūm H. *n.* pig or rat nest, spider web
 (N1).
umâm HL. *n.* tent (N2).
umasou L. *n.* fish species (M).
ūn H. *n.* egg (N1).
un L. *adv.* temporarily, for a while.
un L. *interrog.* who (also un or ul).
un L. *v/intr.* hum, roar (of planes and
 engines) (IPFV).
un L. *v/intr.* set out, go (PFV).
una(n) L. *v/tr.* eat (IPFV).
unâ' bū LHL/LHL. *svc/tr.* make
 holes (in the ground) (IPFV).
unâ' buâ' LHL/LHL. *svc/tr.* make
 holes (in the ground) (PFV).
unaa L. *n.* bead string (N1).
unaal L. *n.* skin (of man), health
 (N1).
unaan L. *v/intr.* go (Same subject
 Sequential) (PFV).
unam L. *n.* grass skirt (N1).
unáng LH. *n.* woman (F).
unangâm LHL. *n.* women's house,
 family house (N2).
unangmôn LHL. *n.* woman, sister
 (F).
unangtên LHL. *n.* girl (F).
unê LHL. *v/intr.* go (IPFV).
Unekle ?L. *pn.* Unekle (place
 name).

unimín LH. *n.* monster, supernatural being (M).
unimisem ?L. *n.* sorcery (TP *sanguma*) (N2).
unín LH. *n.* food (N2).
uníng LH. *n.* white stone (N1).
uniniktang L. *n.* body odour (N1).
uniwàn HL. *n.* Pygmy-parrot.
Micropsitta pusio (?or *bruijnii*)
 (M).
-usa L. *v/tr.* place (a child) into the

W

wà HL. *v/tr.* pick (fruit), cut (PFV).
waa L. *n.* wall (N1).
waa L. *v/tr.* hide (PFV).
waa L. *v/tr.* make carvings in arrows (TRANS-ASP).
waa L. *v/tr.* swim (lit. push (water)) (TRANS-ASP).
waal L. *n.* wood borer (M).
waalâ LHL. *v/intr.* fly (of insects and helicopters) (IPFV).
wabman L. *n.* second-born in a family (M/F).
wabolâa HL. *v/tr.* grab many (PFV).
wabû LHL. *v/intr.* grow poorly (e.g. of taro or banana seedlings).
wabû LHL. *v/intr.* multiply.
wai- L. *v/tr.* close (PFV).
wai- L. *v/tr.* cut off (SG object) (PFV).
wai- L. *v/tr.* wait (PFV).
waka L. *v/ambitr.* break, cut (IPFV).
waketòu HL. *v/tr.* cut short.
wal L. *n.* wood borer (M).
walâ HL. *adv.* across (a river or valley).
walâ' HL. *v/intr.* stop, cease (PFV).
walâa' LHL. *v/tr.* open (PFV).
walbì HL. *v/tr.* clear (bush).
walò HL. *v/ambitr.* break off, cut off (SG object).
walo L. *v/tr.* buy (PFV).

arm (so that it can sleep) (PFV).
-usâ' LHL. *v/tr.* put on (clothes) (PFV).
usáan LH. *n.* vomit (N1).
Usalei ?L. *pn.* Usalei (clan name).
usàn HL. *n.* tail (N1).
usem L. *n.* sorcery (TP *sanguma*) (N2).
ut L. *dir.* up, upward, uphill.
uwéin LH. *n.* Coroneted Fruit Dove.
Ptilinopus coronulatus (M).

walò LHL. *v/intr.* multiply.
wāmbal H. *n.* annex to a house (N2).
wambiâ' LHL. *v/intr.* become blocked, get stuck (PFV).
wamflaa L. *v/intr.* fly around, fly in circles; chase around.
wan L. *interrog.* who (also *un* or *ul*).
wan L. *n.* bird, bat (M/F).
wán LH. *n.* sweet potato (N1).
wanáan LH. *n.* bird feather (N2).
wanam L. *n.* bird blind (N2).
wangdâb LHL. *n.* calf muscle (N1).
wanggal L. *n.* women of a certain place (F).
wangón LH. *n.* shin bone (N1).
wantok L. *n.* speaker of same language; friend (M/F).
was L. *n.* drum (N1).
wasêi LHL. *v/intr.* take someone's place (PFV).
wasí LHL. *n.* war(fare) (N2).
wāt H. *dir.* across (a river or valley).
watâ' HL. *v/tr.* prevent, prohibit.
watwatda L. *v/ambitr.* break, damage, destroy (PFV).
wâu LHL. *n.* Greater Bird of Paradise. *Paradisaea apoda* (F).
wâu eit LHL/L. *n.* Greater Bird of Paradise. *Paradisaea apoda* (F).
we L. *v/tr.* buy (IPFV).
we L. *v/tr.* sweep (TRANS-ASP).

