

A Grammar of Mian, a Papuan Language of New Guinea

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To my parents

Abstract

This thesis is a descriptive grammar of the Mian language of Papua New Guinea. The corpus data on the basis of which I analyzed the structures of the language and their functions was obtained during nine months of field work in Yapsiei and Mianmin, Telefomin District, Sandaun Province, Papua New Guinea.

The areas of grammar I cover in this thesis are phonology (ch. 2), word classes (ch. 3), nominal classification (ch. 4 and 5), noun phrase structure (ch. 6), verb morphology (ch. 7), argument structure and syntax of the clause (ch. 8), serial verb constructions and clause chaining (ch. 9), operator scope (ch. 10), and embedding (ch. 11).

Mian has a relatively small segmental phoneme inventory. The tonal phonology is complex. Mian is a word tone language, i.e. the domain for assignment of one of five tonemes is the phonological word and not the syllable.

There is hardly any nominal morphology. If a noun is used referentially, it is followed by a cliticized article. Mian has four genders. Agreement targets are the article, determiners, such as demonstratives, and the pronominal affixes on the verb.

The structure of the NP is relatively simple and constituent order is fixed. The rightmost position in the NP is reserved for a determiner; e.g. an adnominally used demonstrative or emphatic pronoun.

A sizeable subset of Mian verbs shows an aspectual stem distinction with formally distinct perfective and imperfective stems. The majority of Mian verb stems are trans-aspectual and do not have a formal perfective-imperfective distinction. Mian is a nominative-accusative language and head-marking at clause level. It is agglutinating and mildly polysynthetic. Arguments are cross-referenced on the verb by pronominal argument affixes. In addition to these, there is a set of verbal classificatory prefixes which are obligatory for some verbs, most of which involve the handling or manipulation of objects. These prefixes classify a verbal argument according to semantic criteria, such as sex, but also shape and function.

Verbs are inflected directly for some tense and aspect categories, but have to be compounded with an auxiliary stem for others. Auxiliary-compounded verbs follow the inflection patterns of the existential auxiliary.

Mian makes pervasive use of chaining constructions. Verbs can be serialized at the core and the nuclear level of the clause. Clause chaining structures are very common. Verbs can be medial and function as the predicate of a medial clause or 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.

Adverbial clauses with temporal, locative or conditional meaning—like head-internal relative clauses—are nominalizations and function as referring expressions in Mian. Like NPs, they are followed by an article or a determiner. Other embedded structures are embedded questions and quotatives.

Unmarked word order is Subject-Object-Verb. Due to the head-marking characteristics of the language, constituent order is relatively free with the restriction that the verb is clause-final.

Declaration

This is to certify that

- (i) this thesis comprises only my original work towards the PhD
- (ii) due acknowledgment has been made in the text to all other material used.
- (iii) the text is less than 100,000 words in length, exclusive of tables, maps, examples, bibliography and appendices.

Sebastian Fedden

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1 The language and its speakers

Mian is not a native Mian word. In spite of that, it is nowadays used as an ethnonym and as a name for the language and 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 *tén* ‘people’, e.g. *Usalei+tén* and *Kmeil+tén*, denoting the Mian clans who today live in the villages Gubil and Timeilmin, respectively.

The word *Mian* means ‘dog’ in the related languages Faiwol and Bimin (Healey 1964b: 85) and in Oksapmin (Loughnane in prep.). When a patrol came to Telefomin district in the 1930s and asked about the people (who afterwards would become known as the Mianmin) who lived towards the North and West of the Telefomin area, they got the name ‘Mian’, possibly because the Mianmin had a reputation as fierce warriors. This name subsequently became the standard designation for the people within the colonial administration and later was adopted by the Mianmin themselves.

In Oksapmin station, I heard a mythical version of the story of how the Mianmin got their name. An Oksapmin speaker showed me a stretch of rock amidst the green of 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 Mian area¹.

Linguists of the Summer Institute of Linguistics generally used the terms ‘Mianmin’ or ‘Oksapmin’ 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 *wěng*, which simply means ‘language’. Nowadays, they use *Mian wěng* ‘Mian language’. Most names of inhabited places end in *am* ‘house’, such as *Mianam*, *Temselam*, *Klefolam*, *Oksabam*, or in *bib* ‘village, place’, e. g. *Komdubib*, *Skiobib*. I will use ‘Mian’ as an abbreviation of *Mian wěng* for the language and ‘Mianmin’ as the ethnonym and for the location ‘Mianmin airstrip’.

¹ In the Mianmin creation myth a woman called Dimosson created the first Mianmin after having come from the mythical place of Dimobib in the Highlands.

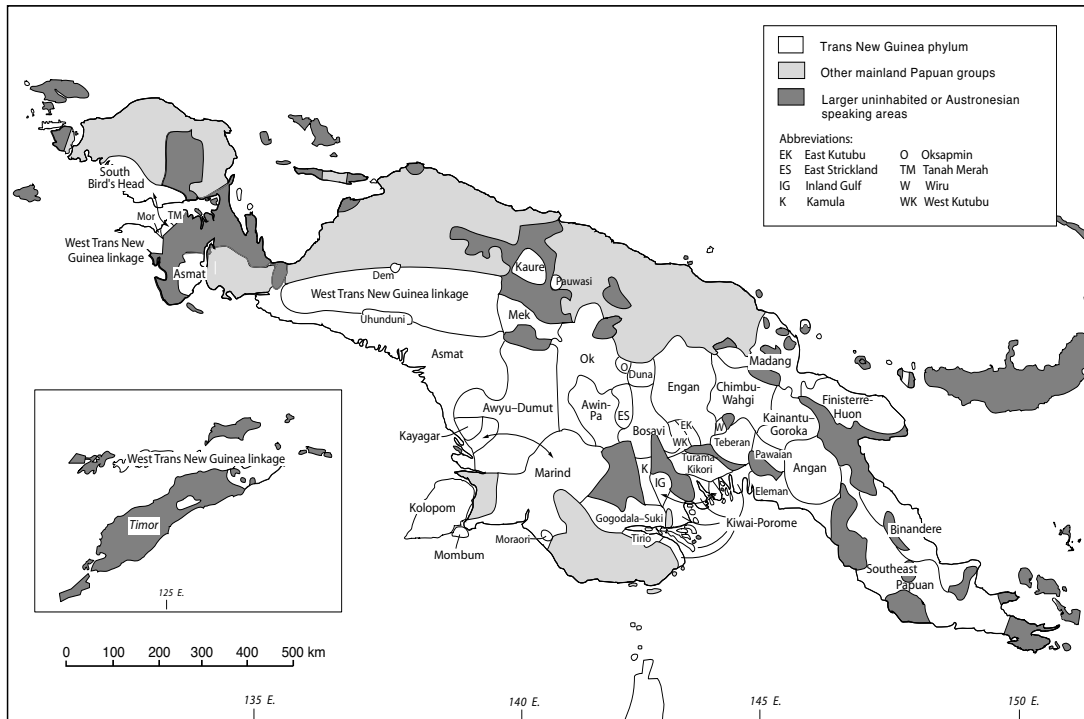
1.1 *Mian wěng*: The Mian language

Mian (known as Mianmin in the literature) is a Papuan language of the Ok family. The Ok family of languages is comparatively well-established within the Trans-New Guinea (TNG) family, as a group of roughly the same order of internal diversification as Germanic or Romance within Indo-European (cf. Healey 1964b, Wurm 1982, Pawley 2005). See Map 1 below for the geographical location of the Ok family within TNG. Mian is spoken by about 3,500 people in the North-western part of Telefomin District, Sandaun Province in Papua New Guinea (cf. Map 2).

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. Roughly, this area is located between the 141st and 142nd degree of longitude and around the 5th parallel.

Two dialect varieties can be distinguished: West Mianmin (also known as Wagarabai or Suganga²) in and around Yapsiei, a government and Catholic mission station about 50 km from the border to West Papua (Irian Jaya) with approximately 1,000 speakers, and East Mianmin in the villages around Mianmin airstrip (Timeilmin, Temsakmin, Sokamin), in Gubil, Fiak, and Hotmin with approximately 2,500 speakers. While the Western dialect is contiguous to several other Ok languages to its west and to the non-related Abau language (Bailey 1975) upstream from Yapsiei, the Eastern dialect is only in contact with the closely related Ok languages Telefol to the east and south and Tifal to the South. Some men of 50 years or more still speak Telefol.

² ‘Wagarabai’ is an Abau name for a big river (which the Mian call ‘Kweima’) flowing into the August river. The lowland groups (quite few of whom were at that time in the Kweima valley) were contacted from Green River, so the patrols would have had Abau-speaking interpreters, hence the use of Abau names. ‘Suganga’, by contrast, is the Mian name for a smaller river upstream from Yapsiei (Don Gardner, pers. comm.).

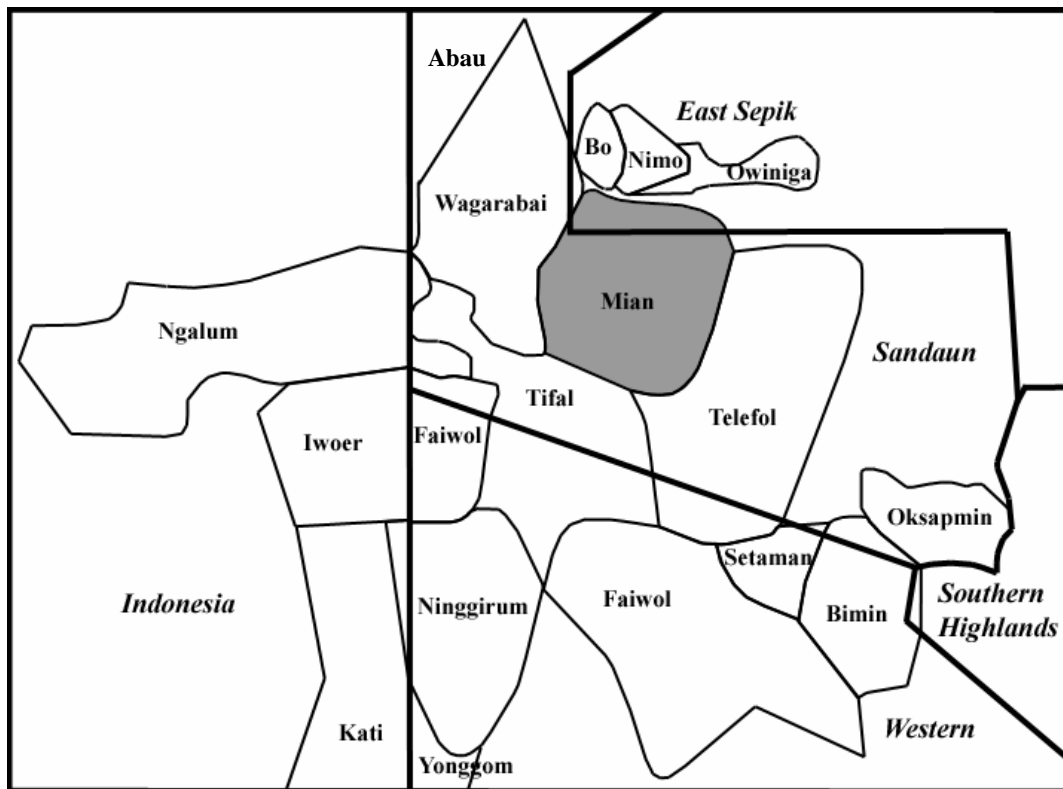


Map 1: Putative subgroups within the Trans New Guinea family (from Ross 2005: 34)

Both Mian dialects are under strong influence from Tok Pisin (Neo-Melanesian pidgin) and English. Although the latter is clearly the most prestigious of the two and school education and official business is conducted in English, TP serves as a widespread lingua franca throughout the area. 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 TP or English. They describe these words and constructions as *wan weng fúnin* or *tablasebwáli weng fúnin*, meaning ‘TP thinking’ and ‘English thinking’, respectively³. As is the case in many parts of the world, creoles and pidgins like TP and the languages of 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 the Mian language will have vanished in favour of TP and English in 50 to 100 years. My impression is that the Eastern dialect is even more susceptible to this development

³ Literally, these Mian phrases mean ‘bird language thinking’ and ‘white man language thinking’, respectively.

because the speakers are generally more educated, have better English and higher chances of finding work outside the speech community or to go to college or university.



Map 2: Mian within the Ok family (adapted from Ethnologue 2005)

1.2 The Ok languages

1.2.1 The Ok languages as a family

Figure 1 is a family tree for the Ok languages based on Healey (1964b) and Voorhoeve (2005). The basic division is between Mountain Ok (Mian, Faiwol, Telef, Tifal, Bimin) and Lowland Ok (Kati, Yonggom, Ninggerum, and Iwoer). The Ngalum language has been omitted from Figure 1 because its position within the Ok family is still unclear (see below).

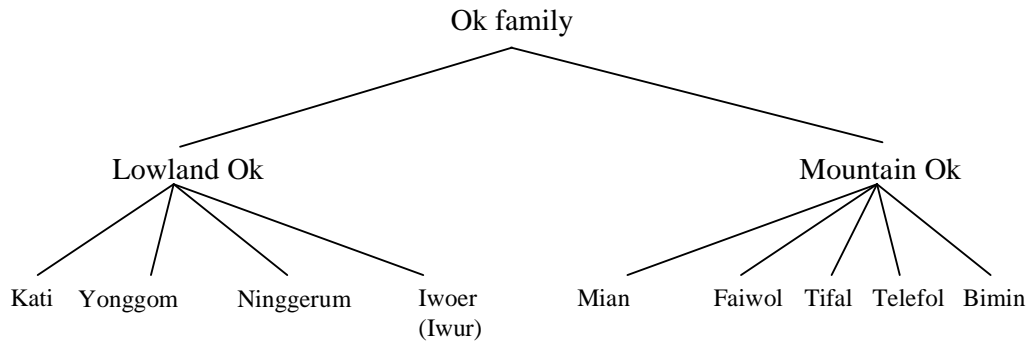


Figure 1: The Ok languages

Healey (1964b: 38) further subdivides the Mountain Ok languages into a Division A consisting of Faiwol, Tifal, Telefol, and Bimin and a Division B with Mian and Wagarabai, i.e. the West Mian dialect; cf. Wurm (1982: 137). This is plausible because Mian (both dialects) shows 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. Tone for all languages except Mian is only marked if indicated in Healey (1964b):

	'tongue'	'elbow'
Mian	/ ^{LH} ha ^s ŋ/	/ ^L hɛt/
Ninggerum	/hoŋ/	/hɛt/
Telefol	/ ^{LH} fɔŋ/	/ ^L fɛt/
Bimin	/fɔŋ/	
Faiwol		/fɛt/

Table 1: Word-initial /f/ and /h/ in Mountain and Lowland Ok

Moreover, Mian has an inclusive/exclusive distinction in the 1st person plural pronouns. Such a distinction is not found in any of the other Mountain Ok languages but, for example, in the Lowland Ok language Ninggerum (Healey 1964b: 67).

The position of Ngalum within Ok remains 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: 150-1) the classification of Ngalum as its own sub-family within Ok is confirmed by the unpublished Ngalum dictionary by Hylkema (1996).

1.2.2 Previous linguistic research on the Ok languages

Research on the languages of the Ok family was mainly conducted in the 1960s and 70s by both linguists and missionaries. Alan Healey's thesis (Healey 1964b) 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 which the reconstruction of the proto language would have to take. Although Healey does not attempt to reconstruct tone, he highlights conspicuous tone parallels for Mian, Telefol, and Tifal (Healey 1964b: 128 and table 3).

Voorhoeve (2005) 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 (in prep.).

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 for several years in Telefomin where they worked with visiting and live-in Mian speakers (my main informant Kasening Milimab among them). Smith and Weston published a two-part sketch grammar (Smith and Weston 1974a, Smith and Weston 1974b). Apart from this sketch, Smith (1977) published an article on Mian sentence structure, and Weston (1977) one on interrogatives. Smith and Weston (n.d.-a) is a compilation of this material with additional information on Mian discourse and Smith and Weston (Smith and Weston n.d.-b) is a wordlist (comprising approx. 2,400 entries). 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 (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 Ok language described in greater detail up to now is Telefol. Research was done by Phyllis and Alan Healey on Telefol phonology (Healey 1964a), noun phrase (Healey 1965a), verb phrase (Healey 1965c), clause structure (Healey 1965b) and clause chaining constructions (Healey 1966). In addition to that, they published an

excellent dictionary (Healey and Healey 1977). Unfortunately, their findings have never been published in a single volume.

Material on Tifal phonology can be found in Steinkraus (1963, 1969), material on Tifal grammar in Healey and Steinkraus (1972) and 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^ʕ/ (spelled <aa>). The tonal phonology is complex. Mian is a word tone language, i.e. the domain for assignment of one of five tonemes (H, L, LH, LHL, and HL) is the phonological word and not the syllable. Lexemes are specified for one toneme and an accent which serves as the anchor point for the toneme. Tonemes 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 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 category (the non-hodiernal past) which is marked tonally to avoid confusion with the otherwise homophonous imperfective aspect.

There is hardly any nominal morphology. The only noun suffix is *-wal* which signals plural and only attaches to a subset of the noun vocabulary, viz. proper names, kin nouns, and dyads. If a noun is used referentially, it is followed by a cliticized article which is etymologically related to the 3rd person pronouns. There is a tendency to use inanimate nouns without this marker even if they are used referentially.

Mian has four genders: Male, Female, Neuter 1 and Neuter 2 which are established by sets of agreement markers. Agreement targets are the article, determiners, such as demonstratives, and the pronominal affixes on the verb.

The structure of the NP is relatively simple and constituent order is fixed. The leftmost position is the possessor slot. It can be filled by a possessive pronoun or an NP. Adjectival modifiers and quantifiers follow the noun. The adjectives *sin* 'old' and *memâ*

'new' tend to precede the noun but can also follow it. The rightmost position in the NP is reserved for an adnominally used determiner; e.g. a clitic article or a demonstrative. The article can be distributed throughout the NP and show up on the head noun, all adjectival modifiers, on numerals and on locative modifiers. Mian has prenominal and head-internal relative clauses. The former are unmarked embedded clauses, the latter are nominalizations and either have an article or a determiner.

A sizeable subset of Mian verbs show an aspectual stem distinction with formally distinct perfective and imperfective stems. This is a typical feature for Ok languages and also found in Telefol and Tifal. A few verbs are defective and lack either the perfective or the imperfective stem. The majority of Mian verb stems are trans-aspectual and do not have a formal perfective-imperfective distinction.

Verbal morphology in general is complex. Mian is a nominative–accusative language and head-marking at clause level. It is agglutinating and mildly polysynthetic. Core arguments are subject, direct, and indirect object. There is no morphological case-marking. Arguments are cross-referenced on the verb by pronominal argument affixes. These cross-reference all subjects and indirect objects. Direct objects are only marked for five verbs, namely 'see', 'kill', 'hit', 'hold', and 'bite'. Indirect objects are obligatorily introduced by a benefactive applicative, which is typologically unusual because it is only overtly realized as *-b* when suffixed to a perfective stem. For imperfective stems the applicative is zero. They are directly followed by the suffix encoding the indirect object.

In addition to the argument affixes, Mian has a set of verbal classificatory prefixes which are obligatory for some verbs, most of which involve the handling or manipulation of objects, such as 'take', 'throw', 'give', and 'fall'. The verbal classificatory prefixes classify a verbal argument according to semantic criteria, such as sex, but also shape and function on an absolutive basis; i.e. classification extends to the subject of intransitive verbs and the direct object of transitive verbs. These prefixes are reminiscent of classificatory verbal elements in various North-American languages, e.g. Navaho.

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

slot). Verbs are inflected directly for some tense and aspect categories, but have to be compounded with an auxiliary stem for others. Auxiliary-compounded verbs follow the inflection patterns of the existential auxiliary.

Mian makes pervasive use of chaining constructions. Verbs can be serialized at the core level of the clause. Serialized verbs share the same subject which is marked on the last verb in the construction (except in causative serial verb constructions 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 serial verb constructions are of relatively low semantic integration and serialized verbs commonly have their own objects. Serialization on the nuclear level of the clause (i.e. tight serialization) is possible and usually morphologically realized as verb-verb compounding.

Clause chaining structures are 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 languages which use clause chaining, medial verbs are often morphologically impoverished. Mian medial verbs, however, only have the morphological restriction that they cannot be marked for future tense and 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 1st person singular. In all other person-number combinations the switch-reference meaning is suspended and *-n* only indicates sequentiality of events.

Adverbial clauses with temporal, locative or conditional meaning—like head-internal relative clauses—are nominalizations and function as referring expressions in Mian. Like NPs, they are followed by an article or a determiner. Other embedded structures are embedded questions and quotatives.

Unmarked word order in medial and final clauses and independent sentences is SOV. Due to the head-marking characteristics of the language, constituent order is relatively free with the restriction that the verb is clause-final. The verb is only followed by an illocutionary clitic which marks sentences as declarative, exclamative, interrogative, quotative, or hortative. Post-verbal locative adverbials are possible but rare. Under no circumstances can the verb be followed by an overt NP argument.

1.4 Fieldwork and informants

The data corpus which forms the basis of my research on Mian was compiled during two fieldtrips to Papua New Guinea from January 8th to July 8th 2004 and from September 9th to December 11th 2005. 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 language description presented in this thesis is based on the eastern dialect.

I worked with two informants on a daily basis: Kasening Milimab, the councillor of Mianmin, a man in his early fifties, and Asuneng Amit, a man in his mid sixties. I worked occasionally with two pupils: Liden Milimab, Mr Milimab's son, (18 years old) and Raymond Dabai (17 years old). I obtained historical accounts and descriptions of traditional initiation rituals from Ibalim and Beitab Fenobi, both men in their late eighties.

I mainly obtained spontaneous data in the form of recorded texts and speaker observation but also used structured elicitation to complement the natural data. Genres represented in the spontaneous corpus are: myths and ancestor stories, historical account, initiation ritual accounts, conversations, songs, and procedural texts. The recorded corpus comprises about three hours of spontaneous texts and about two hours of elicited material. In addition to that, I used Dahl's (1985) questionnaire on tense and aspect categories and the video clips designed by the MPI in Nijmegen for the Reciprocals Project, each with one speaker.

1.5 The *Miantěn*: The Mian people

1.5.1 Landscape and climate

The eastern part of the Mianmin area (where I conducted most of my fieldwork) belongs to the Highlands fringe. The Yapsiei and Hotmin airstrips are at about 200 metres above sea level, but elevation increases in the East and South reaching 760 metres above sea level at Mianmin airstrip. However, 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 20-minute trips by plane can 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 movement: 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 cool evenings, spectacular almost 360-degree red sunsets (*baantôm*), and slightly less rain. My impression was that the people judged every day in its own right and labelled it *am ayam* ‘good day’ (TP *gutpela taim*) or *am misiam* ‘bad day’ (TP *taim nogut*) with a certain flexibility of classification in case the weather changed 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.

1.5.2 Description of Mianmin villages

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 practise subsistence agriculture. Their staple is taro (*imen*), a perennial plant with a tuberous root which has a starch proportion of 25% and a comparatively high protein content (above 1%). In more recent times, sweet potatoes (*wǎn*) were introduced as the result of recurrent crop failure due to taro blight (*imen to lamin kukub*) (cf. Morren 1986). The Mianmin also grow and use sago, bananas, pineapples, breadfruit, pawpaw, sugar cane, pumpkins, and squashes. The leaves of the last two are cooked and eaten as vegetables. Amongst more recently introduced plants one finds 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 and bush knives. Slash and burn agriculture is not common (cf. Sillitoe 1998). While the work of preparing food is mainly done by 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 my informants 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. Nowadays, however, immobile infrastructure such as the airstrip but also schools, hospitals, and aid posts keep the people where they are.

Domestic pigs and chicken are kept in small numbers in not particularly confined places. The number of pigs and chicken 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 animal hunted for their meat are birds, lizards, non-poisonous snakes, rodents, fish (near large rivers, e. g. the August river near Yapsiei—the rivers Hak and Sek are too shallow for anything but casual fishing). There are three 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 a bit of protein from the can.

In traditional Mianmin society, there was no need for money. Nowadays, however, there are both goods which must be bought with money, 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 example as a carpenter or builder for a company, 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 under 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.

1.5.3 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 into the hot ashes where it is cooked for another half an hour. Before eating, the ashes are removed with a knife.

Preparation of food in a leaf oven is more involved. Stones (of cobblestone size) are thoroughly heated on a burning rack of wood. In the meantime, banana leaves are put on

the ground⁴ and the food (usually taro or scraped taro, that is the pulpy interior of the taro tubers scraped out of the skin with the help of a small bamboo scraper (*yám*), 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. After the wood pile has turned to ashes, the stones are put on top of the uppermost leaf cover with the help of huge wooden tongs (*itö*) about 1.5 metres in length. A final layer of leaves goes on top and is weighed down by pieces of wood against gushes of wind and hungry dogs. The leaf oven now forms a mound of about half a metre high. 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' (*ěim*). The umbel-shaped fruits of the pandanus palm (which come in 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 (*imensit 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 thrown away. When the dough is covered completely, people gather around the pizza and start eating it 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.

1.5.4 Political organization

On the political level, ancient and modern modes of organization exist next to each other. Traditional bigmen (*komöck*) 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

⁴ There is another type of leaf oven found in New Guinea for which the leaves are put into a shallow pit in the ground.

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 are allowed to vote for somebody from their midst to become councillor for 7 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 organizes community work. Furthermore, he is supposed to investigate minor offences like theft and public misdemeanour and conduct small courts where he can administer appropriate punishment, normally small fines which have to be paid cash and are used for the benefit of the community. The councillor does not have the authority to deal with crimes.

1.6 Note on examples and orthography

The Mian examples I use to illustrate and support my analysis come from five different sources. The ranking below reflects the frequency with which the different types of examples are used in this grammar.

- 1) Examples from my spontaneous corpus were recorded in the field and are identified by the title of the texts they are taken from.
- 2) Examples elicited with the help of Dahl's TMA tool are identified by the number they have in the questionnaire. For examples elicited with the MPI Reciprocals video clips, the clip number is given.
- 3) All other elicited examples are unmarked.
- 4) Observed examples are marked [Observed]. These came up in natural discourse during participant observation. As these examples were not recorded, tones are inferred from my general knowledge about the tonology of the language.
- 5) Examples from Smith and Weston's work are identified with reference and page number.

- 6) Examples from the Bible (Smith and Weston 1986) are identified by author, chapter, and verse.

For the sake of consistency, I keep the orthography in this grammar as phonetic as possible, meaning that the spelling resembles the pronunciation as closely as possible while retaining some phonemic spelling where it is established in the practical orthography (see 2.9).

Phonetic spelling:

- 1) Tone is spelled phonetically, meaning that the orthography captures pitch rather than tone:

Orthographic	Phonemic	Phonetic	Gloss
<mě̀n>	/ ^{LH} mɛn/	[mě̀:n]	‘string bag’
<tɛm>	/ ^L tɛm/	[tè̃m]	‘in(to)’
<mentễm>	/ ^{LH} mɛn= ^L tɛm/	[mè̃nt ^h è̃m]	‘in(to) the string bag’

In the numbered examples, the first line is always given orthographically, whereas the second line is phonemic. This means that the tonal representations differ. In the first line they refer to phonetic pitch, in the second line they represent underlying tonemes, e.g.

fut élé nininó
füt élé ninĩn=o
 tobacco DEM.SG.N1 name=N2
 ‘the name of this tobacco’ [Sofelok, 2]

All Mian words in the text which are not part of a numbered example are spelled orthographically.

- 2) Assimilation is written phonetically:

unangó wembobe
unǎng=o wen-b-o=be
 woman=SG.F eat.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘The woman is eating’

- 3) All vowel harmony processes are orthographically rendered as they are pronounced, e.g.:

nakae dibibe
naka=e lob-∅-∅-i=be
 man=SG.M SG.MASC.O-take.PFV-PST-1SG.SBJ=DECL
 ‘I have married (lit. I have taken a man)’

í amo genimibobe
í am=o ge+n-Vm-ibo=be
 they house=N2 build.PFV+AUX.PFV-IFUT-2/3PL.AN.SBJ=DECL
 ‘They must/should build a house’

4) Proper names and loan words

All proper names are spelled with a capital letter. Tone is not indicated. Proper names and loan words are spelled phonetically:

from English:	<Ostrelia>	‘Australia’
	<Jemeni>	‘Germany’
	<sak>	‘suck’
	<Pita>	‘Peter’
from TP:	<sekim>	‘check’
	<mun>	‘month’

Phonemic spelling:

In some cases, phonemic spelling is well-established in the practical orthography and I am not going to change this. For example, final devoicing is not, or at least not regularly, realized in the spelling:

<ɪb> /^{LH}ib/ [i:ɸ] ‘cloud(s)’

Only in names that end in /b/ one finds both spellings: <Milimab> and <Milimap>.

2 Phonology

2.1 Phoneme inventory

Table 2 sets out the Mian phoneme inventory. In cases where the orthographic conventions adopted in this grammar⁵ deviate from the phonemic representation, the spelling is given in brackets.

Consonants	bilabial	labio-dental	alveolar	palatal	velar	labia-lized velar	glottal
Stops			t		k	k ^w <kw>	
	b				g	g ^w <gw>	
Nasals	m		n		ŋ <ng>		
Fricatives		f	s				h
Lateral Approximant			l <d, l>				
Semivowels	w			j <y>			

Vowels ⁶	i, ε <e>, a, a ^ʰ <aa>, o, u
Diphthongs ⁷	ei <ei>, ai, au, ou

Suprasegmentals	L, H, LH, LHL, HL + accent
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Table 2: Mian phonemes

Pharyngealized /a^ʰ/ 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. In phonemic representations, underlying tonemes are indicated by superscript letters; e.g. /^{LH}ta^sŋ/ ‘flint lighter’. Stems are lexically specified for an inflection point, henceforth called accent, which serves as the ‘anchor point’ for a tonal melody.

In phonetic representations high pitch is marked by an acute (´) over a tone-bearing segment and low pitch by a grave (`). Contours are shown as rising (ˇ) or falling (˘).

⁵ 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 considerably from Smith and Weston’s, I will slightly adjust their orthography to suit my analysis. The reader can find a detailed justification for all changes in spelling in section 2.9 on orthography.

⁶ /a^ʰ/ is a pharyngealized a. See section 4 on pharyngealization.

⁷ The phonemic status of vowels sequences beginning with a pharyngealized a are yet unclear and therefore not included in the inventory.

In the orthography phonetic pitch will be indicated by accents as in phonetic representations. Any tone-bearing unit which is unmarked in the orthography has low pitch. By convention, tones over diphthongs are written over the first member of the diphthong. Throughout this chapter, words given orthographically will be in italics, phonemic representations will be marked by slashes and phonetic representations by square brackets. For example, orthographic *tǎang* ‘flint, lighter’, phonemic /^{LH}ta^sŋ/, and phonetic [t^hǎ^s:ŋ].

2.2 Consonants

Mian has 15 consonantal phonemes. There are six stops, three fricatives (including /h/), three nasals, one lateral approximant, 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 labiodental, 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 prenasalized indicated by a superscript homorganic nasal; e.g. /^{LH}ba^sb/ [ᵐbǎ:p̚] ‘father’s younger sister’. Prenasalization is less prominent than in Oksapmin (Loughnane in prep.). Semivowels are either labial(-velar) or palatal.

The consonant inventory is quite simple but it has an interesting and unusual feature, namely 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 [ᵐd] is—at least synchronically—a word-initial allophone of /l/. For a more detailed treatment of the lateral approximant see 2.2.1.4 below. The practical orthography takes a more phonetic approach and uses <d> for /l/ when it is pronounced [ᵐd] or [d], and <l> in all other environments.

2.2.1 Phonetic description and allophonic distribution of consonants

2.2.1.1 Stops

- /b/ is a voiced bilabial stop. It occurs syllable-initially and finally. Word-initially, /b/ is prenasalized and realized as [ᵐb]. Syllable-finally, /b/ is devoiced and can either be aspirated [pʰ] or be realized as an unreleased stop [p̚]. It is always aspirated word-medially before vowels. In some older speakers, word-final [pʰ] and [p̚] alternate freely with the labio-dental fricative [f] and with the bilabial fricative [ɸ]. In fast speech, /b/ is lenited to [β] between vowels. /b/ also occurs as the second member of the syllable-initial consonant cluster /sb/.
- /t/ is a voiceless alveolar stop. It occurs syllable-initially and syllable-finally. It is always aspirated before vowels and can be aspirated or be realized as an unreleased stop [t̚] syllable-finally.
- /k/ is a voiceless velar stop. It occurs syllable-initially and syllable-finally. It is always aspirated before vowels and can be aspirated syllable-finally or be realized as an unreleased stop [k̚]. /k/ also 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 /aˤ/, /k/ is realized as an aspirated, voiceless uvular stop [qʰ].
- /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, there is no final devoicing for /g/. Word-initially, /g/ is realized as a pre-nasalized stop [ᵑg].
- /kʷ/ is a voiceless labialized velar stop. It only occurs syllable-initially and is pronounced [kʷ]. Orthographically, it is rendered <kw>.
- /gʷ/ is a voiced labialized velar stop. It only occurs syllable-initially and is pronounced [gʷ]. The spelling is <gw>. Word-initially, /g/ is realized as a pre-nasalized stop [ᵑgʷ].

2.2.1.2 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>.

2.2.1.3 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.
- /s/ is a voiceless, alveolar fricative. It occurs syllable-initially. /s/ occurs in syllable-final position, albeit rarely, e.g. in /as/ ‘tree’, /usnebe/ ‘he went up’, and the TP loan /has/ ‘hat’. Some older speakers sometimes realize intervocalic /s/ as [ʃ]. /s/ occurs as the first element in the consonant clusters /sb, sm, sn, sl/.
- /h/ is a glottal fricative. It only occurs syllable-initially.

2.2.1.4 The lateral approximant /l/

The lateral approximant /l/ is the most complex Mian phoneme as far as allophonic variation is concerned. In native Mian words, it is realized by all speakers as the voiced, pre-nasalized, alveolar stop [ʎd] word-initially. Phonetic [l] occurs word-initially only in a few TP loans, e.g. *lotu* ‘church’, *lais* ‘rice’, and *ledio* ‘radio’.

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

<i>aandál</i>	/ ^l a ^s n+ ^h lál/	[à ^s ·ndál]	‘river bank’
<i>dingdang</i>	/ ^l liŋlaŋ/	[ⁿ dĩŋdàŋ]	‘thin’
BUT <i>élaak</i>	/ ^h ε= ^l la ^s k/	[élà ^s ·k’]	‘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 /^ltil=ɔ=^lbɛ/ [t^hi.lò.βɛ́]/*[t^hi.dò.βɛ́] ‘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 if 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 syllable-initial consonant clusters, such as /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/.

Examples for the different pronunciations of the lateral approximant /l/:

<i>dot</i>	/ ^l lot/	[ndòt̚]			‘very’
<i>dabǎal</i>	/ ^{lh} laba ^l /	[ndə̀βǎ ^h :l]	[ndə̀βǎ ^h :r]		‘ground, soil’
<i>tlemín</i>	/ ^l tlɛ́/	[tlɛ́]	[tɾɛ́]	[trɛ́]	‘come (Ipfv verb stem)’
<i>klaanin</i>	/ ^l kla ^h nin/	[kla ^h nìn]	[kra ^h]		‘rot (Verb stem)’

None of the allophones of /l/ is pronounced voiceless when preceded by a voiceless stop, e.g. /^lkla^h/ [kla^h]/*[k^hla^h] ‘rot (verb stem)’.

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

<i>diadia</i>	/ ^l lialia/	[ndjǎdjǎ]	‘quickly’
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/l/ is the only phoneme in Mian which can form word-initial geminate clusters /ll/:

<i>dli</i>	/ ^l lli/	[ndlì]	[ndrì]	‘dance (Ipfv verb stem)’
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Presumably, this cluster is the result of a deleted schwa. Depending on speed of speech [ndlì] ‘dance (Ipfv verb stem)’ alternates with [ndəlì] and [ndə̀rì].

The question whether this phoneme should be analyzed as /l/ or /d/ has no straightforward answer. So far I have not found any knockdown evidence in favour of

one of these alternatives. The /d/-analysis would have the merit that it helps making the stop system more symmetrical. However, I opt for /l/ because the *l*-allophone has the wider distribution, whereas the *d*-allophone is more restricted since it only occurs in word-initial position and syllable-initially after a consonant.

2.2.1.5 Semivowels

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

<i>wan</i>	/ ^L wan/	[wàn]	‘bird’
<i>kaawá</i>	/ ^{LH} ka ^s wa/	[q ^h á ^s ·wá]	‘steel axe’
<i>faninwali</i>	/ ^L faninwali/	[fànìnwàli]	‘(the) ancestors’

- /j/ is a voiced palatal approximant. It is always pronounced as [j] and can only appear syllable-initially. Orthographically, /j/ is rendered as <y>.

<i>yái</i>	/ ^H jai/	[jái]	‘wound’
<i>yam</i>	/ ^L jam/	[jàm]	‘ripe’
<i>yeye</i>	/ ^L jɛjɛ/	[jèjè]	‘no’

Phonetically, both semivowels play a role in breaking up most vowel clusters which are the result of morpheme concatenation (cf. 2.6.3).

2.2.2 Minimal pairs for Mian 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 have to be treated as near-minimal pairs.

/m/ - /b/	<i>mǎab</i>	/ ^{LH} ma ^s b/	[mǎ ^s :p̥]	‘frog’
	<i>bǎab</i>	/ ^{LH} ba ^s b/	[^m bǎ ^s :p̥]	‘aunt’
	<i>mǎam</i>	/ ^{LH} ma ^s m/	[mǎ ^s :m]	‘mosquito’
	<i>mǎab</i>	/ ^{LH} ma ^s b/	[mǎ ^s :p̥]	‘frog’

	<i>măamobe</i>	/ ^{LH} ma ^s mobe/	[ma ^s ·móβε]	‘It’s a mosquito’
	<i>măabobe</i>	/ ^{LH} ma ^s bobe/	[ma ^s ·βóβε]	‘It’s a frog’
/k/ - /g/	<i>ki</i>	/ ^l ki/	[k ^h i]	‘align (Ipfv verb stem)’
	<i>gi</i>	/ ^l gi/	[^ɰ gi]	‘laugh (Ipfv verb stem)’
/g/ - /g ^w /	<i>gi</i>	/ ^l gi/	[^ɰ gi]	‘laugh (Ipfv verb stem)’
	<i>gw</i>	/ ^l g ^w i/	[^ɰ g ^w i]	‘poison (Ipfv verb stem)’
/k/ - /k ^w /	<i>keim</i>	/ ^l kεim/	[k ^h εim]	‘open, obvious’
	<i>kweim</i>	/ ^l k ^w εim/	[k ^w εim]	‘fever’
/m/ - /h/	<i>măam</i>	/ ^{LH} ma ^s m/	[mă ^s :m]	‘mosquito’
	<i>hăam</i>	/ ^{LH} ha ^s m/	[hă ^s :m]	‘corpse’
/n/ - /ŋ/	<i>neng</i>	/ ^l nεŋ/	[nèŋ]	‘younger sister’
	<i>ngen</i>	/ ^l ŋεn/	[ŋèn]	‘beg (Ipfv verb stem)’
	<i>sán</i>	/ ^h san/	[sá·n]	‘seedling’
	<i>sáng</i>	/ ^h saŋ/	[sá·ŋ]	‘story’
/f/ - /s/	<i>fanin</i>	/ ^l fanin/	[fànìn]	‘ancestor’
	<i>sanin</i>	/ ^l sanin/	[sànìn]	‘shooting (Ipfv VN)’
	<i>mifim</i>	/ ^{LH} mifim/	[mìfì:m]	‘sago palm’
	<i>misim</i>	/ ^l misim/	[mìsìm]	‘for free’
/l/ - /t/ - /m/	<i>ěil</i>	/ ^{LH} εil/	[ěi:l]	‘pig’
	<i>ěit</i>	/ ^{LH} εit/	[ěi:t]	‘penis’
	<i>ěim</i>	/ ^{LH} εim/	[ěi:m]	‘pandanus (taxon)’
/l/ - /s/ - /m/	<i>al</i>	/ ^l al/	[àl]	‘faeces’
	<i>as</i>	/ ^l as/	[às]	‘tree’
	<i>am</i>	/ ^l am/	[àm]	‘house’
/w/ - /j/	<i>we</i>	/ ^l wε/	[wè]	‘sweep (Ipfv verb stem)’
	<i>ye</i>	/ ^l jε/	[jè]	‘hit them (Ipfv verb stem)’

2.2.3 Regular phonological processes for consonants

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

2.2.3.1 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 where relevant:

<i>talib</i>	/ ^L talib/	[t ^h àlìp̥]	‘rafter’
<i>haleb</i>	/ ^L halɛb/	[hàlèp̥]	‘wild pig’
<i>hebmamsab</i>	/ ^{LHL} hebmamsab/	[hèp̥.màmsâp̥]	‘quickly’
<i>koubkenale</i>	/ ^{LHL} koubkɛnalɛ/	[k ^h òup̥.k ^h énàlè]	‘Fuck me!’

2.2.3.2 Aspiration

The voiceless stops /t/ and /k/ and the voiceless allophone [p] of the bilabial stop /b/ are always aspirated before vowels and diphthongs and normally aspirated word-finally in connected speech. In words uttered in isolation the plosive release is often withheld. Examples of aspirated stops (Syllable boundaries are only indicated where relevant and alternative pronunciations are given where applicable):

<i>deib</i>	/ ^L leib/	[ⁿ dɛìp ^h]	[ⁿ dɛìp̥]	‘path’
<i>funibta</i>	/ ^L funibta/	[fùnìp̥.t ^h à]		‘they cooked and then...’
<i>dot</i>	/ ^L lot/	[ⁿ dòt ^h]	[ⁿ dòt̥]	‘very’
<i>tang</i>	/ ^L taŋ/	[t ^h àŋ]		‘smell’
<i>hek</i>	/ ^L hɛk/	[hèk ^h]	[hèk̥]	‘older brother’
<i>kaawá</i>	/ ^{LH} ka ^ʰ wa/	[q ^h à ^ʰ wá]		‘steel axe’
<i>niniktól</i>	/ ^{LHL} niniktól/	[nìnìk̥.t ^h òl]		‘vine species’
<i>skeim</i>	/ ^L skeim/	[sk ^h ɛim]		‘far’

2.2.3.3 Word-final free variation of [p^h], [p̥], [f], and [ɸ]

The phoneme /b/ has four allophones in free variation word-finally, a devoiced aspirated bilabial [p^h], a devoiced bilabial without release [p̥], a voiceless labio-dental fricative [f], and a voiceless bilabial fricative [ɸ]. Choosing [f] or [ɸ] over [p^h] or [p̥] 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 [p̥].

<i>deib</i>	/ ^l ɛib/	[ⁿ dɛip ^h]	[ⁿ dɛif]	[ⁿ dɛiɸ]	‘path’
<i>măab</i>	/ ^{lh} ma ^s b/	[mă ^s :p ^h]	[mă ^s :f]	[mă ^s :ɸ]	‘frog’
<i>băab</i>	/ ^{lh} ba ^s b/	[^m bă ^s :p ^h]	[^m bă ^s :f]	[^m bă ^s :ɸ]	‘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.

2.2.3.4 Intervocalic lenition of /b/ and /k/

In fast speech, the velar stop /k/ is commonly lenited to a voiceless velar fricative [x] or even the voiced variant [χ] between vowels. Usually this phenomenon does not occur in slow speech. Similarly, /b/ is lenited to [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:

<i>naka</i>	/ ^l naka/	[nàxà]	‘man’
<i>tekein</i>	/ ^l tɛkɛin/	[t ^h əxɛin]	‘knowledge’
<i>okok</i>	/ ^l okok/	[əxək ^l]	‘work’
<i>heke</i>	/ ^l hɛk=ɛ/	[hèxé]	‘an/the older brother’
<i>bukubsân</i>	/ ^{lh} bukubsan/	[^m bòxòpsân]	‘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:

<i>bubibe</i>	/ ^l bubibe/	[^m bùβiβè]	‘I am planting’
<i>ibâl</i>	/ ^{lh} ibal/	[iβâl]	‘paperwasp’
<i>mabu</i>	/ ^l mabu/	[màβù]	‘blowfly’
<i>ifubobe</i>	/ ^l ifubobe/	[ifùβòβè]	‘she is serving (food)’

2.2.3.5 Coarticulation with following alveolar nasal /n/

The bilabial stop /b/ undergoes a coarticulation process involving devoicing and place assimilation if followed by the alveolar nasal /n/. The practical orthography reflects this process. Examples of coarticulation with following alveolar nasal:

<i>futnenobe</i>	/ ^l fubnɛnobɛ/	[fùf nènòβɛ̃]	‘she has cooked for me’
<i>fatnabebe</i>	/ ^l fabnabɛbɛ/	[fàf nàβɛ̃βɛ̃]	‘What are you doing?’
<i>tatnea</i>	/ ^l tabnɛa/	[t ^h àf nɛ̀à]	‘he goes downriver and then he...’
<i>debetnoa</i>	/ ^{HL} lɛbɛbnoa/	[ⁿ dóβɛ̃f nòà]	‘she took it with her and then she...’

It is plausible to assume that this process actually involves two step: (i) Assimilation in terms of place of articulation, i.e. /b/ > [d], and (ii) subsequent final devoicing, i.e. [d] > [t].

2.2.3.6 Homorganic nasal assimilation

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

<i>gatambobe</i>	/ ^l gatanbobɛ/	[^ŋ gàt ^h àmbòβɛ̃]	‘it became dry’
<i>gembibe</i>	/ ^l gɛnbibɛ/	[^ŋ gɛ̀mbìβɛ̃]	‘I am sick’
<i>kingkan</i>	/ ^l kinkan/	[k ^h ìŋk ^h àn]	‘shaman’ ⁸
<i>fotebenángenabibe</i>	/ ^{HL} fotɛbɛnangenabibɛ/	[fòtɛ̀βɛ̀nánɔ̀gɛ̀nàβìβɛ̃]	‘I am about to chase them away’

2.3 Vowels

Mian has six vowel phonemes and four (rising) diphthongs, namely /i, ɛ, a, a^ɿ, o, u; ai, ei, au, ou/. The diphthongs are non-suspect because they all occur in nominal and verb stems.

⁸ I assume that /^lkinkan/ 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 /^lkinkan/ see Morren (1986).

The present analysis assumes no length distinction (though see 2.4 below). Vowels and diphthongs behave identically as nuclei in syllables and 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 phonemic status is suspect. In this analysis, I accept as phonemic only diphthongs which occur (also) in nominal and verbal 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. In the rest of this grammar, the term ‘vowel’ is always meant to include the diphthongs unless otherwise specified.

2.3.1 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].
- /ε/ is a mid-low, front, unrounded vowel, which can form the nucleus of any syllable. It is pronounced as [ε]. In the practical orthography, /ε/ is rendered as <e>. In word-initial low-tone syllables, /ε/ is reduced to [ə].

tekein /^ltεkein/ [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 unaccented syllables, /a/ is reduced to [ə], in word-initial low-tone /Ca/ syllables even to [ə].

afāl /^{lh}afal/ [ɛfāl] ‘mucus’
taman /^ltaman/ [təmàn] ‘valley’

- /aˀ/ is low, central, pharyngealized vowel, which can form the nucleus of any syllable. It is longer than the non-pharyngealized /a/ and pronounced [aˀ]. In the orthography, it is written <aa>. For a more detailed discussion of pharyngealization, see section 2.5.

- /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 /^Lonsiobe/ [õsɪ̀ðβɛ̀] ‘they went’. In word-initial low-tone syllables and in any closed syllable with a voiceless stop or the velar nasal /ŋ/, /o/ is lax to [ɔ].

<i>omfa</i>	/ ^H omfa/	[ómfâ]	‘put (Pfv verb stem)’
<i>okok</i>	/ ^L okok/	[òxòk̄]	‘work’
<i>dot</i>	/ ^L lot/	[ⁿ dòt̄]	‘very’
<i>funoba</i>	/ ^L funoba/	[fùnòβà]	‘we cook and then we...’
<i>funobta</i>	/ ^L funobta/	[fùnòβ̄t̄hà]	‘we cook and then...’
<i>blong</i>	/ ^L blong/	[blòŋ]	‘pod, husk’

- /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].

<i>kukub</i>	/ ^L kukub/	[k ^h ʊk ^h ʊp̄]	‘way, fashion’
<i>bukubsân</i>	/ ^{LH} bukubsan/	[^m bòxù̀psân]	‘beads’

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

2.3.2 Minimal and near-minimal pairs for Mian vowels

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 different tones have to be treated as near-minimal pairs.

<i>án</i>	/ ^H an/	[án]	‘arrow’
<i>en</i>	/ ^L εn/	[ɛ̃n]	‘older sister’
<i>ón</i>	/ ^H on/	[ón]	‘bone’

<i>un</i>	/ ^l un/	[ùn]	‘egg’
<i>ĩn</i>	/ ^{lH} in/	[ĩ:n]	‘liver’
<i>tab</i>	/ ^l tab/	[tàp̄]	‘downriver’
<i>teb</i>	/ ^l tɛb/	[tɛp̄]	‘need’
<i>tobol</i>	/ ^l tobol/	[tòβòl]	‘tree species’
<i>tub</i>	/ ^l tub/	[tùp̄]	‘chest’
<i>tib</i>	/ ^l tib/	[tìp̄]	‘shallow’
<i>yǒum</i>	/ ^{lH} joum/	[jǒum]	‘clothing’
<i>yam</i>	/ ^l jam/	[jàm]	‘ripe’
<i>eb</i>	/ ^l ɛb/	[ɛp̄]	‘blowfly egg’
<i>ǒub</i>	/ ^{lH} oub/	[ǒup̄]	‘top centre of head’
<i>kló</i>	/ ^H klo/	[kló]	‘tinea’
<i>klóu</i>	/ ^H klou/	[klóu]	‘fish species’
<i>ěim</i>	/ ^{lH} eim/	[ěim]	‘pandanus (taxon)’
<i>am</i>	/ ^l am/	[àm]	‘house’
<i>deit</i>	/ ^l leit/	[ⁿ dèit̄]	‘nest’
<i>dot</i>	/ ^l lot/	[ⁿ dòt̄]	‘very’
<i>daulam</i>	/ ^l laulam/	[ⁿ dàulàm]	‘fly’
<i>dulam</i>	/ ^l lulam/	[ⁿ dùlàm]	‘bird species’
<i>é</i>	/ ^H ɛ/	[é]	‘he’
<i>ó</i>	/ ^H o/	[ó]	‘she’
<i>í</i>	/ ^H i/	[í]	‘they’
<i>ái</i>	/ ^H ai/	[ái]	‘father’
<i>al</i>	/ ^l al/	[àl]	‘faeces’
<i>aal</i>	/ ^l a ^ɿ l/	[à ^ɿ l]	‘skin’

2.4 Vowel length

Although Mian vowels and diphthongs come in different lengths and there are even a few 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.

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, Smith and Weston (1974a: 6) do not 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. “Lengthened” vowels are analyzed as a sequence of two vowels which form two adjacent syllable nuclei (Smith and Weston 1974a: 14). This sounds as if there is no phonemic length contrast involved. However, Smith and Weston (1974a: 13) give two (near-)minimal pairs under the heading ‘Examples of Length Contrasts’. Hence, I take it that vowel length in Mian is indeed an issue which has to be confronted.

The problematic status of length in the Mian vowel system is due to the fact that there are (so far) no minimal pairs which differ in length while bearing the same tone, whereas this is common in the neighbouring language Telefol (Healey 1964a: 8-12). While a phonemic length distinction is obvious for Telefol, it is much less so for Mian and one has to make up one’s mind how to go about explaining the observable differences in vowel length.

The analysis presented here does not assume a phonemic length contrast. It relies on explaining the observable length differences in Mian vowels and diphthongs in terms of the interaction of vowel quantity with other suprasegmental phenomena, such as tone/pitch and syllable structure, and morphological and syntactic processes, such as compounding and cliticization, which lead to polysyllabic shortening (cf. Lehiste 1972, Klatt 1976).

As I said above, 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 1½ to 2 times longer than the other one. This observation is—at least in a few instances—correct⁹. Consider the difference in vowel length in the following two potential near-minimal length pairs (Vowel length value is the middle out of three tokens of each word uttered in isolation by a single speaker):

⁹ My analysis of the data showed that vowel length differences in near-minimal pairs are most often less obvious than Smith and Weston (1974a: 14) claim. It is more accurate to speak of a length difference of a third.

Phonemic representation	Phonetic representation	Vowel length (bold) in ms	English gloss
/ ^{LH} k ^w εit/	[k ^w ɛ it ^h]	212	‘sugar cane’
/ ^{LH} εit/	[ɛ it ^h]	258	‘penis’
/ ^H mɛn/	[m ɛ n]	213	‘child’
/ ^{LH} mɛn/	[m ɛ n]	250	‘string bag’

Table 3: Potential near-minimal length pairs

In accordance with these data, Smith and Weston (1974a: 13) distinguish /m**ɛ**n/ ‘child’ and /mɛ.**ɛ**n/ ‘string bag’ (full stop indicates syllable boundary). Long diphthongs and vowels are thus analyzed as comprising two syllable nuclei, each of which is a tone-bearing unit. However, they have /kwɛ̣.ít/ (1974a: 15) and not the expected /kwɛ̣ⁱt/ (the superscript ‘i’ is their convention for a non-lengthened diphthong which takes only one tone), though the length difference is even more pronounced in the case of ‘sugar cane’ and ‘penis’ than in the case of ‘child’ and ‘string bag’. Therefore, it seems as if Smith and Weston’s analysis of “lengthened” vowels as two syllable nuclei was not so much prompted by actual length differences but more by their wish to differentiate words with a level tonal melody from words with a non-level tonal melody, cf. /ɛ̣it/ ‘decoration’ with a low tone, hence monosyllabic, and /kwɛ̣.ít/ with a rising tone, hence disyllabic on their analysis; or /ḷɛ̣.íb/ ‘road’, which they analyze as disyllabic, while my data clearly suggest that it should just bear one low tone /ḷɛ̣ib/, as opposed to /ḷɛ̣ib/ ‘moss’.

I do not find it phonetically plausible to shift the burden of explaining vowel length differences to syllabification because both acoustic impression and the F0 trace of words like m**ɛ**n ‘string bag’ 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. In the following, I will discuss the factors that determine Mian vowel length in detail.

2.4.1 Free variation of length

Vowel length is subject to variation between speakers, even between different tokens of the same word uttered by a single speaker. For instance, vowels in different tokens of the same word can freely vary in length by up to about 60 ms for some tokens.

Consequently, the calculation that “lengthened” vowels are so-and-so many times longer than short vowels is at best a statistical average.

2.4.2 Length and pitch

The so-called “lengthened” vowels and diphthongs 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 marker =*be*), or when a noun stem is compounded with another noun stem. In all of these cases the phonological word becomes at least bisyllabic which leads to polysyllabic shortening.

Table 4 gives some comparative data for vowel length in stems and cliticized or compounded stems. The vowel length value is the middle out of two tokens of each word uttered in isolation by a single speaker.

Phonemic representation	Phonetic representation	Vowel length (bold) in ms	English gloss	Process
/ ^{LH} mɛn/	[mɛ̃n]	250	‘string bag’	
/ ^{LH} mɛn=o= ^L bɛ/	[mɛ̃.nó.βɛ̃]	155	‘it’s a string bag’	Cliticization
/ ^{LH} no+mɛn=ɛ/	[nò.mɛ̃.né]	70	‘string bag full of rodents’	Compounding
/ ^H mɛn/	[mɛ̃n]	185	‘child’	
/ ^H mɛn=o= ^L bɛ/	[mɛ̃.nó.βɛ̃]	140	‘it’s a child’	Cliticization
/ ^{LH} bá ^s n/	[^m bá ^s n]	270	‘jaw’	
/ ^{LH} bá ^s n+on/	[^m bá ^s .nón]	165	‘jaw bone’	Compounding

Table 4: Syllable compression due to cliticization and compounding

The data in this table show that in certain contexts the vowels in /^{LH}mɛn/ ‘string bag’ and /^Hmɛn/ ‘child’ are very similar in length, namely 155 ms vs. 140 ms. The reason for this is that the LH contour tone in /^{LH}mɛn/ ‘string bag’ does not show up as a contour when material cliticizes to the noun. In such expanded tonal domains the tonal melody is spread over the whole domain (cf. section 2.8.8.1 and 2.8.8.2). Therefore, it seems more sensible to me to analyze the longer vowel in the uncliticized form /^{LH}mɛn/ to be a phonetic effect of the contour tone 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. Therefore, I assume that vowel length is a function of the tone (cf. Weidert 1981: 66-8).

Compounding has a similar effect on tonal melodies. The LH toneme in /^{LH}ba^sn/ [m^bba^s:n] ‘jaw’ does not show up as a contour in the compound /^{LH}ba^snon/ [m^bba^s:nón] ‘jaw bone’ due to the associations rules in bisyllabic words (see 2.8.6 and 2.8.8.4). 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. Again, vowel length value is the middle out of two tokens of each word uttered in isolation by a single speaker (see Table 5).

Phonemic representation	Phonetic representation	Vowel length (bold) in ms	English gloss
/ ^L okok/	[ð.xðk ^ɾ]	135	‘work’
/ ^L okok=o= ^L bε/	[ð.xð.xð.βè]	95	‘it’s work’
/ ^{LH} mokok/	[mð.xðk ^ɾ]	155	‘heel’
/ ^{LH} mokok=o= ^L bε/	[mð.xð.xó.βè]	100	‘it’s a heel’
/ ^L afet/	[à.fɛ ^ɾ]	150	‘different’
/ ^L afet=o= ^L bε/	[à.fɛ.t ^h ð.βè]	90	‘it’s different’
/ ^{LH} afet/	[à.fɛ ^ɾ]	180	‘cleared of a taboo’
/ ^{LH} afet=o= ^L bε/	[à.fɛ.t ^h ó.βè]	90	‘it’s (been) cleared of a taboo’

Table 5: Vowel length and tone neutralization

Table 5 shows that the (near-)minimal pairs /^Lokok/ vs. /^{LH}mokok/ and /^Lafet/ vs. /^{LH}afet/, at the phonemic level, do not contrast in length but in tone.

This phonetic lengthening of vowels is most conspicuous under rising contours (LH). The effect of vowel lengthening is slightly less obvious when the vowel has falling pitch from assignment of the tonal melodies HL or LHL (see Table 6; vowel length value is the middle out of two tokens of each word uttered in isolation by a single speaker.)

Phonemic representation	Phonetic representation	Vowel length (bold) in ms	English gloss
/ ^{LH} mokok/	[mð.xðk ^ɾ]	155	‘heel’
/ ^{LH} mokok=o= ^L bε/	[mð.xð.xó.βè]	100	‘it’s a heel’
/ ^{LHL} aial/	[ài.ǰáɪ]	140	‘grandfather’
/ ^{LHL} aial=o= ^L bε/	[ài.ǰá.lò.βè]	135	‘it’s the grandfather’

Table 6: Vowel length and falling contours

Note the discrepancy in vowel length between [mɔ.xɔ̌.xó.βɛ̌] (100ms) and [ài.ʃá.lò.βɛ̌] (135ms). This is due to the pitch differences on the vowels in boldface. While the melody LH leaves L on the vowel in the expanded tonal domain, e.g. in [mɔ.xɔ̌.xó.βɛ̌], LHL leaves H, e.g. in [ài.ʃá.lò.βɛ̌], which allows the vowel to retain much of its length.

To sum up, vowel and diphthong length is especially pronounced under rising contours, slightly lesser under falling contours and high (level) pitch and least under low (level) pitch.

2.4.3 Length and syllable structure

Vowel length can be systematically related to other suprasegmental 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 /^Laial/ ‘light’ (125 ms), as both have level tones, a high and a low one, respectively. Similarly, the length difference between /^{LH}ɛit/ ‘penis’ (270 ms) and /^{LH}kweit/ ‘sugar cane’ (185 ms) cannot be due to tone because both bear the same LH melody. This last pair is especially critical because it is a near-minimal pair suggesting that a length contrast might actually exist.

However, all of these differences in length can be readily accounted for by relating them to straightforward differences in syllable configuration. Throughout the Mian system, vowels in monosyllables are longer than vowels in accented syllables of disyllables, which in turn are longer than vowels in accented syllables of trisyllables (which are quite rare and generally suspicious as to whether they might be compounds). Similarly, vowels in onset-less or coda-less nominal stems are longer than vowels in syllables which have onsets or codas.

2.4.4 Summary of factors determining vowel length

Apart from free variation, five factors have been identified which bear on Mian vowel length. The following table gives a summary of their effects (read “>” as “longer vowel than for”).

Cliticization	w/o article or predicator	>	with article or predicator	>	3	due to syllable compression
Compounding	bare stem		compounded stem			
Syllable count	1		2			
Onset	V(C)		CV(C)			
Coda	(C)V		(C)VC			
Pitch	LH	HL, H	L			(only if monosyllabic)
						(only if monosyllabic)

Table 7: Factors influencing vowel length

2.5 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 pharyngealized /a^ʕ/ is considerably longer than the plain /a/; e.g. vowel length measurements for /al/ [àl] ‘faeces’ and /a^ʕl/ [à^ʕl] ‘skin’ are 192 ms and 240 ms, respectively (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).

2.5.1 Contrasts involving pharyngealization

To date, there are actually only three genuine minimal pairs involving a pharyngealized /a^ʕ/, i.e. a pair of words in which the quality of the ‘a’ differs but the tone is the same.

<i>al</i>	/ ^L al/	[àl]	‘faeces’
<i>aal</i>	/ ^L a ^ʕ l/	[à ^ʕ l]	‘skin’
<i>atdab</i>	/ ^L atlab/	[àtdàp̄]	‘stick’
<i>atdaab</i>	/ ^L atla ^ʕ b/	[àtdà ^ʕ p̄]	‘young branch’
<i>ayal</i>	/ ^L aial/	[àʔàl]	‘light’
<i>ayaal</i>	/ ^L aia ^ʕ l/	[àʔà ^ʕ l]	‘tree species’

Apart from that, there are several near-minimal pairs in which the pharyngealization contrast occurs with a contrast in tone or segmental environment. The following list gives a selection of near-minimal pairs involving pharyngealization:

<i>ái</i>	/ ^H ai/	[ái]	‘dad’
<i>aai</i>	/ ^L a ^ʕ i/	[à ^ʕ i:]	‘water’
<i>áng</i>	/ ^H aŋ/	[áŋ]	‘batch, package’
<i>ǎng</i>	/ ^{LH} a ^ʕ ŋ/	[ǎ ^ʕ ŋ]	‘tree species’
<i>mak</i>	/ ^L mak/	[màk̚]	‘other’
<i>daak</i>	/ ^L la ^ʕ k/	[ⁿ dà ^ʕ k̚]	‘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. <105 Hz for one speaker). Otherwise the vowel does not sound pharyngealized.

<i>am</i>	/ ^L am/	[àm]	‘house’
<i>ǎam</i>	/ ^{LH} a ^ʕ m/	[ǎ ^ʕ m]	‘pandanus species’
<i>aaⁿî</i>	/ ^{LHL} a ^ʕ m/	[à ^ʕ :m̂]	‘older sister’ ¹⁰
<i>tang</i>	/ ^L taŋ/	[t ^h àŋ]	‘smell’
<i>tǎang</i>	/ ^{LH} ta ^ʕ ŋ/	[t ^h ǎ ^ʕ ŋ]	‘lighter’
<i>dam</i>	/ ^L lam/	[ⁿ dàm]	‘true’
<i>dǎam</i>	/ ^{LH} la ^ʕ m/	[ⁿ da ^ʕ :m]	‘fence’

¹⁰ Tone assignment in this word is exceptional in that the accent is placed on the final nasal. See section 2.8.4 on tone in monosyllables.

<i>dáng</i>	/ ^H laŋ/	[ⁿ dáj]	‘garden’
<i>dǎang</i>	/ ^{LH} la ^s ŋ/	[ⁿ dǎ ^s :ŋ]	‘back’
<i>án</i>	/ ^H an/	[á·n]	‘arrow’
<i>ǎan</i>	/ ^{LH} a ^s n/	[ǎ ^s :n]	‘leaf’

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

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 among my informants who invariably pronounced an ‘a’ pharyngealized in disyllabic words which have a LHL tone 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 square brackets:

<i>ayâl</i>	/ ^{LHL} aial/	[àjâ ^s ·l]	‘paternal grandfather’
<i>ibâl</i>	/ ^{LHL} ibal/	[iβâ ^s ·l]	‘paper wasp’

Moreover, in many instances (25 out of 120 words, about a fifth), the data I have simply was not sufficient to establish whether a given ‘a’ was pharyngealized or not, i.e. I did not collect enough tokens of the same word for comparison and perhaps a statistical measure of pharyngealization. However, this situation might also be because the pharyngealization contrast is slowly eroding in the Mian language. I can only speculate here but it seems conceivable that finally it might give way to a new (extra low) phonemic tone that would then have the function of distinguishing [·al] ‘feces’ from [Jal] ‘skin’.

2.5.2 Creaky voice

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 [ⁿdà^sk] or [ⁿdǎ^sk]. 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^ʕ/ under a low tone.

2.5.3 Pharyngealized /a^ʕ/ and accent

The pharyngealized /a^ʕ/ 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^ʕ/ as the nucleus of the initial syllable:

<i>kaawá</i>	/ ^{LH} ka ^ʕ wa/	[q ^h à ^ʕ ·wá·]	‘steel axe’
<i>aaleb</i>	/ ^L a ^ʕ lɛb/	[à ^ʕ ·lèp̃]	‘father’
<i>aaling</i>	/ ^L a ^ʕ liŋ/	[à ^ʕ ·liŋ]	‘paternal uncle’
<i>aalá</i>	/ ^{LH} a ^ʕ la/	[à ^ʕ ·lá]	‘lie’
<i>ngaaméin</i>	/ ^{LH} ŋa ^ʕ mɛin/	[ŋa ^ʕ ·méin]	‘yellow’

Apart from the contrastive function given in 2.5.1 above, the special role that pharyngealized /a^ʕ/ plays in Mian accent placement corroborates my assumption that pharyngealization is important in the phonological system of Mian (See 2.8.6).

2.6 Phonotactics

2.6.1 Syllable structure

Mian 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 [ãs] might indicate that this syllable type is highly uncommon and therefore readily transformed into the regular pattern VC. CVCC syllable structure is attested in a limited number of Tok Pisin loans; e.g. /^Hlbooks/ ‘box’

(often pronounced [bókîs] and /^htons/ ‘tongs’ (sometimes pronounced [t^hõs] by older speakers).

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

/ ^h ε/	[é:]	‘he’
/ ^h ai/	[ái:]	‘dad’

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

/ ^h nε/	[né·]	‘I’
/ ^h jai/	[jái·]	‘wound’
/ ^h biobe/	[bi·jò.βè]	‘she is there’
/ ^h jeje/	[jè.jè]	‘no’
/ ^h tofanomabiobe/	[tó.fá.nò.mà.βì.jò.βè]	‘they will put down a long object.’

The C₃ coda position is more restricted. Only /b, t, k, m, n, ŋ, s, l/ can occur in this position, but not /g, f, h/ nor either of the semivowels /w, j/.

/ ^h on/	[ó·n]	‘bone’
/ ^h as/	[às]	‘wood’
/ ^h a ^ɸ ŋ/	[à ^ɸ ·ŋ]	‘tree species’
/ ^h o.kok/	[ò.xòk]	‘work’
/ ^h fal/	[fàl]	‘leaf oven’
/ ^h εil/	[ěi:l]	‘pig’
/ ^h tabnεa/	[tǎĕ.nè.jà]	‘he went downriver and then...’
/ ^h ma ^ɸ m/	[mǎ ^ɸ :m]	‘mosquito’

2.6.2 Consonant clusters

Syllable-initial consonant clusters in syllables of the type C₁C₂V and C₁C₂VC₃ are even more restricted with respect to which consonants can appear in the C₁ and C₂ positions, namely /b, t, k, g, l, s, f/ in C₁ position and /b, l, m, k, n/ in C₂ position. Table 8 lists all attested combinations. Consonants that do not appear in this table cannot be a member of an initial consonant cluster.

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

Table 8: Permissible syllable-initial consonant clusters

Examples for permissible syllable-initial consonant clusters:

<i>blibe</i>	/ ^h blibe/	[^m bli.βɛ̃]	‘I am here’
<i>tlebe</i>	/ ^h tlebe/	[tlɛ̃.βɛ̃]	‘he has come’
<i>klā</i>	/ ^{hH} kla/	[klā:]	‘properly’
<i>glagla</i>	/ ^h glagla/	[^ɰ glà.glà]	‘between’
<i>dli</i>	/ ^h lli/	[ⁿ dli]	‘dance (Ipfv verb stem)’
<i>sbāl</i>	/ ^{hH} sbal/	[sbǎ:l]	‘strong’
<i>slub</i>	/ ^h slub/	[slùp̃]	‘cockroach spieces’
<i>smik</i>	/ ^h smik/	[smìk̃]	‘image’
<i>skem</i>	/ ^h skɛm/	[sk ^h ɛ̃m]	‘knife’
<i>snuk</i>	/ ^h snuk/	[snùk̃]	‘rat’
<i>fleleng</i>	/ ^h flɛlɛŋ/	[flɛ̃lɛ̃ŋ]	‘light’

Mian seems to disfavour consonant clusters. Some of the few that exist are often—but not necessarily—broken up by an epenthetic schwa. Schwa-insertion takes place in those consonant clusters which have /s/ as their first member.

The following examples illustrate these processes:

<i>sbāl</i>	/ ^{hH} sbal/	[səbǎ:l]	‘strong’
<i>slub</i>	/ ^h slub/	[səlùp̃]	‘cockroach spieces’
<i>smik</i>	/ ^h smik/	[səmìk̃]	‘image’
<i>skem</i>	/ ^h skɛm/	[sək ^h ɛ̃m]	‘small knife’
<i>snuk</i>	/ ^h snuk/	[sənùk̃]	‘rat’

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

[sk ^h ɛm]	[sək ^h ɛm]	[səxɛm]	‘knife’
[sbǎ:l]	[səbǎ:l]	[səβǎ:l]	‘strong’

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

2.6.3 Vowel clusters

Mian has a plethora of different vowel clusters, most of which appear “post-morphologically” due to morpheme concatenation. Unlike the diphthongs, which are only rising, vowel clusters can be centring. Vowel clusters which result from morpheme concatenation are clearly syllabified as nuclei of different syllables in slow speech. The second vowel is phonetically supplied with a short linking glide that forms the onset of the syllable, so [j] is inserted after the non-low, front vowel /i/ and (less conspicuously) after mid-low /ɛ/, and [w] is inserted after the non-low, back vowel /u/ and (less conspicuously) after mid-high /o/. There is no glide insertion after the low vowels /a/ or /a^s/. Nonetheless, a following vowel is interpreted as the nucleus of a new syllable, at least in slow speech.

<i>biebe</i>	/ ^L biɛbɛ/	[^m bi.j.ɛ.βɛ]	‘he is there’
<i>Mian</i>	/ ^L mian/	[mì.jàn]	‘Mian’, ¹¹
<i>daanea</i>	/ ^L la ^s nɛa/	[ⁿ dà ^s .nɛ.jà]	‘he put’
<i>ayam</i>	/ ^L aiam/	[ài.jàm]	‘good’
<i>tobbiaioɸe</i>	/ ^{HL} tobbiaioɸe/	[tóp.bí.jái.jò.βɛ]	‘I’ve thrown a long object’
<i>funebua</i>	/ ^L funɛbua/	[fù.nɛ.βù.wà]	‘after he had cooked’
<i>kesoa</i>	/ ^L kɛsoa/	[k ^h ɛ.sò.wà]	‘that’s why’
<i>deibabuobe</i>	/ ^{HL} ɛibabuobe/	[ⁿ dèi.βá.βù.wò.βɛ]	‘we left him’
<i>nakaobe</i>	/ ^L nakaobe/	[nà.xà.ò.βɛ]	‘it’s a man’

In fast(er) speech, unstressed non-low vowels as first members of vowel clusters—i.e. that is all vowels except /a/ and /a^s/—lose their syllabicity and become glides.

<i>Mian</i>	/ ^L mian/	[mjàn]	‘Mian’
<i>tobbiaioɸe</i>	/ ^{HL} tobbiaioɸe/	[tóp.bjájò.βɛ]	‘I’ve thrown a long obj.’

¹¹ This the reason why the anthropologist George Morren (e.g. Morren 1982) chose the spelling *Miyan*.

<i>daanea</i>	/la ^ɬ nɛa/	[ⁿ dà ^ɬ .njà]	‘he put and then he...’
<i>ayam</i>	/aiam/	[à.jàm]	‘good’
<i>unebua</i>	/ ^L funɛbua/	[fù.nɛ.bwà]	‘after he had cooked’
<i>kesoa</i>	/ ^L kɛsoa/	[k ^h ɛ.swà]	‘that’s why’

This process is not found in word forms in which the first member of the vowel cluster bears a high tone. In this case, the second vowel of such clusters is desyllabified in fast speech. These desyllabified vowels lose their ability to bear tone. Also see section 2.8.8.3. on tone

<i>unibbiobe</i>	/ ^{LHL} unibbiobe/	[ù.nìḽ.bíɔ.βɛ̀]	‘they went’
<i>sékúobe</i>	/ ^H sɛkuobe/	[sé.xúɔ.βɛ̀]	‘it’s a knife’
<i>kaawáobe</i>	/ ^{LH} ka ^ɬ waobe/	[q ^h à ^ɬ .wáɔ.βɛ̀]	‘it’s a steel axe’

2.7 Morphophonemics

Mian morphophonemics are relatively simple and do not obscure the essentially agglutinative nature of the language. In the following sections %-signs indicate morphophonemic representations.

2.7.1 The article /i/ ‘Animate plural’

The article /i/ undergoes a morphonemic change to /ɛi/ if it cliticizes to a word ending in a high vowel /i/ or /u/:

ART %i%	→ /ɛi/ / _ i, u
	→ /i/ elsewhere

The following examples may suffice: /^Hsnabi/ ‘crocodile’ and /^Hsnabi=ɛi/ ‘(the) crocodiles’; /^Lumasou/ ‘fish species’ and /umasou=ɛi/ ‘(the) umasou fish’.

2.7.2 Verbal classificatory prefixes

Some of the verbal classificatory prefixes (cf. chapter 5) have morphophonemically conditioned allomorphs. The plural prefix for animates (masculine and feminine) *dol-* has three allomorphs:

%lol% → /lo/ / _ s, k, h
 → /ll/ / _ V
 → /lol/ elsewhere

In the following examples, the morphophonemic changes are straightforward only if the prefix is followed by /k/ as in (2-1), but not in (2-2) and (2-3):

(2-1) *unangí doklibiobe*

unǎng=i *lol-Ø-kl-Ø-i-bio=be*
 woman=PL.AN PL.AN.O-give.PFV-2SG.IO.PFV-PST-1SG.SBJ-GPST=DECL
 ‘I gave you the women’

(2-2) *unangí dlibe/dolibe*

unǎng=i *lol-Ø-Ø-i=be*
 woman=PL.AN PL.AN.O-take.PFV-PST-1SG.SBJ=DECL
 ‘I have taken women (as wives)’

(2-3) *nakai dolaibiobe/dlaibiobe*

naka=i *lol-fa-Ø-i-bio=be*
 man=PL.AN PL.AN.O-put.PFV-PST-1SG.SBJ-GPST=DECL
 ‘I cared for the men’

The prefixes *gol-* and *ol-*, the singular prefix for the Bundle class and the plural prefix for the residue class, respectively, behave similarly to *dol-* insofar as they also lose the final segment when followed by /k/ and /h/.

%gol% → /go/ / _ t, k, h
 → /gol/ elsewhere

%ol% → /o/ / _ t, k, h
 → /ol/ elsewhere

The singular prefixes for the masculine, the long object, and the residue class *dob-*, *tob-*, and *ob-* have two allomorphs. The phonological environment which triggers allomorphy is identical:

%lob% → /lo/ / _ t, f
→ /lob/ elsewhere

%tob% → /to/ / _ t, f
→ /tob/ elsewhere

%ob% → /o/ / _ t, f
→ /ob/ elsewhere

Compare the following examples:

(2-4) *tile dobmein daak tlebe*
til=e lob-mein laak tl-Ø-e=be
 dog=SG.M SG.MASC.O-fall down come.PFV-PST-3SG.M.SBJ=DECL
 ‘the dog has fallen down’

(2-5) *tile dofablibe*
til=e lob-fa+bl-Ø-i=be
 dog=SG.M SG.MASC.O-put+AUX.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am caring for the dog’

Finally, the plural prefixes for the LONG, BUNDLE, and FLAT classes, *tebel-*, *gulel-*, and *gamel-* respectively, are subject to the following morphophonemic variation:

%tebel% → /tebel/ / _ f, V
→ /tebe/ elsewhere

%gulel% → /gulel/ / _ f, V
→ /gule(l)/ elsewhere

%gamel% → /gamel/ / _ f, V
→ /game/ elsewhere

It seems as if %gulel% can be realized as /gulel/ as well as /gule/ before consonants, while %tebel% can only be /tebe/ in this environment. However, %gulel% must also surface as /gulel/ before /f/; *menó gulel-aiobe*/**menó gule-faiobe* ‘I have put down the string bags’. In a second step /f/ is then deleted due to stem allomorphy (see 2.7.3 below).

The only verbal classificatory prefixes which are not subject to morphophonemic change are the FEMININE singular prefix and the singular prefix for the FLAT class. They are realized as /om/ and /gam/, respectively.

2.7.3 Verb stems

Verb stem allomorphy is extremely rare. It occurs when a verb stem starts with /f/, e.g. /^{HL}fa/ ‘put down’ and /^{LHL}fa/ ‘lift up’, and the verb obligatorily takes a verbal classificatory prefix which classifies the direct object according to semantic criteria. The following rules apply:

$$\begin{aligned} \%^{HL}fa\% &\rightarrow /^{HL}a/ \text{ / } l_ \\ &\rightarrow /^{HL}fa/ \text{ elsewhere} \end{aligned}$$

$$\begin{aligned} \%^{LHL}fa\% &\rightarrow /^{LHL}a/ \text{ / } l_ \\ &\rightarrow /^{LHL}ha/ \text{ elsewhere} \end{aligned}$$

The next two examples illustrate stem allomorphy for the verb /^{HL}fa/ ‘put down’, which obligatorily takes a verbal classificatory prefix.

(2-6) *bene tofabibe*

ben=e tob-fa-b-i=be

pen=SG.N1 SG.LONG.O-put.PFV-NHODPST-1SG.SBJ=DECL

‘I put down the pen’

(2-7) *mené golaiobe*

měn=e gol-a-Ø-i-o=be

string_bag=SG.N1 SG.BUNDLE.O-put.PFV-PST-1SG.SBJ-EP=DECL

‘I have put down the string bag’

2.7.4 The existential verb

Then imperfective stem of the existential verb *bi* undergoes a morphophonemic change when followed by /i/:

$$\begin{aligned} \%^{L}bi\% &\rightarrow /^{L}bl/ \text{ / } _i \\ &\rightarrow /^{HL}bi/ \text{ elsewhere} \end{aligned}$$

For example, *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’.

2.7.5 /bio/ ‘General past’

The general past suffix /bio/ undergoes morphophonemic changes when followed by any vowel, which happens, for example, in medial verbs where the tense marker immediately precedes the medial verb marker /=a/.

%bio% → /bu/ /_ V
→ /bio/ elsewhere

- (2-8) *temdeiboibbua*
temlei-b-o-Ø-ib-bio=a
leave.PFV-BEN.PFV-N2.IO.PFV-DS.SEQ-2/3PL.AN.SBJ-GPST=MED
‘after they had left it (as it was), ...’ [Danenok]

2.7.6 /so/ ‘Hesternal past’

The Hesternal past suffix /so/ undergoes a morphophonemic change if it is followed by a vowel:

%so% → /su/ /_ V
→ /so/ elsewhere

- (2-9) *anafuo omfaesuo*
anafu=o om-fa-Ø-e-so=o
anafu=N2 SG.FEM.O-put.PFV-PST-3SG.M.SBJ-HPST=N2
‘the Anafu arrow, which he had put down (there) yesterday’ [Danenok]

2.7.7 Morphophonemic changes in emphatic and restrictive pronouns

In all emphatic and restrictive pronouns, which have the suffix /ta/ ‘emphatic’, the final vowel /a/ is changed to /i/ when the pronoun is followed by the interrogative illocutionary clitic /a/ in polar questions, for example:

Pronoun	Question
<i>kébt</i> a ‘you (M, EMPH)’	<i>kébt</i> a=a → <i>kébt</i> i?a ‘Is it <u>you</u> ?’
<i>óta</i> ‘her/it (EMPH)’	<i>óta</i> =a → <i>óta</i> i?a ‘Is it <u>her</u> ?’
<i>yóta</i> ‘only this (EMPH, RESTR)’	<i>yóta</i> =a → <i>yóta</i> i?a ‘Is it only this?’

2.7.8 Vowel harmony

Mian has some limited occurrences of vowel harmony, all of which only occur in verbs. All vowel harmony is regressive. We can distinguish two cases: (a) harmonizing vowel in verbal classificatory prefixes, which classifies a noun according to certain salient characteristics of its referent, and (b) harmonizing vowel in the Immediate future marker /Vm/.

2.7.8.1 Vowel harmony in /lob/ ‘Sg.Masc.O’ and /tob/ ‘Sg.Long.O’

The vowel in the verbal classificatory prefixes /lob/ ‘singular masculine direct object’ and /tob/ ‘singular long direct object’ (e.g. an arrow) harmonizes with the vowel in the following syllable. For morphological and semantic details on the verbal classificatory prefixes see the chapter 5.

Within this type of vowel harmony, two subtypes can be distinguished depending on whether the verbal classificatory prefix is followed by an overt verb stem or whether the verb stem is zero and the prefix is directly followed by a verbal suffix. In the first case only stem vowel /ε/ triggers vowel harmony and obligatorily does so. Compare (2-10) and (2-11):

- (2-10) *dofaiobe*
lob-fa-∅-i-o=be
 SG.MASC.O-give.birth.PFV-PST-1SG.SBJ-EP=DECL
 ‘I have given birth to him’

- (2-11) *debeb unebe*
lob-eb *un-∅-e=be*
 SG.MASC.O-take.PFV go.PFV-PST-3SG.M.SBJ=DECL
 ‘he carried him away’

Some verbs have zero stems, e.g. the perfective stem of ‘take’, and the verbal classificatory prefix is directly followed by a verbal suffix. In this case vowel harmony in verbal classificatory prefixes is prompted by the next vowel in a verbal suffix, for example, the subject marker. Here, vowel harmony is only triggered by the vowels /i/ and /a/. This type of vowel harmony is optional, depending on speech tempo and speaker preference:

- (2-12) *nakae dobibe/dibibe*
naka=e lob-Ø-Ø-i=be
 man=SG.M SG.MASC.O-take.PFV-PST-1.SG.SBJ=DECL
 ‘I have taken a husband’

In Future forms of zero-stem verbs vowel harmony is optionally triggered if this suffix immediately follows a zero verb stem.

- (2-13) *geime tobamabibe/tabamabibe*
geim=e tob-Ø-amab-i-be
 arrow=SG.N1 SG.LONG.O-take.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will take the arrow’

2.7.8.2 Vowel harmony the Immediate future suffix /Vm/

The vowel in the Immediate future suffix /Vm/ always has the same quality as the vowel in the subject marker, which always follows the tense suffix.

- (2-14) *í imeno nininimibobe*
í imen=o nini+n-Vm-ibo=be
 they taro=PL.N1 scrape_taro+AUX.PFV-IFUT-2/3PL.AN.SBJ=DECL
 ‘they are about to scrape taro’

Table 9 relates vowels in subject markers to vowel harmony in the immediate future suffix.

Vowel	SBJ-markers	IFut form
i	-i ‘1SG’	<i>nininimibe</i>
	-ib ‘2/3PL.AN’	<i>nininimibobe</i>
ε	-e ‘3SG.M’/‘SG.N1’	<i>nininemebe</i>
	-eb ‘2SG’	<i>nininemebobe</i>
o	-o ‘3SG.F’/‘PL.N1’/‘N2’/ ‘EXPL’	<i>nininomobe</i>
	-ob ‘1PL.AN’	<i>nininomobobe</i>

Table 9: Vowel harmony in forms of the Immediate future

2.8 Tone

Mian is a word tone language, which means that 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 their affixes and 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 toneme inventory (cf. Donohue 1997). 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). In other parts of the world, word tone is most famously attested in Swedish and Norwegian (both Indo-European), Mende (a Mande language from West Africa) (Leben 1973) and Shanghai (Sino-Tibetan) (Zhu 1995).

2.8.1 Tone in Smith and Weston (1974a)

As my analysis of the tonal system of Mian is decidedly different from Smith and Weston's (1974a: 12-3; 25-8) approach, a few words about their work are in order to orient the reader. Smith and Weston analyze 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 article closes 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. (Remember from the section on vowel length 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, actually have tone specifications.

There are two main 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 tonemes 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. While we indeed find four different tone patterns in native Mian monosyllables, we need only one more to account for tonal patterns on all disyllables and these five patterns are then sufficient to explain tone on trisyllables as well.

Second, the Smith and Weston analysis misses the generalization that the same tonal melody is found in /^Lam/ [àm] 'house' and /^Libal/ [ìβàl] 'dust', and likewise in /^{LH}mɛn/ [mɛ̃:n] 'string bag' and /^{LH}ninin/ [nìnĩ'n] 'name'. The tonal melody in the first pair is low, in the second rising, the only difference being that the domain over which the tone is spread in the second member of the pair is a disyllabic word instead of a monosyllabic one.

In the following section, I will present my own analysis of Mian tone which tries to solve the two problems addressed here, using the autosegmental approaches to tone that have been developed in the last two decades (see 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 or the skeletal tier.

2.8.2 Tone in Mian

In the nominal vocabulary, i.e. nouns and adjectives, the function of tones is exclusively to distinguish lexical meaning. In addition to this, verbs use tonal contrasts to mark the non-hodiernal past, where the subject marker bears a high tone (see 2.8.9.5.).

Both nominals and verbs are lexically specified for one tonal melody and an accent which indicates where the tonal melody is to be inserted. The accent is the ‘anchor point’ for the melody (cf. Hyman 1978, Donohue 2003, Gussenhoven 2004: 36-9).

There is a total of five tonal melodies (tonemes): L, H, LH, LHL, and HL. The first three of these are very common in nouns and adjectives, the last two are quite rare. All tonemes occur on monosyllabic and disyllabic nominal words. HL is rare in monosyllabic native Mian nouns (and unattested in adjectives), but occurs more often in bisyllabic nouns; e.g. /^{HL}usan/ [úsân] ‘tail’ and /^{HL}mukur/ [múkûr] ‘nose’, but also in several monosyllabic Tok Pisin loans; e.g. /^{HL}su/ [sû] ‘shoe’ and /^{HL}has/ [hâs] ‘hat’.

Mian verb stems choose their tonal melody from a subset of the inventory available to nominals, namely L, LHL, and HL. So, while LHL and HL are rare in nominals, they are very common in verbs. H and LH, on the other hand, are common in nominals but unattested in the verb.

The tonal domain in verbs is generally larger as verbs can easily be five and more syllables long, whereas nominals are mainly mono- or bisyllabic.

Generally, the accent for all stems is placed on the last stem syllable. Both nominals and verbs show accent placement which deviates from this rule.

Nominals with a pharyngealized /a^ʕ/ as the nucleus of the first syllable; e.g. /^{LH}ka^ʕwa/ ‘steel axe’ have the accent on the first syllable.

Verbs fall into three classes: (i) unaccented, e.g. /fu/ ‘cook’, (ii) stem-accented, e.g. /^{LHL}hela/ ‘break’ and (iii) off-stem-accented ones; e.g. /^{LHL}lowon/ ‘eat’. In unaccented verbs L is spread over the whole word. 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, if (and only if) the verb stem is suffixed or auxiliary-compounded. If an off-accented verb stem occurs without any suffixal morphology 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 2.8.6 (for nominals) and 2.8.9.3.3. (for verbs).

2.8.3 Tone in nouns and adjectives

As Mian nominals constitute smaller tonal domains, I will first describe tone in nouns and adjectives and then move on to the more involved suprasegmentals of the verb.

Minimal/near-minimal tone pairs for monosyllables and disyllables are given in Table 10. The monosyllable /^{LHL}a^sm/ [ã^s:m̃] ‘older sister’ behaves exceptionally with respect to tone assignment (see 2.8.4).

Monosyllables			
Toneme	Phonemic	Phonetic	Meaning
H	/ ^H an/	[áːn]	‘arrow’
L	/ ^L am/	[ãm]	‘house’
LH	/ ^{LH} a ^s m/	[ã ^s :m̃]	‘pandanus species’
LHL	/ ^{LHL} a ^s m/	[ã ^s :m̃]	‘older sister’
H	/ ^H mɛn/	[méːn]	‘child’
LH	/ ^{LH} mɛn/	[mɛːn]	‘string bag’
HL	/ ^{HL} has/	[hâːs]	‘hat’ (TP)
Disyllables			
Toneme	Phonemic	Phonetic	Meaning
H	/ ^H sɛku/	[séː.kʰúː]	‘bush knife’
L	/ ^L afɛt/	[à.fɛtʰ]	‘different’
LH	/ ^{LH} afɛt/	[à.fɛtʰ]	‘cleared of taboo’
L	/ ^L ibal/	[ì.βàl]	‘dust’
LHL	/ ^{LHL} ibal/	[ì.βàl]	‘paper wasp’
LH	/ ^{LH} usan/	[ù.sǎːn]	‘vomit (N)’
HL	/ ^{HL} usan/	[ú.sân]	‘tail’

Table 10: Tonal minimal pairs

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

- 1) Toneme inventory: L, H, LH, LHL, and HL.
- 2) All stems are lexically specified for: (i) one toneme and (ii) an accent to which the melody attaches.
- 3) Tone-bearing units (TBUs): Only vowels and diphthongs are tone-bearing units.
- 4) Maximum number of tones per syllable: The Mian tone system is quantity-insensitive, that is tone association is not dependent on syllable weight. Every TBU is entitled to bear exactly one tone out of a tonal melody (cf. Goldsmith 1990: 167). However, a TBU in a word-final syllable is allowed to have two tones. This situation arises when leftover tones at the right edge of the word are

dumped onto the TBU in the final (cf. tone ‘dumping’ under tone assignment rule 5b below). 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 toneme (or the last in the case of the single tone melodies L and H) 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 (cf. 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 toneme are spread over to and associated with any leftover vowels. Spreading occurs in both directions.

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, finally any leftover TBUs are supplied with a tone through spreading.

2.8.4 Tone association in monosyllables

The following diagrams illustrate how the formalism works for monosyllabic nouns and adjectives. The segmental tier gives phonemic representations. Note that /^Lam/ ‘house’, /^{LH}a^sm/ ‘pandanus species’, and /^{LHL}a^sm/ ‘older sister’ constitute a (near-)minimal tone triplet. In (2-15) and (2-16), association involves a straightforward linking of the toneme 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 vowels left.

(2-15)

L		L
	=>	
am		am
*		*
[àm] 'house'		

(2-16)

H		H
	=>	
an		an
*		*
[án] 'arrow'		

In the following derivation, L from the melody LH is associated with the vowel according to the association rules stated above, and H is then dumped on the vowel, as illustrated in (2-17). Association of the melody HL is exactly parallel, as shown in (2-18).

(2-17)

LH		L H		L H
	=>		=>	/
a ^ɿ m		a ^ɿ m		a ^ɿ m
*		*		*
[ǎ ^ɿ m] 'wild pandanus species'				

(2-18)

HL		H L		H L
	=>		=>	/
has		has		has
*		*		*
[hâ's] 'hat (TP)'				

The final tonal melody found on monosyllables is LHL. Only two monosyllabic words in my corpus exhibit this tone pattern: /^{LHL}a^ɿm/ 'older sister', for which I treat the final segment /m/ as the inflection point for the tonal melody (cf. (2-19)), and /^{LHL}kla/ 'very, properly' (cf. derivation (2-20) below).

In /^{LHL}a^ɿm/ '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 vowel to the

left, and the other leftover L is dumped on the /m/. Although it might be possible to treat /m/ here as a syllabic nasal: /a[̣]m̩/ ‘older sister’, the phonetic facts militate against this. Nasal length measurements in /^{LH}a[̣]m/ ‘wild pandanus’ and /^{LHL}a[̣]m/ ‘older sister’ show both /m/ to be very similar in length.

(2-19)

LHL		LHL		L H L		L H L
	=>		=>	\	=>	\
a [̣] m		a [̣] m		a [̣] m		a [̣] m
*		*		*		*
[a [̣] m̩] ‘older sister’						

(2-20)

LHL		LHL		L H L		LHL
	=>		=>	\	=>	\
kla		kla		kla		kla
*		*		*		*
[klã] ‘very, properly’						

Traces of fundamental frequency and spectrograms for both /^{LH}a[̣]m/ ‘pandanus species’ (Figure 2) and /^{LHL}a[̣]m/ ‘older sister’ (Figure 3) are provided below to enable the reader to appreciate the difference in tone.