webiâ LHL. *v/intr.* recover (PFV).
wei- L. *v/tr.* cut off (PL objects) (PFV).
wei- L. *v/tr.* miss (PFV).
wéi LH. *n.* kind of decoration (N2).
weibo L. *n.* Brahminy kite. *Haliastur indus* (F).
weim L. *n.* tree species (N1).
wekîb LHL. *adv.* very, a lot.
wel (TP) L. *n.* oil (N1).
welâ LHL. *v/tr.* cut (PL object) (PFV).
welò LHL. *v/tr.* cut off (PL object) (PFV).
wen L. *v/tr.* eat. *ipfv* (IPFV).
wéng LH. *n.* voice, language, talk, conversation, story (N2).
wengsâng LHL. *n.* story (N2).

Y

ya L. *v/tr.* cross body of water (TRANS-ASP).
yā(i) H. *n.* carrying strap (of a bag) (N1).
yā(i) H. *n.* wound, sore (N1).
yaa LHL. *v/tr.* cross (river) (IPFV).
yaal L. *n.* salt (N1).
yaalâa' LHL. *v/intr.* wriggle, writhe.
yaam L. *n.* taro scraper (N1).
Yabsi L. *pn.* Yapsiei (government station about north-east from Mianmin on the August river).
yakéil LH. *n.* long-beaked echidna (F).
yakukyakuk id. cry like a bird.
yalâa' LHL. *v/tr.* cross (river) (PFV).
yam L. *adj.* ripe.
yam L. *n.* fruit (N1).
yang L. *adj.* sharp.
yangke L. *v/tr.* answer, pay back, take revenge.
yanîm LH. *n.* leech (M).
yawái LH. *n.* vine species (?N1).

wenim ?L. *n.* Orange-footed Scrubfowl. *Megapodius reinwardt* (M).
went L. *v/tr.* hear, listen, understand (PFV).
wentê LHL. *v/tr.* hear, listen to, understand.
weseme ?L. *n.* canoe (N1).
wetoulêb un LHL/L. *svc/intr.* flee (PFV).
wetoulêb unê LHL/LHL. *svc/intr.* flee (IPFV).
wi L. *v/tr.* cut (wood).
wimsân HL. *n.* tail (N1).
wit L. *dir.* up, upward, uphill.
wôblo H. *n.* cone-shaped shell (N1).
wôbolia H. *n.* Crowned pigeon. *Goura* (M).

yē H. *adv.* there and then; here and now.
yē H. *pron.* that (M, DIST), that (N1, DIST).
yēbbaka H. *adv.* together.
yēfamak H. *adv.* somewhere around there.
yēi H. *pron.* those.
yēita H. *pron.* only these.
yekêi LHL. *n.* headdress made of cassowary feathers (N1).
yēta H. *pron.* only this (M, N1).
yeye L. *interj.* no (interjection expressing dissent).
yō H. *adv.* there.
yō H. *pron.* that (F, DIST); those (N1, DIST); that/those (N2, DIST).
yo L. *v/tr.* give birth, create, initiate (TRANS-ASP).
yōle H. *interj.* well.
yolowôk LHL. *n.* giant beetle species (F).
yolyomaa L. *v/intr.* jump (PFV).
yōta H. *pron.* only this (F, N2); only those (N1, N2).
yóum LH. *n.* piece of clothing (N1).

Notes

Notes to Chapter 1

1. In the Mianmin creation myth, their female ancestor Dimosson created the first Mianmin couple after having come from the mythical place of Dimobib in the Highlands. Dimosson's younger sister Fitibkanib created the first Telefol couple and later on gave birth to a white child, which she threw into the river, aghast at its pale skin colour. According to traditional Mianmin belief, all white people descended from this child.
2. Mian is an exception because its word for 'river, water' is *aai*. This word apparently has no cognates in the other Ok languages (Healey 1964b).
3. 'Wagarabai' is an Abau (Bailey 1975) name for a large river (which the Mianmin call 'Kweima') flowing into the August river. The lowland groups (quite a few of whom were in the Kweima valley at that time) were contacted from Green River, so the patrols would have had Abau-speaking interpreters, hence the use of Abau names. 'Skonga' (or sometimes 'Suganga'), by contrast, is the Mian name for a smaller river upstream from Yapsiei (Don Gardner, pers. comm.).
4. Literally, these mean 'bird language thinking' and 'white man language thinking', respectively.
5. In older publications one finds the Dutch spelling 'Iwoer'.
6. The inclusive pronoun *n̄bo* was probably formed by compounding *n̄* 'we (EXCL)' and *̄bo* 'you (PL)' to yield a relatively transparent first person plural inclusive pronoun.
7. Information on tone is not given.
8. There is another type of leaf oven found in New Guinea (e.g. in the Oksapmin area) for which the leaves are put into a shallow pit in the ground.