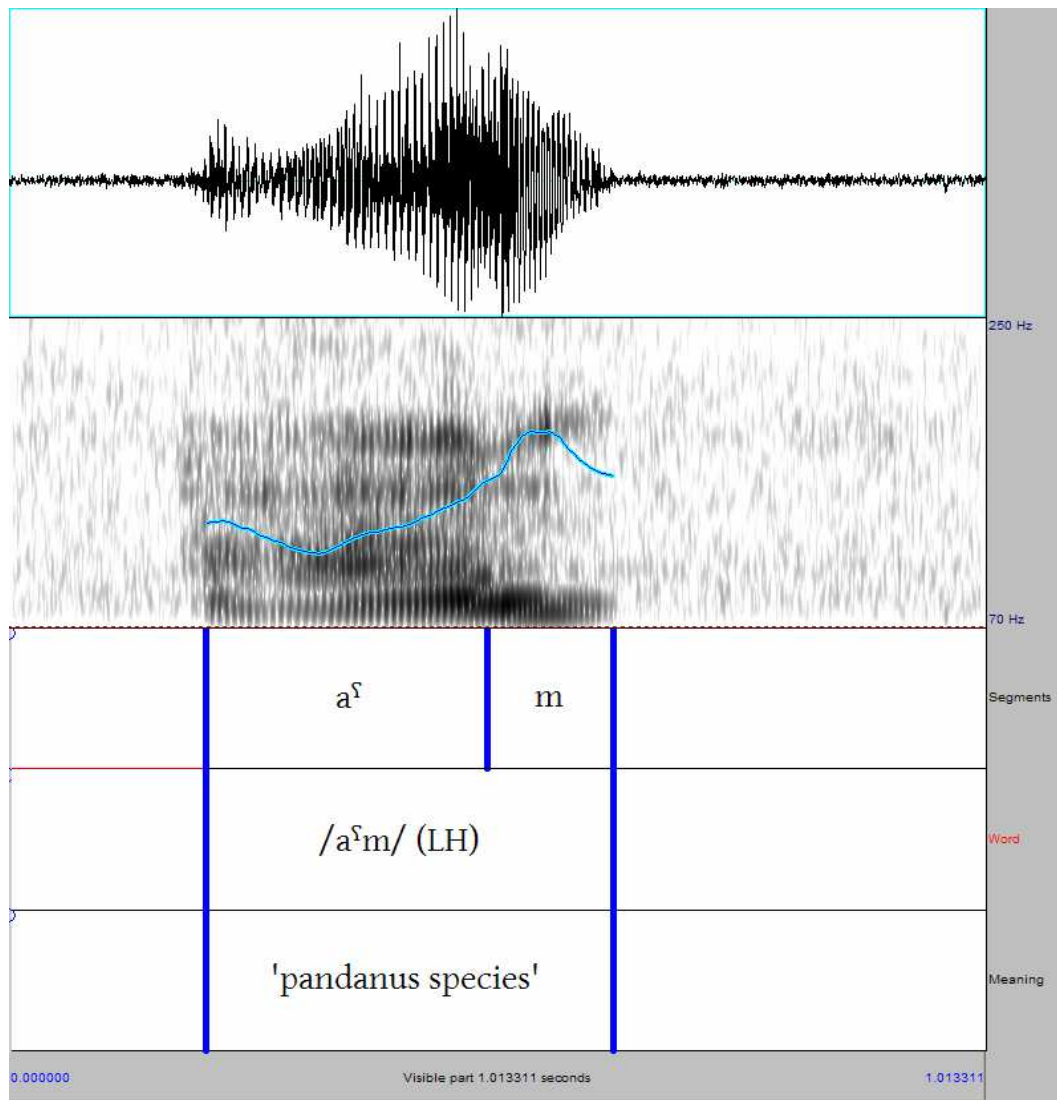


Figure 2: Fundamental frequency and spectrogram for /^{LH}aʔm/ 'pandanus species'

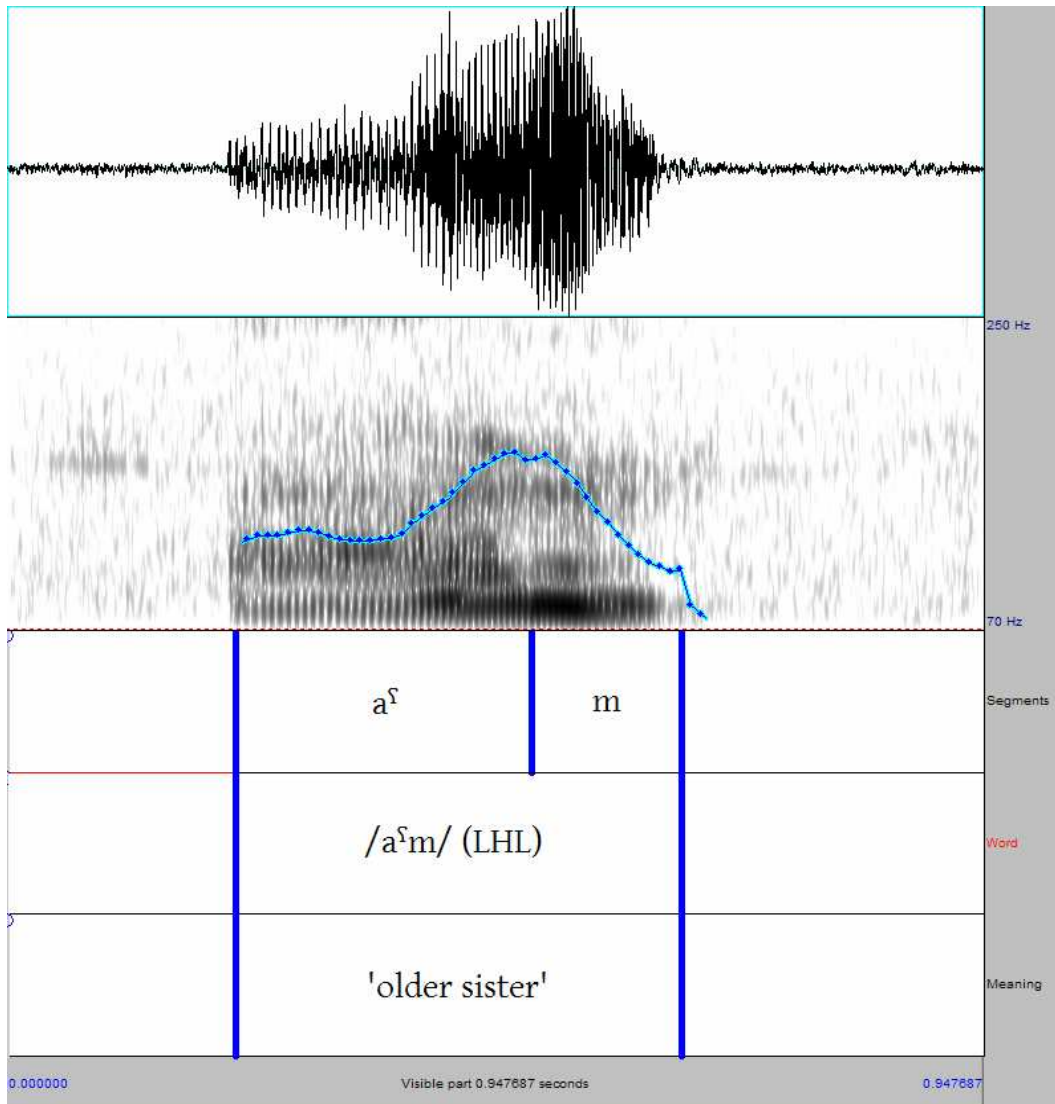


Figure 3: Fundamental frequency and spectrogram for $/^{LHL}a^s m/$ ‘older sister’

2.8.5 Tone association and spreading in disyllables

The following diagrams (2-21) and (2-22) illustrate how the formalism associates tones and vowels in disyllabic nouns and adjectives and spreads tones to unassociated vowels. Note that $/^{L}ibal/$ ‘dust’ and $/^{LHL}ibal/$ ‘paper wasp’ are a minimal tone pair.

In (2-21), L is linked to the TBU in the accented syllable, namely the vowel $/a/$. As the remaining vowel $/i/$ thus stays unassociated, L is spread over to the left, to $/i/$. In (2-22), H is associated first, then the left L is associated with the remaining vowel $/i/$, and finally the right L is dumped on the TBU in the last syllable.

(2-21)

L		L		L
			/	
ibal	=>	ibal	=>	ibal
*		*		*
[iβàl] 'dust'				

(2-22)

LHL		LHL		L H L		L HL
				\		\
ibal	=>	ibal	=>	ibal	=>	ibal
*		*		*		*
[iβâ·l] 'paperwasp'						

If a disyllabic word is specified for H, association is exactly the same as in disyllables which are specified for L.

(2-23)

H		H		H
			/	
sɛku	=>	sɛku	=>	sɛku
*		*		*
[sɛ·kʰú·] 'bush knife'				

Assignment of the melody LH to the disyllabic nominal /^{LH}afɛt/ 'cleared of a taboo' is illustrated by (2-25) below. As this word forms a minimal tone pair with /^Lafɛt/ 'different' the derivation for this word is shown as well in (2-24):

(2-24)

L		L		L
			/	
afɛt	=>	afɛt	=>	afɛt
*		*		*
[ɛ̀fɛ́ɾ] 'different'				

In (2-25), L is linked first, then H is dumped, finally L is spread to the unassociated vowel /a/.

(2-25)

LH		LH		L H		L H
afɛt	=>	afɛt	=>	afɛt	=>	afɛt
*		*		*		*
[ɛ̃fɛ̃t̃] ‘cleared of a taboo’						

Exactly the same happens in disyllabic words which are specified for the melody HL, as shown in (2-26):

(2-26)

HL		HL		H L		H L
usan	=>	usan	=>	usan	=>	usan
*		*		*		*
[úsâ·n] ‘tail’						

2.8.6 Nominals with the accent on the first syllable

Words with a pharyngealized /a^h/, such as /^{LH}ka^hwa/ ‘steel axe’, /^{LH}ma^hmɛin/ ‘maternal uncle’, and /ɲa^hmɛin/ ‘yellow’ have their accent on the first syllable. Thus, the tonal melody attaches to the first syllable rather than the last. The pronunciations are [q^hà^h·wá^h] ‘steel axe’, [mà^h·méin] ‘maternal uncle’, and [ɲà^h·méin] ‘yellow’, respectively.

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

(2-27)

LH		L H		L H
ka ^h wa	=>	ka ^h wa	=>	ka ^h wa
*		*		*
[q ^h à ^h ·wá ^h] ‘steel axe’				

Accent behaviour in Mian is an example for the complex interplay between segmental specification and prosody. 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.

2.8.7 Tone association and spreading in trisyllables

Trisyllabic nominals are rare in my data and 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 mono-morphemic words.

The tone assignment formalism is capable of dealing with trisyllables as well. The derivation collapses tone dumping and spreading in the last step.

(2-28)

LHL		LHL		L H L		L HL
						/ /
awitnin	=>	awitnin	=>	awitnin	=>	awitnin
*		*		*		*
[èwĩtnĩn] ‘star’						

2.8.8 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 nominals the tonal domain, i.e. the domain of segments over which tonal melodies operate, is not the nominal stem but the stem plus any nominal clitics. In Mian nominals, 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; as in /^{LH}mɛn=o=^Lbɛ/ [mɛnóβɛ] ‘it’s a string bag’. While nominal clitics are not specified for tone, illocutionary clitics like /^Lbɛ/ ‘declarative’ are. They lie outside the tonal domain for nominals and the tonal melody is not extended to them.

2.8.8.1 Tone in non-verbal predictions

When a nominal functions as the predicate in a non-verbal predication, the nominal stem is followed by the toneless predictor =o before the (obligatory) illocutionary marker. The tone melody associated with the nominal is spread to include the predictor. In all of the following derivations orthographic representations precede underlying representations of the constituent parts of the word.

The simple tonal melodies L and H are spread from the nominal stem to the predictor.

(2-29) *amobe* /^Lam=o=^Lbε/ ‘it’s a house’

L		L		L	L		L	L
							\	
am	=o	=bε	=>	amo	=bε	=>	amo	=bε
*				*			*	
[à̀mò̀β̀è̀] ‘it’s a house’								

(2-30) *ánobe* /^Han=o=^Lbε / ‘it’s an arrow’

H		L		H	L		H	L
							\	
an	=o	=bε	=>	ano	=bε	=>	ano	=bε
*				*			*	
[á̀nò̀β̀è̀] ‘it’s an arrow’								

When complex melodies with 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 TBU in 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 nominal stems without clitics but associates with the toneless predictor. Derivation (2-31) illustrates this for LH and (2-32) for the HL melody.

(2-31) *aamóbe* /^{LH}a^ɸm=o=^lbε / ‘it’s wild pandanus’

LH	L	LH	L		L H	L	L H L
a ^ɸ m	=o	=bε	=>	a ^ɸ mo	=bε	=>	a ^ɸ mo bε => a ^ɸ mobe
*				*			*
[a ^ɸ móβɛ] ‘it’s wild pandanus’							

(2-32) *hásobe* /^{HL}has=o=^lbε / ‘it’s a hat’

HL	L	HL	L		HL	L	HL L
has	=o	=bε	=>	haso	=bε	=>	haso bε => hasobe
*				*			*
[hásoβɛ] ‘it’s a hat’							

The exceptional behaviour of the only monosyllabic noun with a LHL melody /^{LHL}a^ɸm/ ‘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’, is only attested in contexts in which the tonal domain is co-extensive with the stem itself.

(2-33) *aamóbe* /^{LHL}a^ɸm=o=^lbε / ‘it’s the older sister’

LHL	L	LHL	L		LH L	LHL L	
a ^ɸ m	=o	=bε	=>	a ^ɸ mo	=bε	=>	a ^ɸ mo bε => a ^ɸ mobe
*				*		*	
[a ^ɸ móβɛ] ‘it’s the older sister’							

In disyllabic nominals, the tonal domain is likewise extended to include the predictor. Derivations (2-34) to (2-37) illustrate association for the melodies L, LHL, LH, and HL, respectively.

(2-34) *ibalobe* /^Libal=o=^Lbε / ‘it’s dust’

L	L	L	L	L	L	L L L L	
				/ \			
ibal	=o	=bε	=>	ibalo	=bε	=>	ibalobe
*				*			*
[iβàlòβè] ‘it’s dust’							

(2-35) *ibálobe* /^{LHL}ibal=o=^Lbε / ‘it’s a paper wasp’

LHL	L	LHL	L	LHL	L	LHL L	
ibal	=o	=bε	=>	ibalo	=bε	=>	ibalobe
*				*			*
[iβáalòβè] ‘it’s a paperwasp’							

(2-36) *afetóbe* /^{LH}afet=o=^Lbε / ‘it’s cleared of a taboo’

LH	L	LH	L	LH	L	LLHL	
				/			
afet	=o	=bε	=>	afeto	=bε	=>	afetobe
*				*			*
[èfèt ^h óβè] ‘it’s cleared of a taboo’							

(2-37) *úsánobe* /^{HL}usan=o=^Lbε / ‘it’s a tail’

HL	L	HL	L	HL	L	HHLL	
				/			
usan	=o	=bε	=>	usano	=bε	=>	usanobe
*				*			*
[úsánòβè] ‘it’s a tail’							

2.8.8.2 Cliticization of the article

The article =e, =o, and =i which cliticize to nominals to indicate number gender and referentiality are—like the predicator—not specified for tone and expand the tonal domain of the nominal. 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.

2.8.8.2.1 Monosyllables

(2-38) *amo* /^Lam=o/ ‘the/a house’

L		L		L
				\
am	=o =>	amo	=>	amo
*		*		*
[à ^m ò] ‘a/the house’				

(2-39) *áne* /^Han=ε/ ‘a/the arrow’

H		H		H
				\
an	=ε =>	anε	=>	anε
*		*		*
[á ⁿ é] ‘a/the arrow’				

(2-40) *aamó* /^{LH}a^fm=o/ ‘(the) wild pandanus (pl.)’

LH		LH		L H
a ^f m	=o =>	a ^f mo	=>	a ^f mo
*		*		*
[à ^f mó] ‘(the) wild pandanus (pl.)’				

(2-41) *aamô* /^{LHL}a^fm=o/ ‘a/the older sister’

LHL		LHL		LHL
a ^f m	=o =>	a ^f mo	=>	a ^f mo
*		*		*
[à ^f mò] ‘a/the older sister’				

2.8.8.2.2 Disyllables

(2-42) *ibale* /^Libal=ε/ ‘some dust’

L		L		L
				/ \
ibal	=ε =>	ibale	=>	ibale
*		*		*
[iβàlɛ̃] ‘some dust’				

(2-43) *ibále* /^{LHL}ibal=ε/ ‘a/the paperwasp’

LHL		LHL		LHL
ibal	=ε =>	ibale	=>	ibale
*		*		*
[iβáɫɛ̃] ‘a/the paperwasp’				

(2-44) *afeté* /^{LH}afet=ε/ ‘the (one) cleared of a taboo’

LH		LH		LH
				/
afet	=ε =>	afetε	=>	afetε
*		*		*
[ɛ̀fɛ̃tʰɛ̃] ‘the (one) cleared of a taboo’				

(2-45) *úsáne* /^{HL}usan=ε/ ‘a/the tail’

LH		HL		H L
				/
usan	=ε =>	usanε	=>	usanε
*		*		*
[úsánɛ̃] ‘a/the tail’				

2.8.8.3 Vowel-final nominal stems in the expanded domain

Vowel-final nominal stems specified for an H melody, e.g. /^Hklo/ [kló] ‘tinea’, /^Hmima/ [mí·má] ‘spittle’, and /^Hseku/ [sé·kʰú] ‘bush knife’, and bisyllabic vowel-final nominal stems specified for an LH melody and the inflection point for the toneme

on the first syllable, e.g. /^{LH}ka^ɸwa/ [q^hà^ɸ·wá·] ‘steel axe’, display exceptional tone association behaviour in the expanded domain insofar as the H on the last syllable of the nominal stem is not spread to either the predictor or the article. This is because the clitic vowel is always desyllabified and thus loses its ability to carry a tone. This is illustrated for /^Hsɛku/ [sɛ·k^hú·] ‘bush knife’ in (2-46) and /^{LH}ka^ɸwa/ [q^hà^ɸ·wá·] ‘steel axe’ in (2-47).

(2-46)

H		H		H
				/
sɛku	=ε =>	sɛku _ξ	=>	sɛku _ξ
*		*		*
[sɛ·k ^h ú _ξ] ‘a/the bush knife’				

(2-47)

LH		L H		L H
ka ^ɸ wa	=o =>	ka ^ɸ wa _o	=>	ka ^ɸ wa _o
*		*		*
[qà ^ɸ ·wá _o] ‘steel axe’				

That this behaviour is not a feature of any nominal with an H associated to their last syllable can be seen from, for instance, /^{LH}ŋa^ɸmɛin/ [ŋà^ɸ·méin] ‘yellow’ in (2-48), where H spreads to the predictor because it is not desyllabified.

(2-48)

LH		L		L H		L		L H L		L H L
										\
ŋa ^ɸ mɛin	=o =bε =>	ŋa ^ɸ mɛino	=bε =>	ŋa ^ɸ mɛinobe	=>	ŋa ^ɸ mɛinobe				
*		*		*		*				
[ŋà ^ɸ ·méinóβɛ] ‘it’s yellow’										

2.8.8.4 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 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 the first stem has a pharyngealized /a^ɸ/. Tone

assignment then proceeds as in monomorphemic words. The toneme H is so far unattested in (synchronically transparent) compounds.

Derivation (2-49) illustrates assignment of the L toneme in a compound:

(2-49) *wanam* /^Lwan+am/ ‘bird house’ (i.e. platform for hunting birds)

L	L	L
		/
wan+am =>	wanam =>	wanam
*	*	*
[wànàm] ‘bird house’		

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

(2-50) *wanamobe* /^Lwan+am=o=^Lbε/ ‘it’s a bird house’

L	L	L	L	L	L
				/ \	
wan+am=o	=bε =>	wanamo	=bε =>	wanamobe	
*		*		*	
[wànàmòβè] ‘it’s a bird house’					

The following derivations (2-51) and (2-52) illustrate the assignment of an LH and LHL melody, respectively:

(2-51) *noměn* /^{LH}no+mεn/ ‘marsupial bag’ (i.e. a string bag full of marsupials)

LH	LH	LH	LH
		/	/ /
no+mεn =>	nomεn =>	nomεn =>	nomεn
*	*	*	*
[nòmĕ˙n] ‘marsupial bag’			

(2-52) *milblông* /^{LHL}mil+blɔŋ/ ‘bean pod’

LHL	LHL	LHL	LHL
		/	\
mil+blɔŋ =>	milblɔŋ =>	milblɔŋ =>	milblɔŋ
*	*	*	*
[mìlblôŋ] ‘bean pod’			

In the expanded tonal domain, i.e. when an article cliticizes to the compound stem, the melody spreads over the whole domain. This is shown in (2-53) the LH melody and (2-54) for the LHL melody:

(2-53) *nomené* /^{LH}no+mɛn=ɛ/ ‘a/the marsupial bag’

LH		L H		L L H
no+mɛn =ɛ	=>	nomɛnɛ	=>	nomɛnɛ
*		*		
[nòmɛ̀nɛ́] ‘a/the marsupial bag’				

(2-54) *milblónge* /^{LHL}mil+blɔŋ=ɛ/ ‘a/the bean pod’

LHL		L H L		L H L
mil+blɔŋ =ɛ	=>	milblɔŋɛ	=>	milblɔŋɛ
*		*		
[mìlblóŋɛ̀] ‘a/the bean pod’				

When the first stem in a non-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 2.8.6 above). Consider the derivations (2-55) and (2-56):

(2-55) *baanón* /^{LH}ba^ʕn+on/ ‘jaw bone’

LH		L H		L H
ba ^ʕ n+on	=>	ba ^ʕ non	=>	ba ^ʕ non
*		*		*
[^m bà ^ʕ ·nón] ‘jaw bone’				

(2-56) *baanóné* /^{LH}ba^ʕn+on=ɛ/ ‘a/the jaw bone’

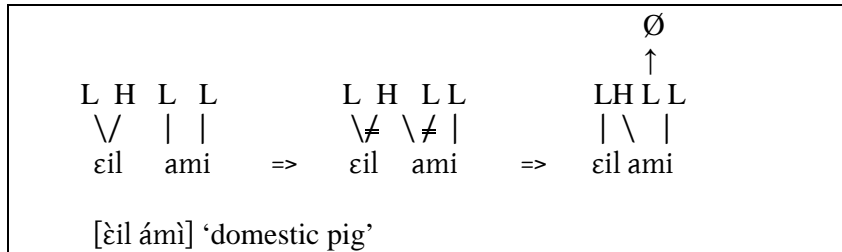
L H		L H		L H		L H
						\
ba ^ʕ n+on =ɛ	=>	ba ^ʕ nonɛ	=>	ba ^ʕ nonɛ	=>	ba ^ʕ nonɛ
*		*		*		*
[^m bà ^ʕ ·nónɛ́] ‘a/the jaw bone’						

2.8.8.5 Contour delinking

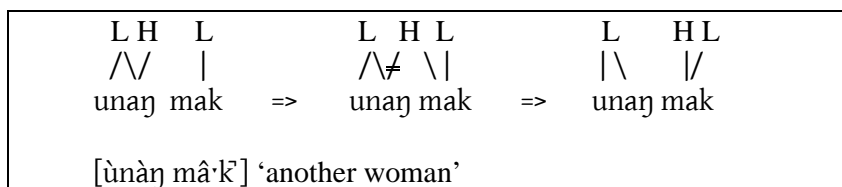
Contour tones lead a precarious existence in Mian. In continuous discourse contour tones are dissolved even across word boundaries. In this process, the second member of the contour is delinked and then relinked to the next TBU to the right. Contour delinking is illustrated for noun phrases in (2-57) and (2-58) and for verb phrases in (2-59).

When a nominal head with a contour tone on the last syllable is modified by an adjective, the contour tone is dissolved, and its second member relinks to the next TBU to the right.

(2-57) *eil ámi* ‘domestic pig’ (constituents being *ěil* /^{LH}eil/ ‘pig’ and *ami* /^Lami/ ‘domestic’)

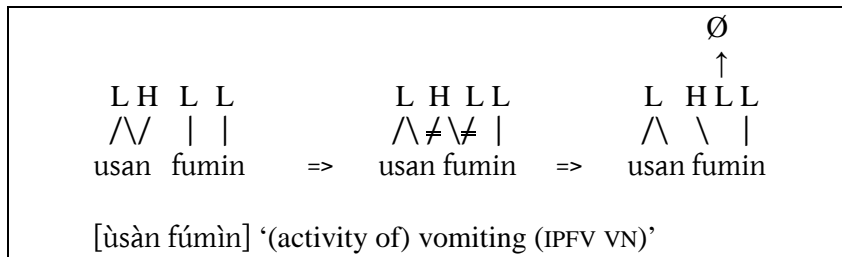


(2-58) *unang mâk* ‘another woman’ (constituents being *unăng* /^{LH}unang/ ‘woman’ and *mak* /^Lmak/ ‘other’)



The same happens when a nominal adjunct with a contour tone on the last syllable precedes a verb. The contour tone is resolved, and its second member relinks to the next TBU to the right, as shown in (2-59):

(2-59) *usan fúmin* ‘(activity of) vomiting (IPFV VN)’ (constituents being *usǎn* /^{LH}*usan*/ ‘vomit’ and *fumin* /^L*fumin*/ ‘(activity of) cooking, smoking’)



2.8.9 Tonal phonology of the verb

While the last section dealt with tone in nouns and adjectives, we now turn to tone in the verb. The main difficulty one has to face in this area of Mian phonology is the fact that the verbal word can reach considerable length (six or seven syllables being nothing special), whereas nouns and adjectives—with a few exceptions—are mono- or bisyllabic. The analysis presented below will not try to account for all tonal phenomena encountered in the verb and will remain tentative until further research has been conducted on suprasegmental properties of the verb. In the remaining chapters of this grammar, verb tone will not be indicated.

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

[k ^h è.mìn]	‘(activity of) making (IPFV VN)’
[k ^h é.mìn]	‘(activity of) cutting cooked scraped taro (IPFV VN)’
[ðmìβè]	‘I start talking’
[ðmíβè]	‘I have taken a female’

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 (cf. section 2.8.9.5). Such grammatical functionality is not attested in nominal tone.

2.8.9.1 Accent and tonal melodies

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

Like nominals, accented verb stems come with an underlying, lexically specified accent which indicates where the tonal melody is to be inserted. In phonological representations, the accent is indicated by an asterisk under the vowel in the accented syllable. Accented verbs are also specified for one of two possible tonal melodies:

- LHL
- HL

As in nominals the penultimate tone in these melodies is initially associated with the TBU in the accented syllable. The present analysis assumes that the domain of application of any given tonal melody is the entire phonological verbal word. In other words, a verb specified LHL will have one prominent syllable which is higher in pitch, while a verb specified 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 stem 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 suffixed or auxiliary-compounded. If an off-accented verb stem occurs without any suffixal morphology the inflection point regularly falls on the final stem syllable.

2.8.9.2 Unaccented verbs

Phonetically, unaccented verbs do not have a prominent syllable, as far as higher fundamental frequency is concerned. Examples of unaccented verbs are:

/kɛ/ ‘make (verb stem)’
 /fu/ ‘cook (verb stem)’

The lexical entry of unaccented verbs does not contain any information about accent, which prompts the tonal grammar to supply the stem of such verbs with a low tone which is then spread over the whole word from left to right, as in the derivations (2-60) and (2-61):

(2-60)

L		L		L
				\
kɛmin	=>	kɛmin	=>	kɛmin
[k ^h ɛmìn]				‘(activity of) making (IPFV VN)’

(2-61)

L		L		L		L		L		L		L
								\		\		\
funamabibɛ	=>	funamabibɛ	=>	funamabibɛ	=>	funamabibɛ	=>	funamabibɛ	=>	funamabibɛ	=>	funamabibɛ
[fùnəmàβiβɛ̀]												‘I will cook’

2.8.9.3 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.

2.8.9.3.1 Verb stems

Before we can examine the association rules for tonal melodies in more detail, a short note on what can constitute a verb stem in Mian is in order.

Mian verb stems are the base which then can be inflected for various tense and aspect categories. A verb stem consists minimally of a mono- or bisyllabic verb stem (which can be zero). Verb stems can be compounded. Most stems can be marked for an indirect object by a cross-referencing suffix. A subset of verbs marks their (obligatory) direct object by a cross-referencing prefix. While the affixes encoding direct and indirect objects are inflectional, they are treated as part of the stem by the tonal phonology. In

stem-accented verbs the accent falls on the rightmost syllable of the stem, i.e. either the stem or the indirect object suffix.

2.8.9.3.2 Association process for stem-accented verbs

In stem-accented verbs, the inflection point for the tonal melody, which spreads over the whole domain of the phonological verbal word, is at the right edge of the final segment of the stem. Thus, there are, for example:

- /^{LHL}hɛla/ ‘break (Pfv verb stem)’
 *
 /^{LHL}alɛjɛ/ ‘show them (Ipfv verb stem)’
 *
 /^{HL}ofa/ ‘put down RESID (Pfv verb stem)’
 *
 /^{HL}tobkima/ ‘put LONG in the fire (Pfv verb stem)’
 *

The following two derivations (2-62) and (2-63) illustrate the behaviour of the melody LHL:

(2-62)

LHL		LHL		LH L		LH L
	=>		=>		=>	\
helanamin	=>	helanamin	=>	helanamin	=>	helanamin
*		*		*		*
[hèlá'nà̀mìn] ‘(instance of) breaking (PFV VN)’						

Suffixation of an indirect object cross-referencing suffix and the benefactive applicative *-b* with perfective verb stems does alter the position of the accent, precisely because such suffixation extends the stem for the purpose of accent placement:

(2-63)

LHL		LHL		LHL		LHL
	=>		=>		=>	/ \
walubonamin	=>	walubonamin	=>	walubonamin	=>	walubonamin
*		*		*		*
[wà̀lùβó'nà̀mìn] ‘(instance of) buying for her (PFV VN)’						

The final two example derivations show the patterning of the tone melody HL.

(2-64)

HL		HL		H	L
κɛmin	=>	κɛmin	=>	κɛmin	
*		*		*	
[kʰé·mìn] ‘(activity of) cutting cooked scraped taro (IPFV VN)’					

(2-65)

HL	L		HL	L		H	L	L		H	L	L
										/	\	
ofanebobɛ	=>	ofanebobɛ	=>	ofanebobɛ	=>	ofanebobɛ	=>	ofanebobɛ		ofanebobɛ		
*		*		*		*		*		*		*
[ófá·nèβòβè] ‘you have put down LONG’												

2.8.9.3.3 Association process for 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. Examples are:

/^{LHL}bɛtɛla / ‘open (Pfv verb stem)’
*

/^{LHL}lowon / ‘eat (Pfv verb stem)’
*

/^{HL}hala / ‘abstain (Pfv verb stem)’
*

/^{LHL}fotebɛ / ‘rout them (Pfv verb stem)’
*

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

(2-66)

LHL	L	LHL	L H L L	L H L L
				//
betelanibiobe	=>	betelanibiobe	=>	betelanibiobe
*		*		*
[^m bɛtʰàràníβìoβɛ́] ‘I opened’				

(2-67)

LHL	L	LHL	L	L H L L	L H L L
					// \
lowombinisobe	=>	lowombinisobe	=>	lowombinisobe	=>
*		*		*	*
[ⁿ dɔwòmbí'nìsòβɛ́] ‘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 (2-68) with (2-69), repeated from (2-64):

(2-68)

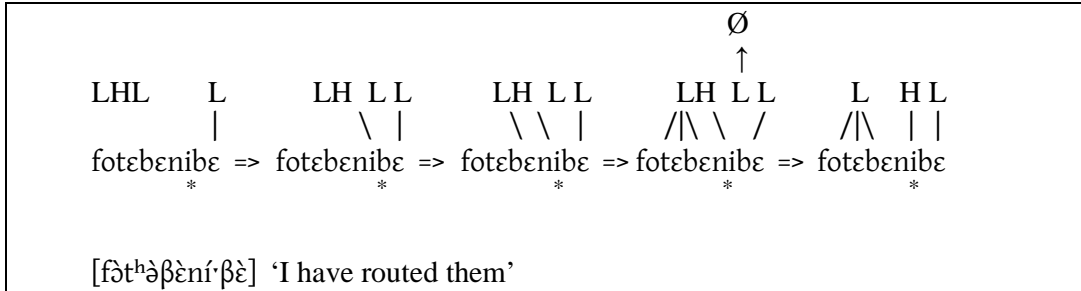
HL	HL	H L	H L
			//
halanamin	=>	halanamin	=>
*		*	*
[hálaná'mìn] ‘(instance of) abstaining (PFV VN)’			

(2-69)

HL	HL	H L
kɛmin	=>	kɛmin
*		*
[kʰɛ́'mìn] ‘(activity of) cutting cooked scraped taro (IPFV VN)’		

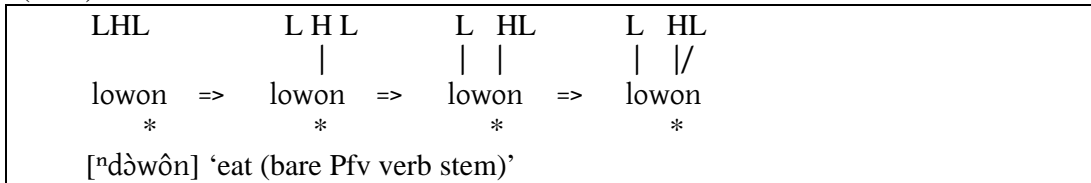
Due to the fact that off-accented verbs have their accent on the syllable after the stem, it is possible that parts of the melody cannot be associated with a vowel. All unassociated tones are deleted, for example:

(2-70)



When off-stem accented verbs appear as bare stems, for example in serial verb constructions, the accent recedes to the final stem syllable. This is illustrated for the off-accented verb /^{LHL}lowon/ ‘eat’ in (2-71):

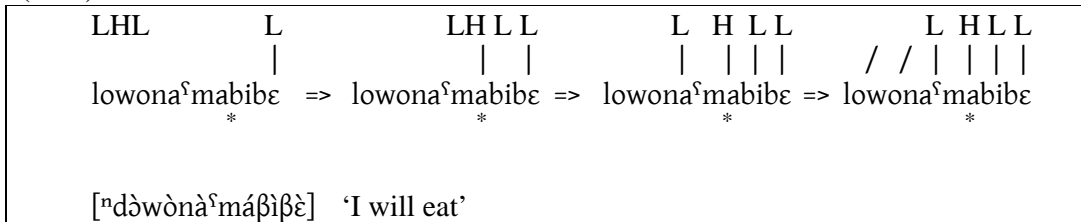
(2-71)



2.8.9.3.4 The inherently accented Future suffixes /a¹mab/ and /o¹mab/

The Future tense suffix /a¹mab/ (for non-animate plural subjects) and /o¹mab/ (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 future 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:

(2-72)



I am aware that the plausibility of the claim that the Future marker is inherently accented cannot 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 (1974, 1978) in order to account for a deviant stress pattern in the language (cf. Halle and Vergnaud 1990: 218). Irregular stress behaviour with some suffixes is also attested in Biniŋ Gunwok (Evans 2003b).

2.8.9.4 Accent in applicativized verb forms

Unaccented verbs which are suffixed with the benefactive applicative /b/ change their accent pattern to stem-accented and a LHL melody. Compare unaccented /fu/ ‘cook’ without applicative (2-73) and with applicative and indirect object (2-74):

(2-73)

L	L		L	L		L	L
						\	
f	u	ɛ	n	ɛ	β	ɛ	ɛ
=> f							
u							
ɛ							
n							
ɛ							
β							
ɛ							
[fùnɛ̀βɛ̀] ‘he has cooked’							

(2-74)

LHL	L		LHL	L		L	H	L	L
f	u	b	k	ɛ	n	ɛ	β	ɛ	ɛ
	*			*			*		
=> f									
u									
ɛ									
n									
ɛ									
β									
ɛ									
[fùḅkʰɛ̀nɛ̀βɛ̀] ‘he has cooked for you’									

This peculiar prosodic behaviour is presumably due to the fact that the Mian benefactive applicative construction is a reanalysis of a sequence comprising a verb stem and the verb GIVE in tight serialization. Synchronically, GIVE has a zero-stem and is specified for an LHL melody. Hence, it may be possible that applicativized verbs in general retained this melody even if they are unaccented when they occur with the applicative.

2.8.9.5 High tone in Non-hodiernal past forms

In certain forms of the Non-hodiernal past the subject marker bears a high tone. No formal analysis of this process is attempted here.

Functionally, this tonal change was necessary to differentiate the Non-hodiernal past, marked with *-b* from the imperfective which synchronically is also marked by *-b* (but without tonal change). I assume that at an earlier stage of the language Imperfective had to be expressed through compounding of a verb stem by the existential auxiliary *n/bi-bl*, which was then inflected. This way of marking imperfective aspect has survived in certain verbs; e.g.:

(2-75) *né sesǎ=tem haa+b-Øl-í=be*
 I bush=in roam.IPFV+AUX.IPFV-1SG.SBJ=DECL
 ‘I am roaming in the bush’

Most verbs however have their imperfective form in *-b*, which might be a phonologically eroded form of the existential *n/bi-bl*:

(2-76) *né imen=e wen-b-i=be*
 I taro=SG.N1 eat.IPFV-IPFV-1SG.SBJ=DECL
 ‘I’m eating a taro tuber’

In example (2-76), **wemblibe* would be ungrammatical. This grammaticalization process put pressure on the language to differentiate the Non-hodiernal past from the imperfective. Thus, a change in tone in the Non-hodiernal past forms was used to disambiguate. Two examples are given in Table 11:

Non-Hodiernal Past	Imperfective
<i>dolábíbe</i> ‘I wrote’	<i>dolábibe</i> ‘I am writing’
<i>singabíbe</i> ‘I poured’	<i>singabibe</i> ‘I’m pouring’

Table 11: Non-Hodiernal past vs. Imperfective

Whether a verb has a H-tone subject marker in the Non-hodiernal past is not completely predictable, and there seems to be some free variation as well. This topic will be explored in more detail in 7.3.1.1.3. in the verb morphology chapter.

2.8.10 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.:

<i>sékú</i>	[sé·k ^h ú]	‘bushknife’
<i>walónamabibe</i>	[wàló·nəmàβìβè]	‘I will buy’
<i>minîn</i>	[mìnî·n]	‘meet, gather’
<i>fotebeníbe</i>	[fòt ^h əβèní·βè]	‘I have routed them’

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

<i>ibal</i>	[iβàl]	‘dust’
<i>fubinibiobe</i>	[fùβìniβìoβè]	‘I was cooking’
<i>funamabibe</i>	[fùnəmàβìβè]	‘I will cook’

2.9 Orthography

Apart from a few exceptions, I will 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 table, 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.), where word-initial /l/ in native Mian words is consistently written with *d*.

Phoneme	Grapheme
/b/	<i>b</i>
/t/	<i>t</i>
/g/	<i>g</i>
/k/	<i>k</i>
/g ^w /	<i>gw</i>
/k ^w /	<i>kw</i>

/m/	<i>m</i>
/n/	<i>n</i>
/ŋ/	<i>ng</i>
/f/	<i>f</i>
/s/	<i>s</i>
/h/	<i>h</i>
/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>

Table 12: Phoneme-grapheme conventions

My analysis of Mian phonology—both segmental and suprasegmental—makes a few changes of the practical orthography necessary; purely for academic purposes, that is. It is not my intention to change the established orthography for Mian. All adjustments will be justified below.

1. The pharyngealized /a^ʕ/ is spelled <aa> in opposition to <a>. Since it is a distinct phoneme, I have decided to also indicate this in the spelling. Smith and Weston use orthographic <aa> in some of the words which I have identified as having a pharyngealized /a^ʕ/, others being non-pharyngealized instances of an ‘a’ which they analyze as long.
2. As I do not analyze 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 *měn* in this grammar.
3. Tone is incorporated into the orthography. The orthography includes phonetic pitch, i.e. diacritics do not indicate lexical tone but surface ptch. Only rising, falling and high pitch are marked. Any vowel without a pitch specification is low.

Pitch	Diacritic
L	a
H	á
LH	ǎ
HL	â

Table 13: Tone in the orthography

In examples, the first line indicates surface tones, that is shows all phonemic pitch differences as they can be heard in a given utterance. The second (morpheme-interlinearized) line indicates lexical tone, i.e. the different tonal specifications for individual words. Tone is not marked on verbs. The following conventions apply:

Tone	Diacritic
L	a
H	á
LH	ǎ
HL	â
LHL	ã

Table 14: Lexical tone

The tonal melody for which a word is specified is marked over the accented syllable.

3 Word classes

3.1 Preliminaries

Mian has two major, open word classes, namely verbs and nouns. All other word classes are closed, and with the exception of adjectives, rather small. The closed word classes comprise the following parts of speech:

- Articles
- Adjectives
- Adverbs
- Pronouns
- Directionals
- Quantifiers
- Conjunctions
- Clitics
- Interjections

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

3.2 Verbs

As verbs are morphologically by far the most complex word class in Mian, I will only be concerned with some defining features of verbs at this point. For details on verbal morphology the reader is referred to chapter 7.

Mian has intransitive, transitive, semitransitive, ditransitive, ambitransitive, and impersonal verbs. Applicativization productively derives semitransitives from intransitives and ditransitives from transitives. On argument structure see section 8.1.

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

Suprasegmentally, verbs are either unaccented or are lexically specified for an accent to which one of two tonal melodies is assigned. Nouns, on the other hand, are associated with one out of five tonal melodies.

Syntactically, verbs are easily identifiable. 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. Under no circumstances can

the verb be followed by any of its arguments. Occasionally, however, one finds locative NPs postposed after the verb which are adverbial modifiers of the preceding verb syntactically, but which form their own intonational unit (cf. 8.5).

Morphologically, verbs can be marked for core arguments with pronominal affixes cross-referencing the subject, the direct object, and the indirect object. Final verbs can be inflected for various aspectual (e.g. imperfective) and temporal categories (e.g. past, future), medial verbs can be inflected for co- or disjoint reference of the subject in the succeeding clause and also for a General past tense.

A subset of verbs has an obligatory verbal classificatory prefix which classifies one of the arguments according to semantic characteristics, viz. sex, form, and function.

Some verbs show an aspectual stem distinction with a perfective/imperfective contrast.

Most verbs 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 inflected for imperfective aspect. Trans-aspectual stems are not restricted in terms of their inflectional morphology.

For certain tense-aspect combinations a verb cannot be inflected directly, but has to be compounded with the existential verb functioning as an auxiliary before inflection can proceed. This compound then follows the inflectional patterns of the auxiliary.

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 a classificatory prefix or with pronominal affixes cross-referencing their direct or indirect object.

Directionals can be directly inflected to form intransitive verbs of motion; e.g. *daak* ‘down’ and *daak-n-i=a* [down-SS.SEQ-1SG.SBJ=MED] ‘I go down and then I...’. Directly inflected directionals will be described in more detail in 8.1.1.1.

Although verbal morphology in Mian is complex, finding a defining formal feature for finite verbs is not straightforward. The likely candidate tense is commonly marked on verbs but the absence of tense marking is not a sufficient condition for excluding a word from the class of verbs; e.g. *wembibe* [*wen-b-i=be*; eat.IPFV-IPFV-1SG.SBJ=DECL]

'I'm eating' is not marked for tense. In this example, the present moment is the default temporal reference point but the form *wembibe* can refer to an unbounded event in the past if a reference point in the past is supplied by the context. Although *wembibe* is not marked for tense, it would be counterintuitive to class it as a non-finite verb because it can function as an independent main verb.

For Mian a good criterion for finiteness is whether a verb is marked for subject. All finite verbs have a pronominal subject marker that cross-references an overt subject NP or instantiates the subject argument itself in lieu of an overt subject NP.

Non-finite verbs, conversely, are not marked for subject. There are two types of non-finite verbs in Mian. Most verbs have a perfective and an imperfective M-stem, e.g. *fuelanam* 'bathe (Pfv M-stem)' and *bum* 'hunt' (Ipfv M-Stem). These are discussed further in 7.5.1. M-stems are used in inchoative verb forms (see 7.3.1.2) and in purposive serializations (see 9.1.3). Verbal nouns are formed by suffixing *-in* to either of these to form the perfective and imperfective verbal noun, respectively, e.g. *fuelanam-in* [bathe.PFV.MSTEM-VN] '(instance of having a) bath', and *fuam-in* [bathe.IPFV.MSTEM-VN] '(activity of) bathing, of having a bath'. Verbal nouns are described further in 7.5.2.

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 '/'; 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. *—/ei* 'fly' without a perfective stem and *kan/—* 'die' without an imperfective stem. For trans-aspectual verbs, one stem is given which can be used for perfective and imperfective verb forms; e.g. *fu* 'cook'.

Obligatory cross-referencing affixes are indicated on verb stems as follows:

- V_{stem} — Verb does not mark either direct or indirect object, e.g. *—/un* 'hum, drone'
- $-V_{\text{stem}}$ — Verb obligatorily cross-references its direct object by a prefix (pronominal or classificatory), e.g. *-tem/-teme* 'see'

- V_{stem} - Verb obligatorily cross-references its indirect object by a suffix, e.g. *fote-* ‘chase away, rout’
- $-V_{\text{stem}}$ - Verb obligatorily cross-references both its direct object and indirect object, e.g. $-\emptyset/-\emptyset\text{-ka}$ - ‘give’

3.2.2 Verbal compounds

Verbal compounds consist of two (bare) stems which come from a relatively small set of verbs. Table 15 lists examples of verbal compounds. Stems which are only attested in compounds appear in brackets. The forms *u-na+bu* ‘make a garden’ (compounded from *u-na* ‘hit it’ and *bu* ‘bury’) shows lexicalized agreement in *u-* (see below).

Compound	Component stems	Lit. meaning	Gloss
<i>halo</i>	<i>ha+lo</i>	break+hit	‘break, split’
<i>balo</i>	<i>ba+lo</i>	break+hit	‘break, split’
<i>dalo</i>	<i>da+lo</i>	break off+hit	‘pick (seed)’
<i>walo</i>	<i>wa+lo</i>	cut+hit	‘cut off’
<i>habu</i>	<i>ha+bu</i>	break+bury	‘hide’
<i>unabu</i>	<i>u-na+bu</i>	hit+bury	‘make a garden’
<i>batlaa</i>	<i>ba+tlaa</i>	break+remove	‘tear apart’
<i>yoma</i>	<i>yo+ma</i>	initiate+plant	‘create’
<i>hake</i>	<i>ha+ke</i>	break+make	‘break through’
<i>fuba</i>	<i>fu+ba</i>	cook+fill	‘wash’
<i>bafu</i>	<i>ba+fu</i>	fill+cook	‘boil’
<i>dete</i>	<i>de+te</i>	desist+come	‘return’
<i>dena</i>	<i>de+na</i>	desist+make	‘stop’
<i>kimaa</i>	<i>ki+maa</i>	align+stand	‘watch over, care for’
<i>-onki</i>	<i>-on+ki</i>	take+align	‘become attached to’
<i>biki</i>	<i>bi+ki</i>	squeeze+align	‘squeeze, close’
<i>bina</i>	<i>bi+na</i>	squeeze+hit	‘shoot, pierce’
<i>bali</i>	<i>ba+(di)</i>	grow+?	‘bear fruit’

Table 15: Examples of verb compounds

Verbal compounds are lexicalized items and are treated as single phonological verbal words. That means they are specified for 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 2.8.9.1.

Furthermore, verbal compounds are single grammatical words; i.e. the whole compound is treated as a verb stem which can undergo inflection. In other words, the constituent parts of the compound cannot be inflected independently. Consider the verbal compound *halo* ‘break, split’ which consists of the stems *ha* ‘break (Pfv.)’ and *lo* ‘hit, kill (Pfv.)’:

- (3-1) *ase súmé halo sea*
as=e súm=e halo-s-e=a
 tree=SG.N1 big=SG.N1 split.PFV-DS.SEQ-SG.N1.SBJ=MED
 ‘a big tree split and then they...’ [Flood]

The second stem in this verbal compound *lo* ‘hit, kill (Pfv.)’ always has to cross-reference its direct object when it occurs outside of compounds, as in (3-2):

- (3-2) *Usaleitén awelí yé yalosibta*
usaleitén awel=i yé ya-lo-s-ib=ta
 PN fathers_of=PL.AN there PL.AN.O-kill.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘they killed the fathers of the Usaleiten there and then someone else...’ [Mianmin and Telefomin]

In the compound *halo* ‘break, split’, on the other hand, the object cross-referencing prefix must not occur. Other verbal compounds in which the second member obligatorily cross-references its direct object when used on its own, but not as the second constituent stem in a verbal compound, are e.g. *balo* ‘break, split’ and *yoma* ‘create’, where the second stem obligatorily has a verbal classificatory prefix when occurring outside of compounds, as in (3-3):

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

The first element in a verbal compound, on the other hand, retains its direct object marker if it obligatorily has a direct object marker outside of compounds. Thus, the

compound as a whole inherits obligatory marking of the first stem in the compound; e.g. *-o(n)* ‘take (Pfv)’ on its own always has a verbal classificatory prefix and so does the compound *-onki* ‘attach to (Pfv)’ consisting of *-o(n)* ‘take (Pfv)’ and *ki* ‘align’:

(3-4) *gimónó ye tobonkibeno binabobiotabe*

gimón=ó *ye*
spine=PL.N1 there

tob-onki-b-e-n-o

SG.LONG.O-attach.PFV-BEN.PFV-AN.PL.IO.PFV-SS.SEQ-PL.N1.SBJ

bina-b-o-bio=ta=be

AUX.HAB-DS.SIM-EXPL.SBJ-GPST=MED=DECL

‘their spines attached (to each other) and stayed like that for a long time’
[Danenok]

An example of a lexicalized pronominal direct object prefix showing up in a verbal compound is *unabu* ‘make a garden’. The first stem *-na* ‘kill’ obligatorily marks its direct object with a pronominal prefix. Note, however, that direct object marking in this compound is not productive anymore. The prefix *u-* probably marks the conventionally fixed direct object *damîb* ‘garden’, which is of N2 gender, so the expected pronominal prefix is indeed *u-*. Residual direct object marking in verbal compounds is very rare. The only other example in which it occurs is: *u-le+lo* ‘pull out taro’; a compound of *lo* ‘hit’ and the so far unidentified stem *le*.

Most verbal compounds are composed of two transitive stems. The resulting compound is also transitive; e.g. *yo+ma* ‘create’, whose component stems *yo* ‘initiate, beget’ and *ma* ‘plant’ are transitive.

A few verbal compounds are made up of two intransitive verbs. In that case the compound is intransitive; e.g. *de+te* ‘return’.

The compound *kimaa* ‘watch over (Pfv)’ is an interesting case because here a transitive verb *ki* ‘align’ and an intransitive verb *maa* ‘stand’ are compounded. In that case, the whole compound inherits the argument structure of the transitive verb; cf. (3-5):

(3-5) *eiló kimaabiebe*

ěil=o kimaa+bi-∅-e=be

pi_g=SG.F watch_over.PFV+AUX.IPFV-IPFV-3SG.M.SBJ=DECL

'He is watching over the sow'

Verbal compounds are often non-compositional or at least not fully compositional in their semantics; e.g. *habu* 'hide' consists of *ha* 'break' and *bu* 'bury' and *yoma* 'create' is made up of *yo* 'initiate, beget' and *ma* 'plant'. Also they may contain stems which are not attested outside of a particular compound; e.g. *+li* in *bali* 'bear fruit'.

Mian has a limited number of compounds which consist of an adjective and a verb or a directional and a verb (obligatory verbal classificatory prefixes are segmented off the compound stem); e.g. *dob-sbal+maa* 'strengthen him', composed of *sbǎl* 'strong' and *maa* 'stand', and *ob-tab+ba/ob-tab+bu* 'swallow it (RESIDUE class)', composed of *tab* 'down(river)' and *ba/bu* 'put into'.

3.2.3 Derived verbs

Mian has one process which productively drives verbs from nouns and adjectives with the suffix *-an*. Such denominal and deajectival verb stems can then be regularly inflected for tense and aspect and receive subject marking.

(3-6) *Pita Paka gwanánebe*

bita baka gwǎn-an-∅-e=be

PN PN spider-VBZR-PST-3SG.M.SBJ=DECL

'Peter Parker became a spider' [Observed in an oral summary of the film "Spiderman"]

(3-7) *haangánsea*

hǎang-an-s-e=a

dry-VBZR-DS.SEQ-SG.N1.SBJ=MED

'it got dry, so I...' [Rolling smokes]

It might be surmised from example (3-6) that the form of the verbalizer is *-a* followed by *-n* 'past'. Especially because the /n/ in the suffix *-an* is sometimes left out on analogy with the alternation *-n ~ -∅* 'past' in directly inflected verb forms (see 7.3.1.1.1): *gwanánebe* 'he became a spider' is also possible. Example (3-7), however, shows that the form of the verbalizer is indeed *-an* and not just *-a*: **haangásea*.

3.2.4 Function verbs

Mian has two function (or ‘light’) verbs: *ge/ga-gena* ‘do’ and *ke* ‘make’, which combine with a noun (e.g. *tekein* ‘knowledge’) or an ideophone (e.g. *fong* ‘whistle’) as a coverb to form a complex predicate. While *ge/ga-gena* ‘do’ only occurs in function verb constructions, *ke* ‘make’ can be an independent verb.

Two examples of the function verb construction follow:

(3-8) *naka* *élé* *tekein* *ke-b-i=be*
 man.M DEM.M.SG knowledge make-IPFV-1SG.SBJ=DECL
 ===know===
 ‘I know this man’

(3-9) *fong* *ge-s-e=a*
 whistle do.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘he whistled and then someone else...’ [Crows]

Complex predicates involving the function verbs *ga/ge* ‘do’ and *ke* ‘make’ will be discussed in section 7.7.

3.3 Nouns

Nouns are by far the largest word class in Mian and Tok Pisin 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 (cf. 3.3.2), dyads (cf. 3.3.3), temporal nouns (cf. 3.3.4) and verbal nouns (cf. 3.3.5).

3.3.1 Properties common to all nouns

Suprasegmentally, all nouns are lexically specified for one out of five tonal melodies whose domain is the word as a whole and 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, kin nouns, and dyads (see below).

Nouns in argument position (i.e. subject, direct or indirect object) and nouns in possessor position in the NP commonly occur with an cliticized article which indicates number, gender, and referentiality of the noun. Cliticized article and noun form one phonological word. On the article see 3.4.

Nouns are vague with respect to number. The only exceptions are a few irregular plural stems: *mén* ‘child’ vs. *memě* ‘children’ and *sak* ‘resident of’ vs. *sel* ‘residents of’.

Number distinctions (singular vs. plural) can be marked for most nouns on the article (see 3.4 below) and also show up on pronominal affixes on the verb.

Nouns are assigned to one of four genders: male (M), female (F), neuter 1 (N1), and neuter 2 (N2). However, gender is not marked overtly on the noun itself. Agreement targets for gender are the article, all pronouns, and the verbal pronominal affixes.

Case is not marked morphologically on nouns. Rather, verbal pronominal affixes indicate syntactic relations in a clause.

Mian allows noun-noun compounding (e.g. *wanam*, i.e. *wan+am* ‘bird house’) and also some marginal adjective-noun compounding (e.g. *gilam*, i.e. *gil+am* ‘house without kitchen’, lit. ‘coldhouse’). The maximum number of compounded nominal stems is three though most compounds consist of two noun stems. The first member in a compound is always a bare nominal stem which is never followed by an article.

There is one derivational process which productively derives verbs from nouns. Nouns can take the verbalizer *-an* to form a new verbal base with the meaning ‘to become N’ to which regular verbal morphology can be appended.

Most nouns do not reduplicate productively (but see dyads below). There are only some lexicalized noun reduplications, such as, *bokoubokou* ‘Stephanie’s astrapia (sc. *Astrapia stephaniae*)’, *sokousokou* ‘insect sp.’, *dingding* ‘taro rhizome’, *gwalgwal* ‘twins’, *kimkim* ‘root’, *kubkub* ‘down (of a bird)’.

Nouns function as heads of noun phrases. They can be preceded by a possessor or a prenominal (embedded) relative clause and followed by adjectival modifiers, numerals, and a locative modifiers. The rightmost position in any NP can be occupied by a pronominal element from one of the many pronoun series or an article.

Within the clause, nouns function as overt subject, direct object, and indirect object arguments. Nouns can also function as predicates in non-verbal topic-comment constructions.

3.3.2 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 demonstratives. Proper names cannot be possessed. Kin nouns do not show these restrictions.

Both proper names and kin nouns can be suffixed with *-wal*. Affixation of *-wal* to proper names forms associative plurals (cf. Moravcsik 2003) of the pattern ‘X and associates’, e.g. *Kasening-wal* ‘Kasening’s family’ (TP: ‘lain bilong Kasening’). With kin nouns, *-wal* just signals plural, e.g. *biēm-wal* ‘the mothers’. This suffix is also used with dyads but not with common nouns. Proper names, dyads, and kin nouns have in common that they tend to occur with the collective article =*o* instead of regular =*i* for animate plural.

3.3.3 Dyads

Dyadic terms (see Evans 2003a, Evans 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 terms:

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 in argument positions of a verb and they appear with an article, which is preferably the collective article =*o* ‘collective’, but =*i* ‘animate plural’ is also possible:

(3-10) *í hato unibbiobe*
 í hat=o *un-Ø-ib-bio=be*

their mother_child_dyad=COLL go.PFV-PST-2/3PL.AN.SBJ-GPST=DECL
 ‘they, mother and child, went away (Lit. ‘the mother and child of them’)

However, dyads are distinct from nouns in the following way. Nouns generally do not occur with the collective article =o, with the notable exception of kin nouns. Outside of dyads and kin nouns, collective marking is very rare, but attested in:

- (3-11) *éí Temsetén memeo ísa deletniba*
éí temsetén memeo ísa
 DEM.PL.AN PN_people children=COLL 3PL.AN=with

lol-eb-n-ib=a
 PL.AN.O-take.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘these (ones) took the Temse children too and then they..’ [Mianmin and Telefomin]

If the dyad refers to a relation between just two individuals, it can be inflected for plural with the pluralizer *-wal*, but does not have to:

- (3-12) *Danenok labwali*
lanenok dab-wal=i
 PN same_sex_sibling_dyad-PL=PL.AN
 ‘Danenok and his brother’ [Danenok]

If more siblings (*mikim*, *dab*) are involved or more children (*dum*, *hat*), the dyad must be inflected for plural with *-wal*:

- (3-13) *níb mikim-wal*
 our.INCL 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 of the dyad head. Note that the pronoun in (3-13) can only be interpreted as a possessive pronoun.

All dyadic terms except *kam* ‘married couple’ can occur with all (animate) plural possessive pronouns but here with appositive meaning, e.g. *ní* ‘our (excl)’, *níb* ‘our (incl)’, *ib* ‘your’, and *í* ‘their’ in the possessor position. The dyad *kam* can only be preceded by those of the second and third person (animate) plural, hence **níb kam* and **ní kam*. Why this is the case remains unclear.

Dyads never appear in phonologically eroded form.

Dyadic term	Meaning	Dyadic term	Meaning
<i>ní dum</i>	we (excl), father and child	<i>ní hat</i>	we (excl), mother and child
<i>níb dum</i>	we (incl), father and child	<i>níb hat</i>	we (incl), mother and child
<i>íb dum</i>	you, father and child	<i>íb hat</i>	you, mother and child
<i>í dum</i>	they, father and child	<i>í hat</i>	they, mother and child
<i>ní mekim</i>	we (excl), siblings of opposite sex	<i>ní dab</i>	we (excl), siblings of same sex
<i>níb mekim</i>	we (incl), siblings of opposite sex	<i>níb dab</i>	we (incl), siblings of same sex
<i>íb mekim</i>	you, siblings of opposite sex	<i>íb dab</i>	you, siblings of same sex
<i>í mekim</i>	they, siblings of opposite sex	<i>í dab</i>	they, siblings of same sex
<i>íb kam</i>	you, married couple		
<i>í kam</i>	they, married couple		

Table 16: Combinations of dyadic terms and pronouns

3.3.3.1 *dum* ‘father and child’ and *hat* ‘mother and child’

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

- (3-14) *íb dumo yé tliobe*
íb lum=o yé tl-∅-io=be
 your father_child_dyad=COLL there come.PFV-PST-2/3PL.AN.SBJ=DECL
 ‘you, father and child, have 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.:

- (3-15) *Beliabe dumwal*
beliab=e lum-wal
 PN=SG.M father_child_dyad-PL
 ‘Beliab and his children’ (from Smith and Weston 1974b: 56)

3.3.3.2 *mikim* ‘siblings of different 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:

- (3-16) *Danenok dabwali ngaanhabianiba*
lanenok lab-wal=i
 PN same_sex_sibling_dyad-PL=PL.AN

ngaan-ha+biaa-n-ib=a
 call.IPFV-3SG.M.IO+AUX.IPFV.SS.SEQ-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. This is information from my consultants and not attested in the spontaneous corpus.

3.3.3.3 *kam* ‘(married) couple’

The dyadic term *kam* behaves slightly differently from the others because it cannot be combined with first person pronouns: **ni(b) kam*. Use of *kam* with pronouns of the second or third person (animate) plural, or with proper names is correct; e.g. *ib kamwal* ‘you, and your partner’, *Kaseninge kamwal* ‘Kasening and his wife, *Umsino kamwal* ‘Umsin and her husband’.

The dyad *kam* ‘married couple’ is sometimes used in what appears to be an idiomatic construction:

- (3-17) *unang ásu kamwali*
unǎng asu kam-wal=i
 woman.F two married_couple_dyad-PL=PL.AN
 ‘a woman and her husband’
 *’two couples’

3.3.4 Temporal nouns

Temporal nouns are used to locate an event in time. Temporal nouns usually occur with the article =o and are of neuter 2 gender. Occasionally, the article is left out without any change in meaning.

Temporal nouns usually occur immediately after the subject, but are quite mobile within the clause (See 8.3.2).

Temporal nouns are:

- sino* ‘formerly, before’
memálo ‘today, now’
sintalo ‘yesterday’
sintalo ó sintao ‘day before yesterday’
sinanggwanó ‘in days of yore’
sinangwanánomo ‘in the far future’
kutimibo ‘in the early morning’
abuko ‘later, afterwards’
mikiktemo ‘at first’

Some expressions with clearly temporal meaning have the morphology of medial verbs with an expletive subject; e.g. *bomosota* ‘in the morning’ (3-18), *kwinota* ‘in the evening’ (3-19), *sinanoa* ‘afterwards, later’ (3-20):

- (3-18) *boma(t)-s-o=ta*
 bright-DS.SEQ-EXPL.SBJ=MED
 ‘in the morning’ (Lit. ‘it “brighted”’)
- (3-19) *kwin-Ø-o=ta*
 dark-DS.SEQ-EXPL.SBJ=MED
 ‘in the evening’ (Lit. ‘it “darked”’)
- (3-20) *sin-an-o=a*
 old-VBZR-EXPL.SBJ=MED
 ‘afterwards, later’ (Lit. ‘it (i.e. the aforementioned) becomes old’)

While *sinanoa* is still always realized as a clause of its own, i.e. with intonational breaks before and after, the other two can be clausal but can also be accommodated within a clause as a temporal adverbial.

The temporal expression *bomanomo* ‘tomorrow’, is a nominalized adverbial clause. Its exact glossing is:

- (3-21) *bomanomo*
bom-an-Vm-o=o
 light-VBLZ-IFUT-EXPL.SBJ=N2
 ‘when it gets light’

However, *bomanomo* shows more positional variability than other nominalized adverbial clauses, in that it does not have to occur clause-initially. Syntactically, *bomanomo* behaves like other temporal NPs, all of which can appear after an overt subject, e.g.:

- (3-22) *né bomanomo Boutlantema taman unaamabibe*
né bomanomo boutlantema taman unaa-amab-i=be
 I tomorrow PN valley go.PFV.FUT-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘Tomorrow I will go to the Boutlantema valley’

Hence, I will treat *bomanomo*—although technically a clause—as a lexicalized temporal with the meaning ‘tomorrow’.

3.3.5 Verbal nouns

Verbal nouns can appear in subject and direct object position, in possessor position and as the predicate of a non-verbal predication. Although they resemble nouns proper in that respect, verbal nouns are much more restricted as to which modifiers they allow. They can be ‘possessed’, as in *kéb onamin* [*kéb on-namin*; your go.PFV-PFV.VNOUN] ‘your going (away)’ but they cannot be counted, i.e. they cannot be modified by a numeral. Furthermore, verbal nouns followed by adjectival modifiers are unattested. On verbal nouns see 7.5.2.

3.4 Articles

Mian nouns are followed by a clitic article if the noun is used referentially. The article also indicates number and, in the singular, the gender of a noun. Articles are usually toneless (see below). The forms of the article are given in Table 17.

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

Table 17: The article

Consider example (3-23) where three nouns—each with an article—appear in subject, direct object and indirect object position:

- (3-23) *nakaminé imeno eilé wenhabea*
nakamǐn=e imen=o ěil=e
 man=SG.M taro=PL.N1 pig=SG.M
- wen-∅-ha-b-e=a*
 eat.IPFV-BEN.IPFV-3SG.M.IO.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘While a pig was eating taro from a man, the man...’ [Pig story]

The reason why I use the term ‘article’ and not ‘overt number/gender marker’ is due to the fact that it also indicates referentiality. The noun without the article occurs in contexts in which the noun is used non-referentially, namely:

- in the citation form, e.g. *nakamǐn* ‘man, brother’, *ěil* ‘pig’, *imen* ‘taro’
- in first elements in noun-noun compounds, e.g. *wan+am* [bird+house] ‘platform for hunting birds’
- in generic terms used to classify animals and plants, e.g. *wan tolim* [bird eagle] ‘New Guinea eagle’
- In non-verbal predications about identity, e.g. *tilobe* [*til=o=be*; dog=PRD=DECL] ‘it’s a dog’.
- under negation, e.g. *imen blim* [taro not_exist] ‘There’s no taro’, *yái-ba=be* [wound-NEG=DECL] ‘It’s not a wound’
- in comparisons, e.g. *ěil=dikin* [pig=like] ‘like a pig’.

This evidence 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. There seems to be 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. Obviously, the Mian article is on the way of becoming a purely classificatory gender marker. 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=ART exist-NEG] with the same meaning¹².

Articles can follow all nouns, i.e. common nouns, proper names, dyads, and temporal and verbal nouns (see section 3.3). Articles can also follow finite verbs in head-internal relative clauses and adverbial clauses. In head-internal relative clauses (3-24), the article indicates number and gender of the relativized item. In adverbials (3-25), the article is invariably =o. Square brackets indicate clause boundaries:

(3-24) *[noi yaleb tlei]*
[no=i ya-l(o)+eb]
 marsupial=PL.AN PL.AN.O-kill.PFV+take.PFV

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

(3-25) *[nakai utlibo] í nininó dlaniba*
[naka=i utl-∅-ib=o]
 man=PL.AN come_up.PFV-PST-2/3PL.AN.SBJ=N2

í ninñ=o lol-fa-n-ib=a
 they name=N2 PL.FEM.O-put.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘when the people grew up, they assumed names and then...’ [Dimosson]

¹² Greenberg (1978) showed 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, indicating ‘the N’, and an indefinite specific article, indicating ‘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 classificatory gender marker on the noun (Greenberg 1978: 63).

Head-internal relative clauses and adverbial clauses are discussed under embedding in chapter 11.

Articles can be distributed throughout the NP and follow the noun and any adjectival modifiers. They can also follow numerals (see 6.4 for details on modified and quantified NPs):

(3-26) *til=e milil=e súm=e*
 dog=SG.M black=SG.M big=SG.M
 ‘a/the big, black dog’

In (3-26), referentiality, number and gender are marked per article =*e* on the head noun and on each adjectival modifier. More common in natural discourse, however, is to mark number and gender only once for the whole NP, namely on the rightmost modifier; for example:

(3-27) *til milil súm=e*
 dog black big=SG.M
 ‘a/the big, black dog’

I analyze 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 derived from *aka* ‘and’) intervenes between the noun and the article in the last constituent of a sequence of coordinate NPs:

(3-28) *naka=i=a unǎng=a=i*
 man=PL.AN=and woman=and=PL.AN
 ‘(the) men and women’ [Dimosson]

Articles are segmentally identical to the 3rd person forms of the free pronouns series (see 3.7.1), from which they are presumably derived. Synchronically, however, they differ from the pronouns in their suprasegmentals. While all pronouns are lexically specified for a high tone, the articles are subject to suprasegmental phonological erosion, i.e. they are on the way to becoming completely toneless. The tonal value of the article depends on the lexical tone specification of the noun (see 2.8.8.2).

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

(3-29) (a) *naka é* (Lit. ‘man he’) > (b) *naka=é* > (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 (>80 years).

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

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

As the article is definitely 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 [nà.k^hà.é] and [nà.k^hà.è]. In the former, the article has its own high tone, in the latter it is toneless and the low tone is copied over from the noun. Hence, articles which retain their own high tone (characteristic of the second stage) and ones which are toneless (characteristic of the third stage) seem to occur in free variation.

3.5 Adjectives

Although adjectives must be considered a closed word class, it is quite substantial in number with at least 30 items, thus being the third largest class after nouns and verbs.

Adjectives denote a property or quality of an object or notion.

Suprasegmentally, adjectives—like nouns—are lexically specified for one accent and one out of four tonal melodies. The melody HL is unattested in adjectives.

Adjectives function as modifiers of nouns in noun phrases but can also be used as independent referring expressions (see below) and as the predicate in non-verbal topic-comment constructions. 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 an NP, both constituents can be followed by an article reflecting number and gender:

- (3-30) *til=e súm=e*
 dog=SG.M big=SG.M
 ‘the big dog’

Alternatively,—and this is more common in natural discourse—the article only appears after the last constituent. Semantically, (3-30) and (3-31) are equivalent:

- (3-31) *til súm=e*
 dog.M big=SG.M
 ‘the big dog’

Some adjectives, e.g. *súm* ‘big’, *ayam* ‘good’, *misiam*, ‘bad’, but not *ninik* ‘dirty’ and *teke(bmin)* ‘long’, nor any colour adjectives, can be used adverbially to modify a verb. Adjectives used adverbially are never followed by an article and occur immediately before the verb they modify:

- (3-32) *mén gwaabó súm mebobe*
mén gwăăb=o súm me-b-o=be
 child little=SG.F big cry.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘The little girl is crying fitfully’

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 topic-comment constructions 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.

The adjectives *súm*, in the sense of ‘great’ not dimensional ‘bigness’. and *afet* ‘different’ can be used in reduplicated form to emphasize plurality or variety.

Adjectives can appear in NPs without an overt nominal head. Compare (3-33) with an adjectival modifier and (3-34) with an independent adjective:

- (3-33) *tile súde atemale!*
til=e súm=e a-tem-al=e
 dog=SG.M big=SG.M 3SG.M.O-see.PFV-2SG.HORT=HORT
 ‘Look at the big dog!’

- (3-34) *súde atemale!*
súm=e a-tem-al=e
 big=SG.M 3SG.M.O-see.PFV-2SG.HORT=HORT
 ‘Look at the big (one)!’

Example (3-34) could be taken as a cue to claim that Mian lumps adjectives and nouns together in a single word class. Clearly, the word *súm* ‘big’ occurs with two different functions here, viz. as a modifier in (3-33) and as a referential expression in (3-34). However, as Croft (2000: 69) points out, claiming that languages which allow adjectives to have modifying and referential function only have a single N/A category (e.g. Quechua, but also Mian), obscures the semantic difference between two distinct uses of *súm*. In (3-33), as a modifier, *súm* denotes a property but as a referential term in (3-34) it denotes an object which possesses that property.

Rather than assuming a single word class N/A, I will analyze the NP *súm=e* in (3-34) as a headless adjective construction. We need to set up a class of adjectives distinct from nouns in Mian for two additional reasons.

First, there is a clear syntactic ordering principle between noun head and adjectival modifier within the NP. Besides the exceptions *sin* and *memâ* noted above, all adjectival modifiers must follow the noun. Thus one finds: *til=e sum=e* and *til sum=e* ‘the big dog’ but not **sum=e til=e* or **sum til=e*.

Second—and this is the decisive argument—, nouns are lexically specified for one gender. The only exceptions are nouns which commonly undergo cross-classification, i.e. pick their gender according to the sex of the referent; e.g. *abăn* ‘orphan’ and *ěil* ‘pig’ can occur with male or female agreement patterns depending on the sex of the referent. Adjectives are not specified for gender. Although adjectival modifiers do not have any inflectional markers which agree in gender with the noun, an article following the adjective always does. If a headless adjective occurs as a referential expression in an NP, as in (3-34) above, agreement patterns follow the gender of the noun normally used to refer to that particular referent.

There are no comparative degree forms for adjectives. It is, however, possible to form a superlative (or elative) with the intensifier *dot* ‘very’:

- (3-35) *élé bib óló dot tekebe*
élé bib óló lot teke=be
 this village this 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 (3-36), or, alternatively, in a two-clause structure with the verb *gai-s-e* ‘pass them’, as in (3-37):

- (3-36) *Mosbi óle sum eka Banimo óta gwaabóbe*
mosbi ó=le sum eka banimo ó-ta gwăab=o=be
 PN N2-TOP big and PN N2-EMPH small=PRD=DECL
 ‘Port Moresby is big and Vanimo is small’

- (3-37) *é né gaitnenea wekib usnebe*
é né gai-s-ne-n-e=a
 he I pass.PFV-BEN.PFV-1SG.IO.PFV-SS.SEQ-3SG.M.SBJ=MED

wekib usn-∅-e=be
 very go_up-PST-3SG.M.SG=DECL
 ‘He is taller than me’ (Lit. ‘He passes me, he went up very much’)

Mian has five basic (i.e. mono-morphemic) colour terms. Colour adjectives show exactly the same syntactic and morphological behaviour as adjectives, that is they follow the noun they modify and can take an article which agrees in number and gender with the noun:

<i>namâ</i>	‘white’
<i>milil</i>	‘black, grey’
<i>ilem</i>	‘red’
<i>mokim</i>	‘blue’
<i>ngaameín</i>	‘yellow’

Three other colour adjectives could be compounds though I have not been able to break them down any further.

<i>itanasît</i>	‘green’
<i>kosmale</i>	‘orange’
<i>timomal</i>	‘brown’

As far as the origin of colour adjectives is concerned, a few informed guesses are possible. The word for red *ilem* derives from *ilem* ‘blood’ for obvious reasons. *Kosmale* comes from *eim kósmale*, which refers to an orange pandanus fruit, and thus has a very similar etymology to English ‘orange’.

3.6 Adverbs

Adverbs are a small class with only a handful of items. Adverbs are used to modify a verb, i.e. to specify certain aspects or properties of an event. Adverbs never 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 8.3.1.

Adverbs can be distinguished from adjectives because they cannot be used as modifiers of nouns. Compare:

(3-38) *nakae hebmamsab wembebe*
naka=e hebmamsab wen-b-e=be
 man=SG.M fast eat.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘The man is eating fast’

(3-39) **naka=e hebmamsab=e*
 man=SG.M fast=SG.M
 Intended: ‘the fast man’

Adverbs can be distinguished from nouns and attributive adjectives, which can also appear before a verb, albeit not as modifiers of the verb. Unlike nouns and attributive adjectives, adverbs can never be followed by an article or function as the predicate in non-verbal predications.

It is more difficult to tell adverbs from verbs or verb stems, which often occur before other verbs, e.g. in serial verb constructions. Especially, *klã* /^{LHL}kla/ ‘very, really, properly’ seems to be closely related to the verb stem *klã* /^{LHL}kla/ ‘make, complete’. However, none of the members of the adverb class (with the possible exception of *klã* ‘very, really, properly’) can be inflected as a verb.

The class of adverbs which modify verbs consists of:

<i>élé</i>	‘here’
<i>yé</i>	‘there’
<i>hebmamsab</i>	‘fast, quickly’
<i>fiab</i>	‘slowly’
<i>fiab beteng</i>	‘carefully’
<i>wekib (ye)</i>	‘very much’
<i>klã</i>	‘very, really, properly’
<i>amĩt (ye)</i>	‘always’
<i>imin</i>	‘again’
<i>smá</i>	‘still’

<i>sin</i>	‘already’
<i>sun</i>	‘habitually’
<i>un</i>	‘temporarily’

Two adverbs can be used to modify or intensify adjectives. They are uninflected and always occur before the adjective they modify:

<i>dot</i>	‘very’
<i>klã</i>	‘very, really, properly’

3.7 Pronouns

Mian has a range of different pronoun series defined by suffixal pronominal morphology. There are one free and two bound pronoun series. Free and bound forms show very obvious formal relatedness. A free-bound distinction in the pronoun system is typical for the Mountain Ok languages (cf. Healey 1964b). 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 free series can co-occur with the clitic =*sa* ‘with’. Either of the bound series can co-occur with the topic-marking clitic =*le*. The possessive pronoun (see 3.7.3) is formally identical to the bound series but is realized as an independent, i.e. non-bound, phonological word.¹³ Pronouns can be used referentially and anaphorically. Most pronouns can be used adnominally and appear in the determiner slot of an NP (cf. Himmelmann 1997).

3.7.1 The free pronoun series

Free personal pronouns, which are used to refer to animates vary according to person (1st, 2nd, and 3rd), number (singular and plural), and in the second and third person singular, gender (male and female). In the 1st plural there is an inclusive-exclusive distinction. Table 18 shows the free personal pronouns for animates. As gender distinctions in third person pronouns which refer 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.

¹³ Healey analyses possessive pronouns as bound for Telefol (Healey 1965a: 30ff).

Person	Number	Gender	Pronoun	Gloss
1	Singular		<i>né</i>	'I'
2		Male	<i>kébó~kóbó</i>	'you (m)'
		Female	<i>ób</i>	'you (f)'
3		Male	<i>é</i>	'he'
		Female	<i>ó</i>	'she'
1 excl		Plural		<i>ní</i>
1 incl			<i>níbó</i>	'we (incl)'
2			<i>íbó</i>	'you (pl)'
3			<i>í</i>	'they'

Table 18: Free pronouns for animates

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. The description of the Mian gender system and a detailed justification for a four-gender analysis for Mian instead of a two-gender analysis can be found in section 4.6.

Table 19 gives the particulars for the third person pronouns for inanimates. The grey area indicates the absence of a number contrast in neuter 2.

Person	Number	Gender	Pronoun	Gloss
3	Singular	Neuter 1	<i>é</i>	'it'
	Plural		<i>ó</i>	'they'
		Neuter 2	<i>ó</i>	'it, they'

Table 19: Free pronouns for inanimates

Syntactically, free personal pronouns can occupy all argument positions and function as subject and direct object, as in (3-40), or subject and indirect object, as in (3-41):

(3-40) *né kóbó katemebibe*
né kóbó ka-teme-b-i=be
 I you.SG.M 2SG.O-see.IPFV-IPFV-1SG.SBJ=DECL
 'I am looking at you'

(3-41) *né kóbó daabkenamabibe*
né kóbó
 I you.SG.M

laa-b-ke+n-amab-i=be
 help-BEN.PFV-2SG.IO.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 'I will help you'

As all subjects and any indirect objects are obligatorily marked on all finite verbs, the pronouns functioning as overt subject and indirect object arguments can be dropped without causing ambiguity.

(3-42) *kóbó katemebibe*
kóbó ka-teme-b-i=be
 you.SG.M 2SG.O-see.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am looking at you’

(3-43) *daabkenamabibe*
laa-b-ke+n-amab-i=be
 help-BEN.PFV-2SG.IO.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will help you’

Direct objects are only marked on a subset of the Mian verbal lexemes. If a verb cross-references its direct object, this is either done with a pronominal prefix (5 verbs) or with a verbal classificatory prefix (approx. 50 verbs). Pronouns cross-referenced by direct-object markers are commonly dropped as well:

(3-44) *katemebibe*
ka-teme-b-i=be
 2SG.O-see.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am looking at you’

If the direct object is not marked on a verb, the pronoun which functions as direct object can only be left out if its identity is recoverable from the linguistic or extra-linguistic context.

3.7.2 The bound pronoun series

Mian has two bound pronoun series, i.e. two series of pronouns which have to be further inflected to form complex pronouns. The possessive pronoun (3.7.3) is not a bound form in Mian but its forms are identical to the bound series.

I call the first bound series the ‘simple’ and the second the ‘alone’ bound series. Note the obvious formal relations between the bound forms of the simple series and the free forms given under 3.7.1. above.

Person	Number	Gender	Pronoun	Gloss
1	Singular		<i>né-</i>	'I'
2		Male	<i>kéb-</i>	'you (m)'
		Female	<i>ób-</i>	'you (f)'
3		Male	<i>é-</i>	'he'
		Female	<i>ó-</i>	'she'
1 excl	Plural		<i>ní-</i>	'we (excl)'
1 incl			<i>níb-</i>	'we (incl)'
2			<i>íb-</i>	'you (pl)'
3			<i>í-</i>	'they'

Table 20: Simple bound pronoun series (animates)

Person	Number	Gender	Pronoun	Gloss
3	Singular	Neuter 1	<i>é-</i>	'it'
	Plural		<i>ó-</i>	'they'
			Neuter 2	<i>ó-</i>

Table 21: Simple bound pronoun series (inanimates)

The 'alone' series is used to express that something exclusively applies, refers, or belongs to the referent or antecedent of the pronoun. To have a second bound pronoun series is typical for Mountain Ok languages (cf. Healey 1964b: 66). The forms of the 'alone' bound series are given in Table 22 and Table 23.

Person	Number	Gender	Pronoun	Gloss
1	Singular		<i>néle-</i>	'I alone'
2		Male	<i>kéleb-</i>	'you (m) alone'
		Female	<i>ólob-</i>	'you (f) alone'
3		Male	<i>éle-</i>	'he alone'
		Female	<i>ólo-</i>	'she alone'
1 excl	Plural		<i>níli-</i>	'we (excl) alone'
1 incl			<i>nílib-</i>	'we (incl) alone'
2			<i>ílib-</i>	'you (pl) alone'
3			<i>íli-</i>	'they alone'

Table 22: 'Alone' bound series (animates)

Person	Number	Gender	Pronoun	Gloss
3	Singular	Neuter 1	<i>é-</i>	'it alone'
	Plural		<i>ó-</i>	'they alone'
			Neuter 2	<i>ó-</i>

Table 23: 'Alone' bound series (inanimates)

The ‘alone’ series is obviously derived from the ‘simple’ series with the help of /lV/ (where ‘V’ indicates progressive vowel harmony), which is suffixed to the (C)V-forms, e.g. *né-le* ‘I alone’, but infixes into the (C)Vb-forms; e.g. *ké-le-b* ‘you (m) alone’. Depending on one’s view of the inner structure of the bound pronouns¹⁴, one could treat -lV as a suffix throughout the ‘alone’-series and analyze the /b/ as a further suffix indicating 2nd person since it only occurs in pronominal forms which either refer to the hearer(s) or at least include them as in the 1st plural inclusive form *níb*. Thus, *nlib* ‘we alone’ could be broken down as follows:

- (3-45) *nlib-*
n-í-lV-b
 1st-PL.AN-alone-2nd
 ‘we (incl) alone’

The third possibility of dealing with the ‘alone’-series is to treat it as a separate lexicalized series of bound pronouns. This is what I will do in my analysis of Mian.

3.7.3 Possessive pronoun

Although the possessive pronoun is not a bound form in Mian, its forms are exactly those of the ‘simple’ bound series. The forms of the possessive pronoun are given in Table 24 and Table 25.

Person	Number	Gender	Pronoun	Gloss
1	Singular		<i>né</i>	‘my’
2		Male	<i>kéb</i>	‘your (m)’
		Female	<i>ób</i>	‘your (f)’
3		Male	<i>é</i>	‘his’
	Female	<i>ó</i>	‘her’	
1 excl	Plural		<i>ní</i>	‘our (excl)’
1 incl			<i>níb</i>	‘our (incl)’
2			<i>íb</i>	‘your (pl)’
3			<i>í</i>	‘their’

Table 24: Possessive pronouns (animates)

¹⁴ Morphologically, the pronouns could be broken down into single segments with transparent meaning:

- /n/ only occurs in the first person forms
- /í/ only appears in plural forms
- /é/ and /ó/ mark male and female gender, respectively (at least for animates)
- all 3rd person pronouns just consist of a single vowel carrying a high tone
- /b/ refers to the 2nd person

Person	Number	Gender	Pronoun	Gloss
3		Neuter 1	é	'its'
	Plural		ó	'their'
		Neuter 2	ó	'its, their'

Table 25: Possessive pronouns (inanimates)

Examples for the use of the possessive pronoun are:

(3-46) *né kaawáo*
né kǎawa=o
 my steel_axe=N2
 'my steel axe'

(3-47) *kéb biemó*
kéb bĭem=o
 your.SG.M mum=SG.F
 'your mum'

(3-48) *íb dāmíbo*
íb lamĭb=o
 your.PL garden=N2
 'your garden'

The forms from the 'alone'-series can also be used as possessive pronouns if one wants to emphasize exclusive possession:

(3-49) *nĭlib amo*
nĭlib am=o
 our_alone. EXCL house=N2
 'our house alone' (from Smith and Weston 1974b: 47)

3.7.4 Pronominal morphology

Mian has a range of suffixes which can attach to either of the bound pronoun root series to form an emphatic pronoun.

3.7.4.1 Emphatic pronouns

The emphatic suffix *-ta* is attached to forms of either bound pronoun series to form an emphatic pronoun. 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 26.

Person	Number	Gender	From simple series	Gloss	From 'alone' series	Gloss
1	Singular		<i>néta</i>	'I (emph)'	<i>néleta</i>	'I alone (emph)'
2		Male	<i>kébtá</i>	'you (m,emph)'	<i>kélebta</i>	'you (m) alone (emph)'
		Female	<i>óbta</i>	'you (f,emph)'	<i>ólobta</i>	'you (f) alone (emph)'
3		Male	<i>éta</i>	'he (emph)'	<i>életa</i>	'he alone (emph)'
		Female	<i>óta</i>	'she (emph)'	<i>ólota</i>	'she alone (emph)'
1 excl	Animate plural		<i>níta</i>	'we (excl,emph)'	<i>nílita</i>	'we (excl) alone (emph)'
1 incl			<i>níbtá</i>	'we (incl,emph)'	<i>nílibta</i>	'we (incl) alone (emph)'
2			<i>íbtá</i>	'you (pl,emph)'	<i>ílibta</i>	'you (pl) alone (emph)'
3			<i>íta</i>	'they (pl,emph)'	<i>ílita</i>	'they alone (emph)'

Table 26: Emphatic pronouns (animates)

The emphatic pronouns for third person inanimates follow the same pattern as the non-emphatic pronouns (cf. Table 27).

Person	Number	Gender	From simple series	Gloss	From 'alone' series	Gloss
3	Singular	Neuter 1	<i>éta</i>	'it (emph)'	<i>életa</i>	'it alone (emph)'
	Plural		<i>óta</i>	'they (emph)'	<i>ólota</i>	'they alone (emph)'
			Neuter 2	<i>óta</i>	'it (emph), they (emph)'	<i>ólota</i>

Table 27: Emphatic pronouns (inanimates)

Examples of the use of emphatic pronouns are:

- (3-50) *néta okok kebibe*
né-ta okok ke-b-i=be
 I-EMPH work do-IPFV-1SG.SBJ=DECL
 'I (as opposed to e.g. him) am working'

(3-51) *kébtabe*
kéb-ta=be
 you.SG.M-EMPH=DECL
 ‘It’s you’ (i.e. ‘it’s your turn’) [Observed in card games]

(3-52) *kélebta halebi yeboebo*
kéleb-ta haleb=i
 you_alone.SG.M-EMPH wild_boar=PL.AN

Ø-ye-b-eo=bo
 kill.IPFV-PL.AN.IO-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 an NP:

(3-53) **kébtá somobe*
kéb-tá som=o=be
 you.SG.M-EMPH banana=PRD=DECL
 Intended: ‘it’s your banana (as opposed to mine)’

Emphatic pronouns formed from the free pronoun series, such as *kóbó-ta* [you.SG.M-EMPH ‘you (emphatic)’ or *íbó-ta* [you.PL-EMPH] ‘you (pl, emphatic)’ are unacceptable in the East-Mian dialect. However, such forms are commonly used by speakers of the West-Mian dialect.

3.7.4.2 The possessive pronoun with nominal function

Pronominal roots from both bound series are suffixed with *-mi* to form the possessive pronouns with nominal function; e.g. *né-mi* ‘mine’ from the simple series and the ‘alone’-possessive noun; e.g. *kéleb-mi* ‘yours (alone)’ from the ‘alone’-series. Table 28 lists all forms.

Person	Number	Gender	From simple series	Gloss	From 'alone' series	Gloss
1	Singular		<i>némi</i>	'I (emph)'	<i>nélemi</i>	'mine alone (emph)'
2		Male	<i>kébmí</i>	'you (m,emph)'	<i>kélebmi</i>	'yours (m) alone (emph)'
		Female	<i>óbmi</i>	'you (f,emph)'	<i>ólobmi</i>	'yours (f) alone (emph)'
3		Male	<i>émi</i>	'he (emph)'	<i>élemi</i>	'his alone (emph)'
		Female	<i>ómi</i>	'she (emph)'	<i>ólomi</i>	'hers alone (emph)'
1 excl	Animate plural		<i>ními</i>	'we (excl,emph)'	<i>nílimi</i>	'ours (excl) alone (emph)'
1 incl			<i>níbmí</i>	'we (incl,emph)'	<i>nílibmi</i>	'ours (incl) alone (emph)'
2			<i>íbmi</i>	'you (pl,emph)'	<i>ílibmi</i>	'yours (pl) alone (emph)'
3			<i>ími</i>	'they (pl,emph)'	<i>ílimi</i>	'theirs alone (emph)'

Table 28: The possessive pronoun with nominal function

The possessive pronoun with nominal function can appear in non-verbal topic-comment constructions to assert ownership of the topic, as in (3-54):

- (3-54) *élé némime*
élé *némi=be*
 DEM.SG.N1 mine=DECL
 'This (one) is mine'

As in English, the possessive pronoun with nominal function cannot appear in possessor position. The acceptable alternative to ungrammatical (3-55) is (3-56):

- (3-55) **némi amobe*
némi am=be
 mine house=DECL
 Intended: 'It is my house'

- (3-56) *am óló némime*
am *óló* *némi=be*
 house.N2 this.N2 mine=DECL
 'This house is mine'

Possessive pronouns with nominal function can occur as NPs in subject position, as in (3-57), and in direct object position, as in (3-58), in a clause. As argument NPs, they

occur either with an article or with an emphatic pronoun. Other determiners found in NPs, such as demonstratives, are unattested:

- (3-57) *nílibmie súmé élé biebe*
nílibmi=e súm=e élé bi-Ø-e=be
 our_alone.EXCL=SG.N1 big=SG.N1 here stay.IPFV-IPFV-SG.N1.SBJ=DECL
 ‘Our big (one) is here’ (from Smith and Weston 1974b: 48)

- (3-58) *Sbiamuke émi óta yé sin klanea*
sbiamuk=e émi ó-ta yé sin kla-n-e=a
 PN=SG.M his N2-EMPH there already complete-SS.SEQ-3SG.M.SBJ=MED
 ‘Sbiamuk has completed his (house) already and then he...’ [Sbiamuk and Nenemei]

3.7.4.3 The negative suffix *-kób*

The negative suffix *-kób* attaches to roots of the simple bound series. It always co-occurs with the negative suffix *-ba*, which is used in negated verbal predications. Pronoun forms negated with *-kób* only occur as the predicate of non-verbal topic-comment constructions.

- (3-59) *kébkóbbabe*
kéb-kob-ba=be
 you-NEG-NEG=DECL
 ‘(it’s) not you’

- (3-60) *nékóbbabo*
né-kób-ba=bo
 I-NEG-NEG=EMPH
 ‘Not me!’ [Danenok]

A pronoun negated by *-kob* plus *-ba* and functioning as the predicate in a non-verbal predication can be preceded by an overt NP as a topic, as in (3-61):

- (3-61) *wengó ókobbabe*
wěng=o ó-kób-ba=be
 talk=N2 N2-NEG-NEG=DECL
 ‘No talk’ (Lit. ‘language, it’s not it’)

3.7.5 Free ‘Alone’-series

Roots of the ‘alone’-series can be suffixed with *-kiem* ~ *-yem* to form a free ‘alone’-pronoun; e.g. *kéleb-kiem* ‘only you (alone)’. This free ‘alone’-pronoun series is only attested in subject position:

- (3-62) *kélebkíem tleb kesoto*
kéleb-kiem t1-Ø-eb kesoto
 you_alone.SG.M-alone come.PFV-DS.SEQ-2SG.SBJ so
 ‘Only you alone came, so we...’ [Crows]

The 3rd singular forms of the free ‘alone’-series double as the numeral ‘one’ (see 6.4.3).

3.7.6 Reflexive pronouns

There are two reflexive pronoun series. One is formed by suffixing *-maye* to a root from the simple bound pronoun series, the other by suffixing *-skil* to a root from the ‘alone’-series.

Table 29 gives the forms for both reflexive series for animates. Use of a reflexive pronoun with inanimate antecedents is unattested.

Person	Number	Gender	Reflexive pronoun from simple series	Reflexive pronoun from ‘alone’-series	Gloss
1	Singular		<i>némaye</i>	<i>néleskil</i>	‘myself’
2		Male	<i>kébmaye</i>	<i>kélebskil</i>	‘yourself (m)’
		Female	<i>óbmaye</i>	<i>ólobskil</i>	‘yourself (f)’
3		Male	<i>émaye</i>	<i>éleskil</i>	‘himself’
		Female	<i>ómaye</i>	<i>óloskil</i>	‘herself’
1 excl	Animate plural		<i>nímaye</i>	<i>níliskil</i>	‘ourselves (excl)’
1 incl			<i>níbmaye</i>	<i>nílibskil</i>	‘ourselves (incl)’
2			<i>íbmaye</i>	<i>ílibskil</i>	‘yourselves’
3			<i>ímaye</i>	<i>íliskil</i>	‘themselves’

Table 29: The reflexive pronoun

Two examples are given below:

- (3-63) *é émaye gonebe*
é é-maye go-n-e=be
 he he-REFL cut_skin-PST-1SG.SBJ=DECL
 ‘He cut himself’

- (3-64) *é éleskil gonebe*
é éle-skil go-n-e=be
 he he_alone-REFL cut_skin-PST-1SG.SBJ=DECL
 ‘He cut himself (alone?)’

Although the distinct roots to which the reflexive markers *-maye* and *-skil* attach suggest a semantic difference along the lines: *némaye* ‘myself’ vs. *néleskil* ‘myself alone’, I was not able to definitely establish such a difference. One of the reasons for this is that reflexives are very rare in the spontaneous corpus and if they appear they do so with the function of an emphatic pronoun. Compare examples (3-65) and (3-66):

- (3-65) *é tlebe*
é tl-∅-e=be
 he come.PFV-PST-3SG.M.SBJ=DECL
 ‘he came’
- (3-66) *é aléló deibonea émaye tlebe*
é alél=o lei-b-o-n-e=a
 he wife=SG.F leave.PFV-BEN.PFV-3SG.F.IO-SS.SEQ-3SG.M.SBJ=MED

é-maye tl-∅-e=be
 he-REFL come.PFV-PST-3SG.M.SBJ=DECL
 ‘He left his wife and came himself’

Only the reflexive pronoun in *-maye* is attested with the function of an emphatic pronoun.

3.7.7 Demonstratives

Demonstratives only exist for the 3rd person and come in a proximal and a distal variety. The proximal series is employed when the object in question is close to the speaker; cf. *élé* ‘here’, the distal series is used when the object is remote from the speaker; cf. *yé* (also *yó*) ‘there’.

Gender	Proximal		Distal (adnominal)		Distal (pronominal)	
	Singular	Plural	Singular	Plural	Singular	Plural
Male	<i>élé</i>	<i>éli</i>	<i>obba yé</i>	<i>obba yéi</i>	n/a	n/a
Female	<i>óló</i>		<i>obba yó</i>			
Neuter 1	<i>élé</i>	<i>óló</i>	<i>obba yé</i>	<i>obba yó</i>	<i>yé</i>	<i>yó</i>
Neuter 2	<i>óló</i>		<i>obba yó</i>		<i>yó</i>	

Table 30: Demonstratives

The proximal demonstratives can be used pronominally and adnominally. In its pronominal use the demonstrative can constitute an NP of its own:

- (3-67) *élé méne dobmikinea*
élé mén=e lob-miki-n-e=a
 DEM.SG.M child=SG.M SG.MASC.O-take_into_arms.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘this (one) took the boy into his arms and then he...’ [Crows]

In its adnominal use, the demonstrative appears in the determiner slot of the NP. The noun does not have an article when the determiner slot is occupied by a demonstrative:

- (3-68) *naka élé*
naka élé
 man.M DEM.SG.M
 ‘this man’

- (3-69) *naka élí¹⁵*
naka élí
 man.M DEM.PL.AN
 ‘these men’

The distal demonstrative series distinguishes an adnominal and a pronominal series. The former always involves a so far unidentified element *obba* and the distal demonstrative *yé/yó/yéi* ‘there’. As in the proximal series, distal demonstratives always follow the noun and are marked for number and gender. The noun itself never has an article.

- (3-70) *nininóbba yó obiaaniba*
ninín=obba yó o+biaan-ib=a
 name.N2=DIST.DEM.N2 say.IPFV+AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘while they were saying that name, they...’ [Sofelok, 2]

- (3-71) *nakaminóbba yéi*
nakamín=obba yéi
 brother.M=DIST.DEM.PL.AN
 ‘those brothers over there’

On the adnominal distal series in head-internal relative clauses see 11.4.5.

In its pronominal use the forms of the distal demonstrative are restricted to inanimates.

- (3-72) *yeye yó asyangbabo*
yeye yó asyang-ba=bo

¹⁵ Although *éli* is the most frequently used form for the animate plural, *lí* is also possible.

no DIST.N2 sharp_stick-NEG=QUOT
 ‘“No, that wasn’t a stick” ’ [Pig story]

The role of demonstratives as determiners is discussed further in section 6.3.

3.7.8 The clitic =sa ‘too’

The clitic =sa ‘too’ (with =sna ~ =sak ~ =snak in free variation) can attach to roots of both bound pronoun series and to the proximal demonstrative. It is used to express that something also applies or refers to the referent of the pronoun.

(3-73) *kébsa klayam aan one!*
kéb=sa klayam aan on=e
 you=too really_good lie go.2SG.HORT=HORT
 ‘You too sleep well!’

(3-74) *Yapsi ólósa yomanebua*
yapsi óló=sa yoma-n-e-bio=a
 PN DEM.N2=too create.PFV-SS.SEQ-3SG.M.SBJ-GPST=MED
 ‘he created (children) in this (place) Yapsiei too and the he...’ [Dimosson]

3.7.9 Topic pronouns

Topic pronouns are formed by cliticizing =le to the free series or the proximal demonstrative series. Topic marked pronouns are used to introduce a new topic into the discourse, as in (3-75) to (3-77):

(3-75) *néle Dabein nétabo*
né=le labein né-ta=bo
 I=TOP PN I-EMPH=QUOT
 ‘“I am Dabein”’ (Lit. ‘As for me, I am Dabein’) [Dimosson]

(3-76) *yole élílesa besa ye biaaniba*
yole élí=le=sa besa ye
 well DEM.AN.PL=TOP=too nothing there

biaan-ib=a
 stay.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘Well, while these too (i.e. the Mianmin as opposed to the Telefomin) were living without trouble, they...’ [Mianmin and Telefomin]

Topic pronouns commonly appear if the overt direct object NP is fronted to the beginning of the clause, as in (3-77):

- (3-77) *meme íle Sobíninge deletnea*
meme í=le sobíning=e lol-eb-n-e=a
 children PL.AN=TOP PN=SG.M PL.AN.O-take.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘As for the children, Sobining took them’ [Story of Sobining]

Pronouns marked as topics on their own are conventionally interpreted as questions. See section 8.7.3 on topic-only questions:

- (3-78) *kóbóle*
kóbó=le
 you.SG.M=TOP
 ‘And you?’

I analyze =*le* as a clitic rather than an affix because it not only attaches to pronouns but can mark medial clauses in clause chains as topical as well.

3.7.10 Interrogatives

Mian has two interrogative pronouns: *fab* ‘where, what’ and *wan* ‘who’. Semantically, the two interrogative pronouns divide the world up into animates (*wan* ‘who’), on the one hand, and inanimates and adverbials (*fab* ‘where, what’), on the other. Interrogative pronouns are vague with respect to 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 *fab* and *wan* can be used pronominally and adnominally. For detail see section 8.7.2.1 on interrogative pronouns and question formation.

3.7.11 Indefinites

There is no set of indefinite pronouns. Instead Mian uses the adjective *mak* ‘other, some’ as a nominal modifier, for example:

- (3-79) *naka mak*
 man some
 ‘some man, somebody (m)’
- (3-80) *unǎng mak*
 woman some
 ‘some woman, somebody (f)’
- (3-81) *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. All directionals have spatial meaning and can denote locations or directions. The inventory consists of six items:

<i>ut-wit</i>	‘up(wards)’
<i>daak</i>	‘down(wards)’
<i>met</i>	‘upriver’
<i>tab</i>	‘downriver’
<i>wat</i>	‘across (a river)’
<i>tam</i>	‘to the side (on same level)’

Mian directionals are intimately linked to the topographical environment in which the speakers of the language live. Figure 4 illustrates the basic meanings of the directionals in relation to the topographical environment.

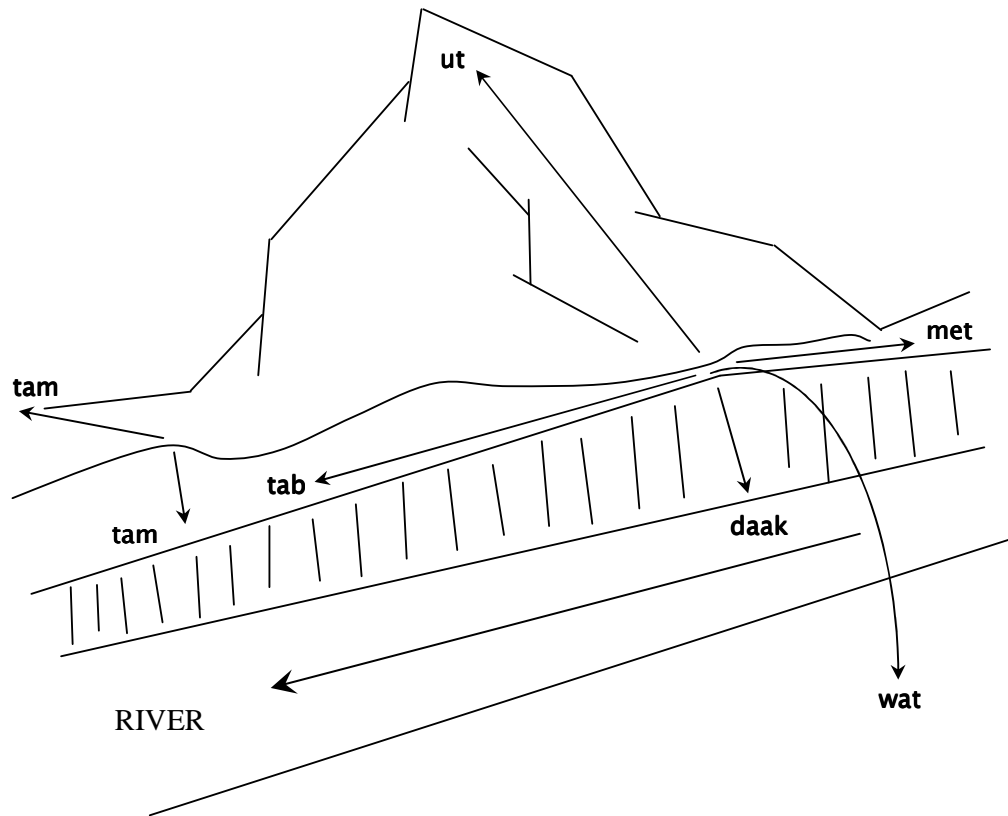


Figure 4: Mian directionals and the topographic environment

The two main axes of orientation are (a) ground elevation, that is *ut* ‘up vs. *daak* ‘down’ and (b) the rivers Hak and Sek, which run roughly parallel to each other, that is *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 the landmark ‘river’ anymore 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* ‘up at the neck’, and locations around the lower part as *tab*; e.g. *kakam tab* ‘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 can be used adnominally and adverbially. In their adnominal use, they are marked with an article which reflects number and gender of the modified noun, e.g. neuter 2 in (3-82) and singular female in (3-83):

(3-82) *Sek tebin uto*
sek tebin ut=o
 PN river_head.N2 up=N2
 ‘up to the head of the Sek river’ [The Flood]

(3-83) *kwel uto*
kwel ut=o
 neck up=SG.F
 ‘up at her neck’

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. There is no article:

(3-84) *Klefoli daak tenibta*
klefol=i laak te-n-ib=ta
 PN=PL.AN down come-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘The Telefomin people came down and then ...’ [Mianmin and Telefomin]

Directionals can be further specified with *é* ‘here’ and *í* ‘there’, which presumably are contracted forms of *éle* ‘here’ and *yé* ‘there’, respectively, to form demonstrative directionals. The demonstrative elements and the directional are fused into a lexicalized demonstrative directional. The elements *é* ‘here’ and *í* ‘there’ do not occur on their own nor do they form parts of other words besides directionals. Table 31 sets out the demonstrative directionals. Note that while the directionals *ut* and *wit* occur in free variation, in demonstrative directionals only *éwit* and *íwit* are attested.

<i>éwit</i>	‘up here’	<i>íwit</i>	‘up there’
<i>élaak</i>	‘down here’	<i>ílaak</i>	‘down there’
<i>émet</i>	‘here upriver’	<i>ímet</i>	‘there upriver’
<i>étab</i>	‘here downriver’	<i>ítab</i>	‘there downriver’
<i>éwat</i>	‘over here’	<i>íwat</i>	‘over there’
<i>étam</i>	‘in here’	<i>ítam</i>	‘in there’

Table 31: Demonstrative directionals

An example is given in (3-85):

(3-85) *éwit tele!*
éwit te-(a)l=e
 here_up come-2SG.HORT=HORT
 ‘Come up here!’ (from 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:

- (3-86) *ítam biaanea ngaambea*
ítam *biaan-e=a*
 there_sideways stay.IPFV.SS.SIM-3SG.M.SBJ=MED

ngaa-n-b-e=a
 call_out.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘While being in there he was calling out, and the others...’ [Dafinau origin]

3.9 Quantifiers

The class of quantifiers comprises all numerals, *hómôn* ‘many, much’, *alukûm* ‘all, every, each’, and *alik* ‘all, every, each (restricted to animates)’. Numerals and *hómôn* ‘many, much’ always follow the noun which is counted and all its adjectival modifiers. The quantifiers *alukûm* and *alik* can be floated, i.e. they can appear before or after the quantified NP. On quantifier floating see e.g. Akiyama (1994). On quantification in general see Bach et al. (1995).

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:

<i>élekiem</i>	‘one (M, N1)’
<i>ólokiem</i>	‘one (F, N2)’
<i>asu/asusuna</i>	‘two’
<i>asumatna</i>	‘three’

The pronouns from the free ‘alone’-series *élekiem* (also *éleyem*) ‘he/it alone’ and *ólokiem* (also *óloyem*) ‘she/it alone’ (see 3.7.5) double as the numeral ‘one’, depending on gender. The numeral obligatorily agrees in gender with the noun which is counted:

- (3-87) *naka=e élekiem*
 man=SG.M one.M
 ‘one man’ OR ‘the man alone’
- (3-88) *unăng=o ólokiem*
 woman=SG.F one.F
 ‘one woman’ OR ‘the woman alone’

The numerals *asu* ‘two’ and *asumatna* ‘three’ can occur with an article reflecting number and gender of the counted noun but are often bare. *Asu* ‘two’ has the variant *asusuna*, which looks like a partial reduplication of the simple numeral *asu*. Nonetheless, *asusuna* also means ‘two’ rather than ‘four’:

- (3-89) *unǎng=i* *asu(=ei)/asusuna(=i)*
 woman=PL.AN two
 ‘two women’

The numeral *asusuna* is (at least historically) segmentable into the (partially reduplicated) numeral *asusu* and *na*, which derives from the verb *na* ‘do’. Assuming that this scenario is correct *asusuna* ‘two’ would have been a verbal predicate meaning ‘are two’. This construction can still be found in non-verbal predications and be used productively with any adjective yielding the meaning ‘be A’:

- (3-90) *sob élé beitloknabe*
 sob *élé* *beitlok-na=be*
 soap.N1 DEM.SG.N1 soft=PRD=DECL
 ‘This soap is soft’
- (3-91) *né aleló asusunabe*
 né *alél=o* *asusu-na=be*
 my wife=SG.F two=PRD=DECL
 ‘I have two wives’ (Lit. ‘My wives are two’)

The same holds for *asumatna* ‘three’, which consists of *asu* ‘two’ and *mak* ‘other’ and again *na* (with the same etymology as suggested above). Hence, *asumatna* probably used to mean ‘be two and another’:

- (3-92) *unǎng=i* *asumatna(=i)*
 woman=PL.AN three(=PL.AN)
 ‘three women’ (Lit. ‘two women and another’)

As *na* in numerals synchronically cannot be inflected as a verb anymore, I do not see any plausible reason to analyze Mian numerals as verb phrases. Therefore, I will assume that the erstwhile verb stem *na* ‘do’ is basically a part of the lexemes *asusuna* ‘two’ and *asumatna* ‘three’.

The numerals for numbers larger than three are phrasal:

<i>asuke asuke</i>	‘four’	[two+two]
<i>asuke asuke make</i>	‘five’	[two+two+another]
<i>asuke asuke asuke</i>	‘six’	[two+two+two]

Phrasal numerals involve stringing together as many *asuke* ‘two and’ (i.e. the numeral *asu* ‘two’ plus the verb stem *ke* ‘do’ serving as a coordinator only in phrasal numerals) as needed to count to any even number and rounding this off by *make* ‘(one) other’ for odd numbers. Phrasal numerals can occur with or without *na*:

(3-93) *unǎng=i* *asu=ke* *asu=ke*
 woman=PL.AN two=and two=and
 ‘four women’ (Lit. ‘two and two women’)

(3-94) *meme* *asu=ke* *asu=ke* *make* *na=i*
 children two=and two=and other do=PL.AN
 ‘five children’ (Lit. ‘two and two children and another’)

For odd numbers the form *make* is used regardless of the gender of the counted entity. I assume that the segment /ε/ used to be an article indicating gender but which has frozen in the 3rd singular male gender. This suggests that phrasal numerals are fixed expressions.

Also note that in *asumatna* ‘three’ [*asu mak=na*] the final consonant in *mak* ‘other’ has assimilated in place of articulation to the following nasal. It seems that synchronically *asumatna* is not analyzed as *asu* ‘two’ and *mak* ‘other’ anymore. Especially younger speakers also use *asuke make* for ‘three’, thus regularizing the rules for counting to include ‘three’.

It is not difficult to see how this counting method can get quite painful very quickly for speakers, who nowadays operate with large exact numbers on a regular basis. Consequently, Tok Pisin numerals are replacing the traditional ones, roughly from six upwards.

Younger people 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 digits, e.g. *élékiem blim* ‘ten’ (1 nothing), *élékiem asuke asuke make* ‘fifteen’ (1 5), *asuke asuke blim* ‘forty’ (4 nothing).

Instead of a numeral denoting an exact figure, the quantifier slot in the NP can be filled by *hómôn* ‘many’, with which the speakers do not commit themselves to a certain number:

- (3-95) *til=i* *milil=i* *súm=i* *hómôn=i*
 dog=PL.AN black=PL.AN big=PL.AN many=PL.AN
 ‘many big black dogs’

Contrary to Healey’s (1964b) claim Mian indeed has a body-tally system based on the number 27, as it is typical for the other Mountain Ok languages. He 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 1964b: 65)

Counting in the Mian tally system starts 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 proceeded down the right side of the body (with the other hand) till the whole procedure ended with the thumb of the right hand and the number 27. Smith and Weston (1974b: 50-2) report that speakers became increasingly vague while counting down the right-hand side of the body.

The reason why the Mian system escaped Healey’s attention is probably due to the fact that body-part numerals cannot be used as numerals in NPs. This might be because the Mian body-tally system apparently was never used as a general counting device, as for example in Telefol (cf. Healey 1964b, Healey 1965a), but rather highly restricted to counting connected 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 and I have not been able to elicit forms from my informants. For completeness’s sake, I will give the forms up to 23 found in Smith and Weston (1974b: 50-2) in Table 32. As the numbers from one to six are identical to those in my own data, I will not repeat them here. All forms are given without tones.

Body counting numeral	Literal meaning	Meaning as numeral
<i>ban=dim</i> forearm=top	'on the forearm'	'seven'
<i>het dafab</i> elbow summit	'elbow'	'eight'
<i>tumin</i> shoulder joint	'shoulder joint'	'nine'
<i>kwing=dim</i> shoulder=top	'on the shoulder'	'ten'
<i>tam=dim</i> side=top	'side of face'	'eleven'
<i>klon=dim</i> ear=top	'on the ear'	'twelve'
<i>kin=dim</i> eye=on	'on the eye'	'thirteen'
<i>munung=dim</i> nose=top	'on the nose'	'fourteen'
<i>kin milim</i> eye (other)side	'eye other side'	'fifteen'
<i>klon milim</i> ear (other)side	'ear other side'	'sixteen'
<i>tam milim</i> side (other)side	'side of face other side'	'seventeen'
<i>kwing milim</i> shoulder (other)side	'shoulder other side'	'eighteen'
<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>ban milim</i> forearm (other)side	'forearm other side'	'twenty-one'
<i>gong milim</i> wrist (other)side	'wrist other side'	'twenty-two'
<i>kweil awok milim</i> hand mother (other)side	'thumb other side'	'twenty-three'

Table 32: Mian body tally counting system

3.10 Conjunctions

The inventory of conjunctions is quite small. Being a clause-chaining language with morphologically rich medial verbs, Mian mainly relies on switch-reference and temporal verb morphology in medial verbs to indicate semantic relations between clauses for which English uses conjunctions like *then*, *when*, *as*, *while*, etc.

The class of conjunctions comprises:

<i>eka~aka</i>	‘and’
<i>=a</i>	‘and’
<i>bleka</i>	‘or’
<i>otáne</i>	‘but’
<i>niminbaba</i>	‘for, because’
<i>=mole</i>	‘if’
<i>kesoa</i>	‘so, that’s why’
<i>bita</i>	‘until’

Aka~eka is strictly coordinating, that is it can only be used if two expressions, e.g. noun phrases (3-96), adjectival modifiers (3-97), or clauses (3-98) are of the same syntactic order:

- (3-96) *Memín áíé aka Daning áíé aka*
memín áí=e aka laning áí=e aka
 PN father=SG.M and PN father=SG.M and
 ‘both Memín’s father and Daning’s father’ (from Smith and Weston 1974b: 99)

- (3-97) *sobe ngaaméin eka beitlokobe*
sob=e ngáamein eká beitlok=o=be
 soap=SG.N1 yellow and soft=PRD=DECL
 ‘The soap is yellow and soft’

- (3-98) *binoa eka imin tenoa*
bi-n-o=a eka imin te-n-o=a
 stay.IPFV-SS.SEQ-3SG.SBJ=MED and again come-SS.SEQ-3SG.F.SBJ=MED
 ‘she stayed and then came back’ [Afoksitgabaam]

In (3-98), *eka* is redundant: *binoa imin tenoa* is also possible. I assume that the medial verb clitic *=a* derives from the coordinating clitic *=a* ‘and’ which in turn is a shortened form of *aka~eka* ‘and’. The coordinating clitic *=a* ‘and’ is used to coordinate NPs (see 6.8 for examples).

The conjunction *bleka* is only attested as a coordinator of NPs:

- (3-99) *kóbó eil éta bleka aning éta dowonaamabeba?*
kóbó ěil é-ta bleka aning é-ta
 you.SG.M pig.M SG.M-EMPH or fish.M SG.M-EMPH

lowonaa-mab-eb=a
 eat.PFV.FUT-FUT.NANPL.SBJ-2SG.SBJ=PQ
 ‘Do you want to eat pork or fish?’

On *bleka* as a question tag, see section 8.7.1.4.

The conjunction *otáne* ‘but’ links two independent clauses. The first clause appears without an illocutionary marker, as in (3-100):

- (3-100) *sinta imeno funamabi otáne imeno misiamanoa deibobíbe*
sinta imen=o fu+n-amab-i otáne
 yesterday taro=PL.N1 cook+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ but
- imen=o misiam-an-Ø-o=a*
 taro=PL.N1 bad-VBZR-DS.SEQ-1SG.SBJ=MED
- lei-b-o-b^H-i=be*
 leave.PFV-BEN.PFV-PL.N1.IO.PFV-1SG.SBJ- NHODPST=DECL
 ‘Yesterday, I wanted to cook taro but they were bad and I left them’ (from Smith and Weston 1974b: 131)

The conjunction *niminbaba* ‘for, because’ can only be used if the preceding clause chain is terminated with the declarative illocutionary clitic *=be*:

- (3-101) *né monio súmbabe. niminbaba né smá skol kebibe*
né moni=o súm-ba=be.
 my money=N2 big-NEG=DECL
- niminbaba né smá skol ke-b-i=be*
 for I still school do-IPFV-1SG.SBJ=DECL
 ‘I don’t have much money. For I’m still a student’

For details on the clitic conjunction *=mole* ‘if’ see section 11.3.1. The conjunctions *kesoa* ‘so, that’s why’ and *bita* ‘until’ will be described in section 8.4 on non-verb-final medial clauses.

3.11 Clitics

3.11.1 Illocutionary clitics

These mark a whole sentence for illocutionary force. The inventory comprises:

- be* ‘declarative’
- bo* ‘emphatic, quotative’
- ble* ‘exclamative’
- a* ‘polar question’

e ‘content question’
o~e ‘hortative’

All illocutionary clitics are discussed in section 10.1. The question clitics *e* and *a* receive additional treatment under question formation in section 8.7.

The illocutionary clitic *bo* ‘emphatic, quotative’ is interesting because it has three different functions in Mian. First, it is used to mark embedded quotatives (see 11.1). 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 (3-102):

(3-102) *naio fiamie fiamibabo tolie e teme bikiniba*
nai=o fiami=e fiami-ba=bo
 vagina=SG.F arrow_type=SG.N1 arrow_type-NEG=EMPH

tolie é tem=e biki-n-ib=a
 arrow_type=SG.N1 SG.N1 in=SG.N1 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]

Bo is also used in clause chains to indicate that the event described in the following clause comes as a surprise. In this function it only occurs with the intransitive verb *tem/teme* ‘have a look’, e.g.:

(3-103) *daaknoa temoabo aaie baebio kesoa*
laak-n-o=a tem-Ø-o=a=bo
 down-SS.SEQ-3SG.F.SBJ=MED look.PFV-DS.SEQ-3SG.F.SBJ=MED=SURP

aaie ba-Ø-e-bio kesoa
 water=SG.N1 dry_up-PST-SG.N1.SBJ-GPST so
 ‘she went down and had a look and—oh no!—the water had dried up, so
 she...’ [Flood]

3.11.2 Medial verb markers

The medial verb marker *a* cliticizes to medial verbs in clause chains (see 9.2). It is probably derived from the coordinating conjunction *aka~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* remains unclear and both are glossed as MED ‘medial’.

3.11.3 The negative clitic *mo* and the interrogative clitic *mó*

The negative clitic *mo* is used in prohibitives (see 7.3.4.3) and declarative clauses negated with *-ba* ‘negation’ (see 7.4). The interrogative clitic *mó* is employed in polar questions (see 8.7.1).

3.11.4 Noun clitics

Mian has a range of noun clitics which always follow the category N, i.e. the noun without any determiner. Noun clitics are:

<i>dum</i>	‘with (instrumental)’
<i>dikin</i>	‘like (in comparisons)’
<i>deib</i>	‘for (purposive; cf. <i>deib</i> ‘road’)
<i>daa</i>	‘at (locative)’
<i>ob</i>	‘many’
<i>gam</i>	‘covered with, afflicted with (of substances or diseases)’
<i>baka</i>	‘with (only inanimates)’
<i>sa</i>	‘with (possessive)’

A few examples follow:

- (3-104) *unang óló anatdum binabiobe*
unǎng óló anat=lum bina-b^H-io=be
 woman DEM.SG.F arrow.N1=with shoot.PFV-NHODPST-2/3PL.AN.SBJ=DECL
 ‘They shot this woman with an arrow’

- (3-105) *é eildíkin ngaambebe*
é ěil=likin ngaan-b-e=be
 he pig.M=like call_out.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is calling out like a pig’

- (3-106) *klógam*
kló=gam
 ringworm=covered
 ‘covered/afflicted with ringworm’

- (3-107) *imenbaka*
imen=baka
 taro=with
 ‘with taro’

The noun clitic =*sa* ‘with’ also attaches to bare nouns, e.g.:

- (3-108) *ningsâ*
nĩng=sa
 thorn.N1=with
 ‘with (a) thorn’ (about a spider)

The noun clitic =sa ‘with’ contrasts with the clitic =sa ‘too’, which either attaches to pronouns (3-109) or to full NPs (3-110):

- (3-109) *kéb=sa*
 you.M.SG=too
 ‘You (m, sg) too’

- (3-110) *ning ó=sa*
nĩng *ó=sa*
 thorn.N1 N1.PL=too
 ‘the thorns too’

The clitic =sa ‘with’ is also used in non-verbal predications to indicate possession (See predicative possession under 8.6):

- (3-111) *ó amunsabe*
ó *amun=sa=be*
 she belly=with=DECL
 ‘She is pregnant’ (Lit. ‘with belly’)

The reason why I analyze *sa* as a clitic and not a suffix is that when followed by the existential verb =sa procliticizes to the verb:

- (3-112) *né aleló saninmio*
né alě̀=ó *sa=n-Vm-i=ó*
 I wife=SG.F with stay.PFV-IFUT-1SG.SBJ=N2
 ‘If I had a wife,...’

3.12 Interjections

Interjections are uninflected words which denote 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 tone and intonation, I will not mark tone on interjections.

The inventory comprises:

<i>ae, ai</i>	‘yes’
<i>yeye</i>	‘no’
<i>ayasi</i>	‘sound of surprise/disbelief’
<i>ayo</i>	‘sorry’
<i>ba</i>	‘ehm’
<i>yole</i>	‘well’
<i>klaye</i>	‘well, now’
<i>o</i>	‘oh’
<i>yait, yaiks</i>	‘yuck’

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 perfective verb stem *baa* ‘say’. As bare verb stems are commonly used as imperatives, it is conceivable that speakers used the imperative form *baa* [^mbà^s] ‘Say (it)!’ to order themselves to continue speaking. Synchronically, however, the interjection *ba* is not pronounced with a pharyngealized /a^s/.

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:

íbo yé bliba? — ‘Are you (pl) there?’
klayam bieba? — ‘Are you well?’

Customary answer:

ae, ní yé biobobe - ‘Yes, we are there.’
ae, klayam blibe - ‘Yes, I am well.’

Departing party says:

klayam biebte! — ‘Stay well!’

Customary answer:

klayam one! — ‘Go well!’

In the morning:

(klayam) seba? — ‘Did you sleep (well)?’
(ae, klayam) sibe — ‘(Yes,) I have slept (well).’

Customary answer:

At night:

klayam aan one! — ‘(Go to) Sleep well!’

Customary answer:

kébsa klayam aan one — ‘You too (go to) sleep well!’

Both parties meet (on a path):

kóbó yé tleba? — ‘You have come to this place?’

Customary answer:

(ae,) yé tlibe ‘Yes, I have come to this place.’

4 Gender

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 certain agreement patterns associated with their gender (Corbett 1991, Aikhenvald 2000).

Although gender is a nominal category, gender distinctions surface as formal variation on agreeing categories which are different from the noun. In Mian, agreeing categories within the NP are articles and determiners. Outside the NP, pronominal affixes on the verb, i.e. subject, direct, and indirect object markers, agree in gender with any overtly realized arguments.

Mian does not mark gender overtly on the noun, i.e. there is no nominal affix indicating a noun’s gender. According to Corbett (1991: 145ff) genders are formally defined by sets of agreement markers and not by formal properties of the noun. Some formal marker has to be present on categories different from the noun, which systematically covaries with the gender of the noun (cf. 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 3.4). This is not problematic because the agreement markers on other agreement targets besides the article show the same patterns. Agreement patterns for determiners and pronominal affixes on the verb are given in Table 37 at the end of this section.

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’: 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 some nouns referring to human beings and higher animals (e.g. pigs, dogs, 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 pig to a female pig, 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. Free pronoun forms all have high tone: *é* ‘he’, *ó* ‘she’ and *í* ‘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 will assume in this grammar that articles are inherently toneless. Example (4-1) illustrates nouns in subject and direct object position. Example (4-2) 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.

(4-1) *nakae eiló kan haabiebe*
naka=e ěil=o kan haa+bi-Ø-e=be
 man=SG.M pig=SG.F follow roam.IPFV+AUX.IPFV-IPFV-he.SBJ=DECL
 ‘The man is following the sow around’

(4-2) *nakae eiló*
naka=e ěil=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>unǎng=o</i> | ‘a/the woman’ | <i>unǎng=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 defined by sets of agreement markers, four genders are set up. The sets of agreement markers defining these genders are given in brackets:

- Male (=e, =i) e.g. *naka* ‘man’
- Female (=o, =i) e.g. *unǎng* ‘woman’
- Neuter 1 (=e, =o) e.g. *imen* ‘taro’
- Neuter 2 (=o, =o) e.g. *am* ‘house’

4.2 Gender assignment

The choice of the terms MALE and FEMALE is prompted by the fact that the more traditional terms MASCULINE and FEMININE are better applied to two classes of nouns established by the system of verbal classificatory prefixes, which functions in quite a different way from the gender system under discussion here. The terms MALE and FEMALE might be unusual but are not problematic because the male and the female 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 homogenous as well and comprises count nouns with inanimate referents. For male, female and neuter 1 genders a contrast in number can be encoded. Neuter 2 is semantically more heterogenous and there is no number contrast. Gender assignment criteria are summarized in Table 33 below.

Assignment criteria			Gender
Animate	Human	Sex	Male (e.g. <i>naka</i> 'man')
	Animal (Sex readily discernible or relevant)		Female (e.g. <i>unǎng</i> 'woman')
	Animal (Sex not readily discernible or irrelevant)	Conventionalized gender	Male (e.g. <i>tolim</i> 'eagle')
			Female (e.g. <i>kobōl</i> 'cassowary')
Inanimate	Count nouns (e.g. <i>mě̃n</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')		
	Places (e.g. <i>am</i> 'house', <i>mon</i> 'old garden', <i>dafab</i> 'summit')	Neuter 2	
	Masses (e.g. <i>afobeing</i> 'goods, property', <i>moni</i> (TP) 'money')		
	Body decoration (e.g. <i>eit</i> 'decoration', <i>basi</i> 'pig's tusk')		
	Weather phenomena (e.g. <i>sōk</i> 'rain', <i>ayung</i> 'mist')		
	Illnesses (e.g. <i>kweim</i> 'fever', <i>houhou</i> 'cough')		
	Intangibles/abstracts (e.g. <i>áns</i> 'song'; <i>wasi</i> 'warfare')		
	Verbal nouns (e.g. <i>fumin</i> 'cook (IPFV VN)')		
	Some tools and weapons (e.g. <i>kaawá</i> 'steel axe'; <i>skemdáng</i> 'knife')		

Table 33: Gender assignment criteria

4.2.1 Nouns referring to animates

Nouns referring to humans are assigned to male and female genders on the basis of biological sex. The same applies to all mammals which live in close contact with humans, mainly pigs and dogs, and for some birds where plumage is indicative of sex. In all other cases (i.e. birds without 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 male or female gender. In cases in which the sex of the animal is somehow identified, for example, by finding eggs inside a fish or a snake, conventionalized gender is usually over-ridden and the noun is assigned to male or female based on sex, resulting in either male or female agreement patterns. Table 34 gives examples for some animals for which gender assignment is conventionalized. The respective taxa appear in brackets.

Animal	Male	Female
Birds (<i>wan</i>)	<i>wan taimá</i> ‘heron’ <i>wan tiam</i> ‘crow’	<i>wan gwìngwî</i> ‘emerald dove’ <i>koböł</i> ‘cassowary’
Rodents, marsupials, monotreme (<i>no</i>)	<i>no snuk</i> ‘rat’ <i>no kwiam</i> ‘tree kangaroo’	<i>no befakam</i> ‘flying philanger’ <i>no yakeil</i> ‘echidna’
Reptiles (<i>tim</i>)	<i>tim ali</i> ‘python’ <i>tim heye</i> ‘lizard sp.’	<i>tim biman</i> ‘snake sp.’ <i>maab tôm</i> ‘small tortoise sp.’
Fish (<i>aning</i>)	<i>aning moko</i> ‘fish sp.’	(no example in corpus)
Spiders	n/a	<i>gwan hódou</i> ‘spider sp.’
Insects, etc.	<i>tebël</i> ‘ant’ <i>fobia</i> ‘leech’	<i>slub</i> ‘cockroach’ <i>takumein hok</i> ‘scorpion’

Table 34: Conventionalized gender for animals

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 Mian¹⁶. 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.

¹⁶ Contrary to Alamblak, in Mian roundness or squatness is irrelevant as a gender assignment criterion for inanimate nouns.

Animate nouns are well-behaved in terms of gender assignment. They are either male or female in the singular and there is a distinct agreement form for animate plurals in =*i*, where the gender contrast is neutralized.

4.2.1.1 Nouns of male gender referring to humans

naka ‘man’, *mñn* ‘son’, *ayâal* ‘pat. grandfather’, *nokai* ‘mat. grandfather’, *maaméin* ‘mother’s younger brother’, *kiab* (TP) ‘Kiap, patrol officer’, *hek* (*súm*) ‘oldest brother’, *ning* ‘younger brother’, *molim* ‘father-in-law’, *imak* ‘husband’, *fanin* ‘ancestor’, *baliam* ‘ancestor’, *aaleb* ‘father’, *awòkîm* ‘father’s sister’s husband’, *aaling* ‘father’s younger brother’, *aab* ‘brother’, *ái* ‘dad’, *ayâab* ‘father’s older brother’, *komòk* ‘leader’, *kimàanîn* ‘boss, minder’, *tembal* ‘young man, bachelor’, *běm* ‘worm’, *bemámin* ‘caterpillar’, *hangkelebmişn* ‘(very) old man’, *nek* ‘friend’, *afñn* ‘friend, ally’, *makăa* ‘enemy’, *kingkan* ‘shaman’

4.2.1.2 Nouns of female gender referring to humans

unăng ‘woman’, *mõn* ‘daughter’, *awòk* ‘mother’, *biěm* ‘mum’, *akulăb* ‘mother’s older sister’, *en* (*súm*) ‘oldest sister’, *neng* ‘younger sister’, *ăam* ‘older sister’, *afòk* ‘grandmother, female ancestor’, *alěl* ‘wife’, *sou* ‘young, unmarried woman’, *andlok* ‘mother-in-law’, *konokmõn* ‘(very) old woman’.

4.2.2 Nouns referring to inanimates

The main difference between the two neuter genders in Mian is countability. Neuter 1 can again be subdivided into two subsets:

- 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.
- 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. Note that in English all of these are usually treated as mass nouns which can only be counted by means of a mensural classifier, e.g. *two litres of water, a jot of blood, five bundles of wood*. In Mian such nouns are formally treated as count nouns.

4.2.2.1 Nouns of neuter 1 gender

Semantically, the nouns of neuter 1 gender can be further subdivided into:

Body parts: *abĩn* ‘navel’, *anang* ‘mouth’, *bán(ón)* ‘arm’, *baan(ón)* ‘jaw’, *ón* ‘bone’, *gabaam(ón)* ‘head’, *aal* ‘skin’ [and the compound *sitaal* ‘lip’ (lit. toothskin)], *kwel* ‘neck’, *kwěil* ‘hand’, *kweilbân* ‘palm’, *skil* ‘foot’, *skilbân* ‘sole’, *dlong* ‘knee’, *daang(ón)* ‘back(bone), spine’, *debel(ón)* ‘forehead’, *ěit* ‘penis’, *fiam* ‘tail fin’, *bél* ‘wing’, *hǎang* ‘tongue’, *ikam* ‘leg’, *ĩn* ‘liver’, *klón* ‘ear’, *kin* ‘eye’, *múkũng* ‘nose’, *kwíng* ‘shoulder’, *mokök* ‘ankle’, *mutum* ‘heel’, *nǎi* ‘vagina’, *sit* ‘tooth’, *tub(ón)* ‘breast’

In natural discourse, body part terms are often reassigned to the male or female gender to match the sex of the owner, for example in (4-3) where the article following the noun *nǎi* ‘vagina’ reflects female gender, and not plurality:

(4-3) *naio fiamie fiamibabo tolie e teme bikiniba*
nai=o fiami=e fiami-ba=bo
 vagina=SG.F arrow_type=SG.N1 arrow_type-NEG=EMPH

toli=e é tem=e biki-n-ib=a
 arrow_type=SG.N1 SG.N1 in=SG.N1 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: *ǎam* ‘wild pandanus’, *amũn* ‘lake’, *as* ‘tree’, *ěim* ‘pandanus’, *ibal* ‘dust’, *imen* ‘taro’, *wǎn* ‘sweet potato’, *(a)ket* ‘flower’, *tek* ‘vine’, *deit* ‘nest’, *som* ‘banana’, *kimit* ‘cucumber’, *kimkim* ‘root’, *dingding* ‘taro rhizome’, *mifĩm* ‘sago palm’, *nĩng* ‘thorn’, *un* ‘egg’

Cultural artifacts: *fũt* ‘cigar, cigarette’, *aful* ‘ball’, *án* ‘arrow’, *ánok* ‘bow’, *atit* ‘wooden stick used for eating’, *ayal* ‘light(source)’, *baangklí* ‘stone adze’, *geim* ‘pronged

arrow', *fabĩ* 'stone adze', (*a*)*fong* 'walking stick', *mě̃n* 'stringbag', *tlũm* 'brace, bridge', *was* 'drum', *yõum* 'piece of clothing'

Liquids and substances: *aai* 'water', *ilem* 'blood', *as* 'wood', *isã* 'pus', *ifã* 'sweat', *al* 'excreta, shit', *fũt* 'tobacco', *atol* 'flame', *dě̃ib* 'moss', *dén* 'tree sap', *gãam* 'juice, grease', *imã̃n* 'urine'

The neuter 2 gender is semantically less homogenous. It contains:

- nouns denoting masses
- nouns referring to locations and landmarks
- weather phenomena
- intangibles and abstract notions (such as illnesses, forms of magic, and 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, (4-4) is ambiguous:

(4-4) *amo yé biobe*
am=o yé bi-∅-o=be
 house=N2 there stay.IPFV-IMPV-N2.SBJ=DECL
 'There is a house' OR 'There are houses' (depending on context)

Lexical numerals can be employed to count N2 nouns, as in (4-5):

(4-5) *amo asu yé biobe*
am=o asu yé bi-∅-o=be
 house=N2 two there stay-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.

4.2.2.2 Nouns of neuter 2 gender

The nouns of neuter 2 gender can be characterized as places and locations, masses, body decoration, weather phenomena, intangibles and abstract notions, such as illnesses, and some tools and weapons.

Places and landmarks (especially places with certain functions, e.g. abode of humans or animals): *am* ‘house’ [and all its compounds, such as *gilam* ‘house without kitchen’ (lit. ‘cold house’), *itam* ‘dance house’, *kwoisâm* ‘spirit house’, *katabam* ‘cave’ (lit. ‘flying-fox house’)], *basal* ‘veranda’, *betan* ‘area, place’, *bib* ‘village, place’, *dámîb* ‘garden’, *dáng* ‘garden’, *deib* ‘path’, *mon* ‘old garden’, *smé* ‘cave’, *sesă* ‘bush’

Masses: *afobeing* ‘goods’, *atum* ‘smoke’, *awitnîn* ‘star(s)’, *difib* ‘rubbish’ (e.g. torn paper, small bits of wood), *dîm* ‘flesh’, *fub* ‘rubbish bits’, *kibi* ‘face’ (consisting of eyes, nose, mouth, etc.), *kutab* ‘white ash(es)’, *unîn* ‘food’

Body decoration: *amun* ‘hole in nosetip’, *baasi* ‘pig tusk (put through the septum)’, *eit* ‘decoration’, *mitakla* ‘hole through septum’, *klon maalu* ‘pig tusk (put through the ear)’

Weather phenomena: *sők* ‘rain’, *ayung* ‘mist’, *îb* ‘cloud(s)’

Intangibles/abstract notions: *am* ‘day’, *angkusil* ‘war magic’, *áns* ‘song’, *dam* ‘dream’, *hób* ‘breath’, *wasi* ‘war(fare)’, *awă(u)* ‘fight’, *wěng* ‘talk, language, voice’ [and all its compounds, such as *glolwěng* ‘rumour’ (lit. ‘wind-talk’), *kwelwěng* ‘whisper’ (lit. throat-talk)], *tital* ‘strength, power’, *tang* ‘smell’, *fotom* ‘shame’, *kěł* ‘black magic’ (rough equivalent of TP ‘poison’), *usem* ‘sorcery’ (rough equivalent of TP ‘sanguma’), *kukub* ‘way, custom’, *ninîn* ‘name’, *okok* ‘work’, *tan* ‘sunlight’, *téing* ‘generosity’

Illnesses: *kló* ‘ringworm’, *enin* ‘pain’, *genin* ‘illness (general state of being unwell)’, *kusang* ‘sneeze’, *kweim* ‘fever’, *houhou* ‘cough’

Some tools and weapons: *kaawá* ‘steel axe’, *skemdáng* ‘knife’, *mők* ‘stone adze’

Apart from these, the neuter 2 gender includes all perfective and imperfective verbal nouns (cf. 7.5.2 on verbal nouns).

4.3 Cross-classification

Cross-classification refers to a change in gender, where the same noun can be assigned to two different categories and this formal change is accompanied by a predictable change in semantics (Corbett 1991, Evans 1997: 116-9).

A number of animate nouns allow cross-classification (also called semantic gender), i.e. they can be used with either male or female gender agreement depending on the sex of an appropriate referent in a given situation. This applies to nouns denoting sex differentials, such as *abǎn* ‘orphan’, *ala* ‘close (same-sex) friend’, *bekeb* ‘companion’, *inǎb* ‘snake’, *kulǎn* ‘game animal’, *mén* ‘child’, *taman mén* ‘illegitimate child’ (lit. fornication child), *til* ‘dog’, *ěil* ‘pig’, *wan* ‘bird, bat’.

Cross-classification for inanimates extends to body parts which can be assigned to the gender reflecting the sex of their owner (see above) and *hób* ‘breath, spirit’, *hǎam* ‘corpse’, *dam* ‘body, corpse’, and *smik* ‘image, reflection, essence, shadow’.

The noun *hób* means ‘breath’ with neuter 2 agreement but can take male and female agreement patterns to designate supernatural phenomena, *hób=e* ‘a/the ghost of a male’, *hób=o* ‘a/the ghost of a female’, and *hób=i* ‘(the) ghosts’.

The nouns *hǎam* ‘corpse’, which exclusively refers to dead humans not to animal carcasses, and *dam* ‘(living or dead) body’ always either take male or female agreement depending on the sex of the individual: *hǎam=e* ‘a/the corpse of a man’, *hǎam=o* ‘a/the corpse of a woman’, and *hǎam=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’.

Most variable is the noun *smik*. It is of high cultural salience (cf. Gardner 1987) and can occur with the agreement patterns of all four genders. With neuter 2 agreement, *smik* means ‘picture, image, copy’ and with neuter 1 agreement means ‘shadow’. Finally, it can refer to reflections of people or their spirits or souls, if it takes male or female agreement: *smik=e* ‘a/the reflection/spirit of a male’, *smik=o* ‘a/the reflection/spirit of a female’. The plural in both cases is *smik=i* ‘(the) reflections/spirits (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 sex of the referent; e.g. male: *kiab* ‘kiap, patrol officer’ and *bolis* ‘policeman’.

Inanimates are usually assigned to neuter 1 as one would expect; e.g. *senso* ‘chainsaw’ *hâs* ‘hat’, *balu* ‘plane’, *tôs* ‘torch’, *sîôt* ‘shirt’, *ben* ‘pen’, *bôks* ‘box’, and *kâb* ‘cup’.

Nouns referring to locations and institutions are neuter 2; e.g. *klabus* ‘prison’, *kot* ‘court’, *skûl* ‘school’, and *lotu* ‘church’. Mass nouns like *moni* ‘money’ are also assigned to neuter 2. An interesting case is *buk* ‘book’ which is also neuter 2, maybe because it is classified as a mass of paper pages.

4.5 Summary of agreement patterns

Table 35 summarizes agreement patterns on the article, which formally define the four genders.

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

Table 35: Agreement patterns on the article

Table 36 sets out the agreement patterns for the bound pronoun series and demonstratives. The bound pronoun series is used to form, for instance, emphatic pronouns which occupy the determiner slot in the NP when used adnominally (See 6.3 for details on determiners and their position in the NP.)

Table 37 lists the agreement patterns for pronominal affixes on the verb. One notices at a glance that the patterns are identical for all agreement targets.

Gender	Bound pronouns		Demonstrative	
	Sg	Pl	Sg	Pl
Male	é-	í-	élé	éí/íí ¹⁷
Female	ó-		óló	
Neuter 1	é-	ó-	élé	óló
Neuter 2	ó-		óló	

Table 36: Agreement patterns of demonstrative and bound pronoun series

Gender	Subject		Direct object		Indirect object (Pfv)		Indirect object (Ipfv)	
	Sg	Pl	Sg	Pl	Sg	Pl	Sg	Pl
Male	-e	-ib	a-	ya- ¹⁸	-a	-e	-ha	-ye
Female	-o		wa-		-o		-we	
Neuter 1	-e	-o	a-	wa-	-a	-o	-ha	-we
Neuter 2	-o		wa-		-o		-we	

Table 37: Agreement patterns for pronominal affixes on the verb

4.6 Alternative analysis of the gender system¹⁹

The homophony patterns of the agreement markers in Table 35 and Table 37 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 explored in this section. Eventually, this analysis will be rejected.

4.6.1 Two genders: Masculine and feminine

Gender systems are not a particularly common phenomenon in Trans-New Guinea languages and if they do occur they are usually analyzed as two-class systems with a masculine and a feminine gender (cf. Wurm 1982: 80). The closely related Ok language Telefol, for instance, is described by Healey (1965a: 31-2) as having two genders (masculine and feminine)²⁰. Having a two-gender system is typical for the Ok languages in general (Healey 1964b: 116).

¹⁷ Both forms are used. There does not seem to be a meaning difference.

¹⁸ This is the most frequent form. Direct object marking in the animate plural (i.e. plural for male and female gender) is idiosyncratic in that -na/- ‘hit, kill’ also allows *i-* and *ye-* and *tama* ‘bite’ requires *yan-* (cf. section 7.2.1.3.3).

¹⁹ This section is going to appear in Fedden (to appear-b).

²⁰ 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, *Ibid.*).

To claim that the Mian gender system has four genders is therefore somewhat 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 38 sets out the agreement patterns on the article for a two-gender analysis.

Gender	Agreement patterns		Example
	Animates		
	Singular	Plural	
Masculine	= <i>e</i>	= <i>i</i>	<i>naka</i> ‘man’
Feminine	= <i>o</i>		<i>unǎng</i> ‘woman’
	Inanimates		
Masculine	= <i>e</i>		<i>imen</i> ‘taro’
Feminine	= <i>o</i>		<i>imen</i> ‘taro’, <i>am</i> ‘house’

Table 38: Agreement patterns on article (Two-gender analysis)

The consequences of this analysis are (i) a fundamental difference between animate and inanimate nouns in terms of behaviour of gender and number and (ii) an intricate connection or association between gender and number/quantity for inanimates. Animates have a gender contrast in the singular and a plural in =*i*, whereas for some inanimates (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.

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: 41f); i.e. plural inanimates (or quantities) and nouns whose referents are considered to

be of large size also take /o/ (Smith and Weston 1974b: 42)²¹; e.g. *kaawa-o* ‘steel axe’, *imen-o* ‘large taro, quantity of taro’.

It is well-known that size can be an assignment criterion for gender (cf. Foley 1986, Aikhenvald 2000). So it could indeed be the case that *kaawá* ‘steel axe’ is assigned to the feminine gender because it is considered to refer to a large object. The noun *kaawá* would then be subject to the Mian rule that inanimates 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 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. *sum* ‘large, big’, has to be used; thus *imen=e sum=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 mensural and sortal classifiers and is also attested for classificatory verbs (cf. Aikhenvald 2000: 293, 300), it does not figure predominantly in gender systems. Yet, in Mian we have seen that for homogenous substances, like liquids, differences in the agreement pattern correlate with differences in quantity; e.g. *aaí=e* ‘some water’ vs. *aaí=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 (cf. Aikhenvald 1998). Hence, it seems plausible to assume that in Mian homogenous substances are assigned to their gender on the basis of quantity. 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 and more than one object, in other words, a contrast in number. Thus, an

²¹ Note that Smith and Weston analyze 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 analyze these formatives as clitic articles.

inanimate noun with =e can only refer to a single entity; e.g. *imen=e* ‘a/the taro’ / *‘a small amount of taro’,²².

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 *kaawá=o* ‘(the) steel axe(s)’. Parallel to Lakoff (1987), who characterized the members in the feminine class in the Australian language Dyirbal²³ as “women, fire, and dangerous things”, one could describe the Mian feminine as comprising “women, houses, and plural objects”.

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 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 (e.g. masculine or feminine) 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 markers for Somali are set out in Table 39. The definite article is used for illustration (from Saeed 1999: 112).

²² 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 *unǎng* ‘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 quite restricted to a few speakers who worked with the SIL linguists Smith and Weston and who therefore might be biased by their analysis. Furthermore, no speaker (whether co-worker of Smith and Weston or not) would ever maintain that a form such as *imen=o* ‘(the) taros’ is *unǎng*, that is feminine. Neither would they say this about a large quantity of a liquid, e.g. *aai=o* ‘much water’. In both cases they would just say *homon* ‘a lot of’. 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.

²³ Dixon (1972) uses the term class II.

	Singular	Plural
Masculine	<i>-ka</i>	<i>-ta</i>
Feminine	<i>-ta</i>	<i>-ka</i>

Table 39: Definite article in Somali

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 40 illustrates agreement patterns of the predicate agreement marker (cf. Corbett 1991: 197).

	Singular	Plural
Masculine	∅	<i>i</i>
Feminine	<i>a</i>	<i>e</i>
Neuter	<i>o</i>	<i>a</i>

Table 40: Serbo-Croat predicate agreement markers

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.

The important point here 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 analyze four genders and state that feminine and neuter 1 are in a relation of partial polarity with each other (as in Table 41; repeated from Table 35):

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

Table 41: Agreement patterns on article

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 severe 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 not only 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. It also seems to recommend itself by making explicit a plausible historical connection between the classes of singular feminine animates and inanimate plurals.

It is well-known that for some classical daughter languages of Proto Indo-European (PIE) suffixes in the feminine singular (nominative) and the neuter plural (both nominative and accusative) are identical, namely -a; e.g. Latin *femin-a* ‘woman’ (feminine singular); *don-a* ‘presents’ (neuter plural²⁴). An account for this homophony is that in early PIE and pre-IE, neither of which had a category ‘gender’²⁵, there was a

²⁴ The singular form is *don-um* ‘present’ in the nominative and the accusative.

²⁵ It is assumed for IE that gender as a system of agreement is an innovation in late PIE times (Lehmann 1974: 198).

single collective form marked with $*-h$ ²⁶ which expressed low individuation later developing into the feminine singular and the neuter plural form. The marker $*-h$ was (among others) in opposition to $*-s$, which had an individualizing force and a specific meaning (cf. Lehmann 1958: 189-90) and later became the masculine form.

Similarly, in Mian the masculine marker $=e$ is used to refer to individual, singular objects (whether animate or inanimate), whereas the feminine marker $=o$ is associated with a collective meaning.

Regardless of the common diachronic origin and the homophony patterns in nominal inflection in Latin, no one would claim that the plural neuter noun in the nominative and the accusative are assigned to the feminine gender. This is because the homophonous a -suffixes belong to different inflectional case paradigms. Thus, a neuter noun in the plural is declined *dona* (nominative) ‘presents’, *donōrum* (genitive), *donīs* (dative/ablative), *dona* (accusative), whereas feminine plurals are declined *feminae* (nom) ‘women’, *feminārum* (gen), *feminīs* (dat/abl), *feminās* (acc).

The parallelism of homophony patterns in Latin and Mian may well be accidental. We simply do not know enough about earlier stages of New Guinea languages to confidently make claims that a former collective category was the source for the marker $=o$. What the example from Indo-European shows, though, is that homophony in certain formatives can point to historical relatedness. This, however, does not necessarily mean that we should synchronically identify these formatives as exponents of the same category.

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 which 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 and a plausible historical scenario, in which $=e$ was originally used to refer to individuals and $=o$ to refer to collectives,

²⁶ In the course of the development of PIE this laryngeal was lost with compensatory lengthening of the preceding vowel (cf. Lehmann 1958: 195). Reflexes of this development can still be found in the long feminine singular and neuter plural suffixes in Latin.

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 conceived of as a feature a noun is inherently specified for (barring e.g. suppletive or irregular plural stems and pluralia tantum, such as *scissors* or *oats* in English, which are lexically plural), but rather a feature of the NP 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 completely unspecified for number. Only the addition of the determiners *=e* or *=i* clarifies whether one man or more than one is/are being referred to.

Although some languages undoubtedly show polarity effects and ‘gender polarity’ may be a convenient descriptive term for these phenomena, it is quite clear that polarity should not be understood as a grammatical principle:

Irrespective of the empirical question of whether polarity systems are found in natural language, a polarity principle should also be rejected on conceptual grounds. It is hard to see how it could meet the design conditions on human language, or plausible assumptions about learnability. As a methodological position it is simply unworkable in that it allows for the use of contrasting gender values as exponents of plurality. What we have here, [...] is a fundamental conflation of two quite different notions: gender and number. (Lecarme 2002: 113)

Thus, a two-gender analysis could 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 feminine inanimates, such as *kaawá* ‘steel axe’, do not show gender polarity and therefore would have to be specified as invariant. Consequently, even a two-gender analysis has to recognize 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, is not more parsimonious than the four-gender analysis since it also has to rely on 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 and rids us of the problem that we have to recognize polarity as a grammatical principle. 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.

5 Verbal classificatory prefixes

A sizeable subset of the Mian verbal vocabulary (approximately 50 verbs) requires a classificatory prefix whose function is (a) to encode the direct object of transitive verbs and the subject of intransitive verbs and (b) to classify it according to certain salient characteristics of its referent, viz. sex, shape, and function.

Semantically, these verbs (with a few exceptions) refer to various forms of object manipulation, movement, and handling, for example ‘put’, ‘lift’, ‘take’, ‘give’, ‘throw’, ‘fall’, and ‘bury’. As suggested by their semantics, most of these verbs are transitive and their verbal prefixes have a classificatory relation to the verb’s direct object, the only exception being *-mein* (*daak tlemin*) ‘come down falling’, an intransitive verb where the classification applies to the subject. Thus, verbal classificatory prefixes in Mian operate on an absolutive basis (cf. Keenan 1984).

Interestingly, it is verbs of handling and object manipulation which contain classificatory elements in a number of North American languages which also operate on an absolutive basis (cf. Hoijer 1945, Langdon 1970, Barron 1982). A comparison with the Mian system will be provided at the end of this chapter.

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 ‘(noun) class’ for the categories established by the system of verbal classificatory prefixes. The following table illustrates how singular-plural pairs of classificatory prefixes define a set of nominal classes. (For details on morphophonemic alternation see 2.7.2).

Classes	Verbal classificatory prefixes	
	Singular	Plural
Masculine (MASC)	<i>dob- ~ do-</i>	<i>dol- ~ dl- ~ do-</i>
Feminine (FEM)	<i>om-</i>	
Long object (LONG)	<i>tob- ~ to-</i>	<i>tebel- ~ tebe-</i>
Bundle-like object (BUNDLE)	<i>gol- ~ go-</i>	<i>gulel- ~ gule-</i>
Flat object (FLAT)	<i>gam-</i>	<i>gemel- ~ geme-</i>
Residue class (RESID)	<i>ob- ~ o-</i>	<i>ol- ~ o-</i>

Table 42: Verbal classificatory prefixes in the 3rd person

Figure 5 shows the overlap of the four genders and the six classes established by the verbal classificatory prefixes. The formal and semantic differences between these two systems of nominal classification will be discussed in 5.9 below.

Classes established by VCPs	Masculine	F	B	L	Residue	Feminine
		l	u	o		
Genders	Male	a	n	n	Female	Neuter 2
		t	d	g		
		e				
		Neuter 1				

Figure 5: Overlap between genders and classificatory prefix classes

A system of classificatory verbal prefixes was described for the Papuan language Waris by Brown (1981). Seiler (1983) argues that first elements in former verb-verb compounds were reanalyzed as classificatory prefixes. On a similar phenomenon in 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; e.g.:

Classificatory prefix		Independent verb	
<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 impossible to determine at the moment. With the exception of *gam-* ‘flat 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 clitic *gam* ‘covered with, afflicted with’:

- (5-1) *klógam*
kló=gam
 ringworm=covered
 ‘covered with ringworm’

To sum up, the reanalysis scenario developed by Seiler probably does not apply to Mian or is a much older phenomenon than in Waris or Imonda.

5.1 The Masculine class: *dob-/dol-*

This class is semantically mildly heterogenous. It contains all animate nouns of Male gender; e.g., *mĩn* ‘son’, *kimaanĩn* ‘minder, boss’, *komǒk* ‘leader’, *tablasěb* ‘European, authority figure’, *til* ‘dog’, and all body parts belonging to a male:

(5-2) *tile dofabiebe*

til=e lob-fa+bi-∅-e=be

dog=SG.M SG.MASC.O-put.PFV+AUX.IPFV-IPFV-3SG.M.SBJ=DECL

‘He is caring for the dog’

(5-3) *tili dlabiebobe*

til=i lol-fa+bi-∅-ebo=be

dog=PL.AN PL.AN.O-put.PFV+AUX.IPFV-IPFV-2SG.SBJ=DECL

‘You are caring for the dogs’

The Masculine class also contains some inanimate nouns of Neuter 1 gender, e.g. *yǒum* ‘piece of clothing’, *flêt* (TP) ‘plate’, *síôt* (TP) ‘shirt’, some species of *som* ‘banana’,²⁷ *ěim* ‘pandanus palm/fruit’, and *tá baangklí* ‘stone axe’.

This shows that the classification effected by sets of verbal 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 are Masculine; for example:

(5-4) *eimó delebtlibe*

ěim=o

lol-eb

tl-∅-i=be

pandanus_fruit=PL.N1 PL.MASC.O-take.PFV come.PFV-PST-1SG.SBJ=DECL

‘I have brought (some) pandanus fruits’

The Masculine 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 instead of *dol-* (see below on this phenomenon). It is impossible to give a hard and fast

²⁷ All species of *som* ‘banana’ are of Neuter 1 gender. Verbal classificatory prefixes, however, group them into a Masculine and a Feminine subset; e.g. some bananas appear with *dob-/dol-* and some with *om-/dol-*. *Som* is a generic term for all bananas and each species has its own name; e.g. *som mobin*, *som taal*.

rule as to from which number onward the change in prefixes (and hence in classification) occurs, but it shows that verbal classificatory prefixes are more sensitive to semantics than the genders.

5.2 The Feminine class: *om-/dol-*

The Feminine class is semantically quite heterogenous. It contains all animate nouns of Female gender; e.g. *mõn* ‘daughter’, *bïem* ‘mum’, *afõk* ‘grandmother’, etc. and all body parts belonging to a female:

(5-5) *unangó omebe*
unãng=o om-Ø-Ø-e=be
 woman=SG.F SG.FEM.O-take.PFV-PST-3SG.M.SBJ=DECL
 ‘He has taken a wife’

(5-6) *unangí dlibe*
unãng=i lol-Ø-Ø-i=be
 woman=PL.AN PL.AN.O-take.PFV-PST-1SG.SBJ=DECL
 ‘I have taken wives’

The Feminine class also contains some species of *som* ‘banana’ which are of Neuter 1 gender, and all inanimate nouns of the Neuter 2 gender, such as *kaawá* ‘steel axe’, *am* ‘house’, *unĩn* ‘food’, *áns* ‘song’, *damĩb* ‘garden (place)’, *eit* ‘decoration’, *sõk* ‘rain’, *fotom* ‘shame’, and many more (for a comprehensive list of Neuter 2 nouns see the section on gender).

Recall that the Neuter 2 gender was set up mainly on formal grounds in order to distinguish inanimate nouns on the basis of countability. 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:

(5-7) *amo yé biobe*
am=o yé 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 direct object of a verb with obligatory classificatory prefixes, Feminine prefixes are used. Consequently, a number contrast can be expressed within the system of verbal classificatory prefixes.

(5-8) *amo omhalimbibe*

am=o om-halin-b-i=be

house=N2 SG.FEM.O-be_concerned.IPFV-IPFV-1SG.SBJ=DECL

‘I am concerned about the house (e.g. because it is dilapidated)’

(5-9) *amo dohalimbibe*

am=o lol-halin-b-i=be

house=N2 PL.FEM.O-be_concerned.IPFV-IPFV-1SG.SBJ=DECL

‘I am concerned about the houses’

The fact that all Neuter 2 nouns belong to the Feminine class which also contains all nouns of Female gender points to the historical relatedness of Female 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 analyzed as belonging to distinct genders synchronically.

The feminine verbal 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 5.10 on reclassification below).

5.3 Verbal prefixes referring to animates

I mentioned above that the classificatory function of the verbal prefixes is restricted to third person. Among the verbs which obligatorily take verbal classificatory prefixes are several in which the prefix can refer to animates (e.g. *-Ø/-* ‘take’, *-halila/-halin* ‘be concerned’, *-suana/-suan* ‘hate’, or *-/-haa* ‘chase’). These verbs use a full prefix paradigm with distinct forms for all persons in the singular (cf. Table 43).

Person	Class	Verbal prefixes	
		Singular	Animate plural
1		<i>nem-</i>	<i>dol- ~ dl- ~ do-</i>
2		<i>kem-</i>	
3	Masculine (MASC)	<i>dob- ~ do-</i>	
	Feminine (FEM)	<i>om-</i>	

Table 43: Verbal prefixes referring to animates

Examples for the use of non-3rd person prefixes are:

- (5-10) *néta kemamabibo ge baabosea*
né=ta kem-∅-amab-i=bo
 I-EMPH 2SG.O-take.PFV-FUT.NANPL.SBJ-1SG.SBJ=QUOT

ge baa-b-o-s-e=a
 do.PFV say.PFV-BEN.PFV-3SG.F.IO.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘‘I will marry you’’ he said to her and then she...’ [Afueiwok]

- (5-11) *níle nakai asusunai deletniba*
ní=le naka=i asusuna=i
 1PL.EXCL=TOP man=PL.AN two=PL.AN

lol-eb-n-ib=a
 PL.AN.O-take.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘Us the two men took and then they...’ [Ala ritual]

5.4 The Long class: *tob-/tebel-*

This class is semantically homogenous. 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: *án* ‘arrow’, *ánat* ‘arrow type’, *atit* ‘bamboo tool for eating’, *ninggêim* ‘barbed arrow’, *fút* ‘tobacco’, *geim* ‘pronged arrow’, *gǐng* ‘midrib of leaf’, *ón* ‘bone’, *ben* (TP) ‘pen’, *bensol* (TP) ‘pencil’, *itǒ* ‘wooden tongs’, *sékú* ‘bush knife’, *dekǐng* ‘vine, belt’, *nil* (TP) ‘nail, spike’:

- (5-12) *geime tobmein daaktlebe*
geim=e tob-mein laak tl-∅-e=be
 pronged_arrow=SG.N1 SG.LONG.SBJ-fall down come.PFV-PST-SG.N1.SBJ=DECL
 ‘The pronged arrow has fallen down’

- (5-13) *geimo tebemein daaktlobe*
geim=o tebe-mein laak tl-∅-o=be
 arrow=PL.N1 PL.LONG.SBJ-fall down come.PFV-PST-PL.N1.SBJ=DECL
 ‘The 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), *ěit* ‘penis’ (Residue), *ěim* ‘pandanus fruit’ (Masculine).

5.5 The Bundle class: *gol-/gulel-*

The noun *měň* ‘string bag’ and all types of string bags; e.g. *men síl* ‘string bag type’ 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 on reclassification below).

(5-14) *mené golibe*
měň=e *gol-∅-∅-i=be*
 string_bag=SG.N1 SG.BUNDLE.O-take.PFV-PST-1SG.SBJ=DECL
 ‘I have taken the string bag’

(5-15) *menó gulelibe*
měň=o *gulel-∅-∅-i=be*
 string_bag=PL.N1 PL.BUNDLE.O-take.PFV-PST-1SG.SBJ=DECL
 ‘I have taken the string bags’

5.6 The Flat class: *gam-/gemel-*

The Flat class only contains a few items which are extended in two dimensions in a salient way: *aal* ‘skin’, *blaster* (TP) ‘band aid’, *blanket* (TP) ‘blanket’, *flim* ‘palm bark (for house floors)’.

(5-16) *blankete gamtlaanamabibe*
blanket=e
 blanket=SG.N1

gam-tlaa+n-amab-i=be
 SG.FLAT.O-remove.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will remove the blanket’

(5-17) *blanketo gemetlaanamabibe*
blanket=o
 blanket=PL.N1

gemel-tlaa+n-amab-i=be
 PL.FLAT.O-remove.PFV+AUX.PFV-FUT.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’, *sosben* (TP) ‘pot’, *ánok* ‘bow’, *kět* ‘container’ and interestingly two animates which are of conventional Female gender and thus would be expected to take the Feminine prefixes *om-/dol-*, namely *maab séi* ‘tortoise species’ and *maab tóm* ‘tortoise species’,²⁸.

(5-18) *keté obbianebe*
kět=e ob-bia-n-e=be
 container=SG.N1 SG.RESID.O-throw.PFV-PST-3SG.M.SBJ=DECL
 ‘He has thrown the container’

(5-19) *ketó obbianebe*
kět=o ol-bia-n-e=be
 container=PL.N1 PL.RESID.O-throw.PFV-PST-3SG.M.SBJ=DECL
 ‘He has thrown the containers’

The verbal 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 verbal classificatory prefix

Table 44 lists the most frequent verbs which require affixation of a verbal classificatory prefix.

²⁸ My informant said that both animals are considered to be “heavy” and therefore occur only with *ob-/ol-* of the Residue class whereas all other animate Female nouns are in the Feminine 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.

Verb stems	Meaning	Comment
-a/—	‘leave, let’	
-ba/-bu	‘put into a bag; cover’	
-bia/-	‘push, throw’	
-eb/—	‘take, carry’ (directly inflected only as medial verb)	
-fá/—	‘lift’	
-fa/-Ø-ka	‘put’	
-halila/-halin	‘feel sorry for, be concerned about’	
-kima/-kimsan	‘put in the fire’	
-klafa/—	‘put on back (piggy-back style)’	only animate object
-ma/-san	‘plant’	
-mein daak te/tle	‘fall down’	
-meki/—	‘hang up (like bag)’	
-mou/—	‘put on shoulder’ (pig or child)	only animate object
-Ø/—	‘take’	
-Ø/-Ø-ka-	‘give’	
-o(n)/—	‘take’	
-sileb(a)/—	‘follow directly’	only animate object
-ski	‘turn’	
-suana/-suan	‘hate’	
-tabba/-tabbu	‘put on’	
-tamaa/—	‘step on’	
-tana/-tunu	‘light with fire’	always <i>ob-/ol-</i> for the RESIDUE class
-tlaa/—	‘remove’	
-touleb(a)/—	‘take into arms’	

Table 44: Verbs with obligatory classificatory prefix

5.9 Gender system vs. Classification by verbal prefix

Nominal categorization in Mian is complicated by 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 Male, Female, Neuter 1 and 2 subcategories. All pronominal affixes on the verb agree in person, number and gender with the overt nouns they cross-reference. If the verb occurs without overt NP arguments, pronominal affixes either agree anaphorically with an aforementioned overt NP or encode the person, number and gender value of their referent.

These instances of agreement are predictable from the person, number and gender of the nominal argument. In other words, argument 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.

On top of that, there are the categories established by sets of classificatory prefixes. There are four reasons why I consider this system of classificatory verbal prefixes to be different from the system of gender agreement:

- Only some verbs, with similar semantics of object manipulation or handling, participate in the system of classificatory prefixes, whereas argument affixes on all finite verbs mechanically agree with their arguments.
- Nominal classification by classificatory prefixes operates on an absolutive basis, whereas the gender system does not.
- Formal means and semantic categorizations used by the two classificatory systems are quite different (see below).
- The system of verbal 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 for 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, verbal classificatory prefixes are more complex than the pronominal affixes which define the genders. First, almost all prefixes have morphophonemic prefix variants conditioned by quite diverse phonological environments (see 2.7.2). Second, a few classificatory prefixes show vowel harmony with a following vowel (see 2.7.8).

Note also the differences in semantic split-up: In the gender system, the main semantic distinctions are animacy and sex, establishing a male, a female, 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 verbal prefix classification system, animacy/sex is also an important categorization criterion but the classes Masculine and Feminine contain many items from the inanimate world. Moreover, shape (long or flat object) and function (bundle-like object) are criteria for classification. The residue class mainly contains inanimate nouns which are also of N1 gender, but not exclusively so (for example a few animates such as *maab tòm* ‘tortoise species’) and the residue class is not co-extensive with this gender since many N1 nouns are classified as Masculine, Feminine, Long, Bundle, or Flat 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 to categorize nouns.

5.10 Reclassification

Reclassification refers to a different categorization of a noun due to the choice of a different verbal classificatory prefix in order, for example, to highlight a certain feature of the referent. Reclassification of nouns is a marginal phenomenon in Mian, but it exists nevertheless. It mainly applies to nouns whose referents are or can be somehow 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 never expressed in the noun, but in the classificatory prefix. An example of reclassification by using a different verbal classificatory prefix is given in (5-20) and (5-21):

(5-20) *eiló omfanebe*
 ěil=o om-fa-n-e=be
 pork=N2 SG.FEM.O-put.PFV-PST-3SG.M.SBJ=DECL
 ‘He has put down the (piece of) pork’

(5-21) *eiló golmekinebe*
 ěil=o gol-meki-n-e=be
 pork=N2 SG.BUNDLE.O-hang_up.PFV-PST-3SG.M.SBJ=DECL
 ‘He has hung up the (piece of) pork (on a string)’

In this case, the semantic impact of the verbal classificatory prefixes of the Bundle class is hard to miss. The information that the referent of the direct object, namely the meat,

comes with a string or rope attached so that it can be carried around or hung up as 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’ 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, *sosben*, a TP loan which refers to metal pots of various sizes with handles, can never occur with the Bundle class prefixes, even though the action of hanging them up can be referred to by *-meki*.

- (5-22) *sosbene obmekinebe/*golmekinebe*
sosben=e ob-meki-n-e=be
 pot=SG.N1 SG.RESID.O-hang_up.PFV-PST-3SG.M.SBJ=DECL
 ‘He has hung up the pot’

Thus, the “hang-upability” of referents of objects of the verb *-meki* is more a selectional restriction of this verb rather than having anything to do with the presence of the Bundle class prefixes.

Often two different sets of classificatory prefixes are possible but the choice subtly changes the semantics of an utterance. Compare:

- (5-23) *some dobmekinebe*
som=e lob-meki-n-e=be
 banana_bunch=SG.N1 SG.MASC.O-hang_up.PFV-PST-3SG.M.SBJ=DECL
 ‘I have hung up the banana bunch (e.g. the whole bunch on a nail)’

- (5-24) *some golmekinebe*
som=e gol-meki-n-e=be
 banana_bunch=SG.N1 SG.BUNDLE.O-hang.up.PFV-PST-3SG.M.SBJ=DECL
 ‘I have hung up the banana bunch (to which a string or rope is attached)’

In (5-23), *some* ‘a/the banana bunch’ is reclassified as a bundle-like object. Although the direct object is the same in (5-23) and (5-24), 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 (5-24) can also have a different meaning, namely that the referent of the direct object is a bag full of bananas. Bundle class prefixes can indicate that the referent of the direct object is contained in a bag:

- (5-25) *tomé golmekinebe*
tõm=e gol-meki-n-e=be
 stone=SG.N1 SG.BUNDLE.O-hang_up.PFV-PST-3SG.M.SBJ=DECL
 ‘He has hung up a bag full of stones’

If several bags are involved, the difference in number is expressed on the article which agrees with the noun in number and on the verbal prefix, but the fact that the objects are in a bag is solely conveyed by the Bundle class prefix:

- (5-26) *tomó golmekinebe*
tõm=o gol-meki-n-e=be
 stone=PL.N1 PL.BUNDLE.O-hang_up.PFV-PST-3SG.M.SBJ=DECL
 ‘I have hung up bags full of stones’

That reclassification of a noun as bag-like is not restricted to the verb *-meki* ‘hang up’ can be seen from the following example:

- (5-27) *méné yé golonea*
mén=e yé gol-on-n-e=a
 child=SG.M there SG.BUNLDE.O-take.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘It (the wild boar) takes the child (with the umbilical cord), and then...’
 [Afoksitgabaam]

This sentence is from a story in which a pregnant woman is savaged by a wild boar who tears her open, takes her child, still attached to the umbilical cord (the handle, so to say), and throws it on the ground.

Reclassification of *yõum* ‘piece of clothing’, which is Masculine by default (5-28), to the Flat class is exemplified in (5-29):

- (5-28) *youmé tek dime dofaneboe*
yõum=e tek dim=e
 piece_of_clothing=SG.N1 rope on=SG.N1

lob-fa-n-ebo=be
 SG.MASC.O-put.PFV-PST-2SG.SBJ=DECL
 ‘You have put the piece of clothing on the line’

- (5-29) *youmó gemetlaanebobe*
yõum=o geme-tlaa-n-ebo=be
 piece_of_clothing=SG.N1 PL.FLAT.O-remove.PFV-PST-2SG.SBJ=DECL
 ‘You have undressed (lit. ‘removed your clothes’)’

What the reclassification of ‘clothes’ as flat effects in this case is the highlighting of the fact that they covered a person’s body before they had been removed, as stated in the utterance in (5-29).

These examples illustrate that reclassification can be used quite creatively in Mian.

5.10.1 Plurals of inanimate nouns of Neuter 1 gender

It has been observed above that *ěim* ‘pandanus fruit’ is classified as Masculine by 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 by *tob-/tebel-*, but if their numbers exceed a handful, the plural prefix *ol-* is employed:

- (5-30) *kóbó geimo tebelubma tebelabma biebobē*
kóbo geim=o tebel-ubma tebel-abma
 you.SG.M pronged_arrow=PL.N1 PL.LONG.O-turn_around REDUP

bi-∅-ebo=be

exist-IPFV-2SG.SBJ=DECL

‘You are turning around (a few) pronged arrows in your hands’

- (5-31) *kóbó geimo olubma olabma biebobē*
kóbo geim=o ol-ubma ol-abma
 you.SG.M arrow=PL.N1 PL.RESID.O-turn_around REDUP

bi-∅-ebo=be

exist-IPFV-2SG.SBJ=DECL

‘You are turning around (quite a few) pronged arrows in your hands’

5.10.2 Use of Feminine 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, Flat, Long, and Residue class prefixes. Compare:

- (5-32) *menó gulelhalimbibe*
měň=o gulel-halin-b-i=be
 string_bag=PL.N1 PL.BUNDLE.O-be_concerned.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am concerned about the string bags’

- (5-33) *menó omhalimbibe*
měn-o om-halin-b-i=be
 string_bag=PL.N1 SG.FEM.O-be_concerned.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am concerned about the (heap of torn) string bags’

In this case, use of the Feminine 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:

- (5-34) *imene obnene!*
imen=e ob-∅-ne-n=e
 taro=SG.N1 SG.RESID.O-give.PFV-1SG.IO-2.SG.HORT=HORT
 ‘Give me the taro!’

- (5-35) *imene omnene!*
imen=e om-∅-ne-n=e
 taro=SG.N1 SG.FEM.O-give.PFV-1SG.IO-2.SG.HORT=HORT
 ‘Give me the half taro!’

Again, examples (5-34) and (5-35) are instances of reclassification. The semantic features ‘broken mass’ or ‘half’ are not expressed in the noun but lie exclusively in the classificatory prefix.

5.11 Excursus: Agreement or classification by verb?²⁹

In this section, I will discuss whether the function of the verbal classificatory prefixes in Mian can rightfully be termed ‘classification by verb’ or whether it would be more reasonable to treat them a second agreement system which operates independently of the gender agreement system.

This is a tough question because in looking for an answer one not only has to find sound criteria in relation to which the two Mian classification systems can be evaluated but one must also confront another even tougher and much more basic question, namely: What is agreement?

²⁹ For a detailed discussion of the formal and semantic properties of gender systems and systems which use classification by verb see Fedden (2002b).

The Mian argument affixes on the verb are not pure agreement markers but more pronominal in nature (cf. 7.2.1.3.1 on pronominal affixes). However, this does not mean that they fall outside of agreement. Rather, I will assume that argument affixes show agreement in the service of construal with their overt argument NPs (cf. Baker 2002). Whether one wants to call this type of agreement anaphoric or pronominal, as opposed to grammatical agreement where certain features of a noun are simply copied onto the verb, is not relevant for the following discussion.

In the literature on gender systems and agreement several properties of such nominal classification systems are identified (cf. Dixon 1982: 213-8, Dixon 1986: 106-7, Corbett 1991, Aikhenvald 2000: 20-1, Corbett 2006).

First, gender systems constitute a closed, grammatical system. All nouns are obligatorily assigned to exactly one gender, which is the one for which the noun is lexically specified. Cross-classification is limited and usually semantically transparent. Second, the number of genders is quite small and can be exactly specified. Third, the genders are defined by subsets of agreement affixes which may mark the category of gender on the noun itself (overt gender) and have to mark gender on one constituent which is different from the noun, e.g. verb and determiner.

Applying these three criteria to the two different classification systems in Mian, both of them immediately appear to conform to them. In both cases, classification is a morphological phenomenon. It is achieved by a closed system of affixes. In both systems, all nouns are generally assigned to one gender/class; there are no nouns which do not take part in either or both of the systems. Furthermore, the number of classes is small (four and six, respectively) and they are marked on at least one category outside the noun which is classified. Gender is marked on articles, determiners, and verbs. Within the system established by verbal classificatory prefixes, class is marked exclusively on the verb.

However, in other respects the two classification systems are quite different. While gender marking is pervasive and shows up on a range of categories other than the noun, classificatory prefixes are restricted to verbs, and only on a subset of them to boot. Gender agreement is obligatory with subject and indirect object markers independent of the semantics of the verb. Verbal classificatory prefixes, however, only occur on a subset of verbs almost all of which make semantically similar predications of object

movement, manipulation or handling. Furthermore, nominal classification by verbal classificatory prefixes operates on an absolutive basis, that is classification extends to S/O-arguments of the verb. Gender agreement, on the other hand, operates independent of verb transitivity. Semantically, the gender system is characterized by distinctions along the lines of animacy and sex and count vs. mass nouns. Although the class system also relies on distinctions of sex, the parameters of shape and function (long, flat object, bundle) come in, which are completely irrelevant for classification within the Mian gender system. Furthermore, shape and function are not typical semantic classification criteria in gender systems of the world's languages (cf. Aikhenvald 2000: ch. 11).

All these features of the Mian classificatory prefix system are indeed more reminiscent of several North American languages which employ classification by verb, like Navaho, Cherokee, and Diegueño (cf. Hoijer 1945, Davidson et al. 1963, Langdon 1970, Barron 1982) than of gender systems (including Mian's own gender system). In these North American languages, nouns referring to concrete objects are classified by classificatory elements in the verb complex. Such classificatory elements occur in verbs which make predications of position, and object movement or handling about their subject if they are intransitive and about their direct object if they are transitive. As far as semantic categorization parameters are concerned, shape is very prominent in languages with classificatory verbal elements.

A glance at these properties makes it obvious that classification by verb as found in North American languages shares features with the Mian system. Both even show the same absolutive operational basis.

To sum up, if one applies the criteria from the literature for both gender and classification by verb, the Mian gender system can be straightforwardly located whereas the Mian class system defies easy assignment to one of these techniques of nominal classification since it obviously combines features of both techniques.

Dixon (1982: 224) points out that classification by verb in general displays one major defining feature of gender systems, namely the marking of the category gender/class on a constituent other than the noun which is being classified. The verbal morphology of languages which make use of the technique classification by verb shows different degrees of fusion between the classificatory and the predicating element inside the verb complex (cf. Barron 1982, Fedden 2002a, Fedden 2002b). In Navaho, both elements are

completely fused giving rise to a full system of suppletive classificatory verb stems, whereas in Diegueño the classificatory element is realized as a segmentable verbal prefix. Those two languages form the poles on the fusion-agglutination scale for languages with classificatory elements inside the verb complex.

In the literature on classification by verb, agreement and classification by verb are strictly separated. Barron (1982: 134) argues that classification must be effected by the verb itself or a morpheme which attaches to it, in order to rightfully speak about classification by verb. Agreement, on the other hand, is seen as a purely grammatical relation in which certain features of a noun are simply copied onto the verb. Seiler (1986: 80) characterizes the relation between a classificatory verb and its nominal argument as “solidarity” and not as agreement or selectional restriction. Like Barron, Seiler interprets agreement as a grammatical phenomenon in which the verb conforms to the noun by encoding the category to which the noun belongs. Selectional restrictions, on the other hand, make a nominal argument conform to semantic requirements of the verb, for example, ‘drink’ requires its direct object to have a feature LIQUID. Therefore, the more the relation between a verb and its nominal argument is characterized by mutual independence, the more appropriately one could actually speak of classification by verb.

If agreement is defined as systematic covariance between a semantic or formal feature of one element, in this case the noun, and a formal feature of another element, in this case the verb (cf. Steele 1978: 610, see also Corbett 2006), it becomes doubtful whether agreement can always be neatly separated from classification by verb. Diegueño, for instance, whose affixal, segmentable classificatory elements closely resemble agreement markers, has one verb form per predication, for example *-mar* ‘cover’, which does not change—apart from the classificatory prefix—if the same predication is made about a different object. Thus, the verbs *a-mar* and *tu-mar* differentiate between the covering of a long and a round object, respectively (Langdon 1970: 80, 87). It could be argued that in Diegueño noun class shows up on the verb as a simple class agreement prefix. However, agreement marking belongs to inflectional and not to derivational morphology. Langdon (1970: 78, 80) analyzes the classificatory elements of Diegueño as stem-forming morphemes, which means their affixation would count as a derivational process.

However, in Diegueño the verbal prefixes indicate a grammatical relationship between two words, namely the verb and one of its nominal arguments, which is normally not regarded to be a feature of derivational affixes (cf. Anderson 1992: 77ff). Because they encode such a grammatical relationship, verbal prefixes in Diegueño obviously show a decisive characteristic of agreement markers.

At this point in the discussion it has become obvious that agreement and classification by verb cannot be separated from each other in a straightforward way and that it is even more difficult to make explicit what the exact difference between these two techniques of nominal classification actually is. To achieve this, our understanding of agreement must become more fine-grained.

Lehmann (1982: 206) defines (standard) agreement as a unidirectional, asymmetric grammatical relation in which one category, for which an element is specified, is expressed on another element. The verbal markers in Mian and Diegueño can only be treated as agreeing if class is marked on the verb but not if choice of a different affix results in a change in classification. This condition is contained in Lehmann's definition of agreement (namely condition 3).

Constituent B agrees with constituent A (in category C), if and only if the following hold true:

1. There is a grammatical or semantic syntagmatic relation between A and B.
2. A grammatical category C with a form paradigm of subcategories exists.
3. A belongs to subcategory *c* of C, and *A's belonging to c is independent of the presence and nature of B.*
4. *c* is expressed on B and forms a constituent with it.

(Lehmann 1982: 203, italics mine)

Lehmann's definition was written with grammatical agreement in mind but I see no reason why it would not work for agreement in the service of construal. In the following, I will use one Mian example to explain Lehmann's conditions on agreement:

(5-36) *nakae atemibe*
naka=e a-tem-Ø-i=be
 man=SG.M 3SG.M.O-see.PFV-PST-1SG.SBJ=DECL
 'I have seen the man'

In this case, *nakae* is constituent A and *a-temibe* is constituent B. The grammatical category C is 'gender'. Even though the marker on the verb fuses information on person, number and gender in the prefix *a-*, the focus here will be only on 'gender'.

Condition 1 excludes accidental identity regarding a certain category as a form of agreement. There must be a grammatical or semantic relationship between A and B. This holds true for the relation between verb and its argument. Condition 2 says that Mian must have a grammatical category gender which is subdivided into well-defined subcategories (c) by subsets of affixes ($C \in g$). Condition 3 says that constituent A *nakae* belongs to a subcategory c of C, namely ‘male’, and that this fact is independent of the presence and the grammatical or semantic nature of B *-temibe*. Condition 4 states that the subcategory c ‘male’ out of category C ‘gender’ is marked on B by the affix *a-* and that this affix forms one constituent with *-temibe*.

The Mian gender system with the four genders M, F, N1, and N2 conforms to all four conditions and the argument affixes defining the genders can therefore rightfully be termed ‘agreeing’. The system of verbal classificatory prefix, however, violates condition 3 to a certain extent.

(5-37) *some dobmekiobe*
som=e lob-meki-Ø-i-o=be
 banana_bunch=SG.N1 SG.MASC.O-hang_up.PFV-PST-1SG.SBJ-EP=DECL
 ‘I have hung up the banana bunch’ (e.g. the whole bunch on a nail)

(5-38) *some golmekiobe*
som=e gol-meki-Ø-i-o=be
 banana_bunch=SG.N1 SG.BUNDLE.O-hang_up.PFV-PST-1SG.SBJ-EP=DECL
 ‘I have hung up the banana bunch (to which a string or rope is attached)’

In these examples, *some* (constituent A) belongs to two different subcategories of a category C and *A’s belonging to the respective subcategories is NOT independent of the presence and nature of B*. The conclusion is that in Mian the classification of a noun can change and the change is exclusively dependent on the classificatory marker on the verb. In this respect, Mian behaves more like Navaho (examples from Davidson et al. 1963: 30):

- (5-39) a. *béésò sì-ʔq̣*
 money PFV-(small round object).lie
 ‘a single coin lies (there)’
- b. *béésò sì-nìl*
 money PFV-(aggregate of small objects).lie
 ‘(a handful of) coins lie (there)’

- c. *béésò* *sì-łtsòòz*
 money PFV-(flat flexible object).lie
 ‘a bill lies (there)’

This form of multiple classification or reclassification is much more pronounced in languages like Navaho. The possibilities to highlight certain characteristics of a referent or to disambiguate a polysemous noun (e.g. *béésò* ‘money’) in the appropriate context by far exceed what Mian has to offer in this respect. The principle, however, is the same. In both Navaho and Mian, class membership of a noun can change and this change is dependent on the verb. Unterbeck (2000: 428) summarizes this as follows: “the verbal classification of Navaho [...] offers the possibility to semantically contribute to compose the linguistic representation of objects. The object to be denoted in a certain situation is the source for the choice of both noun and classificatory verb”. If one substitutes “classificatory verb” by verbal classificatory prefix the same holds true for Mian.

In conclusion, I will not treat the classificatory verbal prefixes as a second set of pronominal affixes which agree in gender with a noun but rather as verbal classificatory prefixes. I showed their classificatory nature with examples in which the verbal classificatory prefix encodes information not contained in the classified noun.

6 The noun phrase

6.1 NP structure

Mian NPs conform to the following structural template:

Possessor	Prenominal modifier	Head noun	Postnominal modifier(s)	Quantifier	Locative modifier	Determiner
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The head noun slot can only hold an item of the category N (which includes verbal nouns) or a pronoun. Headless adjectives can constitute an NP of their own. In that case the head noun slot is empty.

Any material filling the possessor slot must be a possessive pronoun or an NP. The prenominal modifier slot can accommodate one adjective or a (pre-nominal) relative clause. The postnominal modifier slot can be filled by one or more adjectival modifiers. Further constituents within the NP are quantifiers and locative modifiers. The determiner slot can be filled by the article or an adnominally used pronoun (cf. Himmelmann 1997: 215ff), for example a demonstrative. Table 45 lists examples illustrating NPs of different complexity.

POSS	Prenominal modifier	Head noun	Postnominal modifier(s)	Quantifier	Locative modifier	DET	
		<i>élé</i>					‘this (one)’
		<i>naka</i>				=e	‘a/the man’
			<i>sum</i>			=e	‘a/the big (one)’
		<i>til</i>	<i>sum milil</i>			=e	‘a/the big black dog’
		<i>naka</i>	<i>sum</i>			<i>élé</i>	‘this big man’
		<i>am</i>	<i>sum</i>		<i>éwat</i>	=o	‘the big house over there’
<i>fut élé</i>		<i>ninŋ</i>				=o	‘the name of this tobacco’
<i>buko</i>		<i>kimin</i>				=o	‘the reading of books’
<i>né</i>	<i>sin</i>	<i>fanin</i>				=e	‘my old grandfather’
	<i>futaan óló dolaibbio</i>	<i>naka</i>				=e	‘the men who wrote this letter’
		<i>meme</i>	<i>gwăab</i>	<i>asumatna</i>		<i>éli</i>	‘these three small children’

Table 45: NP examples

The normal situation in natural Mian discourse is that the clitic article occurs only once in a referential NP, namely on its rightmost constituent:

- (6-1) *til milil súm=e*
til milil súm=e
 dog.M black big=SG.M
 ‘a/the big, black dog’

However, it is also possible to have the clitic article distributed over the whole NP. It can show up on the noun itself, on any adjectival modifier and on numerals:

- (6-2) *til milile súmé*
til=e milil=e súm=e
 dog=SGM black=SG.M big=SG.M
 ‘a/the big, black dog’

The obligatory article is in complementary distribution with other element in the determiner slot, e.g. a demonstrative. When the determiner slot is filled by a demonstrative or any other adnominally used pronoun, there is no article, e.g.:

- (6-3) *til milile súm élé*
til=e milil=e súm élé
 dog=SGM black=SG.M big DEM.SG.M
 ‘this big, black dog’

Therefore, I analyze the obligatory, i.e. rightmost, article as a filler of the determiner slot (as shown in Table 45 above).

6.2 Minimal NPs

A minimal NP can either consist of a bare noun, a noun with a clitic article or a pronoun. Bare NP occur, for instance, in non-referential contexts, e.g.:

- (6-4) *as blimobe*
as blim
 wood not_exist
 ‘There is no wood’

A minimal NP can consist of a noun, proper name, or nominal compound with a clitic article:

(6-5) <i>unǎng=o</i> woman (N)	}	<i>ye biobe</i> there is
<i>Umsin=o</i> Umsin (female PN)		
<i>wanam=o</i> birdhouse (NomC)		

‘There is a woman/Umsin/a birdhouse’

The forms of all pronoun series (except the possessive series) can be used pronominally, i.e. they can constitute NPs by themselves. Table 46 gives a synopsis of these forms.

(For details on the semantics of the respective pronoun series, see 3.7.)

Pronoun series	1		2		3		1		2	3	Gloss
	M	F	M N1.SG	F N1.PL N2	excl	incl					
Free	<i>né</i>	<i>kóbó</i>	<i>óbó</i>	<i>é</i>	<i>ó</i>	<i>ní</i>	<i>níbó</i>	<i>íbó</i>	<i>í</i>	‘I’	
Emphatic	<i>néta</i>	<i>kébtá</i>	<i>óbta</i>	<i>éta</i>	<i>óta</i>	<i>níta</i>	<i>níbtá</i>	<i>íbtá</i>	<i>íta</i>	‘I (emph)’	
Emphatic ‘alone series’	<i>néleta</i>	<i>kélebta</i>	<i>ólobta</i>	<i>ólota</i>	<i>életa</i>	<i>nílita</i>	<i>nílibta</i>	<i>ílibta</i>	<i>ílita</i>	‘I alone (emph)’	
Topic	<i>néle</i>	<i>kóbóle</i>	<i>óbóle</i>	<i>éle</i>	<i>óle</i>	<i>níle</i>	<i>níbóle</i>	<i>íbóle</i>	<i>íle</i>	‘as for me’	
Demonstrative				<i>élé</i>	<i>óló</i>				<i>élí-ílí</i>	‘this one’	
Emphatic Demonstrative				<i>éléta</i>	<i>ólóta</i>				<i>élíta</i>	‘this one (emph)’	
Topic Demonstrative				<i>éléle</i>	<i>ólóle</i>				<i>élíle</i>	‘as for this one’	
Distal Demonstrative				<i>yé</i>	<i>yó</i>					‘that one’	
Free ‘alone’ series	<i>nélé-kiem</i>	<i>kéleb-kiem</i>	<i>ólób-kiem</i>	<i>élé-kiem</i>	<i>óló-kiem</i>	<i>níí-kiem</i>	<i>nílib-kiem</i>	<i>ílib-kiem</i>	<i>íí-kiem</i>	‘only I alone’	
Restrictive				<i>yéta</i>	<i>yóta</i>					‘only this one’	
Reflexive I	<i>né-maye</i>	<i>kéb-maye</i>	<i>ób-maye</i>	<i>é-maye</i>	<i>ómaye</i>	<i>ní-maye</i>	<i>níb-maye</i>	<i>íb-maye</i>	<i>í-maye</i>	‘myself’	
Reflexive II	<i>néle-skil</i>	<i>kéleb-skil</i>	<i>ólób-skil</i>	<i>éleskil</i>	<i>óloskil</i>	<i>níiskil</i>	<i>nílib-skil</i>	<i>ílib-skil</i>	<i>íli-skil</i>	‘myself’	

Table 46: Pronoun series (synopsis)

All of these can occur in subject position. Free pronouns occasionally occur in direct and indirect object position whereas the other pronoun series have so far only been attested in subject position.

Forms from either of the reflexive series appear only as objects if their function is to indicate reflexivity:

- (6-6) *né némaye/néleskil goiobe*
né né-maye/néleskil go-Ø-i-o=be
 I I-REFL cut_skin.PFV-PST-1SG.SBJ-EP=DECL
 ‘I’ve 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 NP, as in (6-7) or on its own in lieu of an overt subject NP, as in (6-8):

- (6-7) *naka élé émaye eiló ananebe*
naka élé é-maye ěil=o wa-na-n-e=be
 man.M DEM.SG.M he-REFL pig=SG.F 3SG.F.O-kill-PST-3SG.M.SBJ=DECL
 ‘This man himself killed the sow’

- (6-8) *émaye klabebe*
émaye kla-b-e=be
 he-REFL fix-IPFV-3SG.M.SBJ=DECL
 ‘He himself is fixing (it)’ (from Smith and Weston 1974b: 105)

All quantifiers (that is all numerals and *hómôn* ‘many’) and all adjectival modifiers can constitute NPs on their own. In that case the noun head slot is empty.