Notes to Chapter 2

1. The practical Mian orthography was developed by the SIL linguists Smith and Weston (1974a). As my analysis of the vowel system and the tonal phonology differs from Smith and Weston's, I will slightly adjust their orthography to suit my analysis. The reader can find a detailed justification for all orthographical changes in section 2.9 on orthography.
2. /a^ɛ/ is a pharyngealized vowel. See section 2.5 on pharyngealization.
3. Reduplication is not morphologically productive in Mian.
4. I assume that /^hkinkan/ is a (now) opaque compound consisting of the nominal root /kin/ 'eye' and the (perfective) verb stem /kaⁿ/ 'die'. One of the distinctions of a shaman in traditional Mian society was that they were able to see the ghosts of the dead. For other possible meanings of /^hkinkan/, see Morren (1986).

5. My analysis of the data showed that vowel length differences in near-minimal pairs are most often less obvious than Smith and Weston claim. It is more accurate to speak of a length difference of a third.
6. This word behaves exceptionally with respect to tone assignment (see 2.8.2.1).

Notes to Chapter 3

1. Healey analyses the cognate possessive pronouns as bound for Telefol (Healey 1965a).
2. Nasal vowels are not phonemic in Mian but the cry of a crow is consistently emulated as *hẽẽ*.

Notes to Chapter 4

1. Contrary to Alambak, in Mian roundness or squatness is irrelevant as a gender assignment criterion for inanimate nouns.
2. In Telefol, animate nouns are assigned to either masculine or feminine on the basis of biological sex, whereas inanimates usually receive their gender depending on the size of the referent/real-world object. Small referents are masculine, large ones feminine (cf. Healey 1965a).
3. Note that Smith and Weston analyse the formatives which agree in gender as class-marking suffixes. In quoting Smith and Weston's examples I maintain their notation (i.e. a dash indicating affixation) although I analyse these formatives as clitic articles.
4. Some speakers actually claim to know what gender a noun has, i.e. they can say for a given noun whether it is *naka* 'man' (i.e. masculine) or *unáng* 'woman' (i.e. feminine). So when asked about the gender of a singular discrete entity (woman, steel axe, house) they would say they are feminine. However, this does not seem to be common knowledge but is quite restricted to a few speakers who worked with the SIL linguists Smith and Weston and who therefore might be biased by their analysis. They even extend their classifications to forms like *imen=o* '(the) taros' and *aai=o* 'much water', which both are *unáng*, that is feminine. There is an important caveat though. As gender systems are known to be largely unconscious, gender judgments are unreliable and thus cannot be taken at face value.

Notes to Chapter 5

1. All species of *som* 'banana' and *éim* 'pandanus' are of neuter 1 gender. Verbal classificatory prefixes, however, group them into M-class and F-class subsets, i.e. some bananas and pandanus plants appear with *dob-/dol-* and some with *om-/dol-*. *Som* and *éim* are generic terms or taxa and each species has its own specific name, e.g. *som mobin*, *éim ayaab*.

2. My consultant mentioned that both animals are considered to be “heavy” and therefore occur only with *ob-/ol-* of the residue class whereas all other animate feminine nouns are in the F-class which is defined by the verbal classificatory prefixes *om-/dol-*. However, it is hardly possible to establish the feature “heavy” as a defining semantic criterion for the residue class.