Adjectival Modifiers

<i>namá=e</i>	‘a/the white (one)’
<i>sum=e</i>	‘a/the big (one)’
<i>sin=e</i>	‘a/the old (one)’
<i>mak=e</i>	‘an-/the other (one)’
<i>make ... make</i>	‘the one... the other’
<i>awěm=o</i>	‘a/the tabooed (one)’

Quantifiers

<i>élékiem=e</i>	‘the one (m.)’
<i>ólókiem=o</i>	‘the one (f.)’
<i>asu=ei</i>	‘the two (of them (An.))’

<i>asu=o</i>	‘the two (of them (Inan.))’
<i>asumatna=i</i>	‘the three (of them (An.))’
<i>homon=i</i>	‘many’

Locative adverbials likewise can be used as NPs. The article is obligatory in this case:

<i>temdaak=e</i>	‘the (one) underneath’
<i>tibut=e</i>	‘the (one) on top’
<i>ébla=i</i>	‘the (ones) on this side, close to speaker’

Verbal nouns can appear in the head slot of an NP. Verbal nouns are quite rare in discourse and occur in subject and direct object position. Verbal nouns freely occur with or without the article =o:

- (6-9) *kéb onamin meb tlóbe*
kéb onamin mēb tl-∅-o=be
 your go.PFV.VN close come.PFV-PST-N2.SBJ=DECL
 ‘Your going (away) has come close’ [Observed; said to me a few days before my departure from Mianmin]

- (6-10) *né buko kiminomo tekein kebibabe*
né buk=o kimin=o=mo
 I book=N2 read.IPFV.VN=N2=NEG

tekein ke-b-i-ba=be
 knowledge make-IPFV-1SG.SBJ-NEG=DECL
 ===know===
 ‘I don’t know how to read’ (Lit. ‘I don’t know the reading of books’)

6.3 Determiners

The rightmost slot in an NP is reserved for a determiner. This function can be served by a whole range of pronouns (cf. section 3.7). The following pronoun series can be used adnominally:

- Demonstrative series
- Emphatic series
- Emphatic demonstrative series
- Topic series
- Restrictive series

Table 47 and Table 48 provide examples for determiners in NPs with animate and inanimate noun heads, respectively. Emphatic meaning is indicated by underlining.

N	Dem		N	Emph	
<i>naka</i>	<i>élé</i>	‘this man’	<i>naka</i>	<i>éta</i>	‘the <u>man</u> ’
<i>unǎng</i>	<i>óló</i>	‘this woman’	<i>unǎng</i>	<i>óta</i>	‘the <u>woman</u> ’
<i>naka</i>	<i>éli/lí</i>	‘these men’	<i>naka</i>	<i>íta</i>	‘the <u>men</u> ’

N	EmphD		N	Topic	
<i>naka</i>	<i>éléta</i>	‘ <u>this</u> man’	<i>naka</i>	<i>éle</i>	‘as for the man’
<i>unǎng</i>	<i>ólóta</i>	‘ <u>this</u> woman’	<i>unǎng</i>	<i>óle</i>	‘as for the woman’
<i>naka</i>	<i>élíta</i>	‘ <u>these</u> men’	<i>naka</i>	<i>íle</i>	‘as for the men’

N	Restrictive	
<i>naka</i>	<i>yéta</i>	‘only that man’
<i>unǎng</i>	<i>yóta</i>	‘only that woman’

Table 47: Determiners in NPs with animate head nouns

Note that the pronouns from the restrictive series *yéta* and *yóta* do not have an animate plural form (hence **naka yéita*), the reason probably being that the restrictive series has an individualizing function which is in principle incompatible with multiple animate entities.

N	Dem		N	Emph	
<i>imen</i>	<i>élé</i>	‘this taro’	<i>imen</i>	<i>éta</i>	‘the <u>taro</u> ’
<i>imen</i>	<i>óló</i>	‘this taros’	<i>imen</i>	<i>óta</i>	‘the <u>taros</u> ’
<i>am</i>	<i>óló</i>	‘this/these house(s)’	<i>am</i>	<i>óta</i>	‘the <u>house(s)</u> ’

N	EmphD		N	Topic	
<i>imen</i>	<i>éléta</i>	‘ <u>this</u> taro’	<i>imen</i>	<i>éle</i>	‘as for the taro’
<i>imen</i>	<i>ólóta</i>	‘ <u>this</u> taros’	<i>imen</i>	<i>óle</i>	‘as for the taros’
<i>am</i>	<i>ólóta</i>	‘ <u>this/these</u> house(s)’	<i>am</i>	<i>óle</i>	‘as for the house(s)’

N	Restrictive	
<i>imen</i>	<i>yéta</i>	‘only that taro’
<i>imen</i>	<i>yóta</i>	‘only those taros’
<i>am</i>	<i>yóta</i>	‘that/those house(s)’

Table 48: Determiners in NPs with inanimate head nouns

The following examples illustrate the use of determiners in NPs which consist solely of an adjective (6-11), a numeral (6-12), *mak* (6-13), and a directional (6-14):

- (6-11) *sum é-ta*
big SG.M-EMPH
'the big (one)'
- (6-12) *élekiem é-ta*
one.M SG.M-EMPH
'the one (alone)'
- (6-13) *mak í=le*
other PL.AN=TOP
'as for the others'
- (6-14) *étam í=le*
inside_here PL.AN=TOP
'as for the (ones) inside here'

The next examples illustrate the use of determiners in more complex NPs, i.e. NPs with at least one modifier:

- (6-15) *skilón moton é-ta*
foot true SG.N1-EMPH
'the foot proper' [Crow story]
- (6-16) *sob=e sum eka tekebmĩn élé*
soap=SG.N1 big and long DEM.SG.N1
'this big and long (bar of) soap'
- (6-17) *naka asumatna élí*
man three DEM.PL.AN
'these three men'
- (6-18) *soka wanggěli asuke asuke make na élí-ta*
PN women.of two two other do DEM.PL.AN-EMPH
'these five women of Sokamin'

In natural Mian discourse, all determiners can optionally form one phonological unit with the preceding word. Thus, we find [à^s·b]_ω [ét^hà]_ω and [à^s·bét^hà]_ω both with the meaning 'the brother (emph)'. This behaviour is different from that of articles which always cliticize.

Tonally, however, determiners and articles are very similar. If a determiner cliticizes, its high tone becomes unstable. Thus we not only find [à^sbét^hà] but also [à^sbèt^hà] with no obvious difference in meaning. This alternation is exactly parallel to free variation between [nàk^hàé] and [nàk^hàè] 'a/the man'.

6.4 Modified NPs

Mian has two main classes of nominal modifiers, viz. adjectives (whose function is to specify colour, size or dimension, and quality), and quantifiers (which comprise numerals and *hómôn* ‘many’ and whose function is quantification). Mian has prenominal and head-internal relative clauses. While the former occupy the prenominal modifier slot, the latter are marked as NPs and therefore are not modifiers of the relativized item. Relative clauses will be dealt with in section 11.4.

6.4.1 Adjectival modifiers

All adjectives except *sin* ‘old’ and *memâ* ‘new’, which tend to occur prenominally, come in the postnominal modifier slot in the following preferred order:

- 1) Colour; e.g. *milil* ‘black’, *mokim* ‘blue’, *ngaaméin* ‘yellow’
- 2) Size/dimension; e.g. *sum* ‘big’, *gwăab* ‘small’, *teke(bmǐn)* ‘long, tall’, *mebwěing* ‘short’
- 3) Others; e.g. *ayam* ‘good’, *misiam* ‘bad’, *beit* ‘weak’, *sbăl* ‘strong’, *ninik* ‘dirty’

Deviation from this positional preference is possible, yet uncommon. Although adjectival modifiers are quite rare in natural Mian discourse, there is no theoretical limit to the number of adjectives that can modify a noun. Consider the following examples:

(6-19) *til=e milil=e*
 dog=SG.M black=SG.M
 ‘a/the black dog’

(6-20) *til=e milil=e súm=e*
 dog=SG.M black=SG.M big=SG.M
 ‘a/the big, black dog’

(6-21) *til=e milil=e súm=e sbăl=e*
 dog=SG.M black=SG.M big=SG.M strong=SG.M
 ‘a/the strong, big, black dog’

(6-22) *til=e milil=e súm=e sbăl=e ninik=e*
 dog=SG.M black=SG.M big=SG.M strong=SG.M dirty=SG.M
 ‘a/the dirty, strong, big, black dog’

In all of the examples (6-19) to (6-22) above the article is distributed throughout the NP, i.e. referentiality, number and gender are marked per article =*e* on the head noun and on each adjectival modifier. More common in natural discourse is to mark number and gender only once for the whole NP, namely on the rightmost modifier; for example:

- (6-23) *til milil súm=e*
 dog black big=SG.M
 ‘a/the big, black dog’

Adjectival modifiers are normally just juxtaposed but can be coordinated overtly by means of the coordinator *aka~eka* ‘and’:

- (6-24) *sob=e súm eka tekebmĭn élé*
 soap=SG.N1 big and long DEM.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:

- (6-25) *sin am=o*
 old house=N2
 ‘an/the old house’

However, the same construction is also possible with an article on the adjective: *sino amo*. Moreover, I observed that *sin* and *memâ* also occur in the post-nominal modifier slot: *am(o) sino*. Smith and Weston (1974b: 52-3) 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.

Nouns followed by the clitic =*sa* ‘with’ can fill the postnominal modifier slot in an NP just like any other adjectival modifier. Compare:

- (6-26) *imen súm=e*
 taro.N1 big=SG.N1
 ‘a/the big taro’

- (6-27) *imen kibi=sa=e*
 taro.N1 ash=with=SG.N1
 ‘the taro with ash (on it)’ [Fitibkanib and Dimosson]

6.4.2 Reduplicated adjectives

A very few adjectival modifiers can be used in reduplicated form to emphasize plurality or variety. In my corpus reduplication is confined to *súm* in the sense of ‘great’ not dimensional ‘bigness’ (6-28) and *afet* ‘different’ (6-29):

(6-28) *naka súmsúmi*
naka súm-súm=i
 man REDUP-great=PL.AN
 ‘(many) great men, leaders’

(6-29) *wengó afetafeto*
wěng=o afet-afet=o
 language=N2 REDUP-different=N2
 ‘many different languages’

The reason why adjectival reduplication should be understood as highlighting plurality or variety and not as indicating intensification is that it only occurs with plural nouns. If its function was to effect intensification, one would expect reduplicated adjectives to occur in singular NPs as well.

6.4.3 Quantifiers

The class of quantifiers comprises numerals and the vague quantifying expression *hómôn* ‘many’. Quantifiers usually appear without an article. In Mian, pronouns from the ‘alone’-series *élekiem* (also *éleyem*) ‘he/it alone’ and *ólokiem* (also *ólóyem*) ‘she/it alone’ double as the numeral *one* depending on gender:

(6-30) *naka=e élekiem*
 man=SG.M one.M
 ‘one man’ OR ‘the man alone’

(6-31) *unǎng=o ólokiem*
 woman=SG.F one.F
 ‘one woman’ OR ‘the woman alone’

The only two basic numerals Mian has are *asu* ‘two’ and *asumatna* ‘three’. The former has a variant *asusuna*, which looks like a partial reduplication of the simple numeral *asu* ‘two’. Nonetheless, *asusuna* also means ‘two’ not ‘four’.

- (6-32) *unǎng=i* *asu(=ei)/asusuna(=i)*
 woman=PL.AN two(=PL.AN)
 ‘two women’

Numerals larger than three are phrasal and involve stringing together as many *asuke* ‘two and’ (i.e. the numeral *asu* ‘two’ and the verb stem *ke* ‘do’ serving as a coordinator in phrasal numerals) as needed to count to any even number and rounding this off by *make* ‘(one) other’ for odd numbers. Phrasal numerals can occur with or without *na*:

- (6-33) *unǎng=i* *asu=ke asu=ke*
 woman=PL.AN two=do two=do
 ‘four women’ (Lit. ‘two and two women’)

- (6-34) *meme asu=ke asu=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:

- (6-35) *meme gwaabí asumatna*
meme gwǎab=i asumatna
 children little=PL.AN three
 ‘three little children’

Instead of a numeral denoting an exact figure, the quantifier slot in the NP can be filled by *hómôn* ‘many’, with which the speaker does not commit himself to a certain number:

- (6-36) *til=i milil=i súm=i homôn=i*
 dog=PL.AN black=PL.AN big=PL.AN many=PL.AN
 ‘many big black dogs’

6.4.4 The intensifiers *dot* ‘very’ and *wekib* ‘a lot’

Smith and Weston (1974b: 88) claim that each adjectival modifier and *hómôn* ‘many’ can take one of the intensifiers *dot* ‘very’ and *wekib* ‘a lot’. This is not corroborated by my data. The only examples in my corpus and in Smith and Weston’s material are predicative adjectives with intensifier *dot* ‘very’, e.g.:

- (6-37) *dot klayamobe*
lot klayam=o=be

very good=PRD=DECL
 ‘it’s very good’

The intensifier *wekib* ‘a lot’ is only attested as a verbal intensifier in my corpus; for example in (6-38):

(6-38) *é wekib usnebe*
é wekib usn-∅-e=be
 he a_lot go_up-PST-3SG.M.SBJ=DECL
 ‘he has become very tall’ (Lit. ‘he has gone up a lot’)

6.4.5 Relative clauses

Relative clauses in Mian basically 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 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).

All Mian relative clauses are finite and can be either prenominal or head-internal³⁰. Neither of these strategies employs relative pronouns. Prenominal relative clauses precede their head noun in the slot for prenominal modifiers. They do not receive any marking indicating subordination; e.g.:

(6-39) *balubib yé maablib nakai*
balubib yé maa+bl-∅-ib *naka=i*
 airstrip there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ 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 NPs. Thus, they are

³⁰ 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, however, this distinction is irrelevant.

nominalizations, i.e. they essentially function as NPs occupying the argument position which the relativized item has in the main clause; e.g. direct object in (6-40):

- (6-40) *nakai balubib yé maablibi yatemibibe*
naka=i balubib yé maa+bl-∅-ib=i
 man=PL.AN airstrip there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN

ya-teme-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 some head-internal relative clauses, the relativized item can be omitted. The restrictions concerning omission of the relativized item are examined in more detail in the section on head-internal relative clauses below. An example is:

- (6-41) *balubib yé maablibi*
balubib yé maa+bl-∅-ib=i
 airstrip there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ=3PL.AN
 ‘the (ones) who are standing at the airstrip’

In the above examples, the relativized item functions as the subject of the relative clause. The relativized item can also function as the direct or indirect object, and as possessor. At least in prenominal relative clauses the relativized item can also be a locative.

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 11.4.7). This will be discussed in more detail below. Verbs in relative clauses show all inflectional possibilities of a (sentence-final) verb in an independent sentence in terms of tense, aspect, and argument marking. For example, they can be inflected for Future, which medial verbs cannot.

Subject, direct object and indirect object position are fully accessible to relativization, as is the topic NP in a topic-comment construction. The possessor position is relativizable only if the possessor is raised to argument status and marked as an indirect object on the verb of the relative clause.

Head-internal relative clauses are much more frequent than prenominal ones in natural discourse. Nearly all examples of prenominal relative clauses are elicited.

However, in most cases the prenominal variant of a head-internal relative clause was offered immediately by the speaker without any further cues as to whether a prenominal relative construction was also possible.

Both types of relative clauses will be described in detail in 11.4 under embedding.

6.4.6 Locative modifiers

The locative slot within the NP can be filled by any of the demonstrative directionals (see section 3.8). For example:

<i>éwit</i>	‘up here’	<i>íwit</i>	‘up there’
<i>élaak</i>	‘down here’	<i>ílaak</i>	‘down there’
<i>éwat</i>	‘here across’	<i>íwat</i>	‘across there’

The article can be distributed or be marked on the rightmost constituent of the NP, in this case the locative modifier. Other determiners apart from the article, e.g. demonstratives, are unattested:

- (6-42) *am(o) súm(ó) éwato*
am(=o) súm(=o) éwat=o
 house(=N2) big(=N2) there_across=N2
 ‘the big house over there’

Locative modifiers within the NP can only specify a general direction and distance to where a given object is located. In order to localize an object with respect to some other object a relative clause has to be used. It is not possible for the Mian equivalent of the English prepositional phrase *on this plate*, which is *flétem élé* [*flét=tem élé*; plate=inside this], to fill the locative slot in an NP. Instead a relative clause has to be used. Compare (6-43) and ungrammatical (6-44):

- (6-43) *unin hómóno flétem élé buolo mo downaamabibabe*
unĩn homôn=o flét=tem élé bi-o=óló
 food plenty=N2 plate=in DEM.SG.N1 stay.IPFV-N2.SBJ=DEM.N2

mo lowonaa-mab-i-ba=be
 NEG eat.PFV.FUT-FUT.NAN.SG.SBJ-1SG.SBJ-NEG=DECL
 ‘I won’t eat all the food (lit. the plenty food) which is on this plate’

- (6-44) **[unin hómono [flétem élé]_{NP}]_{NP} mo dowonaamabibabe*
 Intended: ‘I won’t eat all the food on this plate’

Unlike English, which accepts PPs embedded in NPs, for example [the food [on the plate]_{PP}]_{NP}, Mian does not allow locative NPs as NP constituents.

In (6-43), the locative NP *flétem élé* ‘on this plate’ appears as a locative adjunct within the relative clause, not as the constituent of an NP. Hence, this example is grammatical. This correlates nicely with the behaviour of locatives in declarative sentences where specifying the location of some entity requires an existential verb. It is impossible to use a non-verbal construction here. Compare (6-45) and (6-46):

- (6-45) *Milsene dálwat biebe*
milsen=e lál=wat bi-∅-e=be
 PN=SG.M bank =across stay.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘Milsen is across the river bank’

- (6-46) *Milsene dálwatobe*
milsen=e lál=wat=o=be
 PN=SG.M bank=across=PRD=DECL
 ‘It’s Milsen’s river bank’
 BUT not: *‘Milsen is across the river bank’

6.5 Attributive possession

As we are dealing with NP structure here, this section is confined to attributive possession. For a description of predicative possession see section 8.6.

Mian has one construction for encoding attributive possession in which the possessor precedes the possessed. The possessor slot can be filled by either a possessive pronoun or by a full NP.

In the most common and least complex case the possessor slot is filled by a possessive pronoun, set out in Table 49 and Table 50. 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.

Person	Number	Gender	Pronoun	Gloss	Free pronouns	Gloss
1	Singular		<i>né</i>	‘my’	<i>né</i>	‘I’
2		Male	<i>kéb</i>	‘your (m)’	<i>kóbó</i>	‘you (m)’
		Female	<i>ób</i>	‘your (f)’	<i>óbó</i>	‘you (f)’
3		Male	<i>é</i>	‘his’	<i>é</i>	‘he’
		Female	<i>ó</i>	‘her’	<i>ó</i>	‘she’
1 excl	Animate plural		<i>ní</i>	‘our (excl)’	<i>ní</i>	‘we (excl)’
1 incl			<i>níb</i>	‘our (incl)’	<i>níbó</i>	‘we (incl)’
2			<i>íb</i>	‘your (pl)’	<i>íbó</i>	‘you (pl)’
3			<i>í</i>	‘their’	<i>í</i>	‘they’

Table 49: Possessive pronouns (and free pronouns) for animates

Person	Number	Gender	Possessive pronouns	Gloss	Free pronouns	Gloss
3	Singular	Neuter 1	<i>é</i>	‘its’	<i>é</i>	‘it’
	Plural		<i>ó</i>	‘their’	<i>ó</i>	‘they’
			Neuter 2	<i>ó</i>	‘its, their’	<i>ó</i>

Table 50: Possessive pronouns (and free pronouns) for inanimates

The following examples 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 49. For all others possession is indicated by order. The possessive relation is not marked on the possessed:

- (6-47) a. *né wengsángo* ‘my story’
 b. *kéb genino* ‘your (m) sickness’
 c. *ób imake* ‘your (f) husband’
 d. *í áié* ‘their dad’

The possessor slot can also be occupied by a full NP, which itself may consist either of a noun as in (6-48), a proper name as in (6-49), or a verbal noun as in (6-50).

- (6-48) *futé gingé*
füt=e gǐng=e
 tobacco=SG.N1 midrib=SG.N1
 ‘the midrib of the tobacco (leaf)’ [Rolling smokes]

- (6-49) *Sobininge eité*
sobining=e ěit=e
 PN=SG.M penis=SG.N1
 ‘Sobining’s penis’ [Sobining]

- (6-50) *onamin deibo*
onamin leib=o
 go.PFV.VN path=N2
 ‘the passage’ (Lit. ‘the path of going’) [Pineapples]

Evidence that the possessor slot can also accommodate full NPs comes from examples like (6-51) and (6-52), where NPs consisting of a noun and a determiner go in the possessor slot:

- (6-51) *fut élé nininó*
fūt élé ninĩn=o
 tobacco DEM.SG.N1 name=N2
 ‘the name of this tobacco’ [Sofelok, 2]

- (6-52) *weng óló mitmakamo*
wěng óló mitmakam=o
 talk DEM.N2 origin=N2
 ‘the origin of this talk’ [Sofelok, 2]

Possessive constructions can occur in sequences. In such sequences, each NP is possessed by the preceding one:

- (6-53) *naié kene milimé*
năi=e ken=e milĩm=e
 vagina=SG.N1 edge=SG.N1 half=SG.N1
 ‘half of the edge of the vagina’ [Fitibkanib and Dimosson]

In his work on possession, Heine (1997a: 148-9) points that one of the most common sources or templates which account for the rise of constructions encoding attributive possession in the world’s languages is the Topic Schema, which he formalizes as:

(As for) $X, X's Y > X's Y$

In this template, X is the topic participant (i.e. the possessor) and Y the possessed. A pertinent and clear example to illustrate this comes from Motu (Lichtenberk 1985: 99):

- (6-54) *boroma kwara-na*
pig head-its
 ‘the pig’s head’

The most important features of this construction are: (a) the possessor (*boroma* ‘pig’) precedes the possessed, and (b) the possessor is cross-referenced on the possessed constituent as a pronominal element or modifier (*-na* ‘its’). Possessor specification is responsible for structures, as in (6-54). Specification in general is a “pragmatic strategy whereby a nominal constituent is extended by adding another constituent whose main function is to specify [...] the preceding one” (Heine 1997a: 186).

I assume that specification is also responsible for the rise of the Mian possessor construction. In (6-55) below, the possessed constituent appears to be introduced to specify the possessor. The pronominal marker cross-referencing the possessor (but still being part of the possessed constituent) is the possessive pronoun *é* ‘his, its’. This way of expressing possession is quite rare in Mian but synchronically attested, as in (6-55):

- (6-55) *eilé é gabaamé*
 ěil=e é gabăam=e
 pig=SG.M SG.M head=SG.N1
 ‘a/the pig’s head’ (Lit. ‘a/the pig, the head of it’)

Note that in all cases in which the possessor slot is filled by an NP, there will be two (at least segmentally) homophonous vowels at the edges of the two NPs in the construction; viz. the article of the possessor and the possessive marker cross-referencing the possessor (cf. *unăngo ó gabăam* ‘the woman’s head’ and *ěili í gabăam* ‘the pig’s heads’), I assume that in a process of phonological erosion the somewhat redundant possessive pronoun was dropped, so that (6-56) became the standard way of expressing attributive possession in present-day Mian. Note that the article on the possessor is obligatory:

- (6-56) *eilé gabaamé*
 ěil=e gabăam=e
 pig=SG.M head=SG.N1
 ‘a/the pig’s head’

Synchronically, grammaticalization of possessor constructions is complete. Non-human and even non-animate possessors are possible (cf. examples (6-56), (6-52), and (6-50) above). Usually there is no overt marker indicating a possessive relation anymore (although the old construction found in (6-55) survives). Rather possessor and possessed are simply juxtaposed. Nonetheless, there is a clear syntactic structure in Mian attributive possessives. Changing the order of possessor and possessed might at

best considerably alter the meaning of the example phrases above but will in most cases lead to non-sensical utterances.

It has been pointed out that the construction with the overt possessive pronoun has not dropped out of the language. However, this construction is rare and it is my impression that it is predominantly found with proper names as possessors. (Note, however, that (6-57) could also be rendered as *seliminé kukub ole* with the same meaning.)

- (6-57) *Seliminé é kukub ole*
selimĩn=e é kukub ó=le
 PN=SG.M 3SG.M habit.N2 N2=TOP
 ‘as for Selimin’s habit’ [Story of Selimin’]

If the possessor slot holds a coordinate NP, 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 *-sa* ‘too’ in (6-58) and (b) simple juxtaposition in (6-59). On the use of resumptive pronouns see also section 11.4.4.

- (6-58) *Fieia ésa Hentaboseb ésa í wengsángó*
fieia é=sa hentaboseb é=sa í wengsǎng=o
 PN SG.M=too PN SG.M=too their story=N2
 ‘the story of both Fieia and Hentaboseb’ (Lit. ‘both F. and H. their story’)
 [Fieia and Hentaboseb]

- (6-59) *Fitibkanibo Dimoson í wengsángó*
fitibkanib=o limoson í wengsǎng=o
 PN=SG.F PN their story=N2
 ‘the story of Fitibkanib and Dimosson’ [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 NP, especially with the evidence for assuming both a possessor slot and a prenominal modifier slot.

In some cases the distinction between a possessive construction and a compound is fuzzy. Consider the example *al atosin* [bowels bit(s)]. Would this be better glossed as ‘bit(s) of bowels’ or as ‘bowel bit(s)’? Or *ili ánat* [bamboo arrow] better as ‘arrow of

bamboo’ or ‘bamboo arrow’? While both analyses seem possible, it is noticeable that in the two examples *al atosin* and *ili ánat* the first noun appears without an article, which make the whole construction look more like two compounded stems. Hence, I’ll opt for the compound analysis here. See Healey (1965a: 10-1) for a description of a similar problem in Telefol.

Mian compound structure: If the first element in a complex NP appears without an article (and without any other pronominal element), the construction is a compound (i.e. *al atosin* ‘bowel bit(s)’). If the first noun is followed by any pronominal element, the construction is possessive (i.e. *al=o atosin* ‘bit of bowels’).

Tonal evidence supports this analysis. Compounds constitute a single tonal domain. The tone on the compound is a composite melody consisting of the respective stem tonemes 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 modifiers, rather than just left of the noun. Although the standard word order in Mian NPs is noun head followed by one or more postnominal modifiers, the adjectival modifiers *sin* ‘old’ and *memâ* ‘new’, most often occur before the head noun:

- (6-60) *né sin fanine gembebe*
né sin fanin=e gen-b-e=be
 my old grandfather=SG.M be_sick.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘My old grandfather is sick’

In example (6-60) *sin* ‘old’ can only be interpreted as a modifier. As it cannot itself be in the possessor slot, a reading like *‘the grandfather of my old one...’ is ruled out. Therefore, 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.

6.6 Taxonomic terms

Nouns referring to taxa, such as *wan* ‘bird’, *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:

- (6-61) *wan tolim*
bird eagle
‘New Guinea eagle’ (*Harpyopsis novaeguineae*)

A sentence example is given in (6-62):

- (6-62) *wan tolime tenea buba obtlaabaeko geta baaiba*
wan tolim=e te-n-e=a
bird eagle=SG.M come-SS.SEQ-3SG.M.SBJ=MED
- bu-b-a*
grab-BEN.PFV-3SG.M.IO.PFV
- ob-tlaa-b-a-ek=o*
SG.RESID.O-remove.PFV-BEN.PFV-3SG.M.IO.PFV-3SG.M.SBJ.HORT=HORT
- ge=ta baa-Ø-ib=a*
do.PFV=MED say.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
“‘The eagle must come and grab (it) for him and remove it for him’, they said
and then the eagle...’ [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), Kayardild (Evans 1995); see also Dixon (1986), Sands (1995), and Wilkins (2000).

In such a construction a dependent non-referential generic term is juxtaposed to 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, precisely because it is non-referential.

Further examples are:

- tin ibâl* ‘paperwasp’
insect paperwasp

<i>as</i>	<i>boliam</i>	‘Tulip tree’ (Gnetum Gnemon)
tree	tulip	
<i>tá</i>	<i>baangklí</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; cf. *tolim=e* ‘an/the eagle’, *boliam=e* ‘a/the Tulip tree’, *baangklí=e* ‘a/the stone adze’. The following nouns are used as generic terms:

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. 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 TP <i>balus</i> ‘pigeon’).
<i>no</i>	All marsupials and rodents (e.g. wallabies, rats)
<i>til</i>	Basically meaning ‘dog’, but used as a generic term for some non-native animals. The referential nouns found with <i>til</i> are TP loans; e.g. <i>til busi</i> ‘cat’, <i>til gout</i> ‘goat’, and <i>til hos</i> ‘horse’. This taxon is used for small or svelte non-native animals.
<i>ěil</i>	Basically meaning ‘pig’, but used as a generic term for some non-native animals. Referential noun which go with <i>ěil</i> are TP loans; e.g. <i>ěil bulmakau</i> ‘cow’, and <i>ěil sibsib</i> ‘sheep’. This taxon is used for stocky non-native animals.
<i>tĩm</i>	Lizards, geckos, etc. and crocodiles
<i>inǎb</i>	Snakes
<i>mǎab</i>	All amphibians and turtles/tortoises

<i>tin</i>	Bee- and wasp-like insects
<i>măam</i>	Mosquitos
<i>kweng</i>	Grasshoppers

<i>hok</i>	Scorpions, crabs
<i>gwǎn</i>	Spiders

<i>aning</i>	Fish
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Plant life

<i>as</i>	Trees and palms
<i>ěim</i>	Pandanus
<i>som</i>	Bananas
<i>imen</i>	Taro
<i>wǎn</i>	Sweet potatoes
<i>tek</i>	Vines

Implements

<i>tá</i>	Traditional adze-type cutting instruments (incompatible with <i>kaawá</i> ‘(modern) steel axe’)
<i>mě̃n</i>	String bags

In the rest of this section on generic terms I would like to point out a few irregularities of this classificatory construction, culminating in the question of whether NPs like *wan tolim* ‘eagle (bird)’ should not simply be treated as noun-noun compounds.

First, generic term and referential noun obligatorily or preferably occur in reverse order in a few cases:

<i>taan wan</i>	‘Metallic starling’ (Alponis metallica)
<i>takumein hok</i>	‘scorpion species’

In order to refer to a metallic starling, one can say *taan wan*. To just say **taan*, however, 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.

Second, some names for individual species simply lack any generic term, existing outside the folk taxonomy. Examples are:

iwăt ‘breadfruit’ (Artocarpus altilis) ‘breadfruit (tree)’ *as *iwăt*
mifim ‘sago’ (Metroxylon sagu) ‘sago (palm)’ *as *mifim*

I am positive that this is true for breadfruit, for which there is really only one word, viz. *iwăt*. It is however possible that *mifim* is itself used as a taxon for different kinds of sago (but the answer to this question lies well beyond my knowledge of ethnobotany).

Third, the referential term can be an adjective, for example:

(6-63) *wan namâ* ‘Sulphur-crested cockatoo’ (Cacatua galerita)
 bird white

The NP in (6-63) behaves exactly like two nominal elements in a classification construction, rather than like a noun and adjectival modifier. To appreciate this point, we have to consider an example in which (6-63) occurs in an utterance, where the appearance of articles allows us to draw conclusions about the structure involved:

(6-64) *wan namâ=e yé ei-b-e=be*
 bird white=SG.M there fly.IPFV-IPFV-3SG.SG.M=DECL
 ‘a/the cockatoo is flying there’
 OR ‘a/the white bird is flying there’

(6-65) *wan=e namâ=e yé ei-b-e=be*
 bird=SG.M white=SG.M there fly.IPFV-IPFV-3SG.SG.M=DECL
 ONLY ‘a/the white bird is flying there’

In (6-64), the NP as a whole bears an article, which results in the ambiguity. However, if the article is distributed throughout the NP, the structure can only be one of head noun followed by adjectival modifier.

Finally, I would like to argue that structures like *wan tolim* ‘eagle (bird)’ are distinct from noun-noun compounds and should be analyzed as adnominal ‘classifying’ constructions (in the sense of Chappell and McGregor 1989), in which the referential noun (*tolim*) is in apposition to the classifying noun (*wan*).

Some of my discussion on generic terms above has suggested that the generic term and the referential noun are indeed in a close relationship. One feature that such constructions have in common with compounds is that the first stem must appear in its

bare form (i.e. without the article). Thus, both compounds and adnominal ‘classifying’ constructions are treated as single grammatical words.

However, there are two phonological criteria which can be used to distinguish the two constructions.³¹

First, the two construction types behave differently in terms of intonation. The two nouns in a classification construction are uttered with a hiatus between them and are syllabified as distinct words; e.g. *wan eitî* ‘fruit dove’ is pronounced [wàn.-èi.tʰî] and not *[wà.nèi.tʰî] (hiatus indicated by -, syllable boundaries indicated by full stops). In fast speech the intonational break becomes much less conspicuous. Compounds, on the other hand, are always uttered as single words; e.g. *wanam* ‘bird house’ [wà.'nàm].

Second, and more importantly, compounds, as in (6-66), show homorganic nasal assimilation while classifying constructions, as in (6-67) do not. Compare:

(6-66) *hembiaaniba*
hen+biaan-ib=a
 search.IPFV+AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘while they were searching’

(6-67) *wan blit*
 bird yellow-bellied longbill
 ‘Yellow-bellied longbill’ (*Toxorhamphus novaeguineae*)

While the verb stem /hɛn/ is pronounced [hɛm] before /b/, the pronunciation *[wambliɪt] is unattested, regardless of speech tempo. There is only [wan bliɪt].

6.7 Dyadic terms

Dyadic terms are a subclass of the word class of nouns. They can function as heads of NPs which in turn are arguments of the predicate in the same clause or occur as possessors or another NP.

(6-68) *dabi yé temdeiboieibua*
lab=i *yé*
 same_sex_siblings_dyad=PL.AN there

³¹ Tonal processes do not help to identify the two different structures because there is no difference in tonal behaviour.

temlei-b-o-Ø-ib-bio=a
 leave.PFV-BEN.PFV-N2.IO.PFV-DS.DEQ-2/3PL.AN.SBJ-GPST=MED
 ‘after the brothers had left it (as it was), one of them...’ [Danenok]

In most cases, however, dyadic terms occur with the possessor slot filled. Most frequently, this is a plural possessive pronoun which refers to the whole set of individuals that is described by the dyad:

(6-69) *íb mikim*
 your opposite_sex_siblings_dyad
 ‘you, brother and sister’

The reason why I analyze the dyad as the NP head with a possessive pronoun in the possessor slot and not as an NP apposed to a free pronoun (an analysis suggested by the English translation I gave in (6-69) is because the forms are clearly from the possessive pronoun series:

(6-70) **íbó mikim*

In the construction exemplified in (6-71) the free personal pronoun cannot be used; cf. also *níb mikim* ‘we (incl), brother and sister’ and unacceptable **níbó mikim*. I assume that the possessive analysis is extended to the cases where the possessive pronoun is homophonous with the free pronoun:

(6-71) *í mikim*
 their opposite_sex_siblings_dyad
 ‘they, brother and sister’ [MPI Reciprocals clip 1]

The possessor slot of a dyadic term can also be filled by a proper name, forming an inclusory construction. Reference is to one individual in the relation expressed by the dyad or by another NP.

(6-72) *lanenok lab-wal*
 PN same_sex_siblings_dyad-PL
 ‘Danenok and his brother’ [Danenok]

(6-73) *alél hátwal*
alěl hat-wal
 wife mother_and_child_dyad-PL
 ‘the wife and the children’ [Crows]

Fillers of the possessor slot of dyads always occur in their bare form as in the three foregoing examples, unless there is an additional possessive marker, as in (6-74):

- (6-74) *Milsene ní dabo wengó obuobe*
milsen=e ní lab=o
 PN=SG.M 1PL.EXCL same_sex_siblings_dyad=COLL

wěng=o o-b-uo=be
 language=N2 say.IPFV-IPFV-1PL.SBJ=DECL
 ‘Milsen and I, brothers, are talking’

The proper name cannot be the subject in (6-74) because its number value clashes with the number value of the subject marker on the verb.

Dyadic terms and plural kinship terms with *-wal* tend to be used with the collective marker *=o* instead of *=i* for animate plural or with no article at all.

6.8 NP coordination

Mian has four strategies for coordination of NPs:

- juxtaposition
- coordination with *=sa* ‘too’
- coordination by *=a* ‘and’
- coordination (of NPs and adjectives) by *eka~aka* ‘and’

All of these strategies are available for animate and inanimate nouns alike. Coordination by juxtaposition has a maximum of two coordinated NPs in the corpus whereas there is no upper limit of coordinated NP for the other two strategies.

The simplest strategy is NP coordination by juxtaposition. Coordination by juxtaposition is mainly used if the referents of the coordinate NPs are relatively low in individuation. Examples (6-75) and (6-76) illustrate this for animates and inanimates, respectively.

- (6-75) *naka homon unăng homôn=i*
 man many woman many=AN.PL
 ‘many men and many women’ [Sofelok, 2]

- (6-76) *dábó ket=o*
láb=o ket=o

seed=N1.PL blossom=N1.PL
 ‘seeds and blossoms’ [Sofelok, 1]

Coordination by juxtaposition is not available with NPs referring to individuals or singular entities in subject, direct and indirect object position. However, juxtaposition of proper names occurs in the possessor position, albeit rarely (example repeated from (6-59) above):

(6-77) *Fitibkanibo Dimoson í wengsángo*
fitibkanib=o limoson í wengsãng=o
 PN=SG.F PN their story=N2
 ‘the story of Fitibkanib and Dimosson’ [Fitibkanib and Dimosson]

Givón (1990b: 497) notes that NPs which are conjoined by simple juxtaposition often yield unified group lexical items. Wälchli (2003) calls compounds whose component parts refer to stereotypically conjoined entities additive cocompounds. Mian has a few group lexical items, such as *alël+melel* (lit. wife-offspring) ‘(core) family’ and *awok+álok* ‘adults, parents’, consisting of *awók* ‘mother’ and a cranberry morph *alok* without any synchronically establishable meaning). Although these were probably formed by juxtaposition and at least partially have become semantically opaque, NP juxtaposition synchronically is a syntactic device forming coordinate NPs without any tendency for lexicalization.

The second coordination strategy involves the clitic =*sa* ‘too’, which attaches to the adnominally used pronoun in the determiner slot of each coordinate NP. Coordinate NPs can refer to individuals (6-78) or to groups (6-79). The coordinated NPs are bracketed:

(6-78) [*kasening é=sa*] [*albet é=sa*]
 PN 3SG.M=too PN 3SG.M=too
 ‘Kasening and Albert’

(6-79) [*unangísna*] [*meme gwaabísna*] [*súmísa*] [*awokalokisa*]
unãng=i=sna *meme* *gwãab=i=sna* *súm=i=sa*
 woman=PL.AN=too children small=PL.AN=too big=PL.AN=too

awokalok í=sa
 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~aka* ‘and’), which cliticizes to each NP in the coordinate structure as in (6-80) and (6-81) or just appears once on the rightmost member of the coordination as in (6-82). Note that the order of the article and the coordinator on the last coordinated member is reversed. Reversal does not take place if the noun does not end in /a/, as in (6-81):

(6-80) *naka=i=a unǎng=a=i*
man=PL.AN=and woman=and=PL.AN
‘(the) men and women’ [Dimosson]

(6-81) *tén=a unǎng=a naka=i=a*
child=and woman=and man=and=PL.AN
‘children, women, and men’ [Leaf oven]

(6-82) *nakaminwáli imakwalai*
nakamĩn-wal=i imak-wal=a=i
brother-PL=PL.AN husband-PL=and=PL.AN
‘brothers and husbands’ [Mianmin and Telefomin]

Note that in (6-81) the article only shows up on the rightmost member of the coordinate NP while in the other two examples both NPs have their own article.

(6-83) *ĩn=a kakab=a bobol=a=o*
liver=and lungs=and heart=and=PL.N1
‘liver, lungs, and heart’ [Crows]

Instead of shortened =a ‘and’ one also finds *eka~aka* ‘and’ in NP coordination.

(6-84) *memin ái=e aka laning ái=e aka*
PN father=SG.M and PN father=SG.M and
‘Memin’s father and Daning’s father’ (from Smith and Weston 1974b: 99)

(6-85) *é-maye eka bokolfet=e é ning é=sak*
SG.M-REFL and PN=SG.M SG.M younger_brother SG.M=too
‘he himself and Bokolfet’s younger brother too’ [Mianmin and Telefomin]

The conjunction *eka~aka* ‘and’ is used (and in fact has to be used) for the coordination of adjectival modifiers within a single NP. The adjectives conjoined by *eka~aka* have to be in the bare form without an article, as in (6-86), repeated from (6-16):

- (6-86) *sob=e súm eka tekebmiñ élé*
 soap=SG.N1 big and long DEM.SG.N1
 ‘this big and long (bar of) soap’

6.9 NP apposition

In my analysis of NP 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 NPs always follow the NP to which they are apposed. Typical examples include apposition of a proper name (6-87) and (6-88), specification of profession (6-89), and a reflexive pronoun with contrastive function (6-90). (In the following examples, the appositional modifier are separated by a comma.)

- (6-87) *né imak=e, nialiaaleb=e*
 my husband=SG.M PN=SG.M
 ‘my husband, Nialiaaleb’ [Klebein]
- (6-88) *bib=o, ninñ=o skiobib*
 place=N2 name=N2 PN
 ‘a place, name of Skiobib’ [Dimosson]
- (6-89) *kasening=e, kaunsol=e*
 PN=SG.M councillor=SG.M
 ‘Kasening, the councillor’ [Mianmin and Telefomin]
- (6-90) *ní, ní-maye kla+biaan-ob=ta*
 we we.EXCL-REFL make+AUX..IPFV.SS.SIM-1PL.SBJ=MED
 ‘we, ourselves, are making (these arrows) while we...’ [Arrows]

NP apposition is also commonly used to clearly identify the referent(s) of a free pronoun, e.g. a demonstrative:

- (6-91) *élí, hek-wal=a awěł=a=i*
 these older_brother-PL=and fathers.PL=and=PL.AN
 ‘these (ones), the older brothers and fathers’ [Mianmin and Telefomin]

It remains to be determined whether the structures illustrated in the examples above are indeed properly termed ‘appositions’ or whether they should be treated as dependents of the head of the NP that they modify. There is syntactic evidence that the modified NP can be a maximal projection of its noun head. This fact supports an analysis of the second NP as an apposition because it occurs outside the modified NP. In the following example, the demonstrative *óló* ‘this’ in determiner position marks the right edge of the modified NP. The appositive NP follows this first NP, but is not a constituent part of its structure. The appositive NP is enclosed in square brackets:

- (6-92) *wengsáng óló, [Dimosono wengsáng óta]*
wengsáng óló, limoson=o wengsǎng ó=ta
 story.N2 DEM.N2 PN=SG.F story N2=EMPH
 ‘this story, the story of Dimosson’ [Dimosson]

The quantifier *alukûm* ‘all, every, each’ can be floated (cf. Akiyama 1994). It usually follows the whole NP but can also precede it (cf. example (6-95) below). The quantifier *alik* ‘all, every, each (restricted to animates)’ is only attested following the NP.

Neither *alukûm* nor *alik* can take an article or any other determiner. Semantically, these two expressions differ in that the former can be used with inanimate nouns whereas the latter is confined to animates.

- (6-93) *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 but not *alik* can be employed to express that some event affected an inanimate object in its entirety:

- (6-94) *afonón ó=sa alukûm kib-a-Ø-o=be*
 shin_bone PL.N1=too all ash-VBZR-PST-N1.PL.SBJ=DECL
 ‘The shinbones too became all ashes’ (Lit. ‘all “ashified” ’)
 [Crows]

Alukûm can precede the whole NP. This may also apply to *alik* but is not attested in the data:

- (6-95) *alukùm asyamo klaanobe*
alukùm asyam=o klaan-n-o=be
 all fruit=PL.N1 rot.PFV-PST-PL.N1.SBJ=DECL
 ‘All fruits have rotted’

6.10 Temporal NPs

Temporal adverbials within the clause always behave like NPs, in that they invariably occur with a pronominal element. They consist minimally of a demonstrative as in (6-96) and maximally of a complex NP with possessor as in (6-97):

- (6-96) *óló*
 DEM.N2
 ‘now’
- (6-97) *febluali é dimeta*
febluali é lim=eta
 February SG.N1 on=SG.N1.EMPH
 ‘in February’

The directional noun *dim* ‘on’, which prominently figures in locative NPs (see below), is often used in temporal adverbials as well (also in clauses) to designate a point in time. *Dim* can be used with a possessor, as in (6-97). This fact suggests that *dim* is a noun or at least retains nominal features. The special grammatical status of directional nouns is covered in the section on locative NPs.

All temporal nouns obligatorily have a pronominal element which marks the right edge of the NP, for example an article in (6-98), an emphatic pronoun in (6-99), and a demonstrative in (6-100):

- (6-98) *memálo*
memâ=(l)o
 new=N2
 ‘now, today’ [Rolling smokes]
- (6-99) *memálota*
memâ=o-ta
 new=N2-EMPH
 ‘now, today’ [Mianmin and Telefomin]

- (6-100) *memâ=lim óló*
 new=on DEM.N2
 ‘in these (present) days’ [Sofelok, 2]

Temporal nouns most commonly occur after the subject (cf. 8.3.2). Further examples of temporal nouns can be found in chapter 3 on word classes.

6.11 Locative NPs

Locative NPs are adverbial adjuncts which situate an event spatially. All locative NPs in Mian are optional. They minimally consist of one noun and one directional proper or directional noun. While directionals proper constitute a word class of their own, directional nouns combine properties of nouns and directionals and are assigned to the word class of nouns.

The class of directionals is closed and contains six members³²:

- ut* ‘up(wards)’
daak ‘down(wards)’
met ‘up(river)’
tab ‘down(river)’
tam ‘sideways, at the same level’
wat ‘across (a river or valley)’

The class of directional nouns is confined to four items:

- dim* ‘on(to)’
tem ‘in(to)’
tabăab ‘beneath’
glaglá ‘between’

The examples in (6-101) give an overview of the four types of locative NPs from the most simple ones to the more complex. The formal difference between directionals proper and directional nouns is explained below.

³² The directionals *ut* ‘up(wards)’ and *daak* ‘down(wards)’ are used to refer to directions which involve a considerable change in altitude relative to the position of the speaker. *Met* ‘up(river)’ and *tab* ‘down(river)’ refer to the respective directions along a river or valley. However, all four of these directionals are also used in small-scale spatial reference (as are *tam* and *wat*), where *met* and *tab* are not used absolutely anymore (with reference to a river) but rather denote ‘up a little, towards the speaker’ and ‘down a little, towards the hearer’, respectively (cf. Smith and Weston 1974b: 55). Likewise, the upper part of a standing or sitting person is *ut* not *met* whereas for the lower part of their body *tab* not *daak* is commonly used.

- (6-101) a. *tek=lim*
 rope=on(to)
 ‘on(to) the (clothes)line’
- b. *skiobib=tab*
 PN=downriver
 ‘downriver to/at Skiobib’
- c. *kweilban=lim=daak*
 palm=on(to)=down
 ‘down on(to) the palm’
- d. *kět=e* *tabăab=tem=laak*
 container=SG.N1 beneath=in(to)=down
 ‘down underneath the container’

Locative NPs minimally consist of a noun and either one directional noun (169a) or one directional proper (169b). Example (169c) has one of each and (169d) displays two directional nouns and one directional proper and constitutes the most complex type of locative NP. Note that no locative NP can have more than one directional proper³³.

6.11.1 Directional nouns

The class of directional nouns contains: *dim* ‘on(to)’, *tem* ‘in(to)’, *tabăab* ‘under’ and *glaglá* ‘between’. Directional nouns combine features of nouns and features of directionals proper³⁴.

Like nouns, directional nouns can have a possessor slot, whereas directionals proper always follow the bare noun, e.g. *skiobib tab* ‘downriver at/to S.’, but **skiobib=o tab*. The noun filling the possessor slot of a directional noun can be an NP as in (6-102).

- (6-102) *keté dim=ut*
 kět=e *lim=ut*

³³ It is impossible for a locative NP to have more than one directional proper. Note that this is independent of the logical possibilities. Even though directionals proper refer to concrete directions and some combinations are mutually exclusive, e.g. an object cannot be simultaneously located *ut* ‘up’ and *daak* ‘down’, it could be *wat* ‘across’ a river and *ut* ‘up’ the mountain. Nevertheless such combinations are unattested.

³⁴ At least for *tem* ‘in(to)’ there is a homophonous nominal form with the meaning ‘hole, inside’; cf. *amŭn+tem* [belly hole] ‘abdominal cavity’ and *anang+tem* (often pronounced [ànànt^hè̃m] with assimilated nasal) [mouth hole] which means ‘mouth, oral cavity’ and not *‘in(to) the mouth’. Synchronic evidence for a noun *dim* ‘top’ is harder to come by, but consider: *amgolim* [*am+go=dim* house+head=top] ‘roof’.

show that the article following *dim* takes its cues in terms of gender agreement from *am* ‘day’ (Neuter 2) and *tek* ‘rope, vine’ (Neuter 1), respectively:

(6-107) *am mak lim=o*
 day.N2 some on=N2
 ‘sometimes’ (Lit. ‘on some day’)

(6-108) *tek lim=e*
 rope.N1 on=SG.N1
 ‘on the (clothes) line’

What’s more, gender agreement is often disregarded completely and the article on the directional noun is =o regardless of the gender of the modified noun, so instead of *tek dime* ‘on(to) the line’ in (6-108) one also finds *tek dimo*. The article =o also marks temporal NPs (see section 6.10 in this chapter) and adverbial clauses (see section 11.2).

There is evidence that *tabăab* ‘beneath’ also belongs to the class of directional nouns. It can have its noun in the possessor slot, as in (6-109) or just follow a bare noun, as in (6-110):

(6-109) *háse tabaabtémdaak*
hâs=e tabăab=tem=laak
 hat=SG.N1 beneath=in=down
 ‘underneath the hat’ [Spatial reference]

(6-110) *mikil tabaab óta bliobe*
mikil tabăab ó-ta bl-∅-io=be
 mountain.N2 beneath N2-EMPH stay.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They live at the foot of (lit. beneath) mountains’ [Mammals and Insects]

Also belonging to the class of directional nominals is *glaglá* ‘(the) between (of)’ which allows the NP denoting the “between what” to appear in the possessor slot. This is evident from (6-111) where a coordinated possessor is taken up by a pronoun in the neuter plural:

(6-111) *bókse ket ésa sú esa ó glaglá daak ofanebobe*
bôks=e kět é=sa sũ é=sa
 box=SG.N1 container SG.N1=too shoe SG.N1=too

ó glaglá=laak ob-fa-n-ebo=be
 N1.PL between=down SG.RESID.O-put.PFV-PAST-2SG.SBJ=DECL
 ‘You’ve put the box down between the shoe and the container’ (Lit. ‘down the between of the shoe and the container’) [Spatial reference]

To sum up, syntactically directional nouns behave like nouns. They have a possessor slot and they take the full range of determiners. With respect to gender agreement, on the other hand, directional nouns behave more like directionals proper, which—not being nouns—are not specified for gender. If directionals proper have a determiner at all, it is an article which agrees in gender with the modified noun or the article =*o*.

6.11.2 Positional nouns and locative =*daa*

For locating an object (i.e. the figure) with respect to some other object (i.e. the ground), Mian makes extensive use of positional nouns, e.g. *milim* ‘side’, *dǎang* ‘back’, and *ablan* ‘underside’, which denote certain physical properties of the latter. Such positional nouns have to be followed by the locative clitic =*daa* when used as locatives:

- (6-112) *ase daangdáa maabiebobe*
as=e lǎang=laa maa+bi-∅-ebo=be
 tree=SG.N1 back=LOC stand_up.PFV+AUX.IPFV-IPFV-2SG.SBJ=DECL
 ‘You are standing behind the tree’ (Lit. ‘at the the backside 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). The figure is encoded as either subject or direct object while the ground is in the possessor position of the locative phrase headed by the positional noun.

A short word on the etymology of the locative clitic =*daa*: Phonologically, the most likely candidate of origin is the homophonous verb stem *daa* ‘stay, abide’. Also, it makes sense semantically that a verb with such a meaning was reanalyzed as a locative marker.

Positional nouns are usually followed by an (optional) directional to indicate the position of the figure from the viewpoint of the speaker, i.e. *met* ‘up, close to speaker’ in (6-113) and *tam* ‘to the side’ in (6-114):

- (6-113) *bókse keté amít daamet ofanebobe*
bôks=e kět=e amít=daa=met
 box=SG.N1 container=SG.N1 opening=LOC=up

ob-fa-n-ebo=be
 SG.RESID.O-put.PFV-PST-2SG.SBJ=DECL
 ‘You’ve put the box up (i.e. close to me) to the opening of the container’
 [Spatial reference]

(6-114) *háse bókse milimdáatam ofanebobe*
hâs=e bôks=e milim=laa=tam
 hat=SG.N1 box=SG.N1 side=LOC=sideways

ob-fa-n-ebo=be

SG.RESID.O-put.PFV-PST-2SG.SBJ=DECL

‘You’ve put the hat sideways to the side of the box’ [Spatial reference]

Some positional nouns are body parts which have been metaphorically extended to refer to comparable parts of inanimate objects; e.g. *dǎang* ‘back(side)’ On the widespread phenomenon of metaphorically extending human body parts for deictic spatial purposes see Heine (1997b).

For example, *debelón* ‘forehead’ is used in (6-115) to refer to the front side of a hat and *mutum* ‘heel’ in (6-116) to refer to the small side of a box:

(6-115) *bókse háse debelónsindaa ofanebobe*
bôks=e hâs=e lebelón+sin=laa
 box=SG.N1 hat=SG.N1 forehead+side=LOC

ob-fa-n-ebo=be

SG.RESID.O-put.PFV-PST-2SG.SBJ=DECL

‘You’ve put the box to the frontside of the hat’ [Spatial reference]

(6-116) *háse bókse mutumdaatab ofanebobe*
hâs=e bôks=e mutum=laa=tab
 hat=SG.N1 box=SG.N1 heel=LOC=down

ob-fa-n-ebo=be

SG.RESID.O-put.PFV-PST-2SG.SBJ=DECL

‘You’ve put the box down (i.e. away from me) to the small side of the box’
 [Spatial reference]

Apart from positional nouns, free pronouns (6-117) and locative adverbials (6-118) are followed by the locative clitic =*daa*:

(6-117) *háse bókse kikibye nédaa/kébdáa ofanebobe*
hâs=e bôks=e kikibye né=laa / kéb=laa
 hat=SG.N1 box=SG.N1 close_to I=LOC / you=LOC

ob-fa-n-ebo=be

SG.RESID.O-put.PFV-PST-2SG.SBJ=DECL

‘You’ve put the hat near me/near you close to the box’ [Spatial reference]

(6-118) *bókse keté émetdaa ofanebobe*
bôks=e kět=e émet=laa
 box=SG.N1 container=SG.N1 here_up=LOC

ob-fa-n-ebo=be

SG.RESID.O-put.PFV-PST-2SG.SBJ=DECL

‘You’ve put the box in front of (lit. up here of) the container’ [Spatial reference]

7 Verb morphology

The Mian verb is not only by far the most involved category morphologically, it is the only category which shows any morphological complexity in the language.

Many verbs formally distinguish a perfective and an imperfective stem, which are used to differentiate between bounded and unbounded events, respectively. Aspectual stem distinctions are a typical feature of the Ok languages (Healey 1964b) and can also be found in other Papuan languages; e.g. Korafe (Farr 1999: 22-3).

Mian is mildly polysynthetic in that all finite verbs are obligatorily marked for subject and indirect object (if it is part of the verb's argument structure). A subset of verbs also mark their direct objects. All argument affixes are pronominal in nature, i.e. they are not pure agreement affixes. They cross-reference overt argument NPs, which can be freely elided. Argument affixes agree with overt argument NPs in person, number and gender. If the argument NP is elided, argument affixes agree anaphorically with a previously mentioned NP or encode person, number, and gender features of the referent.

The verb has two slots for tense and aspect markers, one on either side of the subject marker slot. The pre-subject slot accommodates a range of tense and aspect suffixes, whereas the post-subject slot is filled only by tense markers. The fillers of the post-subject slot are probably more recent grammaticalizations from erstwhile auxiliary constructions, which have been reanalyzed as tense suffixes.

Verbs can be inflected directly for certain tense/aspect combinations, but compounding of a lexical verb stem with the existential verb *n/bl~bi* is important for some tense/aspect combinations. It is also quite typical for verbs in Papuan languages to be marked for illocutionary force (Foley 1986: 164). Mian has several sentential clitics which attach to the verb to mark an utterance as declarative, as a content or polar question, or as hortative.

Mian verbs can productively form serial verb constructions. As verb serialization is a syntactic and not a morphological phenomenon, I discuss it in section 9.1.

7.1 Classification of verbs

Verbs can be classified according to three criteria, namely direct inflection, position in the sentence, and finiteness.

First, verbs can either be directly inflected or auxiliary-compounded (see 7.3.1 on directly inflected verbs and 7.3.3 on auxiliary-compounded verbs).

Second, a verb is 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. Final verbs are marked for subject, direct object, indirect object, tense and aspect, while medial verbs are slightly more restricted in terms of their morphology. Of the categories marked on final verbs, medial verbs can be marked for all except future tense and illocutionary force. Tense marking with *-bio* ‘General 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 morphological categories which mark whether or not the subject of the following clause is the same. The same markers also indicate sequentiality or simultaneity of events.

Third, verbs are either finite or non-finite. Any verb marked for subject counts as finite, any verb not marked for subject as non-finite. The traditional criterion for finiteness, namely tense marking, does not work well for Mian because verb forms can lack tense marking. We would not want to claim that such verbs are non-finite, because they function as independent or medial main verbs. Finite verbs are marked for subject, direct object, indirect object, tense, and aspect, whereas non-finite verbs can only be marked for direct object, indirect object and aspect.

7.1.1 Notation conventions for verbs

For ease of reference, I repeat the notation conventions for verbs stated in section 3.2.1. 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 ‘/’; 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. —/ei ‘fly’ without a perfective stem and *kan/—* ‘die’ without an imperfective stem. For trans-aspectual verbs, one stem is given which can be used for perfective and imperfective verb forms; e.g. *fu* ‘cook’.

Obligatory cross-referencing affixes are indicated on verb stems as follows:

- V_{stem} — Verb does not mark either direct or indirect object, e.g. —/un ‘hum, drone’
- $-V_{\text{stem}}$ — Verb obligatorily cross-references its direct object by a prefix (pronominal or classificatory), e.g. *-tem/-teme* ‘see’
- $V_{\text{stem-}}$ Verb obligatorily cross-references its indirect object by a suffix, e.g. *fote-* ‘chase away, rout’
- $-V_{\text{stem-}}$ Verb obligatorily cross-references both its direct object and indirect object, e.g. *-Ø/-Ø-ka-* ‘give’

7.2 Stems and argument marking

7.2.1 Morphology common to final and medial verbs

7.2.1.1 Perfective and imperfective verb stems

Verb 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 [perfective—SF] 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: 60ff) 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 even building a house. This stem can of course be used for punctual situations, which have no internal structure and are thus incompatible with imperfectivity. So, 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, it disregards the duration of the situation. Mian does not show the common correlation of perfective aspect and past time reference, which is stated in the definition above.

The perfective stem can appear in past tense verb forms and also in forms with future time reference, but not in verb forms with present time reference. Although it is quite true that the correlation between the perfective and past time reference is strong in the world’s languages, there are languages which allow perfective aspect in non-past forms, e.g. the perfective future in Russian. Some languages might even be considered to have a perfective present (cf. Dahl 1985: 80-1). Thus, it seems plausible to say that Mian has perfective aspect which allows past and future time reference.

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: 60ff) 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 auxiliary-compounded habitual construction (with the habitual form of the auxiliary *+bina*) which is never used for continuing, non-habitual situations. Figure 6 summarizes the Mian aspectual distinctions.

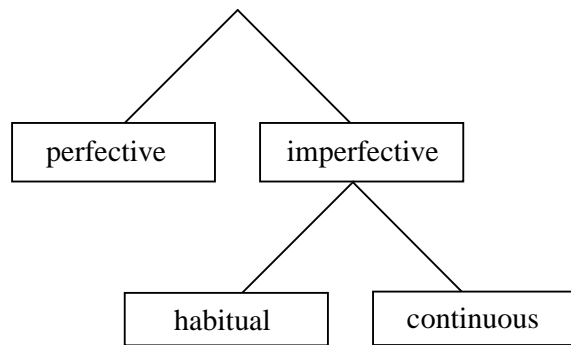


Figure 6: Mian aspectual oppositions (adapted from Comrie 1976)

In terms of formal stem alteration, Mian verb lexemes falls into three main classes:

- 1) Biaspectual verbs, which have formally distinct perfective and imperfective stems.
- 2) Trans-aspectual (or aspect-neutral) verbs, which have formally identical perfective and imperfective stems. Whether such a stem denotes a bounded or an unbounded event can only be determined from aspectual suffixes.
- 3) Defective verbs, which are further subdivided into perfective-only verbs and imperfective-only verbs, each lacking their respective aspectual counterpart.

7.2.1.1.1 Biaspectual verbs: Stem alternation processes

For biaspectual verbs, perfective and imperfective stems are formally distinct. Examples

(1) and (2) illustrate this for *ifa/ifu* ‘serve food’:

(7-1) *ó tataanó ifubobe*
ó tataan=o ifu-b-o=be
 she vegetables=N2 serve_food.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She is serving vegetables’

(7-2) *ó soflitaanó ifanobe*
ó soflitään=o ifa-n-o=be
 she vegetables=N2 serve_food.PFV-PST-3SG.F.SBJ=DECL
 ‘She has (just) served vegetables’

There are three morphological processes that relate perfective and imperfective stems, namely suffixation, apophony, and suppletion (or near-suppletion). In addition to this, aspectual stem alternation can be irregular. The different types of stem alternation are summarized in Table 51. Arrows indicate direction of derivation for suffixation. Suffixes are separated from the stem with a hyphen.

Process	Perfective stem		Imperfective stem	Gloss
Suffixation	<i>fa</i>	→	<i>fa-ka</i>	‘make fire’
	<i>went</i>	→	<i>went-e</i>	‘hear’
	<i>dei-la</i>	←	<i>dei</i>	‘remove hair’
Suffixation to clipped stem	<i>nge-la</i>	←	<i>ngen</i>	‘beg’
Apophony	<i>ifa</i>		<i>ifu</i>	‘serve (food)’
	<i>ge</i>		<i>ga</i>	‘do’
Suppletion	<i>n</i>		<i>bl~bi</i>	‘stay, exist’
	<i>dowon</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>une</i>	‘go’
	<i>n</i>		<i>bi~bl</i>	‘stay, exist’

Table 51: Stem alternation processes

7.2.1.1.1.1 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*.

- (7-3) *é ase fanebe*
é as=e fa-n-e=be
 he fire=SG.N1 make_fire.PFV-PST-3SG.M.SBJ=DECL
 ‘He has made a fire’

- (7-4) *é ase fakabebe*
é as=e faka-b-e=be
 he fire=SG.N1 make_fire.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is making a fire’

Other verbs that follow this pattern are: $-\emptyset/-\emptyset$ -ka- ‘give X to Y’, *ha/haka* ‘break’, *goka/go* ‘cut (skin/meat)’ Verb which optionally mark their imperfective stem with *-ka* are *fuba/fuba(ka)* ‘make a fire’ and *dola/dola(ka)* ‘write’.

The second suffixal stem alternation process adds *-e* to the perfective to form the imperfective stem.

(7-5) *ae, wentebibe*
ae wente-b-i=be
 yes listen.IPFV-IPFV-1SG.SBJ=DECL
 ‘Yes, I am listening’

(7-6) *kéb wengó wentibe*
kéb wěng=o went-∅-i=be
 your.SG.M talk=N2 hear.PFV-PST-1SG.SBJ=DECL
 ‘I have heard/understood what you said’

The only other verb that follows this pattern is: *-tem/-teme* ‘see’.

Next, there are processes in which material is added to the imperfective stem in order to mark the perfective stem; e.g. *-la*:

(7-7) *né minaanó deibibe*
né mināan=o lei-b-i=be
 I whisker=PL.N1 remove_hair.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am shaving’

(7-8) *é minaanó deilaiobe*
é mināan=o leila-n-e=be
 he whisker=PL.N1 remove_hair.PFV-PST-3SG.M.SBJ=DECL
 ‘He has shaved’

Another verbs that follow this pattern is: (*aben*) *gila/gi* ‘laugh’.

In imperfective N-stems (see 7.2.1.2), i.e. those verbs whose imperfective stem ends in /n/, the suffix *-la* attaches to a clipped imperfective stem; e.g. (*-)halila/(-)halin* ‘worry, be concerned about’ and *ngela/ngen* ‘beg’.

On analogy with these, some N-stem verbs require the suffix *-na* to mark the perfective stem. This marker of perfectivity has possibly grammaticalized from the verb stem *na* ‘do’. The imperfective stem is clipped before suffixation:

(7-9) *né naka élé dosuambibe*
né naka élé lob-suan-b-i=be
 I man.M DEM.SG.M SG.MASC.O-hate.IPFV-IPFV-1SG.SBJ=DECL
 ‘(Presently) I hate this man’

(7-10) *né naka élé dosuanaibiobe*
né naka élé lob-suana-Ø-i-bio=be
 I man.M DEM.SG.M SG.MASC.O-hate.PFV-PST-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’, *ngaana/ngaan* ‘sing, call out, shout’, and *hena/hen* ‘search’.

7.2.1.1.1.2 Apophony

Aspectual stem marking by apophony is rare. There seem to be two processes of apophony involved in aspectual stem alteration. The first apophony process changes /u/ in the imperfective into /a/ in the perfective stem.

(7-11) *biemó uninó ifubobe*
bïem=o unĩn=o ifu-b-o=be
 mum=SG.F food=N2 serve.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘Mum is serving the food’

(7-12) *biemó uninó ifanobe*
bïem=o unĩn=o ifa-n-o=be
 mum=SG.F food=N2 serve.PFV-PST-3SG.F.SBJ=DECL
 ‘Mum has served the food’

Other verbs that follow the *ifa/ifu* pattern are: *-ba/-bu* ‘put into’, *-tabba/-tabbu* ‘put onto’, *-tana/-tunu* ‘light (with fire)’, *tana/tunu* ‘comb’; *miba/mibu* ‘close with lid’, *nantana/nantunu* ‘lick’.

The second apophony process changes /a/ in the imperfective into /ɛ/ in the perfective stem:

(7-13) *né funania óló klayamobo gabibe*
né funa-n-i=a óló klayam=o=bo
 I think.PFV-SS.SEQ-1SG.SBJ=MED DEM.N2 very_good=PRD=QUOT

ga-b-i=be
 do.IPFV-IPFV-1SG.SBJ=DECL
 ‘I think (lit. ‘am thinking’) this is very good’

- (7-14) *Sobininge he gesebe*
sobining=e he ge-s-e=be
 PN=SG.M moaning_sound do.PFV-RPST-3SG.M.SBJ=DECL
 =====moan=====
 ‘Sobining moaned’ [Sobining]

This process only applies to the function verb *ge/ga-gena* ‘do’.

7.2.1.1.1.3 Suppletion

A few verbs have suppletive imperfective and perfective stems, e.g. *dowon/wen* ‘eat’, *-ma/-san* ‘put, plant’, and *baa/o* ‘say, tell’.

- (7-15) *né imene wembibe*
né imen=e wen-b-i=be
 I taro=SG.N1 eat.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am eating a taro’

- (7-16) *né sintalo imen hómóno downisobe*
né sintalo imen homôn=o lowon-Ø-i-so=be
 I yesterday taro much=PL.N1 eat.PFV-PST-1SG.SBJ-HPST=DECL
 ‘Yesterday, I ate much taro’

7.2.1.1.2 Irregular aspectual stem alternation

Three verbs show irregular aspectual stem alternations. These are ‘come’, ‘go’ and the existential verb. The irregularity also extends to the fact that these three verbs can have more than one stem in the perfective and the imperfective. In this section I only discuss ‘come’ and ‘go’. The inflectional possibilities and stem alternations of the existential verb are described in section 7.3.2.

7.2.1.1.2.1 *tl~te/tle~te* ‘come’

For final verbs, there are the perfective stems *tl* and *te*. The former is used for all tenses except the Remote past (7-18) and the Non-Hodiernal Past (7-19), for which *te* must be employed. Compare:

- (7-17) *tlibiobe*
tl-∅-i-bio=be
 come.PFV-PST-1SG-GPST=DECL
 ‘I came’
- (7-18) *tesioibe*
te-s-io=be
 come.PFV-RPST-2/3PL.AN.SBJ=DECL
 ‘they came (in the remote past)’
- (7-19) *tebiibe*
te-b^h-i=be
 come.PFV-NHODPST-1SG.SBJ=DECL
 ‘I came (but not today)’

In medial verbs, *tl* is used with *-∅* ‘DS.Seq’ following. *Te* is used with following *-s* ‘DS.Seq’ and *-n* ‘SS.Seq’. The stem *tlaan* is employed to indicate SS and sequentiality of events.

All hortative forms require *tl*, except in the 1st and 2nd singular: *te+n-an=o* [come.PFV+AUX.PFV-1SG.SBJ.HORT=HORT] ‘I should come!’ and *te-l=e* [come.PFV-2SG.SBJ.HORT=HORT].

The imperfective stem *te* ‘come (Ipfv)’ is used for both medial and final verbs.

The perfective verbal noun is *tenam-in* ‘come (Pfv, verbal noun)’.

In addition to that, ‘come’ has a distinct iterative stem *tle*. Consider the following examples:

- (7-20) *balue tlebe*
balu=e *tl-∅-e=be*
 plane=SG.N1 come.PFV-PST-SG.N1.SBJ=DECL
 ‘The plane has come’
- (7-21) *balue tebebe*
balu=e *te-b-e=be*
 plane=SG.N1 come-IPFV-SG.N1.SBJ=DECL
 ‘The plane is coming’

- (7-22) *balue tlebebe*
balu=e *tle-b-e=be*
 plane=SG.N1 come.ITER-IPFV-SG.N1.SBJ=DECL
 ‘The plane is coming (again and again)’

With (7-20) the speaker indicates that the plane has arrived, i.e. that it has either landed on the airstrip or that its imminent landing is obvious because that plane can be seen or heard. Example (7-21) expresses that the plane is on its way or that it is approaching the airstrip³⁵. These two examples also make clear 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 express the situation, e.g. (7-20) and (7-21) can both be said if the plane is still in the air.

Finally, (7-22) 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 (7-23) and (7-24):

- (7-23) *ileme tlebebe*
ilem=e *tle-b-e=be*
 blood=SG.N1 come.ITER-IPFV-SG.N1.SBJ=DECL
 ‘Drops of blood are coming (again and again) (i.e. the blood is dripping from a cut)’

- (7-24) *kóbó keté betelanebmole bebualiei tlemabiobe*
kóbó *kět=e* *betla-n-eb=mole*
 you.SG.M container=SG.N1 open.PFV-PST-2SG.SBJ=if

bebuali=ei *tle-amab-io=be*
 butterfly=PL.AN come.ITER-FUT.NANPL.SBJ-2/3PL.AN.SBJ=DECL
 ‘If you open the container, the butterflies will be coming (out)’

The iterative stem is also used in the imperfective verbal noun *tlem-in* ‘come (Ipfv, verbal noun)’ and in auxiliary compounded verb forms, for example in the habitual:

³⁵ The Tok Pisin equivalent would be *Balus i wok long kam* ‘The plane is coming’ (Lit. The plane is working at coming).

- (7-25) *é amityé tlebinabebe*
é amityé tle+bina-b-e=be
 he always come.ITER+AUX.HAB-IPFV-3SG.M.SBJ=DECL
 ‘He always comes’

7.2.1.1.2.2 *un~on/une* ‘go’

For final verbs, there are the perfective stems *un* and *on*. The former is used for all tenses except the Remote past (7-27) and the Non-Hodiernal Past (7-28), for which *on* must be employed. Compare:

- (7-26) *unibe*
un-∅-i=be
 go.PFV-PST-1SG=DECL
 ‘I went’
- (7-27) *onsiobe*
on-s-io=be
 go.PFV-RPST-2/3PL.AN.SBJ=DECL
 ‘they went (in the remote past)’
- (7-28) *ombíbe*
on-b^H-i=be
 go.PFV-NHODPST-1SG.SBJ=DECL
 ‘I went (but not today)’

In medial verbs, *un* with following *-∅* ‘DS.Seq’ and *on* with following *-s* ‘DS.Seq’. The stem *unaan* is employed to indicate SS and sequentiality of events.

All hortative forms require *un*, except in the 2nd singular: *on=e* [go.PFV=HORT] ‘You should go!’.

The imperfective stem *une* ‘go (Ipfv)’ is used for both medial and final verbs.

The perfective verbal noun is *onam-in* ‘go (Pfv, verbal noun)’ the imperfective verbal noun *unem-in* ‘go (Ipfv, verbal noun)’.

7.2.1.1.3 Trans-aspectual verbs

For trans-aspectual (or aspect-neutral) verbs, stems are formally identical, i.e. the contrast between perfective and imperfective aspect is not shown by the stem. Consider the following two examples:

(7-29) *ó binó webobe*
ó bĩn=o we-b-o=be
 she floor=N2 sweep-IPFV-3SG.F.SBJ=DECL
 ‘She is sweeping the floor’

(7-30) *ó binó wenamabobe*
ó bĩn=o we+n-amab-o=be
 she floor=N2 sweep+AUX.PFV.FUT.NANPL.SBJ-3SG.F.SBJ=DECL
 ‘She will sweep the floor’

In both examples the stem is *we* ‘sweep’. Trans-aspectual stems can be used in perfective and imperfective verb forms, e.g. they can be combined with imperfective aspect morphology, such as *-b* ‘Imperfective’ in (7-29), and also with the perfective auxiliary *+n* (7-30), which can only co-occur with perfective or trans-aspectual verb stems, but not with imperfective stems.

Henceforth, any statement that specifies a rule for perfective stems also applies to all trans-aspectual stems and all statements specifying rules for imperfective stems likewise applies to all trans-aspectual stems.

Table 52 gives a list of common trans-aspectual verbs.

Verb stem	Gloss
<i>(aaie) ei</i>	‘be flooded with water; impound water’
<i>bafu</i>	‘boil’
<i>bali</i>	‘bear (fruit)’
<i>bu</i>	‘hunt’
<i>(fal) ga</i>	‘put/cook in leaf oven’
<i>fu</i>	‘cook; smoke’
<i>gaala</i>	‘tear down, destroy (house)’
<i>giba</i>	‘care for, feed, rear (animal)’
<i>gibbu</i>	‘be wet’
<i>gwi</i>	‘use black magic’
<i>haa</i>	‘weave (stringbag)’
<i>heba</i>	‘lean on’
<i>heitda</i>	‘shake (hand)’
<i>ina</i>	‘do thus’
<i>ke</i>	‘make, do; work’
<i>ki</i>	‘align, measure; read’
<i>kla</i>	‘complete, fix’
<i>kou</i>	‘fuck’
<i>miba</i>	‘close with lid’
<i>na</i>	‘make, do’

<i>singa</i>	‘pour’
<i>tubu</i>	‘pour salt onto’
<i>-di</i>	‘fetch’
<i>(taal) -gi</i>	‘lead (on leash)’
<i>-li</i>	‘plant’
<i>-ski</i>	‘turn’
<i>wa</i>	‘swim’
<i>wi</i>	‘cut (wood)’
<i>yo</i>	‘initiate, beget’

Table 52: Common trans-aspectual verbs

7.2.1.1.4 Defective verbs

Defective verbs either lack the imperfective or the perfective stem. Table 53 lists perfective-only verbs:

Verb stem	Meaning
<i>bina/—</i>	‘shoot’
<i>-eb/—</i>	‘take’
<i>-fá/—</i>	‘lift’
<i>-sileb/—</i>	‘follow (directly)’
<i>unabu/—</i>	‘create a garden’
<i>kan/—</i>	‘die’
<i>gaise/—</i>	‘pass them’
<i>-bia/—</i>	‘throw’
<i>-fu/—</i>	‘grab’
<i>unabua/—</i>	‘dig a hole’

Table 53: Perfective-only verbs

Most perfective-only stems can be compounded with an auxiliary to express unbounded events.

A more detailed discussion of auxiliary compounding with perfective stems is found in section 7.3.4.2.

Imperfective-only verbs lack a perfective stem, for instance, *be* ‘be walking’ is always an imperfective.

(7-31) *inabé yé bebebe*
inăb=e yé be-b-e=be

snake=SG.M there walk.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘A snake is moving along there’ [Observed]

Table 54 lists imperfective-only verbs.

Verb stem	Gloss
—/be	‘be walking, keep V-ing’
—/ei	‘fly’
—/sasan	‘moan’
—/un	‘hum, drone’
—/afen	‘be alive’
—/haa	‘roam’

Table 54: Imperfective-only verbs

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.

7.2.1.2 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, i.e. whether it is biaspectual, etc. The four conjugation classes are:

- Stems ending in a vowel (V-stems)
- Perfective stems ending in a consonant (C-stems)
- Imperfective stems ending in /n/ (N-stems)
- Compounds with the existential verb (X-compounds)

The class of V-stems is by far the largest. It contains all verb stems which end in a vowel; e.g. *baa* ‘say (Perfective)’ and *fu* ‘cook (Trans-aspectual)’, *ei* ‘fly (Defective, Imperfective-only)’. These are inflected regularly.

The class of C-stems is small. It contains only perfective stems which end in a consonant; e.g. *dowon* ‘eat (Pfv)’, *-tem* ‘see (Pfv)’, etc. C-stems have a distinct future stem which the other classes lack; e.g. *dowonaa* ‘eat (Pfv, future stem)’ and *-temaa* ‘see (Pfv, future stem)’.

The class of N-stems is also small. It contains only imperfective stems which end in /n/; e.g. *hen* ‘search (Ipfv)’ and *ngen* ‘beg (Ipfv)’. All N-stems form their perfective stems by suffixing either *-na* or *-la* to the clipped imperfective stem; e.g. *hena* ‘search (Pfv)’ and *ngela* ‘beg (Pfv)’. N-stems are directly inflected for future tense and in inchoative forms.

The class of X-compounds has two subclasses:

The first subclass comprises those defective (imperfective-only) verbs which always have to be compounded with an auxiliary in order to be inflected, e.g. —/*haa* ‘roam’ and —/*afen* ‘be alive’. Note that this class of verbs is a subclass of the imperfective-only verbs listed in Table 54 above. Compare an X-compound, for which the auxiliary has to be inflected for imperfective aspect (7-32), with a verb which must be directly inflected for imperfective aspect (7-33):

(7-32) *né sesa háablibe*
né sesă haa+bl-Ø-i=be
 I bush roam.IPFV+AUX.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am roaming the bush’

(7-33) *umbebe*
um-b-e=be
 hum.IPFV-IPFV-SG.N1.SBJ=DECL
 ‘it is humming’

My analysis of *-b* ‘Imperfective’ in (7-33) as an affix as opposed to *bl* in (7-32), which I analyze as an auxiliary, is prompted by the fact that the former is exclusively a bound form while the auxiliary form can appear as an independent verb.

The second subclass of X-compounds consists of defective (perfective-only) verbs which can be directly inflected to form perfective verb forms, i.e. forms which denote bounded events, e.g.:

(7-34) *obo obtoulebnota*
ob-o
 SG.RESID.O-pick_up.PFV

ob-touleb-n-o=ta
 SG.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...’
 [Crows]

The imperfective can only be expressed with the auxiliary:

- (7-35) *obtoulebbiobe*
ob-touleb+bi-Ø-o=be
 SG.RESID.O-take_into_arms.PFV+AUX.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She is carrying it (i.e. an object belonging to the residue class) in her arms’
 (Lit. ‘she took it into her arms and is staying’)

Perfective-only X-compounds are: *maa/–* ‘stand up’, *-mou/–* ‘put on one’s shoulders’, *-eb/–* ‘take’, *-sileb/–* ‘follow’, and *-touleb/–* ‘take into arms’. The reader will find a more detailed discussion of auxiliary compounding with perfective stems in section 7.3.4.2.

7.2.1.3 Argument marking

7.2.1.3.1 Pronominal affixes

In the Mian verb we have to distinguish pronominal argument affixes from verbal classificatory prefixes. Argument affixes encode the subject and the indirect object (suffixal) and for five verbs the direct object (prefixal). Verbal 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).

I analyze 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 NPs are optional. A verb with its argument affixes constitutes a grammatically complete utterance. Compare (7-36) with overt arguments and (7-37) without overt subject and direct object:

- (7-36) *né kóbó katemebibe*
né kóbó ka-teme-b-i=be
 I you.SG.M 2SG.DO-see.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am looking at you’

- (7-37) *katemebibe*
ka-teme-b-i=be
 2SG.DO-see.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am looking at you’

The same holds for indirect objects. Compare (7-38) and (7-39):

(7-38) *né nakae daabanamabibe*

né naka=e

I man=SG.M

laa-b-a+n-amab-i=be

help-BEN.PFV-3SG.M.IO.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL

'I will help the man'

(7-39) *daabanamabibe*

laa-b-a+n-amab-i=be

help-BEN.PFV-3SG.M.IO.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL

'I will help him'

Corbett (2006: 103ff) compares agreement markers and pronominal affixes. On this issue also see Evans (2002), Mithun (2003), and Corbett (2003). Pronominal affixes typically encode 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 encode all core arguments (i.e. all subjects and indirect objects and direct objects for five verbs) and they do have some degree of lexical meaning. Direct and indirect object argument affixes are an obligatory part of the verbal citation form. They cannot be omitted: thus, *ka-tememin* 'see you (IPFV.VN)', and not **tememin* 'see'; *daa-b-a-namin* 'help him (PFV.VN)', and not **daanamin* 'help'. This is not what we would expect if the Mian argument affixes were pure agreement markers.

The arguments provided show that the Mian argument affixes are not instances of pure agreement. 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 3rd person) gender are essential to the construal of overt NPs with their cross-referencing affixes. Hence, pronominal affixes show agreement in the service of construal.

7.2.1.3.2 Subject marking

All finite verbs obligatorily have a pronominal suffix which agrees with the subject in the categories person, number, and gender. Having subject marking is the defining feature of finite verbs in Mian.

Subject marking in final verbs differs from subject marking in medial verbs in that there is some marker allomorphy involved which subject markers in medial verbs lack.

Table 55 gives the forms of the subject marker including the allomorphs (which are only found in final verbs). Depending on the position of the suffix within the verb and the phonological context, there are three—or for first person plural four—alternants for those subject markers which end in /b/. Grey areas in the table indicate the neutralization of a gender contrast.³⁶

Person	Number	Gender	Subject marker (Final verbs)	Subject marker (Medial verbs)
1			-i	-i
2			-eo ~ -ebo ~ -eb	-eb
3	Singular	Male	-e	-e
		Female	-o	-o
		Neuter 1	-e	-e
	Plural	Neuter 1	-o	-o
Neuter 2		-o	-o	
1 excl/incl			-uo ~ -obo ~ -ob ~ -bio	-ob
2/3			-io ~ -ibo ~ -ib	-ib

Table 55: Subject markers (suffixal)

The choice of subject marker alternants is determined by the position of the suffix within the verb and on its phonological environment, not by the category of the formative preceding or following the subject marker.

The first alternant 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.

³⁶ The gender contrast, which exists in the second person singular in all pronoun series, is neutralized in the subject marker.

- (7-40) *óbó uninó ifubeobe/*ifubebbe*
óbó unin=o ifu-b-eo=be
 you.SG.F food=N2 serve.IPFV-IPFV-2SG.F.SBJ=DECL
 ‘You (f) are serving food’

The function of the subject marker alternation is solely to avoid a clash of two /b/ 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 (7-45) below.

In order to avoid *b*-clash, the second alternant can be used but only in forms either inflected with *-n-∅* ‘past’ or *-(V)m* ‘immediate future’:

- (7-41) *kóbó uninó ifanebobe*
kóbó unin=o ifa-n-ebo=be
 you.SG.M food=N2 serve.PFV-PST-2SG.SBJ=DECL
 ‘You (m) have served food’

Instead of *ifanebobe*, one can use *ifaneobe* with the first subject marker alternant. Subject marker alternation is independent of semantics. In forms with the same meaning, the marker is subject to alteration depending on its position within the string of verbal suffixes and the phonological context only. Compare:

- (7-42) *í ímaye goniobe*
í í-maye go-n-io=be
 they they-REFL cut_skin-PST-2/3PL.AN.SBJ=DECL
 ‘They have cut themselves’

- (7-43) *í ímaye gonibobe*
í í-maye go-n-ibo=be
 they they-REFL cut_skin-PST-2/3PL.AN.SBJ=DECL
 ‘They have cut themselves’

Whenever the subject marker is followed by another verbal suffix, e.g. a tense suffix in the post-subject slot, as in (7-44) or the negative suffix (7-45), the third alternant must be used:

- (7-44) *kóbó uninó ifanebsobe*
kóbó unin=o ifa-n-eb-so=be
 you.SG.M food=N2 serve.PFV-PST-2SG.SBJ-HPST=DECL
 ‘You (m) served food yesterday’

- (7-45) *óbó uninómo ifubebbabe*
óbó unĩn=o=mo ifu-b-eb-ba=be
 you.SG.F food=N2=NEG serve.IPFV-IPFV-2SG.SBJ-NEG=DECL
 ‘You (f) are not serving food’

The same applies if the subject marker 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 (7-46):

- (7-46) *klayam tleba?*
klayam tl-∅-eb=a
 very_well come.PFV-PST-2SG.SBJ=PQ
 ‘Have you arrived safe and sound?’

The first alternant also appears in all finite verbs in which the subject marker is the last morpheme, for example, before conjunctions like *kesoa* ‘so, that’s why’, *(o)dimó* ‘at that time’, *otáne* ‘but’, *mole* ‘if’, etc., as in (7-47):

- (7-47) *amíte tala unebib kesoa*
amít=e tala une-b-ib kesoa
 opening=SG.N1 inside go.IPFV-DS.SIM-2/3PL.AN.SBJ so
 ‘They were entering the opening, so he...’ [Dafinau]

The issue arises here as to whether /o/ in the second alternant; *-ebo* ‘2SG.SBJ’ is really part of the subject marker. After all, it seems to occupy the same slot as the hesternal past suffix *-so* in the verb form *infanebsobe* ‘yesterday you served food’ in (7-44) and might therefore be another tense suffix in the post-subject slot. Under negation, however, it becomes 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:

- (7-48) *ifa-n-eb-ba=be/*ifanebobabe*
 serve_food.PFV-PST-2SG.SBJ-NEG=DECL
 ‘you did not serve food’
- (7-49) *ifa-n-eb-so-ba=be*
 serve_food.PFV-PST-2SG.SBJ-HPST-NEG=DECL
 ‘you did not serve food’

The subject marker *-bio* in the 1st person plural is only chosen over *-uo* if the subject marker follows the future marker *-amab/-omab*. It is never used when following any of the other tense and aspect markers in the pre-subject slot, such as *-b* ‘imperfective’.

(7-50) *ní uninó downomabbibe*
ní unĩn=o lowon-omab-bio=be
 we.EXCL food=N2 eat.PFV-FUT.AN.PL.SBJ-1PL.SBJ=DECL
 ‘We want to/will eat’

Although the 1st plural future in *-bio* is the usual form in contemporary Mian, old speakers still use the first alternant in *-uo*. The following example (7-51) is from an account of how spirit houses were built in traditional society. The speaker is well over 80 years old:

(7-51) *tl-omab-uo=be*
 come.PFV-FUT.AN.PL.SBJ-1PL.SBJ=DECL
 ‘we will come’ [Building of a Spirit house]

In medial verbs, only the first alternant of the subject marker is ever used. This can be explained phonologically. The second alternant only 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 marker is never triggered.

7.2.1.3.3 Direct object marking

In contrast to subject marking, which is suffixal, object marking makes exclusive use of prefixes. While subject marking is obligatory in all finite verbs, marking of the direct object is restricted to a subset of the verbal lexicon. Furthermore, direct object marking is formally more heterogenous than subject marking. Mian distinguishes three types:

- (a) Five verbs take an obligatory pronominal prefix which agrees in person, number, and (in the 3rd person) gender with the direct object. These verbs are:

- <i>fu</i> /—	‘grab, hold’
- <i>lo</i> /—	‘hit, kill’
- <i>na</i> /—	‘hit, kill’
- <i>tem</i> /- <i>teme</i>	‘see’
- <i>tama</i> /—	‘bite’

Although the obligatory direct object markers these verbs take are subject to some irregularities (see below) and a lexical feature of these verbs, it is conspicuous that the verbs of this class—with the exception of ‘see’—are high in transitivity (cf. Hopper and Thompson 1980).

(b) A number of perfective- only “cut and break”-verbs indicate the number of the (inanimate) direct object through stem apophony on an absolutive basis.

(c) A sizeable portion of the verbs require a verbal classificatory prefix; e.g. *dob-bu*/— ‘bury (a male)’ or *ol-o*/— ‘take (plural inanimate objects)’. These verbal classificatory prefixes are formally completely distinct from the direct object argument prefixes used for the verbs under (a) and the classification system relevant for these prefixes cross-cuts the gender system (see section 5.9).

In the case of the verbs given under (a), markers always agree in person and number with the direct object. In the 3rd person they also agree in gender. Table 56 gives the forms of the direct object marking prefixes for all verbs in (a) above except *-tama*/— ‘bite’ (see below). Grey areas indicate the neutralization of a gender contrast.³⁷

Direct object			Direct object marking prefix
Person	Number	Gender	
1	Singular		<i>na</i> -
2			<i>ka</i> -
3	Singular	Male	<i>a</i> -
		Female	<i>wa</i> -
		Neuter 1	<i>a</i> -
	Plural	Neuter 1	<i>wa</i> -
		Neuter 2	<i>wa</i> -

³⁷ The gender contrast which exists in the second person singular in the personal and the possessive pronoun is neutralized in the object marker.

Animate plural			ya-
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Table 56: Direct object markers (prefixal)

In contrast to the subject marker, the object marker shows a lesser degree of formal differentiation for the animate plural forms. Whereas the subject marker 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 object marker makes no distinctions whatsoever in the animate plural. There is just one form for all persons.

Direct object marking by argument prefix is characterized by the following slight, albeit unpredictable irregularities. While *-na/—* ‘hit, kill’ can take all the prefixes set out in Table 7, the animate plural form is usually *i-* instead of *ya-*. Also the vowel in the prefix is most commonly / ϵ / if the prefix starts with a consonant: *ne-na* ‘hit me’, *ke-na* ‘hit you’, *we-na* ‘hit her’, and *ye-na ~ i-na* ‘hit us/you/them’; but *a-na* (rather than **e-na*) ‘hit him’.

Furthermore, *-tama/—* ‘bite’ requires the direct object marker to end in /n/; thus *nan-tama* (but **na-tama*) ‘bite me’, *kan-tama* ‘bite you’, *an-tama* ‘bite him’, *wan-tama* ‘bite her’, and *yan-tama* ‘bite us/you/them’. That this allophony is not a phonologically determined phenomenon can be seen from: *na-tem* (but **nan-tem*) ‘see me’, *ka-tem* ‘see you’, etc.

Taking into account the fact that direct object marking by pronominal prefix is restricted to five verbs and that, in this small class, markers show unpredictable irregularities one would hardly want to call direct object marking by pronominal prefix productive in Mian. Rather this is a residual phenomenon.

The verbs given under (b) above are perfective “cut-and-break” verbs which obligatorily agree with their direct objects number by stem apophony. All of these verbs are compounds consisting of a cutting verb, e.g. *wa* ‘cut’, and a semantically more general verb, e.g. *lo* ‘hit’ or *tlaa* ‘remove’; for example *walo* ‘cut (singular object)’ in (7-52) and *welo* ‘cut (plural object)’ in (7-53). The variation is always between /a/ for a singular object and / ϵ / for a plural object.

(7-52) *né dábé walonibe*
né láb=e wa+lo-n-i=be
 I seed=SG.N1 cut.SG.O+hit.PFV-PST-1SG.SBJ=DECL
 'I have cut off a seed'

(7-53) *né dábó welonibe*
né láb=o we+lo-n-i=be
 I seed=PL.N1 cut.PL.O+hit.PFV-PST-1SG.SBJ=DECL
 'I have cut off seeds'

The number of verbs which obligatorily agree with their direct object in number only is quite small and semantically very homogenous. Further examples of this class are: *halo* 'cut, break (singular wooden object)' and *helo* 'cut, break (plural wooden object)', *batlaa* 'break, tear apart (singular vine, leaf, bark)' and *betlaa* 'break, tear apart (plural vine, leaf, bark)'.
 If a verb which indicates the number of its direct object by stem apophony is an ambitransitive verb, the object of the transitively used verb becomes the subject of the intransitively used verb, as in (7-54):

(7-54) *ase halosea*
as=e ha+lo-s-e=a
 tree=SG.N1 break.SG.SBJ+hit.PFV-DS.SEQ-SG.N1.SBJ=MED
 'The tree broke (down) and then someone...' [Flood]

7.2.1.3.4 Indirect object marking and the applicative *-b ~ -s / -∅*

Indirect object markers are always preceded by the benefactive applicative. Like for many verb stems there is a perfective-imperfective distinction in the applicative. In the perfective, there are two allomorphs *-b* and *-s*, in the imperfective the applicative is zero. Allomorphy in the perfective is mainly phonologically conditioned. The form is *-s* when following the diphthongs /ai/ and /ei/ and preceding another vowel, according to the following rule:

BEN *-b* → /s/ / ai, ei_V
 → /b/ / elsewhere

Examples are:

wai-s-a [wait.PFV-BEN.PFV-3SG.M.IO.PFV] ‘wait for him (Pfv verb stem)’
gai-s-e [pass.PFV-BEN.PFV-PL.AN.IO.PFV] ‘pass them (Pfv verb stem)’

However, allomorphy in the applicative cannot be fully explained phonologically. After the benefactive stem *dei* ‘leave’ (of the verb *de* ‘desist’) the applicative always is *-b* never *-s* although this verb conforms to the rule specified above.

Like subject marking, indirect object marking is suffixal and it is likewise obligatory, i.e. any indirect object which belongs to the verb’s argument structure (whether inherent or derived, e.g. benefactive or possessor) must be marked on the verb.

Unlike subject and direct object marking, however, indirect object marking is sensitive to whether the marking suffix occurs in imperfective or perfective verb forms (see below). Table 57 gives the forms of the indirect object marking prefixes. Grey areas indicate the neutralization of a gender contrast.

Indirect object			Indirect object marker (PFV forms)	Indirect object marker (IPFV forms)
Person	Number	Gender		
1	Singular		<i>-ne</i>	<i>-ne</i>
2			<i>-ke</i>	<i>-ke</i>
3	Singular	Male	<i>-a</i>	<i>-ha</i>
		Female	<i>-o</i>	<i>-we</i>
		Neuter 1	<i>-a</i>	<i>-ha</i>
	Plural	Neuter 1	<i>-o</i>	<i>-we</i>
Neuter 2		<i>-o</i>	<i>-we</i>	
Animate plural	Plural		<i>-e</i>	<i>-ye</i>

Table 57: Indirect object markers (suffixal)

The main difference between the two series of indirect object markers is that the ones in the left column in Table 57 occur in the perfective while the forms in the right column occur in the imperfective. Both series can be used with trans-aspectual stems. The perfective set of indirect object markers always has to be introduced as an argument by the benefactive applicative *-b* ~ *-s*. In the imperfective the applicative is zero.

The examples (7-55) in illustrate how the forms of the applicative and the indirect object suffix depend on stem aspect:

- (7-55) a. *ó uninó ifabenobe*
 ó unĩn=o ifa-b-e-n-o=be
 she food=N2 serve.PFV-BEN.PFV-PL.AN.IO.PFV-PST-3SG.F.SBJ=DECL
 ‘she has served food for us’
- b. *ó uninó ifuyebobe*
 ó unĩn=o ifu-Ø-ye-b-o=be
 she food=N2 serve.IPFV-BEN.IPFV-PL.AN.IO.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘she is serving food for us’

If a verb stem is trans-aspectual, both series of indirect object markers are available, but the choice restricts the possibilities of subsequent tense and aspect marking. For example *fuyebobe* in (7-56) is marked as ‘Imperfective’ in the aspect slot. The Past marker *-n* in this position is impossible, thus **fuyenobe*. Although the stem *fu* ‘cook’ itself is trans-aspectual, affixation of the imperfective series of the indirect object suffixes marks the verb form as imperfective and *-n* ‘Past’ cannot be directly suffixed to imperfectives (see 7.3.1.1.1).

- (7-56) a. *ó imeno fubenobe*
 ó imen=o fu-b-e-n-o=be
 she taro=PL.N1 cook-BEN.PFV-PL.AN.IO.PFV-PST-3SG.F.SBJ=DECL
 ‘she has cooked taro for us’
- b. *ó imeno fuyebobe*
 ó imen=o fu-Ø-ye-b-o=be
 she taro=PL.N1 cook-BEN.IPFV-PL.AN.IO.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘she is cooking taro for us’

The zero root ‘give’ is regularly inflected for indirect object with the markers from Table 57. The verb in (7-57) has an epenthetic /u/ which breaks up the disallowed consonant cluster **/mbk/*:

- (7-57) *né monio omubkenamabibe*
 né moni=o
 I money=N2
- om-Ø-u-b-ke+n-amab-i=be*
 SG.FEM.O-give.PFV-EP-BEN.PFV-2SG.IO.PFV+AUX.PFV-FUT.NANPL.SBJ-
 1SG.SBJ=DECL
 ‘I will give you the money’ [Observed]

In forms of the imperfective stem of ‘give’ *-Ø-ka-* (i.e. zero-stem plus imperfective *-ka*) impermissible consonant clusters do not occur:

(7-58) *í blatiko dokayebinabiobe*
í blatik=o
 they plastic=N2

lol-Ø-ka-Ø-ye+bina-b-io=be

PL.FEM.O-give-IPFV-BEN.IPFV-PL.AN.IO.IPFV+AUX.HAB-IPFV-2/3PL.AN.SBJ=DECL
 ‘They (habitually) give vomit bags to us’

The verb ‘give’ has an alternative series of indirect object markers which can be used with the perfective stem *-Ø-* only. These are given in Table 58. Grey areas indicate the neutralization of a gender contrast.

Indirect object			Alternative set of indirect object marker for <i>-Ø-</i> ‘give (Pfv)’
Person	Number	Gender	
1	Singular		<i>-n</i>
2			<i>-kl</i>
3		Male	<i>-al</i>
		Female	<i>-ul</i>
Animate plural	Plural		<i>-i ~ -y</i>

Table 58: Alternative perfective series of indirect object suffixes for *-Ø-* ‘give’

Although the alternative series of indirect object markers can only be used with the perfective stem, they attach directly to the stem and never involve the benefactive applicative *-b*. Apparently, there is no meaning difference between (7-57) and (7-59):

(7-59) *né monio omklamabibe*
né moni=o om-Ø-kl-amab-i=be
 I money=N2 SG.FEM.O-give.PFV-2SG.IO.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will give you the money’

Indirect objects which take the semantic role of recipient in the case of ‘give’ are always animate. Examples in which the recipient role of ‘give’ is filled by an inanimate noun are unattested.

- (7-63) *é ase febonebe*
é as=e fe-b-o-n-e=be
 he fire=SG.N1 make_fire.PFV.BEN-BEN.PFV-3SG.F.IO.PFV-PST-3SG.M.SBJ=DECL
 ‘He has made a fire for her’

7.2.1.3.7 U-augmented benefactive stems

In a few perfective verb stems, all of which end in /a/, e.g. *al tlia* ‘be angry’, *-na* ‘hit; kill’, and *ha* ‘break’, the benefactive applicative *-b* has to attach to the stem augmented by /u/:

- (7-64) *é no snuke anautnenebe*
é no snuk=e
 he rodent rat=SG.M

a-nau-b-ne-n-e=be
 3SG.M.O-kill.PFV.BEN-BEN.PFV-1SG.IO-PST-3SG.M.SBJ=DECL
 ‘He has killed the rat for me’

This process is unpredictable, i.e. it does not apply to all perfective stems ending in /a/. For example, *-a* ‘leave, let’ does not have a u-augmented stem when applicativized. Moreover, this process is not phonological, because suffixation of the applicative *-b* to the non-augmented stem would not violate any phonotactic rules of the language. Hence, I assume that the three verbs listed above have a lexically specified u-augmented benefactive stem.

7.2.1.3.8 /U/-epenthesis

Perfective C-stems require an epenthetic /u/ to appear between the stem and the applicative *-b*. /u/ is always present when *-b* would otherwise attach to a morpheme ending in a consonant. Such a situation arises only when the stem itself ends in a consonant (e.g. in the stems *un-u-b* ‘go for’, *went-u-b* ‘hear for’ and *dowon-u-b* ‘eat for’), as in (7-65), or when the stem is zero and the prefix ends in a consonant (in forms of the zero root ‘give’), as in (7-66):

(7-65) *é Banimo unubkenamabebe*
é banimo
 he PN

un-u-b-ke+n-amab-e=be
 go.PFV-EP-BEN.PFV-2SG.IO.PFV+AUX.PFV-FUT.NANPL.SBJ-3SG.M.SBJ=DECL
 ‘He will go to Vanimo for you’

(7-66) *monio omubkenamabibe*
moni=o
 money=N2

om-Ø-u-b-ke+n-amab-i=be
 SG.FEM.O-give.PFV-EP-BEN.PFV-2SG.IO.PFV+AUX.PFV-FUT.NANPL.SBJ-
 1SG.SBJ=DECL
 ‘I will give you the money’

It seems quite straightforward that /u/ in each case breaks up the illicit consonant clusters */nbk/ and */mbk/, respectively. However, /u/ is also present in other benefactive forms of ‘go’ and ‘give’, even if the suffixation of the applicative and the indirect object marker would not create phonotactically illicit clusters:

(7-67) *né Banimo unubanamabibe*
né banimo
 I PN

un-u-b-a+n-amab-i=be
 go.PFV-EP-BEN.PFV-3SG.M.IO.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will go to Vanimo for him’

(7-68) *monio omubanamabibe*
moni=o
 money=N2

om-Ø-u-b-a+n-amab-i=be
 SG.FEM.O-give.PFV-EP-BEN.PFV-3SG.M.IO.PFV+AUX.PFV-FUT.NANPL.SBJ-
 1SG.SBJ=DECL
 ‘I will give him the money’

There are no phonotactic reasons which rule out forms like [ɔmbanamaβiβɛ]. Yet, this form is unattested. The correct form is [ɔmuβanamaβiβɛ]. I assume that /u/ in benefactive forms of C-stems originally appeared in order to break up illicit consonant clusters and then was extended to all forms of benefactive paradigms.

Finally, epenthesis of /u/ is also necessary if the verb stem *lo* ‘hit, kill’ is applicativized with *-b*. This verb is always clipped to *l* in benefactive forms and compounds, thus effectively becoming a C-stem:

- (7-69) *é aso helubenebe*
é as=o
 he wood=PL.N1

he+l(o)-u-b-e-n-e=be
 cut.PL.O+hit.PFV-EP-BEN.PFV-PL.AN.IO.PFV-PST-3SG.M.SBJ=DECL
 ‘He has cut a lot of wood for us/you (pl)/them’

7.2.1.3.9 The imperfective series of the indirect object marker

The imperfective series of the indirect object marker is suffixed to imperfective and trans-aspectual stems directly. There are no morphological changes in the stem. The benefactive applicative is usually zero (but see below). Compare (7-70) without indirect object and (7-71) with indirect object:

- (7-70) *é ase fakabebe*
é as=e faka-b-e=be
 he fire=SG.N1 make_fire.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is making a fire’
- (7-71) *é ase fakawebebe*
é as=e faka-Ø-we-b-e=be
 he fire=SG.N1 make_fire.IPFV-BEN.IPFV-3SG.F.IO.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is making a fire for her’

Imperfective verb forms inflected for indirect object are generally not overtly applicativized by *-b*, as the above examples illustrate. However, some speakers extend the use of the applicative to imperfective verbs forms which are inflected for a first or second person singular indirect object. 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 applicativized forms *ase fakatnebebe* and *ase fakabkebebe* with the same meanings, respectively. However in all other persons, the applicative cannot be used with an imperfective stem. I suspect that the explanation for this extension of the use of the applicative *-b* lies in the fact that in the first and second person singular there is no

formal differentiation between the perfective and the imperfective series of the indirect object marker (see Table 57 above).

7.2.1.3.10 Semantic roles of the indirect object

The indirect object can assume the following semantic roles:

- benefactive/malefactive
- recipient
- goal/source
- experiencer
- possessor

The indirect object is frequently assigned more than one semantic role in given case. Recipient, experiencer, and possessor roles overlap especially often with benefactive or malefactive depending on whether the action or event described by the verb is advantageous or disadvantageous to the indirect object's referent.

7.2.1.3.11 Benefactive/malefactive

In the most straightforward case, the indirect object assumes the role of the benefactive, i.e. it specifies who benefits from the event or action denoted by the verb.

(7-72) *né bin=ó wewebibe*
né bñ=o we-∅-we-b-i=be
 I floor=N2 sweep-BEN.IPFV-3SG.F.IO.IPFV-IPFV-1SG.SBJ=DECL
 'I am sweeping the floor for her'

The indirect object can also function as malefactive, i.e. the referent of the indirect object is disadvantaged by the action denoted by the verb.

(7-73) *uleta kweit hálutnenebue?*
uleta kwěit
 who sugar_cane

ha+l(o)-u-b-ne-n-e-bio=e
 cut.SG.O+hit.PFV-EP-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ-GPST=CQ
 "'Who broke my sugar cane?'" [Unangkliten story]

Sometimes there is an ambiguity between benefactive and malefactive which must be resolved by the linguistic context or the situation in which the utterance is made.

- (7-74) *é eiló wanautnenebe*
é ěil=o wa-nau-b-ne-n-e=be
 he pig=SG.F 3SG.F.O-kill.PFV.BEN-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ=DECL
 ‘He has killed my sow for me (and I have asked him to do so)’
 OR ‘He has killed my sow (against my will)’

It can be seen from this example that, in some cases, roles can be mixed, i.e. the indirect object can assume the roles of benefactive/malefactive and possessor.

7.2.1.3.12 Recipient

A very common semantic role of the indirect object is that of recipient. Again, additional benefactive or malefactive meaning is possible, depending on whether the recipient profits from the action or not.

- (7-75) *né komoké futaanó dola omfutnenebe*
né komok=e futään=o lola
 my boss=SG.M letter=N2 write

om-fu-b-ne-n-e=be
 SG.FEM.O-send.PFV-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ=DECL
 ‘My boss wrote and sent a letter to me’

7.2.1.3.13 Goal/source

The indirect object can encode the participant towards whom an action is directed, i.e. the goal of the action:

- (7-76) *unangó baaboneole*
unäng=o baa-b-o-n-e=o=le
 woman=SG.F say.PFV-BEN.PFV-3SG.F.IO.PFV-SS.SEQ-3SG.M.SBJ=N2=TOP
 ‘when he said to the woman: “...” [Pig story]
- (7-77) *nakaí gwiyebiaanabiobe*
naka=í
 man=PL.AN

gwi-∅-ye+biaana-b-io=be
 use_poison-BEN.IPFV-PL.AN.IO.IPFV+PST.HAB-IPFV-2/3PL.AN.SBJ=DECL
 ‘They used to use poison on people’ [Dafinau]

Conversely, the indirect object may bear the role of source, that is specifying the origin of an action. Again, role mixing with benefactive or malefactive, etc. often takes place:

(7-78) *nile tobtlaabanibta*
nil=e
 nail=SG.N1

tob-tlaa-b-a-n-ib=ta
 SG.LONG.O-remove.PFV-BEN.PFV-3SG.M.IO.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘They removed the pineapple spike from (and also for) him and then’
 [Pineapples]

7.2.1.3.14 Experiencer

In verbs denoting physiological or psychological states, the indirect object encodes the experiencer:

(7-79) *kéb gabaamóné enkebea?*
kéb gabaamón=e en-∅-ke-b-e=a
 your head=SG.N1 pain.IPFV-BEN.IPFV-2.SG.IO-IPFV-SG.N1.SBJ=PQ
 ‘Does your head pain?’ (Lit. ‘Does your head pain on you?’)

7.2.1.3.15 Verbs with obligatory indirect object

A number of Mian verbs obligatorily take an indirect object and are marked accordingly. These verbs are underived semitransitives (see 8.1.3.1) Table 59 lists these verbs.

PFV stem-BEN-IO	IPFV stem-BEN-IO	Gloss
<i>ale-b-e</i>	<i>ale-∅-ye</i>	‘show to’
<i>doko-b-a</i>	—	‘forget’
<i>fote-b-e</i>	<i>fote-∅-ye</i>	‘chase away’
<i>gai-s-e</i>	—	‘pass, surpass’
(<i>al</i>) <i>tliau-b-e</i>	<i>atli-∅-ye</i>	‘be angry’
—	<i>en-∅-ye</i>	‘pain’
—	<i>∅-∅-ye</i>	‘hit (at)’

Table 59: Verbs with obligatory indirect object marking

7.2.1.3.16 Verbs without indirect object marking

Some verbs never take an indirect object and consequently are never marked accordingly (cf. Table 60).

Perfective stem	Imperfective stem	Meaning
<i>yo</i>	<i>yo</i>	'initiate, beget'
—	<i>(as) ei</i>	'be lit; be cooked/burnt'
—	<i>be</i>	'be walking'
—	<i>ei</i>	'fly'
—	<i>sasan</i>	'moan'

Table 60: Verbs that cannot take an indirect object

7.3 Tense and Aspect morphology of final verbs

Mian has a rich tense and aspect system. All markers are suffixal and can occur in either one of two different slots in the morphological structure of the verb. The first slot is before the subject marker (hence, pre-subject slot). Its fillers are tense and aspect markers. The second slot follows the subject marker slot (hence, post-subject slot). It is reserved for markers which carry only temporal information.

Verb stems are either directly inflected for various tense and aspectual categories or they are compounded with an existential auxiliary which bears the inflectional suffixes. This section deals with directly inflected verbs, the inflectional possibilities of the existential verb *n/bl~bi* and finally those verb forms which require compounding of the stem with an auxiliary.

7.3.1 Directly inflected verbs

In directly inflected verbs, tense and aspect markers are suffixed directly to a lexical verb stem. Table 61 sets out tense and aspect formatives and the slots which these occupy within the verb suffix template.

Stem	TNS/ASP	SBJ	TNS	NEG	ILLOC
Pfv (all stems)	<i>-n ~ -∅</i> 'Pst'	<i>-i</i> <i>-eo~-eb(o)</i> <i>-e</i> <i>-o</i> <i>-uo~-ob(o)</i> <i>-io~-ib(o)</i>	<i>-bio</i> 'GPst'	<i>-ba</i> 'Neg'	<i>=be</i> 'Decl' <i>=bo</i> 'Emph' <i>=ble</i> 'Excl' <i>=a</i> 'PQ' <i>=e</i> 'CQ'
	<i>-nab</i> 'NrPst'		<i>-so</i> 'HPst'		
	<i>-b^(H)</i> 'NhodPst' ³⁸				
	<i>-s</i> 'RPst'				
Pfv (only C-stems)	<i>-(V)m</i> 'IFut'				
	<i>-(a)mab/-omab</i> 'Fut'				
Ipfv (all stems)	<i>-b</i> 'Ipfv'				
	<i>-l</i> 'Ipfv'				

Table 61: Tense and aspect categories in directly inflected verbs

7.3.1.1 Tense and Aspect markers (pre-subject slot)

Eight elements can go into the pre-subject slot, namely *-n ~ -∅* 'Past', *-nab* 'Near Past', *-b* 'Non-Hodiernal Past', *-s* 'Remote Past', *-(V)m* 'Immediate Future', *-(a)mab/-omab* 'Future', and *-b* and *-l*, both 'Imperfective'. The first six of these are tense markers, the last two mark aspect. The choice of tense and aspect markers is restricted by stem aspect. Some suffixes are only compatible with perfective, some only with imperfective stems. Distributional restrictions are summarized in Table 62.

	With Pfv stems	With Ipfv stems
Tense	<i>-n ~ -∅</i> 'Past' <i>-nab</i> 'Near Past' <i>-b</i> 'Non-Hodiernal Past' <i>-s</i> 'Remote Past' <i>-(a)mab/-omab</i> 'Future' (C-stems only) <i>-(V)m</i> 'Immediate Future' (C-stems only)	<i>-(a)mab/-omab</i> 'Future'
Aspect		<i>-b, -l</i> 'Imperfective'

Table 62: Distributional restrictions of aspect/tense markers in the pre-subject suffix slot

7.3.1.1.1 *-n ~ -∅* 'Past'

The Past marker indicates that an event or action took place and was completed in the past. By default this marker is interpreted as an 'Immediate Past', i.e. that the action

³⁸ The tense suffix *-b^(H)* is marked for a tonal change on the following subject marker. As this change only occurs in some forms of the Non-Hodiernal Past, the high tone is set in brackets.

denoted by the verb has been completed immediately before the present moment. Only perfective stems can be directly inflected for Past.

- (7-80) *ase fanebe*
as=e fā-n-e=be
 fire=SG.N1 make.PFV-PST-3SG.M.SBJ=DECL
 ‘He has (just) made a fire’

There is a tendency for *-n* ‘Past’ to be realized as *-∅* before the subject markers beginning in /i/. Moreover, it tends to be realized as *-∅* in all other contexts if this does not lead to like-vowel clash. Thus one also finds *ase faebe* with the same meaning as in (7-80), but not **geebe* ‘he has built’. Here the form *genebe* has to be used to avoid a like-vowel sequence.

In Tok Pisin translations, past forms like the one in (7-80) were always translated using the completive marker *pinis*³⁹. The interpretation as immediate past is only an implicature though. Past-marked forms can refer to past events in general if the context provides an appropriate temporal reference point. The following example comes from a historical account of an event which took place approximately 100 years ago:

- (7-81) *Mianten áwelí yé fotebeiba uniobe*
miantěn awěł=i yé
 Mian_people fathers=PL.AN there
- fote-b-e-∅-i-b=a*
 rout-BEN.PFV-PL.AN.IO.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
- un-∅-io=be*
 go.PFV-PST-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 Past marker *-n* ~ *-∅* can be combined with the tense markers *-so* ‘Hesternal past’, or *-bio* ‘General past’ to locate the situation at different times in the past (see below). If the Past marker is suffixed to C-stems, it always realized as zero, e.g. *un-∅-io=be* [go.PFV-PST-2/3PL.AN.SBJ=DECL] ‘they went’ or *tl-∅-e=be* [come.PFV-PST-3SG.M.SBJ=DECL] ‘he came’.

³⁹ An alternative analysis for *-n* ~ *-∅* may be ‘Completive’.

7.3.1.1.2 *-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 (7-82):

- (7-82) *eim áyaabe gaibbue ne ali ofanabibe*
ěim áyaab=e ga-Ø-ib-bio=e
 pandanus PN=SG.N1 cook_in_leafoven-PST-2/3PL.AN.SBJ-GPST=SG.N1
- ne ali ob-fa-nab-ib=e*
 and smear SG.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 think it is plausible to assume that *-nab* grammaticalized from the verb *na* ‘do’ which itself was suffixed by an aspect marker *-b*. Synchronically, however, there is considerable semantic bleaching. As the putative original meaning of *na* ‘do’ has become semantically irrelevant in the forms in question, I will analyze *-nab* as a tense suffix indicating near past.

7.3.1.1.3 *-b* ‘Non-Hodiernal past’

The marker *-b* locates an event in the past excluding today. At this stage, the semantics of this tense category—especially the temporal remoteness which it indicates—are not entirely clear. Informants gave translations in which the remoteness ranged from yesterday to the day before yesterday to past in general. 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 formally 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 aspect and tense suffixes. We can distinguish four cases which are summarized in Table 63 below.

First, a verb may be perfective-only, i.e. it simply lacks an imperfective stem. Consequently, there can be no Imperfective form, e.g. *kan/–* ‘die’ has *kambebe* ‘he died (before today)’. This form cannot mean *‘he is dying’.

Second, for biaspectual verbs, the perfective and imperfective stems are formally distinct. In this case, the perfective stem inflected with *-b* refers to an action in the past, while the imperfective stem inflected with *-b* refers to a continuous or habitual action; e.g. *dowon/wen* ‘eat’ with *dowombibe* ‘I ate’ and *wembibe* ‘I am eating’ and *ifa/ifu* ‘serve food’ with *ifabibe* ‘I served food’ and *ifubibe* ‘I am serving food’. The same distinction applies to applicativized stems which are always perfective; e.g. *alebabibe* ‘I showed to him’, while in imperfective stems the indirect object is directly suffixed to the stem; e.g. *alehabibe* ‘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 in order to disambiguate Imperfective from Non-Hodiernal past past forms; e.g. *singa* ‘pour’ with *singabibe* ‘I am pouring’ versus *singabíbe* ‘I poured’ and *dola* ‘write’ with *dolábebe* ‘he wrote’ and *dolábébe* ‘he is writing’. This distinctive tone pattern is not restricted to trans-aspectual stems for which disambiguation is necessary. It also appears on Non-Hodiernal past forms which would otherwise be distinguishable from the Imperfective because of the aspectual stem alternation; e.g. *hela/haka* ‘cut alongside’ with *hakabibe* ‘I am cutting alongside’ versus *helábibe* ‘I cut alongside’. Even some perfective-only stems for which an Imperfective interpretation of a form inflected with *-b* is never possible show the tone change on the subject marker in the Non-Hodiernal past; e.g. *gaise/-* ‘pass them.’ with *gaisebíbe* ‘I passed them’ 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 (using black magic)’ and ‘I poisoned (using black magic)’.

	Stems	Non-Hodiernal Past	Imperfective
1 Pfv-only	<i>kan/-</i>	<i>kambebe</i> ‘he died’	n/a
2 Biaspectual	<i>baa/o</i>	<i>baabebe</i> ‘he said’	<i>obebe</i> ‘he’s saying’
	<i>dowon/wen</i>	<i>dowombibe</i> ‘I ate’	<i>wembibe</i> ‘I’m eating’
	<i>ge/ga</i>	<i>gebibe</i> ‘I did’	<i>gabibe</i> ‘I’m doing’
	<i>ifa/ifu</i>	<i>ifabibe</i> ‘he served’	<i>ifubibe</i> ‘I’m serving’
	<i>ale-b-e/ale-ha</i>	<i>alebabibe</i> ‘I showed to him’	<i>alehabibe</i> ‘I’m showing to him’
3 H on SBJ	<i>dolâ</i>	<i>dolábébe</i> ‘I wrote’	<i>dolábebe</i> ‘I’m writing’
	<i>singa</i>	<i>singabíbe</i> ‘I poured’	<i>singabibe</i> ‘I’m pouring’
4 Homophony	<i>gwi</i>	<i>gwibibe</i> ‘I poisoned’	<i>gwibibe</i> ‘I’m poisoning’

Table 63: Non-Hodiernal past vs. Imperfective

The use of tone to distinguish Non-Hodiernal past and Imperfective is not predictable on the basis of whether a verb is trans-aspectual and thus in need of disambiguation concerning the two categories in question. H-tone subject markers appear in some biaspectual verbs and a few trans-aspectual verbs have homophonous forms. More systematic elicitation is necessary before reliable generalizations about the distribution of tone in Non-Hodiernal past forms can be made.

7.3.1.1.4 -s ‘Remote past’

The tense marker *-s* is used to locate an event in the remote past. 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 perfective and trans-aspectual verb stems.

Consider the following example from a historical account about the development of the relations between the Mianmin and their neighbours, the Telefomin.⁴⁰

- (7-83) *yole eilé anasibe?*
yole *ěil=e* *a-na-s-ib=e?*
 well pig=SG.M 3SG.M.O-kill.PFV-RPST-2/3PL.AN.SBJ=PQ
 ‘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* (see under slot 2 tense suffixes) and not with *-s* for the Remote past. There seems to be a certain interchangeability between these two tenses. The Remote past, however, tends to be collocated with the temporal expression *sinangwanó* ‘a very long time ago; in days of yore’ in the first clause of a clause chain whose final verb is marked for Remote past.

⁴⁰ 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.

7.3.1.1.5 *-b* ‘Imperfective’

The Imperfective marker *-b* is used to refer to on-going and habitual situations. It can only be suffixed directly to imperfective and trans-aspectual verb stems. 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:

(7-84) *ní wembuobe*
ní wen-b-uo=be
 we.EXCL eat.IPFV-IPFV-1PL.SBJ=DECL
 ‘We (excl.) are eating’

(7-85) *né amo gembibe*
né am=o gen-b-i=be
 I 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.:

(7-86) *yomin am=o gen-b-io=be*
 initiate.IPFV.VNOUN 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 (7-87) or that it is performed habitually (7-88):

(7-87) *é amityé houhou ga-b-e=be*
 he always cough do.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘he coughs often’ OR ‘he coughs all the time’ [TMA Questionnaire, 94]

(7-88) *fūt élé ninĩn=o sofelok=bo*
 tobacco DEM.SG.N1 name=N2 PN=QUOT

ge *o-ha-b-io=be*
do.PFV say.IPFV-SG.N1.IO-IPFV-2/3PL.AN.SBJ=DECL
‘they call this tobacco Sofelok’ (Lit. they are saying: ‘The name of this tobacco is S.’) [Sofelok, 2]

7.3.1.1.6 *-l* ‘Imperfective’

What I have said about the semantics of the Imperfective marker *-b* above also applies to *-l*. I have not found a meaning difference between verb forms in *-l* and in *-b*. The generalization is that any verb which has a verbal noun in *-lin* also has an imperfective form in *-l* alongside the one in *-b* (also see 7.5.2 on verbal nouns). Some examples are provided in Table 64 (all inflected verb forms are 1st singular subject).

Stem	Ipfv in <i>-l</i>	Ipfv in <i>-b</i>	Verbal noun in <i>-lin</i>	Stem meaning
<i>baka</i>	<i>bakalibe</i>	<i>bakabibe</i>	<i>bakalin</i>	‘break across’
<i>faka</i>	<i>fakalibe</i>	<i>fakabibe</i>	<i>fakalin</i>	‘make’
<i>fua</i>	<i>fualibe</i>	<i>fuabibe</i>	<i>fualin</i>	‘bathe’
<i>gena</i>	<i>genalibe</i>	<i>genabibe</i>	<i>genalin</i>	‘do; roll, fasten’
<i>haka</i>	<i>hakalibe</i>	<i>hakabibe</i>	<i>hakalin</i>	‘break alongside’
<i>singa</i>	<i>singalibe</i>	<i>singabibe</i>	<i>singalin</i>	‘pour’
<i>wa</i>	<i>walibe</i>	<i>wabibe</i>	<i>walin</i>	‘cut’
<i>wen</i>	<i>unalibe/*wenlibe</i>	<i>wembibe</i>	<i>unalin</i>	‘eat’

Table 64: Verbs with Imperfective form in *-l*

7.3.1.1.7 Future tenses

Mian has two future tenses: a Future marked with *-(a)mab/-omab* (depending on whether the subject is animate plural) and an Immediate Future marked with *-Vm* regardless of subject number.

If the subject of a verb directly inflected for Future is not animate plural, *-amab* is used unless the verb stem ends in vowel, in which case the future marker surfaces as *-mab*. If the subject of a future verb form is animate plural, *-omab* is used without exception.

7.3.1.1.7.1 Directly inflected Future forms

All imperfective stems can be directly inflected for Future. The most straightforward case are imperfective N-stems, where *-(a)mab/-omab* is suffixed to the stem:

(7-89) *hen-amab-i=be*
 search.IPFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will be searching’

(7-90) *hen-omab-io=be*
 search.IPFV-FUT.PL.AN.SBJ-2/3PL.AN.SBJ=DECL
 ‘You/they will be searching’

All other imperfective stems can also be directly inflected for Future. If the subject is animate plural, the M-final imperfective stem is the base for the Future marker. Compare examples (7-91) and (7-92):

(7-91) *as=e faka-mab-i=be*
 fire=SG.N1 make.IPFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will be making a fire’

(7-92) *as=e fakam-omab-io=be*
 fire=SG.N1 make.IPFV.MSTEM-FUT.PL.AN.SBJ-2/3PL.AN.SBJ=DECL
 ‘You/they will be making a fire’

In trans-aspectual verbs, like *fu* ‘cook’, when an imperfective reading is intended, the future marker is suffixed to the *m*-stem if the subject is animate plural. Otherwise the bare stem is used:

(7-93) *fum-omab-io=be*
 cook.IPFV.MSTEM-FUT.PL.AN.SBJ-2/3PL.AN.SBJ=DECL
 ‘They will be cooking’

(7-94) *fu-mab-i=be*
 cook-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will be cooking’

The only perfective stems which are directly inflected for Future are C-stems; e.g. *tl* ‘come’, *un* ‘go’, and *dowon* ‘eat’, all of which are biaspectual, i.e. their perfective and imperfective stems are not homophonous. These have a special future stem which is used in some Future forms and all Immediate Future forms:

C-stem	Future stem
<i>tem</i> 'see'	<i>temaa</i>
<i>dowon</i> 'eat'	<i>dowonaa</i>
<i>went</i> 'hear'	<i>wentaa</i>
<i>un-on</i> 'go'	<i>unaa</i>
<i>tl-te</i> 'come'	<i>tlaa</i>

Table 65: Future stems of C-stems

The future stem is used if the subject is not plural animate (7-95). If it is, the regular perfective stem is employed (7-96):

(7-95) *lowonaa-mab-i=be*
eat.PFV.FUT-FUT.NANPL.SBJ-1SG.SBJ=DECL
'I will eat'

(7-96) *lowon-omab-io=be*
eat.PFV-FUT.ANPL.SBJ-2/3PL.AN.SBJ=DECL
'You (pl)/they will eat'

Similarly: *tlaamabibe* 'I will go' and *tlomabiobe* 'they will go' and *unaamabibe* 'I will go' and *unomabiobe* 'they will go'.

7.3.1.1.7.2 Semantics of the Future marker *-(a)mab/-omab*

The Future marker is semantically interesting because it combines an intentional and a future meaning but the reference point relative to which the event is interpreted can actually lie in the past.

The Future is used to refer to an action intended at the moment of speaking, as in (7-97) but also to actions in the past, most often for intended actions which for some reason did not come to pass, as in (7-98):

(7-97) *Dimosono wengsang óta omebwat daanamabibe*
limosono wengsang ó-ta om-eb=wat
PN=SG.F story N2-EMPH SG.FEM.O-take.PFV=across

laa+n-amab-i=be
put+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
'I want to/am going to record the story of D.' (Lit. 'take and put across)
[Dimosson]

- (7-98) *né sintalo amo genamabi otáne sokó tlebota deisobe*
né sintalo am=o ge+n-amab-i otáne
 I yesterday house=N2 build.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ but

sők=o tle-b-o=ta le-Ø-i-so=be
 rain=N2 come.ITER-DS.SIM-N2.SBJ=MED desist.PFV-PST-1SG.SBJ-HPST=DECL
 ‘I wanted to build a house yesterday but it was raining, and I didn’t do it’

In example (7-98), the temporal reference point is anchored in the past due to the presence of the temporal noun *sintalo* ‘yesterday’ and the verb inflected with *-(a)mab* is interpreted accordingly.

The Future is also used for predictions:

- (7-99) *balue tlaamabebe*
balu=e tlaa-mab-e=be
 plane=SG.N1 come.PFV.FUT-FUT.NANPL.SBJ-SG.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. As I assume, following Bybee et al. (1994: 244), that prediction is the focal use of the category ‘future’, I conclude that *-(a)mab/-omab* has indeed grammaticalized into a marker of futurity without losing its older meaning of intentionality in some contexts.

The marker *-(a)mab/-omab* with future meaning is frequently collocated with temporal expressions, such as *bomanomo* ‘tomorrow’, or clauses, such as *bomasota* ‘in the morning’.

By default, future is interpreted with respect to the moment of speaking, but it can also be interpreted relative to a reference point in the past if such a reference point is provided by the context, as in the following example from an account of a traditional Mianmin initiation ritual:

- (7-100) *lingling=e te+na-s-e=ta*
 taro_rhizome=SG.N1 come.PFV+do-DS.SEQ-SG.N1.SBJ=MED

yóta tam tl-omab-io
 only_then sideways come.PFV-FUT.ANPL.SBJ-2/3PL.AN.SBJ
 ‘The taro rhizome came up too and only then would they (the initiants) come out’ [Taro planting ritual]

The setting of this account is clearly in the past because the ritual described has now been defunct for at least four decades. Nonetheless, a verb form inflected for future is possible in order to express that an event took place *in the post-time* of a reference point established by the context (cf. Klein 1994: 133), in this case the moment the taro rhizome has come up.

An alternative analysis of *-(a)mab/-omab* might be to call it an irrealis marker. The term ‘irrealis’ has gained wide currency in Papuan linguistics (cf. Foley 1986: 158ff, Roberts 1990), and is usually meant to cover a whole range of ‘non-actual’ events (Chung and Timberlake 1985: 241); e.g. future, potential, negatives, imperatives, and hypothetical and contrafactual conditionals.

However, there are obvious problems with an irrealis analysis of this marker for Mian.

First, while *-(a)mab/-omab* in most cases indeed refers to ‘non-actual’ events, viz. future, intention, and counterfactuals, it can be used to refer to events which were actualized; e.g. the ‘coming’ in example (7-100).

Second, it is not used in many categories which are considered to lie in irrealis or ‘non-actual’ terrain, thus imperatives and hortatives are not marked with *-(a)mab/-omab* and negation is completely independent of any tense and aspect marking. Calling *-(a)mab/-omab* irrealis would therefore create a situation with a clear form-meaning mismatch, where irrealis forms can refer to actual events and forms not marked for irrealis can refer to non-actual events. The situation in Mian is exacerbated by the fact that there is no overt realis marker which would establish a realis-irrealis contrast. Consequently, every form not marked irrealis would be treated as realis, creating a semantically even more heterogeneous category.

Third, the study of the evolution of TAM formatives by Bybee et al. (1994: 238) showed that a binary distinction between realis and irrealis is not cross-linguistically valid. Although it has been suggested in the literature that languages differ as to which events are treated as actual and which as non-actual (cf. Chung and Timberlake 1985, Roberts 1990), I think such an approach involves too much guesswork about what is going on in the speakers’ heads to yield valuable insights about the categories in question.

Taking these three arguments into account I reject an analysis of *-(a)mab/-omab* as an irrealis marker and will stick to the more traditional term ‘future’.

7.3.1.1.7.3 Immediate future and the future stem of C-stems

The Immediate Future refers to situations which are imminent. The Mian Immediate future has clear deontic overtones. It is often used not only to mark a temporal distinction but also to express that the situation denoted by the verb *should* or—if negated—*must not* take place. Modal nuances in immediate futures are cross-linguistically common (cf. Bybee et al. 1994: 245).

For C-stems, such as *dowon* ‘eat (Pfv)’ or *went* ‘hear (Pfv)’, the Immediate future is formed by suffixing *-(V)m* to their Future stem:

- (7-101) *né ěim=e lowonaa-m-i=o*
 I pandanus=SG.N1 eat.PFV.FUT-IFUT-1SG.SBJ=N2
- al bela+n-amab-i=be*
 shit break.PFV+AUX.PFV-NANPL.SBJ-1SG.SBJ=DECL
 ‘When/if I eat pandanus, I’ll get diarrhoea’ (Lit. ‘...I’ll break shit’) [Observed]

In Immediate future forms involving the Future stem of C-final perfective stems, *-(V)m* is only overtly realized if the following subject marker consists of one vowel only. Compare:

- (7-102) *tén=i=sna unǎng=i=sna í=mo*
 child=PL.AN=too woman=PL.AN=too they=NEG
- wentaa-ib-ba=be*
 hear.PFV.FUT-2/3PL.AN.SBJ-NEG=DECL
 ‘Children and women must not hear (the name of the Sofelok tobacco)’
 [Sofelok, 2]
- (7-103) *émo wentaamebabe*
e=mo wentaa-m-e-ba=be
 he=NEG hear.PFV.FUT-IFUT-3SG.M.SBJ-NEG=DECL
 ‘He must not hear (it)’

7.3.1.2 Inchoatives

Inchoatives are usually formed from the M-final imperfective stem (see 7.5.1). Exceptions are inchoative forms of imperfective N-stems (see below).

In inchoative forms, the subject marker is suffixed directly to the imperfective M-stem:

- (7-104) *ó youmó fubamobe*
ó yóumo fubam-o=be
 she clothes wash.IPFV.MSTEM-3SG.F.SBJ=DECL
 ‘She starts washing clothes’

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.

Prima facie, it might be counterintuitive for a verb with an imperfective stem to have an inchoative meaning because the inception of an action seems conceptually to be punctual, rather than continuing. In some (Indo-European) languages inchoative or ingressive meaning is often expressed by perfective verb forms (e.g. the aorist in Ancient Greek). However, the inchoative in Mian focuses on an action or event which is beginning at a given temporal reference point, by default the moment of speaking, and then continuing from there.

Inchoative forms of the imperfective N-stems, e.g. *hen* ‘search’, *ngaan* ‘sing, call out’, *ngen* ‘beg’, *sein* ‘be happy’ are also zero-marked. Unlike regular trans-aspectual stems, N-stems do not have an M- stem:

- (7-105) a. *né hen-i=be*
 I search.IPFV-1SG.SBJ=DECL
 ‘I start searching’
- b. *é ngaan-e=be*
 he sing.IPFV-3SG.M.SBJ=DECL
 ‘he starts singing’
- c. *ó sein-o=be*
 she 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’, past and inchoative forms would be homophonous. To mark a form as inchoative, the H-toned inchoative stem *gén* is used. Compare (7-106) and (7-107):

(7-106) *amo genebe*
am=o ge-n-e=be
 house=N2 build.PVF-PST-3SG.M.SBJ=DECL
 ‘He has built a house’

(7-107) *amo génebe*
am=o gén-e=be
 house=N2 build.IPFV.INCH-3.SG.M.SBJ=DECL
 ‘He starts building a house’

On use of tone to mark the Non-Hodiernal past, see 2.8.9.5.

7.3.1.3 Tense markers (post-subject slot)

The tense slot after the subject marker has two fillers: *-so* ‘Hesternal past’ and *-bio* ‘General past’, which both co-occur with *-n* ~ \emptyset ‘Past’ 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 and aspect markers in the slot before the subject marker.

None of these markers can appear in directly inflected imperfective stems. For ongoing events in the past, imperfective stems have to be compounded with an auxiliary which bears the inflectional morphology (see below).

7.3.1.3.1 *-bio* ‘General past’

The general past marker *-bio* 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, but cannot be used to temporally locate a situation yesterday. In directly inflected verbs, *-bio* can only occur in verb forms whose stem is perfective.

(7-108) *é skilón=laak nan-tama-n-e-bio=be*
 he foot=down 1SG.O-bite.PFV-PST-3SG.M.SBJ-GPST=DECL
 ‘It (a snake) bit me down in my leg’ [TMA Questionnaire B2]

(7-109) *Deniele sesatém unebua?*

leniel=e sesă=tem un-∅-e-bio=a?

PN=SG.M bush into go.PFV-PST-3SG.M.SBJ-GPST=PQ

‘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 Past marker *-n*, which is often realized as *-∅* before the subject markers beginning in /i/. Moreover, it tends to be realized as *-∅* in all other contexts if this does not lead to like-vowel clash. Thus, one also finds *nantamaebiobe* ‘he bit me’ with the same meaning as in (7-108), 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 needs temporal expressions, such as the temporal noun *sino* ‘before’ or the temporal adverbial *bifole blimambe édime* ‘last year’, to more exactly locate a situation in the past.

Collocation of the General past with the temporal expression *sintalo* ‘yesterday’ yields ungrammatical results:

(7-110) *é (*sintalo) houtam un-∅-e-bio=be*

he (yesterday) PN go.PFV-PST-3SG.M.SBJ-GPST=DECL

‘(*Yesterday) he went to Hotmin.’

7.3.1.3.2 General past and Non-Hodiernal past: Semantic differences

It seems that the General past stands in some functional competition to the Non-Hodiernal past. Both locate an event at some point in the past. The exact difference is not fully understood at present, mainly due to my uncertainty about the precise meaning and use of the Non-Hodiernal past. However, a few differences in meaning are obvious.

First, 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 happened 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.

7.3.1.3.3 Hesternal past -so

The marker -so 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 verb forms whose stem is perfective. The Hesternal past marker always co-occurs with the Past marker -n, which is often -∅ before /i/. Moreover, it tends to be realized as -∅ in all other contexts if this does not lead to like-vowel clash.

The Hesternal past marker is typically collocated with the temporal nouns *sintalo* ‘yesterday’ or *sintalo ó sintao* ‘the day before 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 (7-111) and (7-112) are correct:

(7-111) *sintao ó sintalo* *houtam un-∅-o-so=be*
 day_before_yesterday PN go.PFV-PST-3SG.F.SBJ-HPST=DECL
 ‘She went to Hotmin the day before yesterday’

(7-112) *sintao ó sintalo* *houtam un-∅-o-bio=be*
 day_before_yesterday PN go.PFV-PST-3SG.F.SBJ-GPST=DECL
 ‘She went to Hotmin the day before yesterday’

7.3.2 Inflection of the existential verb

The existential verb *n/bi~bl* plays an important role in the inflectional paradigms of Mian verbs. These need to be compounded with one of the stems of the existential verb to express certain temporal and aspectual categories. The existential verb also occurs on its own as a main verb with the meaning ‘be there, stay, exist, remain’.

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 66 sets out stem contrasts and inflectional possibilities for the existential verb.

Stem	TNS/ASP	SBJ	TNS	NEG	ILLOC
<i>bi</i> (Ipfv stem)	-∅ 'Ipfv'				
	- <i>n</i> 'Pst'				
	- <i>s</i> 'RPst'				
<i>biaa^H</i> (Non-Hodiernal past stem)	- <i>b^H</i> 'NHodPst', ⁴¹	- <i>i</i> - <i>eo</i> ~- <i>eb(o)</i>		- <i>ba</i> 'Neg'	= <i>be</i> 'Decl' = <i>bo</i> 'Emph' = <i>ble</i> 'Excl' = <i>a</i> 'PQ' = <i>e</i> 'CQ'
<i>n</i> (Pfv stem)	- <i>vm</i> 'IFut'	- <i>e</i> - <i>o</i>			
<i>biaa</i> (Future Imperfective stem) <i>bi</i> (Ipfv stem)	-(<i>a</i>) <i>mab</i> /- <i>omab</i> 'Fut'	- <i>uo</i> ~- <i>ob(o)</i> - <i>io</i> ~- <i>ib</i>			
<i>bina</i> (Habitual stem)					
<i>biaana</i> (Past Habitual stem)	- <i>b</i> 'Ipfv'				

Table 66: Stem contrasts and inflection of the existential verb *n/bi-bl*

There are several noteworthy features about tense and aspect inflection in the existential verb.

First, *-n* 'Past' contrasts with *-∅* 'Imperfective', while in all other directly inflected verbs *-n* and zero are allomorphs with the meaning 'Past'. Thus, there are *fu-n-e=be* [cook-PST-3SG.M.SBJ=DECL] and *fu-∅-e=be* [cook-PST-3SG.M.SBJ=DECL] both with the meaning 'he cooked'. This allomorphy is not found in the existential auxiliary. Dropping *-n* creates a meaning difference: *bi-n-e=be* [stay.IPFV-PST-3SG.M.SBJ=DECL] 'he was staying (up to now)' and *bi-∅-e=be* [stay.IPFV-IPFV-3SG.M.SBJ=DECL] 'he is staying'.

Second, the existential verb has four additional stems apart from the perfective stem *n* and the imperfective stem *bi*:

- *biaa^H* 'stay (Non-Hodiernal past)', cf. (7-113)
- *bina* 'stay (Habitual)', cf. (7-114)
- *biaana* 'stay (Past habitual)'
- *biaa* 'stay (Future imperfective)', cf. (7-117)

(7-113) *biaabi*
biaa^H-b^H-i=be

⁴¹ *-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. The Non-Hodiernal past stem *biaa^H* is also marked H to differentiate it from the Future imperfective stem *biaa*, which does not show any tonal processes.

stay.NHODPST-NHODPST-1SG.SBJ=DECL
 ‘I was staying’

- (7-114) *bina-b-o=be*
 stay.HAB-IPFV-3SG.F.SBJ=DECL
 ‘She stays habitually’

The perfective future of the existential verb is formed from the perfective stem *n*:

- (7-115) *n-amab-i=be*
 stay.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will stay’

- (7-116) *n-omab-io=be*
 stay.PFV-FUT.PL.AN.SBJ-2/3PL.AN.SBJ=DECL
 ‘You/they will stay’

The imperfective Future is formed with the Future imperfective stem *biaa* if the subject is not plural animate and with the regular imperfective stem *bi* if the subject is animate plural:

- (7-117) *biaa-mab-i=be*
 stay.FUT.IPFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will be staying’

- (7-118) *bi-omab-io=be*
 stay.IPFV-FUT.PL.AN.SBJ-2/3PL.AN.SBJ=DECL
 ‘They will be staying’

The Immediate future of the existential verb always uses the perfective stem *n*:

- (7-119) *nimibe*
n-Vm-i=be
 stay.PFV-IFUT-1SG.SBJ=DECL
 ‘I will/should stay’

Apart from these differences, tense and aspect inflection of the existential verb proceeds in much the same way as in other directly inflected verbs. Forms which are only marked *-n* ‘Past’ are by default interpreted as referring to events having taken place immediately before the moment of speaking:

- (7-120) *bi-n-o=be*
 stay.IPFV-PST-3SG.F.SBJ=DECL
 ‘She has been staying (up to now)’

Further temporal specification is possible by suffixing *-so* ‘Hesternal past’ or *-bio* ‘General past’.

- (7-121) *bi-n-i-so=be*
 stay.IPFV-PST-1SG.SBJ-HPST=DECL
 ‘I was staying yesterday’

- (7-122) *bi-n-i-bio=be*
 stay.IPFV-PST-1SG.SBJ-GPST=DECL
 ‘I was staying’

7.3.3 Auxiliary-compounded verbs

For some tense/aspect combinations, verb stems have to be compounded with a range of auxiliary stems, all of which come from the existential verb. For instance, all imperfective stems have to be auxiliary-compounded to refer to on-going events in the past. Table 67 summarizes all possibilities for the compounding of perfective and imperfective stems with an auxiliary stem.

Verb stem		Auxiliary	TNS/ASP	SBJ	TNS	NEG	ILLOC	
Pfv	+	<i>bi</i> ‘Aux Pfv’	<i>-∅</i> ‘Ipfv’	<i>-i</i> <i>-eo~-eb</i> <i>-e</i> <i>-o</i> <i>-uo~-ob</i> <i>-io~-ib</i>	<i>-bio</i> ‘GPst’ <i>-so</i> ‘HPst’	<i>-ba</i> ‘Neg’	<i>=be</i> ‘Decl’ <i>=bo</i> ‘Emph’ <i>=ble</i> ‘Excl’ <i>=a</i> ‘PQ’ <i>=e</i> ‘CQ’	
Pfv Ipfv			<i>-n</i> ‘Pst’					<i>-s</i> ‘RPst’
			<i>biaa^H</i> ‘Aux NHodPst’					
Pfv		<i>n</i> ‘Aux Pfv’	<i>-Vm</i> ‘IFut’		<i>-mab/-omab</i> ‘Fut’			
		<i>biaa</i> ‘Aux Fut Ipfv’ <i>bi</i> ‘Aux Ipfv’						
Ipfv		<i>bina</i> ‘Aux Hab’	<i>-b</i> ‘Ipfv’					
		<i>biaana</i> ‘Aux Pst Hab’						

Table 67: Auxiliary-compounded verb forms

7.3.4 Auxiliary-compounding with imperfective stems

In order to refer to unbounded events in the past, Mian requires imperfective stems to be compounded with *bi*. Suffixation of *-n* ‘Past’ indicates that an action was going on up to the moment of speaking:

- (7-123) *wen+bi-n-e=be*
 eat.IPFV+AUX.IPFV-PST-3SG.M.SBJ=DECL
 ‘He has been eating (until now)’ [Observed]

Bi-compounded forms inflected with *-n* ‘Past’ can be further suffixed with *-so* ‘Hesternal Past’ and *-bio* ‘General Past’ to locate events at different levels of temporal remoteness:

- (7-124) *wen+bi-n-e-so=be*
 eat.IPFV+AUX.IPFV-PST-3SG.M.SBJ-HPST=DECL
 ‘Yesterday he was eating’

- (7-125) *wen+bi-n-e-bio=be*
 eat.IPFV+AUX.IPFV-PST-3SG.M.SBJ-GPST=DECL
 ‘He was eating’

Suffixation of a *bi*-compounded verb stem with the Remote past marker *-s* indicates an unbounded event in the remote past:

- (7-126) *é sinanggwanó sesă=tem haa+bi-s-e=be*
 he long_time_ago bush=in roam.IPFV+AUX.IPFV-RPST-3SG.M.SBJ=DECL
 ‘A long time ago he was roaming the bush’ [TMA Questionnaire, B5]

The non-hodiernal past continuous marker *-biaa^h* refers to an unbounded event in the past excluding today (i.e. the day containing the moment of speaking):

- (7-127) *é sesă=tem haa+biaa^h-b^h-e=be*
 he bush=in roam.IPFV+stay.NHODPST-NHODPST-3SG.M.SBJ=DECL
 ‘He was roaming the bush (yesterday or before that)’ [TMA Questionnaire, B4]

As in non-auxiliary-compounded verbs, the tense suffixes *-s* and *-b^h* cannot co-occur with further tense markers in the post-subject tense slot.

7.3.4.1.1 Habitual forms

In 7.3.1.1.5 above we have seen that verbs inflected with *-b* ‘Imperfective’ can have a (present) habitual interpretation apart from the more basic continuous meaning. However, there is also a dedicated habitual construction involving the auxiliary habitual stem of the existential verb *+bina*. As we would expect, the habitual marker cannot be compounded with perfective stems. Habitual verb forms are always further suffixed by the Imperfective marker *-b*:

- (7-128) *ae, né amityé a-teme+bina-b-i=be*
 yes, I always 3SG.M.O-see.IPFV+AUX.HAB-IPFV-1SG.SBJ=DECL
 ‘Yes, I see him all the time’ [TMA Questionnaire, 40]

The habitual in the past is formed by compounding *+biaana* with an imperfective stem. Again, there is obligatory further suffixation of the imperfective marker:

- (7-129) *naka=i*
 man=PL.AN

gwi-∅-ye+biaana-b-io=be
 use_poison-BEN.IPFV-PL.AN.IO.IPFV+AUX.PST.HAB-IPFV-2/3PL.AN.SBJ=DECL
 ‘They were used to use poison magic on people (but not anymore)’ [Dafinau]

Habitual verb form with *+bina* are often collocated with the adverbs *sun* ‘habitually’ and *amīt* ‘always’.

7.3.4.2 Auxiliary-compounding with perfective stems

Some perfective stems can be compounded 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 *a-fu* ‘grab it’. In (7-130), the result of an action is described. In (7-131), the focus is on the continuation of this result:

- (7-130) *a-fu-n-e=be*
 SG.N1.O-grab.PFV-PST-3SG.M.SBJ=DECL
 ‘He has grabbed it’

- (7-131) *a-fu+bi-n-e=be*
 SG.N1.O-grab.PFV+AUX.IPFV-PST-3SG.M.SBJ=DECL
 ‘He has been holding it’ (Lit. ‘He has grabbed it and was staying up to now’)

The core class of perfective stems which can be compounded with a stem of the existential verb are those which show this aspect alternation. Other verbs which belong to the core class are:

toun ‘sit’
heba ‘lean’
maa ‘stand up’
ei ‘fill’
-mou ‘take on shoulders’
-eb ‘take’
-toupleb ‘take in the arms’

From this core group of perfective stems, the possibility of auxiliary compounding extends to a limited number of other perfective stems for which the aspect alternation is less obvious, e.g. *dowon* ‘eat (Pfv)’, *fote-* ‘rout (Pfv)’, and *fa* ‘make a fire (Pfv)’:

- (7-132) *né dowombinisobe*
né lowon+bi-n-i-so=be
 I eat.PFV+AUX.IPFV-PST-1SG.SBJ-HPST=DECL
 ‘Yesterday I ate and stayed (having eaten)’

As there is an obvious aspect mismatch in forms like *dowombinisobe* in (7-132), which consists of a perfective stem *dowon* ‘eat’ and an imperfective auxiliary *+bi*, the two events cannot be interpreted as overlapping (as in the form *wembinisobe* ‘yesterday I was eating’ above, i.e. while I was eating I stayed) but rather as a bounded event plus the continuation of the result of this event.

In order to express that the result of a bounded event is continuing at the present moment, a perfective stem must be compounded with the imperfective auxiliary stem *+bi* which is then suffixed by *-Ø* ‘Imperfective’ as in (7-133):

- (7-133) *keté afubiebe*
kět=e *a-fu+bi-Ø-e=be*
 container=SG.N1 SG.N1.O-grab.PFV+AUX.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He’s holding the container’

Imperfective stems do not have this possibility. In order to refer to on-going unbounded events, any imperfective stem is just directly inflected by *-b* ‘Imperfective’; e.g. *wen-b-i=be* [eat.IPFV-IPFV-1SG.SBJ=DECL] ‘I am eating’.

7.3.4.2.1 Auxiliary-compounded Future of perfective stems

All vowel-final perfective stems have to be compounded with the auxiliary stem *+n* ‘Perfective’ in order to be inflected for Future.

(7-134) *fu+n-amab-i=be*
 cook+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will cook’

(7-135) *fu+n-omab-io=be*
 cook+AUX.PFV-FUT.ANPL.SBJ-2/3PL.AN.SBJ=DECL
 ‘You/they will cook’

Some perfective stems can be compounded with the Future imperfective stem of the existential verb in order to express that an event will take place in the future and the result of this event will continue after that. The auxiliary *+biaa* ‘FUT IPFV’ is used, if the subject is not animate plural (7-136), and *+bi* ‘IPFV’ if it is (7-137):

(7-136) *keté afubiaamabibe*
kět=e
 container=SG.N1

a-fu+biaa-mab-i=be
 SG.N1.O-grab.PFV+AUX.FUT.IPFV-FUT.NANPL.SBJ-3SG.M.SBJ=DECL
 ‘I will be holding the container’

(7-137) *fa+bi-omab-io=be*
 make_fire.PFV+AUX.IPFV-FUT.ANPL.SBJ-2/3PL.AN.SBJ=DECL
 ‘You/they will make a fire and stay (having made it)’

Again, imperfective stems have to be directly inflected in order to refer to unbounded events in the future.

7.3.4.2.2 Auxiliary-compounded Immediate future of perfective stems

The Immediate future refers to situations which are imminent or about to take place a short while after the moment of speaking. The Mian Immediate future has clear deontic overtones. It is often used not only to mark a temporal distinction but also to express that the situation denoted by the verb should or must take place.

All Immediate future forms of vowel-final perfective stems are compounds of a perfective lexical verb stem and auxiliary stem *+n* ‘PFV’ which is inflected for Immediate future with the suffix *-(V)m*. The brackets mean that the vowel only shows up if the stem ends in a consonant. 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 2.7.8 on vowel harmony):

- (7-138) *í amo genimiobe*
í am=o ge+n-Vm-io=be
 they house=N2 build.PFV+AUX.PFV-IFUT-2/3PL.AN.SBJ=DECL
 ‘They are about to/should/must build a house’

Verbs inflected for Immediate future are often found in temporal adverbial clauses or in the protasis of conditionals. The whole adverbial clause is marked with *=o(=le)* (see 11.2 on adverbials):

- (7-139) *né futé halanimio*
né füt=e hala+n-Vm-i=o
 I tobacco abstain.PFV+stay.PFV-IFUT-1SG.SBJ=N2
 ‘When/if you abstain from tobacco...’

Negation of immediate future forms (i.e. with the verbal affix *-ba* and the negation particle *mo*) expresses that something is impossible or forbidden:

- (7-140) *kóbó futé mo funemebbabe*
kóbo füt=e=mo fu+n-Vm-eb-ba=be
 you.SG.M tobacco=SG.N1=NEG smoke-stay.PFV-IFUT-2SG.SBJ-NEG=DECL
 ‘You cannot/must not smoke’

7.3.4.3 Prohibitive

Although example (7-140) will most likely be interpreted as an order, it is still a declarative sentence, not an imperative, because the verb bears the declarative illocutionary marker =*be*. For the Prohibitive, negated Immediate future forms with a Hortative illocutionary clitic are used:

- (7-141) *futémo funemebe!*
füt=e=mo *fu+n-Vm-eb=e*
 tobacco=SG.N1=NEG smoke+AUX.PFV-IFUT-2SG.SBJ=HORT
 ‘You must not smoke!’

Prohibitives always take the Hortative illocutionary marker =*e*, which is =*ne* after vowels:

- (7-142) *ómo* *tlaa-m-o=ne!*
she=NEG *come.PFV.FUT-IFUT-3SG.F.SBJ=HORT*
 ‘She must not come!’

Although the verb cannot be inflected with *-ba* ‘Negation’ in the Prohibitive, negation is expressed by the negation particle *mo*.

7.3.4.4 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.

7.3.4.4.1 Directly inflected and auxiliary-compounded Hortatives

Hortatives can be formed from perfective or imperfective stems. Vowel-final perfective stems require compounding with the auxiliary stem +*n* ‘PFV’. Imperfective stems and C-stems are inflected directly (cf. Table 68).

Mian hortatives are interesting because their formation involves a special set of subject markers which cannot be found in any other paradigm. Hortatives are additionally marked by an illocutionary particle =*o~e*:

Stem	Subject marker	Illoc. marker
Pfv (C-stems only) Ipfv	<i>-an</i> '1SG.SBJ.HORT'	=o
	<i>-al</i> '2SG.SBJ.HORT'	=e
	<i>-ek</i> '3SG.M.SBJ.HORT'	=o
	<i>-ok</i> '3SG.F.SBJ.HORT'	=o
	<i>-om</i> '1PL.SBJ.HORT'	=o
	<i>-in</i> '2/3PL.SBJ.HORT'	=e

Table 68: Directly inflected Hortatives

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. Yet, the occurrence of =e is not completely restricted to second persons but appears in the 3rd plural as well.

In hortatives of imperfective N-stems the hortative subject marker is directly suffixed to the stem; e.g. *hen* 'search':

hen-an=o 'I should start searching!'
hen-al=e 'You should start searching!'
 etc.

In all other imperfective stems the hortative subject marker is suffixed to the imperfective M-stem:

ase fakam-an=o 'I should be making a fire!'
ase fakam-al=e 'You should be making a fire!'
 etc.

Perfective C-stems are also directly inflected for Hortative. (On stem change in the Hortative paradigm for *un~on* 'go' and *tl~te* 'come' see below). Thus:

dowon-an=o 'I should eat!'
dowon-al=e 'You should eat!'
 etc.

All other perfective stems have to be compounded with the auxiliary stem *+n* 'PFV', which then bears the hortative subject marker.

Stem		Auxiliary	Subject marker	Illoc. marker
Pfv (V-stems)	+	n 'AUX.PFV'	-an '1SG.SBJ.HORT'	=o
			-al '2SG.SBJ.HORT'	=e
			-ek '3SG.M.SBJ.HORT'	=o
			-ok '3SG.F.SBJ.HORT'	=o
			-om '1PL.SBJ.HORT'	=o
			-in '2/3PL.SBJ.HORT'	=e

Table 69: Auxiliary-compounded Hortatives

A full paradigm follows:

<i>ase fa+n-an=o</i>	'I should make a fire!'
<i>ase fa+n-al=e</i>	'You should make a fire!'
<i>ase fa+n-ek=o</i>	'He should make a fire!'
<i>ase fa+n-ok=o</i>	'She should make a fire!'
<i>ase fa+n-om=o</i>	'Let's make a fire!'
<i>ase fa+n-in=e</i>	'You (pl)/they should make a fire!'

7.3.4.4.2 Stem change in Hortative forms

The perfective stems *on~un* 'go (Pfv)' and *tl~te* 'come (Pfv)' are C-stems. *Un~on* 'go (Pfv)' is directly inflected but shows a stem change and no subject marker in the 2nd singular:

<i>un-an=o</i>	'I should go!'
<i>on=e</i>	'You should go!'
<i>un-ek=o</i>	'He should go!'
<i>un-ok=o</i>	'She should go!'
<i>un-om=o</i>	'Let's go!'
<i>un-in=e</i>	'You (pl)/they should go!'

Tl~te 'come (Pfv)' has a stem change in the 1st singular which is auxiliary-compounded and the 2nd singular. In the latter form, the hortative subject marker is *-l* instead of *-al*. A form for the 1st plural is unattested:

<i>te+n-an=o</i>	'I should come!'
<i>te-l=e</i>	'You should come!'
<i>tl-ek=o</i>	'He should come!'
<i>tl-ok=o</i>	'She should come!'
<i>tl-in=e</i>	'You (pl)/they should come!'

The imperfective Hortatives of *un-on* ‘go (Pfv)’ and *tl-te* ‘come (Pfv)’ are regular, i.e. are formed with the M-stems *unem* and *tlem*, respectively, to which the hortative subject markers are suffixed directly.

7.3.4.5 Imperative

In order to issue a direct command to a 2nd person singular the bare verb stem with any obligatory verbal classificatory prefixes and pronominal object affixes is used, for example:

<i>baa</i>	‘Say (it)!’
<i>te</i>	‘Come!’
<i>obbia</i>	‘Throw it!’ ⁴²
<i>deiba</i>	‘Leave him!’ ⁴³

The exact semantic difference between these imperative forms and the hortative forms in the 2nd singular described in the previous section is hard to assess. It is my impression that bare stems convey a stronger directive force than the hortative form of the same verb stem. As bare stems can only refer to the 2nd 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 2nd singular) can be found in the Papuan language Korafe (cf. Farr 1999: 20, 30).

7.3.5 The morphological status of the auxiliary

The issue I will tackle in these paragraphs is the question of the morphological status of the auxiliary elements in verb forms in which the verb stem is not directly inflected for tense and aspect. The analysis I presented above assumed that verb forms like (7-143) are inflected compounds consisting of a lexical verb stem and an auxiliary stem:

⁴² This form parses *ob-bia* [SG.RESID.O-throw.PFV]

⁴³ This form parses *dei-b-a* [leave.PFV-BEN.PFV-3SG.M.IO.PFV].

- (7-143) *kět=e* *a-fu+bi-n-e-so=be*
 container=SG.N1 SG.N1.O-grab.PFV+AUX.IPFV-PST-3SG.M.SBJ-HPST=DECL
 ‘I was holding the container yesterday’

The issue with this analysis is obvious. As auxiliaries occur with all imperfective stems and a few perfective-only stems, i.e. show considerable productivity, the lexicon will be flooded with a plethora of compounded verb stems, such as *a-fu+bi* ‘be holding it’, which each consist of a lexical verb and an auxiliary. This is clearly not desirable.

There two obvious alternatives to the compound analysis: (a) the verb in (7-143) could be a serial verb construction (SVC), and (b) the auxiliary form could be analyzed as an affix.

The SVC-analysis can be proven false quite easily. Consider (7-144):

- (7-144) *wembinesobe*
wen+bi-n-e-so=be
 eat.IPFV+AUX.IPFV-PST-3SG.M.SBJ-HPST=DECL
 ‘he was eating yesterday’

In forms like *wembinesobe* ‘he was eating yesterday’ the auxiliary *bi* simply indicates imperfectivity. It is not the case that we are dealing with two serialized predicates one denoting an ‘eating’-event and the other a ‘staying’-event which proceed one after the other.

Forms with a perfective stem and an auxiliary may look more like a SVC. Again consider (7-145), repeated from (7-132):

- (7-145) *né dowombinisobe*
né lowon+bi-n-i-so=be
 I eat.PFV+AUX.IPFV-PST-1SG.SBJ-HPST=DECL
 ‘Yesterday I ate and stayed (having eaten)’

It is not unreasonable to claim that in *dowombinisobe* ‘Yesterday I ate and stayed (having eaten)’ we have a predicate denoting the ‘eating’-event followed by a predicate denoting the ‘staying’-event and that the former precedes the latter temporally.

Suprasegmentally, however, there is no difference between a form like *dowombinisobe* and *wembinesobe*. 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 which spreads over the whole phonological word, namely /^Lwenbinesobε/ and /^{LHL}lowonbinisobε/. In

SVCs, on the other hand, each verb retains its own melody. Tone sandhi effects may occur but essentially each member in a SVC can be discerned as a single tone domain, i.e. a single phonological verbal word.

Furthermore, if *dowombinisobe* was a SVC, nasal assimilation to the following /b/ should not take place. Consider the following SVC-example with absence of nasal assimilation:

(7-146) *on* *bl-∅-ib* *bita*
 go.PFV stay.IPFV-IPFV-2/3PL.AN.SBJ until
 ‘they went and stayed (where they have gone to) until...’ [Mianmin and
 Telefomin]

In (7-146) we have a clear case of a SVC consisting of a bare stem *on* ‘go (Pfv)’ and subject-inflected *bi~bl* ‘stay (Ipfv)’. There is no assimilation here. Example (7-146) is pronounced [ɔn^mbliḗ^mbit^ha], not *[ɔmbliḗ^mbit^ha].

The second alternative analysis is less easy to refute. It would be possible to treat the auxiliary element as an affix which has grammaticalized from the existential verb and which has its own slot in the verbal template. Table 70 sketches such an analysis (leaving out the slots for negation and illocutionary force) and (7-147) provides a fully glossed example.

Verb stem	AUX	TNS/ASP	SBJ	TNS
<i>afu</i>	<i>-bi</i> ‘IPFV’	<i>-n</i> ‘PST’		<i>-so</i> ‘HPST’
		<i>-s</i> ‘RPST’		<i>-bio</i> ‘GPST’

Table 70: Alternative analysis: auxiliary elements as suffixes

(7-147) *kēt=e* *a-fu-bi-n-e-so=be*
 container=SG.N1 SG.N1.O-grab.PFV-AUX.IPFV-PST-3SG.M.SBJ-HPST=DECL
 ‘I was holding the container yesterday’

This analysis looks elegant and gets rid of the potential flood of verb-auxiliary-compounds in the lexicon but runs into the problem that there is good evidence that what is inflected in the verb in example (7-147) is the auxiliary *bi* and not the lexical verb *afu*. The Past marker *-n* behaves as it does in the existential verb. In directly inflected verbs, *-∅* is an allomorph of *-n* ‘Past’. Thus, there are both:

(7-148) *a-fu-n-e=be*
 SG.N1.O-grab.PFV-PST-3SG.M.SBJ=DECL
 ‘he has grabbed it’

(7-149) *a-fu-∅-e=be*
 SG.N1.O-grab.PFV-PST-3SG.M.SBJ=DECL
 ‘he has grabbed it’

Dropping of *-n* in forms of the existential verb, on the other hand, creates a semantic contrast. Compare (7-150) and (7-151):

(7-150) *binebe*
bi-n-e=be
 stay.IPFV-PST-3SG.M.SBJ=DECL
 ‘He has been staying (up to now)’

(7-151) *biebe*
bi-∅-e=be
 stay.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is staying’

We observe the same contrast in verbs which contain an auxiliary element. Compare (7-152) and (7-153):

(7-152) *afubinebe*
a-fu+bi-n-e=be
 SG.N1.O-grab.PFV+AUX.IPFV-PST-3SG.M.SBJ=DECL
 ‘He has been holding it (up to now)’

(7-153) *afubiebe*
a-fu+bi-∅-e=be
 SG.N1.O-grab.PFV+AUX.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He is holding it’

If *-n* ‘Past’ attached to verbs independent of whether this verb was inflected with an auxiliary or whether it was inflected directly, we would not expect the meaning contrast illustrated by (7-152) and (7-153) to arise. Consequently, the inflected category seems to be the auxiliary and not the lexical verb.⁴⁴

⁴⁴ I agree that stronger, phonological evidence would be desirable to distinguish between compounded and affixed verbs. As both monomorphemic and compounded verb stems with all their affixes constitute one tonal domain, tonal evidence remains equivocal here and does not help to decide between a compound and an affix analysis for auxiliaries.

Although there is no definite proof for the compound analysis, the suprasegmental behaviour of auxiliary-compounded verbs is exactly like clearer cases of verb-verb compounding, such as *habu* ‘hide’, which is made up of the verb stems *ha* ‘break’ and *bu* ‘bury’. Verb-verb compounds with all their affixes also constitute a single domain for tone. Therefore, the suprasegmental behaviour of verb plus auxiliary is at least consistent with a compound analysis.

7.4 The negative suffix *-ba*

The negative suffix *-ba* only occurs in final, never in medial verbs. It indicates the negation of the proposition made by the clause and has scope over the whole clause chain (cf. 10.2). *-Ba* is always the last suffix in a verb. It can only be followed by an illocutionary clitic. Compare:

(7-154) *né tekein kebibe*
né tekein ke-b-i=be
 I knowledge make-IPFV-1SG.SBJ=DECL
 ===know===
 ‘I know’

(7-155) *némo tekein kebibabe*
né=mo tekein ke-b-i-ba=be
 I=NEG knowledge make-IPFV-1SG.SBJ-NEG=DECL
 ===know===
 ‘I don’t know’

Usually the negative suffix *-ba* co-occurs with the negative enclitic *mo* elsewhere in the sentence.

The negative marker *-ba* is independent of stem aspect and occurs with all aspectual stem types.

Suffixation of the negative marker *-ba* can have an influence on which subject marker alternant is selected (cf. section 7.2.1.3.2 on the subject marker).

On the use of *-ba* in non-verbal predications see 8.6.1.

7.5 Non-finite verb forms

7.5.1 M-stems

M-stems can be formed from either the perfective or the imperfective stem. The perfective M-stem consists of the perfective stem plus /nam/, e.g. *fuelanam* ‘bathe (Pfv, M-stem)’. The imperfective M-stem consists of the imperfective stem plus /m/, e.g. *bum* ‘hunt’ (Ipfv, M-stem). The M-stems have a variety of functions in Mian. They are used in purposive serializations (see 9.1.3) and to form the verbal noun (see 7.5.2).

7.5.1.1 Perfective M-stems

Biaspectual, trans-aspectual, and defective (perfective-only) verbs have an additional perfective M-stem, which is the perfective or trans-aspectual stem plus /nam/:

	Stem(s)	Gloss	Pfv M-stem
Biaspectual	<i>fa/faka</i>	‘make fire’	<i>fanam</i>
Trans-aspectual	<i>fu</i>	‘cook, smoke’	<i>funam</i>
	<i>kla</i>	‘fix, complete’	<i>klanam</i>
Defective (Pfv-only)	<i>kan/—</i>	‘die’	<i>kanam</i>

Table 71: Perfective M-stems

The perfective M-stem is used to form the perfective verbal noun; e.g. *fanam-in* ‘make fire (Pfv, verbal noun)’, *funam-in* ‘cook (Pfv, verbal noun)’ and in purposive serializations.

7.5.1.2 Imperfective M-stems

Biaspectual, trans-aspectual, and defective (imperfective-only) verbs have an additional imperfective M-stem, which is the imperfective or trans-aspectual stem plus /m/:

	Stem(s)	Gloss	Ipfv M-stem
Biaspectual	<i>fa/faka</i>	‘make fire’	<i>fakam</i>
Trans-aspectual	<i>fu</i>	‘cook, smoke’	<i>fum</i>
	<i>kla</i>	‘fix, complete’	<i>klam</i>
Defective (Ipfv-only)	<i>—/ei</i>	‘fly’	<i>eim</i>

Table 72: Imperfective M-stems

The imperfective M-stem is used to form the imperfective verbal noun; e.g. *fakam-in* ‘(activity of) making a fire (Ipfv, verbal noun)’, *fum-in* ‘(activity of) cooking (Ipfv, verbal noun)’, for inchoative verb forms, e.g. *fum-i=be* [cook.IPFV.MSTEM-1SG.SBJ=DECL] ‘I start cooking’, and in purposive serializations.

Verbs which belong to the N-stems, i.e. those whose imperfective stem ends in /n/, do not have a distinct M-stem. They are directly inflected with *-in* to form the verbal noun and inchoative forms; e.g. *hen-in* ‘(activity of) looking for (Ipfv, verbal noun)’, *henibe* [search.IPFV-1SG.SBJ=DECL] ‘I start searching’.

7.5.2 Verbal nouns

The verbal noun is the citation form for all verbs. If the stem permits or requires the direct or indirect object to be encoded by an affix, the verbal noun likewise can or has to encode the direct or indirect object.

All verbal nouns are of neuter 2 gender and can take the article =o when used as arguments. Syntactically, verbal nouns occur in subject, direct object, and possessor positions.

Verbal nouns are formed by suffixing *-in* to the perfective and imperfective M-stems. Table 73 lists examples of verbal nouns for biaspectual, trans-aspectual, and defective verbs.

	Aspectual stems	Meaning	Perfective	Imperfective
Biaspectual	<i>baa/o</i>	‘talk, say’	<i>baanam-in</i>	<i>om-in</i>
	<i>on-un/une</i>	‘go’	<i>onam-in</i>	<i>unem-in</i>
Trans-aspectual	<i>fu</i>	‘cook’	<i>funam-in</i>	<i>fum-in</i>
Perfective-only	<i>kan/--</i>	‘die’	<i>kanam-in</i>	—
Imperfective-only	<i>--/ei</i>	‘fly’	—	<i>eim-in</i>

Table 73: The verbal noun

If a verb obligatorily marks its direct object, the cross-referencing prefix, which can be pronominal or classificatory, must be part of the verb noun (cf. Table 74).

	Aspectual stems	Meaning	Perfective	Imperfective
With pronominal prefix	<i>a-tem/a-teme</i>	‘see him’	<i>a-temnam-in</i>	<i>a-temem-in</i>
With verbal classificatory prefix	<i>tob-bia/—</i>	‘throw long object’	<i>tob-bianam-in</i>	—

Table 74: Direct object marking in verbal nouns

Verbal nouns can be inflected for indirect object:

	Aspectual stems	Meaning	Perfective	Imperfective
Biaspectual	<i>baa-b-e/o-Ø-ye</i>	‘talk, say to them’	<i>baabenam-in</i>	<i>oyem-in</i>
Trans-aspectual	<i>fu-b-e/fu-Ø-ye</i>	‘cook for them’	<i>fubenam-in</i>	<i>fuyem-in</i>

Table 75: Indirect object marking in verbal nouns

Verbal nouns of underived semitransitive verbs (see 8.1.3.1) obligatorily include the indirect object marker (Table 76):

	Aspectual stems	Meaning	Perfective	Imperfective
Trans-aspectual	<i>fote-b-e/fote-Ø-ye</i>	‘rout them’	<i>fotebenam-in</i>	<i>foteyem-in</i>

Table 76: Verbal nouns of underived semitransitive verbs

7.5.2.1 Imperfective verbal nouns in *-l* ‘imperfective’ plus *-in*

Apart from the imperfective verbal noun formed from the *m*-stem, there is a formal variant in *-l* ‘imperfective’ plus *-in* ‘verbal noun’ formed from the imperfective stem. I found no meaning difference between these two. As I have not systematically elicited imperfective verbal nouns in *-l*, it is difficult to make a solid generalization as to what the conditions are for an imperfective verb stem to have such a verbal noun. The only obvious fact is that the verbal noun in *-l* can only be formed from the imperfective (or trans-aspectual) stem and that all verbs which have a verbal noun in *-l* also have one formed from the *M*-stem while the reverse does not hold. The only exception is *unalin* ‘eat (Ipfv)’ with the imperfective stems *wen~unan* for which there is no imperfective noun **unamin* or **wenmin*).

The following Table 77 lists all verbs in my corpus which have a verbal noun in *-l*.

Imperfective stem	Verbal noun in <i>-in</i>	Verbal noun in <i>-l-in</i>	Gloss
<i>baka</i>	<i>bakamin</i>	<i>bakalin</i>	‘cut/break’
<i>daba</i>	<i>dabamin</i>	<i>dabalin</i>	‘peel wood’
<i>do-Ø-ka</i>	<i>dokamin</i>	<i>dokalin</i>	‘put him’
<i>faka</i>	<i>fakamin</i>	<i>fakalin</i>	‘make fire’
<i>fua</i>	<i>fuamin</i>	<i>fualin</i>	‘bathe’
<i>gaala(-ka)</i>	<i>gaala(ka)min</i>	<i>gaalakalin</i>	‘tear down’
<i>gena~ga</i>	<i>genamin, gamin</i>	<i>genalin, galin</i>	‘do’
<i>glita(-ka)</i>	<i>glita(ka)min</i>	<i>glita(ka)lin</i>	‘rub off’
<i>hala</i>	<i>halamin</i>	<i>halalin</i>	‘abstain’
<i>haa</i>	<i>haamin</i>	<i>haalalin</i>	‘weave’
<i>haka</i>	<i>hakamin</i>	<i>hakalin</i>	‘cut/break’
<i>kluta(-ka)</i>	<i>kluta(ka)min</i>	<i>kluta(ka)lin</i>	‘shatter’
<i>mimita</i>	<i>mimitamin</i>	<i>mimitalin</i>	‘imitate, echo’
<i>singa</i>	<i>singamin</i>	<i>singalin</i>	‘pour’
<i>taa</i>	<i>taamin</i>	<i>taamin</i>	‘sharpen’
<i>teka</i>	<i>tekamin</i>	<i>tekalin</i>	‘split’
<i>tilaka</i>	<i>tilakamin</i>	<i>tilakalin</i>	‘remove, undo’
<i>waka</i>	<i>wakamin</i>	<i>wakalin</i>	‘break, disturb’
<i>wen~unan</i>	--	<i>unalin</i>	‘eat’

Table 77: Verbs with imperfective verbal nouns in *-l-in* and *-in*

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 verbal noun)’, whereas the latter denotes one or more unbounded events, e.g. *unemin* ‘(activity of) going (Ipfv verbal noun)’. The following two examples illustrate this semantic difference in a minimal sentence pair:

(7-156) *onamino fatnata deblibe?*

onamin=o fab+na=ta le+bl-Ø-ib=e
 go.PFV.VN=N2 what+do=MED desist.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ=CQ
 ‘Why don’t you go?’

(7-157) *unemino fatnata deblibe?*

unemin=o fab+na=ta le+bl-Ø-ib=e
 go.IPFV.VN=N2 what+do=MED desist.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ=CQ
 ‘Why don’t you move along (i.e. in a queue)?’

Smith and Weston (1974b: 65-6) term all verb forms in *-in* ‘customary’. While 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 ‘customary’ is clearly a misnomer because imperfective verbal nouns do not necessarily denote

habitual or customary actions, e.g. in (7-157) where the verbal noun *unemin* is simply continuous, nor do perfective verbal nouns ever signify habitual actions.

7.5.2.2 N-stems

The verbal noun of imperfective N-stems is formed by directly suffixing *-in* to the imperfective stem. N-Stems can be either biaspectual or defective (imperfective-only) verbs. There is no verbal noun in *-l* plus *-in*. The perfective verbal noun is formed regularly.

	Aspectual stems	Gloss	Perfective	Imperfective
Biaspectual	<i>hena/hen</i>	‘search’	<i>henanam-in</i>	<i>hen-in</i>
	<i>ngela/ngen</i>	‘beg’	<i>ngelanam-in</i>	<i>ngen-in</i>
Imperfective-only	<i>-/un</i>	‘hum’	—	<i>un-in</i>

Table 78: Verbal nouns of N-stems

N-stems with indirect object form the verbal noun regularly (Table 79):

	Aspectual stems	Gloss	Perfective	Imperfective
Biaspectual	<i>hena-b-e/hen-Ø-ye</i>	‘search for them’	<i>henabenam-in</i>	<i>henyem-in</i>
	<i>ngela-b-e/ngen-Ø-ye</i>	‘beg from them’	<i>ngelabenam-in</i>	<i>ngenyem-in</i>

Table 79: Verbal nouns of N-stems with indirect object

7.5.2.3 The verbal noun of the existential verb

The verbal noun of the existential verb *n/bl-bi* ‘stay, exist, remain’ is *nin*. There is no verbal noun formed from the imperfective stem *bl~bi*.

7.5.2.4 Verbal nouns of X-compounds

X-compounds can be either perfective-only, e.g. *maa/—* ‘stand up’ or imperfective-only, e.g. *-/haa* ‘roam’. Their imperfective verbal noun is a compound of the verb stem and the verbal noun of the existential verb *nin*. Perfective-only X-compounds have a regular perfective verbal noun. (Table 80).

	Aspectual stems	Gloss	Perfective	Imperfective
Perfective-only	<i>maa/—</i>	‘stand up’	<i>maanam-in</i>	<i>maa+nin</i>
Imperfective-only	<i>—/haa</i>	‘roam’	—	<i>haa+nin</i>

Table 80: Verbal nouns of X-compounds

7.6 Iterativity

Iterative events are commonly expressed by using a verb form inflected with *-b* ‘Imperfective’. Such forms can have a continuous or an iterative interpretation:

(7-158) *Skote ase wibebe*

skot=e as=e wi-b-e=be

PN wood=SG.N1 hack-IMPV-3SG.M.SBJ=DECL

‘Scott is hacking a piece of wood’

OR ‘Scott is hacking (repeatedly) at a piece of wood’

Single subevents within a larger iterative event can be focussed on by using repeated perfective stems followed by the existential verb:

(7-159) *Skote afule waisa waisa biebe*

skot=e aful=e wai-s-a

PN=SG.M ball=SG.N1 hack.PFV.BEN-BEN.PFV-SG.N1.IO.PFV

wai-s-a

hack.PFV.BEN-BEN.PFV-SG.N1.IO.PFV

‘Scott is hacking at the ball’

OR ‘Scott is hacking repeatedly at the ball’

bi-Ø-e=be

stay-IPFV-3SG.M.SBJ=DECL

This construction is non-committal as to whether the repeated actions are performed by a single individual or by several individuals (or groups) in a row:

(7-160) *dowon dowon biaaniba*

lowon lowon+biaan-ib=a

eat.PFV eat.PFV+AUX.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...’

7.7 Function verb constructions

Mian has two function (or ‘light’) verbs: *ge/ga-gena* ‘do’ and *ke* ‘make’, which combine with a coverb or ‘host’ (cf. Schultze-Berndt 2006) to form a complex predicate. In most cases the coverb is either a noun (e.g. *tekein* ‘knowledge’) or an ideophone (e.g. *he* ‘moaning sound’) but in some cases the word class of the coverb is hard to determine because it only occurs in a construction with a function verb.

While complex predicates with *ge/ga-gena* ‘do’ are predominantly intransitive, *ke* ‘make’ forms intransitive and transitive complex predicates. Two examples follow:

(7-161) *kan-an=o ge=ta he ge-s-e=be*
die-1SG.SBJ.HORT=HORT do.PFV=MED moan do.PFV-RP-3SG.M.SBJ=DECL
‘‘I have to die!’’ he thought and moaned’ [Sobining]

(7-162) *naka élé=mo tekein ke-b-i-ba=be*
man.M DEM.M.SG=NEG knowledge make-IPFV-1SG.SBJ-NEG=DECL
====know====
‘I don’t know this man’

The function verb *ge/ga-gena* ‘do’ mainly takes ideophones as coverbs. Table 81 lists some examples.

<i>bokbok</i>	<i>ge/ga-gena</i> ‘do’	‘boil’
<i>kusang</i>		‘sneeze’
<i>fong</i>		‘whistle’
<i>fu</i>		‘blow’
<i>he</i>		‘moan’
<i>blala</i>		‘flash (of lightning)’

Table 81: Function verb constructions with *ge/ga-gena* ‘do’

Examples for (possibly) non-ideophonic elements as coverbs are *meng ge/ga* ‘pull’ and *bing ge/ga* ‘pull’, *glit ge/ga* ‘dawn’. The exact meaning of these coverbs is not clear at the moment.

The function verb *ke* ‘make’ mainly occurs with nouns in complex predicates.

<i>tekein</i>	<i>ke</i> ‘make’	‘know’
<i>okok</i>		‘work’
<i>tata</i>		‘be strong’
<i>mikik</i>		‘prepare’
<i>dong</i>		‘sit quietly’

Table 82: Function verb constructions with *ke* ‘make’

The function verb *ke* ‘make’ productively takes Tok Pisin loans as coverbs; e.g.

(7-163) *maami ileme sakim kebinabiobe*
määm=i ilem=e sakim ke+bina-b-io=be
 mosquito=PL.AN blood=SG.N1 suck make+AUX.HAB-IPFV-2/3PL.AN.SBJ=DECL
 ‘Mosquitoes (habitually) suck blood’

Nearly every Tok Pisin loan verb and a few nouns and adjectives can be coverbs of *ke*.

Some examples are give in Table 83:

<i>flet</i>	<i>ke</i> ‘make’	‘deplete’
<i>kis</i>		‘kiss’
<i>kot</i>		‘stand trial’
<i>lotu</i>		‘go to church’
<i>ledi</i>		‘prepare’
<i>sakim</i>		‘suck’
<i>sekim</i>		‘check’
<i>skul</i>		‘go to school’
<i>soka pila</i>		‘play soccer’
<i>spin</i>		‘spin’

Table 83: Tok Pisin loan verbs as coverbs of *ke* ‘make’

7.8 Noun-verb idioms

Mian has a range of lexicalized idiomatic expressions which can consist of a noun (adjunct) and a verb. Noun-verb idioms are for example:

<i>aaie fuela/aaie fua</i>	‘bathe’
<i>aben gi</i>	‘laugh’
<i>tamano kou</i>	‘fornicate, rape’
<i>usän fu</i>	‘vomit’

What all of these have in common is that the noun preceding the verb functions as an adjunct and not as an object. It is not assigned a thematic role. Nominal adjuncts are highly restricted in their syntax. They have to immediately precede the verb and are not relativizable. Objects on the other hand can be fronted and relativized.

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 for the first type is *aaie fuela/fua* ‘bathe’, which still means ‘bathe’ when *aaie* ‘water’ is omitted:

- (7-164) *fua+biaan-ib=to*
 bathe.IPFV+AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘while they were bathing, they...’ [Sobining]

In other cases, the adjunct cannot be omitted without affecting the semantics. Compare:

- (7-165) *kou-Ø-we-b-e=a*
 fuck-BEN.IPFV-3SG.F.IO.IPFV-3SG.M.SBJ=MED
 ‘while he was fucking her, she...’ [Newlyweds]

- (7-166) *tamano* *kou-Ø-ye-b-ib=ta*
 fornication fuck-BEN.IPFV-PL.AN.IO.IPFV-2/3PL.AN.SBJ=MED
 =====rape=====
 ‘while they were raping them, ...’ [Mianmin and Telefomin]

7.9 Immediate action

Mian has a special construction for immediate actions involving the function verb *ge/gena~ga* ‘do’. 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, e.g.:

- (7-167) *futé gingé tobtlaananggenabibe*
füt=e *gĩng=e*
 tobacco=SG.N1 midrib=SG.N1

tob-tlaa+n-ang+gena-b-i=be
 SG.LONG.O-remove.PFV+AUX.PFV-IMMACT.SG.SBJ+do.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 (SG SUBJ)’ for singular subjects there is also *-om* ‘Immediate action (PL SUBJ)’ for plural subjects:

- (7-168) *sluluowa unomgenoba*
sluluowa un-om+ge-n-ob=a
 with_haste go.pfv-IMMACT.PL.SBJ+do.PFV-SS.SEQ-1PL.SBJ=MED
 ‘we wanted to go with haste and then we...’ [Ala ritual]

Instead of the imperfective stem of the function verb *gena~ga* ‘do’ inflected with *-b* ‘imperfective’ one also finds the inchoative verb form with the inflected imperfective M-stem *genam* in the same construction. There is no obvious difference in meaning, e.g.:

- (7-169) *eka imake yébbaka dobanggename kesoa*
eka imak=e yébbaka
 and husband=SG.M together
- lob-∅-ang+genam-e kesoa*
 SG.MASC.O-take.PFV-IMMACT.SG.SBJ+do.IPFV.MSTEM-SG.N1.SBJ so
 ‘it (the water) was about to take the husband as well, so...’ [The Flood]

The ‘Immediate action’-construction is presumably a reanalysis of an embedded quotative construction (see 11.1). The erstwhile hortative suffixes *-an* ‘1SG.HORT’ and *-om* ‘1PL.HORT’ are still discernible (see 7.3.4.4). Compare the following example (7-170) with (7-167) above. The embedded hortative sentences is given in brackets:

- (7-170) [*futé gingé tobtlaanano*] *genabibe*
 [*füt=e gǐng=e*]
 tobacco=SG.N1 midrib=SG.N1
- tob-tlaa+n-an=o*
 SG.LONG.O-remove.PFV+AUX.PFV-1SG.SBJ.HORT=HORT
- gena-b-i=be*
 do.IPFV-IPFV-1SG.SBJ=DECL
 ‘I think I should remove the midrib of the tobacco leaf’

There are several reasons why I set this up as a distinct construction. Speaker intuitions about word boundaries indicate that *tobtlaanangenabibe* ‘I am about to remove a long object’ as one word, while *tobtlaanano genabibe* ‘I think I should remove a long object’ is judged to be two separate words.

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 the case in the 'Immediate action'-construction. The identity of the immediate action suffix is entirely predictable from the number of the subject of the matrix verb. If it is singular, *-ang* is used, if it is plural *-om*.

Finally, the construction for immediate actions allows inanimate subjects, e.g. the water in (7-169), while quotative constructions (whether declarative, interrogative, or hortative) are restricted to subjects which have a consciousness and are capable of intentional action.

7.10 Medial verb morphology

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 Argument structure and syntax of the clause

This chapter deals with the argument structure of the verb and with constituent order in the clause. Unmarked word order in Mian is SOV. While the verb is almost always final in any clause (two marginal exceptions will be dealt with below), the order of arguments and adverbial adjuncts is less rigidly fixed.

Mian is zero-anaphoric. Consequently, NPs arguments tend to be dropped after their referents have been introduced into the discourse. Thus, clauses very often consist just of a verb whose pronominal affixes allow tracking of discourse participants.

8.1 Argument structure

Mian is a head-marking language. It does not rely on nouns being marked for morphological case. Rather relevant syntactic relations are marked on the verb (cf. Nichols 1996). Most arguments in a clause (all subjects and indirect objects plus the direct objects of a subset of verbs) are represented on the verb by affixes.

8.1.1 Argument structure

Mian has intransitive, transitive, semitransitive, ditransitive, and ambitransitive verbs. The benefactive applicative is used as a valency-increasing device to derive semitransitives from intransitive and ditransitives from transitives in a very productive way. Recall that the benefactive *-b* only appears in perfective verb forms. In the imperfective the benefactive applicative is zero. The only underived ditransitive verb in Mian is *ale-b-e/ale-Ø-ye* ‘show to them’. On the reasons for this analysis, see section 8.1.4 on ditransitives.

Ambitransitives can function as intransitive or transitive without any derivational process.

In addition to that, there are also a few impersonal verbs, which denote the arrival of morning and afternoon and the passage of time. All finite verbs must contain a subject marker which refers to the verb’s subject which in the rare case of impersonal verbs is an expletive.

I define the argument structures as follows:

- Intransitives have exactly one core argument (S)⁴⁵
- Transitives have exactly two core arguments (A and O)
- Semitransitives have exactly two core arguments (A and IO)
- Ditransitive have exactly three arguments (A, O, and IO).

As Mian is an nominative-accusative language, argument affixes conflate S and A as opposed to O. The class of ambitransitives (cf. Dixon 1994, Dixon 2002) consists of those verbs which can be used intransitively or transitively.

8.1.1.1 Intransitive verbs

Intransitive verbs have exactly one argument which has the grammatical relation of subject. Intransitives comprise the following semantic classes:

- verbs of movement, e.g.: *tl-te/te*, *tle* ‘come, arrive’, *un-on/une* ‘go’, *-ei* ‘fly’, *-be* ‘walk, move along’
- verbs of (change of) posture, e.g.: *maa* ‘stand up’, *toun* ‘sit down’, *ǎan un-on/une* ‘lie down’
- verbs denoting processes, e.g.: *klaa* ‘rot’, *dama/-* ‘grow up’, *sika* ‘swell’
- social activities, e.g.: *dli* ‘dance’
- verbs denoting noises, e.g.: *kle* ‘crack, rustle (of wood or leaves)’, *-un* ‘hum, drone’
- bodily processes, e.g.: *kusang ge/kusang ga* ‘sneeze’, *usǎn fu* ‘vomit’, *-gen* ‘be sick’, *kan/-* ‘die’
- emotional states, e.g.: *tobtlina/tobtlin* ‘be confused’
- the existential verb *n/bi-bl* ‘exist, stay, live, remain’

In addition to these, all denominal and deadjectival verbs derived with the verbalizer *-an* are intransitive (for this type of derivation see 3.2.3). Consider (8-1) and (8-2):

(8-1) *konokmonánamabibe*
konokmǎn-an-amab-i=be
 old_woman-VBZR-FUT.NANPL.SG.SBJ-1SG.SBJ=DECL
 ‘I will be an old woman’ (from Smith and Weston 1974b: 38)

(8-2) *ayamanebiobe*
ayam-an-e-bio=be
 good-VBZR-3SG.M.SBJ-GPST=DECL
 ‘he became well’ [Pineapples]

⁴⁵ I use the Dixonian symbols S for the subject of an intransitive verb, A for the subject of a transitive verb and O for its object (see e.g. Dixon 1994).