Notes to Chapter 8

1. The Tok Pisin equivalent would be *Balus i wok long kam*. ‘The plane is coming.’ (lit. ‘The plane is working on coming’).
2. The gender contrast, which exists in the second person singular in all pronoun series, e.g. *kōbo* ‘you (SG M)’ vs. *ōbo* ‘you (SG F)’, is neutralized in the subject marker.
3. The gender contrast which exists in the second person singular in the personal and the possessive pronoun is neutralized in the object suffix.
4. Healey (1965c: 28) analyses an applicative suffix *-b* for the closely related Ok language Telefol, which is employed to introduce a recipient argument. This suffix only appears in the perfective aspect (called ‘punctiliar’ by Healey) and is very likely related to Mian *-ûb-* ‘give (pfv)’, which is perfective-only as well.
5. The tense suffix *-b^(H)* is marked for a tonal change on the following subject suffix. As this change only occurs in some forms of the Non-hodiernal past, the high tone is set in brackets.
6. From the names given in the account and their kin relations to living Mianmin people, I estimate that these events took place about 100 years ago.
7. *-b^(H)* ‘Non-hodiernal past’ is marked for a tonal change on the following subject marker. This tone change is obligatory in all ‘Non-hodiernal past’-forms of the existential verb.
8. This form parses as *ob-bià* [3SG.RESID.O-throw.PFV]
9. This form parses as *dei-˘b'-a* [leave.PFV-give.PFV-3SG.M.R].

Notes to Chapter 9

1. The verb *fu* can also refer to certain physical afflictions, such as shortness of breath, affecting a person. In this sense, the object suffix of ‘give’ represents the experiencer, as in the following example *mām=o om-fu-˘t'-ne-n-o=be* [shortness_of_breath=N2 3SG.F_CL.O-send.PFV-give.PFV-1SG.R-REAL-EXPL.SBJ=DECL] ‘I got shortness of breath’.
2. Only stems are specified for tone, affixes are unspecified for tone.
3. The suffix *-ka* is also operative as a stem aspect changing suffix. For about ten verbs, this suffix is employed to derive the imperfective from the perfective stem. Compare the following two examples:

- (1) *as=e* *fa-n-e=be*
 fire=SG.N1 make_fire.PFV-REAL-3SG.M.SBJ=DECL
 ‘He made a fire.’
- (2) *ase* *fa-ka-b-e=be*
 fire=SG.N1 make_fire-IPFV/?PUT-IPFV-3SG.M.SBJ=DECL
 ‘He is making a fire.’

Whether the stem aspect suffix *-ka* is etymologically related to *-ka* ‘put’ or whether the homophony is incidental, is unclear at this stage of the research.

4. Glosses not also used in this grammar are APPL - applicative and IO - indirect object.
5. Also see Haiman (1980: 433) on the circular behaviour of switch reference marking in reciprocals in the Papuan language Hua.
6. Smith and Weston’s glosses for this example, which are not used in my analysis of Mian, are: CM - class marker, FUT - future, IND - indicative, NU - number, PU - punctiliar.
7. This verb is pronounced [k^hima^sbua].

Notes to Chapter 11

1. The evidence for first person plural subjects remains inconclusive. As first person plural forms are only sparsely attested in the spontaneous data corpus, I tested the behaviour of verbs inflected with *-n* with first person plural subjects in elicitation. A co-referent subject in the reference clause was always accepted but speaker judgments were inconsistent when reference was disjoint. What’s more, examples which had been accepted earlier were rejected later.
2. In a story with an “Open Sesame”-type cave, whose stone door can only be opened by blowing on the stone through a bamboo tube.
3. Stirling (1993: 50) argues that the systems in Gokana and Kaingáng are in fact logophoric and that Eskimo has an obviation system.
4. In my analysis of the Mian gender system, I treat genders as singular-plural pairs defined by sets of affixes. Both masculine and neuter 1 gender have *-e* as the subject marker. If the subject of the marked clause is masculine and the subject of the reference clause is neuter1 both verbs will have *-e* in the subject slot (see chapter 4).
5. This sentence would sound at least odd if either of the clauses had a verb in the progressive: [?]*While the clock was striking one, the bullet hit him* or worse [‡]*While the bullet was hitting him, the clock struck one*. Both of these sentences might be used to describe slow motion footage of the event of a bullet hitting somebody at exactly one o’clock but under normal circumstances they sound odd.

Notes to Chapter 12

1. The near past marker *-nab* 'Near past' is the only one of the pre-subject slot fillers which is unattested in final verbs in a clause chaining construction. *-Nab* only occurs in medial verbs where it indicates DS and event sequentiality with a short interval between marked and reference clause events. It also occurs in simple independent sentences with the meaning 'Near past'.
2. This is possibly due to (accidental) homophony between *=a* 'medial' and *=a* 'polar question'.

Note to Chapter 13

1. Foley (1991) uses the following glosses, which are not covered in the abbreviations section of this book: VI - Noun class VI, NR.DIST - Near distal.

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