Semantically, denominal and deadjectival verbs can be described as one-place predicates which predicate the inception of the state expressed by the noun or adjective from which the verb is derived.

The most frequent class of intransitive verbs are verbs of motion. Their subject refers to the agent or experiencer of the motion event:

- (8-3) *unangmonó mako tenota*
unangmǝn=o mak=o te-n-o=ta
 woman=SG.F other=SG.F come-SS.SEQ-3SG.F.SBJ=MED
 ‘Another woman arrived and then she...’ [Afoksitgabaam]

Basic verbs of motion are:

tl~te/te, tle ‘come, arrive’
un~on/une ‘go, set out’

Basic motion verbs readily combine with and can even fuse with any of the directionals *daak* ‘down’, *ut* ‘up’, *tab* ‘downriver’, *met* ‘upriver’, *wat* ‘across’, or *tam* ‘to the side, sideways’ functioning as a locative/directional adverb to indicate the direction of the movement. Fused medial verb forms are distinct from fused final ones. Table 84 sets out all combinations of motion verb and directional (including attested fused forms).

Directional adverb	Motion verb stem	Fused medial verb forms	Fused final verb forms	Gloss		
<i>daak</i> ‘down’	<i>tl~te/te, tle</i>	<i>daake</i>	<i>daake</i>	‘come down, descend’		
<i>ut</i> ‘up’		<i>utl, ute</i>	<i>utl</i>	‘come up, ascend’		
<i>tab</i> ‘downriver’		no fused forms attested		no fused forms attested	‘come downriver’	
<i>met</i> ‘upriver’					‘come upriver’	
<i>wat</i> ‘across’					‘come across’	
<i>tam</i> ‘sideways’					‘come from the side’	
<i>daak</i> ‘down’	<i>un~on/une</i>			no fused forms attested	<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>wat</i> ‘across’		<i>wasn</i>	‘go across’			
<i>tam</i> ‘sideways’		<i>tamn</i>	‘go to the side’			

Table 84: Directional and motion verb combinations

An example for a medial verb in which directional and motion verb are fused is:

- (8-4) *imen deib laake-s-ib=ta*
 taro purpose down_come.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘they (the Telefol women) came down for taro and then they (the Mianmin men)’ [Mianmin and Telefomin]

An example for a final verb in which directional and motion verb are fused is:

- (8-5) *é wekib usnebe*
é wekib usn-Ø-e=be
 he very up_go.PFV-PST-3SG.M.SG=DECL
 ‘He is taller than me’ (Lit. ‘He passes me, he went up very much’)

Directionals themselves can be directly inflected with *-n* ‘SS.Seq’ to form medial verbs of motion. Such forms always have the meaning of going somewhere, not of coming from somewhere. Table 85 summarizes direct inflection of directionals.

Directional	SR marking	Subject marker	Medial verb	Meaning
<i>daak</i>	-n ‘SS.Seq’	-i ‘1SG’	=a =ta	‘I descend and then I...’
<i>ut</i>				‘I ascend and then I...’
<i>tab</i>				‘I go downriver and then I...’
<i>met</i>				‘I go upriver and then I...’
<i>wat</i>				‘I go across (a river) and then I...’
<i>ta</i>				‘I go sideways/enter/exit and then I...’

Table 85: Directly inflected directionals

Note that *ta* instead of *tam* ‘sideways’ is used as the base for direct inflection. Thus, *tam-n-i=a* ‘I go sideways and then I...’ surfaces as [t^haːniːa].

Direct inflection of directionals to form medial verbs is restricted to *-n* ‘SS.Seq’:

- (8-6) *sin tlebue daaknea skilóné bubanea*
sin tl-Ø-e-bio=e *laak-n-e=a*
 first come.PFV-PST-3SG.M.SBJ-GPST=SG.M down-SS.SEQ-3SG.M.SBJ=MED

skilón=e bu-b-a-n-e=a
 foot=SG.N1 hold-BEN.PFV-3SG.M.IO.PFV-SS.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 verb stem *on* ‘go (Pfv)’ which as a medial verb always takes -s ‘DS.Seq’:

- (8-7) *tab on-s-o=a*
 downriver go.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘she went downriver and then someone else...’ [Crows]

8.1.1.1.1 Locative NP adjuncts

Verbs of motion can be modified by a locative NP adjunct indicating the direction where the goal of the movement is located, as in (8-8) and (8-9):

- (8-8) *damib=tam unaaniba*
lamib=tam unaan-ib=a
 garden=sideways go.PFV.SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they went sideways to the garden and there they...’ [Pig story]

- (8-9) *kweité temwat onsea*
kwëit=e tem=wat on-s-e=a
 sugarcane=SG.N1 inside=across go.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘he went across into the sugar cane and then someone else...’ [Pig story]

8.1.1.1.2 Bare NPs as locative adjuncts

The target of the movement encoded by motion verbs is often just realized as a bare NP, i.e. an NP without a directional:

- (8-10) *dámib unibbioto sokó tlebota*
lamib un-Ø-ib-bio=to
 garden.N2 go.PFV-DS.SEQ-2/3PL.AN.SBJ-GPST=MED

sök=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...’ [Afoksitgabaam]

- (8-11) *imake tenoa*
imak=e te-n-o=a
 husband=SG.M come-SS.SEQ-3SG.F.SBJ=MED
 ‘she was coming to her husband and then she...’ [The Flood]

Note especially example (8-11) in which the endpoint of the movement specified by the verb *tenoa* is a human being. However, the human goal is not participating in the ‘coming’-event; the NP *imake* simply denotes the place where the husband is located.

Prima facie, these bare locative adjuncts are formally indistinguishable from overt direct object NPs. However, in terms of semantic roles these are always locatives. The main syntactic difference is that objects are relativizable while locative adjuncts in general are not. Also there is a strong tendency for all locative adjuncts to directly precede the verb, while objects of transitive verbs are more mobile within the clause (cf. 8.2.2). Hence, I analyze bare locative NPs as (locative) adjuncts of intransitive verbs rather than core arguments (i.e. the direct objects) of a transitive verb.

8.1.1.2 Verbal classificatory prefixes in intransitive verbs

Verbal classificatory prefixes operate on an absolutive basis, i.e. they classify objects of transitive and subjects of intransitive sentences. The latter case is very rare: the only verb where the verbal prefix classifies its subject is the lexicalized serial verb construction *-mein (daak) tlemin* ‘to fall (down)’ (lit. ‘fall and come (down)').

- (8-12) *unang mako abilímut daanoa omein daakebio kesoa*
unang mak=o abil=dim=ut laa-n-o=a
 woman some=SG.F sky=on=up dwell-SS.SEQ-3SG.F.SBJ=MED
- om-mein laake+bi-Ø-o kesoa*
 SG.FEM.SBJ-fall down_come.PFV+AUX.IPFV-DS.SEQ-3SG.F.SBJ so
 ‘Some women dwelled in the sky and then fell down and stayed, so...’
 [Dimosson]

8.1.1.3 Intransitive verbs without semitransitive counterpart

Applicativization derives semitransitives from a few intransitive verbs. However, most intransitive verbs cannot occur with a derived indirect object, namely:

- a subset of the verbs of motion, e.g.: *—/ei* ‘fly’ and *—/be* ‘walk, move along’
- verbs denoting processes: e.g. *klaa* ‘rot’, *dama/—* ‘grow up’, *sika* ‘swell’
- verbs denoting noises, e.g.: *kle* ‘crack, rustle’, *—/un* ‘hum, drone’
- bodily processes, e.g.: *kusang ge/kusang ga* ‘sneeze’, *usǎn fu* ‘vomit’, *—/gen* ‘be sick’, *kan/—* ‘die’

8.1.2 Transitive verbs

Transitive verbs fall into three morphologically defined subgroups depending on whether the direct object is marked by argument prefix, by classificatory verbal prefix, or not at all:

- Subclass 1: Transitives which cross-reference the object with an pronominal prefix
- Subclass 2: Transitives which cross-reference the object with a classificatory prefix
- Subclass 3: Transitives which never cross-reference the object

It is possible to make a further distinction within the class of transitive verbs and call the set comprising the first two transitive subclasses *marked* transitives because these verbs invariably occur with an object due to the obligatory presence of the prefix, whether pronominal prefix or verbal classificatory prefix.

Subclass 1 verbs, which have obligatory object pronominal prefixes, comprises five items: *-tem/-teme* ‘see’, *-fu/-* ‘hold’, *-lo/-* ‘hit, kill’, *-na/-* ‘hit, kill’, and *-tama/-* ‘bite’. An example is given in (8-13):

- (8-13) *nakae atemibe*
naka=e a-tem-Ø-i=be
 man=SG.M 3SG.M.O-see.PFV-PST-1SG.SBJ=DECL
 ‘I have seen the man’

The direct object is marked on the verb with the pronominal affix *a-*. The overt object NP *nakae* can be elided without affecting the grammaticality of the utterance.

- (8-14) *atemibe*
a-tem-Ø-i=be
 3SG.M.O-see.PFV-PST-1SG.SBJ=DECL
 ‘I have seen him’

Subclass 2 of transitive verbs comprises those verbs with verbal classificatory prefixes, which classify direct objects according to semantic criteria (cf. chapter 5), e.g.:

- (8-15) *futé tobkimaibe*
füt=e tob-kima-Ø-i-o=be
 tobacco=SG.N1 SG.LONG.O-put_in_fire.PFV-PAST-1SG.SBJ-EP=DECL
 ‘I have put the tobacco in the fire’

Again, the object NP can be elided without affecting the grammaticality of the utterance:

- (8-16) *tobkimaibe*
tob-kima-∅-i-o=be
 SG.LONG.O-put_in_fire.PFV-PST-1SG.SBJ-EP=DECL
 ‘I have put a long object in the fire’

Other transitive verbs with obligatory verbal classificatory prefix are: *-ma/ -san* ‘plant’, *-eb/—* ‘take’, *-o/—* ‘take, pick up’, *-fa/ -∅-ka* ‘put’, *-kima/ -kimsan* ‘put in the fire’, *-tana/ -tunu* ‘set fire to’, *-bia/—* ‘throw’, *-ba* ‘cover (of liquids)’, *-bu* ‘bury’, *-tlaa/—* ‘remove’, *-ski* ‘turn’, and *-∅/—* ‘take’. For a more comprehensive list see 5.9.

Subclass 3 of transitive verbs never cross-reference their direct object. Compare (8-17) with an overt object NP and (8-18) without one:

- (8-17) *né imeno wembibe*
né imen=o wen-b-i=be
 I taro=N1.PL eat.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am eating taro’

- (8-18) *wembibe*
wen-b-i=be
 eat.IPFV-IPFV-1.SG.SBJ=DECL
 ‘I am eating’

As with the first two subclasses, the direct object NP of transitive verbs in the third subclass tends to be elided if its identity is recoverable from context or speech situation or if its identity is irrelevant. Consequently, the normal situation for any transitive verb is to occur without overt direct object NPs in Mian discourse.

This may make transitives without cross-referencing object prefixes 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 prefixes differ from intransitives in that they are always capable of having an overt direct object NP (which is still understood even though it might be dropped). Strictly 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 prefixes can be characterized as involving a participant—in addition to the agent encoded as subject—which undergoes or is affected (or effected/produced) by the action described by the verb. Even though they might show up without an overt direct object

NP and thus syntactically may look like one-place predications, semantically they invariably describe two-place relations between an agent and an undergoer.

An alternative analysis is to treat transitives without cross-referencing object prefixes as ambitransitive, i.e. verbs which can be used either transitively or intransitively. Two types of ambitransitives are normally distinguished in the literature. The decisive question is “which of the transitive arguments corresponds to the intransitive argument (cf. 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 varieties of ambitransitives the “S=A type” and the “S=O type”.

The alternation illustrated in (8-17) and (8-18) could thus be due to the fact that the verb *dowon/wen* ‘eat’ is an S=A ambitransitive in Mian. However, I have no evidence whatsoever that suggests (8-18) illustrates a change in argument structure, in other words, that the verb becomes intransitive just because the overt object NP is elided. Therefore, I will reject the S=A ambitransitive analysis here and recognize a third subclass of transitive verbs whose objects can be freely elided without assuming a change in argument structure.

Other transitive verbs of subclass 3 are: *baa/o* ‘say, tell’, *ngana/ngaan* ‘sing, call out’, *fu* ‘cook, smoke’, *fuba* ‘wash’, *bafu* ‘boil’, *went/wente* ‘hear, understand’, *sita* ‘care for’, *kimaa/—* ‘look out for, guard’, *ga* ‘cook in a leaf oven’, *wa* ‘adorn with carvings’, *bina/—* ‘shoot, pierce’, *bali* ‘to bear (fruit)’, *ge/gen* ‘build, roll, fasten’, *kla* ‘fix, complete’, *fa/faka* ‘make a fire’, *ou* ‘put arrow head into shaft’, *manafa* ‘cut meat’, *nini* ‘scrape (taro)’, *hena/hen* ‘search’, *bu* ‘hunt’, *yo* ‘initiate, beget’, *habu* ‘hide’, *deba* ‘make arrow’, *tosiana/tosian* ‘fear’, *haa* ‘weave (string bag)’.

8.1.2.1 Derivation of transitives from intransitives

For a few verbs valency alternates between monovalent and bivalent depending on the presence of a pronominal object prefix or a classificatory prefix. An example is *tem*, which has the intransitive variety *tem* ‘have a look’ and the transitive variety *-tem* ‘see’; e.g. *a-tem* ‘see him’.

An example of a verb for which valency is determined by the presence of a classificatory prefix rather than a pronominal object prefix is *san* ‘grow (Pfv, intransitive)’ vs. *-san* ‘plant (Pfv, transitive)’. Compare the following two examples:

(8-19) *aliam=o san+biaan-o=a*
 shoot=SG.N1 grow.IPFV+AUX.IPFV.SS.SIM-PL.N1.SBJ=MED
 ‘while the shoots were growing, they...’ [Sofelok, 1]

(8-20) *lol-san+biaan-ib=a*
 PL.MASC.O-plant.IPFV+AUX.IPFV.SS.SIM-PL.N1.SBJ=MED
 ‘while they were planting them (e.g. bananas), they...’ [Sofelok, 1]

Such verbs count as intransitive when used without prefix and as transitive when supplied with prefix.

8.1.3 Semitransitive verbs

8.1.3.1 Underived semitransitives

These are verbs which always take two arguments, namely subject and indirect object. In other words, there is no intransitive counterpart.

The presence of the benefactive *-b* in the perfective shows that the second argument is an indirect object, as in (8-21). Imperfective stems have a zero applicative. The pronominal suffix encoding the indirect object attached directly to the stem. (8-21) is a natural example for an underived semitransitive verb:

(8-21) *yé Klefoli tata keniba yé Mianten áwelí yé fotebeiba uniobe*
yé klefol=i tata ke-n-ib=a
 there PN=PL.AN strong do-SS.SEQ-2/3PL.AN.SBJ=MED

yé miantěn awěł=i yé
 there Mian_people father=PL.AN there

fote-b-e-∅-ib=a
 rout-BEN.PFV-PL.AN.IO.PFV-DS.SEQ-2/3PL.AN.SBJ=MED

un-∅-io=be
 go.PFV-PST-2/3PL.AN.SBJ=DECL
 ‘the Telefomin were going strong and routed the fathers of the M. and went’
 [Mianmin and Telefomin]

Underived semitransitive verbs are: *fote-b-e/fote-ye* ‘chase away, rout them’, *gai-s-e/—* ‘pass, ignore, surpass them’, and *mele-b-e/—* ‘touch them’.

The imperfective stem of ‘hit, kill’, which is zero, is also an underived semitransitive verb because the ‘hittee’ is obligatorily encoded as an indirect object: *∅-ye* ‘hit, kill them (Ipfv)’ (see 7.2.1.3.5).

Verbs which denote physical or mental states are underived semitransitives in Mian. For these verbs, the experiencer is encoded as an indirect object. The terms in brackets are the nouns which these verbs obligatorily take as subjects:

<i>(bobol) dokobe/—</i>	‘forget’ (lit. heart forgets on them)
<i>(al) tliau-b-e/(al) tli-∅-ye</i> ⁴⁶	‘be angry’ (lit. gut chews them)
(any body part) <i>—/en-∅-ye</i>	‘(body part) pains them’

An example is:

- (8-22) *gabaamé enkebea?*
gabăam=e en-∅-ke-b-e=a
 head=SG.N1 hurt.IPFV-BEN.IPFV-2SG.IO.IPFV-IPFV-SG.N1.SBJ=PQ
 ‘Is your head hurting?’

8.1.3.2 Semitransitives derived from intransitives

Some intransitive verbs can be applicativized, i.e. they can have a derived indirect object. An example for a verb of motion is given in (8-23):

- (8-23) *fanata unutnenene?*
fa(b)+na=ta un-u-b-ne-n-e=ne
 what+do=MED go.PFV-EP-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ=CQ
 ‘How has he escaped me?’ [Klebein]
 (Lit. ‘What has he done, has he gone on me?’)

Other semitransitives which are derived from intransitives with the applicative are:

tlu-b-a ‘come for him (Pfv)’ from intransitive *tl-te* ‘come (Pfv)’
sika-∅-ye ‘swell on them (Ipfv), from intransitive *sika* ‘swell (Ipfv)’

⁴⁶ In the imperfective, a fused form of subject NP and verb *atli-ye* ‘be angry’ is also attested.

8.1.4 Ditransitive verbs

The only underived ditransitive verb in Mian is *ale-b-e/ale-Ø-ye* ‘show to them’. This verb obligatorily indexes the participant to whom something is shown with an indirect object marker. 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 NP, as in (8-24):

- (8-24) *Kasake alebeibbiota*
kasak=e ale-b-e-Ø-ib-bio=ta
 Kasak_ritual=SG.N1 show-BEN.PFV-PL.AN.PFV-DS.SEQ-2/3PL.AN.SBJ-GPST=MED
 ‘they had shown us the Kasak ritual’ [Kasak]

In natural Mian discourse overt NP arguments are often 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 NP and transitive verbs, which were discussed in section 8.1.2 above, I have no evidence suggesting that the verb *ale-b-e/ale-Ø-ye* ‘show to them’ becomes semitransitive, i.e. only has a subject and an indirect object, when the overt object NP is elided. Therefore, I analyze *ale-b-e/ale-Ø-ye* ‘show to them’ as an underived ditransitive verb whose object NP can be freely elided without assuming a change in argument structure.

Mian has a plethora of ditransitives which are derived from transitive verbs with the applicative. Typologically, the most interesting case is ‘give’ because the perfective stem and the imperfective stem of ‘give’ are derived from two different transitive verbs.

The perfective stem of ‘give’ is derived from *-Ø/-* ‘take’, which is a defective (perfective-only) verb. Recall that both ‘take’ and ‘give’ have an obligatory verbal classificatory prefix. Compare (8-25) and (8-26):

- (8-25) *unangó omibe*
unǎng=o om-Ø-Ø-i=be
 woman=N2 SG.FEM.O-take.PFV-PST-1SG.SBJ=DECL
 ‘I have taken a wife’

- (8-26) *monio omubonebe*
moni=o om-Ø-u-b-o-n-e=be
 money=N2 SG.FEM.O-give.PFV-EP-BEN.PFV-3SG.F.IO.PFV-PST-3SG.M.SBJ=DECL
 ‘He has given her the money’

For unbounded ‘giving’-events; e.g. repeated (unsuccessful) or habitual giving, the imperfective stem has to be used, which is derived from *-Ø-ka* ‘put (Ipfv)’,⁴⁷ in lieu of an imperfective stem in the defective verb *-Ø/-* ‘take’. Compare (8-27) and (8-28):

(8-27) *imene obkabibe*
imen=e ob-Ø-ka-b-i=be
 taro=SG.N1 SG.RESID.O-put-IPFV-IPFV-1SG.SBJ=DECL
 ‘I am putting (down) a taro’

(8-28) *í blatiko dokayebinabiobe*
í blatik=o
 they plastic=N2

lol-Ø-ka-Ø-ye+bina-b-io=be
 PL.FEM.O-give-IPFV-BEN.IPFV-PL.AN.IO.IPFV+AUX.HAB-IPFV-2/3PL.AN.SBJ=DECL
 ‘They (habitually) give vomit bags to us’ [repeated from (7-58)]

Most transitive verbs can be applicativized to become derived ditransitives. Table 86 gives examples for transitive verbs and ditransitives derived from them.

Transitive		Derived ditransitive
Subclass 1: Direct object encoded by pronominal prefix	<i>-na/-</i> ‘kill’	<i>-nau-b-a/-</i> ‘kill for him’
Subclass 2: Direct object encoded by verbal classificatory prefix	<i>-tlaa/-</i> ‘remove’	<i>-tlaa-b-a/-</i> ‘remove for/from him’
	<i>-suana/-suan</i> ‘hate’	<i>-suana-b-a/-suan-Ø-ha</i> ‘hate for his sake’
Subclass 3: Unmarked transitives	<i>baa/o</i> ‘say, talk’	<i>baa-b-a /o-Ø-ha</i> ‘say to him, tell him’
	<i>ngela/ngen</i> ‘beg’	<i>ngela-b-a /ngen-Ø-ha</i> ‘beg from him’
	<i>fu</i> ‘cook’	<i>fu-b-a/fu-Ø-ha</i> ‘cook for him’
	<i>habu/-</i> ‘hide’	<i>habu-b-a/-</i> ‘hide from him’

Table 86: Derived ditransitives

8.1.5 Ambitransitive verbs

A small number of verbs *prima facie* look like S=O ambitransitives, i.e. verbs where intransitive S becomes transitive O, as in ‘the door opened’ vs. ‘I opened the door’. Consider examples (8-29) and (8-30):

⁴⁷ *-ka* is a common suffix deriving imperfective from perfective verb stems:

(8-29) *né ase hakabibe*
né as=e haka-b-i=be
 I tree=SG.N1 break.IPFV-IPFV-1SG.SBJ=DECL
 'I am splitting a tree (to produce firewood)'

(8-30) *ase hakabene?*
as=e haka-b-e=ne
 tree=SG.N1 break.IPFV-IPFV-SG.N1.SBJ=P.Q
 'Is a tree splitting?' [The Flood]

This looks like a typical S=O ambitransitive alternation. However, the intransitive reading in (8-30) is not the only one available. The sentence can also be interpreted transitively. This is because the subject markers for Neuter 1 singular and Male singular subjects are homophonous. So the following analysis for (8-30) is also possible:

(8-31) *ase hakabene?*
as=e haka-b-e=ne
 tree=SG.N1 break.IPFV-IPFV-3SG.M.SBJ=PQ
 'Is he splitting a tree?'

In S=O type 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 undergoer, stays the same, but syntactic relations change. S/O has the function of object in transitive clauses while it has the function of subject in intransitive clauses. Furthermore, the transitive manifestation of the S=O ambitransitive verb includes a causal component which the intransitive manifestation lacks. Compare:

(8-32) *eimé belanibe*
ěim=e bela-n-i=be
 panandus_fruit=SG.N1 break.PFV-PST-1SG.SBJ=DECL
 'I have cut across the pandanus fruit'

(8-33) *tomé belaseta*
tõm=e bela-s-e=ta
 stone=SG.N1 break.PFV-DS.SEQ-SG.N1.SBJ=MED
 'the stone (gate) opened and then they...' [Danenok]

It was mentioned above that the direct object NP of S=A ambitransitives can be elided freely, without affecting the meaning of the clause. However, leaving out the direct object of S=O ambitransitives leads to an intransitive interpretation of the clause. If the direct 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 strain, pressure, etc.). Mian ambitransitives do not follow this expected pattern. Rather, when a direct object is lacking, the subject is invariably interpreted as the agent in Mian ambitransitives and not as the undergoer.

- (8-34) *belaniba*
bela-n-ib=a
 break.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they cut open (i.e. operated on a patient) and then...’ [Pineapples]

In fact, the sentence in (8-33) above is ambiguous. Without context it can be interpreted intransitively as ‘the stone (gate) opens’ but also transitively as ‘he breaks open the stone (gate)’. I assume that context and the switch-reference system help to disambiguate in such situations.

Other ambitransitive verbs are: *biki* ‘squeeze, pierce’, *ha(la)/haka* ‘break across’, *bala/baka* ‘break alongside’, *dou* ‘close’.

Applicativized ambitransitives show the same behaviour as non-applicativized ones. Consider the unequivocally transitive use in (8-35):

- (8-35) *amisaalo doubonebe*
amisaal=o lou-b-o-n-e=be
 door=N2 close-BEN.PFV-3SG.F.IO.PFV-PST-3SG.M.SBJ=DECL
 ‘He closed the door for/on her’

The sentence *amisaalo doubanobe*, however, is ambiguous and can have two different analyses: (i) with transitive *dou* (8-36) and (ii) with intransitive *dou* (8-37):

- (8-36) *amisaalo doubanobe*
amisaal=o lou-b-a-n-o=be
 door=N2 close-BEN.PFV-3SG.M.IO.PFV-PST-3SG.F.SBJ=DECL
 ‘She closed the door for him’

- (8-37) *amisaalo doubanobe*
amisaal=o lou-b-a-n-o=be
 door=N2 close-BEN.PFV-3SG.M.IO.PFV-PST-N2.SBJ=DECL
 ‘The door closed on him’

8.1.6 Possessor raising

In the foregoing section I have discussed applicativization as a productive valency-increasing operation in Mian. Another function of applicativization in Mian is possessor raising. An animate possessor of one of the arguments of the verb is marked as an indirect object on the verb and thus realized as a core argument.

Possessor raising is commonly found with body parts, but not restricted to those (see below). If the verb is semi-intransitive (after possessor raising), the body part is cross-referenced on the verb as the subject. Consider the following example with the applicativized intransitive verb *sika* ‘swell (Ipfv)’:

- (8-38) *keneng sikayebiaanoa*
kenəŋ sika-Ø-ye+biaan-o=a
 cheek.N1 swell.IPFV-BEN.IPFV-PL.AN.IO.IPFV+AUX.SS.IPFV-PL.N1.SBJ=MED
 ‘while their cheeks were swelling up, they...’ [Sofelok, 2]

Possessor raising is also attested with body wastes:

- (8-39) *alo meb tlubasota*
al=o mɛb tl-u-b-a-s-o=ta
 shit=PL.N1 close come.PFV-EP-BEN.PFV-3SG.M.IO.PFV-DS.SEQ-PL.N1.SBJ=MED
 ‘His shits came close and then he...’ [Danenok]

If the verb is ditransitive (after possessor raising), the body part is the direct object. Recall that not all transitive verbs mark their direct object with a pronominal or classificatory prefix:

- (8-40) *bánóné helutnenebe*
bánón=e
 arm_bone=SG.N1

hel(o)-u-b-ne-n-e=be
 break_across.PFV-EP-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ=DECL
 ‘He’s broken my arm’

Mian has a restriction which says that the pronominal affixes cross-referencing subject and any object must not have the same referent. In reflexive situations, the direct object marker on the verb cannot reflexively refer to the endpoint of a reflexive action (cf. 8.1.8 on reflexivization). Likewise, raising of a possessor to indirect object is impossible if the subject is identical to the possessor of the body part:

- (8-41) *bánóné helaiobe*
bánón=e *hela-Ø-i-o=be*
 arm_bone=SG.N1 break_across.PFV-PST-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 by marking them as an indirect object on the verb, as in (8-42) and (8-43):

- (8-42) *nakaminé imeno eilé wenhabea*
nakamĩn=e imen=o *ěil=e*
 man=SG.M taro=PL.N1 pig=SG.M

wen-Ø-ha-b-e=a
 eat.IPFV-BEN.IPFV-3SG.M.IO.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘While a pig was eating taro from a man (, the man...)’ [Pig story]

- (8-43) *uleta kweit halutnenebue?*
uleta *kwěit*
 who.SG.M sugarcane

hal(o)-u-b-ne-n-e-bio=e
 break.SG.O.PFV-EP-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ-GPST=CQ
 ‘Who broke some of my sugarcane?’ [Unangkliten story]

The final example illustrates possessor raising with a (marked) transitive verb, which obligatorily cross-references its direct object with a pronominal prefix, e.g. *wa-na* [3SG.F.O-kill.PFV] ‘kill her’:

- (8-44) *né tilo wanautnene nakae mo tekein kebibabe*
né *til=o* *wa-nau-b-ne-n-e*
 1SG dog=SG.F 3SG.F.O-kill.PFV.BEN-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ

naka=e *mo* *tekein* *ke-b-i-ba=be*
 man=SG.M NEG knowledge make-IPFV-1SG.SBJ-NEG=DECL
 ===know===
 ‘I don’t know the man who killed my dog’

8.1.7 Impersonal verbs

A few verbs which indicate the arrival of the morning, the evening or the night, and generally the passage of time invariably have *-o* in the position of the subject marker.

However, they can never occur with an overt subject NP which this *-o* would cross-reference. Therefore, I treat these verbs as impersonal and analyze *-o* as an expletive subject marker. Impersonal verbs cannot be applicativized.

Semantically, impersonal verbs are zero-place predications, similar to expletive constructions in Indo-European languages, such as English ‘it is raining’, German ‘es regnet’, French ‘il pleut’. Two examples are given below:

(8-45) *bomasoto yole é amo memáo geneto*

boma-s-o=to
light-DS.SEQ-EXPL=MED

yole é am=o memâ=o ge-n-e=to
well he house=N2 new=N2 build.PFV-SS.SEQ-3SG.M.SBJ=MED
‘In the morning he built a new house and then...’ (Lit. ‘when it lighted...’) [Pig story]

(8-46) *bliba kwinoa aam ónsiobe*

bl-∅-ib=a kwín-∅-o=a áam
stay-DS.SEQ-2/3PL.AN.SBJ=MED dark-DS.SEQ-EXPL=MED lie

on-s-io=be
go.PFV-RPST-2/3PL.AN.SBJ=DECL
‘They stayed and in the evening they went to sleep’
(Lit. ‘...when it darkened...’) [Pig story]

The temporal expression *binóa* ‘time is/was passing’ might also be classed as an impersonal verb because its morphological make-up is still clearly verbal: *bi-n-o=a* [stay-SS.SEQ-EXPL=MED] Lit. ‘it stayed’, as in (8-47):

(8-47) *kouwebea binóa yé mililanobe*

kou-∅-we-b-e=a
fuck-BEN.IPFV-3SG.F.IO.IPFV-DS.SIM-3SG.M.SBJ=MED

bi-n-o=a yé milil-an-o=be
stay.IPFV-SS.SEQ-EXPL=MED there black-VBZR-EXPL=DECL
‘while he was fucking with her, time was passing and then it got dark’
[Newlyweds]

8.1.8 Reflexivization

Reflexivization is an infrequent phenomenon in Mian. Thus, 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 direct object of a transitive verb with a reflexive pronoun. Compare (8-48) and (8-49):

- (8-48) *nakae aale gonebe*
naka=e aal=e go-n-e=be
 man=SG.M skin=SG.N1 cut.PFV-PST-3SG.M.SBJ=DECL
 ‘The man has cut the skin’

- (8-49) *nakae émaye gonebe*
naka=e é-maye go-n-e=be
 man=SG.M he-REFL cut.PFV-PST-3SG.M.SBJ=DECL
 ‘The man has cut himself’

Reflexivization works productively with some transitive verbs only, namely those which denote a physical action towards the self, e.g. (8-50) cannot have a reflexive reading:

- (8-50) *nakae émaye kimaabiebe*
naka=e é-maye kima+bi-Ø-e=be
 man=SG.M he-REFL 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 is entailed. All grooming verbs require a direct object which refer to the affected body part:

- (8-51) *nakae minaanó deilanebe*
naka=e mināan=o leila-n-e=be
 man=SG.M whisker=PL.N1 remove_hair.PFV-PST-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. It is interpreted as reflexive in its intransitive form, as in (8-52):

- (8-52) *naka=e aaie fua-b-e=be*
 man=SG.M water bathe.IPFV-IPFV-3SG.M.SBJ=DECL
 ===bathe===
 ‘The man is bathing (himself)’

If this verb is applicativized, a reflexive reading is impossible:

- (8-53) *kóbó aaie fuelatnenale!*
kóbó
 you.2SG.M
- aaie fuela-b-ne+n-al=e*
 water bathe.PFV-BEN.PFV-1SG.IO.PFV+AUX.PFV-2SG.SBJ.HORT=HORT
 ===bathe===
 ‘You should bathe me!’

Another interesting point about what cannot be encoded reflexively concerns transitive verbs which obligatorily cross-reference their direct objects with a pronominal prefix. These are:

- tem/-teme* ‘see’
- fu/—* ‘grab, hold’
- na/—* ‘hit, kill’
- lo/—* ‘hit, kill’
- tama/—* ‘bite’

Although all of these five strictly transitives (with the exception of *-tem/-teme* ‘see’) denote concrete physical action, none of these can actually be used reflexively by having co-referent subject and object markers on the verb. This is simply not permitted by the grammar. Apart from this general restriction, there are semantic and cultural reasons which militate against reflexivization. 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. I distinctly remember the consternation in my informants when I tried to elicit the Mian equivalent of ‘I will hit/kill myself’. This was not something they do, I was told in quite a serious tone.

To see oneself, however, is both semantically plausible and culturally appropriate. Yet, in former times the only surface which reflected properly was water. Hence one said and still says today:

- (8-54) *nakae aakikite dokabebe*
naka=e aa+kikite loka-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 *aakikit* is actually the noun used to refer to mirrors, one still cannot “see oneself” in Mian. An alternative to (8-54) is (8-55):

- (8-55) *é kibió watemebebe*
é kibi=ó wa-teme-b-e=be
 3SG.M face=N2 N2.O-see.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘He’s looking at his face (in the mirror)’

8.2 Constituent order

This section deals with the order of constituents in the clause. There are no differences in constituent order between medial clauses and independent sentences. The only clause type which can show constituent order not attested in any other clause type is the head-internal relative clause (cf. 11.4.2). I will first describe the unmarked order of overtly realized argument NPs and then discuss deviations from it. Finally, the position of different types of adverbials in the clause will be discussed.

8.2.1 Unmarked order of overt argument NPs

All overt arguments are either free pronouns or full NPs. Rarely, both subject and object are realized as free pronouns. In such cases, the subject invariably precedes the object, whether direct (8-56) or indirect (8-57):

- (8-56) *é baatnenea né í yatemibo ge baatnenesobe*
é baa-b-ne-n-e=a né í
 he say.PFV-BEN.PFV-1SG.IO.PFV-SS.SEQ-3SG.M.SBJ=MED I they
- ya-tem-Ø-i=bo ge*
 PL.AN.O-see.PFV-PST-1SG.SBJ=QUOT do.PFV
- baa-b-ne-n-e-so=be*
 say.PFV-BEN.PFV-1.SG.IO.PFV-PST-3SG.M.SBJ-HPST=DECL
 ‘Yesterday, he told me that he saw them’ (Lit. ‘Yesterday, he told me: “I have seen them”’)

- (8-57) *ní kóbó deibkeoba*
ní kóbó lei-b-ke-Ø-ob=a
 we.EXCL you.SG.M leave.PFV-BEN.PFV-2SG.IO.PFV-DS.SEQ-1PL.AN.SBJ=MED
 ‘we left you and then someone else...’ [Crows]

Note that clauses with overt pronominal subject and direct object, as in (8-56), are unattested in the spontaneous corpus and only occur in elicited material.

Examples in which all three core arguments are overtly realized as free pronouns are unattested.

If the argument positions of a verb are filled by full NPs instead of pronouns, the unmarked constituent order is also SOV. Overt subject NPs usually precede direct object NPs. This order is very consistent in elicited examples.

- (8-58) *nakae unangó watemebe*
naka=e unǎng=o wa-tem-∅-e=be
 man=SG.M woman=SG.F 3SG.F.O-see.PFV-PST-3SG.M.SBJ=DECL
 ‘The man has seen the woman’

In natural discourse, however, relative order of subject and direct object is less consistently SOV. This usually does not create problems due to the language’s head-marking characteristics, which in most cases allow the identification of syntactic relations through information from the pronominal affixes without having to take word order information into account. Deviation from the unmarked order in natural discourse will be discussed in 8.2.2.

Overt indirect object NPs are ordered according to animacy. As indirect objects much more frequently refer to humans (or at least to animates) they tend to occur before the direct object, as in the following two examples from the spontaneous corpus:

- (8-59) *aleló alo gwelubosea*
alǎl=o al=o
 wife=SG.F bowels=PL.N1

gwel(o)-u-b-o-s-e=a
 cut_out.PFV-EP-BEN.PFV-3SG.F.IO.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘he cut out the bowels (of an animal) for the wife and then she...’ [Flood]

- (8-60) *Futaman miné mako yé walalibole*
futaman mǎne mak=o yé
 PN_valley man-SG.M some=N2 there

wa-l(o)+∅-al-∅-ib=o=le
 N2.O-hit.PFV give.PFV-3SG.M.IO.PFV-DS.SEQ-2/3PL.AN.SBJ=N2=TOP
 ‘they cut off some and gave (it) to the man from the Fu valley and then he...’
 [Danenok and his brother]

If all three argument positions are filled by overt NPs, unmarked order is to have the indirect before the direct object. The subject can either precede or follow:

- (8-61) *nakaminé imeno eilé wenhabea*
nakamĩn=e imen=o ěil=e
 man=SG.M taro=PL.N1 pig=SG.M

wen-∅-ha-b-e=a
 eat.IPFV-BEN.IPFV-3SG.M.IO.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘While a pig was eating a man’s taro (, the man...)’ [Pig story]

8.2.2 Deviant order of overt argument NPs

Although unmarked constituent order in Mian is SOV, it is possible to invert subject and direct object if both grammatical relations are realized by overt NPs. In some cases, pronominal marking disambiguates as in example (8-62) where the pronominal affixes *-e* and *wa-* clearly indicate that the man is the ‘seer’ and the woman the ‘seen’:

- (8-62) *unangó nakae watemebe*
unǎng=o naka=e wa-tem-∅-e=be
 woman=SG.F man=SG.M 3SG.F.O-see.PFV-PST-3SG.M.SBJ=DECL
 ‘The man has seen the woman’

A natural example is (8-63) where pronominal marking on the verb clearly indicates who leads whom:

- (8-63) *meme íle Sobininge deletnea*
meme í=le sobining=e lol-eb-n-e=a
 children PL.AN=TOP PN=SG.M PL.AN.O-take.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘As for the children, Sobining took them’ [Sobining]

Argument inversion is also possible with overt pronominal subjects if the object NP is topic-marked:

- (8-64) *imen éle né wembibe*
imen é=le né wen-b-i=be
 taro SG.N1=TOP I eat.IPFV-IPFV-1SG.SBJ=DECL
 ‘As for the taro, I’m eating (it)’

I analyze example (8-64) as topicalization rather than a cleft structure 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:

- (8-65) **imene né wembibe*
imen=e né wen-b-i=be
 taro=SG.N1 I eat.IPFV-IPFV-1SG.SBJ=DECL
 Intended: ‘I’m eating the taro’

This restriction is independent of whether the verb marks the direct object or not. Thus, (8-66) is bad as well though the pronominal affixes on the verb make the syntactic relations quite clear:

- (8-66) **nakae né atemibe*
naka=e né a-tem-Ø-i=be
 man=SG.M I 3SG.M.O-see.PFV-PST-1SG.SBJ=DECL
 Intended: ‘I’ve seen the man’

I will mention here in passing that in serial verb constructions, overt argument NPs can appear inside the verb series if they are exclusive to one of the verbs in the chain:

- (8-67) *dabaalé haka damo ombuebiota*
labäal=e haka lam=o
 ground=SG.N1 break.IPFV body=SG.F

om-bu-Ø-e-bio=ta
 SG.FEM.O-bury.PFV-3SG.M.SBJ-GPST=MED
 ‘after he had dug up the ground and buried her, (the Niniktol vine...)’
 [Afoksitgabaam]

In this example, *damo* ‘(her) body’ is an argument of the verb *ombuebiota* ‘he buried her’ not of *haka*. For details see section 9.1 on serial verb constructions.

8.3 Position of adverbials

Adverbial constituents in a clause can be adverbs, and temporal and locative adverbials. None of these are obligatory. The main formal difference between adverbs, on the one

hand, and temporal adverbials, on the other, is that the latter are formally marked as NPs by taking the article =o or another determiner from a proper subset of determiners available for NPs in general, while adverbs are always unmarked.

8.3.1 Adverbs

Items which can function as adverbs are either adjectives, used adverbially, or adverbs proper. The latter can never modify a noun attributively like adjectives and constitute a word class of their own. Semantically, adverbially-used adjectives and most adverbs proper specify the manner of carrying out the action denoted by the verb. Some adverbs proper have a temporal meaning. On adverbs also see section 3.6.

Adverbs proper and adjectives used adverbially never take an article nor any of the determiners found in NPs. Adverbs tend to occur immediately before the verb they modify.

Examples for adverbial adjectives are:

(8-68) *tén gwaabé súm mebebe*
tén gwăab=e súm me-b-e=be
 child little=SG.M big cry.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘The small boy is crying fitfully’ [Observed]

(8-69) *ánsó ayam ngaambobe*
áns=o ayam ngaan-b-o=be
 song=N2 good sing.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She is singing a song/songs beautifully’

Example (8-69) contrasts with (8-70) below in that in the former *ayam* ‘good’ is used as an adverb whereas it is used as an attributive adjective, as in (8-70):

(8-70) *ánsó ayamo ngaambobe*
áns=o ayam=o ngaan-b-o=be
 song=N2 good=N2 sing.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She is singing beautiful songs’

Examples for adverbs proper are:

(8-71) *fiab baal*
 slowly say.2SG.IMP
 ‘Say (it) slowly!’ [Observed]

- (8-72) *heb ke-n-al=e!*
 quickly do+AUX.PFV-2SG.HORT=HORT
 ‘Do (it) quickly!’ [Danenok]

Although the preferred position for all adverbs is immediately before the verb, adverbs are mobile within the clause and can also come clause-initially, as in (8-73) and after the first overt argument which is the subject in unmarked constituent order, as in (8-74):

- (8-73) *heb mamsab né imene wembibe*
heb mamsab né imen=e wen-b-i=be
 quickly 1SG taro=SG.N1 eat.IPFV-IPFV-1SG.SBJ=DECL
 ‘Quickly, I am eating a taro’

- (8-74) *né heb mamsab imene wembibe*
né heb mamsab imen=e wen-b-i=be
 I quickly taro=SG.N1 eat.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am quickly eating a taro’

8.3.2 Temporal adverbials

Temporal adverbials are NPs which preferably occur clause-initially, as in (8-75) or after the first overt argument NP, which is the subject in unmarked constituent order, as in (8-76):

- (8-75) *sinanggwanó unangmonó táie baangklié debetnoa*
sinanggwǎn=o unangmǒn=o
 in_days_of_yore=N2 woman=SG.F

táie bǎangkli=e lob-eb-n-o=a
 blade=SG.N1 stone_adze=SG.N1 SG.MASC.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED
 ‘A long time ago, a woman took a Baankli adze, and then she...’
 [Afoksitgabaam]

- (8-76) *né memálo futé tobonia*
né memâl=o füt=e tob-o-n-i=a
 I now=N2 tobacco=SG.N1 SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I now take the tobacco, and then I...’ [Rolling smokes]

Temporal adverbs, such as *imin* ‘again’ and *eimin* ‘again’, *amit* ‘always’ and *amityé* ‘always’, and *sin* ‘earlier already’ are never followed by an article, tend to occur immediately before the verb, as in (8-77), though they may also show some mobility within the clause, as in (8-78):

(8-77) *imensano imin oleb metnibale*
imensan=o imin ol-eb met-n-ib=ale
 taro_stalk=N1.PL again PL.RESID.O-take.PFV upriver-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘Again they took taro stalks and went upriver and there they...’ [Sofelok, 2]

(8-78) *eimin imensano welebnibta*
eimin imensan=o wel(o)+eb-n-ib=ta
 again taro_stalk=N1.PL cut.PL.O.PFV+take.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘Again they cut and took taro stalks and then they...’ [Mianmin and Telefomin]

8.3.3 Relative position of temporal and manner adverbial

If a temporal adverbial and a manner adverb co-occur in a clause, unmarked order is to have the temporal after the first argument and the manner adverb before the verb:

(8-79) *né sintalo imene hebamsab dowombibe*
ne sintalo imen=e hebamsab lowon-b^H-i=be
 I yesterday taro=SG.N1 quickly eat.PFV-NHODPST-1SG.SBJ=DECL
 ‘Yesterday, I quickly ate a taro’

There are no positional restrictions as long as the temporal comes first in the clause. It is possible for the manner adverb to come first but only if both adverbials immediately follow each other and are not in clause-initial position. Table 87 lists all possible positions of a temporal adverbial and a manner adverb in one clause. Impossible positions are marked *.

	SBJ		DO		VERB
	<i>né</i>		<i>imene</i>	<i>sintalo hebamsab</i>	<i>dowombibe</i>
		<i>sintalo hebamsab</i>		<i>hebamsab sintalo</i>	
		<i>hebamsab sintalo</i>			
<i>sintalo hebamsab</i>					
<i>sintalo</i>				<i>hebamsab</i>	
<i>sintalo</i>		<i>hebamsab</i>			
		<i>sintalo</i>		<i>hebamsab</i>	
		<i>*hebamsab</i>		<i>sintalo</i>	
<i>*hebamsab</i>		<i>sintalo</i>			
<i>*hebamsab</i>				<i>sintalo</i>	
<i>*hebamsab sintalo</i>					

Table 87: Relative position of temporal adverbial and manner adverb

8.3.4 Locative adverbials

Locative adverbials show a strong tendency to occur immediately before the verb:

- (8-80) *naka make Golokawat biaanea*
naka mak=e goloka=wat biaan-e=a
 man some=SG.M PN=across stay.IPFV.SS.SIM-3SG.M.SBJ=MED
 ‘While some man lived across in Goroka, he...’ [Pineapples]

- (8-81) *dekengé kim=daak toba unea*
lekǝng=e kim=laak tob-a un-Ø-e=a
 belt=SG.N1 ground=down SG.LONG.O-leave.PFV go.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘he left the belt on the ground and set out and then...’ [Dafinau]

Locative adverbials are rarely preposed to the beginning of the clause. A natural example is:

- (8-82) *aa unin daako ase súmé halosea*
aa unin laak=o as=e súm=e
 water eat.IPFV.VN down=N2 tree=SG.N1 big=SG.N1

halo-s-e=a
 break.SG.SBJ.PFV-DS.SEQ-SG.N1.SBJ=DECL
 ‘down at the water(-drinking) place a big tree broke down’ [Flood]

8.3.5 Position of finite adverbial nominalizations

Finite adverbial nominalization, i.e. adverbial clauses marked as NPs with the article =o, always occur clause initially. The following two examples illustrate this for a temporal (8-83) and a conditional clausal NP (8-84):

- (8-83) *né Ostlelia imin unaamabio mo tekein kebibabe*
né ostlelia imin unaa-mab-i=o
 I PN again go.PFV.FUT-FUT.NANPL.SBJ-1SG.SBJ=N2

mo tekein ke-b-i-ba=be
 NEG knowledge make-IPFV-1SG.SBJ-NEG=DECL
 ===know===
 ‘I don’t know when I’ll return to Australia’

- (8-84) *balubibe aaie einemeo baluemo tlaamabebabe*
balubib=e aai=e ei+n-Vm-e=o
 airstrip=SG.N1 water=SG.N1 fill_up+AUV.PFV-IFUT-SG.N1.SBJ=N2

balu=e=mo *tlaa-mab-e-ba=be*
 plane=SG.N1=NEG come.PFV.FUT-FUT.NANPL.SBJ-N1.SG.SBJ-NEG=DECL
 ‘If the water fills up the airstrip, the plane won’t come’

8.4 Non-verb-final medial clauses

Word order in Mian is partly syntactically determined, for instance, the verb almost always occurs clause-finally. This is always true for core arguments none of which can ever follow the verb in a clause. However, there are two noteworthy exceptions to the general rule that the verb has to be clause-final, namely the postverbal *kesoa* ‘so, that’s why’ and *bita* ‘until’. Both of these are only found in medial clauses.

8.4.1 Consecutive *kesoa* ‘so, that’s why’

The consecutive conjunction *kesoa* ‘so, that’s why’ invariably occurs after the verb and intonationally belongs to this clause. The consequence introduced by *kesoa* is given in the succeeding clause:

(8-85) *milimsíne haangáne kesoa tobskinamabibe*
milím+sin=e *háang-an-Ø-e* *kesoa*
 half+side=SG.N1 dry-VBZR-DS.SEQ-SG.N1.SBJ so

tob-ski+n-amab-i=be
 SG.LONG.O-turn+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘The other side has dried so I’ll turn it (the tobacco leaf) around’ [Rolling
 smokes]

Kesoa is a borderline case of postverbal positioning because it probably used to be a verb and constituted its own clause. Verbal morphology and medial verb marking is still clearly discernible: *ke-s-o-a* [do-DS.SEQ-EXPL=MED]. Intonationally, however, *kesoa* does not constitute a medial clause anymore and the preceding verb loses its medial marking, hence *haangáne* instead of *haangánea* in (8-85). This indicates grammaticalization of *kesoa* into a consecutive conjunction. On the other hand, *kesoa* retains some features of a medial clause: apart from the medial verb marker =*a*, =*ta* is also possible (*kesota*). The exact semantic difference between these two variants remains unclear at this stage. I gloss them both as ‘so’ or ‘that’s why’.

8.4.2 Temporal *bita* ‘until’

The temporal conjunction *bita* ‘until’ behaves similarly to *kesoa* ‘so, that’s why’ in that it can form an intonational unit with the preceding clause. In this case, the medial verb marker does not show up on the preceding verb:

- (8-86) *deiba bebob bita tatnoba*
lei-b-a *be-b-ob* *bita*
 leave.PFV-BEN.PFV-SG.N1.IO.PFV walk_around.IPFV-IPFV-1PL.SBJ until

tab-n-ob=a
 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]

Contrary to *kesoa*, *bita* ‘until’ can also form an intonational domain by itself, in which case the medial marker on the preceding verb is obligatory:

- (8-87) *tamano kouyebibta bita bomasota*
tamano kou-∅-ye-b-ib=ta *bita*
 fornication fuck-BEN.IPFV-PL.AN.IO.IPFV-IPFV-2/3PL.AN.SBJ=MED until

boma-s-o=ta
 light-DS.SEQ-EXPL.SBJ=MED
 ‘they were raping them until morning, and then they...’ [Mianmin and Telefomin history]

8.5 Postposed locative adverbials

Locative adverbials of motion verbs occasionally follow the verb of motion (preferably a directly inflected directional) in medial clauses. Postposed locatives 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 repeated in the locative NP:

- (8-88) *ba sino unang ásu kamwali utniba Sek tebin uto*
ba sino unǎng asu kam-wal=i
 ehm before woman two married_couple_dyad-PL=PL.AN

ut-n-ib=a *sek+tebin* *ut=o*
 up-SS.SEQ-2/3PL.AN.SBJ=MED PN+river_head up=N2

‘Ehm, before a woman and her husband went up, up to the head of the Sek river, ...’ [The Flood]

- (8-89) *deletniba watniba Klefolib wato*
lol-eb-n-ib=a *wat-n-ib=a*
 PL.AN.O-take.PFV-SS.SEQ-2/3PL.SBJ=MED across-SS.SEQ-2/3PL.AN.SBJ=MED
- klefolib wat=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 *yole* ‘well’, can be inserted before the locative. As the motion verb, however, is always marked as a medial by *=a* or *=ta*, I will treat postposed locatives not as part of the medial clause with the corresponding motion verb but as a non-verbal predication constituting its own intonational domain. Consider the non-verbal predication in the following independent sentence:

- (8-90) *Klefolib watobe*
klefolib wat=o=be
 PN across=PRD=DECL
 ‘It’s over in/to Telefolip’

In a clause chain the declarative marker *=be* cannot be used without immediately terminating the clause chain. Therefore, non-verbal predications within clause chains appear without any illocutionary marking. The analysis of postposed locatives as non-verbal predications suggests that a better translation for example (8-89) might be ‘They took them and went over, that’s over to Telefolip’. On non-verbal predications see the following section 8.6.

8.6 Non-verbal predications

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 are always one-place predicates and can consist of a pronoun or noun (including proper names and verbal nouns in *-in*), an adjective or a locative NP.

Like predications involving finite verbs, non-verbal predications 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* ‘exclamatory’, *=a* ‘polar question’ and *=e* ‘content question’.

An example for a declarative non-verbal predication is:

- (8-91) *ilibae tilobe*
iliba=e til=o=be
 PN=SG.M dog=PRD=DECL
 ‘Iliba is a dog’

Any NP or pronoun is permitted as the argument (namely noun, pronoun (personal or demonstrative), proper name, or adjective). If the identity of the referent of the argument NP is obvious or can be retrieved from context or speech situation, the argument can be left out:

- (8-92) *tilobe*
til=o=be
 dog=PRD=DECL
 ‘(It) is 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 Mian *tilobe* actually refers to the entity about which the predication is made. A more accurate translation of (8-92) would therefore be ‘Is a dog’. Therefore, I put ‘it’ in brackets.

If the predicate term ends in a vowel the predicator is optional. Compare (8-93) and (8-94) with the same meaning:

- (8-93) *nakabe*
naka=be
 man=DECL
 ‘(It) is a man’

- (8-94) *nakaobe*
naka=o=be
 man=PRD=DECL
 ‘(It) is a man’

If the illocutionary marker does not begin in a consonant, the epenthetic vowel is always dispensed with:

- (8-95) *tila?*
til=a
 dog=PQ
 ‘Is (it) a dog?’

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:

- (8-96) *né Bikenei unangóbo ge baaso*
né bikene=i unǎng=o=bo ge baa-s-o=a
 1SG PN=PL.AN woman=PRD=QUOT do.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 predicate slot in a non-verbal predication cannot be filled by a bare personal pronoun. Instead an emphatic pronoun has to be used:

- (8-97) *netábe*
né-ta=be
 I-EMPH=DECL
 ‘(It) is me’

Another common function of non-verbal predications is to predicate certain properties of a referent:

- (8-98) *ngaaméinóbe*
ngǎamein=o=be
 yellow=PRD=DECL
 ‘(It) is yellow’

- (8-99) *ninin Sofelok óló sino awemóbe*
ninin sofelok óló sino awěm=o=be
 name.N2 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 the predicator =*na* which is possibly derived from the verb stem *na* ‘do’. This construction can be used only with adjectives:

- (8-100) *sob élé beitloknabe*
sob élé beitlok=na=be
 soap.N1 DEM.SG.N1 soft=PRD=DECL
 ‘This soap is soft’

Although the predicator =*na* might have originated in the verb *na*, it cannot be inflected in property predications. Therefore, I treat this construction as non-verbal.

A further function of non-verbal predications is to designate locations:

- (8-101) *dál watobe*
lál wat=o=be
 river_bank across=PRD=DECL
 ‘(It) is on the bank on the other side of the river’

It is important to note that (8-101) can only be used to refer to a location but not to locate an entity at certain location. In order to do that, one has to use the existential verb:

- (8-102) *Kaseninge dál=wat biebe*
kasening=e lál=wat bi-Ø-e=be
 PN=SG.M river_bank=across stay.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘Kasening is on the other side of the river’

Non-verbal predications are also used to indicate possession. In non-verbal possessive constructions, the predicate can be a possessive pronoun with nominal function, e.g. *némi* ‘mine’, *kébmí* ‘yours’, *nélemi* ‘mine alone’, *kélebmi* ‘yours alone’, etc. as in (8-103) with a topic term and (8-104) without one:

- (8-103) *taang élé némibe*
tāang élé némi=be
 flint.N1 DEM.SG.N1 mine=DECL
 ‘This lighter is mine’

- (8-104) *némibe*
némi=be
 mine=DECL
 ‘It’s mine’

Predicative possession is expressed non-verbally with the help of the noun clitic =*sa* ‘with’, as in (8-105) and (8-106):

(8-105) *unangó amunsabe*
unǎng=o amun=sa=be
 woman=SG.F belly=with=DECL
 ‘The woman is pregnant (lit. ‘with belly’)’

(8-106) *né amsabe*
né am=sa=be
 I house=with=DECL
 ‘I have a house’

8.6.1 Negation in non-verbal predications

Non-verbal predications are negated like finite verbal predications by means of the negative marker *-ba*. This suffix attaches directly to the predicate without an overt predicator. The following examples show negation of non-verbal predications expressing identity (8-107), properties (8-108), possession (8-109) and location (8-110).

(8-107) *yeye yo yaibabo*
yeye yo yai-ba=bo
 no DIST.N2 wound-NEG=QUOT
 ‘‘No, that is not a wound’’ [Pig story]

(8-108) *né monio súmbabe*
né moni=o súm-ba=be
 1SG money=N2 big-NEG=DECL
 ‘I don’t have much money’ (Lit. ‘My money isn’t big’)

(8-109) *taang élé kébmibabe — némi=be*
tǎang élé kébmi-ba=be — némi=be
 flint.N1 DEM.SG.N1 yours.SG.M-NEG=DECL — mine=DECL
 ‘This lighter is not yours—(it) is mine’

(8-110) *dál watbabe*
lál wat-ba=be
 river_bank across-NEG=DECL
 ‘(It) is not the bank on the other side of the river’

Pronouns as predicates in negated non-verbal predications first have to be affixed by *-kób* followed by *-ba*. The negative suffix *-kób* attached to the bound pronoun series (cf. 3.7.2) and can only be found in non-verbal predications:

- (8-111) *kébta alo faeboba gese eka make nékóbbabo gese monsanipto*
kéb-ta al=o fa-Ø-ebo=ba
 2SG.M-EMPH faeces=PL.N1 make.PFV-PST-2SG.SBJ=?

ge-s-e eka mak=e né-kób-ba=bo
 do.PFV-DS.SEQ-3SG.M.SBJ and other=SG.M 1SG-NEG-NEG=QUOT

ge-s-e monsa-n-ib=to
 do.PFV-DS.SEQ-3.SG.M.SBJ go.?-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘‘You shat’’, he said and the other said ‘‘Not I’’, and so they went on, and
 then...’ [Danenok]

8.6.2 Non-verbal predications in clause chaining constructions

In all examples given so far the predicate of a non-verbal predication has been followed by an illocutionary particle which marks the end of independent and grammatically complete sentences. However, non-verbal predications also occur in clause chaining constructions:

- (8-112) *Kasening Milimab néta wengsang óló omebwat daanamabibe*
kasening milimab né-ta wengsäng óló
 PN PN I-EMPH story.N2 DEM.N2

om-eb wat laa+n-ama-b-i=be
 SG.FEM.O-take.PFV across put.PFV+AUX.PFV-FUT.NANPL.SBJ-
 1SG.SBJ=DECL
 ‘I’m Kasening Milimab (lit. K.M. that’s me) and I want to record this story (lit. take this story and put it across)’ [Dimosson story]

The predicate of a non-verbal predication within a clause chain can be followed by *yé* ‘there’:

- (8-113) *iná kakaba bobolao keimyé hekhek gabe kesoa*
ĩn=a kakab=a bobol=a=o keim=yé
 liver=and lung=and heart=and=PL.N1 open=there

hekhek ga-b-e kesoa
 panting_sound do.IPFV-IPFV-3SG.M.SBJ so
 ‘(his, i.e. a child’s) liver, lungs, and heart were open and he was panting, so the man’ [Crows]

Quite commonly, non-verbal predications in clause chains are followed by the consecutive conjunction *kesoa* ‘so, that’s why’ and a consequence clause:

- (8-114) *nai éta kesoa íle yé koubiaanibto memei yobinabiobo*
nǎi é-ta kesoa
 vagina.N1 SG.N1-EMPH so
- í=le yé kou+biaan-ib=to*
 they=TOP there fuck+AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
- memei yo-bina-b-io=bo]*
 children beget+AUX.HAB-IPFV-2/3PL.AN.SBJ=QUOT
 ‘(It) is a vagina so while fucking (in) there, they beget children’ [Pig story]

8.7 Question formation

This section deals with interrogative sentences. I will use the term “polar question” for what is often called *yes-no* question in the literature. It is true that in most instances of polar questions the speaker will expect a simple ‘yes’ or ‘no’ as an answer, however, strictly speaking this need not be so (cf. Comrie 1984: 18). In alternative questions, for instance, such as *Do you want pork or fish for dinner?*, the speaker wants a specification of the offered alternatives⁴⁸. Alternative questions are treated as polar questions because both display the same illocutionary marking. Also, in the most straightforward and common case of two (or more) alternatives offered in a question, these alternatives are mutually exclusive and thus could be seen as poles in a space of possible choices.

Questions with which the speaker requests information about the *who*, *what*, *when*, etc. of an event or action I call “content questions”. Content questions consist of a proposition which is completely presupposed apart from one element, which is the one queried (cf. Givón 1990b: 714-5, 93).

8.7.1 Polar questions

Polar questions are formed with the interrogative particle =*a*. Occasionally, one finds polar questions with =*e* (which is the marker for content questions).

Like all illocutionary particles (cf. 3.11), =*a* encliticizes to the immediately preceding word and forms a single prosodic word with it. As all items in the class of illocutionary

⁴⁸ Comrie (Ibid.) also notes that the term ‘yes/no question’ is misleading for the description of interrogatives with a function other than asking questions, e.g. in *I ask myself whether this will happen?*

particles occur in the same slot in a sentence, namely at its very end, there can only ever be one illocutionary particle and the word it encliticizes to is invariably the predicating element in the sentence.

Intonationally, polar questions are characterized by a short intonational peak on the last syllable of the utterance, whose nucleus is invariably formed by the illocutionary particle.

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 (cf. section 8.6 on non-verbal predications).

8.7.1.1 Polar questions about verbal predications

In polar questions about verbal predications the interrogative particle cliticizes to the verb as in the formulaic greeting in (8-115):

- (8-115) *klayám bieba?*
klayâm *bi-∅-eb=a*
 properly_good stay-IPFV-2SG.SBJ=PQ
 ‘Are you well?’

Word order does not change in questions. The declarative marker *be*, the emphatic/quotative marker *bo* or the exclamative marker *ble* are replaced by *a* and the utterance has a marked intonational contour as opposed to the corresponding declarative sentence. Compare the polar question in (8-116) and its declarative counterpart in (8-117):

- (8-116) *kéb méné smá gwaab bía?*
kéb mén=e *smá gwăab* *bi-∅-e=a*
 your child=SG.M still small stay-IPFV-IPFV-3SG.M.SBJ=PQ
 ‘Is your son still small?’

- (8-117) *kéb méné smá gwaab biebe*
kéb mén=e *smá gwăab* *bi-∅-e=be*
 your child=SG.M still small stay-IPFV-IPFV-3SG.M.SBJ=DECL
 ‘Your son is still small’

Note the morphophonemic change in (8-116): If *a* is the third vowel in a vowel sequence in forms of the existential verb *bi*, the disallowed vowel clusters *[biɛa] and *[bioa] are simplified to [biʔa] and [buʷa], respectively.

Optionally, polar questions can additionally contain the interrogative clitic *mó* (as opposed to negative *mo* with low tone). This immediately precedes the verb and encliticizes to the preceding word as in (8-118):

- (8-118) *áns ólómó gobobieba?*
áns ólómó go-b-o+bi-Ø-eb=a
 song.N2 DEM.N2=INT like.PFV-BEN.PFV-N2.IO.PFV+AUX.IPFV-IPFV-2SG.SBJ=PQ
 ‘Do you like this song?’

It is possible that *mó* has the function of marking the constituent after which it occurs as the focus of the question and that different positions of *mó* can indicate different foci. In that respect it might be similar to the Russian question particle *li* (cf. Comrie 1984: 20-1). However, further research is necessary to substantiate this.

The scope of the interrogative clitic *a* is always the whole sentence and not just the clause at the end of which the clitic appears:

- (8-119) *kóbó glolamító=mó betelaneba imin dounebbua?*
kóbo glolamĩt=o mó betela-n-eb=a
 you wind_opening=N2 INT open.PFV-SS.SEQ-2SG.SBJ=MED

imin lou-n-eb-bio=a
 again close-PST-2SG.SBJ-GPST=PQ
 ‘Did you open and again close the window?’ [TMA Questionnaire, 61]

The question in (8-119) can only have the meaning given, but not ‘You opened the window, did you close it again?’. Nor can it be paraphrased with two consecutive questions, such as ‘You opened the window? Did you close it again?’

The first clause cannot be interpreted as declarative because it contains *mó* which may not occur in declarative sentences. Moreover, Mian illocutionary particles like interrogative *a* invariably have scope over the whole sentence, i.e. the final clause in which they occur and all medial clauses preceding the final clause. This is a typical feature of Papuan languages which employ clause chains (cf. Foley 1986: 199-200). Also see section 10.1 on scope of illocutionary force in clause chains.

The first clause in (8-119) cannot be interpreted as a question in itself either. Only the last verb *dounebbua* ‘did you close?’ bears the interrogative marker *a*. This is not immediately obvious from the orthography as *betelaneba* ‘you open’ ends in the medial clause marker *a*, which is homophonous to the interrogative particle. However, there are two cues which indicate that *a* in *betelaneba* does not mark the first clause as interrogative but rather marks the verb as medial: (a) there is no marked pause between the two clauses, which would be expected if each clause constituted a question in itself, and (b) the first clause does not display characteristic polar question intonation.

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. It seems that the use of the interrogative marker in hortative verb forms is restricted to first person singular (8-120) and plural (8-121):

(8-120) *ayale kemelanana*
ayal=e kemela+n-an=a
 light=SG.N1 extinguish.PFV+AUX.PFV-1SG.HORT=PQ
 ‘Shall I extinguish the light?’ [Observed]

(8-121) *unoma*
un-om=a
 go.PFV-1PL.INCL.HORT=PQ
 ‘Shall we go?’

8.7.1.2 Polar questions about non-verbal predications

In polar questions about non-verbal predications the interrogative particle attaches to either a noun (8-122a), an emphatic pronoun (b), a restrictive pronoun (c), or an adjective (d). 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 sentences. Note the morphophonemic change in the emphatic and restrictive pronouns (see 2.7.7).

(8-122) a. <i>tila?</i>	b. <i>nétia?</i>	c. <i>yótia?</i>	d. <i>ayama?</i>
<i>tíl=a</i>	<i>né-ta=a</i>	<i>yóta=a</i>	<i>ayam=a</i>
dog=PQ	I-EMPH=PQ	only_this=PQ	good=PQ
‘Is it a dog?’	‘Is it <u>me</u> ?’	‘Is it only this?’	‘Is it good?’
	(e.g. Is it my turn?)		

Possible answers to these four questions are given in (8-123a-d):

- (8-123) a. *ae, tilobe* ‘Yes, it’s a dog.’
 b. *ae, kébtabe* ‘Yes, it’s you(r turn)!’
 c. *ae, yótabe* ‘Yes, that’s it!’
 d. *yeye, ayambabe. misiamobe* ‘No, it’s not good. It’s bad.’

8.7.1.3 Alternative questions

Alternative questions, in which the speaker expects the addressee to specify one (or maybe more than one) of the alternatives offered rather than just say ‘yes’ or ‘no’, are a subtype of polar questions. They are formed with the interrogative particle *a* and do not involve change of constituent order.

- (8-124) *kóbó aning éta bleka eil éta downaamabeba?*
kóbo aning é-ta bleka
 you.M.SG fish.M SG.M-EMPH or

ěil é-ta lowonaa-mab-eb=a
 pig.M SG.M-EMPH eat.PFV.FUT-FUT.NANPL.SBJ-2SG.SBJ=PQ
 ‘Do you want to eat fish or pork?’ [Observed]

The conjunction *bleka* ‘or’ conjoins the elements denoting the alternative options in polar questions. The alternatives have each to be followed by an emphatic pronoun, as in (8-124), not just an article, hence **kóbo aning=e bleka eil=e downaamabeba?*

8.7.1.4 Alternative questions with *bleka* ‘or’ as a question tag

Another way of forming an alternative question is by using *bleka* ‘or’ as a question tag, e.g. in clauses with a non-verbal predicate, as in (8-125):

- (8-125) *yáíe yai bleka?*
yáí=e yái bleka
 wound=SG.N1 wound or
 ‘Is it a wound, wound, or not?’ [Pig story]

This question tag can also appear in sentences whose predicate is a finite verb, as in (8-126):

- (8-126) *mó wentebeta obi bleka?*
mó wente-b-eb=ta o-b-i bleka
 INT hear.IPFV-DS.SIM-2SG.SBJ=MED say.IMPV-IPFV-1SG.SBJ or
 ‘Do you understand what I’m saying, or don’t you?’
 (Lit: ‘Are you hearing as I’m talking, or?’) [Mianmin and Telefomin]

Tag questions in English attach to declarative (imperative or exclamative) sentences, not to questions, and have the pragmatic function of seeking confirmation regarding the proposition of the declarative sentence (cf. Huddleston 1988: 139).

However, it is my impression that in the Mian case the question tag offers a second alternative which is presented as almost equally probable. Thus, the alternatives offered in (8-125) are that the topic either is a wound or it is not a wound, with a slight bias towards the former. In other words, *bleka* juxtaposes the negative to the affirmative in a stronger fashion than question tags, such as *isn’t it?* or *right?* do in English.

Also, consider the form of the predicate which precedes the question tag *bleka*. Neither the noun *yái* ‘wound’ in (8-125) nor the verb *obi* ‘I am saying’ in (8-126) can be followed by an illocutionary marker because of the presence of *bleka*, which goes into the slot normally occupied by the illocutionary particle. Therefore, it is *prima facie* unclear whether what the tag attaches to is a statement or a question. I would argue for the latter because the interrogative particle *mó* can appear in verbal predications with *bleka*, such as (8-126), but never in declarative sentences.

To sum up, sentences with question tags are themselves questions and the tag introduces the negation of the proposition of the preceding sentence as a second alternative, rather than to seek confirmation for this proposition.

8.7.2 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 content questions is presupposed apart from the queried constituent.

Content questions are formed with the interrogative particle *=e* (~ *=ne* after vowel). Like the polar question marker *a*, *e* encliticizes to the clause-final predicate word. The host of the illocutionary marker is the finite verb in verbal predications and a noun, pronoun, or adjective, etc. in non-verbal predications. Unlike polar questions, content questions are never marked by the interrogative particle *mó*.

Apart from being marked with the interrogative particle *e*, content questions also involve one of the two basic question words or interrogative pronouns *fab* ‘where’ (8-127) or *wan* ‘who’ (8-128), which have further semantic extensions into other epistemic domains (see below):

(8-127) *fab unebe?*

fab un-∅-eb=e

where set_out.PFV-PST-2SG.SBJ=CQ

‘Where are you going?’ (Lit. ‘Where have you set out to?’)

(8-128) *wanéta káb élé klutanene?*

wan+é-ta káb élé kluta-n-e=ne

who+3SG.M-EMPH cup.N1 DEM.SG.N1 break-PST-3SG.M.SBJ=CQ

‘Who’s broken this cup?’ [TMA questionnaire, alternative for 127]

Semantically, the two interrogative pronouns almost exactly divide the world up into animates (*wan* ‘who’), on the one hand, and inanimates and adverbials (*fab* ‘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 pronouns *fab* and *wan* are vague with respect to the categories number and gender. Emphatic pronouns, which can be compounded with both *fab* and *wan* have to be marked for number and gender. Mian interrogative pronouns 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 (cf. Evans 1995: 365) and Kuuk Thaayorre (Gaby 2006: 243-4). Both *fab* and *wan* can be used pronominally and adnominally.

Content questions in Mian usually have declarative 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.

The interrogative marker *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). It seems that use of the content question marker *e* in hortative verb forms is restricted to first person singular and plural.

- (8-129) *fab ofanane?*
fab *ob-fa+n-an=e*
 where SG.RESID.O-put.PFV+AUX.PFV-1SG.HORT=CQ
 ‘Where shall I put it down?’ [Observed]

8.7.2.1 Interrogative pronouns

The interrogative pronouns *fab* and *wan* always appear in situ, i.e. they occur in the same position as non-interrogatives with the same grammatical function (cf. Li and Thompson 1984: 51) and are not fronted.

As in polar questions, word order is not changed with respect to the corresponding declarative sentence and the interrogative occupies the position which the queried constituent would have in an appropriate answer sentence.

There are a few cases where the interrogative pronoun does not appear to be in situ but rather is postposed after the verb. As we will see, the position of the pronoun in such cases is not the result of any movement, neither syntactically nor pragmatically prompted. I will turn to this issue in more detail below.

8.7.2.1.1 *fab*

The interrogative pronoun *fab* occurs in four different construction types. Depending on the construction, the semantic interpretation of *fab* varies:

- 1) Bare *fab* means ‘where’

- 2) The compound *fab* plus finite verb form of *na* ‘do’ has the meaning ‘do what, do why, do how’. Morphologically and syntactically, this compound behaves like a finite verb.

- 3a) The verbal noun *fatnamin*, i.e. *fab* plus the imperfective verbal noun *namin* ‘do’ covers a semantic area which in English is divided up into: ‘what, why, how, how much/many, which, what kind of’. The compound *fatnamin* behaves morphologically and syntactically like a (verbal) noun.

3b) The compound *fatnamin* can occur with the instrumental noun clitic =*dum* ‘with’ and the locative modifier *dimóta* ‘on’ forming the instrumental NP *fatnamin=dum* ‘with what’ asking for instrument or means and the locative NP *fatnamin dimota* ‘when’ asking for temporal location. Both *fatnamindum* and *fatnamin dimóta* have the formal and syntactic properties of adverbial NPs.

Table 88 lists all interrogative expressions based on *fab*, their basic meaning, semantic extension and distribution.

Interrogative expression	Basic meaning	Semantic extension	Distribution as
<i>fab</i>	‘where’	‘where’	Noun
<i>fatna-</i>	‘do what’	‘do what’, ‘do how’, ‘do why’	Finite verb
<i>fatnamin</i>	‘what’	‘what’, ‘how’, ‘why’, ‘how much/many’, ‘what kind’	Verbal noun
<i>fatnamindum</i>	‘with what’	‘with what’	Noun phrase
<i>fatnamin dimóta</i>	‘when’	‘when’	

Table 88: Mian interrogative expressions based on *fab*

8.7.2.1.1.1 Bare pronoun *fab* ‘where?’

In isolation, the interrogative pronoun *fab* is interpreted as ‘where’. A question with bare *fab* is never marked with the interrogative particle *e*:

(8-130) Q: <i>fab?/*fab=e</i>	A: <i>íwat biebe</i>
<i>fab</i>	<i>íwat</i> <i>bi-∅-e=be</i>
where	there_across stay.IPFV-IPFV-SG.N1.SBJ=DECL
‘Where?’	‘It’s over there’

In combination with predicates of location or movement, such as the existential verb *n/bi-bl* in (8-131) or *un~on/une* ‘go in (8-132), *fab* also has the meaning ‘where’:

(8-131) <i>fab biene?</i>
<i>fab</i> <i>bi-∅-e=ne</i>
where stay.IPFV-IPFV-SG.N1.SBJ=CQ
‘Where is it?’

(8-132) <i>fab unaamabebe?</i>
<i>fab</i> <i>unaa-mab-eb=e</i>
where go.PFV.FUT-FUT.NANPL.SBJ-2SG.SBJ=CQ
‘Where will you go?’

The interrogative pronoun *fab* can be used adnominally as well. In its adnominal use, *fab* follows the noun means ‘which’ rather than ‘where’:

- (8-133) *amo fab aa únomabbione?*
am=o fab áa un-omab-bio=ne
 house=N2 which lie go.PFV-FUT.PL.AN.SBJ-1PL.SBJ=CQ
 ‘(To) which house will we go to sleep?’ [Danenok]

8.7.2.1.1.2 Finite forms of *fatna* ‘do what?’

Mian has a compounded verb stem which consists of *fab* and *na* ‘do’, which can be inflected as a verb and which has the meaning ‘do what’:

- (8-134) *fatnabebe?*
fab+na-b-eb=e
 what+do-IPFV-2SG.SBJ=CQ
 ‘What are you doing?’ [Observed]

Note the phonological change in the interrogative pronoun due to assimilation of place of articulation with respect to the nasal at the beginning of the verb stem. One might ask whether *fatna* should not be analyzed 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: 13-4), Austronesian languages, e.g. Paamese (Crowley 1982) and Australian languages, e.g. Kayardild (Evans 1995: 371-2) and Dyirbal (Dixon 1972). Outside the Pacific area, interrogative verbs can for example be found in West Greenlandic (Kalaallisut) (cf. 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) analyzes 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 (cf. Evans 1995: 282).

The status of *fatna* in Mian seems less straightforward. *Fatna* is still transparently a compound of the interrogative element *fab* and the verb stem *na* to warrant an analysis

as an interrogative pro-verb. The degree of fusion between the compounded elements *fab* and *na* is relatively low. Place assimilation of /b/ to [d] (which is realized as [t] syllable-finally due to final devoicing) before an alveolar nasal applies across the board in Mian and is thus not indicative of a beginning fusion between the interrogative and the verb stem.

On the other hand, there is a semantic shift in compounded *fab* from ‘where’ to ‘what’. Bare *fab* cannot mean ‘what?’ and the compound cannot mean ‘do where’. As the meaning of *fab* is clearly construction-specific here, the meaning of the compound cannot be said to be fully transparent anymore. Also, the assimilated stop [t] in the compounded interrogative *fatna* is often elided in normal and fast speech: cf. *fana* ‘do what?’. This suggests that the two stems are in a process of fusing and may develop into an interrogative pro-verb.

The core meaning of *fatna* is ‘do what’:

(8-135) *né ul óló downaamio fananamabine?*

né ul óló lowonaa-m-i=o
I mushroom.N2 dem.N2 eat.PFV.FUT-IFUT-1SG.SBJ=N2

fa(b)+na+n-amab-i=ne

what+do+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=CQ

‘If I eat this mushroom, what will happen to me?’ [TMA Questionnaire, 81]

(Lit. ‘If I eat this mushroom, what will I do?’)

However, in some contexts the free English translation of a question with inflected *fatna* is closer to ‘why’, as in (8-136) or ‘how’, as in (8-137):

(8-136) *ó fananota besao mebone?*

ó fa(b)+na-n-o=ta besa=o me-b-o=ne
she what+do-SS.SEQ-3SG.F.SBJ=MED nothing=N2 cry.IPFV-IPFV-3SG.F.SBJ=CQ

‘Why is she crying without reason?’ [Newlyweds]

(Lit. ‘What has she done, is she crying for nothing?’)

(8-137) *fanata unutnenene?*

fa(b)+na=ta un-u-b-ne-n-e=ne
what+do=MED go.PFV-EP-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ=CQ

‘How has he escaped me?’ [Story of the Klebein woman]

(Lit. ‘What has he done, has he gone on me?’)

The last two examples shed some light on the syntactic and morphological behaviour of *fatna* in content questions.

First, these forms function as verbs and are heads of their own clauses as can be seen in (8-136), which consists of a medial clause *ó fatnanota* and a final clause *besao mebone*. This is captured in the literal translations above. Like medial verbs, inflected *fatna* is subject to the usual inflectional restrictions for medial verbs, namely that they cannot be marked for future tense.

Second, the bare stem *fatna* can appear in shortened medial clauses under subject identity as in (8-137). 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 9.2.11)

Therefore, *fatna* is a morphologically and syntactically regular verb in many respects. *Fatna* can also form hortative verb forms. Again, this possibility seems to be restricted to 1st person singular and plural:

- (8-138) *fananane?*
fa(b)+na-n-an=e
 what+do+AUX.PFV-1SG.SBJ.HORT=CQ
 ‘What shall I do?’

8.7.2.1.1.3 The verbal noun *fatnamin* ‘what’

The verbal noun *fatnamin* has the basic meaning ‘what’. As an isolated utterance, *fatnamin* is interpreted as ‘what’, ‘why’, or ‘how’. Unlike a question with bare *fab*, a question with *fatnamin* can optionally be marked with the content question marker *e*:

- (8-139) *fatnamin?/fatnamin=e?* ‘What (is it)’/‘Why (is it)’/‘How (is it)’

If *fatnamin* appears in an argument position of a verb, as in (8-140), i.e. in the position the argument constituent would have in an appropriate answer sentence (8-141), it means ‘what?’:

- (8-140) Q: *kóbó fatnamin downaamabebe?*
kóbó fatnamin lowonaa-mab-eb=e
 you.SG.M what eat.PFV.FUT-FUT.NANPL.SBJ-2SG.SBJ=CQ
 ‘What do you want to eat?’

- (8-141) A: *né eilé downamabibe*
né ěil=e lowonaa-mab-i=be
 I pig=SG.M eat.PFV.FUT-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I want to eat pork’

As no interrogative containing *fab* can ever be used to inquire about animates, the argument position *fatnamin* occupies is usually that of the direct object of the verb.

Inanimate subjects of the (intransitive) existential verb *n/bi-bl*, can also be queried by using *fatnamin*:

- (8-142) Q: *fatnamin yé biene?*
fatnamin yé bi-Ø-e=ne
 what there stay.IPFV-IPFV-SG.N1.SBJ=CQ
 ‘What is there?’

- (8-143) A: *imene yé biebe*
imen=e yé bi-Ø-e=be
 taro=SG.N1 there stay.IPFV-IPFV-SG.N1.SBJ=DECL
 ‘There is a taro (tuber)’

When *fatnamin* precedes the noun it is interpreted as ‘what for’, ‘how much/many, or ‘what kind of’. Example (8-144) illustrates a question about a purpose:

- (8-144) *fatnamin dafa mebebe?*
fatnamin lafa me-b-eb=e
 what need cry.IPFV-IPFV-2SG.SBJ=CQ
 ‘Why are you crying?’ [The Newlyweds]
 (Lit. ‘For what need are you crying?’)

The questions in (8-145) and (8-146) 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.

- (8-145) *fatnamin lais smá biene?*
fatnamin lais smá bi-Ø-e=ne
 what rice.N1 still stay.IPFV-IPFV-SG.N1.SBJ=CQ
 ‘How much rice is still there?’ But also: ‘What kind of rice is still there?’

- (8-146) *é fatnamin am genebue?*
é fatnamin am ge-n-e-bio=e
 he what house.N2 build.PFV-PST-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 Mian speakers tend to use *fatnaminfela* for ‘how much/many’. This construction is inspired by Tok Pisin *hamaspela* ‘how much/many’.

- (8-147) *fatnaminfela tablasēb únangí íwat blibe?*
fatnaminfela tablasēb únang=i íwat
 how_many European woman=PL.AN there_across

bl-∅-ib=e
 stay.IPFV-IPFV-2/3PL.AN.SBJ=CQ
 ‘How many white women are over there?’

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 *fatnamin* developed as a secondary sense from ‘what, what kind of’.

8.7.2.1.1.4 *fatnamindum* ‘with what’ and *fatnamin dimóta* ‘when’

The noun clitic =*dum* ‘with’ and the directional noun *dimóta* ‘on’ can follow *fatnamin* and modify it to indicate a question about an instrument (8-148) or a specific point in time (8-149):

- (8-148) *kóbó wane fatnamindum ananebe?*
kóbo wan=e fatnamin=dum a-na-n-eb=e
 you.SG.M bird=SG.M what=with 3SG.M.O-kill.PFV-PST-2SG.SBJ=CQ
 ‘With what did you kill the bird?’

- (8-149) *fatnamin dimóta tlebbue?*
fatnamin dimóta tl-∅-eb-bio=e
 what on come.PFV-PST-2SG.SBJ-GPST=CQ
 ‘When did you come?’

8.7.2.1.2 *wan* ‘who’

The interrogative pronoun *wan* ‘who’ is used to inquire about the identity of animates including their names. There are four free variants *wan*, *un* and *wal*, *ul*⁴⁹. In isolation,

⁴⁹ Note on the allostems of *wan* /^hwan/ ‘who’: The variation between *wa* and *u* is free and can be found in other areas of Mian grammar, e.g. the variation of the object agreement prefix *wa-* ~ *u-*. If the variant *ul* is

wan only occurs in questions about possessors. Like possessors expressed by full NPs, the interrogative pronoun *wan=e* (with an article =*e* in the singular male form) precedes the possessed:

- (8-150) *élé wane tile?*
élé wan=e til=e
 DEM.M.SG who=SG.M dog=CQ
 ‘Whose dog is this?’

In questions about the identity of a certain individual *wan* ‘who’ is compounded with an emphatic pronoun, such as *éta* ‘he (emph)’ (see 3.7.4.1). The interrogative marker *e* is used to mark interrogative illocution. Note that in the cliticization of the marker *e*, the final vowel of the emphatic pronoun is simply deleted; there is no **wanibte*.

- (8-151) *íbo waníbte?*
íbo wan+íb-ta=e
 you.2PL who+2PL.AN-EMPH=CQ
 ‘Who are you (pl)?’

- (8-152) *unang óló wanóte?*
unǎng óló wan+ó-ta=e
 woman this who+3SG.F-EMPH=CQ
 ‘Who is this woman?’

The combination *wan* ‘who’ plus emphatic pronoun is also used to inquire about proper names, which are not strictly animate but they are nonetheless important properties of humans and some animates.

- (8-153) *kéb nininó wankébtte?*
kéb ninín=o wan+kéb-ta=e
 your.2SG.M name=N2 who+2SG.M-EMPH=CQ
 ‘What (lit: who) is your name?’

The corresponding answer shows that the interrogative occurs in situ. Emphatic pronouns are obligatory in the answer:

used with emphatic pronouns which start in /i/, there is another morphophonemic variant *ulei*. Thus the forms for the 2nd and 3rd animate plural are *uleibta* ‘who (you, pl)’ and *uleita* ‘who (they)’, respectively.

- (8-154) *né ninin óle X nétabe*
né ninin ó=le X né-ta=be
 my name N2=TOP PN I-EMPH=DECL
 ‘My name is X’ (Lit: ‘As for my name: X that’s me!’)

In questions about arguments in a clause, *wan* ‘who’ is compounded with an emphatic pronoun and occurs in situ. In (8-155) and (8-156) the subject is being queried:

- (8-155) *blaia uléta kweit hálutnenebue?*
blaia ul+é-ta kwěit
 damn who+3SG.M-EMPH sugarcane.N1

hal(o)-u-b-ne-n-e-bio=e
 cut.SG.O.PFV-EP-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ-GPST=CQ
 ‘Damn, who cut my sugar cane?’ [The Unangkliten village]

- (8-156) *wanéta am óló genebue?*
wan+é-ta am óló ge-n-e-bio=e
 who+3SG.M-EMPH house.N2 DEM.N2 build.PFV-PST-3SG.M.SBJ-GPST=CQ
 ‘Who built this house?’ [TMA Questionnaire, 128]

So far my corpus does not contain any instances where *wan* ‘who’ is used to inquire about animate direct objects (e.g. ‘Who did you see?’) or indirect objects (e.g. ‘To whom did you give the axe?’), or ‘For whom did you cut the wood?’). For inquiring about inanimate direct objects see section 8.7.2.1.1.3 on *fatnamin* ‘what’ above.

So far the examples have illustrated pronominal use of *wan* plus emphatic pronoun. In its adnominal use, *wan* follows the noun and its meaning is ‘which’:

- (8-157) *nakai waníta tlaaibe?*
naka=i wan+í-ta tlaa-ib=e
 man=PL.AN who+3PL.AN-EMPH come.PFV.FUT-2/3PL.AN.SBJ=CQ
 ‘Who’s about to come?’ (Lit: ‘Which men are about to come?’) [Danenok]

I stated above that there are cases where the interrogative pronoun seemingly does not appear in situ. Consider (8-158):

- (8-158) *kábe klutane élé wanéte?*
káb=e kluta-n-e élé wan+é-ta=e
 cup=SG.N1 break-PST-3SG.M.SBJ this who+3SG.M-EMPH=CQ
 ‘Who’s broken the cup?’ (Lit: ‘This (one) who broke the cup, who (is he)?’) [TMA questionnaire, 127]

Compare the word order in (8-158) with (8-159) and also consider word order in a possible declarative answer in (8-160):

(8-159) *wanéta káb élé klutanene?*
wan+é-ta káb élé kluta-n-e=ne
 who+3SG.M-EMPH cup.N1 DEM.SG.N1 break-PFV-3SG.M.SBJ=CQ
 ‘Who’s broken this cup?’ [TMA questionnaire, alternative for 127, repeated from (8-128)]

(8-160) *Milsene kábe klutanebe*
milsen=e káb=e kluta-n-e=be
 PN=SG.M cup=SG.N1 break-PST-3SG.M.SBJ=CQ
 ‘Milsen has broken the cup’

Unmarked Mian word order is SOV. At first sight, word order in (8-158) seems at variance with the unmarked word order in (8-159) and (8-160). The subject, which is the queried constituent in (8-158), looks to be postposed to the right. One could assume that postposition of the interrogative pronoun is prompted by pragmatics, in this case by the need to focus on the culprit. However, this does not seem to be the case.

A closer look at the material preceding *wanéte* in (8-158), namely *kabe klutane élé* ‘this one who has broken the cup’, shows that no movement has taken place. This string is a head-internal relative clause (see 11.4.2) in topic position and the interrogative is in predicate position in a non-verbal predication.

Hence, we conclude that in (8-158) no movement has taken place, pragmatically prompted or otherwise.

8.7.2.1.3 Is *wan* an interrogative verb?

An interesting final question is whether *wan* ‘who’ could be analyzed as an interrogative verb. After all, forms like *wanéta* 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 to be likely because on such an analysis the expected form for the 2nd singular subject marker would be *-eb* giving **wanébate* instead of the correct form *wanébate* (cf. (8-153)).

Similarly, the subject markers for the 2nd and 3rd animate plural show syncretism. The form is *-ib* for both persons. So, if we were dealing with interrogative verbs, we

would expect the same syncretism to occur here, i.e. there should be only one form *waníbtá* for both 2nd and 3rd animate plural. However, the correct forms are *waníbtá* for the 2nd, as in (8-151), and *waníta* for the 3rd, as in (8-157), which is exactly what we would expect if *íbtá* and *íta* were emphatic pronouns.

8.7.3 Topic-only questions

Topic-only questions are questions in which only a topic is given, as in English *What about X?* 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 topic or something that was anticipated by a statement, such as *I'm going. What about you? (Are you going as well?)*. In Mian topic-only questions are formed by using a free pronoun and the topic clitic =*le*. Possible implied questions are given in brackets. In case context is lacking the default interpretation of a topic-only question would be about the topic's whereabouts:

(8-161) *kóbóle*
kóbó=le
 you.SG.M=TOP
 'What about you?' (What are you doing?)

(8-162) *Mandat éle*
mandat é=le
 PN 3SG.M=TOP
 'What about Mandat?' ('Where is he?')

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, there are no interrogative pronouns nor do any interrogative particles occur.

Typical question intonation, that is a short intonational peak on the nucleus of the last syllable of the utterance, is not possible either.⁵⁰ Topic-only questions invariably involve topic pronouns but these can also occur in non-interrogative sentences. I assume that there are two reasons why (8-161) and (8-162) are readily interpreted as topic-only

⁵⁰ The absence of usual non-phonological strategies for question marking seems to be typical for topic-only questions; cf. English *And you?*, German *Und du/Sie?*, Tok Pisin *Na yu?*. Note however that these examples would have rising intonation. Without rising intonation, they would not be readily interpreted as questions.

questions: (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 vowel⁵¹, and (b) as a matter of convention, any utterance that ends in a contrastive pronoun is interpreted as a topic-only question.

8.8 Reciprocal constructions⁵²

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.

8.8.1.1 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 (cf. Kemmer 1993). An example is given in (8-163):

(8-163) *í wěng=o o-b-io=be*
 they language=N2 say.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They are talking (lit. saying language)’ [MPI clip 1]

8.8.1.2 The *sese*-construction

The dedicated reciprocal construction involves the reciprocal suffix *-sese*. The only function of this construction is to encode reciprocal situations. Reciprocal semantics are entailed:

(8-164) *í ye-na-sese+bl-∅-io=be*
 they PL.AN.O-hit.PFV-RECIP+AUX.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They are hitting each other (i.e. are engaged in reciprocal hitting)’

⁵¹ This is difficult to determine because it is not clear what is due to tone and what is due to intonation. In other words, the high pitch on the contrastive marker could come from the preceding H spreading over. If this is so, one would have to assume declarative intonation for topic-only questions.

⁵² Most of this section and a detailed historical account of how reciprocal constructions developed in Mian will appear in Fedden (to appear-a).

Reciprocants have to be animate. Events involving inanimate participants cannot be encoded reciprocally 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) one of direct object or indirect object depending on the argument structure of the verb.

In example (8-165) the reciprocants are in subject and direct object position:

- (8-165) *í ya-tem-sese+bl-Ø-io=be*
 they PL.AN.O-see.PFV-RECIP+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 indirect object with different semantic roles, namely goal (8-166), possessor/benefactive (8-167), and possessor/ malefactive (8-168):

- (8-166) *í baa-b-e-sese+bl-Ø-io=be*
 they talk.PFV-BEN.PFV-PL.AN.IO.PFV-RECIP+AUX.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They are talking to each other’

- (8-167) *í mak=i meme=i kla*
 they other=PL.AN children=PL.AN very

kimaa-b-e-sese+bl-Ø-io=be
 care_for.PFV-BEN.PFV-PL.AN.IO.PFV-RECIP+AUX.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They care for each other’s children’

- (8-168) *í am aso otanabesesebliobe*
í am as=o
 they house fire=PL.N1

ol-tana-b-e-sese+bl-Ø-io=be
 PL.RESID.O-set(fire).PFV-BEN.PFV-PL.AN.IO.PFV-RECIP+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:

- (8-169) *í ye-na-sese+bi-n-io=be*
 they PL.AN.O-hit.PFV-RECIP+AUX.IPFV-PST-2/3PL.AN.SBJ=DECL
 ‘They have been hitting each other (i.e. the exchange of blows is completed)’

(8-170) *í ye-na-sese+bi-n-ib-so=be*
 they PL.AN.O-hit.PFV-RECIP+AUX.IPFV-PST-2/3PL.AN.SBJ-HPST=DECL
 ‘Yesterday they were hitting each other’

Inflection of the existential auxiliary for future in reciprocal constructions is unattested.

The dedicated reciprocal construction has several noteworthy features.

First, there is an existential auxiliary *bi~bl* ‘be there, stay, exist’ agreeing 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 morphology. This suggests that the *sese*-construction is the result of a syntactically more complex construction in which constituent parts were fused together. This point is taken up in detail below where the historical development of the dedicated reciprocal is proposed.

Third, the whole set of reciprocants seems to be cross-referenced on the verb as direct or indirect objects all of which are in the plural in examples (8-164) to (8-170).

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 marker in the singular:

(8-171) *unǎng asu ulǎb=i te te+na-n-ib=a*
 woman two agemate=PL.AN come come+do-SS.SEQ-2/3PL.AN.SBJ=MED

wěng=o o+biaan-ib=a
 language=N2 say.IPFV+AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED

mele-b-o-sese+bl-Ø-io=be
 touch.PFV-BEN.PFV-3SG.F.IO.PFV-RECIP+AUX.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘Two women meet and while they are talking they are touching each other’
 [MPI clip 3]

In the case of just two participants, the non-subject cross-referencing marker has to be singular. In this case, Mian merges the actors through plural subject marking whereas it keeps the undergoers apart (through singular object marking).

8.8.1.3 The morphological status of *-sese*

There is good evidence that contemporary *-sese* is best analyzed as an affix. A verb inflected with *-sese* is treated as a single verb by the morphology. It can take aspectual morphology as in (8-172) or switch reference marking as in (8-173):

- (8-172) *ib sinwalo kla gobesesenine!*
ib sinwal=o kla
 your brothers=COLL properly

go-b-e-sese+n-in=e!
 like.PFV-BEN.PFV-PL.AN.IO.PFV-RECIP+AUX.PFV-2/3PL.AN.SBJ.HORT=HORT
 ‘You must love each other’ [John 15, 12]

- (8-173) *í maki dim dotamaasesesiba*
í mak=i lim
 they others=PL.AN on

lol-tamaa-sese-s-ib=a
 PL.AN.O-step_on.PFV-RECIP-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘they trampled on one another and then...’ [Luke 12, 1]

8.8.1.4 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 more looks like a clause chain. Consider (8-174):

- (8-174) *í a-tem-s-e wa-tem-s-e*
 they 3SG.M.O-see.PFV-DS.SEQ-3SG.M.SBJ 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 to 3rd singular masculine 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 and stress as the verb with which it is compounded.

This constructional variant has to be used when there are two reciprocants of opposite sex, as in (8-175), but can also be used if the speaker wants to especially focus on the sequentiality of the reciprocal subevents:

- (8-175) *í mele-b-o-s-e*
 they touch.PFV-BEN.PFV-3SG.F.IO.PFV-DS.SEQ-3SG.M.SBJ
- mele-b-a-s-e*
 touch.PFV-BEN.PFV-3SG.M.IO.PFV-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:

First, the verbs describing the subevents of throwing glances or touching have subject markers in the expected slot but these subject markers are frozen to 3rd singular masculine regardless of the number or gender of the reciprocants.

Second, 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). 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).⁵³

Consider the following Amele example:

- (8-176) *age qet-u-do-co-b qet-u-do-co-b eig-a*
 3PL cut-APPL-3SG.IO-DS-3SG cut-APPL-3SG.IO-DS-3SG 3PL-TODAY’S PAST
 ‘They cut each other’ (from Roberts 1987: 132)

Obviously, the Mian examples (8-174) and (8-175) and the Amele example (8-176) are very similar in structure. In his structural typology of reciprocals across languages,

⁵³ Also see Haiman (1980: 433) on the circular behaviour of switch reference marking in reciprocals in the Papuan language Hua.

Evans (in prep.: 23) coined the term “unified zigzag construction”. In such constructions:

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 2004: 17).

In the “unified zigzag construction” the entities which denote the subevents remain distinct phonological words; i.e. there are three distinct verbs, namely the two “zigzag” verbs and the auxiliary. This raises the question how many verbs and how many clauses should examples (8-174) to (8-176) be analyzed as having?

This question is typologically relevant because languages differ in how much complexity, in terms of event structure, they allow to be accommodated into one clause. Reciprocals are an especially interesting case because they are highly complex event types which derive from the simultaneous overlay of two propositions sharing the same predicate but with converse argument configurations (cf. Evans in prep.); e.g. in the English sentence *X and Y hit/kick/kiss/etc. each other*, X and Y are simultaneously agent and patient.

Nonetheless, in English a reciprocal event can be organized in a single clause. One argument position of a transitive verb is filled by a conjoined NP or a plural NP or pronoun, referring to the full set of participants. The other argument position is filled by the bipartite reciprocal anaphor *each other*, while in other languages, e.g. in Golin (Papuan, Chimbu Province) reciprocal situations have to be handled by a bi-clausal description: *X Ves Y, Y Ves X*. (Evans 2004).

Again consider the Mian zigzag construction, repeated from (8-175):

(8-177) *í mele-b-o-s-e*
 they touch.PFV-BEN.PFV-3SG.F.IO.PFV-DS.SEQ-3SG.M.SBJ

mele-b-a-s-e
 touch.PFV-BEN.PFV-3SG.M.IO.PFV-DS.SEQ-3SG.M.SBJ

bl-∅-io=be
 stay.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They (man and woman) are touching each other’

Semantically, we are dealing with three propositions:

- | | | |
|------------------------------------|-----------------------------|-----------------|
| 1) X touches Y | 1 st zigzag verb | <i>melebose</i> |
| 2) Y touches X | 2 nd zigzag verb | <i>melebase</i> |
| 3) X and Y are doing this together | Existential verb | <i>bliobe</i> |

However, it is much less clear whether we are also dealing with three distinct clauses.

There are two arguments for the assumption that we have only one clause:

First, in Mian (as in Amele) subject agreement in “zigzag”-constructions is conventionalized and frozen; i.e. 3rd singular in Amele and 3rd singular masculine in Mian. This seems to support the assumption that “zigzag” verbs do not constitute heads of their own clauses but are rather elements of some serial verb construction (see Evans (2004: 17f) for a parallel argument for Amele).

Second, no material can go between the zigzag verbs. For example, they cannot be followed by the clitic =a ‘and’ which expresses anterior sequentiality in clause chaining constructions and thus is the hallmark of medial verbs. Example (8-178) illustrates a true biclausal construction in which =a can occur:

- (8-178) *ó atemsoa é watemsea*
 ó a-tem-s-o=a
 she 3SG.M.O-see.PFV-DS.SEQ-3SG.F.SBJ=MED
- é wa-tem-s-e=a*
 he 3SG.F.O-see.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘He glances at her and then she glances at him and then...’

In reciprocal constructions, however, this is not allowed. Hence, (8-179) cannot have a reciprocal interpretation:

- (8-179) *í mele-b-o-s-e=a*
 they touch.PFV-BEN.PFV-3SG.F.IO.PFV-DS.SEQ-3SG.M.SBJ=MED
- mele-b-a-s-e=a*
 touch.PFV-BEN.PFV-3SG.M.IO.PFV-DS.SEQ-3SG.M.SBJ=MED
- bl-∅-io=be*
 stay.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 *‘They are touching each other’

Based on these two arguments I claim that synchronically the Mian zigzag reciprocal unifies three events into a single clause.

8.8.1.5 Is there a *bebe*-construction for imperfective verbs?

I have reason to suspect that apart from the *sese*-construction which is used with perfective or trans-aspectual verbs there is also a *bebe*-construction for imperfective verbs. At this stage, this assumption must remain tentative because there is only one elicited instance of the discontinuous variant in which each zigzag verbs is inflected with *-be* in my data⁵⁴:

- (8-180) *unǎng=i* *asumatna* *ke-n-ib=a*
 woman=PL.AN three do-SS.SEQ-2/3PL.AN.SBJ=MED
- gokim=i* *hen-∅-ye-be*
 head_lice=PL.AN look_for.IPFV-BEN.IPFV-PL.AN.IO.IPFV-RECIP
- hen-∅-ye-be* *bl-∅-io=be*
 look_for.IPFV-BEN.IPFV-PL.AN.IO.IPFV-RECIP stay.IPFV-IPFV-2/3PL.AN.SBJ=DECL
 ‘They each are looking for lice on the other’ [MPI clip 56]

The verb stem *hen* ‘be looking for’ is imperfective and therefore cannot be suffixed with *-sese*, but there could be *-bebe*, a reciprocal marker for situations in which the subevents have to be presented as temporally extended and simultaneous by virtue of the morphology of the verb (or maybe just are presented like that because the speaker intends to do so).

As *-sese* diachronically derives from a clause chain with the DS sequential marker *-s* in the medial verbs, I find it plausible to assume that *-be...-be* comes from the other DS marker *-b*, which also indicates simultaneity of events. If this is true then Mian recycled both DS markers (and only those) back into reciprocal constructions.

On the possible historical origin and the development of the dedicated reciprocal constructions in Mian see Fedden (to appear-a), where I propose that the *sese*-construction is a syntactic reanalysis of a tight serialization involving the zero-stem ‘give’.

⁵⁴ Cases where *-bebe* (parallel to *-sese*) is suffixed to one verb stem are so far unattested.

8.9 Causatives

Like many languages, Mian has lexical causatives. An intransitive verb and its causative counterpart are realized as distinct verb stems:

Intransitive	Causative
<i>ein</i> ‘cook’	<i>fu</i> ‘cook’
<i>kan</i> ‘die’	<i>-na/–</i> ‘kill’
<i>bokbok ge/ga</i> ‘boil’	<i>bafu</i> ‘boil’

Ambitransitive verbs have a causative element as part of their meaning when used transitively, cf. *halo* ‘break (Intransitive) vs. *halo* ‘(cause to) break (Transitive)’ or *dou* ‘close (Intransitive)’ vs. *dou* ‘(cause to) close (Transitive)’. On ambitransitives, see 8.1.5.

There is no morphological causative. The syntactic causative is a special form of verb serialization consisting of (exactly) two verbs, where subject marking is used to index the causer on the first verb and the causee on the second verb, e.g.:

- (8-181) *geime tobai unebe*
geim=e *tob-a-i*
 pronged_arrow=SG.N1 SG.LONG.O-let_go.PFV-1SG.SBJ

un-∅-e=be
 go.PFV-PST-SG.N1.SBJ=MED
 ‘I dropped the pronged arrow’ (Lit. ‘I let go of the arrow and it went’)

It is not difficult to see how this construction might have evolved from the hypothetical example in (8-182):

- (8-182) *geime tobaia unebe*
geim=e *tob-a-∅-i=a*
 pronged_arrow=SG.N1 SG.LONG.O-let_go.PFV-DS.SEQ-1SG.SBJ=MED

un-∅-e=be
 go.PFV-PST-SG.N1.SBJ=MED
 ‘I dropped the pronged arrow’ (Lit. ‘I let go of the arrow and it went’)

The reason why I have not analyzed *-∅* ‘DS.Seq’ to be part of the verb form *tobai* in (8-181) is because there is no contrast between *-∅* ‘DS.Seq’ and *-n* ‘SS.Seq’ or *-b*

‘DS.Sim’ anymore, as there is in a medial verb. In the causative serialization the subject marker is suffixed directly to the stem.

What I would like to do in the remainder of this section is to discuss one case that has been identified as the Mian causative construction in the literature. Smith and Weston (1974b: 138) claim that: “[t]he verb *kimanin* ‘watch over, command’ is used in the first clause of a sequence sentence [i.e. a clause chaining construction—SF]” to indicate a cause-effect relation. They give one example. Morpheme breakdown, glosses and translation are Smith and Weston’s (1974a: 139)⁵⁵:

(8-183) *awok-o men-e ki-mab-o a aai-e*
 mother-CM child-CM command-FUT-she SEQ water-CM

fuela-n-a-mab-e bo
 bathe-PU-NU-FUT-he IND EMPH
 ‘The mother will command the child and he will bathe’
 i.e. ‘The mother will make the child bathe’

Based on Smith and Weston’s data and glosses, Song (1996: 36-7) in his typological survey of causatives classifies the construction in (8-183) as an overt AND type of causative, i.e. a biclausal construction with an overt coordinating element, in this case *a* ‘sequential’ connecting the clauses specifying cause and effect. Before going into the question whether this construction is indeed a causative, the morphological analysis has to be corrected.

First, Smith and Weston analyze *kimabo* erroneously as a future form though medial verbs in Mian are never inflected for future. Although they do not explicitly say so, no future forms appear in their table summarizing the morphology of the medial verb nor do any of their examples have future-inflected medial verbs.

Second, the verb stem of ‘watch over’ is *kimaa* (with a pharyngealized *a*). This verb cannot be inflected directly but has to be compounded with an inflected existential auxiliary (cf. the verbal noun *kimaa+nin*, where *nin* is the verbal noun of the existential verb).

My analysis of (8-183) above is:

⁵⁵ Smith and Weston’s glosses for this example, which are not used in my analysis of Mian, are: CM – class marker, PU – punctiliar, NU – number, IND – indicative.

(8-184) *awök=o* *mén=e* *kimaa+bi-Ø-o=a*
 mother=SG.F child=SG.M watch_over+AUX.IPFV-DS.SIM-3SG.F.SBJ=MED

aaie *fuela+n-amab-e=bo*
 water bathe.PFV+AUX.PFV-FUT.NANPL.SBJ-3SG.M.SBJ=EMPH
 ===bathe===

‘While the mother is watching over the child, it will bathe’

The second issue with Smith and Weston’s analysis is of a semantic nature. Although it is true that the verbal noun *kimaanin* can be used as a noun with the meaning ‘boss, minder’, the verb stem *kimaa* essentially means ‘watch over, look out for’ and not ‘command’. There is not a single instance in my corpus where *kimaa* could be felicitously translated as ‘command’. In my view it is mainly the glossing of *kimaa* as ‘command’ that suggests that we are dealing with a causative construction.

Furthermore, even the assumption of a potential causative construction with *kimaa* ‘watch over’ in a medial clause indicating causation, is not supported by my data. Nowhere does the clause following a medial clause with *kimaa* express an effect related to a causer, who would be the subject of *kimaa*.

To conclude, I am very sceptical as to whether an analysis of the construction (8-184) is valid. Such constructions may have a causative implicature at best but they are not dedicated causatives.

9 Chaining constructions

This chapter deals with two different types of chaining constructions. The first type is verb serialization where two or three verb stems are concatenated to form a sequence of predicates within a single clause. The second type 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 (cf. Reesink 1983, Foley and Van Valin 1984). A succinct definition of co-subordination can be found in Reesink (1983: 224-6): “[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.”

9.1 Serial verb constructions

Mian serial verb constructions (SVCs) consist of two to four 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. There are no markers of coordination, subordination, or any syntactic dependency (cf. Aikhenvald 2006: 1).

In a Mian SVC, all verb stems except the last one in the sequence are bare verb stems, that is they are not marked for subject nor do they carry information on tense or aspect. They can, however, have their own arguments in the form of prefixes for direct objects and in the form of suffixes for indirect objects. In other words, each verb stem in a SVC takes its own argument structure into the serial verb marriage 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.

Mian mostly has same-subject serializations (cf. 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 is the causative serialization in which subjects usually are distinct (cf. section 8.9 on causatives).

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 (final clause and independent sentences). Any information on illocutionary force, tense, and polarity invariably has scope over the whole SVC.

An important structural distinction which is often made for SVCs is at what ‘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; e.g. aspect at nucleus level and nominal arguments at core level. Most Mian SVCs are core layer structures because their verbs can have their own direct object arguments. Aspect, on the other hand, does not have to be shared. A minority of SVCs might be better analyzed as serialization at nuclear level (or even verbal compounds) because aspectual information must not be at variance and the direct object must be shared throughout the SVC.

9.1.1 Core serial verb constructions

Most Mian SVCs at core level are of low semantic integration. Essentially every verb stem constitutes a predicate and each predicate can have its own arguments. Hence, Mian SVCs obviously violate two of the standard criteria for SVCs in the literature; namely that (a) SVC constitute a single predicate and (b) that the whole SVC refers to a ‘single event’ (cf. Aikhenvald 2006: 4-6, 10-2).

9.1.1.1 Serialization of intransitive verbs

The most common intransitive verbs in Mian SVCs are the basic motion verb *tl-te/tle-te* ‘come’ and the existential verb *n/bi-bl* ‘stay, exist’. In the following examples, two intransitive verbs are combined in a SVC:

(9-1) *te temeta*

te tem-Ø-e=ta

come look.PFV-DS.SEQ-3SG.M.SBJ=MED

‘he came and looked and then someone else...’ [Crow]

- (9-2) *bi tenoale*
bi te-n-o=a=le
 stay come-SS.SEQ-3SG.F.SBJ=MED=TOP
 ‘she stayed and came and then she...’ [Dimosson]

As intransitive verbs are monovalent, there is never a direct object involved in the construction. On the syntactic behaviour of locative adjuncts in SVCs see below.

9.1.1.2 Serialization of a transitive and an intransitive verb

Mian freely allows transitive verbs to enter SVCs. If one of the verbs in the SVC is transitive, it can have its own overt direct object which is—of course—not shared by the intransitive verb; e.g. in (9-3) the NP *eil ásyam* ‘pig fruit’ is only the object of *dowon* ‘eat’:

- (9-3) *gwaabí eil ásyame dowon unebiba*
gwăa=i ěil asyam=e lowon une-b-ib=a
 small=PL.AN pig fruit=SG.N1 eat.PFV go.IPFV-DS.SIM-2/3PL.AN.SBJ=MED
 ‘while the small ones (pigs) ate a few pig fruits and were leaving, someone else...’ [Afoksitgabaam]

This example also illustrates that the verbs in a core layer SVC can have different aspect values: the perfective stem *dowon* ‘eat’ is followed by the imperfective stem *une* ‘go’.

Marked transitive verbs obligatorily cross-reference their object with a pronominal prefix. They also do this in SVCs:

- (9-4) *né Yabsitab atem tlibiobe*
né yabsi=tab a-tem tl-i-Ø-bio=be
 I PN=downriver 3SG.M.O-see.PFV come.PFV-PST-1SG.SBJ-GPST=DECL
 ‘I saw him downriver in Yapsiei and came’

In most SVCs the transitive verb precedes the intransitive 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:

- (9-5) *ésak ut omeiseneto*
é=sak ut om-ei-s-e-n-e=to
 he=too up SG.FEM.O-take.PFV-BEN.PFV-PL.AN.IO.PFV-SS.SEG-3SG.M.SBJ=MED
 ‘he too jumped up and took it (i.e. a wooden club) from them and then he...’
 [Danenok]

9.1.1.3 Serialization of transitive verbs and argument sharing

When two transitive verbs combine in a SVC, the direct object is usually shared between the two verbs in the SVC. It can be realized as a full NP, as in (9-6), or only appear as a pronominal or classificatory prefix on one of the transitive verbs, as in (9-7),:

(9-6) *noi alo fuba oleb tlibiobo*

no=i *alo* *fuba* *ol-eb*
 marsupial=PL.AN bowels wash PL.RESID.O-take.PFV

tl-∅-i-bio=bo

come.PFV-PST-1SG.SBJ-GPST=QUOT

‘I washed the marsupial bowels and brought them back’ [The Flood]

(9-7) *una dowonea*

u-na *lowon-n-e=a*
 3SG.F.O-kill eat.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘he killed and ate her up and then he...’ [Afoksitgabaam]

If none of the transitive verbs in a SVC cross-reference their direct object, it is normally realized as a full NP:

(9-8) *eiló yé ga downobta*

ěil=o *yé* *ga* *lowon-n-ob=ta*
 pig=SG.F there cook_in_leafoven eat.PFV-SS.SEQ-1PL.SBJ=MED
 ‘we cooked the sow in a leaf oven and ate it and then we...’ [Kasak ritual]

(9-9) *aaie dabaalé isit down hakenanea*

aai-e *labǎal=e* *isit*
 water=SG.N1 ground=SG.N1 raw

lowon hakena-n-e=a

eat.PFV break_through.PFV-SS.SEQ-SG.N1.SBJ=MED

‘the water ate the ground raw and broke through it and then the water...’ [Flood]

However, if the identity of the direct object is readily retrievable from the context, e.g. due to mention of the object in a preceding clause, object elision is common, as in (9-10):

(9-10) *make yamane walota fu down temeabo*

mak=e *yam-an-e=e* *walo=ta* *fu*
 one=SG.N1 ripe-VBZR-SG.N1.SBJ=SG.N1 cut.SG.O=MED cook

lowon tem-∅-e=a=bo

eat.PFV look.PFV-DS.SEQ-3SG.M.SBJ=MED=SURP
 ‘he cut one which got ripe and tried to cook and eat it (lit. cooked, ate, and saw), and hey...’ [Afoksitgabaam]

If all verbs in a SVC are transitive and take prefixes for object (whether pronominal or classificatory), these prefixes refer to the same participant:

- (9-11) *eil óta alukúm wana omeb te omfaibbiotable!*
 ěil ó-ta alukũm wa-na om-eb te
 pig SG.F-EMPH all 3SG.F.O-kill.PFV SG.FEM.O-take.PFV come

om-fa-Ø-ib-bio=ta=ble
 SG.FEM.O-put.PFV-DS.SEQ-2/3PL.AN.SBJ-GPST=MED=EXCL
 ‘‘They killed a whole pig, brought it, and put it down!’’ [Kasak ritual]

However, Mian allows each transitive verb in a SVC to have its own direct object. This is not a typical feature in SVCs which usually do not duplicate roles (cf. Durie 1995: 340-1). Argument NPs can intervene between verb stems in a SVC. Intervening NPs are interpreted as the direct object of the following verb in the sequence, as in (9-12):

- (9-12) *dabaalé haka dam ombuebiota*
labǎal=e haka lam=o
 ground=SG.N1 break.IPFV body=SG.F

om-bu-Ø-e-bio=ta
 SG.FEM.O-bury.PFV-DS.SEQ-3SG.M.SBJ-GPST=MED
 ‘after he had dug up the ground and buried her body, (the Niniktol vine...)’
 [Afoksitgabaam]

In this example, each verb in the SVC has its own overtly realized direct object. *Damo* ‘(her) body’ is only the object of *om-bu* ‘bury a female’ and not of *haka* ‘break (Ipfv)’.

A similar phenomenon can be witnessed in (9-13), which is probably the most complex SVC in terms of intervening arguments in my whole corpus:

- (9-13) *ase ha toun de tom dá oleb te fale imeno mako ba oletnoba*
as=e ha toun le tòm la
 wood=SG.N1 break.PFV set_down desist.PFV stone break_out.PFV

ol-eb te fal=e imen=o mak=o
 PL.RESID.O-take.PFV come leafoven=SG.N1 taro=PL.N1 other=PL.N1

ba ol-eb-n-ob=a
 put_into PL.RESID.O-take.PFV-SS.SEQ-1PL.SBJ=MED

‘we broke firewood, dug out stones and brought them (i.e. the stones) and stopped (doing that), and put other taro tubers for the leaf oven into (a bag) and brought them and then we...’ [Ala ritual]

In Mian SVCs, the assignment of direct object to verb proceeds from left to right. If there is only one direct object which precedes the whole SVC, it is shared by all transitive verbs in that SVC. Any intervening direct 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 direct object NP intervenes, which in turn is interpreted as the direct object of next and all following transitive verbs in the same clause.

9.1.1.4 Auxiliary-compounded stems in SVCs

Apart from bare verb stems and verb stems with pronominal direct and indirect object affixes, one occasionally finds a verb stem compounded with the auxiliary stem *+bi* in SVCs, yielding an auxiliary-compounded stem, indicating that an event is temporally extended within the sequence of events in the SVC.

(9-14) *kinkanob sitabi deiba* [inflected verb of SVC inaudible]

kinkan=ob sita+bi
shaman=many try_to_unstick+AUX.IPFV

lei-b-a

leave.PFV-BEN.PFV-3SG.M.IO.PFV

‘many shamans were trying to unstick (a child’s foot stuck in the protagonist’s throat), left him and they...’ [Crow story]

(9-15) *eilí bubi inanimibo*

ěil=i bu+bi i-na+n-Vm-ib=o
pig=PL.AN hunt+AUX.IPFV PL.AN.O-kill.PFV+AUX.PFV-IFUT-2/3PL.AN.SBJ=N2
‘when they would (be) hunt(ing) and kill pigs’ [Taro ritual]

9.1.1.5 Directional adverbs inside SVCs

Directional adverbs can freely intervene in a SVC. Like nominal arguments, they are interpreted in relation to the next verb which can be either a transitive verb, as in (9-16), or an intransitive motion verb, as in (9-17).

Directional adverbs are always monosyllabic and tend to cliticize to the preceding constituent. Nonetheless, the modifying relation is to the following verb:

(9-16) *omebtab omfanea*
om-eb=tab *om-fa-n-e=a*
 SG.FEM.O-take.PFV=down SG.FEM.O-put.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘he (a wild boar) took her and threw her down, and then he...’
 [Afoksitgabaam]

(9-17) *walotab yé unibole*
walo=tab *yé* *un-∅-ib=o=le*
 multiply.PFV=downriver there go.PFV-DS.SEQ-2/3PL.AN.SBJ=MED=TOP
 ‘they multiplied and moved there downriver and then someone else...’
 [Dimosson]

9.1.2 Nuclear serial verb construction or verbal compound?

Some verb sequences, which consist of maximally two verbs, show a very tightly knit structure in four ways, which core layer serializations do not share. They:

- do not allow one stem to be perfective and the other one imperfective (although either stem can be trans-aspectual)
- are realized as a single phonological verbal word for accent assignment⁵⁶
- can show fusion between the verb stems
- require one direct object for the whole verb sequence and the second verb must drop its verbal classificatory prefix

Verb stems in a core SVC, on the other hand:

- have no aspectual restrictions
- are separate phonological words
- never show fusion with another verb stem
- never drop object prefixes

A good example which illustrates all four features of such a verb sequence is given in (9-18):

(9-18) *noi yaletneta*
no=i *ya-l(o)+eb-n-e=ta*

⁵⁶ As this is a decisive criterion for the distinction between SVCs and verbal compounds, I need to mention the caveat that the current analysis of verb suprasegmentals is not fine-grained enough to phrase the above statement other than tentatively.

marsupials=PL.AN PL.AN.O-kill.PFV+take.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘he killed and took the marsupials and then he...’ [Crows]

The nuclear serialization here is *yaleb* ‘kill them and take’. The two serialized verb stems are *lo* ‘kill’ and *eb* ‘take’, which share the same aspectual value ‘perfective’. The sequence is realized as a single phonological word and shows fusion due to the deletion of /o/ (-*lo* ‘kill’ > *l*).

The first stem *lo* cross-references the direct object of the whole sequence *noi* ‘the marsupials’ with the pronominal prefix *ya-*, while the second one *eb* drops its verbal classificatory prefix, with which it obligatorily occurs outside of nuclear serializations, as in: *wana omeb te omfaibbiotable!* ‘“They killed it (a sow), brought it, and put it down!”’ (For the full example with glosses see (9-11) above.) In this example, the verb stem -*eb* ‘take’ occurs within a core SVC and thus has to cross-reference its direct object with the verbal classificatory prefix *om-*.

A further example of a nuclear SVC is (9-19), repeated from (8-60):

- (9-19) *Futaman miné mako yé walalibole*
futaman mǎn=e mak=o yé
 PN_valley man=SG.M some=N2 there
- wa-l(o)+Ø-al-Ø-ib=o=le*
 N2.O-hit.PFV give.PFV-3SG.M.IO.PFV-PST-2/3PL.AN.SBJ=N2=TOP
 ‘they cut off some and gave it to the man from the Fu valley and then he...’
 [Danenok]

Crowley (1987: 59-61) compares the formal and semantic features of nuclear SVCs and verbal compounds in Paamese. He notes that both construction types show similarities, such as semantic unpredictability of the verbal construction as a whole, but he also points out that “compound forms are treated not only grammatically as single units, but also phonologically” (Crowley 1987: 60), whereas this is not the case for nuclear SVCs. As the Mian verb-verb structures under discussion in this section constitute single phonological words, they are probably better analyzed as verb+verb compounds.

9.1.3 Purposive serialization

Verbs in SVCs are always ordered in a temporally iconic way, i.e. that an event which chronologically precedes another one is mentioned first. There is one 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-stem of a verb, e.g. *fuelanam* ‘bathe (Pfv)’ or *fuam* ‘bathe (Ipfv)’ rather than the bare stem. On other functions of M-stems see section 7.5.1.

Compare the semantic difference between the purposive serialization in (9-20) and a temporally iconic serialization in (9-21):

(9-20) *né aaie fuelanam unaamabibe*
né aaie fuelanam unaa-mab-i=be
 I bathe.PFV.MSTEM go.PFV.FUT-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will go in order to bathe’

(9-21) *né aaie fuela tlibe*
né aaie fuela tl-Ø-i=be
 I bathe.PFV come.PFV-PST-1SG.SBJ=DECL
 ‘I have come from bathing’ (Lit. ‘I bathed and came’)

If the motion verb in a purposive construction 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 can take place:

(9-22) *noi bum unebua*
no=i bum un-Ø-e-bio=a
 marsupial=PL.AN hunt.IPFV.MSTEM go.PFV-DS.SEQ-3SG.M.SBJ-GPST=DECL
 ‘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 during the motion event, the imperfective M-stem has to be used followed by an imperfective verb of motion:

(9-23) *bum haabinebale*
bum haa+bi-n-eb=a=le
 hunt.IPFV.MSTEM roam.IPFV+AUX.IPFV-SS.SEQ-3SG.M.SBJ=MED=TOP
 ‘he was roaming (the bush) hunting and then...’ [Crow]

other systems of nominal classification. For a detailed discussion see Stirling (1993: 135-47).

In Papuan languages, SR marking usually occurs in clause chaining constructions (cf. Longacre 1972, Foley and Van Valin 1984, Foley 1986). 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: 177ff). 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 SR 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 or dependent 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’). Refer to Figure 7 for a schematic diagram of the functioning of the Mian SR system (SR – switch reference marker, TA – tense and aspect morphology, Illoc – Illocutionary force).

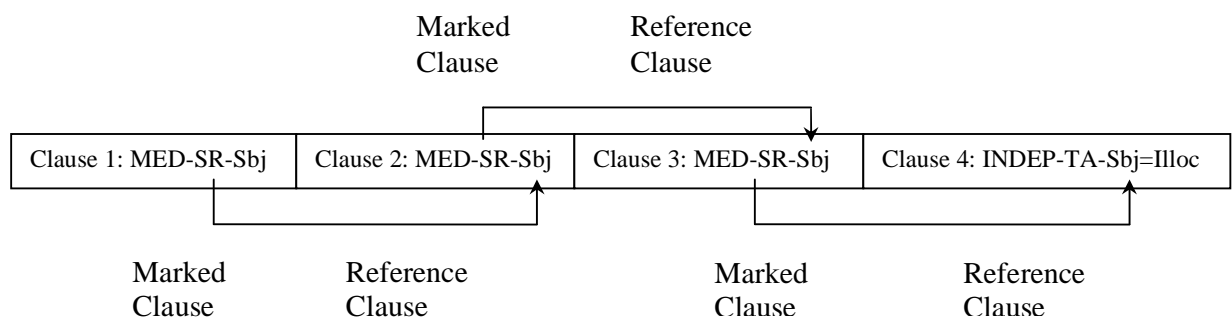


Figure 7: Switch reference in clause chains

9.2.2 Medial vs. final verbs

Many Papuan languages with SR systems in clause chains display a difference in inflectional possibilities between (a) final verbs, which occur in final clauses in clause chains (and simple independent sentences, for that matter) and (b) medial verbs, which occur in all clauses in the chain except the last. Compared to final verbs, medial verbs are commonly morphologically impoverished.

In some languages, medial verbs are only marked for whether the subject of the verb in the following clause has disjoint or co-reference. This is the case in Kalam (cf. Pawley 1966, Pawley 1993) and Fasu (Loeweke and May 1980). Medial verbs can be more complex than this, for example, carrying a subject marker, which indicates DS in Fore (Scott 1978) while zero is the SS form, or carrying an anticipatory subject marker, as in Hua (Haiman 1980: 187-9).

In other languages one finds portmanteaux in which a SR marker and a subject marker are fused, 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 (Reesink 1987: 87-8). In all of these cases, there is a difference in morphological complexity of medial verbs compared to sentence-final, which appear as the predicate of the last clause in the chain. See Roberts (1997) for a typological survey of SR systems in New Guinea languages.

Mian medial verbs, in contrast, are almost as morphologically complex as their final counterparts. They:

- convey aspectual information through the aspectual stem distinction unless the verb is trans-aspectual
- are always marked for subject and any additional argument in the same way as if the verb occurred in an independent sentence
- take a range of markers in their first suffix slot which convey temporal and SR information. These are homophonous with the ones found in Slot 1 in final verbs (see below)
- can have the tense suffix *-bio* in the post-subject suffix slot which indicates temporal location of an event in the past
- are directly inflected or auxiliary-compounded. Medial verbs can occur with most auxiliaries also 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 future tense by *-(a)mab/-omab* nor for negative polarity by *-ba*. Nor can they be inflected

for hortative. 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 NPs, e.g. *naka=i=a unǎng=a=i* [man=they=and woman=and=they] ‘(the) men and women, (the) people’.

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 can also incorporate other meanings, mainly temporal and aspectual ones, such as sequentiality (Seq) and simultaneity (Sim) of events described by the two consecutive clauses (cf. Stirling 1993: 39-50, Roberts 1997). The following section will deal with the SR morphology in medial verbs.

9.2.3 Switch reference morphology in directly inflected verbs

Like final verbs, medial verbs can either be directly inflected or auxiliary-compounded. Table 89 gives an overview of the inflectional possibilities of directly inflected medial verbs. ‘SI’ indicates a short time interval.

Stem	SR slot	SUBJ	TNS Slot	MED
Pfv	<i>-n</i> ‘SS.Seq’	<i>-i</i>	<i>-bio</i> ‘GPst’	<i>=a</i> <i>=ta</i>
	<i>-∅</i> ‘DS.Seq’	<i>-eb</i>		
	<i>-nab</i> ‘DS.Seq.SI’	<i>-e</i>		
	<i>-s</i> ‘DS.Seq’	<i>-o</i>		
Ipfv (M-stems)		<i>-ob</i>		
Ipfv	<i>-b</i> ‘DS.Sim’	<i>-ib</i>	<i>-bio</i> ‘GPst’	

Table 89: Directly inflected medial verbs

Note that the morphemes that can go into the SR slot combine both a SR meaning and a temporal/aspectual meaning related to the temporal structure of events, e.g. *-n* not only indicates SS but also sequentiality of events, and *-b* not only expresses DS but also event simultaneity. Table 90 groups these formatives into whether they indicate SS or DS and whether they indicate sequentiality or simultaneity.

	Seq	Sim
SS	<i>-n</i>	<i>+biaan</i>
DS	<i>-∅</i>	<i>-b</i>
	<i>-nab</i>	
	<i>-s</i>	

Table 90: Mian SR morphemes

A few comments regarding this table are necessary here to orient the reader. All markers will be dealt with in detail later in this section.

The marker *-n* in directly inflected medial verbs has two functions. Only if the subject of the marked clause is 1st singular, does it unequivocally indicate SS and event sequentiality. In all other person-number combinations *-n* functions as a more general marker of event sequentiality. The subject of the subsequent clause can be the same or different. For the sake of completeness, I included the auxiliary *+biaan* in the table, which has to be used to indicate SS and event simultaneity. This will be discussed further below.

The marker *-nab* always indicates DS and event sequentiality, but also expresses that there is a short interval until the ensuing event commences.

The marker *-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.

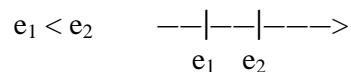
9.2.3.1 *-n* ‘SS.Seq’

The marker *-n* means ‘SS.Seq’ if the subject of the marked clause is 1st singular. The event described in the marked clause temporally precedes the event in the reference clause and events are sequentially performed by the same individual as in (9-25). (In this and all following examples in this section SR markers appear in boldface.)

- (9-25) *né memálo futé tobonia futaanó omonania*
né memálo füt=e tob-o-n-i=a
 I now tobacco=N1.SG SG.LONG.O-take.PFV-**SS.SEQ**-1SG.SBJ=MED

futāan=o om-o+na-n-i=a
 cigarette.paper=N2 SG.FEM.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]

In a Reichenbachian model (cf. Reichenbach 1947), the temporal structure of events in (9-25) may be represented as follows (‘ e_1 ’ and ‘ e_2 ’ refer to the event described in the marked and the reference clause, respectively; ‘<’ means ‘prior to’):



If the subject of the marked clause is anything but 1st singular the subject of the reference clause can also be different, as in (9-26):

(9-26) *teniba maki te amtamo unomabio*
te-n-i=ba mak=i te am=tam=o
 come-SS.SEQ-2/3PL.AN.SBJ=MED other=PL.AN come house=inside=N2

un-omab-io
 go.PFV-FUT.PL.AN.SBJ=2/3PL.AN.SBJ
 ‘they came, others came and went into the house’ [Building a spirit house]

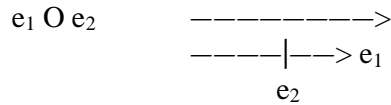
9.2.3.2 -b ‘DS.Sim’

The marker -b ‘DS.Sim’ is used to describe situations in which the event in the marked clause (e_1) is on-going when the event of the reference clause commences. Subject reference is disjoint. The reference clause event (e_2) can be a bounded event which is properly contained within e_1 as in (9-27):

(9-27) *ngaambea nakai wenteniba*
ngaan-b-e=a naka=i
 call.IPFV-DS.SIM-3SG.M.SBJ=MED man=PL.AN

wente-n-ib=a
 hear.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘While/when he was calling, the men heard him, and (then ...)’ [Dafinau]

The temporal structure of events in this example would look like ('O' means 'simultaneous with'):

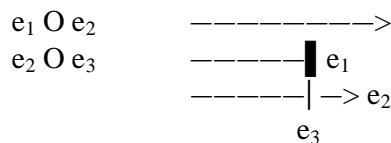


In example (9-28) *-b* 'DS.Sim' is used to describe a situation in which the event in the first reference clause (e_2) is itself unbounded:

- (9-28) *tomé fuo fuo gabiba yatemebea tomé belaseta*
 e_1 *tõm=e fuo fuo ga-b-ib=a*
 stone=SG.N1 blow blow do.IPFV-**DS.SIM**-2/3PL.AN.SBJ=MED
- e_2 *ya-teme-b-e=a*
 PL.AN.O-see.IPFV-**DS.SIM**-3SG.M.SBJ=MED
- e_3 *tõm=e bela-s-e=ta*
 stone=SG.N1 break.PFV-**DS.SEQ**-SG.N1.SBJ=MED
 'While they were blowing at the stone⁵⁷, he was watching them and the stone opened (and then they...)' [Danenok and his brother]

If both e_1 and e_2 are represented by medial verbs inflected with *-b*, the only restrictions regarding the temporal interpretation of the events with respect to each other is that e_2 must not commence before e_1 did. Events can be temporally co-extensive but they do not have to be. Note that there is a third event in (9-28) 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 can continue after the stone gate has opened.

Thus, the temporal structure of the events in (9-28) can be represented as follows (I use the symbol '■' to indicate the endpoint of an unbounded event as opposed to '|' which indicates a bounded event):



⁵⁷ In a story with an Open-Sesame-type cave whose stone door can only be opened by blowing on the stone through a magic bamboo tube.

9.2.3.3 The DS sequential markers and $-\emptyset$ and $-s$

While $-\emptyset$ ‘DS.Seq’ only indicates DS and event sequentiality, $-s$ ‘DS.Seq’ also specifies that the event in the marked clause is a necessary condition for the event in the reference clause to take place. The contrast between $-\emptyset$ and $-s$ is illustrated in (9-29):

- (9-29) *gingé tobvlaania tobkimaia haangánsea hania*
ging=e tob-tlaa-n-i=a
 midrib=SG.N1 SG.LONG.O-remove.PFV-SS.SEQ-1SG.SBJ=MED
- tob-kima- \emptyset -i=a*
 SG.LONG.O-put_in_fire.PFV-DS.SEQ-1SG.SBJ=MED
- hǎang-an-s-e=a ha-n-i=a*
 dry-VBLZ-DS.SEQ-SG.N1.SBJ=MED 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]

Here are four events which all occur sequentially. The third clause has a different subject from the rest 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 (9-29) 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 happen. Compare:

- (9-30) *kóbó tesebta okok kenomabbio*
kóbó te-s-eb=ta
 you.SG.M come.PFV-DS.SEQ-2SG.SBJ=MED
- okok ke+n-omab-bio=be*
 work.N2 do+AUX.PFV-FUT.PL.AN.SBJ-1PL.SBJ=DECL
 ‘Only after you’ve come, will we work (i.e. I can’t do this work alone)’
- (9-31) *kóbó tlebta okok kenomabbio*
kóbó tl- \emptyset -eb=ta
 you.SG.M come.PFV-DS.SEQ-2SG.SBJ=MED
- okok ke+n-omab-bio=be*
 work.N2 do+AUX.PFV-FUT.PL.AN.SBJ-1PL.SBJ=DECL
 ‘You’ll come and we’ll work’

The semantic difference between $-s$ and $-\emptyset$ which I have described here seems plausible on the basis of the examples provided. However, to establish the exact semantics of $-s$

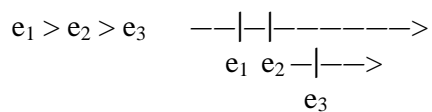
and $-\emptyset$ in medial verbs more systematic text study is needed. At this stage I will gloss both ‘DS.Seq’.

9.2.3.4 $-s$ ‘DS.Seq’ with the imperfective M-stem stem

The SR marker $-s$ can be suffixed to imperfective M-stems (see 7.5.1). Such a form focusses 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 (9-32):

- (9-32) *melebasoa memsea gilán unobua*
 e_1 *mele-b-a-s-o=a*
 touch.PFV-BEN.PFV-3SG.M.IO.PFV-DS.SEQ-3.SG.F.SBJ=MED
- e_2 *mem-s-e=a*
 cry.IPFV.MSTEM-DS.SEQ-3SG.M.SBJ=MED
- e_3 *gilán un-n-o-bio=a*
 fast go.PFV-SS.SEQ-3SG.F.SBJ-GPST=MED
 ‘it (a wallaby) touched him (a baby) and as he started to cry, it ran away and then it...’ [Afoksitgabaam]

Thus, the temporal structure of the events in this example can be represented as follows. Note that event e_2 refers to the inception of ‘crying’, as expressed by the m -stem *mem*:



9.2.3.5 $-nab$ ‘DS.Seq.Short Interval’

The marker $-nab$ in medial verbs indicates DS and sequentiality and also a short interval between events:

- (9-33) *aalebe abuko yé deibanabiba yé utenea*
aaleb=e abuko yé
 father=SG.M later there

lei-b-a-nab-ib=a

leave.PFV-BEN.PFV-3SG.M.IO.PFV-DS.SEQ.SI-2/3PL.AN.SBJ=MED

yé ute-n-e=a

there come_up.PFV-SS.SEQ-3SG.M.SBJ=MED

‘later they left the father there and after a short while he jumped up’ [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 (9-33) to a few hours, for instance from dusk to about midnight.

9.2.4 The existential verb as a medial verb

The inflectional possibilities of the existential verb *n/bi-bl* in a medial clause are summarized in Table 91.

Auxiliary	SR Slot	SBJ	TNS Slot	MED
<i>bi</i> ‘stay.IPFV’	-∅ ‘DS.Sim’	<i>-i</i> <i>-eb</i> <i>-e</i> <i>-o</i> <i>-ob</i> <i>-ib</i>	<i>-bio</i> ‘GPst’	<i>=a</i> <i>=ta</i>
	<i>-n</i> ‘SS.Seq’			
	<i>-s</i> ‘DS.Seq’			
<i>biaan</i> ‘stay.IPFV.SS.SIM’				
<i>n-</i> ‘stay.PFV’	<i>-Vm</i> ‘IFut’			
<i>bina</i> ‘stay.HAB’ (<i>biaana</i>)	<i>-b</i> ‘DS.Sim’		<i>-bio</i> ‘GPst’	

Table 91: The existential verb *n/bi-bl* as a medial verb

It is important to note about this table that *-n* in auxiliary-compounded medial verbs also shows the peculiarity of only indicating SS and sequentiality if the subject is 1st singular.

The form *biaan* ‘stay.IPFV.SS.Sim’ is here analyzed as a single stem which is synchronically not segmentable anymore though it is conceivable that /n/ originally belonged to the class of fillers of the SR slot in the verb template. The analysis of *biaan* as a stem is not just a trick to dodge the obligation to account for the peculiar behaviour of *-n*, which here would indicate SS and simultaneity and not SS and sequentiality, which is its meaning when suffixed to the auxiliary stem *bi*. 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 SR, subject, or tense marking. In such a construction *biaan* is used, not *biaa*:

- (9-34) *élé fut bíaanta belaseta*
élé fut biaan=ta
 DEM.SG.N1 tobacco.N1 stay.IPFV.SS.SIM=MED

bala-s-e=ta
 break.PFV-DS.SEQ-SG.N1.SBJ=MED
 ‘This is tobacco there and it blossomed (and then we ...)’ (Lit. ‘it broke’)
 [Sofelok, 1]

More examples for shortened medial clauses can be found in section 9.2.11.

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-compounded medial verbs, I will confine the description here to *biaan* ‘stay.SS.Sim’. Consider (9-35):

- (9-35) *yé biaanota Miantení yé yomanota*
yé biaan-o=ta
 there stay.IPFV.SS.SIM-3SG.F.SBJ=MED

miantěn=i yé yoma-n-o=ta
 Mian_people=PL.AN there create-SS.SEQ-3SG.F.SBJ=MED
 ‘While staying there, she created the Mian people and then...’ [Dimosson]

9.2.5 Auxiliary-compounding in medial verbs

Medial verbs are compounded with a fully inflected form of the existential verb *n/bi-bl* ‘be (there), exist, stay, remain’ in order to express certain contrasts in temporal structure of events in a clause chain and also certain SR-related contrasts, e.g. for sequential unbounded events and simultaneous events performed by the same individual.

Table 92 lists the combinatorial possibilities for perfective and imperfective stems to be compounded with an auxiliary stem.

Verb stem		Auxiliary	SR Slot	SBJ	TNS Slot	MED
Pfv Ipfv (only X- compounds)	+	<i>bi</i> ‘Ipfv’	-∅ ‘DS.Sim’	-i		=a =ta
Pfv Ipfv			-s ‘DS.Seq’	-eb		
			-n ‘SS.Seq’	-e		
Pfv		<i>biaan</i> ‘IPFV.SS.Sim’	-o			
Ipfv		<i>n</i> ‘Pfv’	-Vm ‘IFut’	-ob -ib		
	<i>bina</i> ‘Hab’	-b ‘DS.Sim’			-bio ‘GPst’	
	<i>biaana</i> ‘Hab’ ⁵⁸					

Table 92: Auxiliary-compounded medial verbs

9.2.5.1 *+bi* ‘Ipfv’

Medial verbs which consists of an imperfective stem compounded with the auxiliary stem *bi* denote unbounded events. The SR marker *-n* unequivocally indicates coreferentiality of subject and sequentiality only if the subject is 1st singular. In all other person number combinations *-n* is a more general marker of event sequentiality. Consider (9-36) and (9-37):

- (9-36) *mewebineto omeb taneta*
me-∅-we+bi-n-e=to
 cry.IPFV-BEN.IPFV-3SG.F.IO.IPFV+AUX.IPFV-SS.SEQ-3SG.M.SBJ=MED

om-eb *ta-n-e=ta*
 SG.FEM.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...’
 [Afoksitgabaam]

- (9-37) *kimaabinota deibonebiobe*
kimaa+bi-n-o=ta
 care_for.PFV+AUX.IPFV-SS.SEQ-3SG.F.SBJ=MED

lei-b-o-n-e-bio=be
 leave.PFV.BEN-BEN.PFV-3SG.F.IO.PFV-PST-3SG.M.SBJ-GSPT=DECL
 ‘She was caring (for him) and then he left her’

Auxiliary-compounded verbs inflected with *-n* ‘SS.Seq’ can be further inflected for the General past tense with *-bio*:

⁵⁸ A verb compounded with the auxiliary *+biaana* is only attested once in the corpus. The difference from the habitual auxiliary *+bina* is not clear

- (9-38) *né ánsó ngaambinibiota tlibe*
né áns=o ngaan+bi-n-i-bio=ta
 I song=N2 sing.IPFV.AUX.IPFV-SS.SEQ-1SG.SBJ-GPST=MED

tl-∅-i=be
 come.PFV-PST-1SG.SBJ=DECL
 ‘After having sung a song I arrived’

The SR marker *-s* in auxiliary-compounded medial verbs indicates disjoint subject reference and event sequentiality:

- (9-39) *halaayebisibta watnibta*
halaayebisibta watnibta
 fornicate-PL.AN.IO+AUX.IPFV-DS.SEQ-2/3PL.AN.SBJ=MED

wat-n-ib=ta
 across-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they (the Mianmin men) were fornicating with them (the Telefomin women) and then they (the Telefomin women) went across (to Telefomin) and then they ...’ [Mianmin and Telefomin]

9.2.5.2 *+bi* ‘Ipfv’ plus *-∅* ‘DS.Sim’ in X-compounds

The only imperfective stems which can be compounded with *+bi* ‘Ipfv’ plus *-∅* ‘DS.Sim’ in medial verb forms are X-compounds, i.e. those which always have to be auxiliary-compounded in order to be inflected. These verbs cannot be inflected directly by *-b* ‘DS.Sim’. There is no form **haa-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:

- (9-40) *haabiota éle méné dobmikinea*
haa+bi-∅-o=ta éle mén=e
 roam.IPFV+AUX.IPFV-DS.SIM-3SG.F.SBJ=MED DEM.SG.M child=SG.M

lob-miki-n-e=a
 SG.MASC.O-take_into_arms.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘while she was roaming (the bush), this (one) held the child in his arms, and then...’ [Crows]

Note that this is the same as in final verbs: *haa+bl-∅-i=be* [roam.IPFV+AUX.IPFV-IPFV-1SG.SBJ=DECL] ‘I’m roaming’, but **haa-b-i=be* [roam.IPFV-IPFV-1SG.SBJ=DECL]

9.2.5.3 *+bina* ‘Hab’

Imperfective verb stems compounded with the habitual auxiliary stem *+bina* can be used as medial verbs as well with the expected semantic effect. They must always have their SR slot filled by *-b* ‘DS.Sim’ and their tense slot filled by *-bio* ‘General past’:

- (9-41) *inabinabibbioto Futaman miné eilí bum bebeto*
ina+bina-b-ib-bio=to *futaman mĩn=e*
 do_thus+AUX.HAB-DS.SIM-2/3PL.AN.ABJ-GPST=MED PN son=SG.M

ěil=i bum be-b-e=to
 pig=PL.AN hunt.IPFV.MSTEM 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]

9.2.5.4 *+biaan* ‘Ipfv.SS.Sim’

The only way to express simultaneity of events without a switch in subject reference is to employ the auxiliary stem *+biaan* ‘Ipfv.SS.Sim’ in the marked clause. The closest English translation of such a verb would be ‘while V-ing’:

- (9-42) *noi ale gokabiaanoale al atosino wa wembiaanoa*
no=i al=e
 rodent=PL.AN bowels=SG.N1

goka+biaan-o=a=le
 cut_skin.IPFV+AUX.IPFV.SS.SIM-3SG.F.SBJ=MED=TOP

al atosin=o wa wen+biaan-o=a
 bowels.N1 half=N2 cut eat.IPFV+AUX.IPFV.SS.SIM-3SG.F.SBJ=MED
 ‘While cutting out the rodents’ bowels, she was cutting and eating bits of the intestines’ [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 as in (9-42) 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.

9.2.5.5 Auxiliary-compounding with perfective stems

Like final verbs, medial verbs can consist of a perfective verb stem compounded with an auxiliary stem 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 perfective stem and *+bi* plus $-\emptyset$ ‘DS.Seq’, as in (9-43), and perfective stem and *+biaan*, as in (9-44):

(9-43) *deibobia unom daaknoa*

lei-b-o+bi-∅-e=a

leave.PFV-BEN.PFV-3SG.F.IO.PFV+AUX.IPFV-DS.SIM-3SG.M.SBJ=MED

unom daak-n-o=a

go.? 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]

(9-44) *maabiaanea eiló kimaabia*

maa+biaan-e=a

stand_up.PFV+AUX.IPFV.SS.SIM-3SG.M.SBJ=MED

ẽil=o kimaa+bi-∅-e=a

pig=SG.F care_for.PFV+AUX.IPFV-DS.SIM-3SG.M.SBJ=MED

‘while standing there, he was guarding the sow’ [Danenok]

On auxiliary-compounded perfective stems in final verbs see 7.3.4.2.

9.2.6 Tense marking with *-bio* ‘General past’ in medial verbs

Mian allows medial verbs to be marked by the tense suffix *-bio* ‘general past’. 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-contiguosness of events:

- (9-45) *dabwali yé gaibbioto einsota maanafaniba*
lab-wal=i yé
 same_sex_sibl_dyad-PL=PL.AN there
- ga-Ø-ib-bio=to*
 put_in_leafoven-DS.SEQ-2/3PL.AN.SBJ-GPST=MED
- ein-s-o=ta maanafa-n-ib=a*
 cook-DS.SEQ-N2.SBJ=MED cut_meat-SS.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 story]

In (9-45), 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 relative tense by *-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 (9-46) or a different actor (9-47):

- (9-46) *Danenok dabwal ile unibbua imeno uleloniba*
lanenok lab-wal í=le
 PN same_sex_sibl-PL PL.AN=TOP
- un-n-ib-bio=a*
 go.PFV-SS.SEQ -2/3PL.AN.SBJ-GPST=MED
- imen=o ulelo-n-ib=a*
 taro=N1.PL pull_out-SEQ-2/3PL.AN.SBJ=MED
 ‘D. and his brother went and (later, i.e. at their destination) pulled out taros and then they...’ [Danenok story]
- (9-47) *halebe méné yé golonea dabaaldím yé obabe unebua sokoyabuo unan tenoa*
haleb=e mén=e yé
 wild_pig=SG.M child=SG.M there
- gol-o-n-e=a*
 SG.LONG.O-take.PFV-SS.SEQ-3SG.M.SBJ=MED

labăal=lim yé ob-a-b-e
ground=on there SG.RESID.O-leave.PFV-BEN.PFV-PL.AN.IO.PFV

un-Ø-e-bio=a
go.PFV-DS.SEQ-3SG.M.SBJ-GPST=MED

sokoyabu=o unan te-n-o=a
wallaby=SG.F eat.IPFV come-SS.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...' [Afoksitgabaam]

If a medial verb inflected for tense with *-bio* is imperfective, the action denoted by the verb is always interpreted as on-going during the interval specified by *-bio*:

(9-48) *kulaní yaleb te gawebeto wembobioto unangmóno mako tenota*
kulăn=i ya-l(o)+ eb te
game_animal=PL.AN PL.AN.O-kill.PFV+take.PFV come

ga-Ø-we-b-e=to
put_in_leafoven-BEN.IPFV-3SG.F.IO.IPFV-DS.SIM-3SG.M.SBJ=MED

wen-b-o-bio=to
eat.IPFV-DS.SIM-3SG.F.SBJ-GPST=MED

unangmõn=o mak=o te-n-o=ta
woman=SG.F another=SG.F come-SS.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...'
[Afoksitgabaam]

In (9-48) the son and his mother habitually repeat the same string of actions 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 which have taken place at some point in the past which is 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:

(9-49) *unang máko nininó Dimosono unom watnoa Dimobibwat binabobua*
unăng mak=o ninin=o limoson=o
woman certain=SG.F name=N2 PN=SG.F

un-nom wat-n-o=a
go.PFV-? across.PFV-SS.SEQ-3SG.F.SBJ=MED

limobib=wat bina-b-o-bio=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’

In (9-49) 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 humans. 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, as described by *watnoa* ‘she went across’.

9.2.7 Tense marking with *-so* ‘Hesternal past’ in medial verbs

Mian also allows for a medial verb in the marked clause to indicate that the event which it denotes occurred one day before the event in the reference clause. In the simplest case, the bound verb stem *s-* ‘sleep’ 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* and conforming to the template:

s-SBJ-nom=MED (where SBJ refers to the actor in the sleeping event)

The suffix *-nom* is probably further segmentable but its internal make-up remains unclear. It could be an inflected form of the perfective stem *n-* of the existential verb. There is no segmental change in *-nom* regardless of person, number, or gender of the subject.

(9-50) *nakaminé make unangmónó memá omalibbua sibnoma bomasoa*
nakamĩn=e mak=e unǎngmǎn=o
 man=SG.M some=SG.M woman=SG.F

memâ om-Ø-al-Ø-ib-bio=a
 newly SG.FEM.O-give.PFV-3SG.M.IO.PFV-DS.SEQ-2/3PL.AN.SBJ-GPST=MED

s-ib-nom=a boma-s-o=a
 sleep.PFV-2/3PL.AN.SBJ-?=MED light-DS.SEQ-N2.SBJ=MED
 ‘A woman was newly given to a man and later they slept and on the next morning...’ [Newlyweds]

The bound verb root *s-* ‘sleep’ can also combine with other verbs to form a complex predicate expressing that the event denoted by this verb took place a day before the event in the reference clause. Such verb forms follow the pattern:

V-SBJ-*so-nom*=MED (where *-so* is the hesternal past suffix)

I assume that the Hesternal past suffix *-so* has an incorporated form of *s-* ‘sleep’ as its etymological source. Henceforth, I will gloss *s-* as ‘sleep’ when it is a free verb stem but ‘HPst’ when it’s a bound form. An example for a medial inflected with *-so* ‘Hesternal past’ is:

- (9-51) *unangó méné dofanosonoma mebobé*
unǎng=o mén=e lob-fa-o-so-nom=a
 woman=SG.F child=SG.M SG.MASC.O-put.PFV-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.’
 (Lit.: ‘The woman gave birth to a boy, then slept and now she’s crying.’)

The marked clause is commonly but not obligatorily modified by the temporal adverbial *sintalo* ‘yesterday’:

- (9-52) *ní (sintalo) tlobsonoma memálo okok kenomabbio*
ní (sintalo) tl-Ø-ob-so-nom=a
 1PL.EXCL yesterday come-DS.SEQ-1PL.SBJ-HPST-?=MED

memálo okok ke+n-omab-bio=be
 today work do+AUX.PFV-FUT.PL.AN.SBJ-1PL.SBJ=DECL
 ‘We came yesterday and today we’ll work.’

The medial verb in (9-52) forces the interpretation that the coming-event happened a day before the day which contains the moment of speaking:

Medial verbs inflected with *s-* ‘sleep’ 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:

- (9-53) *í unibsonoma imin tlibsobe*
í un-ib-so-nom=a
 they go.PFV-2/3PL.AN.SBJ-HPST-?-MED
- imin tl-∅-ib-so=be*
 again come-PST-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 (9-53) 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’:

- (9-54) **i sintalo unibsonoma imin 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 *sintao ó sintalo* ‘the day before yesterday’ (9-54) is grammatical:

- (9-55) *í sintao ó sintalo unibsonoma (sintalo) imin tlibsobe*
í sintao ó sintalo un-ib-so-nom=a
 they day_before_yesterday go.PFV-2/3PL.AN.SBJ-HPST-?-MED
- (sintalo) imin tl-∅-ib-so=be*
 yesterday again come-PST-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 the speaker to use a relative clause, which is bracketed in (9-56):

- (9-56) *deibenea monea [anafuo omfaesuo] tanta ometna teneta*
lei-b-e-n-e=a
 leave.PFV-BEN.PFV-PL.AN.IO.PFV-SS.SEQ-3SG.M.SBJ=MED
- mon-e=a*
 go.PFV.SS-3SG.M.SBJ=MED

[*anafu=o om-fa-Ø-e-so=o*]
 anafu_arrow=N2 SG.FEM.O-put.PFV-PST-3SG.M.SBJ-HPST=MED

tam=ta om-eb=na te-n-e=ta
 inside=MED N2-take.PFV=do come-SS.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]

9.2.8 Further complications in the Mian SR system

9.2.8.1 Inconsistencies in SR marking

The Mian SR 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 1st person singular.⁵⁹ It seems as if indication of SS and (to a lesser degree) DS is not fully entrenched in the language, either because SR is a more or less incipient phenomenon or because it is on the way to dropping out of the language. Before these two possibilities can be discussed in greater detail, an overview of this peculiar SR behaviour is necessary.

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 (9-57), repeated from (9-29) above:

(9-57) *gingé tobvlaania tobkimaia haangánsea hania*
ging=e tob-tlaa-n-i=a
 midrib=N1.SG SG.LONG.O-remove.PFV-SS.SEQ-1SG.SBJ=MED

tob-kima-Ø-i=a
 SG.LONG.O-put_in_fire.PFV-DS.SEQ-1SG.SBJ=MED

hǎang-an-s-e=a ha-n-i=a
 dry-VBLZ-DS.SEQ-SG.N1.SBJ=MED break.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I removed the midrib (of the tobacco leaf), put it (the tobacco) in the fire,
 when it has dried so I break it and then I ...’ [Rolling smokes]

⁵⁹ The evidence for 1st person plural subjects remains inconclusive. As 1st person plural forms are only sparsely attested in the spontaneous data corpus, the behaviour of SS-marked verbs with 1st plural subjects was tested in elicitation. A co-referent subject in the reference clause was always accepted but speaker judgments were inconsistent when reference was disjoint. Examples which had been accepted earlier were rejected later.

Exchanging *tobtlaania* for *tobtlaa∅ia* or *tobkima∅ia* for *tobkimania* in this example would result in a deviant 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 1st 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 SR markers is summarized in Table 93.

SR marker	Subject person/number	Indicates
<i>-n</i> ‘SS.Seq’	1 st singular subject	SS
<i>-n</i> ‘Seq’	Non-1 st singular subject	Sequentiality regardless of subject reference
<i>-b</i> ‘DS.Sim’ <i>-s</i> ‘DS.Seq’ <i>-∅</i> ‘DS.Seq’	Any subject	DS

Table 93: Functions of SR markers

The following examples illustrate this. If the subject of the marked clause is anything but first singular and the verb is marked *-s* ‘DS.Seq’, the next subject must indeed have disjoint reference. Compare (9-58) and ungrammatical (9-59):

(9-58) *méné dofaso mebebe*
mén=e lob-fa-s-o=a
 child=SG.M SG.MASC.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’

(9-59) **mén=e lob-fa-s-o=a*
 child=SG.M SG.MASC.O-put.PFV-DS.SEQ-3SG.F.SBJ=MED

me-b-o=be
 cry.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She_i gave birth to a boy and so she_i is crying’

However, if the subject of the marked clause is anything but first singular and the verb marked *-n*, the subject in the reference clause can either have co- or disjoint reference and *-n* indicates only that events proceed sequentially, while SR meaning is suspended as in (9-60):

- (9-60) *méné dofanoa mebobé*
mén=e lob-fa-n-o=a
 child=SG.M SG.MASC.O-put.PFV-SS.SEQ-3SG.F.SBJ=MED

*me-b-o=be*⁶⁰
 cry.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘She_k gave birth to a boy and she_k is crying’

But (9-61) is equally acceptable:

- (9-61) *méné dofanoa mebebe*
mén=e lob-fa-n-o=a
 child=SG.M SG.MASC.O-put.PFV-SS.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’

If we now imagine that the mother of the new-born is talking, SR suspension does not apply, in other words, DS marking invariably indicates disjoint reference and SS marking co-reference, as illustrated by examples (9-62) and (9-63):

- (9-62) *méné dofasia mebebe/*mebibe*
mén=e lob-fa-s-i=a
 child=SG.M SG.MASC.O-put.PFV-DS.SEQ-1SG.SBJ=MED

me-b-e=be / **me-b-i=be*
 cry.IPFV-IPFV-3SG.M.SBJ=DECL / cry.IPFV-IPFV-1SG.SBJ=DECL
 ‘I gave birth to a boy and so he is crying’

- (9-63) *méné dofania mebibe/*mebebe*
mén=e lob-fa-n-i=a
 child=SG.M SG.MASC.O-put.PFV-SS.SEQ-1SG.SBJ=MED

me-b-i=be / **me-b-e=be*
 cry.IPFV-IPFV-1SG.SBJ=DECL / cry.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘I gave birth to a boy and I am crying’

One could object that these examples are all elicited. Reesink (1983: 241-2) rightly points out that it is important to study SR behaviour in coherent discourse rather in isolated, and even worse, elicited, examples.

⁶⁰ On the question whether this example allows for a reading with disjoint subject reference see below.

It is well-known that SS marking in Papuan languages with a SR system can be apparently inconsistent. This can be the case if the reference clause is providing background information, for example in temporal clauses and clauses which describe meteorological conditions, or physiological/psychological states. Reesink (1983: 240) points out that switch reference marking proceeds with respect to topicality hierarchies. In other words, the topic-hoods of certain subjects may override the system, thus resulting in 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: 228ff).

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:

- (9-64) *yomaneta* [*nakai utlibo*] *í nininó dlaniba*
yoma-n-e=ta [*naka=i*
 create-SS.SEQ-3SG.M.SBJ=MED man=PL.AN

utl-∅-ib=o
 come_up.PFV-PST-2/3PL.AN.SBJ=N2

í ninin=o lol-fa-n-i=ba
 they name=N2 PL.FEM.O-put.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘he begot (children), [when the people grew up,] they assumed names and
 then...’ [Dimosson]

In this text excerpt the subject is the male protagonist and it would be plausible to assume that the bracketed adverbial clause was skipped and SS marking was interpreted with respect to the clause following the adverbial, if the man re-occurred as topic. Yet, the begetting of children was the last action he performed in this story. He drops out as a topic and is never mentioned again. That *-n*-marking 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 1st singular. In this case, *-n* unequivocally indicates event sequentiality and SS.

If we assume that a central function of an SR system is to help with reference resolution in potentially ambiguous situations, the restrictions of the Mian SR system are peculiar because—from a functional perspective—such restrictions do not seem to make much

sense. After all, SR 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 SR is only obligatory in the third person or even restricted to third person, are Gokana (Comrie 1983), Kaingáng (Wiesemann 1982) and Yup'ik Eskimo (also West Greenlandic; Kaalalisut) (Woodbury 1983). Whether these are uncontroversial examples of SR languages⁶¹ is not important here; but clearly, if SR 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 effected by a SR system for two reasons:

- (a) all medial verbs are obligatorily marked for person and number of the subject, and
- (b) Mian has a category 'gender', and the cross-referencing subject markers agree in gender with the subject.

For example, in (9-65) repeated from (9-61), the gender difference reflected in the subject markers forces a disjoint-reference interpretation of subjects (markers and their glosses appear in boldface):

- (9-65) *méné dofanoa mebebe*
mén=e lob-fa-n-o=a
 child=SG.M 3SG.M.O-put.PFV-SS.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'

⁶¹ Stirling (1993: 50ff) argues that the systems in Gokana and Kaingáng are in fact logophoric and that Eskimo has an obviation system.

The only two cases which cannot be disambiguated by subject marking and gender are those where:

- (a) both subjects have the same gender (or homophonous subject markers⁶²), or
- (b) both subjects are marked with *-ib* ‘2nd/3rd 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 employ DS marking, e.g.:

(9-66) *fotebeiba dalanibale*
fote-b-e-∅-ib=a
 rout-BEN.PFV-PL.AN.IO.PFV-DS.SEQ-2/3PL.AN.SBJ=MED

lala-n-ib=a=le
 go_away-SS.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 (9-66) could also refer to the 2nd plural but in the historical account from which the example was taken reference is unequivocally to the 3rd 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 (9-67):

(9-67) *dekengé damaneto dafinaue tam tlebioto*
lekǝng=e *lama-n-e=to*
 vine_species=SG.N1 grow_up.PFV-SS.SEQ-SG.N1.SBJ=MED

lafinau=e *tam* *tl-∅-e-bio=to*
 vine_species=SG.N1 sideways come.PFV-DS.SEQ-SG.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 (9-68), repeated from (9-60), is not ambiguous, since the gender of the subject forces a conjoint reading:

⁶² 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).

- (9-68) *méné dofanoa mebobé*
mén=e lob-fa-n-o=a
 child=SG.M SG.MASC.O-put.PFV-SS.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 1st singular), here *dofanoa*, followed by a different subject in the reference clause, an overt NP (e.g. *unǎng mako* ‘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 NP, subjects in (9-68) 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 NP must be used:

- (9-69) *imeno nininiba é aso haneole*
imen=o nini-n-ib=a
 taro=PL.N1 peel_taro-SS.SEQ-2/3PL.AN.SBJ=MED

é as=o ha-n-e-o=le
 he wood=PL.N1 break.PFV-SS.SEQ-3SG.M.SBJ=N2=TOP
 ‘They peeled taro tubers and then he broke firewood and then...’ [Danenok]

If the subject is identifiable no overt NP is used, as in (9-70), repeated from (9-61):

- (9-70) *méné dofanoa mebebe*
mén=e lob-fa-n-o=a
 child=SG.M SG.MASC.O-put.PFV-SS.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’

In this example the marked clause provides enough context to identify the boy as the ‘crier’. In fact, the suggested reintroduction of a full NP or a pronoun was rejected here as unacceptable: **méné dofanoa méné mebebe* ‘She gave birth to a boy and the boy is crying’ and **méné dofanoa é 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 (9-71):

- (9-71) *eká Klefol wanggeli tenibta daak tesibta imendeib daak tesibta imeno ulelubesibta*
eká Klefol wanggel=i te-n-ib=ta
 and PN woman_of=PL.AN come.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
- laak te-s-ib=ta*
 down come.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
- imen=leib laak te-s-ib=ta*
 taro=purpose down come.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
- imen=o ulel(o)-u-b-e-s-ib=ta*
 taro=PL.N1 pull_out.PFV-EP-BEN.PFV-PL.AN.IO.PFV-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* ‘2nd/3rd Animate plural’ in all medial clauses in this example, SR 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* simply indicates event sequentiality and then uses the same verb stem *te* ‘come’ but inflected with *-s* ‘DS.Seq’ in the second clause in anticipation of a different subject.

In the recording of the story (9-71) 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 here⁶³.

9.2.8.2 Accounting for the inconsistencies in SR marking

The previous section presented an overview of the peculiar inconsistencies of SR marking in Mian medial verbs. It seems as if indication of SS or DS is not fully entrenched in Mian. There are two possible reasons for this situation. Either SR is a more or less incipient phenomenon or it is on the way of dropping out of the language. In this section I will examine both of these hypotheses in some detail.

⁶³ It is also possible that the speaker wanted to emphasize the direction of the movement. After all, the emphasis is more on the directional *daak* than on the verb *tesibta*.

Pertinent to both accounts is the fact that Mian SR markers in medial verbs are homophonous with tense/aspect markers in final verbs. Table 94 juxtaposes tense/aspect and SR markers. Both sets occur in the same slot in the verb, namely immediately before the subject marker slot.

Final verb		Medial verb	
Tense/Aspect markers	Meaning	SR markers	Meaning
$-n \sim -\emptyset^{64}$	Past	$-n$	SS sequential
$-s$	Remote past	$-s$	DS sequential
$-b$	Imperfective	$-b$	DS simultaneous
		$-\emptyset$	DS sequential

Table 94: Tense/Aspect markers in final verbs and SR markers in medial verbs

The SR marker and aspect markers are homophonous (on the apparent disalignment of $-\emptyset$ see below) and they are subject to the same co-occurrence restrictions with respect to verb stem aspect.

9.2.8.2.1 SR as an additional meaning in tense/aspect markers

The first account of why the Mian SR system behaves non-canonically assumes that the SR markers have their origin in the tense and aspect morphology of the language. In New Guinea this does not seem to be a very common development. Existing theories of the origin of SR 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 (Givón 1983: 78). For a condensed summary of these theories of origin and an evaluation of their plausibility see Roberts (1997: 190-2). Typologically, homophony between aspect and SR markers does not seem to be well attested, but see Jacobson (1983: 174-7) on some formal similarities of SR and aspectual morphology in North American languages.

Apart from homophony there is a semantic connection between SR and aspect markers. This is especially conspicuous for $-b$ ‘Imperfective’/‘DS.Sim’. In final verbs, marking for imperfective aspect by $-b$ indicates that the action is on-going at the moment of speaking; e.g. *né wembibe* ‘I am eating (now)’. In medial verbs, this marker

⁶⁴ Recall that the zero morph in the aspect slot is a morphophonemic variant of $-n$ ‘past’. The determining factor is phonological: $-n$ is freely deleted before /i/. Often, $-n$ is also elided in fast speech regardless of the phonological environment unless the elision causes like-vowel clash.

is interpreted relatively to the verb in the following clause. It 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”⁶⁵). Imperfective aspect is strongly associated with simultaneity of events.

A similar semantic connection can be found between past tense and sequential ordering of events. Past marking by *-n* in final verbs (without any further tense marking with *-bio* ‘General past’ or *-so* ‘Hesternal past’) signifies that an action as a whole was completed (right) before the moment of speaking; e.g. *é dowonebe* ‘he has (just) eaten’. In medial verbs, this marker is interpreted relatively to the verb in the following clause, indicating that the action as a whole took place (and was completed) before the next one commences. Past tense is strongly associated with sequential ordering of events. In the following paragraphs, I will now show in some detail how the tense/aspect markers in medial verbs could have acquired SS/DS as an additional meaning.

Longacre (1983) argues for a two-fold ‘naturalness assumption’ in SR languages. By this he means an association between SS marking and sequentiality, on the one hand, and DS marking and simultaneity, on the other.

[...] we can normally expect that actions in succession are performed by the same person, while actions that overlap are performed by different people.
(Longacre 1983: 198)

When Longacre’s naturalness assumption is applied to the Mian case, one sees immediately that this makes sense for DS marking and simultaneity. If we 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. On this analysis, *-b* would have started out as an aspect marker indicating imperfective aspect and then acquired SR-relevant meaning. Similarly, the marker *-n*, which expresses sequentiality of events in medial verbs, would have acquired SS as an additional meaning via the naturalness assumption.

⁶⁵ 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.

In the Tucanoan language Guanano, on which Longacre (1983) based his argumentation for the naturalness assumption, information on temporal structure is more basic than information on SR, in other words, the latter is related to the former by a (cancellable) implicature based on the assumption that the use of the marker indicating sequentiality of actions implies that these actions are performed by the same individual. However, subjects in Guanano can be disjoint in reference as long as events take place sequentially.

It might be conceivable that the situation in Mian is similar, in that *-n* in medial verbs basically only marks sequentiality of events and the SS interpretation of the marker is an implicature. The marker *-n* can be used with a different subject following, as long as actions are sequential.

DS meaning, on the other hand, is not related to the marker *-b* by implicature but is actually part of its meaning. As a consequence, 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 data corpus (as long as the events described are simultaneous):

- (9-72) *kehabea kimaabie bita baliseta*
ke-Ø-ha-b-e=a
 clean-BEN.IPFV-SG.N1.IO.IPFV-DS.SIM-3SG.M.SBJ=MED
- kimaa+bi-Ø-e* *bita*
 care_for.PFV+AUX.IPFV-IPFV-3SG.M.SBJ until
- bali-s-e=ta*
 bear_fruit-DS.SEQ-SG.N1.SBJ=MED
 ‘While cleaning it (a plant) he was caring for it until it bore fruit’
 [Afoksitgabaam]

This may suggest that in Mian—similar to Guanano—the sequential-simultaneous distinction, i.e. information about temporal structure, is more basic than the SS-DS distinction (at least for *-n* and *-b*).

To sum up, it appears that the markers *-n* and *-b* have acquired the additional meaning DS and SS in medial verbs, respectively. I have argued that this development took place in accordance with the assumption that sequential actions are normally performed by the same individual while simultaneous actions are most likely to be

performed by different individuals. One can find examples in which the SR meaning of these markers is suspended, suggesting that *-b* and *-n* are on their way from pure aspect and tense markers to SR markers, but with the SR meaning not fully established yet.

The DS markers *-s* and *-∅* behave contrary to this assumption. As tense markers in final verbs their meaning is ‘Remote past’ and ‘Past’, respectively. As SR markers they indicate sequentiality, yet not SS, as one would expect, but rather DS. Also, indication of DS is clearly part of the marker’s meaning and not just an implicature. If a verb is marked for ‘DS.Seq’ with *-s* or *-∅*, the subject of the reference clause must be disjoint in reference.

I would argue that the different development of *-n*, on the one hand, and *-s* and *-∅*, on the other hand, reflects the fact that sequentiality is not as strongly associated with SS as simultaneity is with DS. Hence, these markers have not uniformly acquired the secondary meaning DS. Rather, *-n* became used for SS while the other two developed the meaning DS.

The semantic dissociation between the SR markers *-n* and *-∅* needs an explanation because as tense markers in final verbs they appear in morphophonemic alternation, both with the meaning ‘past’. However, the semantic dissociation is only partial. A substantial, and I would argue crucial, portion of the meaning remains constant. Both *-n* and *-∅* still signal sequentiality which is associated with the ‘Past meaning’ of the original tense 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 aspectual/temporal meaning of sequentiality, once a SS/DS contrast had developed elsewhere in the system. The DS marker *-s* is a special case because it apparently has acquired a further meaning apart from DS: *-s* is used to express sequentiality, DS, and a close temporal or causal relation between events. I assume that *-s* as a marker in medial verbs derived from the homophonous ‘Remote past’ marker. It might seem counterintuitive that *-s*, which in medial verbs indicates DS and sequentiality with a tight temporal or causal connection between the two events, should be related to a remote past tense morpheme. However, considering the other choice the language would have had, this becomes more plausible. The only tense/aspect morpheme occurring in final verbs that is not also used in medial verbs is *-b* ‘Non-Hodiernal past’, which is homophonous with the imperfective aspect

morpheme *-b*, also used as the DS.Sim marker in medial verbs. Hence, it seems that choosing *-s* was a reasonable option for the language, if one assumes the language would tend to fill out its SR paradigm by using forms already into the verbal suffix system.

9.2.8.2.2 An alternative account: SR and tense/aspect marker homophony as a result of SR marker attrition

In the previous section it was proposed that Mian SR markers are originally tense/aspect markers, which are still found in final verbs. These tense/aspect markers have acquired additional SR meaning in medial verbs. For some markers (*-n* and to a lesser degree *-b*) indication of SS or DS remains at the stage of an implicature. As a consequence of this, the Mian SR system shows the inconsistencies discussed above. On this analysis, Mian SR could be called a more or less incipient phenomenon.

In this section, I will briefly sketch an alternative account of the inconsistencies in the Mian SR system. The argument involves a different perspective on the historical development of SR marking within the Ok family. Table 95 sets out tense/aspect and SR morphology for Telefol (cf. Healey 1966: 14), Tifal (cf. Boush 1975), and Mian. The only other Ok language for which reliable data is available, Faiwol, has not been reported to have an SR system (cf. Mecklenburg and Mecklenburg 1969, 1977).

	DS.Seq	Remote past
Telefol	<i>-sVl</i> ⁶⁶	<i>-s</i>
Tifal	<i>-sad</i> ⁶⁷	<i>-s</i>
Mian	<i>-s</i>	
	DS.Sim	Continuous ⁶⁸
Telefol	<i>-bVl</i>	<i>-b</i>
Tifal	<i>-bad</i> ⁶⁹	<i>-b</i>
Mian	<i>-b</i>	
	SS.Seq	Past ⁷⁰
Telefol	<i>-nVl</i>	<i>-n~-∅</i>
Tifal	<i>-d</i>	<i>-n~-∅</i>
Mian	<i>-n</i>	<i>-n~-∅</i>

Table 95: SR and tense/aspect morphology in other Ok languages

⁶⁶ V indicated regressive vowel harmony with the vowel of the subject marker.

⁶⁷ Healey and Steinkraus (1972: 112) list *-sil* as the 'DS.Seq' marker in Tifal.

⁶⁸ In the referenced sources on Telefol and Tifal *-b* is called a continuous marker. In my own analysis of Mian *-b* is termed 'Imperfective'.

⁶⁹ Healey and Steinkraus (1972: 112) list *-bal* as the 'DS.Sim' marker in Tifal.

⁷⁰ *-n* is analyzed as 'Immediate past' for Telefol and Tifal.

It is conspicuous that in the two other Ok languages which have SR morphology, namely Telefol and Tifal, SR markers are not homophonous with the respective tense or aspect markers in final verbs. In Telefol all SR markers are three segments long while the tense-aspect markers consist (as in Mian) of a single segment. In Tifal this applies only to the DS markers. Whether SR markers in Telefol and Tifal are further segmentable is not disclosed in the literature on these languages.

It is also obvious that the first consonant is the same in all DS and tense/aspect markers which makes historical relatedness plausible. If one wanted to analyze SR as a secondary meaning in markers which basically indicate sequentiality or simultaneity of events in Mian medial verbs, one would have to assume that homophony of the two sets of markers was the original Ok situation and that the longer SR markers are innovations in Telefol and Tifal, which augmented markers in medial verbs with *-vl* and *-ad*, respectively, but not the markers in final verbs, thereby creating a SR series which is formally different from the tense/aspect series in final verbs. In Mian, on the other hand, this augmentation would not have taken place. Rather, the original situation of homophony persists and SR meaning remains more or less an implicature.

Although scholarly opinion is divided on this topic, Pawley (2005: 23) argues that SR is a property of pTNG⁷¹. Given that the Ok languages are considered relatively conservative within TNG (cf. Wurm 1982: 139, and William Foley, pers. comm.), it seems odd to claim that SR meaning was an innovation in the Ok languages. Also given that phonetic erosion is a much more common process in diachronic development than segment addition, it may be more plausible to assume that SR and tense/aspect markers were formally distinct in pOk, as they still are in Telefol and Tifal, and that Mian is the innovative language which shortened the longer SR markers to just the initial consonant, thereby creating syncretism between SR markers in medial and aspect markers in final verbs. This is substantiated by the fact that in many sets of cognates, Mian is much more often that not the language which has dropped segments whereas Telefol, Tifal and Faiwol retain phonologically longer forms (cf. Table 96; data on Telefol, Tifal, and Faiwol from cognate list in Healey (1964b); Mian data mine):

⁷¹ It is of course possible that SR as a phenomenon is old but has undergone one or more phases of formal renewal.

	'think'	'sunlight'	'bone'
Telefol	<i>fúkún</i>	<i>átaán</i>	<i>kún</i>
Tifal	<i>fuku</i>	<i>átán</i>	<i>kun</i>
Faiwol	<i>fukun</i>	<i>atan</i>	<i>kun</i>
Mian	<i>fun</i>	<i>tan</i>	<i>ón</i>

Table 96: Segment loss in Mian in comparison to Telefol, Tifal, and Faiwol

Once the phonological shortening of SR markers had happened in Mian to a degree where they became homophonous with the tense/aspect forms, these markers would have been more amenable to an interpretation as aspect markers which primarily indicate perfectivity/sequentiality or continuousness/simultaneity of events. Although the SR meaning is retained in the DS.Seq markers *-s* and zero, Mian seems generally “less concerned” with consistent SR marking. This especially applies to *-n* ‘SS.Seq’ and to a much lesser degree also to *-b* ‘DS.Sim’.

In such a scenario, Mian SR marking as part of medial verb inflection would be on the wane rather than an incipient phenomenon.

9.2.9 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 SR 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 or intersection. As Stirling (1993: 35) notes, there are three logical types of referential overlap:

- (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 (PI>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 (Sg>PI)
- (iii) the set of referents of the subject in the marked clause and set of referents of the subject in the reference clause intersect (PI-PI)

Situations in which sets of referents are in a relation of proper inclusion as described under (i) and (ii) most commonly arise when the subjects 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’. As such situations do not occur in my corpus, I cannot say anything about how they are treated.)

Situations in which sets of referents intersect as described under (iii) can only occur if both subjects are plural. So far there is no data on such situations.

Table 97 sets out how Mian deals with SR marking in situations of referential overlap:

	Switch in	Marked clause	Reference clause	SR 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	

Table 97: SR and 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, regardless of whether there is a switch in number only as in (9-73) to (9-75) or a switch in number and person as in (9-76) to (9-78):

1Pl>1Sg

(9-73) *denobto hekwala enwalai itab deibenita*
le-n-ob=to *hek-wal=a* *en-wal=a=i*
 desist.PFV-SS.SEQ-1PL.SBJ=MED brother-PL=and sister-PL=and=PL.AN

itab *lei-b-e-n-i=ta*
 there_downriver leave.PFV-BEN.PFV-PL.AN.IO.PFV-SS.SEQ-1SG.SBJ=MED
 ‘We waited and I left the older brothers and sisters downriver and then I...’
 [Crows]

2PI>2Sg

(9-74) *Milsene íb dumo daakniba kóbó aaie fuelanamabeobe*
milsen=e íb lum=o laak-n-ib=a
 PN=SG.M your.PL father/child_dyad=COLL down-SS.SEQ-
 2/3PL.AN.SBJ=MED

kóbó aaie fuela+n-amab-eo=be
 2SG.M water bathe.PFV.AUX.PFV-FUT.NANPL.SBJ-2SG.SBJ=DECL
 ===bathe=====

‘Milsen and you (son and father) will go down and you will bathe’ (said to Milsen’s father)’

3PI>3Sg

(9-75) *aalá biaanibta aleló baanole*
aalá biaan-ib=ta alél=o
 lie.PL.SBJ stay.IPFV.SS.SIM-2/3PL.AN.SBJ=MED wife=SG.F

baa-n-o=o-le
 say.PFV-SEQ-3SG.F.SBJ=N2=TOP

‘While they were lying down, the wife said: ...’ [Pig story]

1PI>2Sg

(9-76) *níbó aso pila kenoba kóbó win kenebobe*
níbó as=o pila ke-n-ob=a
 1PL.INCL wood=PL.N1 play do-SS.SEQ-1PL.SBJ=MED

kóbó win ke-n-ebo=be
 2SG.M win do-PST-2SG.SBJ=DECL

‘We played domino and you won’

1PI>3Sg

(9-77) *Milsene ní dabo tenoba é ablame dowonebe*
milsen=e ní lab=o
 PN=SG.M our.EXCL same_sex_sibl_dyad=COLL

te-n-ob=a
come.PFV-SS.SEQ-1PL.SBJ=MED

é ablam=e lowon-Ø-e=be
3SG.M nut_species=SG.N1 eat.PFV-PST-3SG.M.SBJ=DECL
'Milsen and I (we brothers) came and he ate an ablam nut'

2Pl>3Sg

(9-78) *Milsene íb dumo daakniba Milsen aaie fuelanamabebe*
milsen=e íb lum=o laak-n-ib=a
PN=SG.M your.PL father_child_dyad=COLL down-SS.SEQ-2/3PL.AN.SBJ=DEP

milsen aaie fuela+n-amab-e=be
PN water bathe.PFV+AUX.PFV-FUT.NANPL.SBJ-3SG.M.SBJ=DECL
===bathe===

'Milsen and you (son and father) will go down and Milsen will bathe' (said to Milsen's father)

The above generalization is less strong than it might seem at first sight because of the more general possibility that second and third person (and maybe also first person plural) medial verbs can be marked *-n* for SS and then be followed by a different subject.

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 (cf. 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.

(9-79) *aléló awokó ometnoto dámiíb unibbuo*
alél=o awók=o om-eb-n-o=to
wife=SG.F mother=SG.F SG.FEM.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED

lamííb un-Ø-ib-bio=o
garden.N2 go.PFV-PST-2/3PL.AN.SBJ-GPST=N2

'After the wife had taken the mother and they had gone to the garden'
[Afoksitgabaam]

This seems to hold true for all other forms of Sg>Pl inclusion. The following examples are elicited:

(9-80) *né eilé anania ní downomabbio*
né ěil=e a-na-n-i=a
 1SG pig=SG.M 3SG.M.O-kill.PFV-SS.SEQ-1SG.SBJ=MED

ní lowon-omab-bio=be
 1PL.EXCL eat.PFV-FUT.PL.AN.SBJ-1PL.SBJ=DECL
 ‘I’ll kill a pig and we’ll eat (it)’

(9-81) *kóbó eilé ananeba níbo downomabbio*
kóbó ěil=e a-na-n-eb=a
 2SG.M pig=SG.M 3SG.M.O-kill.PFV-SS.SEQ-2SG.SBJ=MED

níbo lowon-omab-bio=be
 1PL.INCL eat.PFV-FUT.PL.AN.SBJ-1PL.SBJ=DECL
 ‘You’ll kill a pig and we (incl) will eat (it)’

However, 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 (9-82) 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.

(9-82) *eilé daak te daak temea onsiobe*
ěil=e laak te laak tem-Ø-e=a
 pig=SG.M down come.PFV down 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)’ [Pig story]

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 backbones attached to each other. 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:

(9-83) *make skila kweilao gobtousea taniba*
mak=e skil=a kweil=a=o
 one=SG.M foot=and hand=and=PL.N1

gobtou-s-e=a
pull_towards_body.PFV-DS.SEQ-3SG.M.SBJ=MED

ta-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...' [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 (9-82) and (9-83) show that DS marking can be employed to background the singular subject as a participant in the joint action.

9.2.10 Repetition, repair and elaboration in clause chains

Above it was discussed in detail how SS marking in Mian shows certain unexpected inconsistencies. It was also shown 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 SR system because the repeated verbs actually all have the same subject, as in (9-84):

(9-84) *kan teбота teбота élé yé no mené gokiletneole*
kan te-b-o=ta te-b-o=ta
 follow come-DS.SIM-3SG.F.SBJ=MED come-DS.SIM-3SG.F.SBJ=MED

élé yé no mǝn=e
 DEM.SG.M there marsupial string_bag=SG.N1

gob-kileb-n-e=o=le
 SG.BUNDLE.O-carry.PFV-SS.SEQ-3SG.M.SBJ=N2=TOP
 'While she was following him, following him, this (man) carried the bag with the marsupials there' [Crows]

Reesink (1987: 200-1), using examples from Usan and Kosena, rightly notes that such examples suggest that SR systems are not interpreted in a mechanistic way, which would not allow 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:

- (9-85) *futé abuko kan daak tleta daak teneta belaseta*
füt=e abuko kan laak tl-Ø-e=ta
 tobacco=SG.N1 afterwards follow down come.PFV-DS.SEQ-SG.N1.SBJ=MED
- laak te-n-e=ta belas-e=ta*
 down come-SS.SEQ-SG.N1.SBJ=MED break.PFV-DS.SEQ-SG.N1.SBJ=MED
 ‘Afterwards the tobacco followed and came down (from the sky) it came down and blossomed’ [Sofelok, 1]

In (9-85), the speaker changes the DS-marked verb *tleØta* to SS-marked *teneta* because he intends to continue with *füte* ‘the tobacco’ as the subject. There is no self-correcting pause between *tleta* and the second *daak* but the clause *daak teneta* is uttered with particular emphasis.

When speakers have the feeling that they should give more detailed information which might prove beneficial to the hearer, SR marking can be anomalous due to the speaker’s elaboration of a certain point. For example in (9-86), 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.

- (9-86) *belaniba temibta [dobo sekim ke bi temibta]*
belan-ib=a tem-Ø-ib=ta
 break.PFV-SS.SEQ-2/3PL.AN.SBJ=MED look.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
- [lob-o sekim ke+bi]*
 SG.MASC.O-take.PFV check do+AUX.IPFV
- tem-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 (9-87) below, DS marking in line (a) is anomalous because information which is essential for the understanding of events occurring later in the story is provided. Again, what I consider to be the elaboration is bracketed:

- (9-87) *tam temsea* [*dekengé tobonea kimdaak tofanea tam temsea*] *ase bikinea waisasebe*
- a. *tam tem-s-e=a*
sideways look.PFV-DS.SEQ-3SG.M.SBJ=MED
- b. [*lekǝng=e tob-o-n-e=a*]
vine_species=SG.N1 SG.LONG.O-take.PFV-SS.SEQ-3SG.M.SBJ=MED
- c. *kim=laak tob-fa-n-e=a*
ground=down SG.LONG.O-put.PFV-SS.SEQ-3SG.M.SBJ=MED
- d. *tam tem-s-e=a*
sideways look.PFV-DS.SEQ-3SG.M.SBJ=MED
- e. *as=e biki-n-e=a*
tree=SG.N1 squeeze.PFV-SS.SEQ-SG.N1.SBJ=MED
- f. *wai-s-a-s-e=be*
close.PFV-BEN.PFV-3SG.M.IO.PFV-RPST-SG.N1.SBJ=MED
'he went inside (a tree), he took his belt and put it on the ground, he went inside (the tree), and the tree squeezed shut on him' [Dafinau]

In this example, the first verb *tam temsea* 'he went inside' bears DS marking, which is prima facie inconsistent with what follows in subsequent clauses, namely lines (b) to (d), i.e. the elaboration, where the man is still the subject. What obviously happened here is that when the speaker chose DS marking for the verb the first clause, he intended to continue with *ase bikinea waisasebe* 'the tree squeezed shut on him' in lines (e) and (f). However, having got to that point in the story the speaker realized that he had forgotten to mention that the man takes off his belt and puts it on the ground *before* he enters the tree. This is essential information because the story is about the origin of a certain type of vine used in black magic. Later on in the story this vine will grow out of the man's belt which he put on the ground before disappearing through the hole. As such pieces of information need to be included for narratives to make sense (especially to a cultural outsider like me), SR marking in a marked clause can be inconsistent with the regard to a reference clause in which additional information is given or a certain point receives additional elaboration.

9.2.11 Shortened medial clauses

Medial clauses can be shortened to just a verb stem and the medial clitic =*ta*. The exact conditions for this to happen remain unclear. Two examples are given below:

- (9-88) *kansota youmó omonota geta ulam yé omfasota*
kan-s-o=ta *yǒum=o*
 die.PFV-DS.SEQ-3SG.F.SBJ=MED bark=N2

om-o-n-o=ta *ge=ta* *ulam* *yé*
 SG.FEM.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED roll.PFV=MED corner there

om-fa-s-o=ta
 SG.FEM.O-put.PFV-DS.SEQ-3SG.F.SBJ=MED

‘it (a wallaby) died and she (the female protagonist) took some bark, rolled it (around her) and put it in the corner’

- (9-89) *make yamane walota fu downon temeabo*
mak-e *yam-an-e=e* *walo=ta* *fu*
 one=SG.N1 ripe-VBZR-SG.N1.SBJ=SG.N1 cut.SG.O.PFV=MED cook

lowon *tem-∅-e=a=bo*
 eat.PFV look.PFV-DS.SEQ-3SG.M.SBJ=MED=SURP

‘he cut one which got ripe and tried to cook and eat it (lit. cooked, ate, and saw), and hey...’ [Afoksitgabaam]

10 Operator scope in clause chaining constructions

Grammatically marked categories such as tense, status, 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 are dependent on 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, status, and illocutionary force of the events denoted by the medial verbs.

In this section, all operators which occur in final verbs in clause chaining constructions and the scope they have over the clause chain will be examined in some detail:

Illocutionary force	= <i>be</i>	‘declarative’
	= <i>ble</i>	‘exclamative’
	= <i>a</i>	‘polar question’
	= <i>e</i>	‘content question’
	= <i>o~e</i>	‘hortative’
Polarity	- <i>ba</i>	‘negative’
Past tense	- <i>bio</i>	‘general past’
	- <i>so</i>	‘hesternal past’
	- <i>b</i>	‘non-hodiernal past’
	- <i>s</i>	‘remote past’
	- <i>n</i>	‘past’
Habituality	+ <i>bina</i>	‘habitual’
Future tense	-(<i>a</i>) <i>mab</i> /- <i>omab</i>	‘future’
	-(<i>V</i>) <i>m</i>	‘immediate future’
Aspect	- <i>b</i> / <i>-l</i>	‘imperfective’
	inflected IPFV M-stem	‘inchoative’

10.1 Illocutionary force

Only final verbs can be marked for illocutionary force. The set of illocutionary markers consists of the clitics *be* ‘declarative’, *ble* ‘exclamatory’, *a* ‘polar question’, *e* ‘content question’, and *o-e* ‘hortative’. All of these have scope over the whole clause chain.

- (10-1) *é binó wenea uninó funebe*
é *bĩn=o* *we-n-e=a*
 3SG.M floor=N2 sweep-SS.SEQ-3SG.M.SBJ=MED
- unĩn=o* *fu-n-e=be*
 food=N2 cook-PST-3SG.M.SBJ=DECL
 ‘He swept the floor and then cooked food’

In (10-1), 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, it cannot be construed as a question: *‘Did he sweep the floor? and cooked food’. Interestingly, the first clause on its own can indeed be a question⁷², provided it has the appropriate interrogative intonation:

- (10-2) *é binó wenea?*
é *bĩn=o* *we-n-e=a*
 3SG.M floor=N2 sweep-PST-3SG.M.SBJ=PQ
 ‘Has he swept the floor?’

Nonetheless, in (10-1) 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* ‘exclamatory’ (10-3) and *bo* ‘emphatic/quotative’ (10-4).

- (10-3) *wan tiami sangwán teniba áié dobube unioble!*
wan tiam=i *sangwân* *te-n-ib=a*
 bird crow=PL.AN suddenly come-SS.SEQ-2/3PL.AN.SBJ=MED
- ái=e* *lob-∅-u-b-e*
 dad=SG.M SG.MASC.O-take.PFV-EP-BEN.PFV-PL.AN.IO.PFV
- un-∅-io=ble*
 go.PFV-PST-2/3PL.AN.SBJ=EXCLAM
 ‘Crows came suddenly and took Dad away!’ [Crows]

⁷² This is possibly due to (accidental?) homophony between =a ‘medial’ and =a ‘polar question’

- (10-4) *múkúnge goisosa kansoa élé omfaibiobo ge baasoa*
mukûng=e goi-s-o-s-i=a
 nose=SG.N1 smash.PFV-BEN.PFV-3SG.F.IO.PFV-DS.SEQ-1SG.SBJ=MED
- kan-s-o=a*
 die.PFV-DS.SEQ-3SG.F.SBJ=MED
- élé om-fa-Ø-i-bio=bo*
 here SG.FEM.O-put.PFV-PST-1SG.SBJ-GPST=QUOT
- ge baa-s-o=a*
 do.PFV say.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘ “I smashed her nose, she died and I put her down here”, she said and then
 someone else...’ [Afoksitgabaam]

The illocutionary clitic *ble* indicates that the whole of (10-3) is an exclamation and *bo* in (10-4) likewise expresses that all preceding medial clauses are quotative; i.e. they represent what the woman said at that point in the story. On quotative clauses see 11.1.

Markers of interrogative and hortative illocutionary force obey the same scope rules. In order to turn (10-5) into a question, one has to replace *be* ‘declarative’ with *a* indicating a polar question:

- (10-5) *é binó wenea uninó funea?*
é bîn=o we-n-e=a
 3SG.M floor=N2 sweep-SS.SEQ-3SG.M.SBJ=MED
- unĩn=o fu-n-e=a*
 food=N2 cook-PST-3SG.M.SBJ=PQ
 ‘Has he swept the floor and cooked food?’
 *‘He has swept the floor and has he cooked food?’

In clause chains in which the final verb is marked hortative by *e~o*, scope is over the whole chain:

- (10-6) *debetnia monia sitanano!*
lob-eb-n-i=a
 SG.MASC.O-take.PFV-SS.SEQ-1SG.SBJ=MED
- mo-n-i=a*
 go.PFV-SS.SEQ-SS.SEQ-1SG.SBJ=MED
- sita+n-an=o*
 care_for+AUX.PFV-1SG.HORT=HORT
 ‘I should take him and go and care for (him)!’
 *‘I took him and went and should care for him!’ [Afoksitgabaam]

Although the verbs in the medial clauses which precede the final verb *sitanano* ‘I should care for’ are not marked for hortative themselves, the scope rules force an interpretation of all these verbs as hortative.

The hortative illocutionary marker still has scope over the whole chain if the person and number values of the subjects of the medial verbs change:

- (10-7) *alél hátwali tesiba yatemsebta deibeta unomo!*
alél hat-wal=i te-s-ib=a
 wife mother_child_dyad-PL=PL.AN come-DS.SEQ-2/3PL.AN.SBJ=MED
- ya-tem-s-eb=ta*
 PL.AN.O-see.PFV-DS.SEQ-2/3PL.AN.SBJ=MED
- lei-b-e=ta un-om=o*
 leave.PFV-BEN.PFV-PL.AN.IO.PFV=MED go.PFV-1PL.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 sentence, which can either be a simple sentence or a clause chaining construction. Illocutionary markers never have scope over other sentences apart from the one in which they occur. Sentence boundaries are indicated by brackets:

- (10-8) [*íle yé koubiaanibta memei yobinabiobo*] [*kébsna koubonale!*] *geta nganabasebe*
[í=le yé kou+biaan-ib=ta
 they=TOP there fuck+AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
- memei yo-bina-b-io=bo]*
 children beget+AUX.HAB-IPFV-2/3PL.AN.SBJ=QUOT
- [kéb=sna kou-b-o-n-al=e!]*
 you.SG.M=too fuck-BEN.PFV-3SG.F.IO.PFV+AUX.PFV-2SG.HORT=HORT
- ge=ta ngana-b-a-s-e=be*
 do.PFV=MED call.PFV-BEN.PFV-3SG.M.IO.PFV-RPST-3SG.M.SBJ=DECL
 ‘‘Fucking (in) there, they beget children. You too fuck her!’’ he called out to him’ [Pig story]

The embedded discourse in (10-8) consists of two independent sentences. The first one is itself a clause chain whose final verb is marked quotative by *bo*. The second one is a simple sentence with a hortative verb. Only this second sentence can be interpreted as hortative because the scope of the hortative marker *e* does not have scope into or over the preceding sentence.

10.2 Polarity

Like illocutionary force, polarity marked by *-ba* on a final verb in a clause chain is interpreted with scope over the whole clause chain:

- (10-9) *é ayam bia bib óló haabiaaneta yatemaameba kesoa*
 a. *é ayam bi-Ø-e=a*
 3SG.M good stay.IPFV-SIM-3SG.M.SBJ=MED
- b. *bib óló haa+biaan-e=ta*
 place.N2 DEM.N2 roam.IPFV+AUX.IPFV.SS.SIM-3SG.M.SBJ=MED
- c. *ya-temaa-m-e-ba kesoa*
 PL.AN.O-see.PFV.FUT-IFUT-3SG.M.SBJ-NEG so
 ‘He wasn’t well and he couldn’t walk around this place and see them, so...’
 [Crows]

If the medial clause *é ayam bia* in line (a) occurred in a clause chain whose final verb was not negative, its meaning would be ‘he was well’. Due to the scope of negation over whole clause chains, however, this interpretation is impossible in (10-9).

As polarity specification must not change within a clause chain, two independent sentences have to be used in order to say ‘He didn’t see Asuneng, he saw Beitab’:

- (10-10) *é Asunebemo atemebabe. é Beitab éta atemebe*
é asuneb=e=mo a-tem-Ø-e-ba=be
 he PN=SG.M=NEG 3SG.M.O-see.PFV-PST-3SG.M.SBJ-NEG=DECL
- é beita é-ta a-tem-Ø-e=be*
 he PN 3SG.M-EMPH 3SG.M.O-see.PFV-PST-3SG.M.SBJ=DECL
 ‘He hasn’t seen Asuneng. He saw Beitab’

Medial verbs can never be marked for negative polarity with *-ba*. A clause chain in which a medial verb is marked negative is ungrammatical:

- (10-11) **é Asunebemo atemnebata Beitab éta atemebe*
é asuneb=e=mo a-tem-n-e-ba=ta
 3SG.M PN=SG.M=NEG 3SG.M.O-see.PFV-SEQ-3SG.M.SBJ-NEG=MED
- beita éta a-tem-Ø-e=be*
 PN 3SG.M-EMPH 3SG.M.O-see.PFV-PST-3SG.M.SBJ=DECL
 ‘He hasn’t seen A., he saw B.’

10.3 Scope of tense markers (post-subject slot)

The fillers *-bio* ‘General past’ and *-so* ‘Hesternal past’ of the post-subject slot in the template of final verbs are both absolute tense markers; i.e. they locate an event with respect to the moment of speaking. They have scope over the whole clause chain. In directly inflected final verbs, they only co-occur with *-n ~ -∅* ‘past’ in the pre-subject slot.

10.3.1 *-bio* ‘General past’

The tense marker *-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 earlier.

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 SR marking in the medial verbs structures the events of the clause chain in terms of their sequentiality and simultaneity, as in (10-12):

(10-12) *nile tobtlaabanibta klaubaibta ayamanebiobe*

nil=e

spike=SG.N1

tob-tlaa-b-a-n-ib=ta

SG.LONG.O-remove.PFV-BEN.PFV-3SG.M.IO.PFV-SS.SEQ-2/3PL.AN.SBJ=MED

kla-u-b-a-∅-ib=ta

fix-EP-BEN.PFV-3SG.M.IO.PFV-DS.SEQ-2/3PL.AN.SBJ=MED

ayam-an-∅-e-bio=be

good-VBLZ-PST-3SG.M.SBJ-GPST=DECL

‘They removed the (pineapple) spike from him and fixed him and he became well’ [Pineapple]

Example (10-12) gives the last three clauses of a story which consists of a single clause chain comprising 30-odd clauses with as many verbs, none of which is marked for absolute tense. Only after having come across the final verb *ayamanebiobe* ‘he became well’ does the hearer know that the whole story, i.e. all events which make up the story, took place in the (general) past.

10.3.2 -so ‘Hesternal past’

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 the event denoted by the final verb took place on the day before yesterday).

- (10-13) *í dámĩbtam unaaniba imenbaka tataanbákao olebtlibsobe*
í lamîb=tam unaan-ib=a
 they garden.N2=sideways go.PFV.SS.SEQ-2/3PL.AN.SBJ=MED

imen=baka tatāan=baka=o
 taro=with bush_greens=with=PL.N1

ol-eb tl-∅-ib-so=be
 PL.RESID.O-take.PFV come.PFV-PST-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 (10-13) to mean *‘They went to the garden the day before yesterday, and yesterday they brought back taro and bush greens’.

10.3.3 Scope of tense/aspect markers (pre-subject slot)

Of the tense/aspect suffixes, which go into the pre-subject slot, the following are attested in final verbs in clause chaining constructions.⁷³ Table 98 lists these suffixes and their scope rules.

⁷³ The near past marker *-nab* ‘near past’ is the only one of the set of slot 1 fillers which is so far unattested in final verbs in clause chaining constructions. *-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 sentences with the meaning ‘Near past’.

TNS/ASP	Gloss	Full scope
-b	'Non-Hodiernal past'	yes
-s	'Remote past'	yes
-n~-∅	'Past'	possible
-(a)mab/-omab	'Future'	possible
-b/-l	'Imperfective'	no

Table 98: Pre-subject slot fillers attested in final verbs in clause chains

The tense markers *-b* '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. SR marking in the medial verbs only structures the events of the clause chain in terms of their sequentiality and simultaneity. See example (10-14) for *-b* 'Non-hodiernal past' and (10-15) for *-s* 'Remote past':

- (10-14) *Milsene ní dabo sintalo weng óbiaanoba é buk wengó baatnebebe*
milsen=e ní lab=o sintalo
 PN=SG.M our.EXCL same_sex_sibl_dyad=COLL yesterday

wěng o+biaan-ob=a
 language.N2 say+AUX.IPFV.SS.SIM-1PL.SBJ=MED

é buk wěng=o
 3SG.M book language=N2

baa-b-ne-b-e=be
 say.PFV-BEN.PFV-1SG.IO.PFV-NHOPST-3SG.M.SBJ=DECL
 'While Milsen and I (we brothers) were talking yesterday, he asked me for a book'

- (10-15) *daak temeá onsiobe*
laak tem-∅-e=a on-s-io=be
 down look.PFV-DS.SEQ-3SG.M.SBJ=MED go.PFV-RPST-2/3PL.AN.SBJ=DECL
 'he went down to him (lit. and looked) and they went (together)' [Pig story]

The tense marker *-n ~ -∅* 'Past' usually has scope over the whole clause chain, e.g.:

- (10-16) *é binó wenea uninó funebe*
é bñ=o we-n-e=a unñ=o
 he floor=N2 sweep-SS.SEQ-3SG.M.SBJ=MED food=N2

fu-n-e=be
 cook-PST-3SG.M.SBJ=DECL
 'he swept the floor and then cooked food'

However, *-n ~ -Ø* ‘Past’ does not have scope into marked clauses which denote an unbounded event simultaneous with the event denoted by the reference clause whose verb is marked for ‘Past’. In this case the event in the marked clause goes on after the event in the reference clause has been completed, as with the ‘sleeping’-event in (10-17):

- (10-17) *nakai aala biaaniba elekiem hananebe*
naka=i aala biaan-ib=a
 man=PL.AN lie stay.IPFV.DS.SIM-2/3PL.AN.SBJ=MED
- elekiem hana-n-e=be*
 one.M wake_up-PST-3SG.M.SBJ=DECL
 ‘While the men are sleeping one has woken up’

On the default interpretation (especially with subject coreference throughout the clause chain) Future marking on a final verb has scope over the whole clause chain.

- (10-18) *né aaie obdinia ketémdaak ibania bafunamabibe*
né aai=e ob-di-n-i=a
 1SG water=SG.N1 SG.RESID.O-fetch-SS.SEQ-1SG.SBJ=MED
- kět=tem=laak iba-n-i=a*
 container=into=down pour.PFV-SS.SEQ-1SG.SBJ=MED
- bafu+n-amab-i=be*
 boil+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will fetch some water, pour (it) down into the container and boil (it)’

A situation in which the fetching of the water has already taken place, but neither the pouring nor the boiling, cannot be described by (10-18). At least that is what I was told repeatedly in elicitation sessions. Instead two independent sentences have to be used:

- (10-19) *né aaie obdiobe. kettémdaak ibania bafunamabibe*
né aai=e ob-li-Ø-i-o=be
 1SG water=SG.N1 SG.RESID.O-fetch_water-PST-1SG.SBJ-EP=DECL
- kět=tem=laak iba-n-i=a*
 container.N1=into=down pour.PFV-SS.SEQ-1SG.MED
- bafu+n-amab-i=be*
 boil+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I have fetched water. I will pour (it) down into the container and boil (it)’

This behaviour of the Future marker, namely having full scope over the whole clause chain, is what we would expect given that the Future belongs to the category tense.

However, in natural discourse one finds clause chains which look identical to (10-18) in terms of their structure but in which Future marking apparently does not have (or does not need to have) scope over the whole chain:

(10-20) *tobonia yé ha genamabibe*

tob-o-n-i=a

SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED

yé ha ge+n-amab-i=be

there break.PFV roll.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL

‘I’ve taken it (tobacco leaf) and will break and roll (it)’ [Rolling smokes]

(10-21) *yé ase obtananamabibe. óló yé obtanania funamabibe*

yé as=e

there fire=SG.N1

ob-tana+n-amab-i=be

SG.RESID.O-set_fire.PFV+AUXPFV-FUT.NANPL.SBJ-1SG.SBJ=DECL

óló yé ob-tana-n-i=a

now there SG.RESID.O-set_fire.PFV-SS.SEQ-1SG.SBJ=MED

fu+n-amab-i=be

smoke+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL

‘I want to light (cigarette). Now I’ve lit (it) and will smoke’ [Rolling smokes]

This claim can hardly be evaluated out of context but the last two examples are from a procedural text in which the speaker is rolling a cigarette. The speaker translated *tobonia* in (10-20) into TP as ‘Mi kisim tabako lip pinis’ (that is ‘I’ve taken the tobacco leaf’) and *ase obtanania* in (10-21) as ‘Mi laitim pinis’ (that is ‘I’ve lit (it)’).

These examples suggest that future marking can be interpreted as having scope over the whole clause chain but that it can also be interpreted locally, i.e. confined in scope to the clause containing the final verb which is marked for future. In *elicited* clause chains without switch of subject reference, informants interpreted Future marking exclusively with scope over the whole chain. If subject reference was disjoint, however, both readings were readily offered by my informants:

(10-22) *é unea í eilé ananomabiobe*

é un-∅-e=a

he go.PFV-DS.SEQ-3SG.M.SBJ=MED

í ěil=e a-na+n-omab-io=be

they pig=SG.M 3SG.M.O-kill.PFV+AUX.PFV-FUT.PL.AN.SBJ-2/3PL.AN.SBJ=DECL

‘He will go and they will kill a pig’

OR ‘He has gone and they will kill a pig’

To sum up, Future marking with *-(a)mab/-omab* and Past marking with *-n~ -∅* as operators differ from ‘full-scope’-operators like *-b* ‘Non-Hodiernal past’ and *-s* ‘Remote past’ and all operators indicating illocutionary force or polarity in that they can also be interpreted locally.

The aspect markers *-b* and *-l* both ‘Imperfective’ never have scope over whole clause chains when they occurs in final verbs. Consider (10-23) and (10-24):

(10-23) *né bñn=o we-n-i=a unñn=o*
I floor=N2 sweep-SS.SEQ-1SG.SBJ=MED food=N2

fu-b-i=be

cook-IPFV-1SG.SBJ=DECL

‘I have swept the floor and am cooking food (now)’

*‘I’m sweeping the floor and cooking food’

(10-24) *óló yé tobonia hakaľibe*

óló yé tob-o-n-i=a

now there SG.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; i.e. forms in which the M-final imperfective stem is directly inflected with the subject marker, as in (10-25):

(10-25) *né bñn=o we-n-i=a unñn=o*
I floor=N2 sweep-SS.SEQ-1SG.SBJ=MED food=N2

fum-i=be

cook.IPFV.MSTEM-IPFV-1SG.SBJ=DECL

‘I have swept the floor and start cooking (now)’

*‘I start sweeping the floor and cooking food’

In the last two 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 chain (Foley and Van Valin 1984). 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 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 (cf. section 9.1). This is to be expected as both clause chains and serial verbs are essentially chaining constructions.

10.3.4 Scope of the immediate future

Clause chains in which the final verb is inflected with $-(V)m$ ‘Immediate future’ and the whole proposition is about the future are unattested. There are, however, a few examples in which the final verb is inflected with $-(V)m$ and also negated, thus expressing the impossibility of an action.

The scope of this operator is over the whole clause chain if the subject is co-referent. Scope into a medial clause with a verb marked for DS is blocked, as in (10-26), repeated from (10-9). The scope of the Immediate future is marked by brackets:

(10-26) *é ayam bia [bib óló haabiaaneta yatemaameba kesoa]*

- a. *é ayam bi-Ø-e=a*
 he good stay.IPFV-SIM-3SG.M.SBJ=MED
- b. *bib óló haa+biaan-e=ta*
 place.N2 DEM.N2 roam+AUX.IPFV.SS.SIM-3SG.M.SBJ=MED
- c. *ya-temaa-m-e-ba kesoa*
 PL.AN.O-see.FUT.PFV-IFUT-3SG.M.SBJ-NEG so
 ‘He wasn’t well and he was not able to walk around this place and see them, so...’ [Crows]

10.3.5 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 (10-27):

- (10-27) *íle yé koubiaanibta memei yobinabiobo*
í=le yé kou+biaan-ib=ta
 they=TOP there fuck+AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
- memei yo+bina-b-io=bo*
 children beget+AUX.HAB-IPFV-2/3PL.AN.SBJ=QUOT
 “‘Fucking (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 marker, as in (10-28), where scope is indicated by brackets:

- (10-28) *deibaebiota [wanibta fu unambiaanabiobe]*
leibaebiota
 leave.PFV-BEN.PFV-SG.N1.IO.PFV-DS.SEQ-3SG.M.SBJ-GPST=MED
- [wa-n-ib=ta*
 cut.PFV-SS.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’ [Afoksitgabaam]

The first clause in this example *deibaebiota* ‘he left it and later...’ clearly is outside of any habituality scope because it describes a unique action of the man who cared for the plant which produced the Afoksitgabaam fruit. The restrictions on habituality scope described here seem to be plausible because habitual actions are normally ascribed to one individual or group during a certain time period.

It must however be said that habitual forms in final verbs are not particularly common in the corpus. Therefore, any conclusion regarding the scope of habitual marking must remain tentative.

10.4 Medial verbs in utterance-final position

It is a quite 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 (cf. 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 coordination or 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 (cf. Evans 2007).

Note that medial verbs in utterance-final position always take the medial verb marker =*ta* rather than =*a*.

- (10-29) *né sitó fubanita*
né sīt=o fuba-n-i=ta
 I tooth=PL.N1 wash-SS.SEQ-1SG.SBJ=MED
 'I'll brush my teeth first and then I'll...'

Medial clauses as independent utterances are invariably understood as desiderative statements about the future. Examples like (10-29) are abbreviated versions of a full clause chain ending in a final verb inflected for future. A possible example is (10-30):

- (10-30) *né sitó fubanita aam únaamabibe*
né sīt=o fuba-n-i=ta
 I tooth=PL.N1 wash-SS.SEQ-1SG.SBJ=MED

ăam unaa-mab-i=be
 lie go.PFV.FUT-FUT.NANPL.SBJ-1SG.SBJ=DECL
 'I'll brush my teeth and then I'll go to bed.'

A clause with a medial verb in final position, as in (10-29) cannot be construed to mean: *'I have brushed my teeth', for which (10-31) has to be employed:

- (10-31) *né sitó fubanibe*
né sīt=o fuba-n-i=be
 I tooth=PL.N1 wash-PST-1SG.SBJ=DECL
 'I've brushed my teeth.'

In (10-31), the final verb *fubanibe* ‘I’ve washed’ is marked *-n* for past tense. 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 verbs in examples such as (10-29) should be treated as medial and not as final verbs is that the markers in the pre-subject slot are interpreted as SR markers. The SR system limits the set of available subjects for the implied event. For instance, the medial verb in (10-29) is marked SS. 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, as in (10-32):

- (10-32) *funa-n-eb=ta*
 think.PFV-SS.SEQ-2SG.SBJ=MED
 ‘You think first and then...’

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):

- (10-33) *aaie downsebta*
aaie *lowon-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* ‘exclamatory’, *a* ‘polar question’, or *e* ‘content question’ (which normally only occur on final verbs) in addition to its medial verb marker. 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 (10-34) and (10-35) illustrate this for a declarative and an interrogative sentence, respectively:

- (10-34) *faninwali wengsáng baananggenitabe*
faninwali *wengsáng*
 ancestor-PL=PL.AN story

baa+n-ang+ge-n-i=ta=be
 say.PFV+AUX.PFV-IMMACC.SG.SBJ+do.PFV-SS.SEQ-1SG.SBJ=MED=DECL
 ‘I am about to tell an ancestor story’ (Implied: ‘I will tell it now’)

(10-35) *sitó fubanebtia?*

sīt=o fuba-n-eb=ta=a

tooth=PL.N1 wash-SS.SEQ-2SG.SBJ=MED=PQ

‘Will you brush your teeth first?’ (Implied, e.g.: ‘and then go to bed’)

11 Embedding

Mian has four types of embedded structures. 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 sentences, i.e. they receive marking for illocutionary force, e.g. =*bo* for quotatives, =*a* for embedded polar questions, or =*e ~ =o* 'hortative'. They are always embedded as sentential complements of the function verb *ge/ga* 'do'.

Adverbial clauses and head-internal relative clauses display clausal syntax but are formally nominalizations: they can occur with a proper subset of the determiners which fill the determiner slot in ordinary NPs. It is quite typical for Papuan languages to treat adverbials and relatives the same formally, the functional reason for that being that both types of clauses provide background information (Foley 1986: 202).

Prenominal relative clauses are embedded within NPs. They do not receive any overt marking, i.e. there is no 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 (SR) morphology operating in the main clause, i.e. SR 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 Future tense whereas medial verbs cannot. However, embedded structures can be complex themselves, that is 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 SR morphology pertaining only to subject tracking in the embedded clause chain. In other words, SR 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.

11.1 Embedded quotatives

11.1.1 Quotatives as sentential complements

Quotative sentences are used to represent discourse. They are always embedded as sentential complements of the function verb *ge/ga* ‘do’. Verbs in simple embedded quotative sentences display final verb morphology and either take a clitic =*bo* ‘Quotative’, as in (11-1), or have a hortative verb form (see section 7.3.4.4), as in (11-14). The embedded material is enclosed in brackets:

- (11-1) *é baanea [Boutlantema taman unaamabibo] ge baatnenebe*
é baa-n-e=a [boutlantema taman
 he say.PFV-SS.SEQ-3SG.M.SBJ=MED PN valley

unaa-mab-i=bo] *ge*
 go.PFV-FUT.NAN.PL.SBJ-1SG.SBJ=QUOT do.PFV

baa-b-ne-n-e=be
 say.PFV-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ=DECL
 ‘He_i has told me that he_i wants to go to the Boutlantema valley.’ (Lit. ‘He_i said:
 “I_i want to go to the B. valley”’)

- (11-2) *é baanea [Milsene Gubil uneko] ge baatnenebe*
é baa-n-e=a [milsen=e gubil
 he say-SS.SEQ-3SG.M.SBJ=MED PN=SG.M PN

un-ek=o]
 go.PFV-3SG.M.SBJ.HORT=HORT

ge *baa-b-ne-n-e=be*
 do.PFV say.PFV-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ=DECL
 ‘He has told me that Milsen should go to Gubil’ (Lit. ‘He says: “M. should go
 to G.”, he has told 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’ in the examples above or *fum* ‘think’ in (11-3):

- (11-3) *né funania [né Gubil unano] ge fumbibe*
né funa-n-i=a [né gubil un-an=o]
 I think.PFV-SS.SEQ-1SG.SBJ=MED I PN go.PFV-1SG.HORT=HORT

ge fun-b-i=be
do.PFV think.IPFV-IPFV-1SG.SBJ=DECL
'I think I should go to Gubil'

If the function verb is serialized it has to appear in the perfective *ge*. The function verb can be inflected itself in which case either the imperfective stem *ga* or perfective stem *ge* can be used. If the function verb is inflected, any more specific verb as regards the mode of expression has to be left out. Compare:

(11-4) *né funania né Gubil unano gabibe*
né funa-n-i=a né *gubil un-an=o*
I think.PFV-SS.SEQ-1SG.SBJ=MED I PN go.PFV-1SG.HORT=HORT

ga-b-i=be
do.IPFV-IPFV-1SG.SBJ=DECL
'I think I should go to Gubil'

(11-5) *né funania né Gubil unano geiobe*
né funa-n-i=a né *gubil un-an=o*
I think.PFV-SS.SEQ-1SG.SBJ=MED I PN go.PFV-1SG.HORT=HORT

ge-Ø-i-o=be
do.PFV-PST-1SG.SBJ-EP=DECL
'I thought I should go to Gubil'

Usually embedded quotatives are preceded by a medial clause whose verb specifies the mode of expression, e.g. *baanea* 'he says' or *funania* 'I think'. Note that this medial verb has to be in the perfective.

This 'introductory' medial clause is not obligatory and can be left out without creating a difference in meaning:

(11-6) *debetnia monia sitanano! ge baanoa*
lob-eb-n-i=a *mo-n-i=a*
SG.MASC.O-take.PFV-SS.SEQ-1SG.SBJ=MED go.PFV-SS.SEQ-SS.SEQ-1SG.SBJ=MED

sita+n-an=o *ge* *baa-n-o=a*
care_for+AUX.PFV-1SG.HORT=HORT do.PFV say.PFV-SS.SEQ-3SG.F.SBJ=MED
'“I_i should take him and go and care for (him)!” she_i said and then...'
[Afoksitgabaam]

The verb in an 'introductory' medial always has the switch reference marker *-n*. If the subject of this verb is 1st person singular *-n* unequivocally indicates same subject and

event sequentiality (see 9.2.8.1). In such a case it is obvious that co-reference of subject is not calculated with respect to the embedded sentence but with respect to the matrix verb. In other words, the embedded quotative is skipped by the SR system:

- (11-7) *né funania [Milsene Gubil uneko] ge fumbibe*
né funa-n-i=a [milsen=e gubil
 I think.PFV-SS.SEQ-1SG.SBJ=MED PN=SG.M PN
un-ek=o] *ge* *fun-b-i=be*
 go.PFV-3SG.M.SBJ.HORT=HORT do. PFV think.IPFV-IPFV-1SG.SBJ=DECL
 ‘I think Milsen should go to Gubil’

Embedded quotatives can themselves be clause chains, as in:

- (11-8) *é sintalo baanea [Boutlantema taman unibiota tlibo] ge baatnesobe*
é sintalo *baa-n-e=a* [boutlantema taman
 he yesterday say.PFV-SS.SEQ-3SG.M.SBJ=MED PN valley
un-n-i-bio=ta *tl-Ø-i=bo]* *ge*
 go.PFV-SS.SEQ-1SG.SBJ-GPST=MED come.PFV-PST-1SG.SBJ=QUOT do.PFV
baa-b-ne-n-e-so=be
 say.PFV-BEN.PFV-1SG.IO.PFV-PST-3SG.M.SBJ-HPST=DECL
 ‘Yesterday, he_i told me he_i went to the Boutlantema valley and returned’
 (Lit. ‘Yesterday, he_i said: “I_i went to B. and returned” ’)

11.1.2 Direct reported speech

All instances of represented discourse are given as direct reported speech in the form they were originally uttered (even if reported at a later point in time). Pronominal reference in Mian quotatives is always relative from the point of view of the external speaker (see e.g. Munro 1982, Güldemann and von Roncador 2002). A Mian example is given in (11-9):

- (11-9) *é sintalo baanea [Boutlantema taman unaamabibo] ge baatnesobe*
é sintalo *baa-n-e=a* [boutlantema taman
 he yesterday say.PFV-SS.SEQ-3SG.M.SBJ=MED PN valley
unaa-mab-i=bo] *ge*
 go.PFV-FUT-FUT.NANPL.SBJ-1SG.SBJ=QUOT do.PFV
baa-b-ne-n-e-so=be
 say.PFV-BEN.PFV-1.SG.IO.PFV-PST-3SG.M.SBJ-HPST=DECL

‘Yesterday, he told me that he wanted to go to the Boutlantema valley.’
(Lit. ‘Yesterday, he_i told me: “I_i want to go to B.” ’)

The original utterance, which is being reported in (11-9), 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 (11-10). I use the index ‘k’ to track the source (of the original utterance) and the index ‘l’ for the external speaker:

- (11-10) *é sintalo baanea [né kóbó katemibo] ge baatnesobe*
é sintalo baa-n-e=a [né kóbó
 he yesterday say.PFV-SS.SEQ-3SG.M.SBJ=MED I you.SG.M
- ka-tem-Ø-i=bo]* *ge*
 2SG.O-see.PFV-PST-1SG.SBJ=QUOT do.PFV
- baa-b-ne-n-e-so=be*
 say.PFV-BEN.PFV-1SG.IO.PFV-PST-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’).

11.1.3 Embedded questions

Polar and content questions can be sentential complements of the function verb *ge/ga* ‘do’, which can be either inflected itself or a bare verb stem in serialization with an inflected verbum dicendi such as *baa* ‘say (Pfv)’.

Polar questions, as in (11-11), have two illocutionary clitics, namely *=a* ‘Polar question’ and *=bo* (or *=ba*) to mark the question as quotative. Content questions, as in (11-12), are just marked with *=e*:

- (11-11) *kweité heitne downabeaba ge baanota*
kwěit=e hei-b-ne
 sugar_cane=SG.N1 cut-BEN.PFV-1SG.IO.PFV
- lowon-nab-e=a=ba*
 eat.PFV-NRPST-3SG.M.SBJ=PQ=QUOT

ge baa-n-o=ta
 do.PFV say.PFV-SS.SEQ-3SG.F.SBJ=MED
 “‘Did he cut and eat my sugar cane a short while ago?’” she asked and then...’
 [Unangkliten village]

(11-12) *nakai wanita tlaaibe gabeta*
naka=i wan+i-ta tlaa-ib=e
 man=PL.AN who+3PL.AN-EMPH come.PFV.FUT-2/3PL.AN.SBJ=CQ

ga-b-e=ta
 do.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 section 8.7.

11.2 Adverbial clauses

Adverbial clauses display clausal syntax, yet they are marked as nominalizations. Adverbial clauses always have the article =o. Like medial clauses, they can be topic-marked with =le. I will gloss the marker of adverbials =o as neuter 2 gender.

The verb in nominalized adverbial clauses is not subject to the restrictions for medial verbs, i.e. they can be inflected for Future. Nominalized adverbial clauses always have to occur sentence-initially. Nominalized adverbials can have a temporal (11-13), a locative (11-14), and a conditional (11-15) interpretation:

(11-13) [*né Ostlelia imin unaamabio*] *mo tekein kebibabe*
[né ostlelia imin unaa-mab-i=o]
 I PN again go.PFV-FUT.NANPL.SBJ-1SG.SBJ=N2

mo tekein ke-b-i-ba=be
 NEG knowledge make-IPFV-1SG.SBJ-NEG=DECL
 ===know===

‘I don’t know when I’ll return to Australia’ (repeated from (8-83))

(11-14) *eiwat eiwat metaneta [miné eil ásyame toumbio]*
ei=wat ei=wat meta-n-e=ta
 fill_up.PFV=across fill_up.PFV=across up_inside-SS.SEQ-SG.N1.SBJ=MED

mĩn=e ěil asyam=e toun+bi-Ø-e=o
 son=SG.M pig fruit=SG.N1 sit_down.PFV+AUX.IPFV-IPFV-3SG.M.SBJ=N2

‘it went across forming puddles and up and into (the bush), where the son was sitting at the pig fruit tree’

If the verb of the adverbial clause is inflected for Immediate future, a conditional interpretation is possible, e.g.:

- (11-15) *né alél sánimio seinamabibe*
ne alél sa=n-Vm-i=o
 I wife with=stay.PFV-IFUT-1SG.SBJ=N2

sein-amab-i=be
 be_happy.IPFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘When/if I have a wife, I’ll be happy’

- (11-16) *né eimé downaamio al belanamabibe*
né eim=e lowonaa-m-i=o
 I pandanus=SG.N1 eat.PFV.FUT-IFUT-1SG.SBJ=N2

al belanamabibe
 shit break.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘When/if I eat pandanus, I’ll get diarrhoea (lit. ‘break shits’)

11.3 Morphological independence of verbs in adverbial nominalizations

The verb of the adverbial clause is minimally dependent on the matrix verb in that it always has to have same illocutionary force. This dependency is familiar from clause chains. Unlike medial clauses, however, verbs in adverbial nominalizations are independent of any negation on the matrix verb, as shown in (11-17). Adverbial clauses are “impervious to denial from such following clauses” (Haiman 1980: 142), e.g.:

- (11-17) *bomanomo balubibe aaie einemeo baluemo tlaamabebabe*
bomanomo balubib=e aaie ei+n-Vm-e=o
 tomorrow airstrip=SG.N1 water=SG.N1 fill_up+AUX.PFV-IFUT-SG.N1.SBJ=N2

balu=e=mo tlaa-mab-e-ba=be
 plane=SG.N1=NEG come.PFV.FUT-FUT.NANPL.SBJ-NEG=DECL
 ‘When/if tomorrow water should fill the airstrip with water, the plane won’t come’

Habitual marking does not extend to the adverbial clause. The hitting of cats cannot be interpreted as habitual:

- (11-18) *kóbó busi inanemebo í meou gabinabiobe*
kóbó busi i-na+n-Vm-eb=o
 you.SG.M cat PL.AN.O-hit.PFV+AUX.PFV-IFUT-2SG.SBJ=N2
- í meou ga+bina-b-io=be*
 they meow do.IPFV+AUX.HAB-IPFV-2/3PL.AN.SBJ=DECL
 ‘If/when you hit a cat, it (habitually) meows’ [TMA questionnaire, 75]

11.3.1 Conditionals with =mole ‘if’

We have seen that adverbials marked with =o can have a conditional interpretation if their verb is inflected for Immediate future. Mian also has a dedicated conditional. In this construction, the protasis is marked with the clitic conjunction =mole ‘if’.

There are several types of conditionals. In Type 1 the protasis verb must be inflected for the ‘Past’ category and the apodosis-verb appears in the Future tense. This type corresponds to the realis conditional in English, which has Present tense in the protasis and Future tense in the apodosis. The protasis always has to precede the apodosis:

- (11-19) *bomanomo balubibe aaie einemole baluemo tlaamabebabe*
bomanomo balubib=e aaie ei-n-e=mole
 tomorrow airstrip=SG.N1 water=SG.N1 fill.PFV-PST-SG.N1.SBJ=if
- balu=e=mo tlaa-mab-e-ba=be*
 plane=SG.N1=NEG come.PFV.FUT-FUT.NANPL.SBJ-SG.N1.SBJ-NEG=DECL
 ‘If tomorrow water fills (lit. filled) the airstrip up, the plane won’t come’

- (11-20) *sókó tlomole Hake tlamabebe*
sók=o t1-Ø-o=mole hak=e
 rain=N2 come.PFV-PST-N2.SBJ=if PN=SG.N1
- tlaa-mab-e=be*
 come.PFV.FUT-FUT.NANPL.SBJ-SG.N1.SBJ =DECL
 ‘If it rains (lit. rain comes), the Hak river will swell up’

The 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. Note that the apodosis-verb is still inflected for Future. An example for the Type-2 conditional is:

- (11-21) *sokó tlemomole Hake tlemabebe*
sök=o tlem-o=mole hak=e
 rain=N2 come.IPFV.MSTEM-N2.SBJ=if PN=SG.N1

tle-mab-e=be
 come.IPFV-FUT.NANPL.SBJ-SG.N1.SBJ=DECL
 ‘If/Every time it rains, the Hak river swells up’ (Lit. ‘If/Every time rain comes, the Hak river will be swelling up’)

If the aposdosis is a hortative the protasis verb is inflected for Future, e.g.:

- (11-22) *kóbó aninge downaamabebmole walonale!*
kóbó aning=e lowonaa-amab-eb=mole
 you.SG.M fish=SG.M eat.PFV.FUT.FUT.NANPL.SBJ-2SG.SBJ=if

walo+n-al=e
 buy.PFV+AUX.PFV-2SG.SBJ.HORT=HORT
 ‘If you want to eat fish, buy (some)!’

11.4 Relative clauses

11.4.1 Prenominal relative clauses

Prenominal relative clauses are clausal modifiers embedded into the NP. They always have a head noun, which must follow the clause, e.g. in (11-23; repeated from (6-39)), where the head noun functions as the subject of the relative clause:

- (11-23) *balubib yé maablib nakai*
balubib yé maa+bl-Ø-ib naka=i
 airstrip there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ man=PL.AN
 ‘the men who are standing at the airstrip’

Here, a clause *balubib yé maablib* ‘they are standing at the airstrip’ precedes its head noun *nakai* ‘the men’. Postcedent identification is made obvious by both the morphology and the syntax. While the syntax dictates that the head noun is the one following the relative clause, there is additional information from agreement in the pronominal marking on the verb. In (11-23), for example, the verb *maablib* ‘they are standing’ is marked *-ib* for a postcedent in the (animate) plural. Moreover, this pronominal marker on the verb reveals which role the head noun is assigned within the relative clause, in this case subject.

With pronominal relative clauses, the head noun must not be left out. Hence, example (11-24) is ungrammatical:

- (11-24) **balubib yé maa+bl-Ø-ib*
 airstrip there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ
ya-teme-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 not subject to any limits in terms of its morphology. It can, for instance, be inflected for tense, as in (11-25):

- (11-25) *balubib klaibbio nakai*
balubib kla-Ø-ib-bio *naka=i*
 airstrip build-PST-2/3PL.AN.SBJ-GPST man=PL.AN
 'the men who built the airstrip (years ago)' [Observed]

The head noun is only allowed to appear in a reduced form in the relative clause, namely as a pronominal suffix on the verb. Under no circumstances can a pronominal relative clause have an overt NP, either a full NP (11-26) or a free pronoun (11-27), co-referent with and with the same grammatical function as the relativized item. This is cross-linguistically common (Comrie 1981: 140).

- (11-26) *nakae balubib yé maabie nakae*
naka=e balubib yé maa+bl-Ø-e *naka=e*
 man=SG.M airstrip there stand_up.PFV+AUX.IPFV-IPFV-3SG.M.SBJ man=SG.M
 *'the man who is standing at the airstrip'

- (11-27) *é balubib yé maabie nakae*
é balubib yé maa+bl-Ø-e *naka=e*
 he airstrip there stand_up.PFV+AUX.IPFV-IPFV-3SG.M.SBJ man=SG.M
 *'the man who is standing at the airstrip'

The restriction that the relative clause must not contain an overt repetition of the postcedent becomes more obvious when we consider an example in which the head noun is the direct object of the relative clause; e.g. (11-28):

- (11-28) *né atemi nakae*
né a-tem-Ø-i *naka=e*
 I 3SG.M.O-see.PFV-PST-1SG.SBJ man=SG.M
 'the man whom I have seen'

In this case, overt repetition of the postcedent inside the relative clause yields an ungrammatical utterance: **né nakaē atemi nakaē*.

This shows that prenominal relative clauses are subject to a restriction which is irrelevant in simple declarative sentences (or in clauses in a clause chain, for that matter), where the overt direct object *nakaē* has to occur before the verb:

- (11-29) *né nakaē atemibe*
né naka=e a-tem-∅-i=be
 I man=SG.M 3SG.M.O-see.PFV-PST-1SG.SBJ=DECL
 ‘I have seen the man’

My corpus does not contain examples in which the head noun is the indirect object of the verb in the relative clause; e.g. Mian equivalents of the English phrases *the man whom she gave the taro* or *the man to home I talked*.

Relativized possessors, on the other hand, are possible if they are marked as an indirect object on the verb in the relative clause (cf. possessor raising in 8.1.6). Consider (11-30):

- (11-30) *eiló imeno wenhabo nakaē*
ēil=o imen=o wen-∅-ha-b-o naka=e
 pig=SG.F taro=PL.N eat.IPFV-BEN.IPFV-3SG.M.IO-IPFV-3SG.F.SBJ man=SG.M
 ‘the man whose taro (tubers) a sow was eating’

There is one example in my corpus where the relativized item functions as a locative in the relative clause:

- (11-31) *yonomabib amo*
yo+n-omab-ib am=o
 initiate+AUX.PFV-FUT.PL.AN.SBJ-2/3PL.AN.SBJ house=N2
 ‘the house in which they will initiate’ [Initiation rites]

The interpretation of *amo* ‘the house’ as a locative within the relative clause is not overtly indicated in (11-31) but is the only plausible one given the semantics of the verb and the head noun. After all, houses are not likely to be initiated nor are they commonly beneficiaries of initiation procedures.

The head noun of a prenominal relative clause can have the following roles within the matrix clause: subject (11-32), direct object (11-33), indirect object (11-34),

indirect object (possessor) (11-35), and topic in verbless topic-comment constructions (11-36):

- (11-32) *balubib yé maabie nakae amo watemebebe*
balubib yé maa+bl-Ø-e naka=e
 airstrip there stand_up.PFV+AUX.IPFV-IPFV-3SG.M.SBJ man=SG.M

am=o wa-teme-b-e=be
 house=N2 N2.O-see.IPFV-IPFV-3SG.M.SBJ=DECL
 ‘The man who is standing at the airstrip is looking at a house’

- (11-33) *balubib yé maabie nakae atemebibe*
balubib yé maa+bl-Ø-e naka=e
 airstrip there stand_up.PFV+AUX.IPFV-IPFV-3SG.M.SBJ man=SG.M

a-teme-b-i=be
 3SG.M.O-see.IPFV-IPFV-1SG.SBJ=DECL
 ‘I’m looking at the man who is standing at the airstrip’

- (11-34) *né tilo antamano nakae mo gobablibabe*
né til=o an-tama-n-o naka=e
 my dog=SG.F 3SG.M.O-bite.PFV-PST-3SG.F.SBJ man=SG.M

mo go-b-a+bl-Ø-i-ba=be
 NEG like.PFV-BEN.PFV-3SG.M.IO.PFV+AUX.IPFV-IPFV-1SG.SBJ-NEG=DECL
 ‘I don’t like the man whom my dog has bitten’

- (11-35) *balubib yé maabie nakae imeno eiló wenhabobe*
balubib yé maa+bi-Ø-e naka=e
 airstrip there stand_up.PFV+AUX.IPFV-IPFV-3SG.M.SBJ man=SG.M

imen=o ěil=o wen-Ø-ha-b-o=be
 taro=PL.N pig=SG.F eat.IPFV-BEN.IPFV-3SG.M.IO.IPFV-IPFV-3SG.F.SBJ=DECL
 ‘A sow is eating the taro (tubers) of the man who is standing at the airstrip’

- (11-36) *balubib yé maabie nakae tekeobe*
balubib yé maa+bi-Ø-e naka=e
 airstrip there stand_up.PFV+AUX.IPFV-IPFV-3SG.M.SBJ man=SG.M

teke=o=be
 tall=PRD=DECL
 ‘The man who is standing at the airstrip is tall’

These examples do not show all possible combinations of the roles the head noun can potentially have within a relative clause and within the matrix clause, but the two roles are independent of each other and all combinations are attested.

Note further that in example (11-35) the possessor position is only accessible to relativization because the possessor is raised to argument status and marked on the verb as an indirect object.

Finally, we need to determine what structure an utterance consisting of a prenominal relative clause and its head noun has. Consider example (11-37):

- (11-37) *balubib yé maabie nakaē*
balubib yé maa+bi-Ø-e naka=e
 airstrip there stand_up.PFV+AUX.IPFV-IPFV-3SG.M.SBJ man=SG.M
 ‘the man who is standing at the airstrip’

The relative clause *balubib yé maabie* ‘he was standing at the airstrip’ does not have a relative pronoun. Nor is there any overt marking of the clause as subordinate, as for example in the Papuan (Ndu) language Iatmul (from Staalsen 1972):

- (11-38) *yí-lí-məy-a vaalə*
 IAT go-EXT-2SG.M-UNREAL-SUB canoe
 ‘the canoe you will be going in’

Nor is there any marking which indicates that prenominal relative clauses in Mian function as NPs themselves. In Yimas (Foley 1991), relative clauses, which can precede or follow the 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 nominalizations and indicates the head noun modified by the relative clause (from Foley 1991: 413):

- (11-39) *krayŋ m-ka-tu-r-ŋ*
 YIM frog.VI.SG NR.DIST-1SG.A-kill-PERF-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 nominalization in apposition with the head noun here. Neither do we have a clause which is clearly marked as subordinate.

However, Mian permits a few pronominal adjectival modifiers, namely *sin* ‘old’ and *memâ* ‘new’. Although both of these can also follow the noun and in either position can occur with or without an article, the bare pronominal form is the most common one⁷⁴. Therefore, it seems as if the Mian NP has a slot in pronominal position which can be filled by either one of the adjectival modifiers *sin* ‘old’ and *memâ* ‘new’ or by an embedded pronominal relative clause and which prefers its fillers to be ‘bare’, i.e. their determiner slot is empty. All fillers of the pronominal slot are interpreted as modifiers of the noun they precede.

11.4.2 Head-internal relative clauses

Unlike pronominal relative clauses, in which the relativized item is only referred to by pronominal marking on the verb but occurs outside the clause as its head, in head-internal relative clauses the relativized item 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 elements, all of which are also used to mark non-relativized NPs. Thus, they essentially function as NPs occupying the argument position which the relativized item has in the main clause. Consider example (11-40), repeated from (6-40), in which a head-internal relative clause functions as the direct object of the main clause:

- (11-40) *nakai balubib yé maablibi yatemebibe*
naka=i balubib yé maa+bl-Ø-ib=i
 man=PL.AN airstrip there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN

ya-teme-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 yé maablibi* bears a nominal marker =i identical to the one which marks the subject NP *nakai* ‘the men’.

⁷⁴ According to Smith and Weston (1974b: 52-3) the two modifiers in question can only occur pronominally and only in their bare form. I assume that the language is gradually regularizing its adjectival modifiers both in terms of marking and in terms of position within the noun phrase by allowing *sin* ‘old’ and *memâ* ‘new’ to occur postnominally like all other attributive adjectives. Regardless of position they can occur with or without a pronominal copy.

It is common for relative clauses (and subordinate clauses in general) in Papuan languages to behave morphologically like definite NPs (Foley 1986: 202-4). This similarity in form is parallel to their similarity in function as definite referring expressions: “Definite NPs 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 non-relativized NPs, an article has to occur if the NP is definite (or indefinite) referential and is left out if the NP is indefinite non-referential. Likewise, head-internal relative clauses always have to have an article or a determiner, precisely because they are definite/referring expressions.

Note that sometimes the article 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 (11-41):

- (11-41) *nakae balubib yé maabie*
naka=e balubib yé maa+bi-Ø-e=e
 man=SG.M airstrip there stand_up.PFV+AUX.IPFV-IPFV-3SG.M.SBJ=SG.M
 ‘the man who is standing at the airstrip’ [Crow story]

In this example, the article *=e* coalesces with the subject marker *-e* because they are identical consecutive vowels. The result is a single vowel. Thus, the verb *maabie* ‘he is standing’ is pronounced [ma^h.βi.jɛ]. I am inclined to assume that in example (11-41) the article is present underlyingly, rather than to 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 above), which never have an article.

In head-internal relative clauses the relativized item can function as subject (cf. examples (11-40) and (11-41) above), direct object (11-42), indirect object (11-43), and possessor (11-44):

- (11-42) *noi yaleb tlei*
no=i ya-l(o)+eb tl-Ø-e=i
 marsupial=PL.AN PL.AN.O-kill.PFV+carry come.PFV-PST-3SG.M.SBJ=PL.AN
 ‘the marsupials he has killed and brought’ [Crow story]

- (11-43) *kóbó sensoe watwatdabanebe*
kóbó senso=e
 you.SG.M chainsaw=SG.N1

watwatda-b-a-n-eb=e
 damage.PFV-BEN.PFV-SG.N1.IO.PFV-PST-2SG.SBJ=SG.N1
 ‘the chainsaw you have damaged’

- (11-44) *nakaminé imene eiló wenhaboe*
nakamĩn=e imen=e ěil=o
 man=SG.M taro=PL.N1 pig=SG.F

wen-Ø-ha-b-o=e
 eat.IPFV-BEN.IPFV-3SG.M.IO-IPFV-3SG.F.SBJ=SG.M
 ‘the man whose taro (tubers) a sow is eating’

A head-internal relative clause can function within the matrix clause as: subject (11-45), direct object (11-46), indirect object (11-47), indirect object (possessor) (11-48), and topic in a verbless topic-comment construction (11-49):

- (11-45) *nakai balubib yé maablibi eilé ananibobe*
naka=i balubib yé maa+bl-Ø-ib=i
 man=PL.AN airstrip there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN

ěil=e a-na-n-ibo=be
 pig=SG.M 3SG.M.O-kill.PFV-PST-2/3PL.AN.SBJ=DECL
 ‘the men who are standing at the airstrip have killed a pig’

- (11-46) *nakai balubib yé maablibi yatemebibe*
naka=i balubib yé maa+bl-Ø-ib=i
 man=PL.AN airstrip there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN

ya-teme-b-i=be
 PL.AN.O-see.IPFV-IPFV-1SG.SBJ=DECL
 ‘I’m looking at the men who are standing at the airstrip’

- (11-47) *nakae unangó gobabue némo gobablibabe*
naka=e unāng=o
 man=SG.M woman=SG.F

go-b-a+bi-Ø-o=e
 like.PFV-BEN.PFV-3SG.M.IO.PFV+AUX.IPFV-IPFV-3SG.F.SBJ=SG.M

né=mo go-b-a+bl-Ø-i-ba=be
 I=NEG like.PFV-BEN.PFV-3SG.M.IO.PFV+AUX.IPFV-IPFV-1SG.SBJ-NEG=DECL
 ‘I don’t like the man whom the woman likes’

- (11-48) *nakai balubib yé maablibi imeno eiló wenyebobe*
naka=i balubib yé maa+bl-Ø-ib=i
 man=PL.AN airstrip there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN
- ěil=o wen-Ø-ye-b-o=be*
 pig=SG.F eat.IPFV-BEN.IPFV-PL.AN.IO-IPFV-3SG.F.SBJ=DECL
 ‘A sow is eating the taro (tubers) of the men who are standing at the airstrip’

- (11-49) *ní sensoe Jemeni daako walobe ayamobe*
ní senso=e jemeni laak=o
 we.EXCL chainsaw=SG.N1 PN down=N2
- wal(o)-Ø-ob=e ayam=o=be*
 buy.PFV-PST-1PL.SBJ=N1.SG good=PRD=DECL
 ‘The chainsaw we’ve bought down in Germany is good’

11.4.3 Omission of the relativized item in head-internal relative clauses

So far, in all examples of head-internal relative clauses, the relativized item features as a full NP. However, this need not be the case. The relativized item can be freely omitted if it is the subject of the relative clause, as in (11-50) and (11-51):

- (11-50) *sin tlebuie*
sin tl-Ø-e-bio=e
 first come.PFV-PST-3SG.M.SBJ-GPST=SG.M
 ‘the (one) who came first’ [Crow]

- (11-51) *bible blibi*
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 relativized item functions as the object of the relative clause, omission is only possible if the verb marks the direct object, as in example (11-52):

- (11-52) *né atemie*
né a-tem-Ø-i=e
 I 3SG.M.O-see.PFV-PST-1SG.SBJ=SG.M
 ‘the (one) whom I’ve seen’

Omission of indirect objects and possessors is unattested.

11.4.4 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 relativized item. Contrary to the toneless articles on the relative clause, the resumptive pronoun is a free pronoun with a high tone:

- (11-53) *kwoisámo gengkanbinabobo ó wengóta*
kwoisám=o gen-kan+bina-b-ob=o
 spirit_house=N2 build-IPFV+AUX.HAB-IPFV-1PL.SBJ=N2
- ó wěng=ota*
 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 relativized possessors as in (11-53) that have them. As possessors (or genitives) are cross-linguistically less accessible to relativization than subjects and objects (cf. the Accessibility Hierarchy (cf. 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.

11.4.5 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 NPs, head-internal relative clauses can take a whole range of pronominal elements, such as:

- Distal demonstrative *yé/yó/yéi*
- Demonstrative pronoun *élé/óló/éli*
- Topic pronoun *éle/óle/íle*
- Demonstrative topic pronoun *éléle/ólóle/élíle*
- Emphatic pronoun *éta/óta/íta*
- Emphatic demonstrative *éléta/ólóta/élíta*
- Restrictive pronoun *yéta/yóta*

Instead of an article, the distal demonstratives *yé/yó/yéi* can be used to mark a head-internal relative clause as a nominalization:

- (11-54) *tubaaná bélón aanó bubbuba yé bioyo*
tubăan=a bélón ăan=o bubbuba
 chest_feather=and wing_bone feather=PL.N1 down=and

yé bi-∅-o=yo
 there stay.IPFV-IPFV-PL.N1.SBJ=DIST.N1.PL
 ‘(both) the chest feathers and the downs of the wing feathers which were there’
 [Crows]

The animate plural form of the distal demonstrative *yéi* is rare:

- (11-55) *nakaobba yé aaie fuabibyei*
naka=obba yé aaie fua-b-ib=yei
 man DIST there water bathe.IPFV-IPFV-2/3PL.AN.SBJ=DIST.PL.AN
 ===bathe===
 ‘those men who are bathing’

The following examples illustrate the use of the demonstrative (11-56), topic pronoun (11-57), demonstrative topic pronoun (11-58), emphatic and the restrictive (11-60) pronoun as markers of head-internal relative clauses:

- (11-56) *kóbó sensoe watwatdabaneb élé*
kóbó senso=e
 you.SG.M chainsaw=SG.N1

watwatla-b-a-n-eb élé
 do_damage.PFV-BEN.PFV-SG.N1.IO.PFV-PST-2SG.SBJ DEM.SG.N1
 ‘this chainsaw you damaged’
- (11-57) *né wengsang óló baanamabiolé*
né wengsǎng óló baa+n-amab-i=o=le
 I story N2.DEM say.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=N2=TOP
 ‘As for this story which I’m going to tell’ [Leaf oven]
- (11-58) *noie ase dime tububie éléle*
no=e as=e lim=e tubu+bi-∅-e
 marsupial=M.SG tree=SG.N1 on=SG.N1 sit_down.IPFV+AUX.IPFV-IPFV-3SG.M.SBJ

élé=le
 DEM.SG.M=TOP
 ‘as for this marsupial there sitting on the tree’ [Mammals and insects]

(11-59) *nakai Klefolam blib íta/éíta*
naka=i klefolam bl-Ø-ib í-ta
 man=PL.ANPN stay.IPFV-IPFV-2/3PL.AN.SBJ 3PL.AN-EMPH
 ‘the men who live in Telefomin’

(11-60) *buk=o ki-b-eb yóta*
 book=N2 read-IPFV-2SG.SBJ RESTR.N2

om-Ø-ne-n=e!
 SG.FEM.O-give.PFV-1SG.IO-2SG.HORT.SBJ=HORT
 ‘Give me just that book you’re reading!’

Note that the restrictive pronoun *yéta/yóta* ‘only that, just that’ does not have an animate plural form **yéíta*, the reason probably being that *yéta/yóta* has an individualizing function which is in principle restricted to singular entities.

Determiners marking the relative clause as a nominalization tend to encliticize to the relative clause verb. This tendency is especially pronounced if the verb ends and the pronoun starts in segmentally like vowels, as in:

(11-61) *nakae balubib yé maabiele*
naka=e balubib yé maa+bi-Ø-e=ele
 man=SG.M airstrip there stand_up.PFV+AUX.IPFV-IPFV-3SG.M.SBJ=DEM.SG.M
 ‘this man who is standing at the airstrip’

Note that the pronominal elements in relative clauses behave suprasegmentally like determiners in non-relativized NPs. If they are realized as independent phonological words, they retain their high tone, thus [nak^hæ ^mbaluβib^oje ma^ʔβi^ɛ élé]. If they cliticize to the verb in the relative clause, they tend to be toneless. Hence, we find both [nak^hæ ^mbaluβib^oje ma^ʔβi^ɛélé] and [nak^hæ ^mbaluβib^oje ma^ʔβi^ɛε].

11.4.6 Complex head-internal relative clauses and switch reference

Head-internal relative clauses themselves can be complex insofar as they can be a clause-chaining construction consisting of at least one medial clause and one final clause. Although there should be no theoretical limit to the number of medial clauses, in my corpus complex head-internal relatives maximally contain one medial clause. 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 dependent clauses are more pronounced here—as in other left-branching languages—, because the hearer has to process the whole relative clause before being able to identify the relativized item.

In complex chained 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 indicates that the whole relative clause functions as an NP:

- (11-62) *Afueiwoko Dimobibwat daanoa tesuo*
afueiwok=o limobib=wat laa-n-o=a
 PN=SG.F PN=across dwell.PFV-SS.SEQ-3SG.F.SBJ=MED
- te-s-o=o*
 come-RPST-3SG.F.SBJ=SG.F
 ‘Afueiwok, who dwelled across in Dimobib and came (a long time ago)’
 [Afueiwok]

In terms of marking switch-reference and event sequentiality/simultaneity, medial verbs in chained relative clauses behave exactly like medial verbs in independent clause chains. Switch-reference morphology provides a nifty mechanism to anticipate a change of the grammatical role of the relativized item. Consider (11-63):

- (11-63) *nakaminé tosiana wetouleb unea deiba unibbuele*
nakamĩn=e tosiana wetouleb un-Ø-e=a
 man=SG.M be_afraid.PFV flee_in_panic.PFV-DS.SEQ-3SG.M.SBJ=MED
- lei-b-a* *un-Ø-ib-bio=ele*
 leave.PFV-BEN.PFV-3SG.M.IO.PFV go.PFV-PST-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]

11.4.7 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 (11-64):

(11-64) *nakai balubib yé maablib élí*
naka=i balubib yé maa+bl-∅-ib
 man=PL.AN airstrip there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ

éli
 PL.AN.DEM
 ‘these men who are standing at the airstrip’

Now, it is not necessarily straightforward that an expression, such as in (11-64), should be analyzed as one clause with an overt subject NP *nakai* as opposed to another theoretically possible analysis which breaks this expression down into a nominal head *nakai* and an embedded postnominal relative clause *balubib yé maablib élí*.

There is prosodic and syntactic evidence that *nakai balubib yé maablib élí* ‘these men who are standing at the airstrip’ indeed is a full clause and not a head noun followed by a postnominal relative clause. Prosodically, the whole string [*nakai balubib yé maablibi*] 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 clauses.

Syntactic evidence partly 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, namely Subject-(Direct or Indirect) Object-Verb. Furthermore, the verb in a head-internal relative clause has exactly the same morphosyntactic possibilities in terms of tense, aspect, and pronominal marking and compounding with auxiliaries as (final) verbs in independent sentences.

(11-65) *nakai (SBJ) yé maablibi*
naka=i yé maa+bl-∅-ib=i
 man=PL.AN there stand_up.PFV+AUX.IPFV-IPFV-2/3PL.AN.SBJ=PL.AN
 ‘the men who are standing there’

(11-66) *nakaminé (SBJ) noi asusuna (DO) dotoulebbie élí*
nakamĩn=e no=i asusuna
 man=SG.M marsupial=PL.AN two

lol-toulebb+bi-e *éli*
 PL.AN.O-put_over_arm+AUX.IPFV-IPFV-3SG.M.SBJ PL.AN.DEM
 ‘these two marsupials which the man is carrying on his arm’ [Mammals and insects]

This case provides problematic evidence because the constituent order OSV in (11-69) is not possible in independent sentences if the subject is a free (non-emphatic) pronoun. Compare⁷⁵:

(11-70) *nakae néta atemibe*
naka=e né-ta a-tem-Ø-i=be
 man=SG.M I-EMPH 3SG.M.O-see.PFV-PST-1SG.SBJ=DECL
 ‘I (i.e. not you) have seen the man’

(11-71) **nakae né atemibe*
 Intended: ‘I have seen the man’

So we have to conclude that should we want to analyze *nakae né atemie* ‘the man whom I’ve seen’ in (11-69) as a head-internal relative clause, it would not conform to clausal syntax. There are two ways out of this situation.

First, one could assume embedding for this special case and say that in (11-69) a nominal antecedent *nakae* is followed by an embedded postnominal relative clause *né atemie*. Clearly this is unsatisfactory because (a) under such an analysis only examples like (11-69) would involve embedding whereas for all other cases there is no evidence for embedding at all. Such a solution makes the analysis of head-internal relatives unnecessarily complicated. After all, head-internal relatives, whether they conform to basic constituent order in declarative sentences or whether they are deviant in that respect, are formally marked the same way.

The second option is to assume that all head-internal relatives are clauses without any embedding, the corollary being that head-internal relative clauses 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* (unbewegter Nucleus) as opposed to a variant with a *preposed nucleus* (vorangestellter Nucleus)⁷⁶. 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

⁷⁵ German is better able to express the meaning difference between these two examples than English is. The former example translates into ‘Den Mann sah ICH [the.DAT man saw I (stressed)]’, whereas the latter would be ‘Den Mann sah ich’ [the.DAT man saw I].

⁷⁶ On the issue of head position in head-internal relative clauses also see Basilico (1996).

(cf. 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 relativized item is the object of the relative clause, as in *nakae né atemie* ‘the man whom I’ve seen’, the preposed-nucleus strategy is consistently chosen.

Né wengó yóta

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13 Appendix 1: Abbreviations

1	First person	M	Male
2	Second person	MASC	Masculine
3	Third person	MED	Medial
AN	Animate	N1	Neuter 1
AUX	Auxiliary	N2	Neuter 2
BEN	Benefactive	NANPL	Not animate plural
BUNDLE	Bundle class	NRPST	Near past
COLL	Collective	NEG	Negation
CQ	Content question	NHODPST	Non-hodiernal past
DECL	Declarative	O	Direct object
DEM	Demonstrative	PST	Past
DIST	Distal	PFV	Perfective
DS	Different subject	PL	Plural
EMPH	Emphatic	PN	Proper name
EP	Epenthetic vowel	PQ	Polar question
EXCL	Exclusive	PRD	Predicator
EXCLAM	Exclamative	QUOT	Quotative
EXPL	Expletive	RESID	Residue class
F	Female	REFL	Reflexive
FEM	Feminine	RECIP	Reciprocal
FLAT	Flat class	RPST	Remote past
FUT	Future	SG	Singular
GPST	General past	SI	Short interval
HAB	Habitual	SIM	Simultaneous
HORT	Hortative	SEQ	Sequential
HPST	Hesternal past	SS	Same subject
IFUT	Immediate future	SBJ	Subject
IMMACT	Immediate action	SURP	Surprise
IMP	Imperative	TOP	Topic
INCL	Inclusive	VBZR	Verbalizer
INTERJ	Interjection	VN	Verbal noun
IO	Indirect object		
IPFV	Imperfective		
ITER	Iterative		
LOC	Locative		
LONG	Long class		

14 Appendix 2: Texts

14.1 Origin of the Afoksitgabăam fruit

(Asuneng Amit, recorded 3/06/2004)

1. *wengsăng óló faninwali wengsang baananggenitabe*

wengsăng óló fanin-wal=i wengsăng
 story DEM.N2 ancestor-PL=PL.AN story

baa+n-ang+ge-n-i=ta=be

say.PFV+AUX.PFV-IMMACC.SG.SBJ+do.PFV-SS.SEQ-1SG.SBJ=MED=DECL
 ‘I am about to tell this story, a story about the ancestors’

2. *sinanggwanó unangmónó táié baangklíe debetnoa*

sinangwăno unangmǝn=o tá=e băangklí=e
 in_days_of_yore woman=SG.F cutting_tool=SG.M stone_axe=SG.N1

lob-eb-n-o=a

SG.MASC.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED
 ‘In days of yore a woman took a stone axe’

3. *tanoa*

ta-n-o=a
 sideways-SS.SEQ-3SG.F.SBJ=MED
 ‘she went sideways (into the bush)’

4. *eil ásyame toubebua*

ěil asyam=e
 pig tree_fruit=SG.N1

tou-b-e+bi-∅-o=a

sit_down.PFV-BEN.PFV-PL.AN.IO.PFV+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. *gwaabí ímaye downonebiba*

gwăab=i í-maye lowon une-b-ib=a
 small=PL.AN they-REFL eat.PFV go.IPFV-DS.SIM-2/3PL.AN.SBJ=MED
 ‘the small (ones) themselves ate and (then) were going away’

6. *haleb éta tesea*
haleb éta te-s-e=a
 wild_boar 3SG.M-EMPH come-DS.SEQ-3SG.M.SBJ=MED
 ‘when a wild boar came’
7. *baanklié dobonoa*
băankli=e lob-o-n-o=a
 stone_axe=SG.N1 SG.MASC.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED
 ‘she took the stone axe’
8. *bina malasoa*
bina ma-la-s-o=a
 hurl.PFV shoot.PFV-3SG.M.IO.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘she hurled (the axe) and shot it’
9. *yé omebtāb omfanea una dowonea*
yé om-eb=tab om-fa-n-e=a
 there SG.FEM.O-take.PFV=down SG.FEM.O-put.PFV-SS.SEQ-3SG.M.SBJ=MED
- u-na lowon-n-e=a*
 3SG.F.O-kill.PFV eat.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘it took her, put her down, killed her and ate her up’
10. *méné yé golonea*
mén=e yé gol-o-n-e=a
 child=SG.M there SG.BUNDLE.O-take.PFV-SS.SEQ-3SG.M.SBJ=MED
 ‘it takes her child (with the umbilical)’
11. *dabaalím yé obabe unebua*
labăal=lim yé ob-a-b-e
 ground=on there SG.RESID.O-leave.PFV-BEN.PFV-PL.AN.IO.PFV
- un-Ø-e-bio=a*
 go.PFV-DS.SEQ-3SG.M.SBJ-GPST=MED
 ‘it left it (the child) for them (other pigs) on the ground and went away’
12. *sokoyabuo unan tenoa*
sokoyabu=o unan te-n-o=a
 wallaby=SG.F eat.IPFV come-SS.SEQ-3SG.F.SBJ=MED
 ‘after a while a wallaby came to eat’

13. *asyame unan te melebasoa*
asyam=e unan te
 tree_fruit=SG.N1 eat.IPFV come

mele-b-a-s-o=a
 touch.PFV-BEN.PFV-3SG.M.IO.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘it came to eat tree fruit and touched him (the child)’
14. *memsea*
mem-s-e=a
 cry.IPFV.MSTEM-DS.SEQ-3SG.M.SBJ=MED
 ‘he started crying’
15. *gilan unobua binoa*
gilan un-n-o-bio=a bi-n-o=a
 quickly go.PFV-SS.SEQ-3SG.F.SBJ-GPST=MED stay-SS.SEQ-3SG.F.SBJ=MED
 ‘after it had run away it stayed’
17. *eka imin tenoa*
eka imin te-n-o=a
 and again come-SS.SEQ-3SG.F.SBJ=MED
 ‘then it came again’
18. *melebasoa*
mele-b-a-s-o=a
 touch.PFV-BEN.PFV-3SG.M.IO.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘it touched him’
19. *gilan unobua binoaka eka imin tenoa*
gilan un-n-o-bio=a bi-n-o=a
 quickly go.PFV-SS.SEQ-3SG.F.SBJ-GPST=MED stay-SS.SEQ-3SG.F.SBJ=MED

eka imin te-n-o=a
 and again come-SS.SEQ-3SG.F.SBJ=MED
 ‘after it had run away, it stayed (there), and it came again’
20. *temoabo*
tem-∅-o=a=bo
 look.PFV-PST-3SG.F.SBJ=MED=SURP
 ‘it looked and—hey!’

21. *mén életa biaaneta mebeaba genoa*
mén éle-ta biaan-e=ta
 child he_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=QUOT do.PFV-SS.SEQ-3SG.F.SBJ=MED
 ‘it thought “A child is there alone and he is crying?” ’
22. *debetnia monia sitanano ge baanoa*
lob-eb-n-i=a mo-n-i=a
 SG.MASC.O-take.PFV-SS.SEQ-1SG.SBJ=MED go.PFV.SS-SS.SEQ-1SG.SBJ=MED

sita+n-an=o ge baa-n-o=a
 bring_up+AUX.PFV-1SG.HORT=HORT do.PFV say.PFV-SS.SEQ-3SG.F.SBJ=MED
 ‘ “I should take him and go and bring (him) up” it said’
23. *debeb monoto kimaabioto*
lob-eb mo-n-o=to
 SG.MASC.O-take.PFV go.PFV.SS-SS.SEQ-3SG.F.SBJ=MED

kimaa+bi-Ø-o=to
 care_for.PFV+AUX.IPFV-DS.SEQ-3SG.F.SBJ=MED
 ‘it took him away and while it was caring for him
24. *damaneta taneta*
lama-n-e=ta ta-n-e=ta
 grow_up.PFV-SS.SEQ-3SG.M.SBJ=MED inside-SS.SEQ-3SG.M.SBJ=MED
 ‘he grew up, he went into the bush’
25. *kulaní yaleb teneta gawebeto*
kulän-i ya-l(o)+eb te-n-e=ta
 animal=PL.AN PL.AN.O-kill+take.PFV come-SS.SEQ-3SG.M.SBJ=MED

ga-Ø-we-b-e=to
 cook_in_leafoven-BEN.IPFV-3SG.F.IO.IPFV-DS.SIM-3SG.M.SBJ=MED
 ‘he killed game animals, brought (them) and used to cook it in a leaf oven for it
 (the wallaby)’
26. *yaleb te gawebeto wembobioto*
ya-l(o)+eb te
 PL.AN.O-kill+take.PFV come

ga-Ø-we-b-e=to
 cook_in_leafoven-BEN.IPFV-3SG.F.IO.IPFV-DS.SIM-3SG.M.SBJ=MED

wen-b-o-bio=to
 eat.IPFV-DS.SIM-3SG.F.SBJ-GPST=MED
 ‘he killed them (game animals), brought them and used to cook them in a leaf oven for it and she used to eat’

27. *unangmóno mako tenota*
unangmõñ=o mak=o te-n-o=ta
 woman=SG.F some=SG.F come-SS.SEQ-3SG.F.SBJ=MED
 ‘when some woman came’
28. *dobosota blibbiota*
lob-o-s-o=ta *bl-Ø-ib-bio=ta*
 SG.MASC.O-take.PFV-DS.SEQ-3SG.F.SBJ=MED stay.IPFV-DS.SEQ-2/3PL.AN.SBJ-GPST=MED
 ‘she married him and they lived there’
29. *imake eil ásyame toubenam onseto*
imak=e ěil asyam=e tou-b-e-nam=o
 husband=M.SG pig fruit=SG.N1 sit.PFV-BEN.PFV-AN.PL.IO.PFV-PFV.MSTEM=N2

on-s-e=to
 go.PFV.DS-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)’
30. *alél óto awokó ometnoto*
alěl ó-to awõk=o om-eb-n-o=to
 wife SG.F-EMPH mother=SG.F SG.FEM.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED
 ‘the wife for her part took the mother’
31. *dámíb unibbioto*
lamíb un-Ø-ib-bio=to
 garden go.PFV-DS.SEQ-2/3PL.AN.SBJ-GPST=MED
 ‘they went to the garden’
32. *sokó tlebota*
sõk=o tle-b-o=ta
 rain=N2 come.IPFV.ITER-DS.SIM-N2.SBJ=MED
 ‘after a while the rain was falling’

33. *tenibta*
te-n-ib=ta
 come-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they came’
34. *am yé tlaanibta*
am yé tlaan-ib=ta
 house=SG.N1 there come.PFV.SS.SEQ-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they arrived at home’
35. *ó heb yé daakta eka uktémdaak aan ónaboto*
ó heb yé laak=ta eka ũk=tem=laak
 she quickly there down=MED and fireplace=into=down
ãan on-nab-o=to
 lie 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’
36. *o denasebto ase fasite ge baata*
o lena-s-eb=to as=e fa-s-i=ta=e
 oh clear_off.PFV-DS.SEQ-2SG.SBJ=MED fire=SG.N1 make_fire-DS.SEQ-
 1SG.SBJ=MED=HORT

ge baa=ta
 do.PFV say.PFV=MED
 ‘she said, “Oh, you clear off, I want to make a fire first (and then you can...)”’
37. *dlibo ombianan geta*
lli-b-o
 push.PFV-BEN.PFV-3SG.F.IO.PFV

om-bia+n-ang+ge=ta
 SG.FEM.O-throw.PFV+AUX.PFV-IMMACC.SG.SBJ+do.PFV=MED
 ‘she was about to push it and throw it (out of the fireplace)’
38. *múkúnge goisosota*
mukûng=e goi-s-o-s-o=ta
 nose=SG.N1 smash.PFV-BEN.PFV-3SG.F.IO.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘she smashed its nose’
39. *kansota*
kan-s-o=ta
 die.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘it died’

40. *youmó omonota geta*
yǒum=o om-o-n-o=ta ge=ta
 bark=N2 SG.FEM.O-take.PFV-SS.SEQ-3SG.F.SBJ=MED roll.PFV=MED
 ‘she took a piece of bark and she rolled it up’
41. *ulam yé omfasoto*
ulam yé om-fa-s-o=to
 corner there SG.FEM. O-pu.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘put it into a corner’
42. *ileme dalaneta*
ilem=e lala-n-e=ta
 blood=N1.SG go_down-SS.SEQ-SG.N1.SBJ=MED
 ‘the blood ran off’
43. *eiwat eiwat metaneta*
ei=wat eiwat meta-n-e=ta
 fill_up.PFV=across fill_up.PFV=across up_inside-SS.SEQ-SG.N1.SBJ=MED
 ‘it went across forming puddles and up and into the bush’
44. *miné eil ásyame toumbio*
mĩn=e ěil asyam=e toun-bi-Ø-e=o
 son=SG.M pig tree_fruit=SG.N1 sit.PFV+AUX.IPFV-IPFV-3SG.M.SBJ=ADV
 ‘where the son was sitting at the pig fruit tree’
45. *ei dobbaseta*
ei lob-ba-s-e=ta
 fill_up.PFV SG.MASC.O-cover.PFV-DS.SEQ-SG.N1.SBJ=MED
 ‘it (the blood) rose and covered him’
46. *aé ólóle biemó unautnesibto*
aé ólól=le biēm=o
 yes DEM.N2=TOP mum=SG.F

u-nau-b-ne-s-ib=to
 3SG.F.O-kill.PFV.BEN-BEN.PFV-1SG.IO-DS.SEQ-2/3PL.AN.SBJ=MED
 ‘“Yes, this means (lit. as for this) they killed my mum’
47. *ileme teta natnenebe ge baaneta*
ilem=e te=ta na-b-ne-n-e=be
 blood=SG.N1 come.PFV=MED make-BEN.PFV-1SG.IO.PFV-PST-SG.N1.SBJ=DECL

54. *denasebta aso fanange baanangenio*
lena-s-eb=ta *as=0*
 clear_off.PFV-DS.SEQ-2SG.SBJ=MED fire=N2

fa+n-ang+ge
 make_fire.PFV+AUX.PFV-IMMACC.SG.SBJ+do.PFV

baa+n-ang+ge-n-i=0
 say.PFV+AUX.PFV-IMMACT.SG.SBJ=do.PFV-PST-1SG.SBJ=N2
 ‘when I was about to say, “You clear off, I am about to make fire”’
55. *múkúnge goisosia*
mukûng=e *goi-s-o-s-i=a*
 nose=N1.SG hit.PFV.BEN.PFV-3SG.F.IO.PFV-DS.SEQ-1SG.SBJ=MED
 ‘I smashed her nose’
56. *kansoa*
kan-s-o=a
 die.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘it died’
57. *élé omfaibiobo ge baasoa*
élé om-fa-Ø-i-bio=bo *ge*
 here SG.FEM.O-put.PFV-PAST-1SG.SBJ-GPST=QUOT do.PFV

baa-s-o=a
 say.PFV-DS.SEQ-3SG.F.SBJ=MED
 ‘and I put it here’, she said’
58. *mewebineto*
me-Ø-we+bi-n-e=to
 cry.IPFV-BEN.IPFV-3SG.F.IO.IPFV+AUX.IPFV-SS.SEQ-3SG.M.SBJ=MED
 ‘he was crying for her’
59. *omeb taneta dabaalé haka dam ombuebiota*
om-eb *ta-n-e=ta* *labăal=e*
 SG.FEM.O-take.PFV inside-SS.SEQ-3SG.M.SBJ=MED ground=SG.N1

haka dam om-bu-Ø-e-bio=ta
 break.IPFV body.F SG.FEM.O-bury-DS.SEQ-3SG.M.SBJ-GPST=MED
 ‘he carried her into the bush, dug a hole (lit. broke the ground) and buried her body’

60. *niniktólé babiaaneta*
niniktól=e *ba+biaan-e=ta*
 vine_species=SG.N1 grow+AUX.IPFV.SS.SIM-SG.N1.SBJ=MED
 ‘later a Niniktol vine was growing’
61. *gabaamón tem te babiaaneta uteseta*
gabaamón tem te *ba+biaan-e=ta*
 head in come grow+AUX.IPFV.SS.SIM-SG.N1.SBJ=MED

ute-s-e=ta
 come_up-DS.SEQ-3SG.M.SBJ=MED
 ‘it was growing inside the skull and came up’
62. *kehabea kimaabie bita*
ke-Ø-ha-b-e=a
 clean-BEN.IPFV-SG.N1.IO.IPFV-DS.SIM-3SG.M.SBJ=MED

kimaa+bi-Ø-e *bita*
 care_for.PFV+AUX.IPFV-IPFV-3SG.M.SBJ until
 ‘he was cleaning (it) and looking after it until’
63. *baliseto*
bali-s-e=to
 bear_fruit-DS.SEQ-3SG.M.SBJ=MED
 ‘it bore fruit’
64. *make yamane walota*
mak=e *yam-an-e=e* *walo=ta*
 one=SG.N1 ripe-VBLZ-SG.N1.SBJ=SG.N1 cut_off.PFV.SG.O=MED
 ‘he cut one off, which got ripe’
65. *fu downon temeabo klayamane kesoa*
fu lowon tem-Ø-e=a=bo
 cook eat.PFV look.PFV-PST-3SG.M.SBJ=MED=SURP

klayam-an-Ø-e *kesoa*
 very_good-VBLZ-DS.SEQ-SG.N1.SBJ so
 ‘he cooked and eat it and checked it out, woops!, it was very good, so
66. *deibaebiota wanibta*
lei-b-a-Ø-e-bio=ta
 leave.PFV-BEN.PFV-SG.N1.IO.PFV-DS.SEQ-3SG.M.SBJ-GPST=MED

wa-n-ib=ta
 cut.PFV.SG.O-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘he left it [the vine], and later they pick (fruits)’

67. *fu unambiaanabiobe*
fu 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 (still cook and eat them).’

68. *né wengsángo bayótabe*
né wengsãng=o bayóta=be
 my story only_this=DECL
 ‘That is my story.’

14.2 Rolling smokes

(Kasening Milimab, recorded 2/03/2004)

1. *né memálo futé tobonia*
né memálo füt=e tob-o-n-i=a
 I now tobacco=SG.N1 SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED
 ‘Now I take the tobacco’

2. *futaanó omonania*
futaän=o om-o+na-n-i=a
 tobacco_leaf=N2 SG.FEM.O-take.PFV+do-SS.SEQ-1SG.SBJ=MED
 ‘I also take the cigarette leaf’

3. *gingé tobtlaania*
ging=e tob-tlaa-n-i=a
 midrib=SG.N1 SG.LONG.O-remove.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I remove the midrib (of the tobacco leaf)’

4. *tobkimaia haanganseá*
tob-kima-Ø-i=a haäng-an-s-e=a
 SG.LONG.O-put_in_fire.PFV-DS.SEQ-1SG.SBJ=MED dry-VBZR-DS.SEQ-3SG.M.SBJ=MED
 ‘I put it in the fire until it gets dry’

5. *hania*
ha-n-i=a
 break.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I break (it)’

6. *futé genano genia*
füt=e ge+n-an=o ge-n-i=a
 cigarette=SG.N1 roll.PFV+AUX.PFV-1SG.HORT=HORT do.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I think I should roll a cigarette’

7. *futé gingé tobtlaanangenabibe*
füt=e ging=e
 tobacco=SG.N1 midrib=SG.N1

tob-tlaa+n-ang+gena-b-i=be
 SG.LONG.O-remove.PFV+AUX.PFV-IMMACT.SG.SBJ+do.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am about to remove the midrib of the tobacco leaf.’

8. *óló yé tobkimanamabibe*
óló yé tob-kima+n-amab-i=be
 now there SG.LONG.O-put_in_fire.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘Now I will put it in the fire.’
9. *tobkimaioibe*
tob-kima-Ø-i-o=be
 SG.LONG.O-put_in_fire.PFV-1SG.SBJ-EP=DECL
 ‘I have put it in the fire.’
10. *óló yé tobkimaibua milimsíne haangáne kesoa*
óló yé tob-kima-Ø-i-bio=a
 now there SG.LONG.O-put_in_fire.PFV-1SG.SBJ-GPST=MED
- milimsĩn=e haǎng-an-e kesoa*
 other_side=N1.SG dry-VBZR-3SG.M.SBJ so
 ‘Now, after I had put it in the fire, the other side got dry, so’
11. *tobskinamabibe*
tob-ski+n-amab-i=be
 SG.LONG.O-turn+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I will turn it.’
12. *é haangáne kesoa*
é haǎng-an-e kesoa
 it dry-VBZR-3SG.M.SBJ so
 ‘It has got dry, so’
13. *tobonia yé ha genamabibe*
tob-o-n-i-a yé ha
 SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED there break.PFV
- ge+n-amab-i=be*
 do.PFV+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ=DECL
 ‘I take it and will break and roll (it).’
14. *óló yé tobonia*
óló yé tob-o-n-i=a
 now there SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED
 ‘Now I take it’

15. *hakalibe*
haka-l-i=be
 break.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am breaking (it)’
16. *hania*
ha-n-i=a
 break.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I have broken (it)’
17. *futaantêm daake yé toumibe*
futaän=tem daak=e yé toum-i=be
 cigarette_leaf=in down=SG.N1 there set_down.IPFV.MSTEM-1SG.SBJ=DECL
 ‘I start to put (it) down into the cigarette leaf.’
18. *yé hania*
yé ha-n-i=a
 there break.PFV-SS.SEQ-1SG.SBJ=MED
 ‘I have broken (it)’
19. *yé genanggenamibe*
yé ge+nang+genam-i=be
 there do.PFV-IMMACT.SG.SBJ+do.IPFV.MSTEM-1SG.SBJ=DECL
 ‘I am about to start rolling.’
20. *yé genalibe*
yé gena-l-i=be
 there roll.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am rolling.’
21. *óló yé hania*
óló yé ha-n-i=a
 now there break.PFV-SS.SEQ-1SG.SBJ=MED
 ‘Now I have broken (it)’
22. *yé gembibe*
yé gen-b-i=be
 there roll.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am rolling.’

23. *yé genam bebibe*
yé genam be-b-i=be
 there roll.IPFV.MSTEM keep.IPFV-IPFV-1SG.SBJ=DECL
 ‘I keep rolling.’
24. *yé genam bebibe*
yé genam be-b-i=be
 there roll.IPFV.MSTEM keep.IPFV-IPFV-1SG.SBJ=DECL
 ‘I keep rolling.’
25. *yé genam bebibe*
yé genam be-b-i=be
 there roll.IPFV.MSTEM keep.IPFV-IPFV-1SG.SBJ=DECL
 ‘I keep rolling.’
26. *smá yé gembibe*
smá yé gen-b-i=be
 still there roll.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am still rolling.’
27. *smá yé gembibe*
smá yé gen-b-i=be
 still there roll.IPFV-IPFV-1SG.SBJ=DECL
 ‘I am still rolling.’
28. *óló yé geia blimane kesoa*
óló yé ge-Ø-i=a blim-an-Ø-e
 now there roll.PFV-DS.SEQ-1SG.SBJ=MED finished-VBZR-DS.SEQ-SG.N1.SBJ

kesoa
 so
 ‘Now I have finished rolling (lit. I have rolled, it is finished), so’
29. *yole yé ase obtananamabibe*
yole yé as=e ob-tana+n-amab-i=be
 well there fire=SG.N1 SG.RESID.O-light.PFV+AUX.PFV-FUT.NANPL.SBJ-
 1SG.SBJ=DECL
 ‘I will light (it).’
30. *óló yé obtanania*
óló yé ob-tana-n-i=a
 now there SG.RESID.O-light.PFV-SS.SEQ-1SG.SBJ=MED
 ‘Now I light (it)’

31. *funamabibe*
fu+n-amab-i=be
smoke+AUX.PFV-FUT.NANPL.SBJ-1SG.SBJ-DECL
'I am going to smoke.'
32. *óló yé fumibe*
óló yé fum-i=be
now there smoke.IPFV.MSTEM-1SG.SBJ=DECL
'Now I start smoking.'

14.3 Danenok and his brother

(Asuneng Amit, recorded 10/6/2004; the following text is the beginning of the story)

1. *faninwali wengsǎng baananggenitabe*
fanin-wal=i wengsǎng
 ancestor-PL-PL.AN story

baa+n-ang+ge-n-i-ta-be
 tell.PFV+AUX.PFV-IMMACC.SG.SBJ+do.PFV-SS.SEQ-1 SG.SBJ=MED=DECL
 ‘I am about to tell an ancestor story.’
2. *Danenok labwali wengsǎngobe*
lanenok dab-wal=i wengsǎng=o=be
 PN same_sex_siblings_dyad-PL=PL.AN story=PRED=DECL
 ‘The story of Danenok and his brother.’
3. *baananggenitabe*
baa+n-ang+ge-n-i-ta-be
 tell.PFV+AUX.PFV-IMMACC.SG.SBJ+do.PFV-SS.SEQ-1 SG.SBJ=MED=DECL
 ‘I want to tell (it).’
4. *Danenok dabwali gimónó omeb te tenabiaaniba*
lanenok lab-wal=i gimón=o om-eb
 PN same_sex_siblings_dyad-PL=PL.AN spine=N1.PL SG.FEM.O-take.PFV

te tena+biaan-ib-a
 come come.too+AUX.IPFV.SS.SIM-2/3PL.AN.SBJ=MED
 ‘While Danenok and his brother were sitting with their spines touching
5. *geime deba+monsaniba*
geim=e leba+monsa-n-ib=a
 pronged_arrow=N1.SG make_arrow+go.?-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they were making arrow(s)’
6. *gimono yé tobonkibeno binabobiotabe*
gimon=o yé tob-onki-b-e-n-o
 spine=N1.PL there SG.LONG.O-attach.PFV-BEN.PFV-AN.PL.IO.PFV-PST-N1.PL.SBJ

bina-b-o-bio-ta-be
 stay.HAB.IPFV-N1.PL.SBJ-GPST=MED=DECL
 ‘their spines attached (to each other) and stayed like that for a long time’

7. *delaomgeniba sitabiniba*
lela-om+ge-n-ib-a
 break_apart.PFV-IMMACT.PL.SBJ+do.PFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they wanted to break apart’
- sita+bi-n-ib-a*
 jiggle+AUX.IPFV-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they were jiggling’
8. *dab yé temdeiboibbua*
lab yé
 same_sex_siblings_dyad there
- temlei-b-o-∅-ib-bio=a*
 leave.PFV-BEN.PFV-N2.IO.PFV-2/3PL.AN.SBJ-GPST=MED
 ‘after the brothers had left it (as it was)’
9. *make alukam unanggameo*
mak=e alukam un-ang+gam-e=o
 one=SG.M toilet go.PFV-IMMACT.SG.SBJ+do.IPFV.MSTEM-3SG.M.SBJ=N2
 ‘when one (of them) wanted to go to the toilet’
11. *make skila kweilao gobtousea*
mak=e skil=a kweil=a=o gobtou-s-e-a
 other=SG.M foot=and hand=and=N1.PL pull_together.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘the other pulled together feet and hands’
12. *taniba*
ta-n-ib-a
 sideways-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they went sideways (i.e. inside the toilet)’
13. *fanea tam tlaaibole*
fa-n-e=a tam tlaa-ib=o=le
 shit-SS.SEQ-3SG.M.SBJ=MED sideways come.?.PFV-2/3PL.AN.SBJ=N2=TOP
 ‘they shat and came back outside’
14. *makesna alukam unibo ge genangameo*
mak=e=sna alukam un-∅-i=bo
 other=SG.M=too toilet go.PFV-PST-1SG.SBJ=QUOT

ge *ge+n-ang+gam-e=o*
 do.PFV do.PFV+AUX.PFV-IMMACT.SG.SBJ+do.IPFV.MSTEM-3SG.M.SBJ=N2
 ‘and when the other one wanted to go to the toilet’

16. *make skila kweilao gobtousea*
mak=e skil=a kweil=a=o
 one=SG.M foot=and hand=and=PL.N1

gobtou-s-e=a
 pull_together.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘the (first) one pulled together feet and hands’

17. *taniba*
ta-n-ib=a
 sideways-SS.SEQ-2/3PL.AN.SBJ=MED
 ‘they went sideways (inside the toilet)’

18. *fa tam taneole fanea tam tlaaibole*
fa tam ta-n-e=o=le
 shit sideways sideways-SS.SEQ-3SG.M.SBJ=N2=TOP

fa-n-e-a tam tlaa-ib=o=le
 shit-SS.SEQ-3sg.m.sbj=MED sideways come.?.PFV-2/3PL.AN.SBJ=MED=TOP
 ‘he shat and he came outside; he shat and they came outside’

19. *inabinabbioto*
ina+bina-b-ib-bio=to
 make_thus+AUX.HAB-DS.SEQ-2/3PL.AN.SBJ-GPST=MED
 ‘they used to do thus’

20. *make dāmīb unamabibo genemeo*
mak=e lamīb unaa-mab-i=bo
 one=SG.M garden go.PFV.FUT-FUT.NANPL.SBJ-1SG.SBJ=QUOT

ge+n-Vm-e=o
 do.PFV+AUX.PFV-IFUT-3SG.M.SBJ=N2
 ‘and if one said “I want to go to the garden’

21. *make skila kweilao gobtousea*
mak=e skil=a kweil=a=o
 other=SG.M foot=and hand=and=PL.N1

- gobtou-s-e=a*
 pull_together.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘the other pulled together feet and hands’
22. *unibbua okok kem haabi*
un-n-ib-bio=a *okok kem*
 go.PFV-SS.SEQ-2/3PL.AN.SBJ-GPST=MED work make.IPFV.MSTEM

haa+bi
 roam.IPFV+AUX.IPFV
 ‘after they had gone they were roaming (the bush) to do work’
23. [...?]⁷⁷ *dikin haabi tlaaibole*
likin haa+bi tlaa-ib=o=le
 do_garden_work roam.IPFV+AUX.IPFV come.?.PRF-2/3PL.AN.SBJ=N2=TOP
 ‘they were roaming (the bush) to do garden work and came back’
24. *eka makesa*
eka mak é=sa
 and other SG.M=too
 ‘and the other too’
25. *eka nésak unamabibo genemeo*
eka né=sa unaa-mab-i=bo
 and I=too go.PFV.FUT-FUT.NANPL.SBJ-1SG.SBJ=QUOT

ge+n-Vm-e=o
 do.PFV+AUX.PFV-IFUT-3SG.M.SBJ=N2
 ‘and if the other wanted to go to the garden’
26. *make skila kweilao gobtousea*
mak=e skil=a kweil=a=o gobtou-s-e=a
 other=SG.M foot=and hand=and=PL.N1 pull_together.PFV-DS.SEQ-3SG.M.SBJ=MED
 ‘the other pulled together feet and hands’
27. *unibbua dikin haabi tlaaibole*
un-n-ib-bio-a *likin*
 go.PFV-SS.SEQ-2/3PL.AN.SBJ-GPST=MED do_garden_work

⁷⁷ Recording unintelligible.

haa+bi *tlaa-ib=o=le*
 roam.IPFV+AUX.IPFV come.?.PFV-2/3PL.AN.SBJ=N2=TOP
 ‘after they had gone, they were roaming (the bush) to do garden work and came
 back’

28. *inabinabibbioto*
ina+bina-b-ib-bio=to
 make_thus+AUX.HAB-DS.SEQ-2/3PL.AN.SBJ-GPST=MED
 ‘they used to do thus...’